

Objective Summary

Strategic Direction 7: Employ data-based decision strategies to ensure the most efficient use of university resources.

Objective 1: For all employees (faculty and staff), maintain staffing levels based on demonstrated need and attract/retain the best candidates for available positions.

Objective 2: Ensure effective and efficient use and maintenance of university academic space, at the department, college, and university level.

Objective 3: Increase the effectiveness of computer and other information technologies on campus.

Objective 4: Improve resource conservation efforts on campus to conserve fiscal and natural resources while supporting our core values of a genuine respect of the natural environment and sustainable principles.

Objective 1 – Staffing

Strategic Direction 7: Employ data-based decision strategies to ensure the most efficient use of university resources.

Objective 1: For all employees (faculty and staff), maintain staffing levels based on demonstrated need and attract/retain the best candidates for available positions.

Activities that are Measurable:

Activity 1: Compare faculty salaries annually to a select group of peer institutions and identify funding needed to move salaries to targeted benchmarks. The benchmarks should factor in rank and discipline differences.

Rationale: In order to provide a sound educational environment for our students, the university must hire and retain the very best possible candidates for faculty positions. A primary component in attracting and retaining excellent faculty is to offer salaries that are competitive in the market.

Unit Responsible: Academic Affairs (primarily IRAP for data collection)

Assessment Strategy: Difference between Appalachian mean faculty salaries and established faculty salary benchmarks of the peer group of institutions.

Five-Year Timeline: On-going

Estimation of Resources: \$375,000 to reach current benchmarks

Activity 2: Compare faculty start-up packages periodically with those offered to new faculty at an appropriate group of peer institutions and identify funding needed to ensure Appalachian remains competitive in its offers to new faculty. The start-up packages will vary according to discipline and may include items such as specialized equipment and summer research or travel grants.

Rationale: Research in all disciplines has become a pivotal part of undergraduate education. In order to deliver high quality education to our students, the university must hire the very best possible candidates for faculty positions. In addition to salary, a very important component in attracting excellent faculty is to offer a competitive start-up package comparable with those offered by our peer institutions.

Objective 1 – Staffing

Units Responsible: Academic Affairs (primarily the Provost, Colleges, and the Graduate School)

Assessment Strategy: Difference between start-up packages offered by discipline for new faculty at Appalachian with the offerings at an appropriate group of peer institutions.

Five-Year Timeline: On-going

Estimation of Resources: The resources needed will vary each year depending on the disciplines of the faculty being hired, but could require as much as \$500,000 to \$1,000,000 more on an annual basis than is currently being spent.

Activity 3: Compare EPA staff salaries annually to a select group of peer institutions and identify funding needed to move salaries to targeted benchmarks. The benchmarks should factor in the title and role differences.

Rationale: In order to provide a sound educational environment for our students, the university must hire and retain the very best possible candidates for EPA staff positions. A primary component in attracting excellent employees is to offer salaries that are competitive in the market.

Unit Responsible: All Divisions

Assessment Strategy: Difference between Appalachian salaries those with similar title and roles at the peer group of institutions.

Five-Year Timeline: On-going

Estimation of Resources: Unknown

Activity 4: Compare SPA staff salaries annually to appropriate salary benchmarks and identify funding needed to move salaries to targeted benchmarks. The benchmarks should factor in the title and role differences of employees.

Rationale: In order to provide a sound educational environment for our students, the university must hire and retain the very best possible candidates for SPA staff positions. A primary

Objective 1 – Staffing

component in attracting excellent employees is to offer salaries that are competitive in the market.

Unit Responsible: All Divisions with the assistance of Human Resource Services.

Assessment Strategy: Compare graded position salaries with factored salary benchmarks and market salary benchmarks for career-banded positions

Five-Year Timeline: On-going

Estimation of Resources: \$5,000,000 to reach current benchmarks

Activity 5: Identify an appropriate method for determining faculty staffing needs across the University that quantifies need based on measurable data. The method should attempt to compare target faculty staffing levels based on comparisons with an appropriate peer group of institutions in conjunction with University goals.

Rationale: In order to provide a sound educational environment for our students, the university must hire and retain the very best possible candidates for faculty positions. With this limited resource, it is important to direct hiring in areas where faculty are most needed

Unit Responsible: Academic Affairs.

Assessment Strategy: Compare actual faculty staffing levels with target staffing levels based student demand for instruction across the University

Five-Year Timeline: On-going

Estimation of Resources: Resources available are prescribed based on enrollment figures.

Activity 6: Identify an appropriate method for determining non-faculty EPA and SPA staffing needs across the University that quantifies need based on measurable data. If possible, the University should utilize methods that may be benchmarked against an appropriate peer group of institutions in conjunction with University goals.

Objective 1 – Staffing

Rationale: In order to provide a sound educational environment for our students, the university must provide necessary support staff, including both type and level. However, the university must be cautious to ensure that it maintains appropriate budget reserves to cover needed nonpersonnel costs.

Unit Responsible: All Divisions

Assessment Strategy: Compare actual staffing levels with target staffing levels based on annual data collected.

Five-Year Timeline: On-going

Estimation of Resources: Unable to estimate.

Objective 2 – Space Management

Strategic Direction 7: Employ data-based decision strategies to ensure the most efficient use of university resources.

Objective 2: Ensure effective and efficient use and maintenance of university academic space, at the department, college, and university level.

Activities that are Measurable:

Activity 1: For all general Classrooms (room use code 110), achieve an average of 65 percent room and 75% seat utilization between 8 AM and 5 PM based on North Carolina System standards.

Rationale: Current data indicates that classrooms of some departments are underutilized while pressures are mounting for increased research and office spaces in most units, both academic and administrative. It is recommended that departments in need of space examine the possibility of the reallocation of existing departmental space or examine academic scheduling practices that result in the lower classroom utilization rates. Collaboration with the Director of Space Management and Planning will determine the feasibility of converting underutilized classrooms into other appropriate uses. These conversions should help alleviate the need for offices and research space while increasing utilization of remaining classrooms.

Units Responsible: Departments, Colleges, Academic Affairs (primarily Office of Space Management and Planning), Business Affairs (primarily Design and Construction and the Physical Plant).

Assessment Strategies: Series 25, X-25 report generator using the snapshot date data for each semester. Use current building and room inventory data to verify number of classrooms, capacity and square footage.

Five-year timeline: Completion date is as needed.

Estimation of resources required: Dependent on complexity and number of renovation projects; example in 2006 dollars one general classroom conversion into three generic office space was estimated to be \$30,000.

Objective 2 – Space Management

Activity 2: For all Labs/Studios which are scheduled for class activity (room use code 210), achieve an average of 65% percent room and 80% seat utilization between 8 AM and 5 PM based on North Carolina System standards.

Rationale: Current data indicates that departments should investigate how labs/studios are used as pressures are mounting for increased research and office spaces in most academic units. It is recommended that departments in need of space first examine the possibility of the reallocation of existing departmental space by collaboration with the Director of Space Management and Planning to determine the feasibility of converting labs/studios into other uses. If conversions are possible they may help alleviate the need for offices and research space and in turn increase utilization of remaining labs/studios.

Units Responsible: Departments, Colleges, Academic Affairs (primarily Office of Space Management and Planning), Business Affairs (primarily Design and Construction and the Physical Plant).

Assessment Strategies: Series 25, X-25 report generator using the snapshot date data for each semester. Use current building and room inventory data to verify number of labs, capacity and square footage.

Five-year timeline: Completion date is as needed.

Estimation of resources required: Dependent on complexity and number of renovation projects.

Activity 3: For all future renovations and new construction, offices meet or exceed the North Carolina System minimum square foot standards. Additionally, identify all current substandard office space for renovation possibilities.

Rationale: State guidelines currently provide for a minimum office size of 140 square feet for faculty offices. Inventory data indicates many faculty offices are well below this standard. New construction and renovations should be required to conform to the state standard and resources should be made to improve the existing spaces as possible. It is recommended that departments undergoing renovation or new construction determine space needs by collaboration

Objective 2 – Space Management

with the Director of Space Management and Planning to determine the possibilities.

Units Responsible: Departments, Colleges, Academic Affairs (primarily Office of Space Management and Planning), Business Affairs (primarily Design and Construction and the Physical Plant).

Assessment Strategies: Use current building and room inventory data to verify and analyze number of offices and square footage.

Five-year timeline: Ongoing.

Estimation of resources required: Dependent on complexity and number of renovation projects.

Activity 4: Track classrooms and labs off-hour schedules and use (5 - 9 PM).

Rationale: Utilization of space in non-traditional time slots should be investigated as pressures are mounting for increased research and office spaces in most academic units. It is recommended that departments in need of space first examine the possibility of the reallocation of existing departmental space by collaboration with the Director of Space Management and Planning to determine the feasibility for other time slots which may prove useful in a changing student population.

Units Responsible: Departments, Colleges, Academic Affairs (primarily Office of Space Management and Planning), Business Affairs (primarily the Physical Plant).

Assessment Strategies: Use current building and room inventory data along with snapshot data and analyze with X25 software

Five-year timeline: Ongoing.

Estimation of resources required: Staffing of courses to be delivered.

Objective 2 – Space Management

Activity 5: Create a living campus master plan that is continually updated to identify sustainable infrastructure solutions to efficiently and effectively meet the infrastructure needs of the University's growing enrollment.

Rationale: As the University grows to keep pace with a rapidly growing state population, a viable and living campus master plan is required to ensure the best use of limited real estate assets. A static master plan that is periodically updated cannot keep pace with the rapid change in the coming years. The University should create a facilities planning office that can leverage Computer Aided Design (CAD), Geographical Information System (GIS), and Space Management software to provide best value alternatives to the growing campus needs.

Unit Responsible: Academic Affairs (primarily Provost's Office and the Office of Space Management and Planning), Business Affairs (primarily Design and Construction and the Physical Plant).

Assessment Strategy: Creation of a Campus Infrastructure Planning Office and implementation of a living Campus Master Plan.

Five-Year Timeline:

Year 1: Identify staffing, space and software requirements.

Year 2: Hire Staff and create planning office

Year 2-5: Provide world class facility planning support to the University.

Estimation of Resources: \$150K/year for staff and equipment support. Cost would be offset by improved facility design criteria, lower acquisition costs and inflation cost savings due to accelerated acquisition. Every year a project is delayed results in a loss of approximately 8% of buying power or scope for the appropriated project funds.

Objective 2 – Space Management

Activity 6: Ensure that campus interior and exterior space is adequately maintained to create an attractive learning and working environment in alignment with the University’s mission.

Rationale: The University does not have an interior finish or furniture replacement plan. Many building interiors have not been painted or have had carpet replaced in decades. As competition for the best and brightest faculty and students increases, attention must be paid to the environment in which faculty and students work and learn. Students cannot learn much about a University’s academic quality on a visit, but they can and do notice the quality of the facilities they tour. Lack of attention to interior finishes can reflect a lack of concern for other University programs.

Unit Responsible: Business Affairs (primarily Design and Construction and the Physical Plant).

Assessment Strategy: Dollars per square foot invested in academic building interior finish replenishment. Customer feedback concerning satisfaction with current physical working environment.

Five-Year Timeline:

Year 1: Identify and prioritize current backlog of required interior and exterior finish maintenance. Create a team consisting of facilities staff and college representatives to generate an annual Integrated Priority List of projects.

Year 2-5: Begin corrective measures to replace finishes based on the Integrated Priority List and funds available.

Estimation of Resources: Target 10 percent of R&R funding to be set aside each year to address interior/exterior finish maintenance backlog.

Objective 3 – Information Technology

Strategic Direction 7: Employ data-based decision strategies to ensure the most efficient use of university resources.

Objective 3: Increase the effectiveness of computer and other information technologies on campus.

Activities that are Measurable:

Activity 1: Ensure the appropriate classroom technologies exist throughout campus to support instruction

- Establish classroom technology types and the adequate percentage of each
(See <http://www2.acs.appstate.edu/hardware.htm>)
- Develop standards for cost effectiveness, support and ease of use.
- Develop a deployment and refresh plan based on expected type and use levels

Rationale: Deploying standard classroom technologies across campus enhances faculty and student productivity and learning. With the use of technology in the classroom increasing, cost effective, supportable and common platforms maximize use.

Units Responsible: Departments, Colleges, Academic Affairs, Information Technology Services.

Assessment Strategies:

- Conduct an annual inventory of all classrooms to include the type of technology level and utilization based on class and event use
- Develop metrics that will identify and promote the optimum use of these types of classrooms.
- Facilitate academic departments input based on the needs of their faculty to facilitate planning and scheduling.

Five-year timeline:

- Assess annually
- Outfit and/or update roughly 20% of classrooms per year

Estimation of resources:

- \$560,000 per year for equipment and installation
- Three full-time personnel and two to three student positions to:

Objective 3 – Information Technology

- Monitor classrooms and equipment
- Report technical problems and issues
- Provide faculty and staff training
- Research new and emerging technologies
- Maintain and replace instructional technologies in the classroom

Activity 2: Ensure that faculty and staff have adequate technology resources to perform their assigned duties

Rationale: Key factors in creating a productive workplace include the type of workstations and associated suite of software tools. With the use of technology increasing, cost effective, supportable and common platforms maximizes efficiency.

Units Responsible: All Divisions

Assessment Strategies:

- Conduct an inventory of state owned campus workstations to assess their adequacy in performing the expected job related functions.
- Use collected data to determine refresh strategies
- Track software usage and demand to inform decisions related to licensing levels
- Establish metrics to determine appropriate support levels

Five-year timeline: Each year should see significant improvement as we move forward with this model. By the end of the five years, this should be a very cost effective and efficient model.

Estimation of resources:

- Improvements in reliability and appropriate usage of workstations should result in a significant reduction of human resources required for maintenance and support of older equipment and outdated software.

Objective 3 – Information Technology

Activity 3: Ensure students have adequate technology resources to engage in instructional activities

Rationale: Moving toward a more standardized approach to the selection and support of workstations both on campus and at the students' residence will enhance student access to technology. With the use of technology increasing, standardizing our efforts on cost effective, supportable, and common platforms maximizes efficiency. We will combine the university's ability to control campus-owned devices in student labs, teaching classrooms, and public areas, with encouraging students who bring technology on campus to follow a model that provides a supportable framework on campus. This approach should improve our ability to help students resolve problems and enhance their instructional experiences.

Units Responsible: Departments, Colleges, Academic Affairs, Information Technology Services.

Assessment Strategies:

- Conduct regular inventories of state-owned campus workstations to assess their adequacy in performing the expected job related functions and track their usage patterns.
- Survey and track service center activity on student-owned computers to better understand the support and maintenance needs related to these types of devices.
- Monitor wireless access patterns to assess mobile use of technology.
- Track software usage and demand to inform decisions related to licensing levels

Five-year timeline: This activity will begin immediately and will be fine-tuned each year to optimize the benefits for the student and our campus support groups.

Estimation of resources:

- We plan to leverage vendor warranty service with on-campus support to minimize impact on staff. We need to establish a metric to determine the appropriate support levels for our student technology support structure.

Objective 3 – Information Technology

Activity 4: Develop an efficient and comprehensive support structure for Teaching and Learning with Technology and the emerging eLearning model of anywhere/anytime education.

Rationale: In addition to the current support and growth using technology to enhance instruction on-campus, we must dramatically increase access to higher education constituents whom we have been unable to serve with our historically residential focus. Moreover, strategically developing technological modes of instructional delivery provides a framework for continuation of instruction in the event of a serious disruption of normal operations.

Units Responsible: Departments, Colleges, Academic Affairs, Information Technology Services.

Assessment Strategies:

- Develop metrics for numbers and accomplishments for:
 - Faculty trained in using the newly adopted Moodle course management system
 - In-Stream and Follow-up assessments of support and professional development provided
 - Track number and use of new or redesigned hybrid and on-line classes
- Develop rubrics for evaluating course and/or material designs.
- Use both in-stream and post-course assessments by students for feedback on efficacy and student perceptions of the use of the selected technologies and course designs.

Five-year timeline:

- Immediate faculty training on Moodle in workshop series of 20-30 persons
- Continued migration from Web CT to Moodle through fall 2008
- Develop 15-20 courses per semester once structures are in place

Estimation of resources:

- One full-time web developer to support faculty in the migration to Moodle
- Personnel needs depend on evaluation of faculty served, number of courses, and pace required to address high priority need

Objective 4 – Energy/Utilities Conservation

Strategic Direction 7: Employ data-based decision strategies to ensure the most efficient use of university resources.

Objective 4: Improve resource conservation efforts on campus to conserve fiscal and natural resources while supporting our core values of a genuine respect of the natural environment and sustainable principles.

Activities that are Measurable:

Activity 1: Create a campus resource conservation office and implement resource conservation technologies.

Rationale: Energy and water costs make up over 58% of the facilities maintenance and operations cost for the university. At the present time, little to no funding has been leveraged to employ simple supply side resource saving strategies.

Unit Responsible: Physical Plant and Design and Construction (Business Affairs)

Assessment Strategy: Measurement of MMBTUs and gallons of water per square foot of building space.

Five-Year Timeline:

- Hire Manager and begin energy and water conservation audits.
- Provide for internship opportunities for undergraduate and graduate students.
- Implement low cost energy saving projects (e.g. lighting upgrades from T-12 to T-8 lighting)
- Develop and implement building HVAC energy management strategies including building setbacks while buildings are not in use.
- Improve metering to accurately document energy use.
- Achieve a five year reduction in energy use of 20% of the current campus baseline.

Estimation of Resources:

- University may be able to self-finance through New River Light and Power. Otherwise, employing an Energy Savings Performance Contract vehicle may be an alternative method.
- Maximum payback for early projects should not exceed three years. Projects would essentially be self resourced through savings.

Objective 4 – Energy/Utilities Conservation

- Energy manager position was converted from an existing position.
- Estimated short term energy savings of \$1.2 million per year and long term savings of \$2.6 million per year could be realized if the University fully supports energy projects and adopts resource conservation as a core value.

Activity 2: Implement a campus-wide wise resource conservation management and comprehensive recycling program targeting students, faculty and staff to reduce energy use and conserve resources for existing grounds and facilities.

Rationale: All energy costs for academic buildings are paid for with state funds. There is currently no incentive to reduce energy or water use on the demand side. As the premier institution of higher education in the Northwestern North Carolina region, Appalachian must have the vision and take a prominent role in setting the standard of an environmentally responsible institution. As the University positions itself to be a leader in the area of sustainability, programs must be put in place to empower and inform resource users to adopt sustainable principles in their purchase and use of resources. This effort must also include the reuse of resources consumed by improving campus recycling participation and the type of waste streams recycled.

Unit Responsible: Physical Plant with adjunct committee (Faculty Senate, Staff Council), and Student Development support.

Assessment Strategy:

- Reduction in MMBTUs and gallons of water per square foot of space targeted for conservation.
- Reduction in tipping fees/tonnage for wastes headed for the landfill.

Five-Year Timeline:

Year 1: Initiate program development. Benchmark programs at other universities. Develop initial plan and public relations campaign.

Year 2 – 5: Implement plan and track progress.

Objective 4 – Energy/Utilities Conservation

Estimation of Resources: \$25-\$35K for advertisement and program support. Additional resources may be generated from recycling receipts and/or energy savings. Energy savings from this activity are captured in activity 1.

Activity 3: Adopt sustainable practices and principles and attain Leadership in Energy and Environmental Design (LEED) certification in major construction or rehabilitation capital projects if cost effective from a life-cycle cost perspective.

Rationale: Current construction and major rehabilitation projects do not fully exploit potential resource conservation and sustainability methods. Large energy savings and reductions in traditional fossil fuel use could be obtained by implementing appropriate technologies. As the University positions itself to be a leader in the areas of sustainability, programs must be put in place to empower and inform resource users to adopt sustainable principles. Cost of initial acquisition typically increase initial project cost by 2 to 5 percent but return the investment in as little as one year.

Unit Responsible: Academic Affairs (primarily Provost's Office and the Office of Space Management and Planning), Business Affairs (primarily Design and Construction and the Physical Plant).

Assessment Strategy:

- Reduction in energy and non-renewable resource use per square foot of rehabilitated buildings in comparison to historical use.
- Reduction in energy and non-renewable resource use per square foot of new buildings in comparison to similar building type base line use.
- Percentage of square footage of new or rehabilitated buildings that meet or exceed LEED certification requirements.

Five-Year Timeline: On-going

Estimation of Resources: 2 to 5 percent in addition to initial project acquisition costs.