

# **RESULTS THROUGH PRODUCTIVITY REPORT**

**FOR OHIO PUBLIC  
HIGHER EDUCATION**

**2007**



**OHIO BOARD OF REGENTS  
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# EXECUTIVE SUMMARY

In April 2004, the Governor's Commission on Higher Education and the Economy (CHEE) recommended that the Ohio Board of Regents submit a biennial "Results through Productivity" report to the Governor and the General Assembly in connection with the budget process. This report is the second such report published by the Regents. The purposes of this report are to provide policy makers and the public with evidence of actual efficiencies attained and to be attained by the state's public colleges and universities and to stimulate further efficiencies.

From FY 1999 to FY 2005 full-time equivalent (FTE) campus enrollment increased 16.1%, from 320,595 to 372,336. Over the same period campus costs per FTE in constant 2005 dollars decreased 2.8%, from \$11,084 to \$10,779. Ohio's public campuses are educating more students at a lower, inflation-adjusted cost.

During that period, state support per FTE declined \$1,176. The campuses have covered \$305 (or 26%) of that lost revenue through cost reductions. The balance (\$871) has been defrayed primarily through tuition increases.

Based on information provided to the Board of Regents by the colleges and universities, the Regents submit this Results through Productivity report. This report demonstrates that:

- The colleges and universities undertook administrative cost savings initiatives that saved in excess of **\$265 million** in FY 2005 and FY 2006.
- The colleges and universities undertook academic cost savings initiatives that saved in excess of **\$57 million** in FY 2005 and FY 2006.
- A number of institutions are engaging in new collaborative efforts that either reduce costs or provide far broader educational opportunities at no additional cost, including regional academic and research alliances, shared resources and purchasing, and shared facilities.
- Through pilot projects in course and curriculum redesign, improving student learning and faculty teaching, distance learning and community partnerships, institutions are reducing costs and improving outcomes through innovation.
- The institutions introduced a number of new programs to meet state need, notwithstanding limited new state funding.

It must be emphasized that the Regents received a very large volume of institutional responses to the questions on efficiencies and new initiatives. The examples reported here represent a very small fraction of those responses and are primarily intended to give the reader an indication of the range and variety of actions undertaken by public colleges and universities in Ohio. A lengthy appendix containing a more complete set of institutional responses is available.

Finally, this report provides support for two legislative initiatives that could greatly reduce institutional costs in the construction context: the elimination of the statutory requirements for multiple prime contractors and for the use of the prevailing wage.

## RESULTS THROUGH PRODUCTIVITY



# Administrative Cost-Saving Initiatives

*Institutions have undertaken numerous initiatives to either reduce or contain administrative costs. Those initiatives have taken a wide variety of forms, but several recurring themes can be found across many institutions.*

- Personnel actions
- Electronic communications and technology
- Energy and facilities
- Increased revenue from other sources
- Healthcare benefits management
- Contract restructuring and purchasing
- Food service cost savings

*Some examples of these activities are illustrated on the following pages.*

## FOOD SERVICE COST SAVINGS

**Bowling Green State University** increased operating efficiencies in Commons Dining/Chily's Convenience Store, saving \$200,522 over two years. Food products and dining service supplies expenditures were reduced by \$95,000 in 2006.

**Wright State University** implemented a number of Dining Services efficiencies and cost savings. The Sodexo food plan was renegotiated (\$500,000), marginal evening food delivery service was closed (\$13,000), and a food delivery service contract was awarded to Donatos Pizza that will return 21% of the gross sales to the University (\$35,000).

## CONTRACT RESTRUCTURING AND PURCHASING

The **Wright State University School of Medicine** re-structured its Professional Liability Policy, dropping the excess liability coverage and further leveraging purchasing power through a consortium (\$184,000).

**Miami University** participated in Inter-University Council Purchasing Group Consortium Contracts, saving \$150,000 in FY 2006.

Administrative cost savings at **Bowling Green State University** include joint purchasing contracts (\$70,000), discontinuing acceptance of credit cards for non-auxiliary transactions (\$700,000), negotiation of new life insurance contract (\$200,000), and implementation of the Kronos Automated Timekeeping System (\$165,000).

**Northeastern Ohio Universities College of Medicine** implemented a campus procurement card program for small dollar purchases, reducing purchase orders by more than 75% and saving \$175,000.

In April of 2005 **Sinclair Community College** teamed with Montgomery County in order to utilize the county's surplus sale process. This change has resulted in labor savings and increased revenue from surplus sales by \$44,000.

**Clark State Community College** participated in a natural gas storage program where winter month natural gas was purchased at off-peak prices, saving \$12,500 annually.

**Owens Community College** launched the "From Your Desktop to Your Door" on-line purchasing program with OfficeMax. Office supply orders are placed at the desktop and promptly delivered by Office Max to the offices initiating the order. The College receives deep discounts in this arrangement. Annual savings total \$10,000 plus volume incentive rebates of about 7% of annual net sales.

**Stark State College of Technology** restructured communications agreements, saving \$22,000; and reduced bad debts by using attorney general for collections.

## RESULTS THROUGH PRODUCTIVITY

## PERSONNEL ACTIONS

**Ohio University** consolidated its University Planning, Renovations and Engineering offices. It was determined that combining the units into one department could streamline facility renovation processes, improve coordination of construction projects at the university, eliminate customer confusion regarding the project process, and also result in cost savings. This resulted in the elimination of five (5) positions. The personnel savings coupled with a fee charged to projects has resulted in a net reduction of \$600,000 in university budget support to the combined department.

**Sinclair Community College** did not replace two programmer/analysts who resigned during the previous two fiscal years. These positions were not replaced, saving \$100,000.

**Wright State University** consolidated business manager positions in the School of Professional Psychology, School of Business, and the College of Education & Human Services, saving \$100,000.

The **University of Akron** combined positions in its libraries, saving \$146,600. Elimination of an associate dean's position in the College of Education saved \$70,000. Elimination of administrative positions in College of Arts and Sciences saved \$50,000.

**Cleveland State University** eliminated one vice president (\$200,000), a part-time director (\$20,000), two assistant dean positions (\$42,845), two student support positions (\$77,344). These personnel actions saved \$340,189.

**Bowling Green State University** implemented a number of cost savings in human resources activities, including a Staff Retire and Re-Hire Program (\$417,586), and increased use of temporary personnel services (\$35,000).

**Clark State Community College** eliminated a physical plant position, saving \$55,000 annually.

A reduction in workforce at **Northeastern Ohio Universities College of Medicine** (37 administrative & classified positions) saved \$1,391,000 annually.

In October of 2006, the **University of Cincinnati** announced the consolidation of its divisions of Finance and Business Services into one division called Administration and Finance. The new division permanently reduced the number of supervisory and management positions by approximately 94, saving \$5 million. More importantly, by organizationally relating key service areas with fiscal operations, UC is beginning to deliver administrative infrastructure more efficiently and with greater accountability.

**Sinclair Community College** saved \$231,000 over two years by reducing part-time and student wage expense in non-instructional areas.

**Jefferson Community College's** President declined raises in 2006 and 2007, saving \$6,350. In addition, part-time recruiter and bookstore positions were not replaced in FY 2007, saving \$35,713.

**Columbus State Community College** offered Early Retirement Incentive program to employees, with payroll savings of \$1.6 million to be realized beginning in FY07.

**Columbus State Community College** eliminated an Associate Provost position and its associated administrative support, saving \$225,000 annually.

**North Central State College** eliminated four administrative positions by combining the Business and Education Division and the Arts and Sciences Division (\$73,800 savings), and eliminating positions in the Student Success Center (\$40,500), the College Child Development Center (\$138,949), and Campus Recreation Center (\$50,571).

## HEALTHCARE BENEFITS MANAGEMENT

**The Ohio State University** reduced health benefit costs, saving \$5.6 Million.

**Jefferson Community College** implemented one year health care premium savings of \$56,144. Further reductions are subject to collective bargaining which is currently in process.

**Washington State Community College** implemented Health Savings Accounts for employees, saving \$50,000 per year.

## INCREASED REVENUE FROM OTHER SOURCES

The **Wright State University** Army and Air Force ROTC increased the Armed Services external support for staff funding by \$1,003,664.

**Jefferson Community College** increased revenue by renting space on water tower for cellular service (\$31,700).

**Owens Community College** sold naming rights for buildings (new or old) and/or building parts, resulting in \$150,000 of additional revenue.

## RESULTS THROUGH PRODUCTIVITY

## ENERGY AND FACILITIES

**Wright State University's** Physical Plant division implemented a High Efficiency Cleaning Program. The program created higher custodial cleaning efficiency through the trained utilization of pressure washing equipment for restrooms and the use of back-pack vacuums for office space. Net yearly savings (taking into account higher wages for remaining staff) total \$220,659.

**Northwest State Community College** turned custodial closets and storerooms into offices, increasing space utilization. The school also closed the cafeteria to use space as student study and faculty/staff lounge, used first floor atrium as eating area, moved police office to atrium, downsized copy center to create workforce development training areas, and eliminated student mailboxes (moved to electronic communications).

**Miami University** began electrical power generation - peak sharing in 2006, saving \$266,762 within six months.

Efficiencies in **Bowling Green State University's** maintenance area, e.g., use of outside contractors for maintenance of the building and equipment has decreased considerably, saving \$49,360 annually.

**Kent State University** implemented cost reductions and productivity Improvements for Physical Plant, Construction and Public Safety Operations that totaled \$3,474,810 over two years.

Energy-savings efforts at the **University of Cincinnati**, led by Utilities and Facilities Management, have resulted in \$2.6 million dollars in cost savings in the last year.

**Northeastern Ohio Universities College of Medicine** implemented heating and cooling conservation practices, saving \$77,796.

**Clark State Community College** locally administered a construction project, saving \$250,000.

**Miami University** replaced exterior residence hall light bulbs with energy efficient compact fluorescent bulbs, saving \$10,500 over the life of the bulbs.

**Shawnee State University** replaced 30 year old mechanical systems in the Health Science Building with new Variable Air Volume (VAV) equipment. Direct Digital Control (DDC) was added at the room level to better schedule building temperature control during unoccupied times. Occupancy sensors were added to turn off lights and reset room temperatures during unoccupied times. New electronic ballasts and T8 lighting replaced magnetic ballasts and T12 lamps. These actions saved \$17,000 per year.

**Lakeland Community College** commissioned a comprehensive energy use assessment in order to: evaluate the potential to increase the energy efficiency of current and planned buildings; explore the potential for a more efficient energy supply, pursuing proven technology options already existing in Europe; and to minimize the overall environmental impact of energy use, including greenhouse gas creation. This detailed assessment was carried out by a team that included College management and facilities staff, together with architectural, business, and energy expertise from both the USA and Europe. This study provides the college with an energy master plan template that can reduce energy consumption by 25% to 50% over the next five to seven years.

**Sinclair Community College** engaged in a number of physical plant improvements and economy measures. A partial listing includes replacing outside air dampers to more efficient dampers to stop excess air leakage (\$27,500), replacing hot water heaters with heat exchangers fed from existing boilers (\$8,500), using less ice melter/salt (\$7,823), installing larger gasoline tank and new diesel fuel tank (\$5,018), replacing eight to 10 motors per year with high efficiency motors (\$4,000), installing more efficient lighting in half of the parking garage (\$3,750). These actions saved a total of \$56,591.

**Lorain County Community College's** Physical Plant Department saved \$103,033 by reducing maintenance contract costs by eliminating heating and air conditioning service contracts with Honeywell and replacing service with new staff.

## OTHER

**Terra State Community College** recently completed a two-year process of converting from a quarter system to a semester calendar. This should result in increased administrative savings.

**Central Ohio Technical College** eliminated its full-scale conference center, saving \$100,000 per year.

FY 2006 budget cuts at the **University of Cincinnati's** Departments of Construction Management (elimination of 26 positions), Renovations, Capital Finance, and Campus Planning totaled \$2,138,722.

**Kent State University's** main campus implemented cost reductions and productivity improvements in Finance Activities (\$740,778), Student Service Operations (\$668,863), and Academic Support Operations, (\$613,232). Reductions in administrative support costs at the regional campuses totaled \$2,305,204.

A reorganization of the **Ohio State University** Advising and Academic Services program allowed for more direct contact with students while reducing the number of high level administrators as well as increasing access through centralized Technology Services, saving \$435,000.

## RESULTS THROUGH PRODUCTIVITY

## ELECTRONIC COMMUNICATION AND TECHNOLOGY

**Wright State University's** Office of Student Affairs now processes Lake Campus, main campus, and Graduate School admissions activities through one central database management system rather than separate systems, saving \$140,000 annually. All client communication is now done electronically, saving \$10,000.

The **Ohio State** Research Foundation implemented Electronic Research Administration software systems and tools to manage faculty grants and contracts, saving \$800,000 in 2006 and a cumulative \$2.9 million since 2000.

**Miami University** implemented an online application for undergraduate admissions – eliminating an external contract costing \$60,000 annually through CollegeNet. In addition, overtime costs for Admission staff have been reduced 15-20% annually.

**Sinclair Community College** discontinued the practice of using separate software packages to support its portal and learning management system. Software that performs both functions was purchased, saving \$40,000.

**Columbus State Community College** converted legacy computer historical data to other common formats that allowed cost savings in equipment maintenance, consulting, and other resources used, saving \$404,362 annually.

A variety of IT enhancements at **Northeastern Ohio Universities College of Medicine** were implemented. These included web intranet transactions (\$11,000), communications upgrades (\$70,800), and expanded use of video-conferencing (\$5,000).

## RESULTS THROUGH PRODUCTIVITY



# Academic Cost-Saving Initiatives

*Institutions have undertaken numerous initiatives to either reduce or contain academic costs. Those initiatives have taken a wide variety of forms:*

- Personnel actions
- Class scheduling and class size management
- Increased revenue from other sources
- Technology enhancements
- Program downsizing

*Some examples of these activities are illustrated on the following pages.*

## INCREASED REVENUE FROM OTHER SOURCES

**Owens Community College** secured \$324,000 worth of equipment through corporate donations and grant activity in FY2005 & FY2006.

**Marion Technical College** gained approval for a \$196,000 2-year grant from the Ohio Board of Nursing to expand Nursing enrollment capacity. This funding offsets the cost of 1.4 annual FTE faculty.

## CLASS SCHEDULING & CLASS SIZE MANAGEMENT

**North Central State College** reduced the number of class sections offered and increased class size, saving \$15,000 per year.

**Cincinnati State Community & Technical College** developed new class fill rate standards, saving \$36,000 per year; and eliminated low enrollment off-site classes, saving \$48,000 per year.

**Hocking Technical College** increased its use of adjuncts and used more administrators and staff in teaching, saving \$58,794.

**Belmont Technical College** increased the allowable minimum enrollment in a course section, saving \$100,000 annually.

**Shawnee State University** increased average class size from 15.9 students in AY 2005 to 16.2 in AY 2006, reducing the number of class sections offered by 43 and saving \$163,000.

**The University of Akron** increased summer class sizes campus wide, saving \$792,597.

**The Ohio State University - Marion Campus** implemented a more stringent course enrollment and class cancellation policy, and shifted toward class offerings that attract larger numbers of students, saving \$130,000 annually.

## TECHNOLOGY ENHANCEMENTS

**Columbus State Community College** began offering all course syllabi electronically in 2004 using the BlackBoard Platform, saving \$100,000 annually. Joining the Ohio Learning Network BlackBoard Consortium with the University of Cincinnati saved an additional \$40,000 annually.

At **Clark State Community College**, the online Medical Terminology course was converted to a self paced on-line course with more automated feedback features that resulted in less instructor man-hours which allowed an increase in the student enrollment capacity from 25 to 50 per section. Annual savings of \$7,300 were realized.

**Lorain County Community College** piloted several course redesign projects with the goal of enhancing the quality of learning, increasing student engagement and retention, employing technology, and reducing overall costs. After a Microeconomics course redesign, student test scores improved, student success rates increased, and costs per student fell by \$15. The Microeconomics course redesign won the ANGEL IMPACT Award in 2006.

**The Ohio State University** Law School increased use of communication technology in course delivery, faculty research & publication, and alumni correspondence, saving \$83,000 per year.

## RESULTS THROUGH PRODUCTIVITY



## PERSONNEL ACTIONS

The **University of Toledo** reduced support personnel costs, saving \$171,814 in FY 2005 and \$1,235,318 in FY 2006. Vacant faculty positions were eliminated or deferred, saving \$467,255 in FY 2005 and \$1,958,786 in FY 2006.

**Cleveland State University** eliminated faculty positions in 2005, saving \$270,000. Hiring term faculty instead of tenure track faculty saved an additional \$52,900.

The **Medical University of Ohio** adopted a limited STRS Retirement Incentive Plan for faculty, saving \$1.8M.

**Kent State University** eliminated early retiree faculty positions on the main campus, left some faculty positions vacant at both the main campus and the regional campuses, and split faculty appointments across multiple campuses. These personnel actions saved a total of \$5,487,115. Similar actions taken in FY 2006 saved \$5,562,136.

**North Central State College** did not replace full-time faculty in FY 2005 and FY 2006, saving \$110,697.

**Cincinnati State Community & Technical College** did not replace faculty in Mechanical Engineering Technology, Computer Networking Technology, and Graphics, saving \$260,000 per year.

**Clark State Community College** delayed hiring a full-time Mathematics faculty professor by one year, saving \$60,000.

**Sinclair Community College** reduced faculty release time equivalent to eight part-time faculty positions in 2006, saving \$190,000.

A faculty early retirement buyout at **Lakeland Community College** from fall 2005 to June 2008 is expected to net savings of \$500,000.

## OTHER

A FY2007 budget realignment at **Ohio University** required a \$9,300,000 reduction in expenditures, with an additional \$5,000,000 cut to provide funds for strategic investment. Academic units experience a 5% reduction, and administrative units took a 9.2% reduction. A total personnel reduction of 145 FTE was achieved through layoff, abolishing open positions, attrition, early retirement, and elimination of part-time positions.

**Columbus State Community College** leased the Electrical Trades Center as an Off Campus Center. The expanded partnership with the Center saved \$414,000 over the full cost of comparable space.

**The Medical University of Ohio** merged two basic science departments in 2006, saving \$300,000. The University also has made greater use of local physicians to provide education and training, saving \$350,000 annually.

**Cuyahoga Community College** formed Strategic Partnership with the City of Cleveland to offer joint Police Academy, saving \$25,000 annually.

## PROGRAM DOWNSIZING

**Clark State Community College** designated selected low-enrollment courses in Logistics and Real Time Reporting to be only taught online. This ensured that students in the programs developed online learning skills and eliminated a need to offer day and evening sections of selected courses. This resulted in instructor savings of \$6,000 per year.

**Columbus State Community College** created certificate programs in Heating Ventilation & Air Conditioning Technology due to low enrollment in AAS Program. Enrollment doubled during this time frame which provided an influx of an additional \$205,000 revenue to the College.

**Sinclair Community College** eliminated the Disabilities Services AAS program due to diminished need for graduates due to change in State law. The Electronics Engineering Technology - Telecommunications Option AAS was eliminated due to declining enrollment and lack of community interest.

**The University of Akron's** Applied Cognitive Aging PhD program suspended new admissions to redirect resources to Ph.D. programs in Psychology that were growing. This saved \$75,000.

**Bowling Green State University** eliminated the specialization in Actuarial Science BA. It duplicated the Actuarial Science specialization in the BS degree and was eliminated due to redundancy and low demand. The Business Administration Honors Program was integrated into the University Honors Program due to low demand.

**Kent State University** eliminated the Environmental Technology Major at Ashtabula and Tuscarawas campuses in fall 2004. A public survey indicated the program was no longer needed. One tenure-track faculty was reassigned to Geography/Geology in Ashtabula.

The **University of Cincinnati's** BBA Extended Baccalaureate was downsized due to failure to achieve enrollment targets. This saved \$300,000. This program extended Business Program baccalaureate degree completion to the branch campuses for new day and evening study. Although day time enrollments were achieved, the evening target fell short and the program has been downsized to reflect this outcome.

**The Ohio State University** Survey Research Center was eliminated due to deficits in its operating budget and low faculty interest in doing their work through it. This saved \$90,000.

## RESULTS THROUGH PRODUCTIVITY



# Collaborations

*Cost-effectiveness and the delivery of high quality programs require that schools collaborate in areas where start-up costs are high and economies of scale exist. While more can be done, public higher education recognizes this and has engaged in many efforts to work together to reduce costs and offer a wider variety of academic programs.*

*Institutions have reported the following types of collaborations:*

- Regional academic alliances
- Shared resources and purchasing efficiency
- Shared facilities
- Research alliances
- Revenue enhancements

## REVENUE ENHANCEMENTS

**Wright State University** has collaborated with **Sinclair Community College** on a Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP), for which the University has enhanced revenues (NSF funding, \$1,786,559 through 2010). Anticipated consequences are increased articulation from Sinclair Community College and enhanced retention at WSU.

## SHARED RESOURCES AND PURCHASING EFFICIENCY

**Stark State College of Technology** has partnered with **Zane State College** for SkillsMax assessments, saving \$15,000 in 2005.

**The Ohio Learning Network (OLN)** has operated two major Collaboration and Learning Environment (CLE) projects since 2000. The first is a consortia of Ohio institutions that use WebCT. The consortia saves money through bulk license purchasing, and shared resources, and helps to advance the utilization of WebCT courseware. To date, this project has saved 30 Ohio institutions more than \$680,500, with \$174,339 of these savings occurring in FY 2005 and 2006.

**OLN's** second shared CLE hosting project began in 2004 with seed money from Board of Regents' technology initiatives funds. OLN partnered with the **University of Cincinnati** to host Blackboard Academic Suite and **Kent State University** to host WebCT Vista. These efforts have saved institutions \$129,635 in license fees over the last two years and provided enterprise level hosting, system administration, integration and migration services, and professional development. Current hosted clients include Marion Technical College, Edison Community College, Capital University, Columbus State Community College, Cincinnati State Technical and Community College, and Ohio Wesleyan University.

**Owens Community College** joined the Northwest Ohio Non-Profit Entities Consortium, a collaborative purchasing effort with local colleges, schools and governmental agencies that increases the purchasing power of Consortium members.

**Owens Community College** signed two 1 + 1 articulation agreements for the Dietetic Technician and Licensed Practical Nursing Certificate Program with **Terra Community College**. Terra students will take their general education courses at Terra and finish their technical courses at Owens, thus avoiding a duplication of programs and facilities for costly high-tech areas.

**Shawnee State University** partnered with the OSU South Centers at Piketon to provide non-credit business and industry training to area manufacturers and small businesses. Through the partnership, both entities are working together to develop a certificate course in entrepreneurship to stimulate new business growth, seek additional training funds, market the training and educational offerings, and conduct training and education programs jointly. Savings were about \$30,000 annually.

The **University of Akron** participates in consortial purchasing of serials for University libraries and purchased WebCT through OLN, eliminating future price increases totaling \$1.91 million.

**Stark State College of Technology** joined the Stark County Schools Council of Government's natural gas cooperative purchasing consortium in 2005, saving an estimated \$30,000.

## RESULTS THROUGH PRODUCTIVITY

## REGIONAL ACADEMIC ALLIANCES

**Lourdes College** and **Owens Community College** announced a collaboration that would allow students accepted into one of four health science programs at Owens to also earn a baccalaureate degree at Lourdes.

The **Youngstown State/Jefferson Community College** Power Plant Degree Program Partnership permits JCC to offer the degree program to students in its service district. JCC provides students with the general education courses and YSU provides the technical courses using JCC's interactive video classroom.

**Terra Community College** has partnered with other Ohio institutions to offer degrees in Education (**Lourdes College**), Engineering (**Miami University**), Phlebotomy (**Lorain Community College**), Respiratory Care (**Bowling Green, Firelands**), and Dietary Technician and Practical Nursing (**Owens Community College**).

**North Central State College** developed a program called ConNext that is designed to help high school drop-outs earn a diploma from their home high school at North Central State College. ConNext is a cooperative effort involving Pioneer Career and Technology Center, the student's former high school, and NC State. Courses are taken at NC State's computer lab in a self-paced environment using Plato software.

**Columbus State Community College** entered into collaborative agreements with **Tiffin University, The Ohio State University, Wilberforce University, University of Rio Grande, University of Cincinnati, Capital University,** and **Miami University** to offer bachelor's degree completion programs, resulting in an estimated savings of at least \$10,000 per student over comparable tuition costs for the first two years at those institutions.

**Columbus State Community College** joined the Ohio Learning Network BlackBoard Consortium with the **University of Cincinnati**, saving \$40,000 per year.

In support of its expanded transfer mission, **Belmont Technical College** partnered with **Ohio University's Eastern Campus** to offer an Associate of Arts Joint Degree, saving \$100,000 annually with an enrollment of 15-20 students. Belmont also partners with **Youngstown State University** in its Power Plant Technology program saving \$75,000 annually.

**Washington State Community College** offers credit articulation for three programs with the Washington County Career Center, thus eliminating the costs of duplicate instruction. Students in these programs realize savings of up to \$3,000.

The **University of Cincinnati** collaborates with the Cincinnati Children's Research Foundation on a joint project to provide bioinformatics support for personalized medicine efforts. The \$28M grant includes capital support for one floor of the CARE building. Faculty in the College of Medicine are included on this grant, which has resulted in several start up companies.

The **University of Akron's** College of Nursing collaborated with local hospitals to provide clinical faculty for the accelerated Bachelor of Science in Nursing option, saving \$56,000. UA also collaborates with the Medina County Career Center to offer Fire and Hazardous Materials Training.

**Wright State University** provides University College Advising at **Sinclair Community College**, encouraging students to pursue a bachelor's degree following their degree completion at Sinclair.

## SHARED FACILITIES AND SPACE EFFICIENCY

**Owens Community College** collaborated with the **University of Toledo** and Toledo Public Schools to provide Owens classes in UT and Toledo Public School facilities, thus expanding access to higher education while avoiding the cost of additional facilities.

The Coshocton Campus of **Central Ohio Technical College** provides facility efficiency by offering degrees from COTC and **Muskingum College** and is exploring opportunities with other higher education partners.

**Marion Technical College** negotiated partnerships with other Ohio Universities to rent low-utilization classroom space, saving approximately \$34,000.

**Columbus State Community College** partnered with Tolles Technical Center to offer the Practical Nursing Program, saving \$400,000 as the College did not have to build a lab.

**Clark State Community College** has partnered with the Tecumseh and Champaign YMCAs to help them fund their facilities improvements. In return, the College is provided free use of classroom space for both credit and non-credit training, saving \$10,000 per year.

**Sinclair Community College** collaborated with the YMCA to leverage existing real estate and infrastructure, thus avoiding the cost of constructing two new Learning Centers, estimated at \$1,200,000.

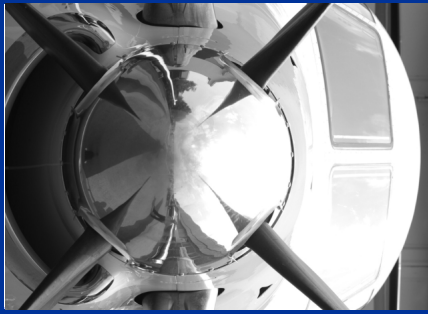
## RESULTS THROUGH PRODUCTIVITY

## RESEARCH ALLIANCES

**Owens Community College** joined the Research Consortium for Northwest Ohio with the **Medical University of Ohio, University of Toledo** and **Bowling Green State University**. The Consortium pools facilities, equipment and personnel for research activities, thus avoiding a duplication of program and facilities for costly high-tech areas.

**The University of Cincinnati** participates in the Third Frontier - Ohio Center for Advanced Propulsion and Power grant, a joint project involving five universities in Ohio (**University of Cincinnati, OSU, University of Dayton, University of Akron, Case Western Reserve University**) and several industrial partners (GE Aircraft Engines, Parker Hannifin, Glennan Microsystems, WEBCore, Timken and Argo Tech) and two federal labs (NASA Glenn Research Center and Wright-Patterson Air Force Base Research Labs) to conduct turbine engine research. The goal is to create the premier turbine engine research and development enterprise in the world.

## RESULTS THROUGH PRODUCTIVITY



# Pilot Projects

*Discovering and implementing new and more creative methods of instruction and administration are critical for both cost-effectiveness and improvement of outcomes. Higher education institutions are engaged in a wide variety of “pilots” in the following areas:*

- Course re-design
- Distance learning
- STEM (Science, Technology, Engineering, and Math) instruction

*Through the sharing of knowledge gained from these pilot projects and their implementation on a larger scale, Ohio higher education will reduce costs and improve outcomes through innovation. Some examples of these activities are illustrated on the following pages.*

## COURSE REDESIGN

**The Ohio State University** is a founding member of the Redesign Alliance, an outgrowth of its participation in the Center for Academic Transformation's Program in Course Redesign, where it developed the nationally recognized "buffet" strategy for teaching introductory statistics. Members of this Alliance will identify large enrollment courses that will be redesigned by specifying learning outcomes, adopting a variety of instructional deliveries with increased use of technology, and producing cost savings.

**Central Ohio Technical College** Natural Sciences faculty members applied for an Ohio Learning Network FIPSE grant sponsored by the National Center for Academic Transformation. The purpose of the grant was to provide funding for the re-design of a high impact course for the purpose of reducing the Drop, Failure and Withdrawal rates for that course. COTC Faculty chose a natural science course, Human Anatomy and Physiology I, as the course for re-design.

**Kent State University's** Department of English completed a course redesign project that extended through FY 05 and FY 06 for its first-year, Liberal Education Requirements (LER) composition courses, with that redesigned curriculum effective in Fall 2007. The redesign has resulted in fewer 3-hour sections on the Kent Campus for AY 06-07, resulting in an approximate savings of \$230,000.

Also during FY 05 and FY 06, the **Kent State University** Department of Mathematics redesigned its two introductory math courses. Results from a Fall 2004 pilot showed the student success rate improving from 65-70% to 85-90%. Savings are projected to be \$65,000 per year. Students will also experience savings when the Math Department completes an online textbook that it currently has under development.

**Columbus State Community College** participated in a course redesign effort sponsored by the Ohio Learning Network and the Center for Academic Transformation. Humanities 111 (History of Western Civilization) was redesigned using the “online model.”

## STEM

The Electric Vehicle Institute at **Bowling Green State University** has several applied research collaborations underway with the Electric Power Research Institute, Inc., Bowling Green Municipal Utilities, and the NASA Glenn Research Center.

A grant application was submitted by **Bowling Green State University** to Fifth Third Bank to provide a continuum of support for young women to pursue STEM careers, building on the junior high and high school Women in Science (WiS) program. Funds will be used to provide need-based student scholarships and program support for the WiS program, summer fellowships for WiS participants to work with BGSU faculty in their research laboratories, and academic scholarships to enroll at BGSU.

## RESULTS THROUGH PRODUCTIVITY

## DISTANCE LEARNING

Over the next five years, **Wright State University** will develop eight online graduate degrees, three undergraduate degrees, two certificate programs, and continue to expand the number of online General Education courses. In addition, a wide variety of individual online courses will be developed.

As of Autumn 2006, the **University of Cincinnati** has twenty distance learning programs. Fourteen are degree programs (ranging from Associate to Doctorate level), two are undergraduate certificate programs, and four are teaching endorsement programs. The majority of these programs were added over the past five years. The primary instructional approach for these programs is online delivery. This expansion has supported an enrollment increase of 55% in distance learning enrollments.

With the merger of the **University of Toledo** and the **Medical University of Ohio** in July 2006, eLearning and Academic Support expanded its facilitation and coordination of distance learning and web-assisted courses to the Health Science Campus. Several electronically delivered degree and certificate programs are now available to students from the College of Nursing. UT also participates with OLN (Ohio Learning Network) and several community colleges and other four year institutions in the Regents Associate Degree pilot project.

**Cleveland State University** has established a Center for eLearning to support eLearning initiatives in its academic departments.

**Clark State Community College** has expanded its distance learning methods: 148 of its courses are delivered online. The school anticipates developing 20 online courses per year until all appropriate courses are available online.

**Wright State University** has developed infrastructure to effectively operate a distance graduate program in Human Factors Engineering. The school is exploring the possibility of leveraging the existing infrastructure to expand distance offerings into other departments and majors.

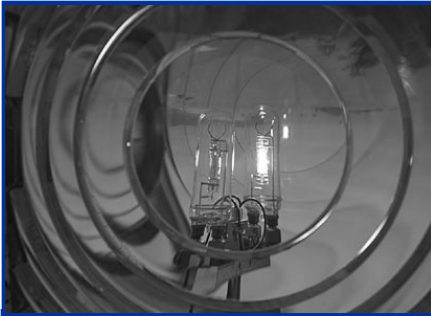
**Shawnee State University** is employing the DIDLET system (Digital Infrastructure for Distance Learning of Engineering Technology) to offer Industrial and Engineering Technologies (IET) courses to high school students for college credit. The Department of IET will have three courses on DIDLET by the end of the current academic year. They are being offered as regular SSU courses with the high school students enrolled under post-secondary option.

**Bowling Green State University** is developing a formal relationship with **Owens Community College** to help their e-students seamlessly move to online bachelor degree completion programs at BGSU. This effort would then be broadened to include other community colleges in Ohio that also offer associate degree e-programs online.

## OTHER

Through the **North Central State College College-NOW** project, high school students are able to graduate with their high school diploma and an associate degree. College-Now has been developed through a partnership between career and technology centers, area high schools, businesses, and North Central State College.

## RESULTS THROUGH PRODUCTIVITY



# Program Initiatives

*Many new initiatives or program expansions were undertaken by higher education in the last two years in order to meet the needs of Ohio's changing economy and to improve student performance. A high proportion of these were in the following areas:*

- Programs that align with Ohio's Third Frontier research priorities
- Nursing programs in response to Ohio's nursing shortage
- Programs that meet local workforce needs
- Programs in information technology
- Increased access and student success
- Community outreach
- Facility improvement
- Quality enhancement initiatives
- STEM<sup>2</sup>

*Some examples of these activities are illustrated on the following pages.*

## FACILITY IMPROVEMENTS

**Jefferson Community College** performed mandatory lab upgrades to support its Microsoft Certified Systems Administrator certificate program, CISCO Certified Network Associate and Network Professional certificate programs, and Electronics associate degree program.

**Cuyahoga Community College** has invested significant funding to purchase up-to-date equipment for the Engineering labs, particularly in the areas of biomedical and alternative energy.

## PROGRAMS TO MEET LOCAL WORKFORCE NEEDS

**Belmont Technical College** redesigned its medical coding certificate program to match current market needs, expanded its associate degree programs in Electronic Engineering and Information Technology, and created a new program in Power Plant Technology.

At **Marion Technical College**, Medical Laboratory Technology is a high priority program due to labor market shortage and increasing public demand. With a three-year headcount increase of 171%, the program has gone from nearly being discontinued to now meeting all direct program costs.

At **Owens Community College**, priority programs include Nursing, Physical Therapy Assistant, Cancer Information Management, Medical Assisting, Massage Therapy, and Life Sciences – Biology. Other priority initiatives include programs in Criminal Justice, Emergency Preparedness, and Fire Science.

**Lorain County Community College** created a new one-year technical certificate in Geographic Information Systems. The certificate provides practical hands-on experiences that can transfer to the workplace.

**Bowling Green State University's** Cooperative Education program offers students opportunities to extend classroom learning to a wide range of organizations in locations around the country. Nearly 1,500 BGSU students participated in cooperative education activities in 2005-2006.

**Northeastern Ohio Universities College of Medicine** recently began a pharmacy program in addition to its existing medical program. The initial class will matriculate in the fall of 2007.

At **Jefferson Community College**, enrollment is at a program maximum in Dental Assisting and Respiratory Therapy due to a strong demand for graduates and excellent placement. In addition, the enrollment cap for Nursing was raised from 44 to 66.

## COMMUNITY OUTREACH

**Bowling Green State University's** Literacy Serve and Learn program is an academic outreach partnership initiative between the Center for Innovative and Transformative Education and the Toledo Public Schools that has encouraged more than 500 BGSU undergraduates to develop quality learning relationships with hundreds of Toledo Public School youngsters.

## RESULTS THROUGH PRODUCTIVITY

## INCREASED ACCESS AND STUDENT SUCCESS

Bucyrus, Ashland, and Willard are new homes to **North Central State College** through Outreach Centers. All three cities will house NC State classes at on-site locations. Bucyrus High School, Ashland County West Holmes Career Center, and Willard High School will all be host locations for beginner courses leading to an NC State Degree.

Using **Bowling Green State University** faculty, students at **Lorain County Community College** may take the courses they need to obtain a bachelor's degree in Biology. In FY 2004, 18 students took part in this program; in FY 2007, 29 students were enrolled. A BA in Environmental Sciences has also been approved with classes beginning in Spring 2007.

**Wright State University** added additional staff to enhance student success and accelerate student movement into appropriate majors. The University also implemented a mentoring program for African-American males that pairs "at risk" African-American males with WSU faculty and staff.

**Miami University** began evening degree completion programs at its regional campuses. Miami Middletown began offering the Business Technology Management and Associate of Arts in Social Science through its evening degree completion program, Degree Power Schedule, in fall 2005; and Engineering Technology has offered its associate and bachelor's degrees in the evenings for many years to students of both campuses.

**Cuyahoga Community College**, with funding from the Knowledge Works Foundation as part of the "Achieving the Dream Program", is pilot testing initiatives to increase the success of developmental education students. A preliminary analysis shows that the pass rate of students in the piloted math course was 68%, compared to a rate of 55% for a sample of students drawn from other sections of the same course

A major component of **Ohio University's** Vision OHIO strategic plan includes programs designed to enhance the experience of freshmen students. Initial funding of over \$300,000 was provided with the possibility of base funding during the budgeting process for FY 2008. This component includes additional support for the creation of residential learning communities, support for additional tutors, supplemental instruction and advisors in the student help center, and increasing the number of tenure-track faculty teaching first-year courses

Nearly 21% of **Lakeland Community College's** total student population took an on-line Lakeland class during the 2006 fall term. On-line courses accounted for 10.5% of all FTEs during the 2006 fall term.

At **Washington State Community College**, a unique program called Career Pathways is designed to help low-income people gain employment in the healthcare industry.

## NURSING PROGRAMS IN RESPONSE TO MARKET SHORTAGE

**Belmont Technical College** expanded its associate degree and certificate programs in nursing, with assistance from Clay scholarships financed from a \$250,000 gift to the College's foundation.

Shortages in nursing, as well as limitations in the availability of clinical studies under a traditional paradigm, resulted in **Lakeland Community College** developing an evening/weekend nursing program. This expansion was launched during the 2004 fall term. Nursing FTEs increased from 105 in FY 2002 to 158 in FY 2006, a 52% increase.

**Cuyahoga Community College** has devoted additional resources to its Nursing Program. These resources have been used to hire additional faculty, who provide instruction to classes held on-site at Parma General Hospital. The College has also entered into an agreement, funded by the U.S. Department of Labor, to provide instruction in Nursing and Radiologic Technology on-site at the Cleveland Clinic.

## STEM<sup>2</sup>

**Bowling Green State University's** Academic Investment in Math and Science (AIMS) program is designed to help minorities and women study in STEM (science/ technology/ engineering/ math)-based disciplines, graduate in four years and pursue terminal degrees. Currently there are 70 AIMS Scholars, covering freshmen to senior years and two fifth-year seniors. About 25% of the AIMS Scholars perform undergraduate research. One AIMS researcher published in a refereed journal last year. In 2006 AIMS graduated 66.7% of the 2002 cohort of 18 in four years. Several of those graduates are pursuing post-baccalaureate studies.

Priority initiatives at the **University of Akron** include STEM<sup>2</sup> programs in Nursing, Polymer Science and Polymer Engineering, Chemistry, Biology, and Engineering (Mechanical, Civil, Chemical and Biomedical) as well as a new Ph.D. in Integrative Biosciences, allowing the University to capitalize on strengths such as enrollment productivity, research productivity, and opportunity for external funding.

**Miami University** began a new program in Chemical Engineering in fall 2005 and had sixty students registered for fall 2006.

**Cuyahoga Community College** enhanced programs in Engineering Technologies, creating a new degree program in Integrated Systems Technology, new courses in Electrical/Electronic Engineering, and submitted several alternative energy grant proposals.

## RESULTS THROUGH PRODUCTIVITY



## PROGRAMS IN INFORMATION TECHNOLOGY

**Lorain County Community College's** Computer Information Systems Web Development program offers a revised curriculum that is better aligned with business and industry. An "Introduction to International Business" course was added to the curriculum which is more suitable to the global marketplace. The program covers the design, creation and development of web sites and web-based applications.

**Shawnee State University's** Digital Simulation and Gaming Engineering Technology program prepares graduates to work as game/simulation programmers, designers, and architects. The curriculum is designed to support a team-based, open-ended project environment for engineering technology students.

**Wright State University** offers a new degree program in Alternative Energy, also one of the few such programs in the nation, that pairs well with Ohio's automotive manufacturing heritage and generates university visibility to increase engineering interest.

## PROGRAMS THAT ALIGN WITH OHIO'S 3RD FRONTIER RESEARCH PRIORITIES

**Lorain County Community College** offers bachelor's degree programs in Biology (with **Bowling Green State University**), Computer Science & Engineering (with the **University of Toledo**) and Public Health (with **Youngstown State University**). These programs address priorities identified by the Third Frontier.

**Wright State University** increased funding for Technology Transfer in the past 2 years and plans to increase that support in the future. Successful inventions lead to production of royalty income and, in many cases, some of that income is used to support further research. Faculty entrepreneurs who start businesses based on university technology will create high value jobs, which has become an important outcome for Ohio universities. The main intent of Technology Transfer is to enhance state and regional economic development, ultimately generating additional jobs and tax dollars, which in turn help keep the Dayton area and the university fiscally healthy.

## QUALITY ENHANCEMENT

New review criteria have been established for the **University of Cincinnati's** graduate review program for improving graduate programs, with program enhancements funded through prioritized use of a new tuition fund. Programs identified as "excellent" in the graduate review process include Molecular Genetics, Physics, Philosophy, Math, Criminal Justice, Developmental Biology, and Industrial Hygiene.

**Ohio State University** awarded the first round of Targeted Investments in Excellence funding in FY06 and FY07 for programs that have the potential to achieve world-wide recognition. Programs that received funding were the Climate, Water, and Carbon Program; Mathematical Biosciences Institute; Public Health Preparedness Program; Center for Cosmology and Astro-Particle Physics; Center for Clean, Sustainable Energy; Advanced Materials Initiative; Population and Health Initiative; Translational Plant Sciences Initiative; the Music Industry Program; and the Micro-RNA Project.

The **University of Toledo** completed an analysis of its academic programs that will receive priority for enhanced resources. Thirty new positions have been allocated for fiscal years 2005, 2006, and 2007. Funding over the three fiscal years for these programs totals \$800,000 in FY2005, \$881,000 in FY2006, and \$870,000 in FY2007. One-time start-up costs for these positions will exceed \$6,000,000. Programs receiving enhanced funding include Biological Sciences; Economics; Earth, Ecological, and Environmental Sciences; Geography & Planning; Physics; Astronomy; Chemistry; Science Education; Medicinal & Biological Chemistry; Pharmacology; Engineering (Bioengineering, Civil, MIME, & Chemical); and Information, Operations, Technology Management.

**Bowling Green State University's** Entrepreneurship Program - supported through a mix of public and private funding - is one of the fastest growing minors at the University. In Fall of 2006 there were 132 students who declared an entrepreneurship minor. During the 2005-2006 academic year, over 300 students took one or more courses in entrepreneurship.

## RESULTS THROUGH PRODUCTIVITY



# Multiple Prime & Prevailing Wage Requirements

*Under current law, Ohio’s public colleges and universities are governed by two statutes related to construction projects – multiple prime contracting and prevailing wage requirements – that are not imposed on private enterprises. Public higher education institutions were surveyed regarding their positions on those statutes.*

## MULTIPLE PRIME CONTRACTING

Under multiple prime contracting, construction projects are not bid to a single contractor who manages the entire project, but instead are bid to separate contractors who are in charge of different aspects of the project (electrical, framing, plumbing, etc.). The college has the job of coordinating the activities of the various contractors under this arrangement.

The institutions that undertake most of the construction projects find that this requirement increases both the time and money costs of construction.

In response to the question, “Do you favor the elimination of the requirement that you use multiple prime contractors in your capital projects and, if so, why?” 19 of 26 responding institutions favored the elimination of the multiple prime contracting requirements. Those 19 institutions represent 77% of the FY 2005/FY 2006 capital appropriations for all public higher education institutions.

## THE OHIO STATE UNIVERSITY

We strongly favor the elimination of the outdated and anti-competitive use of mandatory multiple prime contractors for construction projects (to enable us to use construction managers at risk, design-build, and single prime). Allowing universities to use the same capital construction techniques used by private business and local governments in Ohio and by public entities in most other states would increase our ability to compete for the very best researchers and their significant research dollars.

We would envision a range of savings depending on the project somewhere between 5% to 10%. For the past two fiscal years (FY05 and FY06), we would estimate savings of approximately 6%.

## KENT STATE UNIVERSITY

The use of multiple prime construction contracts in other states and in the private sector is almost nonexistent. While in theory it is argued that the lowest price can be achieved through the selection of several prime contractors, the lost coordination and accountability of a single general contractor adds time, cost overruns, and increased administrative oversight to projects that far exceed any supposed savings from awarding multiple prime contracts.

An estimated \$2.0 million would have been saved over the last two fiscal years if there was no requirement to use multiple prime contractors.

## NORTHEASTERN OHIO UNIVERSITIES COLLEGE OF MEDICINE

Ohio is one of the remaining minority states that require multiple primes for higher education capital projects. Rather than continuing debate on this issue, NEOUCOM would be in favor of proposing a series of pilot capital projects on several of the large university campuses that would allow for project cost comparisons to be made with and without multiple prime contractors. The results of these pilot projects could then be utilized in further assessing the merit of requesting the elimination of the multiple prime contractor requirement. States have reported construction project savings from 5-10 percent by eliminating the multiple prime requirement. NEOUCOM would have realized construction project savings of approximately \$190,000 and \$73,000 in FY06 and FY05, respectively.

## NORTH CENTRAL STATE COLLEGE

The elimination of multiple prime contractors would reduce the number of contractors bidding on capital projects and put more liability on the sole contractor which would ultimately raise their bid. No change in cost.

## RESULTS THROUGH PRODUCTIVITY

## PREVAILING WAGE REQUIREMENT

Contractors on construction projects bid by public colleges and universities are required to pay “prevailing” or local union scale wages.

In response to the question, “Do you favor the elimination of the requirement that you pay “prevailing wages” in your capital projects and, if so, why?” 16 of 25 responding institutions favored the elimination of the prevailing wage requirements. Those 16 institutions represent 60% of the FY 2005/FY 2006 capital appropriations for all public higher education institutions.

## CLARK STATE COMMUNITY COLLEGE

Not requiring prevailing wages results in more competitive pricing. Prevailing wages (PW) drive up project costs. PW limits contractors to normal competitive advantages with their regular wages. PW creates conflicts internally with contractor staff. People on different projects doing the same thing are making different wages.

## LORAIN COUNTY COMMUNITY COLLEGE

LCCC does not support the elimination of the State's prevailing wage requirement. The prevailing wage law has generally assured that adequate skilled, experienced labor is available for facilities projects. Repealing the prevailing wage requirement may generate short-term savings but long-term costs if workmanship is compromised and major repairs and renovations are necessary early in a building's life cycle.

## WRIGHT STATE UNIVERSITY

While the state has a role in protecting the economic interests of workers, it is not at all clear that workers on public projects ought to enjoy an advantage over those who work on other projects. It is also troubling to have this requirement apply even if the project is not being financed by state tax or bond proceeds. At a minimum, the law should be changed to apply only to projects being funded principally by the state.

## KENT STATE UNIVERSITY

In today's construction environment the only system for ensuring the existence of quality skilled trades is through the union apprentice programs. In a system where the low bidder almost always must be selected, removing the quality control that unions provide will almost certainly lead to lower quality construction and greater costs in the long run.

## UNIVERSITY OF AKRON

Prevailing wages limit the free-enterprise bidding and have added about 20 percent to our cost. This translates into additional cost of \$4.2 million in FY05 and \$5.1 million in FY06.

## SHAWNEE STATE UNIVERSITY

There are good arguments on both sides of this issue. Frequently state universities are criticized for not operating more on a business-like basis which would help save public funds. The private sector is not constrained by a requirement to pay prevailing wages on their construction projects, yet have the same concerns about quality as well as costs. We would appreciate an approach where the decision would be dependent upon whether the project was mission critical new construction, the funds available, and markers indicating quality services will be delivered on the project. Had prevailing wage not been required over fiscal years 2005 and 2006, the University estimates it would have saved about \$130,000.

## RESULTS THROUGH PRODUCTIVITY



# Cost Pressures & Institutional Responses

*Colleges were asked to describe the major forces influencing recent trends in their instruction-related operating costs and their institutions' responses to those cost pressures. The complete responses for the University of Akron and Sinclair Community College are included in this summary, along with excerpts from a number of other institutions.*

## UNIVERSITY OF AKRON

Some of the major forces influencing the University of Akron's instruction-related operating costs are:

[1] Benefits costs increased 9 percent in FY05 and 4.5 percent more in FY06. Utility costs increased 20.2 percent in FY05, and 20.3 percent more in FY06. Some of the increase can be attributed to an increase in building space.

[2] A shortage of qualified faculty in STEM, business, nursing and other fields has resulted in aggressive competition for such individuals. The University of Akron must offer competitive salaries and benefits to retain and recruit the best faculty in these fields.

[3] Student demand for classes in business, nursing and the sciences is high, but our ability to meet this demand is constrained by our funding. Higher enrollments also raise the instruction-related operating costs in every aspect, including faculty salaries, initial purchase expenses and depreciation rate of computers, instrumentation, equipment and consumable items.

[4] Students and faculty must have access to modern technology and equipment, especially in STEM fields. These costs are significant and are trending higher.

[5] We have incurred some incremental costs in the last two fiscal years as the result of having unions represent our employees. In 2005, we formed an Office of Labor Relations to help assure contractual compliance and continued good relations with our union employees.

[6] To increase the number of Ohioans holding a bachelor's degree or higher, the University of Akron has embarked on an intensive effort to improve retention and degree-attainment rates. This initiative carries incremental costs to pay for additional sections of lower-level classes, additional advisors and additional support staff to operate learning labs and other developmental programs.

## Responses to these cost pressures include:

[1] Seeking funding from non-state sources. For example, the University of Akron sought federal appropriations to build online degree programs and new certificates.

[2] Vacant positions are left open. In 2005, the University formed a Strategic Position Review Committee, the members of which review every vacancy and evaluate its impact on student learning, student service and other criteria.

[3] More reliance on non-tenure track faculty members to teach classes and increasing the size of classes at the expense of our student-to-faculty ratio.

[4] Partnering with other institutions to increase efficiency. For instance, at our Medina County University

Center, set to open in the fall of 2007, faculty from other institutions will teach programs that the University of Akron does not offer today.

[5] Raised tuition and fees both years.

[6] Launched a major resource campaign that has raised \$246 million to date. It should be noted that these funds are restricted, and therefore are not an exact substitute for state appropriation.

[7] Invested in our physical and academic infrastructure, resulting in increased enrollment.

[8] University of Akron employees pay more for their health care coverage. In 2004, employees paid about 8 % of the overall cost; today, they are paying 15 %.

## RESULTS THROUGH PRODUCTIVITY

## SINCLAIR COMMUNITY COLLEGE

The results for Sinclair Community College demonstrate a productive management of fiscal resources during a time of unprecedented cuts in state support and significant growth in enrollments. From FY 2001 to FY 2005, total FTE enrollment increased by 16%. At the same time, total expenditures per FTE student decreased by 3.6% when controlled for inflation. Simply put, the College spent less per student in FY 2005 than in FY 2001 in real dollar terms.

During this same period and adjusted for inflation, state support per subsidy eligible FTE declined by 14%. Therefore, total expenditures minus state support (which equates to tuition and other local funding) increased by 10.7% in real dollar terms. This decline in state funding resulted in significant increases in tuition to partially compensate.

### Cost drivers during this timeframe included:

- Direct costs to support increases in enrollments and services
- New programs and options in response to student and industry demands
- New student services to improve student success and retention, particularly for “at risk” students
- Competitive adjustments in salaries and wages
- Substantial increases in health care costs
- New and continuing investments in information technology systems and services

Like its counterparts in higher education, Sinclair wrestles with the cost pressures noted above. The College has taken positive steps to live within its means, as evidenced both by the responses noted above and by specific examples on the succeeding pages.

In addition, Sinclair has launched a strategic program alignment initiative in late FY 2006 covering every aspect of its operations. The College has undertaken this initiative to ensure that its programs, initiatives and services meet the current and emerging needs of the community and that financial resources are optimally utilized to support these needs.

### To mitigate these cost increases, Sinclair proactively targeted a variety of key impact areas for cost reduction and efficiency improvement. Examples are as follows:

- By increasing the average class size from 17 in FY 2001 to 18.7 in FY 2005 (representing a 10% productivity gain), the College saved approximately \$2.5 million in annual expenditures.
- Reduced operating budgets by over \$1.3 million in fiscal year 2002. Made additional budget cuts in FY 2006 of \$2.2 million.
- Used reallocation of personnel and non-personnel costs as first response to address new cost needs.
- Reduced health care costs by aggressive negotiations, plan design changes and cost shifting.
- Reduced/avoided information technology and related costs by increasing replacement lifecycles, renegotiating maintenance contracts and implementing a variety of efficiency initiatives.
- Saved energy costs by aggressively managing rates and implementing energy-improvement projects
- Secured substantial amounts of grant/external funding for key student learning improvement initiatives.

## RESULTS THROUGH PRODUCTIVITY

## EXCERPTED RESPONSES FROM OTHER INSTITUTIONS

### Increasing Cost of Technology

**University of Cincinnati** - Technical and network support for new and updated technologies represents a new cost that may need to be addressed by changing priorities within existing students technology fees as well as setting new priorities within the university budget.

**Washington State Community College** - To address the costs of equipment upgrades and replacements, which are beyond the resources available, Washington State pursues outside grant funding and classroom/lab computers are upgraded or replaced about every 5 years instead of the normal 3-year cycle.

### Increasing Healthcare Costs

**Shawnee State University** - Shawnee State University is under extreme cost pressures being driven by an explosive growth in health care expenses. From FY 02 to FY 06 the University's health care costs increased 58%; the CPI increase was only 12% over the same time period.

**Lakeland Community College** - As a result of entering into a local K-12 school district's consortium to purchase group health care and life insurance benefits, Lakeland Community College's average annual health care costs per full-time employee only increased by 5.4% compared to a 14.2% increase in the local economy's health care premium costs.

### Library Materials

**Columbus State Community College** - Columbus State Community College has responded to the increased cost of library materials by paying dues to OhioLINK and OhioNET so that these library consortia can serve as the negotiating organizations for the purchase of group licensed resource contracts.

If the library had to negotiate each of these contracts for licensed resources individually, the cost would be far more than the current dues paid annually by consortia members.

### Aging Facilities and Space Needs

**Kent State University** - With 95 buildings over 30 years old - rendering them ill-equipped for today's technological and educational demands - reductions in capital support create challenges to ensuring quality facilities at Kent State University's Eight Campus System.

**Owens Community College** - Lack of physical space due to enrollment growth has led to the addition of class delivery alternatives such as web classes and leased space from Medical University of Ohio and from Toledo Public Schools to hold classes.

### Faculty Salaries

**Wright State University** - Additional engineering faculty are needed to support new programs in emerging technology areas and to support new research centers. Salaries for new tenure track faculty continue to rise at a much greater rate than inflation due to a shortage of graduating Ph.D.'s in business.

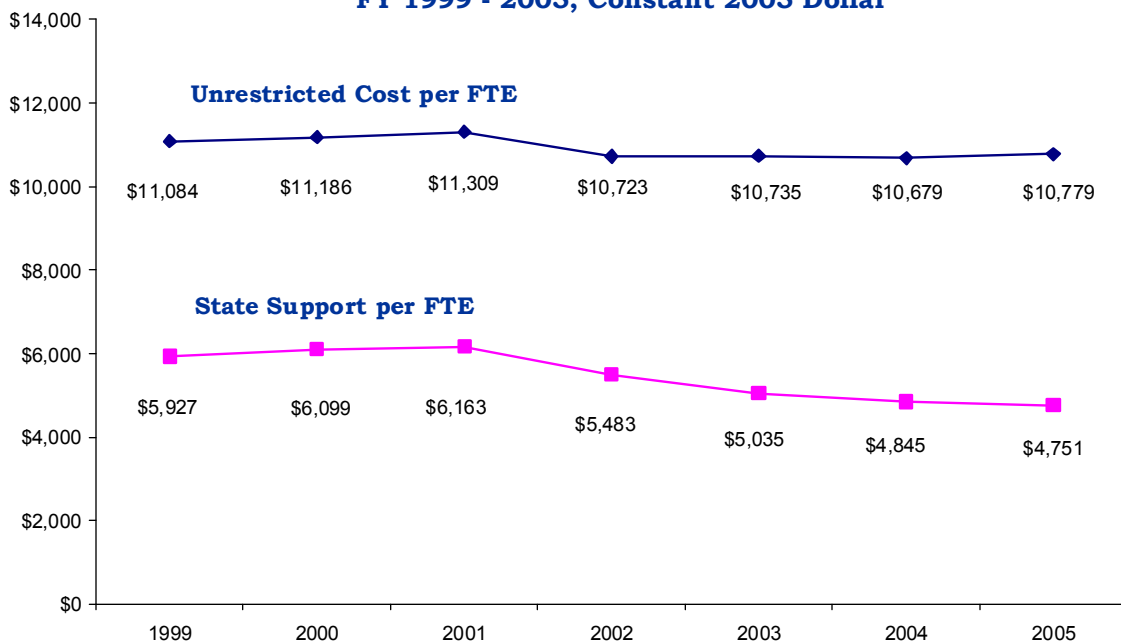
### OTHER COST PRESSURES

- Distance learning
- Improve student success
- New/upgraded course-management systems
- Testing/placement/advising
- Increased travel / professional development expenses
- Underprepared students
- Utility costs
- Financial aid

## RESULTS THROUGH PRODUCTIVITY

# TRENDS IN ENROLLMENT AND COSTS PER FTE

**Higher Education Costs and State Support per  
Full-Time Equivalent Student (FTE)  
FY 1999 - 2005, Constant 2005 Dollar**



- State support per FTE in constant 2005 dollars over the seven years ending in FY 2005 fell by 19.8% (\$1,176), from \$5,927 in FY 1999 to \$4,751 in FY 2005.
- That reduction in state support has been offset in part by a 2.8% reduction in cost per FTE (-\$305). Costs per FTE in constant 2005 dollars decreased from \$11,084 in FY 1999 to \$10,779 in FY 2004.
- The remaining difference between costs and state support must be funded either through further cost-cutting or additional forms of revenue, of which tuition is the primary source. This “other revenue” per FTE increased from \$5,157 in FY 1999 to \$6,028 in FY 2005.
- Notwithstanding the reduction in state support per FTE, all measures of public higher education enrollment have increased over this time period. Enrollment increased by 51,741 FTE – from 320,595 in FY 1999 to 372,336 in FY 2005 – a 16.1% increase. Public sector headcount enrollment increased by 50,044 students – from 424,092 in fall 1998 to 474,136 in fall 2004 – a 12% increase.

## RESULTS THROUGH PRODUCTIVITY

# INFLATION-ADJUSTED COST PER FTE BY YEAR AND INSTITUTION

	Adj. Cost 1999	Adj. Cost 2000	Adj. Cost 2001	Adj. Cost 2002	Adj. Cost 2003	Adj. Cost 2004	Adj. Cost 2005	% Change FY99 to FY05	% Change FY04 to FY05
<b>Community Colleges</b>	\$8,837	\$8,641	\$8,584	\$7,712	\$7,853	\$7,869	\$7,471	( 15%)	( 5%)
Cuyahoga Community College	\$10,549	\$9,989	\$9,984	\$8,426	\$9,292	\$9,214	\$8,055	( 24%)	( 13%)
Jefferson Community College	\$7,885	\$7,263	\$6,992	\$6,758	\$6,738	\$6,651	\$6,416	( 19%)	( 4%)
Lakeland Community College	\$8,793	\$8,845	\$9,179	\$8,417	\$7,562	\$7,839	\$7,960	( 9%)	2%
Lorain County Community College	\$7,949	\$7,703	\$7,381	\$6,859	\$6,438	\$6,227	\$6,398	( 20%)	3%
Sinclair Community College	\$7,335	\$7,449	\$7,377	\$7,038	\$6,938	\$7,041	\$7,112	( 3%)	1%
<b>State Community Colleges</b>	\$6,460	\$6,496	\$6,529	\$6,315	\$6,335	\$6,146	\$6,213	( 4%)	1%
Cincinnati State Technical & Community College	\$6,953	\$7,392	\$7,536	\$6,973	\$6,850	\$6,405	\$6,357	( 9%)	( 1%)
Clark State Community College	\$7,469	\$7,150	\$7,086	\$6,586	\$6,262	\$6,112	\$5,838	( 22%)	( 4%)
Columbus State Community College	\$6,016	\$5,840	\$5,804	\$6,061	\$6,253	\$6,020	\$6,114	2%	2%
Edison State Community College	\$6,972	\$6,853	\$6,592	\$6,952	\$6,843	\$6,364	\$6,331	( 9%)	( 1%)
Northwest State Community College	\$6,666	\$7,101	\$6,847	\$6,511	\$6,412	\$6,607	\$6,954	4%	5%
Owens State Community College	\$6,012	\$6,141	\$6,476	\$5,824	\$5,823	\$5,775	\$5,949	( 1%)	3%
Southern State Community College	\$6,603	\$6,891	\$6,339	\$5,870	\$6,033	\$6,153	\$6,171	( 7%)	0%
Terra State Community College	\$7,648	\$8,086	\$8,065	\$7,533	\$7,371	\$7,475	\$7,228	( 6%)	( 3%)
Washington State Community College	\$7,729	\$7,394	\$7,463	\$7,098	\$7,119	\$6,815	\$6,877	( 11%)	1%
<b>Technical Colleges</b>	\$7,392	\$7,432	\$7,405	\$7,058	\$6,739	\$6,765	\$6,871	( 7%)	2%
Belmont Technical College	\$6,909	\$7,044	\$6,781	\$6,914	\$6,330	\$6,337	\$6,868	( 1%)	8%
Central Ohio Technical College	\$8,062	\$7,661	\$7,384	\$6,526	\$6,220	\$6,488	\$6,752	( 16%)	4%
Hocking Technical College	\$7,373	\$7,338	\$7,265	\$7,210	\$7,360	\$7,233	\$7,199	( 2%)	( 0%)
James A. Rhodes State	\$7,399	\$7,606	\$7,969	\$7,174	\$7,078	\$7,380	\$7,633	3%	3%
Marion Technical College	\$6,847	\$7,016	\$7,227	\$6,694	\$6,352	\$6,035	\$6,422	( 6%)	6%
Zane State College	\$7,099	\$6,962	\$7,239	\$6,853	\$6,452	\$7,280	\$6,672	( 6%)	( 8%)
North Central Technical College	\$8,586	\$7,810	\$7,995	\$7,414	\$6,908	\$7,086	\$7,435	( 13%)	5%
Stark State College of Technology	\$7,045	\$7,680	\$7,283	\$7,051	\$6,267	\$6,051	\$6,137	( 13%)	1%
<b>Universities and Regional Campuses</b>	\$12,274	\$12,471	\$12,680	\$12,128	\$12,199	\$12,201	\$12,410	1%	2%
Bowling Green State University	\$10,057	\$9,998	\$10,260	\$9,894	\$10,691	\$10,845	\$10,315	3%	( 5%)
Central State University	\$25,304	\$21,301	\$21,097	\$17,476	\$17,445	\$14,966	\$13,333	( 47%)	( 11%)
Cleveland State University	\$12,184	\$11,726	\$12,030	\$11,364	\$11,753	\$12,423	\$12,957	6%	4%
Kent State University	\$9,659	\$9,768	\$9,680	\$9,479	\$9,636	\$9,169	\$9,340	( 3%)	2%
Miami University	\$10,954	\$11,151	\$11,507	\$11,285	\$11,594	\$12,156	\$12,954	18%	7%
Northeastern Ohio Universities College of Medicine	\$58,772	\$59,498	\$58,819	\$58,973	\$56,764	\$56,073	\$49,348	( 16%)	( 12%)
Ohio State University	\$14,685	\$15,257	\$15,747	\$14,444	\$14,386	\$14,197	\$14,719	0%	4%
Ohio University	\$10,721	\$11,612	\$11,608	\$10,958	\$11,310	\$11,297	\$11,481	7%	2%
Shawnee State University	\$8,636	\$8,951	\$9,847	\$9,240	\$8,417	\$8,822	\$9,094	5%	3%
University of Akron	\$12,511	\$12,128	\$11,939	\$11,422	\$11,661	\$11,521	\$11,570	( 8%)	0%
University of Cincinnati	\$13,751	\$14,357	\$14,732	\$14,662	\$14,556	\$14,920	\$14,813	8%	( 1%)
University of Toledo	\$11,517	\$11,600	\$11,515	\$11,888	\$11,607	\$11,531	\$11,789	2%	2%
Wright State University	\$13,774	\$12,815	\$12,927	\$12,438	\$11,457	\$11,322	\$11,119	( 19%)	( 2%)
Youngstown State University	\$9,591	\$9,556	\$9,844	\$9,406	\$9,604	\$9,626	\$10,108	5%	5%
<b>State Totals</b>	\$11,084	\$11,186	\$11,309	\$10,723	\$10,735	\$10,679	\$10,779	( 3%)	1%

## RESULTS THROUGH PRODUCTIVITY



# GROSS TUITION REVENUE, GRANTS, AND AVERAGE NET TUITION PER FTE

## OHIO RESIDENT UNDERGRADUATES

	YEAR					
	FY2002			FY2005		
	Gross Tuition per FTE	Total Grants per FTE	Average Net Tuition per FTE	Gross Tuition per FTE	Total Grants per FTE	Average Net Tuition per FTE
<b>Community Colleges</b>						
Cuyahoga Community College	\$1,823	\$1,490	\$333	\$2,030	\$1,699	\$331
Jefferson Community College	\$1,892	\$2,549	\$-656	\$2,468	\$2,710	\$-242
Lakeland Community College	\$2,333	\$1,245	\$1,088	\$2,969	\$1,299	\$1,670
Lorain County Community College	\$2,493	\$1,544	\$948	\$2,878	\$1,791	\$1,087
Sinclair Community College	\$1,737	\$1,553	\$183	\$2,236	\$1,675	\$560
<b>State Community Colleges</b>						
Cincinnati State Technical & Community College	\$3,646	\$1,720	\$1,926	\$3,980	\$1,671	\$2,309
Clark State Community College	\$2,824	\$2,316	\$507	\$3,618	\$2,377	\$1,242
Columbus State Community College	\$2,421	\$1,088	\$1,333	\$3,598	\$1,489	\$2,109
Edison State Community College	\$2,542	\$1,072	\$1,470	\$4,186	\$1,970	\$2,216
Northwest State Community College	\$3,160	\$2,566	\$594	\$4,143	\$1,964	\$2,179
Owens State Community College	\$2,048	\$1,587	\$461	\$2,940	\$1,869	\$1,071
Southern State Community College	\$3,218	\$2,852	\$366	\$3,146	\$1,980	\$1,165
Terra State Community College	\$3,106	\$1,380	\$1,727	\$3,957	\$1,692	\$2,266
Washington State Community College	\$3,583	\$2,497	\$1,036	\$4,242	\$2,467	\$1,775
<b>Technical Colleges</b>						
Belmont Technical College	\$2,693	\$2,072	\$621	\$4,175	\$2,645	\$1,530
Central Ohio Technical College	\$3,266	\$1,908	\$1,358	\$3,971	\$2,199	\$1,772
Hocking Technical College	\$3,227	\$1,751	\$1,476	\$4,093	\$2,097	\$1,996
James A. Rhodes State College	\$3,300	\$1,859	\$1,440	\$3,981	\$2,158	\$1,823
Marion Technical College	\$2,819	\$1,726	\$1,093	\$4,150	\$2,211	\$1,939
North Central State College	\$3,662	\$2,229	\$1,433	\$3,962	\$1,617	\$2,345
Stark State College of Technology	\$3,000	\$1,344	\$1,657	\$3,627	\$1,869	\$1,758
Zane State College	\$2,524	\$2,467	\$57	\$3,647	\$2,770	\$877
<b>University Main &amp; Regional Campuses</b>						
Bowling Green State University	\$5,680	\$1,594	\$4,086	\$8,100	\$2,258	\$5,842
Bowling Green State University - Regional Campuses	\$3,976	\$1,780	\$2,196	\$5,177	\$2,174	\$3,003
Central State University	\$3,663	\$60	\$-2,938	\$3,016	\$4,485	\$-1,469
Cleveland State University	\$3,934	\$1,993	\$1,941	\$6,656	\$2,606	\$4,050
Kent State University	\$6,009	\$1,764	\$4,244	\$8,003	\$2,157	\$5,846
Kent State University - Regional Campuses	\$4,128	\$1,696	\$2,431	\$5,485	\$2,265	\$3,220
Miami University	\$8,491	\$1,477	\$7,015	\$20,267	\$12,179	\$8,088
Miami University - Regional Campuses	\$3,286	\$1,510	\$1,776	\$4,424	\$1,541	\$2,883
Ohio State University	\$4,617	\$1,982	\$2,635	\$6,882	\$2,419	\$4,462
Ohio State University - Regional Campuses	\$3,907	\$1,708	\$2,199	\$5,233	\$2,017	\$3,216
Ohio University	\$5,232	\$1,458	\$3,774	\$7,132	\$1,848	\$5,283
Ohio University - Regional Campuses	\$4,272	\$2,252	\$2,021	\$5,477	\$2,737	\$2,740
Shawnee State University	\$3,889	\$2,340	\$1,549	\$6,353	\$2,912	\$3,441
University of Akron	\$5,061	\$2,143	\$2,919	\$7,650	\$2,539	\$5,111
University of Akron - Regional Campuses	\$3,472	\$768	\$2,704	\$4,613	\$1,318	\$3,295
University of Cincinnati	\$6,098	\$2,293	\$3,805	\$8,699	\$2,565	\$6,133
University of Cincinnati - Regional Campuses	\$3,981	\$1,559	\$2,422	\$5,068	\$1,900	\$3,168
University of Toledo	\$5,131	\$2,107	\$3,024	\$7,467	\$2,410	\$5,058
Wright State University	\$4,989	\$1,867	\$3,123	\$6,850	\$1,944	\$4,907
Youngstown State University	\$4,754	\$2,362	\$2,392	\$5,884	\$2,840	\$3,044

## RESULTS THROUGH PRODUCTIVITY

# SOURCES OF INFORMATION

- 1.** Data on higher education costs and enrollment come from the Higher Education Information system data. That data is submitted by public institutions to the Ohio Board of Regents and is the same data used to distribute state funds to higher education through the State Share of Instruction formula.
- 2.** Information on collaboration, pilot projects, program initiatives and eliminations, and cost savings came from a detailed survey of Ohio's public higher education institutions that was conducted by the Ohio Board of Regents.
- 3.** The institutional survey asked for the items of greatest significance and interest, so that a concise and informative statewide report could be compiled. The information items included in this report were selected from a great volume of survey material submitted by the institutions. These selections are not intended to summarize the actions undertaken by any individual institutions. Readers who are interested in particular institutions should read the complete surveys submitted by those institutions.
- 4.** Tuition and financial aid data were obtained from the Ohio Board of Regents annual survey of campuses. Several institutions chose to participate in a unit-record financial aid data collection, while the majority of institutions supplied data in aggregate form. Note that for Washington State Community College, FY2003 tuition and grant data is substituted for FY2002 data.

## RESULTS THROUGH PRODUCTIVITY