ANTIOCH UNIVERSITY

REPORT TO THE BOARD OF TRUSTEES

Five-Year Capital Budget

2003-04 TO 2007-08

June 5-7, 2003

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section dealing with all other types of capital acquisition, but expenditures in this third section are primarily for library periodicals and monographs.

The Five Year Capital Budget is presented by campus. For each of the five years, a narrative description is provided for facilities, technology and other acquisitions. In addition, a schedule summarizing the items by year and category is provided following the narrative. It is intended that by adopting the 2003-04 operating budget, the Board of Trustees will simultaneously adopt the capital acquisition plan contained in the first year of the Five Year Capital Budget.

Glenn Watts
Vice Chancellor and
Chief Financial Officer

Antioch University
Five Year Capital Budget
Projects above $10,000
2003-04 Budget

ANTIOCH COLLEGE

INTRODUCTION: This capital narrative describes the proposed expenditures for 2003-04 that can be funded by the College Operating Budget, through borrowing or from anticipated gifts. These projects attempt to meet short-term replacement, repair and renewal needs and focus on those things that will make the most positive contributions to our recruitment and admissions efforts. We are also focusing attention on improvements that are necessary to insure safety and to protect the physical plant from further damage due to neglect. High on the priority list is providing all dormitory students with high-speed access to the Internet. We know that today's student depends on his or her computer for communication and access to a variety of academic resources. Also high on the list is upgrading the computers used by faculty and staff to enable better teaching and better communication using our new integrated E-mail and voice mail system. The proposed acquisitions consider safety requirements, student residential needs, academic support needs, and the College's ability to fund. Several major projects that will be funded from the Capital Campaign are not included in the five-year period covered by this plan. While we expect that most of the support for these projects will be received during the next five years, we do not know exactly when the funding for these programs will arrive.

2003-04 PROPOSED EXPENDITURES

I. FACILITIES 2003-04

A. **Priority 1**: Fire Alarm System Upgrades. In recent years, a number of tragic fires have occurred in dormitories at campuses across the nation. The comprehensive review of the College buildings conducted by the Safety Committee revealed that several of the major campus buildings have inadequate fire alarm and detection systems or no system at all. In 2003-04 we will begin installing fire alarm systems in dormitories that have no centrally monitored detection and alarm systems. At present, these dormitories rely on local smoke detectors

that frequently malfunction or are inoperative. Even when functioning properly, they can alert only a local area and have no capacity to summon the fire department.

The systems to be installed will take into account the fact that cooking and smoking occur in dormitories in order to minimize the number of false alarms. If permitted by code, rapid heat rise detectors will be installed rather than smoke detectors in some areas. These detectors will minimize the number of false alarms. The limited availability of funding does not permit the installation of new systems in all buildings during 2003-04, but systems will be added to Norment ($18,000) and Presidents ($34,200).

B. **Priority 2**: Floor Tile in Residence Halls. During the past decade it became fashionable to carpet many of the common areas and hallways in dormitories and academic buildings. While there is an obvious aesthetic appeal to carpeting, and some studies have indicated that it is no more expensive to maintain than hard surface floors, we have become painfully aware that mold can flourish in carpet if it becomes damp. This is true even of synthetic fiber carpets with jute backings, but it is even true of synthetic carpets with synthetic fiber backing. Carpets harbor organic dirt and other material that can provide nutrients to mold. The fiber surface is difficult to clean thoroughly on a regular basis and once dampened, mold can flourish.

The problem of mold in carpets is particularly severe in below-grade areas where moisture can penetrate concrete floors from below. Under these conditions, there may be just enough dampness to permit mold to grow and emit spores, which are then circulated by air handling units to other parts of the building.

Over the next several years we will continue our program of replacing glued-down carpeting in all areas that are below grade and replacing it with tile or other hard-surface flooring. Carpet replacement has already taken place in Spalt as part of the major mold prevention effort in 2002-03. In 2003-04, we will replace carpeting in Mills Hall, Presidents, and Birch Hall.

C. **Priority 3**: ADA-Ramp and Doors (McGregor Building). This building includes the largest lecture hall on campus and is used not only for teaching, but also for Community meetings and various public events. Handicapped access is available only by the use of wooden ramps, and some of the doors are too heavy to open from a wheelchair. A restroom was rehabilitated during 2002-03 and now meets ADA standards. During 2003-04, a permanent ramp will be constructed and power door openers installed.

D. **Priority 4**: Dormitory Shower Replacement (Units, Norment). The showers in these buildings need to be renovated. The plumbing is old and leaks because the fixtures cannot be repaired due to extreme wear. The tiled walls and floors are cracked, and while they have been caulked, they still leak from time to time. Water that leaks into the sub-floor and adjacent rooms creates conditions where mold and vermin can flourish.

E. **Priority 5**: Roof Replacement and Repair. Many of the roofs on the College buildings are in poor condition and have needed replacement for several years. The flat roofs, in particular, need to be replaced because water can accumulate and then leak long after the storm has past. Even small leaks are a problem because they can create conditions under which mold can flourish. Available funding does not allow all of the roofs that need to be replaced to receive attention in 2003-04, but we will replace those on Birch Hall and The Presidents Dormitory complex. Additional insulation will be installed during both projects to reduce heating and cooling costs.

F. **Priority 6**: Resurface Drives and Parking Lot (Marshall Street, North Side of Art Bldg.). Some of the walkways in these areas are bituminous concrete and they are deteriorating rapidly. Repaving or replacement with Portland cement would provide a more suitable surface. Those that are cement are cracked and uneven, and they need to be repaved. The landscaping is also in need of an upgrade. Over time, the campus has lost many mature trees and plantings. This funding will upgrade the appearance of these areas of the campus.

G. **Priority 7**: HVAC Improvements – Union Building West. Air conditioning has become the norm for many college and university buildings and students and their parents now expect it. It also is essential to the success of the summer semester. The unit servicing the west section of the Union building has failed and no longer is able to provide cooling for the practice rooms, dance space and lounge. This makes much of the space unsuitable for use in the warmer months of the year. In addition, these areas have been unheated for several years. The new units should be capable of meeting both heating and cooling needs. Although this project needs to be completed, its priority is not sufficiently high to have it funded in 2003-04 unless an unexpected source of revenue appears.

II. TECHNOLOGY 2003-04

A. **Priority 1**: Wireless Access to the Internet, Phase I. Further progress needs to be made in the expansion of the campus network. There are still dormitory areas (North Hall, President's and West) as well as instructional areas in McGregor Hall that need to be added to the campus network. We have had to make choices regarding the scope and priority of this work. For example, new technologies make is possible to provide wireless Internet connectivity to dorm and academic areas at a fraction of the cost of pulling cable through and between these buildings. However, this solution does not directly address the issue of phone access to those dorm rooms that currently have no telephone service. Our campus phone switch does not current have Voice over IP capacity, so wireless Internet links cannot be used for campus phone traffic at this time. It is possible to purchase hardware that would add this capability to the phone system, but the costs involved and the functionality of the equipment suggest that further study is required. Therefore, Wi-Fi seems to be the most timely and economical choice.

   When we begin using wireless technology (Wi-Fi), College students will purchase wireless network cards for their computers in order to use this service, and dorms that are currently hard wired could add a wireless network layer in order to facilitate the students' ease of movement from one dorm to another during their course of study at Antioch. The Bookstore will stock approved wireless cards that students can puchase.

B. **Priority 2**: Computer Workstations. Few subjects can be taught today without the use of personal computers. Unfortunately, much of the hardware currently in use at the College is obsolete and incapable of running current software. A minimum of seventy-six computers is needed to enable all faculty and other employees to have machines capable of running currently supported operating systems and software. Many students own their own laptops and expect that the faculty will take advantage of the hardware and software that is currently on the market. The faculty, however, are frequently required to use hardware and software that is several generations older than what their students have.

   Each year for the foreseeable future, it will be necessary to replace and acquire a number of personal computers for use by the faculty and for the computer labs used by students who do not own their own equipment. There is a backlog of obsolete machines that need to be replaced, and our initial efforts are concentrated on upgrading these workstations. At our annual rate of investment in new machines, it will take several years to become reasonably current with the acceptable level of technology.

C. **Priority 3**: Backup and Storage File Server. The College has provided back-up service for faculty, staff, and students, but the server used for this purpose is woefully inadequate. Its size and reliability no longer meet the needs of the campus. When the only data being transmitted was text messages, the amount of server space needed was relatively small to retain all of the information generated during a term. However, the expansion of multi-media applications, requires much larger storage space. A new back-up and storage file server will insure that many hours of student and faculty effort are not lost due to a component failure.

D. **Priority 4**: Color Laser Printer. The College has invested in a Scantron system using eListen software to automate the interpretation of a large number of survey and response forms. The various evaluations, surveys and questionnaires include Student Evaluation of Instruction, Student Opinion of Academic Advising, Co-op Advisor Evaluations, Job Supervisor Evaluations, General Education Surveys, and many more. Unfortunately, the Scantron system does not function well with black and white forms. Scantron requires that red and white lines segregate question blocks and these are interpreted differently than the black or blue responses entered by student pens. Printing the forms in black and white will not insure the integrity of the data, and, in fact, confuses the scanner.

   At present, response forms are printed for each specific survey or questionnaire, and when the survey or questionnaire changes, new response sheets have to be printed. Color printing is cheapest when a large number of forms can be ordered. However, because of the relatively small number of survey responses used at any one time, and because of the number of revisions that get made, it is not economical to order a large number of the same response form.

   By equipping the Office of the Registrar with an HP Color Laser Jet 4600 printer, the response forms can be printed as needed and in quantities needed. Waste should be significantly reduced and cost-savings should result. In fact, the per-copy cost of the HP 4600 should compare favorably with the per-copy cost for larger quantities from a job printer.

III. OTHER 2003-04

A. **Priority 1**: Reconfigure Vehicle Fleet. A committee of students, staff and faculty worked this spring on a variety of environmental opportunities to see how costs could be lowered, services improved and the environment protected. A study of the campus vehicle fleet revealed that 15-passenger vans were being used extensively for local trips involving only one or two passengers. Because the fleet consists of only 15-passenger vans and a single manual transmission sedan, there was little opportunity for economical travel. The committee studied a number of alternative vehicle configurations, including a fleet with several liquefied natural gas (LNG) vehicles, but concluded that the cost of an on-campus fueling station was prohibitively expensive. Upon completing its work, the committee recommended the following policy:

> All future vehicles purchased for use in the College Fleet should minimize the use of non-renewable energy sources by employing advanced technology, bi-fuel capability, or having the capacity of using alternative fuels. This policy applies to maintenance vehicles, including trucks, tractors, and mowers whenever such alternatives are available.

Implementation of this policy will begin in 2003-04 with the reassignment of the three worst vans in the College Fleet to Physical Plant for maintenance use. This will allow the Physical Plant to remove from service three vehicles that are in far worse condition. The three vans removed from the Fleet should be replaced with two passenger cars and a minivan that satisfy the above policy. Transferring the three vans from the Fleet to Physical Plant will significantly reduce the number of miles these vehicles are driven each year and thereby lower the consumption of gasoline. Removing the three worst Plant vehicles from service will eliminate the pollution from their worn engines.

While the price of environmentally friendly vehicles may be slightly greater than conventional vehicles, the life-cycle cost of operation is likely to be lower due to lower maintenance costs and the increasing cost of conventional fuels. Savings can also be anticipated from lower insurance costs associated with smaller vehicles (cars vs. vans) and a better overall safety record. In addition to the economic value of removing over-sized, inefficient vehicles from the College Fleet, Antioch will be demonstrating commitment to its principal of moving toward a sustainable future.

B. **Priority 2:** Library Books. In order to keep the library collection current, new books are purchased each year. Fortunately, the College is the beneficiary of a substantial endowment restricted to the purchase of library books. This endowment provides the College with all of the new books it can reasonably accommodate each year.

C. **Priority 3**: Cafeteria Ovens and Gas Range. The ovens and gas range at the cafeteria have been in use for many, many years. The ovens do not hold constant temperatures and it is difficult to get them to produce a given temperature, regardless of how the thermostats are set. Similarly, the range heats inconsistently, which makes timing of food production difficult. Replacing these units during 2003-04 will make it easier for the cafeteria cooks to prepare meals, and it will also enable them to prepare better meals. With the anticipated increase in the number of students who will be eating at the cafeteria, it is important that the quality of the food be as high as possible.

D. **Priority 4**: Replace Five Drink and One Milk Machine. The Cafeteria has five drink machines that are on bases that are rotting and do not meet health code standards. Additionally, two milk machines should be replaced during 2003-04. The drink machine counters are in the worst condition and there is not sufficient money to replace both milk machines. Therefore, one of the milk machines will not be replaced until 2004-05.

E. **Priority 5**: Equipment to Upgrade the Cafeteria Kitchen. Like the ovens, range, and drink dispensers, most of the smaller machines and fixtures used in food preparation at the cafeteria are well beyond their life expectancy. Not all of the worn equipment can be replaced in the current year, but in 2004-05, the College will replace five stainless utility carts, freezer shelving, a Buffalo food chopper and may, if pricing on the other items permits, acquire a fryer-oil filtration and recycling system. Modern cafeterias routinely filter and purify their frying oil in order to minimize taste transfer from one food group to the next. The Cafeteria does not have this equipment and is forced to change oil more frequently than would be necessary if the filtration system were available.

F. **Priority 6**: Replacement Forklift (used). The College owns one, very old gasoline-powered forklift. Unfortunately, the engine of this machine is in very bad repair and it emits large amounts of burned oil. When used in an enclosed space, which is the usual condition for this machine, the air rapidly becomes polluted. Were the engine the only problem with this machine, a rebuilt engine could be installed, but the hydraulic systems and other components are also in poor condition. The College would like to replace this unit in 2003-04, but there are

not sufficient resources available in the College's capital budget. If additional revenues are realized, this forklift will be replaced this year. Otherwise, it will require replacement in 2004-05.

2004-05 PROPOSED EXPENDITURES

I. FACILITIES 2004-05

A. **Priority 1**: Fire Alarm System Upgrades. In recent years, a number of tragic fires have occurred in dormitories at campuses across the nation. The comprehensive review of the College buildings conducted by the Safety Committee revealed that several of the major campus buildings have inadequate fire alarm and detection systems or no system at all. In 2003-04 we will begin installing fire alarm systems in dormitories that have no centrally monitored detection and alarm systems. At present, these dormitories rely on local smoke detectors that frequently malfunction or are inoperative. Even when functioning properly, they can alert only a local area and have no capacity to summon the fire department.

The systems to be installed will take into account the fact that cooking and smoking occur in dormitories in order to minimize the number of false alarms. If permitted by code, rapid heat rise detectors will be installed rather than smoke detectors in some areas. These detectors will minimize the number of false alarms. The limited availability of funding does not permit the installation of new systems in all buildings in 2004-05, but a system will be added to North Hall ($34,500) and possibly the first phase of the Library ($13,300).

B. **Priority 2**: Drives, Walkways and Landscaping. The College has resurfaced several parking lots in recent years, and some sidewalks have been redone. However, several parking lots are in poor condition and most of the walkways on campus need to be replaced. In 2004-05 the College will repave the Mills parking lot, pave a parking lot along Livermore Street that will be added during 2003-04, and pave the south end of a parking lot at Birch Hall. The Birch Hall lot is not entirely paved and a muddy and rutted area requires frequent attention. In addition, the fire lane between Weston Hall and Birch Hall will be paved.

C. **Priority 3**: ADA Doors, Ramps and Restrooms. The Library is one of the most heavily used buildings on campus, but it is almost inaccessible to the handicapped. This building is slated to be renovated as part of the

Capital Campaign, but the need to improve the entrance way may require renovation before the rest of the building. In 2004-05, the front of the Library will be repaired and made handicap-accessible.

D. **Priority 4**: Residence Halls Shower Replacement. Dormitory showers can create conditions that promote mold if water leaks into adjacent areas. In 2004-05, the showers in West Hall will be renovated. The renovated units will provide greater comfort for students and they will also conserve water because they will be fitted with low-flow shower controllers.

E. **Priority 5**: Environmental Control Systems, Phase I. Nearly all of the buildings on the College campus were build before modern environmental control systems were developed. Some of the buildings such as South Hall, have been renovated and retrofitted with efficient thermostatic control systems, but most of the buildings have less than adequate systems. In some cases, the original compressed air systems are not working at all. In these buildings, temperatures are regulated during the winter by opening windows.

   As a first step to evaluating the cost-benefit of system upgrades or replacements, the College has contracted with Viron Energy Services to perform at no cost a study of the energy conservation opportunities available to the College. Preliminary work has been done, but more study and analysis is needed before a plan can be adopted. Much of this survey work will occur during 2003-04 and the initial improvements to the energy control systems can begin in 2004-05.

F. **Priority 6**: Roof Replacement on Pool Building. The roof of the pool building has been repaired numerous times, but each successive repair becomes less effective. The health department is concerned about water from outside the building that leaks into the pool because of possible contamination. The roof has exceeded its useful life and will be replaced in 2004-05.

G. **Priority 7**: Window Replacement. One of the major areas of energy loss from College buildings is through leaky and single-pane windows. Modern windows offer superior insulation qualities, ease of use, greater security, and are far more attractive than our current windows. In 2004-05, window replacement projects are planned for Norment, Weston and West Halls.

H. **Priority 8**: HVAC Improvement – Norment House. This building is a student dormitory that would be much more attractive to students if it was air-conditioned. A forced air system will cool the building, plus the airflow will help eliminate mold formation and minimize moisture in the building. Forced air systems also allow for the introduction of outside air and this prevents the accumulation of high levels of carbon dioxide. It is becoming evident that all future air conditioning plans (when possible) should include forced air. Before Norment can be air-conditioned, a new 3-phase transformer will be needed to supply adequate electricity to the building.

I. **Priority 9**: Hot Water Heaters (Presidents). The heat exchangers used to heat the Presidents dormitories have no forced air distribution capacity or thermostat control. Replacement with more efficient designs will provide more economical, more comfortable and lower maintenance operation. The new units will also be upgradeable to handle cooling whenever funding becomes available for chiller equipment.

II. TECHNOLOGY 2004-05

A. **Priority 1**: Computer Workstations. Computers will continue to play an increasingly import role in the communications and working lives of students, faculty and staff. Unfortunately; much of the hardware currently in use at the College is completely obsolete – only capable of running no longer supported operating systems and, in some cases, decade old software. With the purchase of new machines we also obtain bundled software and current operating systems. Because funding is not available to replace all obsolete computers in one year, workstations will be replaced over several years.

B. **Priority 2**: Wireless Access to the Internet, Phase II. Progress has been made at the College to connect the various buildings to a central data transmission backbone, but many buildings remain unable to connect to the network. Installing physical wire to each office has the advantage of allowing faculty, staff, and students to not only connect their computers at high speed, but also to have telephone service and, where appropriate, video connections. Unfortunately, it is time-consuming and expensive to install wire to every campus location and our greatest need at the moment is for students and staff to have high-speed Internet access.

Most of our administrative offices already have telephone service and high-speed access to the campus network. Academic offices, however, while having telephone service, often are not served with high-speed data connections. Generally, they are using their telephone line and a modem to connect for e-mail and the Internet.

Some of our students have access to telephone service in their rooms, and these students also have access to high-speed data transmission. In about half of our dorm rooms, however, students do not have access to either telephone service or high-speed data transmission. Students have resolved the telephone problem by bringing cell phones, but they are stymied by not being able to connect to the campus data network. In some dorms, the few hallway telephone lines have been commandeered for data traffic on a first-come, first-served basis. This blocks incoming telephone calls and serves only one individual at a time.

In order to meet the need for high-speed data transmission, we will begin a phased introduction of wireless high-speed access to the campus network. This involves installing a series of low-power transceivers and equipping student and faculty machines with wireless interface cards. The number of transceivers required depends on the type of construction used and the location of the individual users. In addition, each of the transceivers needs to have a high-speed connection to the campus network.

Using wireless technology, a much larger percentage of the campus population can be given access to the Internet and the campus network at a lower cost. The only drawback is that wired services (telephone and video) will not be introduced in the dormitories at the same time that high-speed data services are provided.

III. OTHER 2004-05

A. **Priority 1:** Reconfigure Vehicle Fleet, Phase II.)Phase 2 of the vehicle fleet upgrade will involve the addition of fuel-efficient sedans to the College fleet. It is anticipated that gasoline prices will have increased somewhat and the attractiveness of high-efficiency vehicles or alternative fuel vehicles will become greater. If Liquid Natural Gas (LNG) is available locally, serious consideration will be given to adding LNG-powered vehicles for regional travel.

B. **Priority 2:** Library Books. In order to keep the library collection current, new books are purchased each year. Fortunately, the College is the beneficiary of a substantial endowment restricted to the purchase of library books. This endowment provides the College with all of the new books it can reasonably accommodate each year.

C. **Priority 3**: Color Laser Printer. In 2003-04 a color laser printer was purchased for use by the Registrar. Other offices on campus were allowed to use this machine on a per-copy basis. The Development Office believes that they have sufficient volume of work to justify having a color laser printer available in their offices. This machine would be used for fund-raising solicitations, brochures and announcements.

D. **Priority 4**: Furniture and Equipment. Replacing some of the most worn and damaged furniture would enhance the general appearance of the College offices, public spaces and classrooms. This includes desks, chairs, files, tables and other intensively used items. This amount will cover only a small portion of the need, but by replacing furniture items that are in the worst condition, the functionality and appearance of the College can be greatly improved.

2005-06 PROPOSED EXPENDITURES

I. FACILITIES 2005-06

A. **Priority 1**: Environmental Control Systems, Phase I. Nearly all of the buildings on the College campus were built before modern environmental control systems were developed. Some of the buildings such as South Hall, have been renovated and retrofitted with efficient thermostatic control systems, but most of the buildings have less than adequate systems. In some cases, the original compressed air systems are not working at all. In these buildings, temperatures are regulated during the winter by opening windows.

As a first step to evaluating the cost-benefit of system upgrades or replacements, the College contracted with Viron Energy Services to perform at no cost a study of the energy conservation opportunities available to the College. Phase I of this work began in 2004-05 and the next stage of improvements to the energy control systems will be added in 2005-06.

B. **Priority 2**: Landscaping. The physical appearance of the College is a major factor in the decision-making process of many parents and students when considering whether to select Antioch. Evaluating the intellectual capacities of the faculty or the quality of the library holdings is a difficult task for most families, but the appearance of the grass and the trim of the hedges is something everyone understands. Besides being an important factor in the selection process, landscaping also is important in setting the tone of the campus.

Attractive grounds suggest a pleasant environment in which to work and study. This year, funds will be used to improve the appearance of the Horseshoe Drive area.

C. **Priority 3**: Sidewalks. The majority of the campus walkways are blacktop, but they are also old and deteriorating. In 2005-06, a major effort will be made to upgrade these paths to concrete and to widen them sufficiently to permit snow removal with power equipment.

D. **Priority 4**: Replacement of Residence Halls Furniture. Mattresses and some other furniture were replaced in Presidents and Spalt in 2002-03 because of mold. The furniture in other dormitories receives considerable use and periodic replacement is necessary to insure reasonable comfort for the residents and to assist with the recruitment of new students.

E. **Priority 5**: HVAC Improvements. During the last 30 years, air conditioning in dormitories has moved from "non-existent" to "expected." Some of the College dormitories have air conditioning, but most do not. Therefore, to make these facilities more attractive both for students living there and as an inducement to potential students to enroll at the College, more of the dormitories need to have central air conditioning. In 2005-06, HVAC improvements are planned for Presidents and North Hall. At present, North Hall does not have sufficient electrical capacity to support air conditioning. However, as part of the electrical upgrades planned for this year, electrical service should be available. If for some reason the electrical improvements contemplated in Priority 8 are not completed, the HVAC project for North Hall will have to be deferred.

F. **Priority 6**: Upgrade Electrical Service. The College has two electrical distribution systems, a 2400-volt and a 12,400-volt system. We are attempting to migrate all buildings to the 12,400-volt system because it provides "cleaner" and more reliable power. In addition, as we reconfigure the distribution system, we are changing the metering system. Much of our electricity is now on a secondary meter system, but a change to a primary metering system could save us as much as 10% of our electricity cost. During 2005-06, we plan to extend the 12,400-volt system and primary metering to Spalt, the Union, Weston Hall, Norment Hall and North Hall. Metering will be centered at the G Space.

G. **Priority 7**: Energy-Efficient Lighting. Interior lighting quality and energy costs are a serious concern. The College continues to use incandescent bulbs in many areas and there are relatively few of the new, energy-

efficient florescent tubes in use. Most hallway, restroom and stairwell lights never get turned off. Replacing incandescent fixtures with either halogen or high-efficiency florescent tubes will cut costs and improve the quality of indoor lightening. Older florescent fixtures should also be updated. Motion detectors installed in areas where lights are frequently left on will quickly pay for the investment. Exit signs should be changed to LED-type signs to save energy and the labor cost associated with replacing bulbs. Existing exterior lighting needs to be evaluated and upgraded, plus some areas need additional lighting installed.

H. **Priority 8**: Hot Water Heaters/Tube Bundles (Curl Gym, McGregor Hall, North Hall). The tubes in the heat exchangers used to heat water and a number of campus buildings have become corroded and clogged or lack the mechanical equipment to move heat from the radiator to other parts of the room. Replacement with more efficient designs will provide more efficient, lower maintenance operation.

II. TECHNOLOGY 2005-06

A. **Priority 1**: Classroom Technology. In order to accommodate larger enrollments, it will be necessary to create a new computer classroom. However, finding sufficient space for such a project is a challenge. One possibility is to use the storage room in the basement of Antioch Hall. Renovating this area should provide lab space for approximately 30 student workstations, an instructor station and a media development workstation. This space will require the removal of old desks, old equipment, and may require Physical Plant to replace the HVAC for the room. New computers will be purchased and out-fitted with an appropriate software suite that matches the requirements of the teaching faculty.

B. **Priority 2**: Computer Workstations. Few subjects can be taught today without the use of personal computers. Unfortunately, much of the hardware currently in use at the College is obsolete and incapable of running current software. Many students own their own laptops and expect that the faculty will take advantage of the hardware and software that is currently on the market. The faculty, however, are frequently required to use hardware and software that is several generations older than what the students have.

Each year for the foreseeable future, it will be necessary to acquire a number of personal computers for use by the faculty and for the computer labs used by students who do not own their own equipment. There is a backlog

of obsolete machines that need to be replaced, and our initial efforts are concentrated on upgrading these workstations. At our annual rate of investment in new machines, it will take several years to become reasonably current with the acceptable level of technology.

C. **Priority 3**: Network Expansion and Upgrade. Much of the College data network consists of fiber optic cabling that runs under ground between the campus buildings. The type of fiber that has been in use up until this point is multi-mode fiber that is capable of carrying data at 100 Mbps (fast Ethernet speed). Almost all of the College's network hardware connected to this fiber is only capable of operating at 10 Mbps. Therefore, we are not taking advantage of the fiber we currently have. A three-phase approach over time should be used to update the campus network:

1) ***Purchase 100 Mbps Network Hardware*** - The College should invest in 100 Mbps Ethernet switches and connect them to the existing fiber to handle 100 Mbps speeds in "normal" traffic areas of the campus.

2) ***Upgrade the Network Backbone to Gigabit Speed*** – Although Gigabit Ethernet products have been available since 1998, they are now becoming sufficiently economical to fit into the College budget. Those sections of the network backbone that connect to servers and other high-traffic generators should be connected using Gigabit Ethernet.

3) ***Purchase and Run Single Mode Fiber*** - The multi-mode fiber should be replaced with high bandwidth capacity single mode fiber for "high" traffic areas of the campus network (i.e., areas where large amounts of data need to be regularly moved over the network, or where audio or video needs to be streamed).

III. OTHER 2005-06

A. **Priority 1:** Vehicle Replacement. While it is not possible to state with certainty the kinds of vehicles that will be most appropriate in 2005-06, it is clear that vehicle replacements will be required. It is not likely that hydrogen vehicles will be available at this time, but LNG vehicles may be practical if a local refueling site is functioning.

B. **Priority 2:** Library Books. In order to keep the library collection current, new books are purchased each year. Fortunately, the College is the beneficiary of a substantial endowment restricted to the purchase of library books. This endowment provides the College with all of the new books it can reasonably accommodate each year.

C. **Priority 3**: Replacement of Residence Halls Furniture. Mattresses and some other furniture were replaced in Presidents and Spalt in 2002-03 because of mold. The furniture in other dormitories, including mattresses, receives considerable use and periodic replacement is necessary to insure reasonable comfort for the residents and to assist with the recruitment of new students.

D. **Priority 4**: Classroom Furniture and Academic Equipment. Much of the furniture in our classrooms is in poor condition and needs to be replaced. With the funds available this year, we will replace the desks and chairs that are in the worst condition. Much of our laboratory and teaching equipment is also in poor condition. The faculty has been quite innovative in finding ways to work around the absence of much of the newer technology, but some things require that students be able to work with the actual equipment.

2006-07 PROPOSED EXPENDITURES

I. FACILITIES 2006-07

A. **Priority 1**: Drives, Walkways and Landscaping. The College has resurfaced several parking lots in recent years, and some sidewalks have been redone. However, several parking lots are in poor condition and many of the walkways on campus need to be replaced. Landscaping and replacement of major trees will also be a priority for 2006-07.

B. **Priority 2**: Environmental Control Systems, Phase III. Nearly all of the buildings on the College campus were built before modern environmental control systems were developed. Some of the buildings such as South Hall, have been renovated and retrofitted with efficient thermostatic control systems, but most of the buildings have less than adequate systems. In some cases, the original compressed air systems are not working at all. In these buildings, temperatures are regulated during the winter by opening windows.

The College has contracted with Viron Energy Services to perform at no cost a study of the energy conservation opportunities available to the College. Work will have been done during Phases I and II, but more will be needed before all the energy control problems are resolved.

C. **Priority 3**: HVAC Improvements. Air conditioning in dormitories Is now expected. Some of the College dormitories have air conditioning, but most do not. Therefore, to make these facilities more attractive both for students living there and as an inducement to potential students to enroll at the College, more of the dormitories need to have central air conditioning. In 2005-06, HVAC improvements were planned for Presidents and North Hall. In 2006-07, dormitories without air conditioning will be considered.

D. **Priority 4**: Landscaping. The physical appearance of the College is a major factor in the decision-making process of many parents and students when considering whether to select Antioch. Evaluating the intellectual capacities of the faculty or the quality of the library holdings is a difficult task for most families, but the appearance of the grass and the trim of the hedges is something everyone understands. Besides being an important factor in the selection process, landscaping also is important in setting the tone of the campus. Attractive grounds suggest a pleasant environment in which to work and student. This year funds will be used to improve the appearance of the north side of campus including the union building, Weston Hall and Birch Hall.

E. **Priority 5**: Upgrade Electrical Service. The College has two electrical distribution systems, a 2400-volt and a 12,400-volt system. We are attempting to migrate all buildings to the 12,400-volt system because it provides "cleaner" and more reliable power. In addition, as we reconfigure the distribution system, we are changing the metering system. Much of our electricity is now on a secondary meter system, but a change to a primary metering system could save us as much as 10% of our electricity cost. During 2005-06, we plan to extend the 12,400-volt system and primary metering to Spalt, the Union, Weston Hall, Norment Hall and North Hall. Metering will be centered at the G Space. In 2006-07 all remaining buildings will be moved to the 12,400 volt system.

F. **Priority 6**: Energy-Efficient Lighting: Interior and exterior lighting quality and energy costs were partially addresses by the 2005-06 projects, but more remains to be done. The College continues to use incandescent bulbs in many areas and there are relatively few of the new, energy-efficient florescent tubes in use. Most hallway, restroom and stairwell lights never get turned off. Replacing incandescent fixtures with either halogen or

high-efficiency florescent tubes will cut costs and improve the quality of indoor lightening. Older florescent fixtures should also be updated. Motion detectors installed in areas where lights are frequently left on will quickly pay for the investment. Exit lighting should be changed to LED-type signs to save energy and the labor cost associated with replacing bulbs. Exterior lighting is generally energy-inefficient and needs to be upgraded. In addition, there are several areas where more lighting needs to be installed. Parking lots and walkways, in particular, need additional lighting.

G. **Priority 7**: ADA Doors, Ramps and Restrooms. Campus buildings were designed and constructed before there was much thought to making them accessible to the handicapped. As a consequence and despite considerable effort in recent years, a few buildings and parts of several others remain to be made handicap-accessible. To the extent possible, the remaining major buildings that are not accessible will be ramped to permit access. Power doors will be installed on additional entrances.

H. **Priority 8**: Window Replacement. Depending on which buildings have been renovated with funds raised by the Capital Campaign, priorities for window replacements may change. The windows in Antioch Hall should be replaced and those in the Science Building are notoriously energy inefficient. The buildings that will receive new windows in 2006-07 will depend on which buildings have been previously retrofitted.

I. **Priority 9**: Roof Replacement and Repair. A few roofs on College buildings are in poor condition and will need replacement in 2005-06. The flat roofs, in particular, need to be replaced because water can accumulate and then leak long after the storm has past. Even small leaks are a problem because they can create conditions under which mold can flourish. Additional insulation will be installed during these projects to reduce heating and cooling costs.

II. TECHNOLOGY 2006-07

A. **Priority 1**: Classroom Technology. Few of the College classrooms support the use of modern teaching technology. Whenever a faculty member wants to use a PowerPoint presentation as part of his lecture, he or she needs to bring a portable projector, a laptop, power cords, etc., and arrive at least thirty minutes before class in order to set up all of the equipment. The extension of the campus high-speed network to the academic buildings

will allow the faculty to use the Internet as a teaching resource, but this can happen only if adequate teaching technology is available in the classroom. In 2006-07, several classrooms will be equipped with screens, projectors, dedicated computers, etc., and each classroom will be fully connected to the campus network. New computers will be purchased for faculty who commit to using these facilities and out-fitted with an appropriate software suite that matches the requirements of the faculty.

B. **Priority 2**: Computer Workstations. Few subjects can be taught today without the use of personal computers. Unfortunately, much of the hardware currently in use at the College is obsolete and incapable of running current software. Many students own their own laptops and expect that the faculty will take advantage of the hardware and software that is currently on the market. The faculty, however, are frequently required to use hardware and software that is several generations older than what the students have.

   In each year for the foreseeable future, it will be necessary to acquire a number of personal computers for use by the faculty and for the computer labs used by students who do not own their own equipment. There is a backlog of obsolete machines that need to be replaced, and our initial efforts are concentrated on upgrading these workstations. At our annual rate of investment in new machines, it will take several years to become reasonably current with the acceptable level of technology.

C. **Priority 3**: Campus Network Upgrade, Phase I. Much of the College data network consists of fiber optic cabling that runs under ground between the campus buildings. The type of fiber that has been in use up until this point is multi-mode fiber that is capable of carrying data at 100 Mbps (fast Ethernet speed). Almost all of the College's network hardware connected to this fiber is only capable of operating at 10 Mbps. Therefore, we are not taking advantage of the fiber we currently have. A three-phase approach over time should be used to update the campus network:

   1) ***Purchase 100 Mbps Network Hardware*** – The College should invest in 100 Mbps Ethernet switches and connect them to the existing fiber to handle 100 Mbps speeds in "normal" traffic areas of the campus.

   2) ***Upgrade the Network Backbone to Gigabit Speed*** – Although Gigabit Ethernet products have been available since 1998, they are now becoming sufficiently economical to fit into the College budget. Those

sections of the network backbone that connect to servers and other high-traffic generators should be connected using Gigabit Ethernet.

3) ***Purchase and Run Single Mode Fiber*** – The multi-mode fiber should be replaced with high bandwidth capacity single mode fiber for "high" traffic areas of the campus network (i.e., areas where large amounts of data need to be regularly moved over the network, or where audio or video needs to be streamed).

III. OTHER 2006-07

A. **Priority 1:** Library Books. In order to keep the library collection current, new books are purchased each year. Fortunately, the College is the beneficiary of a substantial endowment restricted to the purchase of library books. This endowment provides the College with all of the new books it can reasonably accommodate each year.

B. **Priority 2:** Vehicle Replacement. While it is not possible to state with certainty the kinds of vehicles that will be most appropriate in 2005-06, it is clear that vehicle replacements will be required. It is not likely that hydrogen vehicles will be available at this time, but LNG vehicles may be practical if a local refueling site is functioning.

C. **Priority 3**: Classroom Furniture and Academic Equipment. Much of the furniture in our classrooms is in poor condition and needs to be replaced. With the funds available this year, we will replace the desks and chairs that are in the worst condition. Much of our laboratory and teaching equipment is also in poor condition. The faculty has been quite innovative in finding ways to work around the absence of much of the newer technology, but some things require that students be able to work with the actual equipment.

D **Priority 4**: Replacement of Residence Halls Furniture. Mattresses and some other furniture were replaced in Presidents and Spalt in 2002-03 because of mold. The furniture in other dormitories receives considerable use and periodic replacement is necessary to insure reasonable comfort for the residents and to assist with the recruitment of new students. Mattresses in some dormitory rooms will be replaced.

2007-08 PROPOSED EXPENDITURES

I. FACILITIES 2007-08

A. **Priority 1**: Environmental Control Systems, Phase IV. Nearly all of the buildings on the College campus were built before modern environmental control systems were developed. Some of the buildings such as South Hall, have been renovated and retrofitted with efficient thermostatic control systems, but most of the buildings have less than adequate systems. In some cases, the original compressed air systems are not working at all. In these buildings, temperatures are regulated during the winter by opening windows.

The College has contracted with Viron Energy Services to perform at no cost a study of the energy conservation opportunities available to the College. Much work will have been done during the three preceding phases and this final phase should give the College a modern energy control system.

B. **Priority 2**: Energy-Efficient Lighting. Interior lighting quality and energy costs are a serious concern. The College continues to use incandescent bulbs in many areas and there are relatively few of the new, energy-efficient florescent tubes in use. Most hallway, restroom and stairwell lights never get turned off. Replacing incandescent fixtures with either halogen or high-efficiency florescent tubes will cut costs and improve the quality of indoor lightening. Older florescent fixtures should also be updated. Motion detectors installed in areas where lights are frequently left on will quickly pay for the investment. Exit lighting should be changed to LED-type signs to save energy and the labor cost associated with replacing bulbs. Existing exterior lighting needs to be evaluated and upgraded, plus some areas need additional lighting installed.

C. **Priority 3**: Landscaping. The physical appearance of the College is a major factor in the decision-making process of many parents and students when considering whether to select Antioch. Evaluating the intellectual capacities of the faculty or the quality of the library holdings is a difficult task for most families, but the appearance of the grass and the trim of the hedges is something everyone understands. Besides being an important factor in the selection process, landscaping also is important in setting the tone of the campus. Attractive grounds suggest a pleasant environment in which to work and study. This year funds will be used to improve the appearance of the south side of the campus including the Gym, Library, Art Building and others.

D. **Priority 4**: Drives, Walkways and Parking Lots. The College has resurfaced several parking lots in recent years, and some sidewalks have been redone. The remaining parking lots that are in poor condition and the walkways on campus that need to be replaced will receive attention in 2007-08.

E. **Priority 5**: Window Replacement. One of the major areas of energy loss from College buildings is through leaky and single-pane windows. Modern windows offer superior insulation qualities, ease of use, greater security, and are far more attractive than our current windows. In previous years, several window upgrades will have occurred, some with funds from the Capital Campaign as major building renovations are completed. In 2007-08 we will focus on the most needy remaining opportunities.

II. TECHNOLOGY 2007-08

A. **Priority 1**: Classroom Technology. Few of the College classrooms support the use of modern teaching technology. Whenever a faculty member wants to use a PowerPoint presentation as part of his lecture, he or she needs to bring a portable projector, a laptop, power cords, etc., and arrive at least thirty minutes before class in order to set up all of the equipment. The extension of the campus high-speed network to the academic buildings will allow the faculty to use the Internet as a teaching resource, but this can happen only if adequate teaching technology is available in the classroom. In 2007-08, additional classrooms will be equipped with screens, projectors, dedicated computers, etc., and each classroom will be fully connected to the campus network. New computers will be purchased for faculty who commit to using these facilities and out-fitted with an appropriate software suite that matches the requirements of the faculty.

B. **Priority 2**: Campus Network Upgrade, Phase II. Depending on the intensity with which the campus computer network is being used, it may be necessary to upgrade the speed capacity of the backbone and some of the distribution channels. It is anticipated that by 2007-08, music, video, graphics, and other data will place a severe demand on the network. It may also be necessary to extend the backbone to some areas that have been previously served by wireless technology, or to replace the wireless segments with fiber optic cable. This cannot be determined with precision at this time, but it is a virtual certainty that data traffic demands will be far higher in 2007-08 than they are today.

C. **Priority 3**: Computer Workstations. Few subjects can be taught today without the use of personal computers. Unfortunately, much of the hardware currently in use at the College is obsolete and incapable of running current software. Many students own their own laptops and expect that the faculty will take advantage of the hardware and software that is currently on the market. The faculty, however, are frequently required to use technology and software that is several generations older than what the students have.

We anticipate that in each year for the foreseeable future, it will be necessary to acquire a number of personal computers for use by the faculty and for the computer labs used by students who do not own their own equipment. There is a backlog of obsolete machines that need to be replaced, and our efforts will continue to be concentrated on upgrading these workstations. At our annual rate of investment in new machines, it will take several years to become reasonably current with the acceptable level of technology.

III. OTHER 2007-08

A. **Priority 1:** Library Books. In order to keep the library collection current, new books are purchased each year. Fortunately, the College is the beneficiary of a substantial endowment restricted to the purchase of library books. This endowment provides the College with all of the new books it can reasonably accommodate each year.

B. **Priority 2**: Copy Machines. All of the campus copy machines were replaced in 2002-03. Many of these machines will have reached the end of their useful life by 2007-08 and, in fact, some will need replacement before five years has past. Lightly used machines may not need replacement in 2007-08, but the majority of the machines will need to be upgraded.

C. **Priority 3**: Replacement of Residence Halls Furniture. Mattresses and some other furniture were replaced in Presidents and Spalt in 2002-03 because of mold. The furniture in other dormitories receives considerable use and periodic replacement is necessary to insure reasonable comfort for the residents and to assist with the recruitment of new students.

D. **Priority 5**: Classroom Furniture and Academic Equipment. Much of the furniture in our classrooms is in poor condition and needs to be replaced. With the funds available this year, we will replace the desks and chairs that

are in the worst condition. Much of our laboratory and teaching equipment is also in poor condition. The faculty has been quite innovative in finding ways to work around the absence of much of the newer technology, but some things require that students be able to work with the actual equipment.

Joan Straumanis
President

Antioch University
Five Year Capital Budget Summary
Antioch College

2002-03 Base Year Capital Expenditures		Amount	Source
Facilities			
Mold & Bacteria Remediation	$	382,971	Ohio HEFC Bond/Operating
Roof Replacement & Repairs	$	89,115	Operating Budget
HVAC Replacement - Library	$	53,029	Operating Budget
ADA - Elevator	$	105,511	Ohio HEFC Bond Funds
Drives, Walkways and Other Improvements	$	57,700	Operating Budget
Science Bldg. & Theater Bldg. Improvements	$	15,641	Operating Budget
Technology			
Voice Mail System	$	40,000	Operating Budget
Workstations, Printers, Servers	$	61,674	Operating Budget
Other			
Furniture Replacement - Mold Remediation	$	45,181	Operating Budget
Library Books	$	23,958	Endowment Income
Cafeteria Equipment	$	4,200	Operating Budget
Vehicle Replacements	$	17,666	Operating Budget
Replace All Copy Machines	$	96,438	Operating Budget
Maintenance Equipment	$	5,780	Operating Budget
Total	**$**	**998,864**	

2003-04 Proposed Expenditures		Amount	Source
Facilities			
Fire Alarm System Upgrades	$	37,200	Operating Budget
Fire Alarm System Upgrades	$	15,000	Ohio HEFC Bond Funds
Floor Tile in Residence Halls	$	85,000	Operating Budget
ADA Upgrades	$	60,000	Operating Budget

Antioch University
Five Year Capital Budget Summary
Antioch College

Dormitory Shower Repairs & Upgrades	$	30,000		Operating Budget
Roof Replacement on Birch & Presidents Dorm.	$	91,000		Operating Budget
Resurface Drives, Walks and Parking Areas	$	50,000		Ohio HEFC Bond Funds
Union Building West Air Conditioning	$	50,000	na	Unfunded
Technology				
Wireless Access to the Internet, Phase I	$	85,000		Ohio HEFC Bond Funds
Computer Workstations	$	35,000		Ohio HEFC Bond Funds
Backup and Storage File Server	$	15,000		Ohio HEFC Bond Funds
Color Laser Printer	$	4,000		Operating Budget
Other				
Reconfigure Vehicle Fleet	$	65,000		Operating Budget
Library Books	$	80,000		Endowment Income
Cafeteria Ovens and Gas Range	$	17,400		Operating Budget
Replace Five Drink & One Milk Machine	$	16,500		Operating Budget
Equipment to Upgrade the Cafeteria Kitchen	$	12,504		Operating Budget
Replace Forklift (used)	$	20,000	na	Unfunded
Total	**$**	**698,604**		

2004-05 Proposed Expenditures	**Amount**	**Source**
Facilities		
Fire Alarm System Upgrades	$ 47,800	Operating Budget
Drives, Walkways and Landscaping	$ 85,000	Operating Budget
ADA Ramps, Doors, Restrooms	$ 50,000	Operating Budget
Residence Hall Shower Replacement	$ 30,000	Operating Budget
Environmental Control Systems, Phase I	$ 100,000	Operating Budget
Roof Replacement on Pool Building	$ 40,000	Operating Budget
Window Replacements	$ 75,000	Operating Budget
HVAC Improvements - Norment	$ 80,000	Operating Budget
Hot Water Heaters (Presidents)	$ 50,000	Operating Budget

Antioch University
Five Year Capital Budget Summary
Antioch College

Technology			
Computer Workstations	$	35,000	Operating Budget
Wireless Access to the Internet, Phase II	$	60,000	Operating Budget
Other			
Reconfigure Vehicle Fleet, Phase II	$	45,000	Operating Budget
Library Books	$	90,000	Endowment Income
Color Laser Printer	$	4,000	Operating Budget
Furniture & Equipment	$	30,000	Operating Budget
Total	**$**	**821,800**	

2005-06 Proposed Expenditures	**Amount**		**Source**
Facilities			
Environmental Control Systems, Phase II	$	175,000	Operating Budget
Landscaping	$	50,000	Operating Budget
Sidewalks	$	50,000	Operating Budget
HVAC Improvements	$	75,000	Operating Budget
Upgrade Electrical Service	$	150,000	Operating Budget
Energy-Efficient Lighting	$	50,000	Operating Budget
Hot Water Heaters/Tube Bundles	$	50,000	Operating Budget
Technology			
Classroom Technology	$	30,000	Operating Budget
Computer Workstations	$	50,000	Operating Budget
Network Expansion & Upgrade	$	20,000	Operating Budget
Other			
Vehicle Replacements	$	50,000	Operating Budget
Library Books	$	100,000	Operating Budget/Gifts
Replacement of Residence Halls Furniture	$	75,000	Operating Budget

Antioch University
Five Year Capital Budget Summary
Antioch College

Classroom Furniture & Academic Equipment	$	50,000	Operating Budget
Total	**$**	**975,000**	

2006-07 Proposed Expenditures		**Amount**	**Source**
Facilities			
Drives, Walkways & Parking Areas	$	30,000	Operating Budget
Environmental Control Systems, Phase III	$	100,000	Operating Budget
HVAC Improvements	$	125,000	Operating Budget
Landscaping	$	50,000	Operating Budget
Upgrade Electrical Service	$	100,000	Operating Budget
Energy-Efficient Lighting	$	25,000	Operating Budget
ADA Access and Restrooms	$	50,000	Operating Budget
Window Replacement	$	60,000	Operating Budget
Roof Replacement & Repairs	$	100,000	Operating Budget
Technology			
Classroom Technology	$	30,000	Operating Budget
Computer Workstations	$	35,000	Operating Budget
Campus Network Upgrade, Phase I	$	50,000	Operating Budget
Other			
Library Books	$	110,000	Endowment Income
Vehicle Replacements	$	35,000	Operating Budget
Replacement of Residence Halls Furniture	$	75,000	Operating Budget
Classroom Furniture & Academic Equipment	$	50,000	Operating Budget
Total	**$**	**1,025,000**	

Antioch University
Five Year Capital Budget Summary
Antioch College

2007-08 Proposed Expenditures		Amount	Source
Facilities			
Environmental Control Systems, Phase IV	$	100,000	Operating Budget
Energy-Efficient Lighting	$	50,000	Operating Budget
Landscaping	$	50,000	Operating Budget
Drives, Walkways & Parking Lots	$	90,000	Operating Budget
Window Replacement	$	60,000	Operating Budget
Technology			
Classroom Technology	$	150,000	Operating Budget
Campus Network Upgrade, Phase II	$	50,000	Operating Budget
Computer Workstation Upgrades	$	35,000	Operating Budget
Other			
Library Books	$	110,000	Endowment Income
Copier Machine Replacement	$	80,000	Operating Budget
Replacement of Residence Halls Furniture	$	75,000	Operating Budget
Classroom Furniture & Academic Equipment	$	85,000	Operating Budget
Total	**$**	**935,000**	

Antioch University
Five Year Capital Budget
Projects above $10,000
2003-04 Budget

GLEN HELEN ECOLOGY INSTITUTE

INTRODUCTION: Glen Helen's budget is small (~$700,000) relative to the other units of Antioch University. The Institute, however, is responsible for the maintenance of 22 facilities/structures (buildings, storage, bridges), multiple parking areas, and a 1,000 acre nature preserve. Historically, the GHEI has lacked funds to direct toward capital maintenance and improvements. The recent University decision to expense depreciation will now provide a minimum of $20,000 for such projects (over the next five years). Repair, replacement, and upgrade needs of the Glen's facilities far exceed the funds available, but the depreciation funds provide a significant start. To provide a capital budget that is a useful planning tool for the Institute we have included expenses that are $1,000 or above. In addition, the GHEI proposes several significant capital projects for the construction and rehabilitation of its facilities over the next five years at an expense of $2.5 million to be funded through the capital campaign.

2003-04 PROPOSED EXPENDITURES

I. FACILITIES 2003-04

A. **Priority 1:** Dormitory Window Repairs and Upgrades. Many windows and associated hardware need to be replaced in the Hickory and Sycamore dormitories. ($2,000)

B. **Priority 2:** Outdoor Education Center Furniture Replacement. The Lodge, a multi-use facility which houses the OEC cafeteria, kitchen, and classrooms, is typically in operation seven days per week. It is in need of replacement chairs and tables. ($3,000)

C. **Priority 3:** Glen Helen Building Classroom Upgrades. Programming, formal Antioch College programs and Institute educational programs, continues to increase. The building's classrooms will be upgraded, including classroom furniture and teaching aids. ($2,500)

D. **Priority 4:** Glen Helen Building Front Entrance Step Replacement. These steps and handrail were originally installed in 1973. They have deteriorated to the point that they now present a safety hazard to the Glen's visitors, volunteers, and staff. ($1,500)

E. **Priority 5:** Intern Residence Housing Furniture Replacement. Quality housing is a critical factor in the Institute's ability to attract interns for its Outdoor Education Center. We propose to purchase furniture for either the Farm House or Clayton House (the two principal intern housing units). ($1,000)

F. **Priority 6:** Glen Helen Building Lighting Upgrades. GHB electricity costs continue to increase. Lighting in the building is predominantly inefficient incandescent or halogen bulbs. We propose to switch out the bulbs with energy efficient compact fluorescent bulbs. The use of these bulbs will be in keeping with the environmental mission of the Institute. Payback for the initial expense will be less than one year. ($1,000)

G. **Priority 7:** Glen Helen Building Library Book/Journal Acquisition. The Glen Helen Building Library acquisitions are badly outdated. New books will be purchased and journals acquired. The library lacks current ecological and environmental science journals required to meet the needs of the staff, Antioch College Students, GHEI Interns, and the needs of the regional community that relies upon the GHEI as a community outreach center. This process will take several years to ensure that the library is again current. The focus will be on books and especially journals that the College Library does not have or have plans to acquire. ($2,500)

II. TECHNOLOGY/EQUIPMENT 2003-04

A. **Priority 1:** Research/Natural Resource Management Equipment. This equipment will continue to support efforts to enhance our knowledge of the Glen Helen's natural resources and aid overall management efforts. This year we will seek to purchase a dissecting microscope and heavy-duty drill and bit designed to penetrate the near-surface limestone rock. ($6,500).

2004-05 PROPOSED EXPENDITURES

I. FACILITIES/EQUIPMENT 2004-05

A. **Priority 1:** OEC Administrative Offices. The OEC staff is currently housed in a rented trailer providing limited office space. At the GHEI's OEC a new administrative/education facility will be built providing offices, classrooms and meeting space to serve existing programs. Secondarily, the space will serve Antioch College and regional businesses and other organizations seeking retreat and meeting space. The additional space will provide additional revenue through weekend rentals of the space. ($350,000)

B. **Priority 2:** Trailside Museum & Visitor Center and Corry Street Entrance Complex. Originally built in 1951, this 750 sq. ft. museum is in need of major renovation. The building is poorly insulated, has its original furnace and a roof 30 plus years old. The exhibits are out of date and of poor quality. Plans include a new roof and possible facility expansion. The building will be retrofitted to be more energy-efficient, including insulation and HVAC system. Additions will also include a sign-in area, point of entry with maps, and toilets facilities, all constructed of eco-friendly material. The adjoining Corry Street Complex will include a new "gateway" structure including an outdoor "greenscape" to link the Glen Helen Building and parking area. ($225,000) *Funding Source: Capital Campaign*

C. **Priority 3:** Roof Replacement and Repair – Glen Helen Building. The existing roof was installed in 1973 and is currently leaking in several places. The complete replacement of the roof will occur over three years. This year the section encompassing the auditorium will be replaced. ($15,000) *Funding Source: Capital Campaign*

D. **Priority 4:** Outdoor Education Center Furniture Replacement. Old bunk beds in the dormitories will continue to be replaced as will the furniture in the Intern housing. ($1,500)

E. **Priority 5:** Glen Helen Building Library Book/Journal Acquisition. The Glen Helen Building Library acquisitions are badly outdated. New books will be purchased and journals acquired. The library lacks current ecological and environmental science journals required to meet the needs of the staff, Antioch College Students, GHEI Interns, and the needs of the regional community that relies upon the GHEI as a community outreach center.

This process will take several years to ensure that the library is again current. The focus will be on books and especially journals that the College Library does not have or have plans to acquire. ($2,000)

F. **Priority 6:** Trail Maintenance and Restoration. Many trails in the North Glen are over used and eroding. Necessary work will be carried out on these trails. ($1,500)

II. TECHNOLOGY/EQUIPMENT 2004-05

A. **Priority 1:** Research/Natural Resource Management Equipment. This equipment will continue to support efforts to enhance our knowledge of the Glen Helen's natural resources and aid overall management efforts. ($5,000)

III. OTHER 2004-05

A. **Priority 1:** Vehicle Replacement. The GHEI's vehicle fleet is aging. There is an immediate need for replacement of the full-size pickup. ($5,000)

2005-06 PROPOSED EXPENDITURES

I. FACILITIES 2005-06

A. **Priority 1:** Renovation of Outdoor Education Center Lodge. This is a major renovation. It will include replacement of the aging kitchen with a new and enlarged kitchen and storage; upgrade toilet and utilities to be ecosystem friendly; open existing kitchen and dining area for partitioned classroom and dining space; and upgrade finishes and use energy conservation materials. $250,000 Funding *Source: Capital Campaign*

B. **Priority 2:** Renovation of existing Hickory and Sycamore Dormitories. Each dormitory provides 32 beds. This is a major renovation. A new flat roof and new HVAC system will be installed. Teacher rooms will be enhanced and toilet and shower facilities will be upgraded. Will upgrade finishes and use energy conservation materials. Four beds will be added to each dorm. $400,000 *Funding Source: Capital Campaign*

C. **Priority 3:** Glen Helen Building Library Book/Journal Acquisition. The Glen Helen Building Library acquisitions are badly outdated. New books will be purchased and journals acquired. The library lacks current ecological and environmental science journals required to meet the needs of the staff, Antioch College Students, GHEI Interns, and the needs of the regional community that relies upon the GHEI as a community outreach center. This process will take several years to ensure that the library is again current. The focus will be on books and especially journals that the College Library does not have or have plans to acquire. ($3,000)

D. **Priority 4:** Land Management/Trail Maintenance and Restoration. Priority areas will be restored and eroding trails repaired. ($2,000)

II. TECHNOLOGY/EQUIPMENT 2005-06

A. **Priority 1:** Research/Natural Resource Management Equipment. This equipment will continue to support efforts to enhance our knowledge of the Glen Helen's natural resources and aid overall management efforts. ($5,000)

B. **Priority 2:** Telephone and Voice Mail System. ($3,000)

C. **Priority 3:** Computer Acquisition. Continue to replace aging computers for use by staff. ($2,000)

III. OTHER 2005-06

A. **Priority 1:** Vehicle Replacement. Continued payments on the new pickup. ($5,000) *Funding Source: Capital Campaign*

2006-07 PROPOSED EXPENDITURES

I. FACILITIES 2006-07

A. **Priority 1:** Renovation of Outdoor Education Center Facilities.

- Clayton House: Currently an Intern Residence, will be renovated (exterior and interior repair and renovations – water heaters, furnaces, plumbing, gutters, siding, furniture) for use as either staff housing or be converted to student "eco-house." $75,000

- Farm House: Currently an Intern Residence, the house will be renovated (exterior and interior repair and renovations – water heaters, furnaces, plumbing, gutters, siding, furniture) for use as either staff housing or an appropriate educational venue. $75,000

- Barn at Clayton House: This is a major renovation. The barn will be converted to Naturalist Housing (replacing the Clayton and Farm Houses). This multi-level facility will have a common gathering area, apartments and laundry, classrooms, greenhouse and meeting space. $500,000 *Funding Source: Capital Campaign*

B. **Priority 2:** Glen Helen Building Library Book/Journal Acquisition. The Glen Helen Building Library acquisitions are badly outdated. New books will be purchased and journals acquired. The library lacks current ecological and environmental science journals required to meet the needs of the staff, Antioch College Students, GHEI Interns, and the needs of the regional community, which relies upon the GHEI as a community outreach center. This process will take several years to ensure that the library is again current. The focus will be on books and especially journals that the College Library does not have or have plans to acquire. ($3,000)

C. **Priority 3:** Land Management/Trail Maintenance and Restoration. Priority areas will be restored and eroding trails repaired. ($3,000)

II. TECHNOLOGY/EQUIPMENT 2006-07

A. **Priority 1:** Research/Natural Resource Management Equipment. This equipment will continue to support efforts to enhance our knowledge of the Glen Helen's natural resources and aid overall management efforts. ($6,000)

B. **Priority 2:** Computer Acquisition. Continue to replace aging computers for use by staff. ($3,000)

III. OTHER 2006-07

A. **Priority 1:** Vehicle Replacement. Continued payments on the pickup truck. ($5,000) *Funding Source: Capital Campaign*

2007-08 PROPOSED EXPENDITURES

I. FACILITIES 2007-08

A. **Priority 2:** Tractor Replacement. The current Steiner Tractor has been a workhorse for the Glen for the past 20 years. It is used extensively throughout Glen Helen to Maintain land areas. ($15,000)

B. **Priority 3:** Renovation of Outdoor Education Center Facilities. General upgrades will be completed to their Roost (Raptor Center) including the roof, furnace, water heater, and furniture. $50,000 *Funding Source: Capital Campaign*

C. **Priority 4:** Drives. There are several gravel-topped drives and parking areas that need annual repairs and major repairs every few years, including regrading and adding of new layer of gravel. In addition, periodically landscape maintenance must be completed to include tree trimming and drainage enhancement. $5,000 *Funding Source: Capital Campaign*

II. OTHER 2007-08

A. **Priority 1:** Vehicle Replacement. Continued payments on the pickup truck. ($5,000)

Robert S. Whyte
Executive Director

Antioch University
Five Year Capital Budget Summary
Glen Helen

2002-03 Base year Capital Expenditures (Est.)	Amount	Source
Facilities	$ 24,760	Operating budget
Technology	$ 18,935	Operating budget
TOTAL	**$ 43,695**	

2003-04 Proposed Expenditures	Amount	Source
Facilities		
Windows, steps, lighting	$ 7,000	Operating budget
Technology		
Microscope, limestone drill	$ 6,500	Operating budget
Other		
OEC & dorm furniture	$ 4,000	Operating budget
Library collection	$ 2,500	Operating budget
TOTAL	**$ 20,000**	

2004-05 Proposed Expenditures	Amount	Source
Facilities		
Construct new OEC Office Building	$ 350,000	Operating budget
Renovate Museum & Visitor Center	$ 225,000	Capital Campaign
New Roof - Glen Helen Building	$ 15,000	Capital Campaign
Trail Maintenance	$ 1,500	Operating budget
Technology		
Research/Natural Resource Mgmt Equipment	$ 5,000	Operating budget
Other		
OEC Furniture	$ 1,500	Operating budget
Library Collection	$ 2,000	Operating budget
Vehicle Replacement	$ 5,000	Operating budget
TOTAL	**$ *605,000***	

Antioch University
Five Year Capital Budget Summary
Glen Helen

2005-06 Proposed Expenditures	Amount	Source
Facilities		
Renovation of OEC	$ 250,000	Capital Campaign
Renovation of Hickory & Sycamore Dorms	$ 400,000	Capital Campaign
Trail Maintenance	$ 2,000	Operating budget
Technology		
Research/Natural Resource Mgmt Equipment	$ 5,000	Operating budget
Telephone & Voice Mail System	$ 3,000	Operating budget
Computer Replacements	$ 2,000	Operating budget
Other		
Vehicle Replacement	$ 5,000	Capital Campaign
Library Collection	$ 3,000	Operating budget
TOTAL	**$ 670,000**	

2006-07 Proposed Expenditures	Amount	Source
Facilities		
Renovate Clayton House	$ 75,000	Capital Campaign
Renovate Farm House	$ 75,000	Capital Campaign
Conversion of Barn to Naturalist Housing	$ 500,000	Capital Campaign
Trail Maintenance	$ 3,000	Operating budget
Technology		
Research/Natural Resource Mgmt Equipment	$ 6,000	Operating budget
Computer Replacements	$ 3,000	Operating budget
Other		
Vehicle Replacement	$ 5,000	Capital Campaign
Library Collection	$ 3,000	Operating budget
TOTAL	**$ 670,000**	

Antioch University
Five Year Capital Budget Summary
Glen Helen

2007-08 Proposed Expenditures	Amount	Source
Facilities		
Remodel Raptor Center	$ 50,000	Capital Campaign
Driveway Resurfacing	$ 5,000	Capital Campaign
Technology		
Other		
Vehicle Replacement	$ 5,000	Operating budget
Tractor Replacement	$15,000	Operating budget
TOTAL	**$ 75,000**	

Antioch University
Five Year Capital Budget
Projects above $10,000
2003-04 Budget

ANTIOCH NEW ENGLAND GRADUATE SCHOOL

2003-04 PROPOSED EXPENDITURES

I. FACILITIES 2003-04

Priority 1: Bond Principal. Each year, Antioch New England deducts the bond principal as a capital expense. For 2003-2004, $110,000; for 2004-05, $120,000; for 2005-06, $125,000; for 2006-07, $135,000 and for 2007-08, $145,000.

Priority 2: HVAC system. The computer hardware and software that runs our HVAC system will not be supported after August 1. When we moved in we had to go with the VW bug model and not the BMW due to limited budget and as a result, its useful life has reached the limit. $12,000

Priority 3: Dryvit Repair. We had some minor roof and Dryvit damage as a result of the severe snow and ice conditions from three winters ago. Repair costs will be in the $6,000-8,000 range. $8,000 is included in the budget.

Priority 4: Electronic Door. To better serve our students with disabilities, an electronic door(s) will be installed at our main entrance and admissions entrance. $10,000

II. TECHNOLOGY 2003-04

Technology is a perpetual "work in progress," and we are implementing the Technology Task Force's long-term plan to address the critical issues related to technological development. In addition, we are following a plan for prioritizing replacement, upgrading, and application needs, as well as personnel support needs. Presently we are generally pleased with our technology infrastructure, though more resources can always be used.

Priority 1: Upgrade Phone System. $29,785. Our current system is not so current. At the end of June 2003, our voice mail will no longer be supported because the "guts" of our current software and hardware will not accommodate the current upgrades. In November 2003, our entire hardware package will no longer be supported due to the same set of circumstances.

Priority 2: Computer Upgrades. For 2003-04 the capital budget includes $102,500 to continue to support the computer hardware replacement begun in 2000-01. $21,680 of this amount is the final lease payment on the 2000-2001 equipment. Outsourcing of "First Class " (email system) and required technological support will continue to come from the operating budget, as will the personnel costs we have added to expand and support the infrastructure. In the future five-year capital technology plan, the ULC and the Board may at a minimum expect to see hardware and software replacement on an annual basis. For illustration purposes, the following reflect reasonable estimates for future capital expenditures: 2004-05- $85,000; 2005-06 - $95,000; and 2006-07 - $110,000 and 2007-08 - 115,000

III. OTHER 2003-04

Priority 1: Maintenance/Upgrade of Library Collection. $80,000 of estimated capital expense has been budgeted in the 2003-04 proposal to cover the cost of maintaining journal subscriptions, licensing fees, book acquisitions, CD-ROM data bases, etc. The capital expense includes funds for the purchase of "Dissertation' Abstracts" which will benefit ANE doctoral students as well as students in the Ph.D. in Leadership and Change Program.

Priority 2. Classroom Chairs. We will purchase classroom chairs to replace the ones we have "mustered out of service." $6,000.

PROPOSED CAPITAL EXPENDITURES 2004-05 AND BEYOND

I. FACILITIES

While we have filled in the Five-Year Capital Budget Summary grid, it is important here to acknowledge the fact that we have identified needs and potential expense, realizing that replacement and/or upgrade does not easily translate to a specific timetable. Within the 2004-2008 period:

1. We will continue to assign principal payments to the capital expense section; for amounts, see narrative above.

2. It is anticipated that we will move toward the implementation of Phase II of the "warehouse" renovations and expansion. Specifically, we envision the creation of one large classroom and one very large (4,000 square feet) multi-purpose room that would enable us to hold major conferences and accommodate large gatherings for lectures, etc. Code requirements necessitate adding more plumbing and another egress. Estimated cost: $150,000 -- $200,000. Funding source: funding of carry-forward reserves and perhaps some capital campaign dollars to augment capital budget outlays.

3. Refinishing of the secondary parking lot at the end of Avon Street at an estimated cost of $12,500.

4. Possible replacement of carpeting in lobby, community room and other high traffic areas. There is not an immediate need to pay attention to this issue, but we are aware that replacement is a real possibility within the next two to three years. Estimated cost: $15,000- 18,000.

5. We do not anticipate any major problems with the HVAC systems, main roof, windows, Dryvit exterior, etc. over the course of the next five years. Each should have a minimum life of fifteen years before major maintenance or replacement is required. Nevertheless, we would continue to hope that carry forward funding would be available as an emergency cushion.

6. Painting and other general customary needs are covered annually in the Operations budget as part of the "plant" category.

7. It is important we start thinking about purchasing nearby properties. Our expansion options are limited due to the various local regulations. If we start to pick up a few of the properties that are in the commercial zone on Pearl Street, our options expand. $200,000 (source Capital campaign) has been proposed for the 2004-05 budget.

II. TECHNOLOGY

See narrative above.

III. OTHER

See narrative re: library acquisitions above.

Peter Temes
President

Antioch University
Five Year Capital Budget Summary
Antioch New England Graduate School

2002-03 Base Year Capital Expenditures		Amount	Source
Facilities	$	310,025	Operating Budget
Technology	$	89,932	Operating Budget
Other	$	57,243	Operating Budget
TOTAL	**$**	**457,200**	

2003-04 Proposed Expenditures		Amount	Source
Facilities	$	30,600	Operating Budget
Technology	$	132,285	Operating Budget
Other	$	86,000	Operating Budget
TOTAL	**$**	**248,885**	

2004-05 Proposed Expenditures		Amount	Source
Facilities	$	218,000	Operating Budget
Technology	$	85,000	Operating Budget
Other	$	85,000	Operating Budget
TOTAL	**$**	**388,000**	

Antioch University
Five Year Capital Budget Summary
Antioch New England Graduate School

2005-06 Proposed Expenditures	Amount	Source
Facilities	$ 212,500	Operating Budget
Technology	$ 95,000	Operating Budget
Other	$ 93,000	Operating Budget
TOTAL	**$ 400,500**	

2006-07 Proposed Expenditures	Amount	Source
Facilities		Operating Budget
Technology	$ 110,000	Operating Budget
Other	$ 93,000	Operating Budget
TOTAL	**$ 203,000**	

2007-08 Proposed Expenditures	Amount	Source
Facilities		Operating Budget
Technology	$ 115,000	Operating Budget
Other	$ 93,000	Operating Budget
TOTAL	**$ 208,000**	

Antioch University
Five Year Capital Budget
Projects above $10,000
2003-04 Budget

ANTIOCH SEATTLE

2003-04 PROPOSED EXPENDITURES

I. FACILITIES 2003-04

Priority 1: Relocate & Remodel Enrollment Services and Administrative Areas. Enlarge Admissions Area to consolidate all Enrollment Services (Registrar, Financial Aid, Student Accounts and Admissions) into a single accessible area. Create new offices on second floor. The "one-stop shopping concept" improves accessibility and service and allows for staffing efficiencies. Widen Reception window and redesign counter area, copy center, work area and staff mailbox system. Create more room for front desk staff, enlarge work area, and provide better visibility of the first floor common area and entry way. ($252,267)

Priority 2: Electronic Door Locks. The current master key system is six years old. A number of exterior keys have been lost or have gone unreturned and duplicated without authorization over the years making the system hard to track. Re-keying the exterior doors each time a key goes missing is a costly remedy. Electronic locks will allow us to lock out a key should it become lost and render it useless with 15 minutes worth of work and only the cost of replacing the lost key. ($10,000)

Priority 3: Add Lights and Remote Access to the Building's Control System. Under current conditions, timers and/or switches control lighting. There is no allowance for day of the week or holidays. This arrangement

maintains lights on for 16 hours or more a day consistently throughout the year. Moving the lights to a central control with remote access would help to conserve energy and save a significant amount of money for the University. ($10,000)

Miscellaneous Items under $10,000

Window security bars
Classroom 103 lighting upgrade
Smooth uneven sidewalk areas
Awning signage
Barcode system
Replace exit security gates
Replace lighting, south stairwell
Repair south entrance doors & replace entrance mat

II. TECHNOLOGY 2003-04

A. **Priorities**: Upgrade Faculty and Staff Computers & Upgrade Network Equipment. Having last year completed a 3-year comprehensive upgrade cycle, we are in a new round of continued upgrades to address new needs, obsolescence, and hardware deterioration cause by normal wear and tear. Specific new needs include the increased demand for the use of laptop computers by faculty and staff with field assignments. Our current network backbone hardware is almost 4 years old. To proactively ensure the stability of this key resource we are planning for a phased upgrade of this equipment.

B. Analysis. Our new standard for a faculty computer is 20G hard drive, 128 MB of RAM, and 1 GHz of processor speed. Network hardware will be based on a 100 MB/s standard. The market for these products changes so rapidly it is not possible to identify a specific brand and vendor. Comparative shopping is required at the time of each batch purchase.

C. Proposed Action. This year we have allocated approximately $79,000 toward computer and network equipment purchases. Computers are being phased in through a 4-5 year upgrade cycle for staff and faculty. Network equipment upgrades are being phased in over a 3-year period. We anticipate maintaining (if not

increasing) this amount in the budget each year to keep up with the need to replace and upgrade computers on an on-going basis.

III. OTHER 2003-04

Priority 1: Upgrade Furnishings in Room 100. We are currently researching options for new furnishings for this classroom. We use this room for community wide and public events, cohort classes and also frequently rent it to outside groups. Currently the room is furnished with basic, inexpensive, folding rectangular tables. We are looking into various types of modular conference room furnishings that can be set up in numerous configurations. We are taking into account ease of storage, functionality, durability, and weight. Preliminary information indicates $15,000 will cover tables and coordinated audio-visual furnishings.

Priority 2: Upgrade Library Furnishings. This is Phase 2 of the library upgrade and includes furnishings that match the bookcases and circulation desk purchased this year. We are planning to purchase one 72" single-sided bookcase with storage doors for behind the circulation desk, an 80" single-sided bookcase for theses and magazines, cases for the Lippett Collection, and three chairs for the circulation desk. $10,000 is budgeted for this upgrade.

Priority 3: Upgrade to Ergonomic Office Chairs and Computer Tables. We surveyed all offices in December 2001 and determined that 48 workspaces are not equipped with ergonomically correct chairs and 26 computers are not on ergonomic stands. Estimated cost to make all upgrades was $22,500. Some progress has been made to improve the worst situations, and we would like to make the remaining upgrades over the course of a couple years. We have budgeted $10,000 this year.

Miscellaneous Items under $10,000

Large TV/VCR mounted in 5 classrooms
Two rescue chairs
Furnish public areas outside 112/114
Art purchase
Replace tack strip in classrooms
Install dimmers & motion detectors in room 100
Add to radio system for daily & emergency

2004-05 PROPOSED EXPENDITURES

I. FACILITIES 2004-05

Priority 1: Remodel Tenant Space at Expiration of Lease to Create Classrooms. Create two, large, clear-span learning areas and furnish. The project includes the addition of two small restrooms and a storage space to accommodate expansion needs. ($250,000)

Priority 2: Resurface Rooftop Parking, Repair And Recoat Built-Up Roofing. The current concrete roof slab is at the end of its life cycle. The top slab is deteriorating, allowing excessive water penetration and causing increasing wear and tear on substrate water barrier and insulation. Water penetration and deterioration is evident along outer walls and at various spots throughout the interior of the building. This project would remove and replace the top slab and loose substrate material. While the top slab is removed, the exposed built-up vapor barrier would be recoated, the drainage system would be cleaned and repaired, the existing nonessential chimneys at the center (east and west) parapet wall would be removed and sealed, and all nonessential penetrations and voids filled. ($180,000)

Priority 3: Replace Existing Single Pane Glass with Double Insulated Glass. The existing single pane glass is drafty, stained and weathered – hinders visibility, has higher sound transmission, creates cold spots and presents a poor appearance. Replace single pane glass in second floor windows with a more energy efficient double pane insulated low-e glass. Test for lead and asbestos containing material in the window caulk and abate as necessary. This project will be phased over several years. ($12,000)

Miscellaneous Items under $10,000

Install parking curbs around wall areas to prevent vehicles from hitting and penetrating moisture protection on rooftop parapet.

II. TECHNOLOGY 2004-05

Priorities: Continue computer and network upgrade cycles ($85,000).

III. OTHER 2004-05

Priority 1: Upgrade Library/Computer Lab Furnishings. This is Phase 3 of the library upgrade and includes a new library table and six matching upholstered chairs, new chairs for all computer workstations, improved signage, and art. The chairs currently used in the lab/library were purchased in 1987 and are at the end of their useful life. ($10,000)

Priority 2: Upgrade public area furnishings. We plan to replace, upgrade, and add common area furnishings in the Second Floor gathering and waiting areas and in the open area of the space we added in 2001. This includes the four sets of tables and chairs surrounding the skylight, the chairs in the waiting areas outside Student Accounts/Financial Aid and the President's office, and more upholstered benches along the Second Floor hall. We made creating gathering spaces a priority in designing our building and have found that students and employees use these spaces regularly. The furnishings were already old when we moved to this building and have received a lot of wear and tear since. ($20,000)

Priority 3: Upgrade Student Lounge Furnishings. Furniture in the student lounge is over 15 years old. ($6,000)

Priority 4: Install Moveable Storage System in Archives. Install a moveable shelving system in the Archives room. This type of system would increase storage capacity by 70% and ease the storage and retrieval of files. ($18,000)

2005-06 PROPOSED EXPENDITURES

I. FACILITIES 2005-06

Priority 1: Install an Electronically Activated Security Gate, Rooftop Parking. Install an electronically controlled parking security gate at the entrance of the rooftop parking ramp. This project would allow free access to bicyclists and pedestrians, and limit vehicular access to authorized permit holders, visitors and daily parkers. It would include electronic access via touch key and card reader, and an intercom system for visitor access. This

option would greatly reduce unauthorized parking, visitor confusion and ticketing. The end result would be to free up over thirty hours a week in staff involvement with ticketing and grievance resolution on the part of both staff and faculty. ($15,000)

Priority 2: Install Vandal Shield/ Pyrolytic Film. Install vandal shield on first floor street windows facing Sixth Avenue and Battery Street to prevent excessive cost of window replacement due to vandalism and reduce fading of Bookstore's inventory. Currently, the unprotected windows are vulnerable to damage from broken glass due to terrorism, earthquakes, hurricanes, riots, vandalism and other activities. Security film can dramatically reduce damage and injury from fractured glass hazards and provide a virtually scratch resistant surface against graffiti. It not only provides surface protection, but can be energy efficient offering high-heat rejection properties. Using the proper film will add up to 50% to the insulation factor of the window. The pyrolytic film reflects up to 99% of the sun's UV rays, reducing fading and the deterioration of store merchandise, furnishings and carpeting. (The bookstore is included in this estimate.) ($18,000)

Priority 3: Remodel and Paint Building Exterior. The existing paint is faded and spotted. Stress cracks along the exterior of the building are allowing weather infiltration and adding to the deterioration of the structural walls. Clean the exterior walls, fill cracks, patch/repair surface irregularities, seal expansion joints, and repaint building and signage. Where the parapet wall is separated along the building edge, epoxy seal and repair to prevent water infiltration and damage to the structural reinforcing steel and interior. Apply a veneer/façade/curtain wall to the Sixth Avenue face of the building to give it a distinctive, distinguished, and university like look and feel. Repair and paint moisture damaged interior plaster walls. ($250,000)

II. TECHNOLOGY 2005-06

Priority 1: Computers. Continue computer and network upgrade cycles. ($90,000)

Priority 2: Expand Telephone System. Expand telephone system to add capacity for digital and analog ports. Digital ports are used for telephone extensions. We currently have 168 digital ports and we are running out of capacity for additional extensions. Analog ports are used for devices such as modems, faxes, credit card machines, etc. We have 24 analog ports and we are almost out of available ports. ($8,000)

Priority 3: Purchase POS and ICS Systems for Bookstore. An Inventory Control System (ICS) is an integrated merchandise control tool. It keeps track of textbook, trade book and general merchandise stock providing up-to-date inventory information. It is also a useful tool for verifying the annual physical inventory counts and an aid to loss control efforts. It automatically updates quantities as merchandise is received, sold (through POS) and/or returned. It interfaces faculty orders with on-hand merchandise and generates want lists for distributor and publisher orders. It updates want lists as orders are placed, so orders for titles aren't duplicated or lost. It facilitates returns to publishers by printing return lists and labels. It also prints price labels.

A Point-of-Sale (POS) register provides a comprehensive point-of-sale system tracking transactions by clerk, department, title, and time. It provides price look-up capabilities for accuracy and can be programmed to perform automatic discounts on sale items. It will scan incoming checks for previous NSF checks and prompt the clerk to ask for alternate form of payment. It can be set up to accommodate financial aid / scholarship accounts and can also be set up to accept campus account charge accounts (for departmental purchases) and gift certificates. All transactions will update on-hand inventory information in the ICS. The system requires $3900 and in annual fees and $23,000 software costs. (Total capital cost: $20,000)

2006-07 PROPOSED EXPENDITURES

I. FACILITIES 2006-07

Priority 1: Renegotiate Bond Guarantee Agreement with US Bank. The 10-year guarantee of the bonds for the Seattle facility expires this year. A new guarantee needs to be negotiated or the bonds need to be refinanced. (Cost Unknown)

Priority 2: Replace Smoke/Heat Detectors and Fire Alarm Panel. The building's fire alarm system will be at the end of its useful ten-year life cycle. Replace the current system with an addressable fire alarm system, to include an addressable fire alarm panel and compatible smoke and heat detectors. Presently, when a smoke alarm alerts or goes bad, the entire zone has to be searched to find the alarm or signal in trouble. The new system will show the exact unit in trouble right at the panel saving both the fire department and maintenance valuable time in searching out the cause and taking corrective action. This project would place us in compliance with the Uniform Fire Code. ($10,000)

Priority 3: Level Sidewalks. The trees fronting the building along Sixth Avenue and Battery Street are causing the sidewalks to heave in areas where their root structures have been able to grow unrestrained toward the surface. The uneven surface of the sidewalk is causing a safety problem for pedestrians. This project would bring in an arborist to cut or redirect the roots without harm to the trees. Once this was accomplished a bio-barrier would be placed to redirect any further root growth away from the surface curtailing any future upheaval of the sidewalk. The sidewalk could then be reinstalled to its original condition providing a smooth, safe walkway. ($12,000)

Priority 4: Expand Bookstore. Expand Bookstore in order to increase sales and services. In five years we assume the Assistant Manager will be a full time position and would need an office. Expanded space and product lines would require specialized shelving and display fixtures. ($15,000)

II. TECHNOLOGY 2006-07

Continue Computer Equipment Upgrade Program ($95,000)

III. OTHER 2006-07

Priority 1: Library Security System. Purchase a security system for the library including desktop security de-activation. This has been recommended by our librarian to cut down on losses. ($13,000)

2007-08 PROPOSED EXPENDITURES

I. FACILITIES 2007-08

Priority 1: Replace Carpeting in High Traffic Areas and Stairwells. Replace carpeting in high traffic areas. Replace stairwell carpeting with a more durable, low maintenance and skid resistant surface. ($16,000).

II. TECHNOLOGY 2007-08

Continue Computer Equipment Upgrade Program ($100,000)

III. OTHER 2007-08

Priority 1: Replace Classroom Chairs. New chairs were purchased after we moved to 2326 Sixth Avenue. We continued to add new chairs over the next three years. The first chairs purchased are 10 years old. This is the beginning of a cycle of replacing classroom chairs. ($20,000)

Priority 2: Install Audio and Visual Equipment In Classroom. Install appropriate audio and visual equipment in classrooms. The equipment should be fixed and appropriate in size and configuration for the classroom it is installed in. ($15,000)

Priority 3: Install a Public Address System. Install a public address system throughout the campus. Install the primary controls at the front desk and locate speakers in all common areas and classrooms. ($10,000)

Toni Murdock
President

Antioch University
Five Year Capital Budget Summary
Antioch Seattle

2002-03 Base year Capital Expenditures (Est.)	Amount	Source
Facilities	$ 142,875	Operating
Technology	$ 110,667	Operating
Other	$ 32,561	Operating
TOTAL	**$ 286,103**	

2003-04 Proposed Expenditures	Amount	Source
Facilities		
Remodel Enrollment Svce & Admin Offices	$ 252,267	Operating budget
Various Safety & Security Projects	$ 35,000	Operating budget
Technology		
Replacement/Upgrade: Computers	$ 79,000	Operating budget
Other		
Ergonomic office chairs and computer stands	$ 10,000	Operating budget
Library Furnishings	$ 10,000	Operating budget
Room 100 Furnishings	$ 15,000	Operating budget
Various Furnishings	$ 15,000	Operating budget
TOTAL	**$ 416,267**	

Antioch University
Five Year Capital Budget Summary
Antioch Seattle

2004-05 Proposed Expenditures	Amount	Source
Facilities		
Resurface rooftop parking, recoat roofing	$ 180,000	Operating budget
Remodel tenant space into classrooms	$ 250,000	Operating budget
Replace windows	$ 12,000	Operating budget
Parking curbs	$ 3,000	Operating budget
Technology		
Replacement/Upgrade: Computer upgrades, security, increase bandwidth of network, mobile wireless classroom	$ 85,000	Operating budget
Other		
Computer Lab, Lobby & Student Lounge Furnishings	$ 36,000	Operating budget
Moveable storage system	$ 18,000	Operating budget
TOTAL	**$ 584,000**	

2005-06 Proposed Expenditures	Amount	Source
Facilities		
Parking Entrance Security System	$ 15,000	Operating budget
Vandal proof 1st floor windows	$ 18,000	Operating budget
Paint building exterior	$ 250,000	Operating budget
Technology		
Replacement/Upgrade: Computer upgrades, upgrade network to 100 MB network.	$90,000	Operating budget
Expand phone system	$8,000	Operating budget
Point of sale system for Bookstore	$20,000	Operating budget
TOTAL	**$ 401,000**	

Antioch University
Five Year Capital Budget Summary
Antioch Seattle

2006-07 Proposed Expenditures	Amount	Source
Facilities		
Smoke/heat detectors	$ 10,000	Operating budget
Sidewalk repairs	$ 12,000	Operating budget
Expand Bookstore space	$ 15,000	Operating budget
Technology		
Upgrades: Computer upgrades, network update	$95,000	Operating budget
Other		
Library Security System	$13,000	Operating budget
TOTAL	**$ 145,000**	

2007-08 Proposed Expenditures	Amount	Source
Facilities		
Replace Carpeting	$ 16,000	Operating budget
Technology		
Upgrades: Computer upgrades	$100,000	Operating budget
Other		
Replace Classroom Chairs	$ 20,000	Operating budget
Classroom Audio & Visual Equipment	$ 15,000	Operating budget
Public Address System	$ 10,000	Operating budget
TOTAL	**$ 161,000**	

Antioch University
Five Year Capital Budget
Projects above $10,000
2003-04 Budget

ANTIOCH SOUTHERN CALIFORNIA

2003-04 PROPOSED EXPENDITURES

1. FACILITIES

A. **Priority 1**: Los Angeles Campus Relocation. The campus is located in a commercial building in Marina del Rey with a five year lease that will run out in 2003. The assignable space of 28,206 sq. ft., increased to 30,525 sq. ft. on January 1, 2002. We have one, one-year option remaining that we can exercise.

B. Analysis. Given the University's limited ability to take on more debt, there is no plan to own a building at this time. This is still a long-term goal as LA and SB are the only campuses in the system that do not own their buildings. The soft commercial real estate market in California should work in our favor.

C: Proposed Action. With a view to investigating a potential re-location, the President appointed a representative Task Force last year. We have selected a Tenant Broker (Travers Realty) and an architectural firm (HOK Design) to work with us on this project. The broker short listed about 25 potential properties based on proximity, location, parking and other factors. The Task Force toured the most promising sites and we have developed a short-list of four projects that we are investigating in more detail. Only one of these is a stand-alone building available for purchase. In view of our desire to own our real estate, we will try to obtain an option to purchase if we end up renting this property.

We wish to remain loyal to our strategy of projecting AUSC as a vibrant, long-term player in the Southern California educational marketplace and also provide the campus with a stronger identity and a higher profile.

A. **Priority 2**: Santa Barbara Campus Relocation: The Santa Barbara campus is located in a rental building downtown (14,403 sq. ft). The existing five-year lease ran out in September 2001 but we had two, two-year options, and chose to exercise the first option. We were successful in consolidating all activities at 801Garden St. and gave up the satellite location a block north of the campus in 2001-02.

B. Analysis. There is no plan to own a building for the campus at this time. However, we will investigate other rental opportunities with the objective of moving by September 2005. This will require leasehold improvements and furniture purchases of about $125,000 (in addition to tenant improvements funded by the landlord) in 2004-05. SB is a very small market with high rents and limited availability. It will prove to be a sizable challenge to find good, affordable space.

C. Proposed Action. No concrete action is proposed in the 2003-04 budget year besides bringing together a representative task force under the leadership of the new president to identify needs and outline a process.

II. TECHNOLOGY 2003-04

A. **Priority 1**: Network Upgrade. Install up-to-date electronics and upgrade wiring to provide a more stable service and reduce downtime.

B. Analysis. The state of the wiring and the bandwidth for services affect reliability and speed for all users.

C. Proposed Action. Consolidate wiring through replacement lines in LA and SB. Install new level 3 Cisco switches

A. **Priority 2**: Phone Switch.

B. Analysis. The phone switch at SB has been malfunctioning and has caused a lot of disruption in communications. It is a 10 year- old NEC Electra system that is no longer manufactured and is expensive to maintain and is unreliable. We had originally budgeted for this replacement for 2005-06 but needed to advance it to the current year.

C. Proposed Action. We will purchase a new switch for LA as that switch, a Nortel Norstar purchased in 1998, while functioning well, has reached capacity. The LA switch will be re-configured and installed in SB with new hand-sets. By this action we will have good switches at both campuses with enough capacity for the next five years. In addition, we want to implement a wireless node (Wi-Fi) at both campuses in 2004-05.

A. **Priority 3**: Network Security and Firewall.

B. Analysis. Vulnerability of our systems to malicious attack and unauthorized use of our student and financial data is of great and ongoing concern.

C. Proposed Action. To configure router as firewall on T-1 Line and install Sonic Wall to protect the T-1 as well as the back-up DSL line.

A. **Priority 4**: Upgrades to Student Lab Hardware and Software.

B. Analysis. The aim is to provide both PC and MAC equipment in all student labs with a standard suite of software and maintain high availability of all equipment- computers and printers. It is also important that students train on the kind of equipment they will encounter in their jobs on graduation.

C. Proposed Action. To plan the cyclical replacement of lab equipment and to create a standard software image to replicate on all computers.

A. **Priority 5**: Improve Backup Support for Servers.

B. Analysis. We have been using manual tape back-up. It gives us some ability to recreate records in case of a system failure. There is a need for a full tape back-up system as part of our business continuity planning.

C. Proposed Action. Implement a server based full back-up and data recovery system at both campuses.

A. **Priority 6**: Equipment Replacement and Upgrade. Upgrade desktop and mobile computers, printers, servers and software.

B. Analysis. We have been upgrading all staff computers and peripherals on a periodic basis to maintain their currency and to meet the current processing speed, memory and operating environment requirements. While the preponderance of equipment is PCs, some MAC equipment is employed where user needs dictate its use.

C. Proposed Action. Plan for periodic replacements so that equipment is between 3 and 4 years old.

A. **Priority 7**: Network Buildup in New Locations for both LA and SB.

B. Analysis. We anticipate a need for wiring, servers, switches, routers and other infrastructure components when we relocate, in addition to the current equipment that we will redeploy.

C. Proposed Action. No action can be planned as it will depend on the building configuration (layout), number of floors, status of current wiring, etc.

III. OTHER 2003-04

A. **Priority 1**: Classroom and Lounge Furniture. The importance of having good, comfortable furniture in the classrooms is obvious.

B. Analysis. For top long AUSC has not given thought to who is our typical student. She is an adult, about 35, who comes to Antioch for part-time studies after a day at work (seated) and after a commute of 30 to 45 minutes. We need to provide her with a comfortable, ergonomic chair and desk combination. We are engaged in a process to replace all 'high school' style furniture, mainly consisting of chairs with a swivel writing tablet, with more comfortable chairs and tables that can be configured to meet various classroom set-up needs, both on casters for easy mobility. In the same vein, we are moving to upgrade student lounge furniture to make it more comfortable and inviting.

A. **Priority 2**: Office Furniture. This is to meet the work and storage needs of all staff.

B. Analysis. We have yet to develop standards for furniture and our purchases have often been dictated by price and availability. We would certainly apply standards for any furniture to be purchased for the new facilities. There is also a need to provide ergonomic seating.

A. **Priority 3**: Library. We have recognized the need to provide library services at both campuses. This need has to date been side-lined by a combination of limited resources and more pressing needs.

B. Analysis. We recognize that we lack the space and resources for a full-fledged library. Instead, we wish to emulate the New England model and create a library with a special focus: e.g., a library on Social Justice. This will allow us to leverage our limited resources to obtain recognition and good 'trading' rights for inter-library loans. We will try to avoid duplication between LA and SB by creating a regional Library with shared holdings split between the campuses.

C. Proposed Action. We will buy enough library equipment – furniture, shelves, computers, microfiche readers, etc., in 2004-05 and add around $50,000 for holdings each year.

Chloe Reid
Acting President

Antioch University
Five Year Capital Budget Summary
Antioch Southern California

2002-03 Base year Capital Expenditures (Est.)	Amount	Source
Facilities	$ 8,000	Operating
Technology	$ 333,036	Operating
Other	$ 175,500	Operating
TOTAL	**$ 516,536**	

2003-04 Proposed Expenditures	Amount	Source
Facilities		
Leasehold Improvements - new facility	$ 300,000	Operating budget
Technology		
Video Conference systems	$ 20,000	Operating budget
Multi-Media Equipment	$ 20,000	Operating budget
Computer Replacements	$ 55,000	Operating budget
Other		
Furniture & Carpet	$ 15,000	Operating budget
TOTAL	**$ 410,000**	

Antioch University
Five Year Capital Budget Summary
Antioch Southern California

2004-05 Proposed Expenditures	Amount	Source
Facilities		
Leasehold Improvements	$ 125,000	Operating budget
Technology		
Computer Replacements	$ 45,000	Operating budget
Other		
Multi media equipment	$ 15,000	Operating budget
Glass display case	$ 5,000	Operating budget
TOTAL	**$ 190,000**	

2005-06 Proposed Expenditures	Amount	Source
Facilities		
Technology		
Computer Replacements	$25,000	Operating budget
Other		
Multi media equipment	$ 30,000	Operating budget
Phone & Data System	$ 25,000	Operating budget
TOTAL	**$ 80,000**	

Antioch University
Five Year Capital Budget Summary
Antioch Southern California

2006-07 Proposed Expenditures	Amount	Source
Facilities		
Technology		
Computer Replacements	$70,000	Operating budget
Other		
Videos and Books	$20,000	Operating budget
TOTAL	**$ 90,000**	

2007-08 Proposed Expenditures	Amount	Source
Facilities		
Technology		
Computer Replacements	$100,000	Operating budget
Other		
Furniture	$80,000	Operating budget
Videos and Books	$20,000	Operating budget
TOTAL	**$ 200,000**	

Antioch University
Five Year Capital Budget
Projects above $10,000
2003-04 Budget

ANTIOCH UNIVERSITY MCGREGOR

2003–04 PROPOSED EXPENDITURES

I. FACILITIES 2003-04

Priority 1: Scrape and Paint Two Restrooms. Replace flooring in three restrooms. Modernize restrooms in all three. (fixtures) If we can't do complete modernizing, then just paint and new flooring should be a priority. One of the restrooms is directly across from the SAS department and the other two are the men's and women's in the south hall. These restrooms are in terrible shape. These are the restrooms that are used and seen by most of the employees and the bulk of the students and first time visitors to our building. Besides the aesthetics there is also the question of sanitation. Cost - $3500.00 each.

Priority 2: Paint Rooms: 211, 209, 203. All these rooms are highly visible from the main hallway and lobby. Rm. 203 is the Admissions and Registrar area. First-time applicants and continuing students frequent this area regularly. They are the first and sometimes lasting impression. Cost: $2,500.00

Priority 3: Telephone Line in Conference Center. Many classes and cohorts meet in this room. For safety and convenience reasons it makes sense to add a phone. Cost to install telephone line: $600.00

Priority 4: Furniture Upgrade. Furniture is needed for new offices and to replace broken and worn furniture. Our current plan includes:

5 desks
8 desk chairs
12 bookcases
5 filing cabinets
3 lateral filing cabinets
meeting table & chairs
4 mailboxes for the Kettering student lounge

We need to furnish offices for the five new faculty: Each office is to have a desk, desk chair, two bookcases, and a filing cabinet. The extra three chairs are to replace broken chairs in current employee offices. The extra two bookcases are for existing staff. The three lateral filing cabinets are for student records (needed due to program growth). The meeting table and chairs are for the newly created meeting area on the first floor. The mailboxes for Kettering are for the students; we need to replace the current boxes as they are cardboard and falling apart.

II. TECHNOLOGY 2003-04

A. **Priority 1:** Non-TCP/IP Printer Replacement. This budget year will be used to replace the last remaining AppleTalk-only printers in the offices and work groups. These obsolete units will be replaced with more efficient and high-speed TCP/IP printers.

B. Analysis. Old and unreliable printers are a significant frustration for network users. Additionally, routing AppleTalk (LocalTalk) protocol over the Internet for administrative printing from Datatel is extremely inefficient and slow. However, like most other campuses, McGregor has a significant investment in older laser printers.

C. Proposed Action. Purchase new Hewlett Packard high-speed network laser printers. Estimated Cost - $2,000 each X 5 = $10,000

A. **Priority 2:** Main Server Replacement. The campus' main file server is now six years old and is no longer sufficient in speed and capacity to store the ever-growing collection of electronic documents the campus maintains.

B. Analysis. Insufficient storage space or limited ability to backup critical documents and other work is simply a bad business practice. Providing these services in an adequate manner is a basic and expected service.

C. Proposed Action. Purchase a new Apple X-Serve with adequate storage and backup system for the campus. Estimated Cost - $10,000

A. **Priority 3:** Additional A.V. Equipment and Technology Upgrades. Estimated Cost: 70,000

2004–05 PROPOSED EXPENDITURES

I. FACILITIES 2004-05

A. **Priority 1:** Paint, Replace Flooring and Modernize the Remaining Three Restrooms. Cost: $3,500 each.

A. **Priority 2:** Directory for Lobby. Cost: $1,000

A. **Priority 3:** Heating in Boulding Library.

II. TECHNOLOGY 2004-05

A. **Priority 1:** Employee Workstation Standardization

B. Analysis. During this fiscal year, Antioch McGregor's desktop computer/portable computer technologies used by faculty, administrators, and staff will become, in part, obsolete. The computer industry has changed so rapidly that equipment acquired a few years ago is no longer capable of handling current software applications. This project would replace the most obsolete units within the McGregor technology environment.

C. Proposed Action. Purchase enough workstations to upgrade employee computers. *Estimated Cost*: $60,000.

A. **Priority 2:** Classroom of the Future. Additional A.V. equipment and technology upgrades. Estimated Cost: $90,000

2005–06 PROPOSED EXPENDITURES

I. FACILITIES 2005-06

A. **Priority 1**. Replace Windows and Frames in Lobby.

A. **Priority 2**. Scrape and Paint Windows on Outside of Conference Center.

A. **Priority 3**. Replace Windows and Frames in Large Conference Room.

II. TECHNOLOGY 2005-06

A. **Priority 1:** WebCT Server Replacement.

B. Analysis. During this fiscal year, Antioch McGregor's web-based course delivery system may be obsolete. This project would replace the Sun Enterprise 250 with current hardware and WebCT software and tools. Estimated Cost: $35,000

A. **Priority 2**: Classroom of the Future. Additional A.V. equipment and technology upgrades. Estimated Cost: $50,000

A. **Priority 3**: Network Printer Replacement. This budget year will be used to replace the obsolete units within the campus printer pool.

B. Analysis. Old and unreliable printers are a significant frustration for network users.

C. Proposed Action. Purchase new Hewlett Packard high-speed network laser printers. Estimated Cost: - $2,000 each X 5 = $10,000

2006–07 PROPOSED EXPENDITURES

I. FACILITIES 2006-07

A. **Priority 1:**. Renovation of South End of the Basement for Classrooms.

II. TECHNOLOGY 2006-07

A. **Priority 1:** Employee Workstation Standardization.

B. Analysis. During this fiscal year, Antioch McGregor's desktop computer/ portable computer technologies used by faculty, administration, and staff will become, in part, obsolete. The computer industry has changed so rapidly that equipment acquired a few years ago is no longer capable of handling current software applications. This project would replace the most obsolete units within the McGregor technology environment.

C. Proposed Action. Purchase enough workstations to upgrade employee computers. Estimated Cost: $30,000.

A. **Priority 2:** Classroom of the Future. Additional A.V. equipment and technology upgrades. Estimated Cost: $50,000

2007–08 PROPOSED EXPENDITURES

I. FACILITIES 2007-08

A. **Priority 1:** Replace Windows in SAS Main Office – Room 203

II. TECHNOLOGY 2007-08

A. **Priority 1**: Network Hardware Replacement:

B. Analysis. If it has not been possible up to this point, this year must be used to upgrade obsolete networking hardware for the campus. This may entail the purchase of new routers, switches, UPS units, and other miscellaneous hardware.

C. Proposed Action. Purchase, install, and configure new network hardware. Estimated Cost: $50,000

A. **Priority 2**: Classroom of the Future. Additional A.V. equipment and technology upgrades. Estimated Cost: $70,000

Barbara Gellman-Danley
President

Antioch University
Five Year Capital Budget Summary
Antioch University McGregor

2002-03 Base year Capital Expenditures (Est.)	Amount	Source
Facilities	$ 171,220	Operating Funds
Technology	$ 182,801	Operating Funds
	$ 53,166	OHE Bond
Other	$ 19,779	Operating Funds
	$ 1,360	OHE Bond
TOTAL	**$ 428,326**	

2003-04 Proposed Expenditures	Amount	Source
Facilities	$ 109,500	Operating Funds
Technology	$ 90,000	Operating Funds
Other	$ 10,000	Operating Funds
TOTAL	**$ 209,500**	

2004-05 Proposed Expenditures	Amount	Source
Facilities	$ 10,500	Operating Funds
Technology	$ 150,000	Operating Funds
Other	$ 1,000	Operating Funds
TOTAL	**$ 161,500**	

Antioch University
Five Year Capital Budget Summary
Antioch University McGregor

2005-06 Proposed Expenditures	Amount	Source
Facilities	$ 10,000	Operating Funds
Technology	$ 95,000	Operating Funds
Other		
TOTAL	**$ 105,000**	

2006-07 Proposed Expenditures	Amount	Source
Facilities	$ 125,000	Operating Funds
Technology	$ 80,000	Operating Funds
TOTAL	**$ 205,000**	

2007-08 Proposed Expenditures	Amount	Source
Facilities	$ 2,000	Operating Funds
Technology	$ 120,000	Operating Funds
TOTAL	**$ 122,000**	

Antioch University
Five Year Capital Budget
Projects above $10,000
2003-04 Budget

WYSO PUBLIC RADIO

2003-04 PROPOSED EXPENDITURES

I. FACILITIES 2003-04

A. **Priority 1**: WYSO Office Wing Renovations. During 1998-99, Antioch University and WYSO contributed the funds necessary to renovate WYSO's office wing in the basement of the Sontag-Fels Building.

Since 1998, the station's staff has grown and its need for additional office space has grown with it. Staff members have begun to occupy basement offices not originally a part of the 1998-99 renovations. Additional office space will be required in 2003-04 for further staff enhancements and expansion of the broadcast/-production plant. For the past couple of fiscal years, WYSO has proposed appropriate office renovations. Unfortunately, other priorities have made this a back-burner issue. Nevertheless, management believes that some, even limited office renovations should occur in 2003-04.

B. Analysis. WYSO's broadcast and business operations have consolidated into a single location in the basement of Sontag-Fels Hall. A reasonable amount of the WYSO plant is presentable and professional in appearance, which is useful in that it affects the demeanor and focus of staff members. A presentable and professional appearance is a requirement for the station's continued growth and development as regards the general public and, specifically, meetings WYSO would otherwise like to host with potential business

underwriting clients and other strategic partners. Accordingly, the WYSO plant continues to have several deficiencies due to the lack of funding for more extensive office renovations, specifically an office that the station would like to convert into a conference room. Creation of a WYSO Conference Room would likely be a benefit to Antioch University McGregor, as well. During the last few years, McGregor has made use of the WYSO Performance Studio to host events and seminars. It would seem logical that an additional conference room in Sontag-Fels would serve the interests of both units of the University.

C. Proposed Action. WYSO has not had the opportunity to determine the costs of proposed renovations. However, the station is hopeful that it may be able to arrange a trade-out of on-air underwriting and website acknowledgement to an area contracting firm(s), to get these renovations accomplished. Otherwise, WYSO will solicit bids for this work and, in consultation with the Antioch administration and the WYSO Resource Board, determine an appropriate course of action for the execution of this project.

A. **Priority 2**: Purchase/Install Generator for Transmitter. To assure minimal interruption of its broadcast service, WYSO must purchase and install a generator at its transmitter site. Dependent on the unit that is selected, the station will then be able to determine specific requirements for installation.

B. Analysis. Though obvious and a little silly to state, the most significant thing about radio is...radio. Listeners come to hear some*thing*. When a station is off-the-air, for any reason, its reliability as a service and, therefore, its intrinsic value is somewhat diminished. Sensible broadcast operations take great care to minimize service interruptions. Redundant transmission systems are certainly one remedy against the possibility of any catastrophic failure of a station's main transmitter. However, other transmission failures can be caused by loss of power from a local utility company (due to a lightning strike or other weather-related activity). In these instances, a station's best defense is a power generator to keep the transmitter functioning and the station broadcasting until such time that power is restored. Keeping station downtime to the most limited and controlled circumstances will improve WYSO's overall value to the Miami Valley community. The station will gain a reputation for being a reliable source for emergency information (when currently some of these situations are the very ones responsible for silencing WYSO's signal). A power generator is a standard cost of doing business in the broadcast world and should be considered a necessity for WYSO as soon as it is possible.

C. Proposed Action. This project will be costly. Management anticipates submitting a report on this matter to the WYSO Resource Board for consideration for inclusion in a package of proposed capital improvements. It is then expected that the several capital improvement projects will receive priority rankings, enabling the Board to establish an overall goal for a major capital campaign.

A. **Priority 3**: HVAC for Transmitter Plant. Toward the end of 2002-03, a major compressor in the air conditioning unit at WYSO's transmitter plant failed and is beyond repair. Replacement of this part may cost the station upwards of $3,500. While WYSO can make this purchase, management is looking into the cost-benefits of replacing the entire HVAC system.

B. Analysis. As stated below, radio's digital transmission future is here. Upon conversion, the new broadcast scheme will necessitate radio broadcasters to operate not one, but two transmitters at all times. This will not only increase costs of ongoing operations (especially for maintenance and power consumption), it will place additional burdens upon the entire transmission plant. Replacing the faulty compressor may bring the existing air conditioning unit back to full operational order. However, when fully functional, the unit may not have the capacity to adequately cool the facility in a digital broadcast environment. This may be a good moment to not be penny wise and pound foolish about such an important and critical expenditure.

C. Proposed Action. This will depend on whether WYSO simply replaces the faulty compressor or concludes that a new air conditioning system should be purchased. If the former, those funds will come out of the station's operating budget. If the latter, depending on the total expense, some funds might be drawn from the operating budget, while the remainder may be sought from grant sources that provide quick turnaround funding for high-priority, time-sensitive projects. Having adequate cooling of the transmission plant will soon become a critical issue as the weather continues to warm up.

II. TECHNOLOGY 2003-04

A. **Priority 1**: Acquire Two or Three Computers. WYSO needs additional computers to conduct its broadcast and business operations.

B. Analysis. WYSO made significant progress within the past few years in the acquisition of new computers for its full-time staff, as well as for digital audio production/distribution. However, as the station's staff grows, it will require one additional computer for a full-time staff member, and one or two additional computers to continue the process of digitization/automation of the broadcast/production/distribution environment of the shop. Analog systems are almost entirely a thing of the past at most radio stations in the United States. However, several digital systems are also proving to have been transitional technologies and are now falling by the wayside. Examples include DAT (digital audio tape) player/recorders and digital cart machines, etc. More and more, stations are using their station automation systems for the production, routing, and playback of discrete audio segments (often utilizing in-studio, touch screen technologies). In turn, many automation systems communicate directly with a station's traffic (i.e., program log) generation system, creating a transparent playback environment for many recorded programming segments, such as promotional announcements, local news commentaries, etc. In 2001-02, WYSO transitioned from a mostly jury-rigged and highly inefficient traffic/billing system that consisted of two computers (one, a decade old Macintosh; the other, six-year old PC) running completely incompatible software programs. As has been WYSO's experience in recent years, investments in new computer systems increases staff productivity dramatically which, in turn, produces increased returns to the station's bottom line, thereby taking WYSO several large steps closer to establishing a truly self-sufficient operation.

C. Proposed Action. WYSO acquired additional computer systems in 2002-03 through a trade-out of on-air underwriting credits with an area retailer. Management has a long-established policy of declining total trade-outs of goods and services in exchange for underwriting (preferring, instead, that any trade arrangements feature some amount of cash changing hands). However, I authorized this exception in 2002-03 rather than face the possibility that WYSO would not keep pace.

III. OTHER 2003-04

A. **Priority 1:** Conversion to HD Radio Transmission. Last year the Federal Communications Commission issued to radio broadcasters a standard for digital transmission. Unlike the digital conversion mandates to television stations, there is no date-certain by which radio must be broadcasting a digital signal. Stations are welcome to begin broadcasting an HD Radio (or IBOC, i.e., in-band, on-channel) signal immediately (several

already are). The digital transmission standard requires all stations to broadcast both an analog and a digital signal for the foreseeable future.

B. Analysis. There is no doubt that HD Radio conversion will be a significant capital expense. At this writing, the public radio industry still anticipates that both federal and Ohio state funds will be available, on a competitive basis, to assist stations to affect digital conversion projects. However, due to the voluntary nature of the FCC's Order, it is unclear how much money the U.S. Congress or the Ohio State Legislature will set aside for public broadcasting projects.

C. Proposed Action. Management will draft a comprehensive, HD Conversion proposal. The document will include timeline scenarios for phased conversion over the course of several fiscal years, as well as a scenario for a total conversion that would come about after a major capital campaign focused on WYSO's digital future.

2004-05 PROPOSED EXPENDITURES

I. FACILITIES 2004-05

A. **Priority 1**: WYSO Office Wing Renovations. As above, 2003-04 Proposed Expenditures; with the further consideration that the station may need to expand its production plant modestly through the addition of one or two editing booths should its local/regional news service continue to grow.

II. TECHNOLOGY 2004-05

A. **Priority 1**: Digital Conversion. As above, 2003-04 Proposed Expenditures, regardless of the manner and timeline WYSO affects for conversion to HD Radio, there are aspects of the station's air chain that may not withstand further tests of time. In comparison to the total costs of conversion, WYSO may need to replace one or both of its two main studios' broadcast consoles. There is little doubt that it will certainly need to improve the routing, distribution, and processing of digital audio within the air/production plant. This would require targeted investments in computer equipment (CPUs, servers, touch-screen monitors, etc.).

WYSO's current analog transmitter is not a model commonly used in the radio industry and it has a number of serious deficits in its design and function. During 2001-02, the station restored an old analog unit to act as its working back-up transmitter. However, the back-up operates at a significantly lower power output than the station's main transmitter. Neither transmitter is ready to meet the challenge of HD Radio broadcasting. More importantly, it is unclear how long WYSO's current, main transmitter can continue to function with reasonable reliability. Within the past year, when WYSO had a Chief Engineer on duty more regularly, the transmission plant saw appropriate upgrades and repairs affected. These gave me confidence that the current transmission scheme can be maintained for, at least, another few years. However, it is critical to note that the station does not now have a Chief Engineer working as regularly as before.

A. **Priority 2**: Acquire New Computers. WYSO will need additional computers to conduct its broadcast and business operations. This includes replacement of aging systems.

B. Analysis. WYSO believes it will be better served by having its own internal server for the management of its e-mail, distribution and access of office software applications, etc. Equally, as the station's website continues to grow and mature, the station will need to hire a new media services and/or communications director to oversee, among other things, website content/online services development. This would, in turn, necessitate the station's acquiring the necessary hardware/software to effectively manage these services.

C. Proposed Action. WYSO anticipates having some funds available in each of its fiscal budgets to devote towards some aspects of technology development. However, costs associated with equipment acquisition and installation may also be secured through trade-out(s) of on-air underwriting and website acknowledgements with area computer retailers. Additional funds may be raised through grants funding and/or a major capital campaign. As well, management continues to believe that there are opportunities to develop specific joint partnerships. Assuming such partnership initiatives come into being, management is hopeful that operational efficiencies will be affected such that services can be maintained and grown strategically.

2005-06 PROPOSED EXPENDITURES

I. FACILITIES 2005-06

A. **Priority 1**: Establish Dayton Studio. As WYSO grows its regional news/public affairs service, it will make good business and broadcast sense to establish a studio facility in Dayton.

B. Analysis. WYSO anticipates increasing its local/regional production of news reports, features, documentaries, etc. Operating a Dayton-based studio allows greater opportunities for interviewing guests and producing pieces.

C. Proposed Action. WYSO will pursue a collaborative relationship with its Twin Signals Project partner, WDPR (Dayton Public Radio). WYSO believes it is reasonable and likely that it can establish a Dayton studio within the WDPR complex and work with them on a joint project to secure the funds necessary to establish this facility.

II. TECHNOLOGY 2005-06

A. **Priority 1**: Digital Conversion. (as above)

III. OTHER 2005-06

2006-07 PROPOSED EXPENDITURES

I. FACILITIES 2006-07

A. **Priority 1**: Establish Digital Editing Suite(s). As WYSO grows its regional news/public affairs service, it will make good business and broadcast sense to establish enhanced opportunities for producers to work on pieces by providing additional studio space to do this work.

B. Analysis. WYSO anticipates increasing its local/regional production of news reports, features, documentaries, etc. Creating mini-studio(s), digital editing suite(s), in which producers can edit and mix pieces will further enhance WYSO's output and provides additional opportunities to improve the station's air sound. Further, expansion of production opportunities will allow WYSO to eventually accommodate artist-in-residence programs to benefit both WYSO and Antioch students (e.g., a collaborative venture between WYSO and Antioch College's Documentary Institute).

C. Proposed Action. WYSO may obtain funds through major donations, grants, and/or collaborative fundraising opportunities it pursues with appropriate divisions at the University.

II. TECHNOLOGY 2006-07

A. **Priority 1**: Digital Conversion. (as above)

2007-08 PROPOSED EXPENDITURES

II. TECHNOLOGY 2007-08

A. **Priority 1**: Digital Conversion. (as above)

2008-09 PROPOSED EXPENDITURES

II. TECHNOLOGY 2008-09

A. **Priority 1**: Digital Conversion. (as above)

Steve Spencer
General Manager

Antioch University
Five Year Capital Budget Summary
WYSO

2002-03 Base year Capital Expenditures (Est.)	Amount	Source
Facilities		
Technology		
TOTAL	**$ -**	

2003-04 Proposed Expenditures	Amount	Source
Facilities		
WYSO Wing Renovation	n/a	Operating budget
Purchase Generator for Transmitter	n/a	
HVAC for Transmitter Plant	$ 3,500	
Technology		
Computer Equipment	$ 4,750	Operating budget
Other		
Conversion to HD Radio Transmission	n/a	
TOTAL	**$ 8,250**	

2004-05 Proposed Expenditures	Amount	Source
Facilities		
WYSO Wing Renovation	n/a	Operating budget
Technology		
Digital Conversion	$ 15,000	Cap Cam/Grant
Acquire New Computers	$ 8,000	Operating budget
TOTAL	**$ 23,000**	

Antioch University
Five Year Capital Budget Summary
WYSO

2005-06 Proposed Expenditures	Amount	Source
Facilities		
Establish Dayton Studio	$ 50,000	Operating budget
Technology		
Digital Conversion	$15,000	Operating budget
Other		
TOTAL	**$ 65,000**	

2006-07 Proposed Expenditures	Amount	Source
Facilities		
Establish Digital Editing Suite	$ 50,000	Operating budget
Technology		
Digital Conversion	$15,000	Operating budget
TOTAL	**$ 65,000**	

2007-08 Proposed Expenditures	Amount	Source
Technology		
Digital Conversion	$15,000	Operating budget
TOTAL	**$ 15,000**	

Antioch University
Five Year Capital Budget
Projects above $10,000
2003-04 Budget

University Wide

2003-04 PROPOSED EXPENDITURES

I. FACILITIES 2003-04

A. **Priority 1**: Parking Lot Resurfacing. The parking lot on the south side of the Kettering Building is deteriorating and is in need of resurfacing. The section on the west side was resurfaced in 2002-03. Over the years, a number of utility repairs and other intrusions have opened the surface and left scars that have encouraged water erosion and frost heave. Potholes have developed and the bituminous concrete used for the surface is significantly deteriorated. The condition of the lot was made worse by the removal of two, large underground storage tanks once used for fuel oil. The removal of these tanks was required by EPA regulations, but their excavation significantly damaged the lot surface. This project was first proposed in the 1999-2000 Capital Plan, but the cost was greater than estimated and the project was not started until 2002-03.

B. Analysis. The Kettering parking lot is used extensively by students of Antioch University McGregor and its condition reflects on McGregor and the University. McGregor students who attend class at the Kettering Building are primarily in the Management and Teacher Education Programs. Many teachers first visit Antioch to attend summer programs offered by McGregor at the Kettering Building. Their first impressions are formed, in part, by the condition of the parking lot. Resurfacing the parking lot will enable the underlying base material to be salvaged and we can avoid the higher cost of subsurface replacement at a later date.

C. Proposed Action. The resurfacing of the parking lot is being done in two phases because of the cost. Phase I has been completed and Phase II needs to advance. It is no longer advisable to delay the resurfacing by patching

and sealing because the subsurface will be damaged. The Phase II cost of resurfacing is estimated to be $45,000.

A. **Priority 2**: Replace Roof–Kettering Building Addition. The roof of the Kettering Building addition that houses the administrative offices of the University has developed chronic leaks which, despite numerous repairs, cannot be satisfactorily stopped. Part of the problem is due to an inadequate drainage system that clogs and causes large amounts of water to accumulate on the roof. Inevitably, this water accumulation finds cracks and defects in the roofing material and leaks into the offices below.

B. Analysis. The current roof is separating from the building at the edges due, in part, to the possible use of the wrong type of fastener when the roof was last replaced. If this is, in fact, the primary cause of the current problems, it would not be possible to economically or satisfactorily replace the fasteners without also replacing the roof membrane. Continued leakage repeatedly damages ceiling tiles and has destroyed files and office supplies stored below the leaking roof.

C. Proposed Action. The roof should be replaced, but as part of the project the drain system should be improved, if possible, by the addition of one or two additional drains. The roof should be replaced with sloping insulation that will increase the energy efficiency of the building and also channel water to the new drains. This will help avoid water collection on the roof and reduce the chance of seepage through the faults in the membrane. The estimated cost of replacing the roof and improving the drainage is $25,000.

II. TECHNOLOGY 2003-04

A. **Priority 1**: Replace/Upgrade UPS Power Units. Electrical power in Yellow Springs has a reputation for being "dirty" and unreliable. Although the municipality has invested considerable funds in upgrading the electrical distribution system within the Village, power surges and voltage drops remain common. Outages of long-duration are becoming less frequent, but severe weather is always a risk in the Miami Valley. Although major interruptions have been reduced, computers in the University Administration offices experience frequent interruptions of two or three seconds on a routine basis. Although these interruptions may go largely unnoticed by most people, they are sufficiently long to cause computers to shut down.

B. Analysis. The University installed small UPS units on all of its office machines three years ago. The investment greatly increased the reliability of the machines and reduced frustration from lost work. However, the units have been failing at an increasing rate, perhaps because of the "dirty" power that they filter. Over that three year period, there have been a significant number of electrical storms in the Miami Valley, including several that induced high voltage surges. While the UPS units have failed, they have probably saved our computer equipment from serious damage.

C. Proposed Action. We recommend that UPS units that have failed be replaced at a cost of $1,218.

A. **Priority 2**: Workstation Replacements. The University Administration depends on its desktop computers for the production of documents and as our interface with the Datatel system. In addition, these machines are used for e-mail throughout the day. They receive a great deal of use and several of the machines in the office are becoming obsolete and need to be replaced.

B. Analysis. The price of desktop machines has decreased steadily and the functionality and speed of the newer machines is considerably greater than the capacity of machines that were manufactured only three or four years ago. The ability to restructure huge databases, prepare large spreadsheets, and to manipulate graphics for presentations will all be enhanced by faster machines with larger hard drives.

C. Proposed Action. The University recommends that six desktop machines be replaced during the fiscal year. The estimated cost for the machines, network cards, monitors and associated equipment should not exceed $10,000.

2004-05 PROPOSED EXPENDITURES

I. FACILITIES 2004-05

A. **Priority 1**: Kettering Building Pipe Maintenance. The water supply and drain lines in the Kettering Building are almost entirely from the original construction of 1953. Virtually all of the water supply lines are galvanized pipe and this pipe is beginning to rust through in several places. In addition, most of the major shutoff valves have become "frozen" with time and could not be used to turn off the water supply in an emergency. Leaking water has ruined ceiling and floor tiles, damaged lights and other electrical circuits, and could cause major flooding.

B. Analysis. Replacing all of the galvanized pipe in the Kettering Building is not economically feasible, but certain pipe segments and several of the major valves need to be replaced or repaired. Unless the leaking and weakened pipe segments are replaced, they will continue to leak and cause damage to the building and equipment. If the main valves are not replaced or repacked, they will continue to leak and will not be available to shut off the water supply if there is a pipe break or plumbing fixtures in the building need to be serviced.

C. Proposed Action. It is recommended that a qualified plumbing contractor inspect the piping in the building to determine the full extent of the structural repair needs and to replace or repair pipe sections and valves that have failed or may fail in the near future. It is estimated that the survey and repair of the most seriously weakened components will cost $6,500.

A. **Priority 2**: Replacement of Kettering Heating Units, Phase I. The Kettering Building, with the exception of the front addition occupied by the Offices of the Chancellor and Vice Chancellor, is heated using a single pipe system that supplies heated water to wall units in each of the laboratories and offices. These units contain a radiator and a two-speed blower to circulate air. In addition, each unit contains a drip pan and a drain connection to handle condensate when the unit was used for cooling. These units were installed when the building was built. Six of the units were rehabilitated in 1999-2000, but the others have had little or no attention since the building was constructed.

B. Analysis. Additional examination of the remaining units revealed that the motors of several had been cannibalized to keep more critical units operating. Several of the motors are no longer capable of multi-speed operation, others are noisy because of bearing problems, and some have failed completely. The valves used to regulate the hot water supply to the units are not operating, and many are leaking. The drip pans used to collect condensate when the units were used for cooling have rusted through, and the drain lines have become clogged with debris. Because the three compressors used to cool the building have been abandoned, the wall units are not being used for cooling at this time.

Although most of the classrooms and laboratories have more than one wall unit, there have been enough failures that much of the space on the second and third floors cannot be adequately heated. These units are structurally sound, but early attempts at rehabilitation have not been entirely successful. Rehabilitation, although less

expensive than replacement, has lasted only for a few years before the old components begin to fail.

C. Proposed Action. The University Administration recommends that all room-heating units in the Kettering Building be replaced with new units that can handle both heating and cooling. This should be done on a phased basis to avoid excessive capital expense in any one year. The estimated cost of Phase I is $45,000.

A. **Priority 3**: Remodel Information Services Offices. The two staff members who support the mission-critical Datatel system are cramped into two very small interior offices. These cramped offices restrict the employees' ability to spread out work and to have adequate documentation binders close at hand. By any reasonable standard, these individuals do not have sufficient work space to do their jobs.

B. Analysis. Renovation of existing space would allow the creation of two reasonably sized offices to house the Datatel staff. Space would also be available to accommodate documentation on the Datatel system and the server and support equipment. Better order to this material would help the staff respond more quickly to problems and to have quicker access to needed information that is critical to project design and development.

C. Proposed Action. Creation of two offices within existing space with additional lighting and electrical service will improve the productivity and comfort of the Datatel staff. The administration recommends that the remodeling project take place in 2004-05, if not sooner, at a cost of about $20,000.

II. TECHNOLOGY 2004-05

A. **Priority 1**: On-line Registration Server. Students across the country expect to have on-line registration and records access. The earliest of the on-line systems utilized the touch-tone telephone to allow a student to interact directly with a computer in order to complete registration and/or check his or her academic records. More recently, the Web has become increasingly popular. The advantages of on-line registration are that students can complete registration on a time schedule that is convenient to them, rather than on one that is convenient for the campus. On-line registration can be made available 24 hours each day, 7 days per week. For undergraduates, this can mean the ability to stay a week longer at a summer job or co-op position, and for adult students, it means greater convenience by avoiding a special trip to the campus.

In order to remain competitive for both undergraduates and adult students, the campuses of the University will need to offer on-line registration. At present, Datatel software supports telephone registration, but additional hardware and telephone lines would be needed. Because we operate at multiple locations, we would need to duplicate the hardware and telephone lines at each campus or arrange for students to register at Yellow Springs using toll-free numbers.

B. Analysis. Touch-tone registration is proven technology that is widely available to students, but the Internet is just as accessible to students and far more functional.

Because the touch-tone registration systems relies on a voice-response unit to interface the computer with the student, there is a severe limitation on the amount and type of information that can be easily communicated. The Internet, on the other hand, provides an opportunity to convey large amounts of information graphically in a very short period of time. On the Internet, the time, faculty member and location of various classes can easily be presented to the student in a highly understandable form. In addition, Internet registration does not require the purchase of specialized voice-response units or other hardware. It does require appropriate software that can interface with the Datatel database to present the material appropriately.

C. Proposed Action. Antioch should use Datatel software and acquire a server to process the registration data. Server and associated hardware would likely cost about $8,500.

A. **Priority 2**: Upgrade Laptop/Desktop Computers. The University Administration depends on its computers for the production of documents and as our interface with the Datatel system. In addition, these machines are used for e-mail, whether we are in the office or on the road. They receive a great deal of use and several of the machines are becoming obsolete and need to be replaced.

B. Analysis. The price of both desktop and laptop machines has decreased steadily and the functionality and speed of the newer machines is considerably greater than the capacity of machines that were manufactured only three or four years ago. Laptops have become much lighter and this makes it easier to take them home for evening and weekend work. The ability to restructure huge databases, prepare large spreadsheets, and to manipulate

graphics for presentations will all be enhanced by faster machines with larger hard drives.

C. Proposed Action. The University recommends that one desktop and two laptop machines be replaced during the fiscal year. The estimated cost for the machines, network cards, monitors and associated equipment should not exceed $4,500.

2005-06 PROPOSED EXPENDITURES

I. FACILITIES 2005-06

A. **Priority 1**: Replacement of Air Conditioning Compressor. The Kettering Building offices of the Chancellor and Vice Chancellor are served by a two-chiller system that is separate from the rest of the Kettering Building. These offices are in a more recent addition to the building and that is why they are served by a separate system. As a result of problems with the control system, the two chiller units operated throughout the winter. As a result, the primary unit was frequently frozen and this resulted in premature failure. This unit cannot be repaired economically and needs to be replaced.

B. Analysis. The system was originally designed with two chilling units which operate in series. When the weather is mild, one unit is sufficient to keep the offices cool, but when the temperature get above 85 degrees, the second unit is necessary. The need for chilling has increased as the amount of electronic equipment used in the Chancellor's Office has increased. The additional equipment adds heat to the interior and, because the windows cannot be opened, there is no way to remove excess heat.

At the present time, the offices are being cooled by the Number 2 chiller, but if it should fail during the summer cooling period, the offices will rapidly become too hot to allow people to work productively.

C. Proposed Action. A replacement for the Number 1 chiller should be purchased. Once installed, this new chiller can assume the primary load for cooling the office space and the Number 2 chiller can return to its back-up role. Because the Number 2 chiller has been weakened by operating in winter temperatures, its useful life has

probably been shortened. By returning it to the back-up role, we can maintain the entire system for a far longer period of time.

A. **Priority 2**: Replacement of Kettering Heating Units, Phase II. The Kettering Building, with the exception of the front addition occupied by the Offices of the Chancellor and Vice Chancellor, is heated and cooled using a single pipe system that supplies heated (or chilled) water to wall units in each of the laboratories and offices. These units contain a radiator and a two-speed blower to circulate air. In addition, each unit contains a drip pan and a drain connection to handle condensate when the unit was used for cooling. These units were installed when the building was built. Six of the units were rehabilitated in 1999-2000, but the others have had little or no attention since the building was constructed. Replacement of these units began with Phase I in 2004-05.

B. Analysis. Additional examination of the remaining units revealed that the motors of several had been cannibalized to keep more critical units operating. Several of the motors are no longer capable of multi-speed operation, others are noisy because of bearing problems, and some have failed completely. The valves used to regulate the hot water supply to the units are not operating, and many are leaking. The drip pans used to collect condensate when the units were used for cooling have rusted through, and the drain lines have become clogged with debris. Because the three compressors used to cool the building have been abandoned, the wall units are not being used for cooling at this time.

   Although most of the classrooms and laboratories have more than one wall unit, there have been enough failures that much of the space on the second and third floors cannot be adequately heated. These units are structurally sound, but early attempts at rehabilitation have not been entirely successful. Rehabilitation, although less expensive than replacement, has lasted only for a few years before the old components begin to fail.

C. Proposed Action. The University Administration recommends that all room-heating units in the Kettering Building be replaced with new units that can handle both heating and cooling. This should be done on a phased basis to avoid excessive capital expense in any one year. The estimated cost to complete this project is $45,000.

A. **Priority 3**: Kettering Window Replacement, Phase I. The main portion of the Kettering Laboratory building was constructed in 1953 with single-pane glazing and storm windows. The single-paned windows and the uninsulated aluminum framing transmit a large amount of heat to the exterior during winter and allow a large amount of heat

to enter the building during summer.

B. Analysis. Antioch University McGregor uses much of the first floor for classroom instruction. As part of a renovation project to the classrooms, a number of windows have been replaced on the first floor. These are quality windows, double glazed and insulated. They can be easily opened to allow fresh air to enter, an important feature in a building that has no central air circulation system. New windows would greatly enhance the energy efficiency of the building and increase its future value regardless of how it is used.

C. Proposed Action. The University Administration recommends that the windows in the Kettering Building be replaced over a two-year period using the same type of glazing and frame as has been installed in the classroom areas. The total cost of the project is estimated to be about $45,000, with the first year cost set at $25,000 and the second year cost set at $20,000.

II. TECHNOLOGY 2005-06

A. **Priority 1**: Replace Datatel Server. By 2005-06 the existing Datatel Server will have been in use for four years and, based upon our prior experience, the server will no longer be capable of handling the demands of the campuses.

B. Analysis. The upgrade path for the current server is a machine with faster processors than our current unit. The database that we use with the Datatel software will not accommodate multi-thread processing, but it will accommodate dual processors. While it is possible that this software will be rewritten before 2005-06, it is unlikely that multi-thread processing will be possible at that time. Therefore, faster processing speed is essential in order to maintain satisfactory support for campus users.

We are scheduling the replacement of the Datatel Server for 2005-06, but it is likely that we will need to accelerate the acquisition. Demands on the server have been geometric rather than linear.

C. Proposed Action. We recommend that a higher speed server be acquired not later than the beginning of 2005-06. It may also be necessary to replace the RAID disk drives with higher-capacity and faster units. Faster disk drive access times may be required to take advantage of the faster processing speed of the new server. It may

also be necessary to increase the capacity of the disk drives in the RAID system to handle the increased volume of data that will accompany new, web-based applications.

A. **Priority 2**: Video Conference Teaching System. Video conferencing products that take advantage of the high-speed data carrying capacity of the Internet are now on the market. The equipment to allow personal computers to process two-way video and audio signals simultaneously already exists and is certain to get better as computer chips improve. Video conferencing for administrative and teaching purposes is coming into broader use as the Nation's telecommunication system becomes more capable of handling the high-speed data transmissions needed to make video conferencing acceptable. Video conferencing within buildings where the rooms are connected by a local area network is quite useful; the pictures are clear and the motion is fluid, but when the same signals are carried over the Internet and then through the local telephone system, the limited capacity of the circuits greatly degrades the quality of the images and voices.

   Video conferencing for teaching should now be feasible as higher speed cable and DSL communication channels become available to many homes.

B. Analysis. Getting high-speed communication traffic to individual homes is being improved by four different technologies. The oldest of the high-speed communication links to the home is the ISDN phone line that can deliver data at 128Kbps. The next fastest technology is a satellite link. Using the small satellite dishes that have become common for television can provide down link transmission of data at 400Kbps. However, the up link signal is not as fast.

   The newest technology is Digital Subscriber Line (DSL) and it uses the existing copper wires connecting homes to greatly increase transmission speeds. Rather than convert digital information to and from sound waves the way that a conventional PC modem does, DSL uses digital signal processing technology to send and receive data at frequencies above the voice band. This means that a home telephone equipped with DSL could provide a normal voice circuit while at the same time providing a high speed, two-way data circuit. Asymmetric DSL is capable of sending data upstream at speeds ranging from 64Kbps to 768Kbps. The downstream channel would receive data at rates between 1.5 to 8Mbps. Symmetric DSL would divide the bandwidth evenly to provide two high-speed video links between the classroom and the home.

transferring a major production job to these smaller machines would disrupt the routines of those offices or displace other important work.

C. Proposed Action. Replacement of the large-volume copier in the Chancellor's Office will insure that quality printed material is available to the Board of Trustees and other groups. The quality of reproduced material is important to the image of the University and the ability to produce large volumes of printed material on a short time table is important for the Chancellor and Vice Chancellor. The net cost of the replacement machine will depend on the residual value of the existing machine. While a new machine might cost $10,000 or more, the actual cost in 2005-06 should be somewhat less because of the residual value that can be applied against the purchase cost.

2006-07 PROPOSED EXPENDITURES

I. FACILITIES 2006-07

A. **Priority 1**: Kettering Window Replacement, Phase II. The main portion of the Kettering Laboratory building was constructed in 1953 with single-pane glazing and storm windows. The single-paned windows and the uninsulated aluminum framing transmit a large amount of heat to the exterior during winter and allow a large amount of heat to enter the building during summer. This is Phase II of the project.

B. Analysis. Antioch University McGregor uses much of the first floor for classroom instruction. As part of a renovation project to the classrooms, a number of windows have been replaced on the first floor. These are quality windows, double glazed and insulated. They can be easily opened to allow fresh air to enter, an important feature in a building that has no central air circulation system. New windows would greatly enhance the energy efficiency of the building and increase its future value regardless of how it is used.

C. Proposed Action. The University Administration recommends that the windows in the Kettering Building be replaced over a two-year period using the same type of glazing and frame as has been installed in the classroom areas. The total cost of the project is estimated to be about $45,000 with the first year cost set at $25,000 and the second year cost set at $20,000.

2007-08 PROPOSED EXPENDITURES

II. TECHNOLOGY 2007-08

A. **Priority 1**: Electronic Library Server. Increasing numbers of periodicals and a number of monographs are currently available in electronic form. This number is expected to increase and become available for desktop use, but these services will not be free. Virtually all material that currently finds its way into print is in digital form. The only reason this material is not more widely available on the Internet is that no effective means has been developed to compensate the creators of the intellectual property or those who invest the funds necessary to make the material available. Various approaches have been suggested to permit payment for broader use of periodicals and monographs in electronic form.

The current approach for making electronic material available is a subscription fee. By paying for a subscription, an institution is authorized to gain access to a particular periodical and, in the case of universities, allow students to access the material. It is possible that this approach may expand with more individual publishers making their material available electronically. Alternatively, distribution or consumer consortia may be formed to acquire the material for electronic distribution. Regardless of how the material is made available, it is possible that there will be a need for a single point to enable Antioch users to gain access to this material.

The reason why a single point of access may be needed is that passwords for each employee and student are unlikely to be available from the providers. Rather, providers will sell a single institutional authorization, which, typically, would be assigned to a library. If each campus subscribes independently, we will have six separate subscriptions for each electronic information source. However, if we have a library server connected to each campus library through the Internet, the library server can hold the subscriptions and make the connection to the information provider.

In addition to providing connectivity for the libraries, the library server could also handle off-campus connections by our students. That is, if students are authorized, they could use the Library server to gain access to all of the electronic material for which the University has subscriptions.

Antioch University
Five Year Capital Budget Summary
University Wide

2002-03 Base year Capital Expenditures (Est.)	Amount	Source
Facilities		
Technology	$ 10,000	Operating budget
TOTAL	**$ 10,000**	

2003-04 Proposed Expenditures	Amount	Source
Facilities		
Remodel Shared HR Space - Kettering	$ 40,000	Operating budget
Technology		
Datatel Backup Server	$ 10,000	Operating budget
Workstation Replacements	$ 10,000	Operating budget
H323 Video Conferencing System	$ 20,000	Operating budget
Other		
TOTAL	**$ 80,000**	

2004-05 Proposed Expenditures	Amount	Source
Facilities		
Parking Lot Resurfacing	$ 20,000	Operating budget
Pipe Maintenance	$ 6,500	Operating budget
Heating Units	$ 17,000	Operating budget
Technology		
On-Line Registration Server	$ 3,500	Operating budget
Video Conference System	$ 10,000	Operating budget
Other		
TOTAL	**$ 57,000**	

Antioch University
Five Year Capital Budget Summary
University Wide

2005-06 Proposed Expenditures	Amount	Source
Facilities		
Parking Lot Resurfacing	$ 20,000	Operating budget
Air Conditioning Compressor	$ 10,000	Operating budget
Technology		
On-Line Registration	$3,500	Operating budget
Other		
TOTAL	**$ 33,500**	

2006-07 Proposed Expenditures	Amount	Source
Parking Lot Resurfacing	$ 20,000	Operating budget
Facilities		
Technology		
Video Conference Teaching System	$40,000	Operating budget
Replace Datatel Server	$15,000	Operating budget
TOTAL	**$ 55,000**	

2007-08 Proposed Expenditures	Amount	Source
Facilities		
Technology		
Electronic Library Server	$14,000	Operating budget
TOTAL	**$ 14,000**	