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PALMERSTON NORTH:

A STUDY OF SUBURBAN SHOPS AND SERVICES

A Thesis Presented in Partial Fulfilment of
the Requirements for the Degree of
Master of Arts in
Geography at Massey University

By

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PREFACE

Aim

The aim of the thesis is to try to establish, through a study of suburban shops and services in Palmerston North, some of the past and present trends and patterns which might assist in the future planning of suburban facilities.

Chapter I describes the general patterns of suburban shops and services. In Chapters II, III and IV shopping centres of four or more shops and services are examined in greater detail, while Chapter V is a case study of shops, services and shopping patterns in Milson suburb.

Method

Direct observation and classification of suburban shops and services was followed by interviews with shopkeepers in some suburban shopping centres, and finally a random sample of Milson shoppers was interviewed in their homes.

The first task was to order and define suburban shops and services so that they could be studied. The Palmerston North City Council Town Planning Department's definition of the central business district (or city centre) was used, and shops within its boundaries excluded. All other shops listed in the Town Planning Department's booklet "Suburban Shopping: List of Activities: March 1968" were marked on large-scale maps of the city and checked in the field; new shops were added and defunct ones deleted. All the different functions found in suburban shopping centres were listed (Table III) and groups of shops were classified according to the number of shops and services situated together (Table I).

The location of shops and services and the association of functions were mapped, and the larger groups of shops with four or more functions, termed shopping centres, were studied in detail. All the owners or managers of shops, as well as hairdressers and barbers in all the major shopping centres (10 - 16 functions) and some of the minor centres (4 - 8 functions) were interviewed. Only three people refused to answer the questionnaire (Appendix A), and in two of these cases some of the information was obtained from the firms' managers.

In order to obtain detailed information on shopping patterns, and to compare the use of suburban shops with visits to the city centre and other shops, a random sample of 95 Milson shoppers was interviewed in their homes (Appendix B).

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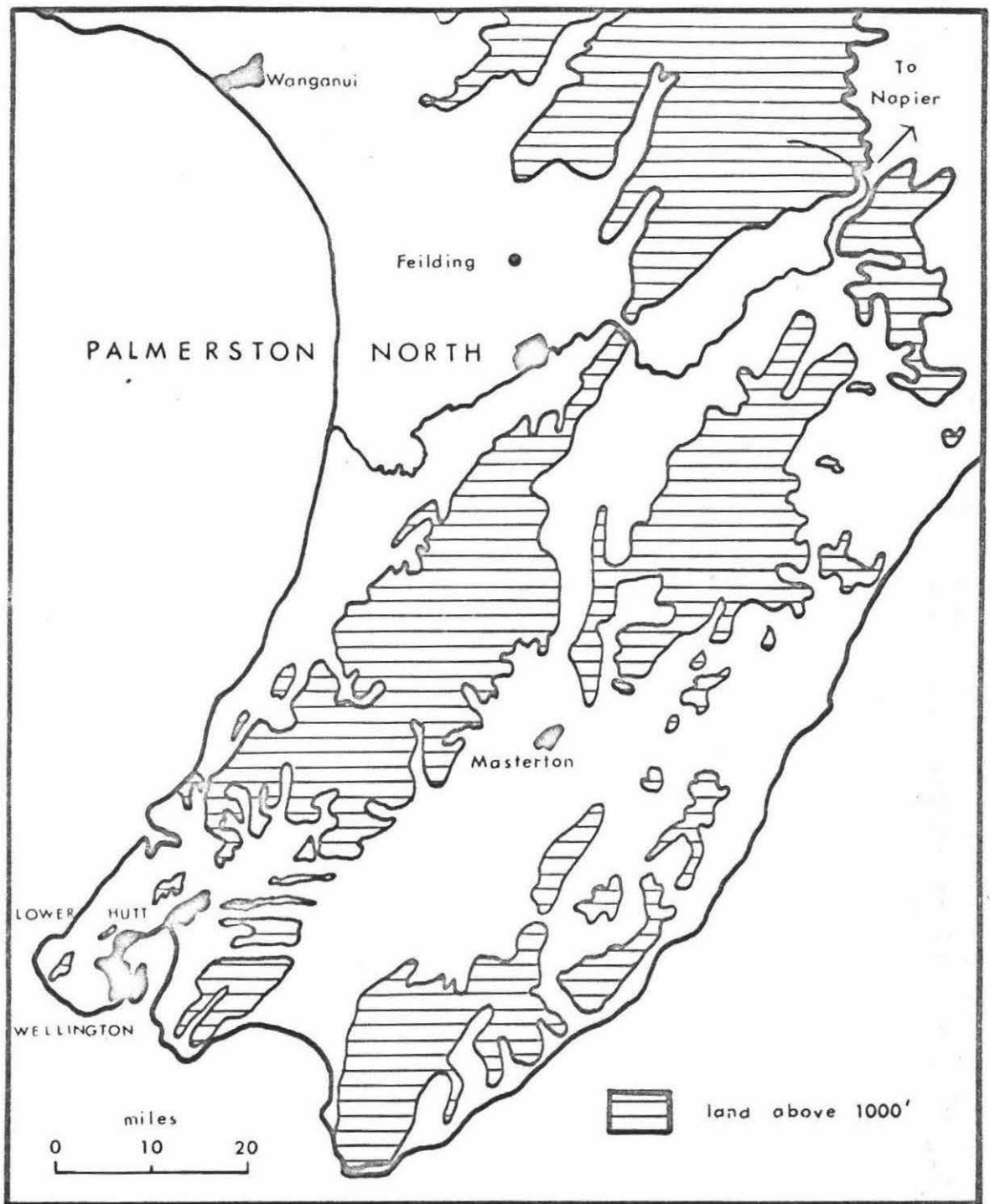


FIG. 1 LOCATION OF PALMERSTON NORTH

I. SHOPPING AND SERVICE FACILITIES IN PALMERSTON NORTH

Introduction

Palmerston North, with a population of 50,900¹ is one of New Zealand's major provincial cities. It is situated on the extensive Manawatu River plain in the southern half of the North Island, and its central position on some of the main transport routes has made it a significant marketing and commercial centre for the surrounding rich agricultural region. More recently, education has become an important function with the growth of Massey University and the establishment of a Teachers' College and a developing Area Technical Institute.

The city was planned round a central square with four main arterial roads leading from it, and spread over the flat, river terraces to form a compact, oblong settlement 3½ or 4½ miles in extent. Additions to the city in 1969 extended the boundaries irregularly on all sides.

Classification

There were two main types of shopping groups in Palmerston North: suburban centres which served the suburbs, and special centres which were situated in or near the centre of the city and served a more widespread, non-local population (Figure 2). When classified by the number of functions in each centre they formed a distinct size hierarchy² (Table I).

Table IClassification of Shopping Groups in Palmerston North

The term "function" was a general one used to describe all the different types of suburban shops and services found in minor and major shopping centres. Two shops with the same function, (for example two dairies) in one shopping centre were listed as two separate functions. Consumers Co-operative Society stores and supermarkets were listed as two functions (grocer and butcher), but where there were only two other shops in a group the total of four was not defined as a shopping centre, but as a small group.

<u>Type of Centre</u>	<u>No. of Functions</u>
A. Special Shopping Centres	
city centre	-
Terrace End	47 (2 vacant)
Pioneer Highway	3 (3 vacant)
supermarket	varies
B. Suburban Shopping Centres	
major shopping centre	10 - 16
minor shopping centre	4 - 8
small group	2 - 4
single unit	1

Special Centres

The largest and most important special centre was the city centre or central business district which was the main shopping centre of Palmerston North, with a very wide range of goods and services, catering not only for the whole city but also for the region. The shops at first developed mainly around the perimeter of a very large central square and the original nearby railway station, with more recent extensions along Rangitikei Street and Broadway Avenue. The City Council's Town Planning Department's definition of the central business district was used; it included residential and industrial areas as well as shops, and was bounded by Featherston, Campbell, Cuba, Cook and Ferguson Streets and Victoria Avenue (Figure 2).

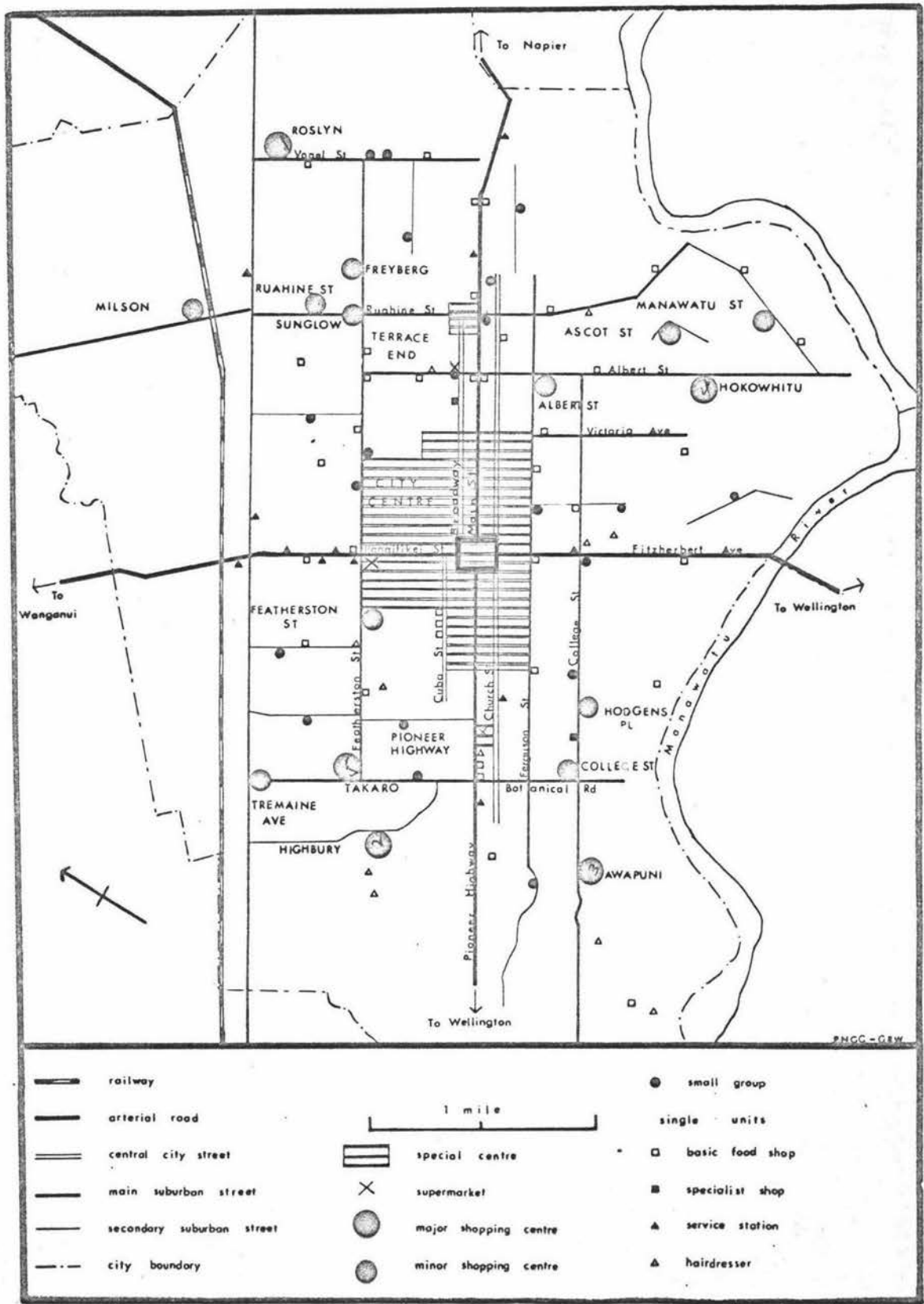


FIG. 2 SUBURBAN SHOPS, SERVICES AND ROAD PATTERNS

Terrace End had a large shopping centre, with a wide range of goods and services, and was used by some people as an alternative to the city centre. It developed originally in a favoured residential area close to a nearby railway siding; recently new shops and parking facilities have been added. It included the shops along Main Street and Ruahine Street as well as two recent car-oriented shopping groups in Broadway Avenue - Broadway Court and Broadtop Shopping Centre, and had more in common with the city centre than with the suburban centres: "Terrace End's more metropolitan nature with its greater degree of specialization and greater range of services....."³

Pioneer Highway (Plate 1) was an unusual centre. In size it was comparable with the major suburban centres, but it was located near the city centre, and had a large car park. Its main attractions were Parlanes Supermarket, the Totalisator Agency Board, and two take-away food shops, which were all geared to passing rather than local traffic. Although there were eight shop premises, several of the smaller ones had had a succession of unsuccessful small businesses, and three were empty for most of 1969.

There were three supermarkets, Woolworths Food Fair, Parlanes Supermarket, and the Self Help. These large, new food shops were situated on main roads with high traffic volumes not far from the city centre and provided large car parks for their customers. They sold a wide range of food, including groceries, meat, fruit and vegetables, as well as some hardware and drapery. The large car parks, a wide range of goods under one roof and some cut prices were their main attractions. Although supermarkets were included as part of the group of shops with which they were associated, (Woolworths was situated on the edge of the city centre and the Self Help in a small group), because of their growing importance as competitors to the local suburban food shops, they were also classified and mapped separately (Figure 2).

The Consumers Co-operative Society butchers and groceries, and the Save-more groceries were similar to supermarkets in their range of goods and emphasis on discounts or lower prices, but because of their usually smaller scale, they were not classified separately.

Suburban Centres

Suburban centres were divided into four sub-groups. First, there were five major shopping centres, Roslyn, Highbury, Awapuni,



Plate 1

Pioneer Highway, a special shopping centre, showing Parlanes Supermarket, and an off-street parking area.

Hokowhitu and Takaro, each with ten or more shops and a wide range of functions including basic food shops, specialist shops and services. They developed after World War II to serve the new suburbs which were built on the outskirts of the city.

Second, the eleven minor shopping centres were small centres with from four to eight separate functions, mainly basic food shops with one or two specialist or service functions. There were six early minor centres, Featherston Street, Albert Street, Ruahine Street, Sunglow, Hodgens Place and Milson, the first five of which were situated between the city centre and the major centres and had their first shops built before, or at the beginning of, World War II. The sixth early minor centre, Milson, was established before the war to serve an old railway settlement which was originally beyond the city boundary. Two minor centres, Ascot Street and Manawatu Street, built since World War II, were both situated near the Hokowhitu major centre, and there were three new minor centres, Freyberg, Tremaine Avenue and College Street which grew to minor centre size by the addition of one shop during 1969.⁴

The third sub-group was small groups of two or three shops which were situated throughout the suburbs, and sold mostly basic foodstuffs (Plate 2), while the fourth sub-group, single units, consisted of shops or services standing alone, mostly dairies (Plate 3), service stations and women's hairdressers. They were also located throughout the suburbs.

History

Palmerston North began in 1870 as a clearing in the bush about $1\frac{1}{2}$ miles from the right bank of the Manawatu River, on the extensive, flat Manawatu Plain. It was originally laid out on a geometrical plan based on a central square at the junction of four main arterial roads which divided the city into four quarters (Figure 2). The railway was built along Main Street through the centre of the square, but later re-routed along the north-west side of the city where land had been set aside. At first the city was able to expand fairly evenly on all sides of the square, but later development was limited on two sides by the railway in the north-west and the river in the south-east, producing the present oblong-shaped settlement, with recent irregular boundary extensions.

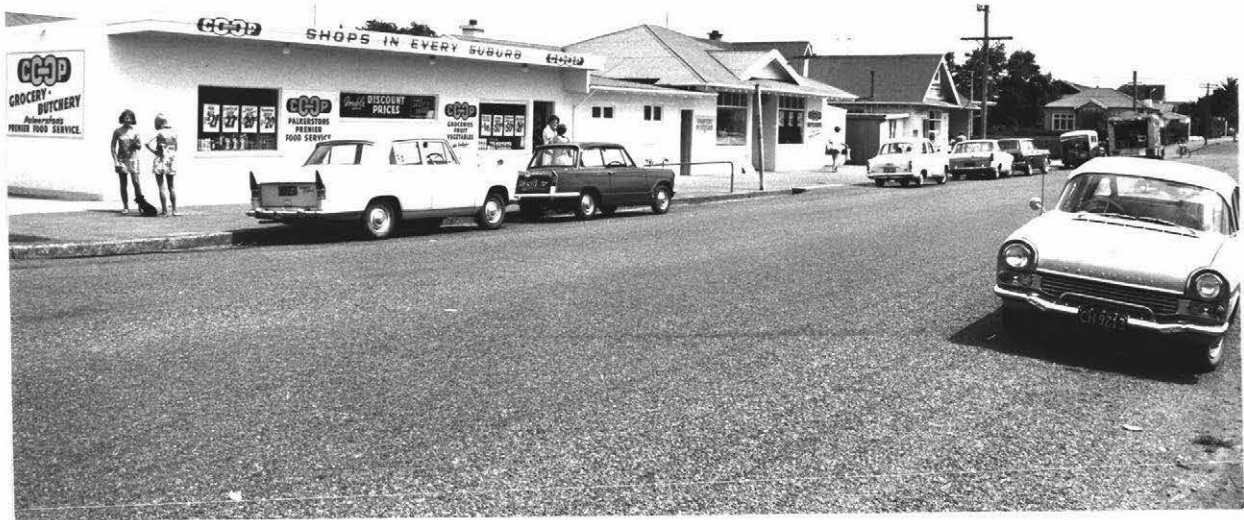


Plate 2

A small group of shops in Russell Street: Consumers Co-operative grocer and butcher with a small drapery between, and a dairy. A linear centre with kerb-side parking.



Plate 3

Blackwell's Foodmarket: a typical dairy in an old building with a house attached, situated near an intersection and next to a primary school.

Historical accident and commercial enterprise accounted for most of Palmerston North's shopping and service facilities. Early commercial and industrial development took place around the railway, concentrated mainly on the central station near the square, with a secondary development at the Terrace End siding to the north-east. At first the settlement was small enough to be served by these shops but as it grew, more shops, usually butchers and grocers, were built away from the railway and the square.

Before the war, in the 1920s and 1930s, the first suburban shops were established by private enterprise in what was to become a band of minor shopping centres around the city centre, up to $1\frac{1}{4}$ miles from the square - Featherston Street, Sunslow, Ruahine Street, and Albert Street (Figure 2). Wilson's shopping centre also began in the 1920s as two shops serving a small railway settlement, built beyond the then north-western city boundary. The band of potential minor centres was completed in 1940 when Hodgens Place was built by the government as a complete block of five shops to serve a new State housing area. All these minor centres, except Hodgens Place, began with one basic food shop (dairy, butcher or grocery) in an area of pre-war housing and expanded gradually with additions of one or two shops at a time, as further houses were built. Hodgens Place opened with two basic food shops (dairy and butcher) and three specialist shops.

After World War II (1939-45) population increased and housing spread out to form new suburbs. More shops were built. Some of these formed the nucleus of the present major shopping centres - Takaro, Awapuni, Hokowhitu and Roslyn - situated $1\frac{1}{2}$ to $1\frac{3}{4}$ miles from the city centre, and forming a second band outside the band of minor centres built earlier (Figure 2). Again, there is one major shopping centre for each quarter of the city, but the Hokowhitu quarter has two extra centres, both minor ones, begun in the 1950s at Ascot and Manawatu Streets, and the Takaro quarter also has an extra centre, the major centre at Highbury.

Four of these post-war centres began, as had the earlier minor centres, as one or two basic food shops, most often dairies, but a new trend began in 1954, when shops were built in larger blocks: a block of three shops was begun at the Ascot Street minor centre, a block of eight shops was added to the Hokowhitu centre, and a complete block of 14 shops was built at Roslyn. The trend continued in the 1960s when a block of

four shops and another of seven shops were completed at Awapuni shopping centre. All these were private developments. The Takaro quarter of the city acquired a second major shopping centre, partially duplicating Takaro's service when the State, in 1964, planned a complete block of 15 premises at Highbury to serve a new State housing area. Smaller groups and single shops were also added to other centres in the 1960s, so that all except Ruahine Street expanded again. Although basic food shops formed the basis of all centres, minor and major, they all had one or more specialized shops or services, most of which relied on the trade brought by the food shops.

Two examples, of an early minor centre and a more recent major centre illustrate the historical development of suburban shopping centres. The first shop in the Albert Street centre, on the corner of Ferguson and Albert Streets, three quarters of a mile from the square, was a butcher, opened about 1930 and bought by the Manawatu Meat Company in 1946. In 1948 a barber joined the butcher, followed by a dairy in 1950, and in 1962 two more shops were built by Watson Brothers who operated one as a grocery and let the other to a fruiterer. Awapuni, a major shopping centre (Figures 3 and 8), began in the 1950s as a dairy on the corner of Pitama Road and College Street, about $1\frac{1}{2}$ miles by road from the square. In 1960 the Consumers Co-operative Society built a block of four shops across the road from the dairy; one was used for their own grocery and butcher's shop, while the three which were let became a dairy, a chemist's and a fruiterer's. Two years later a service station was built, and the fruiterer moved from the Consumers Co-operative Society's block to his own newly-built shop. Finally, in 1966 a company which had bought a half-acre section next to the service station and had it re-zoned Commercial B, built College Court, a block of seven shops, with parking space in front, at right angles to the road. The shops were occupied by a butcher, a variety of specialist shops and a post office.

The Consumers Co-operative Society (Manawatu) Ltd. is an unusual and important feature of Palmerston North's suburban shopping scene. Members, mostly citizens of Palmerston North and district, by investing a small sum, qualify for an annual rebate on all purchases from Co-operative shops. There are now seventeen suburban groceries, mostly with butchers attached, as well as shops in Terrace End and the city centre. The first shop, a grocery, was built in Broadway in the city centre, in 1935, and

further shops followed the subdivision of the city (Plates 2, 4, 8 and 15). Sites zoned by the City Council for shops were bought by the Co-operative Society as they became available and as population increased in each area, a grocer-butcher combination was built to serve 500 houses. Where there was no dairy in the immediate vicinity one was built and rented out, to meet people's after-hour needs. Over the past twenty years the Society has been the main builder of suburban groceries but the old policy is now in some doubt, as although most of the people still use local shops, in some cases it is for only a small percentage of their needs. Many loyalties are no longer local.

In 1966 the Co-operative Society closed the original Broadway shop and one in nearby Ruahine Street, and combined the two businesses into one large, new shop, Broadtop, in Terrace End. Parking space was provided, as well as premises for a group of specialist shops. Other new shops, and a new block with parking space, were also established amongst the old Terrace End shops, so that it is now a large centre which attracts some people from four miles away.⁵

The most recent development in shopping facilities is based on increased car ownership. Many people are no longer tied to local shops but can "shop around" and choose areas with easy parking and lower prices. One result is the new, large, "one-stop" supermarkets, represented in Palmerston North by Woolworths Food Fair, the Self Help, and Parlans Supermarket (Figure 2 and Plate 1). They are situated within a mile of the square on the arterial roads which lead into the city centre. There is one on each of three sides of the city centre, with a gap to the south-east because of zoning restrictions on Fitzherbert Avenue.

An old-established, local grocery firm, Watson Brothers, has recently opened a chain of new-style food shops termed Save-more grocers, similar to the supermarkets but on a smaller scale, and with no butcher's shop.⁶ They sell all their groceries, fruit, vegetables and hardware at reduced prices. Apart from the shop in the city centre and a special delivery store, there are three suburban shops, one of which, at College Street shopping centre, has a small off-street parking lot. The others are in Vogel Street and the Highbury shopping centre.

The Consumers Co-operative Society have also recently added some cut prices to the discount they offer, and the newly rebuilt shop at Tremaine

Avenue shopping centre has been set back from the road to allow for an off-street parking lot.

Many privately owned dairies and groceries belonging to the Good Housekeeping or Four Square groups also offer regular special prices for some goods. Nevertheless, the new cut-price stores are a threat to some dairies, grocers, butchers and fruiterers.

The special centres (Table I) are excluded from further detailed discussion, which deals with the suburban shops only.

Geography

There was a close relationship between the distribution of suburban shops and services and the volume of traffic on suburban roads (Figure 2). Palmerston North had a distinctive road pattern, with six different types of streets (Table II), each with a related pattern of shops. First there were the four arterial roads leading from outside the city to the central square. These divided the city into four quarters and within each quarter a similar road pattern of central city streets, main and secondary suburban streets and local roads was repeated. Second, Broadway Avenue, which was intermediate in nature between the arterials and the next two groups. The third group of roads, central city streets, led, like the arterials, straight to the city centre, but from within the city. The main suburban streets, the fourth group, were the long main roads leading from the arterials to the suburbs, and the fifth group, the secondary suburban streets, were usually shorter, and straight. The last group, the local roads, which were not mapped, comprised all the remaining streets.

A tally of traffic volumes was closely related to the road pattern and to shops and services (Table II). The arterials, which had the very highest traffic volumes outside the city centre - an average of 6,700 or more vehicles per day - divided the city into quarters and acted as main traffic arteries bringing traffic into the city centre and away from the city to other areas and cities such as Wellington, Wanganui and Napier. Shops and services on the arterial roads - Terrace End shopping centre, supermarkets, service stations and dairies - were geared to passing car traffic. Terrace End, by providing off-street parking and thus adapting to car traffic had become an important shopping centre, and two of the three supermarkets were on arterials. Over half the service stations (55 percent) were also there, with a further 28 percent on Milson Line

Table II.Roads, Traffic Volumes and Functions, 1968

Traffic volumes formed a hierarchy, not a continuum

Type of Road	Name of Road	Traffic Volume average vehicles per day outside the city centre.	Typical Shops and Services
arterial roads	Rangitikei St. Fitzherbert Ave. Main St. Pioneer Highway	over 6,700	service stations, supermarkets, dairies.
Broadway Avenue	(a special central city street)	about 6,650	variety of shops and services.
central city streets	Church St. Cuba St. Grey St.	5,800 - 5,400	most shops within the city centre.
main suburban ^a streets	Ruahine St. Milson Line Featherston St. College St. Botanical Rd. Vogel St. Ferguson St. Albert St. Tremaine Ave. Victoria Ave. ^b	4,100 - 2,050	most of the shopping centres.
secondary suburban streets	Cook St. Highbury Ave. Ascot St. Wood St. Seddon St. Lyndhurst St. Rugby St. Rangiora Ave. Limbrick St. Russell St. Jickell St. Manawatu St.	2,000 and under	small groups, mostly basic food shops and ^b hairdressers.
local roads	all the remaining roads		very few shops, all single units, mainly dairies and hairdressers.

^a Only Highbury, Manawatu Street and Ascot Street shopping centres were on other streets.

^b Victoria Avenue was an exceptional main suburban street, as only one shop was located on it.

Source: Palmerston North City Council, City Engineer for Traffic volumes.

and Tremaine Avenue, the other two important roads leading out of the city: there were only three other service stations outside the city centre. The high traffic volumes seemed to have discouraged other shops, as apart from a scattering of single shops, mostly dairies, the only group was one of three food shops on Fitzherbert Avenue.

Broadway Avenue, one of the city centre's main shopping streets, was intermediate in all respects between the arterial roads and central city streets. It had a variety of shops, - part of the Terrace End shopping centre, a supermarket, a butcher and two specialist shops - thus mixing the characteristics of arterials and main suburban shopping streets. But in traffic volume it was nearer to the arterials, with an average of about 6,650 vehicles per day.

The central city streets all led into the city centre, but did not extend beyond the city boundaries as did the arterial roads. They were shorter and of less importance than the arterials and Broadway Avenue. There were some suburban shops on them, mostly dairies, but most of their shops were concentrated within the city centre.

The main suburban shopping streets penetrated the suburbs, joining them, via the arterials, to the city centre. Traffic volumes (4,100 to 2,050 vehicles per day) were higher than on the smaller suburban streets but far lower than on the arterials, Broadway Avenue and the central city streets. The main concentration of suburban shops was here, including over half of all shops and services in groups of two or more and nearly all the minor and major shopping centres. A wide range of services was therefore included, from dairies to florist, hairdresser and bank, to serve the suburbs and passing car-travellers.

The secondary suburban shopping streets, usually short and straight roads confined within one suburb, contained all the remaining groups of shops - one major centre, two minor centres, and many small groups - most of which consisted of food shops.

The local roads - all the remaining suburban streets - were usually short and often curved or ending in cul-de-sacs. Only a few isolated shops were situated here, mainly hairdressers operating from their own homes and the occasional dairy or butcher.

Association of Functions

Suburban shops and services were classified into functions according to the goods sold or services offered, and 24 functions were identified (Table III).

Table III

Range of functions in Suburban Shopping Centres

All shops and services found in suburban shopping centres were included. The following were excluded: dry cleaning agencies, taxis, three large nurseries which sold direct to the public but not from a shop on the street frontage, factories, and a few isolated functions such as a dentist and a photographic studio which were not found in any of the shopping centres.

General		Specialist	
Shops	Services	Shops	Services
dairy	hairdresser	draper	Plunket rooms
butcher	service station	fish and chips	post office
grocer		fruiterer	barber
supermarket		chemist	bank (branch)
		books	Totalisator Agency Board (T.A.B.)
		home cookery	library
		garden supplies	doctor
		miscellaneous	
		second-hand	
		clothing	
		footwear and	
		shoe repairs	
		florist	
		wine shop	

The term "function" was a general one used to include all the different shops and services found in suburban shopping centres in Palmerston North (Tables I and III). The full range of services such as Plunket rooms and library was included in this study, as it was felt that they were as important to the consumers as shops. "Shops" were defined as businesses which sold goods (Some offered services such as a dry cleaning agency as well), whereas "services" provided mainly a service, although some goods were sold as well. Functions were sub-divided into general and specialist according to the number of each type of shop or service in the suburbs of Palmerston North (Table IV); there were 19 or more of each general function but only 12 or fewer of each specialist function.

Table IV
Association of Suburban Functions

See note to Table I. Only full post offices and services as listed in Table III are included. There were 17 Consumers Co-operative Society grocers, 14 of which were associated with Co-operative butchers, five Watson Brothers groceries, including three Save-more stores, and four Manawatu Meat Company butchers.

major centre size of group	name of shopping group	General										Specialist										total number of functions
		basic food shops			services			shops				services										
		dairy	butcher	grocer	hairdresser	service station	draper	fish and chips	fruiterer	chemist	books	home cookery	garden supplies	miscellaneous	doctor	flunet rooms	post office	barber	bank	T.A.B.	library	
major centre (10-16 functions)	Roslyn	x	x	x	x		x	x	x	x		x		x		x	x	x	x	x	16	
	Highbury	xx	xx	xx	x		xx	x	x	x		x	x ^a	x	x	x	x	x	x	x	16	
	Avapuni	xx	xx	x	x	x	x	x	x	x		x				x					14	
	Hokowhitu		xx	xx		x	x	x	x	x						x					11	
	Takaro	x	x		x		x	x	x	x			x ^b						x		10	
minor centre (4-8 functions)	Milson	x	x ^e	x	x	x	x								x	x				8		
	Featherston St.	x	xx		x	x	x		x					x							8 ^c	
	Tremaine Ave. ^d	x	x	x	x ^e	x	x ^e														6	
	Albert St.	x	x ^e	x ^e					x									x			5	
	College St. ^d	xx	x ^e	x ^e	x																5	
	Manawatu St.	x	x	x	x			x													5	
	Ascot St.	x	x		x				x												4	
	Sunglow ^d	x				x		x				x									4	
	Freyberg ^d	x	x	x			x ^e														4	
	Ruahine St.	x	x				x					x									4	
	Hodgens Place	x	x					x			x										4	
	small group (2-4 functions)	Broadway		xx	x							x										4
Vogel St.		x	x	x								x									4	
Russell St.		x	x	x			x														4	
Lyndhurst St.		x	x	x	x																4	
College St.		x	x	x									x ^f								4	
Vogel St.				x					x	x											3	
Fitzherbert Ave.		x	x	x																	3	
Marne St.			x	x	x																3	
Jickell St.		x	x										x ^g								3	
Seddon St.		x	x	x																	3	
Limbrick St.		x	x	x																	3	
Ferguson St.		x	x	x																	3	
Rugby St.		x	x	x																	3	
Church St.		x		x																	2	
Ruahine St.		x	x																		2	
Botanical Rd.		x																x			2	
Wood St.		x	x																		2	
North St.	x			x																2		
Ward St.	x												x ^h							2		
Rangiora Ave.	x	x																		2		
Single Unit	33	2	5	12	13	0	0	0	1	0	0	0	1 ^f	4	3	0	0	0	0	0	74	
Total	63	37	30	24	19	12	9	7	7	6	3	2	7	7	5	5	3	2	1	1	255	

^a Second-hand clothing and footwear
^b Cycles
^c One vacant shop
^d New minor centre

^e Added in 1969
^f Florist
^g Wine shop
^h Shoe repairs

The classification used in Table IV was an original one, designed to suit the particular local situation, where suburban shops in a relatively small area were studied in detail, but based on ideas from several overseas and New Zealand studies⁷ and particularly Barber and Clark, most of which dealt with larger areas, usually including non-suburban centres, and therefore with a much wider range of business types. Most dealt mainly with shops (as defined above) either listing them individually as groceries, dairies, butchers, draper, shoes etc.,⁸ or grouping them in categories such as food and drink, apparel etc.⁹ Where services (as defined here) were included, there was no general pattern throughout the different studies. Clark¹⁰ listed hairdressers, bank, etc., as specific types, while Munro¹¹ mentioned offices, bank branches and a post office agency, and O'Donnell¹² and Pearson¹³ used the term personal service with various sub-divisions: Berry, Barnum and Tenant¹⁴ used only particular business types such as bank or barber to represent the full range of functions, and Percival¹⁵ mentioned the library, service station and post office as "other uses" in contrast to the shops. Service stations were sometimes listed with similar functions as "automotive,"¹⁶ but as they were the only such function in this study, they were included under services. Similarly the Totalisator Agency Board branch was listed as a service, and not in a special category "amusements."¹⁷

The association of different functions in a hierarchy of different-sized shopping groups, was listed in Table IV and summarized in Tables V and VI.

The association of different types of shops and services was as important as their location. Some shops stood alone, while others tended to be associated with other businesses. This was not haphazard; certain functions attracted sufficient custom as single units, but others needed the association of other businesses to survive, so that a distinct pattern was formed, in both the size hierarchy and the historical development of shopping groups.

General shops formed the basis of all groups: all had at least one basic food shop, but no matter how large the centre, there was a limit to the total number of basic food shops (Table IV). The highest number was six in Highbury major centre and even Terrace End shopping centre, which contained 47 shops, had only six basic food shops. Excluding the single units, the only groups with fewer than two basic food shops were

Table VAssociation of Suburban Functions: Summary of Table IV

See notes to Tables I and IV. Because of the generally smaller number of cases, percentages are not listed for the special functions.

Type of Shopping Group	General (number and percentages)										Specialist (numbers only)										Total							
	basic food shops					services					shops					services					no.	%						
	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%										
	No. of each type of Group	dairy	butcher	grocer	hairdresser	service station	draper	fish and chips	fruiterer	chemist	books	home cookery	garden supplies	miscellaneous	doctor	Plunket Rooms	post office (full)	barber	bank (branch)	T.A.B.	library							
Major centre	5	6	9	8	22	6	20	4	17	2	11	6	5	4	5	4	0	2	3	2	1	4	1	2	1	1	67	26
Minor centre	11	12	18	11	30	6	20	5	20	4	21	5	3	2	1	1	2	0	0	1	1	1	1	1	0	0	56	22
Small group	20	17	25	16	43	13	43	3	13	0	0	1	1	1	0	1	1	0	3	0	0	0	1	0	0	0	58	23
Single unit	74	33	48	2	5	5	17	12	50	13	68	0	0	0	1	0	0	0	1	4	3	0	0	0	0	0	74	29
Total	110	68	100	37	100	30	100	24	100	19	100	12	9	7	7	6	3	2	7	7	5	5	3	2	1	1	255	100

Table VIAssociation of Suburban Functions: General Summary

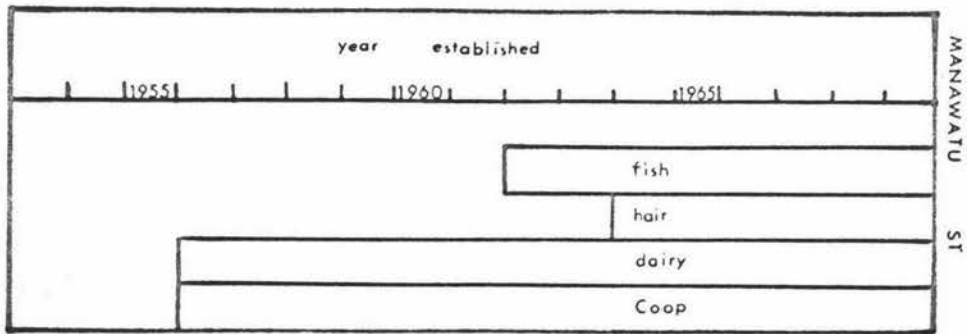
See notes to Tables I and IV.

Type of Shopping Group	No. of each type of Group	General				Specialist				Total	
		basic food shops		services		shops		services		no.	%
		no.	%	no.	%	no.	%	no.	%		
Major shopping centre	5	20	15	6	14	29	55	12	52	67	26
Minor shopping centre	11	29	21	9	21	14	26	4	17	56	22
Sub total - shopping centres	16	49	36	15	35	43	81	16	69	123	48
Small group	20	46	34	3	7	8	15	1	4	58	23
Single unit	74	40	30	25	58	2	4	7	27	74	29
Sub total - small groups and single units	94	86	64	28	65	10	19	8	31	132	52
Total	110	135	100	43	100	53	100	24	100	255	100

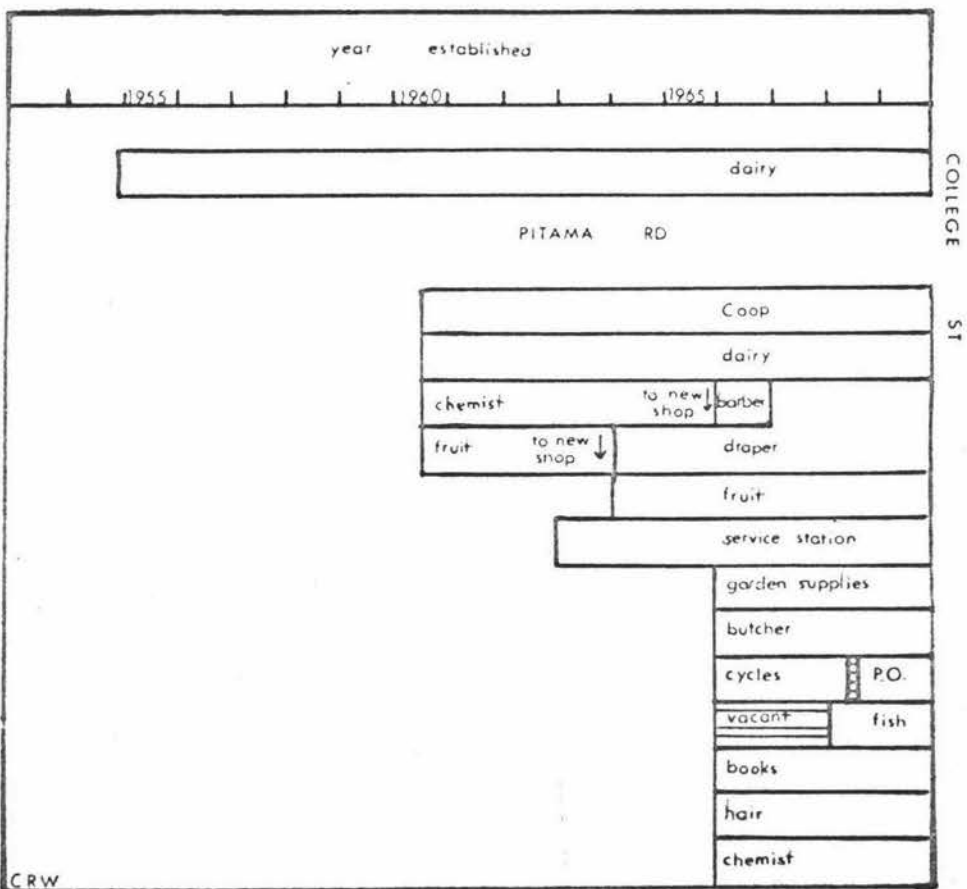
Sunglow, (a somewhat unusual centre catering mainly for car travellers), which contained a dairy, a service station, a fish and chip shop and a home cookery, and four of the small groups of two or three functions. Basic food shops tended to associate with each other in small groups, and were often joined by specialist shops and services which could not stand alone, so that a hierarchy of shopping centres of different sizes was formed. Reading from the bottom of Table IV, single units and small groups consisted mainly of general shops (basic food shops), with very few specialist shops or services, while in minor centres a considerable number of general services was added to the basic food shops, as well as some specialist shops, but there were very few special services. Major centres, and especially the two largest ones, included shops and services from the full range of general and special business types. They had grown from minor centres by the addition of specialist services and/or more specialist shops, and by the duplication of basic food shops.

The historical succession of business types followed a similar pattern (Figure 3). The first shop was usually a dairy, often joined and occasionally preceded by, a butcher. In some centres a Consumers Co-operative Society grocery was built next to the dairy. (Co-operative butchers were usually added to the grocery later, as population grew). The next function was a specialist shop, usually one of those most commonly found, such as a fish and chip shop, drapery or chemist's shop. Then came a hairdresser, and this marked the dividing line between minor and major centres (Plate 4). Minor centres grew no more; they had a maximum of two different functions in any group other than basic food shops, and these were mostly drapers, hairdressers and service stations. Major centres (Figure 3, Plate 5), continued to grow, usually adding the less common specialist shops such as books, garden supplies or miscellaneous shops and finally a post office. Other specialist services such as a bank or library were usually added last, or were associated with the largest centres which were built as a whole.

Fish and chip shops and home cookeries were anomalies. Fish and chip shops were found in centres from small groups upwards, and had joined shopping centres at various stages of their history. The three home cookeries were all near the hospital. Two, established in other shopping centres in the past, had not survived. Several miscellaneous specialized shops had been tried over the years in both minor and major



(d) MANAWATU ST



(b) AWAPUNI

FIG. 3 EVOLUTION OF SUBURBAN SHOPPING CENTRES



Plate 4

Manawatu Street, a minor shopping centre with a limited number of functions: grocery and butcher, dairy, hair-dresser and fish and chips. A linear centre with angle parking.



Plate 5

Takaro, a major shopping centre showing a wider range of functions: chemist, bank, fish and chips, fruiterer, butcher, cycles, drapery, bookshop, hairdresser, and a dairy (on the corner, out of the picture). A linear centre with angle parking.

centres and had failed. These included furniture, electrical and hardware, and plant shops and a drapery selling baby and maternity wear. There was some difficulty in establishing specialist shops, especially in minor centres, where several changes of tenants and types of business had occurred, yet in special circumstances some shops and services were long-lived. The Albert Street barber had been in business for 21 years, and the Ruahine Street home cookery near the hospital for 12 years, although with several tenants. A cycle and a footwear shop survived in two of the major shopping centres, and three others, a wine shop, shoe repairs and a florist were associated with basic food shops in small groups. Generally speaking, the suburban shops sold mainly convenience goods,¹³ "bread and butter lines" - unspecialized goods such as stationery, sewing accessories, cheap children's clothing and basic cosmetics to meet immediate needs. Expensive or specialized goods which people bought only after choosing carefully amongst several shops were usually unsuccessful in the suburbs, even in the major centres. Table VI shows that nearly the same total number of shops and services were located in shopping centres with four or more shops and services as in smaller groups, but different business types were concentrated at different levels in the hierarchy of shopping groups. Most of the general business types (64 percent of shops and 65 percent of services) were in small groups or single units, but specialist business types, (31 percent of shops and 69 percent of services) were concentrated in shopping centres. Thirty percent of basic food shops stood alone as single units, and most of these were dairies (Plate 3), nearly half of which were single units (Table V). Over half of the general services also stood alone, including over two-thirds of the service stations and half of the women's hairdressers (Table V), while all but two of the specialist shops were in shopping centres or small groups (mainly the former) and the two exceptions were located very near to shopping groups. No specialist services except four doctors and three Plunket Rooms stood alone (Table IV), and there were none in small groups.

Summary

Shops and services in Palmerston North were divided into suburban groups, which served the suburbs, and special centres, located in or near the city centre, which served a more widespread population. Suburban shops were sub-divided into a size hierarchy ranging from

single units to major centres with 10 - 16 functions. Two special centres, the city centre and Terrace End shopping centre developed first, followed by a series of minor centres with four - eight shops and services which were established around the city as it expanded. Finally the outer ring of major centres which developed to serve the post-war suburbs, were established one and a quarter or more miles away from the competition of the city centre.

The location of shops and services was closely related to the volume of traffic on the roads, so that most of the shopping centres were on the main roads leading to the suburbs which had the third highest traffic volumes, while the arterial roads, and the central city streets which had the highest traffic volumes, contained mostly single units, such as dairies and service stations, which catered mainly for passing traffic.

There was a pattern, also, in the association of shops and services in groups, in both space and time. Basic food shops were the core of all groups, and usually the first function to be established. Two or three basic food shops grouped together formed most of the small groups, which contained only a few special shops and very few services. Small groups grew to minor centres by the addition of more general services and special shops, and major centres were formed by the duplication of basic food shops and the addition of more special shops and special services.

References

1. On 1st April, 1969; urban area, 52,600.
2. For details of the classification, see the introduction to Chapter II.
3. Kells, 1968, 10.
4. While this research was being undertaken.
5. Kells, 1968, 15.
6. The Save-more butchery next to the Save-more grocery in College Street is privately owned.
7. Barber, 1965, Barnum and Tennant, 1962; Clark, 1967; Elliot, 1967; Munro, 1966; O'Donnell, 1962, 1965; Pearson, 1957; Percival, 1965.
8. Clark, 1967, 30.
9. Berry, Barnum and Tennant, 1962, 68; Elliot, 1967, 21; O'Donnell, 1962, 61.
10. 1967, 30.
11. 1966, 69.

12. 1962, 59.
13. 1957, 232.
14. 1962, 68.
15. 1965, 331.
16. O'Donnell, 1962, 58; Barber, 1965, 23.
17. Barber, 1965, 23.
18. Holton, 1958, 53-54; Voorhees, Sharpe and Stegmaier, 1955, 5.

II. SUBURBAN SHOPPING CENTRES: SOME GEOGRAPHICAL ASPECTS

Classification

Nearly half of Palmerston North's suburban shops and services were in shopping centres of four or more businesses (Table VI), and it is with them that the remainder of this study is concerned. Owners or managers of all the shops and hairdressers and barbers were interviewed (Appendix A) but no details of service stations and specialist services were obtained.

Shopping centres were classified according to the number of shops and services grouped together. Shops directly across the road from each other, or separated by only a small gap of one or two houses, non-residential uses or vacant land, were included together as a centre. But where a shop was separated from its neighbours by three or more houses it was regarded as a single unit. All Consumers Co-operative Society and supermarket butchers' shops were counted separately from the grocers' shops, but where there were only two other shops in a group, the total of four did not qualify as a shopping centre. There were 16 shopping centres: five major centres, with ten to 16 shops and services (Plates 5, 6, 7 and 8) and 11 minor ones with four to eight shops and services (Plates 4 and 15, Table VII).

The classification used was original, based on local conditions but using ideas from other studies. As a natural break fell between the total of eight shops and services in Milson and Featherston Street centres and the ten shops and services in Takaro centre, the division between major and minor centres was placed there, but it could equally well have been placed between the Featherston Street and Tremaine Avenue centres.

There was no uniformity in the classifications used in other studies, the term "neighbourhood centre" being used variously for centres of one to six shops,¹ six to 15 shops,² or from ten to 15 or 20 shops.³ Overseas studies dealt only with centres of ten or more shops, calling them neighbourhood centres, which were comparable with Berry, Barnum and Tarrant's villages⁴ and Berry's neighbourhood centres.⁵

In New Zealand studies the division between the smaller and larger centres was usually placed at six or seven shops. The terms Class I and Class II centres were used by Clark⁶ to denote centres of one to

Table VII

A Classification of Suburban Shopping Centres

	Name	General		Specialist		Total	Location
		Basic Food Shops	Services	Shops	Services		
major centres (10-16 functions)	Roslyn	3	1	6	6	16	corner Vogel Street and Kipling Street
	Highbury	6	1	6	3	16 ^a	corner Highbury Avenue and Pembroke Street
	Awapuni	5	2	6	1	14	corner College Street and Pitama Road
	Hokowhitu	4	1	5	1	11	corner Te Awe Awe Street and Albert Street
	Takaro	2	1	6	1	10	corner Botanical Road and Featherston Street
	Sub-total	20	6	29	12	67	
minor centres (4-8 functions)	Milson	3	2	1	2	8	corner Milson Line and McGregor Street
	Featherston Street	3	1	2	1	8 ^b	Featherston Street, Between Campbell and Waldegrave Streets
	Tremaine Avenue ^d	3	2	1	0	6	corner Tremaine Avenue and Botanical Road
	Albert Street	3	0	1	1	5	corner Albert Street and Ferguson Street
	College Street ^d	4	1	0	0	5	corner College Street and Botanical Road
	Manawatu Street	3	1	1	0	5	corner Manawatu Street and Crewe Crescent
	Ascot Street	2	1	1	0	4	Ascot Street
	Sunglow	1	1	2	0	4	corner Featherston and Ruahine Streets
	Freyberg ^d	3	0	1	0	4	corner Freyberg and Featherston Streets
	Ruahine Street	2	0	2	0	4	corner Ruahine Street and Terrace Street
	Hodgens Place	2	0	2	0 ^c	4	corner College Street and Hodgens Place
Sub-total	29	9	14	4	57		
Total	49	15	43	16	124		

^a Two shops were vacant early in 1969, but were filled by the end of the year.

^b One vacant shop.

^c A partial post office service, run in conjunction with a dairy, was not counted as a separate business type.

^d New minor centre.

six, and seven to twelve business types. As Clark counted each business type (or function) once only, while in the present study every shop and service was counted even when functions were duplicated, the centres were nearly comparable in size. Different studies also used different units - some used shops only, while others included various services. The present study includes a wider range of services than in most other studies.

The five major centres and six of the minor centres, Milson, Albert Street, Manawatu Street, Ascot Street, Ruahine Street and Hodgens Place were studied in detail. The three new minor centres and two of the early minor centres were excluded from detailed interviewing, but were discussed in the general patterns in Chapter I.

Location

Shopping centres were located mainly on a limited number of main suburban streets which led directly to the suburbs and had the highest traffic counts apart from the central city streets and arterial roads (Figure 2).⁷ All but three of the 16 shopping centres were on these roads. (Figure 4). Most of the minor centres were located about three quarters of a mile to $1\frac{1}{4}$ miles from the city centre on the main suburban roads leading to the major centres which were situated in the outer suburbs.⁸ Distance from the competing city centre has enabled the major centres to develop into large centres with ten or more shops and services, while the minor centres remained smaller: people living over $1\frac{1}{2}$ miles from the city centre tended to use a wider range of suburban specialist shops and services than those living nearer to the city centre.

All shopping centres were situated on junctions. Seven were located at a four-road junction, including four at the intersection of two main suburban roads. Two were on intersections of a main suburban road and two minor roads, and all but one of the remainder on the junction of a main suburban street and one minor road. There was no relationship between the importance of the intersection and the size of the shopping centre - only one major centre was on a four-road junction. Clark's and Barber's studies⁹ of Christchurch shopping centres showed a similar relationship, but not as complete a one, between intersections and shopping centres.

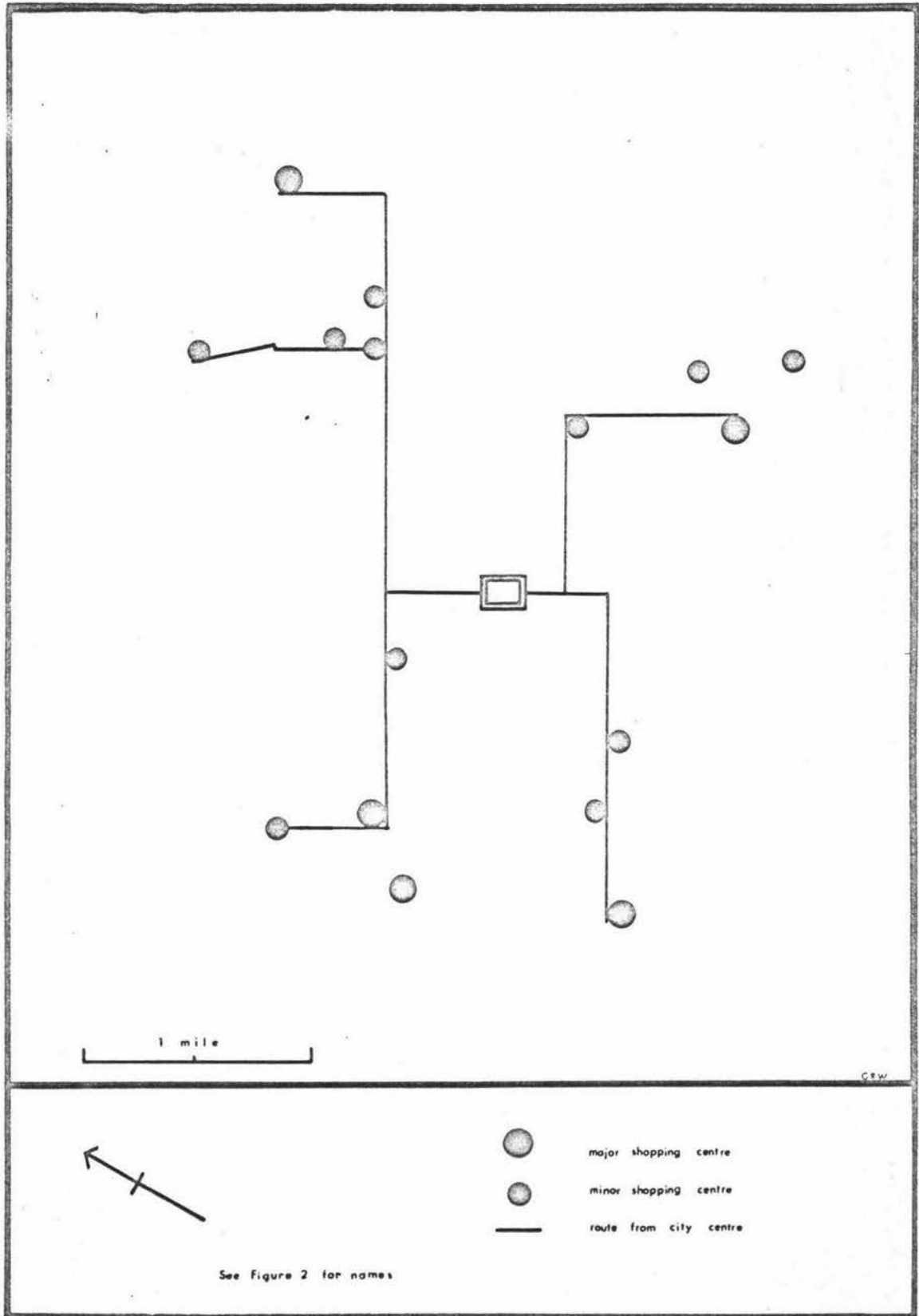


FIG. 4 LOCATION OF SUBURBAN SHOPPING CENTRES

Catchments

All the shopkeepers were asked to mark the catchment area of their shop on a map of Palmerston North, and the shopping centres' main catchment areas within the city¹⁰ shown in Figure 5 were an average derived from the individual catchments for each shop in the shopping centre. The main catchments shown represented the area covered by at least four of the individual shops' catchments. In most cases the main catchment boundary lines were obvious, as several shops had the same boundaries. But the minor centres, because of their smaller number of shops, and some refusals or insufficient knowledge on the part of shopkeepers, were only approximations based on limited evidence. To avoid confusion, the catchments of the outer minor centres, Ascot Street, Manawatu Street and Milson were not shown on the map. The two former fall within Hoko-whitu and Albert Street areas and overlap them, and Milson is dealt with fully in Chapter 5. Because Highbury and Takaro shopping centres were so close together that their catchments overlapped considerably, they were considered as one catchment, which closely resembled those of the other major centres. Although on the map the catchment boundaries fall short of the new 1969 city boundaries, the blank areas, except in the north-east, had been recently brought into the city by the boundary changes and were not closely settled.

The arterials were again of major significance: none of the main catchments, and very few of the individual catchments crossed an arterial road. Only small areas of settled land were not covered by the catchments of any centre, and all these were along the arterials: around Terrace End and Pioneer Highway shopping centres, and along the Rangitikei¹¹ and Fitzherbert arterials. People from these areas presumably used the special centres (Table 1) because of their proximity and the direct route leading to them. A number of schools, industry and the showgrounds also contributed to the gap. Nevertheless, the catchments of Roslyn and Highbury - Takaro centres reached to the north-east - south-west (Main Street - Pioneer Highway) arterials, including some people who lived next door to Terrace End or Pioneer Highway shopping centres. Some people living very close to the city centre used Takaro shopping centre, and the minor centres, presumably mainly for foodstuffs.

The major centres were reasonably well-distributed; commercial enterprise had met the demand and provided one in each outer suburb, $1\frac{1}{4}$ miles to 2 miles from the central square except for the isolated and

smaller Milson area, where the present large minor centre of seven shops and services could become a major centre in the future. Except along north-east Main Street and in the Terrace End area, which had its own large shopping centre, most people lived within about a mile of a major centre.

Catchments were basically about a mile square, with distortions to Hokowhitu and Awapuni because of bends in the river, and additions to Highbury - Takaro of settlement to the north-east across Tremaine Avenue and an extension in the north-west next to the showgrounds (Figure 5).

Except in Roslyn, the shops were nearer to the inner corner of the catchment boundary and the city centre, than to the outer catchment boundary. People living between the city centre and a ^{suburban} shopping centre tended to be drawn to the latter with its greater range, rather than to a smaller centre. Those living beyond the ^{suburban} shopping centre were much further from the city centre than the shopping centre and tended to use the latter. Nevertheless, Hokowhitu and Takaro drew people from within half a mile of the city centre. Because the Hokowhitu shops were nearer to the city centre, and with no intervening minor centre, the Hokowhitu centre catchment reached to the Fitzherbert Avenue - Rangitikei Street arterial, while most of the other catchments fell short, although Highbury - Takaro reached the city centre in one place.

Apart from the position of the shops in the outer suburbs, and the layout of the city and its relation to the river, the controlling factor in the shape of the catchments was the road pattern (Figure 6). One main road leading to the suburb ran across each catchment and it was crossed or joined by a second important road. People were drawn along these roads to the shopping centre which was located at or near their junction. The edge of the catchment in each direction usually fell where the next long, parallel, main road crossed the one which led directly to the shopping centre. In Awapuni, for instance, the centre was situated on the College Street - Pitama Road corner; the next parallel main road to College Street, Ferguson Street, formed the catchment boundary. In the other direction, the boundary was formed by Botanical Road which was the next parallel main road to Pitama Road.

The minor centres were unevenly distributed (Figure 2). Most of them lay between the major centres and the city centre, on a main suburban road leading to the city.

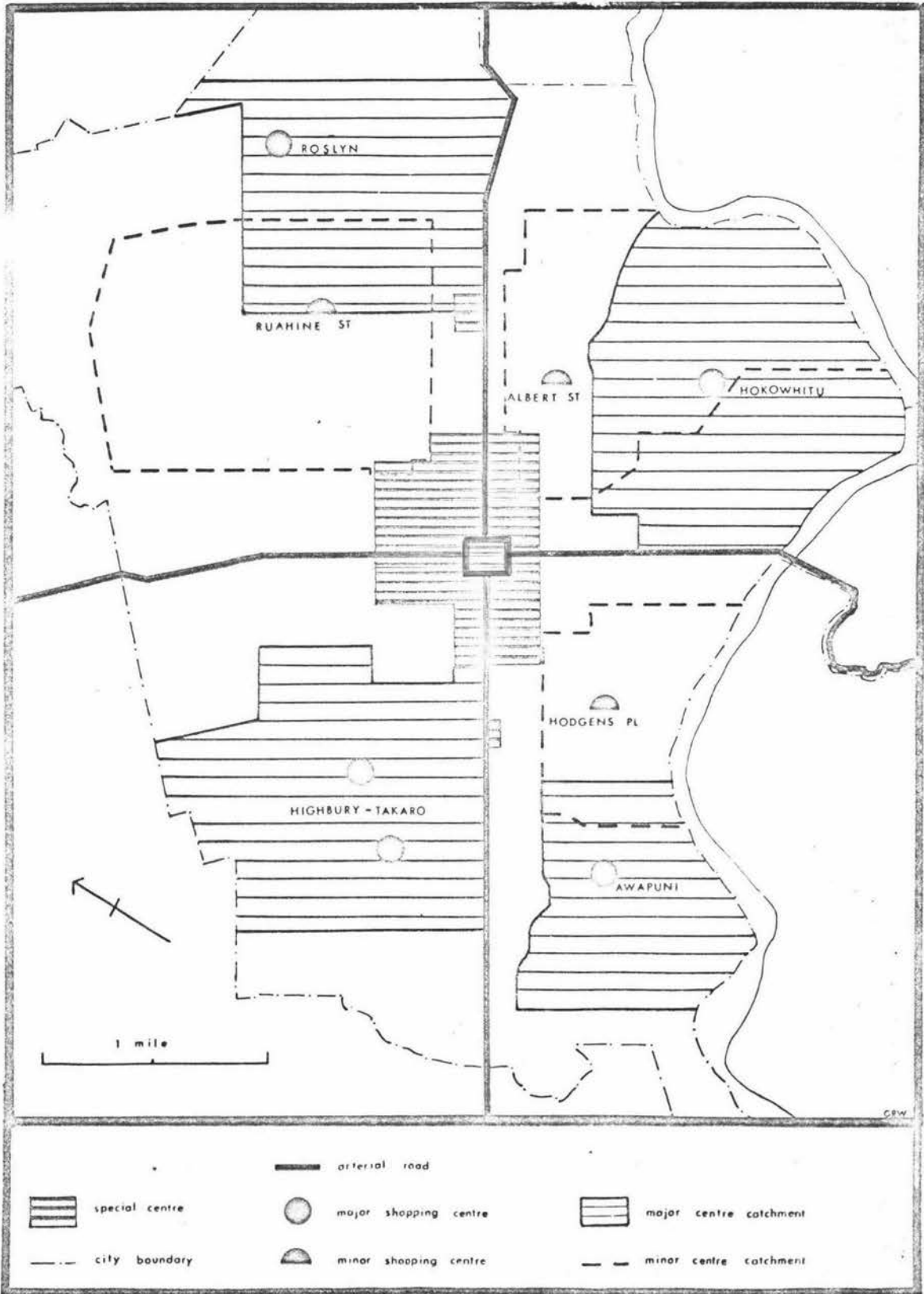


FIG. 5 CITY CATCHMENTS OF SEVEN SUBURBAN CENTRES

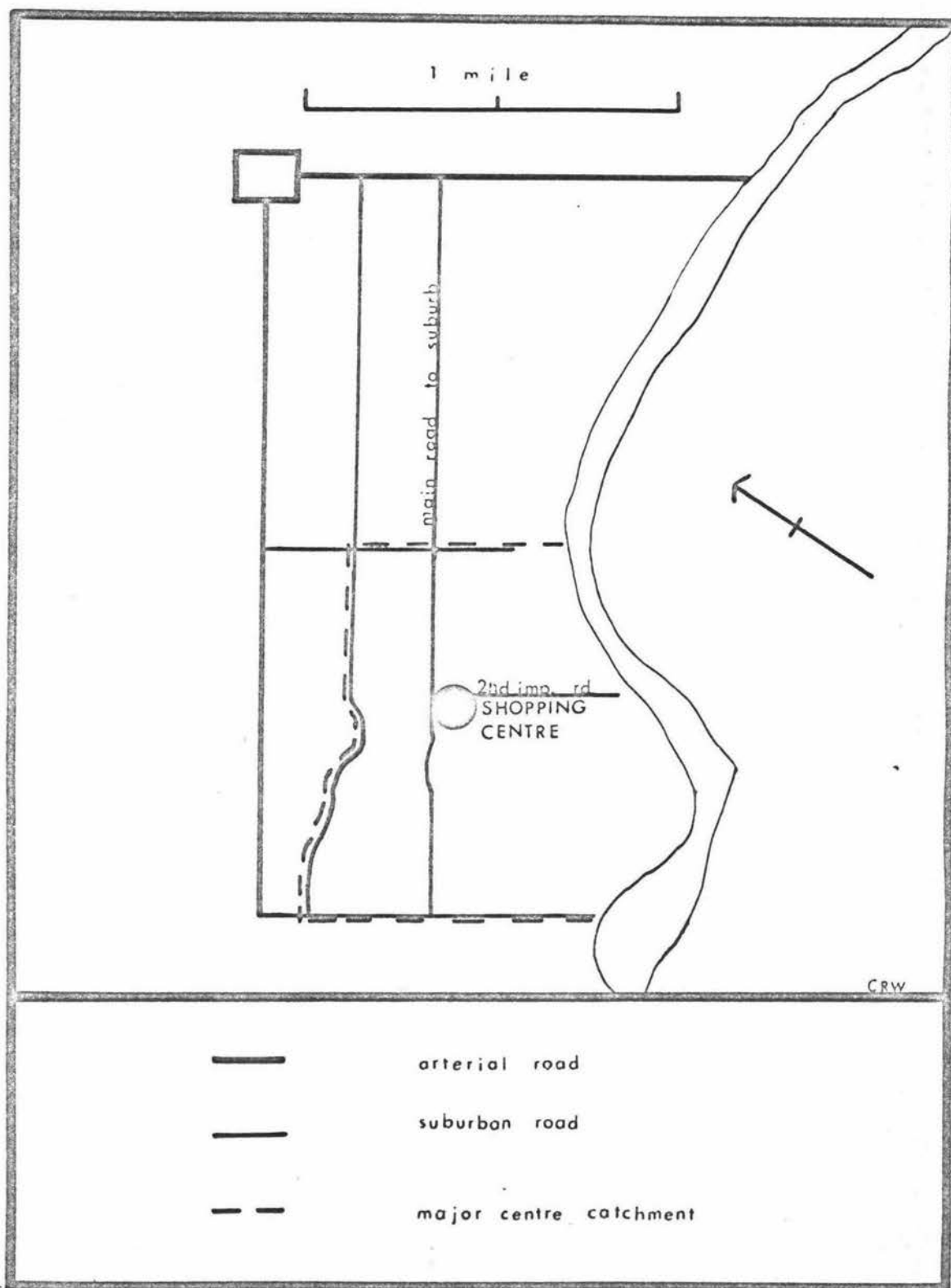


FIG. 6 RELATIONSHIP OF MAJOR SHOPPING CENTRE CATCHMENTS AND MAIN ROAD PATTERNS: AN EXAMPLE: AWAPUNI

Position of minor centres between the major centres
and the city centre

major centre	related minor centres
Roslyn	Sunglow, Freyberg
Highbury-Takaro	Featherston Street
Hokowhitu	Albert Street
Awapuni	Hodgens Place, College Street
Milson	Ruahine Street

Four others lay on the outskirts of the city (Milson, Tremaine Avenue, Ascot Street, Manawatu Street) and served areas beyond the major centres. But three minor centres were situated in the Roslyn quadrant within a quarter of a mile of each other around the Ruahine Street - Featherston Street crossroads, and two others in the Awapuni quadrant were within one quarter of a mile of each other in College Street. Ascot Street and Manawatu Street (Hokowhitu quadrant) were within half a mile of each other and only one quarter of a mile from the major Hokowhitu centre. Nevertheless, only a few shops seemed to lack customers. The distance of the minor centres from the square varied from the nearest, Featherston Street, which adjoined the city centre and could almost be considered as part of it, to Milson and Manawatu Street on the outskirts of the city.

Generalizations on the minor centre catchments were approximations only because of the smallness of the sample in both the number of shopping centres studied in detail (five out of eleven) and the lack of information from three shops. Catchments were oblong in shape with the long axis along the main route to the city on which the centre was situated (Figure 5). Customers came from the area immediately around the centre, as well as from cars passing the centre. The road pattern was thus the controlling factor in the shape of the catchments, as with major centres. The south-west corner of the Albert Street catchment was cut off because travellers from that area passed the competing and larger Hokowhitu centre or travelled via the arterial road to the city. The same happened to Hodgens Place in competition with Awapuni centre, but Ruahine Street was on the route to the city for many Milson householders and therefore had a catchment which was larger than that of Hodgens Place centre and

more regular than that of Albert Street centre. The shops were located nearer to the city centre than the outer catchment boundary, as with the major centres.

The minor catchments overlapped the edges of the major catchments for about a quarter of a mile in Roslyn and Awapuni. Albert Street's catchment actually included the Hokowhitu shopping centre and two other minor centre catchments, Ascot Street and Manawatu Street, lay almost wholly within Hokowhitu shopping centre's area. Within about a quarter of a mile of Hokowhitu shopping centre one small block of houses came within the catchments of all four centres.

Milson suburb had a separate minor shopping centre with its own distinct catchment area across the railway line and separated from other catchments. But some people from the older-established areas of Milson also travelled over $1\frac{1}{2}$ miles to use the Ruahine and Roslyn shopping centres, because of particular services not available in Milson at the time (see Chapter 5).

In overall size of catchment area there was only a slight relationship between size of catchment and number of businesses in the centre. Major centres with ten or more businesses and a wide range of specialist and service functions had, in general, only slightly larger catchments than minor centres of four or five separate establishments, presumably because of the passing travellers who extended the catchments of the minor centres. If the country customers who used Roslyn and Takaro, and those from beyond the river (where the city boundary was recently extended) who used Hokowhitu were added, these catchments would be much larger. A survey of shoppers using each centre, including the addresses of country customers, and passing travellers is needed to make a full and detailed comparison of minor and major centre catchments.

Although the number of shops in each shopping centre bore no relationship to the catchment population, when the total number of shops in a catchment area was related to the population of that area, as in Table VIII, a pattern in the population per shop was evident, but much further research into the types of shops and their customers would be needed to fully explain it.

Table VIII

Relationship of Population and Number of Shops
within Suburban Shopping Centre Catchments

	Shopping Centre	Population	No. of Shops in Centre	No. of other Shops in Catchment Area	Total Shops in Catchment Area	Approx. Population per Shop
major centres	Highbury-Takaro	9763	24	25	49	199
	Roslyn	6148	16	29	45	136
	Highbury	5882	14	8	22	174
	Awapuni	4352	13	5	18	242
	Hokowhitu	7193	10	22	32	128
	Takaro	6450	10	17	27	235
minor centres	Milson	1438	6	0	6	240
	Albert Street	2026	5	17	22	92
	Manawatu Street	2651	4	7	11	241
	Ascot Street	1509	4	3	7	216
	Ruahine Street	4123	4	13	17	242
	Hodgens Place	2800	4	9	14	215

Source of population figures: Palmerston North City Council Town Planning Department.

The catchments of individual business types in shopping centres varied greatly in size (Figure 7). The smallest were the dairies, which were usually less than one square mile in extent. There were few houses in the city without a dairy within a quarter of a mile, and each dairy seemed to serve its small, local population, passing car-travellers and week-end shoppers. The other basic food shops, butchers and grocers, had average-sized catchments, which did not seem to be limited by competition from shops in near-by smaller groups of shops. While people seemed to visit the nearest dairy whether it was in a

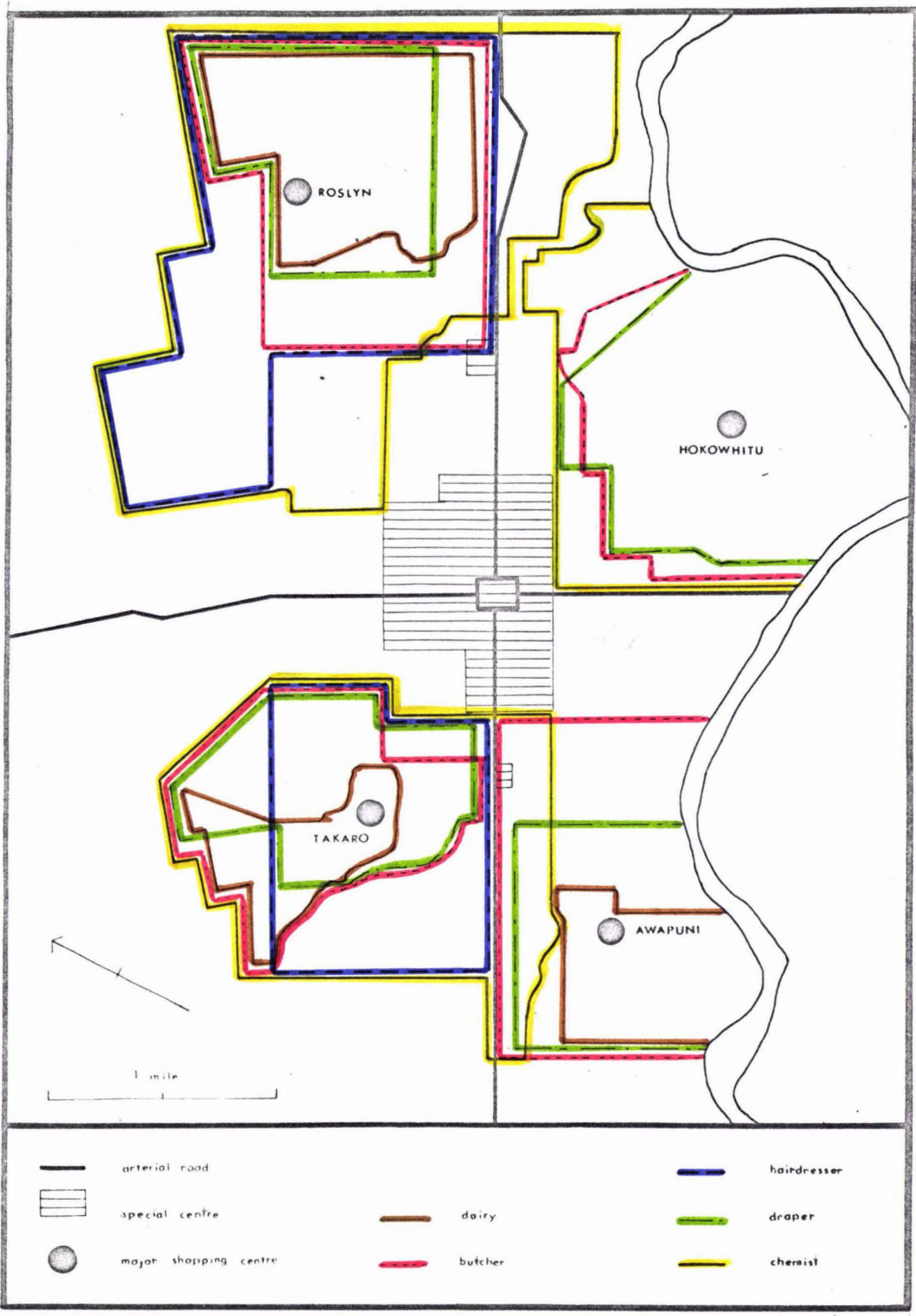


FIG. 7 TYPICAL MAJOR CENTRE CATCHMENTS OF FIVE FUNCTIONS

shopping centre or not, butchers and grocers in shopping centres seemed to attract people from a wider area than did dairies. The catchment area of the Awapuni centre butcher, for instance, included two other butchers' shops.

Most of the specialist shops (see Table III) had average-sized catchments of about $2\frac{1}{4}$ square miles for those in major centres and $1\frac{1}{4}$ square miles for those in minor centres. Even the hardware, cycle and footwear shops did not attract people from more than about a mile away. It seemed that even where there was no competition people did not use the local bookshop, draper, or even more specialized shops unless they were reasonably close. Some immediate needs were met by these shops, with other purchases left to the regular visit to town.

Chemists were an exception. Although they were also specialist shops they all had very large catchments, especially the two that were in shopping centres which also had doctors. As the Chemist's Guild limits the number of chemists' shops, there were only two outside the major shopping centres and the catchments of those within the centres covered the whole city except for the areas served by the Terrace End, Featherston Street and College Street chemists. Again, chemists met an immediate need for prescriptions, and for these people tended to go to the nearest one on a special trip, although they might buy other chemist's goods from a different shop.

The only services whose catchments were mapped - barbers and hairdressers - usually had larger-than-average catchments, in two cases, Albert Street and Ascot Street, exceptionally large, presumably because people were attracted by the quality of the service and the hours during which the shops were open.

Very few individual catchments crossed the arterial roads to "invade" other major centre catchments. But the smaller size of Awapuni's catchment compared with Highbury - Takaro's was partly because of "invasion." Four Highbury - Takaro shops had catchments extending across Pioneer Highway, two of them as far as the Awapuni shopping centre. The Save-more grocery with its lower prices and the Highbury drapery both attracted people, and one of the dairies had an exceptionally large catchment which may have been exaggerated compared with other shops' catchments, by the unusual knowledge the shopkeeper had of the customers' origins. The Highbury chemist also had an unusually large catchment, as did the Roslyn one which also "invaded" across the arterial, and was

the only shop outside Highbury to do so. Both chemists were associated with doctors. Awapuni had been a major centre only since 1966, so that its influence could increase in the future.

Customers

Basically, all shopping centres relied on the surrounding residential area for their customers. Because of their position near the competing city centre of Terrace End, most minor centres sold mainly foodstuffs to people from a limited local area and casual passing customers, while major centres, because of the distance between them and competing special centres, were able to sell a wider range of goods and services to people from a larger area. Most of the minor centres were in areas of static population. Three quarters of Albert Street centre's customers, for instance, were old people and flat dwellers (most of the rest were passing car travellers). Milson, and many of the major centres, being on the outskirts of the city, were in areas of recent or current housing development. One man may have exaggerated when he spoke of Awapuni shopping centre as having "over 7,000 people within half a mile," but he had had a 25 percent increase in turnover since he opened eight years before. The same had happened at Hokowhitu where one business had expanded steadily for 15 years. Competition in both cases was limited.

Most shopkeepers were aware of the type of area their shop was in, and no-one was disparaging about his customers. Hokowhitu and Ascot Street were favoured as being in "good areas" where "people have plenty of money to spend." Takaro and Awapuni shopkeepers liked the wide range of people in their areas; State housing and private housing in Awapuni meant that both cheap and luxury goods sold well. The railway settlement people were solid supporters of Milson centre. A central position in the middle of a large housing area was always appreciated by shopkeepers, especially if the centre was easily accessible and the area expanding.

The density of the State housing area at Highbury was favourably regarded, but some areas of vacant land near centres were criticised; the church land opposite Awapuni centre and the bowling green near Takaro were mentioned. The local area, in nearly every case included a primary school, whose pupils used the nearest shopping centre, and especially the dairy for lunches, ice creams and sweets. School books were also commonly bought at the local shops, and hairdressers and barbers, if available, were used by school children.

As well as the local housing area, most centres had some special customers, from passing traffic, or country customers, or particular local influences. Passing traffic brought car-travelling customers who stopped briefly to buy one or two things at a shopping centre which they passed on their way to the city centre. Shopkeepers in all the major shopping centres except Highbury, which is off the main road, mentioned passing customers, and they were of special importance in two minor centres, making up about a quarter of Albert Street centre's customers and half of those using Ruahine Street centre. (The latter would include many people connected with the hospital). Many men and school boys used the three suburban barbers, stopping on their way past for haircuts or tobacco. The local service was appreciated by mothers who could send their young sons to the barber on their own, instead of having to drive them to town.

Country customers were important in the three centres situated on main through roads on the outskirts of the city - Roslyn, Takaro and Milson. Eighteen percent of the credit customers at the Milson Consumers Co-operative Society grocery were country people.

Particular local factors which brought customers to near-by shopping centres included institutions, factories and recreational areas. The Public Hospital was very important to the Ruahine Street centre which was built opposite. Nurses, and other staff, patients and visitors shopped there, and one shop regularly took a trolley of goods round the wards. The three suburban home cookeries which were still in existence were all near the hospital, including the one in Ruahine centre. Factories were important to two shopping centres; Takaro centre was opposite the large Glaxo Laboratories, and the Tremaine Avenue industrial and commercial area was an important source of customers for the adjacent Roslyn centre. It supplied about half of one shop's customers and 20 percent of another's, the latter mainly women shopping after work, some of whom would live in the area. Large numbers of workers also required morning and afternoon teas, lunches and haircuts. Of minor importance were some recreational areas. The park situated right next to Highbury centre brought some people to the shops and mothers were able to shop more peacefully or have their hair cut while their children played in the playground. But although Ascot Street centre had a park and playground opposite, none of the shopkeepers mentioned this, although one or two said that the kindergarten and Plunket Rooms situated by the park attracted some

customers to the shops. The bowling green at Takaro, and the golf course near the Hokowhitu centre brought a few customers to the shops.

Two special business types were important in attracting customers to particular shopping centres: the Save-more and Consumers Co-operative Society groceries and the post offices. At Hokowhitu and Milson in particular, the family benefit drawing facilities attracted a considerable number of people once a month, many of whom spent some of their money in the centre. Some Takaro shopkeepers, who had tried to get a post office in their centre, were disappointed that it was put in the new Highbury centre, thus attracting people to their near-by competitors. Shopkeepers did not like competition from near-by shops.

Some tension was evident between Takaro and Highbury centres because of their proximity. The State built the Highbury shops in the centre of a State housing settlement, although Takaro shopping centre was only two large blocks away. But in spite of Highbury's greater range of shops, including the coveted post office, the Takaro centre seemed able to compete and had recently had two shops added to it. Highbury had two vacant shops for much of 1969, but they had been recently occupied. Hodgens Place also suffered from the competition of the College Street centre which had recently acquired a Save-more grocer and butcher.

The recent advent of supermarkets and the Save-more groceries, and their effect on competing smaller foodshops needs a special study. An overseas' study¹² of the effect of supermarket competition, on the traditional greengrocer and butcher concluded that there had been no significant impact up to the time of the study, except for some cut prices and diversification, and that the best supermarkets and the best traditional shops would continue to do good business. A subjective assessment of the state of the various businesses in Palmerston North, based on the shopkeepers' spontaneous comments, revealed that four butchers had difficulty attracting sufficient customers, and two of them mentioned new, larger shops amongst their competitors. Yet another butcher felt that "the good ones would hold their own." Only one dairy and one fruiterer (whose business had been prosperous a few years before) found business poor, and one specialist shop. (Many of the latter had failed over the years). Two fish and chip shops also had difficulties, one partly because of the high power charges he had to pay because he was under a different power supplier from his competitors. With 22 fish and chip shops in Palmerston North he felt the competition was rather severe.

Summary

Suburban shopping centres were classified into two groups, major and minor centres, according to the number of shops and services they contained. Most of them were situated on the main suburban roads which had the highest traffic counts apart from the arterials and the central city streets, and all were located on intersections of varying sizes.

Average shopping centre catchments within the 1968 city boundaries, were all contained within one quarter of the city - none of them crossed the arterial roads. The areas not covered by any suburban centre catchment, apart from the country areas into which the city had recently expanded, were adjacent to the four main arterials, along which people travelled to the special centres. Major centres were well-distributed, so that most people lived within about a mile of a large group of shops, but minor centres were unevenly scattered, with many duplications. Although minor centres had oblong-shaped catchments while major catchments were square, both were controlled by road patterns and the inclusion of country customers would extend the areas of most of the major centre catchments so that they would be larger than those of the minor centres. With both types of centre the shops were usually located towards the city centre rather than in the centre of the catchment area.

There was a pattern in the size of catchments for individual functions. Dairies had the smallest catchments, while those of butchers, grocers, and most of the specialist shops were all average in size, in spite of the greater number of competing grocers and butchers. Chemists, especially when associated with doctors, and some barbers and hairdressers had exceptionally large catchments.

Each centre attracted customers from the surrounding houses and the local schools, while passing traffic was important to many minor centres and country customers to most of the major centres and Milson. Other customers came from the hospital and factories. Two particular functions were especially important in attracting people to shopping centres - Save-more and Consumers Co-operative Society grocers and post offices.

REFERENCES

1. Gibson, 1950, 499.
2. Munro, 1966, 69.
3. Pearson, 1957, 233; Percival, 1965, 330.
4. 1962, 68.
5. 1967, 135.
6. 1967, 30.
7. See Chapter 1, Geography.
8. There were four exceptions - Ascot Street and Manawatu Street served small local areas within the catchment of a major centre. Milson served an old settlement, and Tremaine Avenue a new settlement, both near the city boundary. If Milson, which was already the largest minor centre, developed into a major centre, it would complete the pattern of outer major centres and inner minor centres in the main suburbs, but new shops in Sunny Heights area could prevent this.
9. Clark, 1967, 30; Barber, 1965, 23.
10. As maps with the pre-1969 city boundary were used in the survey, catchment areas beyond this were not included.
11. Some of these people would use Featherston Street centre, which lies just outside the city centre. The shopkeepers here were not interviewed.
12. Anonymous, 1964, 10.

III. SUBURBAN SHOPPING CENTRES: SOME PLANNING ASPECTS

Traffic

An anonymous article in the Dominion newspaper¹ estimated that in eleven years from 1969 car ownership would double. A study by Dudding² discussed the importance of forecasting the future growth of motor vehicle ownership in New Zealand and reviewed the methods available, adapting them to New Zealand conditions. New Zealand had the third highest motor vehicle ownership in the world, and a high saturation level of ownership because of the high standard of living and the number of people, (63 percent), aged between 15 and 75 years in 1966, all of whom would probably want to own a car. Trucks and motor cycles should also be included, giving New Zealand a likely saturation point of 630 motor vehicles per 1,000 people. Motor vehicle ownership was therefore likely to continue to increase from the 1966 rate of 274 cars per 1,000 people to 320 in 1971, 402 in 1981, and 453 in 1990. Although the forecasts of the two studies were very different, it is obvious that planning for increased numbers of motor vehicles is essential.

Some Palmerston North figures illustrated the trend. In Milson, a suburb of people with average incomes, many women had their own cars, and only 15 percent of households never had a car for shopping, while 76 percent of households had a car for shopping once a week or more often. Even in the area of Milson settled by young couples in newly-built group houses, three-quarters of the women had the use of a car for regular shopping trips, and the lowest Milson figure, for the older area near the airport, was 69 percent. A recent survey showed that 60 percent of the Massey University students who lived in flats owned cars, and where working sons or daughters lived at home there could often be two or more cars per household, or possibly three or more if the wife had her own vehicle. The likely increase in car ownership in the future was also supported by the Milson figures. The 30 - 39 year old group had the highest usage of a car for shopping; all of them had a car available for shopping, three-quarters whenever they wanted it, and only five percent less often than once a week. As this group ages, this pattern will presumably continue, leaving only the 20 - 29 year old group with a lower usage; at present, 19 percent of the 20 - 29 year olds have a car for shopping less often than once a week.

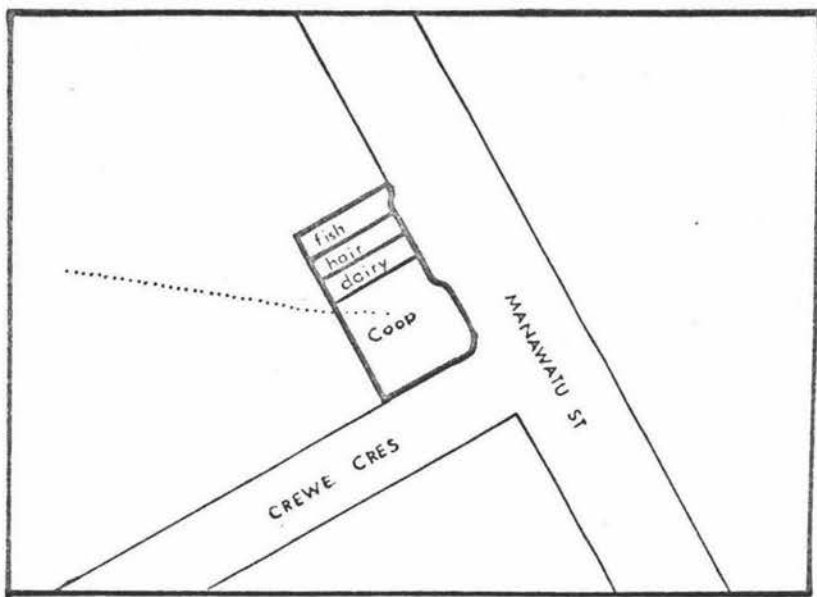
The effect of increasing car ownership on shopping centres has been felt for many years as more people are able to shop by car. Traffic in shopping centres is becoming increasingly important to both customers and shopkeepers. It has three main aspects - parking, safety, and service lanes.

Parking

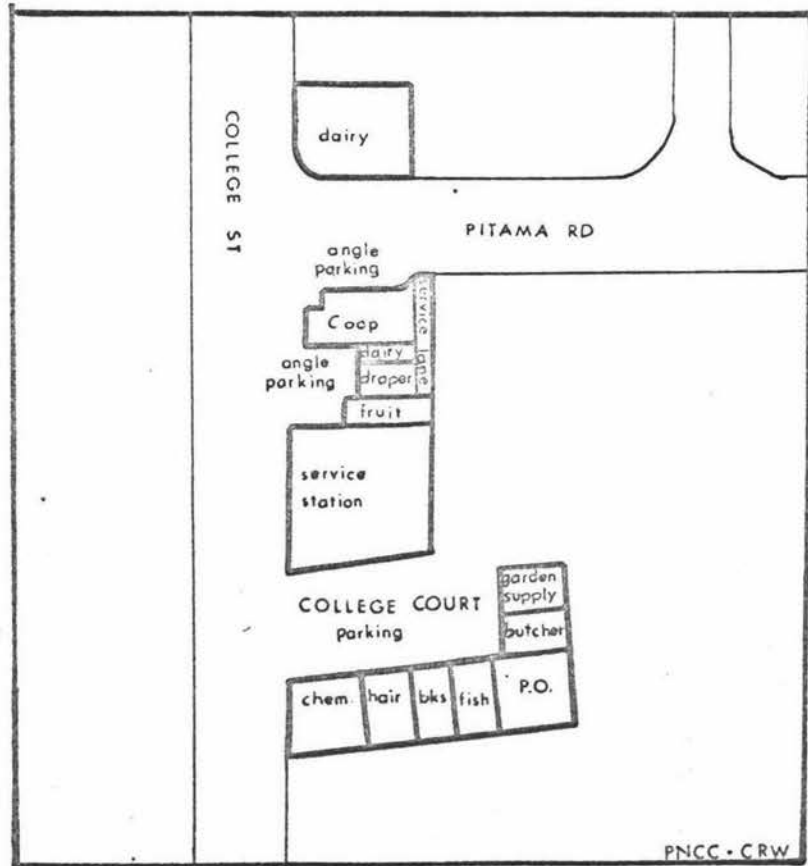
The adaption of Terrace End shopping centre to car shoppers and the advent of supermarkets have already been mentioned. People are no longer tied to local shops, but can use their cars to "shop around". Increasingly sophisticated methods of parking have been tried as traffic volumes have increased since World War II. Outside the earliest shops, no special provision was needed, as traffic was limited and there were no regulations governing parking spaces. The kerb-side was sufficient (Plate 2). Examples are found outside the original shops in Hokowhitu and Milson centres (Figures 9b and 11). But as traffic increased, parking often became a problem. In response to the Town and Country Planning Act of 1953 the Palmerston North City Council, in its District Scheme, made the provision of one off-street parking space compulsory for every 400 square feet of gross floor area built in a commercial zone. The response was often angle parking, with the shops set back from the street; this provided more spaces, but was still on the street. Manawatu Street shopping centre and many newer additions to older centres have this type of parking (Figure 8a, Plate 4). But recently, car ownership and the competition of supermarkets, which provide ample parking, have increased the need for parking in shopping centres. Larger areas are beginning to be provided, as at Awapuni and Highbury (Figures 8 and 9, Plate 6).

In 1969 only two minor centres, Albert Street and Hodgens Place had no parking problems, according to the shopkeepers who were interviewed. All the others had insufficient parking space in some areas during busy periods. This was true even of Highbury shopping centre where some of the retailers in the central shops facing Highbury Avenue thought there was not enough room at peak hours, although others were satisfied.

"Adequate parking" is a subjective term, and opinions will vary. Some shoppers require parking right outside the door of the shop at all times, while some make their shopping visits in the less busy times to ensure parking, and others are prepared to walk some distance. There are two aspects to be considered - parking for "long stay" customers

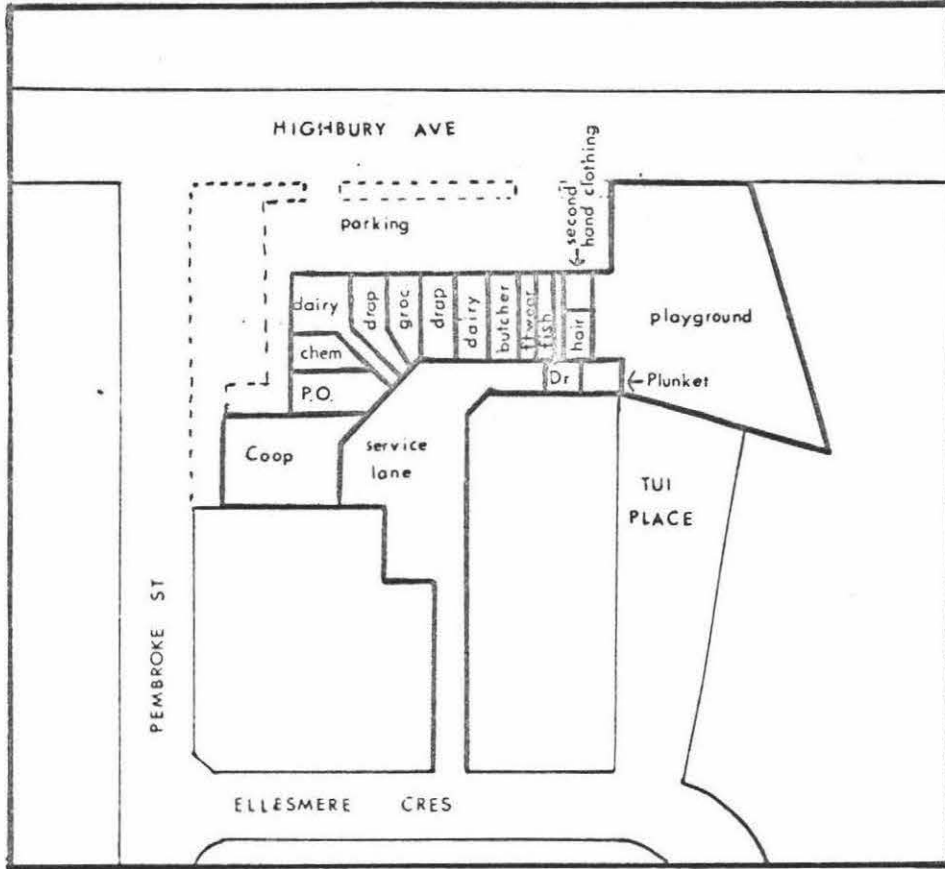


(a) MANAWATU ST

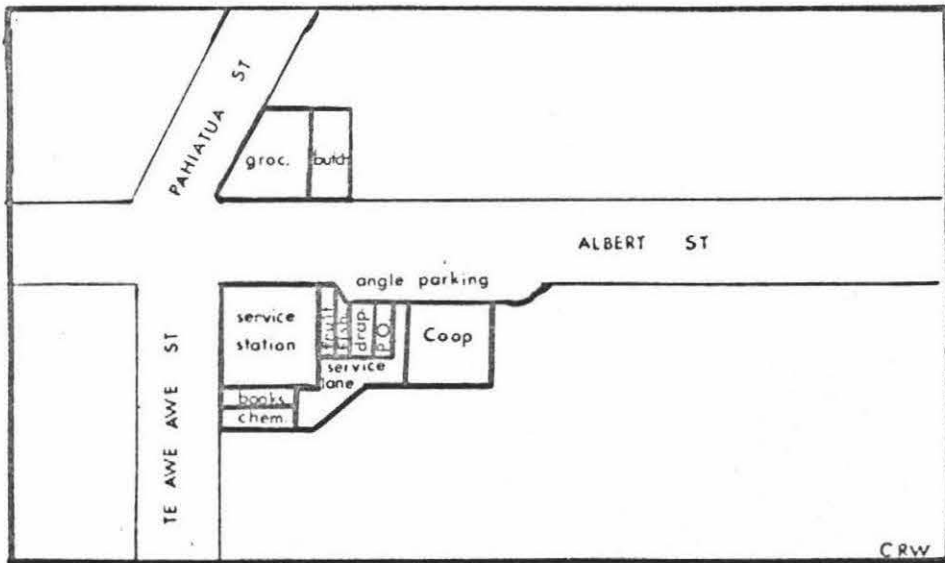


(b) AWAPUNI

FIG.8 LAYOUT OF SUBURBAN SHOPPING CENTRES



(a) HIGHBURY



(b) HOKOWHITU

FIG. 9 LAYOUT OF SUBURBAN SHOPPING CENTRES



Plate 6

Highbury, a major, planned shopping centre with a wide range of functions and an off-street parking lot. The children's playground is just visible behind the mobile library at the left of the photograph.

who wish to stay some time in the centre and visit several shops, and those passing the centre who stop for a moment only to buy one article. "Long stay" customers are usually prepared to walk a few yards from a car parked somewhere near the shopping centre. The shopping trip is often the only purpose of the outing, and the effort of walking is not great in relation to the number of goods to be purchased, and the expected length of the visit. For this type of centre, as at Highbury (Plate 6), people will walk willingly from a large off-street parking lot to the shops. Although the shops are set back from the road, the size of the centre and its large range of goods and services are sufficient to attract even passing traffic off the main road.

But some of the minor centres rely on a considerable amount of passing traffic, and here the problem is different. These are small groups of shops which have no great drawing power. People passing by stop their cars and hurry into one shop to buy a particular article, while on their way to another destination. If there is no parking place immediately outside the shop, many of these people will not stop at all, because the effort of walking back to the shops seems too great in relation to the one good to be bought and the limited time available. One Ruahine Street shopkeeper complained that many people who could not find a parking place drove on to Terrace End or the city centre. As one-third of his customers were passers-by parking was very important to him. The problem was aggravated here because of the hospital opposite (hospital visitors used up parking space), but a Milson retailer had the same difficulty. Perhaps such shops need to stand alone or in pairs, so that the maximum amount of parking space is available. Angle parking in front of a pair of shops would probably be adequate in most areas, and the shop frontages would still be close enough to the road to be obvious to passing car travellers.

There are two other parking problems - employees' cars and some special local difficulties. Ruahine Street was an example of a local parking problem because of a big institution, the Public Hospital, opposite it. One retailer complained that sometimes hospital visitors monopolised the parking spaces outside the shops. Roslyn had a similar problem - when the T.A.B. was open, punters' cars filled up all available parking space.

A final problem was provided by employees themselves. Nearly 41 percent of employees and shop owners came to work in cars, and 60 percent

of them parked on the road. Some made an effort to park along the street or around the corner, away from the shop fronts, but many did not. There was obvious resentment felt by one shop-owner whose neighbour's car filled one of the only two spaces outside his shop all day. Only 21 cars out of a total of 79 were parked at the back of the shops in the service lane, which in itself could be a problem. Special consideration of these cars is needed in the regulations governing provision of parking outside shops. There seems to be a case either for special additional parking to be set aside for employees and owners in enlarged parking lots, or for space to be made available in service lanes. The number of parking spaces for both customers and employees will need constant revision as car ownership increases. Spreading of peak shopping times would help. Most women did their main food shopping on Thursday or Friday, and food shops accentuated this by advertising "specials" in Wednesday evening's newspaper, thus encouraging people to shop at the end of the week. Nearly all shops had their busiest days on Thursday and Friday. Only the bookshops, who had their main trade on Monday when the magazines came in counteracted the end of week concentration, and their trade was only a minor part of the total. The recent change to Thursday late night shopping instead of Friday at Highbury shopping centre, which has proved successful in attracting customers, may ease some parking problems. There were also common peak hours which occurred every day - lunch time and after school. Economy and customers' convenience are at loggerheads here; to provide enough parking spaces for the peak periods seems uneconomical, as many would be empty for the rest of the day or week. Yet after a certain point car customers might be frustrated enough to change to another shopping centre, and especially to supermarkets with their wide range of goods and lower prices.

Service Lanes

Service lanes in suburban shopping centres seemed fairly adequate. The City of Palmerston North District Scheme's Code of Ordinances states that adequate vehicular access must be provided to the rear of commercial premises, and except in the Albert Street shopping centre most of the shops had a service lane and 85 percent of the retailers used them. Use depended on two main factors - type of shop, and adequacy of access from the service lane to the storeroom. Certain food shops - grocers and dairies, fruiterers and fish and chip shops - had the greatest

need of service lanes and made the most use of them. Large wholesalers' trucks and other trucks had to make regular deliveries, parking for some time while goods were unloaded. Only two dairies and one fruit shop had no lane, and only one dairy did not use the lane provided. Butchers, because they opened at 7.30 a.m., and unloaded their meat before other shops were trading, and hairdressers and barbers, because of the small volume and size of goods unloaded, did not really need a service lane, but those who had one usually used it. A number of shops used the lane only for heavy or bulky goods, finding it easier to bring smaller, lighter parcels straight into the shop, especially when they arrived a few at a time and were placed straight on the shelves.

The relation of the store room to the service lane was a design problem which should cause no problems in newer shops. But one dairy unloaded from the road because it was nearer to the storeroom than the service lane and a Hokowhitu grocer's storeroom opened across the footpath, blocking both the footpath and a parking space.

Complaints about service lanes were few; only 14 percent of the shopkeepers said, in answer to a specific question, that they had difficulty in using a service lane. All were in major centres and three related to parking of retailers' own cars in the lane, for which special provision needed to be made. Overcrowding was the other main problem, with large trucks delivering foodstuffs causing most of the difficulty. At times they blocked the lanes, preventing others from using them. This is similar to the parking problem in that to make a parking area or service lane large enough for the maximum traffic which may occur only once a week is uneconomic. Co-operation between shopkeepers and a re-organisation of unloading times may be possible. But larger vehicles are now being used by some wholesalers and the size of service lanes may need to be revised. The larger groceries and dairies need an unloading bay where they can pull out of the main part of the lane, leaving it free for others. Several people criticised the provision of only one entrance to lanes. Highbury was one example (Figure 9a). With no through-way vans had to turn in the yard, leaving little space for parking.

Service lanes are required to do two conflicting tasks - delivery of goods to and from shops, and provision of parking for shop assistants. Either they need to be designed for this dual role, leaving plenty of room for parking as well as for the increased size of some trucks, or

special areas need to be provided elsewhere for assistants' cars. This could be in the enlarged parking lots which will be needed as car ownership increases.

Safety

Safety in shopping centres is in conflict with economic necessities and historical development. Business men build on busy suburban corners where the shop will be noticed and readily accessible to the maximum number of people. But corners are also potential accident spots, and the likelihood is increased when extra traffic is generated by the shops. When the early food shops were built, traffic was much less and the problem minimal, but shops are still built on corners in spite of greatly increased traffic. Although the Transport Department puts control signs on dangerous intersections, all the shopping centres except Takaro and two minor centres had an accident involving injury needing medical attention in 1968, and Milson centre had two accidents, in one of which a child was killed.

On the surface, Highbury, a planned shopping centre (Figure 9a) seems to be on the way to solving the problem. The shops are on Highbury Avenue, which, although an important street within the State housing area, is not a through route. (Some Highbury shopkeepers complained that it was Takaro, a much smaller centre, which attracted car travellers from out of town because it is situated on a main through route, Botanical Road). Highbury has a large parking area separated from the street and all the shops except one have access to a service lane at the rear which they all use without difficulty. Nevertheless there were two accidents at the centre in 1968. The shops are built around a corner, so that traffic turning from or into Pembroke Street is added to that using the parking area. Pedestrians have to cross the entrances to the parking area, but this is inevitable unless costly underpasses are built. Traffic enters and leaves by both entrances. Future centres might be more safely located away from street corners, and with one-way traffic into and out of the centre. But these are technical matters requiring the combined talents of a traffic engineer and an architect.

"Interrupted" centres which have a road running between the shops, have other problems. With shops situated on both sides of the road some shoppers have to cross the intervening street. Hokowhitu (Figure 9b, Plate 7) is the worst example of this. It has two basic food

shops on one side of the busy suburban thoroughfare, and a large block of mixed shops and a service station across the road. It is also on a crossroad junction involving four streets.

Service stations in shopping centres are a considerable nuisance to pedestrians. Three centres have such an arrangement (Figures 8b, 9b and 11, Plates 7, 8 and 15). Shoppers have to cross in front of the service station to walk from one group of shops to the next, conflicting with cars entering and leaving the service station. This is potentially dangerous and inconvenient for both cars and shoppers. Cars waiting to be repaired or picked up can add to the nuisance if left across the footpath or using up kerb-side parking. One useful aspect is the provision of toilets which are not otherwise available in shopping centres, but unfortunately service stations do not usually encourage anyone other than their own customers to use them.

Most service stations are single units, standing by themselves, and it is probably better to exclude them from shopping centres. They do not need other adjacent shops to draw customers - 68 percent stand alone. Although their presence may draw a few customers to the centre, the advantages are not worth the disadvantage of added congestion and possible danger to pedestrians. It may be convenient for car drivers to have all services together, but it is not difficult, once in a car, to drive a few hundred yards to the nearest service station or garage. A service station at the end of a block of shops may be a satisfactory compromise, but there is always the possibility that further shops may be built beyond the service station if that is the only land available, placing the station between blocks of shops. This has happened at Awapuni shopping centre (Figure 8b, Plate 8). The dairy on the Pitama Road - College Street corner was the first shop, followed by others across Pitama Road. Then the service station was built, at the end of the row of shops, and recently a new block of shops, College Court, was added on the other side of the service station, so that it is now enclosed by shops on both sides.

Pedestrian malls

Pedestrian malls could provide safer shopping in some future major shopping centres. Shopkeepers were asked if they knew what pedestrian malls were, and if they thought them a good idea in suburban centres. Sixty-eight percent had heard of malls, (some recognising the



Plate 7

Hokowhitu, a major shopping centre, "interrupted" by a main road and a service station.



Plate 8

Awapuni, a major shopping centre "interrupted" by a service station and a road (beyond the Consumers Co-operative grocery.) Note the lack of parking space on a Friday morning.

term only after the term's meaning had been explained) and nearly half thought them a good idea in general, although some felt that they were suited only to centres larger than those in the suburbs of Palmerston North. The few who gave reasons for objecting to pedestrian malls felt either that they were not needed (which was true of minor centres) or that people did not like walking from off-street parking lots and needed to be parked nearby to pick up groceries. Shopkeepers recognised that passing car-travellers, who stopped briefly for one or two purchases, would be deterred by large off-street parking lots which separated the shops from the road frontage. The few minor centres which depended to any great extent on passing cars were not large enough to need pedestrian malls, although a small off-street parking lot at the end of the row of shops would probably bring in some of the potential customers who now drove on when the present on-street parking places were full. But major centres such as Highbury, could, in future, be planned around small, sheltered pedestrian malls for more pleasant, safe and relaxed shopping.

Planning

Planning controls have been used to avoid repeating past mistakes. The ordinance requiring the provision of parking sites and service lanes is a good example of this, although it will need revising as traffic increases. A minor example of the lack of planning control occurred in one centre when a new storeroom was added to a shop. Permission was given for the storeroom to be built adjacent to the front of the shop although a service lane was provided at the back. Trucks then had to park on the road while unloading goods across the pavement, interfering with shoppers. A garage-type door which lifted up over the pavement added to the difficulties.

Control could perhaps have been used to prevent poor planning in Awapuni shopping centre. In order to build College Court, the developing company had to apply to have the land rezoned commercial, and this could have been refused. But a conflict arises here, for although it is in the public interest to have well-planned shopping centres, it is also in the public interest to have the seven new shops, which could not have been built in the Awapuni centre if rezoning permission had been refused.

A similar conflict arises over the location of shopping centres. In the interests of safety and easy traffic flows shops are better away from main streets and busy corners. But a shop has to make a profit and therefore must attract customers. If sites are set aside only on

minor streets and away from intersections, and entrepreneurs refuse to build, the public interest is certainly not served, unless there are plenty of other shops nearby. Yet it seems likely that if no other sites are available in a populated and expanding area less than optimum sites will be used. If such sites are located in the centre of housing areas and spaced to avoid damaging competition, both profitable businesses and safe, convenient shopping should be possible. As the centre grows, and the range of goods increases, these would provide sufficient attraction in themselves, regardless of the site. This does not apply to shops relying on passing traffic - these need to be located in single or double units on main roads so that sufficient angle parking is available, but not necessarily at junctions.

Layout

External layout

There were three main types of shopping centre - the simple linear centre, the "interrupted" centre, and the planned centre.

The linear centre,³ (Figure 8a, Plates 2, 4, and 5) was the most common and oldest form of shopping centre, and it had three main features: continuous shop fronts, shops on one side of the street only, and no off-street parking lots. The shops formed a continuous strip with only very minor interruptions, such as a service lane entrance. All were on one side of the road, although in some centres they continued around the corner into a small side street. No planning was involved; one shop was added to another as the need arose. A basic food shop, often the original shop, was usually situated on the favoured corner site where a main or minor suburban road joined a side street, and a row of other shops extended from the food shop along the main street. No special parking lots were provided, although some of the newer centres had the shops set back from the road to allow angle parking in front of them. Sizes varied from 16 shops in the largest linear centre, Roslyn, to four in Albert Street. All the minor centres, except Milson, were of this type, as well as two of the major centres.

The "interrupted" centre,⁴ (Figures 8b, 9b and 11, Plates 7, 8 and 15) had three main features: shops were "interrupted" by service stations, they were on both sides of the road and there were no off-street parking lots.

Groups of shops were separated from each other by a service station, and some shops were across the road from the main block. The lack of planning was obvious. As in linear centres, the first shop built was usually a basic food shop on one corner, usually at a junction or cross-roads where a main suburban street was crossed by another road. Instead of continuing next door to the original shop or shops on the main street, development had "jumped" an intervening street and continued on the other side. Each centre also had a service station built between two groups of shops. Parking was as before - kerb-side or angle. Sizes varied from ten shops at Hekowhitu to six at Milson and there were two major and one minor centre of this type. Awapuni shopping centre (Figure 8b) was partly an "interrupted" centre, but the new block of shops, College Court, was also an example of the third type of centre, which had been planned as a whole.

Planned centres,⁵ (Figures 8b and 9a, Plates 6 and 9) had continuous shop fronts, were on one side of the road only, and had off-street parking.

The earliest planned centre, the four shops in Hodgens Place, built by the State in 1941 to serve a State housing area, had only a small parking area, but this was separated from the street by a small band of grass. Highbury shopping centre, (Figure 9a), built by the State in 1964 to serve another State housing area, was on a much larger scale. It had a large parking lot which was separated from the street by a long strip of grass and had two entrances (or exits).

The College Court area of Awapuni shopping centre (Figure 8b, Plate 9) was an interesting example of private planning, apparently forced on the developers by the lack of land for expansion parallel to the street. Rezoning was obtained for a small section of land, and in order to fit in seven premises and parking, the shops had to be built at right angles to the road, with a parking lot in front of them.

Weather and Design

Greater consideration of the weather could improve the design of some shopping centres. Restricted verandah roofs in one centre allowed the prevailing wind and sometimes the rain to drive in the doors of the shops. Wind, often very cold, was an unpleasant feature in Palmerston North. In some centres it howled along the street past the



Plate 9

College Court, part of the Awapuni major shopping centre, set at right angles to the road. The Atlantic sign marks the edge of the service station which separates College Court from the older shops. Note the post office, a secondary attractor, which helps to draw customers past the other shops, and the small off-street parking strip.

shops, blowing rubbish and dust in spirals round the shoppers. One retailer said that wholesalers' vehicles always used the rear access for unloading except when the wind made it too difficult. But in the College Court section of Awapuni, the shops were built across the prevailing wind, forming a sheltered court, which was warm and pleasant and encouraged lingering even when a strong, cold wind was blowing. Some shopkeepers welcomed the sun, but some butchers had a unique problem. They preferred the shady side of the street, even when it meant being separated from the main body of shops as in Hokowhitu.

Internal layout

Criticism of the internal layout of shops, although not specifically asked for in the questionnaire, was quite common, and of greater concern to the shopkeeper than external layout. Several shops, usually dairies, were too small, or had windows too small for the displays needed for modern trading. Dairies in four centres had taken over the next-door premises and some were overcrowded with a very wide range of merchandise. A greater variety of shop sizes was sometimes needed, and provision in future centres for an originally small dairy to expand ^{also} and perhaps move to larger premises added later, while the original shop became a specialist store. In Roslyn centre, for instance, a new building was erected when the T.A.B. needed larger premises, and the post office took over the old T.A.B. building. Later, a larger shop, originally built as larger premises for the dairy, was occupied by the Roslyn Branch of the Public Library when its previous Rangiora Avenue premises were condemned. Alternatively, a large Co-operative store or Save-more was needed instead of a dairy as a primary attractor of customers in a new centre, with smaller premises added later to attract specialist stores and services as the population grew.

Storage space was also important, with varying needs for different business types, while living accommodation was needed in dairies with their long hours and weekend opening.

Order of shops

Sophisticated ideas relating to the arrangement of different types of shops in "such a manner that the greatest possible number of customers are attracted to the shopping centre and funnelled through it, thereby creating the maximum amount of pedestrian traffic and inter-store

shopping opportunities"⁶ have been established overseas during the study and development of large, planned centres. Although Palmerston North centres were much smaller and usually unplanned, some of the same principles could be applied. Gruen and Smith discussed some of these in detail,⁷ "Primary customer attractors"⁸ - shops capable of attracting a customer to a centre - were usually, in Palmerston North, the basic food shops, and especially the dairies or grocers, which formed the basis of all the shopping centres. There was no centre without at least one grocer or dairy, and most of them had two. The same was true even of the small groups of only two or three shops.

Ideally, Gruen and Smith felt that primary attractors should be arranged on the "single-pull plan"⁹ where the primary attractor was in the centre and dominated the group, or, where there were several main attractors, on the "triple-pull plan" with three main shops distributed throughout the centre and the less important shops placed in between them. The "single-pull plan" was common in most minor centres in Palmerston North, where the primary attractor was a dairy or grocery, and usually the largest store. But only in Ascot Street was the primary attractor situated in the centre of the block. Although most of the major centres had two or more primary attractors, these were not usually well spaced, as they were usually amongst the first stores established, and therefore were grouped at one end with the other shops added on later. But this occurred also in the planned centre, Highbury, (Figure 9a) where the sections were put up for tender and private owners built on them, within specifications laid down by the architect in charge. The post office and Consumers Co-operative store attracted customers to turn the corner into Pembroke Street but there was no primary attractor at the playground end of the centre. (The playground itself was a secondary attractor for mothers with young children).

Once people had been drawn to a centre, "secondary customer attractors"¹⁰ - shops capable of pulling customer traffic through the centre - were needed. Some primary attractors performed this function, as well as other shops and services which varied with the location and character of the shopping centre. In Palmerston North post offices were important as secondary attractors, as well as sometimes generating primary traffic. The post office at College Court in Awapuni shopping centre, for instance, (Figure 8b, Plate 9) recently decorated with an attractive (and attracting) striped awning, and situated at the far end of the row of shops set at right angles to the road, was appreciated by the other shopkeepers in

the row as a secondary attractor, drawing people into the court from the road frontage, and helping to offset the disadvantage of not being seen from the road. The two specialist shops situated around the corner from the main Hokowhitu shops (Figure 9b) and separated from them by the service station would have benefited from having a primary attractor, such as the grocer across Albert Street, located beyond them in Te Awe Awe Street.

The location of services was considered by Gruen and Smith¹¹ to be less critical with respect to customer traffic than that of other business types, because once a clientele had been built up, services generated enough business to operate successfully regardless of location. This seemed to be true of services in Palmerston North. Most service stations were single units on main roads, and the three in shopping centres seemed able to attract customers independently of the shops. Some Milson people used only the service station and one of the food shops out of the whole Milson shopping centre. Half the hairdressers, also, were located in single units, and those in shopping centres were often located in a small shop at the end of the row, as in Highbury (Figure 9a), or in an inconspicuous position as in Awapuni (Figure 8b). The hairdressers themselves expressed no dislike of this situation (having chosen it) and one stated specifically that it did not matter to her where her shop was. A clientele was built up by the recommendations of satisfied customers, and some even followed a hairdresser to new premises in another area. The two doctors in shopping centres were also located at the end of a row of shops, as were the Roslyn centre's library and T.A.B., (which had been added after the original shops), and the Plunket Rooms in Highbury and Milson centres. An advantage of having services, which generated less traffic than many shops, at the end of the row, was that then they did not interrupt a busy line of shops with a "dead area".

This sometimes occurred on Friday nights, as with a specialist shop which was located between two food shops which closed early, leaving it in a "dead" area. But a fish and chip shop in another centre was regarded as a useful Friday evening primary customer attractor for a neighbouring specialist shop. On the other hand, smells were a problem for one shopkeeper situated next door to a fish and chip shop. Perhaps they should be located at the eastern end of a row of shops so that the prevailing westerly winds would carry away

the smells and the rubbish often dropped outside.

Grouping of facilities

Reynolds¹² has described urban development in Pakuranga, where a large shopping centre was built with schools, reserves, shops and services integrated with housing. White,¹³ in an article in the *Town and Country Planning Journal*, suggested that as labour-saving kitchens were now accepted, women should be encouraged to interest themselves in planning so that towns could be designed to meet their needs.

"It is they who have to escort children to school, and then go in the opposite direction for their shopping. They are the ones who suffer when the only playground for their children is the street. It is those who push prams and carry heavy shopping baskets who know how far it is to the shopping centre - a fact which is mercifully disguised from officials who always seem to have motor cars. It is women who are the worst victims of loneliness, boredom and frustration on the great dormitory estates where social life is so sadly lacking."¹⁴

A similar situation, on a much smaller scale, occurred in some suburbs in Palmerston North. In Milson (Figure 11), although the Plunket Rooms were located behind the shops, there was no park nearby, the Play Centre was in the next street, and the kindergarten site was some distance away although conveniently next door to the primary school. In Roslyn the shopping centre was half a mile from the Plunket Rooms and even further from the kindergarten which was over a quarter of a mile from the Plunket Rooms. Young mothers without a car would find this very inconvenient.

Some of the problems could perhaps be alleviated by grouping facilities such as children's playgrounds, kindergartens, primary schools and Plunket Rooms next to the shopping centre in the middle of new residential areas. With imaginative planning so that the shops faced onto the playground, and the provision of seats, the shopping centre could become a meeting-place for mothers, where they could talk while the children played. Careful design would be needed to ensure safety through the separation of the shopping traffic from children.

Already in Palmerston North there was some grouping of facilities. Ascot Street shopping centre had a small playground, adjacent to the Plunket Rooms and the kindergarten, but unfortunately they were situated across the road from the shops. The planned centre, Highbury, (Figure 9a,

Plate 10) provided the main example. The Plunket Rooms and the shops were situated next door to a small park and children's playground. The arrangement benefitted shopkeepers, mothers and children, as the children could play while their mothers shopped without interruption. Some of the Highbury women found it convenient to leave their children in the playground while they had their hair done in the nearby hairdressers. The Parks and Reserves Department found that this playground was one of the most popular in the city, even when compared with others in similar areas with large numbers of children, and thought this a good arrangement for future shopping centres; they had set aside land for a playground in one of the shop sites at Milson.

The higher cost of land near shops kept major park areas of 18 - 20 acres away from the shopping centres, although the Parks and Reserves Department was not against the idea in principle. The sports ground, for instance, (Figure 10) which was developed during 1969 in Milson, was about three quarters of a mile away from the shops, at the other end of the suburb, where it formed a green barrier between residential and industrial areas. Major parks were usually located as near to a school as possible, so this would keep schools too, away from shopping centres. Siting shops on the same side of the road as schools (or vice versa) would be an improvement, as children using the shops would not have to cross the road, as they often did now. Numbers of children from Terrace End and Milson schools, for instance, had to cross lunch-time traffic to reach the shops to buy their lunches.

One disadvantage of the central grouping of many facilities would be that people living some distance from the shops would have to travel that distance for all services, whereas with haphazard siting of kindergartens, Plunket Rooms and parks, there was a chance that at least one of them might be reasonably near. The different total numbers of the different facilities would also present problems - all major centres could not, for instance have Plunket Rooms, as there were only five in the suburbs and one was in an outlying minor centre. Unified, forward planning and co-ordination could probably surmount any such difficulties.

Most shopkeepers favoured the idea of grouping facilities. Three quarters of them thought it would suit mothers of young children, and 62 percent thought it would affect their businesses favourably, while the others thought it would have no effect on business. A very small minority doubted the wisdom of having playgrounds near shops where traffic was concentrated.



Plate 10

The children's playground adjacent to the Highbury shopping centre. The left-hand building is the Plunket Rooms, with a doctor's surgery next door. The mobile library stands in front of the shops.

An interesting additional feature, provided by the builder of Roslyn shopping centre, was a small glass-enclosed notice board set on the wall between shops, where residents could advertise goods for sale, articles lost, or other messages by obtaining the key to the case from one of the shopkeepers.

The lack of toilets in shopping centres was an embarrassment to 22 percent of shopkeepers, as customers asked if their children could use the shop's facilities, especially in Highbury centre where only two shopkeepers did not mention the problem. A possible solution, in new centres in areas where there were likely to be large numbers of young children, would be the provision of toilets in small neighbouring playgrounds. But it may be that it was the proximity of the playgrounds, which, by encouraging longer stays in the Highbury centre, engendered the need for toilets!

Summary

Increased car ownership is of increasing importance to shopping centres. Lack of parking space at peak periods was a problem in parts of all but two centres, although provision of some parking space is now compulsory for buildings in commercial zones. The original kerb-side parking in early shopping centres gave way to angle parking and finally to the large off-street car parks which are now being provided in supermarkets and will in time be needed in all major centres where people stop to buy a considerable number of articles, and are therefore willing to walk a short distance from their cars. Shops catering for a considerable number of passing car travellers who stop only briefly will probably be better served by being located in pairs or as single units, so that sufficient angle parking is available immediately outside. Employees' cars need special parking areas so that they do not block the spaces outside the shops.

The provision of service lanes was adequate, at the moment, as most shops had a lane, most of them used the lane, and few shopkeepers had any loading problems. Shopping centres, being situated on main street corners to attract the maximum number of customers were sometimes potentially dangerous and the situation was further complicated in three of the centres where the shops were "interrupted" by a service station. The possibility of locating future centres off the main roads is worth consideration, as are pedestrian malls, and the idea of designing

centres for particular weather conditions.

There were three different types of shopping centre layout: linear centres consisted of a short strip of shops with kerb-side or angle parking, in "interrupted" centres the shops were on two sides of the road and were further interrupted by service stations, while only two centres, both built by the State, had been planned with off-street parking.

Overseas principles for the location of different functions within a shopping centre to attract the greatest number of customers through it had not been applied in Palmerston North, although it was possible to identify primary customer attractors (dairies and groceries) and some secondary customer attractors such as post offices, while the location of services was found to be of less importance than that of shops.

The grouping of facilities such as playgrounds, Plunket Rooms, and kindergartens near shopping centres had occurred in Highbury where it was of benefit to both shoppers and shopkeepers and also, in part, in a few other centres, but in many areas such facilities were inconveniently scattered, especially for mothers without cars.

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4. Milson, Hokowhitu, Awapuni.
5. Hodgens Place, Highbury, Awapuni (College Court).
6. Gruen and Smith, 1960, 132.
7. " " " " 132-137.
8. " " " " 134.
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IV. SUBURBAN SHOPPING CENTRES: MISCELLANEOUS ASPECTS

Appearance

Shop-building in Palmerston North was utilitarian. Except at Highbury, no attempt had been made to provide more than shops, services and parking. Some of the more modern shops, such as those in College Court were attractive in themselves, and other blocks such as those at Roslyn and Hokowhitu had a unified appearance, but there was no attempt at landscaping, apart from a few trees in supermarket car parks.

Shopkeepers saw shopping centres largely in utilitarian terms. Their primary function was to make money and as long as a centre was reasonably modern and well-cared-for they were satisfied. "Plain, nothing frilly or fancy" summed up their attitudes. No-one saw shopping centres as places for landscaping. This was not to say that shopkeepers necessarily disapproved of such extras - it was rather a lack of imagination, as most people need to see things and become used to them before they can accept them. The somewhat more advanced design of Highbury was recognised by shopkeepers, one of whom thought it was "as good as anything in the country."

Nuisances

Shopkeepers were asked if they had any trouble from children, dogs, bicycles, rubbish or shoplifting (Tables IX and X). Four main features emerged. First, complaints were common with very few shopkeepers having no trouble at all. Second, different centres suffered to different degrees. Third, bicycles and shop-lifting were the main problems, and fourth, different business types suffered from different problems and to different degrees. All complaints for each shopping centre were totalled, and the percentage of mentions scored out of the total possible number was worked out. Major centres headed the list, all but Awapuni occupying either first or second place. Highbury was well in the lead with 60 percent of possible mentions, but the high number of children in the Highbury area (a group of State houses built in the 1950's) would contribute to this, as children would influence the scores in three of the columns - "children", "bicycles" and "shop-lifting." The group with the next highest score, Takaro, Hokowhitu, Roslyn and Manawatu Street centres all had between 42 and 50 percent of possible mentions, and Milson and Hodgens Place had the least trouble, with only

Table IX

Nuisances in Suburban Shopping Centres:(a) by Shopping Centre.

	number of interviews	bicycles	shop lifting	dogs	rubbish	children	total	percentage
major centres								
Roslyn	10	7	5	6	4	1	23	46
Highbury	10	8	7	3	4	8	30	60
Awapuni	11	6	4	1	3	1	15	27
Hokowhitu	7	4	5	5	1	0	15	46
Takaro	8	6	5	2	3	3	19	42
minor centres								
Milson	4	1	2	0	1	0	4	20
Albert Street	4	3	0	2	0	2	7	35
Manawatu Street	4	2	2	3	2	1	10	50
Ascot Street	4	0	2	1	3	1	7	35
Ruahine Street	3	2	1	0	1	0	4	26
Hodgens Place	4	1	2	1	0	0	4	20
Total	69	40	35	24	22	17	138	100

Table X

Nuisances in Suburban Shopping Centres:(b) by Function.

	number of interviews	bicycles	shop lifting	dogs	rubbish	children	total	percentage
dairies	12	8	10	5	8	4	35	58
butchers	9	4	0	4	2	2	12	27
grocers	7	6	7	2	2	1	18	51
hairdressers)	9	3	0	2	4	2	11	22
barbers								
drapers	6	5	5	2	2	2	16	53
fish and chips	6	0	0	0	1	1	2	7
fruiterers	6	4	3	5	1	2	15	50
chemists	5	4	5	2	1	1	13	52
bookshops	5	4	3	2	1	0	10	40
miscellaneous ^a	4	2	2	0	0	2	6	30
Total	69	40	35	24	22	17	138	100

^a garden supplies, home cookery, footwear, cycles.

20 percent of possible mentions.

Although each possible trouble was mentioned by at least a quarter of the shopkeepers, bicycles were by far the greatest nuisance, being mentioned by half of the interviewees, with Roslyn, Highbury and Takaro the worst areas. There were two aspects - bicycles dropped on the footpath (the main problem) and bicycles ridden on the footpath, which were aggregated in the tables. Children tended to drop their bicycles on the path instead of leaning them against a rail or post, thus blocking the path and sometimes shop entrances as well. The problem was most serious during the peak hours - lunch time, after school and Friday nights. Bicycles dropped by the customers of a fish and chip shop regularly blocked the entrance to a neighbouring shop, and one barber's shop often attracted a Friday evening collection of over 15 bicycles spread on the path. In most centres some rails and occasionally racks were provided, but opinions on their use varied. Two shopkeepers said bicycles were still a problem in spite of their efforts to get children to use the bicycle rails, but ten (out of 63) said spontaneously that children used the rails provided, and some had noted a great improvement in the position after the rails had been erected, so that bicycles were no longer a nuisance. Three said they could control the nuisance by asking children to pick up their bicycles, and one sent the culprits to the end of the lunch queue. Thus the remedy may be in the shopkeepers' own hands. But control depends partly on the shopkeeper's personality (his willingness and ability to control children) and partly on the type of business, as a very busy person, such as a fish and chip shop owner or employee, may have no time to notice or deal with the problem. Provision of rails seemed to depend on the landlord; some provided them, but one, when asked to do so by the shopkeeper, said that the latter would have to pay. Group effort, with the costs shared between landlord and several shopkeepers would perhaps help.

Riding on footpaths was mentioned by only eleven shopkeepers, with children the main culprits, although one respondent said that "it was not only Children." Roslyn and Highbury were the worst areas. Only Ascot Street had no problem, perhaps because it had an unusually wide footpath and no barber or fish and chip shop. The problem was difficult to solve and shopkeepers had had varying responses to their efforts. Seven found that children responded when spoken to, but others found that this was so only if the children were small, and another found that

his requests elicited only "cheek." Again, the shopkeeper's personality and method of speaking to the children (as well as the children's attitudes and background) were probably important. One shopkeeper felt that the problem was insuperable, as even when a Traffic Officer dealt with it parents often paid the fine and did not reprimand the children. Some parents offended themselves and the paper boys also set a bad example. But in one centre where six shopkeepers found bicycles a nuisance, another shopkeeper said that the children were "very good" - the personality difference again.

Shop-lifting was a serious problem in Highbury and Takaro where over 60 percent of the shopkeepers mentioned it. Only Albert Street had no problem, partly because it had fewer child customers, being in an old-established area of flat-dwellers and elderly people. Some children went on bicycle rides, calling in at shops and stealing goods on the way. Others, when on errands for their mother, removed the original marked price on an article, increased the price, and spent the extra change on sweets. Catching offenders was difficult. It was "difficult to lay your hands on them." One owner who said shop-lifting was prevalent had caught only one person in two and a half years and he expressed what many implied - that he did not like having to speak to people. Some tended to excuse children, who were often the culprits, on the grounds that they had not been taught any better (some had been taught to steal) or that they were hungry, or that as teenagers they stole something that they wanted badly but could not afford, and ceased to offend as they grew older. These shopkeepers needed to be aware of the Juvenile Crime Prevention Officer of the Police Department, whose job was to try to prevent such children from continued offences by constructive methods rather than punishment, so that they would not necessarily be charged with an offence.

Dogs and rubbish were a nuisance to about one-third of the shopkeepers. Manawatu Street, Roslyn and Hokowhitu had the worst dog problems with 60 percent or more of the shopkeepers mentioning them. Dogs were not supposed to come within 50 feet of a shop, but it was up to the public to catch strays or have them impounded. But sometimes it was one or two dogs brought to work by shopkeepers themselves which caused most of the trouble. Again, shopkeepers differed in their attitudes. In one centre, three out of four shopkeepers objected to the dogs, but the

fourth thought that they were not really a nuisance, as there were no strays, dogs were part of the community and one could ask the owners to look after them properly and receive co-operation. The dog problem seemed to have been alleviated in one centre, where 70 percent of the shopkeepers said they had had a lot of trouble in the past. Apparently the Health Inspector had had a notice erected forbidding dogs, unless on a leash, and this had had considerable effect, although its influence on stray dogs is doubtful, unless they can read!

There were three aspects to the rubbish problem, and unfortunately they were not recognised at the beginning of the survey, so that the questionnaire did not adequately discriminate amongst them. They were the collection of the shopkeepers' own rubbish, the provision of litter bins on the street, and the emptying of the bins. Some owners took their own rubbish to the dump, or paid for it to be taken, but in other cases the landlord dealt with it. Litter bins were a necessity, especially outside fish and chip, ice cream and sweet shops. Although some people did not use them, the problem was lessened when bins were provided. Regular emptying was essential, as otherwise rubbish was blown out of the bins. The problem was greatest in Ascot Street, but no centre was entirely free from it, in some form.

Children were problems for about one quarter of the shopkeepers, but the nuisance was exaggerated because it included some shop-lifting. Eighty percent of Highbury shopkeepers had trouble with children, but this was to be expected in an area with a large number of children. The only other centres where the problem was important were Albert Street (50 percent of possible mentions) and Takaro (38 percent of possible mentions).

Different types of shops had different problems and to different degrees. Dairies had by far the most problems, with 58 percent of total possible mentions (Table X) and high counts for bicycles, rubbish and shop-lifting. All the other shops ranged between 51 percent and 22 percent of possible mentions, but fish and chip shops had the unusually low score of only seven percent. Fish and chip shops, along with hairdressers, barbers and butchers were the only shops which did not suffer from shop-lifting, because of the nature of their businesses and lack of goods on open display. But even when the fish and chip figures were adjusted to allow for this, the total was still

only eight percent of possible mentions. It may be that fish and chip shop workers were too busy to be aware of nuisances, as well as the fact that the greatest nuisance, bicycles dropped on the footpath, was often caused by fish and chip shop customers.

Ownership and Employment

Tables XI and XII show the number of family businesses (shops owned and managed by the same person, with other employees, often members of the family) and shops with managers (shops owned by companies or private owners who did not work in the shop themselves, but employed a manager) situated in suburban shopping centres. Table XI shows that by far the greatest number of shops were family businesses - 56 out of a total of 71. Nearly all shopping centres and especially the major centres, had either more family businesses or equal numbers of family and managed businesses. The more even balance between the two in several minor centres was explained by the four Manawatu Meat Company butchers situated there, usually with a company-owned grocer's shop. All the major centres had a much greater proportion of family businesses than managed ones, except for Hokowhitu where the two were somewhat more evenly balanced, partly because one of the shops only just qualified as "managed", as the private owner still did the accounts and general overseeing, but, because he served behind the counter in a second shop he had opened in another centre, he had to employ a manager in his original shop.

A total of 138 full-time and 52 part-time employees (including the owner and his family or the manager) was spread evenly throughout all the shopping centres, with an average of just over one and a half to nearly three in each business, and twice as many or more full as part-time workers in each centre. Employment of part-time workers was very common - only one centre had none. There were no differences in employment patterns between major and minor centres. Table XII shows the same figures, but listed according to the different functions instead of by shopping centres. It shows that nearly all the managed businesses were butchers or grocers; all but one were either Consumers Co-operative Society or Watson Brothers' groceries, or Manawatu Meat Company butchers. Only two other businesses had managers. Differences in the number of employees, and the proportion of full to part-timers were also revealed in Table XII. The average number of employees per business ranged from one to five. Grocers, with an average of five,

Table XI

Ownership and Employment in Suburban Shopping Centres.

		Total number of interviews	Type of ownership			Employment		av. no. employed per business
			family business	manager	full-time	part-time	total number employed ^a	
major centres	Roslyn	10	10	0	15	6	18	1.8
	Highbury	10	8	2	21	12	27	2.7
	Awapuni	11	10	1	24	8	28	2.5
	Hokowhitu	8	5	3	19	8	23	2.8
	Takaro	8	8	0	17	6	20	2.5
	sub-total	47	41	6	96	40	116	2.4
minor centres	Milson	4	3	1	9	0	9	2.2
	Albert Street	5	3	2	8	2	9	1.8
	Manawatu Street	4	2	2	6	1	6.5	1.6
	Ascot Street	4	3	1	7	3	8.5	2.1
	Ruahine Street	3	1	2	6	3	7.5	2.5
	Hodgens Place	4	3	1	6	3	7.5	1.8
sub-total	24	15	9	42	12	48	2	
Total		71	56	15	138	52	164	2.3

^a Full-time = 1, part-time = $\frac{1}{2}$

Table XII

Ownership and Employment in Suburban Businesses.

	business type	Total number of interviews	Type of business			Employment		av. no. employed per business	
			family business	manager	full-time	part-time	total number employed ^a		
General	basic food shops	dairies	12	0	23	10	28	2.3	
		butchers	9 ^b	4	5	16	5	18.5	2
		groceries	9	1	8	31	6	35	5
	services	hairdressers	7	7	0	13	4	15	2.1
		barbers	2	2	0	2	0	2	1
Special	drapers	6	6	0	10	6	13	2.1	
	fish and chips	6	5	1	9	3	10.5	1.7	
	shops	fruiterers	6	6	0	12	2	13	2.1
		chemists	5	5	0	14	5	16.5	3.3
		bookshops	5	5	0	4	7	7.5	1.5
	miscellaneous ^c	4	3	1	4	2	5	1.2	
	Total	71	56	15	138	52	164	2.3	

^a Full-time = 1, part-time = $\frac{1}{2}$

^b There were also 15 Consumers Co-operative Society butchers, who were not interviewed.

^c Garden supplies, home cookery, footwear, cycles.

employed by far the greatest numbers, usually including a manager, three full-time workers and a boy after school to deliver goods by bicycle. Chemists employed the next greatest number, usually including the owner, one or two assistants and a part-time bicycle-delivery boy. All other businesses employed an average of just over one to just over two people, except for the barbers, both of whom worked alone. All shops employed more full-time than part-time workers, except for bookshops which had seven part-time employees. The bookshop figures were biased by one unusual situation where the shop owner did all the administration herself, but employed two part-time workers, one in the morning and one in the afternoon, as well as occasionally serving behind the counter herself, so the shop had three part-time and no full-time workers. Most shops had about two or three full-time to one part-time employee, but barbers had no part-time assistance, and fruiterers very little (six full-time to one part-time). Two groups employed a greater proportion of part-time workers: in dairies nearly half of the staff worked part-time, usually a husband who helped his wife, or other people employed as extra assistance at busy times, and drapers had a higher than average proportion of three part-time to five full-time workers.

Buildings

Only 12 businesses out of a total of 68 owned their own premises. Five of the eight groceries, all belonging to the Consumers Co-operative Society or Watson Brothers owned their own buildings, and one butcher's shop was owned by the Manawatu Meat Company, although the same company rented three other premises. Amongst the specialist shops half of the chemists and two fruiterers owned their own shops, the latter having built their own shops in developing centres, one after first renting other premises there for three and a half years. Of the other special shops, only one draper and the home cookery owned their premises. All of the hairdressers and barbers rented their buildings, as did all the dairies, bookshops and miscellaneous shops and all fish and chip shops except for one which was built as an adjunct to a fruiterers.

Shops were nearly always built in blocks, with several premises owned by one person or company, so that although there were 68 shops there were only 22 separate shop owners, and in four centres all the shops were under a single owner. None of the minor centres had more than two owners, and only two of the major centres had more than four owners.

Thirty shopkeepers out of the 56 who did not own their premises said that they would like to, 20 being prevented by lack of capital, four by sub-division difficulties (a whole block had to be bought, not just one shop), three because the owner would not sell, and a further three for other, miscellaneous reasons. Forty-three of the shopkeepers who rented their premises thought the rent reasonable, one even saying it was very reasonable, although several qualified their satisfaction by saying that the rent was reasonable for a particular building of poor quality, or for one in a particular area. Only one of the 13 who thought the rent too high would not prefer to own his own building.

Very few shopkeepers mentioned any difficulties over renting shops in the suburbs, and several thought that there were too many premises available, some referring to the vacant shops at Highbury centre.¹ In one case the owner implied that he had taken over the next-door premises rather than leave it empty, although four other expansions to neighbouring shops had occurred because of lack of space in the original building. The four cases where difficulty had been experienced in finding a shop to rent were all different; one shopkeeper could not find suitable premises, another could not find a place in the right area, a third found the goodwill too high, and a fourth found rents too high.

High rents in the suburbs were mentioned only six times, four of these being in connection with Pioneer Highway shopping centre where some premises were empty throughout 1969. But the area, which was intermediate between the city centre and the suburbs, and with many pensioners living near, as well as high rents, may have contributed to the vacancies.

Delivery

Forty shops out of the 68 interviewed delivered goods, 14 every day, seven regularly but not every day, and 19 only when they were asked. All the basic food shops, but only some of the special shops delivered. All the grocers except the Save-more (a special cut-price, cash only, shop) delivered every day, usually by van on Friday, and with a boy on a bicycle, after school, on the other days. Seven out of the nine butchers also delivered, three every day and four several times a week, and eight out of the eleven dairies, most of them only when they were asked. Of the special shops, all chemists and fruiterers delivered,

most of them when they were asked. Two of the bookshops also delivered, (one mostly at Christmas when parents wanted toys delivered on Christmas Eve), one of the drapers, and two of the miscellaneous home cookery and garden supply shops, all only when they were asked. An unusual feature was the fish and chip shop which daily supplied pre-ordered school lunches to an Intermediate School. One of the hairdressers also had an unusual arrangement - twice a year she collected elderly women and returned them to their homes after a permanent wave.

Goods to be delivered were loaded both in service lanes by 16 people and on the road by eleven people, while three used both places, six used a bicycle and one delivered on foot. (Three did not answer the question). Only three had any difficulty in loading goods.

Summary

The appearance of shopping centres was entirely utilitarian, with no attempt at landscaping. Various nuisances were common, especially in Highbury shopping centre with its large numbers of children. Bicycles were the greatest problem, followed by dogs, rubbish, shop-lifting and children. Dairies had the greatest trouble, while drapers and especially fish and chip shops had few problems.

In all centres family businesses were far more common than shops run by a manager, nearly all of which were company-owned grocers and butchers. Most shops employed one or two people, but grocers had an average of five employees each, and barbers only one. About one part-time worker was employed for every ^{2.7} full-time ones, being most common in dairies, groceries and chemists, the latter two using boys for deliveries.

Shop buildings were usually owned in blocks, so that 68 shops had only 22 owners. Most businesses rented their shop premises, and those who owned them were mostly company groceries. Although most people thought their rent was reasonable, over half of those renting shops would like to own them, but were often prevented by lack of capital. The present shopkeepers had had little difficulty in finding suitable suburban shops to rent.

REFERENCES

1. The shops were occupied later in the year, one by an expansion of the drapery which opened a fabric shop, and one as a charitable second-hand clothing shop.

V. MILSON: A CASE STUDY

Setting

Milson is an isolated suburb. It is situated on the north-west boundary of Palmerston North and cut off on all sides from other settlements (Figure 2). To the north lies Palmerston North's airport; to the south-east the railway flanked by farmland and industry; to the north-west and south-west park and farmland (Figure 10); all of which not only gives a physical separation but a suggestion of isolation as well.

The isolation is accentuated by the limited access to Milson by means of only two main roads, Milson Line and Rangitikei Line (Figure 10). Since both roads cross the railway line by overhead ramps, the feeling of isolation is reinforced, although the actual distance from other settlements is short.

The suburb was built around a crossroads on Milson Line, the more direct route from the city. All the shops are at the crossroads, most of the limited community activities are nearby (Figure 11) and settlement began there, later spreading outwards, mainly to the north-east and south-west.

Settlement

Milson, although small, was not a homogeneous suburb. Historical circumstances and communications have sub-divided it into four distinctive areas, called here Airport, Railway, Fairs, and the new area, Sunny Heights (Figure 10).

Airport, the north-east area, included McGregor and Seaforth Streets, and the non-Railway houses in Milson Line (Plate 11). There were many older houses, including some very old cottages near the shops with more recent dwellings interspersed, mainly at the outer edges of the area. Three groups of flats and three state houses were included, and one farmhouse.

The Railway houses were a distinctive, rather unattractive group. Built by the government before World War II to house railway workers, they had a standardized appearance, all being set square on to the road with a tiny porch flanked by two windows, and no garage (Plate 12). In many cases, presumably because people were often transferred and rented rather than owned their houses, gardens were rudimentary or non-existent. But the Railways Department kept the houses painted,

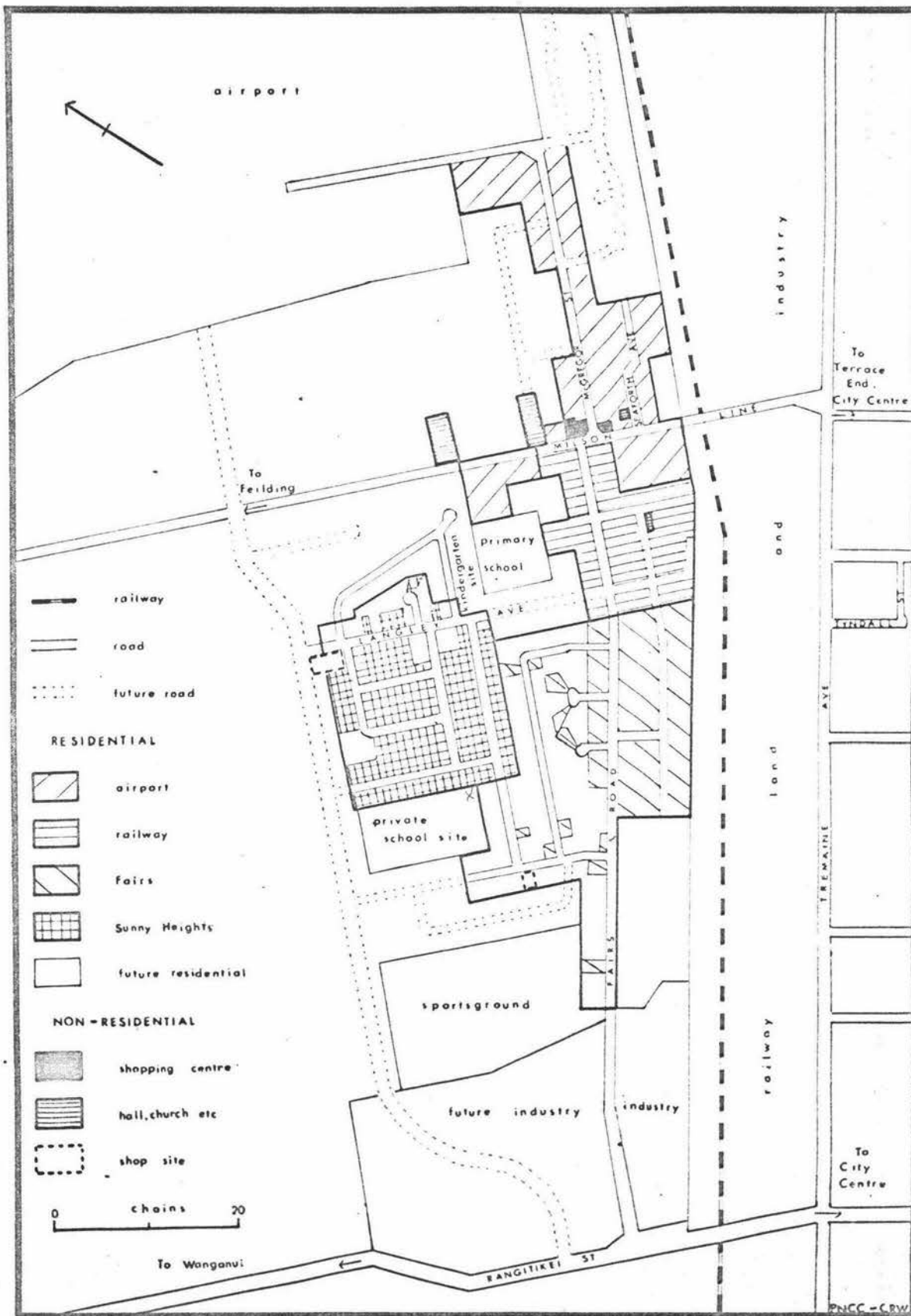


FIG. 10 MILSON - LAND USE



Plate 11
The Airport area, Milson, showing the mixture of new and old housing.



Plate 12

The Railway area, Milson, showing standardized railway housing for railway workers.

and the newer ones were of a much better standard, very similar to State houses. There was one pair of modern railway flats near the school, and a Railway hall near the centre of the area.

The Fairs subdivision, being much more recent, and of private homes, was, on the whole, much more attractive. As most of the area was developed at the same time, most of the houses were of much the same, reasonably modern appearance, without the old homes found in the Airport area (Plate 13).

The Sunny Heights area was only a few years old, so that all the houses were new. Although it was a group housing area, with standardized plans provided for people with limited finance, the houses were individually owned and attractive and varied enough to produce a pleasant environment. Some areas were not yet settled, or had only one or two houses (Plate 14).

There was little non-residential development in Milson, and most of it was near the shops, in the earliest-settled parts. Apart from the airport and railway line, there was one industry, a commercial dry-cleaners next to the service station in McGregor Street. An old house just along the road from the shops served as a church, and further along Milson Line an old farmhouse on the former McKenzie estate had become a period-styled licensed restaurant. Plunket Rooms were situated behind the shops, and the Play Centre used a hall in Seaforth Road. Milson Primary was the only school, but sites were set aside for future educational and recreational needs, including a big park which was being developed on the south-west edge of Milson. There were still considerable areas of open space between and beyond the settled areas, even in the old McGregor's Road area.

The Shopping Centre

All the shops in Milson were in one minor centre (Figures 10 and 11, Plate 15), which was situated on Milson Line, the main road leading from Palmerston North, at its junction with two other important roads - McGregor Road leading to the airport and north-east Milson, and Fairs Road leading to south-west Milson. About a quarter of the suburb lay to the north-east of the shops and three quarters to the south-west. At the end of 1969 there were eight shops and services, including three basic food shops (butcher, grocer and dairy), one specialist shop (a drapery), two general services (hairdresser and service station), and two special services (post office and Plunket Rooms). The post office had previously been a limited service run in conjunction with a bookshop.



Plate 13

The Fairs area, Milson



Plate 14
Sunny Heights, Milson, the new group housing area.

Over the years there have been various changes in the type and position of shops. Only two existed in the 1920s. A baker sold bread from a small shop in front of his bakery in McGregor Road, (the street was then called McKenzie Road and the bakery is now occupied by the commercial dry-cleaning factory) and a grocer occupied the two small shops which are now the post office and the drapery. The centre was extended in the early 1940s to serve the growing number of motorists - a dairy with two roadside petrol pumps was opened on the corner now occupied by the service station. The Consumers Co-operative Society bought the grocer's business in 1945, but continued in the old premises, and in the 1950s the dairy moved to its present site. Towards the end of the 1950s a large new subdivision, Sunny Heights, was opened up (Figure 10), and settlement spread to the south-west. Up to that time all the houses had had easy and direct access to the shops which formed the nucleus of the suburb, but the new settlement, operated by a group housing company, had very poor access to the shops, for the only road into the area was at the furthest possible point from the shops. A temporary but rather unsatisfactory foot track through the school grounds provided a closer link with the shops than by road, but there was a tendency for shoppers in cars to travel into the city via Rangitikei Street, since it was not much further than travelling to the Milson shops. Fortunately, tenders were called in 1969 for the extension to Langley Avenue which will give direct access to the shops via Fairs Road.

In 1960 the Co-operative store moved to new corner premises and the old shop became a dairy; shortly afterwards the hairdressing salon opened. Although the new dairy added drapery, bookshop and some post office functions, three food shops were too many for the area, and it finally closed early in 1969. This was a year of change. The Consumers Co-operative Society built a butcher's shop behind the grocer in McGregor Road, and the dairy was divided into two shops, one of which became the present drapery and the other a bookshop and partial post office. But with too little capital to build up a large stock, and competition from the dairy and grocer, the bookshop was forced to close and the Post and Telegraph Department took over the shop as a full post office.

In 1969 the Consumers Co-operative grocery, typical of many located throughout Palmerston North, was the largest and only modern store. It was situated in the favourable corner position on Milson Line, and provided a service similar to that of a supermarket, selling a wide

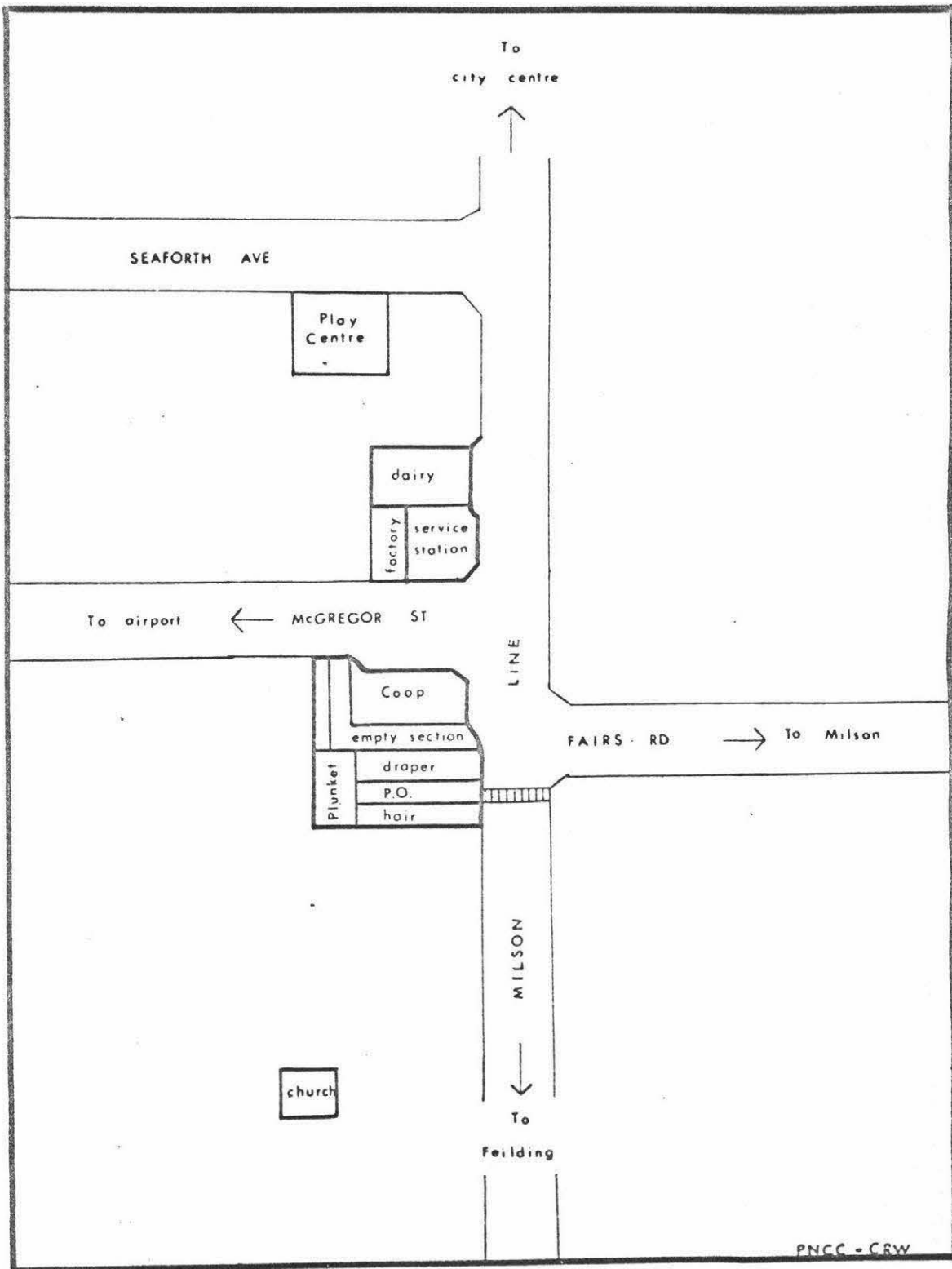


FIG. 11 LAYOUT OF MILSON SHOPPING CENTRE



Plate 15

Milson, a minor shopping centre, "interrupted" by the road to the airport and a service station. Note the "jay-walkers" and the empty pedestrian crossing.

range of groceries, fruit and vegetables, stationery, hardware, garden supplies and meat. A manager and four full-time assistants ran the shop.

The dairy, or Mini-market, was also typical of many in Palmerston North; it was owned and operated by a husband and wife who lived on the premises - an old house with the shop built on the front. The shop was crowded with a wide range of goods - dairy products, groceries, fruit and vegetables, magazines and stationery, some hardware and garden supplies, home cookery, toiletries, cosmetics and sewing accessories.

The drapery shop was rented and the business run by a mother-in-law - daughter-in-law team. It opened in renovated premises at the beginning of 1969 and by September stock had been built up and business was doing well. "Bread and butter" lines were stocked; they ranged from wool and sewing accessories, hosiery and other small articles, through children's clothing and shoes, to men's jumpers and women's dresses. Prices were comparable with city prices, with a small profit and quick turnover.

Although the hairdressing salon was eight years old, there had been five owners in that time. The present one had begun in 1969 and was building up business at the time of the survey. The post office opened as a full service towards the end of 1969, after the demise of the bookshop. The nine-years-old Plunket Rooms were situated behind it, but entered from McGregor Road.

Because it was the only one in an area somewhat isolated from the rest of Palmerston North (the central square was over two miles away), the shopping centre served the whole suburb, in spite of difficulties of access from Sunny Heights. Only two percent of the households did not use any of the Milson shops, and these lived in Sunny Heights with its poor road access. A further eight percent used Milson only for odd extra needs and never as a main source of goods or services.

Apart from country customers living near Milson, and passing through on their way to town, the shops served Milson suburb and a small area just over the Milson Line railway ramp (Figure 10). The draper and the hairdresser attracted a few customers from Tremaine Avenue and Tyndall Street, including factory workers who came to the post office to collect family benefit money in their lunch hour and spent some of it in the Milson shops. Country customers were important. Because it was on the main road, and on the outskirts of the city, Milson shopping centre attracted country people for whom it was the nearest centre and who had

to pass it on their way to town, or when bringing their children to Milson school. It served the same function for local country people as the major centres of Roslyn, Hokowhitu and Takaro did for those from other outlying areas. Eighteen percent of the grocer's credit customers were country people, many of whom had a weekly order delivered. Typically, it was the road patterns which influenced the catchment area, although Milson differed from other centres in having no local competition from other centres.

Milson was an "interrupted" centre, with the shops separated by the service station and McGregor Road which led to Palmerston North's airport (Figure 11). It was an excellent example of lack of planning and overall design, and potentially dangerous. In 1963 there were two accidents involving injury - a child was killed on the pedestrian crossing and a cyclist turning from Fairs Road across Milson Line was hit by a car. Only one other shopping centre had two accidents involving injury in 1968. Three factors contributed to the lack of safety. First, the road pattern. The busy main road from Palmerston North passed the Milson shops and the open speed limit began just beyond the centre, so that traffic which sped up to cross the ramp did not slow down as it passed the shops. Second, the "interrupted" shopping centre. Shops were located on either side of the road to the airport, and additional traffic was generated by the shopping centre itself. Third, most of Milson's houses were situated across the road to the south-west of the centre, so that 71 percent of the shoppers and school children had to cross Milson Line to reach the shops. Although there was a pedestrian crossing from the end of Fairs Road, it led to the smaller shops and not to the most frequently used Consumers Co-operative store, so that few pedestrians used it, preferring to "jay-walk" directly to the grocery (Plate 15).

Parking space was inadequate, a typical situation at peak periods. The only special parking provision was the small number of angled spaces in front of the two food shops. This was adequate for the dairy, according to the owner, but the other half of the centre became crowded at busy times. The few spaces outside the draper and post office tended to be occupied for two hours at a time by women who were at the hair-dressers, blocking other potential customers. Some who had intended to call in at Milson shops probably did all their business in town or at Terrace End instead, when easy parking was not available at Milson. The three employees who brought their cars to the centre also parked on

the road and took up needed space. Milson centre was unusual in that only the dairy had a service lane which about half of the wholesale trucks used, without difficulty. The grocer, being on the corner, was able to use the side street for loading, as did the butcher.

Population

The sample used in this study was a random one. All the 409 inhabited houses were mapped and numbered, and the 104 to be interviewed were chosen from a table of random numbers. By repeated revisiting all but one of the main shoppers in each household (who was away at the time) were contacted, but four refusals and four temporarily empty railway houses left a total of 95 completed interviews.

Milson's population in 1969 was about 1400. The sample included 88 men and 91 women, including three adult dependants and seven children working and living at home. Dependent children numbered 156, including 70 pre-school children and 86 at primary or secondary school. Twenty-seven households had no children at home; in the rest of the homes there was an average of between two and three children per household, and a range of none to seven children. Nearly half of the homes had a pre-school child, or children, with a concentration in the area of new housing, Sunny Heights. The average household contained from three to five people and the range was from one to ten. Four was the most common household number, and two thirds of the homes had between three and five members.

Ages of interviewees¹ ranged from 21 to over 70 years (Table XIII) with no very young married couples, who presumably spent a few years in flats, moving later to their own homes. The youngest group (20 - 29 years) was the largest, with 45 percent under 30 years, while numbers in each older group decreased steadily after a rapid fall to the 30 - 39 year old group.

Within Milson there were significant demographic differences (Table XIII). Airport was partly an "older" area, and Sunny Heights "young" both historically and in the present age of the population. Fairs and Railway were in between. Airport had an evenly balanced population - half were over 40 years old and half younger, and most of the few people in Milson aged 60 years and over lived there. In Railway and Fairs the young outnumbered the old, a ratio of about 11 : 7 in the Railway area, while in the Fairs area there were twice as many aged under

Table XIII

Milson: Sample Population

Age of Interviewees	Total Number	Total Percentage	Airport		Railway		Fairs		Sunny Heights	
			no.	%	no.	%	no.	%	no.	%
20 - 29	43	45	10	35	7	39	7	30	19	76
30 - 39	21	22	4	14	4	22	9	39	4	16
40 - 49	12	13	3	10	4	22	4	18	1	4
50 - 59	11	12	5	17	3	17	2	9	1	4
60 - 69	5	5	4	14	0	0	1	4	0	0
70 plus	<u>3</u>	<u>3</u>	<u>3</u>	<u>10</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	95	100	29	100	18	100	23	100	25	100

forty years as there were older people. Sunny Heights had an overwhelmingly young population - mostly young married couples with pre-school children. Ninety-two percent of the population was under 40 years old and 76 percent were aged less than 30 years. No-one was older than 52 years.

Size of households is partly related to the age of the parents, and therefore followed a similar pattern. The range was from one to ten people to a household, while most had four people. Most Sunny Heights homes had the average of four people, but over one third of the Airport homes had only two people, usually a husband and wife whose children had left home. All except one of the single people also lived there. Some were widows, with a marked concentration in the old houses near the shops in McGregor Street, but a few were bachelors.

Over one third of the women in Milson worked, half of them full-time and half part-time.

Shopping Patterns

Table XIV shows where Milson people shopped. Milson households used a variety of shops and services, with the local shopping centre and the city centre being the most important. Milson was the main source of foodstuffs, while Milson and the city centre shared in providing the commonly used goods and services which were available locally. The city centre was the main source of most of the specialized goods and services,

Table XIV

Sources of Goods and Services for Milson Households

At the time of the survey the Milson butcher had not opened and the Milson bookshop had not closed.

Source of Goods or Services	Percent of Households Using the Centre																										
	bread	groceries	fruit and veges.	cakes	fish	fish and chips	meat	stationery	books, toys, gifts	clothing	wool, sewing goods	magazines	hairdresser	barber	chemist, prescriptions	ch. cosmetics, toiletries	hardware	garden supplies	post office	bank	service station	library	T.A.B.	hotel	doctor	dentist	
Milson (except dairy or grocer)			9 ^a					11	11	1	27	19	27						31		41	20 ^a					
Milson dairy	42	22	17	15			1	17			6	17				6	1	4									
Milson grocer	29	44	17	5			10	9	3							18	6	4									
Roslyn			1		1				1					3	6	5				4				21		8	
Terrace End	1	1	2		2	13	6	2		1	8		2	6	29	5	4	3	6	8					2	13	16
Supermarket	2	23	15	2			11	13	2	2	1					8	1										
City centre	6	3	7	21	45 ^b	41	21	20	26	76	37	9	29	53	42	34	58	47	44	51	25	23	2	31	61	64	
Other shops etc.	11	4					41 ^d			18	14											5		13 ^e	13	2	
No main source	9	3	(31 ^c)	8	4	9	6	23	3	1	5	7	11	8	21	20	18	23	17	8	21	21 ^f	6	14			
None				44	42	31	3	3	54		1	47	31	26	1	3	8	13		30	12	29	69	38	4	17	
Not given	1		1	5	6	6	1	2		1	1	1		4	1	1	4	6	2	2	1	1	2	2	1	1	
Total using Milson	71	66	61 ^{a,c}	20	0	0	11	37	14	1	33	36	27	0	0	24	7	8	31	0	41	35 ^f	0	0	0	0	

^a The mobile van or vans.

^b 10% used Rangitikei Street.

^c 18% used their gardens for most of their vegetables and fruit.

^d 17% used the freezing works.

^e 13% used their clubs.

^f 15% used both the main Public Library and the mobile van.

although the Milson post office and mobile library were well used and Terrace End and Roslyn had some significance. Age, place of residence within Milson, and the availability of a car for shopping were the main factors which were found to influence people's buying habits.

Milson Shopping Centre and Supermarkets

Nearly all Milson households used the local shopping centre. Most people visited it at least once a week, and only two percent of the households never used it. Over half of the households visited the Milson shops daily, although the number of functions used varied considerably; some used only one shop, occasionally, for extra goods, while others used all seven functions, most of them as a main source of goods or services. Nearly half used at least three shops and/or services as main sources. Although every service and shop was used by at least one third of the households, it was the basic foodstuffs and fruit and vegetables which were the most important goods provided locally. Half of the households had their main foodshop, where they bought most of their groceries, meat, fruit and vegetables, in Milson, and one third of the households used Milson only for food and petrol (at the service station). Food was a convenience good which had to be bought regularly and in relatively large quantities. For many people, therefore, and particularly for the 37 percent of shoppers who did not have a car for shopping whenever they wanted it, local shops were needed. Bread in particular, was bought fresh daily by 58 percent of households, and several times a week by a further 30 percent; 71 percent of households bought it at Milson. Nearly one third collected it on foot or occasionally by bicycle, and another half by car; some of the latter women walked if it were fine and if they felt like it. Although most of the bread was collected by the women, in a quarter of the households a man collected it, often on his way home to lunch. In nine percent of the cases, children collected it, sometimes before school to have it fresh for lunch. The dairy was the most popular bread shop, supplying 42 percent of the houses, including some who bought their main groceries from the Co-operative grocer. Some liked the fresh Saturday bread the dairy stocked, and some the fact that it was usually available from the dairy without ordering. Although 44 percent of households bought their main groceries from the Co-operative grocer, only 29 percent bought their bread there. A few people bought

bread in the city centre, only two percent used a supermarket, and nearly nine percent had no particular place but used several shops.

Groceries were the main item of basic food in any household, and two thirds were bought locally, with twice as many people using the grocer (44 percent) as the dairy (22 percent) and supermarkets (23 percent). But the dairy, because of its longer hours and week end service, was widely used for extra goods, so that although fewer than one quarter of the households used it for main groceries, over two thirds used it for some goods.

Only 21 percent of the people bought groceries less often than once a week. The weekly order on Thursday or Friday was common, and 43 percent bought only once a week, while one quarter bought several times a week, and one fifth bought something besides the bread daily, particularly those who lived near. Two thirds of groceries were collected by car, sometimes by men, but mostly by women.

It was originally intended to ask people, "Where do you buy your bread, groceries, magazines, etc." and then to ask "Why?" for each category. But many people found it difficult to give an answer - some struggled and said "I just do" - and it was realized that they would find it tedious and probably embarrassing to have to answer the question repeatedly, and it was therefore abandoned except for groceries. No probing was done, as the list of possible reasons (price, nearness, range, quality, parking, service or friendliness, loyalty, one stop, because the shop was passed, or the person worked there, were the main ones, but there were also eleven others) was too long to read out each time, and it would have suggested ideas to people. Price was by far the most important reason given for buying groceries at a particular shop: 42 percent of the shoppers mentioned it, sometimes with other reasons. Even the next most important reason, nearness, was mentioned by only 14 percent of the shoppers, while seven percent used a shop because they passed it in the car on their way home and six percent because of the service. All other reasons had only four percent or fewer mentions. Nearly all for whom price was the most important consideration went to a supermarket or the Co-operative shop, and no-one gave price as a reason for shopping at the dairy. Of the 27 percent of the households who used the dairy for their main groceries, eleven were unable to give any reason, while nearness and service were the main reasons given. Parking, surprisingly, was mentioned by only two percent

of all grocery buyers. Therefore the trend to supermarket shopping - 23 percent of Milson households bought their main groceries there - would seem to be based more on lower prices than on easy parking. Because there was always parking space available at the supermarkets, people seemed unaware of its importance. However, lower prices were partly dependant on the number of customers attracted, and the latter probably depended on ample parking space, as well as increased car ownership, which enabled many people to travel to a particular shop to take advantage of cut prices. A detailed survey of supermarket customers is needed.

Only about half the Milson supermarket users bought their main meat there, although there was no local butcher. Perhaps this was partly because most regular supermarket users visited them only once a week (and three only once a fortnight) so that some meat had to be bought elsewhere or kept in a freezer. Fifteen percent bought fruit and vegetables and 13 percent stationery at the supermarket, while eight percent bought cosmetics and toiletries, and only a few bread, cakes, books, clothing, wool, sewing accessories or hardware. Only four percent of the households visited a supermarket more often than once a week, including one woman who worked there.

Meat, although a basic food, was bought locally by only 11 percent of the households because, at the time of the survey, there was no full butcher's shop at Milson. The Co-operative grocer provided meat three times a week for those who ordered it, and a special arrangement with the dairy provided one family with meat. The supermarkets and city centre provided for a further 32 percent, but because there was no really suitable shop, over half used a source other than Milson or the city centre. Seventeen percent went direct to the freezing works, (either Borthwicks in Feilding or Longburn), because of cheaper prices or because they owned freezers for bulk storage as well as because of the lack of a local butcher; and others used a wide range of shops with some tendency to use those nearest to Milson.

Fruit and vegetables came from a wide variety of places. They could be considered locally as a basic food, as 43 percent were bought in Milson, although there was no specialised shop. Equal numbers (17 percent) used the dairy and the grocer as their main source and a further nine percent used the two travelling fruiterers who each went round once a week. The garden was a main source for a further 18 percent. Only 15 percent

used a supermarket for fruit and vegetables, although 23 percent used it for their main groceries.

Cakes were bought by only 56 percent of Milson households. About a third of these used Milson and another third the city centre, but very few used a supermarket. Magazines were bought by over half the households, and more than two thirds used a local shop, nearly as many using the dairy as the bookshop, which probably contributed to the latter's early demise. A service station was used by all but 12 percent of households, and half of these used Milson as their main petrol source, while some also had repairs done locally.

Milson Shopping Centre and the City Centre

Only the food shops and the service station at Milson were used by more than half of the Milson households which used a particular service or bought a particular good. But the other shops, (the bookshop and drapery), and the services (post office and hairdresser), were all used by at least a third of the households which needed such services, while most of the rest used the city centre. Thirty-seven percent of stationery requirements were met by the dairy (17 percent), local bookshop (11 percent), and the grocer (nine percent). Again competition from the dairy, and the grocer as well, meant that the bookshop had too little trade to survive, although other households bought books, toys, presents or magazines there.

Milson also provided one third of the wool and sewing goods for the suburb, again sharing with the city centre (37 percent) and a number of other places. Although the dairy competed here as well, supplying sewing accessories, it took only six percent of the local trade, leaving 27 percent for the drapery. Many people used the local shops when something was needed in a hurry, such as cotton for dressmaking, or children's school books, and for which they did not want to go to town, but if the item could wait until the next weekly or fortnightly trip to town, it would be bought then.

The three local services, hairdresser, post office and service station, also shared Milson customers with town, many people using both places. Only the service station served half of Milson users, the library and the women's hairdresser being less popular. The Public Library had a mobile caravan which brought a wide range of books to Milson twice a week, parking once near the shops and once in the Sunny Heights area.

Of the 71 percent of households who used a library, 40 percent used the van, and a similar number the main library, while a further 15 percent used both sources. A promising trend was that children from nine homes used the mobile van although their parents were not library users. Another 29 percent of households used other libraries, including clubs, private lending libraries and the Roslyn branch of the Public Library. Sixty-nine percent of the women used a hairdresser, and 41 percent of these went to the Milson salon, while most of the rest went to the city centre. Some had followed the previous Milson hairdresser to her new salon, and others chose suburban hairdressers in other areas because they liked their skill. Nearly one third of Milson users went to the local post office, but 44 percent used the main post office, and 23 percent other post offices, including Terrace End, or had no main source.

The city centre was the main source of all specialist goods and services which were not available at Milson. For 84 percent of households the city centre was the main non-local shopping place - the others used Terrace End more often than the city centre. Only one person, who was crippled, never used the city centre. Two thirds went to the city centre regularly, once a fortnight or more often, with a weekly shopping trip the most common, and 15 percent shopped there more often than once a week including some who worked in town. Most people (68 percent) went to the city centre by car, the only other significant transport methods being buses and as a passenger in someone else's car, which totalled almost a quarter, with equal numbers in each group.

Terrace End, Roslyn, Rangitikei Street

Although Milson (for food) and the city centre (for specialised goods and services) were by far the most important shopping places, a few other centres had some importance. Visits to the freezing works for meat have been mentioned. The other main centres used, Terrace End, Roslyn,² and Rangitikei Street, were all near Milson and tended to be used mostly for one-purpose trips for special goods or services, in contrast to the shopping done on regular trips to town. Terrace End was an alternative to the city centre as a main shopping centre for 11 percent of Milson households. Sixty percent of the households used it sometimes, the regular users (once a week or more), always travelling by car. A wide range of Terrace End shops and services were visited by small numbers of Milson people - 11 percent or fewer used the bank,

(often as well as one in the city centre), post office, hairdresser or barber; or bought meat, hardware, garden supplies or wool and sewing goods there. A few people also used Terrace End for bread, groceries, fruit and vegetables, fish, stationery or clothing. But it was for prescriptions that Terrace End was most important. Twenty-nine percent of interviewees went there for prescriptions, although only five percent bought other chemist's goods regularly at Terrace End. When a doctor was called to Milson, and a prescription had to be made up straight away, Terrace End provided the nearest service. But cosmetics and toiletries were commonly bought in the city centre or at Milson, mostly at the Co-operative store. Professional services at Terrace End were also used by some Milson people: 20 percent of those who used a dentist (17 percent did not) went to Terrace End, and 14 percent also had their doctor there. Proximity was not the only reason, however, as in two cases the doctor had moved to Terrace End from another area and the patients had moved with him. Of the 61 percent of people who bought fish and chips, 20 percent bought them from a shop in Terrace End neighbourhood, as this was the nearest place for those making a special trip. Some people bought them from wherever they happened to be when the occasion arose, but a number always went to a particular shop because they liked the quality of the product.

Roslyn was used by 28 percent of Milson households, mainly for betting on the races through the T.A.B., because it had the nearest branch. Two thirds of the 31 percent of households using a T.A.B. went to Roslyn and a few people also used Roslyn for the doctor, chemist or barber.

Rangitikei Street, situated between Milson and the city centre for some Milson people, attracted some custom from at least 29 percent of households. Although the numbers were counted in the totals of city centre shoppers, a special count was also made, where possible, once Rangitikei Street's significance was discovered. Fish and chips, bread and meat were the main goods bought there, and the service station was also used, although the numbers for any one item would probably not exceed 40 households. Often the husband called in at Rangitikei Street on his way home to Sunny Heights.

A specific study, with a larger sample is needed to establish whether the reason for use of Terrace End, Roslyn and Rangitikei Street is mainly proximity. Other factors are likely to be involved.

Special Influences

An attempt was made to assess the influence of various factors on shopping patterns in Milson. Age, place of residence, and the availability of a car for shopping seemed to be the most significant factors, but to separate their specific influences, a larger sample would be needed. Because most of the youngest age group also lived in Sunny Heights and therefore a long and roundabout way from the Milson shops, their shopping patterns, which were often different from those of some of the other Milson residents, could be attributed to either age or locality.

Age appeared to influence the number of women working, the ownership of freezers, and the use of cars for shopping. The percentage of women working, both full and part-time, was lowest in the youngest age group (20 - 29 years), most of whom had small children. It increased steadily up to the age of 59 years and then declined. This would influence people's buying habits, especially those of the women who worked in town or had time to buy goods on their way home from work or at lunch time. All but one percent of the households owned either a refrigerator or a freezer, and three quarters regularly had the use of a car for shopping, but the 30 - 39 year old group had the highest use of cars for shopping, and owned the greatest percentage of freezers. The percentages amongst the older groups was lower, so that if the present trend continues, it seems likely that more people in future will own freezers and regularly have cars for shopping and will therefore be free to choose their shopping place, with less reliance on local shops. Already fewer of those who had and used a car regularly did their shopping at Milson than did those without a car and nearly half of the Sunny Heights women, nearly all of whom were under 30 years, had a car whenever they wanted it for shopping. As they grew older, and their husband's incomes increased, the number of cars was also likely to increase. But this will not necessarily mean more non-local shopping, as 72 percent of railway households had a car for shopping when they wanted it, yet most of them visited the city centre only once a fortnight (partly because they were paid fortnightly) and only 17 percent of them used a supermarket regularly, compared with over half of Sunny Heights women. Further research is needed. Sunny Heights people may have bought cars and freezers because of their distance from the shops.

Age at first appeared to be the main influence on use of supermarkets, as more under 30 year olds used them than older shoppers. Although only half of each group ever visited a supermarket, about one third of the younger women did so regularly, compared with only about one fifth of older women, and younger women tended to use the supermarket for their main groceries, while older women bought mainly extra groceries there. This seemed to indicate a greater willingness by younger women to change their habits and to try new shops. But when use of a supermarket was related to place of residence as well as to age, a different pattern emerged. The young people living near the Milson shops used them; those living at a distance in Sunny Heights, who had to use an inconvenient foot track or a car to reach the shops preferred to take advantage of the lower supermarket prices. None of the young (under 30 years) Railway households, and only 20 percent of the young Airport ones used a supermarket at all, although a high proportion of Railway houses had a car available for shopping because the men worked in shifts. Unfortunately the sample from each group was much too small to provide conclusive evidence, but it seemed that it was the lack of convenient local shops as well as age which were related to the regular use of the supermarkets.

Cars had some influence on the use of the city centre and Terrace End. Although no-one used Terrace End regularly without a car, 17 percent of those visiting the city centre regularly went by bus or as passengers in others' cars.

Summary

Milson was an isolated suburb, which grew up around a small railway settlement on the outskirts of the city. All the seven shops and services and most of the other non-residential facilities were located on or near a crossroads on Milson Line, the main direct route to Milson from the other parts of the city. Nearly all of those who used the shopping centre either lived or worked in Milson, and because of the suburb's isolation, almost all the households used the shopping centre, as well as many country people.

The shopping centre was an "interrupted" one, with the shops separated by a service station and the road to the airport. Parking was not adequate during peak periods, except outside the dairy, but although only the dairy had a service lane, no loading or unloading difficulties were experienced as the Consumers Co-operative Society

grocer and butcher used a side street. Because of its position just within the 30 miles per hour restriction, its "interrupted nature," its position at the crossroads, and the number of customers living across Milson Line to the south-west, the shopping centre was potentially dangerous.

The 1400 people living in Milson were mainly married couples and pre-school children, with a concentration of the latter in the Sunny Heights area while most of the older married couples and single people lived in the other areas, and especially Airport.

The local shops provided most of the basic foodstuffs and fruit and vegetables for the Milson households, although most of the meat came from outside the suburb because there was no full butcher's shop at the time of the survey. The grocer was the main source of groceries, but the dairy supplied most of the bread. Supermarkets were used by nearly a quarter of the people for groceries, but a much smaller percentage bought other goods there. The service station, post office, mobile library, hairdresser, draper and bookshop were all used by one third or more of the households, while most of the remainder used the city centre, which was the main source for all the specialised goods and services not available at Milson. Other places which were of some importance to Milson people were the freezing works, Terrace End (especially the chemist) Roslyn (the T.A.B.) and Rangitikei Street for a variety of goods.

Although age, place of residence, and the availability of a car for shopping all influenced people's shopping patterns, the small size of the sample when subdivided amongst the four settlement areas made it difficult to establish some of the facts. Age influenced the number of women working (the percentage increased steadily from the 20 year olds to those aged 59 years), the use of cars for shopping and the ownership of freezers as distinct from refrigerators (the highest percentages of both were in the 30 - 39 year old group), so that as the suburb, and especially the Sunny Heights area, age, more women are likely to be free to shop away from the local shops; although the factors which influenced this were not clearly established, age and place of residence were both important.

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1. The person who did the household's main shopping and therefore usually the wife.
2. Only two Roslyn shopkeepers (a chemist and a barber) included Milson in their catchments when interviewed, and it was therefore not mapped in Figure 5 as part of Roslyn's main catchment area.

CONCLUSION

The influence of transport is of basic importance in understanding suburban shopping centres. Suburban shops are provided by business men as a means of making money and therefore depend on a sufficient concentration of people who have easy access to them and a need for the goods they sell. In the past, this meant a number of basic food shops situated within walking distance of residential areas. A few other functions such as a draper or a hairdresser were added to some of the basic food shops to form a band of minor shopping centres about a mile and a quarter or less from the city centre which provided most of the specialised goods and services.

As population and car ownership increased, settlement extended into suburbs situated further from the city centre and the major shopping centres which grew up around the original basic food shops were able to compete with the city centre in the provision of some specialised goods and services such as bookshops and post offices.

More recently, the increasing number of people who are able to shop by car has enabled the supermarkets, with their wide range of goods, cash sales, large car parks and some lower prices to attract enough people from a sufficiently wide area to make the lower prices an economic proposition.

Transport has influenced shopping centres in many other ways. Access to centres is of great importance; most of the major and minor centres are situated on the main roads leading from the city centre to the suburbs, and the supermarkets are located on the even busier central city streets and main arterials. Shopping centre catchments are also influenced by the road patterns. None of the average catchments of the shopping centres studied in detail crossed the four main arterial roads, and nor did the catchments of more than a few individual shops or services. The shape of catchments was also related to road patterns; minor centre catchments usually extended in an oblong shape along the main suburban roads on which they were situated, while major catchment boundaries were usually the next main roads parallel to the ones on which the shopping centre was located. Main roads leading from outlying areas brought country customers to their nearest shopping centre and many car travellers shopped at major or minor centres, dairies and service stations which they passed on their way into or out of the city centre.

The layout of shopping centres has also been strongly influenced by traffic trends. At first traffic was limited and shops needed no special provision for the parking of cars. As traffic increased, angle parking was provided, but when saturation point is reached special off-street parking, as at Highbury centre and the supermarkets, is needed. The realisation that traffic and pedestrians now need to be separated for safety and convenience may lead to more relaxed shopping in suburban pedestrian malls, perhaps with attractive landscaping.

The present trend towards a greater emphasis on planning for people's social as well as physical needs has not yet made much impact on Palmerston North's suburban shopping centres, although the Highbury centre was planned as a whole with a Plunket Rooms and children's playground adjacent to the shops. But it may be possible to pay greater attention in future to co-ordinated overall, planning so that facilities such as shops, Plunket Rooms, kindergartens, play centres, halls, schools, parks, playgrounds and churches may be grouped as conveniently and attractively as possible.

	WHAT	WHO	WHERE	HOW OFTEN	DAY	WHY	HOW	GH
<u>FOOD</u> Where do you usually buy your food: Milson Supermarket Other S.C. Town	bread groceries main extra cakes Fruit, veges main extra meat main fish fish & chips							
<u>BKS. STAT.</u> Where do you usually buy your books & stationery	stationery magazines books, presents, toys							
<u>DRAPERY</u> Where do you usually buy:	clothing wool and sewing needs	yours husb. ch.						
<u>HAIR</u> Where do you usually have your hair done?		you Daugh. husb. son						
<u>CHEMIST</u> Which chemist do you usually go to for	prescriptions cosmetics and toiletries							
<u>MISCELL.</u> Where do you usually buy the following?	hardware garden supplies							
<u>SERVICES</u> Where do you usually go for the following:	P.O. Bank Service station Library T.A.B. Hotel							
Do you have a regular	Dentist Doctor							

APPENDIX B

RETAILER'S QUESTIONNAIREOBSERVATION:

Name of S.C. -----

Type of Shop -----

HISTORY:

1. Do you know when this particular shop opened?.....
2. Was it ever in any other building?
3. Was it ever in any other area?
4. Was there ever any other type of shop
in this building?
5. When?
6. Other shops under same owner

OWNERSHIP, EMPLOYMENT: Are you the owner or do you manage this business?7. MANAGERFAMILY BUSINESS

		F.T.	P.T.	Car			F.T.	P.T.	Car
	Owner		Owner
	Manager		Helpers
	Employees		Employees
HOURS	OPEN			PEAK					
8.	M	a.m.	p.m.	9.	a.m.	p.m.			
	T	.....	.....		.....	.....
	W	.....	.....		.....	.....
	Th	.....	.....		.....	.....
	F	.....	.....		.....	.....
	Sat	.....	.....		.....	.....
	Sun	.....	.....		.....	.....

- BUILDING 10. Do you own the building or is it rented: Owned... Rented
11. Is the rent reasonable?
12. Would you prefer to own the building?
13. Prevented by
14. Difficulties over renting?

15. Do you think it would suit Mothers of young children to have kindergartens, schools, Plunket and a park next door to the shopping centre?
16. Would this affect your business?
17. How do you feel about this shopping centre? What things do you like or dislike?
18. Layout. How do you feel about the layout of this S.C.?
19. Do you like the position of your shop in relation to others?.....
20. Appearance. How do you feel about the appearance of this S.C.?.....
21. Parking. Is there enough parking space for customers?
22. Where do you and your employees park?
23. Accidents. Have there been any accidents in the S.C?
24. Pedestrians. Have you heard of pedestrian precincts?
- Would they be a good idea in a centre like this?
25. Delivery. Do you deliver?.....How often? Every Day M. to F.....
- Regularly, not every day
- When asked
26. Where do you load the van?
27. Do you have any difficulty in loading it?
28. Servicing. Do you have the use of a service lane?
29. Do you use it for unloading goods?
30. Are there any difficulties?
31. Do you have any trouble from Children
- Dogs
- Bicycles
- Rubbish
- Shop Lifting.....
32. Do you think this shopping centre is in a good position?
- Why?
33. Is there anything which has a special influence in this S.C?
- School
- Park or Playground
- Residential area
- Factory
- Through Traffic
- Other
34. Are there any plans to provide any new goods or services?
- 35a. What line of goods doesn't do well out here?
- b. Is anyone going to stop selling it (them)?
- 36a. Are any of the other services (define) not used very much?
- b. Are they (is it) going to shut down?
37. There is/are an empty shop(s) in this S.C. Do you know how long it (they) have been empty?
- a. Vacant shop Yes..... No
- b. Date vacated
- c. Do you know of any plans to use them?

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