

## Summary of PACE Activities

Early in his tenure as UNC President, Erskine Bowles launched an initiative designed to streamline administrative practices in order to redirect scarce resources to the University's academic priorities. To lead this collaborative effort, he appointed the President's Advisory Committee on Efficiency and Effectiveness (PACE), a blue ribbon task force led by Krista Tillman of BellSouth, Corp.

The PACE review has been tri-fold. First, the President reviewed the internal operations of General Administration to identify savings totaling 10% of the budget. Next, the PACE established seven campus-wide work groups, each with a targeted focus and a task of identifying "best practice" opportunities and associated system-wide potential savings. The opportunities emanating from these work groups are summarized below. The final phase is a campus-specific review that is currently underway at each campus.

The detailed reports of the seven work groups have been reviewed by the staff at General Administration and will be discussed with the chancellors and the members of the Board of Governors. *Following these discussions, a determination will be made regarding which recommendations to adopt and an action plan will be developed to ensure that the adopted recommendations are implemented.*

The work groups and a summary of their recommendations follow.

	Year One	Year Two	Year Three	Year Four	Year Five
<b>Total investment required</b>	44,659,352	11,869,000	11,871,500	11,830,000	7,830,000
<b>Total potential savings</b>	5,725,000	15,705,000	18,388,000	20,576,000	22,630,000
<b>Total net savings</b>	-38,934,352	3,636,000	6,316,500	8,546,000	14,600,000
<b>Total cost avoidance</b>	59,685,800	52,239,800	80,944,600	84,453,800	88,610,800

### Academic Administration and Support

The Work Group made recommendations related to library operations, archiving, and advising.

- University library operations would benefit from increased collaboration and sharing of resources. The University libraries at all campuses share books and other materials through an inter-library exchange program, but delivery of materials is often slow. A rapid delivery program (delivery in less than two days) would significantly enhance this program and could be accomplished within existing resources. The collaborative purchasing that currently occurs could be enhanced by negotiating a university-wide contract with a single vendor, resulting in larger purchase discounts for many of the campuses. Significant savings can be achieved by expanding the collaborative purchasing environment from book purchases to the purchase of electronic resources. A small expenditure of funds

(\$670,000 in year 1 followed by lower amounts in subsequent years) would allow the creation of a common virtual catalog shared by all campuses. Building a centralized remote storage facility for library materials would cost \$25 million plus operating costs, but would ultimately result in significant savings. The alternatives -- leasing a central facility or duplicating the storage space at all 16 campuses -- would both cost far more in the long run.

- A systematic approach to the archiving of electronic records is needed. An initial investment of \$1 million is needed and recurring costs would be approximately \$16 million annually. The alternative of archiving electronic records by individual campuses would result in a doubling of this expenditure on a recurring basis.
- NCSU has created an electronic student advising system that enables students to get the feedback that they need on a timely basis without standing in long lines or scheduling appointments. This is a best practice that should be considered by the other campuses.

Potential savings and cost avoidance identified by the Academic Administration and Support Work Group are summarized below.

<b>Academic Administration and Support</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>One library catalogue system</b>					
<i>Investment</i>	37,000	39,000	415,000	0	0
<i>Savings</i>					
<i>Total</i>	-37,000	-39,000	-415,000	0	0
<i>Cost avoidance</i>	0	0	0	0	0
<b>Remote storage facility for library materials</b>					
<i>Investment</i>	25,000,000	0	0	0	0
<i>Savings</i>					
<i>Total</i>	-25000000	0	0	0	0
<i>Cost avoidance</i>	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
<b>Central electronic records management</b>					
<i>Investment</i>	1,000,000	0	0	0	0
<i>Savings</i>	0	0	0	0	0
<i>Total</i>	-1000000	0	0	0	0
<i>Cost avoidance</i>	31,000,000	16,000,000	16,000,000	16,000,000	16,000,000
<b>Total investment</b>	26,037,000	39,000	415,000	0	0
<b>Total savings</b>	0	0	0	0	0
<b>Total net savings</b>	(26,037,000)	(39,000)	(415,000)	0	0
<b>Total cost avoidance</b>	35,000,000	20,000,000	20,000,000	20,000,000	20,000,000

### **Human Resources**

The Human Resources Work Group made recommendations for improving benefits, increasing collaborative efforts among campuses, combining the campus oversight of EPA non-faculty and SPA staff administration, and operating independently from the Office of State Personnel (OSP). The proposal to operate independently from OSP far

outweighs the other proposals in terms of significance, and the President will seek the counsel of the Governor and key legislators to determine their willingness to support such an initiative. The adoption of some or all of the HR recommendations will be considered following the conclusion of those consultations.

### **Auxiliary Services**

Although the recommendations of the Auxiliary Services Work Group would not result in savings of appropriated dollars, the recommendations result in revenue enhancement and/or savings in non-State operations that will be of significant benefit to students. Proposals focus on vending contracts, dining operations, bookstores, trademark licensing, and credit card fees, and are as follows:

- Sharing contractual negotiating successes among campuses and employing those successes and other negotiating strategies when renegotiating vending contracts can result in significant revenue enhancement, providing funds to pay debt service, provide scholarships, or enhance student life. Of particular concern is the statutory requirement that precludes campuses negotiating exclusive beverage contracts. Separate negotiations for water and juice contracts have added significant costs to the University and limited healthy drinking options for students. A statutory change to the statutes is recommended to be sought to end this requirement.
- System-wide dining contracts with large vendors should be explored to see if they are feasible, and if so, if significant savings would result. At a minimum, the process of sharing and adopting best dining practices among the campuses will be led by North Carolina State University and UNC-Chapel Hill.
- Sharing best practices among bookstore operations is also recommended, both for self-operated and contracted bookstores. Aligning large and small bookstores within the system so that smaller ones are operated as satellite entities will benefit the smaller stores. Implementing a system-wide consortium for buying used textbooks will benefit the bookstores and will also significantly benefit students purchasing textbooks. Seeking relief from the State sales tax for purchases of textbooks and other educational materials will also benefit students.
- Campuses that have not licensed their trademarks and achieved the related benefits (both revenue and control) should do so.
- Creating system-wide policies for credit cards and negotiating a system-wide credit card contract would provide less confusion among the campuses and result in cost savings. Passing credit card transaction fees on to users would result in savings for the University.

### **Other Barriers**

The Other Barriers Work Group proposed the elimination of a number of reports including the management flexibility reports, the BD119 report, the home-based employees report, the vacancy report, the personal services report, and the institutional trust fund report. In some instances, this would require action by either the Board of

Governors, the legislature, or another State agency. The President has agreed to end the requirement for producing the BD119 report, a report required by General Administration. Elimination of the management flexibility planning report would first be proposed to the Board of Governors and, with the approval of the Board, elimination of the annual report on management flexibility would be advanced to the General Assembly. With Board approval, the University will seek exemption from the home-based employees report and will seek to amend the statutes such that the personal services report can be produced electronically without the significant manual input currently required. GA proposes to work with the State Budget Office to seek the elimination of the Institutional Trust Fund Report. The President and the legislature's Fiscal Research Division believe that the vacancy report has real value and will continue to ask the campuses to prepare this report.

This Work Group was concerned about new and unnecessary record keeping that might result from the State's conversion to new financial software. The GA Finance Division is working with the State Budget Office and the State Controller's Office to ensure that new record-keeping resulting from this conversion is minimal.

A recommendation was made to seek legislation allowing the University more latitude in administering the disposition of surplus property. This process seems to be working well at most campuses, so those campuses with concerns should seek administrative remedies.

Four recommendations were made for improving purchasing practices, including the recommendation that unlimited purchasing authority be granted to the Board of Governors and that the requirement to work through the Purchases and Contracts Division be eliminated. Further information is needed to gauge the potential benefits and implications of this recommendation. A system-wide e-procurement system is proposed and, dependent on the results of a cost/benefit analysis, could be developed. A purchasing web site for information sharing could also be developed, again dependent upon the results of understanding the associated costs. The Work Group further recommended that the University seek the legal discretion to relinquish the requirement for sovereign immunity in specific contractual circumstances but the President and the GA staff are unwilling to accept this recommendation because of the legal and fiscal risks involved.

This Work Group also recommended that universities have the authority to make all budget transfers without seeking the approval of the Office of State Budget and Management (OSBM) and that audit sampling rather than 100% transaction review be employed at campuses. The GA Finance Division will work with OSBM and will make a recommendation as to the need for legislation to seek relief from the budget transfer approval process. Audit sampling may be employed at the discretion of campus leadership but the President recommends that any campuses considering this revised approach proceed cautiously.

Savings and cost avoidance that could result from adopting the recommendations of the Other Barriers Work Group are summarized on the following page.

<b>Other Barriers</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Financial changes due to BEACON implementation</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	0	0	0	0	0
<i>Total</i>	0	0	0	0	0
<i>Cost avoidance</i>	688,000	688,000	688,000	688,000	688,000
<b>Management flexibility report</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	320,000	320,000	320,000	320,000	320,000
<i>Total</i>	320,000	320,000	320,000	320,000	320,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>Disposition of surplus property</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	160,000	160,000	160,000	160,000	160,000
<i>Total</i>	160,000	160,000	160,000	160,000	160,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>BD119 report</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	225,000	225,000	225,000	225,000	225,000
<i>Total</i>	225,000	225,000	225,000	225,000	225,000
<i>Cost avoidance</i>	0	0	0	0	
<b>Total investment</b>	0	0	0	0	0
<b>Total savings</b>	705,000	705,000	705,000	705,000	705,000
<b>Total net savings</b>	705,000	705,000	705,000	705,000	705,000
<b>Total cost avoidance</b>	688,000	688,000	688,000	688,000	688,000

### **Facilities Management**

The Facilities Management Work Group focused on achieving energy savings and eliminating State-mandated requirements that contribute to inefficiencies.

- To effect energy improvements, campuses should consider the use of performance contracts. The current limit of \$100 million statewide has not posed a problem to date, but should be addressed if deemed inadequate in the future. The Chancellor of the University of North Carolina at Greensboro should share her experiences with performance contracting with the other chancellors. The Work Group further recommends that more effective campus energy management programs be implemented. This should be done and does not require an administrative or legislative change. The Work Group further proposes that new buildings be constructed in compliance with LEED and that life cycle cost examinations be

incorporated into the construction considerations. These best practices should be employed immediately.

Campuses are concerned that energy savings will result in associated budget reductions, and the GA Finance Division is working with the State Energy Office and the Office of State Budget and Management to address this issue.

- As a result of mandated State building processes, building electronic systems (HVAC, fire alarm, security) are often different among buildings within a campus and sometimes within the same building. Legislative relief will be sought to end the processes causing lack of building system conformity.
- The Work Group recommends increasing the limit on informal contracts from \$300,000 to \$2 million. This should be evaluated more thoroughly before placing this recommendation on the University's legislative agenda to ensure that there is a complete understanding of the number of contracts affected and the benefits/risks of the proposal. A hybrid model may be developed that allows for informal processes to be followed for projects estimated to cost \$2 million or less but at the same time requires that contractors be bonded for projects that cost less than \$2 million.
- The Work Group recommends that inflationary increases be allowed on facilities-related materials; however, it is not planned for this recommendation to be pursued at this time.
- The dollar limit on projects that can be accomplished from an institution's own workforce is proposed to be raised to \$500,000, with no limit on the portion of this cost attributable to labor. This should be placed on the 2007 legislative agenda, pending further analysis of the number of projects that could be impacted and the resulting determination that the recommended level of \$500,000 is appropriate.
- Benchmarking, improving the utilization of space, and implementing more cost effective business automation practices are recommendations of the Work Group that will be adopted.
- The Work Group recommends that small order purchasing limits be raised from \$5,000 to \$30,000. This may have already been accomplished legislatively, but may not be adhered to by State agencies. The GA legal division will recommend whether a statutory change, an Attorney General's opinion, or a different action is needed to ensure that the \$30,000 limit is followed.
- The Work Group recommends DOI reviews be eliminated for minor renovation projects. This would require legislation, following consultation with the Department of Insurance to attempt to improve DOI services. Overall, the \$2 million level proposed may be too high, and it may be more appropriate to determine whether DOI could conduct a single review rather than three reviews as a way to streamline renovation processes.

Savings and cost avoidance that could result from adopting the recommendations of the Facilities Management Work Group are summarized on the following page.

<b>Facilities Management</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 4</b>	<b>Year 3</b>	<b>Year 5</b>
<b>Utility savings/performance contracting</b>					
<i>Investment</i>	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000
<i>Savings</i>					
<i>Total</i>	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)
<i>Cost avoidance</i>	0	1,000,000	3,600,000	3,600,000	3,600,000
<b>Building electronic systems efficiency improvements</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	0	0	400,000	300,000	500,000
<i>Total</i>	0	0	400,000	300,000	500,000
<i>Cost avoidance</i>	0	100,000	560,000	560,000	560,000
<b>Increase informal contract funding limits</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	60,000	60,000	60,000	60,000	60,000
<i>Total</i>	60,000	60,000	60,000	60,000	60,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>Raise force construction legislative funding limits</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	0	0	0	0	0
<i>Total</i>	0	0	0	0	0
<i>Cost avoidance</i>	900,000	900,000	900,000	900,000	900,000
<b>Implement campus energy management program</b>					
<i>Investment</i>	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000
<i>Savings</i>	0	0	0	0	0
<i>Total</i>	(3,200,000)	(3,200,000)	(3,200,000)	(3,200,000)	(3,200,000)
<i>Cost avoidance</i>	0	2,454,000	8,908,000	5,398,800	13,065,000
<b>Capital building program efficiency</b>					
<i>Investment</i>	0	50,000	4,000,000	50,000	4,000,000
<i>Savings</i>	0	0	0	0	0
<i>Total</i>	0	(50,000)	(4,000,000)	(50,000)	(4,000,000)
<i>Cost avoidance</i>	0	100,000	8,100,000	100,000	8,100,000
<b>Space management/utilization</b>					
<i>Investment</i>	4,000,000	4,000,000	4,000,000	4,000,000	0
<i>Savings</i>					
<i>Total</i>	(4,000,000)	(4,000,000)	(4,000,000)	(4,000,000)	0
<i>Cost avoidance</i>	0	0	20,000,000	20,000,000	20,000,000
<b>Business process automation</b>					
<i>Investment</i>	4,000,000	4,000,000	2,400,000	4,000,000	2,400,000
<i>Savings</i>					
<i>Total</i>	(4,000,000)	(4,000,000)	(2,400,000)	(4,000,000)	(2,400,000)
<i>Cost avoidance</i>	0	1,500,000	3,952,000	3,952,000	3,952,000

<b>Ease procurement restrictions for facilities ops</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	0	0	0	0	0
<i>Total</i>	0	0	0	0	0
<i>Cost avoidance</i>	0	2,500,000	2,500,000	2,500,000	2,500,000
<b>Benchmarking FM costs</b>					
<i>Investment</i>	180,000	180,000	180,000	180,000	180,000
<i>Savings</i>					
<i>Total</i>	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)
<i>Cost avoidance</i>	0	1,500,000	4,200,000	4,200,000	4,200,000
<b>External barriers to utility cost reductions</b>					
<i>Investment</i>	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
<i>Savings</i>					
<i>Total</i>	(2,500,000)	(2,500,000)	(2,500,000)	(2,500,000)	(2,500,000)
<i>Cost avoidance</i>	0	2,920,000	8,760,000	5,840,000	14,600,000
<b>Total investment</b>	15,480,000	15,530,000	17,880,000	15,530,000	13,880,000
<b>Total savings</b>	60,000	60,000	460,000	360,000	560,000
<b>Total net savings</b>	(15,420,000)	(15,470,000)	(17,420,000)	(15,170,000)	(13,320,000)
<b>Total cost avoidance</b>	900,000	12,974,000	61,480,000	47,050,800	71,477,000

### **Construction/Leasing Work Group**

Understandably, this Work Group and the Facilities Management Work Group overlapped in their recommendations. This Work Group further identified the need to streamline the time spent reviewing plans by the Department of Insurance, with a focus on decreasing the number of reviews from three to one (industries and private universities are only required to have a single review for code compliance.) The Work Group proposed shortening the timeframes for designer selection and for awarding contracts, but it is possible to do this within the current rules and regulations and campuses should accept the responsibility for these improvements. Shortening the project authorization process for self-liquidating projects, particularly for those that must be approved by the Joint Legislative Commission on Governmental Operations, is needed and the GA Legal Division will draft legislation that seeks a reporting of these projects to Governmental Operations, with the proviso that the project will proceed in 30 days absent objection.

Regarding leasing, the Work Group recommended that the leasing process be shortened and that leasing using the Staubach Company be abandoned. The GA Legal and Finance Divisions will work with the State Property Office to seek administrative improvements in processes and will recommend appropriate legislative actions if administrative improvements are not forthcoming.



Savings and cost avoidance that could result from adopting the recommendations of the Construction and Leasing Work Group are summarized below.

<b>(Used base of \$350MN- expenses were \$379MN '05-'06)</b>					
<b><i>Construction and Leasing</i></b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Construction document review process					
<b><i>Investment</i></b>	0	0	0	0	0
<b><i>Savings</i></b>	0	0	0	0	0
<b><i>Total</i></b>	0	0	0	0	0
<b><i>Cost avoidance</i></b>	17,500,000	17,500,000	17,500,000	17,500,000	17,500,000
Designer selection process					
<b><i>Investment</i></b>	0	0	0	0	0
<b><i>Savings</i></b>	0	0	0	0	0
<b><i>Total</i></b>	0	0	0	0	0
<b><i>Cost avoidance</i></b>	4,700,000	4,700,000	4,700,000	4,700,000	4,700,000
Total investment	0	0	0	0	0
Total savings	0	0	0	0	0
Total net savings	0	0	0	0	0
Total cost avoidance	22,200,000	22,200,000	22,200,000	22,200,000	22,200,000

### **Information Technology Work Group**

Building on a history of collaboration, the Information Technology Work Group has made recommendations that take advantage of significant collaborative opportunities. The sharing of professional staff among campuses through the existing IT Alliance will help in maximize campus investments for improved services in preparing for IT audits, addressing compliance and security issues, and testing and development services on-site. Four campuses (ECSU, FSU, NCSA, and UNCP) will share a production environment so that each will gain efficiencies long-term, although an up front investment will be needed. A common course management system used system-wide would create efficiencies and, eventually, should be accomplished using open source software. Recognizing that an initial investment and recurring expenses would be needed, campuses could consolidate their disaster recovery requirements at a single site, providing much needed assurances that the University will be prepared for potential disasters. Implementing a system-wide e-procurement system (also recommended by the Other Barriers Work Group) and outsourcing student email could contribute real savings to University operations.

Two recommendations relate to communications devices. Providing a monetary allowance for appropriate groups of employees to utilize their personal cell phones for business purposes would eliminate the need for employees to carry two cell phones and would result in savings. Adopting a strategy for a single University-owned communications device (cell phone, blackberry, desk phone) would allow the elimination of multiple devices where appropriate.

Within a campus, centralizing the purchase of personal computers, co-locating and consolidating servers, and using “thin” PCs where appropriate would result in substantial savings. Similar purchases should be extended beyond a campus where possible. Choosing a single software application and eliminating redundant applications should be thoroughly explored and implemented whenever possible. Common information architecture structures throughout the University would ensure a reliable, up to date, non-redundant information repository of data. Mapping and optimizing campus processes will ensure greater effectiveness and reduce the reliance on paper.

Although there are no associated savings and there are up front and recurring costs, the University will need a common identify management system.

Savings and cost avoidance that could result from adopting the recommendations of the Information Technology Work Group are summarized below.

<b>IT</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Shared professional staff</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	0	0	0	0	0
<i>Total</i>	0	0	0	0	0
<i>Cost avoidance</i>	497,800	497,800	497,800	497,800	497,800
<b>Banner hosting</b>					
<i>Investment</i>	300,000	0	0	0	0
<i>Savings</i>	0	184,000	428,000	684,000	888,000
<i>Total</i>	-300,000	184,000	428,000	684,000	888,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>Centralized course management</b>					
<i>Investment</i>	550,000	350,000	350,000	350,000	350,000
<i>Savings</i>	200,000	400,000	600,000	800,000	1,000,000
<i>Total</i>	-350,000	-150,000	50,000	250,000	450,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>DR</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	0	0	0	0	0
<i>Total</i>	0	0	0	0	0
<i>Cost avoidance</i>	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
<b>E-procurement</b>					
<i>Investment</i>	5,500,000	2,500,000	2,500,000	2,500,000	2,500,000
<i>Savings</i>	0	8,700,000	9,600,000	9,600,000	10,150,000
<i>Total</i>	5,500,000	6,200,000	7,100,000	7,100,000	7,650,000
<i>Cost avoidance</i>					

<b>Outsource student email</b>					
<i>Investment</i>	92,352	0	0	0	0
<i>Savings</i>	100,000	200,000	300,000	300,000	300,000
<i>Total</i>	7,648	200,000	300,000	300,000	300,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>Cell phone allowance</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	309,000	463,000	618,000	618,000	618,000
<i>Total</i>	309,000	463,000	618,000	618,000	618,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>Communication devices consolidation</b>					
<i>Investment</i>	1,600,000	0	0	0	0
<i>Savings</i>	720,000	720,000	720,000	720,000	720,000
<i>Total</i>	-880,000	720,000	720,000	720,000	720,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>PC server lifecycle management</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	1,625,000	1,625,000	1,625,000	1,625,000	1,625,000
<i>Total</i>	1,625,000	1,625,000	1,625,000	1,625,000	1,625,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>Server co-location virtualization</b>					
<i>Investment</i>	1,600,000	0	0	0	
<i>Savings</i>	450,000	450,000	450,000	450,000	450,000
<i>Total</i>	1,150,000	450,000	450,000	450,000	450,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>Open source software</b>					
<i>Investment</i>	0	0	0	0	
<i>Savings</i>	0	500,000	1,000,000	1,000,000	1,000,000
<i>Total</i>	0	500,000	1,000,000	1,000,000	1,000,000
<i>Cost avoidance</i>	0	0	0	0	0
<b>Thin clients</b>					
<i>Investment</i>	0	0	0	0	0
<i>Savings</i>	540,000	2,430,000	2,970,000	4,860,000	6,680,000
<i>Total</i>	540,000	2,430,000	2,970,000	4,860,000	6,680,000
<i>Cost avoidance</i>					
<b>Total investment</b>	9,642,352	2,850,000	2,850,000	2,850,000	2,850,000
<b>Total savings</b>	3,394,000	15,472,000	18,111,000	20,457,000	23,231,000
<b>Total net savings</b>	6,248,352	12,622,000	15,261,000	17,607,000	20,381,000
<b>Total cost avoidance</b>	2,897,800	2,897,800	2,897,800	2,897,800	2,897,800