

STATE UNIVERSITY OF NEW YORK
AT ALBANY

COMPREHENSIVE CAMPUS PLAN

INTERIM REPORT

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SECTION I - CAMPUS PROGRAM REQUIREMENTS, PLAN OBJECTIVES, AND PLANNING PRINCIPLES.

Introduction

A useful description of future land and facility requirements must be keyed to an estimate of future campus population at each stage of growth and in conjunction with corresponding academic objectives. The establishment of policy on enrollment sizes and curriculum is properly the responsibility of the University. However, certain assumptions in these areas must be made by the Consultants in order to give dimensions to the physical development program, so that all aspects of the physical plan are projected in relative balance to one another.

Projections of this kind are not easily made, especially for the Albany campus, which is just on the threshold of its significant expansion. About 3,250 FTE (full time equivalent) students were enrolled in the spring of 1963. By 1970 an enrollment of 7,500 FTE students is expected, and there is a strong possibility of 20,000 students by the end of the century if present birth rates in the state remain stable and sufficient resources are made available for higher public education.

In addition, the Albany Center is in the process of transition from a basically undergraduate institution to a university level institution. Physically, the Center is phasing its operations so that a new campus can be fully occupied by the end of the decade. The implication of these last points is that existing patterns of operation are probably not reliable

indicators of what will happen in the future.

To help make meaningful, though gross, distinctions for this emerging University, we have divided our long-range expectations into four major stages of growth. To account for the differences between head count projections and course hour load projections, stages of growth are expressed by FTE, a statistical shorthand figure determined by dividing the total number of course load hours taken by all students by the normal course hour load of a full-time student. It is also assumed in FTE that graduate students enrolled are in attendance, not simply enrolled but completing course requirements off-campus, such as a Ph.D. dissertation.

Table A

<u>THE STAGES OF GROWTH</u>			
Stage I	7,500	Student Level	1963-1970
Stage II	10,000	Student Level	
Stage III	15,000	Student Level	
Stage IV	20,000	Student Level	

For each of these stages we have constructed a profile of expectations regarding the composition of the campus population and the relationship of population to academic objectives. Campus population includes the non-student population. To consider students only would be a serious distortion of the nature of the demands placed on land and facilities.

Furthermore, the student population estimates have also been treated in

terms of levels of instruction and achievement, since the magnitude of space requirements varies in accordance with the level of instruction and research being pursued.

While estimates and distribution of campus population can be reasoned on the basis of general conditions at typical state university centers, the matter of academic planning has given us some concern. For general planning purposes we have limited ourselves to available benchmarks. The assumptions as to academic growth have been derived from:

- (a) SUNY Master Plan Revised 1960;
- (b) Curriculum descriptions appearing in the College and University catalogs; and
- (c) Minutes of meetings to date with SUNY and SUCF.

But academic planning of a comprehensive and far-reaching nature has not yet been sufficiently articulated by SUNY for the Consultants to appraise the consequences of educational policies in terms of long-range physical planning. Such comprehensive planning would include decisions as to the types of curriculum that will be developed by each stage of growth; an analysis of the extent to which existing programs will be strengthened, modified, or phased out; and a projection of the probable number of students that will be enrolled in each curriculum area within the jurisdiction of the Albany Center.

It is unlikely that a full determination of these matters can be made at this time, especially for the stages of growth beyond 1970.

The essential reason is that the Albany Center, as a significant part of its role in the total University system, will serve as an advanced higher education facility for other components of the University. Any projections for Albany must be tied into the academic and physical planning proposed for the four-year and two-year institutions from which upper division and graduate students will come. The nature of these inter-institutional relationships, as far as numbers and educational planning are concerned, cannot be judged by the Consultants. Within these limits our comments on both the Educational Plan and the Enrollment Plan are adjusted to previously mentioned available benchmarks.

SUMMARY

To establish general guidelines for the programmatic aspects of the long-range plan, the Consultants have made interim assumptions concerning the probable growth pattern for the Albany campus. These assumptions have been organized as profiles of growth. They are based on three kinds of information:

- (1) General academic policy of curriculum development, including existing programs and future objectives.
- (2) Specific policies on student enrollment.
- (3) Factors evident in current planning elsewhere.

The first two source materials are largely memoranda, brochures, and documents issued by the State University of New York and the State University Construction Fund for this project and for the State University

system in general. Admittedly, the last area is one of applied speculation. However, to fulfill our obligations, it is necessary to make some judgments in this Interim Report in order to obtain clarification of academic policy, so that it may be fully reflected in our final report.

The suggested checkpoints that were listed in the State University Construction Fund Manual of April, 1963, are included herein. However, it is difficult to separate the Educational Plan from the Enrollment Plan, and these two subjects were considered as basically one subject during the preparation of this report.

PROFILE OF STAGE I GROWTH - 7,500 STUDENTS - 1963 - 1970

A. EDUCATIONAL PLAN

The SUNY Master Plan Revised 1960 sets forth the educational goals for the Albany Graduate Center as follows:

The conversion of the College of Education to a multi-purpose institution offering four-year degree courses, appropriate fifth year (master's level programs), and graduate programs through the doctoral level.

The transition from a college "previously limited to students preparing for teaching"¹ to a Graduate Center is less than a year old.

The following programs and degrees are offered:

- (1) Undergraduate - Two programs are offered in the liberal arts and sciences. They share many things in common in the lower division. All students take 45 semester hours from a core curriculum in the B. A. program and 36 to 39 hours from a core

¹ Page 29, Annual Catalog, 1962-1963, College at Albany.

curriculum in the B.S. program. Beyond that the sequence of learning is differentiated for those preparing for teaching and those following a general program.²

- (2) Graduate - Graduate programs are largely in the subject areas offered in the B.A. programs and are focused on the Master's degree. In addition, a Master's degree is given in Library Science and a Doctorate in Education.

Phd +
-ant

Planning Assumptions. A student in the sciences may require four times as much instructional space as a student in the humanities. A graduate student may require twice as much space as a student in the lower divisions. Even though the development plan will deal with space programs in terms of gross magnitudes, some distinctions must be made between subject area and level of instruction. The following assumptions have been used in describing the academic "mix" in Stage I.

- (a) Teacher education and general education will share equally in the lower division enrollments.
- (b) Teacher education and general education will share equally in the upper division enrollments.
- (c) Teacher education and the general subject offerings now given in the Master's program will share equally in the enrollments at the Master's degree level.
- (d) Because of the increasing importance of the library in higher education and the probable introduction of new library equipment and concepts in the decade ahead, it is probable that a Doctorate in Library Science will be introduced. Thus 25 per cent of

² See Appendix A for listing of courses.

no
↓
10/10

the doctoral candidates will be enrolled in Library Sciences and 75 per cent in Education.

no

- (e) The physical, life and earth sciences will share about 25 per cent of the enrollment at the lower division, upper division, and master's degree level. ~~No doctoral programs will be offered in these fields.~~

Other Planning Assumptions. No special facilities will be constructed for extension or summer sessions, but existing facilities will be scheduled for these services to the extent that space, faculty and staff are available. The introduction of a tri-mester plan would probably mean that the summer session would be dropped. Extension studies have been largely dependent on course offerings and space assignments. The transition to a University type operation and the possibility that eighty per cent of the students will be housed on campus indicates that all facilities will be put to optimum use. Accordingly, there would be a drop (amount unknown) in extension services that depend on buildings and space on the new campus.

no

Field Services. As a University Center there will be a higher degree of activity in field services at Albany. The demands placed on facilities for these activities are more likely to be felt in the later Stages than in Stage I, especially if professional schools are operated.

Special Research Centers. Two research centers have been identified as possibly falling under the aegis of the Albany Campus: A School of Public Affairs, which seems particularly appropriate for a city which is the seat of State Government; and the Center of Atmospheric

*Inter-
Area
Studies*

Research, which would give the desired balance of a science-oriented specialty ~~without infringing on the present SUNY policy of not encouraging programs in the sciences which overlap programs being supported by private institutions elsewhere in the Mohawk Valley region and in other parts of the state.~~ It is difficult to predict how many other research centers may be sponsored. It is more than likely that in the later stages of growth additional centers will be brought into being, again largely because this is the legitimate and necessary role for a thriving University Center. The development plan will reflect this probable course by ensuring sufficient land for accommodating such centers, even though they cannot be given a program description or architectural form at this time.

The Fine and Performing Arts. Again, for reasons of balance, advanced programs in the Fine Arts can be expected in the later stages of growth, though none are contemplated in this stage, except the courses which are presently offered.

Public Ventures. As a University Center the Albany campus will attract distinguished faculty and visitors. It will open its doors from time to time for town-gown lectures, public performances, and other special events. These programs will be limited to the capacities of the available facilities and no special construction is envisioned other than those required for a University Center. Because of the important renewal efforts being made for the core of the City of Albany, it can be

expected that activities which have special importance to the city at large might be held in the off-campus auditoria which are being planned for the South Mall. However, these things are of secondary importance in the development of the Educational Plan.

B. ENROLLMENT PLAN

In terms of percentages, the number of students in each level of instruction will shift more toward upper division and graduate education. Based on policy statements provided by SUNY, about 15 per cent of the FTE students at the 7,500 enrollment level will be graduate students, and of that number, 2.5 per cent will be doctoral candidates.

The lower division students (freshmen and sophomores) will be drawn largely from the Albany region, though an indeterminate number from other sectors of the state and a limited number of out-of-state students may be admitted to take advantage of a particular curriculum strength, to enrich the learning experience, and to avoid parochialism.

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The upper division (juniors and seniors) will be comprised of students who have successfully completed the first two years of study at Albany, plus transfers from two-year colleges in other parts of the state, plus transfers from other colleges and universities attracted by the academic specialties developed on the Albany campus. Since no projections are available to us on drop-outs, retentions, and transfer rates, we are assuming that from the 7,500 student figure, the upper and lower divisions will share about equally in the number of students not assigned to the graduate divisions. The number of special students may rise because of

vocational re-training programs, but we will assume a straight line percentage for these projections, using 1961 as a base year, or 2 per cent of the total enrollment:

Table B

(1970)

STAGE I - STUDENT ENROLLMENTS BY LEVEL OF INSTRUCTION

	75	Special Students
3500 -	3,150	Lower Division
2600 -	3,150	Upper Division
	1,097	Master's Program
1200	28	Doctoral Program
	7,500	Total FTE Students

Faculty. Based on University policy, there will be one faculty member per fifteen undergraduate students and one faculty member per eight graduate students (assumed to be FTE) during Stage I.

OK

Table C

STAGE I - FACULTY

425	Required for undergraduate program
140	Required for graduate program

565 Total Faculty

Several assumptions are implied in the foregoing table:

- (1) Special students are included in the calculations for undergraduates.
- (2) For statistical purposes, the Faculty ratio has been calculated on the basis of graduate and undergraduate enrollments, although actually this kind of differentiation is unlikely to occur and the Faculty may instruct both levels.
- (3) There will be no non-teaching Faculty in this stage of growth.

Graduate Assistants and Fellows. SUNY expects that one of six graduate students will be a teaching or research assistant or graduate fellow. These students have been included as FTE in the Student Enrollment figures. For planning physical facilities, however, they will also make certain demands on such factors as office space. The number of these research assistants and graduate fellows needs to be identified as a subtotal.

too low

Table D

STAGE I - GRADUATE ASSISTANTS AND FELLOWS

Total: 187

Staff. Estimates of staff population are not easily arrived at because the existing ratios of students to staff will neither reflect operations of a new campus nor the expected surge in enrollments.

Earlier reviews by SUNY and the Consultant have established a ratio based on the assumption that for every 93.5 students there would be 6.5 staff members or 1 staff member per 15 students. The figures for twenty representative institutions are 1 staff member per 9 students. These are, however, mature institutions. Considering the fact that many staff positions on the Albany campus must be filled regardless of whether the enrollment is 7,500 or 20,000, the staff portion of the campus population is revised to reflect a ratio of 1 staff member per 8 students in Stage I.

OK

Table E

STAGE I - STAFF

Total: 938

Implicit assumptions in the above calculation are:

- (1) "Staff" covers all non-teaching personnel, including the President, Deans, Librarians, clerical, technical, and custodial employees.
- (2) Staff calculations do not include an assignment of some percentage of the total for professional personnel involved in such University level functions as extension services and research of an instructional nature. In addition, the policy decision that the Albany campus will not sustain a large program in the physical sciences (especially research and graduate programs) further reduces the ratio of staff to students in Stage I and probably in the other stages as well.

no

Visitors. In estimating facilities and land requirements, provision must be made for visitors. Studies of parking and circulation

requirements for twenty representative institutions indicate that one out of one hundred people on campus is a visitor. This would mean about 89 visitors in Stage I.

Another rule of thumb used in general campus planning calculates visitors on the basis of a 1 to 10 ratio of faculty and staff. Applying this figure to Stage I population, 144 visitors could be expected. This latter figure is assumed for Stage I because we expect the business of transition and expansion will attract more than one per cent of the student, faculty and staff population.

These figures do not include construction and engineering crews, nor do they include the possibility that the Albany campus will receive students and faculty members from other institutions through cooperative exchange programs with various institutions in the Mohawk Valley region. These students and faculty members are accounted for in the faculty and student enrollments.

Table F

STAGE I - VISITORS

Total: 150

Growth. Our revised composite campus population figures at the 7,500 FTE student level for the new Albany campus are assumed

to be:

Table G

STAGE I - GROWTH

Students	7,500
Faculty	565
Staff	938
Visitors	150
<hr/>	
Total:	9,153

Distribution of Enrollment for Space Planning Purposes. Using assumptions outlined earlier, student enrollments are listed below by subject area and level of instruction. In a later report we hope to be able to assign a gross square footage figure per group, in order to be able to estimate in gross terms the magnitudes of instructional space required at each stage of growth. At this time two distinctions are made. "Type ^B" space is essentially space required for courses which are handled through classrooms, lecture halls, and seminar rooms. "Type ^A" space is that which is assigned to instruction handled largely in laboratories and lecture halls.

Table HSTAGE I - DISTRIBUTION OF ENROLLMENTS FOR SPACE PLANNING PURPOSES

	Type A*	Type B**
Undergraduate Lower Division	787	2,363
Undergraduate Upper Division	787	2,363
Graduate Master's Program	274	823
Graduate Doctoral Program	-	28
Graduate Post-Doctoral	-	-

Total: 1,848 5,577

TOTAL: 7,425***

* Type A - Biology, Chemistry, Earth Sciences, Science, Physics.

** Type B - All other subject course areas.

*** Remaining 75 students are accounted for as special students distributed equally through all subject areas.

PROFILE OF STAGE II GROWTH - 7,500 to 10,000 STUDENTS

By Stage II the transition from a Teachers College to a University Center will have been completed. All subject offerings in Stage I will be continued. Several new subject areas will have been introduced, perhaps Asiatic languages. Several new offerings will have been made in the sciences, perhaps Botany and Zoology. Because the University Center is beginning to feel the effects of its responsibilities as an upper division and graduate institution, there are gradual shifts

in the distribution of students away from teacher education toward the general programs.

Planning assumptions are:

- (1) The number of graduate students will increase to 20 per cent, of which 2.5 per cent will be in doctoral programs. There will be several post-doctoral fellows in Education and Library Science.
- (2) Special students will drop from 2 per cent of the enrollment to 1.5 per cent.
- (3) The undergraduate enrollment will be divided into 40 per cent lower division and 60 per cent upper division.
- (4) Teacher education and general education share equally the lower division enrollment.
- (5) Teacher education shares 40 per cent of the upper division enrollment, and general education 60 per cent.
- (6) Teacher education shares 50 per cent of the enrollment at the Master's level, and general education 50 per cent.
- (7) Reflecting the requirements of a technological society, the percentage of students enrolled in sciences rises to 30 per cent in undergraduate and master's programs.

Table I

STAGE II - ENROLLMENTS BY LEVEL OF INSTRUCTION

150	Special Students
3, 140	Lower Division Students
4, 710	Upper Division Students
1, 947	Master's Programs
50	Doctoral
3	Post-Doctoral
<hr/>	
10, 000	Total FTE Students

Table J

STAGE II - DISTRIBUTION OF ENROLLMENTS FOR SPACE PLANNING PURPOSES

	Type A Space	Type B Space
Undergraduate Lower Division	1,244	1,896
Undergraduate Upper Division	1,413	3,297
Graduate Master's	584	1,363
Graduate Doctoral	-	50
Post-Doctoral	-	3
	<hr/>	
Total:	3,241	6,609

TOTAL: 9,850*

* Plus 150 special students assumed to be distributed equally through all subject areas.

Faculty. Assuming Stage I ratio of one faculty per fifteen undergraduate and one faculty per eight graduate students, but not including post-doctoral fellows:

Table K

STAGE II - FACULTY

533	Required for Undergraduate
250	Required for Graduate
<hr/>	
783	Total

Graduate Assistants and Fellows. One of six graduate students will be a teaching assistant or research fellow:

Table L

STAGE II - GRADUATE ASSISTANTS AND FELLOWS

Total: 333

Staff. Staff requirements will continue in the ratio of one staff per eight students:

Table M

STAGE II - STAFF

Total: 1,250

Visitors. Visitors will continue to be calculated at the Stage I ratio of one visitor per ten faculty and staff members.

Table N

STAGE II - VISITORS

Total: 203

Table OSTAGE II - COMPOSITE CAMPUS POPULATION

Students	10,000
Faculty	783
Staff	1,250
Visitors	203

Total:	12,236
--------	--------

PROFILE OF STAGE III GROWTH

For Stage III, during which enrollment will increase to 15,000 FTE students, we will assume a straight line projection of the preceding figures and assumptions. These calculations are summarized in Tables Y and Z.

PROFILE OF STAGE IV GROWTH

During this period the Albany Center will mature as a University facility, with an enrollment of 20,000 students at the end of the stage. The plant will be operated at optimum capacity under a tri-mester plan. The following planning assumptions are made:

- (1) The number of graduate students has increased to 30 per cent of the total enrollment, with doctoral candidates comprising 2.5 per cent of the graduate student enrollment. The number of post-doctoral candidates has increased. Doctoral programs are being offered in Public Affairs and Atmospheric Research, Romance Languages and English.

- (2) The number of students enrolled in Extension Division activities has declined. However, Field Services programs have been enlarged to encompass new programs in geriatrics, urban development, and library development.
- (3) The Milne School has been relocated onto the campus.
- (4) In terms of percentages, special students have decreased to 1 per cent of the total enrollment.
- (5) Undergraduate enrollments are divided 30 per cent lower division and 70 per cent upper division.
- (6) Teacher education shares 40 per cent of the lower division enrollment and 60 per cent of the upper division enrollment.
- (7) Teacher education shares 30 per cent of the upper division enrollment and general education 70 per cent.
- (8) Teacher education shares 40 per cent of the Master's degree program and general education 60 per cent.
- (9) Forty (40) per cent of the total enrollment is in the sciences.

Table P

STAGE IV - ENROLLMENT BY LEVEL OF INSTRUCTION

200	Special students
4,140	Lower division students
9,660	Upper division students
5,850	Master's program
146	Doctoral program
4	Post-doctoral
<hr/>	
20,000	Total

Table Q

STAGE IV - DISTRIBUTION OF ENROLLMENTS FOR SPACE PLANNING PURPOSES

	Type A Space	Type B Space
Undergraduate lower division	1,650	2,490
Undergraduate upper division	3,860	5,800
Graduate - Master's	2,340	3,510
Graduate - Doctoral	10	136
Post-doctoral	1	3
	<hr/>	
Total:	7,861	11,939

TOTAL: 19,800*

* 200 special students are assumed to be distributed equally through all subject areas, making a total of 20,000 FTE students.

Faculty. Assuming faculty to student ratios of one faculty per six graduate students and one faculty per fifteen undergraduate students:

Table R

STAGE IV - FACULTY

1,000 Graduates
<u>933 Undergraduates</u>
1,933 Total

Graduate Assistants and Fellows. Assuming Stage I ratios for research fellows and teaching assistants of one in six:

Table S

STAGE IV - GRADUATE ASSISTANTS AND FELLOWS

Total: 1,000

Staff. In Stage IV we will assume a ratio of one staff per ten students. This reflects optimum size operation.

Table T

STAGE IV - STAFF

Total: 2,000

Visitors. In Stage IV, visitors will be calculated as in Stage I, i. e., one visitor per ten faculty and staff.

Table U

STAGE IV - VISITORS

Total: 393

Table V

STAGE IV - COMPOSITE CAMPUS POPULATION

20,000	Students
1,933	Faculty
2,000	Staff
393	Visitors
24,326	Total

SUMMARY

Composite Campus Population

Essentially the program for the physical plant is established by a multiplication of the people in each category with a development standard for each type of facility required to meet the institution's educational objectives. Both the percentage of people and the development standard in each sub-category of the composite campus population may change from stage to stage. (For example, it may be policy to provide one parking space for each faculty member in Stage I and later reduce that to two spaces for every three faculty members in Stage IV.)

Naturally the greater the distinctions that can be made between the composite campus population figures and the development standards at each stage of growth, the more flexible and realistic the plan -- and the more it will reflect a growing institution. Our purpose has been to establish a representative picture of a vital University center on a new campus and at the threshold of a great expansion program.

A summary of the total campus population for each stage is shown in Table Y. These figures are a critical key to space programming, since they determine the number of people for whom physical plant facilities will have to be provided in each stage of growth.

Table Y

	<u>COMPOSITE CAMPUS POPULATION</u>			
	Stage I	Stage II	Stage III	Stage IV
Students	7, 500	10, 000	15, 000	20, 000
Faculty	565	783	1, 175	1, 933
Staff	938	1, 250	1, 875	2, 000
Visitors	150	203	305	393
TOTAL	9, 153	12, 236	18, 355	24, 326

Distribution of Enrollment for Space Planning Purposes

Our purpose in distributing enrollments is to be sure that some distinctions are made between the types of space that are required for various instructional purposes.

Since an academic plan is not available as a guide for this distribution, and rather than deal with subject areas (which would require a prognostication of how many students would enroll in the various course offerings and a determination of a suitable space standard per student enrolled), we have made assumptions as to approximately how many students would be enrolled in programs which require laboratory space and how many would be enrolled in non-laboratory courses. Further distinction is made by level of instruction.

The concept of differential rates of growth is introduced again in the following table (Table Z) for each stage of growth. Inasmuch as the architectural concept proposed involves universal space, with optimum flexibility for classroom, seminar, and laboratory use, only gross distinctions need be made for long-range planning purposes.

In a later report we will indicate a suitable space standard for Type A space and Type B space, with variations reflecting levels of instruction. The multiplication of the number of people by the space standards will determine the magnitude of space required at each stage of growth.

Table Z

DISTRIBUTION OF ENROLLMENTS FOR SPACE PLANNING PURPOSES³

Stages	TYPE A SPACE *							TYPE B SPACE **								
	UG LD	UG UD	MP	DOC	PD	SP	UG LD	UG UD	MP	DOC	PD	UG LD	UG UD	MP	DOC	PD
Stage I 7,500	787	787	274			75	2,363	2,363	823	28						
Stage II 10,000	1,244	1,413	584			150	1,896	3,297	1,363	50						3
Stage III 15,000	1,866	2,120	876			225	2,844	4,946	2,045	75						3
Stage IV 20,000	1,650	3,860	2,340	10	1	200	2,490	5,800	3,510	136						3

Abbreviations:

- UG - Undergraduate
- LD - Lower Division
- UD - Upper Division
- MP - Master's Program
- DOC - Doctoral
- PD - Post-doctoral
- SP - Special

* Space required for courses which are essentially handled in classrooms, lecture halls, and seminar rooms.

** Space required for courses which are essentially handled in laboratories and lecture halls.

*** See Notes a through f on following page.

3 See Appendix B for list of all tables.

Notes:

- a Undergraduate lower division enrollments in the sciences will drop from 11 out of 100 students in Stage I to 8 out of 100 students in Stage II because total undergraduate lower division enrollments will have decreased in terms of percentage.
- b Undergraduate upper division enrollments in the sciences have increased from 11 out of 100 students to 19 out of 100 students because of increasing emphasis on the sciences.
- c Master's degree enrollments in the sciences have shifted from 4 out of 100 in Stage I to 12 out of 100 in Stage IV because of increasing emphasis on the sciences.
- d Undergraduate lower division enrollments in general education and teacher education (non-science) have shifted to 31 out of 100 students to 12 out of 100 students because of the increasing responsibility of the University Center to instruct upper division and graduate students.
- e Upper division enrollments in general education and teacher education (non-science) have dropped slightly from 31 out of 100 students to 29 out of 100 students because of an increase in emphasis on Master's programs.
- f Master's programs enrollments have increased from 12 out of 100 students in Stage I to 18 out of 100 students in Stage IV.

LIST OF BUILDINGS TO BE BUILT THROUGH 1970

H O U S I N G

COMPLETION DATE	ACADEMIC BUILDINGS	SQ. FT.	DORMS	SQ. FT.	MARRIED STUDENT	SQ. FT.	GRADUATE STUDENT
Sept. 1964	(Service Building Partially Completed) Total to date:		Dormitory No. 1 Completed				
Sept. 1965	Service Building Complete Lecture Halls Library Student Faculty Classroom Buildings: Biological Science Chemistry Education Humanities Physics Social Science Total Total to date:	64,600 222,000 246,800 139,000 110,000 97,200 57,800 97,200 57,800 110,000 1,202,400 <u>1,202,400</u>	Dormitory No. 2 Completed	355,750 355,750			
Sept. 1966	Health & Physical Education Infirmary Theater Classroom Buildings: Administration Business Administration Earth Science Fine Arts Total Total to date:	123,800 26,000 110,000 79,600 97,200 97,200 79,600 <u>613,400</u> <u>1,815,800</u>	Dormitory No. 3 Completed	355,750	500 Units (25 Buildings)	250,000	28.
				<u>711,500</u> <u>1,067,250</u>		<u>250,000</u>	

LIST OF BUILDINGS TO BE BUILT THROUGH 1970 - CONTINUED

COMPLETION DATE	ACADEMIC BUILDINGS	SQ. FT.	DORMS	H O U S I N G			GRADUATE STUDENT
				SQ. FT.	MARRIED STUDENT	SQ. FT.	
Sept. 1967			Dormitory No. 4 Completed				
	Total to date:	1,815,800		355,750 1,423,000			
Sept. 1970 (7,500 students)	Partial Classroom Expansion Women's Health and Physical Education	89,600 (Date inconclusive)			400 Units 394 Req'd. (20 Buildings)	200,000	* Refer to Sec. 1 A Educ. Plan., Grad. Planning Assumptions.
	TOTALS AT END STAGE I (Sept. 1970)	1,905,400	4 Dorms.	1,423,000	900 Units (45 Buildings)	450,000	

EXPANSION BEYOND 1970

H O U S I N G

*STUDENTS	ACADEMIC BUILDINGS	SQ. FT.	**DORMS	SQ. FT.	MARRIED STUDENT	SQ. FT.	GRADUATE STUDENT
10,000 STAGE II	Partial Classroom Expansion (Total Expansion=26 Buildings Minus 2 in 1970=24 Buildings 24 Buildings : 3 stages = 8 Buildings/Stage Totals to date:	632,800	Dormitory No. 5 Completed*	287,500 [±] ****	380 Units (365 Req'd.) 19 Bldgs.	190,000	Complex "A" Completed
15,000 STAGE III	Partial Classroom Expansion Field House Totals to date:	2,538,200 632,800 (Date incon- clusive) 3,171,000	Dormitories No. 6 & 7 Completed *	1,710,500 287,500 [±] 287,500 [±] 2,285,500 [±]	1,280 Units 620 Units (617 Req'd.) 31 Bldgs. 1,900 Units	640,000 310,000	Complex "B" Completed
20,000 STAGE IV	Classroom Expansion Complete	632,800	Dormitory No. 8 Completed *	287,500 [±]	940 Units (943 Req'd.) 47 Bldgs.	470,000	
	TOTALS AT END PHASE IV (20,000 Students) ****	3,803,800	8 Dorms.	2,573,000 [±]	2,840 Units 142 Bldgs.	1,420,000	Data Inconclusive

* Construction Phasing Based Upon Student Enrollment Growth
 ** 1,150 Students/Dorm @ 250 sq. ft./student = 287,500 sq. ft.
 *** Does not include areas of: Field House
 Women's Health & Physical Education
 **** No. of Units Completed at Each Phase Divisible by 20.

ADDED STUDENT HOUSING (DIAGRAMMATIC)

PHASE VALUES

[Solid black]	1964
[Diagonal lines /]	1965
[Diagonal lines \]	1966
[Horizontal lines]	1967
[Vertical lines]	1970
[Dotted pattern]	10000 SF.
[White]	15000 SF.
[White]	20000 SF.

GRAD HOUSING 'B'

GRAD HOUSING 'A'

DORM 5

DORM 8

DORM 3

DORM 4

DORM 2

DORM 1

DORM 6

INFR

DORM 7

SVA.

SVA.

SERVICE BLDG.

DIAGRAMMATIC SITE PHASING PLAN

SCALE: 1" = 800'

D. HOUSING

Student housing requirements will be substantial in relation to the total student enrollments because of the state and regional character of a University Center.

Relatively high density housing structures have been schematically shown on the Interim Comprehensive Campus Plan to allow a maximum of green belts and open spaces for buffering zones and to meet parking, recreational, and other requirements.

In addition to living units, each housing complex should include facilities for meeting rooms, social and recreation rooms, dining rooms, study areas, etc.

According to current SUNY policy, fraternities are not allowed to have nationalities. Trends indicate that this policy will be continued, and that fraternity housing will not be a factor in the projected University housing program. Therefore, students living in fraternity houses will be considered commuting students.

Faculty members will not be housed on campus but will live in the community at large. Since there is no housing shortage in the area, this should not present a problem. However, the President of the University will be housed on campus.

Types of Housing

- (a) Undergraduate. Dormitories for single undergraduates have been designed to provide on-campus living quarters for 80 per cent of the single students. Six to eight students

will be housed in each unit, allowing 250[±] gross square feet per student. A synopsis of the average student housing facilities of a cross-section of other Universities is shown in the following table (taken from "College Students Live Here", a report from the Educational Facilities Laboratories):

	<u>Men</u>	<u>Women</u>
Study-Bedroom	106 Sq. ft. per student	112 Sq. ft. per student
Toilet-Shower	15 " " " "	16 " " " "
Corridor-Stairs	38 " " " "	48 " " " "
Lounge	20 " " " "	24 " " " "
Storage-Laundry	16 " " " "	22 " " " "
Dining-Kitchen	24 " " " "	29 " " " "
Staff Apartment	5 " " " "	8 " " " "
Other	35 " " " "	17 " " " "
TOTAL	213 Sq. ft. per student	253 Sq. ft. per student

- (b) Graduate. Graduate housing requirements are predicated on providing housing on campus for 80 per cent of the single graduate students. The structure will be similar to the undergraduate dormitories but will be built as part of the research center complex. Four students will be housed per unit, with 300[±] gross square feet allocated for each student.
- (c) Married. Married student housing requirements are predicated on providing housing in proximity to the campus for 60 per cent of the married students. The married student housing area shown on the Interim Plan should accommodate approximately 2,000 living units. Should trends indicate that additional living units will be required during the later stages, another off-campus site should be obtained.

During the early growth stages, living units would be broken down into the following categories:

Efficiency	400 Sq. ft.	40 Per cent
1-Bedroom Unit	500 Sq. ft.	40 Per cent
2-Bedroom Unit	600 Sq. ft.	20 Per cent

As the University develops and patterns emerge, these percentages would be adjusted to reflect actual housing requirements.

Special Student Housing

Special students have not been included in the breakdown of housing requirements for the four stages of growth. We expect that in the first stages of growth special students will be largely students following a part-time, specialized sequence of courses. By Stage IV special students may be visiting scholars and mature adults not enrolled in degree programs and not carrying full course hour loads but admitted to certain courses. With the exception, perhaps, of several scholars who might be temporarily housed in a faculty club, special student housing requirements would be satisfied off-campus.

Methodology for Estimating Student Housing Requirements During Each Stage of Growth

The kinds of curriculum developed and the levels of instruction sustained on the Albany campus will be reflected in the number of students enrolled. We have accepted the present SUNY policy that 15 per cent of the students in Stage I will be graduate students and that the male-female

composition for the entire student population will be 45 per cent male and 55 per cent female.

However, in Stages II and IV we have made certain assumptions that reflect the differential rates of growth typical of a university center.

For example, these assumptions for married student housing are:

- (a) The percentage of graduate and undergraduate students will change from 15 per cent in Stage I to 30 per cent in Stage IV.
- (b) The male-female composition will differ in each stage according to the kinds of curriculum developed. For example, a curriculum which is oriented towards the sciences and technology is likely to enroll more male than female students. A curriculum oriented towards teacher education is likely to enroll more female than male students.
- (c) A factor which will affect the number of single and married students is the level of instruction. On a co-educational campus, the percentage of married graduate students is generally twice the percentage of married undergraduate students.
- (d) The percentage of female students declines as the level of instruction advances. Thus there are more female married students at the undergraduate level, fewer at the master's level, and fewer still at the doctoral level.

In order that University policy may be adequately reflected in our final report, we request that SUNY review these assumptions and make any comments, recommendations, and/or revisions that may be necessary. To simplify this review, we suggest the following steps:

- Step 1. Assign total number of students in each stage of growth.

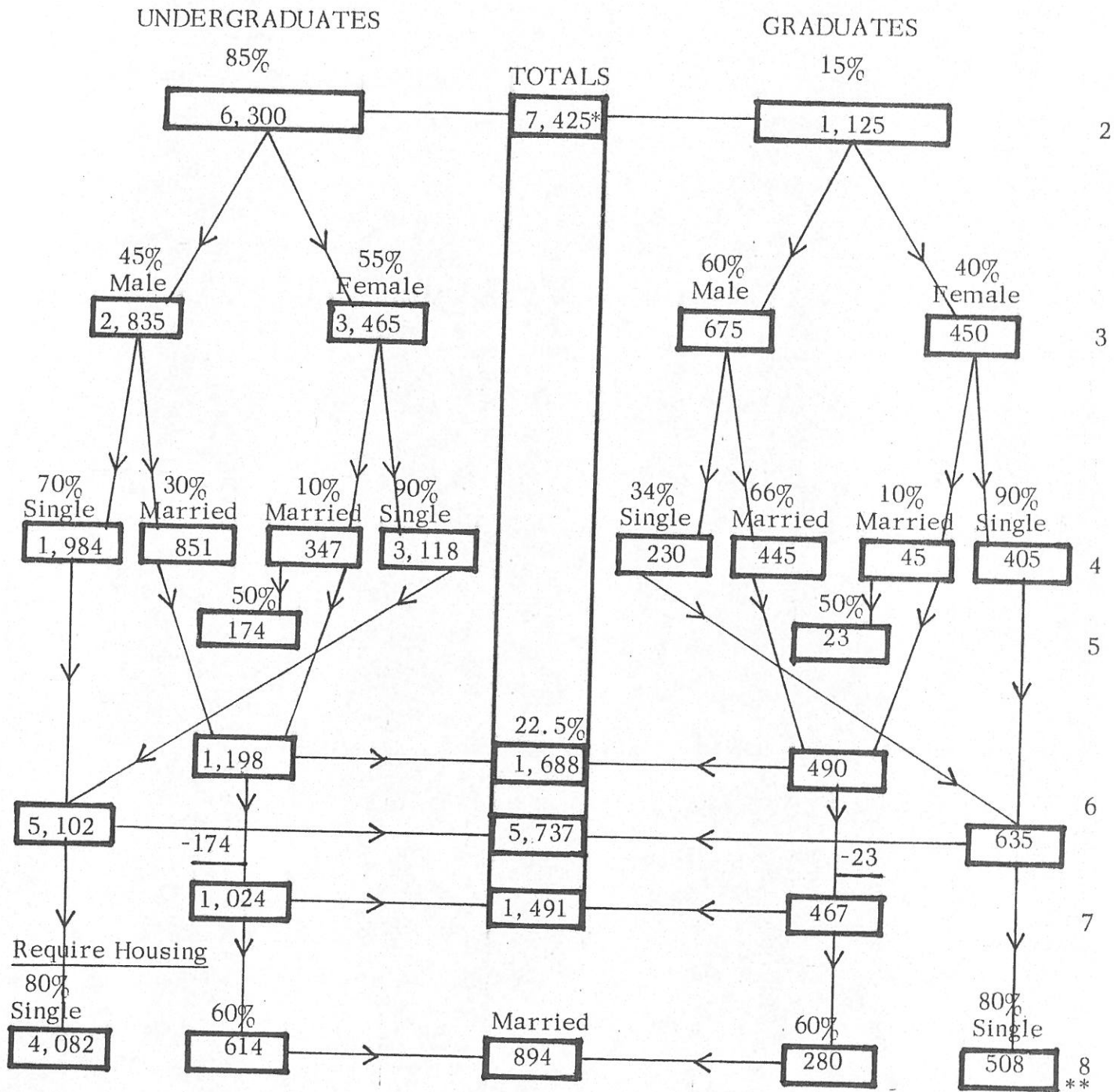
- Step 2. Assign enrollments into graduate and undergraduate levels.
- Step 3. Identify graduate and undergraduate enrollments by numbers of male and female students in each.
- Step 4. Identify graduate and undergraduate enrollments by numbers of male and female married and single students. (Note: Different percentages have been assumed for graduates and undergraduates.)
- Step 5. Identify numbers of male and female graduate and undergraduate students married to each other.
- Step 6. Identify total numbers of:
 - (a) Married undergraduates
 - (b) Married graduates
 - (c) Single undergraduates
 - (d) Single graduates
 - (e) Totals
- Step 7. Deduct number of male-female graduate-undergraduate students married to each other, thus reducing total married student housing requirements.
- Step 8. Apply SUNY policy ratios to obtain housing requirements for:
 - (a) Married students
 - (b) Single undergraduates in campus dormitories
 - (c) Single graduates in graduate housing on campus

COMPOSITE STUDENT POPULATION & HOUSING REQUIREMENTS

STAGE I

7, 500 STUDENTS

(1963 to 1970)



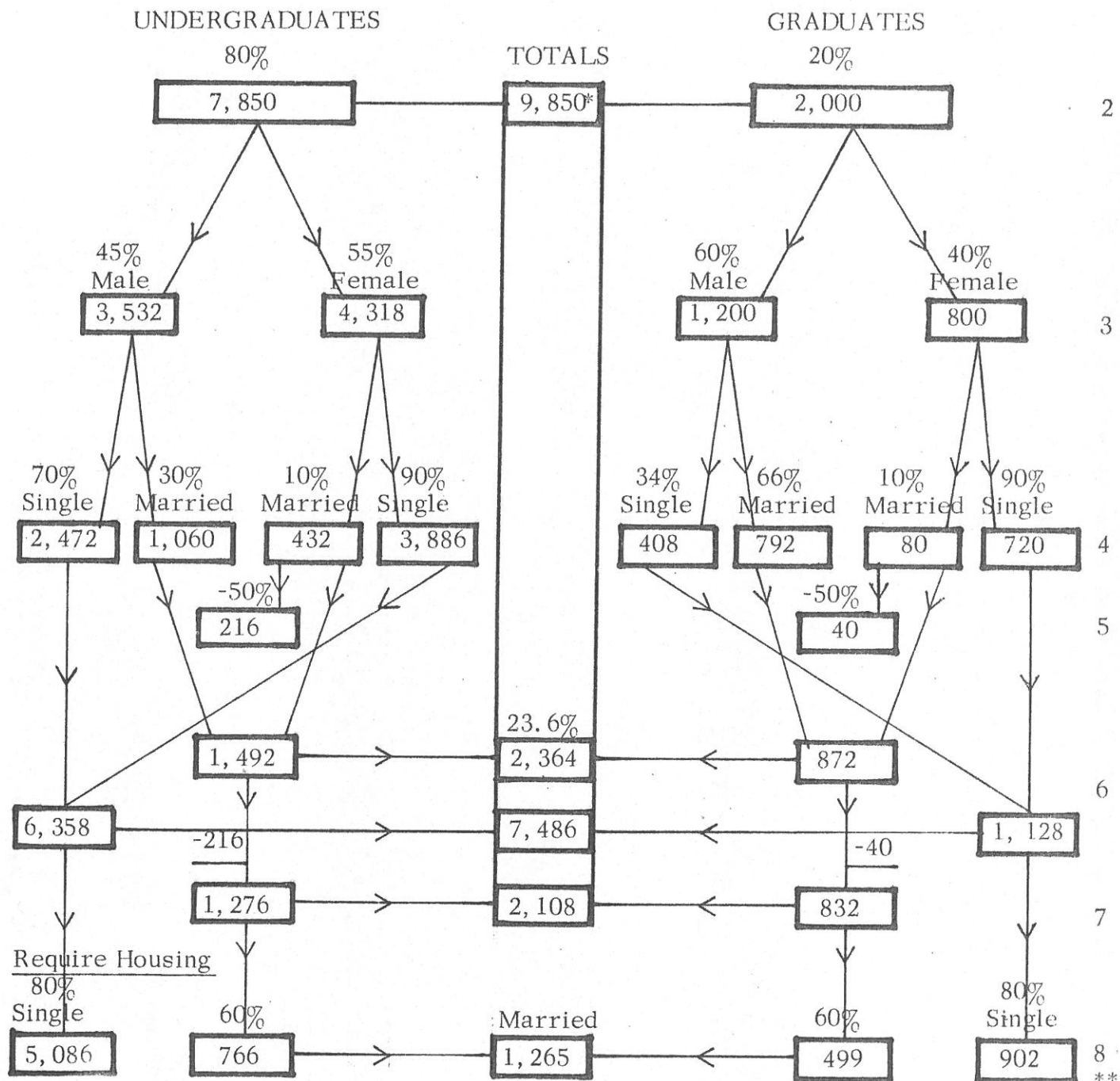
* See Paragraph on Special Students.
 ** See Methodology - Steps 1 through 8.

COMPOSITE STUDENT POPULATION & HOUSING REQUIREMENTS

STAGE II

10, 000 STUDENTS

1



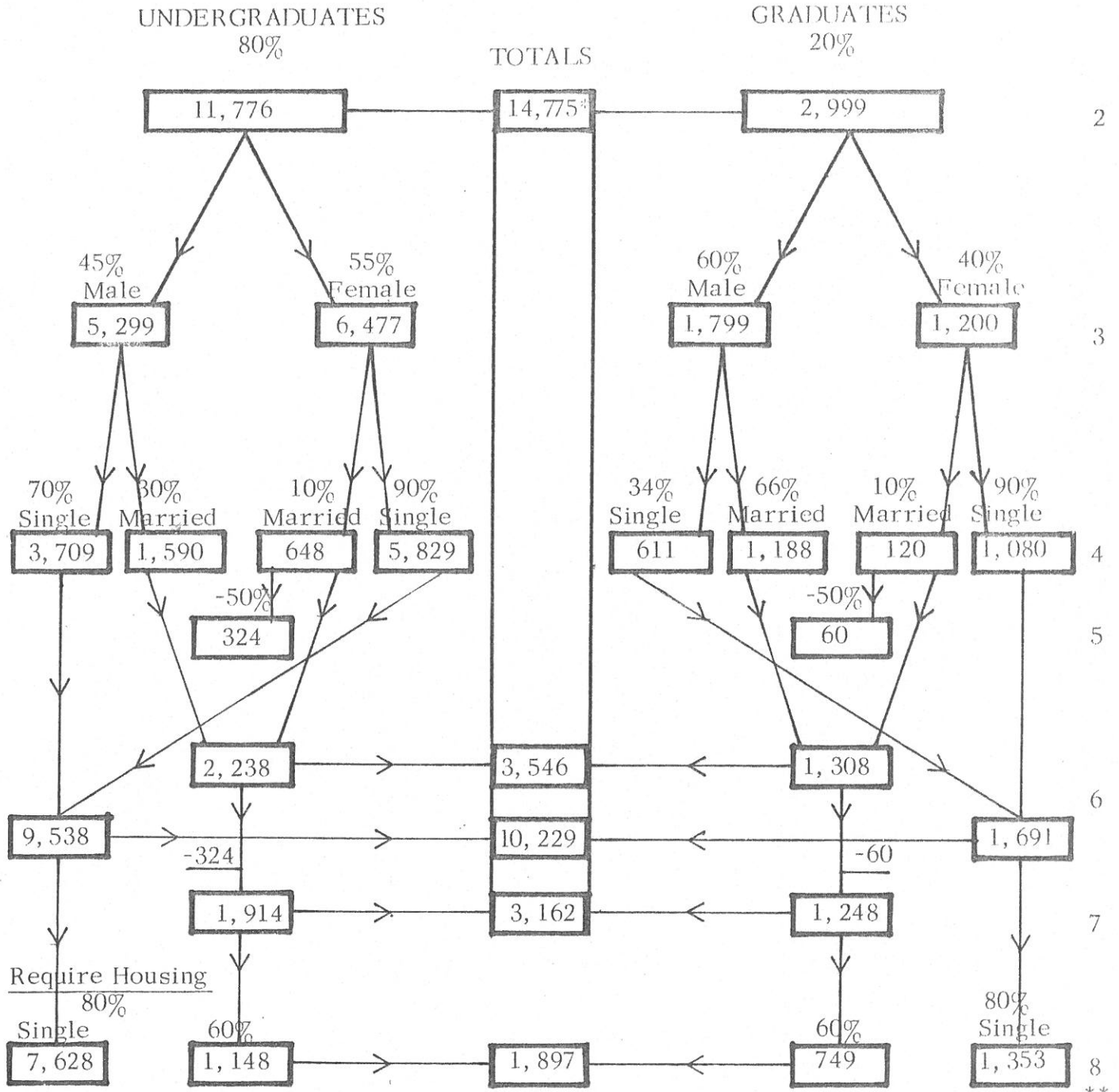
* See Paragraph on Special Students.

** See Methodology - Steps 1 through 8.

COMPOSITE STUDENT POPULATION & HOUSING REQUIREMENTS

STAGE III

15,000 STUDENTS



* See Paragraph on Special Students.

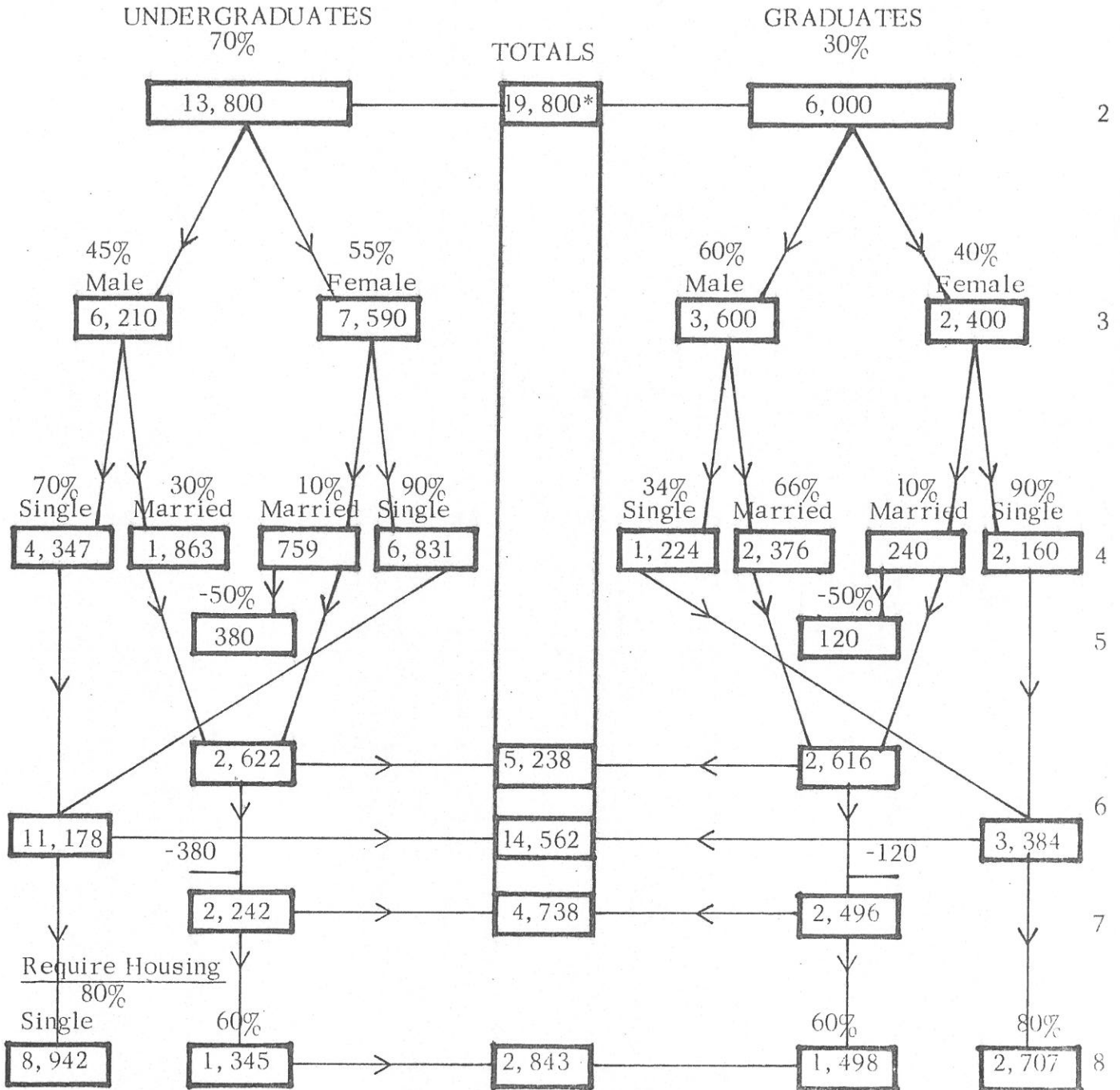
** See Methodology - Steps 1 through 8.

COMPOSITE STUDENT POPULATION & HOUSING REQUIREMENTS

STAGE IV

20,000 STUDENTS

1



* See Paragraph on Special Students.
 ** See Methodology - Steps 1 through 8.

SUMMARY

GROWTH STAGE	I	II	III	IV
Single Undergraduates in Dormitories	4,082	5,086	7,628	8,942
Single Undergraduates Commuting	1,020	1,272	1,910	2,236
Married Undergraduates in SUNY Housing (Married to other students)	614	766	1,148	1,345
Married Undergraduates Commuting	174	216	324	380
Single Graduates in SUNY Housing	410	510	766	897
Single Graduates Commuting	508	902	1,353	2,707
Married Graduates in SUNY Housing (Married to other students)	127	226	338	677
Married Graduates Commuting	280	499	749	1,498
Special Students Commuting	23	40	60	120
	187	333	499	998
	75	150	225	200
TOTAL:	7,500	10,000	15,000	20,000

E. CIRCULATION AND PARKING

The circulation and parking facilities shown on the interim plans and functional diagrams are based on the following assumptions and/or policies:

Arrival. The primary arrival at the campus would occur by auto with access to the campus perimeter loop from major city streets rather than directly from expressways. The community area of the campus will be surrounded by expressways, so the campus will be readily accessible via Washington Avenue, Western Avenue, and Fuller Avenue, shortly after leaving an expressway.

Mass Transit. The present Albany mass transit systems would have to be expanded concurrently with campus growth to provide a desirable link with the community and reduce campus parking facility requirements. A good mass transit media traversing the perimeter campus loop road would encourage students, staff, and faculty members to use mass transit systems for arrival and/or departure from the campus.

Intra-campus. The perimeter loop for vehicular circulation best serves the function of a pedestrian-oriented campus and provides the greatest separation of pedestrian and vehicular traffic within the campus while allowing free and easy movement of vehicles and ready access to the community.

Government Buildings. The State office buildings to the South will generate large volumes of traffic which should have immediate access to expressways and be kept separate from the campus traffic as far as practicable.

Service. Where possible all facilities will be served directly from the campus loop road. When this is not practicable, the pedestrian walks will serve a dual function by being constructed to serve as service roads while retaining a pedestrian character. Facilities served by pedestrian circulation should be scheduled so that servicing will not occur during school hours.

Pedestrian. All facilities will be inter-connected by hard-surfaced walks, providing a complete all-weather pedestrian circulation system. Within building complexes the pedestrian circulation should be covered where practical and in keeping with the design intent of the buildings.

Generally, the major walk systems should reflect the geometric form of the campus with the informal minor walks, short cuts, etc. following land forms and expressing the desired lines of pedestrian circulation.

Parking. To minimize pedestrian-vehicle interference, the proposed parking areas are accessible only from the perimeter loop roads. Parking facilities fall into three (3) general categories:

- (1) Parking at housing units.
- (2) On-campus parking areas for faculty, students, visitors, etc.
- (3) Off-campus dead storage area in conjunction with the future Stadium and/or recreation areas.

The campus has been primarily designed for pedestrian circulation and few buildings have contiguous parking. The nature of a University center in an urban area requires that adequate parking facilities be provided for faculty, staff, and visitors in order to facilitate procurement of personnel and to maintain operational efficiency.

The student parking problem must be fully controlled or provided for in off-street locations to prevent use of neighboring community or campus streets for parking, since curb parking is undesirable from the viewpoint of both aesthetics and safety. Students will accept longer walking distances from parking spaces to destination, so the fringe area location of parking areas will be adequate.

SUNY policy for determining land allocation for parking areas is based on a ratio of 130 cars per acre.

PARKING SPACE REQUIREMENTS

GROWTH STAGES	Design Criteria	I				II				III				IV			
		Number of Spaces	Car Number of Spaces	Car Number of Spaces	Car Number of Spaces	Number of Spaces	Car Number of Spaces	Car Number of Spaces	Car Number of Spaces	Number of Spaces	Car Number of Spaces	Car Number of Spaces	Car Number of Spaces	Number of Spaces	Car Number of Spaces	Car Number of Spaces	
Undergraduates (Dormitories)	12%	4,082	490	5,086	610	7,628	915	8,942	1,073								
*Married Students (SUNY Housing)	75%	894	671	1,265	949	1,897	1,423	2,843	2,132								
Graduates (SUNY Housing)	35%	508	178	902	316	1,353	474	2,707	947								
Faculty	70%	565	396	783	548	1,175	823	1,933	1,353								
Staff	70%	938	657	1,250	875	1,875	1,313	2,000	1,400								
Visitors	70%	150	105	203	142	305	214	393	275								
Commuting Students	55%	1,819	1,000	2,491	1,370	3,738	2,056	5,008	4,404								
* Married to each other	0%	197	0	256	0	384	0	500	0								
TOTALS		9,153	3,497	12,236	4,810	18,355	7,218	24,326	11,584								

F. DINING

Food Preparation. A large central plant for receiving and storing bulk orders is provided in the central service area. The storage area is large enough so that food can be bought at seasonal low prices. The layout allows handling by fork-lift trucks.

A large food preparation kitchen is provided to prepare and ship daily issues of food to each of the cooking kitchens throughout the campus. The capacity of this central kitchen is adequate for many years, and can be increased by adding employees and increasing the number of work shifts. The plant can be enlarged at a later date if necessary.

The problems of handling garbage are reduced by the use of Somat machines.

Food Service. Individual kitchens cook and portion out the food prepared in the central plant. All service is cafeteria style, except faculty dining.

Dining. Dining facilities programmed for Stage I are also adequate for the 10,000 students in Stage II, since the cafeteria in Dormitory No. 5 will be added and additional meals can be provided in the Student Faculty Building by changing the dining schedule to provide four servings per seat in the cafeteria and three servings per seat in the snack bar.

Beyond Stage II additional dining facilities must be provided in

the Academic Complex. Several areas will lend themselves to this. At the moment the best location seems to be below the Podium in the new wings on one or both sides of the Student Faculty Building. Eventually two dining rooms of 500 seats each should be constructed in this area.

An additional 250 seats for faculty dining should be provided in the main complex adjacent to the new student dining area, and approximately 500 seats for student dining should be provided in the Graduate centers.

The following schedules indicate approximate requirements for student and faculty dining facilities in Stage I and Stage IV:

STAGE I

A. Student Meals (7,500 Students)

(1) Student Faculty Building

(a) Cafeteria - 500 seats
at 2.9 servings each = 1,450 Meals

(b) Snack Bar - 500 seats
at 2.9 servings each = +1,450 Meals

2,900 Meals

(2) Dormitories 1 to 4 inclusive

4 Dormitories - 500 seats
at 2.25 servings each = 1,125 Meals
x 4

4,500 Meals

(3) Other facilities

(a) Married Student Housing 40 Meals

(b) Faculty Dining + 20 Meals

(c) Off-campus + 40 Meals

100 Meals

TOTAL:

7,500 Meals

B. Faculty Meals (565 Faculty)

(1) Student Faculty Building -
Faculty Dining - 275 seats,
less 20 students, or 255 seats
at 2 servings each = 510 Meals

(2) Cafeteria and Snack Bar
(Student Faculty Building)
and off-campus + 55 Meals

TOTAL: 565 Meals

STAGE IVA. Student Meals (20,000 Students)

(1) Student Faculty Building

(a) Cafeteria - 500 seats
at 2.9 servings each = 1,500 Meals

(b) Snack Bar - 500 seats
at 3 servings each = +1,500 Meals

3,000 Meals

(2) Dormitories 1 to 8 inclusive

(a) 8 Dormitories - 500 seats
at 2.25 servings each = 1,125 Meals
x 8

9,000 Meals

(3) Graduate Dormitories

2 Dormitories at 1,200 meals = 2,400 Meals

(4) New dining facilities in Academic
Complex (One in Graduate area and two
near Student Faculty Building)

3 Cafeterias - 500 seats
at 3 servings each = 1,500 Meals
x 3

4,500 Meals

(A. Student Meals -- Continued)

(5) Other facilities

(a) Married Student Housing	500 Meals
(b) Faculty Dining	+ 50 Meals
(c) Off-campus	+ <u>550 Meals</u>

1,100 Meals

TOTAL:

20,000 Meals

B. Faculty Meals (1,933 Faculty)

(1) Faculty Dining area (Student Faculty Building) - 250 seats at 3.3 servings each =	825 Meals
(2) New Faculty Dining area - 250 seats at 3.3 servings each =	+ 825 Meals
(3) Cafeteria, Snack Bar, and off-campus =	+ <u>283 Meals</u>

TOTAL:

1,933 Meals

G. PHYSICAL EDUCATION, INTRAMURAL ATHLETICS, AND RECREATION

SUNY belongs to the National Association of Intercollegiate Athletics and to the New York Intercollegiate Athletic Association. However, current policy discourages intercollegiate athletic participation.

A strong intramural program is envisioned for SUNY. Through organizations like the Women's Athletic Association and the Association of Men's Intramural Athletics, each student is encouraged to participate in one activity each major sport season.

Prior to graduating with B. A. or B. S. degrees, all students must pass two semesters of physical education: PE 1W for freshmen women, and PE 1M for freshmen men. PE 2W, PE 2M, and PE 25 are electives for upperclassmen choosing further athletic training.

During Stage III (15,000 students), for example, there will be 4,710 lower division undergraduates, 7,066 upper division undergraduates, and 2,921 graduate students. Of these, it is assumed that the following will be physical education participants:

Lower division undergraduates	80 Per cent	3,768
Upper division undergraduates	10 Per cent	707
Graduates	2 Per cent	58
Total		<u>4,533</u>

Assuming class meetings of 40 hours per week to serve 4,533 students at the prescribed SUNY student-teacher ratio of 1:15,

the following student groups and classroom periods will be required:

$$40 \text{ Hours} \frac{113 \text{ Classroom periods per week}}{4,533 \text{ Students}}$$

Since each group will average 15 students, facilities for 15 group meetings per week will be required.

Assuming that Physical Education groups would be divided into such phases as:

- A September 1 - November 1
- B November 1 - January 15
- C January 15 - March 15
- D March 15 - June 1

each student could participate in four different types of sports paralleling weather and seasonal interests.

Typical scheduling might be as follows (rationale for determining peak acreage requirements):

A. September 1 - November 1

<u>Type Activity</u>	<u>Groups</u>	<u>No. of Students</u>	<u>Acreage Required</u>
Basic Skills	4 X 15	60	5.0 Outdoor - .5 Indoor
Football	6	90	10.0 Outdoor
Soccer	2	30	3.5 Outdoor
Volley Ball	2	30	.3 Outdoor
Swimming	<u>1</u>	<u>15</u>	<u>- .3 Indoor</u>
	15	225	1.1 Indoor 18.5 Outdoor

B. November 1 - January 15

<u>Type Activity</u>	<u>Groups</u>	<u>No. of Students</u>	<u>Acreage Required</u>
Basketball	5 X 15	75	1.5 Indoor 1.5 Outdoor
Cross Country	2	30	8.0 Outdoor
Boxing	1	15	.7 Indoor
Wrestling	1	15	.7 Indoor
Handball	1	15	1.75 Indoor 1.75 Outdoor
Ice Skating	2	30	1.2 Outdoor
Ice Hockey	1	15	1.5 Indoor
Gymnastics	2	30	.5 Indoor
Swimming	<u>1</u>	<u>15</u>	<u>.3 Indoor</u>
	16	240	12.5 Outdoor 6.3 Indoor

C. January 15 - March 15

<u>Type Activity</u>	<u>Groups</u>	<u>No. of Students</u>	<u>Acreage Required</u>
Basketball	4 X 15	60	1.2 Indoor
Gymnastics	2	30	.50 Indoor
Boxing	1	15	.70 Indoor
Wrestling	1	15	.70 Indoor
Handball	1	15	.70 Indoor
Skiing	2	30	15.0 Outdoor
Ice Skating	2	30	1.0 Outdoor
Ice Hockey	1	15	1.5 Indoor
Swimming	<u>1</u>	<u>15</u>	<u>.3 Indoor</u>
	15	225	16.0 Outdoor 5.6 Indoor

D. April 1 - June 1

<u>Type Activity</u>	<u>Groups</u>	<u>No. of Students</u>	<u>Acreage Required</u>	
Softball	8 X 15	120	12.0	Outdoor
Tennis	2	30	2.5	Outdoor
Golf	2	30	8.0	Outdoor
Track	1	15	4.5	Outdoor
Water Skills	1	15	5.0	Outdoor
Volley Ball	1	15	.1	Outdoor
Swimming	<u>1</u>	<u>15</u>	<u>.3</u>	Indoor
	16	240		32.1 Outdoor .3 Indoor

Of the 11,766 undergraduate students, approximately one third, or 3,922 students, will participate in intramural athletics. Of the 2,921 graduate students, approximately one fifth, or 582 students, will participate in intramural athletics.

$$\begin{array}{r}
 3,922 \text{ Undergraduate students} \\
 + 582 \text{ Graduate students} \\
 \hline
 4,504 \text{ Intramural participants}
 \end{array}$$

Since intramural participation closely parallels physical education both in numbers and types of sports, acreage requirements will be similar. It is assumed that there would be only occasional overlapping of time periods set aside for the physical education program and for the intramural athletics program, and that playing fields could be used interchangeably.

Unsupervised, spontaneous sports near campus housing areas will demand approximately one acre per 100 students in residence. This recreation space is necessary for the inevitable "game of catch" - type activities that flourish on college and university campuses; and unless it is provided, areas intended for physical education and intramural athletics will be constantly clogged.

Although Intercollegiate (Varsity) participation is not currently encouraged, it is undeniably popular with student bodies of the projected size of SUNY at Albany, and reasonable space allocation for it should be considered mandatory.

The following chart is a composite of acreage requirements for recreational and athletic activities projected for SUNY during Stage III, as delineated by the Interim Plan:

Intercollegiate

(1)	Track, Football	9 Acres
(1)	Baseball	3 "
(1)	Soccer, Lacrosse	4 "
(20)	Tennis	4 "
		<u>20</u> "
	Practice Fields	<u>12</u> "

32 Acres

Intramural and Physical Education

(Organized and supervised)

(3)	Field Hockey	5 Acres
(8)	Golf, Football, Soccer	20 "
(8)	Basics, Speedball, Softball	15 "
(30)	Tennis	6* "
(18)	Basketball, Volleyball	3* "
	* Paved areas to be flooded for ice skating & hockey	
(1)	Archery	<u>2</u> "

51 Acres

General Recreation **

150 Acres**

(Unsupervised)

** Based on 1 acre/100 students in residence. However, a portion of this includes athletic fields and general open spaces.

Indoor Facilities

Gym - Physical Educational and Intramural Athletics	6.5 Acres
Fieldhouse - Physical Education, Intramural & Intercollegiate Athletics	<u>8.5</u> "

15 AcresTOTAL RECOMMENDED ATHLETICS AND
RECREATIONAL AREA ON CAMPUS

160 ACRES

H. CAMPUS WIDE COMMUNICATION PLANNING PRINCIPLE

Communication planning requirements can be grouped into:

- (1) those necessary solely for the operation of the Albany campus, and
- (2) those necessary for inter-institutional programs.

The first requirements are further subdivided into equipment and space needed for instructional and research purposes. The second are those devices and related spaces needed for communication and control, such as fire and security alarm systems; traffic controls; signal systems for marking the start and finish of classes; loudspeaker systems for campus-wide announcements, etc.

The following facilities will be located in the basement level of the Academic Complex:

- (a) Telephone console under the Biology building
- (b) Central control area for service and maintenance communication under the Social Science building
- (c) Data control center under the Administration building
- (d) Service corridor linking all buildings and utilized by electric carts
- (e) United States Post Office Sub-station

In addition, this level will house television broadcasting facilities connected by coaxial cable to the main Lecture Hall Complex and lounges.

The Lecture Hall Complex will house a campus radio station and provide equipment and space for showing movies.

Indication of the starting and ending of class periods and the hours of the day as well as music will be provided by a Carillon located in the center of the campus on top of the water tower.

Space for future expansion of communication facilities is now being incorporated in the campus plan.

The requirements for linking together the various institutions in the Mohawk Valley depend on whether or not the University Center in Albany will be the central station for preparing, storing, broadcasting and channeling audio-visual materials. In any case provision will be made for receiving this type of closed network programs.

In addition there may be requirements for a system-wide computing center on campus, one that serves as a primary element for a series of secondary machines located on other campuses, or at least a secondary machine. This will be of special importance to the graduate research programs. Exact requirements for space and equipment are not known at the present time, but adequate power sources have been provided in the plans for long-range utility requirements.

I. CAMPUS WIDE UTILITIES PLANNING PRINCIPLE

Water. During the present Construction Stage, water is being obtained via a 12-inch line from Washington Avenue.

For Stage I and part of Stage II, water will be obtained from the adjacent pumping station facility at the State Office Campus. In addition, a proposed water tank in the center of the Academic Complex is planned for fire reserve, pressure fluctuation, and fall-out reserve. It is anticipated that this source will be adequate for the needs of a 7,000-10,000 student body.

However, long-range programmed enrollment will require additional facilities and storage capacities.

CONCLUSION: We recommend that studies of future needs consistent with available funds be made to ascertain whether present water line capacities should be increased at this stage to provide for long-range demand. (See report on Water Supply by John J. Baffa Associates, Consulting Engineers, in the Appendix.)

Electric Power. The sub-station built by the Department of Public Works to serve the State Office Campus is the source of electric power at this time. The present program indicates that this source will be adequate for an enrollment of approximately 10,000 students.

CONCLUSION: Based on present enrollment projections for a student body of 20,000 students, it is apparent that an additional source or sources of power will be required to meet the demands. (See report on Electrical Work by Cosentini Associates, Consulting Engineers, in the Appendix.)

Telephone. Present facilities are planned for an ultimate plant of 5,000 lines, using a Centrex system. Service is received by making use of 8 spare ducts in an existing duct bank originally designed for Building 72 (Alternate Seat of Government).

CONCLUSION. See attached report on Telephone Service by Cosentini Associates, Consulting Engineers.

Heating and Cooling: Presently designed facilities for heating and cooling run from the Service Complex through the Service Tunnel to the main Academic Complex. These facilities were designed to accommodate the main Complex plus 12 additional buildings in the expansion area.

CONCLUSION. Recommend cost analysis studies based on future needs to determine feasibility of expanding present facilities at this time for future needs versus cost of installing additional lines in the future when the need is imminent, as well as to determine future expansion needs. (See report on HVAC Work by Cosentini Associates, Consulting Engineers, in the Appendix.)

Sanitary Sewer System: Presently designed system directs proportionate amounts of the total sanitary waste into existing lines on Washington Avenue and from there to Patroon Creek; and from Western Avenue to the Krumkill Creek drainage area to an existing pump station three-quarters of a mile south.

CONCLUSION: Recommend additional studies based on future needs of ultimate campus population be made to determine:

- (a) Ultimate capacity of existing line outside of the present campus, and capacity of proposed lines within the present campus.
- (b) Most economical method to handle waste of the ultimate campus population.
- (c) Phasing studies and recommendations on best time to undertake this work, in relation to:
 - (1) Presently designed and contracted work;
 - (2) Proposed design of future work;
 - (3) Ultimate campus size and proposed interior plan;
 - (4) Political boundaries - Town of Guilderland, City of Albany.

(See attached reports on Water Supply and Sanitary Sewer Systems, by Cosentini Associates, Consulting Engineers, and John J. Baffa, Consulting Engineers.)

Storm Water System. Presently designed system directs portions of the total storm water run-off into existing facilities on Washington Avenue; on a minor portion of Fuller Road; and Western Avenue (the major exit point).

In addition, there is a natural watershed area at the existing pond on the site, and where not disturbed it will drain naturally into the pond. An improved spillway and 36-inch outlet pipe will be provided for the pond. The overflow from this pond and the connections into the existing line of Western Avenue flow directly into Krumkill Creek.

CONCLUSION: We recommend that additional studies of the capacities of the presently designed system be made to determine what additional facilities will be required to handle the increased amounts of run-off that can be anticipated with the growth of the student population and the corresponding expansion and development of the ultimate campus. These studies should also include the estimated capacities of the Krumkill Creek drainage area and the future development of areas adjacent to it. (See attached reports on Storm Water by Cosentini Associates, Consulting Engineers, and by John J. Baffa Associates, Consulting Engineers.)

General Comments on Campus Wide Utilities Problems. Without exception, all utilities are seriously affected by the programmed growth of the SUNY campus. These problems have been reviewed within the following frame of reference:

- (a) Impact on work presently under construction
- (b) Impact on work presently being designed
- (c) Impact on present off-site utility capacities
- (d) Programs of municipal utility improvements.

Additional studies augmenting the attached studies by John J. Baffa Associates, Consulting Engineers, and by Cosentini Associates,

Consulting Engineers, should also be reviewed from the same reference framework.

J. ADULT - YOUNG ADULT PLANNING PRINCIPLE

Consistent with our assumptions that the Albany campus is oriented to the region and the state at large and has only a minimal connection with the community, the adults and young adults of the community will be offered limited use of the University facilities:

- (1) Continuing education at the graduate level
- (2) Possibly some general education until the Tri-City area can support a community facility.

The Albany campus has been designed for a limited general education program, and programmed expansion will continue to provide facilities of this nature so long as they present no conflict with the prime function.

K. COST PLANNING PRINCIPLE

The vast scope of this project makes possible the unique opportunity of reducing unit costs. There is an inherent savings in the cost of materials because of the large quantities involved.

More important, a savings in labor costs can be realized by the use of repetitive structural, mechanical, and architectural details in many areas throughout the campus. Trained crews, using techniques of mass production, can reduce the cost of the usual "custom" work found in most buildings.

Interest and variety will be obtained through change of character in the various courts and open spaces. The use of varied plant materials, water and fountains, sculpture and lighting, all will give a richness of texture and serve as a foil for the modular architectural system. This landscape enrichment can be obtained at very modest cost in light of the overall budget.

The building construction will be phased with the growth of the student body in order to get maximum utilization of all existing facilities.

L. CULTURAL LIFE PLANNING PRINCIPLE

As previously mentioned, the SUNY campus will frequently be the scene of lectures, seminars, theater productions and other special presentations. Although these events will be held for the benefit of students and faculty, it is important that some provisions for attendance by persons from the Tri-City area be considered in the overall plan.

The benefits to be gained by such effort will include not only the direct aspects of extension of town-gown good will but also will indirectly influence the development of greater cultural awareness within the area and foster cooperative relationships between the University and local business and industrial concerns.

Disadvantages would result primarily from unnecessary expansion of the physical facilities of the University to accommodate area

residents. For this reason, no special provisions have been considered above and beyond the plant needed for the actual campus population. Parking for special events will generally occur at off-peak hours and will not itself present a problem.

Students at SUNY will of course be able to attend public cultural functions held off-campus in various parts of the Tri-City area. Buildings specifically designed for cultural purposes are somewhat limited now, but it is possible that a new convention center and/or cultural center may be constructed as part of the renewal and construction activities of the City of Albany. Such a center could probably be used by the University for programs too extensive for on-campus facilities.

In keeping with SUNY policy, religious facilities will not be provided on the campus. Numerous denominational facilities are located near the campus or are accessible by private and public transportation. Consideration is now being given to the establishment of a non-denominational center near the campus by the local Council of Churches. Therefore it appears that any religious needs can and will be met through the cooperation of community groups.

M. PLANNING FOR EXPANSION

As this entire report has been prepared specifically for expansion to the ultimate desired size for the Albany campus as set forth by SUNY, this section has no particular application. See Pages 29-30 of I-C for specific building expansion beyond 1970 and Pages 5-27 of I-A and I-B for anticipated campus population expansion.

SECTION II - THE REGION (TRI-CITY AREA)

A. TRANSPORTATION

Highways. Two interstate highways, the Adirondack Northway (I-87) and the New York State Thruway (I-90 West and I-87 South) interchange just to the northwest of the campus. These routes and their connections to major state highways provide adequate access to the campus from all sections of the region, state, and New England area.

The Northside Interstate Connector (541) is scheduled for completion within five years and will provide improved access to the campus from the east. However, connections from it to the SUNY campus do not appear adequate for servicing the campus.

Although private vehicles have direct access to the campus, interstate bus service (Greyhound, Adirondack, Trailways, and Vermont Transit) is presently provided only at terminals located in downtown Albany.

Local transit company buses provide service to all parts of Albany and to other major urban centers within the area.

Railroads. Two passenger railroads serve Albany. The Delaware and Hudson provides limited service between Albany and Montreal, and the New York Central System provides service or connections to all points west, south, and east of the area.

Station facilities are now located in downtown Albany, but plans are being considered to relocate the New York Central Terminal in the Pine Bush area, about two miles northwest of the campus. The D & H station may also be moved but will probably remain near the downtown area.

Airports. The Albany County Airport (three miles from the campus) is the only area airport which is a terminal for scheduled airlines. Mohawk, TWA, and American Airlines provide direct or connecting service to all points west, south and east. Limited, direct service to some northern cities is operated by Mohawk, but most Canadian connections must be made from metropolitan New York terminals.

Although only limited helicopter service exists in the region, provisions for a commercial heliport have been considered in Albany.

CONCLUSIONS:

- (a) Access to SUNY at Albany from other parts of New York State, New England, and elsewhere is good, considering all types of transportation. Because of schedules offered and fares charged, it is assumed that the types of public transportation favored, in descending order of preference, will be bus, railroad, and air.
- (b) At the present time local highway access to the campus for faculty, commuting students, and visitors is relatively good and will improve as new routes are completed and public transportation service is expanded. However, special attention must be given to a new interchange along the Northside connector which can adequately serve the campus.

(c) Because of the favorable transportation picture, students will be able to reach SUNY within an hour from almost any part of the Tri-City area; and the ratio of commuting students to resident students may be relatively high, at least in the undergraduate schools.

(d) Cooperative efforts among the higher education institutions of the area (SUNY and private institutions) toward exchanges of faculty and consolidation of specialized facilities and classes should be made increasingly desirable by the improving highway transportation pattern. The campus location also seems ideal for use as a regional adult education center.

(e) The importance of providing highway and parking facilities prompted the consultants to prepare a special report which may be found in the Appendix.

B. POPULATION

The population of the Tri-City Area (Albany, Rensselaer, Saratoga, Schenectady and Schoharie Counties) is expected to increase by 29.4% to 53.0% by 1980 over the 1960 total of 680,000 inhabitants. Estimates of the 1980 population obtained from various methods of computation range from 880,000 to 1,040,000, according to the January 1963 report of the State Commission on the Capital City. If the present percentage of college age persons (about 5%) is maintained, the number in this age group will reach 44,000 to 52,000 by 1980.

Employment (about 40% of the total area population is employed) must rise in proportion to any overall population increase.

Manufacturing employment, a major generator of other types of jobs, and State governmental and institutional employment will remain key factors in boosting the area's population.

CONCLUSIONS:

(a) The impact of a greatly increased regional population upon the University Center will have a tendency to increase commuter student enrollment at all instructional levels. Commuter parking, unless enrollment limits are instituted and/or area-wide public transit service is improved, will be a major land consuming element.

(b) Increased employment will be a great asset to SUNY - Albany if a sponsored research program is to be considered an important part of the long-range development plan. Another benefit will be the availability of highly trained personnel who could be utilized in cooperative instructional programs at the University.

C. PUBLIC FACILITIES

No major regional electric, gas or other distribution lines limit expansion of the Campus. One minor transmission line of the Niagara Mohawk Power Corporation does cut through land which is suitable for Campus expansion. Portions of this line will be displaced by proposed highway construction at Washington Avenue and it is likely that the line could be relocated along additional portions of its length if the University has acquired additional land.

Highway requirements, relocations and improvements are fully presented in the Appendix. Although limiting Campus expansion to the north and west, the highway construction program will have no detrimental effect on SUNY-Albany if adequate access to the campus is provided during all phases of work.

CONCLUSIONS:

(a) When land acquisition is undertaken, the appropriate utility offices should be appraised of SUNY's expansion plans so that existing facilities can be relocated from unsuitable locations and so that future service easements will not disrupt site planning.

(b) The New York State Department of Public Works should be kept informed of SUNY's expansion plans so that it may act as the coordinating agent for all State and Interstate highway programs having a direct relationship to the Campus. Albany County, the City of Albany and the Town of Guilderland should also be contacted where expansion plans will require coordination with their respective plans.

D. PLANS

Although regional planning is not presently being done in the Tri-City area, it may become a reality in the future. Many individual communities are now doing planning; however, current planning by the City of Albany and the Town of Guilderland is of importance to SUNY.

The City of Albany has plans for the development of the Pine Bush area west of the Campus and beyond the Northway. In addition to some commercial, industrial, and public building sites, some 2,900 dwelling units have been proposed. Married students, faculty and staff will be able to find living units in this section provided by private enterprise. A proposed public park at the Six-Mile Water Reservation will be convenient for use by SUNY resident students as a supplement to University provisions.

The Town of Guilderland is vitally concerned with SUNY expansion plans which will affect planning and zoning in the McKownville section along Western Avenue.

CONCLUSIONS:

- (a) Representatives of Albany and Guilderland should be kept abreast of all definite SUNY expansion plans. A working relationship should be established so that related phases of Campus and community development can be expedited.
 - (b) When regional planning is instituted, SUNY's participation would be helpful to continue proper development of the area's higher educational facilities and programs in cooperation with neighboring institutions, public and private.
 - (c) When Tri-City Regional Planning is instituted, SUNY's participation will be important because of the University's ever-increasing impact upon the area.
-

SECTION III - THE COMMUNITY

A. CLIMATE (Detailed analysis under Section IV)

B. POPULATION

Population increases were forecast for the City of Albany and the Towns of Guilderland and Colonie in the Capital City Commission's report. The number of inhabitants in each municipality for the year 1980 is estimated at 160,000; 22,000; and 95,000, respectively. The 1960 populations of these communities were 129,800; 16,700; and 52,800, in the same order.

The ten-year forecast for Albany probably will show a growth of about 10,000 to a total population of 40,000. Guilderland and Colonie can be expected to have totals of almost 19,000 and 70,000, respectively.

C. CIRCULATION

Three major urban streets--Washington Avenue, Fuller Road, and Western Avenue--border the campus on the north, west, and south, respectively. Local transit service will use these arteries for access to the campus system. Private vehicles from Guilderland, Colonie, and Albany will also utilize these streets. Washington Avenue and Western Avenue effectively block campus expansion to the north and south, but Fuller Road does not totally restrict construction to the west. Fuller Road can be bridged or relocated to provide for campus expansion to the Northway.

Traffic control problems resulting from the influx of campus

traffic will require continuous review by State and local authorities.

D. LAND USE

Along the north side of Washington Avenue, lands across from the SUNY campus are mostly undeveloped except for a large motel-restaurant-theater complex to the east. West of Fuller Road approximately two fifths of the land is vacant. The developed area for the most part is made up of single family residences of moderate value. A cemetery straddles Fuller Road about midway between Washington Avenue and Western Avenue. A large community shopping center is located at the northwest corner of Fuller Road and Western Avenue.

Beginning at Fuller Road, a large section of single family homes extends northward along the north side of Western Avenue. To the east, past the campus lands and fronting on Western Avenue, are some commercial structures. Another large area of homes borders both the SUNY campus (west of the lake) and the State Office Campus. A small tract of vacant land is located in this area.

The major portion of the easterly boundary of the SUNY site is coincident with that of the State Office Campus.

Mixed residential and commercial uses are found along the south side of Western Avenue.

E. UTILITIES (See Section I and Appendix)

F. RECREATION AREAS

The city-owned Six Mile Water Reservation is located at the northeast corner of Fuller Road and Washington Avenue. This area, although virtually undeveloped, is used for picnicing and swimming. It is the only public open space near the campus. Pine Bush development plans call for use of this area as a public park.

G. HOUSING

Although the many nearby single-family homes offer opportunities for faculty and staff housing, few rental apartments are available near the campus. The Pine Bush apartments are available near the campus. The Pine Bush area, slated for development after completion of the Washington Avenue Extension, will offer opportunities for the development of additional housing, both sale and rental types, by private capital.

H. ZONING

To date existing zoning in the Town of Guilderland and the City of Albany has been adequate for controlling the type of development on lands near the campus. Considering the pressures for all types of commercial development which will be felt coincident with campus construction and occupancy, the stiffening of ordinances applying to the greater campus area in both Albany and Guilderland seems most desirable.

Much of the present State property (SUNY and State Office Campus) is not zoned. It is assumed that restrictions on any land which might be acquired in the future could be amended to allow for SUNY's planned growth.

CONCLUSIONS:

- (1) Adequate traffic control should be provided by State and local agencies at points of campus entrance and egress to and from urban streets.
 - (2) Vacant lands adjacent and near the SUNY campus offer immediate opportunities for expansion. Properties in developed areas should be considered for acquisition as they become available.
 - (3) The extensive investigations into problems of water supply and sewage disposal should be continued by the consulting engineers and the City of Albany and Town of Guilderland representatives. The necessary major utilities projects will have a major influence on the phasing of construction. Some determination of what facilities will be needed and who will provide them should be made as soon as possible to expedite any required construction.
 - (4) Recreation areas of adequate size for the student population should be provided on campus so that local public sites will not be overrun.
 - (5) Although the University will provide an extensive number of dwelling units for married students and for faculty members, privately built units should also be considered. These units probably would be most suitable for faculty and staff members and builders might be able to utilize State assistance funds.
 - (6) Discussions should be held with the Zoning Boards of Albany and Guilderland to encourage the establishment and maintenance of high standards for all types of development near the campus. The campus should help attract "better than average" enterprises which could afford to do something extra to improve the general appearance of the area. Any zoning changes should be effected before construction progresses much farther.
-

SECTION IV - CAMPUS AND ENVIRONS

(Key items - to be covered in text and diagrammatically in graphics by overlays)

A. CIRCULATION AND PARKING

1. Major road systems surrounding the campus present serious obstacles to expansion. These road systems are:

- (a) Washington Avenue - a 6-lane major urban artery - recently improved
- (b) Washington Avenue Extension - present proposal seriously reduces amount of available land for expansion at northwest corner of site
- (c) Fuller Road - local city connector for north and south traffic - recently improved
- (d) Western Avenue - existing east-west connector to city - limits expansion to the south
- (e) Westerly portion of the State Office Campus road system - forms expansion barrier to the east
- (f) Interstate road systems beyond the limits of those described above - absolutely define the limits of expansion of any single campus group

- (1) Northside Arterial - N.
- (2) Northway - I-87-W.
- (3) Crosstown Connection - E.
- (4) Northway and Thruway - S.

2. Presently designed campus road system is adequate for a 7,500 student body and perhaps somewhat beyond that number. As future expansion takes place, however, this road system will become inadequate and obsolete and will have to be redesigned to accommodate projected growth.

3. Present parking, designed to handle approximately 3,100 cars for a student body of 7,500, will also have to be expanded to allow future growth. Relocation and redesign of present parking should also be considered, for not only will it be inadequate but it will be occupying locations better suited to academic and housing uses. In addition, the present system of mass parking lots should be restudied for future growth planning, with particular emphasis given to smaller lots in several locations designed to handle a dispersed population.

The design of these areas should be considered from the viewpoint of both the functional requirements and, more important, the overall esthetic requirements of the total University image to be created.

B. TOPOGRAPHIC FEATURES

1. Existing undisturbed natural areas within the boundaries of the present site and campus should be maintained.

2. Existing vegetation and general character of the site to the west of Fuller Road should be recognized. Future development in those areas should be done sympathetically to maintain the general character and quality of open space to tree-covered area.

3. Existing screening between the campus and Washington Avenue should be maintained and possibly supplemented to provide a visual and sound barrier.

4. Existing screening between Washington Avenue and the proposed location of the Northside should be maintained as a buffer.

5. Existing screening between the present campus and the State Office Campus should also be maintained as an element of separation between the two architectural entities and functions.

6. As much as possible of the existing screening along the Northway (I-87) should be maintained to separate any anticipated development in that area from the road and to protect against subsequent noise nuisance, particularly if this area is ultimately designated as a housing area.

7. High points of land provide the necessary vertical elevation for programmed elements such as the Dudley Observatory

C. DRAINAGE

1. There are no major drainage problems at the present time, with the possible exception of spring flooding in the lake area which has occurred in the past. It is presently proposed that this area be regraded to contain any normal spring flooding.

2. The effect of any proposed development in the upper water shed area of the McKownville reservoir area will have to be considered, if this water shed and reservoir cannot ultimately be acquired.

3. The underlying sand base of the site accepts a rapid rate of

percolation which helps prevent flooding that might normally occur if the base were less porous.

D. TOPSOIL

1. The existing depth of topsoil is approximately 5 inches in the undeveloped areas. However, the soil is composed of a thin upper level of decomposing vegetation (leaves and pine needles) and a minimum amount of usable topsoil. In tree-covered areas to be cleared, a loss of approximately 40 percent of the topsoil can be expected.

2. The topsoil condition is typical of that found in native stands of pine and oak, and as such will tend to be rich in humus with a high admixture of sand at the base. The ph will run fairly high on the acid side of the scale.

3. As noted above, it will be difficult to stockpile topsoil in areas densely covered with trees.

In areas where expansion is to be programmed, it can be anticipated that proportionately large amounts of topsoil will have to be brought in from off-site areas.

E. NATURAL FEATURES

1. Existing vegetation in open spaces and undeveloped lands is primarily white pine (*pinus strobus*), scrub or red pine (*pinus resinosa*), and scrub oak (*quercus species*). This vegetation is found consistently

throughout the surrounding areas in small stands. The stands are interspersed with open groves of meadow grass with an occasional volunteer standing in the open glen.

The lower elevations are dotted with typical wet-footed plants of the genus acer, alnus, and populus.

The middle range of vegetation is made up primarily of young plants of the major genres listed above.

2. No rock-out crops exist on the present site and/or environs.
3. The existing lake on the campus should be retained. The disposition of the McKownville reservoir and water shed should be clarified. (See C-2 Drainage.)
4. The natural topography of the undeveloped land is of a rolling nature. The average percentage of slope is approximately 6 percent. The steepest slope percentage on the few hillsides rises to approximately 30-35 percent, with the average percentage of slope across the open land from Washington Avenue southwest to Western Avenue being 2 percent.
5. Soil analysis:
 - (a) Geographically the area is situated generally between the submerged river valley of the Colonie Channel (one-half mile east of Fuller Road) and the Mohawk Channel (one-half mile south of Western Avenue). The bedrock material rising gradually out of these valleys is Hudson River shale. Borings taken in 1952 for the New York State Thruway show fine to medium surface sand varying in depth from 10'-40' (depending on surface elevation) and then grading off to silt at 54'-80',

then through clay at 74'-86' to a bed of glacial till which was found at depths of 110'-152'. Below this depth shale was encountered.

(Note: Core borings taken by the Department of Public Works in 1962 for the Albany campus differ somewhat from this in that sand was encountered through depths to 200' with the ground water table visible at 24' at Elevation 259. See sub-surface data from original campus work.)

- (b) Water table varies, depending on surface elevation, from surface to a depth of 3' in lower elevations, to a depth of 25'-50' under the higher dunes.
- (c) The soil type and bearing capacity can accommodate the total range of building types.

F. VISTAS AND VIEWS

The present complex of academic buildings and towers will provide an unlimited variety of views from outside the campus. The views from within the complex to the outside provide no special or desirable vistas.

G. POSSIBLE POINTS OF VEHICLE ACCESS AND EGRESS

1. Present plans provide access and egress to the campus at three separate locations:
 - (a) Washington Avenue
 - (b) Western Avenue
 - (c) Fuller Road
2. As the student body expands, these access points may be not only inadequate in design for the additional volumes of traffic that can be

expected, but more important they may be insufficient in number.

3. Possible additional points of access and egress should be considered in the following areas:

- (a) High speed access off the Northside arterial
- (b) Expanded ceremonial access off Washington Avenue
- (c) Expanded daily access off Western Avenue
- (d) Provision for adequate sight distances at all of the above locations

H. ENVIRONMENTAL NUISANCES

Environmental nuisances are almost non-existent at the present time and none are anticipated, with the possible exception of traffic noises generated from the proposed highway programs to the northeast and the northwest.

I. CLIMATE

1. Temperature:

- (a) Mean January temperature: 20-25°
- (b) Mean July temperature: 70-75°
- (c) Highest recorded temperature: 104°
- (d) Lowest recorded temperature: -26°
- (e) Mean temperature for growing season: 60-62°
- (f) Average length of growing season: 160 days
- (g) Last killing frost: May 1-10
- (h) First killing frost: October 1-10

2. Precipitation:

- (a) Mean annual precipitation: 35-40"
- (b) Average growing season precipitation: 16-18"

(c) January precipitation:	2-3"
(d) July precipitation:	3-4"
(e) Greatest recorded rainfall (in 1 month):	13.48"
(f) Least recorded rainfall (in 1 month):	.08"
(g) Mean annual relative humidity (7:30 A. M.):	78%
(h) Average annual snowfall:	50"
(i) Average number of days with 1" snow cover:	50 ±

3. Wind Direction:

(a) March:	Northwesterly
(b) Remaining months:	Southerly

At no time during the year are the winds considered excessive

4. Sunshine:

(a) Mean sunshine for growing season:	60% of possible sun (Sunrise to sunset)
(b) Mean January sunshine:	44% of possible sun
(c) Mean July sunshine:	61% of possible sun

SECTION V - PROPOSED CAMPUS PLAN

While the guiding philosophy throughout the development of the Comprehensive Campus Plan has been to carry forward the concept initiated in the existing Master Plan for 1970, all current planning is a synthesis of the many factors bearing on the development of any university center.

The influences of the region and the community, the education program, existing conditions, and many other considerations have been analysed and are expressed in the Interim Plan.

In keeping with the University's present thinking, the projected enrollment for the year 2000 is approximately 15,000 students, with possible expansion to an ultimate size of some 20,000 students.

The State University at Albany is an urban liberal arts university, with integrated facilities and faculty for graduate and undergraduate students. In order to achieve a suitably tranquil academic environment, it is the desire of the Architect to discourage casual observers and limit community participation in campus activities to "invited guests."

The design expression has taken the form of a strong central academic core, distinguished by continuous colonades which unify the buildings visually and provide pedestrian shelter. The individual buildings are grouped functionally around landscaped courtyards.

Expansion of the academic core takes place at both the east end and the west end of the existing podium, with expansion of both the Humanities and the Science complexes physically contiguous and architecturally similar to the buildings currently in the design phase.

Expansion of undergraduate housing has been accomplished by the addition of four tower-low rise groups located at the four corners of the podium.

Married student housing has been located to the west of Fuller Road, where there is direct access to a secondary city street and an existing shopping facility. These buildings would be 2-story row house apartments, opening on landscaped quadrangles and situated to take advantage of the pleasant, rolling countryside.

Growth of athletic facilities will occur adjacent to the existing gymnasium, with a common plaza expressing the public orientation of the facilities. Play fields have been expanded to the east and to the west, where they will serve as green buffers for the dormitory groups. Additional playfields have been developed on State-owned land across Washington Avenue.

Graduate research facilities and graduate living facilities have been grouped in a complex to the east of the main campus. This location provides:

- (1) Easterly termination of the campus
- (2) Easy access to the community at large
- (3) Desirable separation of graduate living from the undergraduate core.

In addition, should faculty offices expand into the State Office Campus, the functional relationship of the two facilities would be most desirable.

Automotive circulation is basically handled by a perimeter loop with entrances from all adjacent city streets. The Washington Avenue entrance will be the "ceremonial" entrance, with another major point of access developed at the gymnasium complex.

The Interim Plan makes use of major portions of the existing road system; and although there are some areas where alignment is less than ideal, the high cost of relocation does not seem justified for low-speed campus traffic.

Service circulation will share the pedestrian walk system which links all elements on campus. In areas where heavy service will be required, there are service loops directly from the perimeter road.

Undergraduate Subject Areas (1963)

Teacher Education Program

Bachelor of Arts:

English
 French
 German
 History
 Latin
 Mathematics
 Science
 Social Studies
 Spanish

Bachelor of Science:

Biology
 Business
 Chemistry
 Mathematics
 Physics

Additional Programs in
 General Education

Bachelor of Arts:

Economics
 Political Science
 Psychology
 Speech

Bachelor of Science:

Earth Sciences

Master's Degree Program (1963)

Biology
 Chemistry
 Physics
 Business
 Education
 English
 Earth Sciences
 French
 Latin
 Mathematics
 History
 Social Sciences
 Speech

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APPENDIX C

REPORT ON WATER SUPPLY, by John J. Baffa Associates,
Consulting Engineers

The master planning for the water supply can in general be accomplished as follows:

1. Entire future water requirements can be supplied through the present campus area pumping station with properly sized pumping equipment and appurtenances and adequate storage facilities. An increase in size of the currently proposed 12-inch feeder main to the University site would prevent future disturbance of paved areas by a parallel pipe line. A 14- or 16-inch line would provide adequate capacity at only 16- to 30% increase in cost. Exact sizing requires detailed consideration of requirements versus pump head characteristics.
2. The City of Albany distribution system feeding the campus area should be reinforced with adequately sized pipe lines. Sizing and arrangement should take due account of area growth in accordance with the City of Albany master planning.

3. For sewerage, the recommendations in our report of 27 December 1962 are still valid for the period to 1970. Beyond this, the University requirements must be taken care of by comprehensive sewerage planning for the Albany area.
4. Storm water drainage - main drain to Western Avenue should be designed to handle 200 cfs. Drainage in Western Avenue should be improved.

REPORT ON HVAC WORK, ELECTRICAL WORK, PLUMBING,
by Cosentini Associates, Consulting Engineers.

HVAC WORK:

The present campus is being designed for a student population of 10,000, which includes work planned in Phases I, II, and III, plus 12 future classroom buildings. The installed refrigeration tonnage for this extent of the work will be 5,000 tons, and the total installed HTHW boiler capacity will be 260,000,000 BTU/Hr. (1,670,000 # HTW/Hr. @ 150 F. T.).

A master plan of study for the campus is presently underway with a potential student population of 20,000. This includes a future Research School with two (2) graduate dormitories. The estimate of total required refrigeration capacity for the entire campus is 9,000 tons, with a boiler capacity of 540,000,000 BTU/Hr. (3,460,000 # HTW/Hr. @ 150 F. T.).

For the overall master plan, several alternate schemes of distributing the chilled water and HTHW services are feasible.

Basic schemes are outlined as follows:

Scheme No. 1 (See Dwg SK-HVAC-1)

A. Description

1. Future boiler and refrigeration plants to be constructed adjacent to present one. Combined plants to include ultimate heating and refrigeration capacity of future campus, less the refrigeration load of the Research School, two graduate dormitories, and two undergraduate dormitories at the east end of the site.

2. Future distribution tunnels to be provided to serve the future buildings, as shown on the above drawing. Booster pumping station in extended HTHW piping system to be provided as required.

3. Piping sizes in present main pipe tunnel from Service Building to Academic Complex and in Dormitory No. 1 to remain unchanged.

4. Piping in present service tunnel looping the Academic Complex to be sized to serve 14 additional future peripheral classroom buildings (in addition to the 12 future buildings now being designed.)

B. Impact on Work Presently Under Construction

1. Piping, pipe anchors, expansion loops and equipment to be reviewed for adequacy in handling future loads and stresses due to increased future pressures in piping systems.
2. Present site work affected by future distribution tunnels.

C. Impact on Work Presently Being Designed

1. Sizing of HTHW and chilled water piping mains in Academic Complex to be increased to accommodate 26 future classroom buildings instead of the 12 future classroom buildings presently being designed.
2. Increase of pipe sizes, insulation, supports, etc., for Item 1 above, will result in higher HVAC contract prices for Phases II and III of the project.

Scheme No. 2 (See Dwg. SK-HVAC-2)

A. Description

1. Future boiler and refrigeration plants to be constructed adjacent to present one. Combined plants to include entire capacity of future campus, except for Research Center and two graduate dormitories.
2. Second future boiler and refrigeration plant, to serve future Research Center and graduate dormitories only, to be constructed within or in vicinity of these buildings in a suitable location.

3. Future distribution tunnels to be provided to serve the future buildings, as indicated on the above drawing.

4. Piping sizes in present main pipe tunnel to Academic Complex to remain unchanged.

5. HTHW piping in present service tunnel looping Dormitory No. 1 and in branch to Gymnasium to be resized to accommodate future enlarged Gymnasium Complex.

6. Piping in present service tunnel looping the Academic Complex to be sized to serve 14 additional future peripheral classroom buildings and future Dormitories No. 7 and 8 directly east of the classroom building area.

B. Impact on Work Presently Under Construction

1. Piping, pipe anchors, expansion loops and equipment to be reviewed for adequacy in handling future loads and stresses due to increased future pressure in piping system.

2. HTHW piping in north and east tunnel of Dormitory No. 1 will have to be increased in size to serve future enlarged Gymnasium Complex. This will undoubtedly be a price extra for the HVAC work in this contract.

3. Present site work affected by future distribution tunnels.

C. Impact on Work Presently Being Designed

1. Sizing of HTHW and chilled water piping mains in Academic Complex to be increased to accommodate future Dormitories No. 7 and 8 in addition to 26 future classroom

buildings instead of the 12 future classroom buildings presently being designed.

2. HTHW pipe sizes for lines serving Gymnasium area to be increased due to enlarged scope of Gymnasium Complex.

3. Increase of pipe sizes, insulation, supports, etc., in above two items will result in higher HVAC contract prices for Phases II and III of the project.

RECOMMENDATION

After studying the above two basic schemes, it is our opinion that Scheme No. 2 would be more desirable by all parties concerned. Briefly, this is due to the fact that:

1. Present work on Phases I, II, and III, is affected only minimally.
2. Long expensive future pipe tunnel is eliminated, thus avoiding re-routing of site development utilities, and piping booster station.
3. Research Center Complex is completely independent of remainder of campus, hence not limiting the extent of this major component of the University.

ELECTRICAL WORK:

The electrical distribution system is presently designed to handle a maximum load of 10,000, to 12,000 KVA, based on the

buildings instead of the 12 future classroom buildings presently being designed.

2. HTHW pipe sizes for lines serving Gymnasium area to be increased due to enlarged scope of Gymnasium Complex.

3. Increase of pipe sizes, insulation, supports, etc., in above two items will result in higher HVAC contract prices for Phases II and III of the project.

RECOMMENDATION

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3. Research Center Complex is completely independent of remainder of campus, hence not limiting the extent of this major component of the University.

ELECTRICAL WORK:

The electrical distribution system is presently designed to handle a maximum load of 10,000, to 12,000 KVA, based on the

proposed University plan for 10,000 students, that is (4) Dormitory Complexes, the Academic Complex plus (12) future classroom buildings, the Gymnasium, the Infirmary and the Service Buildings. The incoming electrical service is presently being taken, by means of (3) underground feeders at 13,200 volts, from the existing sub-station built by the Department of Public Works to serve the Campus Office Building site. The anticipated load is the maximum that the sub-station can handle over and above the Office Building load.

The proposed ultimate development of the University to handle 20,000 students would increase the estimated electrical demand load to approximately 22,000 KVA and would, of course, require an additional service from the Niagara Mohawk Power Company. This additional service would be received possibly at 34,500 volts, but most probably at 115,000 volts, and would necessitate the construction of a new sub-station by the State University of New York to receive this service and step it down to 13,200 volts for distribution to the new buildings.

Prior discussions with Niagara Mohawk in relation to service for the original project indicated that the incoming service would have to be in the northwest sector of the property, preferably from north of Washington Avenue, but possibly from west of Fuller Road.

At the time the new sub-station will be built, the Service Buildings (including the Refrigeration and Boiler Plants), Gymnasium and Dormitories 1, 2, 4 will be separated from the existing service,

and connected with the Milne School, Housing and Dormitories 5 and 6, to the new service, thus freeing sufficient capacity in the existing service to handle the expanded Academic Complex, Dormitories 3, 7, 8, 9, 10, and the Research School and Gymnasium. Normally open ties will be provided between the new and old services to enable operation of the entire University on an emergency basis should one service fail.

The impact of this proposed expansion on the electrical work already designed and under construction is rather limited. Its main effect would be to require provision of additional spare ducts in certain of the underground electrical runs which were formerly branch runs, but which would now become major duct banks.

A sketch has been prepared showing possible routing of the distribution system for the ultimate site development.

The incoming telephone service is based on an ultimate plant of 5,000 lines which may or may not be adequate for the proposed expansion. The Telephone Company must be consulted with regard to this matter since the allocated telephone ducts may not be adequate, and since additional space may be required for the Console Room and Frame Room to be located in the Biology Building. Since telephone service is to be received by making use of (8) spare ducts in an existing duct bank originally designed to serve only Building No. 22 (Alternate Seat of Government), a second telephone service entrance point may be required in the future.

PLUMBING:

A. Present Planning

The present design considerations include a student population of 10,000 (Phase I, II, and III, plus 12 future Academic Buildings).

The interior plumbing systems required for the present project are contained within the buildings and services (water, sanitary and storm water house sewers), will terminate at points ten feet beyond the building walls. Gas service will be connected to existing Niagara Mohawk facilities and services extended into the buildings.

B. Future Master Plan

1. Impact on Work Presently Being Designed

Interior Plumbing Systems - Changes to the basic present design considerations concerning house drains, domestic water and fire protection will be limited to possible increased pipe sizes, relocation of main services entry points into the Academic Complex. This will increase Phase II and III contract costs.

2. Sanitary and Storm Water House Sewers

Sanitary and storm water house sewers which will be located under the future expanded Academic Complex podium deck will have to be closely coordinated with the site planners in order that proper elevations can be attained to insure basic gravity flow, sufficient

2. Future Boiler Plant - If additional boiler plant facilities will be installed in the Service Buildings, additional plumbing roughing will be required under the present contract, which will result in cost extras.

PRELIMINARY DRAFT
HIGHWAY AND TRAFFIC REPORT
FOR THE
STATE UNIVERSITY OF NEW YORK
AT ALBANY

SCOPE

This report deals with the existing and proposed regional highway system in the vicinity of the projected University area, analysis of the surrounding State, County, City and town highway network, both existing and planned for the future; and the interior road system of the University. Access from the University to the adjoining highway system has been treated as a vital consideration in the analysis. The location and size of parking areas has been investigated and recommendations have been made in this respect. Bus transportation has been considered and the requirements of the University set forth in this field.

Rail, airline and helicopter service are not included directly in the scope of this report. At the present time, both rail and air transport appear adequate to serve the present-day needs. The New York Central Railroad has plans to relocate the railroad passenger terminal for the central Tri-City area to a location northwest of the campus site, southeast of route 5 - Karner Road intersection. This will provide passenger rail facilities within about three miles of the campus. Presumably, both airline and railroad service would be expanded to meet the additional demand, as a matter of intelligent private enterprise.

It would be reasonable to expect that helicopter travel will become more prevalent in the future, particularly considering the proximity of the Campus with respect to the Albany airport. Provision for helicopter landing should be considered so that fields can be developed when the need arises. This will not add materially to the costs involved and will provide flexibility to the transportation plan for the area. Alternate feasible locations for these fields are shown on the proposed plan.

HIGHWAY TRANSPORTATION

The campus area will be completely ringed by a system of roads and will have limited access State arterial and town and county class routes will encompass the University in a general clockwise pattern varying from one and one half to two miles in length. These roads will serve persons board and off the bus and will provide access to the campus entrance and exit.

plan, as presently proposed for these routes, is excellent in many respects. Access from these highways to the entrance drives via the local street system is one of the main considerations of this report.

Peak hour estimates indicate a total of 3,000 vehicles with the State University as their destination in 1975. This is based on the following summary:

TYPE	NUMBER	% DRIVING	NO. PERSONS	PEAK HOUR VOLUME
Undergraduates	6300	12	756	---
Married on Campus	810	75	770	---
Graduate Students	900	35	315	150
Commuting Students	7000	55	3850	1200
Faculty & Staff	3600	70	2520	1500
Visitors & Service				125
Buses				25
TOTALS	18600			3000

The above is based on an occupancy ratio of 2.4 students per vehicle in the commuting student category, with 75% arriving during the peak hour. It is further assumed that the remaining 3150 commuting students will use mass transit or other means of transportation.

If provision can be made for these 3000 trips during the peak hours, then it is assumed that the remainder of the day will be provided for by the street and highway system. The morning peak hour has generally been considered to be the critical time period in this analysis. It is recognized that there may be a few days during the year; for example, during major athletic events, when capacity will be exceeded for periods of time. It is not the intent of this report to provide for these maximum periods, but rather to assure the highway and parking capacity for those critical hours that occur 5 days per week.

Two thousand of these vehicles have been assigned to the expressway system. The remaining 1000 have been assigned to the local street system. The streets comprising this system and the major feeder roads in the vicinity tributary to them are tabulated as follows:

Western Avenue

Eastbound and westbound on Western Avenue
 Old Fuller Road
 State Office Campus
 University campus (access at one point)
 Schoolhouse Road

Washington Avenue

Eastbound and westbound traffic on Washington Ave.
 Old Fuller Road
 Eastbound from the Northside arterial
 State Office campus complex
 University campus (at 3 points)

Fuller Road

Western Avenue
 Central Avenue
 Washington Avenue
 Westbound from the Northside arterial
 University campus (access at two points)

With respect to the access to the University Campus the following potential problems are explored:

- A. A left turn (presumably at a signalized intersection) is necessitated for westbound traffic exiting from the Northside arterial at Fuller Road.
- B. Westbound traffic on the Northside arterial desirous of approaching the campus site from the Crosstown interchange will have to merge with office campus traffic in addition to Washington Avenue traffic and then turn left into the campus from Washington Avenue. This would be an opposed left turn against a traffic volume that can be expected to be less than the 1963 volume but still a substantial quantity. The alternative route would be for westbound traffic to travel to Fuller Road. However, this would then necessitate the left turn referred to in A above and possibly an opposed left turn at Fuller Road and Washington Avenue, in addition to a mile of additional travel distance.

Two alternatives are presented to simplify this movement. One would be to provide a connection from the southbound Office campus access road direct to the University campus. This would achieve

the desired result of crossing Washington Avenue at a grade-separated location. It would, however, place a substantially increased volume on the off ramps serving the Office campus. These volumes are estimated to be 740 from westbound Northside arterial merging with 1000 from the eastbound direction of the Northside arterial. The other alternative would be to construct a weaving section between the westbound on ramp of the Office campus and an off ramp for westbound traffic in the vicinity of the projected main University campus entrance. The design of this weaving section could be similar to that proposed for eastbound traffic between the Office campus interchange and the Crosstown interchange.

- C. The return movement of campus traffic to the east via the Northside arterial will necessitate the mixing of University and Office campus traffic unless access is provided in the proximity of the main entrance. However, the construction of an on ramp for eastbound traffic in this section, along with a weaving section between this ramp and the eastbound off-ramp at the Office campus interchange would provide an expeditious route for the campus movement to the east, relieving both Washington Avenue and the Office campus network.
- D. In the event that the partial interchange consisting of provision for an off ramp for westbound and an on ramp for eastbound traffic is approved, a grade separation between this roadway and Washington Avenue would be extremely desirable. This would prevent any possible back-up on the Northside arterial and relieve Washington Avenue of the burden of a heavy crossing movement.
- E. Eastbound traffic turning off the Northside arterial at the ramp west of the campus will have to turn left at Washington Avenue. Traffic signal control at this intersection appears to be warranted. As an alternative, the off ramp could be moved easterly.
- F. Westbound traffic utilizing Washington Avenue from the Albany area would have to make an opposed left turn in order to obtain access to the campus. However, this would not be a serious conflict if the westbound Northside arterial traffic destined for the campus was serviced by the partial interchange

in the vicinity of the main entrance.

- G. Opposed left turns will be required for southbound Fuller Road and eastbound Western Avenue traffic in order to gain access to the campus.

SUMMARY OF PROBLEMS AND OPPORTUNITIES

RELATING TO EXTERNAL ROADS

LIMITED ACCESS ROUTES

A. Southside Arterial

Completion of the ramp system connecting with Route 20 will provide a direct right turn for traffic leaving the campus by way of Western Avenue with destination to the North. Traffic approaching from the north would have a non-opposed left turn at the signalized ramp connection and an opposed left turn at the campus entrance. The latter could be modified by means of an indirect left turn loop at grade if the volumes warranted this treatment in the future.

B. Crosstown Arterial

Traffic approaching the University campus from the southeast would approach via the Southside arterial and the Crosstown arterial, exit at Cortland street, turn left at Ormond Street and again turn left at Western Avenue. The addition of an indirect loop for northbound Crosstown traffic desiring to turn westbound on to Western Avenue would eliminate the necessity for the two left turns referred to above. This loop would be an addition to the northbound off ramp in the vicinity Brevator Street.

Northbound traffic on the Crosstown desiring entry to the northern portion of the Campus would travel a section of the Office campus loop and Washington Avenue, turning left into one of the Washington Avenue entrance drives.

C. New York State Thruway

Interchange locations on the Thruway will remain

at their existing points. There should be no direct effect on the University Campus.

D. Northside Interstate

The addition of a westbound weaving section and off ramp for the main entrance and a eastbound weaving section and on ramp, will preclude the necessity for heavy left turn movements on and off Washington Avenue into the main entrance. Eastbound off movements would be made as shown in the present design at a ramp just west of the campus site; or, more desirably, at a ramp near the main entrance. The westbound on movement could be made at another location, although it would be desirable to provide for this at the location of the proposed interchange.

OTHER HIGHWAYS

Route 5 relocation. This proposal has not yet progressed to the design stage. One possible terminal point at the easterly end would be at the Thruway interchange. This would connect directly to the Thruway, the Northway and the Northside arterial. Regardless of the exact alignment, the net result would be to considerably reduce the travel time from the Schenectady area to the Campus.

Route 20. There are no existing plans for major improvements to Western Avenue. This report includes a recommendation for the acquisition of land for a left turn trumpet on the south side of Western Avenue at the Campus entrance.

Fuller Road. This highway has recently been improved and will provide direct access to the Campus. Provision for a relocation to the west should be investigated concurrently with development plans of the University to the west of existing Fuller Road. However, it appears desirable to maintain the existing roadway to service the main campus, the Cemetery and act as a connection between the main campus and the faculty and married student housing areas.

Washington Avenue. The extension of Washington Avenue will result in the following:

- A. The road will be relieved of a considerable volume

of through traffic presently using the thoroughfare in both directions to and from the Thruway and Northway.

- B. A gradual increase in these volumes is to be expected through development of the Pine Bush area and normal increases including University Traffic.

ANALYSIS OF APPROACH AND DEPARTURES

Vehicles approaching the campus have been assumed as approaching in a volume proportional to the population served. Utilizing Route 20 as an east-west axis generally and Fuller Road as a north-south axis, the following assignments have been made using a four quadrant system.

Northwest - 24%

Northeast - 40%

Southeast - 24%

Southwest - 12%

Peak hour estimates indicate a total of 3000 vehicles with the State University as their destination. 2000 of these are expected to be served by the expressway and interstate system and these have been assigned by the State Bureau of Highway Planning. The remaining 1000 have been assigned to the local street system approaching the campus. The following are the methods of approach and the advantages of each:

FROM THE SOUTHEAST

A. VIA THE THRUWAY, WESTBOUND

Access to the northern portion of the campus would be by way of the Northside arterial to off ramp to Washington Avenue, unopposed left turn to Washington Avenue and a right turn to the campus drive, or directly from the Northside arterial to the campus depending on the location of the off ramp. Those desiring access to the Fuller Road campus drive would follow the Northside arterial to Washington Avenue, right turn at Washington, left at Fuller and left at drive. Access to the southern portion of the campus could be by the on ramp to the southside

arterial and the off ramp at Western Avenue, unopposed left turn and the opposed left turn from Western Avenue to the drive. Provision for future construction of a left turn trumpet could be made at this point.

- B. VIA THE Southside arterial to the northern portion of the campus could be traversed either by means of the Crosstown arterial and Washington Avenue or by traveling the southside to the Northside interstate and hence directly into the campus, provided the eastbound off ramp is constructed to connect directly to the main entrance drive.

FROM THE NORTHEAST

- A. Via the northside arterial; westbound to the north portion of the campus directly into the main entrance, with the inclusion of the ramps referred to in the proximity of the main entrance. Alternately, travel through the office campus complex would have to be achieved.

Access to the southern portion of the campus would be utilization of the Crosstown connection to Cortland Street.

Travel to the Fuller Road drives would be by means of the off ramp to Fuller Road, unopposed left turn to Fuller Road and opposed left turn to the drives.

- B. Travel westbound on Western Avenue would be by right turns on Western Avenue access drive or by right turn to Fuller Road.
- C. Travel on Washington Avenue would be by opposed left turn into the campus.

FROM THE NORTHWEST

- A. Traffic southbound on the Northway would have the ability to use the ramps at Western Avenue for access to the southern portion of the campus or the Northside arterial and Washington Avenue for access to the Northern portion.
- B. Traffic from Central Avenue and any future route 5 relocation that chose to use Fuller Road would

have direct access along Fuller Road and hence either to Washington Avenue or Western Avenue.

- C. Eastbound traffic on Washington Avenue extension would have direct right turn access points to the Campus.

FROM THE SOUTHEAST

Access would be by School House Road to Western Avenue to the Campus by means of opposed left turn.

A summary of these movements and related problems is tabulated in the following table:

TRAFFIC INBOUND TO UNIVERSITY

DIRECTION	ROAD	VIA	LEFT TURNS	DIRECT RIGHT TURNS	RAMP TURNS	BEST ACCESS	VOLUME PEAK HOUR	
Eastbound	Thruway	Northside			1	Wash Av.	150	*
Westbound	Thruway	Northside			3	Wash Av.	50	*
Southbound	Northway	Northside			2	Wash Av.	350	*
Southbound	Northway	Western Av.	2			Western Avenue	200	
Westbound	Southside	Crosstown & Western		1	2	Western Avenue	250	
Westbound	Southside	Western	1	1		Fuller Road	200	
Eastbound	Northside					Wash Av.		Cov. aby.
Westbound	Northside				1	Wash Av.	550	*
Northbound	Crosstown			1	1	Western Avenue	150	
Eastbound	Western Av.		1			Fuller Road	50	
Westbound	Western Av.			1		Western Avenue	350	
Eastbound	Washington			1		Wash at Grade	50	
Westbound	Washington		1			Wash at Grade	350	
Southbound	Fuller Rd.		1			Fuller Road	200	
Northbound	Fuller Rd.					Fuller Road	100	

* Assumes that a new interchange is provided

TRAFFIC OUTBOUND FROM UNIVERSITY

LEAVING	TO (DIRECTION)	ON	VIA	LEFT TURNS	DIRECT RIGHT TURNS	RAMP TURNS
Wash Av. at grade	Westbound	Thruway	Fuller Rd. & Northside	2	1	**
Wash Av. at grade	Eastbound	Thruway	Fuller Rd. & Northside	2	1	**
Wash Av. at grade	Northbound	Northway	Fuller Rd. & Northside	2	1	**
Western Avenue	Northbound	Northway	Western Av.		1	
Western Ave. or Fuller Rd	Eastbound	Southside	Western Avenue	1	1	
Wash Av.	Westbound	Northside				Cov shy #
Wash Av.	Eastbound	Northside	-			1 #
Western Avenue	Southbound	Crosstown	Western Avenue	1	1	
Fuller Rd	Westbound	Western Avenue	Fuller Rd	1	1	
Western Avenue	Eastbound	Western Av.		1		
Wash Av at grade	Westbound	Washington Avenue		1		
Wash Av at grade	Eastbound	Washington Avenue			1	
Fuller Rd	Northbound	Fuller Rd.			1	
Fuller Rd	Southbound	Fuller Rd.		1		
Western Avenue	Eastbound	Southside	western & Crosstown	1	1	

* assumes that a new interchange is provided

** assumes that a direct westbound ramp is not provided to the Northside arterial

SUMMARY OF RECOMMENDATIONS PERTAINING TO
HIGHWAY AND LOCAL STREETS

- A. An interchange with provision for the following movements should be considered for the area in the vicinity of the main campus entrance
- (a) on ramp for eastbound traffic
 - (b) off ramp for westbound traffic
 - (c) off ramp for eastbound traffic
 - (d) separate weaving sections as required for the above movements.
- B. In the event that this location is considered too close to the office campus interchange, the proposed location of the new interchange could be moved to the west to the vicinity of the western access to the campus on Washington Avenue.
- C. If "B" above is adopted consideration should be given to:
- (a) Providing an on ramp for westbound traffic from the campus to the Northside arterial as a part of the new interchange.
 - (b) eliminating the westbound off ramp to Fuller Road.
 - (c) Consideration should be given to a grade separation at one of the three entrances to the campus, where it crosses Washington Avenue. This would be in conjunction with the interchange referred to in A or B above.
- D. Provision for a future trumpet for indirect left turns to the campus drive from Western Avenue should be included in the design for future construction.
- E. A right turn ramp from the Crosstown arterial highway for northbound traffic desirous of traveling west on Western Avenue would expedite this movement to the southern portion of the campus.
- F. Provision for a route parallel to Fuller Road should be considered.

INTERIOR ROADWAYS

Access to the interior roadway system would be by means of two points on Fuller Road, one on Western Avenue and three on Washington Avenue, one of which is recommended to be grade separated. Each of these grade intersections should consist of two inbound and two outbound roadways separated by a median strip.

The interior roadway layout can be either 2-way undivided or two one directional roadways separated by a landscaped median strip. It appears that for initial design of the main interior roadway a divided highway should be employed. This would permit all the benefits that accrue from this type of development; namely, safer pedestrian movement, left turn lanes where needed, an available area for utilities, signs, traffic control devices, street lighting and snow storage. This boulevard type construction would require a right-of-way of approximately 110 feet, to be utilized as follows:

2 - 24 foot pavements	-	48
2 - 11 foot shoulders	-	22
2 - 10 foot sidewalk and utility areas	-	20
1 - 20 foot median strip	-	<u>20</u>
Total		110 feet

Access points to the local collector street system should be located conveniently to the parking areas on the campus. Sufficient points should be available at the proper points to insure that:

- (a) Congestion will not develop at access points due to lack of capacity.
- (b) Traffic traveling to the campus can approach and depart via an access point located in the direction of their origin, thus insuring that an added burden is not placed on the surrounding expressway and local street system unnecessarily.
- (c) The proper traffic control devices should be placed at the access points to the University.

It appears to be reasonable that each building on the campus have available, a service road, for periodic use, for deliveries, movement of furniture and machinery and to meet the needs of handicapped students, etc. These roadways should have a paved width of 24 feet, with parking or loading areas at the terminal point. If there is any doubt as to the adequacy of future use of the service area, a 28 foot width will insure two-way movement with parking on one side for those persons who feel

their business is of enough importance to park other than in authorized locations.

PARKING

The parking requirements have been subdivided, for the purposes of this study, into the following:

- (a) resident, both single and married
- (b) daily
- (c) visitor
- (d) special events

The total parking requirement for the peak period during an average weekday have been estimated as follows:

TYPE	NUMBER	% DRIVING	# VEHICLES IN USE ALL HOURS	# PARKING SPACES TO BE PROVIDED
Undergraduate	6300	12	756	756
Married on Campus	810	75	770	770
Graduate Students	900	35	315	200
Commuting Students	7000	55	3850	1800
Faculty & Staff	3600	70	2520	1800
Service	300	100	300	
Visitors	400	80	320	150
TOTAL			(say 5500)	5476

A study of other Colleges and Universities throughout the Country indicates that the size of student bodies, faculties and staffs has increased rapidly in the past two decades. The use of automobiles by University faculty and staff has grown at approximately the same proportion as the rate in other occupations. However, student dependance on the automobile has greatly exceeded earlier expectations. More than one half of the students on many campuses now own or have the use of automobiles. The increase in married students, graduate students and students who hold part-time jobs are all factors that tend to raise vehicle ownership and

operation on the campus. Many students consider the automobile a necessary means of transportation and in many instances, where public transportation is not available, this is the case.

The importance of convenient, landscaped parking areas cannot be overemphasized. Faculty and staff often look upon availability of parking space as a fringe benefit in considering a job offer. Visiting lecturers and industrial clients must be accommodated with parking that is available at all times during the day. Short seminars with a duration of from 2 to 14 days, will attract large numbers of temporary students to the University.

In the case of the State University the campus would have to be completely self-sustaining with respect to parking and loading areas. Parking areas must be developed concurrently as each stage of building construction progresses.

Resident parking could be assigned the longest walking distance from living quarters to parking area. This would indicate that the 1500 parking spaces assigned to the single and married resident students could be assigned the most distant areas.

The daily parking requirement of commuting students could be assigned the next most convenient block of spaces. Eventually 2000 spaces would be assigned to this use. The faculty and staff would be assigned the next areas closer to the academic complex. This is estimated to ultimately require an additional 1800 spaces.

Visitor parking should be the most conveniently located to the buildings. It is estimated that 150 spaces should be initially assigned to this use.

The time at which special events which would attract large numbers of people would normally be scheduled can be assumed to be at times when the normal academic activities are not at their peak. A considerable amount of the above parking spaces would be utilized to perform the dual role of their primary function during the normal week day and to meet the demand of special event parking when required.

In general, with respect to walking distances, it is recommended that the distances from parking areas to buildings or recreational fields be not greater than 800 feet. A nine foot by twenty foot parking stall with a twenty-two foot aisle should be the minimum dimensions used for design. The original site plan shows approximately 3100 spaces for initial development. Additional areas can be brought into use as enrollment expands.

TRANSIT OPERATIONS

The United Traction Company presently operates from the City of Albany along Western Avenue and Washington Avenue. Commuting bus service is also presently available from Troy and Schenectady to Albany. The Schenectady-Albany bus route on Central Avenue will be within one and one-half miles of the campus and a re-routing of some of these buses would bring them directly to the campus. If this could not be accomplished, a transfer point could be established on Central Avenue for shuttle service to the campus. These buses seat from 40 to 45 persons.

Operation on Western Avenue does not appear to present any extraordinary problems. Entry would be by means of right turn and exit would be by unopposed left turn. The approach on Washington Avenue would require an opposed left turn and may require a left turn phase on the traffic signal installation. Exit would be by means of direct right turn.

The transit route for Washington Avenue would utilize the most easterly grade intersection on Washington Avenue, travel around the main oval and back the same route. Eventually, the Transit Company may wish to extend the route to the west on Washington Avenue extension. The route for Central Avenue would utilize the most easterly entrance on Western Avenue, around the perimeter road to the main oval and exit via the perimeter road to the original point of entry.

SERVICE CIRCULATION

The volume of service deliveries is not expected to be a critical consideration in the circulation plan. The main aspect that should be considered is to insure that service deliveries are kept to a minimum during periods of peak flow in the morning and evening hours. It would appear that the more access points available for service vehicles, the greater would be the driver's ability to pick the least congested route to his destination. However, it may be desirable to limit service vehicles from using certain access points and circulation drives. It is apparent, however, that all points on the campus must be serviced at one time or another so that a great deal of flexibility must be maintained in this matter.

SPECIAL EVENTS

The gymnasium is to be located on the southerly side of the campus with parking areas located 1/4 and 1/2 mile away. Access from Fuller Road and Washington Avenue would be direct

and should present a vehicular problem. However, access by way of Western Avenue would necessitate travel over the perimeter road to the parking areas. At the same time some circulation on the perimeter road is to be expected by persons entering from the other two streets attempting to obtain more advantageous parking locations and those whose normal business requires movement on the perimeter road.

The traffic carrying capacity of the perimeter road should be such as to accommodate the volumes expected during normal periods in addition to anticipated volumes for the majority of recurring special events. During these periods one lane of traffic at low speeds is designed to handle approximately 600 vehicles per hour. This volume can be expected to be considerably exceeded during frequent periods and combined with the decrease in capacity occasioned by inclement weather, parked or disabled vehicles, pedestrian interference and other turbulence created in the traffic flow, the necessity for providing two lanes in each direction becomes evident.

The parking areas lie between the perimeter road and the main campus thereby eliminating much of the conflict between pedestrians and vehicles. It will be necessary for motorists to park and cross one aisle in the parking lot to gain access to the walkways leading to the gymnasium and playing fields. The pedestrian walkways, as designed, appear to give excellent access to all parts of the campus.

Special event traffic loads also point up the need for direct access to the expressway system via the northside arterial. Peak discharge volumes are not easily predictable with respect to the points of egress that will be selected. Travel time considerations can be expected to be the critical consideration rather than travel distance, during these events. The existence of two access points connecting Fuller Road with parking area number 4 and the availability of direct access to Washington Avenue and access to the expressway system from parking area number 1 will tend to distribute the peak load over a greater portion of the surrounding highway system.

The location of the stadium should be designed to insure that:

- A. Adequate parking is available.
- E. Adequate capacity is available from and to the adjoining street system at a minimum of three points, with six traffic lanes available for each direction connecting the parking areas with the street system. Proximity to the University is a prime factor in the location of the Stadium. This will enable the University parking areas to serve a dual purpose and tend to decrease the amount of special stadium parking required.

APPENDIX

Existing Traffic Volumes

Fuller Road, south of Washington Avenue
1962 design hour - 794, AADT - 8534

Fuller Road extension (from Northway) just north of Route 20
1962 design hour - 671, AADT - 11,178

Fuller Road, north of Washington Avenue
1962 design hour - 998, AADT - 11,990

Western Avenue (between Fuller Road and Fuller Road Extension)
1962 design hour - 1370, AADT - 11,178

Washington Avenue, west of Fuller Road
1962 design hour - 840, AADT - 13,998

Washington Avenue, east of Fuller Road
1962 design hour - 682, AADT - 11,377

existing morning peak for office campus 8 - 8:30 a.m.
assumed morning peak for University campus 8:30 - 9 a.m.

Anticipated Design Hour Volumes

<u>Northside arterial</u>	Eastbound	Westbound
east of crosstown interchange	1670	3635
off ramp at Crosstown interchange	950	1050
on ramp at Crosstown interchange	350	325
between office & Crosstown interchange	2270	2910
off ramp at Office campus interchange	1000	740
on ramp at office campus interchange	185	250
between office campus & Fuller Rd	3085	2420
off at Fuller Road		450
on at Fuller Road		220
off at Washington Avenue	330	
on at Washington Avenue	540	
Between Fuller Road & Northway	2835	2190
off at northway	640	1470
on at northway	2170	750
west of northway	1305	1470

APPENDIX

Anticipated Design Hour VolumesNorthway and Southside arterial

	Southbound or Eastbound	Northbound or Westbound
North of Northside arterial	3100	2700
On at Northside	435	1675
Off at Northside	2335	585
north of Route 20	1200	1610
on at Route 20	400	275
East of Town Line Road	950	1765
off at Route 20	660	460
off at Crosstown	280	470
on at Crosstown	1196	520
east of Crosstown	1875	1715

SUNY at Albany
Addenda to Traffic and Highway Report
Regarding
Stage Development and Parking Requirements

The expected traffic volumes can be sustained by the surrounding street and expressway system, through all stages, if the interchange at Washington Avenue and Interstate Connector 541 is provided. If it is not provided, other measures will have to be taken during stages III and IV.

Volumes on interior roads and access points will not be excessive if access points are developed as presently planned and an adequate perimeter road system developed as outlined in the highway and traffic report.

If the access to the parking areas from the perimeter road is relatively close to the driveways connecting this road with the surrounding street system, volumes on the perimeter road will tend not to become excessive. It is anticipated that the necessity to develop the perimeter roadway to a four lane parkway will occur between stages I and II. This is anticipated because of the presence of even a small amount of heavy, slow moving traffic, heavy snow accumulations, vehicles desiring to make "U" turns and a significant volume of traffic entering at various points for drop-off or pick-up stops.

The parking requirements for the various stages have been figured on the following basis.

Undergraduates living on Campus - 1 space for each 5 students
Married living on Campus - 1 space for each 1 1/2 students
Commuting students - 1 space for each 2 1/2 students
Graduate students on Campus - 1 space for each 3 students

Faculty - 1 space for each 1 1/2 members

Staff - 1 space for each 1 1/2 staff members

Visitors - 1 space for each 3 visitors

There is no apparent reason to vary the ratios throughout the stages of development unless it becomes a policy matter to regulate vehicle operation and parking for specific classifications. The 1 to 5 ratio for resident students, for example, would certainly be revised if some of the student classes are not permitted to operate or park vehicles on the campus.

An effort has been made in this analysis to present a realistic appraisal of the parking needs of the campus. The totals shown could be decreased if regulatory measures are taken, or increased if future vehicle use increases. 20 per cent of the commuting students have been assumed to arrive by mass transit and the remainder have been assigned a 2.5 occupancy ratio.

The totals for the various stages are as follows:

Stage	Total Parking Spaces	Married Students Spaces	Other	Total Acres Required at 130 Spaces per acre
I	3,270	600	2,670	25.1
II	4,480	840	3,640	29.9
III	7,010	1,270	5,740	46.7
IV	9,010	1,890	7,120	60.1

The location of the parking area entrances should be relatively close to the perimeter roadway's driveways to surrounding access streets. This will insure the minimum amount of congestion on the perimeter road. The parking area entrances should, however, be removed enough from the main access drives, that backups will not occur on the access streets. A distance of 300 to 400 feet should be provided wherever possible between the main access driveway and

the parking lot entrance.

Additional parking for stadium use might be required at a future date. It is evident, however, that a very large percentage of the parking provided for the students, faculty and staff use would be available for stadium functions.

The parking required for married student housing and faculty housing would be located adjacent to these units. The parking areas for other students, staff, visitors and faculty would be in the large parking areas on the campus. Walking distance for student parking areas to destination should be no greater than 1500 feet, wherever possible, and 600 feet for faculty and staff parking. Longer walking distances can be accepted for special events and the lots can, therefore, be utilized for dual purposes.

Shuttle bus service should be considered for lots located at considerable distances from the main buildings. In the event lots had to be located a significant distance and bus service established, the general location of the lot should be oriented toward the future stadium.

Parking areas should be lighted for evening use.

Tables I through IV show the tabulation of parking requirements and expected peak hour flows for the various stages of development.

Stage I Flow & Parking Requirements

Type	Parking Spaces Acquired	Peak Hour Flow (vehicles)	Number
Undergraduate on campus	820	40	4,100
Married on Campus	600	10	894
Commuting both graduate and undergraduate	640	640	1,998
Graduate on Campus	170	10	508
Faculty	380	282	565
Staff	620	468	935
Visitors	40	30	144
Totals	3,270	1,480	9,144

Stage II Flow & Parking Requirements

Type	Number	Peak Hour Flow (Vehicles)	Parking Spaces Required
Undergraduates on Campus	5,386	50	1,080
Married on Campus	1,268	12	640
Commuting both Graduates & Undergraduates	2,451	790	790
Graduates on Campus	895	20	300
Faculty	866	433	580
Staff	1,250	625	830
Visitors	212	40	70
Totals	12,328	1,970	4,480

Stage III Flow & Parking Requirements

Type	Number	Peak Hour Flow (Vehicles)	Parking Spaces Required
Undergraduates on campus	8,117	80	1,620
Married on Campus	1,897	20	1,270
Commuting both graduates & undergraduates	3,633	1,160	1,160
Graduates on Campus	1,353	30	450
Faculty	1,732	866	1,150
Staff	1,875	937	1,250
Visitors	318	60	110
Totals	18,725	3,153	7,010

Stage IV Flow & Parking Requirements

Type	Number	Peak Hour Flow (Vehicles)	Parking Spaces Required
Undergraduate on Campus	9,814	100	1,920
Married on Campus	2,839	30	1,890
Commuting both graduate & undergraduate	4,840	1,550	1,550
Graduate on Campus	2,707	50	900
Faculty	1,933	960	1,290
Staff	2,000	1,000	1,330
Visitors	393	80	130
Totals	24,326	3,770	9,010

INTERIM PLAN REPORT CONCLUSIONS

(As Amended)

A. Land

It will be important for the Construction Fund to evaluate the phasing plan as proposed in the Interim Plan with the proposed land acquisition diagram and establish a guiding policy for the next stages of the consultants' work.

The following action program is recommended:

1. Negotiate a "freeze" on further planning and construction on all state owned land adjacent and in the direct vicinity of the present state university site.

This will include all undeveloped land indicated on the site analysis diagram 6B.
2. Acquire the open land immediately to the west of the presently designed initial complex and adjacent to Washington Avenue (improved) and Fuller Road (site analysis diagram 6B) in accord with the immediate proposals as indicated on the amended interim plan.
3. Purchase individual homes as they become available in the areas:
 - (1) West of Fuller Road between Washington and Western.
 - (2) In the S.W. corner of the university site between Fuller and Western
 - (3) Residential properties all along and on the north side of Western Avenue.
4. Negotiate the purchase of all open land west of Fuller Road between Stuyvesant Shopping Center and the proposed alignment of Washington Avenue extension.

B. Circulation

1. Externally associated highways -
 - (a) A connection between the present SUNY road system under construction and the Northside Arterial as well as Washington Avenue should be reviewed by D.P.W., N.Y.S. as it will relate to the schedule diagram and ultimate traffic in the area of the university complex. All current indications show the need for such an interchange (See traffic study).

- (b) The Construction Fund should further informal discussions started by the consultants and the District Engineer, District No. 1, D.P.W., N.Y.S. on holding the most northerly alignment possible in the Washington Avenue extension project to ensure the maximum potential acreage available to future university use south of this highway.
- (c) When the Northway/Thruway interchange is restudied by D.P.W., N.Y.S., the consultants should be authorized to conduct informal discussions with the District Office as to suitable connections with the university site. The Superintendent of Public Works has indicated co-operation in this area will be afforded.
- (d) Improvements on Western Avenue will primarily be dictated by the development of the Northside and Southside arterials. With Route 20 removed from this facility, Western will be able to return to the role of a major city artery.

Future traffic studies indicate a divided highway will be highly desirable and suitable studies should be made now of all intersection, entrance, center lane and left hand turn needs as they relate to future traffic and University optimum uses. The immediate needs are for a suitable left hand turn into the present SUNY system, other than waiting in the center of the highway, and proper acceleration and deceleration lane to the entrance on the north side of Western Avenue.

- (e) A link from the cross-town arterial to Western Avenue allowing northbound university traffic to enter the campus from the south side is desirable. This can easily be done by a single lane right loop back to Brevator, hence an unrestricted right turn on to Western.

2. Internal -

- (a) The future SUNY road system in the final plan should utilize the maximum footage of the present contract alignment with such graded width and suitable utility tunnels. At those points on the site where road and utility lines cross the Construction Fund should explore the possibilities of putting in all final preparatory work to ensure future economies.
- (b) Design and layout of all future campus roadwork should be flexible enough to allow for future building needs and suitable connectors to the adjacent city streets, major highways and the State Office Campus, should it become desirable.

C. Zoning

The unusual position of the university site in relation to the City of Albany and the Town of Guilderland indicates the need of a special zoning study by the Consultants.

Protections are needed, both use and visual, for the university on Washington, Fuller, and Western Avenue.

After completion of proposed land use, sympathetic to the future development of SUNY, meetings should be held with the two municipalities to establish zoning standards that will be in accord with future extensions of the present university complex and future plans of the communities (i.e. Albany - Pine Bush).

The Town of Guilderland has indicated that suitable guidance in the development of Western Avenue would be sympathetically reviewed.

The major reason for this early study is to ensure a balance of tax free and tax producing function in this strategic section of the community.

D. Policy

1. Education Enrollment Programming -

- (a) The Albany university center is in the process of transition from a basically undergraduate, teacher education institute to a university level institution. Because existing patterns of growth are probably not a reliable indicator of what will happen in the future, the consultants have made certain assumptions and estimates of the rate and patterns of growth that might be encountered in realizing the ultimate population. These assumptions are based on other typical institutions with similar characteristics and problems.
- (b) During this transition period, it appears that the impact on land development and design concepts indicate that the greatest change would occur towards the middle stages of growth between now and the projected student body of 20,000.
- (c) The requirements for this transition in curriculum, space needs, and ultimate population, needs to be given thorough review and reflection by the university now, so that the consultants' conclusions may be accepted or modified or, if required, a new series of conclusions may be established with the university administration so that the final report and plans can reflect all of the current thinking.
- (d) These assumptions on curriculum and population growth need not be exact, since balance is more important than precision in estimating what the future course of development should or may be.

2. Proposed Police Academy for New York State -

The land generally allocated for the State Police Academy is immediately east of the presently proposed university complex and north of the alternate seat of government. Its construction would greatly hamper any growth of the university and it requested that a stay be put on further work in this area. As close control is required from the State Police location in the Alternate Seat of Government, it is requested that the consultants be authorized to study alternate sites for this facility in accord with the general growth plan of the university.

3. Alternate Seat of Government - Reference map, same as antenna

It has been proposed that the parking site be boosted to 500 cars and preliminary studies are being prepared by the Division of Architecture, D.P.W.

It is proposed that the State Construction Fund allow Edward Durell Stone's representative (Mr. Stanley Torkelson) to continue coordinating the above work with Mr. Charles Koweki of the Division of Architecture so that the final solution is in accord with future university proposals and the final layout of the antennae. (See separate detailed section.)

Final arrangements have been made for informal discussions between Edward Durell Stone and the State Architect as to the color of the facing material for the Alternate Seat of Government.

4. Antennae -

Reference map. N.Y.S., D.P.W. Div. of Architecture,
Title "State Office Building" Oct. 25, 1962 No. 63/113

The issue of the antennae for the Alternate Seat of Government and the State Police needs will be strong factors in determining the future use of adjacent land to the Alternate Seat of Government. The design criteria for these masts, their distance and relationship to various kinds of buildings (especially labs using electronic equipment) will certainly effect our interim proposals for future dormitories and the graduate center if they are to remain permanently in the locations proposed.

It is our understanding that the installations are extremely costly, (especially those which are hardened) likewise the Alternate Seat of Government building and it would appear that any installations completed under present and early proposed contract (antennae expected to be put out for bid latter half of July) would be of a permanent nature. (They are not demountable).

We suggest the State Construction Fund determine alternate locations for the antennae which would conform with the following:

- (a) General extensions and additions to the university complex, suggested arrangements of roads, pedestrian ways, landscaping.
- (b) Proposed changes and additions in the State Police needs (electrical) in the Alternate Seat of Government.
- (c) Additional parking proposed for the above (b) extending the present layout of parking from 266 to 500 cars and to conform to (a).
- (d) Explore possibilities for the off site locations of all antennae at some subsequent date.

5. Dudley Observatory -

As developments have occurred for the removal of this facility to the Selkirk area it is requested that we strike the function from our program. The freeing of the land allocated in the interim plan will allow exploration of its use by an immediate need, namely the hospital, which will fortify the need for the purchase of this section of land at an early date.

6. Milne School -

It is our understanding that the Milne School will not be considered in further developments beyond the Interim Plan.

We would like to know if the door is, in fact, completely shut or policy may change at some subsequent date. It would be relatively simple, at this time, to take cognizance of some future program addition of the Milne School in the general site organization without actually showing it on the drawings.

If, on the other hand, it is absolutely dismissed from the program and subsequent work in mile 3 and 4 discounts its acreage needs, its reappearance in the program could entirely disrupt the final plan.

May we have your observations?

7. State Office Campus -

The consultants request that the Construction Fund in association with the Office of General Services, The Governor's Space Committee and D.P.W., supply a detailed program and policy of proposed construction work, total number of employees and subsequent phasing to the "Mall" of all state departments and associated facilities. It is also requested that present indications as to future use of all present facilities be presented as an indicated to the policies to be adopted in all university growth plans.

8. Graduate facilities in the Albany Area -

With the inclusion of a graduate center in the program (beyond proposed facilities included in the basic academic core) clarification is needed at an early date as to its general size and nature. The conditions governing our inclusion of this facility in the long range plans are somewhat diverse.

With the statements from Governor Rockefeller's office indicating development of a "MIT/Cal Tech center in the next decade in this general area. The policy adopted by "the Temporary Commission on the Capital City" (New York State appointed) for major graduate and research facilities The recently released plan for amalgamation of facilities for a "super" graduate program by the private institutions in this area (R.P.I., Union, Etc.). The stated policy that graduate facilities in the State University system will be "sympathetic" to educational programs in effect in all local institutions, to say the least, in confusing.

It is requested that an informal meeting, established by the Construction Fund, be set up with the consultants, to inform them as to what current policy is to be adopted as to these important items.