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INTRODUCTION

This Master Plan for Indiana University-Purdue University at Indianapolis is the product of aspirations, judgments, and efforts from many sources. It was prepared in response to a request from President John W. Ryan of Indiana University, as part of the process of developing a comprehensive plan for the Indiana University system.

We have attempted to include appropriate consideration of the needs of the Indianapolis region, the concerns of Indiana and Purdue universities, and our responsibilities to the citizens of Indiana. The central objective has been to develop a balanced, cohesive, and realistic presentation of what should and can be achieved in the next ten years on behalf of those students who will attend this University.

Because conditions change, in both quantitative and qualitative ways, we regard this Plan as a working document, subject to continuous review and revision. Matching our potential with our capabilities will be a recurring challenge. To meet that challenge, we will do our best to plan effectively and efficiently, as we strive to reach ever broader and higher goals. Our planning will then help us to build the kind of institution of public higher education that Indianapolis and Indiana need and deserve.

Glenn W. Irwin, Jr., M.D.
Chancellor

SECTION I

MISSIONS AND OBJECTIVES

Indiana University-Purdue University at Indianapolis (IUPUI) is a diverse and complex institution of public higher education. Consequently, its missions and objectives are diverse and complex. Translation of the general and traditional missions of teaching, research, and service into more specific terms requires analysis at several levels and from several directions.

These approaches include the regional and state-wide contexts within which IUPUI functions, the academic and administrative organization and status of IUPUI, and projections concerning those ways in which IUPUI could and should develop within the foreseeable future. The "future" is interpreted here as the next ten years, with more certainty indicated for the first five years than for the second five.

Several central points should be noted at the outset. IUPUI is urban (and therefore demographically accessible), large (and growing larger), and uniquely structured (representing an unusual form of unification of the Indianapolis-based programs of the two universities). Although the missions and objectives of the various IUPUI divisions differ in focus and in scope, there are many opportunities for cooperative ventures. In combination, the systematic, planned advancement of mutually reinforcing missions and objectives can be realized, assuming adequate future funding and other forms of support.

Major and central responsibilities of IUPUI divisions include the provision of instruction appropriate to university status, leadership in enriching the scientific and cultural climate of the community, the preparation of students for advanced schooling and professional practice, advancement of institutional strengths to enhance coherence and identity, broadening college-going opportunities, furtherance of beneficial relationships with employers of graduates and sponsors of IUPUI programs, improvement of support services for faculty members and students, and provision of continuing education for professional updating, vocational purposes, or personal aspirations.

These are a few of the more obvious areas that will require special attention and action during the coming decade. Choices will have to be made among and between many worthy proposals. Shall we add a much-needed full-time faculty member or acquire library volumes to fill a critical gap in our holdings? Shall we invest in more counseling staff or in financial aid for students?

By inventorying our current status and projecting probable developments, a long-range plan can identify directions through which we can choose options and set priorities more effectively.

In preparing this Plan, a number of documents were reviewed and drawn upon. These include recent annual reports of the Chancellor and of the Deans of IUPUI divisions. For the past two years, a group of IUPUI faculty and staff members has been developing proposals to guide institutional planning. This Goals and Objectives (GO) Committee interviewed many persons on the campus and in the community and published a preliminary report in the spring of 1973. The GO Committee's comments and recommendations have contributed much to this document--which follows a detailed outline developed by the Indiana University Committee on Long-range Planning.

In addition, to respond to many points raised in the outline, Deans and other IUPUI administrators have prepared reports that have been selectively incorporated into this more general Plan. These reports, from the schools and divisions of IUPUI, are primary sources of planning information and are available for further study.

Finally, copies of a preliminary draft of this Plan have been reviewed by Deans, other administrators, and appropriate committees of the IUPUI Faculty Council. This version incorporates suggestions generated through this review process. In addition, as data have changed and become available, the quantitative content of this Plan has been updated. It is anticipated that further revision of the Plan will take place at regular intervals, with annual analyses of academic planning and of administrative-capital programs in alternate years.

Geographic and Demographic Contexts*

IUPUI is in the center of the Indianapolis Standard Metropolitan Statistical Area, which corresponds to Region 8, as defined for planning purposes by the Indiana Commission for Higher Education. The Region includes Marion and the seven surrounding counties--Hamilton, Boone, Hendricks, Morgan, Johnson, Shelby, and Hancock.

Among the state's 14 regions, Region 8 has the largest population. The 1970 census total of 1,109,882 represents more than a fifth (21.3%) of the Indiana population, occupying less than one-tenth (8.5%) of the state's land area. It is thus the most "urban" among Indiana's regions, with the highest population density per square mile (361).

*Sources of information for this section include Volume I of "The Indiana Plan for Postsecondary Education: Phase One," published September 29, 1972, by the Commission for Higher Education of the State of Indiana.

The 1970 census population totals for Marion County and for Indianapolis are 793,590 and 745,739 respectively.

For postsecondary planning purposes, the 5-14 age group is significant. The Indianapolis region had the largest percentage increase in this population group between 1960 and 1970. More than a fifth (22.1%) of the 5-14 age group in Indiana reside in Region 8.

Region 8 has 37.6 percent of the state's non-white population. The 1970 total non-white population in Region 8 was 140,406, with 137,722 in Marion County, 136,722 in Indianapolis, and 106,937 in Center Township, where IUPUI is developing its central campus facilities. Non-White students represent 11 percent of IUPUI total enrollment; 12.6 percent of the regional population are non-white.

Continued population growth is projected for Region 8, from 1,110,000 in 1970 to 1,300,000 in 1980 and 1,490,000 in 1990. From 1960 to 1970, the change was 165,407, a growth of 17.5 percent.

Although exceptions should be noted for professional divisions that draw students from the entire state, the overall enrollment at IUPUI is regionally based. About three-fourths of IUPUI students come from Region 8, and approximately a third of those from Region 8 who are enrolled in institutions of postsecondary education are students at IUPUI.

Marion ranks high (third) among the state's 92 counties in ratio of total freshman enrollment to prior year's high school graduates, with a percentage ratio of 68.9 compared to 55.2 for the state. Ratios for other counties in the region are 50.45 for Hamilton, 52.88 for Boone, 58.82 for Hendricks, 35.66 for Morgan, 46.46 for Johnson, 50.61 for Shelby, and 56.29 for Hancock.

As Indiana's largest city and state capital, Indianapolis is a major center for government employment. The region also has a broad-based economy, with more than 1,400 diversified industries, which supply products valued at \$1.855 billion annually. Manufacturing employees total some 135,000 and there are more than 53,000 working in the retailing trades. Annual retail sales exceed \$2.4 billion.

With more than 5,000 persons on its payroll, IUPUI is one of the region's major employers. With an annual operating budget of some \$100 million, plus continued capital investments, IUPUI makes a substantial local economic impact, both short-range and long-range. Since higher education is "labor-intensive," with more than two-thirds of operating budgets dedicated to salaries, expenditures by faculty and staff members in the Indianapolis region contribute significantly to the local economy.

Traditionally, Indianapolis has been an area of home owners. Of the 268,969 housing units in Marion County, 139,483 are owner-occupied.

In recent years, there also has been substantial construction of rental apartment complexes and shopping centers at the edges of the city.

At the core of the city, there also have been impressive construction developments. More are on the way. Since these facilities are near the developing IUPUI central campus, on the near west-side of the city, the implications are numerous. The new Convention-Exposition Center, for example, can attract conferences with educational, scientific, and technical content. In general, all of the developments in the heart of the city will encourage more traffic and activity toward and within the core, a magnetic phenomenon that the campus will share. (And to which the campus will contribute.)

A frequently mentioned, and very real, asset of the region is its central location. It is the country's hub of the interstate highway system and also is highly accessible by rail and air. Within the city, and of importance to IUPUI (where 95 percent of the students commute), access to the interstate system is essentially adjacent to the University Quarter Campus.

Despite its relative density of population, compared to other counties in the state, the Indianapolis region is physically characterized as horizontal and dispersed, compared to other metropolitan regions. This places limitations on the economic viability of public transportation, and makes it necessary to continue to study problems associated with parking for students, patients, faculty, staff and visitors. Assuming continued emphasis on use of the automobile as a primary mode of transportation, planning priorities for multi-level parking structures on the campus may be justified.

To the degree that we can contribute to the development of mass transportation, we plan to do so. Considerations of energy conservation, the environment, and land usage all suggest that organizations which generate extensive movement of people through the city have a responsibility to take part in exploring alternative modes of transportation. IUPUI contributes to the traffic and will cooperate in seeking improvements.

In addition, there are related ramifications in transportation regarding the state-wide systems of both I.U. and Purdue. Completion of I-65 has shortened arrival time to and from West Lafayette significantly. Access to and from Bloomington has been improved through four-laning. The effect on both IUPUI and the Bloomington Campus may be significant when residents of the southern portion of Region 8 find that commuting time to either campus is approximately the same.

Local cultural and recreational resources include the new Indianapolis Museum of Art, the Indianapolis Symphony Orchestra, Clowes Hall (on the Butler University campus), local and state libraries, an extensive parks system, and access to nearby reservoirs and lakes.

In addition to Butler University, Region 8 also includes Indiana Central College, Marian College, Indiana Vocational Technical College (IVTC), and Franklin College. Future campus planning for cultural and recreational purposes will include supplementary and complementary aspects of local resources already in being.

There is another supplementary aspect that should be mentioned in a discussion of geographic and demographic contexts. The above items deal with regional characteristics. Some IUPUI divisions have state-wide missions and need to be perceived in that context. For example, about two-thirds of the dentists in Indiana are educated at the School of Dentistry in Indianapolis, and the state's practitioners look to that school for continuing education. To cite another example, the School of Medicine is the largest of the nation's medical schools, and through its innovative state-wide system of medical education has a positive influence on the quality and accessibility of health care available in the state. This is in spite of the fact that the School of Medicine ranks in the lowest quarter among the nation's medical schools, in both annual expenditures per student and faculty-to-student ratio.

In addition to providing education, there are regional and state-wide needs to attract and retain highly trained professional and scientific practitioners. By design, the first phase of the State-wide System for Medical Education involved additional support for interns and residents. The state thus improved its retention rate of graduates of the School of Medicine.

It should be noted, too, that one of the key goals of the new Indianapolis Center for Advanced Research (ICFAR) is to make the region and the state a more attractive area for scientists, who can--and will--contribute significantly to the economic vigor and technological advancement of Indianapolis and Indiana.

The major concentration of the state's economic, governmental, cultural, professional, and technological resources in Indianapolis has clear and vital connections to long-range planning for IUPUI. The city's projected growth, central location, and status as the capital city also contribute to the context in which IUPUI and its divisions can and should develop expanded or new programs of instruction, research, and public service.

In addition, planning for campus facilities is associated with other construction and capital improvements that are taking place, and will take place, at the center of the city. To insure compatibility, functional utility, and esthetic quality, we are cooperating closely with state and city officials who are responsible for planning the physical dimensions of downtown Indianapolis.

Beyond analysis of the significance of the region's growing population, which will increase needs for locally based programs of

higher education, it is important to identify and measure the needs of special groups in the area, such as employers and potential students. No university can flourish in isolation, rendering services that may be anachronistic and unresponsive to realistic placement of its graduates in productive careers. Continuing attention to this aspect of planning will be vital.

Administrative and Academic Organization
and Status

IUPUI was established in January of 1969 by the Boards of Trustees of Indiana University and Purdue University. The Boards jointly resolved that the public higher education needs of Indianapolis and of Indiana would be best served by unification of the operations of both universities in the city.

This agreement assigned primary responsibility for management and operation to Indiana University, with the Chancellor of IUPUI reporting to the President of Indiana University.

The merger also assigned responsibility for academic missions to each university in disciplines and professions where each has special strengths. Within these complementary academic missions, each university approves faculty appointments and curricula, awards degrees, and supplies instructional services to all IUPUI students.

IUPUI components include Indianapolis-based programs that were initiated within the regional campus systems of Purdue and I.U. These now include schools in the liberal arts, sciences, engineering and technology, education, and business.

Other divisions include schools of art, law, physical education, and social service, and, in the health professions, schools of medicine, dentistry, nursing, and a division for allied health professions, with associated teaching hospitals and clinics. In the health professions, and in social service, IUPUI has state-wide instructional, research, and service missions. IUPUI also has a Division of the I.U. School of Public and Environmental Affairs (SPEA).

Management and operational functions of I.U. at IUPUI include business operations, employment of staff, maintenance of academic and other records, provision of central services (including such student services as registration, financial aid, and undergraduate admissions), administration of sponsored programs, and provision of campus facilities.

As a component of I.U., IUPUI takes part in determining shared policies for the I.U. multi-campus system and uses services provided by the central administration of the system. Centrally coordinated activities, for which the Office of the President has responsibility,

include budgetary planning, requests to the General Assembly for operating and capital appropriations, and external representation of the University to many of its constituencies.

Within the I.U. system, IUPUI already has achieved substantial operating authority in functions that can be implemented most effectively in the local context. This development should be thoughtfully advanced as local capabilities are strengthened, with central controls retained only where economy and quality of education can be improved.

A representative group of local civic leaders make up a Board of Advisors to the Chancellor. It is the policy of the Trustees of I.U. and Purdue to review recommendations from this Advisory Board before making major decisions concerning IUPUI. A Trustee from each of the universities serves on the Board.

Within general policies and guidelines of I.U., the Chancellor administers IUPUI and its divisions, participating with the President, the vice presidents, and the other chancellors in central planning, including preparation of recommendations to the Board of Trustees.

Operating and capital budgets for IUPUI programs are coordinated through the Office of the Chancellor, as are recommendations for faculty and staff appointments and promotions, establishment of new schools and degree programs, and other substantive items, which are subsequently reviewed by the Office of the President before submission to the Board of Trustees.

The Office of the Chancellor is the channel through which IUPUI officers, faculty members, and students communicate to the system-wide University administration.

The faculties at IUPUI divisions have organized councils and assemblies to consider such areas as curricular development and other academic priorities. A central IUPUI Faculty Council has been in operation since 1969, with elected representatives from all academic divisions taking part in this organization.

A vital group, for both administrative and academic purposes, is the IUPUI Council of Deans, which includes the heads of all academic divisions. This Council meets regularly with the Chancellor to discuss and approve institution-wide matters. There also is a central IUPUI Administrative Council, headed by the Executive Vice Chancellor.

The Chancellor has appointed, on an annual basis, standing and ad hoc committees to deal with matters of academic and administrative concern. These groups include faculty, students, and staff, as appropriate to the charge given to each committee. Committees appointed by the Chancellor include those concerned with computer services, parking, clinical research, convocations, student financial aid, and safety.

In the realm of academic organization and status, IUPUI also offers a diverse picture. In general, the long-established professional divisions have academic autonomy in such areas as curricular decision-making and conferral of degrees. In recent years, local authority to conduct complete baccalaureate and master's degree programs has been broadened significantly.

There also has been substantial progress in achieving regional accreditation for IUPUI degree programs. The North Central Association of Colleges and Secondary Schools recently awarded accreditation to IUPUI degree programs through the master's level.

In addition, there has been noteworthy progress in the delegation of local authority to recommend key decisions in such areas as faculty appointments, promotions, and awards of tenure. Administrators of both universities are committed to further broadening of academic autonomy, as necessary capabilities in faculty strengths and supporting facilities are developed.

In general, the assignment of academic missions reflected the traditional strengths of the two universities. This uniquely comprehensive combination of academic programs is among the special assets of IUPUI. Purdue's academic missions include those in the physical sciences, engineering, technology, agriculture, home economics, and related areas. I.U.'s missions include the liberal arts, the health professions, the life sciences, law, social service, art, business, and (with cooperation from Purdue) education.

The merger and reorganization of the former regional campuses has resulted in schools of science, liberal arts, and engineering and technology, in addition to emerging divisions of education and business. The merger enlarged, combined and strengthened a number of formerly duplicated academic departments in these schools and divisions. Capabilities for undergraduate and graduate instruction were enhanced, although a number of these departments continue to face critical shortages in full-time faculty, library resources, and teaching equipment.

In the arts and sciences, which form the foundation for any university, IUPUI must meet many "catch-up" needs. As indicated elsewhere in this plan, the quality of education in these disciplines affects the quality of education throughout IUPUI. These schools and departments aspire to identity and status beyond service to other components of IUPUI, however. Faculty members in the arts and sciences are aware of their special commitments to insure high standards of quality, to broaden students' intellectual horizons, and to determine their own distinctive roles in the development of IUPUI. In some areas of the arts and sciences, advanced, graduate programs will be necessary and appropriate.

It is in these divisions that the largest enrollment increases have taken place in recent years, as new degree programs have been established. The new presence of upperclassmen, majoring in specific arts and science disciplines, has magnified needs for full-time faculty, better libraries, and other added supportive facilities. Since the needs of Region 8 include strengthening these units, considerable future expansion is indicated as funds and facilities become available.

At the Medical Center, parallel needs for more instructional strengths are evident, as state-wide missions require successful national competition for able faculty. The special dimensions of teaching and research in the health professions should receive special recognition and support. Students in these professions must have the highest quality education possible, if the citizens of Indiana are to be served well.

In other professions, schools at IUPUI have earned widespread reputations for instructional quality in law, art, social service, and physical education. These divisions should continue to develop capabilities that are appropriate to their special constituencies, in response to regional and state needs.

Beyond programs for degree credit, IUPUI must continue to strengthen its continuing education programs. Courses are needed to keep professionals aware of new knowledge and new techniques, to prepare students for second careers, to add new facets to student life, or to aid the academically or physically handicapped in gaining access to higher education. Each year, some 12,000 professionals and adults take part in continuing education programs at IUPUI. The range of subject matter and the physical accessibility of IUPUI enhance future prospects for this highly important area of instructional service.

The above description of administrative and academic characteristics of IUPUI is designed to furnish perspective for the remainder of this plan. Through presentation of the general nature and scope of IUPUI, a planning framework can be identified and used for the more specific items that follow.

Some Assumptions Concerning IUPUI

Missions in the Future

Future emphasis must be placed on the delivery of educational services with a full range of academic and professional programs. Associated research and public service activities are projected to accompany such growth and change to meet the needs and desires of the numbers and kinds of students to be served.

Current assessments indicate that the decision to merge Indiana and Purdue programs in Indianapolis was sound. In the future, each

university will continue to conduct assigned and complementary academic missions, taking part in interdisciplinary ventures. The I.U. system will continue to carry responsibility for management, as IUPUI continues to develop appropriate forms and levels of autonomy as a major component of the system.

IUPUI is expected to develop further its urban characteristics. Although there will be a more professional-occupational orientation than is encountered at typical residential campuses, a basic discipline orientation also will be required. The student body will continue to be heterogeneous, with diverse needs and interests, requiring a wide range of instructional programs.

Effective education for the professions will require strengthening programs in the liberal arts, the sciences, and the other fundamental disciplines. To attain and maintain professional excellence, parallel levels of quality will be essential in the schools and departments that seek academic excellence.

Accessibility and flexibility (in programmatic, financial, architectural, and geographic terms) will continue to be major objectives, especially for undergraduate programs. Graduate and professional programs will continue to grow in response to demonstrable needs of the region and the state. These needs also will include varied forms of continuing education--professional, vocational, and avocational.

It is further assumed that all programs of public higher education in Indianapolis can and will benefit from locally administered planning and operational services. A related assumption involves the obligation to cooperate with other institutions and organizations in the region and state, to prevent duplication and to promote effective, combined efforts.

In the broadest sense, the mission of IUPUI is to build a fully integrated, internally coherent, quality institution of higher learning, dedicated to high professional and academic standards and to advancement of the quality of urban life, to the extent that new or improved modes of instruction and research can contribute to those goals.

The central mission, then, is to make the sum greater than the parts. This cannot be achieved inexpensively, in terms of either talent or money. IUPUI has the opportunity and the potential to earn a special identity and an innovative status. To reach that identity and status, however, major investments--significantly beyond current levels--will be essential.

Building a comprehensive institution of public higher education will require major commitments from the State, from the Indianapolis region, and from those who belong to this community of scholars.

The potential is there, in the faculty already assembled, in the programs now under way and to be mounted, and in the growing regional resources that can be drawn upon and served in return. Leadership, vision, and a shared sense of self-confidence will be vital. The challenge is to inspire the will and then to find the ways.

SECTION II

ENROLLMENT PROJECTIONS

On the following page, in Table II-1, are enrollment projections for IUPUI, through the 1983 fall term. In general, the projections anticipate relatively strong growth during the next five years and a slower rate of expansion during the second five years of the ten-year planning period. Given the potentials cited in this Plan, long-range prospects could yield a significantly higher total for the second five years. If necessary resources are provided, projections for the second five years will be revised upward.

The recent record is relevant. Since the merger took place, enrollment growth at IUPUI has been substantial. Fall term headcounts, including students at the Columbus Center, were:

<u>1968</u>	12,921	<u>1971</u>	16,580
<u>1969</u>	13,382	<u>1972</u>	16,938
<u>1970</u>	14,603	<u>1973</u>	17,666

Using the 1968 fall term as a base, the average annual increase has exceeded 900. The establishment of more than 20 new and complete degree programs, the completion of new facilities, and the growth of a number of existing programs are among factors that contributed to recent enrollment increases. Continued program and capital development, described in Sections III and XI of this Plan, can enhance prospects for further growth.

Other relevant factors include a growing population of more than 1,100,000 within convenient commuting distance, lower costs for students at IUPUI as compared to residential campuses, and potential Indiana increases in college-going ratios, which are now below those of a number of other states. Indianapolis also is an appropriate community for developing non-traditional programs, such as external degree programs and the transmission of courses via TV to industrial plants, government agencies, professional offices, or homes.

The projections reflect both quantitative and judgmental sources. The quantitative formula included several variables, such as regional population statistics, college-going rates, and local retention rates in high schools and colleges. The figures were then modified to reflect reachable goals in relevant faculty strengths, instructional facilities of various kinds, and other resources. Table II-1 thus represents an accumulation of data that indicates overall trends, based on available data and informed opinions concerning enrollment prospects in the various academic divisions of IUPUI. These prospects vary within divisions.

Within these academic divisions, there also are significant variations among student constituencies. IUPUI has a number of different student bodies, which vary by schools, by level, and by other factors. Differencies include proportions enrolled full-time, retention rates, and selectivity in admissions.

TABLE II-1
ENROLLMENT PROJECTIONS
(Including Columbus Center)

	UNDERGRADUATE	GRADUATE AND FIRST PROFESSIONAL*	SPECIAL**	TOTALS
<u>Actual</u>				
1973-74	10,715	5,285	1,666	17,666
<u>Projected</u>				
1974-75	11,273	5,498	1,667	18,438
1975-76	11,948	5,747	1,802	19,497
1976-77	12,421	5,891	1,909	20,221
1977-78	12,825	6,057	1,997	20,879
1978-79	13,013	6,236	2,073	21,322
1979-80	13,110	6,389	2,095	21,594
1980-81	13,216	6,312	2,065	21,593
1981-82	13,353	6,273	1,987	21,613
1982-83	13,333	6,308	2,005	21,646
1983-84	13,389	6,365	1,970	21,724

* Candidates for master's and doctoral degrees and the degrees of M.D., D.D.S., J.D.
 ** In general, "Special" students are enrolled in courses for degree credit, but have not been admitted to a regular degree program.

In general, however, IUPUI students reflect our urban characteristics. Behind the figures are people, individuals who have many different objectives and needs. Relatively high proportions are employed and married. They also tend to be older than students at residential campuses. A survey of IUPUI students was conducted in the 1971 fall term, in preparation for an accreditation review by the North Central Association of Colleges and Secondary Schools. A few findings from that survey are pertinent, since the kinds of students we serve have not changed appreciably.

More than two-thirds of the undergraduates lived at home with their parents or spouse (40 per cent were married). Half of them obtained most of their financial support from their own job or that of their spouse. They were largely local residents; four out of ten were born in Marion County, and more than half earned their high school diplomas in the county. More than half of the undergraduates' fathers had not attended college. Sixty per cent were in the upper 30 per cent of their high school class, and 70 per cent expected to complete degrees at IUPUI.

More than 70 per cent of the graduate students were enrolled part-time and were full-time salary earners. The largest single group consisted of teachers seeking a master's degree. Others were interested in advanced degrees in the sciences, engineering, and a number of other fields.

The "Special" category shown in Table 1 has pertinent implications concerning the kinds of students who enroll at IUPUI. This category represents individuals who enroll for credit courses, either anticipating formal matriculation in a degree program or taking one or more courses for professional, vocational, or personal reasons.

This dimension of access is a significant educational service. There are many college graduates in the Indianapolis region who need and desire further education. These otherwise "advantaged" individuals find it difficult or virtually impossible to leave their jobs and families to spend one or two years on a residential campus. Local availability of graduate courses and degree programs helps to meet their special needs, in addition to providing long-range benefits for their employers.

Although fall term enrollments were chosen for projection purposes, IUPUI is expected to show year-round growth. Our recent experience with summer session enrollments is noteworthy in this regard. Because of accessibility and added course offerings, IUPUI has become a major center for such programs. Total enrollment has grown from 5,872 in the summer of 1969 to a total of 11,388 at 1974 summer sessions.

Another important area of recent and expected growth is continuing education. More than 12,000 professionals and adults formally

take part in non-credit programs offered by IUPUI divisions each year. There is a trend among professional societies to encourage, even require, their members to update their knowledge and skills regularly. There also is a trend toward more formal quantification and recording of completion of courses in adult education. These trends, plus the region's population base, indicate that an annual total of 20,000 persons engaged in continuing education programs appears feasible within 10 years.

All of these projections are subject to change if there are major fluctuations in the economy, if the Indiana General Assembly commits significantly larger or smaller operating and capital appropriations to IUPUI programs, or if future college-going patterns change markedly. A general, long-range factor could be the development of reputations for special strengths among certain degree programs.

Retention also will be a factor. In the general academic degree programs, attrition between the freshman and sophomore years can be expected. By providing more counseling and remedial instruction, this loss can be reduced. On the other hand, attrition rates in the professional schools at IUPUI are negligible. Except for a few students who are forced to leave because of serious illness or similar reasons, virtually all entrants graduate in these divisions.

It should be noted that, in addition to accommodating growing numbers of graduate and professional students, recent establishment of baccalaureate programs at IUPUI has produced the presence of undergraduate upperclassmen, who major in specific disciplines. They require more specialized, more extensive, and more expensive resources, including more full-time faculty, more library holdings, more sophisticated laboratory equipment, and more staff and facilities to provide advanced clinical and field experiences. Our enrollment has increased as more undergraduates have lengthened their stay at IUPUI from two to four years, but the associated budgetary ramifications should be noted.

Considerable increases in proportions of full-time enrollment are expected, although IUPUI will continue to serve relatively large numbers of part-time students because of our location as an urban campus. Our part-time enrollment for the 1973 fall term was 9,428, which exceeded the combined totals of part-timers at West Lafayette and Bloomington by nearly 1,500.

Again, there should be qualifications for different programs. For example, four-fifths of the professional students at IUPUI are full-time. A much lower proportion of graduate students are classified as full-time, since many of these individuals are employed teachers taking limited course work. However, most of the graduate students seeking master's and doctoral degrees in the life sciences at the Medical Center are full-time.

Major enrollment limitations are in the professional divisions, where special types of faculty expertise and extensive instructional facilities (such as teaching hospitals and clinics) are required. In the health professions, law, and social service, as examples, these limitations are especially evident.

The School of Law presents a special situation. With establishment of a day division, enrollment has more than doubled since 1968. This has strained capabilities to maintain the School's well-known competency. At the current enrollment of 900, there already is significant selectivity in admissions. With the added full-time faculty required, the Law School could have an enrollment of 1,150 before 1983.

Throughout IUPUI, shortages of faculty, library holdings, classroom and teaching laboratory facilities, and other resources also are pervasive and will mandate selective enrollment limitations to maintain academic standards.

At all levels, there is concern about the recruitment of minority students. In the School of Medicine, for example, an administrative staff member concentrates on this area. The Indianapolis Law School has an active role in a national program with this objective. The University Division and a Guided Study Program at IUPUI provide counseling and remedial instruction to the degree that resources permit.

The current and future job market, which now appears to stress needs for health and other human services personnel, also will affect enrollments. A number of the programs at IUPUI are in this category and are expected to grow as needed resources can be developed.

Another avenue for exploration involves innovative approaches to instruction. New educational technology and new forms of non-traditional higher education (such as external degrees) are of strong interest to IUPUI. Many of the students enrolled in these programs would come from the Indianapolis region. Some, such as home-bound mothers of small children, would not otherwise enroll. Innovative scheduling also offers promise. A new Weekend College program in the School of Liberal Arts has had excellent initial reception.

Contractual arrangements can have some effect on enrollments. The School of Medicine, for example, has achieved enrollment expansion through cooperation with other universities and community hospitals over the state. This has involved about 100 contractual arrangements. An agreement between Marian College and the School of Nursing, whereby a portion of credits for the bachelor's degree can be earned at Marian, is a potential harbinger of local activity in this area. The Consortium for Urban Education, which is described elsewhere in this plan, will be an appropriate vehicle for implementing cooperative projects of this kind.

The growth of regional programs of Indiana Vocational Technical College, along with proprietary schools in Indianapolis, will affect planning for vocationally related programs. In a number of areas, such as allied health and technology, IUPUI has special capabilities that complement and supplement local programs. The private institutions of higher education in the Indianapolis region have chosen distinctive missions, which differ from those of IUPUI in significant ways (several offer a primarily residential educational experience, for example). Working with other institutions that offer post-secondary education, the broadest choice of options should be made available to prospective students in the region.

SECTION III

INSTRUCTIONAL PROGRAM DEVELOPMENT

An inventory of degree programs conducted by IUPUI divisions appears on the following pages. Plans for new degree programs are indicated within the divisional headings and are summarized in Table III-1 at the end of this section. The inventory presents a general picture of the types and levels of subject matter covered in the degree programs.

The missions, and capabilities of IUPUI divisions to fulfill these missions, vary considerably. Where the cultural and professional resources of the community fit the missions and can supplement the capabilities, these resources are tapped. Museums, libraries, governmental agencies, and the expertise of practitioners in many occupations enrich the teaching and research programs of IUPUI. In certain areas, such as metropolitan studies, criminal justice education, and special education, distinctive interdisciplinary programs have been developed in the urban setting of IUPUI. More such programs will evolve.

In general, instructional program development has emphasized compatibility with the academic standards of Indiana University and Purdue. For divisions with unique missions within the I.U. system, the standards also apply on a state-wide basis. It is important that our programs insure convertibility of credits among the campuses of the two universities.

Degree Programs of IUPUI Divisions

The School of Medicine conducts programs leading to the Doctor of Medicine, Masters degrees in Anesthesiology and Health Administration, and (through the I.U. Graduate School) the Doctor of Philosophy and the Master of Science in Anatomy, Biochemistry, Medical Biophysics, Medical Genetics, Microbiology, Pathology, Pharmacology, Physiology, and Toxicology. Recent developments include a Physician Assistant program at the Fort Wayne Center for Medical Education and expanded activities in community health, including plans for education for the general public in health maintenance. The School plans to offer a new Master's in Medical Sciences, a Doctor of Science in Medicine, master's and doctoral degrees in the neurosciences, and a new interdisciplinary program in forensic medicine, in cooperation with the Schools of Law and Dentistry.

The School of Dentistry confers the Doctor of Dental Surgery, the Master of Science in Dentistry (in 16 major fields), the Associate of Science in Dental Hygiene, and (through the I.U. Graduate School) the Doctor of Philosophy in Preventive Dentistry and the Master of Science in Dental Materials, Oral Pathology, Orthodontics, and Preventive Dentistry. Associate degree and certificate programs

for dental auxiliaries (hygienists, laboratory technologists, assistants) will expand at Indianapolis and on other campuses. The mission of graduate education (for specialty practice, teaching, research) also will be important to curricular planning.

The School of Nursing conducts degree programs leading to the Associate of Arts in Nursing, the Bachelor of Science in Nursing, the Master of Science in Nursing (Medical-Surgical, Maternity, Nursing Service Administration, Pediatrics, Psychiatry-Mental Health), and the 60-Hour Specialist Degree in Clinical Nursing. A doctorate program in nursing and a graduate program in community health are projected.

The Division of Allied Health Sciences, within the School of Medicine, offers Associate in Science degree programs (in Respiratory Therapy, Hospital Dietary Technology, Radiologic Technology and Occupational Therapy), and Bachelor of Science programs (in Cytotechnology, Medical Records, Medical Technology, Occupational Therapy, Physical Therapy, Radiologic Technology, and in four fields of Public Health). Through the Division of Education, a Master of Science in Preparation of Teachers in the Allied Health Sciences also is offered. In Indianapolis, and on other campuses, these and related programs are expected to assume increasing importance and range.

The Indianapolis Law School grants the degree of Juris Doctor (J.D.) to students admitted with a bachelor's degree and the Bachelor of Laws to special students admitted before receiving the baccalaureate. In addition to the cooperative program in forensic medicine (described under School of Medicine), degree programs in preparation include the Master of Laws and a joint J.D. Master of Business Administration program. The Law School also will initiate programs for education in law in elementary and secondary schools, develop several institutes which will concentrate on selected professional areas, and cooperate with other law schools beyond the state in offering special educational opportunities to senior students.

The School of Social Service, which traditionally offered the State's only Master of Social Work degree, has expanded to include undergraduate degree programs. These comprise the Bachelor of Social Work and the Associate of Science in Human Services. A projected doctoral degree program will prepare advanced students for research and teaching roles. To meet its state-wide responsibilities, the School plans to expand programs at IUPUI and on other campuses in Indiana.

The School of Liberal Arts conducts degree programs leading to the Bachelor of Arts in Economics, English, French, German, History, Philosophy, Political Science, Sociology, Spanish, and Speech. In preparation are Master of Arts programs in English and History. An innovative "Weekend College" has been launched by this School.

The School of Science offers the Bachelor of Arts in Biology and Geology, the Bachelor of Arts and Bachelor of Science in Chemistry and Psychology, and the Bachelor of Science in Mathematics and Physics. Graduate degrees include Master of Science programs in Chemistry, Applied Computer Science, Psychology, and Agriculture (Extension Education), in addition to a Master of Arts in Teaching (Mathematics). Anticipated new programs include Bachelor of Science degrees in Computer Science, Geology, and Earth Science (Secondary Teaching), MAT degrees in Biology and Geology, master's programs in Physics and Psychology, and a Ph.D. program in Chemistry in cooperation with industry.

The School of Engineering and Technology conducts degree programs in Computer Technology (AAS and B.S.), Construction Technology (B.S. and AAS in architectural, civil engineering, and pollution control technology), Electrical Technology (AAS and B.S.), Engineering (B.S. Interdisciplinary, M.S.-Interdisciplinary, and M.S. in Industrial Operations and Mechanical Engineering), Industrial Supervision (B.S.), Manufacturing Technology (B.S. in industrial engineering and mechanical technology and AAS in Industrial Engineering, Mechanical Draft Design, and Mechanical Engineering Technology), and Institutional Management (AAS in Food Service Lodging Supervision). Anticipated added programs include a new curriculum for a Professional Foreman associate degree and a B.S. with a Supervision major. Associate degree programs in Pollution Control Technology and Industrial Engineering Technology will be coordinated with Public Health programs. A master's in Urban Systems Engineering is in preparation.

The Herron School of Art confers the Bachelor of Fine Arts and the Bachelor of Art Education. A Master of Art Education program is in preparation, and will require addition of courses in the crafts. Art history and visual communication also are developing.

The School of Physical Education confers the Bachelor of Science in Physical Education. The School (formerly the Normal College of the American Gymnastic Union) plans to develop a master's degree program to serve teachers in the area.

The Division of Business offers courses leading to the Bachelor of Science, with majors in Accounting, Finance, Management, and Marketing. Through the I.U. School of Business, students in Indianapolis can earn the M.B.A. As this emerging division acquires full-time faculty and other resources, undergraduate and graduate degree capabilities will be enhanced.

The Division of Education offers bachelor's degree programs in elementary and secondary education, and master's degree programs in school administration and in elementary, secondary, and special education. In cooperation with other IUPUI divisions, prospective new programs could involve early childhood, guidance, school-law, consumer education, and geriatric concerns. Long-range plans envision degrees for education specialists and programs at the doctoral level.

The Indianapolis Division of the School of Public and Environmental Affairs offers the Master of Public Administration through the system-level school and includes undergraduate degree programs in Metropolitan Studies and Criminal Justice Education. Because of the concentration of governmental agencies in the city, this Division is expected to grow significantly, to serve students and employees in the public sector.

In general, the thrust of instructional program development at IUPUI will place emphasis on academic and professional quality. The instructional needs of students are interrelated. The liberal arts and sciences carry major service loads for other fields, but their other links to the rest of IUPUI are more significant. These departments provide essential preparation for graduate and professional study, and they set the basic tone for institutional quality in teaching and research. The whole spectrum of instructional programs at IUPUI will thus have to be strengthened if our broad institutional missions are to be achieved.

Existing programs in the health sciences will require improved student-to-faculty ratios, more technical and support staffing, better and larger facilities, and other forms of added support, to insure excellence at the hub of state-wide programs of health instruction. Rising public needs and expectations for delivery of health care will affect planning in these areas.

Established graduate programs at the School of Medicine have achieved notable academic stature. These programs lead to the Master of Science and the Doctor of Philosophy. Similar graduate-level opportunities are available in dentistry and nursing. In addition to preparing able practitioners, these divisions also educate future faculty members and research scientists.

Programs at other established professional schools (art, law, physical education, social service) have relatively clear missions. Their needs vary, and include more faculty and library resources for law, more art-history faculty and studio facilities in art, instructional facilities and added faculty for physical education, and more comprehensive, multi-level capabilities in social service.

The existing "catch-up" needs at IUPUI are critical in emerging undergraduate programs--liberal arts, sciences, engineering and technology, business, and education. A major need is improvement in the proportion of full-time faculty. In the Purdue University academic mission areas, 39 new faculty positions would have been justified in the last three years. The student-to-faculty ratio in several liberal arts departments, such as sociology, economics, speech-theatre, and political science, also is unsatisfactory.

The Division of Business, with more than 900 majors and eight full-time faculty, also faces critical catch-up needs. The growing

Division of Education has similar problems. In the School of Science, biology, chemistry, and geology need immediate support. As the programs of the local Division of Public and Environmental Affairs grow, commensurate support for education in the public sector will be particularly important in Indianapolis.

We also plan to contribute to the continued development of quality graduate education for Indiana and to respond to the special needs of Indianapolis as the state's most populous urban area. Emergence of these needs will be met through the continuing development of IUPUI and of professional and graduate programs through the doctoral level.

There also are many opportunities for continuing education services in the region, not all of which can be offered on a "pay-as-you go" basis. To meet demonstrable needs, consideration should be given to subsidizing selected services in this area.

To serve adults and professionals who need instructional services outside the "traditional" or "regular" programs of academic units, IUPUI plans the early development of an external degree program that would enhance accessibility.

The evolution of new programs also will require parallel organizational changes. These are expected to include changing the Division of Allied Health Science within the School of Medicine to a separate school, strengthening the Divisions of Business and Education, developing a more completely coordinated graduate school, and implementing a comprehensive program to assist students with marginal academic credentials. With modest support, a Guided Study Program at IUPUI has shown that such students can succeed with proper help. This program should be expanded to meet demonstrated needs of IUPUI students who need such services.

IUPUI offers unusual opportunities to develop the communication arts (perhaps to school status) and interdisciplinary programs involving various combinations of professions and disciplines. In special education, for example, cooperation between the Education faculty and experts on learning disabilities, based at the Medical Center, has strong potential.

In addition, IUPUI plans to establish an instructional improvement center, to aid faculty in providing more effective teaching. This center will assist in developing and reinforcing teaching skills, develop techniques for evaluation of teaching, and generally apply principles of teaching techniques to the contexts in which courses at IUPUI are conducted.

We expect to continue to schedule classes and programs intensively, day and evening and throughout the year. One of our aims is to develop a more flexible system of scheduling, so that programs of

varying lengths can be accommodated. This has been achieved to some extent in our summer sessions.

Potential and new educational approaches are described in Section VI of this Plan. In addition, some credits by examination are granted and several professional programs include field experience for credit. These and other means of achieving more flexibility will be explored and selectively adopted.

Table III-1, which appears on the following six pages, comprises long-range plans for instructional programs at IUPUI. Some of these will require approval of degree conferral, and others will involve enhancement of existing capabilities.

In the latter category, an example is the "Special Child Program" at the School of Physical Education. This would enable students to draw upon the resources of the Medical Center and the School of Education to equip themselves as teachers of physical education, with expertise in serving handicapped children.

Another example is the proposed "Executive Development Program" in Business, through which individuals would upgrade their management skills and knowledge, often with the support of their employers. Although this would not be a formal degree program, it would provide a relevant service to the region. In addition, the Table includes references to "Program Improvement," generally indicating where and when faculty strengths will need to be augmented to maintain teaching standards.

It also should be noted that IUPUI schools have diverse requirements, and that a single Table shows an aggregation of varied programs, requiring different levels of funding. The Table thus represents a comprehensive compilation of future educational plans, so that a broad concept of anticipated development can be communicated.

TABLE III-1

PROJECTIONS OF NEW PROGRAMS AND INSTRUCTIONAL PROGRAM IMPROVEMENTS

Indiana University-Purdue University at Indianapolis

	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
SCHOOL OF MEDICINE										
M.S. - Medical Sciences	X									
Doctor of Science - Medicine	X									
Masters - Neurosciences			X							
Forensic Medicine - Program								X		
SCHOOL OF NURSING										
M.S. in Nursing - Community Health		X								
Doc. - Nursing (D.N. Sc.)		X								
Specialist (Clinical Nursing)	X									
SCHOOL OF DENTISTRY										
A.S. Dental Hygiene (IU N.W. Campus)		X								
M.S. Dental Hygiene				X						
A.S. Dental Laboratory Technology				X						
M.P.H. - Masters Public Health									X	
INDIANAPOLIS LAW SCHOOL										
Law Training for the Non-Lawyer			X							
Law for the Grades K-12		X								
Judicial Center Institute		X								
U.S. Gov't. Legal Intern Prog.			X							
Continuing Legal Educational Television						X				
Master of Laws						X				
Joint J.D. - M.B.A.						X				

PROJECTED NEW PROGRAMS

	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
DIVISION OF BUSINESS										
Master of Science						X				
Master of Business Administration										X
School Status		X								
Research Bureau					X					
Independent Accred. of Undergraduate Program by AACSB						X				
Executive Development Program			X							
SCHOOL OF PHYSICAL EDUCATION										
B.S. - Health Education			X							
B.S. - Recreation								X		
M.S. - Physical Education				X						
Special Child Program		X								
LIBRARY IMPROVEMENT										
Books		X	X	X	X	X	X	X	X	X
SCHOOL OF SOCIAL SERVICE										
Bachelor of Social Work		X								
State-wide Program			X							
Ph.D. in Social Work								X		
SCHOOL OF SCIENCE										
MAT - Biology					X					
M.S. - Biology							X			

PROJECTED NEW PROGRAMS

SCHOOL OF SCIENCE (continued)	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Ph.D. - Biology										X
M.S. - Thesis - Chemistry		X								
Ph.D. - Chemistry								X		
B.S. - Geology	X									
B.S. - Geology - Earth Sci. for Teach.	X									
B.S. - Geology - Environ. and Urban			X							
B.S. - Geology - Applied					X					
M.S. - Geology - Applied					X					
M.S. - Geology - Environmental					X					
MAT - Geology - Earth Sci. for Teach.		X								
B.S. - Mathematics - Computer Science	X									
B.S. - Mathematics - Statistics				X						
M.S. - Mathematics - Statistics					X					
M.S. - Physics						X				
M.S. - Urban Psychology		X								
M.S. - Psychology - Voca. & Rehab.		X								
M.S. - Psychology - Soc., Pers., Child					X					
Ph.D. - Psychology - Planning								X		
Ph.D. - Psychology - Clinical Psych.									X	
Program Improvement Psychology	X		X							
Program Improvement Biology		X								
SCHOOL OF ENGINEERING AND TECHNOLOGY										
M.S. - Computer Technology								X		
M.S. - Urban Systems Engineering Option						X				
B.S. - Industrial Supervision	X									
AAS - Industrial Supervision	X									
A.S. - Medical Electronics Tech.	X									

PROJECTED NEW PROGRAMS

[illegible]

PROJECTED NEW PROGRAMS

[illegible]

PROJECTED NEW PROGRAMS

[illegible]

SECTION IV

RESEARCH

A university has a responsibility not only to preserve and transmit knowledge, but to advance the frontiers of knowledge through research into the unknown. Society has long recognized that the unique collection of talents and facilities represented in a university is a major resource for conducting investigations of great social benefit. Such inquiry at the cutting edge of knowledge provides society with new and basic insights into its world. Research also benefits the university, as faculty members enrich their teaching through contact with new developments in their disciplines and as advanced graduate students prepare to engage in future research.

At IUPUI we are sensitive to our responsibilities in research. Mankind is clearly approaching a point where our knowledge of the physical world and its structure may exceed our knowledge of the human experience. Because the students we are educating today will live most of their lives in the twenty-first century, we are concerned that our research programs maintain scientific momentum, while we sustain and develop the long tradition of concern for human welfare exemplified by our research in the health sciences. These twin concerns are being expanded through our programs in law, education, business, and public and environmental affairs.

The diversity of research activities at IUPUI reflects the range and variety of instructional programs. Investigators at IUPUI are engaged in some 350 organized research projects, largely supported by gifts and grants that may include associated training and service functions. In certain areas at the Medical Center, research activities have gained national and international stature. These include heart disease, cancer, mental health, human genetics, and oral health, especially in preventive dentistry and improved dental materials.

Some overall statistical insights concerning the growth, distribution, and sources of funds for sponsored programs can be gained from Tables IV-1 and IV-2 on the following two pages.

Table IV-1 displays an annual comparison, over the last five years, of such support for IUPUI divisions. The table shows significant expansion in both established and new programs. Recent growth has been notable in the arts and sciences, law, and education, although the dollar totals have remained proportionally high for the health areas, headed by the School of Medicine.

Table IV-2 shows sources of funds for the fiscal year beginning July 1, 1973. Most of the "Non-Governmental" sources represent funds from foundations, non-profit agencies (many in the health fields), and organizations such as service clubs. Federal agencies constitute the

TABLE IV-1

SPONSORED PROGRAMS

FIVE-YEAR COMPARISON (IN DOLLARS)

SCHOOLS/DIVISIONS	1969-70	1970-71	1971-72	1972-73	1973-74
Arts and Sciences	\$ 62,204	\$ 153,600	\$ 66,058	\$ 245,602	\$ *
Institutional Programs	32,758	66,416	168,161**	311,046**	894,458
Division of Business	-	-	-	2,715	2,115
Division of Education	-	-	277,621	438,696	249,132
Herron School of Art	-	5,835	7,229	28,824	52,073
Oral Health Research Institute	-	-	-	222,472	222,382
School of Dentistry	1,058,564	1,096,218	1,120,089	1,763,642	1,760,962
School of Engineering and Technology*	-	-	-	-	1,392
School of Law	38,158	91,182	142,407	377,395	645,912
School of Liberal Arts*	-	-	-	-	142,261
School of Medicine	11,725,481	13,330,992	14,508,554	16,821,647	17,691,962
School of Nursing	516,352	616,603	623,035	886,999	662,270
School of Physical Education . .	-	1,023	1,695	2,236	2,228
Division of Public and Environmental Affairs*	-	-	-	-	7,783
School of Science*	-	-	-	-	73,181
Social Service	293,772	302,929	294,077	252,675	142,725
TOTALS***	\$13,727,289	\$15,664,798	\$17,208,926	\$21,353,949	\$22,550,836

* Funds identified separately as of July 1, 1973. See School of Liberal Arts, School of Engineering and Technology, and School of Science.

** Includes Libraries.

*** Includes Indirect Costs.

TABLE IV-2

SPONSORED PROGRAMS

SOURCE OF FUNDS (IN DOLLARS)*

SCHOOLS/DIVISIONS	FEDERAL GOVERNMENT	STATE AND LOCAL GOVERNMENT	NON-GOVERNMENTAL SUPPORT	TOTALS
Institutional Programs	\$ 487,391	\$ 306,184	\$ 100,883	\$ 894,458
Division of Business	-	2,115	-	2,115
Division of Education	183,036	16,096	50,000	249,132
Herron School of Art	-	45,919	6,154	52,073
Oral Health Research Institute	-	22,400	199,982	222,382
School of Dentistry	1,257,773	187,411	315,778	1,760,962
School of Engineering and Technology	-	1,392	-	1,392
School of Law	-	599,093	46,819	645,912
School of Liberal Arts	65,252	569	76,440	142,261
School of Medicine	12,721,366	616,311	4,354,285	17,691,962
School of Nursing	627,097	17,254	17,919	662,270
School of Physical Education . .	-	420	1,808	2,228
Division of Public and Environmental Affairs	-	7,783	-	7,783
School of Science	29,079	36,336	7,766	73,181
Social Service	130,482	2,484	9,759	142,725
TOTALS	\$15,501,476	\$1,861,767	\$5,205,593	\$22,550,836

* As of July 1, 1973

largest source of funds, making national trends in pertinent legislation and appropriations an important factor for planning. Most of these federal funds come to Indiana and Indianapolis because of the presence of IUPUI research programs. In addition, most of these funds are spent in Indianapolis, for salaries and related purposes.

Despite unpredictable shifts in federal policies, broad-based research capabilities at IUPUI have made it possible to register steady and substantial growth. By finding new ways to support promising research opportunities, and by adapting to changing conditions, experience indicates that future growth can be achieved. An annual total of at least \$25 million within five years appears to be realistic and reachable.

Comments on Research

National emphasis on categorical, targeted, interdisciplinary research provides special opportunities for IUPUI as an institution, since programs of this type (often termed "centers" or "institutes") require the participation of various kinds of expertise, drawn from several departments and schools. This type of development could encourage more balanced support among the IUPUI divisions. Law and engineering, as examples, could benefit from cooperative ventures with medicine, as more comprehensive, institutional research programs come into being.

The establishment of interdisciplinary research programs, as institutes or centers, can offer advantages in both scale and management. The Indianapolis Center for Advanced Research (ICFAR), located at the IUPUI Campus but operating as a separate entity, promises many potential benefits. These will include the attraction of scientists to Indianapolis, who will complement our faculty; opportunities to mobilize teams of researchers from the physical sciences, the life sciences, and engineering; the development of advanced, graduate programs of education; and enhancement of relationships with research-oriented business and industry. There is a trend toward cooperative research efforts by academic, industrial, and governmental groups. Well conceived programs of this type can benefit groups of institutions, generating broad support and advancing regional research resources.

Another example is the Regenstrief Health Center, which will deal with the broad and important area of improved delivery of health care. Similar collaborative efforts can be anticipated in other health fields, such as cancer, heart and lung disease, metabolic diseases, and genetics.

Additionally, the Indianapolis Law School has conducted extensive studies on the programming of instruction on law in the elementary and secondary schools. A considerable reservoir of data has been developed, which can be applied to an educational program

ranging from kindergarten through the twelfth grade.

Other new directions for research are expected to involve the solution of urban problems, with Indianapolis serving as both laboratory and beneficiary. As scholars and citizens, faculty members are responsive to community needs. In this area, too, the institutional, multidisciplinary approach is logical and promising.

Several budgetary concerns are relevant. Federal agencies are delegating added responsibilities to campuses for notifications to investigators, while requiring more forms and levels of prior approval. Both trends will require more staff time. There also is continuing concern regarding continuity of support for faculty whose outside funding may be suspended.

Appropriate percentages of faculty effort devoted to research will continue to vary among schools and departments. In the School of Medicine, a somewhat higher per cent is present and is considered reasonable. In the undergraduate divisions, research support has been less than desirable, and should be increased. Faculty members are encouraged and assisted in finding funds to enrich their teaching through scholarly investigation.

A key area of research activity involves studies by individual faculty members, often at their own expense. Although limited funds are available, mostly from federal sources, "seed" support for individual faculty members can generate substantial productivity in research with relatively modest investments. This also is a means of improving morale. IUPUI should aggressively seek, encourage, and use support of this type.

Inventories of faculty interests can be useful for planning purposes. At IUPUI, an inventory of this type has been developed in relation to urban studies. The annual, individual summary activity reports from faculty members could be utilized as available data for this purpose.

It is not unusual in large, geographically scattered, and complex organizations, for faculty members to be engaged in studies of mutual interest, without being aware of each other's work. The values of producing inventories range from informal notification concerning likely colleagues for consultation to formal planning for interdisciplinary projects.

This approach also could be implemented regionally, identifying the types of expertise available at local colleges and universities, industrial research laboratories, and similar organizations.

For economic reasons, the inventory approach also applies to research facilities. Many of the research facilities at the Medical Center are unique and too costly to duplicate, an example being the

new linear accelerator. A similar example in Bloomington is the cyclotron, which can be used by IUPUI faculty. Through improved modes of access (television, computers, system-wide library retrieval capabilities, as examples), sharing of selected, unique, and expensive-to-duplicate research facilities should be enhanced.

In anticipating sources of research funds, the trend toward revenue-sharing should be evaluated. In general, revenue-sharing funds are expected to be concentrated on programs that meet demonstrable community needs. In education (in cooperation with Indianapolis schools) and in urban studies (aimed at relevant local problems), some degree of success in attracting revenue-sharing funds already has been achieved.

Revenue-sharing appears to be limited, however, especially in regard to the health sciences, which also have state and national implications. It is hoped that some form of the present method of funding through federal project grants to investigators will be continued.

To define research needs and missions, IUPUI officers seek counsel from many groups--the faculty, professional associations, community leaders, state and federal agencies, and campus committees. In general, our experience and the counsel that we have received point to needs for broader research franchises than have been assumed in the past.

Distinctions between "applied" and "basic" research, without thinking through the academic and budgetary implications, can lead to arbitrary conclusions. A pilot plan for an "applied" project can be expensive, and an individual faculty member may complete a "basic" study with paper and pencil, plus a limited amount of time for research computing.

"Research" also can be interpreted as innovative improvement of teaching. Updating courses, trying new approaches to evaluation of instructional effectiveness, and developing curricula that anticipate professional trends are among these activities. In IUPUI divisions that place emphasis on the teaching function, these types of studies should be supported and recognized.

As "research" is generally defined, however, there is recognition concerning the broad responsibilities of the schools in the health sciences. Other disciplines and professions at IUPUI should be enabled to develop comparable research dimensions. If demonstrable needs of the region and state can be met, these divisions should have appropriate opportunities to propose further growth in research, with parallel growth in graduate-level instruction.

Field involvement and research, at both the graduate and undergraduate levels, will be natural developments in Indianapolis. The

Indianapolis Law School, the School of Social Service, and the Division of Education already have developed extensive arrangements of this kind with agencies in the city. Innovative and properly supervised instructional and research programs--conducted and tested in the "real world"--constitute a major opportunity for distinctive advancement of IUPUI divisions and programs.

The potential for both applied and basic research at IUPUI has educational, social, and economic dimensions.

Outstanding investigators attract other outstanding faculty members and talented students. They generate basic knowledge, that later must be drawn upon to solve "applied" problems. Expanding this reservoir of fundamental knowledge is a vital function of university-centered research. Although the future dividends are unpredictable, the scholarly foundation for future research achievements is essential. To cite an example, vaccines (which have been of immeasurable value) began with basic studies.

The social outcomes of research include the solving of problems--individual, and environmental. There is expertise of various kinds available for improvement, as teams of researchers find better ways to cope with problems. In addition, the community and the State benefit as these findings are translated into applications.

In the economic realm, substantial funds are attracted to Indiana and Indianapolis because of IUPUI's research capabilities. These funds, most of which are expended locally, would not otherwise come to the State and community. This reputation for advanced knowledge also expands beyond the campus, enhancing the recruitment of scientists and other highly trained persons for business, industry, and other institutions.

The case for research is thus based on educational excellence, on potential benefits across the social spectrum, and on pragmatic economic returns. It is an area of provable, and proved, promise for investment.

SECTION V

PUBLIC SERVICE AND COMMUNITY RELATIONS

"Public service" is a broad and difficult term to define. The frequently cited triad--teaching, research, service--has special relevance, however. First, all universities are expected to provide effective instruction. Second, research is required to insure instruction that keeps pace with change and enhances growth in intellectual and technical knowledge. Third, universities render public services that are compatible with their teaching and research capabilities. At IUPUI--as at most urban universities--the emphasis on teaching, research and service is generally oriented toward the application of knowledge and participation in activities of the community.

The problem of precise definition is compounded at IUPUI because a number of the professional divisions serve patients and clients in the process of providing clinical and field instruction. These are indeed valuable services, and the benefits flow both ways. In addition, faculty members follow the ethical standards of their disciplines and professions, serving individuals and organizations beyond the campus in many ways. Leadership in rendering significant services to the community is a criterion for advancement at IUPUI.

The current annual total of patients referred and admitted to the four University owned teaching hospitals is 18,000. One hundred and fifty thousand outpatients visit the clinics at these hospitals each year. In addition, the School of Medicine faculty annually provides and directs clinical patient care for more than 300,000 persons at affiliated county, state, and federal hospitals at the Medical Center. Medical faculty also take part in visiting professorship programs at 19 cooperating hospitals. The clinics at the School of Dentistry schedule 85,000 patient visits each year. Expansion of the Medical Center hospitals and further development of state-wide plans for health education will increase these public services.

The faculties at the Medical Center also are heavily committed to consultative care and to the care of complex referral patients from the entire state. Specialized dental services are provided for cerebral palsied patients and for cleft lip and cleft palate children. As Indiana's major resource for advanced knowledge and practice in the health sciences, the Medical Center has a leadership role in serving the citizens of the region and the state. As population expands, as prepayment health programs grow, and as incomes rise, this responsibility will continue to be significant.

Similar observations can be made concerning those who are served by students and faculty in other professional divisions--including law, social service, education, art, and engineering--through

supervised field work, internships, in-plant courses, cooperative work-study programs, and other activities that extend instruction into the community.

The "extension" movement was itself an excellent historical example of rendering public service. I.U. began offering organized extension courses in Indianapolis in 1912, and Purdue mounted significant efforts of this kind in the city during World War II. Since then, as these programs evolved into regional campuses, and recently into schools and divisions, thousands of local citizens who would not otherwise have been able to go to college have done so. Until recent years, the Indianapolis Law School was an exclusively evening operation, making it possible for employed students to earn a law degree. Many IUPUI divisions and departments expect to continue to make such options available.

Because of their special expertise, many faculty members are asked to consult on, or participate in, locally relevant projects. For example, faculty at the School of Engineering and Technology have worked with Indianapolis government officials in analyzing the city's computer services, for business operations and for police activities. They also have developed designs for future airport facilities and for proposed expansion of the City-County Building.

These types of services also are provided by the education and business faculties, and by a number of those in the liberal arts departments, including economics and political science.

The voluntary activities of IUPUI students in the community also provide evidence of public service. Some specific examples can be cited.

Medical, dental, nursing, and allied health students volunteer their time to the Southside Community Health Clinic on West Morris Street. This clinic serves about 9,000 area residents with a median income of less than \$5,000 per family. The impetus for establishing the program came from student concern, and it has been in operation since 1969.

Students in physical education go to the Blind School to work with children there. Other students are involved in a project to reduce recidivism among parolees from the Indiana Boys School.

Law students have saved local taxpayers thousands of dollars through participation in the Bail Bond Project. This program involves selective suspension of bail for arrested persons deemed responsible for release on their own recognizance.

Dental students organized a diagnostic program at a home for the aged.

These examples illustrate the many possibilities of voluntary, student-provided services to the community, given the support, counsel, and (when needed) the supervision of faculty and staff.

Another example of outreach to the community has been IUPUI's leadership in organizing and supporting the Consortium for Urban Education (CUE). This consortium is composed of the seven post-secondary educational institutions in the region and six major community service and governmental agencies in the city. A discussion of CUE's activities appears in Section VIII of this Plan. CUE is mentioned here, however, as a specific means for improving relationships with local colleges, universities, and other institutions.

The central IUPUI undergraduate Admissions Office maintains continuing relationships with guidance counselors at 140 high schools in Central Indiana, visiting the schools and advising prospective students. The professional schools provide similar services to faculty members and preprofessional students at colleges and universities in Indiana.

IUPUI has excellent opportunities to establish special programs in cooperation with local secondary schools. These programs can be formal or informal. For example, the chemistry department sends members of its faculty to about two dozen high schools each year to discuss topics in chemistry with future students of science.

Other, more general, communications efforts involve the areas of public and community relations. The IUPUI News Bureau issues news releases, answers queries from the media, edits and distributes internal periodicals, and handles other editorial assignments. The Publications Office edits, designs, and engages printers for bulletins, brochures, posters, and similar items. Related projects include a speakers' bureau, the design of public exhibits, and campus signage and other graphic devices to enhance institutional identity. Although budgets (and therefore staffs) are limited, progress has been made in interpreting IUPUI and its programs to the publics whose understanding and support are needed.

There also is an active Alumni Office, which works with organized associations of graduates of Indianapolis-based schools. This Office also has a key role in organizing public occasions, including annual Commencement ceremonies and other events that bring valuable public notice to IUPUI.

Alumni are responding well to annual giving campaigns, organized within their divisions. Leadership in this area has been demonstrated by Medical School graduates, whose total annual contributions have amounted to some \$170,000.

IUPUI will broaden and intensify its fund-raising efforts in Indianapolis through a local office of the Indiana University

Foundation. There are major potentials in the city, including many prospective donors capable of considering substantial gifts for various worthy purposes.

A related concern should be to identify and to continuously cultivate individual community leaders. While we must make IUPUI more widely and better known, we also seek the understanding and support of those who are in positions to make decisions affecting IUPUI programs.

In this regard, IUPUI officers will continue to work closely with the I.U. system's University Relations department, especially in developing relationships with state governmental officials. At the federal level, parallel cooperation will continue with the Office of Research and Sponsored Programs.

Incentives to encourage faculty and staff to take leading roles in community affairs are appropriate. This effort should include full and formal recognition of their contributions and achievements.

Thus far, this discussion has stressed public service beyond the campus. The uses of on-campus facilities and services also are significant.

The IUPUI professional libraries render significant services to the community and the state. The Law School Library is extensively used by members of that profession. The Medical Library serves practitioners and others throughout Indiana and lends more than 16 times as many volumes to other libraries as are borrowed from other libraries. Similar services are rendered by the Dental Library; requests for theses by dental graduate students are international in scope. More detailed information on the libraries is in Section VI of this Plan.

Policies on use of campus facilities are those of the I.U. system. Although much of this traffic involves use of Union Building facilities, other buildings also are used, with priority being given to student groups and, as resources permit, accommodation of events of a charitable or civic, non-commercial nature. Satisfactory procedures for application, assumption of responsibility, charges, and related matters have been developed within the policy guidelines.

Although funds and facilities have been limited, IUPUI divisions have offered lectures, plays, films, concerts, debates, art exhibitions, and intercollegiate athletic events, to which the general public has been invited, often without charge. By scrounging and improvising, and through rental or lease, preliminary and temporary arrangements have been made to house such activities. Physical inadequacies are obvious, however. Capital needs include an auditorium, a theater, and facilities for physical education.

In many areas, such as drama, concerts, public lectures, and exhibitions, IUPUI can--and will-- contribute to the cultural enlargement of the community. For example, the Herron School of Art has conducted a Community Arts Program, which presents a year-round series of educational and cultural activities, including summer instruction for school-age children. For several non-profit organizations, such as the Indianapolis Zoo and public television Channel 20, the visual communication department at Herron has developed special graphic materials. In addition, Herron has mounted gallery exhibitions, which have been open to the public.

In anticipating future trends, the region's projected growth in population (cited earlier), mounting expectations and demands for varied forms of professional services (including health and legal), the presence of the usual opportunities and problems encountered in an urban context, and commitments by community leadership to public higher education in Indianapolis are among the factors which will affect expansion of public service by IUPUI. For example, the needs of some 60,000 employees in the public sector have key implications for development of the IUPUI programs of the School of Public and Environmental Affairs.

Several of the IUPUI divisions have organized local advisory groups, to provide counsel and assistance in the development of programs that will be responsive to community needs. As indicated by each division's mission, these advisory groups have been drawn from business, industry, professional societies and associations, educational institutions, and government agencies.

A central Advisory Board for IUPUI has been in operation since 1969. This Board is composed of representative civic leaders from Central Indiana who meet monthly to assist the Chancellor in developing policies for the administration of IUPUI and recommendations to the Trustees. The kinds of topics considered include proposed changes in administrative organization, policies concerning allocation of resources, and the planning of campus facilities. Members of the Advisory Board have rendered many kinds of voluntary service and counsel, both formal and informal, to help insure the effectiveness of current and future programs and activities.

This Board will doubtless continue to play an important role in determining the shape and substance of IUPUI to help meet the needs of Region 8 and the state.

Because of the concentration of people, public schools, industry, business, law firms, etc., in Region 8, the demands and opportunities for public service are impressive indeed. As faculties develop in numbers and in competence, IUPUI will increase its service to the citizens it can serve.

SECTION VI

LIBRARY AND LEARNING RESOURCES

A great and distinguished library is a necessity for a great university. Convenient and systematic availability of knowledge, as recorded in books and other media, is a fundamental component of any university. Professional and technological capabilities for the delivery of recorded knowledge also are basic requirements for effective learning, teaching, and research.

At IUPUI, the functions of both collection and delivery manifest numerous and obvious inadequacies. Long-range plans for IUPUI must include central concern for library improvement. This will be vital to progress for all of our academic and professional programs.

Specific inadequacies include critical shortages in book collections, in professional staff, in space and facilities, and in coordinated leadership. We do not have a central library, a major need that is included in our plans for capital projects in Section XI of this plan. Steps are currently being taken to engage a Director of Libraries for IUPUI.

Much more will have to be done to meet catch-up needs, many of which reflect former, minimal programs, which have been conducted in the past in relatively separate--even isolated--operational and geographical modes. To develop a comprehensive institution of higher learning, a comprehensive approach to library development will be essential.

Recent technological developments have affected this area. New "learning resources" include "hardware" (such as combinations of television and computers) and "software" (programs designed to enable people to exploit the instructional capabilities of sophisticated machinery). IUPUI intends to take part in developments related to this growing field, both locally and at the state-wide system level. For certain disciplines, these learning media appear to offer special potential. The participation of faculty members will be needed, because their interest and involvement will determine whatever successes emerge from this area.

Fundamental and traditional needs for books and journals have not been supplanted, however. We will continue to require the collections, services, space, and other means through which students and faculty can use books, however they may be stored, organized, or delivered.

Libraries

To summarize at the outset, the libraries at IUPUI are uneven in

development, seriously lacking in many collections, crowded, in need of coordinated leadership, and faced with budgetary constraints that are incompatible with the academic missions assigned to Indianapolis divisions.

The seven collections, or installations, include Medicine (which also serves Nursing), Dentistry, Law, Blake Street (Liberal Arts and Social Service), 38th Street (Science-Engineering-Technology), Art, and Physical Education. Although the professional libraries, especially in the health sciences and to a lesser degree in law, have achieved relatively higher degrees of range and sophistication, all of the IUPUI libraries face similar problems.

Shortages in book collections can be illustrated with a few statistics. Applying undergraduate standards of the American Library Association, a university campus should have 50,000 volumes for the first 600 full-time students, and 10,000 for every additional 200 full-time students. In the 1973 fall term, IUPUI had a full-time-equivalent enrollment of 12,137, which translates into 620,000 support volumes, using only undergraduate standards. The total holdings are, in fact, below 400,000.

Gaps in the undergraduate collections are especially evident, since they are carry-overs from former two-year "extension" programs. There are parallel problems in the professional divisions. The Indianapolis Law School, which has grown rapidly in recent years, ranks 23rd in student population among 137 law schools surveyed nationally. The School ranks 97th in book appropriations. The typical art library at an institution comparable in enrollment to IUPUI has 15,000 volumes. The library at the Herron School of Art has 4,100.

Cramped and crowded facilities also are common. The Medical Library is searching for space to store 15,000 volumes and can seat only 10 per cent of its patrons in the reading room, although the proportion should be much higher. The Dental Library is housed in an area of 4,500 square feet and should be enlarged to more than 11,000 square feet to meet professional guidelines. Looking ahead five years, students and faculty in Science-Engineering-Technology will require more than twice as much reading, stack, and service space as is now available.

Shortages of professional staff also are pervasive. The School of Social Service collection of 40,000 volumes should have a librarian specializing in social welfare. It does not. Medicine needs staff to broaden services for the State-wide System of Medical Education. Among the 137 law schools mentioned previously, the Indianapolis Law School ranks 86th in totals of professional library staff. These are only a few specific examples to demonstrate immediate staff needs.

Some preliminary planning has been accomplished. Committees with representation from the libraries, the faculty, and administrative offices have studied overall concerns. Because their functions and accreditation requirements are such that operational autonomy is necessary, the professional libraries are expected to develop along current lines. We are developing ways in which cooperative services can be provided among all of the libraries, along with shared and consistent data concerning the holdings of all Indianapolis units.

Two aspects of library planning are of special importance. A central, general purpose library is needed, and the need will increase in future years. Present plans are to expand the Blake Street library building, which is well situated on the growing University Quarter Campus. We also are part of the multi-campus library system of Indiana University. The extensive collections on the Bloomington Campus, the recent development of a central administrative framework for I.U. libraries, and the two-way services that our professional libraries could provide to the system are among factors that should receive attention.

We also are working with other libraries in Central Indiana, public and private, state and local, to implement mutually useful arrangements. There is a possibility of merging segments of the Law School library with library facilities of the State's Supreme Court or other agencies. This could effect significant advancement, including expansion into a research library, which would provide a unique professional resource in and for the State of Indiana.

The status of librarians, at the system and campus levels, has been a continuing concern. Establishment of ranks and privileges equivalent to faculty, representation on appropriate all-campus bodies, and related actions have been taken. It is essential that proper incentives and recognition be provided to insure the needed levels and types of professional library services that IUPUI divisions will require in the coming years.

In all of these areas--personnel, planning, adoption of policies, and the mounting of cooperative programs--consistency and minimum duplication among the campuses will be important. Highly specialized, unusually extensive collections should be placed where primary scholarly and professional needs exist, while making these resources available among the campuses. Bibliographic, reference, and research services are likely areas for exploration of shared means of access, reproduction, and distribution.

This comprehensive development will require guidelines for the sizes and types of collections, facilities, and staffs. These guidelines should include equitable distribution of funds and facilities based on campus enrollments and programs, using standards from such sources as the American Library Association and professional accrediting bodies.

Simply to meet "catch-up" needs, to bring the sizes of collections up to minimum standards, a total cost of \$3,500,000 has been estimated. This total would be in addition to the usual operating budgets for the libraries. Since it will not be possible to allocate this much money from general funds, grants from outside sources also must be sought.

Plans also should be made in 1973-75 to enlarge library facilities for the undergraduate programs. Students and faculty in the new and adjacent Science-Engineering-Technology Building will need such facilities at the Blake Street Library.

Since the IUPUI libraries have had to stretch their capabilities to meet essential needs for print media, there has been limited ability to expand services involving other types of media (although the Herron collection has made some progress in organizing and expanding its collection of color slides of works of art). Plans for development of other media are described in the following section.

Learning Resources

As with the buildings of library resources, IUPUI plans to participate in development of instructional technology, audio-visual capabilities, television-computer applications, and related activities that are broadly described as "learning resources." Wherever all-university delivery systems can provide services faster, on a better unit-cost basis, that avenue will be followed.

IUPUI already works closely with the I.U. system in developing learning concepts, including computer-assisted instruction. Other divisions, with major programs conducted by the School of Medicine, also are extensively involved in origination and use of services from the Indiana Higher Education Telecommunication System.

Further development of locally based capabilities will be necessary, however. Ongoing programs at the Schools of Medicine, Dentistry, and Nursing provide clear evidence of the impact that can be achieved by tailoring uses of learning resources to special instructional needs in those schools. This process will be logical for other disciplines and professions at IUPUI, especially in fields that offer distinctive opportunities for application of learning resources.

A recently established IUPUI Office of Educational Resources and Campus Planning is exploring coordinative methods through which IUPUI divisions can share expertise and equipment. The Office also is to work closely with library administration to insure maximum cooperation and pursuit of mutual interests. Added staff and other forms of support, including policy development, will be needed by this Office at both local and system levels.

The use of closed-circuit television for teaching purposes at Indianapolis is not a new development. The School of Dentistry has conducted clinical instruction via TV since 1954. This was a natural application of TV capabilities, since the image of a relatively small portion of the oral cavity could be enlarged and duplicated on several monitors. TV made it possible to expand the "class" from a few students around a dental chair to a large number of students, all of whom obtained a clear view of the faculty member's clinical demonstration.

"Illustrations" departments in Medicine and Dentistry have long provided graphic materials for instructional purposes. In recent years, the Medical Illustrations department has developed unusual and highly realistic models of portions of the human body for diagnostic instruction. Nursing, Social Service, and Liberal Arts have developed related instructional support services to meet their special needs, including graphics and photography, audio-visual services, and audio and TV recording and delivery capabilities.

The film library of the Central Service A-V Center in Bloomington has been extensively used, and this use is expected to continue.

Within its divisions, then, IUPUI has considerable expertise, experience, and equipment that are relevant to the field of "learning resources." The most extensive is the biomedical communication network developed for the State-wide System of Medical Education. This network involves 150 community libraries, 56 community hospitals, and 11 university campuses. The School of Medicine TV facilities are on the air five hours a day, Monday through Friday, broadcasting live to 11 campuses and to 26 hospitals, and making videotapes available to an additional 50 hospitals. The Medical Educational Resources Program (MERP) also produces motion pictures, aids faculty in utilizing varied forms of learning resources, and operates a 45-carrel self-instruction center. During the next 10 years, MERP expects to activate added TV channels, develop interconnections with CATV systems in Indianapolis and other Indiana cities, and increase distribution of video cassettes.

In another area, that of computer-assisted instruction, IUPUI expects to play a significant role. A campus-wide CAI committee is cooperating with a parallel I.U. system committee, preparing to use CAI effectively when capabilities become available. A new DEC-10 computer at IUPUI will encourage development of CAI, since this computer system includes 32 student stations, with a possible future increase to 128 stations.

The initial program envisaged is PLANIT. The technical disciplines, however, require the display and manipulation of graphic materials, which indicates future needs for the PLATO program. The School of Medicine also has expressed interest in CASE.

Faculty members at the Medical Center, and in the Schools of Science and Engineering-Technology, have shown interest in CAI and have begun to develop course material. With the new DEC-10, and given adequate reference materials and related software, this process of involving faculty and implementing CAI operations can move forward. Within five years, it is expected that several disciplines will be using CAI in innovative and effective ways. The process will take time and money, however, along with staff members who have the necessary expertise and the empathetic ability to apply CAI applications to the faculty's needs.

The inauguration of a cable television system in the Indianapolis metropolitan area could have important ramifications for our professional divisions, for continuing education programs, for external degree activities, and for other, unpredictable, applications. The size of the local population, the varied educational needs to be served, and the technical possibilities of CATV combine to make this a significant area for planning.

One of the major considerations for the future will be coordination of the use, evaluation and delivery of learning resources, along with development of central facilities in a proposed Communications and Fine Arts building. Another, recurring topic has been--and will continue to be--development of an FM radio station.

All of these activities, especially at the early stages, will need the expertise and support of I.U. system-level agencies, since developments of this kind carry system-wide implications and involve long-term, substantial commitments.

Projecting staff and equipment needs will depend upon many other kinds of decisions. If an "open admissions" policy is adopted, for example, a considerable expansion of opportunities for individually paced remedial instruction can be expected.

Through campus mailings, demonstrations, meetings, brochures, the formation of committees, training sessions, and other devices, including an explanatory motion picture produced by MERP, information concerning "learning resources" is being communicated. The financial difficulties experienced in the 1960's by companies that introduced instructional devices, without the understanding or support of those who were expected to do the instructing, testify to the wisdom of dealing with people first, machines second. Budgetary justification for increased use of these initially expensive and time-consuming methods of teaching will require methods of demonstrating long-range effectiveness, efficiency, and economy.

SECTION VII

STUDENT SERVICES AND STUDENT ACTIVITIES

One of the key outcomes of the merger of I.U. and Purdue programs in Indianapolis was the establishment of a central Office of Student Services. Its functions include admissions, registration and related recordkeeping, financial aids, placement, and student activities.

Services for undergraduate divisions have been emphasized initially, since a number of special needs of professional and graduate students are generally met within their respective schools or programs. The departments within the Office, however, are committed to the development of policies and procedures that will be broadly useful to all IUPUI divisions.

Among the general objectives of the Office are the development of more effective systems for obtaining and handling data, encouragement of student participation in institutional planning, enrichment of extracurricular opportunities, and improved communication with students, faculty, and administrators.

A major objective, for example, is compatibility in data systems for such functions as admissions, registration, and class scheduling. In the area of co-curricular activities, programs that will appeal to a wide range of students receive priority.

The varied objectives and capabilities of the Office of Student Services will, of course, be affected by future enrollments and funding levels. In addition, the adoption of institutional priorities will modify the kinds of services provided. Examples could include more open admissions policies, expansion of credit transferability among I.U. and Purdue campuses, changes in system level programs for data-processing, and assignment of added functions to the Office.

A growing, urban campus has special needs among its commuting students. They require places to study, to meet, and to engage in cultural and recreational activities. In addition to providing these amenities, offices that serve students directly should be accessible and functional. These include offices concerned with admissions, registration, financial aid, placement, and co-curricular activities. The students also need varied counseling services, provided in convenient locations, with flexible schedules, rendering professional guidance, testing, referral, and other forms of assistance.

Productive performance of these services can be enhanced by bringing a number of these departments together at a central location, where they can share expertise and equipment. On an interim basis, some of this will be accomplished with completion and use of

the new Campus Services Building. Construction of the Student Activity Building, described in Section XI of this plan, will provide further improvement.

The Student Services Departments have developed individual sets of objectives and priorities. Selected items from departmental plans follow.

Admissions

Objectives include continued development of programs to broaden communication with high school counselors and students, better methods of gathering and supplying timely admissions data, improved orientation for new students, refinement of automated processing of applications, and analyses of academic performance among freshmen to improve pre-admissions counseling.

To effectively carry out these objectives the Admissions Office has estimated that an additional professional staff member should be added no later than the 1975-77 biennium and another professional staff member during the 1977-79 biennium. These additions are needed for greater outreach to disadvantaged students.

In spite of gains made in the area of "machine assistance," experience has shown that the Admissions Office clerical staff will need to be increased to keep pace with rising enrollments. It is estimated that three such employees will need to be added during the next 10-year period.

Registration

Priorities include establishment of the Recorder function in all IUPUI divisions, development of guidelines for certifying candidates for graduation, streamlining the class scheduling process, development of more convenient and automated enrollment systems, more timely and consistent forms for statistical reports, and improved means for integrating enrollment operations with related systems such as class scheduling, financial aids, and fee assessment.

The IUPUI Registrar's Office recognizes that many of these objectives must be accomplished within the framework of the total Indiana University system. In this regard, the office has made a strong commitment to the University's Management Information Systems program as the means for providing this necessary coordination.

Long-range plans include bringing three registration offices together at a central location, communicating and clarifying registration policies, developing techniques for enrolling regular students or non-credit continuing education students at any location (including off-campus) or time, and miniaturizing student records by use of microfilm. The central office requirements for a relocated, single

Registrar's Office is approximately 5,000 square feet of space.

Financial Aids

Some representative priorities are improved counseling for students with special needs (disadvantaged, veterans), refinement of the joint Bloomington/IUPUI system for processing applications, better techniques for monitoring the use of funds, and improved communications with high school counselors, students, and governmental and private agencies that administer financial aid programs.

The basic need to improve services in most of these areas is for additional staff. It is our estimate that the addition of three new professional and four new clerical employees would be required at a minimum to meet these needs. Realistically speaking, we would hope to add these personnel on the basis of one or two per year during the next three biennia. Should substantial increases in enrollment or significant expansion of student financial aid programs occur, both the number and pace at which new staff are added may need to be accelerated.

Long-range goals include developing local capabilities for storage and analysis of pertinent data, more use of machine-assisted methods, and expediting approval of expenditures. Increasing demands for open admissions, along with continually rising educational costs, indicate development of a vigorous, on-going program to identify and obtain financial aid funds for IUPUI from a wide range of sources.

Placement

Among the priorities of this Office are expansion of career counseling for students, increased capability in high-need areas (such as education, liberal arts, and certain of the health professions), more intensive and extensive communication with potential employers (along with more flexible company interview schedules), and expansion of part-time and summer employment opportunities.

Again, the major need is for adequate staff. A new professional to assume responsibility for educational placement (recently shifted from the Bloomington Campus to IUPUI) should be hired by July 1, 1974. Based on staffs at comparable institutions, the Placement Office should have a complement of six professionals and eight clerical employees to serve the current enrollment at IUPUI. To meet this standard would require the addition of five professionals and six clerical employees over the next two biennia.

Long-range concerns include the use of machine-assisted techniques for matching students with jobs (an anticipated off-shoot of the University's MIS project), broadening opportunities for cooperative education opportunities, and involving interested faculty in placement of students.

Student Activities

Priorities for this phase of the Student Services operation include encouragement and support, where appropriate, for activities of campus-wide groups (in such areas as music or drama), and for leadership training programs. Long-range goals include the development of recreational facilities, expansion of student volunteer opportunities, and establishing means for recognizing outstanding students.

While in many respects the most difficult of all Student Services areas to quantify, an effective program of student activities can develop unity and "esprit de corps" among the diversified IUPUI student body. The basic question of which activities are desirable in terms of University encouragement and support (fiscal and otherwise) has not been totally answered. It would be advantageous if a professional person trained in survey techniques could be made available to obtain firm data on this subject.

In a related area, that of athletics, some progress has been made. Intramural activities have been organized in several sports, and an IUPUI basketball team participates in intercollegiate competition. The program is under the general guidance of a committee of the IUPUI Faculty Council and operates in conjunction with the School of Physical Education. IUPUI has applied for and received associate membership in the NCAA.

The athletic program is considered to be a unifying force on the IUPUI campus and with the community. The development of playing fields and related facilities at the University Quarter Campus, for instruction by the School of Physical Education and for informal recreational purposes, should receive special attention. Although football is not contemplated, a number of other sports activities can be developed.

In the next 10 years gradual expansion (following all NCAA rules) of the intercollegiate program to include baseball, tennis, and golf is anticipated. Efforts are also under way to develop an intercollegiate sports program for women. To accomplish these objectives, it will be necessary to add five faculty members with special skills in the School of Physical Education during the planning period.

Health service for students is another area in which plans and decisions will be necessary. This is a special type of service, which will require arrangements that fit IUPUI's special context. A Student-Employee Health Service now provides emergency care for all students and some added services for full-time students, with limited staff and facilities. Although there are extensive resources at the Medical Center, these resources are not designed for handling health problems of students. A separate health care unit for students will be desirable, as we develop equitable means for funding and operating such a unit.

There are other "student services" at IUPUI, including auxiliary enterprises such as dormitory housing, dining facilities, and bookstores. On-campus housing is provided for about 600 students, most of whom are enrolled full-time at the Medical Center. We anticipate that IUPUI will continue to serve commuters primarily. Therefore, long-range plans do not include the development of extensive dormitory units on campus, although private housing developers will be encouraged to build rental apartments adjacent to the University Quarter Campus. This would reduce transportation problems for students and for the community.

A recent and successful arrangement (the Park Lafayette Project), whereby students are accommodated at a federally-sponsored apartment complex in the city, may offer a pattern for the future. We do, however, plan multi-story parking facilities, along with the previously mentioned Student Activity Building. This latter facility is viewed as critical to meeting the needs of commuter students for recreational and leisure space, as well as providing more adequate and efficient office facilities for student services operations.

The self-supporting food services and bookstores are operated on a non-profit basis, and have developed added service locations as new buildings have been added to the campus. This process will continue, with special attention to associated services which may be required for the Student Activity Building.

The Office of Student Services has completed the process of operational unification, reorganizing the former I.U. and Purdue student personnel staffs. Shortages of staff and facilities continue in a number of areas, however. Physical unification in the same building will bring improvements in the operation of student services. Continuing efforts will be made to demonstrate the value and importance of these services to the overall missions of IUPUI, so that appropriate professional staff and related resources can be developed.

SECTION VIII

COOPERATIVE ARRANGEMENTS

IUPUI recognizes the values that can accrue from cooperative arrangements with educational units within the University systems and from formal working agreements with other educational institutions, civic organizations, and governmental agencies.

In the first area, that of intra-University cooperation, a number of salient items have been described previously. Coordination with, and commitment to, the I.U. School of Public and Environmental Affairs were described in Section III. Cooperation in development of library and learning resources is outlined in Section VI, and coordination with system-level University Relations and I.U. Foundation activities is described in Section V. The fact that the University system offers benefits to all campuses, with the associated requirement of participation by all campuses, is articulated throughout this plan.

We are working with the University's Division of Continuing Education as that unit develops state-wide coordinative services, including support resources and dissemination of information on a geographically broad basis. We also will continue to work with the Division of General and Technical Studies, especially as that Division's sub-baccalaureate programs can be articulated with other programs within IUPUI academic divisions, or until local divisions can respond to such needs effectively and appropriately.

Cooperation with other campuses of the I.U. System will include extensive development of programs involving the unique state-wide missions of certain IUPUI divisions. As indicated in Section III, this will involve further development of degree programs at other campuses in several professional areas, including Medicine, Dentistry, and Social Service.

Our planning for international instructional programs is in its early stages. The School of Medicine, which offers senior electives overseas, plans to continue such activities. A group of liberal arts students majoring in French have spent a period studying in Dijon. It is anticipated that IUPUI international offerings will place emphasis on urban concerns.

The varied areas of student services, described in Section VII, are being developed within the context of the I.U. System, with compatible policies and standards. The importance of transfer of academic credits among campuses has been mentioned in Section III. These services, and those in business and fiscal operations, are among the priority operations being analyzed for inclusion in the University's Management Information System.

In the second area of interest in this Section, that of formal inter-institutional arrangements, the nature of IUPUI itself is especially pertinent. A description of this merged operation is presented in Section I.

Several divisions of IUPUI maintain close working relationships with comparable schools on the Bloomington campus. Our Divisions of Business and Education are exploring means through which a coordinated approach to administering related programs on both campuses might be of mutual benefit. In Section IV of this plan, comments on sharing expensive research facilities are advanced. In addition, informal collaboration among faculty members at IUPUI, Bloomington, West Lafayette, and at other campuses of I.U. and Purdue is encouraged.

As IUPUI departments and schools conducting Purdue mission programs expand their academic capabilities, increased options for local faculty and administrators of these programs will be exercised. In addition, through IHETS and other forms of technological learning resources, advanced programs from Purdue's West Lafayette campus can be extended to students in the Indianapolis region on a broader scale.

The IUPUI School of Engineering and Technology already has launched in-plant programs in Indianapolis, through which TV classes from West Lafayette are made available to engineers employed at RCA, Naval Avionics, and Detroit Diesel-Allison Division of General Motors. Other such locations are planned.

With the headquarters of Indiana Vocational Technical College (IVTC) in Indianapolis, along with substantial IVTC enrollments, opportunities for additional cooperative--possibly contractual--arrangements are enhanced. Other formal arrangements with local institutions include an undergraduate nursing program with Marian College and a program whereby IUPUI students obtain ROTC training at Butler University. In addition, we have completed a cross-registration arrangement with Indiana Central College for courses in Criminal Justice Education.

A long-range objective of the Chemistry Department is a Ph.D. program in cooperation with industry. This program can prepare working students for current and future positions, utilizing both academic and industrial settings. The program would join learning and employment, as students progress in positions of responsibility in local, science-oriented companies.

To insure responsive cooperation with industry, the Schools of Science and Engineering and Technology have established a Dean's Industrial Advisory Committee consisting of officers at the vice presidential level from companies in the region. This will enable the schools to keep abreast of current and projected advances in industry and to develop forward-looking cooperative programs.

In cooperation with the Indianapolis public school system, the IUPUI Division of Education has organized several contractually sponsored programs, including a Teacher Corps program and the training of students to serve more effectively in inner-city schools.

We also expect to develop expanding relationships with local government agencies, through the IUPUI Division of the School of Public and Environmental Affairs. An example has been support from the city for local police officers enrolled in the Criminal Justice program leading to associate and baccalaureate degrees.

As mentioned previously, formal and reciprocal arrangements with the Indianapolis Center for Advanced Research have been implemented. ICFAR, with its own identity and character, will interact with IUPUI programs that have related interests.

This area of formal contractual arrangements includes the dozens of written arrangements through which the School of Medicine operates Centers for Medical Education at other university campuses in the State and provides educational services to community hospitals throughout Indiana. The State-wide System of Medical Education is a prime model of multi-institutional cooperation through carefully planned and precise agreements.

This system for providing undergraduate and continuing medical education involves the collaboration of six universities on eleven campuses, plus the participation of 56 community hospitals. Formal affiliation agreements with the Medical School have been completed with these institutions. Similar working agreements with other organizations, such as government agencies and business or industrial groups, may be feasible. Benefits can include reduction in lead time for implementation and in capital costs, although operational costs reflect expanded services.

The third area of interest in this Section concerns the consortium approach. IUPUI took a leading role in the establishment of the Consortium for Urban Education, Indianapolis, in 1969, and continues to provide headquarters facilities for CUE. The Consortium is comprised of 15 member organizations, including colleges and universities in the region and major local service and government agencies with concerns regarding the quality of education in Central Indiana. Objectives include the sharing of expertise, especially on urban problems, the sponsorship of cooperative activities, the provision of consulting services, and coordinative approaches to complex research projects of an urban nature.

One of the outcomes of CUE's programs has been the establishment of a standing Academic Deans Committee. This group has met regularly, developing inter-institutional guidelines for student transfers, cross-registration of courses, sharing of information on part-time

faculty qualifications, and inter-school library coordination. Future items of discussion and agreement could include time-sharing computer applications, sharing of scarce and highly specialized faculty resources, coordination of class schedules and student transfers, mutual subject-area programming, and joint offerings in continuing education.

CUE also has organized workshops (such as an exchange between inner-city teachers and professors of education), stimulated information exchange among its institutional members, provided evaluative services to city agencies, and encouraged student and faculty participation in urban service projects. In addition to encouraging voluntary activities, CUE has obtained grants to aid students and has assisted community organizations in planning programs to utilize student participation more effectively.

On broader levels, IUPUI officers take part in activities of the Midwest Universities Consortium for International Activities (MUCIA) and the Committee on Institutional Cooperation (CIC). We plan to continue to participate in programs of this type, as such participation will advance institutional objectives. The same principle applies within state, regional, and national professional associations. Many IUPUI faculty members and officers are active in these associations, serving in key elective offices and providing leadership in their special areas of professional commitment.

Future Plans

It is difficult to anticipate the rate of progress in the development of intradisciplinary and inter-institutional programs that will occur at IUPUI in the future.

Specific attempts will be made to cooperate with the various universities and schools in the region, and with the various city and state civic groups that can supplement our teaching and research programs. IUPUI also recognizes an obligation to give service to the community and the state by working with governmental agencies as much as is feasible.

Several IUPUI schools and divisions have organized advisory groups, representing appropriate constituencies. Further development of this means of communication will be encouraged. In addition to enhancing understanding and support, advisory groups can participate in selected programs effectively.

SECTION IX

ORGANIZATION AND PERSONNEL RESOURCES

Unification of public higher education in Indianapolis generated a number of challenges, including decisions on how to organize our resources. The unique combination of divisions and programs required careful study of long-range implications resulting from such decisions.

Progress has been achieved in delineating the academic and administrative structure of IUPUI. An organization chart on the following page indicates current status. In several instances, the posts shown are filled on an acting basis. In addition, as mentioned elsewhere in this plan, several of the academic divisions are expected to reach the status of separate schools in the future. In general, however, the chart outlines functional relationships and responsibilities.

As to "personnel resources," several other sections of this plan call attention to faculty shortages. A general guideline for the undergraduate programs will be attainment of 75 percent full-time faculty. Guidelines for graduate and professional programs will be based on comparable programs at other campuses in Indiana and the United States.

Since IUPUI was essentially a "from-scratch" operation administratively, there also have been shortages of managerial and support personnel. Additions have been selective, with priority given to meeting faculty needs.

Three areas of future organizational concern can be identified.

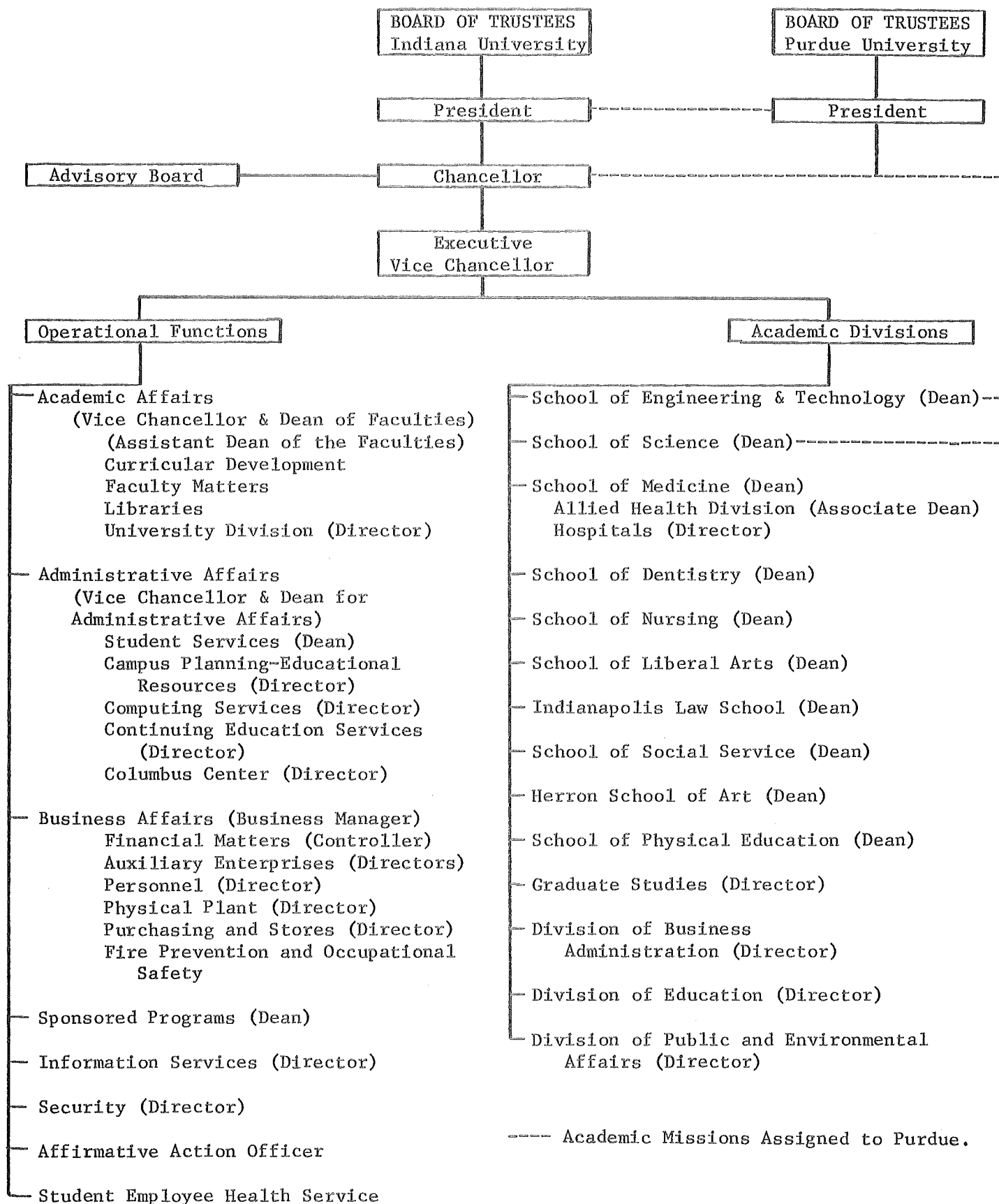
1. The status and relationships of the Health Sciences and the General University Programs deserve continued study. Alternatives have been suggested by the Commission for Higher Education, which has evaluated several options. In 1973, the General Assembly chose to specify operational and capital appropriations for each of these two areas. Comments concerning the desirability of retaining unification of public higher education in Indianapolis are offered later in this section.

2. To accommodate enrollment increases, establishment of complete degree programs, and the general assumption of broader academic and research missions, it will be necessary to increase the ratio of full-time to part-time faculty, reduce student-to-faculty ratios, and increase the number of senior faculty members.

3. Local managerial and operational capabilities will be required to insure effective coordination of added supporting staff services, as these services fit into the I. U. system of administration and as regional needs are identified and met.

INDIANA UNIVERSITY-PURDUE UNIVERSITY AT INDIANAPOLIS

ORGANIZATION CHART



The general principle of unified coordination and operation, within the current framework, is relevant to future relationships of the health divisions and general university programs.

Faculty, students, and alumni of the schools in the health professions have expressed frequent and strong opinions favoring continued association with Indiana University. Similar benefits, including the internationally recognized value of Purdue University degrees, have been cited for professions and fields in which Purdue has academic missions at IUPUI.

In addition, the well-established divisions at the Medical Center have been, and can be, valuable in helping to strengthen the emerging divisions of IUPUI. Similarly, the health sciences can benefit from the other units, including social service, law, the sciences, and engineering.

Many cooperative programs in education and research will be enhanced by continued unification of all Indianapolis divisions. As examples, interdisciplinary programs in special education, forensic medicine, bioengineering, and public health will be easier to organize and coordinate in a combined administrative context in Indianapolis. In addition, a number of supporting services involving computers and other relatively expensive facilities could be more economically and effectively provided, recognizing special needs of different types of programs but utilizing shared resources where appropriate.

The original rationale for the merger and regional expectations and support for a comprehensive institution of higher learning also are factors to consider. As stated previously, this plan assumes that the unified approach will continue in Indianapolis.

To plan optimum student-faculty ratios at the Indianapolis campus poses special complexities. Our instructional faculty serve a wide variety of academic and professional programs, which involve clinical and field settings. In medicine, for example, there are unique requirements for student-faculty ratios, especially for clinical instruction.

If we exclude the professional health programs, law, and the Columbus Center, which represent unusual teaching situations, the other units can be considered as relatively comparable to other campuses. For this group of schools, which conduct both undergraduate and graduate instruction, we had in 1973-74, 389 full-time-equivalent faculty. This total is derived by adding three sub-totals--full-time faculty, part-time faculty statistically converted to full-time equivalents, and inclusion of divisional and departmental chairmen as teaching 25 percent of their time.

This total of 389 full-time-equivalent faculty members teach a full-time-equivalent student body of 7,779. The faculty-student ratio is thus 20 to 1.

Given the variety of service demands on the faculty of an urban university, and because one-fifth of these students are taking graduate work at the master's level, we believe that a faculty-student ratio of 15 to 1 is more appropriate. We plan to move toward that ratio over the next 10 years, at a rate that will reduce the ratio by one student per faculty member in each biennium.

There is another important dimension to this area of planning. Our ratio of part-time to full-time faculty is now too high. This is the result of the past "extension mode" of operation, and of a lag-time in budgetary catch-up for faculty salaries, both of which do not reflect current academic programs or responsibilities. One-third of the full-time-equivalent faculty total represents the efforts by part-time instructors.

We believe that a proportion of one-fourth part-time instruction, rather than one-third, ought to be implemented. This will continue to be a higher proportion than is the case at a traditional residential campus. The total of individuals teaching part-time will still be relatively large, but we wish to take advantage of the intellectual resources of the Indianapolis community, and to give our students an opportunity to learn from active practitioners who can bring special expertise to the classroom.

However, part-time faculty members are less available to students outside of class hours. They also have divided commitments and are less able to take part in the development of educational programs. Our students need the guidance and counsel that full-time faculty members can provide. The high proportion of part-timers places an excessive counseling burden on the full-time faculty, which reduces time for instructional preparation, development, and planning.

We plan to work toward having 75 percent of our teaching done by full-time faculty, with no more than 25 percent of the teaching in any school taught by part-time faculty, and to do this as early as funding will permit. We have set a time-frame of five years for achievement of this objective.

In general, all of the general university divisions of IUPUI can-- and do--present persuasive cases for immediate and substantial augmentation of full-time faculty. Because full-time faculty services are more expensive than part-time, because equitable improvement in annual salaries for current full-time faculty are needed in several of these divisions, and because additional secretarial-technical support will be mandatory to obtain maximum teaching returns, budgetary consequences will be significant.

Deans' projections within selected divisions support these observations. During the next five years, to handle growing teaching loads, the School of Engineering and Technology will have to increase its total FTE faculty from 46 to 56.8. With a static budget for the past

two years and an enrollment increase of 22 percent over the same period, the School of Science could justify an increase of 39 full-time faculty in accordance with accreditation guidelines. In the School of Liberal Arts, half of the student credit hours are taught by full-time faculty. A five-year goal of this School is to have at least three-fourths of course offerings taught by full-time faculty.

The School of Social Service offers a different dimension of faculty and staff projections. As this School expands its degree programs to the undergraduate and doctoral levels and establishes programs at other campuses, more faculty and clerical additions will be necessary in Indianapolis and at other locations. Anticipated statewide needs through 1977 include an estimated 18 added FTE faculty in Indianapolis and other additions for each campus.

The rapid growth of the Indianapolis Law School, the advancement to degree-conferment status of the School of Physical Education, and the past reliance on part-time instruction at the Herron School of Art are related developments that call for more teaching resources.

The Medical Center divisions also face substantial needs for broader faculty strengths. As mentioned previously, the relatively small size of the full-time faculty of the School of Medicine places it in the lowest quarter among schools of medicine in the United States. The Medical School also faces a serious budget problem, since federal grants have been reduced, with reductions representing some 70 FTE faculty salaries. Identification of reserve funds will be essential to maintain existing educational programs.

The School of Dentistry is attempting to maintain the ratio of dentists to the rising Indiana population by expanding its enrollment as rapidly as possible. However, the Council on Dental Education of the American Dental Association has cited a shortage of full-time faculty. To increase the size of classes to meet State needs in the immediate future, the School will require more than 30 added full-time faculty. In addition, as dental paraprofessional programs are expanded, more full-time technicians and assistants will be necessary.

The School of Nursing projects a total of 28 added faculty members for the next five years. These include two more each year for master's degree programs (10), four the first year and three for each of the next four years for undergraduate programs (16), and two for continuing education. Since the School will begin to admit new students as freshmen, rather than sophomores, in the 1974 fall term, added counseling personnel also will be required.

Although selective, these examples demonstrate the varied kinds of faculty needs anticipated within the IUPUI divisions, based on projected enrollments, instructional standards of programs conducted, and plans for making instructional services more accessible locally

or at other campuses in the state. As observed previously, the distinctive teaching missions of different IUPUI divisions make generalizations difficult. Rather than developing aggregations of dissimilar kinds of data, a more logical approach includes division-by-division analysis and subsequent determination of priorities on the basis of total resources available.

Each of the academic divisions determines its appropriate assignment of faculty effort to levels of instruction and the optimum sizes of classes for given disciplines and professions. These vary from a face-to-face encounter in a clinical setting to large lecture classes. In general, all divisions seek to improve and enhance opportunities for direct teacher-student communication. In a number of undergraduate divisions, these opportunities are much fewer than they should be.

Considerable attention has been paid to policies and procedures for faculty appointments, promotion, and award of tenure. Revised policies have been adopted that are generally in keeping with recommendations made by the IUPUI Faculty Council. These policies broaden sources of nomination and procedures for peer review, beginning at the academic departmental level. Each of the department chairmen, deans, and responsible administrators is keenly aware of the long-range importance of using care in granting tenure. A representative committee of faculty members reviews each nomination for promotion before final recommendations are submitted to the Office of the President for review and transmittal to the Trustees. Similar, careful review applies for IUPUI faculty members holding Purdue appointments.

IUPUI committees review and approve requests for sabbatical leaves and proposals for modest, individual research funds. To the extent that heavy teaching loads and limited operational budgets allow, faculty are encouraged to engage in scholarly and professional activities, including participation in pertinent societies and associations. When feasible, community services that employ faculty expertise also are encouraged.

It is our general observation that more attention should be paid to providing opportunities for faculty to continually upgrade their knowledge and skills. Once again, this applies in different ways to different individuals, in different disciplines and professions. This would be an appropriate, and potentially a high-return, area for encouraging gifts and grants to IUPUI.

Proportions of faculty time spent in teaching, research, and service have been mentioned previously, including the discussion of research in Section IV. In general, the demands for instructional effort have dictated a high proportion of teaching commitment. Until substantial additions of full-time faculty can be accomplished, this is expected to be a continuing situation.

To insure equitable treatment for minorities and women on the faculty and staff, an Affirmative Action Officer has been appointed for IUPUI. This individual is charged with implementing an Affirmative Action Plan that meets both the letter and the spirit of federal and state guidelines. Preliminary work has involved review of existing practices and data, the appointment of several representative committees to assist in implementing portions of the Plan, and the preparation of surveys and reports that indicate where priorities for action are needed.

Proposed expansion of administrative and support staff will be carefully evaluated to insure that real needs are being met in realistic, long-range fashion. To maintain added campus facilities, to serve the clerical needs of added faculty and staff, to counsel more students enrolled in more programs, to provide technical services, and to meet growing record-keeping and reporting requirements, more supporting services will be essential.

Each of these areas will be analyzed, possibilities for shared use will be explored, and decisions will be made after detailed consideration of relative priorities among all divisions and offices of IUPUI. Although it is difficult to estimate the exact numbers and types of individuals who must be added to IUPUI's supporting staff, a moderate expansion in the area will be required.

Future administrative and academic arrangements will involve analysis of interrelationships at the system and campus levels. The IUPUI Goals and Objectives Committee, described in Section I, has suggested a number of kinds of decisions that can be made at the local level. The GO Committee, in its preliminary report, delineates how selected levels of authority and responsibility could exercise delegated forms of decision-making. While final authority rests with the Office of the President and the Board of Trustees, it is the Committee's opinion that more delegation would be desirable and feasible.

In the academic realm, the future shape and substance of system-level schools will be significant. These will include the IUPUI-based Schools of Medicine, Dentistry, and Social Work. The Bloomington-based School of Public and Environmental Affairs is another such unit. In addition, the IUPUI Divisions of Education and Business Administration are exploring coordinative approaches with counterparts on the Bloomington Campus. The outcome of these developments will have major implications for the future structure and operation of IUPUI.

SECTION X

OPERATIONAL FUNDING REQUIREMENTS

Operating fund requirements for the next 10 years at IUPUI are shown in Table X-1 on the following page. These figures are based on current dollars and on enrollment projections only, without regard to inflation or "catch-up" needs. Unavoidable cost increases and shortages of faculty staff, and facilities to conduct current programs are important qualifications.

The figures apply to a portion of the overall IUPUI operating budget. This portion, the General Educational Fund, covers costs involved in conducting and supporting instructional programs. In general, these costs are met from state appropriations and the collection of student fees.

Another important component of the IUPUI operating budget involves operation of the University's teaching hospitals, which are supported by patient fees. Rising costs of hospital care, prospects for new or expanded forms of health insurance, and possibilities (as is the case in other states) of state support for educational services provided by these hospitals are among variables that could affect this portion of the operating budget. The University hospitals are essential to medical, dental, and nursing education and render important services to the community and the state.

A third budgetary component, sponsored programs, is described in Section IV. In addition, there are self-supporting auxiliary services, such as student housing, bookstores, and dining facilities.

As mentioned in previous sections, many "start-up" and "catch-up" costs have faced IUPUI units in recent years. More than 20 new, complete degree programs have been established since 1969. Also, as Section VI documents, substantial funds will be necessary to bring library collections up to adequacy.

Through participation in the I.U. Management Information System, through comparative analyses of programs similar to those conducted at IUPUI, and through continuing evaluation of operational costs and outcomes, we will improve our cost-effectiveness performance. However, in terms of expenditures per student (especially in the divisions that once operated as "extensions") our general judgment is that investments are substantially less than they should be. The professional schools also have records of low expenditures for the enrollments served, compared with such schools at other universities. The Indianapolis Law School, for example, had a special "start-up" cost with establishment of a new day division, a cost that has not yet been met. If the professional schools are subjected to undue postponement of improved funding, the quality of professional services

TABLE X-1
FISCAL PROJECTION BASE 1974-1984*

YEAR	ENROLLMENT**	NON-HEALTH	HEALTH	TOTAL
1973-74	17,666	14,127,000	20,343,000	34,470,000
1974-75	18,438	15,108,000	22,672,000	37,780,000
1975-76	19,497	17,091,000	23,992,000	41,083,000
1976-77	20,221	19,056,000	25,182,000	44,238,000
1977-78	20,879	20,951,000	26,647,000	47,598,000
1978-79	21,322	22,159,000	27,597,000	49,756,000
1979-80	21,594	23,377,000	28,401,000	51,778,000
1980-81	21,593	24,133,000	29,124,000	53,257,000
1981-82	21,613	24,382,000	29,900,000	54,282,000
1982-83	21,646	24,607,000	30,596,000	55,203,000
1983-84	21,724	25,281,000	31,285,000	56,566,000

*Projections do not include inflation.
**Enrollment includes Columbus Center.

TABLE X-2
IUPUI PROJECTED EXPENDITURES 1974-84
NON-HEALTH
(In Thousands)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Faculty	6,258	6,984	7,890	8,748	9,802	10,380	11,101	11,485	11,659	11,845	12,194
Administration	175	243	285	318	357	402	472	471	484	493	502
Clerical and Service	911	990	1,109	1,196	1,323	1,424	1,523	1,548	1,559	1,577	1,597
Supplies and Expenses	469	543	782	989	1,232	1,403	1,613	1,701	1,744	1,787	1,879
Capital	312	337	686	1,311	1,622	1,851	1,923	2,209	2,238	2,248	2,462
<i>Sub-Total</i>	8,124	9,100	10,755	12,564	14,338	15,461	16,635	17,415	17,685	17,950	18,635
Campus Services	6,002	6,008	6,336	6,492	6,612	6,698	6,742	6,717	6,696	6,657	6,645
T O T A L	14,127	15,108	17,091	19,056	20,951	22,159	23,377	24,133	24,382	24,607	25,281
Enrollments (FTE)	8,700	8,708	9,183	9,410	9,584	9,708	9,772	9,736	9,706	9,649	9,632
Expenditure per FTE Student (in dollars)	1,623	1,735	1,861	2,025	2,186	2,282	2,392	2,478	2,512	2,550	2,624

TABLE X-3

IUPUI PROJECTED EXPENDITURES 1974-84
HEALTH
(In Thousands)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Faculty	8,520	9,034	9,597	10,102	10,765	11,204	11,608	11,959	12,342	12,708	13,033
Administration	583	635	664	684	720	741	757	774	790	807	823
Clerical and Service	2,197	2,197	2,332	2,455	2,629	2,748	2,839	2,928	3,020	3,100	3,171
Supplies and Expenses	1,077	1,180	1,354	1,510	1,719	1,863	1,987	2,094	2,213	2,333	2,436
Capital	194	206	233	371	425	455	484	551	617	643	717
<i>Sub-Total</i>	12,572	13,255	14,181	15,123	16,260	17,012	17,678	18,308	18,985	19,593	20,183
Campus Services	7,770	9,417	9,810	10,058	10,386	10,584	10,722	10,816	10,914	11,003	11,102
T O T A L	20,343	22,672	23,992	25,182	26,647	27,597	28,401	29,124	29,900	30,596	31,285
Enrollments (FTE)	3,323	3,620	3,780	3,896	4,102	4,218	4,313	4,407	4,501	4,597	4,687
Expenditure per FTE Student (in dollars)	6,122	6,263	6,347	6,463	6,496	6,542	6,584	6,608	6,642	6,655	6,674

for the citizens of Indiana can be eroded. There are points beyond which "economies" can become costly.

Similar observations can be made concerning capital programs described in Section XI. Sharp increases in construction costs in recent years, along with the probability that this trend will continue, raise questions concerning postponement of building projects. Repair and rehabilitation programs also can become counter-productive if deferred beyond certain time-use limits.

To upgrade programs, we expect to continue to evaluate and ameliorate deficiencies, guided by pertinent accreditation standards. The most obvious and critical deficiencies will suggest priorities for investment.

We will continue to explore intramural and extramural forms of cooperation, from the formally contractual to procedural agreements, that may reduce costs. One of the reasons for the merger of I.U. and Purdue programs in Indianapolis was to reduce duplication of academic programs. The merger also resulted in consolidated, previously duplicated, administrative and service functions.

Through the Consortium for Urban Education, through participation in planning for the I.U. system, and through appropriate arrangements with individual institutions or agencies in Region 8, we also will continue to seek mutually satisfactory means of sharing resources. These resources could include specialized forms of faculty and staff expertise, relatively expensive educational or research activities, and facilities with capabilities for serving multiple functions.

Among the areas of cooperation should be the attainment of more consistency in record-keeping and in exchange of acknowledged forms of equivalency. Broader recognition of course equivalencies, for example, would generate benefits for students, especially transfer students. Movement toward an academic "common market" in the region, and state-wide, also could enhance development of shared policies and procedures, some of which should offer means for achieving administrative economies.

New sources of income also must be sought. Through the Office of Sponsored Programs, the I.U. Foundation, and individual faculty and staff members, continuing and aggressive efforts will be made to attract governmental, foundation, corporate and private grants and gifts, in keeping with the mutual objectives of potential donors and recipients.

Plans to seek and to obtain more gifts are being implemented at IUPUI under the aegis of the I.U. Foundation. One of the yet-to-be developed, and potentially important, areas of service at IUPUI is fund-raising, as an organized, full-time, professionally coordinated

program. An Indianapolis Office of the Foundation, working within the context of the University's overall efforts to encourage philanthropic support, will explore and pursue various approaches on behalf of IUPUI and the University.

SECTION XI

PHYSICAL FACILITIES

Capital needs at IUPUI are extensive. Although some campus facilities are excellent, many others are crowded, inconveniently located, below safety standards required by law, "temporary," and otherwise inadequate. Several antiquated structures should be razed. Some facilities can be converted to other uses. A timely and comprehensive approach to campus development will be essential at IUPUI to meet minimal operational needs.

On the following pages are listings of capital projects for the next ten years. Those projects on Table XI-1, are grouped into three categories--those for the health professions, those for other schools and divisions at IUPUI, and those that are general university service facilities. Clinical instruction involves special facilities, which are reflected in the projects for the health professions.

On the page following the list of projects is Table XI-2, a ten-year schedule for meeting space deficits among divisions and programs other than those in the health professions. The schedule is based on a standard of 120 square feet per full-time equivalent student, a standard adopted by the Indiana University system. Full-time equivalent undergraduate and graduate students in the health professions are included in the non-health space need projections because the numbers are relatively small compared to the total and those students represent heavy users of the facilities listed in the non-health category, i.e., Student Activity Building, Science, Engineering and Technology Building, Central Library, Chilled Water Plant, Physical Plant, etc. If these students in the health professions are excluded in the calculations, the standard used would be 165 gross square feet per FTE student.

Because of the unique character of Medical School, Dental School, Nursing School and Hospital Instructional Facilities, their special requirements are not included in Table XI-2. Space requirements for these areas are in addition to those indicated in that Table, but their anticipated needs are discussed in the text and are shown on Table XI-1.

Planning for physical facilities is tied to other sections of this plan. Planning criteria include priorities for instructional development, special needs of different types of functions, target years for moving selected programs to the central University Quarter Campus, and projected enrollments. Other considerations include flexibility to accommodate changing modes of teaching and research, land-use patterns in our urban setting, and physical placement of related programs to enhance efficiency and effectiveness.

All capital projects are subject to continuing scrutiny and review, as funding becomes available, as academic and administrative

TABLE XI-1

INDIANA UNIVERSITY-PURDUE UNIVERSITY AT INDIANAPOLIS

CAPITAL PROJECTS 1974-1984

<u>NON-HEALTH UNIVERSITY FACILITIES</u>	<u>HEALTH SCIENCE UNIVERSITY FACILITIES</u>
Acquisition and Renovation Herron School of Art Facilities	Medical Science Addition (224,000)
Science-Engineering- Technology Building Phase I (123,000)* Phase II (128,000)	Additions, Connecting Tunnels University Hospital Phase III (236,189)
Student Activity Building, including facilities for the School of Physical Education First Phase (100,000)	Allied Health Professions Building Riley Hospital Phase IV
Business, Education and SPEA Building (150,000)	Ambulatory Care Facility (60,000)
Communications-Fine Arts Building (125,000)	Center for Continuing Health Science Education (50,000)
Law School Addition (30,000)	Renovation-Rehabilitation
Central Library and Area Learning Centers (100,000)	
Classroom Building (100,000)	
Renovation-Rehabilitation	
<u>GENERAL UNIVERSITY SERVICE FACILITIES</u>	
Chilled Water Plant (40,000)	
Planning for Physical Plant	
Central Services	
Renovation-Rehabilitation	
Land Acquisition and Site	
Development	
Parking Garages	

*All figures in parentheses represent gross square feet.

TABLE XI-2

GENERAL UNIVERSITY SERVICE AND NON-HEALTH UNIVERSITY FACILITIES

Schedule for Meeting Space Deficits

YEAR	BUILDINGS ADDED	REQUIRED SQUARE FEET*	AVAILABLE SQUARE FEET*	DEFICIT*
1974-75	None	1,479,360	826,229	653,131
1975-76	None	1,555,560	826,229	729,331
1976-77	Student Activity Building (100,000)			
	Science-Engineering-Technology Building (123,000)	1,596,720	1,049,229	547,491
1977-78	Chilled Water Plant (40,000)			
	Science-Engineering-Technology Building Phase II (128,000)	1,642,320	1,217,229	425,091
1978-79	Business, Education and SPEA Building (150,000)			
	Law School Addition (30,000)	1,671,120	1,397,229	273,891
1979-80	Central Library and Area Learning Centers (100,000)	1,690,200	1,497,229	192,971
1980-81	Communications/Fine Arts Building (100,000)	1,697,160	1,597,229	99,931
1981-82	None	1,704,840	1,597,229	107,611
1982-83	Classroom Building (100,000)	1,709,520	1,697,229	12,291
1983-84	None	1,718,280	1,697,229	21,051

*Cumulative by years.

policies are developed, as new architectural concepts or construction technology indicate revision, and as other planning considerations affect plans to house instructional, research, and service activities. Several of these projects may be partially funded from private sources.

This presentation cannot be perceived as an immutable blueprint, but rather as an inventory of physical needs of IUPUI and its divisions. Priorities will be adjusted as functions change and as funds become available.

Continued development of the central campus will provide more effective and more efficient operations. IUPUI shares the problem of geographic scatteration with other urban institutions. When the merger took place in 1969, academic units were located at seven different locations. There are now five. Priority has been assigned to moving the School of Business programs from 38th Street, the Education unit from its inadequate and antiquated building at its isolated location at 902 North Meridian Street, in addition to moving the School of Physical Education from its leased quarters at 1010 West 64th Street, which are even further removed from other operations. Construction of a new classroom building will make it possible to bring Education to the central campus, and completion of the Student Services Building will permit moving Physical Education. Presence of the latter will enhance intramural and recreational activities for all IUPUI students.

The excellent and accessible facilities on East 38th Street must be used for at least the next ten years unless appropriations for facilities far exceed expectations. These facilities will house the major portions of the School of Science, Business, and Education until new facilities are constructed over the next five to seven years. After that, the facilities will be used for general purpose classrooms, which would otherwise be in short supply by then, and by the growing programs of Continuing Education, already heavy users of the 38th Street facilities, for continued development of industrial and professional in-service training programs.

Descriptions of capital projects follow and indicate construction plans for the University Quarter Campus.

GENERAL UNIVERSITY (NON-HEALTH) FACILITIES

Science-Engineering-Technology Building. This building, which is designed for maximum flexibility in future years, will make it possible to move selected portions of the Purdue academic programs from facilities on East 38th Street to the University Quarter Campus. Construction has begun on the first phase of this building. Added funds are needed to complete this phase, so that more academic departments can be relocated on the central campus. Geographical proximity will improve teaching services, permit more efficient use of facilities, enhance cooperative programs, and reduce costly travel by students, faculty, and staff. Space vacated will provide needed space for other

programs at 38th Street, including continuing education activities. During the next ten years, planning and construction funds will be requested, so that the next two phases of this building can house other departments in the physical and life sciences. It is important that these academic areas be in proximity with the health sciences.

Student Activity Building. Enlargement of bonding authority, granted in 1971, will permit construction of a multi-purpose, centrally-located building to meet the varied and special co-curricular needs of the growing, mostly commuting student body at IUPUI. This building will house a number of functions, including the School of Physical Education, which now leases interim facilities on West 64th Street, and may include limited facilities for the Drama Department. The building also will bring together several offices that provide student services, which are described in Section VII. A later addition to this building is planned, to keep pace with campus growth and expanded enrollment in physical education.

Herron School of Art. Herron's buildings at 16th and Pennsylvania streets are leased by the University, with an agreement that purchase by July 1, 1975, can be completed on more favorable terms than would apply after that date. Because of other capital priorities, new construction will not be feasible until the 1980's. Purchase by the deadline date will provide timely financial advantages, and will enable the School to meet art education requirements for the community and State.

Chilled Water Plant. A central chilled water plant decreases the demand for mechanical equipment space in each building, and thus makes more space available for teaching purposes. Because one well-trained staff can oversee equipment in many buildings, operational costs are reduced and maintenance is improved. An engineering study disclosed that conversion to a central chilled water plant could save an average of \$500,000 per year over a ten-year period. The first phase of the chilled water facility could serve the Science-Engineering-Technology building, the three present undergraduate buildings, the Law building, and new portions of the University Hospital.

Classroom Buildings. The Schools of Business, Education and Public and Environmental Affairs will be housed in the first classroom facility to be constructed. The building will be primarily devoted to classrooms, teaching laboratories, and faculty offices, with access to nearby library resources. The three existing, undergraduate buildings were originally designed for two-year regional campus programs. Divisions and departments in the buildings already exceed the capacity of these facilities. The Schools of Liberal Arts and Social Service now have insufficient space. The Division of

Public and Environmental Affairs (SPEA) is in temporary quarters. The Division of Education, in an antiquated building at 902 North Meridian Street, operates in a crowded and undesirable situation. The School of Business is housed at 38th Street away from the heart of the University complex and essential resources. The second classroom building planned for construction late in the decade will be for general purposes, housing expected overflow from already existing programs.

Central Library and Area Learning Centers. Critical needs for improved library resources are described in Section VI of this plan. Construction of a central library will serve expanded library needs. In addition to books and journals, the central library would house electronically recorded learning materials. These also will be selectively located area learning centers with high technology capabilities. These centers will encourage independent study and small-group learning activities, with rapid access to computerized materials in the central library.

Communications and Fine Arts Building. There is significant potential in the Indianapolis region for development of programs broadly related to "communications," the print and electronic media, speech and drama, and similar areas. As noted in Section VI, IUPUI divisions already are major users of statewide television and telephonic services and have developed varied kinds of learning resources, which are geographically scattered. For efficient functioning, a central facility is needed. The building also would house associated academic programs and educational technology production areas. There also would be capability for fine arts activities, such as display galleries.

Law School Addition. A long-standing need to expand the library at the Indianapolis Law School has reached the critical stage. Enrollment has doubled in the last five years, and members of the faculty and of the legal profession in the community also require more library services. Comparisons with other law schools disclose significant inadequacies, which can jeopardize quality of instruction and research. Added space will be necessary to house essential library facilities.

Land Acquisition and Site Development. The University announced plans and boundaries for the University Quarter Campus in 1966, and since then has been purchasing available property within the total campus area. It was expected that urban renewal funds, obtained through cooperation with the City, would meet about one-half of land costs. These monies were not obtained, so it became necessary for the University to provide the total funding. A substantial backlog of property owners wanting to sell endangers the University's

commitment to the immediate campus neighborhood. An infusion of funds is needed to meet this backlog. Associated costs involve site development, which includes demolition of hazardous buildings and conversion of lots through development of walks, planting, and grassy areas, in accord with the master campus plan. "Site development" also includes utilities, including extension of the steam distribution system to accommodate campus growth.

Repair and Rehabilitation. These projects are essential to maintenance of existing buildings, as facilities are adapted to changing functions. As an example, the buildings originally developed by Purdue on 38th Street for regional campus functions will require remodeling of this kind. Many similar projects will be necessary to adjust to revised functions in selected buildings.

HEALTH SCIENCE FACILITIES

The health professional schools have special requirements and needs for capital development. These include several new construction projects and extensive renovation and rehabilitation of older buildings and facilities. Recent construction of a major addition to the School of Dentistry building and completion of a new School of Nursing structure have been major advancements. These developments, in turn, have generated renovation needs in the older portion of the Dental Building and in Ball Residence Hall, the former Nursing School Headquarters. With the exception of the new University Hospital, an important teaching facility for Medicine and Nursing, the School of Medicine has not had a major building addition since 1958. The medical school curriculum has undergone major revision in recent years, and the medical education program has been expanded into an integrated statewide system. In addition, there are large, and growing Allied Health Sciences programs, which will require appropriate facilities. The following presentation includes major capital needs for the health professional schools in Indianapolis.

Medical Science Addition. A substantial addition to this building is vital to help satisfy basic instructional requirements of students in the health professions and to accommodate increasing numbers of students generated by the Statewide Medical Education System. This is a high-priority project, which is partially funded, but has been delayed by the unavailability of adequate funds. A study of the use of the present building is being conducted.

Equipment Needs. In addition to completion of construction of the second phase of the University Hospital, new equipment will be required for this phase. The new Regenstrief Health Center, a major outpatient facility, has been made possible through cooperative efforts

of the Regenstrief Foundation, Marion County Health and Hospital Corporation, and Indiana University. Because this facility will provide teaching opportunities, a share of equipment costs is included in capital planning. In the new School of Nursing building, equipment to provide color capability for closed-circuit television also is necessary.

Tunnel Additions. To physically integrate the Regenstrief Health Center with Medical Center buildings, there must be connection to the existing tunnel system. This addition will provide effective, weather-proof movement for patients, personnel, and supplies.

University Hospital--Phase III. Completion of Phase III will complete the University Hospital, which is currently in the construction stage of Phase IIA. Plans for the final phase are required now, to supply the clinical, instructional, and patient referral needs of the State. After planning, funding for 1975-77 will make it possible to relieve many crowded programs and to proceed with extensive, planned renovation and remodeling of other buildings.

Riley Hospital--Phase IV. The master plan for development of the nationally recognized Riley Hospital for Children indicates that some revisions are needed to reach a more economical solution for two wings of the hospital and a new intensive care center. Planning funds also will be provided by the Riley Memorial Association.

Outpatient Building. The planning and construction of an Ambulatory Services Building is an important project. A planning phase will be needed to determine location and other criteria. Funding for construction has been programmed for 1977-79. It is anticipated that private funds will be obtained to match state appropriations.

Center for Continuing Health Science Education. This will be a key construction project for medical education programs. This facility will provide for a major expansion of the Medical Library and will house several medical education support services. There will be expanded space in this Health Education Building for Medical Illustrations and other educational services that need central, modern facilities. The building is programmed for 1977-79 and is expected to be partially funded by private sources, matching state appropriations.

Rehabilitation and Renovation. A number of projects of this kind have been identified, including essential improvement in the air handling and electrical systems of Riley Hospital and the Medical Science Building, remodeling older portions of the Dental Building, revision of the nuclear medicine unit to accommodate equipment obtained from gift funds, renovation of Coleman Hospital to provide offices, conversion of space in the Long-Clinical Building, modernization of older portions of Riley Hospital,

and similar improvements to insure full and efficient use of available facilities.

FURTHER COMMENTS ON PLANNED CAPITAL PROJECTS

The previous presentation covers current and projected needs for the next ten years, determined by the missions of IUPUI divisions and the magnitude of needs within the divisions.

A central concern has been, and will be, parking. IUPUI now maintains more than 9,000 on-campus surface parking spaces and needs more. The parking system is financed through user fees, with higher charges for more convenient spaces. Income from fees is used for paving, lighting, and landscaping parking areas

The campus master plan projects several multi-story parking structures. The first of these is expected to be located in the Riley Hospital-Regenstrief Health Center area, where there is, and will be, high patient-visitor traffic. Future structures, which also would be financed by user charges, will be placed where studies indicate that major needs exist.

The Trustees have approved policies for construction and operation of needed campus facilities by private developers. Through appropriate and mutually satisfactory long-term lease arrangements, this approach could accelerate and supplement development of the central campus. These facilities could include multi-story parking, apartments, professional offices, and retailing establishments to serve visitors, students, and staff.

With a relatively large, temporarily open, amount of land available for surface parking near the new IUPUI academic buildings, there is time for adequate planning in that portion of the campus. New construction and resulting reductions in surface area, however, will accelerate planning multi-story parking garages. We are seeking expert study and counsel in this area of campus development. We have sought and obtained advice from Indianapolis leaders, from both governmental and private sectors, to develop sound land-use plans. A major concern involves future traffic patterns. To enhance integrated development of the future campus, we support downgrading West Michigan Street as a major traffic artery and the widening of New York Street, which would become a two-way thoroughfare.

We will continue to support public transportation and advocate services that our students, faculty, staff, and visitors can and will use. We have many potential "customers." It should be noted that development of a central campus, with elimination of several scattered locations, will improve coordination and communication. Students and faculty who must take and teach courses at more than one location add to transportation and parking demands. Physical consolidation will reduce these demands.

professional interests of the faculty, and availability of financial support are some of the factors that will determine priorities and the rate of development of research at IUPUI.

IUPUI serves many kinds of students. The segment with the highest enrollment has grown from the regional campuses that were maintained by the two parent universities in Indianapolis. These have been merged and reorganized into the School of Liberal Arts, the School of Science, the School of Engineering and Technology, the Division of Business, and the Division of Education. The latter two divisions are expected to reach the status of schools as soon as their development warrants.

The academic components for this segment have instituted new and complete degree programs, broadened access to higher education, and developed new courses and curricula to meet the special needs and interests of IUPUI students. These divisions will continue to place stress on these central and fundamental functions.

Academic departments for this segment were strengthened significantly after the merger was completed. Capabilities for undergraduate and graduate instruction were enhanced; and appropriate degree programs will continue to be developed, as community needs are demonstrated and academic strengths are acquired. These programs face critical needs for more full-time faculty, additional library acquisitions, more sophisticated teaching equipment, and related resources to accommodate enrollment increases and to establish additional needed, complete degree programs, including graduate programs.

A second segment at IUPUI is the Medical Center, the State's major facility for education, research, and service in the health professions. Components include the School of Medicine, the School of Dentistry, the School of Nursing, the Division of Allied Health Sciences, the University teaching hospitals, and cooperative arrangements with neighboring health-care institutions under county, state, and federal auspices.

It is vital that the state-wide objectives of these divisions be recognized and supported. In preparing practitioners, in conducting research, and in supplying continuing education, this segment serves the entire State of Indiana. The Medical Center should continue to be responsive to needs of the state, growing and adapting to meet its broad responsibilities. Anticipated developments include further growth of the State-wide System of Medical Education, establishment of a School of Allied Health Sciences, expansion of dental programs over the state, and continued development of faculty and facilities.

The special dimensions of teaching and research in the health professions deserve special attention. Any restrictive policies will have unfortunate consequences in these areas, where national

competition for able faculty and mandatory adoption of ever-rising standards pose constant challenges. The students in the health professions must have the highest quality education possible, if the citizens of Indiana are to be served well.

Comparisons between I.U.'s educational programs in health at IUPUI and those of comparable schools indicate that our programs are not as well supported. Quality will drop if IUPUI does not remain competitive in health education. If this occurs, the state will suffer. Long-range plans for IUPUI include expansion in the number of students educated for the health professions, particularly in the fields of allied health. Plans also include increased financial support so that the quality of these programs can be enhanced.

Another major segment of IUPUI includes several other professional divisions--the Indianapolis Law School, the School of Social Service, the Herron School of Art, and the School of Physical Education. Although these schools vary in size and orientation, each has earned a reputation for instructional quality in its respective professional area. Long-range plans call for continued development in educational research, and service programs for these disciplines in response to regional and state needs. These divisions have distinctive roles and have special needs for added faculty and facilities.

IUPUI must continue to strengthen its continuing education programs. In this field there is need for special programs of all kinds--credit and non-credit--introductory and advanced--extended and abbreviated. Courses are needed to keep professionals aware of advancing knowledge, to prepare students for second careers, to add new facets to student life, or for the handicapped preparatory to entering more traditional educational programs. IUPUI must expand its expertise in--and support for--continuing education.

In general, IUPUI is expected to retain its character as a largely commuter campus. In the urban tradition, its students will be older and more occupationally oriented than students at residential campuses, and higher proportions will continue to be employed and married. Many freshmen will continue to come from families with parents who did not go to college. Plans must be made to improve the access of minorities to IUPUI, particularly in the professional schools. More quality graduate and professional programs must be developed that encourage interaction with the community.

Although identification of the various segments of IUPUI is useful for descriptive purposes, the synergistic aspect of their combinations is more important. Together, the IUPUI divisions can exceed the sum of their parts, since they are mutually reinforcing, making possible the provision of numerous benefits through coordinated planning and operation. The concept of interdisciplinary cooperation to achieve more effective results is a basic purpose for the establishment of IUPUI.

Also, cooperation with other educational institutions and civic organizations is evident in a number of IUPUI programs. Examples include leadership and participation in a regional Consortium for Urban Education, joint degree and course arrangements with local colleges and universities, and the innovative State-wide System of Medical Education. Such programs must be strengthened and expanded.

In concept and in operation, IUPUI is unique. Its shape and substance are evolving toward a distinctive identity, marked by its urban orientation, its diverse programs, and its opportunities to make quality higher education more accessible to more persons. To a much greater degree than is generally recognized, IUPUI has assumed authority and capability to determine its own needs and future direction. This process embraces both academic and operational dimensions, and there is wisdom in furthering such progress.

IUPUI is, and will continue to be, pluralistic. It will serve growing numbers of undergraduate, professional, and graduate students--full-time and part-time, day and evening, the year around. It also will meet increasing demands for continuing education, as professional practitioners and adults refresh their skills or seek to broaden their cultural horizons. As IUPUI grows and changes, finding its special identity, a truly comprehensive, accessible, and urban institution of higher learning will develop to serve its region and state with rising distinction.