FOR COMMENT

Residential Planning for the 21st Century

at the University of Pennsylvania

Report of the Vice Provost for University Life

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Executive Summary

This plan proposes a vision for residential living at the University of Pennsylvania over the long term that derives from the assumption that there is value to having more students living on campus than we have now. An increase in the concentration of upperclassmen can improve the intellectual environment of the University, reinforce a strong sense of community, and lead to the enhanced understanding and practice of citizenship by all students. The residential presence on campus of involved, committed and academically focused students will improve the quality of student life. For the University, such an investment will lead to a more sustained connection between students and the University as students become alumni.

Penn made its most significant residential investments in the 1960's and 1970's with the building of high and low rise buildings, and in the 1980's with the rehabilitation and conversion of most of the Quadrangle into first year houses. The University is now faced with the question of how to plan for the future residential environment. This question is driven by a set of environmental issues — the deterioration of existing University facilities and the need for reinvestment; the safety and security of the University community and its effect on competitiveness in the recruitment and retention of students; a "culture" of student choice which affords an extraordinary variety of on-campus and off-campus residential options a growing experience with the effect that student involvement in small residential communities had on the perceived quality of student life; and the recognition that the loss of the student as on-campus resident entails a cost to the University as well as to the student.

To address these issues, and growing out of the work of a number of committees, including the Provost's Work Group on Undergraduate Education, this plan proposes as a strategy the development of up to six residential colleges as the logical extension of the efforts Penn has made over the last twenty years to become a residential campus. Such a strategy would require, first, creating an infrastructure of program, citizenship, affiliation of student and faculty, and supports such as dining. The second stage would be the eventual physical creation of corresponding building facilities to house approximately 300 students each. These residences would be targeted for juniors and seniors, the groups who choose most often to live off-campus, and they would be designed to offer students the physical amenities of smaller communities and the advantages of access to technological innovation, faculty support and residence-centered academic activity, opportunity and service delivery. In addition, the shared focus of dining, recreational and social experiences would provide a stronger framework for citizenship and connection to the University.

This plan makes several assumptions: that as many as 10% of Penn undergraduates might still, for a variety of reasons, choose and/or continue to live off campus that the colleges would be centers of affiliation, even for those students who did not live there; that all existing residential facilities, including first year houses and college houses, would be connected by affiliation to these centers; and that we would continue to use most, if not all, of our existing facilities and invest in their rehabilitation as well as their conversion to spaces that are more suitable to student communities. For this plan to be successful would require the significant integration of residential and academic planning and faculty and school support so that the residences' potential to support the University's academic mission is fully realized.

In addition to the issues raised in this paper, an equally important issue is the question of residential planning for graduate students, both on and off campus. This will be the subject of another concept paper later this year, after conversations with deans, graduate and professional students and members of other interested departments. Questions, comments and suggestions on this subject, and on the paper that follows, can be directed to the Office of the Vice Provost for University Life, 200 Houston Hall/6306.

— Kim M. Morrisson, Vice Provost for University Life

Residential Planning for the 21st Century

by Kim M. Morrisson

Preface

In the fall of 1991, the Vice Provost for University Life, the administrative officer responsible to the Provost for oversight and administration of the University's residential system, was asked by the Provost to develop a long-range plan for residential living at Penn that could be integrated into the long-range Campus Master Plan being prepared for the Trustees. The Vice Provost was asked to provide a vision of residential living at Penn under the best of conditions, one that would grow out of an articulated philosophy and principles. Such a document was also to include the identification of physical options necessary to achieve this vision with a mapping of strategic opportunities that could be realized over the next ten to fifteen years.

This document is the first effort to respond to the Provost's request. The following sections summarize

- the development of Penn as a residential campus,
- the immediate problems and opportunities that confront the University in its residential facilities and the surrounding environment,
- the development and evolution of a residential philosophy for Penn, and
- the various physical options that would be required to implement fully such a philosophy.

The substance of this document grows out of a number of discussions, both formal and informal, that have taken place throughout the year with members of the Provost's Planning group, with members of the Council of College House Masters, with the First Year Council of Senior Faculty Residents, with colleagues and staff in the Office of the Vice Provost and the departments of Residential Living and Academic Programs in Residences, with students from SCUE and from the Undergraduate Assembly, and with "unaffiliated" Penn students who chose to live off-campus and were gracious enough to share their reasons and their experience. To all of these, special thanks.

I. The Development of Penn as a Residential Campus

In his *Proposals Relating to the Education of Youth in Pennsylvania,* Benjamin Franklin envisioned "accommodations where 'boarding scholars diet together, plainly, temperately, and frugally.'"[1] The first dormitory was added to the buildings of Franklin's Academy on Fourth Street in 1762 to accommodate students coming from the other American colonies and the West Indies. Local students lived at home, attending classes by day. Indeed as Meyerson and Winegrad note, "At this time, no advantage—in fact quite the opposite—was seen in encouraging young people from a variety of differing backgrounds to associate with one another far removed from their families' watchful attention to morals and social connections."[2]

With the movement of the University to its West Philadelphia location in the early 1870's, a different model of a University emerged, one that was based more closely on the Cambridge and Oxford collegiate designs. Under the administration of Provost Charles Harrison (1894-1910), a major building campaign was initiated and completed that resulted in the creation of the University Quadrangle—designed by Cope and Stewardson from the model of St. John's College, Cambridge—and Houston Hall, the nation's first student union. These buildings were testament to the recognition that much that was important to the educational objectives of the University would take place outside the classroom, in the places where students lived, dined, and interacted.

Several of the University's fraternity houses date from this period, most notably, the "Castle" (now housing the Community-Service Living-Learning Program), Phi Delta Theta, and Delta Psi in St. Anthony's Hall. Indeed, throughout the early decades of the twentieth century, fraternities and local near-campus row housing offered the only alternative to University-sponsored dormitory life in the Quad. By 1925, the University housed 900 of its undergraduate students.

In 1960, the University completed its first dedicated women's dormitory, Hill Hall, designed by Eero Saarinen and intended to accommodate more than 600 students. By 1968, the University housed over 3,000 undergraduate students in its on-campus residences, excluding fraternities, out of a total full-time undergraduate population of nearly 7,100.

Over the last thirty years, a series of reports have, with a remarkable degree of consistency, guided the evolution of residential life as part of the educational mission of the University. In April 1960, the University Planning Office prepared a development program for undergraduate men's housing in the Quadrangle which was intended to serve the University's long-range goals in education, student life, and physical planning. "The basic requirement for the residential system," noted the planners, "is that it be a collection of opportunities: for good reading, for privacy, for counsel, for study, for sleep, for talk, for meeting faculty and students, for living with and understanding people in many ways, opportunity for growing in the sense of a whole integrated educated man."[3] The report outlined plans for the completion of two college houses in the Quad and for a series of residential houses based upon the model of a residential setting that promoted learning as well as living.

Although this plan was never implemented, the residential philosophy it espoused was heralded in many reports to follow. The Springer Report of 1965, which proposed the creation of a Division of Student Affairs, noted that "the intellectual, cultural, and social environment outside of the classroom cannot be divorced from what goes on within, and the University should not, if it could, draw its curtain of concern at the classroom door."

By the late 1960's, Penn was something of a residential hybrid, housing freshmen, fewer than 25% of its upperclassmen, and approximately 500 graduate students on campus. More than half the undergraduate students lived in fraternities and sororities and in the privately-owned housing immediately surrounding the campus.

The federal urban renewal program and the certification by the Philadelphia Planning Commission of the University's redevelopment area, joined with the University's intention to revitalize, strengthen and expand its undergraduate and graduate programs, led to the building in 1970-71 of the high-rise buildings known as Superblock (Harnwell, Harrison and Hi-Rise North) and Graduate Towers (Nichols House and Graduate B), funded by a bond issue of $56.6 million. This investment in higher-density housing more than doubled the existing on-campus housing stock for undergraduate and graduate students. It accompanied a planned increase in full-time undergraduate enrollment by 700 students and in full-time graduate/professional enrollment by 1,200 students. Indeed, the creation of these buildings presumed that the University would house 75.2% of its undergraduates with an additional 11.5% living in fraternities and sororities.

At the same time, the new facilities provided what was then thought to be the most advanced design in collegiate dormitory housing. Responding to what students desired in terms of privacy, greater independence and apartment-style living, these high-rise buildings mirrored the changes in student expectations and values during the Vietnam era. Supporting these changes, a residential program was put in place which relied heavily on

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[1] quoted in Meyerson and Winegrad, *Gladly Learn and Gladly Teach,* p. 18.

[2] Meyerson and Winegrad, p. 224.

[3] quoted in Mary G. Beermann, "Residential Living: A Critical Decade," October 1981, p. 1, a report to the Executive Director of Student Financial and Administrative Services.

peers, known as residential advisors, to provide the support, counseling, advice, and frequently the discipline that had hitherto been provided by an administrative structure operating under the principle of *in loco parentis*. Such a program continues to this day.

Also constructed as part of the bond issue were three low-rise buildings, and in these an alternative model of collegiate housing was developed. Van Pelt College House opened in 1972, followed by Modern Languages College House, W.E.B. DuBois House, and, outside the bond issue, Stouffer. Much closer in conception to the abortive residential planning model of 1960, the college house program received strong endorsement from the *Ad Hoc* Senate Committee on Academic Priorities (1972), the University Development Commission report (1973), and the Mendelson Committee Report (1974). In its evolution over the last twenty years, the college house model has promoted the development of living-learning communities of faculty, undergraduate and graduate students, with facilities to support formal and informal curricular activity, collaborative learning, and a rich co-curricular life for the approximately 1,380 students and 25 faculty families who participate each year.

In the late 1970's, the University's first substantial efforts to rehabilitate the Quad were undertaken. A $1.95 million gift from Ambassador John Ware led to the creation of Ware College House for Health and Society, which was to form the model for the rehabilitation of additional houses in the Quad. Ultimately, a more modest plan was adopted, funded by a mix of gifts, PHEFA loans, and a bond issue. During the 1980's nearly 75% of the Quad rehabilitation effort was completed.

The programmatic blueprint for the Quad renovation was recommended by the President's Task Force on the Freshman Year, which recommended the formation of the First Year House program as a significant way to reduce the psychological size of Penn for its newest students. Modeled on the college houses with the introduction of faculty presence and supportive academic facilities, the first-year houses also introduced a strengthened advising component with the addition of Assistant Deans for Residence who would be linked to the academic advising office in the College. Four first-year houses were introduced into the Quad—Community House, Spruce Street, Upper Quad, and the as-yet-to-be-renovated Butcher-Speakman-Class of '28—while additional houses were created in King's Court/English House, and Hill House, which also remained a college house. An additional first-year program exists in Harnwell House (High-Rise East), with no resident faculty.

In addition to the first-year programs, the 1980's also saw the development of four living-learning programs in the high-rises, dedicated to particular student thematic interests—Arts House, the Latin American program, the East Asian program, and the International project. The newest living-learning program was created in 1991 with the formation of the Community Service Living-Learning Program in the Castle.

With the addition of the first-year houses, more than 3,000 undergraduate students—or nearly one-third of Penn's undergraduate population—each year have the experience of living in a house-based structure with resident faculty and/or staff. Of these, only the college houses, including Hill, King's Court/English House, the first-year program in Harnwell, and the Castle, have dining sites dedicated to their programs. Table A provides a summary overview of undergraduate (house and non-house) and graduate residential programs, indicating occupancy, student-staff ratios, and programmatic costs.

Table B: Total Enrollment & Residential Occupancy

Fiscal Years at Five Years Intervals, 1971-1991
Plus Current FY 1992 [Revised 6/15/92]

Academic Year	F-T Undergraduates Enrolled	In Residence	%	Grad/Prof'l Students Enrolled	In Residence	%
1970-71	7,588	3,968	52.3	8,805	1,840	20.9
1975-76	8,319	5,149	61.9	9,384	1,923	20.5
1980-81	8,846	6,121	69.2	9,278	1,827	19.7
1985-86	9,253	5,933	64.1	10,121	1,229	12.1
1990-91	9,653	5,598	7.9	10,376	1,320	12.7
1991-92	9,535	5,517	57.9	10,686	1,299	12.2

Between 1968 and 1992, Penn's full-time undergraduate enrollment grew from 7,100 to more than 9,500, an increase of nearly 34%. In 1991-92, Penn housed 5,517 undergraduates (58.1%) with another 800 (8.4%) living in fraternities and sororities. In 1968, in its documentation for the bond issue, Penn assumed approximately 13% of its full-time undergraduate students would live off-campus. In 1992, the number of full-time undergraduate students living off-campus has increased to nearly 35%. Table B shows the growth of full-time enrollment and the changes in the number and percentage of students living in residence over the two decades from 1971 to 1992. Among the Ivies, and excepting Cornell, Penn houses the lowest percentage of its undergraduate students on campus.

In addition to the changes that have taken place on campus, the off-campus environment for students has changed as well. The last two decades have seen an escalation of property values in the University City and surrounding area, increased gentrification, and a significant amount of landlord investment in refurbishing apartment stock in the immediate area. Highly competitive rents compared to University housing, as well as increased space and privacy, have made off-campus housing more attractive to larger numbers of University undergraduates.

Data from the University's Office of Off-Campus Living show that over 10,000 students live off-campus, more than 4,600 of them in the immediate West Philadelphia area (19104, 19139, 19143 zip codes, excluding fraternities). These data are reflected in Table C, showing student demographic data for Fall 1991.

In the last five years, security issues have been a primary concern for students, both on campus and off. The University's investments in off-campus escort and transportation services have been undertaken in response to many of these concerns. Also in response to these concerns, increasing numbers of students are moving to Center City and to the surrounding suburbs. Such shifts have an effect on the amount of time students spend on campus and on their participation in various aspects of the life of the University community.

Similarly, as increasing numbers of undergraduate students choose to live off campus, particularly in their junior and senior years, a widening

Table A: An Overview of Residential Programs, Fiscal Year

	Student Spaces Fall 91	Student Occupants Fall 91	Occupancy %	No. of Staff	Student Staff Ratio	Total Stipend Costs	(12.8%) Employee Benefits	Student Staff Rents
Undergraduate Dorms	4,296	4,134	96.2%	109	38:1	$17,500	$2,240	$536,878
College Houses/LivingLearning Programs	1,430	1,383	96.7%	73	19:1	56,400	7,219	373,256
Total Undergraduate Residents	5,726	5,517	96.3%	182	0:1	73,900	9,459	910,134
Total Graduate	1,321	1,299	98.3%	18	72:1	3,500	448	145,067
Total Residential System	**7,047**	**6,816**	**96.7%**	**200**	**34:1**	**$77,400**	**$9,907**	**$1,055,201**

Note: The occupancy figures are derived from signed agreements with Residential.

chasm grows between the University's efforts in residential living to create smaller, enriched and interactive academic and social communities and the more laissez-faire independent environments in which many students choose to spend what should be their most academically productive years.

Some of the reasons for these choices will be discussed in the next section. One of the questions this paper poses is whether, over the long term, the University should enshrine this growing dichotomy between an undergraduate student's early and later years as an emblem of Penn's particular culture, or whether it should take steps to restructure its residential life into a more coherent pattern, while retaining some aspects of flexibility and choice. Posed in a slightly different way, the question is whether Penn should revisit its objectives in investing in its student dormitories in the late 1960's when it intended to house a higher percentage of a much smaller undergraduate population on campus. Is it time now to make a similar investment for the year 2000, and if so, what form should it take?

II. Current Problems and Opportunities

While many of the problems and opportunities Penn faces in its residential environment are enhanced by its identity as an urban institution, it is by no means alone in confronting security issues, a deteriorating residential physical plant, declining resources available to meet planned and deferred maintenance, increased cost of needed programmatic investment and fluctuations in student interest. Many of our sister institutions within the Ivies and without face similar problems. Those with older residential facilities or facilities built shortly after World War II find themselves now faced with massive rehabilitation costs and/or the need for new construction. For example, in 1990, Brown University proposed a $33 million building improvement and restoration plan affecting more than 3,100 beds and 73% of its housing stock. In its "Housing Restoration Plan" the Brown report cited Harvard's completion of a $67 million (4,000 bed) housing restoration plan and Cornell's implementation of a $73 million (6,900 bed) rehabilitation plan.[4] At Penn, as well, these issues have reached critical proportions.

(1) Security

Penn's administration made a significant commitment to the security of its residential facilities in the 1980's. A consultant's report in 1986 following the tragic murder of a graduate student in Graduate Towers and the alleged rape of a student in the Quad, resulted in the installation of card-reader access and control, security guards at all facilities, installation of security screens or bars on windows below seven feet and dead bolt or mortis locks with anti-carding devices throughout the system. An investment of more than $2,000,000 over a five-year period and an intense effort to make residents more security-conscious in their daily habits had the effect of making residential buildings more difficult to enter for those without license, while balancing assured access for members of the University community. In addition to the one-time installation costs of hardware and equipment absorbed by the residential system, the ongoing costs of contract security guards were built into the annual operational budget at a cost in FY 93 of $905,000.

Although security issues internal to residential buildings have been largely addressed, attention has shifted within the last five years to the security of the surrounding University community. The cost of the University's investment in increased numbers of police officers was distributed over the schools and centers. The residential budget, which funds 28% of the budget of Public Safety, carried a significant share of this increase. For example, Table D shows that in the period from FY 1986 to FY 1993, the residences' share of non-residential security costs increased by 106% compared to an increase in total revenues of 41%.

(continued next page)

[4] "1990 Housing Restoration Plan," Brown University, Office of Residential Life, p. 31.

1992

Faculty Rent	Program Funds Gen. Fees	Total Expense	Line Item as a % of Total Expense	Cost ($) Per Student	FY 92 Program Fees
$43,520	$114,719	$714,857	40.8%	$173	$95,138
175,354	254,923	867,152	49.5%	627	12,275
218,874	369,642	1,582,009	90.3%	287	107,413
0	21,246	170,261	9.7%	131	0
$218,874	**$390,888**	**$1,752,270**	**100.0%**	**$257**	**$107,413**

Table C: Student Demographic Data - Fall 1991 (1)
Full-Time Students Living Off-Campus

Area	Undergrad	Grad	Total
W. Philadelphia (19104)	2,093	1,888	3,981
W. Philadelphia (19139, 19143)	44	584	628
Fraternities/Sororities (19104)	600	1	601
Center City, W. of Broad St.	119	1,654	1,773
Center City, E. of Broad St.	32	174	206
Overbrook, Cityline, Wynnefield	18	140	158
Germantown, Mt. Airy, Roxborough, etc.	25	248	273
Northeast	11	597	0
South/S'west Philadelphia	11	22	33
N. Philadelphia, Kensington, Richmond	16	41	57
Bucks County	13	81	94
Chester County	6	97	103
Delaware County	56	498	554
Montgomery County	40	424	464
Other Pennsylvania	12	143	155
Delaware	5	45	50
South Jersey	19	278	297
North Jersey	6	46	52
Off-Campus, non-local (2)	56	704	760
Total Off-Campus Students	**3,182**	**7,127**	**10,309**
Students Living On-Campus			
On-Campus Residences	5,352	1,377	6,729
Fraternities and Sororities	491	1	492
Total On-Campus Students	**5,843**	**1,378**	**7,221**
Other			
Departmental Address	0	273	273
P. O. Box Address (19101)	7	15	22
Unknown (3)	294	138	432
Total Other	**301**	**426**	**727**
Total Students	9,326	8,931	18,257

Notes:
1. These figures are derived from addresses listed with the Registrar's Office.
2. Address other than Pennsylvania, Delaware, New Jersey.
3. Expired on-campus address.

Table D. Comparative Financial Performance of Residences, FY 1986 and FY 1993

Revenue ($000)	Actual 1986	Budgeted 1993	%Change
Rent	$ 20,241	$ 29,013	43%
Interest Income	515	312	- 39
Endowment Income	9	18	100
Other	574	649	13
Total Revenue	**$ 21,339**	**$ 29,992**	**41%**
Expenditures ($000)			
Residential Maintenance& Operations	$ 10,507	$ 14,804	41%
Utilities	3,994	6,198	55
Principle, Interest, Insurance	5,760	6,575	14
Security Costs	809	1,665	106
Allocated Costs	392	1,021	160
Transfer of Repair Funds	1,299	853	- 34
Expenditures before Credits	$ 22,761	$ 31,116	37
Expense Credits	- 1,422	- 1,124	- 21
Total Expenditures	**$ 21,339**	**$ 29,992**	**41%**

(2) Deteriorating Residential Facilities

When most of Penn's residential buildings were constructed, no funds were identified to address their upkeep and maintenance. In the early 1980's, the Executive Director of Student Financial and Administrative Services in the Vice Provost's office, who was responsible for the residential system, developed, for the first time, a capital plan for residential facilities which anticipated returning $ 1.2 million to $2 million of expected revenue each year into systems improvements for the facilities through a systems reserve fund. Although several years of this plan were realized, increased security, utility and allocated costs eventually consumed the projected revenues so that fewer dollars were able to be reinvested in facilities deferred maintenance and capital investment. Referring again to Table D, in comparing the period of FY1986 to FY1993, allocated costs to the residence system in-creased by 160% while funds available for systems repair decreased by 34%.

The critical needs of the residential system are detailed in a lengthy report produced in fall 1991 by the Director of Residential Maintenance. It estimates that over the next five to eight years, Penn must invest more than $85 million in its existing residences. The needs range from overhaul of mechanical, air handling, electrical, plumbing and operating systems, rehabilitation of structural systems, roofs, and water infiltration problems to rewiring of kitchens and replacement of furniture that is now more than twenty years old. The breakdown of needs by category and by building over the next five years appears in Table E. As other institutions are finding, neglect of these issues can produce a facilities crisis.

(3) Declining Revenue for Reinvestment

Deferred maintenance and capital investment problems are exacerbated when declining occupancy results in inadequate revenues to reinvest in facilities. Over the last five years, the residential rent structure has increased by approximately 6% each year, but the actual number of rent-paying bodies has decreased by 5.6%. Tables F-1 and F-2 summarize and provide details, respectively, of the changes in residential occupancy between FY 1988 and FY 1992.

One reason for declining occupancy has been the declining attractiveness of the facilities, the byproduct of inadequate funding for cosmetic and other improvements. This pattern results in a downward spiral—fewer students producing less revenue each year for facilities improvements.

Another significant reason for declining occupancy has been the non-competitive rent structure of the residences. Since the system is completely self-supporting, it has historically carried its own debt service. Currently $6.1 million of a $29.9 million budget covers debt. These costs are reflected in the rents which are as high or higher than more attractive apartments with more space in the surrounding West Philadelphia community. Table G *[page VIII]* provides comparative rent ranges for room types on campus compared with West Philadelphia and Center City areas.

Changing student interests have also contributed to declining occupancy. The last five years have seen a resurgence of student interest in joining Greek letter organizations after a strong decline throughout the 1970's and early 1980's. As Table H *[pageIX]* shows, Greek membership has risen from 1,732 in 1987-88 to 2,939 in 1991-92, an increase of 70%. In 1987-88, 709 students lived in fraternity and sorority houses. In 1991-92, the number of students living in Greek chapter houses increased to 801, with 833 students anticipated for the 1992-93 academic year. Typically, the students most likely to live in a fraternity or sorority chapter house are sophomores, who are also the largest population, after freshmen, who would be likely to stay in residence. With more sophomores choosing a Greek residential experience, the residences would have to appeal to the older juniors or seniors who would be more likely to want private bedrooms, a room type less likely to be found in our current residential configurations. As the residential system has made changes to convert spaces to these more desirable room types, one result has been a reduction in the total number of students housed. Table I *[page IX]* shows the Fall 1991 distribution of students by class in their current on-campus and off-campus locations.

(4) Cost of Programmatic Investment

Faculty in Residence: One significant improvement in the residential program has been the addition of faculty in residence in the freshman year. The cost, however, is substantial and includes the creation of appropriate faculty apartments out of existing student rooms with corresponding losses in projected rent revenue, as well as a needed programmatic budget to support the activities of a house. Typically, the cost of creating a first-year house with one faculty and one staff apartment, rent support and program budget has totalled more than $500,000. In addition to the Hill House faculty, currently seven faculty members and their families live in residence as part of the first-year program.

Computer Laboratories: Another enhancement has been the creation of computer laboratories in residential facilities to provide students with access to the latest in computer technology. By the end of summer 1992, there will be fifteen functioning residential computer laboratories spread throughout the system, created at a cost of more than $700,000.

Networking: Currently underway are plans to network the residences so that data, voice and video will be available in each student room, an investment in technology that will be necessary if Penn is to remain competitive in this decade. The total projected capital costs of this plan have been estimated to exceed $5 million.

Dedicated Dining: Those associated with the house-based programs would agree that the single most critical factor in their success is dedicated dining. Yet only the College Houses, Hill, King's Court/English House, the first-year program in Harnwell and the Castle have achieved this level of support. The first-year houses in the Quad do not have dedicated dining and its absence is acutely felt.

Dedicated dining sites that support house programs are the glue that cements community, offering consistent and recurring opportunities for house members to gather socially, intellectually or academically. This is most important in the Quad, where the house programs are grafted onto architecturally unsupportive hallways which do not lend themselves to the criss-crossed pathways of central gathering places where residents run into each other all the time. In these settings, it is harder to develop community.

To provide dedicated dining in the Quad would require either the construction of common dining space out of Quad spaces or the renovation of Stouffer Commons in such a way that individual houses could eat together

Table E: Residential Maintenance & Capital Plan: Five Year Summary of Unfunded Expend

		Allocation of Unfunded Expenditures					
Buildings	**Total Unfunded**	**Electrical**	**Mechanical**	**Plumbing**	**Roofing**	**Structural**	**Showcasing**
The Castle	**$ 0**	$0	$ 0	$ 0	$ 0	$ 0	$ 0
Class of '25	**468,876**	0	109,800	64,000	0	40,000	0
DuBois	**1,603,373**	7,500	12,000	107,200	0	86,400	90,000
English House	**743,554**	100,000	18,000	325,200	0	0	0
Grad A	**6,531,859**	32,800	1,147,000	1,550,000	0	271,000	300,000
Grad B	**5,195,754**	32,800	1,034,600	1,380,000	130,000	187,820	275,000
Harnwell House	**12,070,778**	1,090,000	662,000	1,540,000	180,000	0	65,000
Harrison House	**12,471,353**	1,040,000	665,600	1,545,000	0	10,500	30,000
High Rise North	**11,729,803**	1,130,000	673,050	1,540,000	90,000	0	50,000
Hill House	**2,326,005**	170,000	57,250	223,000	40,000	632,000	250,000
Kings Court	**887,032**	212,000	0	58,800	50,000	7,350	0
Mayer	**701,527**	10,500	220,000	0	0	16,000	0
Quadrangle	**28,614,992**	115,000	297,000	4,459,000	438,050	4,118,000	665,000
Stouffer	**1,010,016**	0	180,000	15,000	0	90,000	125,000
Van Pelt	**768,880**	0	12,000	116,800	130,000	10,000	0
Campus	**690,000**	0	0	0	0	690,000	0
Total	**$ 85,813,802**	**$ 3,940,600**	**$ 5,088,300**	**$ 12,924,000**	**$ 1,058,050**	**$ 6,159,070**	**$ 1,850,000**

with some coherent identity. The estimated costs of such a renovation were estimated to be $4.5 million in 1985.

(5) Changing Student Interests

When the high rise apartment buildings were built, students wanted a more independent residential lifestyle, freed from the more traditional social expectations of dormitory living. A survey of students participating in residential Grand Arena (the lottery system) in Spring 1990 indicated that the most important reasons for their choice to live on campus were proximity, security, private bedroom space (when available), room conditions and furniture provided.

When students move off-campus, it is most often into a house they rent with friends at significantly less cost and with much greater common space. Students who live off-campus often choose to do so with enthusiasm for the greater independence it brings. Some have described their desire to take fuller advantage of the city. In a survey conducted in Spring 1991 of students who did not choose to remain on campus the following year, the reasons cited in descending order of importance were greater autonomy and independence, larger rooms, lower rent, more space, condition of rooms and other general reasons such as desire for pets, for year-round leases, for cable TV, better kitchen facilities and parking. At the same time, students who have made this choice have described their ambivalent feelings, missing the community, the collegiality, and the opportunities for a more spontaneous engagement with the University on a daily basis. This choice to move off-campus is clearly made at some cost, sometimes not fully realized until the student reflects back on the experience.

(6) Residential Living and Recruitment

As the University strives to maintain a competitive edge in its recruitment of undergraduate and graduate students for the '90s and into the next century, the quality of its residential plant, the residential programs it offers, their access to technology, and the University's relationship to its surrounding urban environment, will all play critical roles. Indeed these roles are equally critical in establishing strong relationships with alumni whose loyalty is frequently based on the quality of their University experience.

The changing demographics of potential students over the next several decades may create residential expectations which are different from those of today's students. As Penn examines its residential philosophy, some flexibility is therefore desirable so that the University can plan proactively but remain adaptive to new models and opportunities.

III. Penn's Residential Philosophy

A current undergraduate at Penn has the choice, over four years, of living in a first-year house, a college house, a high rise apartment, a Locust Walk house, a fraternity or sorority, or an off-campus apartment or house. Within the residential system alone, an undergraduate student has a choice of 35 room types with different configurations and different rents. Faced with this array, one might conclude that the philosophy of residential living at Penn is one of offering the greatest degree of choice.

A number of planning reports over the last three years have examined residential planning from a variety of perspectives. In December 1989, the report of the Provost's Working Group on Undergraduate Education, under the chairmanship of Prof. David Brownlee, focused its attention on the residences, noting that "a large piece of unfinished business for undergraduate education at Penn is the nurturing of an encompassing intellectual environment: the shaping of that preponderance of time and space that lies outside the classroom." In looking to the residences for the "most promising opportunity to build this kind of intellectual community," the Working Group recognized the potential within residential environments "to invigorate the intellectual climate in which undergraduate education occurs."

The Working Group recommended that "a major effort should be made to place an expanded and enriched residential system at the center of the

Table F-1: Residential Fall Occupancy Fiscal Years 1988 - 1992

	1988	1989	1990	1991	1992	% Change 1988 v.1992
Undergrad Dorms	4,480	4,458	4,371	4,245	4,134	-7.7%
College Houses/ Living-Learning Programs	1,450	1,421	1,408	1,353	1,383	-4.6%
Total Undergraduate Residents	5,930	5,879	5,779	5,598	5,517	-7.0%
Graduate Dorms	1,287	1,335	1,306	1,320	1,299	.9%
Total	**7,217**	**7,214**	**7,085**	**6,918**	**6,816**	**-5.6%**

Note:The occupancy figures are derived from signed agreements with Residential Living.

Table F-2: Residential Systems Fall Occupancy Fiscal Years 1988 - 1992

Undergrad Dorms	**1988**	**1989**	**1990**	**1991**	**1992**
Harnwell	734	724	616	625	654
Harrison	864	866	926	914	913
High Rise North	953	944	939	925	912
Low Rise North	120	111	88	1[1]	8[1]
Quadrangle	1424	1445	1441	1436	1446
English House	174	169	165	158	0[2]
Kings Court	211	199	196	186	201
Subtotal	**4480**	**4458**	**4371**	**4245**	**4134**
College Houses/ Living Learning Programs					
Arts House	110	109	104	86	74
Class of 1925	80	74	77	80	78
Community Service (Castle)	0	0	0	0	24
DuBois	81	79	78	80	81
East Asia	74	68	74	71	35
Hill 539	530	519	467	525	
International House	73	72	71	74	74
Latin American	36	30	30	31	29
Stouffer	128	131	129	130	128
Ware	162	160	160	157	160
Womens Issues	167	0	0	11	7
Van Pelt	0	168	166	166	168
Subtotal	**1450**	**1421**	**1408**	**1353**	**1383**
Graduate Dorms					
Law	98	98	85	64	0[3]
Nichols	527	608	596	593	613
Grad Tower B	567	536	539	536	540
Mayer	95	93	86	93	92
Low Rise North	0	0	0	34	54
Subtotal	**1287**	**1335**	**1306**	**1320**	**1299**
	Total 7217	**7214**	**7085**	**6918**	**6816**

Notes:

Occupancy figures are derived from signed agreements with Residential Living.

1. During the fiscal year 1991 Low Rise North converted the third and fourth floors to graduate and family apartments.
2. English House was closed during fiscal year 1992 for renovations.
3. The Law School dorm was demolished during the fiscal year 1992.

litures, Fiscal Years 1992 - 1996

Major Maintenance	Furnishings	Security Projects	Special Projects
$ 0	$ 0	$ 0	$ 0
0	126,130	0	128,946
200,000	302,290	0	797,983
0	207,220	0	93,134
0	601,600	0	2,629,459
0	477,800	1,266,775	410,959
7,125,400	709 300	0	699,078
7,338,600	732,900	0	1,108,753
7,103,300	693,900	0	449,553
0	550,860	25,000	377,895
400,000	0	0	158,882
350,000	0	0	105,027
16,800,000	150,000	0	1,572,942
0	158,090	0	441,926
0	246,065	0	254,015
0	0	0	0
$ 39,317,300	**$ 4,956,155**	**$ 1,291,775**	**$ 9,228,552**

undergraduate experience" as the most effective way "to realize the vision of One University in this multi-school institution." In its recommendation, the Working Group articulated four guiding principles that are worthy of quoting in full:

1. The academic mission of the University must be reflected in everything we do that shapes the experience of our undergraduates.

2. In the residences, we believe that a more active and better recognized presence of faculty members and graduate students is a necessary part of the University's mission. This is an important resource for transforming the residences into stimulating intellectual communities. We expect that such an enlarged residential role for the faculty will require a significant modification of the governance structure for University residences.

3. Residential buildings should be made a major arena for substantive activities that foster intellectual interchange among the Schools and their faculty, graduate students, and undergraduates.

4. Access to the intellectual environment of the University is the right of all students. The University should commit itself to provide residential space for all those who wish to live on campus. Over the years ahead this may require new construction and/or the integration into the residential system of the University-owned apartment buildings that stand on the periphery of the campus. We must also provide ready access to the resources of the residential system for those who choose to live elsewhere.

These principles were accompanied by a set of expectations that acknowledged the variety of the residential system, but proposed that all students be provided with "certain core services." These included "residentially-located curriculum and advising, attractive space for study, and access to the electronic information environment," in addition to real faculty presence, residentially based classroom space providing opportunities for collaborative learning models, graduate and professional student presence, advising, communal and dedicated dining, residential libraries, and residential social space. These services, it was recommended, should be available to residents and to non-resident students who would be affiliated with each residential center.

A second planning document affecting residential life, the report of the President's Committee to Diversify Locust Walk, was published in September 1991 *[Almanac September 17, 1991]*. Its focus was on planning for increased diversity in the heart of the campus, but its recommendations addressed, architecturally and programmatically, the kind of spaces to which students were attracted. Among its many recommendations were stated the following relevant objectives for Locust Walk:

6. Residential communities along the Walk should embody the following characteristics:

a. they should either be internally diverse or heterogeneous in composition, or they should add to the pluralistic environment of the Walk;
b. they should consciously join together aspects of living and learning;
c. they should exemplify high standards of behavior;
d. they should provide outreach and benefit, both through programming and social activity, to the University community so as to enhance the welcoming nature of the Walk;
e. they should include opportunities for both undergraduate and graduate students;
f. their design should include enclaves that support more contemplative kinds of activity; and
g. they should include provision for some kind of supervision through live-in role models or advisors.

The report also recommended the conversion of one or more High Rises to other than residential purposes, the construction of a mixed-use academic, residential and retail neighborhood incorporating flexible living and common spaces on the current Bookstore site, and the long-range development of the western end of Locust Walk "for mixed academic, residential and administrative use in a manner that captures the architectural character and streetscape of the eastern end of Locust Walk, adds landscaped green space, and provides greater definition to that part of the central campus."

The flexible neighborhoods or communities of small-scale town-house-like environments envisioned in the Locust Walk report reflect the smaller scale settings that students currently find attractive. It is certainly these settings that many undergraduate and graduate students seek when they move off-campus.

The degree of choice available to Penn undergraduate students is quite different from the residential model available at other institutions. Both Yale and Harvard group their first-year students together, either in freshman colleges at Yale or in the Yard at Harvard, and then affiliate them with upperclass colleges or Houses for the remainder of their four years. There is a significant faculty and graduate student presence in these houses, and student affiliation with them is seen as a lifelong commitment. This is a variation of the Oxbridge model in which a student affiliates with a particular college, and then maintains that affiliation even though he or she may eventually live somewhere else.

Princeton, in contrast, houses its freshmen and sophomores together in college houses while its upperclassmen live in on-campus social dormitories or affiliate with eating clubs. A report released in Spring 1992 by a Princeton faculty working group on Undergraduate Academic and Residential Life recommends that Princeton revise its house system to incorporate significant numbers of juniors and seniors. The report's intent is to "strengthen the interaction between undergraduate residential life and the University's basic academic mission." "An expanded collegiate system," the report notes, would. . .

> include opportunities for strengthening teaching, for enhancing the quality of intellectual and cultural life outside the classroom, for improving undergraduate advising, for preserving our distinctive emphasis on close contact between faculty and students, for integrating graduate and undergraduate students in certain aspects of a shared intellectual enterprise, for encouraging fruitful interactions between older and younger undergraduate students, and for making the most of the educational opportunities presented by a socially and culturally diverse student body.

The overall goal of this restructuring is to "establish a comprehensive institutional vision for residential education while preserving elements of flexibility and choice for juniors and seniors." This is a goal that many at Penn also share, just as many of the issues articulated in Princeton's report have resonance for us at Penn.

At Penn the components for an institutional vision for a fully integrated residential life already exist. What is needed is the context in which to place them. The successful components include a fully active first-year house program with faculty presence, enhanced advising, a developing student governance structure, and extensive programmatic support. One critical element, dedicated dining, needs to be strengthened and made generally available throughout the system. We find, however, that after the student's first year, the focus breaks down. Unless the student participates in a college house or in a fraternity or sorority, an identifiable residential affiliation becomes much more amorphous.

Table G: Comparative Monthly Rental Ranges in 1992

Rental Type	On Campus	University City 33rd - 44th	University City West of 44th	Powelton Village	Center City
Rooms	$321 - $417	$210 - $325	$220 - $350	$275 - $425	$260 - $500
Efficiencies	$355 - $553	$235 - $490	$240 - $440	$240 - $500	$335 - $600
One Bedroom	$463 - $834	$325 - $650	$325 - $635	$380 - $640	$425 - $750
Two Bedrooms	$736 - $1,192	$400 - $775	$410 - $750	$520 - $795	$540 - $1,100
Three Bedrooms	$846 - $2,316	$525 - $1,275	$525 - $1,200	$900 - $1,300	$875 - $1,250

Notes:
1. On-campus rents were derived using a nine- and ten-month academic year while off-campus rents were calculated based on a twelve-month rental period.
2. Some on-campus efficiencies and one-bedroom apartments have shared bathrooms.
3. Some off-campus efficiencies are two-room apartments; i.e., the kitchen area is a separate room from the living/sleeping area.

One could argue that the system works reasonably well despite its incoherence, but such an argument values choice over community, continuity, and connection. Over the long term, this writer would argue, there will be increased cost to making choice the centerpiece of a residential philosophy—the cost to the student will be the loss of academic opportunity and access to technological innovation, while the cost to the institution will be the loss of the student as a fully engaged and fully participating member of the community.

How, then, to achieve full engagement and participation? One model, evolving from our existing components, may be that of a collegiate affiliation which incorporates a variety of living affiliations experienced by the student. In such a model, a first-year student will live in a first-year house— Community House, for example. In his or her sophomore year, the student might choose, or might be assigned to a college—let's call it "Franklin College," or such an assignment could occur even before the student arrives. This assignment is a programmatic assignment, not a spatial assignment; the student might actually live in a high rise residence hall. Franklin College, when it physically materializes, would be built as a junior/senior residence, perhaps on Locust Walk or in Superblock. It would be both an idea, a form of "citizenship," and a programmatic reality. It would have faculty, dining, and programs associated with it; its students would be taking undergraduate degrees in all four schools. Juniors or seniors who chose to live off-campus would still be associated with Franklin College, might return there for meals and programs, might study there or use a computer facility. The connections would be maintained wherever the student physically lived.

In similar fashion, Hill House might have its connected junior/senior college located across Hill Field. Each existing first-year house could in this way be connected to some entity to which the student maintains an affiliation, whether an existing college house or an as-yet-non-existent junior/senior structure. As funds become available over time, or as the demand requires, these junior/senior houses can be built. One can imagine the development of a series of such houses—Franklin, Wilson, Pace Alexander, for example —all drawing important links to Penn traditions.

This model of a "virtual" college with citizenship spanning classes in all four schools brings together the educational philosophy of the Brownlee report with the planning possibilities of the Locust Walk report. It is a model that celebrates the connectedness of students to some collegiate experience that cuts across all schools and builds on the strength of what already works. As a model, it also retains some flexibility of student interest. Students who choose to live in Greek chapter houses or in off-campus apartments might still do so, but they would be connected to some ongoing residential academic educational enterprise.

The new houses that would eventually be built would also be targeted for those students—juniors and seniors—who currently do not choose to live on campus in large numbers and could not currently be accommodated if they did so choose. Creating attractive new facilities for these students with appropriate kinds of academic supports offers tremendous educational opportunity—for structuring in-house capstone experiences, internships and career planning, collaborative research and learning, in short, for becoming educational laboratories where students can work creatively during the most academically productive time of their undergraduate years.

IV. Achieving the vision

What would it take to achieve such a vision over the next five to twenty years? The following steps would be required:

(1) the development of a plan for up to six colleges for up to 300-350 residents each, mostly seniors and juniors and graduate students. These might be located on Locust Walk (the Bookstore site), Hill Field, and Superblock. These would provide space for up to 2100 students and could be built as funds become available. What would be required, in the absence of the physical building(s), would be the infrastructure—affiliated faculty and programmatic support, and most important, dedicated dining in an identifiable site. The intent of the infrastructure would be to provide support for the development of a concept of citizenship in a college; this aspect of the plan could be implemented as soon as feasible and well in advance of any physical construction.

(2) complete the unrenovated first-year house in the Quad (Butcher-Speakman/Class of '28) to finish the creation of the first-year houses. (Anticipated cost = $18 million). Consider the possible linkage of each first-year house with one of the six colleges, if the affiliation were preassigned. Such a direct linkage would not be necessary if students chose the college of their affiliation.

(3) affiliate each student, before or after the first year, with one of these six colleges for meals, academic and programmatic supports. Every Penn student should have a collegiate affiliation, regardless of where they lived.

(4) affiliate each College House and living-learning program with one of these colleges.

(5) over time, and as needed, provide additional smaller townhouse-scale housing as recommended by the Locust Walk report, particularly for the Superblock area, and affiliate each with a college. Optimally, such houses might provide residency for 40-50 students. Five houses would provide 250 spaces. They might also house graduate students. Additional small-scale housing might accommodate sororities to provide additional diversity to Locust Walk for those chapters who wish to live closer to campus.

(6) commit to fund, as soon as possible, the deferred maintenance and capital improvements necessary in the high-rise residences ($36 million over the next five years in Superblock alone). These actions, together with programmatic and technological enhancements such as networking and cabling, should make the buildings attractive options as part of this system.

(7) convert the existing shared bedroom spaces in the high rises into the private bedrooms sought by students when they move off-campus and add additional student lounges in the ratio of one lounge to each floor. This would require the reduction of 271 shared bedroom spaces and the conversion of approximately 68 bedspaces into lounge spaces. Total bedspaces available in the undergraduate high-rises would equal 2,482.

(8) Total on-campus occupancy (including Greek chapters), under this plan, would have as its goal 8,400 - 8,600 undergraduates or around 90% of full-time undergraduates. If, as this plan, assumes, more upper-level undergraduate students move onto campus from the surrounding University city area, we would expect the vacancies created in off-

Table H: Fraternity & Sorority Occupancy Academic Years 1987-88 to 1991-92

	1987-8	1988-9	1989-90	1990-1	1991-2
Total Membership	1,732	2,385	2,318	2,821	2,939
House Residents	709	672	798	802	801
% Living in Houses	41%	28%	34%	28%	27%

Notes:
1. These figures are derived from signed occupancy agreements.
2. Total Percentage change in membership was 70%.
3. Total Percentage change in house residents was 13%.

Table I: Students by Residence and Year of Study

Fall 1991 Full-time Students

Area	1st Yr	Soph	Junior	Senior	Total Ugrad	Total Graduate	Total Students
On-Campus Residence	2,395	1,548	806	603	5,352	1,377	6,729
Frat/Sororities							
On-Campus	20	192	158	121	491	1	492
Off-Campus	9	101	212	278	600	0	600
Total Frat/Soror.	29	293	370	399	1,091	1	1,092
Off-Campus							
W. Philadelphia	83	275	708	1,071	2,137	2,473	4,610
Center City Phila	24	26	41	60	51	1,828	1,979
Other Philadelphia	37	13	16	15	81	510	591
Other Off-Campus	40	31	64	78	213	2,316	2,529
Total Off-Campus	184	345	829	1,224	2,582	7,127	9,709
Unknown	8	65	133	95	301	426	727
Total	**2,616**	**2,251**	**2,138**	**2,321**	**9,326**	**8,931**	**18,257**

Note: Figures are derived from addresses listed with the Registrar's Office.

campus apartments to be filled by graduate students who currently live farther away from campus. The University could take active steps to encourage this transition as well as the conversion of excess apartment stock into single family dwellings supported by University guaranteed mortgage options so as not to destabilize the immediate University City area. We make the assumption that as many as 900 upper-level undergraduates might continue to choose to live off-campus, although this number might remain flexible to demand and utilization of housing stock.

There are many possibilities for the development of a model such as the one proposed. The relationship of existing first-year houses and college houses to the proposed new collegiate facilities needs to be studied; the opportunity for affiliation of every faculty and staff member and graduate student with these colleges offers another level of university-wide community. The possibility of Greek chapter affiliation should also be examined. The benefits of the collegiate concept lie in its attempt to bring together the disparate parts of today's residential experience and to keep the student connected to the entity that is formed. For such a plan to work, it must have the full support of the faculty and the schools, for the educational program that takes place in the colleges must be intimately connected to a student's academic objectives. The colleges would be sites where classes are taught, where students share the joys and difficulties of conducting research and writing theses, where speakers provide informal seminars, where students work together on senior projects, where visiting faculty from abroad can live with and mix with students. Residential settings, in this plan, become the tools for "envigorating the intellectual climate in which undergraduate education occurs," (Brownlee) and their potential for supporting the University's educational mission is more fully realized.

For Penn upperclassmen, these new residential settings would provide a framework for community while still allowing the privacy which students seek as they get older. The experience of living with a diverse group of one's peers can be as valuable to a senior as it is to a freshman. Seniors, like freshmen, are in a state of transition; the supports they provide each other can be as useful as the institutional supports provided by the University.

At the same time, the state of Penn's existing residential facilities cannot be ignored; the funds must be found to make them once again attractive settings of choice for Penn students. With this plan, existing housing has an important role to play in providing students with access to technology, to collaborative learning opportunities, and to community living situations. Such housing also provides the proximity and safety which students cite as important.

To initiate such a plan will take time and the commitment of significant resources, particularly at the outset before new facilities are built with new revenue streams to support them. If such a plan is undertaken, it should be evaluated at every step along the way with appropriate modifications. If it works, it should feel like a natural seamless progression, building upon what is most effective in our current system. New spaces, as they are constructed, should be built with flexibility in mind, so that they can be adapted should student interest or the university's direction change. In this way, as planners look back twenty years from today, they should see an evolving system with new building blocks established in each decade since the 1960's, when Penn first undertook to transform itself into a more truly residential campus.

V. Questions for Further Consideration

In addition to the question of whether the proposed model offers the right future direction for Penn, there are many issues that should be considered in future discussions, such as the following:

(1) A successful collegiate model would require strong linkages with functions that are critical to its program, such as:

(a) academic and school-based curricular and educational policy planning efforts, which can support house-based curricula and research initiatives;

(b) dining, which is integral to this plan and the centerpiece of programmatic activity even before the physical appearance of new residential facilties;

(c) recreation, which can effectively support collegiate identity and is a necessary component to any complete program.

What are the most effective organizational models to integrate planning effectively in these areas? What would be required to develop or implement these over the next few years?

(2) This model proposes a University identity for students that cuts across the schools in which they are enrolled. Can this be achieved with the support of the schools, or would it set up untenable competing interests?

(3) If we make the significant investment in facilities that this plan proposes, how can we ensure that students will live in them? Is it necessary to consider some sort of on-campus residency requirement, or can we rely on attractiveness and programmatic appeal to create the demand?

(4) This model assumes that at least an equal number of students will continue to live in Greek housing and that a collegiate residential and Greek system can be mutually supportive. Yet it has also been pointed out that colleges and universities with successful house systems often have weaker Greek systems and vice versa. Is it realistic that a house model uniquely tailored to Penn can take the best of both systems and make them work in an interdependent way? What would it take to make this assumption work?

(5) The relationship of these new collegiate entities with the first-year and college houses requires detailed attention. For example, should student affiliation occur before the student arrives, or after the first year? What are the most effective ways for sophomores to be linked to this program?

(6) The West Philadelphia community immediately surrounding the University would be affected considerably by the shift of more undergraduates onto the campus proper. In view of the University's long-term interest in the economic and social health of the West Philadlephia community, what kind of community planning efforts should coincide with the implementation of this plan?

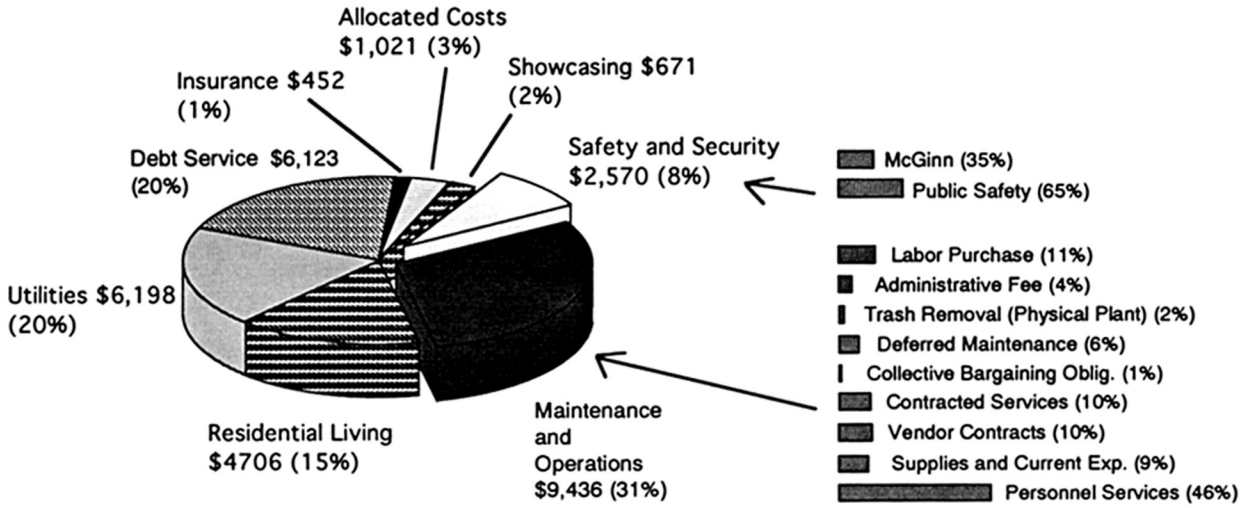
Other questions will emerge as discussions of this paper continue.

Appendix A: Long-term Residential Development Model for the University of Pennsylvania

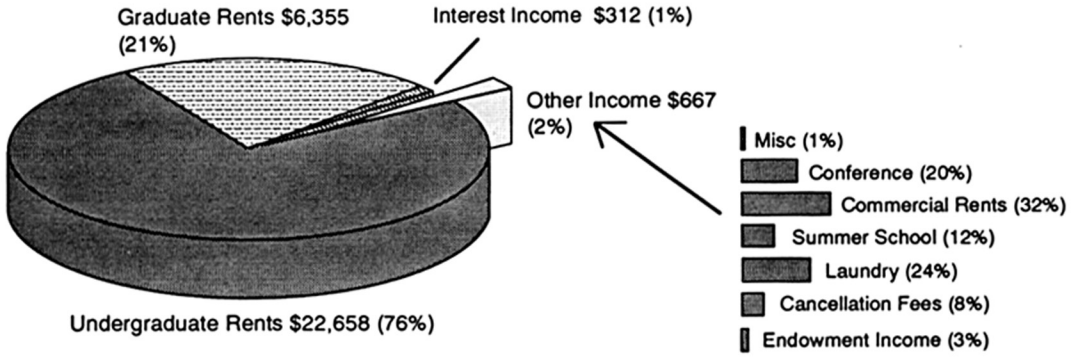
1. **Create infrastructure of "virtual college"**
   — Develop program
   — Define concept of "citizenship"
   — Develop linkages and affiliations
   — Provide opportunities for dedicated dining
2. **Invest in upgrade and rehabilitation of existing facilities**
   — Complete Quad
   — Address deferred maintenance in high rise buildings
   — Convert shared bedrooms spaces and add lounges
3. **Enhance residential system to increase attractiveness and develop educational potential**
   — Develop networking for data, voice and video
   — Add cabling and other enhancements
4. **Create new housing for juniors/seniors/graduate students to increase on-campus residency**
   — Build collegiate structures on Hill Field, Bookstore and Superblock sites to transform "virtual" colleges into physical realities
   — Add small-scale housing on western end of Locust Walk
   — Convert other small buildings to residential facilities as needed and as available

Appendix B: Revenue, Expense and Expense Credit Budgets of the University of Pennsylvania Residential System Fiscal Year 1993 (all numbers in thousands of dollars)

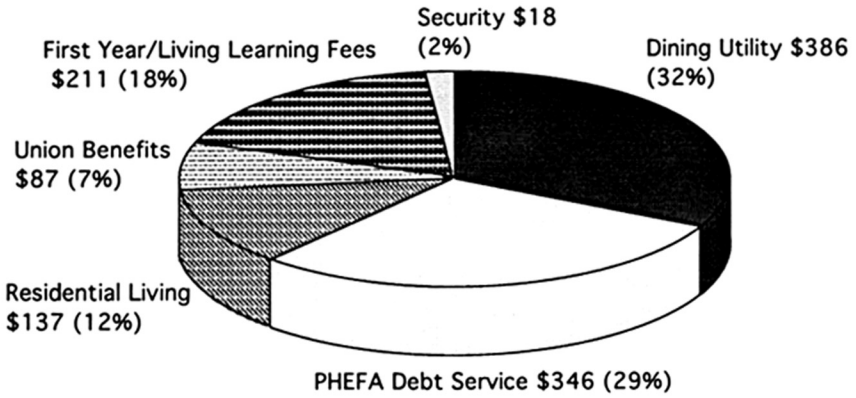
Residential System Expenditure Budget For the Fiscal Year Ending June 30, 1993



Residential System Revenue Budget For the Fiscal Year Ending June 30, 1993



Residential System Expense Credit Budget For the Fiscal Year Ending June 30, 1993



Residential Planning for the 21st Century

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