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commitment to excellence in teaching, evidenced in the recent creation of a series of
Distinguished Professorships in Teaching as it is in the inauguration of a Teaching Academy, and
in the establishment of an Academic Park at the center of the campus that honors with an
impressive bronze plaque in pronounced public view in an adjoining building exemplary teachers
who have served the university and its students over the course of the institution’s 130-year
history. In its Excellence 21 initiative embodying its commitment to continuous quality
improvement, the university has made explicitly and effectively evident its concern for its publics
as the components within the internal university community have for one another themselves.
Through its sustained campus-wide initiative for internationalization of its programs, the
university has emphasized its commitment to the broader interests of the world and of those who
study within its purview. Further, the thoughtful and sustained review and monitoring of student
outcomes assessment constitutes evidence of the commitment of the faculty and university
leadership to student learning and to its continuous improvement.

Criterion Two: "The Institution has effectively organized the human, financial, and physical
resources necessary to accomplish its mission."

Purdue has a strong and effective governance structure. Its Board of Trustees is composed
of members who take great pride in their university and its accomplishments, have a palpable
passion for it, and lend freely of their considerable talents, experience and energies to its care and
betterment. Purdue is perhaps unique among major American teaching and research universities
in that it has had but five presidents during the course of the twentieth century. It has benefitted
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enormously from the sustained strong, visionary and effective leadership of its current president for nearly two decades, a benefit that will last long into the next century. The university has also been particularly fortunate in having had sustained and effective leadership in both academic and financial matters, including an Executive Vice President for Academic Affairs who’s tenure exceeds that of most peers. The president and his executive team have developed what appears to be an extremely effective set of management relationships with the deans of schools and others in Purdue’s uncommonly decentralized authority structure; they have also created, maintained and nurtured the institutions and the culture of shared-governance with the faculty representatives who constitute the University Senate. The university has an outstanding faculty that, while not enjoying the same measure of material support as the faculties of peer institutions, is committed to the university and the fineness of its programs organized in a constellation of ten schools serving over 36,000 students and the academic regimens they pursue. The staff appear to be highly competent and committed to the welfare of their university.

Fiscal, Budgetary and Academic Affairs: The president and other senior executives of the university provide outstanding leadership in fiscal, budgetary and academic affairs. As Indiana’s land-grant university, Purdue is state-assisted and relies on the State of Indiana for approximately 27% of its operating revenues. While the actual state allocated dollars continues to increase the actual percentage of operating revenues received from the state is diminishing. There has been a decrease of approximately 8% since the last review. In spite of the challenge of state funding, the university has maintained and has increased financial resources through sound
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investment and fiscally sound practices. The budget process is participatory and has been extended over the past several years to include a broader range of stakeholders across the campus and includes discussion in appropriate forums of the university including those of the University Senate. This move toward broader sharing of budgetary data and criteria for allocative choices for comment is to be strongly encouraged.

The institution enjoys autonomy in the use of its funds and controls the establishment and periodic adjustment of student fees. In terms of tuition and fees as well as state appropriations per student FTE, however, Purdue ranks near the bottom of the Big Ten. This is a matter of particular concern in a university that is heavily oriented in its teaching, research and outreach mission toward engineering, technology and the sciences. While the leadership of the university has been sagacious in its utilization of funds, over the longer term the level of funding will have to increase if Purdue is to remain competitive among its peers in the Midwest and nationally.

The financial records of the institution are maintained on a cash basis during the year and adjusted to an accrual basis at the close of each year. The financial procedures of Purdue are sound and assure high compliance with sound financial practices of the best universities in the nation. Sound financial principles appear to be practiced at all levels of the university and work to assure the financial viability at all levels of operation. Financial reporting and practices are in compliance with the standards established by the authority setting bodies for higher education.

The long-range capital and financial plans for the university are also sound and based on correct principles. The plan provides wide opportunity for involvement by the faculty. Both the Executive Vice President for Academic Affairs and the Executive Vice President and Treasurer
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work together to assure projects meet the academic needs of the University congruent with its mission and vision as stated in guiding university statements.

Several concerns raised by our predecessors a decade ago concerned the relationship between academic and financial planning and decision-making. In 1990, for example, the reaccreditation team expressed the concern that “there is a perception that staff in the Business Affairs Division make too many decisions that properly belong in the sphere of academic or student services administrators.” Discussions during the current NCA visit confirm that the perception of that time was in fact the reality.

The situation in 1999 is far different. The Executive Vice President for Academic Affairs (EVPAA) and the Executive Vice President and Treasurer (EVPT) have established a highly effective working relationship; they meet regularly and frequently to discuss campus needs, budget, personnel matters, facilities and campus infrastructure. Further, and importantly, the EVPAA has full authority (subject to approval by the President) for allocation of funds (some 60 – 70% of the Purdue budget) to academic and academic support units. The EVPT participates in budget presentations by the EVPAA to the President and has been supportive. Similarly, the EVPAA participates in budget discussions between the EVPT and the President. An outstanding and mutually supportive relationship exists between the two EVP’s and the President. It is less clear, however, whether such working relationships have been institutionalized, whether they will continue when a new President is designated, or whenever changes occur in the two executive vice presidential offices. Every effort should be made to ensure that such effective collaborative relationships be sustained as well as the authority of the EVPAA with respect to
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academic priorities and allocations.

The EVPAA has a well developed and effective budget process in place that insures accountability by academic units but, at the same time, provides flexibility to the academic support units and schools. For example, faculty lines are not controlled by the legislature or by the central administration of the university, but can be reconfigured to suit the needs of schools and other academic units. Faculty lines can be created and modified as needed. In the common parlance employed to describe similar arrangements at other universities, it appears that at Purdue “money is green.” This flexibility should be preserved. In addition, schools retain salary savings, and are able to carry-forward unexpended balances into future years. This policy encourages efficient use of resources. These policies along with results of periodic program reviews allow the schools and other academic units to plan effectively. The decentralized approach to budgeting appears to work well for Purdue.

While there is much to be said for a highly decentralized approach to budgeting and planning, there is some concern that there should be more emphasis on institutional planning and prioritization. Additionally, there is a need for the President and EVPAA to have sufficient funding to promote and nurture selectively new institutions, interdisciplinary programs, existing programs, and research infrastructure which are designated as University priorities. To a limited degree such flexibility already exists given that the EVPAA has some $2.5 million per year for investment and the President has an additional fund of $2 million which can be used for start-up funds for new faculty. But in order for Purdue to have the institutional nimbleness to compete effectively with the region’s and nation’s best institutions, it will be essential that the magnitude
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of funds available for central allocation and investment be substantially enhanced.

**Space and Facilities:** The university is both perceptive and prudent in the planning and management of its space and facilities. The master plan for Purdue University was developed in 1928, and has served as the guideline for the development of the campus since then without major modification. The only exception has been the development and beautification of the internal campus by moving parking from the interior sections of the campus to the external areas of campus accommodating the parking needs with large multi-level parking structures. This movement of parking has provided additional parking to meet the ever-growing needs of the university community.

All new capital projects must pass a rigorous review before final approval by the President, the Executive Vice President for Academic Affairs and the Executive Vice President and Treasurer. This review and approval process, combined with the extensive school/college and campus review, appears to satisfy the campus users for involvement in the process while meeting the teaching and research mission of the university. The decision process for capital improvement and space usage appears to be collegial. The process appears to meet the usage needs of all sections of the campus and is congruent with the academic mission of the institution. Space usage guidelines are adapted from APA and are generally used as the space allocation model for the campus.

Utility management is excellent. The university co-generates power and works with Cinergy, the local Power Company, to optimize most efficient use of power across campus. The
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rates realized through the program are some of the lowest in the country and constitute a model to be emulated. There is currently no deregulation of power usage in Indiana, which precludes competitive shopping for power rates which if available could reduce costs even more.

The general condition of buildings on campus is excellent, indeed in our estimation among the best in higher education. Built space is attractive and well maintained. Every campus building has been rewired to provide better computer connectivity throughout the campus. This upgrade now provides connectivity to both on and off campus users to university data warehoused information. With the continued addition of new buildings, particularly from donated funds, however, it will be necessary to assure that continued operational costs for the new square footage be carefully projected and sources of funding for the same known and secured.

**Information Technology (IT)** is a growth industry on campuses, and effective management of any university is becoming increasingly dependent on IT. With the passing of Year 2000 compliance issues will come renewed challenges of providing access to a variety of information, when and where it is needed, supporting effective collaboration and cooperation, and providing more effective services to the University community as a whole.

Faced with the problem of making administrative systems Year 2000 compliant, but not being confident that commercial products being developed in the mid 90’s would meet the University’s needs, Purdue decided to fix their existing administrative applications, rather than replace them. Software was developed at Purdue to identify and fix codes for existing systems.
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Addressing the Year 2000 problem did not resolve the need for new applications and functionality. Management Information's approach to this issue is to purchase commercial packages, if available, that can meet University needs. When this is not possible, it will develop functionality and applications itself. For example, a new development system that was purchased is ready to go into production. Student Services systems are being developed in-house using the SmallTalk object-oriented programming environment to provide Web access to legacy systems. Object-oriented programming should make it possible to create general solutions that can be applied to a variety of problems. A new Web-based procurement package was purchased that will provide the framework for developing electronic commerce and workflow functionality.

Web access to sponsored program financials will be developed using software from MIT.

Developing administrative systems in-house has the advantage of creating the functionality you want, while hopefully not simply transferring historic, paper-based processes. But, the cost of developing and maintaining in-house systems is potentially very high. And, as the number of Purdue-developed solutions and commercial packages being deployed increases, the problem of integrating these resources into a unified environment will likely grow in complexity. Once the dust settles on Year 2000 conversion and the initial deployment problems have been resolved, Purdue should remain open to reevaluating major commercial administrative systems, especially in areas where in-house development and custom integration have proven more difficult or costly than expected.

We also take note that the Purdue Academic Computing Environment (PACE) project to
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create a unified identification, authentication, and authorization system is critically important. It will make possible the inter-operability between administrative systems needed to provide timely information to the desktops of decision-makers. It is also required to provide academic solutions, like managing student access to courses using WebCT, licensed software, or Library electronic databases and journals based on course enrollment information.

Maintaining communication and coordination across individual schools and departments is a challenge at Purdue. Bi-weekly meetings with departmental computing managers are helpful. These efforts should be leveraged to develop consensus for common standards and guidelines that will facilitate collaboration across programs. A common network infrastructure will make adherence to guidelines and standards increasingly important. For example, collaboration and cooperation currently suffers because it is difficult for some people to find each other’s electronic-mail addresses or locate information necessary for planning and decision-making.

Maintaining a contemporary information technology environment is costly, but essential to any major university today. Including the ongoing cost of maintaining and upgrading the network, public facilities, administrative systems, and other core technologies in the operating budget is necessary. Falling behind in its ability to take advantage of information technology for instruction, research, or administration and having to suddenly catch-up will put Purdue at a competitive disadvantage for faculty recruitment, attracting students, grant applications, and providing the services needed to manage the business of the university as effectively as possible.
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Public access labs have become the regular classroom for many courses and are now scheduled with classes through most of the day. Network storage and access to over 500 applications enables students to do their course work from any public computer or facility. PUCC staff seems very responsive to meeting student needs. While PUCC management seems very responsive to faculty, some faculty are not pleased by the support they receive from day-to-day interaction with staff. The University is aware of this situation, however, and is working to improve it.

Competition for public computers to do course work, check electronic mail, or browse the Internet can result in students waiting for computers in public labs. Making all applications and files accessible to students from both on-campus and off-campus housing would relieve some of the demand for public computers. Such an initiative would encourage more students to own computers thus helping PUCC meet the increased instructional demand for computing and network resources without increasing the number of public labs.

Encouraging the adoption of standards and guidelines for applications is difficult in Purdue’s decentralized environment, but consolidating software titles to reduce functional duplication would simplify training and support, reduce costs, and assure better collaboration and communication for the University community. Greater coordination and cooperation between PUCC and departmental and school IT support staff will be needed to accomplish this.

After the campus backbone network, creating the Multimedia Instructional Development Center (MIDC) is one of the most important initiatives the University has undertaken in recent years. Workshops and support for developing multimedia resources for instruction, funds for
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faculty to develop instructional projects, and a committed professional staff have generated
enthusiasm among faculty. WebCT workshops and support for faculty providing access to
course materials on the Web has been very successful. Equally important, students appreciate the
ready access to on-line course materials and information. Coordination with Center for
Instructional Excellence and Lifelong Learning holds great promise of expanding the benefits of
this work.

Faculty in many departments have traditionally looked to PUCC for access to
computational resources not available in their departments. Maintaining this type of service on-
campus will continue to require on-going investment to enhance and replace technologies. The
high speed campus backbone provides opportunities for researchers to share computational
resources with each other. It also makes possible support for research computing hardware at a
PUCC facility that can be accessed over the campus network. This model can reduce the cost of
technical support while increasing reliability and access.

High-speed access to remote computational services at national supercomputer centers
and colleagues at other institutions through Abiline and vBNS high-performance national
networks hold important opportunities for computational science and engineering. Upgrading
the Purdue connection to Indianapolis would be particularly important for realizing these
opportunities. Equally important will be PUCC’s ability to help faculty understand what off-
campus resources and capabilities are available, provide technical support and consultation
services so faculty and researchers can take advantage of these resources, and participate in
regional and national initiatives, such as computational GRID activities.
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The difficulty in meeting everyone’s needs in a decentralized community prevents PUCC from being as proactive as it could be in coordinating the planning and development of information technology across the University. Information Technology will require greater organizational authority if it is to play a more strategic role in shaping this important dimension of the future of the university. To accomplish this, Purdue should move ahead with its plans to consolidate all central information technology responsibilities under a new Chief Information Officer (CIO).

**Development:** Purdue like other major public universities accepts the tenet that development in the sense of securing private funding will be essential for it to fulfill its mission. Purdue has been quite successful in raising funds from private sources for both academic initiatives and for support for capital projects. The President of the University has been particularly successful in this regard and the university has enjoyed considerable benefit as a consequence.

As higher education enters a new century and millennium, private fund-raising will become an increasingly significant part of the annual budgets of public institutions. Public universities will continue to become more and more like private institutions in this regard as the latter will continue to become more like the former in pursuing public funds. The leadership of Purdue, in an effort to take the university to new levels of excellence over the past 20 years, realized the need and seized the opportunity to greatly expand private fund-raising. Commendably, that vision and those efforts have been rewarded with noteworthy successes, and
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the university has benefitted from having leadership particularly adept in this regard. The need to pursue development activity appears to be broadly accepted among academic leadership in the schools as well as among members of the faculty with whom the team met. It is less clear as to whether there is acceptance of the need for that centrally coordinated organization and effort which will be essential for a major development campaign to succeed.

The university has a number of accomplishments that bode well for the future in this regard. The Vision 21 capital campaign, concluded in December 1994, raised over $80 million beyond its $250 million goal. Over the past ten years the growth rate of private giving has averaged 21%, the current annual level being approximately $82 million. The university has developed and adopted a ten-component “Donor Bill of Rights” to assure that philanthropy merits the respect and trust of the public, and that prospective donors can have full confidence in the not-for-profit public services rendered by the university. Further, a “Statement of Policy” has been adopted which includes a mission statement congruent with and supportive of the academic priorities of the university, a statement of responsibilities to guide development efforts, and a statement of ethics which outlines expectations of those engaged in fund-raising activities.

Given its substantial alumni base, which includes the largest number of CEOs among the country’s top 800 companies to have graduated from a public university, Purdue could very likely achieve the ten-figure goal which only three or four public universities have thus far achieved. As more and more private fund-raising professionals and volunteers join in efforts to significantly increase private monies, however, it will be important to increase the level of coordination between and among schools and other fund-raising entities. While decentralization
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is an incentive to schools and other units, it is important that multiple solicitations of the same
donor by different individuals representing schools and other units be coordinated with the
development office. Moreover, involvement of the central development office in decisions
related to the hiring of new professional development officers in the schools and other units
should be increased. It is important that a collective spirit and attitude be maintained of
principals not being concerned about who receives credit for major gifts, but rather that a spirit of
“what is in the best interest of Purdue University and those it serves” prevails. The prospects for
Purdue are extremely good.

The Student Oriented University: Purdue is a student oriented university. This is
reflected in the place of honor given teaching, the rich panoply of new teaching initiatives, the
attitudes of faculty about students and the sense among students that the university cares about
their learning. It is also reflected in student services, headed by a Vice President for Student
Services. Services for students in the form of educational, auxiliary, and advising service and
programs, however, are also administered through the offices of the Vice President for Housing
and Food Services and through the academic school offices for student affairs. While the
administrative and academic cultures of the university are highly decentralized, the management
structure is not a flat one; and while the organizational structure is complex, there is a tradition of
interpersonal communication that seems to facilitate cooperative and collaborative relations.
Horizontal functional coordination appears to be a strength of the system and culture. There are
reservations among some, however, that this informal system of communication may not endure
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as new people from outside of Purdue become part of the administration without insights to the traditional administrative culture.

The size and complexity of the University presents a challenge for administrators to communicate effectively with students and to involve them in decision-making and institutional governance as was cited in the last NCA review. From the administrative standpoint, students are represented on a variety of administrative and governance committees. There seems to have been a significant enhancement of structural inclusion of students in the decision-making affecting students. Students indicated that they feel involved and empowered to contribute their ideas to the administration effectively.

While communication and functional collaboration between housing and student services, for example, is laudable, there does not seem to be a corresponding institution-wide common strategic goal to emphasize learning outside of the classroom as an integral part of the culture of the university. There may be some value for Student Services or some other appropriate office to initiate campus wide discussions concerning outside the classroom learning experiences, as suggested in several reports of the national Kellogg Commission. In this regard, there may be an opportunity to reinforce goals for achieving racial and cultural diversity and aesthetic development.

With respect to the management of auxiliary enterprises, there appear to be sound human resources and financial management systems in place. There is an anticipation of an enhancement of the database system within the Registrar’s office to enhance the availability of student record information for student advising and Student Services program enhancement. Cultural
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programming for the University community is within the purview of Student Services and Housing and Food Services (auxiliary enterprises). Plans for a new Visual and Performing Arts Center are being developed by the program and facility directors of fine arts, theater, music, and cultural programming faculty and administrators.

The creation of a new center for the Visual and Performing Arts presents the University with an excellent opportunity to integrate aesthetic development into the core of the learning experiences of students. Purdue University is in an excellent position to create a unique emphasis in the arts based on the development and use of various forms of technology in the modern evolution of the arts. Additionally, enhancing cultural diversity and adding to the quality of life for the University community in a unique way, which takes advantage of the interdisciplinary opportunities presented through combining science and the arts is an extremely exciting prospect. The university is to be commended for the initiative and encouraged to plan boldly and creatively to enhance the concept of holistic learning for students and to stimulate creativity and diversity in the learning community.

The Black Cultural Center represents a symbolic tie of the history of equal opportunity at Purdue to the commitment to diversity in the future. The University has made a commitment to enhance diversity through furthering the goal of racial integration with the Center as the focal point for inclusion with an emphasis on the historic significance of the Black experience in our society.

Support services for students in intercollegiate programs appear to be well organized and staffed by knowledgeable and committed individuals. There is a clear commitment to integrity in
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the program and the academic and personal support services seem to be designed to help the students develop their academic programs and achieve academic excellence and graduation.

**Human Resources:** Special attention has been given the area of human resources since the last review. There was concern expressed in the last NCA review about the under-representation of women and minorities at upper levels of university administration and among the senior faculty. Although the University is not satisfied with its accomplishments, Purdue is commended for the progress shown for the commitment to advance equal opportunity, affirmative action, and diversity. In the intervening years since the last review the University appointed one Latino and one African American vice president both of whom left Purdue for university presidencies. The women in administration have increased by nearly three-fold (from 22 to 63) while Black administrators have doubled (from 6 to 13). The creation of the position of Vice President for Human Relations is designed to provide central administrative leadership, coordination, and collaboration for initiatives to advance equal opportunity, affirmative action, and diversity.

The administrative leadership in Human Relations is knowledgeable, committed, and articulate about the relevant issues in human resource management and interracial interactions. All acknowledge that while there is a sound institutional commitment to diversity there is still a considerable challenge to institutionalize the philosophy that diversity enhances the quality of learning at the university. Some financial resources are being developed to stimulate diversity initiatives and the administrative resources seem to be adequate. Some progress has been made
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in the areas of diversity although much still must be accomplished to realize the university’s philosophical position that diversity enhances the quality of the university community.

**Criterion Three: “The Institution is accomplishing its educational and other purposes.”**

The academic programs at Purdue University are strong and rigorous. All programs subject to professional or disciplinary accreditation have received it from the relevant accrediting agencies. We have previously noted that Purdue University is decentralized with academic planning, programs and curricula being the primary responsibility of the schools with close monitoring by the central academic leadership. We shall report on each of the schools individually in the following section, but suffice it to here observe that we found in our reviews of the schools a commitment to collaborative endeavor with academic neighbors and with a strong commitment to quality in teaching, research, and service programs. We include as the most immediately relevant observations concerning criterion three are student assessment, new teaching initiatives, organization and investment in the research infrastructure, technology commercialization as an exemplar of outreach and putting knowledge to work, and undergraduate enrollment management.

**Student Outcomes Assessment:** In consonance with the campus-wide Excellence 21 program devoted to continuous quality improvement, the university has developed a strong student outcomes assessment plan which appears to enjoy broad faculty support. The university’s revised assessment plan was accepted by NCA in January 1997. Since then the plan