

UNIVERSITY - COMMUNITY RELATIONSHIPS:
TOWARDS A COOPERATIVE PLANNING POLICY
IN UNIVERSITY DISTRICTS WITH SPECIAL
REFERENCE TO UNIVERSITY COMMUNITY AREAS
IN BRITISH COLUMBIA

by

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ABSTRACT

The planning of University District in British Columbia suffers from lack of effective coordination among various jurisdictional units which comprise the University Community Area. The growth needs of campuses are planned independently of the needs of urban municipalities. There are numerous situations which call for the merger of decision making and administrative functions of individual organizations into one cooperative planning body which should have the task of planning and development of University Areas within the framework of a long range comprehensive plan. But the existing cooperative arrangements are ad hoc committees or other working agreements which do not promote the kind of planning necessary in these districts. The objective of this Study is to find out the limitations of informal and ad hoc administrative arrangements for mutual planning and to propose more effective methods of cooperative planning.

It is hypothesized that the integration of campus planning with the long-range comprehensive planning of adjacent municipal areas is essential for the effective development of the University District. Case studies of three University Districts in British Columbia, including a comprehensive review of other studies undertaken elsewhere, are presented as research methods in support of this hypothesis.

It is evident from these studies that a University has a profound effect on the evolution of its surrounding urban areas. The University demand for off-campus housing and services, plus the prestige and compelling attractions of the campus for other related educational institutions, research industries, clubs,

galleries , museums and high-quality residential, business and professional establishments, all influence the character of adjacent municipal areas. If a campus happens to be located in an undeveloped or farming area, the growth of the campus tends to accelerate the rate of urbanization in the surrounding area, eventually displacing farming with other land uses which tend to locate in areas adjacent to the campus. If on the other hand the adjacent area was originally developed as a single family residential district, the campus modifies it to satisfy higher density residential, institutional, industrial, cultural and service area requirements.

Such an evolution of the University District is accompanied by a number of conflicts among jurisdictional units and other interest groups. In general, the conflicts centre on the amount of land necessary for university expansion, the type of housing and services required, and the provision of adequate facilities for pedestrian and vehicular movement between the campus and the adjacent community.

The liaison among different administrative entities comprising the University District is by the formation of ad hoc committees of officials. It is evident from this study that an ad hoc arrangement seldom has the effectiveness (i.e. power to implement a plan), efficiency, permanency and financial support and rules to govern its deliberations and activities, which all combine to form the type of organization needed for the planning and development of the University District.

A formal organization for cooperative planning involving precise understanding and long range commitments of the various administrative and political entities with some form of enacting interdependent legislation is recommended.

The University District Planning Commission for each university area is proposed as a method for comprehensive long range planning of the University Districts.

It is evident that the study hypothesis, the integration of Campus Planning with the long-range comprehensive planning of adjacent municipal areas is essential for the effective development of University Districts, is quite valid.

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CHAPTER I

PLANNING OF AREAS SURROUNDING THE UNIVERSITY CAMPUSES

I. UNIVERSITY - COMMUNITY RELATIONSHIPS

The main purpose of planning is to establish relationships among social, economic and physical components of an area for achieving the best possible conditions of living. Any planning thought should give primary consideration to the mutual effects that exist in these categories and to allocate the community's resources and prepare policies and formulate methods of implementation for long range development of an area. The dominant activities of the community determine the kind of physical, social and economic planning required. A university oriented community has major functions such as education, research, residential and service to the public. Therefore its needs for planning are different from those of other community areas of the city.

The University Community attains its character and uniqueness from the interdependence of the university and the surrounding community area. The university primarily consists of students, faculty and staff and its pursuits are academic but the various demands of the university population exist both within the campus and in areas adjacent to the campus. Tunis¹ states that the purpose of most Canadian universities in early days was to provide

¹Albert A. Tunis, "The McGill Story: From Country Estate to Big-City Campus", (U.B.C. Library, Campus Planning paper clippings file).

the learned the skilled professional men demanded by the emerging society, the teachers, clergymen, doctors, dentists, nurses, lawyers and engineers. But the university of today is called upon to impart the highly specialised and expensive training of the scientists and fundamental researchers so necessary in the age of the atom and of outer space. As a result, the enrollments in universities and colleges have more than tripled during the last 30 years and will continue to increase. The expansion of university campuses has led among other things, to new traffic circulation problems, to the purchase of land for housing, to a realization of the need for additional recreational facilities and for higher densities of population in the central academic core. The planning for research industries, relocations of service facilities, and a fuller realization of the university's prime role in the cultural life of the community have become important planning issues in the overall development of the University Areas.

Experience has indicated that the academic pursuits of the university can only succeed if the zone of its influence has a compatible environment capable of providing a full range of services for the community. Levi¹ points out that the urban university and the city are natural partners at least with regard to the University District. The impact of the campus on its surrounding area is manifested in its land use pattern and functions. The University District is primarily an off campus

¹J.H. Levi, "Expanding the University of Chicago", in Case Book on Campus Planning and Institutional Development, (Washington, D.C.: U.S. Government Printing Office, 1962), pp.107 - 127.

student dormitory area having rooming houses and apartments some of which are conversions of single family dwellings. The academic, research, and residential functions of the university provide compelling attractions for a wide variety of other activities that tend to locate and compete for sites in close proximity to the universities. Campus oriented commercial outlets, research industries, educational institutions, fraternal and religious establishments, professional offices, and recreational establishments comprise the University District and give the area "an urban form" which is easily distinguishable from other areas of the city. In addition, the thoroughfares in and around the university have special functions related to access and circulation demand of the campus and the facilities adjacent to the campus.

Practically all studies of the University Districts across the continent reveal that the factors governing the development of areas adjacent to the university campuses are unique and are of special significance to the planning administrations of the university, the city, and the Province or State. The university's point of view is defensible only if it understands the community's position, and the community can hardly judge the university's position if the campus requirements are not studied and made known. Finally, the needs of the University District can bring desirable results only when translated into legally enforceable guides to development. Therefore, the administrative entities involved in the planning and development of the University District should cooperate in order to formulate policies and programmes for the development of this area.

By observing these complex relationships between the uni-

versity and community this investigation is concerned with determining the type of development that is desirable and the variety of problems that must be considered by the administrations concerned in making long range development plans for the University Districts in Vancouver and Victoria metropolitan areas of British Columbia.

II. HYPOTHESIS, SCOPE AND ASSUMPTIONS OF THE STUDY

The municipalities and cities are concerned over the growth of the campuses and foresee sooner or later the university making heavy demands for space and services in order to pursue their academic and research roles successfully, and to meet the challenges of advancing scientific and technological requirements of the civilization. It is desirable that appropriate methods of understanding each other's roles be evolved in order to plan adequately for the future. This study is concerned with the investigation of university - community relationship generally. It is hypothesized that:

The integration of campus planning with the long range comprehensive planning of adjacent municipal areas is essential for the effective development of the University District.

The terms included in the hypothesis are defined as follows:

University District A community composed of a campus and adjacent municipal areas. Boundaries of the community have physical, functional and political attributes. The major functions in the district are; educational, research, institutional, residential, commercial, recreational and cultural. The physical limits that bound these functions vary significantly from one University District to another, and range from $\frac{1}{2}$ mile to 3 miles from the campus.

Politically the University District is comprised of at least two jurisdictional units, one administered by the university and the other by one or more municipalities.

Adjacent Municipal Areas are those parts of the municipality or the city that lie adjacent to the campus, and the responsibility for developing these areas rests with the Municipal Council, or the City or the Province whosoever owns and administers the area.

Long range comprehensive planning of adjacent municipal areas: A process of goal setting, policy formulation, guidance and coordination of development based on a continuous study and analysis of social, economic, physical and political factors that determine the environment of areas adjacent to university campuses.

Scope of the study. The study primarily constitutes a review of the relevant literature on campus planning, and case study approach to the understanding of planning problems in areas adjacent to the university campuses. The review includes diverse examples of planning University Districts in the United States of America, and Canada. The planning principles observed in the review of these studies are illustrated as: (1) functions of campus adjacent areas; and as (2) different types of administrative arrangements evolved by the cities and universities for cooperative planning of the University Districts. The case study approach encompasses three University Districts in British Columbia, two of which are located in the Vancouver Metropolitan Area and the other in the Victoria Metropolitan Area.

Assumption of the study. The basic assumption, which arised out of the meanings given to the terms used in the hypothesis, is stated as follows:

There are at least two separate administrative entities in the University District. The long range planning and development goals of the University differ from those of the city or municipality.

Organization of the Study. The study consists of four parts. The first part is introductory and attempts to explain the interrelations between Universities and cities for planning areas adjacent to university campuses. The aim here is to discuss a specific study hypothesis and research methods for the study. The second part is devoted to an examination of planning studies of University Districts undertaken by other people. In these studies, it became evident that the University District in an urban area has special functions characterized by housing, educational institutions, research industries, commercial, cultural, recreational establishments and the circulation and parking facilities in the area. A comprehensive review of the character of the University District and of the administrative arrangement between universities and cities for cooperative planning of areas adjacent to campuses, is presented. The third part consists of case studies of three University Districts in British Columbia: the Simon Fraser University District; the Victoria University Area; and the University of British Columbia District. Each case study is organized into four parts: (1) major characteristics of the University District; (2) impact of the campus on its surrounding municipal areas; (3) administrative arrangements for cooperative planning; and (4) methods adopted and proposed for the implementation of the University Area Plans.

In these studies, it became evident that the development of the University District suffers from limitations of ad-hoc methods of cooperative planning, and from the inadequacy of existing legislation for development. The fourth part represents the synthesis of what has gone before. It begins with a summary of the thesis; this is followed by a review of the basic assumptions and research methods of the study, the validity of the study hypothesis. It concludes with recommendations and areas for further research.

III RESEARCH METHODS

The research methods followed in this study can be grouped into two principal methods:

1. Library Research. The method includes a review of books, articles in periodicals, and technical reports on University Area planning. In these studies, it became evident that areas adjacent to university campuses have special planning problems which generally require some kind of coordinative approach by university and city administrations to formulate plans of mutual benefit and compatibility. It was also evident from these studies that the planning problem related to growth needs of campuses, university population and community's demand for different types of housing, public services such as roads, parking, public transit and public utilities, space needs for other campus related educational institutions, research industries, cultural, recreational and commercial land uses which tend to locate in areas adjacent to university campuses.
2. Approach by case studies. Three public universities and their surrounding municipal areas in British Columbia, were selected for detailed study. The Case Study method includes questionnaires (Appendix I) which were sent to selected planning officials of municipalities and campuses. The answers to questionnaires were generally sought by personal interviews, and from the study of published reports, minutes of meetings and other relevant unpublished material of planning departments.

Limitations of the Case Study Method. The three campuses are located in two metropolitan areas, and each campus occupies a unique location within the community. There are non-comparable situations such as: (1) location of the university campus in relation to the urban areas; (2) the extent of development of the campus and areas surrounding the university; (3) the pattern of land ownership; and (4) the number of jurisdictional units responsible for planning and development of each University District. Therefore the problems of one campus differ from another. Consequently the degree of concern on the part of planning officials for a particular problem differs appreciably. These differences pose some limitations for comparison but such information as the need for cooperative planning, methods of mutual planning and implementation of plans, can be evaluated on a comparative basis within the terms of the hypothesis.

CHAPTER II

SOME ESSENTIAL FUNCTIONS IN AREAS ADJACENT
TO UNIVERSITY CAMPUSES - A REVIEW

The campus and the urban community are interdependent on each other. This dependence is characterized by linkages of a social, economic and physical nature between cities and universities. But it is only in relation to adjacent areas that the various campus activities begin to manifest themselves more clearly. As a result of interactions of campus and community, a typical land use pattern comes into existence. The land use pattern consists principally, of streets and peripheral highways, recreational areas, and open spaces, residential, institutional, commercial and research industries. An area adjacent to the campus may have all or some of these functions. Allocation of land to these broad categories of uses varies from one University District to another, but what is important is that the land use pattern is not a static physical phenomenon but reveals important functions which give an air of distinction to the University District within the city.

The social and economic activities of the campus and neighbouring Community Areas supplement one another, and constitute the basis for development of a well integrated University District in an urban area.

I CHARACTERISTICS OF MAJOR FUNCTIONS OF THE UNIVERSITY DISTRICT

The Role of the University in the City's Economy

Universities in some cases are the principal components of the economic base of cities. The University of Pittsburg is the second largest employer in that industrial city. In the Boston Metropolitan Area, institutional employment is the third largest, accounting for an estimated payroll of more than \$250 million a year. In the economy of this area vital growth has come from electronic and related industries, a growth attributable to the presence of Harvard and M.I.T. In Cleveland four of the twenty-eight institutions in the University Circle have an annual payroll of more than \$28 million. A University of Pennsylvania survey revealed that the university's payroll was in the neighbourhood of some \$25 million a year. Out-of-town students at the University of Pennsylvania spend an estimated \$15 million a year in the city; the university lends its facilities for conventions and meetings to some 20,000 annual visitors; it pays the city nearly \$500,000 a year in taxes on wages and real estate investment, and spends another \$500,000 on utilities and insurance alone.¹

These estimates reveal that the universities and related institutions are vital to the economy of some cities.

¹W.L. Slayton, 'The University, the City, and Urban Renewal', in The University, the City and, Urban Renewal (Washington D.C.: American Council on Education, 1963), pp.2-7

Livingston estimated that a campus of 37,000 students, faculty and staff members means a campus oriented population of 100,000 which would support a large part of the non-basic economy of the city.

Housing. Housing is the major component of the University District. The University of Wisconsin study reveals that approximately 52 per cent of campus adjacent areas' population is comprised of students, faculty and staff. Eighty per cent of the students, and forty per cent of the faculty members resided within 3/4 mile from the center of the campus.¹ The results of this survey are given in Table I on page 12. The American Society of Planning Officials reported that a university campus has profound influence on surrounding neighbourhoods. This influence is felt in the need and demand for off-campus student and faculty housing, in fraternity and sorority houses, apartments and rooming houses.² A De Paul University survey revealed that the campus adjacent residential development consisted of buildings with two, three or four storey apartments. Many of them were found to be single family houses converted into buildings containing two or three flats.³ A Cambridge Neighbourhoods survey indicated that neighbourhoods adjacent to the M.I.T.

¹ University of Wisconsin, The Sketch Plan for the University of Wisconsin Madison Campus, (Madison, Wisconsin: The University, 1959), pp. 8 - 9.

² American Society of Planning Officials, University Districts Zoning, A Special Report of the Planning Advisory Information Service, (Chicago: ASPO, October 1963), 8 pp.

³ Barton-Aschman Associate Inc., Uptown Campus Plan of De Paul University, (Evanston, Illinois; The Associates 1961.)

TABLE I
COMPOSITION OF POPULATION IN EXPANSION
AND JOINT CITY-UNIVERSITY PLANNING AREAS
(Including dependents)

AREA (Madison, Wisconsin)	NUMBER (Persons)	% OF TOTAL
A. University Expansion Area ¹		
Students	2,780	55.0
Staff	366	7.3
Faculty	143	2.8
Others	1,766	34.9
Total	5,055	100.0
B. Joint Planning Area		
Students	6,459	38.4
Staff	850	5.1
Faculty	716	4.3
Others	8,770	52.2
Total	16,795	100.0
C. Total A and B		
Students	9,239	42.3
Staff	1,216	5.6
Faculty	859	3.9
Others	10,536	48.2
Totals	21,850	100.0

Source: University of Wisconsin, The Sketch Plan for the University of Wisconsin - Madison, (Madison: The University, 1959) Appendix 7. At the time of survey in September 1958, the University had an enrollment of 16,590 students.

¹Excludes on-campus university housing, and Eagle Heights and university houses in the area.

TABLE II

UNIVERSITY STUDENT BODY BY PLACE OF RESIDENCE
UNIVERSITY OF PENNSYLVANIA

	1962		1970	
	Number of Students	% of Total	Number of Students	% of Total
ON-CAMPUS				
Dormitories	2,952	16.1	4,350	19.8
Fraternities	1,128	6.1	1,300	5.8
Campus Area (private homes)	1,151	6.2	300	1.3
Graduate Housing	-		400	1.8
Sub-total	5,591	30.4	6,350	28.7
OFF-CAMPUS				
Adjacent campus area	1,586	8.7	3,575	16.5
Living at home	3,177	17.2	4,325	19.8
Part-time students	7,993	43.7	7,700	35.0
Sub-total	12,756	69.6	15,600	71.3
Total (Enrollment)	18,347	100.0	21,950	100.0

Source: Hammer and Company Associates, The Development of On-Campus Commercial Facilities for the University of Pennsylvania, (Washington, D.C.: The Author, 1963) pp.12-13.

The student population in adjacent campus area is estimated to have increased from 1,586 to 3,575 which is 125 per cent increase in about 8 years (between 1962 to 1970).

At the time of survey the total university population was comprised of 18,347 students' 3,505 faculty' and 4,403 administrative and clerical staff.

campus showed a predominance of large apartments, 90 per cent of which were occupied by tenants. Much of the population was of a transient nature - students and professional people connected with educational institutions.¹

These studies indicate that the residential development in areas adjacent to the campus is mainly comprised of apartments and rooming houses and is related to the economic status of the of the university population. Students need cheap rooms, cheap food, cheap personal services, and cheap entertainment. These demands of low cost facilities and services result in an increase of rooming houses and apartments. Most single students desire accommodation within a rent range of \$30 to \$40 a month. The requirements of married students are different from those of the single students. The University of British Columbia survey results indicate that married students would consider paying \$85 for a one-bedroom unit, \$95 for two bed-room unit, and \$105 for a three-bedroom unit.² Faculty and staff members would consider paying slightly higher rent than the married students. It is fairly clear that the prevailing income level and status of the individual in the university population are basic determinants for the type of accommodation the campus adjacent areas are expected to provide. A large portion of the student population, and practically the entire faculty and staff population reside off-campus.

¹Cambridge Planning Board, Social Characteristics of Cambridge Neighbourhoods, (Cambridge, Mass.: The Planning Board, 1963), pp. 11-13

²"Focus on Residences". The Ubyyssey, A campus student paper published at the University of British Columbia, October 19, 1965.

In 1965 the University of British Columbia on-campus housing facilities accommodated only 17 per cent of the total student population.

It is generally accepted that residence living is a unique experience in the life of the student. Residences are not intended to provide only room and board. They are not merely a home away from home. They are part of the total academic experience. Therefore it is necessary that the campus adjacent residential areas should have the same role as the on-campus residences.

Parsons observes that though the requirements of the campus population for reasonably priced accommodation for apartment and rooming houses close to the campus are fairly well known to the universities and neighbouring communities, yet the goals of the two are divergent with respect to the kind of development each would like to see in campus adjacent neighbourhoods. The universities would like to see maximum provision of middle income housing and upper middle income housing emphasizing more housing for the university faculty. The neighbourhood residents would like to see maximum provision for low income housing and lower middle income housing for the residents - some of whom may be university families. In university districts where minority groups are part of the university population the universities would like to see the provision of non-segregated housing areas for the minority population whereas the neighbourhood residents would like to see good housing for minority groups - with the likelihood of opposition to the use of quotas.

Parsons notes that these conflicting goals run along social, economic, and racial lines, especially in campus adjacent areas where urban renewal schemes were proposed in some U.S. cities.¹

Slayton in his work on several urban renewal projects in the vicinity of universities observed that among the non-university people there exists an attitude of hostility toward the university and its authorities. The reasons for this attitude are, that traditionally the universities have isolated themselves from urban areas by locating their campuses in a more placid and rural environment; in recent years the urgent need for the expansion of campuses has conflicted with the desires of the neighbourhoods to maintain a character of their own; and finally he states that there is some evidence that by creating undesirable pressures on adjacent neighbourhoods university campuses have accelerated the deterioration of these neighbourhoods.²

These studies reveal that housing is the main function of campus adjacent areas but this function remains unintegrated with the total campus environment if planning by universities and cities takes into account the demand and economic aspects of housing alone. Unfortunately most cities and universities do just that. Social factors and the community's desires and goals should also be understood along with economic reasoning in making

¹K.C. Parsons, "Universities and Cities", in (Journal of Higher Education, Vol.24, Nos. 1 and 4, (January and April, 1963), p. 209 (refer to Table V on page 46 of the study).

²W.L. Slayton, "The University, the City and Urban Renewal", in The University, the City and Urban Renewal, (Washington, D.C.: American Council on Higher Education, 1963), p.5

provisions for housing. The ability to pay and the desire for close by residential accommodation of the University population should not make up the sole criteria for proposing the conventional type of apartments and rooming house development. Perhaps the solution lies in understanding more fully the academic significance of housing and the desire to live in harmony with the other 50 per cent of non-university resident population in surrounding neighbourhoods. This calls for a concerted effort of the university and the city for development of the University Area.

Among educators, different views prevail with regard to residence living. Some believe that residence living is part of the total academic experience such as expressed by the President of Columbia University:

Halls of residence were provided precisely as libraries, laboratories, and teachers themselves are provided, in order to exert educational influence and to offer educational opportunity. These halls were built not as an educational convenience, but as an educational necessity. The full benefit of the university membership... can only come when individual student regards himself as a member of the academic family to which he owes companionship and allegiance.¹

Taylor states that a commuting student community is much less likely to develop a recognizable student culture than one in which a high proportion of students are in residence.

¹William Taylor, "Student culture and residence", University Quarterly, Vol. 19, No 4 (1965), pp.331 - 344

The resident community of scholars has been archetype of our own and many other universities approach to university development, studies elsewhere have indicated that living arrangements can have powerful influence, for good or ill, upon students personal and intellectual development. Though many universities are committed to residential principle but proportion of students actually living in halls, hostel, and other provided accommodation has changed very little over the past twenty-five years (in Britain). There are considerable differences between universities in this respect. Keele has nearly all students in residence. Oxford, Cambridge, and most other civic universities have over half, whilst London, Leeds, and Birmingham have about 20 percent students in residence.

Warr reported the results of a survey of on-campus residence students who were asked in a questionnaire some twenty possible advantages and disadvantages of living in residence halls (Table III, page 19). The results seem to indicate that residence living does offer relatively more advantages than other forms of accommodation.¹ Taylor in his study of Student Culture and Residence reviews other studies and surveys which reveal that residence living does not provide the full opportunity to students to really know the city in which they live.

... we have had recommendations that the university students should live in what has rather hopefully

¹Peter B. Warr, "Attitudes and behaviour in a hall of residence", University Quarterly, Vol. 19, No. 1 (December 1964), pp. 56 - 68.

TABLE III
COMPARISON BETWEEN HALLS OF RESIDENCE
AND OTHER FORMS OF ACCOMMODATION

	Percentage of members reporting		
	Halls Better	No diff- erence	Halls Worse
Making friends from other departments	92	6	2
Living in comfortable accomodation	82	14	4
Eating good food	25	48	27
Learning to mix socially	74	23	3
Meeting informally members of faculty	44	52	4
Playing games	80	20	0
Feeling you belong to a community	90	10	0
Studying sufficiently	46	32	22
Becoming more responsible person	38	47	15
Having privacy when wanted	57	20	23
Reading books not connected with courses	45	55	0
Avoiding noise	18	27	55
Paying reasonable amount for accomodation	10	15	75
Talking to someone when you are fed up	89	10	1
Leading unregimented life	58	36	6
Taking part in social activities	78	22	0
Avoiding household chores (cooking etc.)	62	23	15
Talking about topics not connected with your studies	77	22	0
Taking part in organising your community	78	19	3
Gaining self confidence	59	31	10

Source: Peter B. Warr, "Attitudes and behaviour in a hall of residence", University Quarterly, Vol. 19, No. 1 (December, 1964), Table I on page 59; pp. 59 - 68.

130 students in a hall were asked to express their views on 20 possible differences between living in a hall and living in other accommodation. A number of apparent disadvantages of halls were included in this list. Each member was asked to indicate whether in his experience halls of residence provide better or worse for these activities and experiences, whether in their experience there is no difference between living in residence and other accomodation.

been called an "academic latin quarter", or in a setting which is described as "dense; urban, informal; a network of interlocking teaching rooms, coffee bars, laboratories, restaurants, libraries, study bedrooms, theatres, shops -- a street market of ideas rather than a cloister for their sanctification -- and integrated with towns and cities which house them".¹

Some universities, across the continent, are located in the downtown areas of their cities while others are located on the outskirts. Whether those universities which have placid and rural sites have been able to turn out better skilled and professional and intellectual men for society is a question that can not be resolved. Perhaps an appropriate question to resolve would be whether a university and its surrounding areas are well integrated within the University District and metropolitan community.

Commercial Facilities. Campus oriented shopping goods, stores and other commercial outlets comprise another important aspect of adjacent areas. Commercial development serves the needs of the campus population and of the surrounding community as well. Unless they are planned, the commercial facilities tend to disperse throughout the University District, and generally align themselves along the routes leading to the campus. The University of Pennsylvania survey revealed that in addition to university owned cafeterias and book stores there were 93 privately owned commercial units located on the campus area.

¹William Taylor, "Student culture and residence", University Quarterly, Vol. 19, No 4 (1965), p.335.

The results contained in Table 1V on page 22 reveal that ninety per cent or more of their business volume was received from the university population including the families of students, faculty and staff members.

The University of Pennsylvania campus commercial facilities reflect the type of businesses that serve the campus population. Eating and drinking places, clothing stores, laundries and cleaners, hair dressing establishments make up a large part of the commercial development, whereas other facilities though varied in size represented major categories of businesses needed on campus.¹ This survey did not reveal the location of gas and service stations which comprise sizable development areas adjacent to the campus.

The study pointed out that the off-campus commercial development in adjacent areas was neither oriented towards the campus nor received any large volume of their business from the university population. This is due to the presence of most facilities in the on-campus commercial development. The campuses which do not have any sizeable on-campus commercial development, have commercial facilities in adjacent areas which are campus oriented.

The survey revealed the special nature of the university oriented commercial development. Unlike the city stores, the campus oriented stores lost three important business seasons,

¹Hammer and Company Associates, op.cit., p.4

TABLE IV

TYPE, NUMBER, SIZE AND PATRONAGE OF
ON-CAMPUS COMMERCIAL FACILITIES, 1962

Type of store	Number	Estimated 1962 Volume (000)	University share of Volume
Men's clothing	5	675	25%
Women's clothing	2	85	95
Barber shops	5	60	90
Beauty shops	2	32	90
Books	3	260	98
Food	6	693	82
Eating/drinking ¹	24	2,600	98
Taverns	5	150	90
Drug	7	480	95
Laundries/cleaners ²	23	592	98
Jewelry	3	45	95
Record	1	60	95
Camera	1	42	90
Cards and gift	1	22	98
Shoe repair	1	20	98
Florist	1	29	98
Travel Agency	1	-	-
Bowling Alley	1	150	15

Source: Hammer and Company Associates, The Development of On-Campus Commercial Facilities for the University of Pennsylvania, (Washington: The Author, 1963) Table 1 on p.4

¹Includes eating/drinking facilities in Drug store units and delicatessens.

²Includes tailors and pressers.

At the time of the survey in 1962, the university enrollment was 18,347 students; 3,505 faculty; 4,403 staff; totalling 26,225.

On-campus student population living in dorms was 2,952; in fraternities 1,128; and in campus area private homes 1,511.

Off-campus students in areas adjacent to the campus 1,586; living at home 3,177; part-time students assumed at home 7,993; total 18,347 students which formed the market support of the on-campus commercial facilities.

Christmas, Easter and summer during which time out-of-town and local students go away for holidays. Also the expenditure pattern of students varies during a year, which has an effect on certain lines of businesses. Clothing items are generally bought by students in areas where they work during the summer and much of their requirement for clothes is met prior to coming to the campus. In the case of the clothing stores 75 per cent of their business came from off-campus customers.

The commercial development, unless planned, tends to locate along the routes leading to the campus. The University of Wisconsin survey of the campus adjacent areas revealed that the concentrations of retail and service facilities were located along State Street and University Avenue -- major approaches to the campus area. Many of these facilities were inefficiently located and would compete with the university for land.¹ The Pennsylvania study also found that stores were poorly equipped and were inefficient in their function. The privately owned eating and drinking establishments were doing exceptionally good business despite run down condition of their premises and the unsavoury state of the cafeterias and restaurants. Store fronts did not conform to any orderly pattern which created a haphazard appearance from the street.²

The function of the commercial development is not only to provide the merchandise needed by the university population but it is the place where most students like to browse, and

¹University of Wisconsin, op. cit., p.10.

²Hammer and Company Associates, op. cit., p.4

the visitors stop by for a snack or package of cigarettes or a book or magazine. So it has great value and attraction in supplementing the University life. The commercial area is usually the focal point of the university life, and after lectures the campus activity gravitates around shopping plazas.

These special attributes of commercial development portray those factors which should not be by-passed in estimating the demand for commercial development. The size of the population and expenditure patterns reveal only the number, type and size of future development but not the most important underlying function -- social precinct. A large turnover in businesses in some campus oriented commercial districts, is fairly significant to warrant a hard look at the quality and quantity of commercial development compatible with university surroundings.

Cultural Function. A university has a special function in the cultural life of the city. The city's cultural activities in part gravitate around the campus, and quasi-educational elements like churches, clubs, theatres, libraries, galleries, and museums find the university as their most compatible neighbour. The university's cultural significance is stated by Temko as follows:

Indeed, Foothills' chief significance may not reside in its architecture, excellent as it is, but in its underlying social premise ... it is in fact a community college which goes beyond academic and vocational instructions in its function. The theatre and library are generally used by the community ... so Foothills is a multipurpose cultural resource, receiving heavy use by day and night, serving not only 3,500 students

but an entire area of the Bay region.¹

Granger states the importance of beautiful surroundings, an enriching experience for the community:

The value of beautiful surroundings as a refining and educational influence can scarcely be overestimated as an element in the life of the students; and since the university can make strongest appeal to the sentiments of the alumni and to local and state pride through a commanding situation and the dignity and beauty of its buildings, the trustees may well afford to strain its resources to the utmost in order to secure the most desirable site rather than accept, even as a gift, one less desirable.²

Tunis³ in his study of the McGill campus states that the great institutions of the metropolis circle the campus. The medical centers and teaching hospitals, industries, financial houses, law courts, as well as other educational and cultural institutions surround the university campus. In the long range planning of the Santa Barbara campus of the University of California, the purpose of campus programmes of arts and lectures was slated to extend cultural and educational activities for the enjoyment of students, faculty and community. The plan outlined that the expected increase in the richness, variety and popularity of offerings is reflected in the provision for an Auditorium and a museum in the Long Range Development Plan.⁴

¹Allen Temko, "Foothills campus is a community in itself", in Architectural Forum, (February 1962).

²Alfred Granger, "The campus plan", American Landscape Architect, (April 1930), pp.21 - 25.

³Albert A. Tunis, "The McGill Story: From Country Estate to Big-City Campus", (UBC Library, A collection of articles on Campus Planning).

⁴University of California, Long Range Development Plan of Santa Barbara Campus, (Berkeley: The University of California Campus Planning Committee, 1963,) p.3.

The main significance of the above statements lies in the realization that various elements of cultural life generate a demand for sites in the University District and once established the district is called upon to meet other needs such as parking, not only for its own community, but for the residents of the city as well. Besides land use considerations the upkeep, and pleasant attributes of the environment are no less important factors in planning and development. The desirability of architectural unity and continuity between the campus and town influences the status of building and zoning codes and other by-laws of the city.

Recreational Function. Recreation exists as an experience which affects the whole person. The leadership which directs and guides individuals through activities in sports, recreation and physical education was provided by great academic institutions. The facilities for recreation and sports achieve their height at the university campuses and exist not only for the enjoyment of the campus community but remain sensitive to the needs of the city and the region. The major recreational facility types on campuses comprise swimming pools, gymnasiums, stadiums, winter sports arenas and field spaces including golf courses. The university indoor and outdoor facilities are quite popular among the off-campus residents and this popularity is reflected in the intensive use of swimming pools in summer and the winter sports arena in winter season, and also in the instruction programmes exclusively arranged for off-campus community. The sports and recreation facilities consume large spaces. These spaces can

hardly be justified in the center of the campus. Therefore these functions tend to disperse and overspill into the campus adjacent municipal area. The older universities are finding it increasingly difficult to meet the demand for recreational space. Arthur outlines the problems of the University of Toronto:

The main problems before the campus planning committee were expansion of the university and the provision of fields for athletic purposes. Incidental problems include the availability of property for individual buildings ... Women's athletic and Men's athletic buildings.¹

Dunke et al states that the severe space limitations were the main reasons that caused San Francisco State College to be moved from downtown San Francisco to another site. Three major instructional buildings had been condemned by the City and state authorities. Several other temporary buildings, tennis courts, and athletic fields were non-functional. All these buildings and facilities were cramped on a hilly 5 acre site. The campus was surrounded by apartment houses and was near the business section of the city. This provided no scope for expansion and made it necessary to relocate the campus.²

It is apparent that recreation is an important feature of the University District and exists for serving a larger city area

¹Eric Arthur, "University of Toronto Master Plan", in Journal of the Royal Architectural Institute of Canada, (October 1953), pp. 286 - 289.

²Glenn S. Dunke et al, "Moving San Francisco State College to a new site", in Casebook on Campus Planning and Institutional Development, Washington, D.C.: U.S. Printing Office, 1962), pp. 72 - 91.

than the campus. Many cities presently recognize the need for developing a balanced recreation programme throughout the city. The popularity of university facilities, communication, and fast and inexpensive travel, tend to overcrowd facilities which universities have developed. When municipalities prepare their recreation programmes, the role of the campus facilities for the community is generally forgotten or taken for granted for the use of the campus population alone. The University Community is comprised not only of students, faculty and staff but of other city area residents whose leisure time activities gravitate around the campus. This justifies the need to coordinate the recreational facilities and the related programmes of the city and the university.

Research Industries. The research establishments complementary to the university's function of research and education are generally attracted to campus adjacent areas. Industrial concerns requiring high inputs of professional personnel have become aware of the multiple advantages that accrue from close proximity to a scientific and academic community. Also the university derives many benefits from off-campus research facilities and the pools of scientific researchers located in adjacent area. Research and development are the core of the Federal government's scientific activity. The increased emphasis on research has several effects on campus planning. Dober states that the space requirements are the highest per user of all functions supported by the university and research institutions. Research space is expensive to construct and the success of the

research investment is not always certain. Any new discovery furthers the frontiers of knowledge and creates a surge to explore more.¹

Slayton states that a major university centre serves as a strong, positive attraction to the industry, particularly those industries which depend so heavily upon research and new technologies. He notes that in the economy of the Boston Metropolitan Area vital growth has come from electronic and related industries, a growth attributable to the presence of Harvard and M.I.T. In Stanford, California, a major industrial area has developed next to the Stanford campus. In Pittsburg the re-development proposals for the campus adjacent area include the development of a major industrial complex.²

Different kinds of research industries have special land use requirements in the University District. Some industries incur hazards such as radiation, obnoxious fumes, noises and other nuisances. All recognize the desirability of keeping teaching and research in close proximity to one another. It is often unjustifiable to place such hazards and generally space consuming facilities in the center of the campus, especially when the scientists and researchers in such facilities comprise only a small segment of the total university's academic and research

¹ R.P. Dober, Campus Planning, (New York: Reinhold Publishing Corporation, 1963) pp. 97-99.

² W.L. Slayton, op.cit., p 3

community. The central core of a campus is built to a high density of buildings and facilities in order to serve the maximum campus population. So the research industries tend to disperse along the periphery and into campus adjacent areas. It is generally accepted that with reasonable planning, the campus and non-campus research facilities can be supported economically if the functions of the university research are related to off-campus facilities. Technology Square in Cambridge, and the research parks at Stanford, California serve as important examples. Three universities and their adjacent municipalities in British Columbia are counting on attracting research industries to campus adjacent areas. Since research establishments take physical form, determine the land use pattern, increase the tax base for the City, and shape the quality of environment of the University District, their potential is significant to both, the City and the University.

Circulation and Parking. A functional parking programme and planning of access routes are the most challenging problems of universities and cities. As a result of the general increase in vehicle ownership plus increased enrollments and employment in universities, the demand for parking facilities and access has become as pressing a problem as the actual need for expansion of academic facilities. There is reason to think that a university will expand and attach to it other related functions, the parking and circulation demand will increase indefinitely, and more and more unsatisfied demands at the campus will have to be accommodated in adjacent areas. Some campuses devote as much as 40 per cent of

their space to the automobile in the form of parking, drives and streets. Due to the inadequacy of on-campus parking, the student's cars are parked for several blocks in adjacent neighbourhoods, particularly along the routes leading to the campus. Also several campus adjacent areas face traffic congestion problems. On-street parking is significant in the total circulation system. The University Circle Development Foundation at Cleveland estimated that if on-street parking were to be replaced by off-street parking on the Cleveland campus, some 60-80 acres of additional area would be required, whereas 200 acres out of the total campus area of 488 acres, were already in parking use. The study notes that a bold solution is called for lest the cultural centre become an automobile storage yard.¹

Usually an extension to the existing building or construction of a new building is accompanied by a reduction in open space, and an increase in demand for parking for new occupants of the building. Likewise any restriction by the city with regard to on-street parking in the adjacent area effects the university parking policy. In many campuses the parking facilities are usually proposed on the periphery of the academic core. Also there is a trend to locate related research industries along the

¹University Circle Development Foundation, Cleveland, A Parking Programme for University Circle, (Cleveland: The Foundation, 1965), pp.1-2.

edges of the campus. Large field spaces, housing areas, and space consuming campus facilities are also dispersed along the periphery of the campus because they cannot be justified in the center of the academic core. Peripheral space and area adjacent to the campus becomes scarce and their development requires a concerted effort on the part of the university, the city and other agencies.

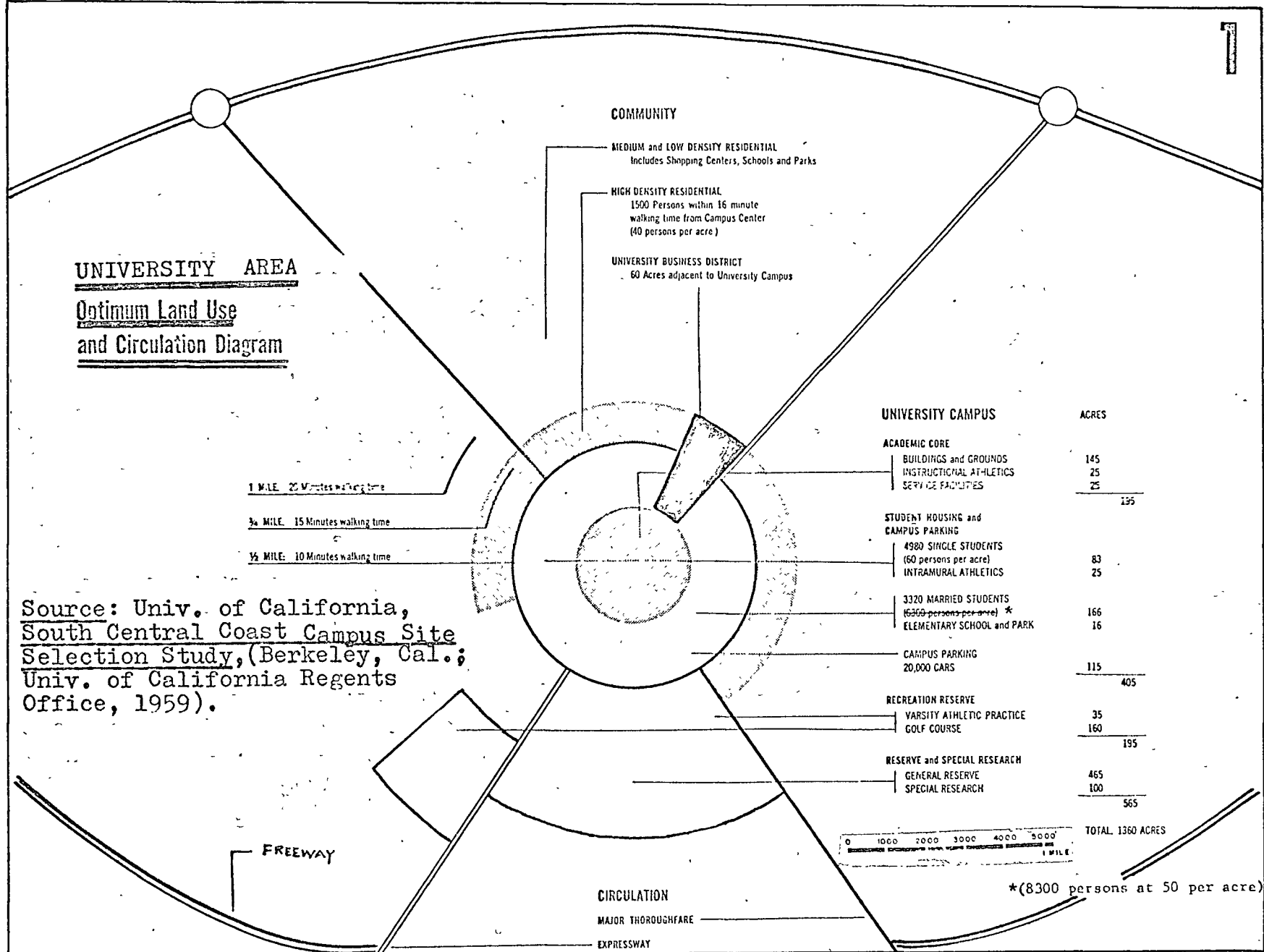
There are only a few campus parking studies where the comprehensive approach to this question is taken. The optimum land use and circulation diagram, prepared for the regents of the University of California, proposed that parking areas be located as spokes radiating from the academic core. Following this page Figure I illustrates various functional relationships in designing a new campus and its community. The parking areas would be used by campus commuters and resident students, with spaces adjoining the core reserved for senior faculty and staff and designed to avoid huge expanses of asphalt covered with cars. The optimum scheme also suggests that parking areas would serve as supplementary insurance against unforeseen future land requirements for expansion of the academic core or for university housing areas. The space standards in Figure I following this page were designed for an ultimate enrollment of 25,000 students.¹

The planning study for a new university of California campus,

¹University of California, South Central Coast Campus-Site Selection Study, (Berkeley, California: University of California Regents Office, 1959).

UNIVERSITY AREA
Optimum Land Use
and Circulation Diagram

Source: Univ. of California,
 South Central Coast Campus Site
 Selection Study, (Berkeley, Cal.;
 Univ. of California Regents
 Office, 1959).



which would contain total population of 34,500 recommended 19,730 on-campus parking spaces at a density of 135 cars per acre which would allow generous landscaping of areas. The plan sets aside 146 acres for parking.¹ The University of Pennsylvania recommends that on-campus parking structures be located within 1,200 feet or five minutes walking time to most instructional facilities, and at distances up to 800 feet or 3 minutes walking time for facilities such as hospitals which have consistently high off-street parking needs or for those facilities that generate only varying peak visitor requirements (such as the football stadium or Auditorium).²

However, the qualifications of these estimates, are that university standards for parking are widely different from those of the adjacent municipality. If the area surrounding the university has to have predominance of university type development, the city's by-laws with respect to institutional, commercial, and different types of residential development would need to be brought in line with the university standards for development.

¹American Society of Planning Officials, Planning for Campus Parking, A Special Report of the Advisory Planning Service, (Chicago: ASPO, 1963).

²University of Pennsylvania, Proposed Off-Street Parking Plan, (Philadelphia: The University Planning Office, 1961).

II INTERGRATION OF CAMPUS PLANNING AND MUNICIPAL PLANNING - EVALUATION

It is well known that the city is a very complex, social, economic, and political phenomenon. It is natural that each city or municipal corporation should hold a unique view of its own future, its requirements, and general welfare. The universities have also been known to hold their independent opinions on matters of development. This is because each independent jurisdictional unit has more or less freedom of action to pursue its best interests. However, the development achieved by each pursuing its interests independent of the others - perhaps even prospering by its own standards - may be considerably inferior to what is cooperatively possible.

Barnes states that the University of California at Berkeley and the City of Berkeley encountered many issues of mutual concern in the development of campus adjacent areas;

1. A severe traffic congestion on roads leading to the campus.
2. Students cars parked for many blocks around the campus.
3. The tax free status of the university and the free services rendered to university by the City.
4. Overcrowded condition and substandard housing areas.
5. Unattractiveness of the campus adjacent commercial areas.
6. Acquisition by the university of city's tax revenue property for campus expansion.¹

For years the university and the city pursued their interests independently of each other but when these problems

¹James A. Barnes, "Campus Planning," Planning 1958
(Chicago: American Society of Planning Officials, 1958)
pp. 142-148

became acute a concerted effort was given by respective administration individually and jointly. The City formed a seven member liaison committee having the three following purposes:

1. To represent the City of Berkeley in discussion and negotiations with the University of California,
2. To assist the City Council, the City Planning Commission, and the City Manager in reaching mutually beneficial solutions to problems of joint concern,
3. To promote broader understanding of the City's view point, and to maintain harmonious relationships with other agencies.¹

Correspondingly the university also formed a seven member liaison committee. This was a sub-committee of the Committee on buildings and campus development. Like the City Liaison Committee, its function was also advisory to the Chancellor of the Berkeley campus.

The City liaison committee advised the City Planning Commission on matters pertaining to policies, and to the City Manager on administrative and non-administrative matters. The committee was comprised of four Commissioners together with the Director of Planning, the City Attorney, and the Director of the Public Works Department.

The formation of two committees facilitates the discussion at their joint meetings which proved to be a successful arrangement. The revised Master Plan of the City stated that in order

¹James A. Barnes, op.cit., pp. 142-148.

to achieve the degree of cooperative planning which the City Planning Commission believes is vital to the future interests of the city and the university, a liaison committee with clearly defined authority should be constituted for the mutual exchange of information and for the review of plans and proposals.

A formal administrative organization having well defined authority was found in the make up of the Wascana Centre Authority at the University of Saskatchewan. The Authority was established by passing of the Wascana Centre Act by the Legislature. The Authority has 11 members and has the status of a private corporate body. The Provincial government has 5 representatives, the University of Saskatchewan and the City of Regina three representatives each.

Under the terms of the legislation, the Authority will follow the development plan of the area. The plan was prepared and adopted by the coordinative effort of the three agencies. The Authority has the functions of reviewing and updating this plan as required, of undertaking all landscape construction, and of maintaining the grounds throughout the area.¹

Each participating party assumes the cost of developing its own area. The costs of operation of the Authority are shared among the three agencies, the Government of Saskatchewan bearing 55 per cent, the City of Regina 30 per cent, and the University of Saskatchewan 15 per cent. This kind of formal

¹Saskatchewan, Wascana Centre Authority, (Regina, Saskatchewan: The Centre Authority, 1962).

arrangement between the developmental agencies ensures effective coordination in resolving planning problems of University Area. In the case of Toronto University the lack of concern on the part of the City and Province left many problems dangling amidst the need for proper planning of areas adjacent to the campus.¹

The main problems were expansion of the university and the provision of fields for athletic purposes. Incidental problems were the availability of property for individual buildings. On one side the campus was bordered by provincial government property, park, and legislative buildings, and the other side was bounded by private dwellings in the City area. The City had been looking into the possibility of developing some of this area for playfields. The City and the Province were made aware of the University's need for facilities but no cooperative action or decision was taken. The University formed a four-man committee to study the problems of the area. The efforts of the committee resulted in a report and a plan with explicit mention of the adequacy of the plan:

In presenting this Master Plan for the University ... it should be accepted as a guide rather than an inflexible document. Changes of policy regarding enrollment, the economic position of the Province over the years, war, emphasis on special studies in the national interest, and other factors might modify the plan. If, on the other hand, the present plan is deemed to have merit, it should be the basis on which all future changes are made.²

¹Eric Arthur, "University of Toronto Master Plan", in the Journal of the Royal Architectural Institute of Canada, (October, 1953), pp.286-304.

²Eric Arthur, op. cit., pp.286-304.

Levi points out that the urban university and the City are natural partners at least with regard to the University District. The campus is built to last for generations, the surrounding neighbourhood development is only for a generation. Without renewal and maintenance of the adjacent areas the campus is placed in the difficult situation of performing its functions in the interests of the community. Only corporate action of the two can promote harmonious development.¹ He gives the classical example of cooperative planning in the Hyde Park - Kenwood project in the vicinity of the University of Chicago.

The areas adjacent to the university campus had different degrees of blight, each requiring individual treatment, and had different degrees of pertinence to the University. The university with its limited funds concerned itself with those neighbourhoods that were inhabited by its students, faculty and staff, whereas the City was counting on the development and restoration of the whole area comprising South East Chicago. The university had no ownership of adjacent properties so it could not obtain a federal grant for renewal, unless these properties had been purchased by the University. Residents of adjacent neighbourhoods found the University's and the City's suggestion for

¹ Julian H. Levi, "Expanding the University of Chicago", in Casebook on Campus Planning and Institutional Development, (Washington, D.C.: U.S. Government Printing Office, 1962) pp. 107-127.

renewal in direct opposition to their own interests.

In order to tackle the entire problem, first of all the aroused people of the area were given a vehicle of expression by the formation of a citizen's body, the South East Chicago Commission. The task of the commission was to work through the city's administration for rigorous enforcement of regulations on maintenance of buildings and other areas, and also maintained an open door policy for any one who wished to be heard on any matter pertaining to the district. The university's participation came in its role as a leader in initiating the formation of the commission whose head was the Chancellor of the University. Despite the rigorous enforcement of by-laws there were many properties which had deteriorated too far to be salvaged. These had to be acquired, the occupants relocated, and the structures demolished. All this required huge sums of money. Before such action could be contemplated, the Commission prepared a plan showing the re-use of the area. This plan was submitted for the approval of everyone concerned in the district. Those who resisted change and development were heard and heard again, and finally were persuaded. This invoked the administrations not only at the City or the University level but at the State level where statutes had to be amended to cover every situation possible.

It is significant to note that a project of this nature involved just as much community development and community education work as the actual planning itself. It is possible that

many urban campuses may have to confront the problem of expansion at some stage or another, the lessons of the University of Chicago, the City, and the State of Illinois in their cooperative endeavour to plan and develop serve as important guides to campus planning. Levi highlights this experience by reporting that after 10 years the cooperative planning brought the following results:

1. The crime rate was down to one-third of the 1953 figures,
2. Median family income in the area had risen to \$8,000 or more,
3. Seventy per cent or more of the population had been given school education or better,
4. Seventy per cent or more of the persons now living in the area were employed in the white collar industry - (the area had 60,000 population in 1962)¹

In planning the Santa Barbara campus of the University of California, the coordination among the County, the City, and University was brought about by each hiring the same firm of planning consultants for the preparation of plans of their respective jurisdictions. The University's advice was sought in the preparation of a Master Plan of roads and land use for the entire area comprising Santa Barbara County, and specifically with regard to the development of campus adjacent areas. The City's Master Plan was developed as an integral part of the County Plan. The University's role in overall planning was

¹ J.H. Levi, "Ground space for the University," The University, the City and Urban Renewal. (Washington, D.C.: American Council on Education, 1963), p.15.

affected by its memberships in the Chamber of Commerce, County wide committees, the Citizen's Planning Association, and through the Affiliates of the University of California at Santa Barbara. The Long Range Development Plan of the Santa Barbara Campus contains the following principle:

Campus officials will continue to work hand in hand with the officials of the City and County of Santa Barbara in achieving land use plans of mutual benefit and compatibility.¹

However, the qualifications of these examples, are: first, a suggestion for the need of coordination among developmental agencies, and second, the kinds of cooperative arrangements possible for concerted action. Principally these methods are as follows:

1. A development authority consisting of provincial, city, and university representatives having their main purpose to establish needs, policies, and programmes of the University Community Area.
2. Permanent liaison committees of the city, university, and senior levels of government for advising their respective authorities on planning and development issues resolved at their joint meetings. Recommendations of each committee are passed on to the officials who are decision makers on policies with respect to the jurisdiction administered by them within the University District.
3. Assigning the planning job to one large consulting firm who would prepare plans of the campus, the city, and the region. Consulting firm should have the capacity and resources to prepare general to detailed plans to cover the entire range of detailed planning necessary in regional, city and campus planning.
4. Citizen's committees consisting of neighbourhood and university members who would meet for debating issues of mutual concern in planning and development of the campus adjacent areas. Wishes of the committee to be passed on to city and university authorities.

¹University of California, Long Range Development Plan for Santa Barbara Campus of the University of California, (Berkeley, California: University of California Campus Planning Committee, 1963), pp.4 - 12.

The above methods are in fact various alternatives from which one or a combination of methods, can be adopted for cooperative planning. Some approaches may be superior or more valid than others if the precise nature of the planning problem has been previously identified.

However a cooperative method of planning should be in harmony with the existing governmental structure.

The "power to govern" in the democracy flows from well organized state government to its component areas by the delegation of powers. The purpose of the "government device" is to cover the whole range of governmental functions, therefore the powers delegated to its component areas are more or less specific. In British Columbia the legislature has the exclusive powers to make laws with respect to educational and municipal institutions of the province. The legislature by the adoption of the Municipal Act created municipal corporations, and by the adoption of the University Act created three provincial universities. Under the principles of these legislations each university and adjacent municipalities can adopt plans or policies with regard to the development of their respective jurisdictions. The set up of the University Community suggests that there are political jurisdictions when in fact there are no jurisdictions socially, physically (except the legal boundary) and economically. The cities and municipal corporations are required to pay their own way whereas the universities are largely financed by the government. In recent years it has been sufficiently demonstrated that these jurisdictions are not able to pay their own way even with large subsidies from the government. In this respect

also the cities, universities, and the province have much in common to explore for better methods.

Ylvisaker notes that the intergovernmental relations should be based upon the following criteria:

1. A process by which jurisdictional disputes can be settled. Each unit is free to tackle the whole range of governmental problems as they affect its area. This gives rise to continuous dispute between units, as the best interests of one do not coincide with the best interests of the other. Ultimately the disputes must be settled -- hence the need for a formal or informal process to settle issues.
2. A process of intergovernmental cooperation in order to exploit the whole variety of devices such as grants-in-aid, cooperative programs, intergovernmental planning and consultation etc. These devices which have been developed within the multiple-government context of modern democracy form the backbone of planning.
3. A process by which several governments may act separately and independently, as well as cooperatively. On the negative side, this constitutes friction and contravailing power, which restrain the higher levels and give each component a fighting chance of doing things in its own way. On the positive side, flexibility and incentive of competition, to do things differently and better, or to do things which any unit may think important though the others do not.
4. A process of organic change which can neither be dictated nor stopped by a minority of components. Historically, the realization of change and accommodation of that change into the governmental process has contributed to the vitality and survival of democratic tradition. This implies that the units should have open minds and sensitiveness to the needs of the changing society, and cooperate rather than dictate their best interests.¹

¹Paul Ylvisaker, "Some criteria for a proper areal division of governmental powers", in Regional Development and Planning, (Cambridge: M.I.T. Press, 1964), pp.519 - 541.

These processes are the desirable qualifications of a method which seeks to develop intergovernmental or interuniversity relationships. A corporate body such as the Wascana Centre Authority, comprised of provincial, city and university members; and the liaison committees of the city and the University such as the Berkeley campus and the City of Berkeley liaison committees, meet the requirements of the processes enumerated above. However, the disadvantage of liaison committees is that they do not have any power to make decisions on policies and programmes for development because their function is only advisory, whereas in the case of a corporate body there is specific enabling legislation empowering the Authority to plan and control the development. With the exception of one method (where the body actually has control over development), the other methods of cooperative planning are informal. Informal arrangements between governing bodies for the exchange of information and advice on matters relating to the development of the University Community Area seems to be readily acceptable as a method of cooperative planning. An informal method does not encourage the continuity of a coordinative approach to problems. Even sophisticated informal arrangements tend to disappear over time due to lack of incentives, change of personnel, time and resources. But the cities and universities have reached such a stage of interdependency that they have and will have many problems to solve mutually for the benefit of the society. Therefore it is

necessary that governing bodies should work out methods which should ensure their continuous attention in the development and planning of urban areas. Experience seems to indicate that the best results are achieved when:

1. a clear responsibility was assigned for an effective coordination at the highest level and consequently on the lower levels, to officials with required seniority, experience, and status;
2. all departments concerned were drawn fully into the task of development with shared responsibility and recognition;
3. the newly established corporate body does not seek, at any level, to over-ride other agencies but considers itself as an adjunct of all others in stimulating local interest, and rendering technical government services to them.¹

¹United Nations Bureau of Social Affairs, Social Progress Through Community Development, (New York: United Nations Publications, 1955), pp. 74 - 98.

TABLE V

SUMMARY OF CONFLICTING GOALS OF
THE CITIES AND UNIVERSITIES

UNIVERSITY	CITY
1. Room for university growth	1. Minimum demolition of housing for non-residential use.
2. Maximum provision of middle income housing emphasizing more housing for faculty.*	2. Maximum provision for low income housing and lower middle income housing for the present resident (some of whom may be university families).
3. Housing for minority groups with maintenance of stabilized racially integrated neighbourhoods.*	3. More good housing for minority groups - with the likelihood of opposition to the use of quotas.
4. Modern shopping districts implying acceptance of chain stores and high rents for new buildings.*	4. Small scattered, owner operated stores at low cost.
5. Continuing of tax free status of the university and no tax levy on properties purchased for expansion in adjacent areas.	5. Campus adjacent development be of such a nature that should broaden the city's tax base.
6. Recreational and open space provision on the periphery of the campus primarily for the use of university population.	6. Open spaces along the edges of the campus should serve city wide and regional function implying maintenance by the university.
7. High priority on city's list should be the development of campus adjacent areas.	7. City government is committed to the welfare of the whole city therefore University Community is of no better significance.
8. City should maintain the city streets adjacent to the campus, and no severe restrictions be placed on street parking.	8. Streets adjacent to the campus are used primarily for on-street parking by the university population, the university should share the maintenance cost.

* Source: K.C. Parsons, 'Universities and Cities', Journal of Higher Education, 24 Nos. 1 and 4 (Jan. and April, 1963) p.209

CHAPTER III

CRITERIA FOR EVALUATION OF PLANNING AND DEVELOPMENT
OF AREAS ADJACENT TO UNIVERSITY CAMPUSES AND
CASE STUDIES OF THREE UNIVERSITY DISTRICTS:
SIMON FRASER UNIVERSITY, VICTORIA UNIVERSITY,
AND UNIVERSITY OF BRITISH COLUMBIA

I CRITERIA FOR EVALUATION

1. Essential Functions: This criteria is based on the review of studies in the previous two chapters. The criteria comprise the following essential functions in a typical University Community.

- (a) Housing, characterised by dormitories, apartments, rooming houses, student cooperative housing, fraternity and sorority houses, and single family dwellings;
- (b) Community facilities characterised by schools, parks-playfields, churches, shopping and community centres;
- (c) Recreation and entertainment, described as field spaces, golf courses, stadiums, gymnasiums, sports areas, swimming pools, theatres and auditoriums;
- (d) Cultural, described as libraries, book stores, publishing houses, art galleries and museums;
- (e) Research, characterised by research industries related to the functions of the university;
- (f) Circulation, described as access routes, regional, metropolitan, town and university routes for vehicular and pedestrian traffic, parking areas, and public transport.

2. Functional Relations: The relationships among different categories of land uses comprising the various functions of the University District are important for achieving overall objectives of education, research, public service and housing to which most University Towns subscribe.

3. Growth Needs of the University Community: Apart from a proper disposition of land uses and community activities, the growth potential of each function should be evaluated well in advance of the allocation of space to various land use categories.

4. Identity: University District should be easily comprehensible as a district part of the metropolitan community. The design of urban spaces should reveal this area as the seat of culture and learning of art, science and technology in addition to its residential and service functions for the community.

5. Organization: The administrative structure of the University District should be designed to serve the interests of its inhabitants and the major participants located within the community area.

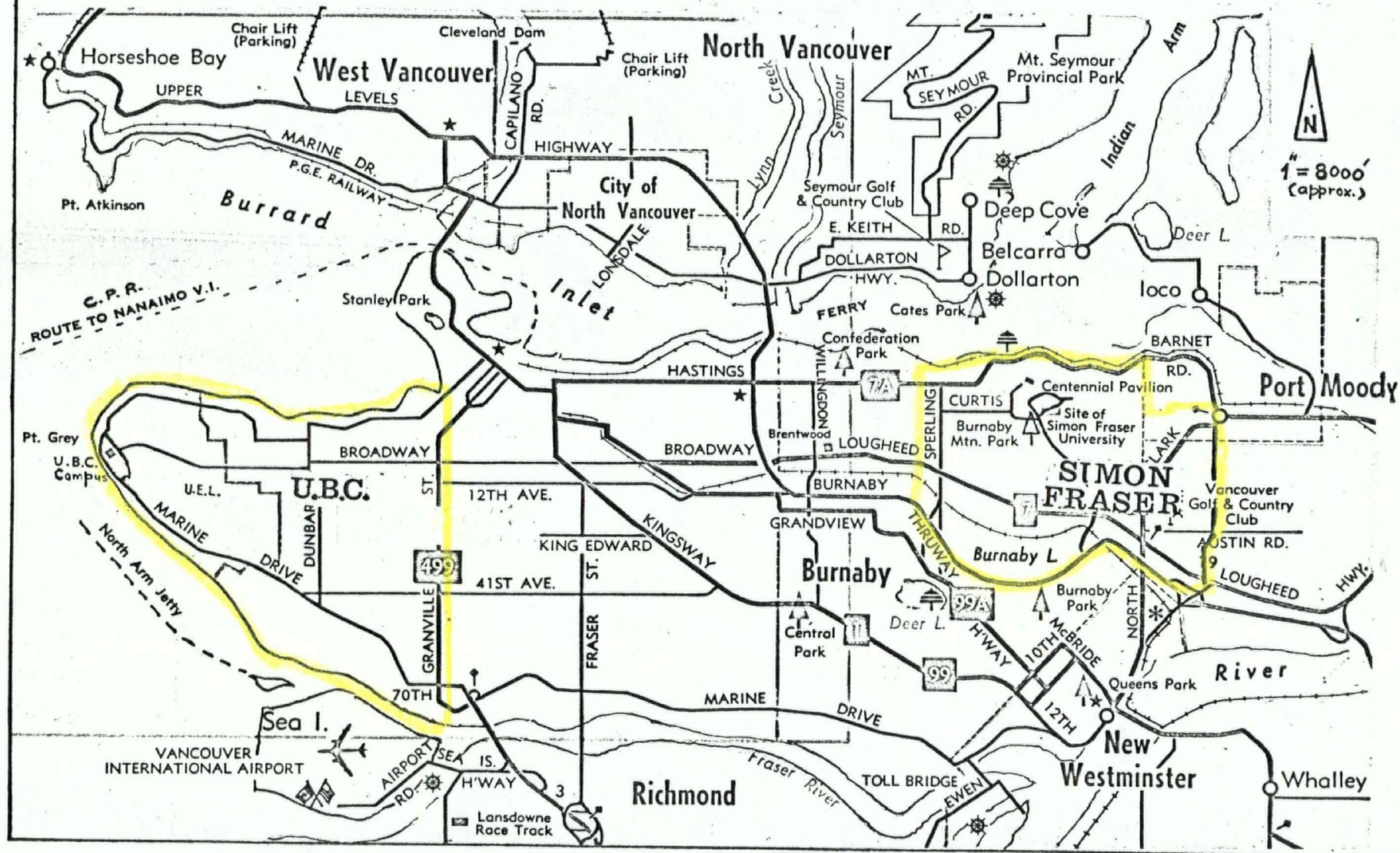
II CASE STUDIES

Simon Fraser University Community:

General characteristics of the University Area. The Simon Fraser University was established as a result of recommendations for decentralising the facilities for higher education in British Columbia. A study on Higher Education in British Columbia revealed that any future expansion of the University of British Columbia beyond a student enrollment of 25,000 will not be in the best interest of higher education, and recommended the establishment of a four-year college along the Trans-Canada Highway in Burnaby municipality. The college will take some of the

UNIVERSITY DISTRICTS METROPOLITAN LOCATION

2



Source: Vancouver Visitors' Bureau, Vancouver, B.C., 1966

anticipated student population growth in the Lower Fraser Valley, and the location will provide automobile access to students from North Vancouver, Surrey and Langley municipalities.¹ In 1963, the provincial legislature established the Simon Fraser University with the passing of the Universities Act. The Burnaby Mountain site was selected for the new university.²

The University District is bounded by Barnet Highway and Burrard Inlet, Blue Mountain Road, Trans-Canada Highway, and Kensington Avenue. The study Area is somewhat larger than the Simon Fraser University Town Site Plan and includes parts of Burnaby, Port Moody and Coquitlam municipalities.³ The university site comprises 1200 acres on the top of the mountain. The City of Vancouver owns some 225 acres of undeveloped land in the southern part of the Study Area. Also in the southern portion of the area and fronting the Lougheed Highway is the Lake City Industrial Estate owned by Pacific Western Holdings Ltd. With the exception of low density residential areas around the perimeter of the University District a large part of the undeveloped land is under municipal ownership.

¹J.B. Macdonald, Higher Education in British Columbia, (University of British Columbia, 1962).

²Universities Act of the Province of British Columbia, (Victoria: Queen's Printer, 1963).

³Project Planning Associates, Simon Fraser Townsite Master Plan, (Toronto: Project Planning Associates, 1963).

Existing commercial facilities are located in the North Road Shopping Centre, and along the Barnet, Loughheed and Blue Mountain roads within the boundaries of the Study Area. A site for a major shopping centre to serve approximately 110,000 persons has recently been zoned adjacent to the existing North Road Shopping Centre. A smaller shopping centre has been proposed west of the University in Burnaby, and is likely to contain campus oriented businesses (Map 3 and Table VI on Page 56)

At the present time the area is devoid of any apartment development except 202 units in Port Moody, but several high density residential zones, to provide a range of accommodation in apartments, are proposed by the Burnaby municipality within the Study Area. Multiple Dwelling areas will be located adjacent to the proposed shopping centres within the area. The university plans to provide on-campus accommodation for 2,500 students which is approximately 20 per cent of the ultimate student enrollment. There are no plans for faculty and staff housing. The demand for off-campus housing will be fairly high in areas adjacent to campus. At present most of the out-of-town students except 60 women in campus dormitory accommodation are located in housing accommodation in and around Hastings Street. Burnaby Planning Department's proposals for apartment zones in areas adjacent to campus plus the regulations permitting boarders in single family homes will largely supplement the university's demand for off-campus accommodation.

Open space provisions in the Study Area include

undeveloped land around the university campus, wooded ravines and Burnaby Lake Area. The proposed Burnaby Lake Metropolitan Park (650 Acres) will be integrated with the University Site and Burnaby Centennial Park through ascending park ravines. In addition there are two sites for golf courses, one south of the Burnaby Centennial Park and the other in West Coquitlam and adjoining the Blue Mountain Road within the boundaries of the University District (Map 4 following page 57).

The Trans-Canada Highway along the southerly boundary of the University District is a major east-west through traffic route and connects to Vancouver on the west side and to Coquitlam and other parts of the region on the east side. Also this highway connects to North and West Vancouver through the Second Narrows crossing. The university traffic is routed by two major access roads, one from the south, connecting the Stormont Interchange of the Trans-Canada Highway with the university, and one from the west, connecting to Hastings Street. Barnet Highway forms a major arterial link between Port Moody and Hastings Street. Another important cross-town route connecting Hastings Street and Como Lake Road in Coquitlam is proposed to be completed in the near future.

The impact of the University on the surrounding area: The university campus is still being built and has an enrollment of about 3,000 students, the impact of the campus on its adjacent areas is beginning to be felt already.

1. Perhaps the first impact was on major landowners in the area. Burnaby municipality, the City of Vancouver, Western Pacific Holdings Ltd.,

Simon Fraser University, a major land owners in the area, commissioned Project Planning Associates of Toronto to prepare the Simon Fraser Townsite Plan. The plan covered an area of 4,000 acres in North-East Burnaby, and outlined the future pattern of land use which would be compatible with the university's functions of education, research, housing and services for the community. The plan was adopted by the Municipal Councils of Burnaby and the City of Vancouver in principle.

2. The second type of impact is manifested in the changing character of the North-East part of Burnaby as a result of the development of the university and highways. The highways have generally improved the access, increased the demand for sites and up-graded the property values and municipal taxes, but on the negative side, have interfered with the desires of the area's residents to maintain the character of their neighbourhoods. The Burnaby Council received petitions from residents on (a) the curtailment of safe pedestrian access for some school children who now have to cross busy highways to go to schools, and (b) on the destruction of horse riding trails and picnic sites on the Burnaby Mountain due to the development of the campus buildings and facilities.
3. Burnaby Council has a restrictive subdivision policy on land held by private owners in the Townsite area. The residents urged the Council to lift these restrictions.

Administrative Arrangement for Cooperative Planning: Simon Fraser University District consists of four jurisdictional units, the municipalities of Burnaby, Coquitlam and Port Moody, and the Simon Fraser University. In addition, the City of Vancouver owns 225 acres of presently undeveloped land, and the Western Pacific Holdings Ltd., a private company, occupies about 650 acres within the boundaries of the Study Area. In 1964, an Advisory Technical Committee consisting of the four major land owners of the Municipality of Burnaby, the City of Vancouver, Simon Fraser University

and Western Pacific Holdings Ltd. was constituted. Coquitlam, Port Moody and the Lower Mainland Regional Planning Board were later asked to participate in the committee. The Director of Planning for Burnaby who is also Chairman of the Technical Committee stated in his report to the Committee that:--

The Burnaby Council have agreed to the establishment of a technical committee to advise them on all aspects of the plan. It is intended that this committee should be broad in scope and would consist not only of representatives from the four parties participating in the Simon Fraser Townsite Plan but also of representatives from the adjacent municipalities of Port Moody and Coquitlam and the Regional Planning Board. Assistance from the Department of Highways, B.C. Hydro, etc. would be obtained where necessary.¹

The representatives from various organisations include the Directors of Planning of the District of Burnaby, the City of Vancouver, the Lower Mainland Regional Planning Board, the Mayor of the City of Port Moody, Principal Planner of the Simon Fraser University and the technical staff of various participating parties. The representatives advise their organisations on matters of joint concern which are discussed at the meeting and thus indirectly participate in the decision making role of the municipal councils and other participating organisations.

Some crucial issues facing the committee arise from the differences of interest of the parties. The university administration is solely interested in the development of the campus and in part of the planning of access routes of the campus

¹A.L. Parr, "Progress Report North-East Burnaby Plan", (Burnaby, B.C.: Burnaby Planning Department, 1964), pp.3. (unpublished).

which pass through municipal areas around the university. The university is anxious to acquire some additional property particularly the undeveloped land owned by the City of Vancouver. The City is counting on this land as a potential source for financing part of its five-year plan. The Burnaby Planning Department would like the University to develop its site as an integral part of the North-East Burnaby Park system. The Regional Planning Board would like to see a policy adopted by the university to set aside area surrounding the immediate campus for a possible regional park. The university fears that unless adequate housing and commercial development by the municipalities is planned within walking distances of the campus, the area immediately adjacent to the campus will have to be developed for these facilities. Port Moody and Coquitlam are linked in the committee because the university might have an impact on highways and residential development in these areas. Also the major town centre for the University District is proposed along the boundary of Burnaby and Coquitlam. Major land owners such as Western Pacific Holdings Ltd. are there because of strong profit motivation in the Townsite proposals.

However the purpose of this dichotomy is to reveal that there are conflicting viewpoints with respect to the development of the University Community Area. The Advisory Technical Committee is a vehicle of expression for the interested parties, and so far has been effective only in awakening the need for joint planning. As a result of diversity of interests some major decisions of location of community facilities did not constitute the consensus of the committee. However, it is

probably premature to consider the adequacy of this kind of informal cooperative arrangement for overall planning because the committee has not met regularly during its inception in the last $1\frac{1}{2}$ years.

Burnaby Planning Department is presently revising the Simon Fraser Townsite Plan to accommodate certain changes in proposals in the locations of major shopping centres and other facilities in the University District. The current planning practice is based upon the following principles:

1. The integration of the university campus with three urban municipalities, Burnaby, Coquitlam and Port Moody. The integration of the campus with the urban area is perhaps one of the major special planning problems in the opinion of planners. Unlike other university campuses the Simon Fraser University occupies an isolated site on the top of Burnaby Mountain and needs to be integrated with the surrounding area.
2. A major Town Centre comprising major facilities for shopping, clubs, churches, recreational uses and transient accommodation to serve an estimated population of 110,000 in North-East Burnaby and the westerly half of Coquitlam is being planned. The Town Centre is located along the major access route to the university, and would serve some of the university's demands for off-campus facilities.
3. A smaller shopping centre within walking distance of the university is being considered. A majority of businesses in this proposal are expected to be primarily campus oriented.
4. The apartment zones offering a range of multiple accommodation are proposed in areas adjacent to the shopping centres.
5. A 60 acre site for a Research Campus south of the university campus is being considered for zoning land for industries.
6. A continuous open space comprising the university campus, Burnaby Centennial Park, and Golf Course, Burnaby Lake and wooded ravines in the North-East Burnaby Area is being planned.

7. The planning of residential areas is based on the "Neighbourhood Principle". The existing and proposed elementary schools are located within walking distances of homes served. The traffic routes will exist on the periphery of each neighbourhood (Table VI on page 57 and Map 3).
8. The population and residential densities are being planned to support neighbourhood and community facilities within the Study Area.
9. A conservation of the existing pattern of land ownership. The major land owners, Simon Fraser University, Burnaby Municipal Corporation, Western Pacific Holdings and the City of Vancouver own more than 50 per cent of the presently undeveloped land in the Townsite Area. With exception of oil tank farms, the remainder of the area is residential and is owned by individual homeowners. A combined approach, for the planning and development, by the major land owners, will result in a far more superior development than it would be possible with the multitude of owners.¹

These principles evolved by Burnaby planners are being fully explored in the revision of the Simon Fraser Townsite Plan. Routine decisions of the Municipal Council on matters pertaining to North-East Burnaby reflect these principles.

¹A.L. Parr, Director of Planning, Corporation of the District of Burnaby, B.C., by interviews in March, 1966.

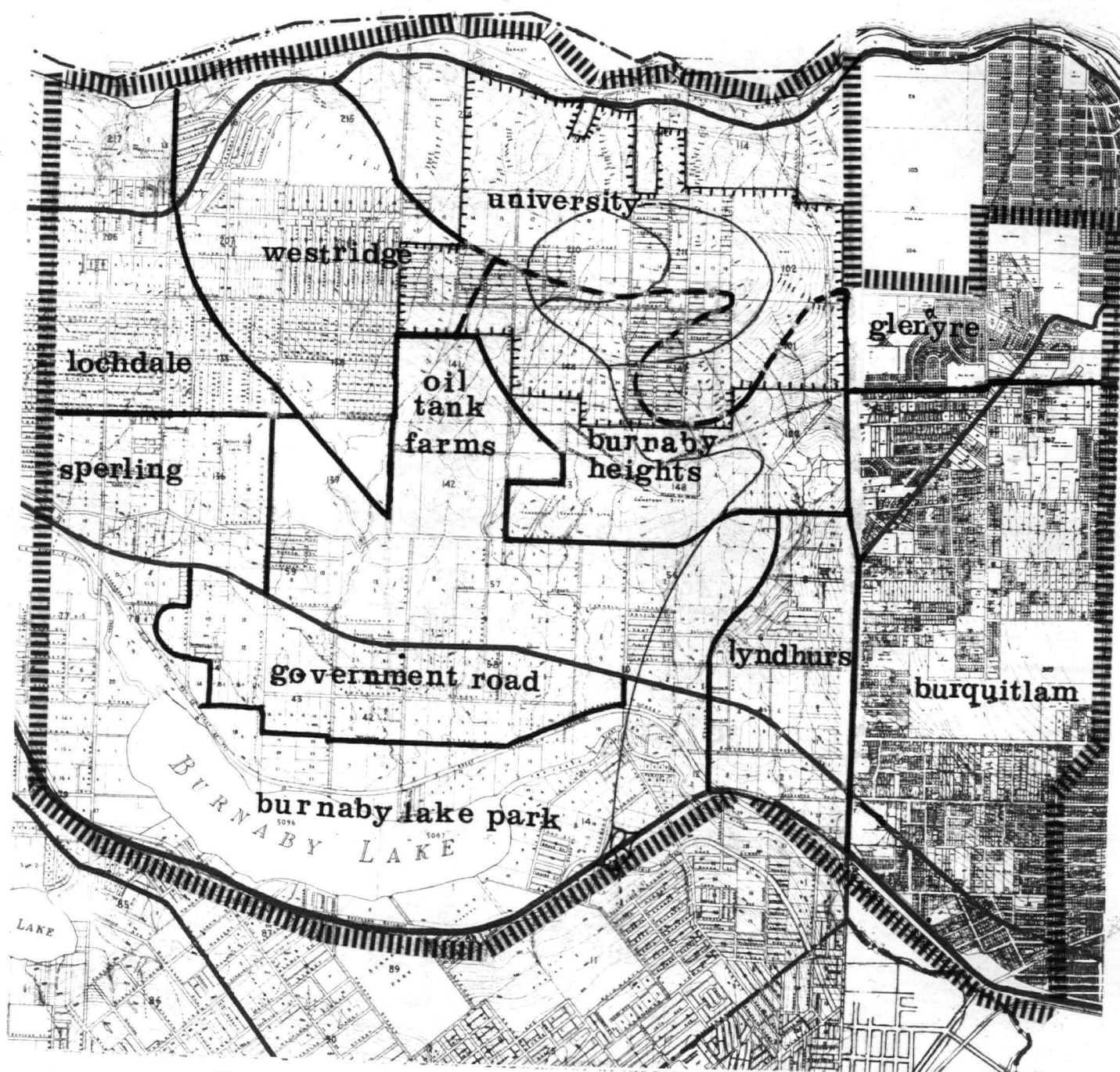
In addition, the following reports of the Burnaby Planning Department were consulted and any changes in proposals subsequent to the publication of reports were revealed by the Planning Staff at Burnaby.

Burnaby Planning Department, Burnaby School Sites, (Burnaby, B.C.: Corporation of the District of Burnaby, 1959).




Burnaby Planning Department, Burnaby Park Sites, (Burnaby, B.C.; Corporation of the District of Burnaby, 1961).

Project Planning Associates, Simon Fraser Townsite Master Plan, (Toronto: The Associates, 1963).

SIMON FRASER UNIVERSITY DISTRICT 3 NEIGHBOURHOODS



LEGEND

-  university boundary
-  neighbourhood boundary
-  university district boundary

Source: Lower Mainland Regional Planning Board,
New Westminster, B.C.



scale 1" = 3400'

April, 1966.

TABLE VI

SIMON FRASER UNIVERSITY COMMUNITY
NEIGHBOURHOODS, POPULATION AND THE
TYPES OF DEVELOPMENT

Neighbourhood or Area	Present Population	Ultimate Population	Type of Development
Lochdale	3,888	6,000	mainly single family residential.
West Ridge	1,458	6,500	single family residential
Sperling	1,672	11,456	ultimate population in SFD 4,556 and MFD 7,400
Government Road	1,077	5,400	single family residential
Lyndhurst	1,543	14,604	ultimate population in SFD 3,874 and MFD 10,730
Burnaby Mountain Heights	140	NIL	university area
Simon Fraser University	60	2,500	campus buildings & student dormitories
Burquitlam	8,300	ENA ¹	single family residential & apartments
Glenayre	2,500	ENA	single family residential & 202 units apartments.
Burnaby Lake	-	NIL	metropolitan park 650 acres including lake.
Research Campus	-	-	research industries
Industrial	-	-	Oil tank farms, and industrial sites.

Sources: Burnaby Planning Department, Corporation of the District of Burnaby, B.C., Lower Mainland Regional Planning Board, New Westminster, B.C.

¹ENA (Estimates not available)

Implementation: Burnaby Planning Department submitted the following methods to the Technical Committee in considering the implementation of the Simon Fraser Townsite Plan.

1. Adoption of an unofficial community plan of the University Community Area to serve as a guide only (Map 4).
2. Adoption of a binding Official Community Plan of the Municipality. Any variance to plan would require the approval of the Provincial Government. The University Townsite Plan will be an integral part of the Burnaby Master Plan.
3. Delineation of an area where major landowners are involved, such owners to develop on an agreed joint basis. The owners to be guided by the unofficial University Area Plan.
4. Land assembly under one ownership.
5. Administration of the plan by an Estate Manager or a real estate corporation of major land owners.
6. The land to be developed will be leased to developers and the whole operation will be managed by a real estate corporation.
7. Municipal controls such as Subdivision, Zoning, Capital budgeting, Scheduling of municipal services, etc., are deemed to be the subsidiary methods for implementation.¹

Victoria University Community:

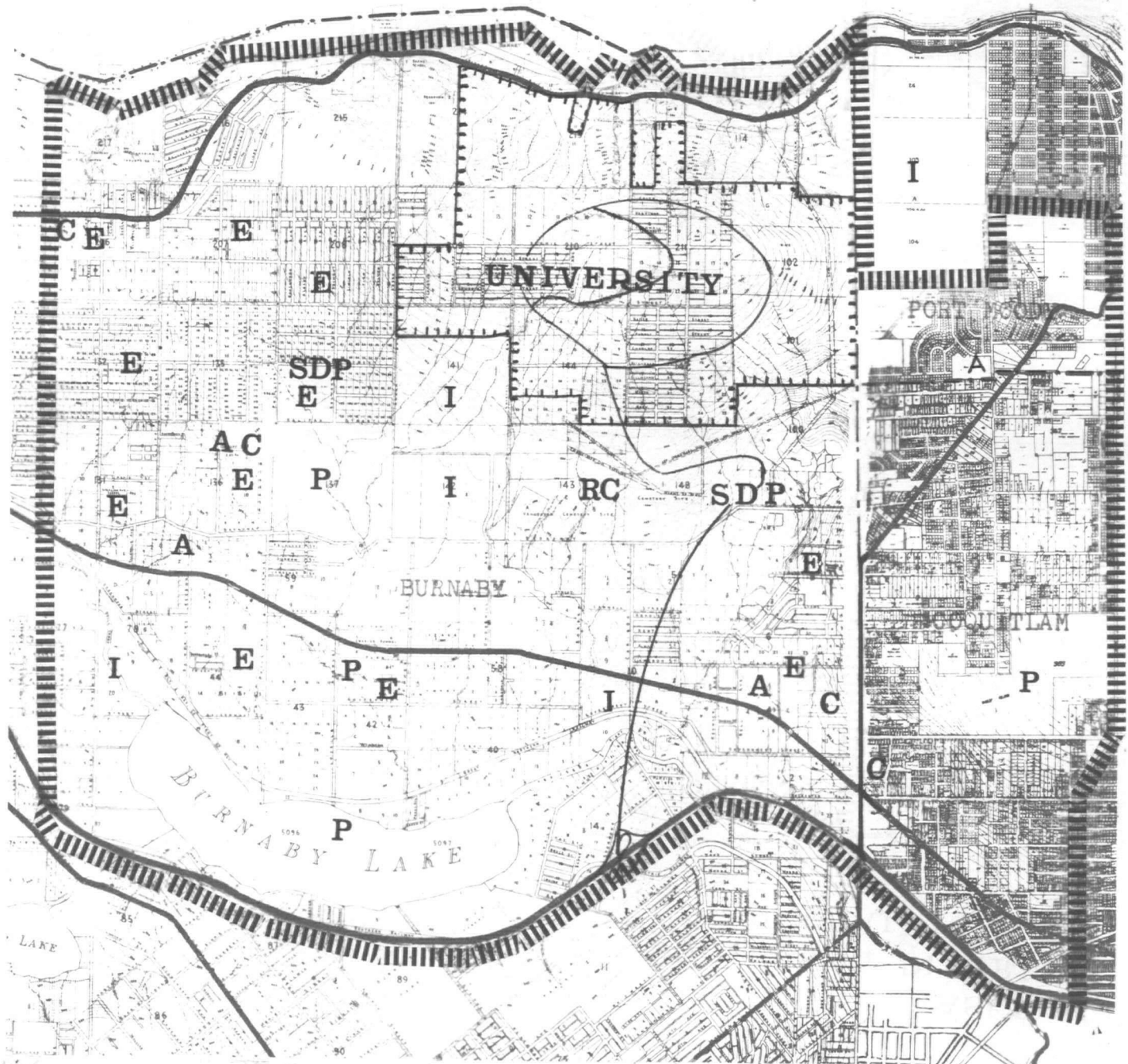
General Characteristics of the Area: The University of Victoria came into being in 1963 with the passing of the Universities Act.² Prior to this, the University enjoyed the status of a college for some sixty years.

¹ A.L. Parr, "Progress Report, North-East Burnaby Plan" (Burnaby, B.C.: Burnaby Planning Department, 1964).

² Universities Act of the Province of British Columbia, (Victoria, B.C.: Queen's Printer, 1963).

SIMON FRASER UNIVERSITY DISTRICT GENERAL PLAN

4



Source: Lower Mainland Regional Planning Board,
New Westminster, B.C.

LEGEND

- single family res.
- A multi family res.
- C commercial
- RC
- I

----- municipal boundary

- university boundary.
- research campus.
- industrial

univ. district boundary

scale 1"=3400'

April, 1966.

- P park and golf course.
- SDP secondary school; district park.
- E elementary school

In 1960, through the cooperation of the Department of National Defence and Hudson Bay Company, the college administration acquired 284 acre campus site in Gordon Head within the Victoria Metropolitan Community. Prior to 1963 Victoria College had all its functions on a 54 acre campus located at a distance of one mile from the Gordon Head campus. At present the academic facilities of the university are distributed between these two campuses.¹

The University District is bounded by Blenkinsop Expressway, Haultain Avenue and coastal waters in the southeasterly part of the Provincial Capital Region. Its relationship to the metropolitan municipalities and the network of existing and proposed major roads, is shown on Map 5. The Study Area includes about 7,374 acres (5,657 acres in Saanich, 1,139 acres in Oak Bay, and 578 acres in Victoria).²

The existing commercial facilities are located at Hillside Plaza, Shellbourne Plaza, Cadboro Bay Village and in a few scattered locations within the boundaries of the Study Area.

The Study Area is single family residential and some farming but a significant apartment development has taken place over the past four years. The apartment areas are

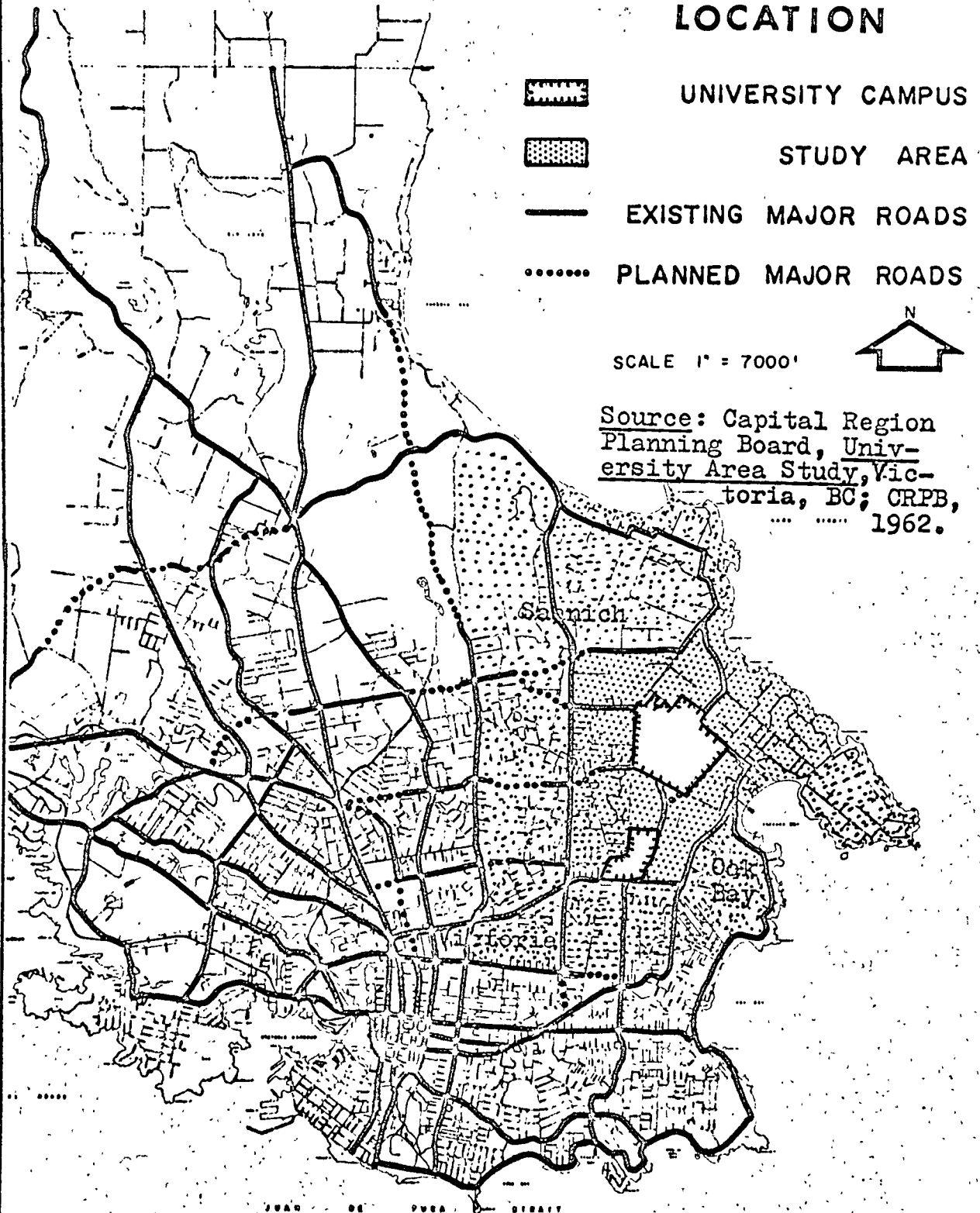
¹University of Victoria, The University Calendar (University of Victoria, Victoria: 1964).

²Saanich Planning Department, A Plan for University Area, (Saanich, B.C. The Planning Department, 1965).

VICTORIA 5

UNIVERSITY AREA

LOCATION



adjacent to the existing shopping plazas. The university plans to provide on-campus accommodation for 2,000 single and 500 married students and 120 faculty members. The demand for off-campus accommodation will be fairly high in areas adjacent to the campus. At present on-campus accommodation is provided for about 350 students, and the other planned accommodation is expected to be built over the next decade or so. It is estimated that with the ultimate size of the university having an enrollment of 10,000 students, 700 faculty and 500 staff, the demand for off-campus accommodation within the Study Area will amount to some 2,000 dwelling units. The relationship of the university enrollment with the existing, planned and needed housing accommodation is shown in Table VII on page 61. It is reasonable to expect that the university may grow beyond its planned size, the needed accommodation will change with the growth. Oak Bay municipality is generally committed to the single family residential principle whereas Saanich Council is pursuing the policy of providing a range of apartment accommodation related to the university's demand within the boundaries of the Study Area. The apartment zones are proposed in areas adjacent to the existing or proposed shopping centres. The Plan outlined a proposal for a town centre comprising facilities for shopping, recreation, clubs, churches,

¹Saanich Planning Department, A Plan for the University Area, (Saanich, B.C.: The Planning Department, 1965).

ENROLLMENT AT THE UNIVERSITY OF VICTORIA

61

TABLE VII:

IN RELATION TO NEEDED HOUSING ACCOMMODATION

SESSION	1962-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70	70-71	71-72	Ultimate
University Enrollment	1,826	2,085	2,550	3,050	3,300	3,700	4,100	4,500	4,900	5,300	10,000
<u>Group I (Students)</u>											
Out-of-Town Students requiring Accommodation	589	660	839	1,200	1,320	1,480	1,640	1,800	1,960	2,120	4,000
Accommodation available on the Campus											
Single Students	-	-	150	150	150	400	400	600	600	600	2,000
Married Students	-	-	-	-	-	-	-	-	-	-	500
Off Campus Accommodation required	589	660	689	1,050	1,170	1,080	1,240	1,200	1,360	1,520	1,500
<u>Group II (Faculty)</u>											
Faculty requiring Accommodation	134	144	150	200	230	260	290	315	340	370	700
Faculty Accommodation avail- able on the Campus	-	-	-	-	-	60	60	120	120	120	120
Faculty requiring Accommodation off the Campus	134	144	150	200	230	200	230	195	220	250	580
<u>Group III (Non-Academic University Staff)</u>											
Non-Academic Staff requiring Accommodation	69	62	70	120	132	150	165	180	196	212	500
Accommodation available on the Campus	-	-	-	-	-	-	-	-	-	-	-
Non-Academic Staff requiring Accommodation off the Campus	69	62	70	120	132	150	165	180	196	212	500

Source: Saanich Planning Department, A Plan For The University Area, (Saanich: Plng. Dept., 1965)

community hall and multiple accommodation, in Gordon Head Community north-west of the campus.

The open space component of the Study Area includes three golf courses, neighbourhood community park, playfields and beaches. Mount Douglas and Mount Tolmie parks and three golf courses serve much larger areas of the metropolitan community. The major open spaces, rural residential zones and coastal waters exist on the periphery and thus create a natural greenbelt around the Townsite. The relationship of open space to residential and other land uses is shown on Map 7, following page 70.

The circulation system of the Study Area is oriented towards the university campus. Blenkinsop Road, Marine Drive and Haultain Avenue form the peripheral access routes. The Cedar Hill Cross Road and the proposed extension of Mackenzie Avenue and Tattersall Drive connect the university to Trans-Canada and Patricia Bay Highways located west of the Study Area. Hillside Avenue, Shellbourne Street, Foul Bay and Cadboro Bay Roads form major links between the Study Area and Downtown.¹

Impact of the campus on the surrounding area: With the selection of the campus site in Gordon Head area, the following impacts of the campus development were noted:

1. A rapid urbanization of the agricultural land surrounding the campus. The rate of urbanization is reinforced by

¹Saanich Planning Department, A Plan for the University Area, (Saanich, B.C.: The Planning Department, 1965).

the fact that almost all land currently involved in the extensions of the municipal sewer system is in the university area. The size of the farm decreased considerably as part-time farming has become a way of life for many suburban dwellers. The land began to be farmed intensively for the production of a variety of vegetables, flowers and nursery plants, and has been vulnerable to small lot subdivision whenever price offered for farm land exceeds the returns to the farmer. The cumulative result is a scattered residential development over a large area north of Cedar Hill Cross Road, contributing to undesirable sprawl. With continued subdivision activity and home building, it is assumed that virtually all farming as an economic use of land will disappear over time.

2. The second impact is an emergence of new profitable market for land developers building houses for upper middle income groups because the university area became a prestige suburb of the region. In addition, the demand for commercial sites increased manifold. At one time three shopping centres had been proposed in areas immediately adjacent to the campus.
3. The urban development is orienting itself to the university's demand for housing and other facilities in the area. There is demand for low rental student housing accommodation and some households have been supplying a certain amount. A survey of off-campus student accommodation conducted in the summer of 1963 revealed that nearly 80 per cent of the accommodation existed in homes within a two-mile radius from the campus, and the remainder 20 per cent in homes at distances greater than two miles. The findings of the survey are shown in Table VIII on page 64. The results indicate that nearly one-third off-campus accommodation was within a half-mile distance (10-15 minutes walking time) from the campus. Generally speaking, the houses providing the off-campus accommodation are not the type and size which usually accommodate roomers. The on-campus accommodation exists only for 142 women students and much of the unsatisfied demand is being met in houses adjacent to the campuses. At the present time students are paying \$35 to \$45 per month for apartments in private homes, and \$70 to \$90 per month for room and board. These rentals are comparable to rental prevalent in the UBC Community Area and the Simon Fraser University Area. The university plans to provide accommodation for 2,500 students on the campus but the demand will be three times in excess of the planned amount. It is estimated that 7,520 (students, staff and their families) will require accommodation on the campus and in areas adjacent to the university.

TABLE VIII

ACCOMMODATION FOR UNIVERSITY OF VICTORIA
STUDENTS IN HOUSES OFF THE CAMPUS

Distance in miles from the campus	Percentage of out- of-town students in residence	Remarks
0.5	31.5	70 per cent of
1.0	16.8	these students
1.5	15.0	walk to the
2.0	16.8	campus and the
2.5	8.4	other 30 per cent
3.0	8.0	go by bus and car.
3.0 to 6.0	3.5	(15.5 per cent use public transport)
100.0		

Source: Saanich Planning Department, A Plan for the University Area (Saanich, B.C.: The Planning Department, 1965), Table 1 on page 8.

At the time of the survey there were three types of housing accommodation in the area; single and double rooms in single family dwellings; and suites in apartments. 50 per cent of the out-of-town students lived in single rooms and 37 per cent in double rooms of the single family dwelling units in the area. The remainder 13 per cent student lived in apartments.

4. The university manifests its impact not only in the demand for low rental accommodation but also in the volumes and pattern of vehicular traffic on routes leading to and from the campus. The traffic modifies the character of residential areas surrounding the campus. The single family dwelling area along the Henderson Road, a major access route to the university, is disturbed by the university traffic and there is growing concern over the planning of sufficient access facilities around the campus.¹
5. The effects of the university on surrounding municipal areas called for a more prudent look at the question of university-community relationships generally, and at the location of community and neighbourhood facilities, etc. in the University Area. In 1963, Saanich Planning Department determined the zone of influence of the university and selected area east of Blenkinsop Expressway for comprehensive planning and development. The University Area consists of parts in Saanich, Oak Bay and Victoria. The study resulted in a University Area Plan in February, 1966. The plan defines the relationships of the university to the surrounding community and provides for the growth needs of the campus, campus related institutional uses, community and neighbourhood areas in a setting of land use policies and controls to achieve the goals of education, research, residential and service to the public. (Map 7, and Table IX on page 69).

Administrative Arrangement for Cooperative Planning: There are four jurisdictional units in the University Area, The University of Victoria, municipalities of Saanich and Oak Bay, and the City of Victoria. Each is responsible for planning and development of their part administered by its council or development authority. In addition, the Capital Region Planning Board serves as an advisory body to the municipalities of the region. The cooperative planning is achieved by the following methods:

1. Liaison Committee consisting of university and municipal officials to discuss technical planning problems of mutual concern. The committee convenes meetings whenever there is a need.

¹G.O. White, Municipal Engineer and Planner, Corporation of the District of Oak Bay, B.C., by interview in March, 1966.

2. Inter-municipal Council consisting of municipal officials. The university does not have any representative on the Council but if these are matters concerning the university area, the university is called upon to participate.¹
3. University Area Planning Committee consisting of municipal councillors and technical staff from Saanich, Oak Bay and the university. This committee was recently constituted and has had no meetings so far.²
4. Advisory Planning Commissions of Oak Bay and Saanich. The Capital Region Planning Board is one of the members in these Commissions which deal with whole ranges of Planning problems concerning their municipal areas and the region. In previous years the Commissions discussed several planning problems pertaining to the University, Community Area and advised their Municipal Council on policies.
5. The Capital Region Planning Board was commissioned by Saanich, Oak Bay and the City of Victoria to prepare planning studies and plans of their respective jurisdictions. In this respect, the Planning Board has been quite effective in coordinating planning of Greater Victoria Area. Among various studies prepared by the Planning Board, the University Area Study was prepared in 1962, at the joint request of Oak Bay and Saanich Councils.²

Through the media of the above administrative arrangements the planning of the University Area has proceeded on a cooperative basis. Although the ultimate decisions are made by the Councils and the University, the participants in these committees had an important role to play in the decisions of their Councils and organizations on policies and programmes for the development of the University Area. There are no

¹A.H. Roberts, Planning Director, Capital Region Planning Board, B.C., by interview in March 1966.

²T.W. Loney, Municipal Planner, Corporation of the District of Saanich, B.C., by interview in March, 1966.

limitations of this kind of informal liaison at the local level but the liaison between the Provincial Government and the local planning bodies requires to be improved. There are problems particularly of financing the construction of highways and other projects of inter-municipal nature about which the local Councils have insufficient guidance as to what an extent the Provincial Government can participate in such programmes. Therefore the Municipal Councils tend to postpone their decisions until such time as a definite answer is received from the Provincial Government. In the opinion of planners this entails unnecessary delay which could be avoided by bringing into the committee a Provincial Minister or Deputy Minister as a permanent participant. This would give the committee the opportunity to hear the Provincial Government's view point at the time a problem is submitted to joint committee for discussion.

At present, the issues resolved at their joint meetings can not be communicated to the senior level of government on a joint basis due to inherent limitations of this arrangement. A municipality, university or the Planning Board deals with the Provincial Government on an individual basis. The problem is presented fragmentarily and in most instances it is weighted heavily in favour of a municipality which makes an application for an enquiry or requests for a provincial grant. The municipality does not deal with the whole problem but only with that part which concerns its jurisdiction. In an event an application is refused it not only affects the municipality concerned but

the total area. Under the limitations of the existing cooperative arrangement which has no provision of a joint communication with the Provincial Government, the problem never gets solved in time. Therefore some better form of organization consisting of municipal, university, the Planning Board officials and the Provincial Government be set up on a permanent basis.

Implementation: University Area Study contains the following methods of implementing the plan.

1. Higher density zone around the existing and proposed community and neighbourhood centres.
2. A "University Precinct" adjacent to the Gordon Head campus. Many universities attract related educational and research institutions which desire to locate in their vicinity. A special pediatric hospital, a medical school and a liberal arts college are possible institutional neighbours to the university. In addition there may be other institutions requiring sites in areas adjacent to the campus in the distant future. The primary purpose in establishing a precinct is to provide for the university expansion on one hand and sites for related uses on the other. The development within the precinct will be subject to special by-laws and other regulatory controls being evolved by the Saanich Planning Department.
3. Provincial participation in the construction of roads adjacent to the campus. The development of the university will create demands for road construction that are beyond the financial resources of the municipalities concerned. Provincial participation in some form would seem mandatory.
4. Creation of a "land bank" by deferring the development of presently undeveloped land owned by the municipality. A land bank will serve a useful tool for carrying out elements of the comprehensive plan. As land is increasing in value at a greater rate than most securities it would be good investment.
5. Zoning, subdivision and capital budgeting plans containing priorities for implementing the plan.
6. The programming and timing of sewers and other

TABLE IX
VICTORIA UNIVERSITY DISTRICT
COMMUNITIES, NEIGHBOURHOODS, POPULATION
AND TYPE OF RESIDENTIAL DEVELOPMENT

Community and Neighbourhood ¹	Area (Ac.)	Ultimate Population	Type of Development ²
<u>Cadboro Bay</u>	1,659	11,205	
Cadboro Bay	602	4,893	SFD & apartments
Ten Mile Point	394	1,998	SFD
University	663	4,314	Campus & university precinct.
<u>Gordon Head</u>	1,428	14,216	Town centre located in this area.
Tyndall	224	2,296	SFD & apartments
Torquay	319	3,280	SFD
Ferndale	459	3,497	SFD
San Juan	148	2,288	SFD & apartments
Feltham	258	2,855	SFD & apartments
<u>Mount Douglas</u>	1,654	10,132	
Ruby	200	2,720	SFD & apartments
Queensbury Hts.	114	1,092	SFD
Queensbury	294	2,411	SFD & apartments
Arrow	124	1,022	SFD
Cedarglen (excluding Mount Douglas Park)	922	2,887	Rural residential having large lots.
<u>Shelbourne</u>	1,864	21,802	
Henderson	370	2,768	SFD & apartments
Shelbourne	346	3,093	SFD
Newton	290	4,064	SFD & apartments
Cedar Hill	410	3,755	SFD & apartments
North Dairy	150	3,248	SFD & apartments
Hillside	298	4,874	SFD & apartments
<u>Uplands</u>	796	5,957	
Uplands	582	3,638	SFD's mainly
Lansdowne	187	2,319	SFD
<u>Total University Area</u>	<u>7,374</u>	<u>63,312</u>	

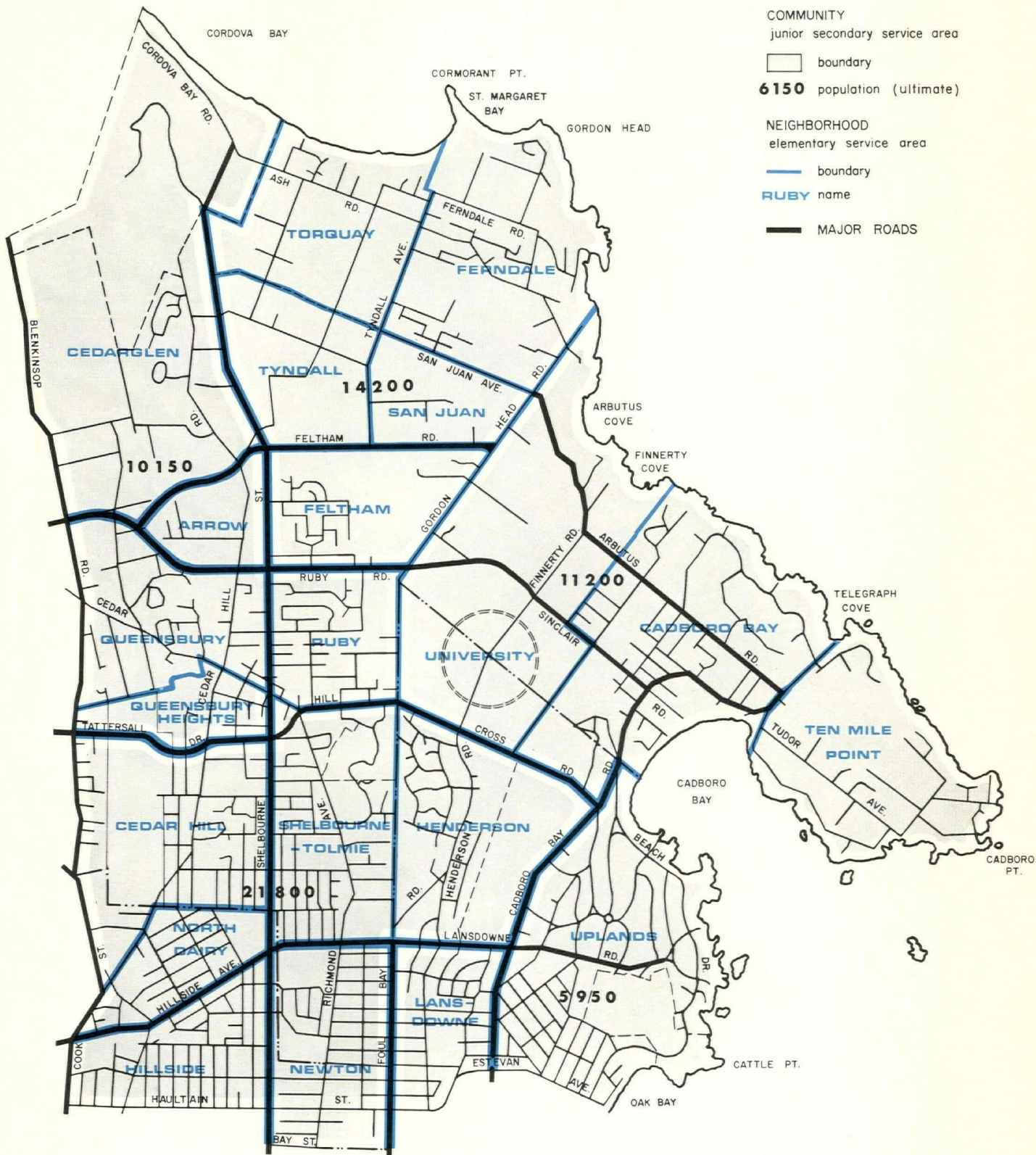
Source: Saanich Planning Department, A Plan for the University Area, (Saanich, B.C.: The Planning Department, 1965). In particular refer to Table V in the report.

¹A community, generally accepted in this plan, is a residential area forming a natural area of 10 - 35,000 potential population, comprised of two or more neighbourhoods, and forming a convenient service area for a junior or senior high school, a park and playfield and major shopping centre.

²The type of development in each community and neighbourhood comprises of shopping centre, schools, parks, playfields in addition to SFD (single family dwellings) and apartments.

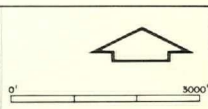
NEIGHBORHOOD AND COMMUNITY BOUNDARIES

6



UNIVERSITY AREA STUDY 1965

THE CORPORATION OF THE DISTRICT
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public utilities as a guide to development into designated areas.

7. Municipal policy of setting aside portion of the mill rate and progressive increment in the mill to be spent exclusively in the acquisition of land for parks-playgrounds in areas designated in the plan. In addition, adding to this fund a portion of the proceeds from the sale of municipal land. However, the limitation in this is the supply of property owned by the municipality.
8. Adoption of the Official Community Plan. Under section twenty-one of the Municipal Act Council may by by-law designate any community plan as the official community plan or as a part of the official community plan (Map 7).

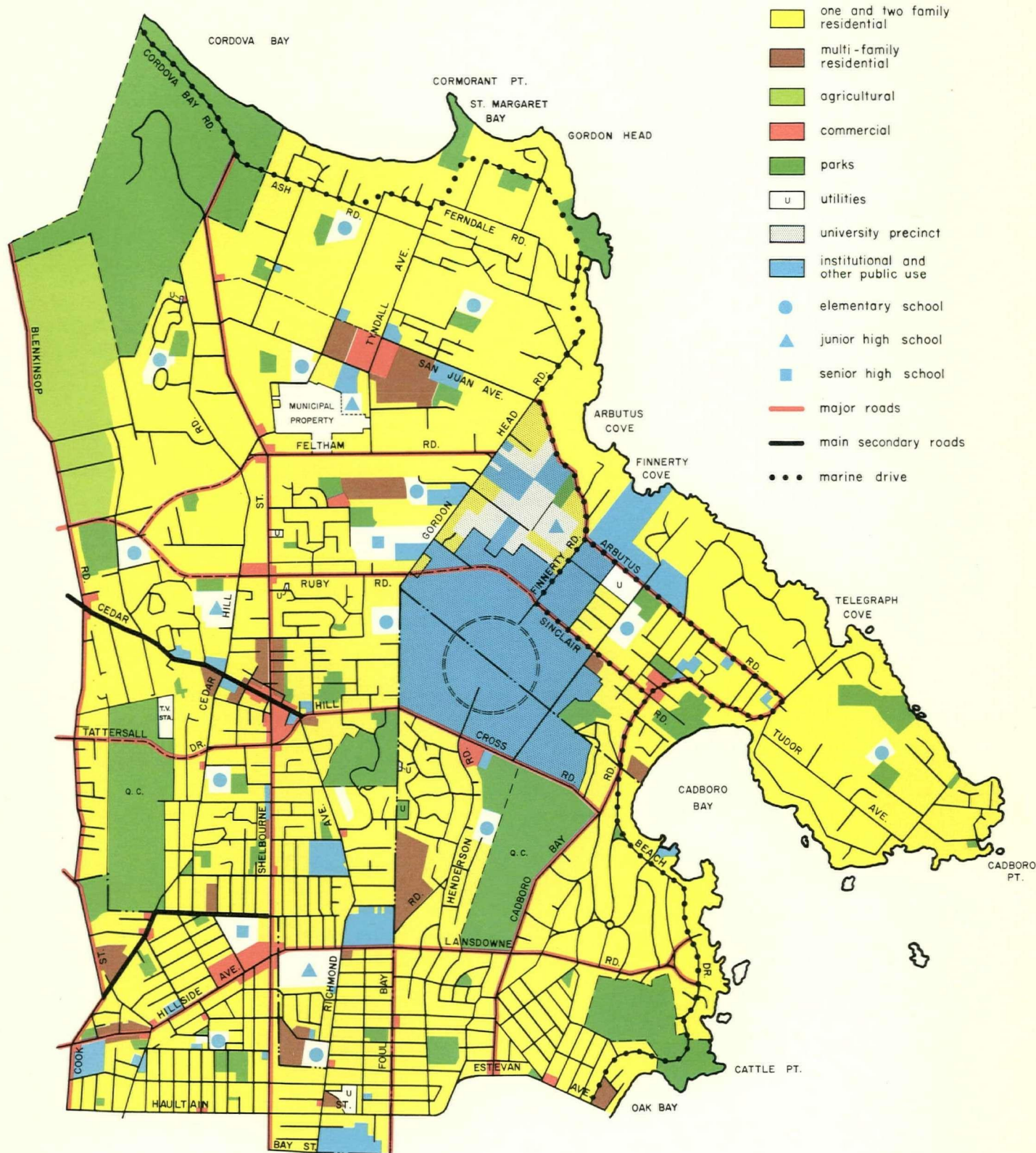
There are advantages and disadvantages involved in this procedure. On the one hand, once a plan is adopted securing a desirable amendment is a complicated and lengthy process. This may deprive the plan of necessary flexibility. On the other hand official adoption lends much more authority and stability to the plan, which would make it more resistant to "undesirable" changes.¹

The University of Victoria administration have a policy of maintaining close liaison with the municipalities concerned to achieve plans of mutual benefit and compatibility. In addition, the university administration has a policy of assembling sufficient land for future expansion of campus facilities. The techniques adopted by the university are as follows:

1. Creation of a development fund, a portion of which is spent in purchasing properties adjacent to the campus. Since 1961 the campus site has increased from 284 to 342 acres largely through the purchase of properties.
2. To work in close cooperation with the adjoining municipalities for the creation of a "University

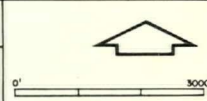
¹Saanich Planning Department, A Plan for the University Area, (Saanich, B.C.: The Planning Department, 1965).

GENERAL PLAN 7



UNIVERSITY AREA STUDY 1965

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Precinct" which has been initiated and proposed by the Saanich Planning Department for the Council's approval.

3. The right to expropriate land under the provisions of the Universities Act. This is perhaps the last resort if everything else fails to acquire additional property for campus expansion.¹

University of British Columbia Community Area:

General Characteristics of the Area: The University of British Columbia was established in 1908 with the passing of the University of British Columbia Act. Originally the campus was located in the City of Vancouver but in 1920's it was moved to the Point Grey District and was placed at the westerly extremity of Point Grey peninsula. In 1923, the Provincial Government set aside 2,900 acres contiguous to the campus as an endowment for the university. The area was planned to be developed as a high class dormitory suburb of Vancouver with a view to realizing the maximum profit possible from development of lands for residential, shopping, research industries, etc.² At the same time the Municipality of Point Grey which was incorporated in 1908 under the Municipal Act began to be developed into single family residential suburb of Vancouver. From the very beginning of the development it was stated that the aim of the Point Grey Area was to become a high class residential district, and in keeping with this aim various regulatory controls and by-laws were adopted by the

¹F. Fairclough, Manager; R.W. McQuean, Bursar; R.W. Siddall, Architect-Planner; and J.A. Webb, Professor; University of Victoria Development Board Meeting, in March, 1965.

²D.B. Turner, University Endowment Lands Master Plan Survey, (Victoria: B.C. Department of Lands and Forests, 1956).

Municipal Council at that time. The municipality was amalgamated with the City of Vancouver in 1929 but the amalgamation did not deprive the district from its objectives of proposed high quality residential development.¹ Since the 1920's both U.E.L. and the Point Grey District have continued to be developed as high class and prestige areas adjacent to the university campus.

The university and U.E.L. are linked to Metropolitan Vancouver by roads which have east-west orientation such as N.W. Marine Drive, Chancellor Boulevard, University Boulevard-Tenth Avenue, Faculty Boulevard (continuation of Sixteenth Avenue), Presidents Boulevard (continuation of Twenty-fifth Avenue), and S.W. Marine Drive. Two roads, Blanca Street and proposed Cleveland Way provide north-south connections.

The University Community Area considered in this study extends from the UBC campus to Granville Street and comprises a 1,000 acre campus, 2,500 acres U.E.L. and 7,680 acres City areas. The area is bounded on its three sides by Marine Drive and Straits of Georgia. The fourth side of the University District is formed by Granville Street. In 1961, a total of 104,294 persons resided in this area. With the exception of U.E.L. and Musqueam Indian Reserve, the area is fully built up and in 1961, contained approximately 32,500 households. The single family dwellings predominated the development until the last decade or so but the apartment development in this area has been quite substantial

¹City of Vancouver, A Plan for the City of Vancouver, (Vancouver: City of Vancouver, 1929).

during the last 10 years and now constitutes about one-third of the dwelling units in the area. In 1961, two-thirds of the dwellings were owner-occupied and the remainder one-third were tenant occupied. In 1961, the average contract rent in tenant occupied dwellings ranged from \$68 to \$116 per dwelling unit.

The recreational areas, golf courses and beaches form a continuous belt of open space along three sides of the area. Four of the five golf courses in this area are located along S.W. Marine Drive, whereas beach parks and beaches generally follow N.W. Marine Drive within the University District. One golf course adjacent to the university gates, a number of neighbourhood parks -playfields and large tracts of undeveloped U.E.L. property constitute inner open spaces.

Neighbourhood and community facilities such as schools, shopping areas, churches, community centres are fairly well distributed throughout the area and are located within easy driving and walking distances of homes served. In addition the amenities of the downtown are readily accessible by cars and public transit facilities which integrate the U.B.C. District with Metropolitan Vancouver.

Impact of the campus on surrounding areas administered by the City of Vancouver: The University has modified the character of residential neighbourhoods, volume and pattern of vehicular traffic on roads adjacent to U.E.L. area, type of commercial development and other facilities of the University District.

1. The first impact has been on the character of the residential areas, West Point Grey and Dunbar areas in particular. These communities were originally planned and developed as single family residential districts of Vancouver. With the growth of the university, there has been an increasing demand for low rental housing accommodation in the form of rooms and suites in single family dwellings. This resulted in a number of conversions of single family dwellings into housekeeping rooms and suites. The use of the basements for living became a rule. Generally speaking, these houses are not of the type and size which usually accommodate roomers. Also many conversions were not accompanied by the addition of adequate facilities in these houses. Consequently this resulted in some overcrowding and deterioration of dwelling areas. As a result of increasing demand for suites, some 140 units in apartment have been constructed since 1960. Any extension of apartment areas in the West Point Grey and Dunbar districts has been opposed by the residents of the communities.

The scarcity of accommodation on the campus and in areas immediately adjacent to the U.E.L. has resulted in outward movement of university population. The residential communities, Kitsilano, Kerrisdale, Granville, Oakridge and West End have been subject to the impact of university population demand for housing. A sample survey of university population, 1,650 students and 150 faculty revealed that a large number of them lived in areas west of Granville Street (Map 8, page 75A). In 1965 only 17 per cent (i.e. 2,805 students) of the university students population was housed in the existing on-campus accommodation whereas housing for faculty and staff was virtually non-existent either on campus or in U.E.L. area. The university plans to build apartments for married students and faculty on the campus but this will form an insignificant portion of the total requirements for different types of housing. It is fairly evident that a large portion of the university's housing demand will have to be met by the adjacent communities for a long time to come. The U.E.L. area is primarily committed to the high class and prestige single family residential and apartment development. It is unlikely that this type of development will come any where in the range of students ability to pay.

2. The second impact of the campus manifests itself in the traffic congestion and competition for curb space on city roads leading to the campus. The magnitude of the problem is revealed by the fact that there are

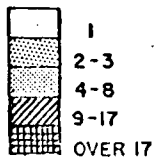
UNIVERSITY OF BRITISH COLUMBIA STUDENT POPULATION DENSITY

NOTE: DENSITY IS BASED UPON A UNIT
OF APPROXIMATELY 16 SQUARE BLOCKS,
THUS PATTERN IS GENERALIZED.
DATA ARE DERIVED FROM A
SAMPLE OF 1,650 STUDENTS.

0 1 2 MILES

Source: Burnaby Planning Dept.,
Burnaby, B.C., 1966

NUMBER OF STUDENTS
PER SQUARE BLOCK



FACULTY POPULATION DENSITY

DERIVED FROM A SAMPLE
OF 150 FACULTY

6,000 cars entering the university gates in about twenty minutes during morning hours of the rush. The students cars are parked for several blocks along the roads leading to the campus. With the growth of the university, medical centre, research industries and the University Endowment Lands, the impact will be much greater in years to come.

3. The problems of traffic congestion, housing for the university population in areas adjacent to the campus and new trends in apartment development have been generally frowned upon by the neighbourhood residents. There has been a growing concern over the loss of amenities of quiet, pleasant and neighbourly living in these areas. From the City's point of view the West Point Grey and Dunbar Community areas are choice locations for some form of apartment development which would serve the needs of the university community and would help in redeveloping pockets of poor single family dwellings within these communities. The residents of these communities are interested in maintaining status quo of the existing zoning. Some of the arguments, which relate to the impact of the university, were revealed in briefs submitted by Point Grey residents and home owners and other groups to the City Planning Department in connection with the re-zoning proposals for apartment areas. These arguments run along the following lines:

- (a) There is shortage of good single family dwellings, and it is therefore, premature to demolish the homes within the proposed area.
- (b) The university can provide for student and faculty housing on its own less expensive land, with special loans for this purpose.
- (c) If needed, the University Endowment Lands could be used for apartments without disturbing an established residential area.
- (d) West Point Grey lacks amenities for apartments such as parks, library, community centre, etc.¹
- (e) Apartments will spoil the amenity of the area, obstruct the views, increase traffic, etc.

¹Vancouver Technical Planning Board, Summary and Reproduction of Briefs Referring to the Apartment Zoning Proposals in Point Grey, (Vancouver, B.C.: The Technical Board, 1965).

- (f) Re-zoning will encourage speculation and deterioration of surrounding homes. Single family zoning should give long term protection.
- (g) Transient apartment dwellers are not wanted in the area.

West Point Grey Homeowners Association put the above objections in the following way:

It is our understanding that approximately 15 acres are to be re-zoned to high rise apartments in the area immediately north of Tenth Avenue near Sasamat. This could take out approximately twenty single homes. These are good single family homes. We would like to point out that a shortage of single family homes exists close to the university. The university can attend to the needs of single and married students as well as faculty by means of self liquidating loans at low interest rates; that there are vacancies in the existing university residences at the present time; that the university is heavily endowed with the land and land outside the gates is expensive.

Vice interests who prey on young persons could be expected to be attracted by apartments near university, and outside its control. Safety of persons and property is always of particular significance in an area where the institution serves the community during the evening hours.

The area lacks amenities to attract apartment dwellers. It does not have a library nor a community centre and is without parks. The playground at Trimble is 8.6 acres but half belongs to the Provincial Government for extension to the Blind School. The lease on the University Golf Course expires in 1970 and is renewable only if it is deemed desirable by the Provincial Government. The beach is only accessible by car because of the steep hill. The area is distant from the work and the amenities of City Centre. Development of the Endowment Lands should meet the needs of the university.¹

¹Vancouver Technical Planning Board, Summary and Reproduction of Briefs Referring to the Apartment Zoning Proposals in Point Grey, (Vancouver, B.C.: The Technical Board, 1965, contained the letter of West Point Grey Homeowners Association.

In the case of re-zoning proposal for apartment area in Dunbar District, a majority of the residents in that community were generally opposed to any apartment development. The arguments did not specifically relate their objections to the university being close to the Dunbar Community but followed the lines of argument such as increase in density and traffic congestion; lowering of property values for the single family homes; loss of amenity, etc. The impact of the university is comparatively less on Dunbar District than on Point Grey but a new kind of impact was feared by the Dunbar Hilltop Business Association as a result of the future development of Twenty-Fifth Avenue extension (continuation of Presidents Boulevard).

With the rapid approach of a University Land Crown Corporation to our immediate west we need little imagination to foresee Twenty-Fifth Avenue becoming a through street leading directly into highly developed areas siphoning off the cream of our Dunbar trade ...¹

However the significance of these citations is to reveal that the impact of the university is not only reflected in the land use within the University Community but in the social and economic environment of these areas as well. These in turn influence the decisions on development for good or ill, and determine the feasibility of carrying out plans or a proposal, such as the proposal location of apartments, which in all

¹ Vancouver Technical Planning Board, Summary and Reproductions of Briefs Referring to Apartment Zoning Proposals in Dunbar, (Vancouver, B.C.: The Planning Board, 1965), p.4. contained in the letter of Dunbar Hilltop Business Association to the City of Vancouver.

probability will constitute a desirable development from the point of view of planners but was turned down. Similarly there may be other planning issues relating to the location of research industries, shopping centres, cultural and educational institutions, recreational uses which are compatible with the functions of the university and are attracted in the vicinity of the campus. All these will have impact in one form or another on the city areas, therefore it is essential that the needs of the university be made known to the City and to the Community groups for achieving plans of mutual benefit and compatibility. Although there is some provision made for these essential functions the University Endowment Lands and the impact on city areas might be less yet for a successful implementation of the Plan will require a coordinated effort of the university, City and U.E.L. Administration and the Provincial Government which owns the U.E.L.

Administrative Arrangement for Cooperative Planning: The areas within the University come under three jurisdictions, the university, U.E.L. Administration and the City of Vancouver.

The Master Plan Survey for the University Endowment Lands outlined:

Although the U.E.L. is considered as an administrative entity the various U.E.L. problems have to be shared with the metropolitan Vancouver and the U.B.C. Major problems relate to water supply, sewerage, roads, transit facilities, telephone, natural gas and electric power, schools, churches, recreation, fire protection and police.¹

¹D.B. Turner, University Endowment Lands Master Plan Survey, (Victoria; British Columbia Department of Lands and Forests, 1956) p.34.

In preparation of the Master Plan the above matters were resolved through the participation of Greater Vancouver Water and Sewerage Districts, City of Vancouver, University of British Columbia, B.C. Telephone and B.C. Electric Companies and various Provincial departments. In general, the liaison among these participants was for a specific purpose i.e. the preparation of a Master Plan, and once the plan had been prepared, no provision was made in the plan for a permanent committee to look into the revisions of plan and methods of implementation which may be necessary in the future. The implementation of the plan solely rests with the U.E.L. Administration which maintains informal liaison with other parties whenever there is need. Likewise the U.B.C. Administration operates on an informal basis with the Provincial Government, the U.E. L. Administration, the City of Vancouver and the B.C. Hydro and Power Authority for discussing problems of mutual concern.

Other than joint planning of roads, utilities, schools and recreation areas, the questions of housing in city areas, commercial facilities and other matters arising from the impact of the campus on adjacent municipal areas have not been discussed, planned and programmed on mutual basis. Neither the City nor the University and U.E.L. Administration have a policy of expressing their concern over the planning and development proposals in areas adjacent to U.E.L. This is apparent from the discussions on an apartment rezoning in Point Grey Area.

The proposal was submitted by the City Planning Department to the City Council to rezone some 15 acres for apartments. The Council received some 342 submissions from property owners in this area but none from the University or U.E.L. Administration. The proposed development was very much in the interest of the university and would have alleviated to some extent a shortage of student and faculty housing so much talked about within the university circle but there was no formal or informal representation by the university on public hearings to express the university's view point. Consequently the proposal was turned down by the Council because of opposition from the neighbourhood residents whose arguments concerning the university were noted earlier. Had the university put its case to the City Council and involved the participation of those residents favouring the development, the results might have been different.

The problem of coordination and cooperative planning is not unique to the U.B.C. Community Area but has been confronted by other universities and communities such as Chicago and Berkeley. The various methods evolved by these universities for cooperative planning are enumerated in Chapter 2 and should serve as a useful guide in the development of areas adjacent to the campus.

The U.B.C. is beginning to attract other research industries such as research laboratories of Columbia Cellulose, a new location for B.C. Research Council laboratory and Medical Centre and related facilities. There is a potential for a Research Park in this area. The University Master Plan showed

an area of about 50 acres to be developed as Research Park on the campus. University Endowment Lands Administration is interested that such a development should take place on the Endowment Lands but adjacent to the campus. This will increase the Provincial Tax base and endowment which could be later used by the university for its development. If a Research Park is located on the campus, the research industries¹ can not be taxed because the university has tax free status. Although the university has the power to acquire any portion of the U.E.L. for its expansion, whether this will promote the endowment fund is questionable.

Perhaps these questions might be resolved if there is a method permitting permanent liaison i.e. an organization consisting of university, Provincial Government and the City of Vancouver to review such proposals within an overall objective of University Area development.

Implementation: The methods for implementing the plans vary from one jurisdiction to another. In the case of U.B.C.

¹D.B. Turner, University Endowment Lands Master Plan Survey. (Victoria: B.C. Department of Lands and Forests, 1956) outlined that the proposed development of 109 acres Industrial Park will be along those principles that will ensure maximization of endowment for the university. The industries will be carefully selected, generally non-noxious industries will be permitted. Some of the types that might be included in the proposed park are: research laboratories; film and paper processing establishments; plants producing such goods as electrical apparatus, photographic equipment or optical instruments; book publishing firms.

"Wanted: One Industrial Park", The Vancouver Sun of February 22, 1966, discusses the prospectus and problems of research industries for their location in the University Endowment Lands.

District, University Endowment Lands and the City of Vancouver have evolved separate methods to implement plans geared to their individual objectives in development. The principal methods are as follows:

University Endowment Lands: The aim of U.E.L. Administration is to develop this area primarily as a high class residential suburb of Vancouver and to realize maximum endowment from the U.E.L. by the development of these lands on a practical, profit making, business basis. The development is generally controlled by the Provincial Government and is guided by a Master Plan prepared with a view to achieve its residential and financial goals. The management and other controls are as follows:

1. A Crown Corporation to plan, develop, control all aspects of the U.E.L. The establishment of a Crown Corporation was recommended by Turner¹ in 1956, and has been recently enacted with the passing of the Universities Real Estate Development Corporation Act, 1965. The Board Members are yet to be appointed for this Corporation, therefore it has not started functioning.²
2. Adoption of a Master Plan to guide the development. The land allocated to various categories of land uses as shown in Table X on page 83.
3. The development of U.E. L. on the leasehold principle. A \$20 million investment be made by the Provincial Government on behalf of the University of British Columbia, the part of the investment to be utilized in putting in services in the development of endowment lands. The serviced land be leased to developers of residential areas, shopping centres, industrial park, etc.

¹D.B. Turner, University Endowment Lands Master Plan Survey, (Victoria, B.C.: British Columbia Department of Lands and Forests, 1956)

²R. Murdoch, Senior Clerk, University Endowment Lands Office, U.B.C., by interview in February, 1966.

TABLE X
UNIVERSITY ENDOWMENT LANDS, LAND USE PLAN
ACREAGES BY LAND USE CATEGORIES

Use Category	Acreage	Percent of total acreage
Single family dwellings	1,112.9	50.5
Multi-family dwellings	101.3	4.6
Professional & Offices	21.6	1.0
Shopping	68.0	3.1
Industrial Park	109.2	5.0
Public & Semi-public buildings	47.7	2.1
Schools	61.9	2.8
Recreation: parks and playgrounds	276.4	12.5
Reserve Areas	40.2	1.8
Roadways	358.8	16.3
Miscellaneous uses	6.0	0.3
Total of U.E.L.	2,204.0	100.0
UBC Campus	988.0	

Source: D.B. Turner, University Endowment Lands Master Plan Survey, (Victoria, B.C.: Department of Lands and Forests, 1956), p.42.

4. Subdivision, zoning, architectural controls, etc. for different areas proposed by the U.E.L. Master Plan.

City of Vancouver: The implementation by the City is achieved by the subdivision, zoning, building and architectural controls. The scheduling of services, and the Capital Budgeting of programmes on a five-year basis are deemed to be additional methods for implementing projects within areas administered by the City. Some other methods which may be significant in the University Area, include redevelopment of limited areas under the National Housing Act.

The City Planning Department recently conducted Apartment and Suburban shopping centres study and following this another study which is currently in progress, relates to the delineation of community areas. Each community area is expected to become a planning unit within City areas. The tentative community areas with comments on the major types of development in each community are shown on Map 9 and in Table XI on page 85. The estimates of the growth of population of U.E.L. and the University Resident population are given in Table XII, page 86.

TABLE XI
U.B.C. DISTRICT
COMMUNITIES, POPULATION AND TYPE
OF DEVELOPMENT

Community and corresponding census tract area		Population 1961	Type of Development
Point Grey	(6)	12,162	SFD & 140 units in apartment; 10 acres commercial.
Kitsilano	(7)	14,692	SFD & 2800 units in apartments; 63 acres commercial & 33 acres industrial.
South Granville	(8)	21,479	SFD & 4000 units in apartments; 44 acres commercial.
Dunbar	(11)	21,374	SFD; 14 acres commer- cial.
Kerrisdale	(12)	11,748	SFD & 2000 units in apartments; 20 acres commercial & 10 acres industrial.
S.W. Marine Drive	(17)	17,077	SFD; golf courses & Musqueam Indian Researve.
University Endowment Lands	(38)	32,272	U.B.C. Campus; SFD & 163 units in apart- ments; 4.5 acres comm- ercial & open spaces
Total of U.B.C. Community Area		104,294	

Source: Dominion Bureau of Statistics, Census of Canada, 1961, Bulletin No. CP-22, (Ottawa, Queen's Printer, 1963), and The City of Vancouver Planning Department, 1966.

Population relates to census tracts shown in parenthesis beside each community and community areas more or less correspond to census tracts shown in parenthesis.

TABLE XII

PROJECTIONS OF POPULATION OF UNIVERSITY RESIDENTS,
AND UNIVERSITY ENDOWMENT LANDS POPULATION.

	1955	1966	1976	Horizon year ¹
Resident students	1,000	3,000	5,000	5,000
University Endowment Lands	3,000	8,000	15,000	25,000
Total of UBC and U.E.L. Area	4,000	11,000	20,000	30,000

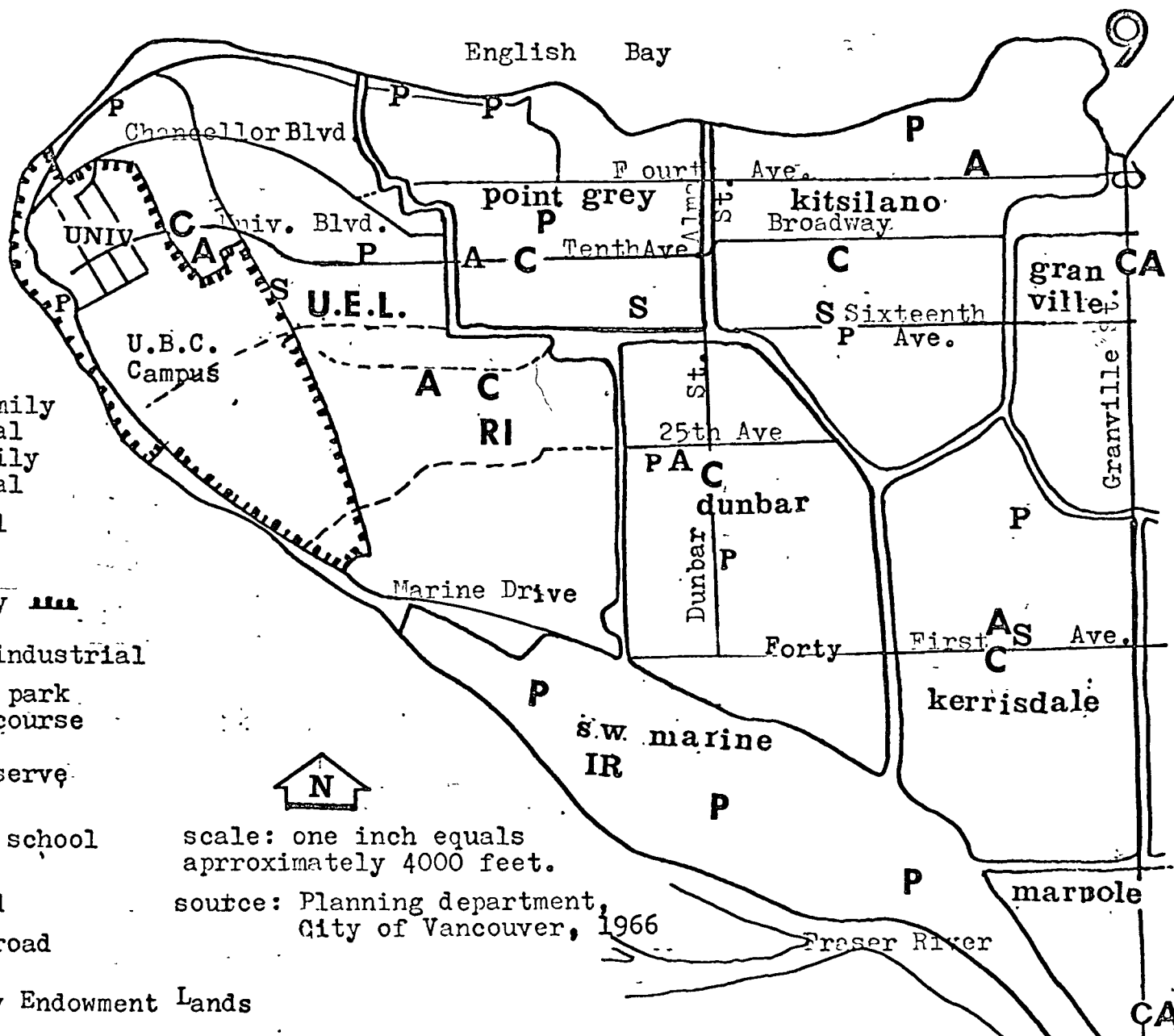
Source: Technical Committee for Metropolitan Highway Planning. A study of Highway Planning for Metropolitan Vancouver, Technical Report No. 1, Population and Land Use Forecasts, (Vancouver, B.C.: The Technical Committee for Metropolitan Highway Planning, 1959).

¹Horizon year refers to the estimated population of 2,000,000 persons at some future date in Vancouver Metropolitan Area.

UBC DISTRICT COMMUNITY AREAS AND PROPOSALS

- single family residential
- A multi-family residential
- C commercial centre
- UNI university
- RI research industrial
- P community park and golf course
- IR indian reserve
- S secondary school
- major road
- proposed road

U.E.L. University Endowment Lands



CONCLUSIONS

I REVIEW OF ASSUMPTIONS, RESEARCH METHODS
AND VALIDITY OF STUDY HYPOTHESIS.

Assumptions: The discussion on impacts of the University campus on surrounding municipal areas, and on methods of co-operative planning between universities and cities, thus far, is fairly conclusive that the following assumption made at the beginning of the study, is quite valid.

There are at least two separate political jurisdictions in the University District. The long range planning and development goals of university differ from those of the municipality or city.

A summary of conflicting goals of universities and cities (Table V on page 46) reveal that, in general, the conflicts centre on the amount of land necessary for university expansion, the type of housing and services to be provided, and the development of access routes and parking facilities in areas adjacent to university campuses. The expansion of university campuses and sometimes alleviation of traffic congestion in some university areas involved renewal and displacement of residential use. It was found that the desires of the residents of the neighbourhoods to maintain the character of their area on one hand, and the university's demand for land and services on the other hand give rise to many conflicts in planning the university area.

Research Methods: In investigating the study hypothesis, the principal research method, case studies, supplemented by a comprehensive review of studies undertaken elsewhere, was found useful. The case study approach included questionnaires

(Appendix I) which provided greater insight into the planning problems of three University Districts. Although, there are non-comparable situations in examples cited in this study (page 8), this did not present undue limitations for evaluating existing administrative arrangements for cooperative planning. In general, the informants were more than willing to reveal and discuss the limitations and drawbacks of their cooperative planning programmes. This, of course, reflects the genuine need for further research in this area. The principal research methods: case study approach, and review of other studies, supplement each other and tend to correct each other's deficiencies.

Validity of Study Hypothesis: The objective of the study was to determine the validity of the study hypothesis by examining diverse situations of planning University Districts. The discussions on university - community relationships thus far has demonstrated very clearly that the impacts of the university campuses on surrounding municipal areas consistently modify the character of the University Districts, but the planning and development of this area, as yet, has received little attention from different jurisdictional units comprising the area. This study supports the study hypothesis that:

the integration of campus planning with the long range comprehensive planning of adjacent municipal areas is essential for the effective development of the University District.

It is reasonable to assume that with continued growth of the universities and urban municipalities, the significance of the University District will become more pronounced. The University Districts are the dynamic areas of metropolitan communities and the sources of this "change" are the rapid advances in higher

education and research, innovations and proliferation of research industries, changing methods of housing university population and community, and the need and demand for quality and quantity of services, cultural and recreational facilities for the university area. Such changes should be planned and "planned changes" should be carried out within the framework of a long range comprehensive plan which can be achieved only if a formal arrangement for cooperative planning is present.

II PLANNING PROBLEMS OF UNIVERSITY DISTRICTS - REVIEW

University Districts in urban areas present special planning problems related to the university's demand for housing and off-campus services, access and parking facilities, sites for university related educational, cultural and research establishments which tend to locate in the vicinity of the university campuses. The planning of the university and surrounding municipal areas, as yet, has not been integrated into the overall decision making functions of universities, municipalities and other levels of the Government and private citizens groups which operate in the development of the university areas.

Each jurisdictional unit is autonomous and is free to pursue its long range planning and development goals independent of the other. As a result composite goals, policies and programmes for comprehensive development of university areas, have not been evolved excepting in a few University Districts. The difficulty of reaching effective joint planning and action stem from the fact that the jurisdictional units concerned in the development of the area do not maintain liaison with each other

or if they do practice any form of coordination, it is "ad hoc" in nature which does not encourage comprehensive and continuing planning of the area.

Although the University Area Plans at some places have been prepared as a result of "ad hoc" cooperative arrangements between officials of participating organisations. Once the plan has been prepared, the implementation of the plan was left entirely with the Municipal Corporations, while other participants assuming no effective role either in the plan implementation and revision of policies and programmes or in the financial responsibility for executing such a plan. Ad hoc arrangements, thus far, have not been effective in bridging the gap between plan preparation and its implementation in University Districts.

The study has indicated that the collaboration and effective joint action generally suffers from a number of factors creating difficulties in the overall planning of University Districts.

Inward looking jurisdictional units. Each jurisdiction possessing separate powers, duties and biases in its own jurisdiction tend to make decisions along the functional lines i.e. the Universities specializing in higher education and campus layout; municipalities specializing in municipal planning and the provision of services for the community; Universities Real Estate Development Corporation (to be discussed later) specializing in property investment to provide funds for public universities; and each department of the Provincial Government specializing in its major functions for overall development of the Province. Each agency looks at the problems of the University District in

in relation to the special function they perform - thus such diverse functional agencies operating in the University District are bound to conflict with each other or ignore comprehensive considerations unless formal coordinating devices are specifically incorporated into the governmental organization.

The objective of the University Real Estate Development Corporation and of Municipalities in relation to the University District could conflict with each other unless co-ordinated: Under the Universities Real Estate Development Corporation Act, 1965, the purpose of the Development Corporation is outlined as follows:

1. The Corporation is established for the purpose of providing funds for the public universities of British Columbia.
2. The Corporation may acquire, accept, develop, lease, manage, alienate, reserve, mortgage, and otherwise deal in real and personal property and interest.
3. The Corporations shall develop University Endowment Lands and other specified properties in the Act.¹

The Corporation is expected to become a major promoter of urban development, and the investment motives of the Corporation may include such things as office blocks, shopping centres, research parks, high rise apartments; etc. In recent years this type of development has shown considerable preference for locations in the University Areas. This fact has obviously

¹ British Columbia, Universities Real Estate Development Corporation Act, (Victoria, B.C.: Queen's Printer, 1965).

caught the attention of municipal councils who feel that this kind of development will increase the real estate tax base of municipalities. Therefore the municipal planning of University area must provide incentive for this type of development. As a result, the municipal councils, through the application of municipal controls such as subdivision, zoning, land acquisition, extension of municipal services, are constantly evaluating their programmes to make the University District a major tax bearing part of the municipality.

It is evident that the objectives of the municipalities and the Universities Real Estate Development Corporation could supplement each other if coordinated from the beginning of the establishment of the Development Corporation. If the functions of the two were uncoordinated, some serious conflicts of land use planning can result and would be detrimental to the harmonious development of areas surrounding the university campuses.

Limitations of municipal controls for comprehensive planning

of University Districts: The various methods of implementation proposed in the University Area Plans place heavy reliance on municipal controls such as the Official Plan, subdivision, zoning, programming of services, capital budgeting, land acquisition, etc. as tools for comprehensive planning. Though these controls are quite useful, ^{yet} the implementation of university area plans suffer from the limitations of such devices. The reason being that these controls were evolved at the time when there were no university campuses and the existing campuses were small enough to influence the character of the surrounding municipal areas. Because of the

special nature of the development of the University Districts, the need for more suitable municipal controls is quite urgent. The concepts of "University Precinct", Research Park, Public Ownership of Land and Effective Organization should be adopted as fundamentals for planning university areas rather than placing undue emphasis on traditional municipal controls in devising methods for implementation. However, such a shift in emphasis, can be brought about only by coordinating various administrative and political entities and interest groups operating in the university area into single framework of decision-making.

It is evident that such diversities of objectives and functions of participating organizations and limitations of municipal controls for comprehensive planning, pose serious difficulties in long-range planning for a University District unless formal co-operative arrangements are formulated.

III A PROPOSAL FOR THE FORMATION OF UNIVERSITY DISTRICT PLANNING COMMISSION.

It is proposed that a University District Planning Commission should be established for each university area. The main object of this proposal is to rectify the drawbacks of existing ad hoc arrangements, for cooperative planning and development of University Areas, by creating better methods for continuous and joint decisions. The major functions and proposed membership of such a commission are outlined in the figure 10 following this page. The Commission possesses the qualities which are essential for a method of cooperative planning.

PROPOSED ORGANISATION AND FUNCTIONS OF
UNIVERSITY DISTRICT PLANNING COMMISSION

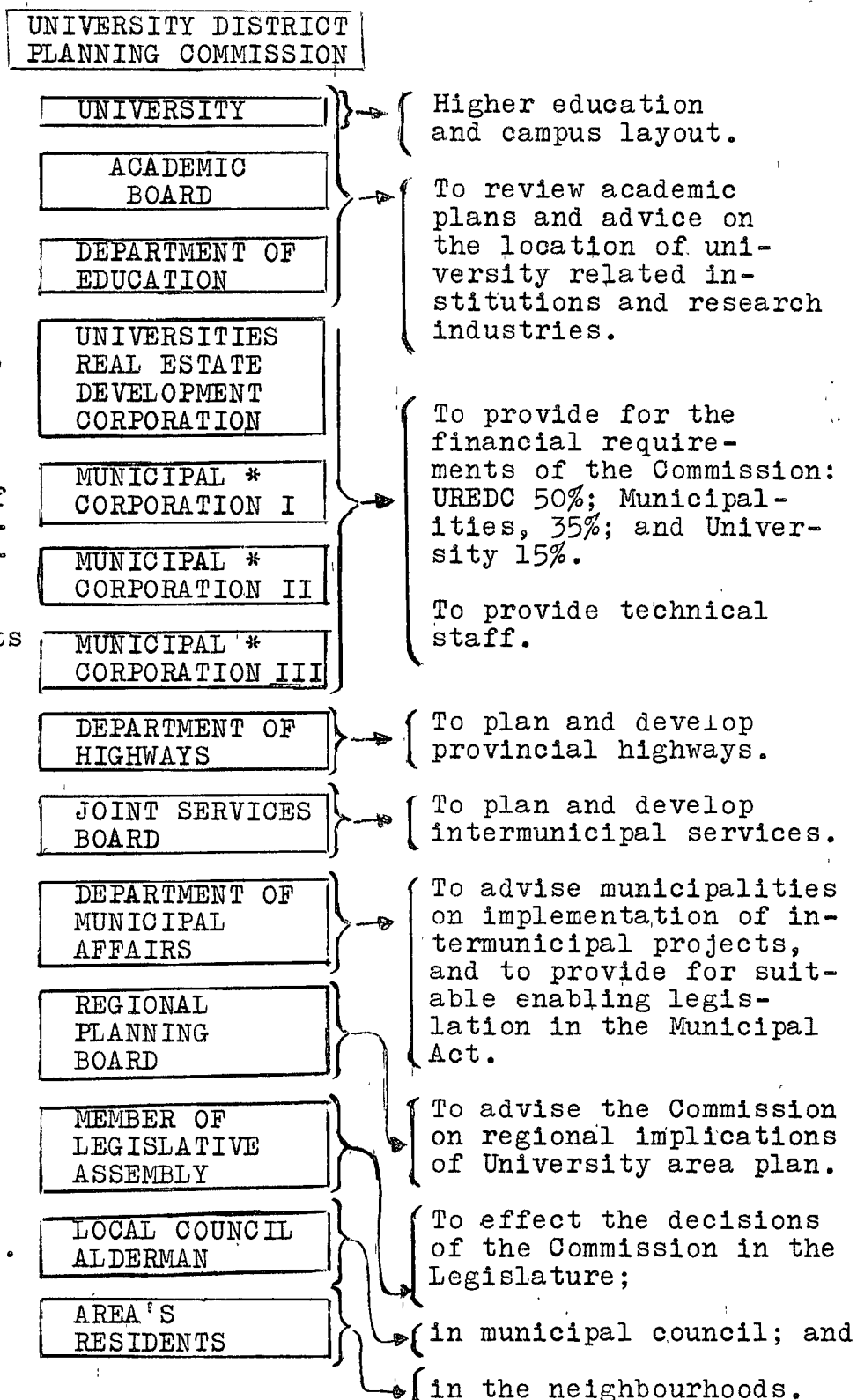
10

Functions:

1. Plan preparation, and continuous planning of the area.
2. Implementation of the plan by allocating responsibility to member organization for implementing parts of the plan.

3. ^{Quasi-}Semi-judicial in case of disputes between jurisdictional units and area's residents.

*The number of Municipal Corporations may be less or more depending upon the location of the university District in Metropolitan Area.



Effectiveness: University District Planning Commission as a device to prepare and implement the plan, to review and amend the plan from time to time as such need arises, and to carry out plan on a joint basis, is a far superior method than "ad hoc" committees, which do not possess powers to formulate policies and programmes to implement plans. The Commission in fact has all the attributes of an effective organization i.e. it can pursue a definite policy, can make quick decisions on alternative plans, and can guide development agencies to apply funds for achieving the chosen objectives of the plan. In addition it can economise on staff and equipment by entrusting responsibility to individual jurisdictions and by contracting projects to Government Departments at favourable rates.

Membership: The membership of the proposed Commission comprises of University, municipal corporations and eight other agencies which have varying degrees of pertinence and responsibility in the comprehensive and continuing planning and development of the University District. The Commission is expected to become a specialized technical, political and semi-judicial in its functions (Figure 1C).

In general the experiences of coordinating bodies of this nature have indicated that during the development of the University Area there are several situations which require amending of the provincial or state statutes for achieving area's objectives. It is essential that Commission's decisions may be communicated directly to the provincial legislature. Therefore, a Member of the Legislative Assembly (preferably from the local constituency) should also be a member of the Commission to fulfil this

organizational need. At the local level, aldermen as members of both the Municipal Council and the Commission will help in integrating the Commission's decisions with those of their Municipal Councils.

It is recommended that the members should elect "Executive" of five from among the members of the Commission and appoint a Chairman, each for a three-year term. The Commission shall adopt by-laws for its organization, government and procedure.

Permanency: The Commission will be a permanent organization to ensure continuity of planning and development. It should have rules to govern its deliberations and activities, and a separate place and office to operate. "Ad hoc" committees lack these attributes, and as a result tend to disappear over time due to lack of incentives, change of personnel or due to ending of the purpose or job for which it was created. The Provincial Government should provide for a suitable enabling legislation to help in the formation of the Commission which may achieve the objectives of planning the University District.

Accountability: The Commission includes representatives from citizen's groups in addition to other jurisdictional units and organizations - thus will remain sensitive to "pressure groups" which impart efficiency to the organization and, in fact, would make the Commission accountable to public at large for the actions it committed. In addition, the pride of residents belonging to University District will be maintained through their membership in the Commission and would promote better understanding between the University and neighbourhoods surrounding the campuses.

Support: It is imperative that the University District Planning Commission should have sufficient funds to perform its role in planning and development. The Commission should be fully integrated into the financial structure of the jurisdictional units. The enabling legislation should provide that the participating organization should contribute certain percentage of the total annual expenditure of the Commission. However, the limitation here would be that the Commission is subject to yearly departmental budgetary procedure of the participating organizations. Therefore, a major portion of the Commission's financial requirements be met from the funds of the Universities Real Estate Development Corporation whereas municipalities, university and citizen's groups should assume relatively lesser financial responsibility. The development of highways and provision of municipal services should largely become the responsibility of the Provincial Department of Highways, and the Joint Services Board respectively.

University District Planning Commission as a device for cooperative planning is definitely a superior arrangement to "ad hoc" committees. It does not in any way deprive the various jurisdictions of their autonomous role, rather it complements in making them more effective by assuming responsibility of plan making and by directing the resources of individual municipalities, university, and other Provincial departments and agencies into single framework of decision-making for joint action.

Therefore, the validity of study hypothesis, can be restated in the light of preceding discussion that: the integration of campus planning with the long range comprehensive planning of adjacent municipal areas is essential for the effective development of the University District.

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APPENDIX

CAMPUS PLANNING RESEARCHQUESTIONNAIRESCHEDULE I - MUNICIPAL PLANNER

1. Does the municipality think that there are special planning problems in areas adjacent to campus?
2. Have you done any special study of what the problems are for planning the university district?
3. If so what recommendations were made?
4. Have you received re-zoning applications of the following kind during the past few years?
 - (a) apartment houses
 - (b) conversion of single family dwellings into rooming or apartment houses,
 - (c) institutions including fraternity houses,
 - (d) research industries,
 - (e) shopping centres,
 - (f) professional office buildings,
 - (g) theatres/entertainment establishments,
 - (h) any other development significant to the university.
5. Is it customary to have public hearing on such development proposals?
6. Did the developers show that changes sought were desirable for the university district?
7. Were you in agreement with the changes?
8. Were there any development proposals rejected by the Council which you thought would constitute desirable development?
9. Please identify the main reasons for their rejection.
10. Have you received any complaints from the residents of areas adjacent to the campus?
11. Would you please identify the basis for complaints.
12. Does the municipality have a policy of negotiating with the university on development proposals?

13. Does the university administration have a policy of approaching the municipality on development proposals which are not in the long-range interest of the university?
14. Do you feel that there is a need for a permanent committee consisting of university, municipal and provincial officials who should study the needs, formulate policies and programmes for the development of areas adjacent to the campus? OR
15. Do you prefer an informal arrangement whereby university, city and provincial officials should arrange meetings to discuss mutual planning problems in the university district?
16. What long-range plans are in existence or are being considered for the university district?
17. What is the best method for achieving comprehensive planning in the university district?

CAMPUS PLANNING RESEARCH

QUESTIONNAIRE

SCHEDULE II - CAMPUS PLANNER

1. Does the university think that there are special planning problems in areas adjacent to the campus?
2. Have you done any special study of what the problems are for planning the university district?
3. If so what recommendations were made?
4. Does the municipality maintain a policy of consulting you on proposed developments in areas adjacent to the campus?
5. Does the university administration have a policy of expressing its concern to the municipality over the planning and development proposals in areas adjacent to the campus?
6. Do you feel that there is need for a permanent committee consisting of university, municipal and provincial officials who should establish needs, formulate policies and programmes for the development of areas adjacent to the campus?
OR
7. Do you prefer an arrangement whereby the university, city and provincial officials should arrange meetings to discuss mutual planning problems in the university district?
8. What long-range plans are in existence or are being considered for the university district?
9. What is the best method of achieving comprehensive planning in the university district?

CAMPUS PLANNING RESEARCHQUESTIONNAIRESCHEDULE III - REGIONAL

1. Do you think that there are special planning problems in areas adjacent to campuses?
2. Have you done any special study of what the problems are for planning the university district (or districts)?
3. If so, what recommendations were made?
4. Do the municipalities maintain a policy of consulting you on proposed developments in areas adjacent to the campus?
5. Does the university administration have a policy of expressing its concern to the Planning Board over the planning and development proposals in areas adjacent to the campus?
6. Do you feel that there is need for a permanent committee consisting of universities, municipal, regional and provincial officials who should study the needs, formulate policies and programmes for the development of areas adjacent to university campuses? OR
7. Do you prefer an informal arrangement whereby the officials of various jurisdictions should arrange meetings to discuss mutual planning problems in the University districts?
8. What are the long-range regional plans at present in existence or are being considered for the university district?
9. What is the best method for achieving comprehensive planning in the university district?