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A study on the integration of existing community transport resources within the boundaries of the City of Stirling

Thremy Richard
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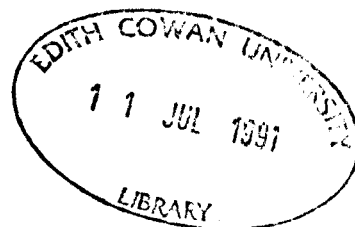
A STUDY ON THE INTEGRATION OF EXISTING COMMUNITY TRANSPORT
RESOURCES WITHIN THE BOUNDARIES OF THE CITY OF STIRLING.

A THESIS SUBMITTED AS
PART OF THE REQUIREMENT FOR THE DEGREE OF
BACHELOR OF SOCIAL SCIENCE WITH HONOURS
HUMAN SERVICE ADMINISTRATION

SCHOOL OF COMMUNITY AND LANGUAGE STUDIES

BY
THREMY RICHARD

PERTH, WESTERN AUSTRALIA
NOVEMBER 1990



ABSTRACT

The study was designed to investigate if, the community transport providers operating within a local authority were able to meet the daily requests for transport to the frail aged and disabled persons living in this locality. Then to ascertain if these transport providers were fully utilising their transport vehicles, which could be volunteers in cars, or a small bus. If they were able to meet these demands, would they be interested in sharing their vehicles by becoming part of an integrated community transport service? The data collection techniques consisted of firstly conducting a qualitative meta-analysis on a selection of community transport articles from overseas, the eastern states of Australia and from local, Western Australian, studies. The second part involved a conducted interview with the transport providers using a standardised interview as the instrument. The major findings of the data analysis showed that volunteers using their own cars provide 69% of this service. In addition, 69% of the (N=26) transport providers were able to meet the daily demands on their services, 19.% are willing to share their vehicles and 65% of the providers are interested in becoming part of an integrated community transport service. Due to the lack of available resources, drivers, and funding, 35% of service providers are unable to meet the daily client demands. The major conclusion of the study is that of the 54% of providers who own their bus(es), only 12% are willing to share their vehicles for integration purposes and 4% will share, but not integrate, until an assurance is made on the compensation for the wear and tear to their bus. The meta-analysis and the findings indicate a small localised integration scheme is possible.

DECLARATION

I certify that this thesis does not incorporate, without acknowledgment, any material previously submitted for a degree or diploma in any institution of higher education and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text.



THREMY RICHARD

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CHAPTER 1

Introduction

The first chapter of this report sets out to review the background to this study. It will introduce the statement of the problem and delineate the research question to be addressed in relation to the problem. It also puts forward the purpose and significance of the study which are followed by the parameters which delimit the study. Included are the definitions used in this study. The research approach and thesis chapters are outlined.

Background to the Study

In Australia, significant demographic and social changes have occurred which have contributed towards the problem of transport provision. Since 1966, the mortality in the age group of 65 and over, has dropped perceptibly with the result that the proportion of elderly within society is increasing and as a group they are also remaining healthier and fitter to a later age (Thane, 1987, p. 373). In addition, the elderly are actively encouraged to stay in their own homes (Kendig, et al, 1986, p. 50) through the provision of help by various services.

An increase in the demand for transport services has occurred with the introduction of the combined Federal and State Governments' Home and Community Care (HACC) program (HACC National Guidelines, 1988, p. 4). The HACC program (sic) enables the frail aged and young disabled people with long term, moderate or severe disability, to continue to

live in their own homes, instead of being institutionalised, by providing basic maintenance and support services where needed. Through the assistance of Meals-on-Wheels and dwelling repairs the elderly are able to achieve this objective of remaining in their own homes. However, a number of individuals do not have access to either private or public transport due to their age or degree of disability and are therefore reliant on others for mobility.

For those people unable to remain in their own homes there is the option of moving into a nursing home, hostel or retirement centre. These options are being sought in increasing numbers every year, placing a strain on existing transport services (Glew, 1990, p. 1). Taxis are expensive and not every nursing home is in possession of a mini bus fitted with a hoist to enable those in a wheelchair, or those with restricted mobility to gain access to transport. The ambulance is used to take residents with these restriction to their required medical appointments. This can then result in residents waiting for many hours to return home. In addition, the nursing homes are not in the financial position to cater for an ongoing transport service. Funding from HACC does not cover the nursing homes or hostels, and therefore these are not eligible for the HACC service delivery, resulting in the transport needs of the residents in these homes not being met.

In the State of Western Australia the provision of transport for the frail aged and disabled is being undertaken in a sporadic fashion by church groups, human service organisations, and some local governments throughout the Perth metropolitan area. Each group

operates independently to provide community transport to those individuals who may be transport disadvantaged (Nolan, 1989, and Clark, 1986). The initial provision of community transport services has been with the use of a car, driven by a volunteer, carrying one or more passengers to visit a metropolitan hospital for needed treatment, or to a doctor's surgery.

Since the middle 1980s, car based community transport provision has increasingly been augmented with small buses which has enabled the various community transport providers to transport a limited number of passengers at the same time to pre-determined destinations, such as a social or therapy group, or a shopping centre. However, these buses may or may not be modified to carry a person in a wheelchair, and then not every organisation has its own bus.

Given the voluntary, ad hoc and sporadic fashion in which these transport services have developed in Western Australia (WA), it is not surprising to observe that the delivery of this community transport service is not based on a model or a framework, but rather that it operates on a demand and supply approach at the "grass-roots" or local level. Further, Nolan (1987, p. 3) describes that approach to community transport as one of community involvement, addressing the problem of mobility among specific groups of people, with the flexibility of a service that can be adapted to local needs.

Statement of the Problem

It has come to the attention of the Community Transport Forum (Personal communication, Davies, 1990), that during the day small

buses at various organisations throughout the City of Stirling appear to not be fully utilised. As one of the objectives of the HACC program is to ensure the provision of a reasonable degree of mobility to the frail aged and the disabled in the community (Clark, 1986, p. 4), this observation has given rise to the concern that possibly not all clients in need of the transport services are being adequately catered for. The transport service allows the clients to have access to such basic commodities as food, medical care and social contact to enable them to remain domiciled living in their own homes.

Furthermore, in today's economic climate it is imperative that every effort is made to offer a service to the client that is both effective and provided at the lowest possible cost to the community. The funding bodies, be it the public in general, service clubs, church groups, or government departments, are increasingly stipulating accountability as the criteria for further funding of ongoing transport projects, at the various human service agencies.

More vehicles are being purchased to meet the increasing demands on the transport providers with the result that service provision in some areas then overlaps and in others is not adequately provided for (Community Transport Seminar, 1988). There appears to be little contact or coordination between those funding bodies which enable the various human services to purchase a bus. The Lotteries Commission with its "once only grant", Rotary Clubs, and government grants from the Home and Community Care program (HACC) operate independently in providing funds to purchase small buses. This results in that

irrespective of their need only some applicants may be successful in their submission to funding bodies for donations or grants to purchase a bus.

In addition, community transport is often only a part of an overall package that is provided to the client by the human service organisation (Clark, 1986, Appendix 3). The fragmented, unlinked services may result in some service providers being unable to meet the needs of the transport disadvantaged due to the lack of available resources.

Also, organisations which are funded solely by the HACC program are limited to providing community transport vehicles to the client group of the frail aged and their carers, and the disabled person. The transport disadvantaged who are not residents or clients of that organisation, which is funded by the HACC, are not eligible to use the service. This HACC policy guideline (HACC National Guidelines, 1988, p. 25-28) has a strict eligibility criteria regarding clients. A consequence is that those people, who are not able to use public transport and are not part of an organisation, are being left to solve their own transport problem.

The perceived problems contributing towards the provision of community transport are:

1. The apparent under utilised mini-buses standing at various organisations throughout the local authority.
2. The uncoordinated purchases of mini-buses of various funding bodies, to meet the increased transport needs.

3. Individuals in need of transport not able to use the HACC funded mini-bus, due to strict eligibility guidelines.

The issues of the lack of coordination and strict policy guidelines, although not causing the problem, certainly exacerbate the ability to achieve simple solutions. Thus, the problem this study has undertaken to investigate is the appropriateness of integrating the existing transport services, to meet the increasing transport demands placed on transport providers.

Research Question

The research question was generated from a conceptual framework described in Chapter 3 and is set out in three interdependent parts:

1. To what extent are the transport providers able to meet the demands of their clients?
2. To what extent are the organisation's transport vehicles fully utilised?
3. Are the transport service providers, operating within the City of Stirling, interested in becoming part of an integrated community transport service?

Significance of the Study

Hyde (1986, p. 71) states that transport must be seen as the means to gain access to "opportunities", not only for work, but also for enjoyment. A major impact of well-being of all members in society, but in particular the elderly, is the need to participate in both physical and intellectual activities (Graycar & Jamrozik, 1989, p. 273). The Department of Sport and Recreation has produced a

number of life enrichment programmes for just this purpose. If the elderly or disabled are unable to access transport they are then denied such enrichment.

Hyde (1986, p. 71), describes broadly the two groups who are transport disadvantaged as:

- those who cannot use public transport regardless of its provision and efficiency, such as those handicapped through age and disability; and,
- those who can potentially use conventional public transport, but are unable to do so due to its absence, such as residents of new estates or where there is a lack of off-peak services, or where services do not go to desired locations.

It is imperative that ways are found to increase the mobility of these people to enhance their quality of life. As Belnap (1981, p. 15) remarks, "availability is not synonymous with accessibility", therefore healthy and physically able older persons can also be isolated. As Thane (1987, p. 373) summarises, "since the aging of society is unavoidable we should seek ways to treat the elderly as a resource rather than viewing them as a burden". Skinner (1980, p. 12) points out that, it is possible to apply the planning principles of transport provision for the elderly and disabled group, to other transport disadvantaged groups.

This study will concentrate on the transport disadvantaged groups pertaining mainly to the frail aged and disabled persons. The significance of this study is situated in extending the context of previous research on community transport conducted since the middle of the 1970's. The overview and possible construction of a framework

from these studies will provide a focus for the possible future implementation of the integration of existing community transport services in the City of Stirling.

It is proposed that community deliberations based on the findings of this study may lead to the streamlining of community transport services, making these more effective and efficient. The eventual anticipated integration of these services, given the attitude of society towards environmental and economic constraints in the 1990's, would benefit the community transport providers, the transport disadvantaged, and the funding bodies.

As an outcome of the deliberations consequential to this study, pollution may be reduced and fuel saved by increasingly providing group transport in a bus, instead of using many cars. Further savings may be possible, as existing resources are shared instead of acquiring new buses.

Research Approach

The approach to this study is to address two major objectives. Firstly, to gain an overview of community transport services by undertaking a meta-analysis of the related literature from overseas, interstate and, in particular, Western Australia. The intention of which, is to provide a rationalised literature overview which can be used in the decision making process to establish solutions to the perceived community transportation difficulties within the the City of Stirling.

The second objective is to conduct interviews with the current community transport providers to determine their attitude to a community transport integration scheme within the City of Stirling's area; their ability to cater to client transport demands; and, the extent to which their vehicles are currently utilised.

The naturalistic approach which uses the technique of observation and interview opens the way to interpretation, sensitivity and richness that may not be possible by applying a pure quantitative method only. It is precisely this assumption that determined the decision to use the naturalistic paradigm for this study.

The multi-objective approach (Cohen and Manion, 1980, p. 208) is used to gather the data for this study. It involves both a synthesis of previously published reports, through the meta-analysis, and a record of interviews with present transport providers which will be used to check the consistency of previous report data across the geographical area of this study. The synthesis of previous studies examines 29 papers, which will be presented as a qualitative meta-analysis (Glass, McGaw and Smith, 1981, p. 232; Deschamp, 1983, p. 21 and Hyde, 1985, Vol 1, p. 303). The review of the contents of these studies, from 1975 to 1990, will consider the dilemmas and successes of community transport studies and projects.

The second part, will entail interviewing community transport providers. The data collection approach encompasses interviewing a selection of persons involved in community transport services. The subjects selected for this study are a sample group of transport

providers operating within the boundaries of the City of Stirling, and who responded to the community transport survey conducted by the Department of Transport, in 1989.

Delimiting the Study.

The research for this study will be confined to the area within the boundaries of the City of Stirling (a local government authority within the State of Western Australia).

This study will be limited to the community transport providers which operate mainly within the City of Stirling, and not the metropolitan area of Perth or country areas.

This study will be limited to the providers of transport to the frail aged and disabled persons. The study will not include other transport providers for equally disadvantaged groups within the City of Stirling.

The study will not implement, or evaluate, any model which may be put forward for the integration of community transport providers operating within the boundaries of the City of Stirling.

Definition of the Terms

For the purpose of this study the following terms have being defined:

Brokerage. A community transport scheme aimed at coordinating available community transport resources operating locally, to

promote a more efficient use of existing resources and reduce the gap between supply and demand.

Community transport. An alternative mode of travel, provided by non-profit organisations and community groups, which responds to the individual's needs by taking into consideration such factors as the passengers' ages, disability, their destination and times of travel.

Community Transport Forum. Established as a result of the Department of Transport, Community Transport Seminar 1988. Members are representatives of community based organisations who have identified problems with community transport and endeavour to solve them through community liaison, action and consultation.

Disabled. A person of any age who has some form of impairment, physical or psychological, and is therefore unable to use the regular transport available.

Eligibility criteria. A guideline by which a person is judged to be eligible to be able to use a particular service.

Home and Community Care Program (sic) (HACC). This programme is primarily directed towards assisting the frail aged person, people with disabilities and their carers to remain independent in the community so that they may stay in their own homes. Services are provided to help with activities such as home help, food services, home maintenance or modification, respite care,

and transport (HACC National Guidelines, 1988, p. 25-28). The funding of the HACC is a joint responsibility of the State and Federal Governments.

Human service organisation. A non-profit organisation in the community which provides services to, with, and for people, by providing access to resources to enhance the quality of their lives.

Integration. The coordination between organisations for the sharing of their transport resources in exchange for reimbursement towards the wear and tear on the vehicles.

Transport disadvantaged. Those individuals who are unable to use the public transport system due to: lack of availability of services; physical or financial reasons; or, having no family to transport them, to gain access to basic commodities or medical services.

Transport resources. The small buses available within the broader community and the vehicles of the volunteers providing community transport.

Chapter 2 of this thesis provides an overview of the previous studies in a meta-analysis matrix and the implication of the findings of this for the present study. This is followed, in Chapter 3, by the development of a conceptual framework which was established to

generate the research questions for this study. Chapter 4 presents the objectives and techniques of the meta-analysis, the design of the study and the methodology. Chapter 5 describes the data analysis and presents the results of the study. The thesis concludes, in Chapter 6, with a discussion of the results and the possible implications for providing improved service delivery to the client groups.

CHAPTER 2

Literature Review

In this chapter the literature relating to this study will be reviewed. Included, will be an introduction of the various individuals who are unable to use public transport and as a result are in need of community transport. This is followed by a discussion on themes of community transport integration which have emerged from the findings of a qualitative meta-analysis conducted on the literature. In Chapter 4 of this study the objectives, techniques and methodology of this meta-analysis will be discussed at length and in detail.

A Broad Perspective of Community Transport

The transport disadvantaged persons. Personal mobility, for many Australians, appears to be very important given that most households have a high rate of car ownership. Perth, in particular, has the highest level of second car ownership per household (Stephens, 1989, p. 9). The urban sprawl in Western Australia exacerbates the need for a private car so that the individual can participate in a unique lifestyle, in the manner afforded to other citizens not otherwise disabled or impaired.

There are people living within the community who do not have access to private or public transport for a number of reasons. Individuals so affected are referred to as transport disadvantaged (Pund, 1986, p. 24). This group may include the elderly, disabled, single parent,

ethnic minorities, low income earners, unemployed, those unable to purchase or maintain a car, and those people too young to have a driver's licence.

The specific transport needs of every individual cannot be met by a public transport system catering for the working commuter (Weaver, 1979, p. 20). The Perth public transport system operates mainly on fixed routes leading to the city centre, with priority given to the needs of the worker travelling to and from work during the peak hours (Nolan, 1989, p. 1). Commuters requiring transport during the off-peak periods are not always adequately catered for.

There are various consequences for the transport disadvantaged. Due to the low demand, or the rapid geographic spread of the outer suburbs, a regular bus service may not be offered during the off-peak times of the day. In households with low incomes, to achieve an acceptable level of mobility the purchase of a car may be necessary (Nolan, 1987, p. 4). When this car is used or needed to travel to work, it can affect the mobility of the remaining members of that household. Equally, the young unemployed person without a car may not be able to reach a job interview located across several suburbs, unless at least one change of bus is made.

Living in isolated areas, women at home with young children can have a number of problems when travelling on public transport. When travelling to such destinations as the shopping centre, or health clinic, she may be confronted with negotiating both her children and her shopping (Skinner, 1980, p. 13). The working mother may find the

infrequent buses do not allow her to take the children to a creche and then to work in sufficient time.

There are people unable to use the available public transport such as the bus, train or taxi, due to physical impairment. The train or bus stop may not be within walking distance for the elderly or frail aged person (Holsman, et al, 1982, p. 6). Alternatively, accessible transport may elude that person if he or she is not able to cross the busy road to reach a bus stop on the opposite side. It is this latter group upon which this study is focused.

The Subsidised Taxi Scheme (STS), administered by the Department of Transport (DOT) for people with disabilities, may still be too expensive, even after the 50% fare reimbursement (DOT Annual Report 1989, p. 32). Vouchers are needed for each one one-way trip, and there is a restriction of 100 vouchers per person per year. In addition, a person may not qualify for STS if their disability is not permanent, or of a stipulated severity.

During a Community Transport Forum Contact Lunch (16 March, 1990) the multi-purpose taxi coordinator Ms C. Pearson stated, that the demand for the multi-purpose taxis in Perth far exceeds the supply. There are five taxis available with each undertaking approximately 14 jobs a day and, in addition, at least 10 people a day are turned away.

Bookings for the Saturday and Sunday outings have to be made 2 weeks in advance. During the week, bookings need to be made a week and a half before the trip. If the taxis are off the road for repairs,

the bookings have to be cancelled. As the problems discussed illustrate, clearly there is a need for more multi-purpose taxis or another mode of transport to be considered to cater to the transport needs of specific groups within the Perth metropolitan area.

People with disabilities cannot be ignored and left to their own devices. Special interest and minority groups within society increasingly demand a right for these individuals to maximise their self-actualisation opportunities. Transportation can be difficult for the disabled person if he or she is not a member of service or organisation, has a low income, or does not own a vehicle, with the result that increased isolation from society occurs.

As Nolan (1987, p. 2) states it should be recognised that the "transport disadvantaged are not a homogenous group". Further, it is difficult to identify not only the problems, but also the transport needs of the transport disadvantaged. From the foregoing it may be deduced that the physical, geographical, and eligibility barriers can affect people in all age groups and societal categories, and ways must be found to increase the mobility of these individuals so that they too may access the opportunities of life and participate as active members within society.

Community Transport - A Qualitative Meta-Analysis

A systematic literature search of relevant studies from both overseas and Australia has revealed the presence of similar problems with regard to the provision of community transport. In the last decade research surveys and studies Australia-wide have documented the

existence of the transport disadvantaged person (Skinner, 1980; Holsman, 1982; Hyde, 1986; Pund, 1986; Stone 1983 and 1986; Vaisvila, 1987; Travers Morgan, 1987; South East Metropolitan Local Authorities, 1989; and, Nolan, 1987 and 1989). These studies have identified the needs of, and subsequent transport provision to, groups of transport disadvantaged. These groups appear to be predominantly the frail aged and disabled persons living within the community. (See Community Transport Project Profiles June 1989, Community Transport in New South Wales, for a brief profile on each of the 93 existing transport schemes). In Perth, the Department of Transport has identified and established a data base of community transport providers operating in the metropolitan area.

In this study the review of the literature draws together findings from a discreet body of non-experimental studies, reports, discussions, conference and workshop papers, journals, abstracts, and agency profiles gathered for the period 1975 to 1990. This review of the literature will not embark on a detailed description of how to establish a successful integration or coordination scheme, but rather to give an outline of how transport providers have tackled some of the issues of integration overseas and within Australia.

These studies have been analysed and categorised into a qualitative meta-analysis matrix. The objective of this matrix is to summarise a large volume of similar information in a systematic and concise manner. The tables of the matrix will add substantial objectivity to discursive literature which may contain a high level of subjectivity. The matrix will also provide an analysis of the related literature

and studies concerning the frail aged and disabled, pertaining to the integration of community transport. This method provides a ready overview of previous data susceptible to rapid analysis and interpretation.

An extensive computer search using TRIS, ERIC, APAIS, ANB and Dissertation abstracts data banks revealed a large number of articles dealing with the transport needs of the elderly and disabled. However, only articles which had a focus on community transport, linked to coordination or integration of transport resources were included in the meta-analysis. A number of relevant overseas articles could not be obtained for various reasons.

A total of 29 articles were identified and obtained for analysis. These were then sorted according to a coding schedule and variables which are outlined in Chapter 4. The articles included Transport, Research and Annual reports and Profiles of Agencies. In this study the definition of the publications are stated as follows, Agency: community transport providers; Working paper: a paper describing work that has been done; Discussion paper: a paper prepared for discussion on work still to be completed.

A further break-down of the literature reviewed referring to the author, year and type of publication is shown in Table 2. The 29 articles were categorised into three headings based on the content focus of the publication as seen in Table 4. These were further categorised into frequency of factors relating to the type of transport provision as seen in Table 5.

It should be noted that the categorisation of the articles should not be regarded as definitive, as the focus of a number of documents incorporated more than one category. A finding from the categorisation process revealed that community transport is very complex and has many issues that are interrelated. There appears to be no one solution to the problems that are associated with it.

Table 1 presents a broad overview of the literature accessed for this study and shows the increasing emphasis in Australia of research on community transport from 1983 onwards. In Australia a total of 13 articles originated during 1987-90. The unavailability of the overseas articles may explain why more Australian articles were obtained for the period 1987-1990. In addition, prior to 1987, community transport although available in Perth, may not have been seen as necessary on a large scale until recently. In the period 1987-90 more emphasises has been placed on addressing the transport issue of the transport disadvantaged, particularly the frail aged and disabled, by the various local, state and federal government departments. A breakdown of the literature is shown in Appendix C.

TABLE 1
RESEARCH LITERATURE REVIEW ON COMMUNITY TRANSPORT
BROKEN DOWN BY COUNTRY OF ORIGIN AND YEAR

COUNTRY OF ORIGIN	1975- 1978	1979- 1982	1983- 1986	1987- 1990	NO DATE	TOTAL
PERTH			1	8		9
AUSTRALIAN STATES		2	5	5		12
NORTH AMERICA	1	2			2	5
BRITAIN				2		2
EUROPE			1			1
TOTAL	1	4	7	15	2	29

Table 2 illustrates that most of the literature on community transport was in the form of a research report or conference paper, and the majority of these were published after 1983. When compared with Table 1 it can be seen that Perth and the eastern states of Australia are becoming increasingly aware of the alternative transport available and appear to be interested in gathering information concerning the provision of community transport.

TABLE 2

RESEARCH LITERATURE REVIEW ON COMMUNITY TRANSPORT
BROKEN DOWN BY TYPE OF PUBLICATION AND YEAR

TYPE OF PUBLICATION	1975- 1978	1979- 1982	1983- 1986	1987- 1990	NO DATE	TOTAL
TRANSPORT REPORT			1	2	1	4
ANNUAL REPORT				2		2
RESEARCH REPORT	1	3	2	5		11
PROFILE OF AGENCY				3		3
CONFERENCE PAPER		1	3	2		6
WORKING PAPER			1		1	2
DISCUSSION PAPER				1		1
TOTAL	1	4	7	15	2	29

Data from Table 3 establishes that research reports were published in a number of countries, with four reports pertinent to Perth. Also of note is that publications emanating from Perth are in a number of formats, namely transport (n=2), research reports (n=4), conference papers (n=3) and a discussion paper. This appears to indicate an awareness to community transport which may be as a result of an increase in demand for an alternative transport provision.

TABLE 3

RESEARCH LITERATURE ON COMMUNITY TRANSPORT

BROKEN DOWN BY TYPE OF PUBLICATION AND COUNTRY OF ORIGIN

TYPE OF PUBLICATION	PERTH	EASTERN STATES	NORTH AMERICA	BRITAIN	EUROPE	TOTAL
TRANSPORT REPORT	2	1	1			4
ANNUAL REPORT		2				2
RESEARCH REPORT	4	2	2	2		10
PROFILE OF AGENCY		3				3
CONFERENCE PAPER	3	2			1	6
WORKING PAPER		1	2			3
DISCUSSION PAPER	1					1
TOTAL	10	11	5	2	1	29

Table 4 categorises the articles into three headings according to the content focus. It can be seen that only six of the articles focused specifically on the integration of transport and over half of the total articles were concerned with community transport and specifically mentioned the aspect of integration.

TABLE 4
RESEARCH LITERATURE ON COMMUNITY TRANSPORT
BROKEN DOWN BY FOCUS OF THE ARTICLE

BREAK-DOWN OF THE FOCUS	TOTAL	PERCENTAGE
TRANSPORT NEEDS OF THE ELDERLY AND DISABLED	7	24.13
COMMUNITY TRANSPORT	16	55.17
INTEGRATION OR COORDINATION OF TRANSPORT	6	20.69
TOTAL	29	100%

The coding schedule used in Table 5 further categorised the 29 articles into frequency of factors. As stated earlier, these factors should not be regarded as conclusive, but only as a focus for the large number of articles selected for the analysis.

Table 5 shows that across the 29 articles there was extensive mention of some sixteen factors which related in part to community transport and the integration of transport services. All these factors identified either successful implementation of integrated transport

or suggest ways of establishing successful integration schemes. It can be seen that these factors cover a wide range of items which will be discussed in the various themes of the meta-analysis.

TABLE 5

RESEARCH LITERATURE MAKING REFERENCE TO FACTORS RELATING TO
THEMES ON COMMUNITY TRANSPORT AND ITS PROVISION : BROKEN DOWN
BY FACTOR AND FREQUENCY OF REFERENCE

FACTOR	FREQUENCY OF REFERENCE
1. Integration benefits and barriers	9
2. Policy choices and issues for providers and government	6
3. Different coordination service	3
4. Shared resource and costs	11
5. Community transport complementary not in competition	2
6. Contributions of local governments and/or Home and Community Care	14
7. Identify needs/ data base	9
8. Integration and establishment	10
9. Trial base scheme needed	2
10. Information dissemination at community level	5

(Table continues)

TABLE 5 (Continued)

FACTOR	FREQUENCY OF REFERENCE
11. Management by Committee or Community at grass-root level	5
12. Coordinator full/part time to facilitate supply & demand	4
13. Drivers, licence, insurance and vehicles	8
14. Pay for service not welfare solution	5
15. Service across suburbs for medical and hospital needs addressing	7
16. Taxi demands/cheaper big groups in bus	6

Themes of the Meta-Analysis

Community transport-complementary not competitive. People unable to use the conventional public transport system under any circumstance, are obviously in need of an alternative transport service. Hyde (1986, p. 76) states that given those circumstances, specialist or community transport must therefore be seen in the light of a complementary, rather than a competitive service. When groups or private individuals within the community can be persuaded to pool or coordinate their existing transport resources, it offers an opportunity for both the user and the provider to work together towards the one goal, that is the provision of transport.

In the United States of America, such "specialised transportation" (Nolan, 1989, p. 15) is now accepted as an alternative system, although it is still seen as being in a formative stage. It is an integrated part of the transport system where the service is a complementary, rather than a competitive service for the transportation providers and users.

In Britain, the transport needs of elderly with mobility difficulties, frail aged and young disabled under 50 years of age are met partly by Dial-a-Ride which operates door to door. In a study conducted by Buchanan in March 1989 (p. 1.2.2), it was believed that the transport disadvantaged will be provided an excellent service when a coordination of the specialist bus and the taxi service function as a network. In addition, this service would be comparable to the able bodied's transport when the taxi vouchers become more accessible to a larger user group.

In the eastern states of Australia since the mid-1970s the provision of community transport to people unable to use the conventional public transport has been undertaken by a large number of local authorities and non-profit organisations in South Australia (Keal, 1983, p. 4-6), Victoria (Skinner, 1980, Table 1, p. 22) and New South Wales (Community Transport Project Profiles June 1989, Community Transport in New South Wales).

In Sydney, Holsman (1982, p. 74) states that, the reluctance of addressing the provision of community transport has come from the

welfare organisations themselves and no one wants to take the responsibility to organise, or integrate the available services. Holsman puts forward, that it may be because the task of integrating the transport service would be quite an undertaking given that there is such a variety of agencies and organisations within the wider community in need of the special transport service.

Integration - benefits and barriers. A limited coordination or integration of community transport has been undertaken by human service organisations in the United States of America since the mid-1970s (Nolan, 1989, p. 21). This was brought about in response to the increase in transport demand, a reduction of the funds for social service programmes, and the concern of duplication of transport services by the providers.

In an evaluation study by Weaver (1979, p. 22) it was found that human service agencies could benefit most from: the "sharing of the support facilities" such as the administration and office space; the "coordination of routes, schedules and vehicle fleet"; and, during peak hours, the demand for transport service. The lack of vehicles may be tackled through integrating with other agencies.

The advantages of integration may be seen in areas such as the bulk buying of vehicle parts, fleet maintenance contracts (which may ensure a more reliable vehicle fleet), and the reduction in insurance which is possible when a large group of agencies are acting in concert.

An underlying assumption that the coordination or consolidation of special transport can lead to economies of scale was the hypothesis to be tested by McKnight, Pagano, Robins and Johnson (1982, p.18). They found that when total resources, which include volunteer labour, shared overheads and actual costs for the provision of transport are integrated, there can be economies of scale.

Integration was seen by Stone (1983, p. 16) to be a solution to a greater utilisation of mini-buses by promoting the sharing of existing resources through the process of brokerage. This approach would be at a local level and a low cost due to the sharing of resources, with its first priority to need, rather than service delivery. As this service delivery is dominated by the need to match supply and demand, unless a substantial outlay of equipment has been made, it should not be necessary for high statistical justification of this service.

Nolan (1987, p. 16) reports that in Sydney at that time, a brokerage scheme had been operating successfully, since March 1986. This scheme is called the St George Community Transport project. In order to deliver this process of brokerage Pund (1986, p. 22) proposes that it is necessary to devise a system to ensure that the delivery of this service is achieved.

In a study for the HACC, in Perth, Clark (September 1986, p. 2-3) suggested that unless the service provider is unable to meet the demands of the clients, "coordination of the voluntary transport services in a small area may not be seen as beneficial and could

result in a loss of autonomy". At a Search Conference in 1986, which was attended by approximately forty community transport representatives from the metropolitan area, it was found that, the attitude towards integration by those who owned their own bus were, that they were "vehemently opposed to it" (Clark, 1986, p. 48). Reasons for this attitude were the concern of vehicle damage through an accident and the driving standards of the drivers, which could contribute towards the damage to the vehicle's engine, thereby incurring unnecessary maintenance costs. Clark further states however, that a justification is present for a centralised booking service which could be of benefit to volunteer agencies. This will enable the agencies to "gain access to more specialised services".

Integration and establishment. Identify the target consumer first, before planning or designing the transport scheme. The design of the service is most important and should not be changed unless it needs to adjust to the increase of the target group, otherwise it may create a bad image for the service provider (European Conference, 1986, p. 133). Also a badly designed coverage area may lead to a service that is under utilised. Good monitoring is needed when the service is implemented to confirm that the service is reaching the targeted groups. It was also found in the United Kingdom that six months of research and development support was needed to implement the best programme.

It is seen as an essential element to advertise the availability of the integrated transport provision service prior to its commencement (Stone, 1986; Pund, 1986 and Vaisvila, 1987). Local newspapers,

letter drops, audio and visual media promotion assures in part to reach those people in need of the transport service.

Identifying needs and data-base. McKnight (1982, p. 18) states, that the coordination of community transport can achieve greater efficiency, particularly if a large ridership can be attracted. However this may be seen as a direct contrast to Scalici (1985, p. 60) where he says that it is possible to introduce integration on a small scale. This could result in achieving greater effectiveness but, "unless a service meets the individual needs of the rider, it will not be used".

Hyde (1986, p. 81) supports this view and further states, that planners and providers should be prepared to take into account the ever changing needs of the client. A possible barrier may be the need for larger or more buses if this ridership is too big, resulting in a longer waiting time between destination and home for the client. The optimum structure for success would be a large ridership in a small scheme where the clients are able to make as many trips as needed given the available funding (European Conference, 1986, p. 137). As the ridership increases, a possible barrier may occur when all avenues of cost-effective measures are exhausted and unless the resources are increased there will be problems with maintaining that service. If resources are limited, it may be wiser to reduce the ridership by not encouraging additional users.

Where funds are limited, Skinner (1980, p. 27) puts forward that it is essential that the major areas of transport needs are identified

and prioritised. This then should be followed by both examining the alternatives to meet the transport needs, and to devise ways of implementing each alternative.

Weaver (1979, p. 24) sees the compiling of a data-base as a key element of keeping the agencies up to date with the latest information. This must be seen as one of the key issues when establishing coordination of the community transport.

In Western Australia the data-base of the community transport providers assists in establishing whether there is an overlap or duplication of a service. However, Nolan (1989, p. 26) suggests that although this directory is able to show the existing under-utilised resources, it does not mean that an integration of resources necessarily should be undertaken. More sophisticated surveys are needed to gather quantitative information on the needs of the service. As Nolan (1989, p. 31) states, unless the implication for a service demand is clear, how can the supply be met?

Nolan (1987, p. 38) recommends that the Department of Transport take on a more active role, particularly in "providing assistance with technical advice" and "assessing applications for bus funding". This could be seen by the service providers as an intrusion which may threaten the flexibility and grass-roots of service provision. Nolan further points out that integration could be of concern to service providers with regard to preserving their own identity and maintaining control over the management of service provision and resources.

When establishing an integration scheme, a potential reduction of day-to-day costs, such as fuel and wear and tear on the bus, may be made by using a computer program currently being developed at the Department of Transport (Stampoultzis & Chambers, 1989, p. 769). When a need for this computer program has being established by the service providers operating in Western Australia, the working model will be completed to enable it to be used by transport agencies. This computer system contains the locality of each land parcel in the metropolitan area and when highly variable pickup routes are entered, with the data of the daily pickup points, the routes can then be calculated and produced on a printout for each driver. The added benefits of this program will be the ability of the coordinator or service provider to access such information as the identification of a bus with a wheelchair hoist or management of fleet maintenance. This system will be available free of charge to all service providers.

In establishing the community transport scheme of integration or brokerage, Pund (1986, p. 35) sees the key factors to the success of the St. George Community Transport project in New South Wales as being:

- identifying organisations that own vehicles,
- negotiating with owners and defraying costs,
- insurance,
- the Department of Motor Transport, registration of vehicles and transport policy, and
- advertising.

Pund (1986) saw that a critical starting point to the establishment of the integration scheme was to discover the availability of small

vehicles within the community through questionnaires which have the advantage of uncovering the reason for the need of these vehicles or mini-buses.

In the St. George scheme, following the identification, the owners were contacted to establish if they would be willing to become part of the integration scheme. A reimbursement was considered necessary to defray costs and make the scheme more attractive to the owners of the mini-bus. Various means of providing reimbursement were pursued. Considered were: submissions for government grants, but only a small amount was approved; local business and service clubs to make donations to the scheme, again only a small amount was donated; local motor mechanics to provide at cost or free maintenance to the bus owners, many owners had a church member groups maintain the bus; and, a cost per kilometre to be paid by the user and the replacement of fuel that was used. The last form of reimbursement appealed to the bus owners and provided a low cost of transport to the user. The St George scheme needed little subsidisation, apart from the cost of the employed coordinating staff.

The St. George project gives the highest preference to the aged and disabled (Pund, 1986, p. 24) The other categories of eligibility are broadly decided by "geographical location", "purpose of use", "funding to group", and the "number of people using the bus". If other things are equal, one group will be given preference over others. However, Holsman (1982, p. 85), recommends that "maximum effort should go to meeting the needs of the individual", as he believes that "the individual frequently become subservient to group needs".

Licence and insurance. Insurance, was seen by Pund (1986, p. 37) as a difficult issue in the early stage of implementation of the NSW integration scheme. Transport providers were concerned about the damage that could be caused to their bus by a driver not belonging to their organisation. The solution lay in a coverage of the volunteer drivers and for all vehicles to be comprehensively insured. Also, a compulsory Third Party cover for passengers with proper registration of the vehicles is considered necessary for those involved in the scheme.

The issue of licence and insurance for the community transport providers remains of concern to many in Perth. As Nolan (1989, p. 32) states, "the legal requirements and implications of these issues are not fully understood". She further suggests that it is necessary to clarify and simplify the range of issues concerning the licence requirement, regardless of whether the bus is used in the integration scheme or just for the transport needs of one agency.

The issue regarding the number of passengers allowed on a bus, and if a fare was to be charged for this service would an 'F' class licence be needed, requires further clarification. The law currently requires a bus driver to have an 'F' class licence if a fare is to be collected (Richard, 1989, P. 14). What type of insurance will be necessary to cover the transport operation? Recently, the Department of Community Services and an insurance company have developed a policy to cover personal accidents, particularly for volunteer workers, but this still leaves the issue of motor vehicle and public liability insurance open to negotiation.

Integration and drivers. The St. George project is seen by many of the community transport providers in the eastern states as being a successful integrated transport project and various services have modelled their provision of service in a similar fashion to this project (Carnegie, 1990, Edmunds, 1989). Each provider has their own input towards the success of service provision. The president of the Marrickville-Canterbury Community Transport Association (Sicurielle 1986-87) stresses that a full-time driver and clerical support for a "needs" based service are essential for any transport service. The Mosman Community Services coordinator (Schoenmaker, 1990, p. 2) also recommends the need for a full-time driver, who sees the job as being more than "just a driver". She further states that attributes such as, "First Aid training, non-judgmental attitude towards the clients, energy and resourcefulness" are high on the priority list.

Hyde (1986, p. 68) states that although it is possible to maintain a highly personalised, flexible door-to-door service, the transport provider has to develop and maintain a large pool of volunteers in order to sustain this service. Morgan (1987, p. 78) notes that traditionally volunteer drivers have the reputation of being accident prone, and with the annual medical and driving tests now required in New South Wales (NSW), a move away from voluntary drivers has occurred.

The issue of paid versus volunteer driver still needs much research. In the event that an integration scheme is implemented in Perth it is seen that a large pool of drivers may need to be established to cater for the demands of the integration. Alternatively, a full-time paid

driver could supplement the scheme. With the advent of an increase in HACC funding it is now possible to employ more drivers, this has transpired in NSW and WA. A Dial-a-Ride scheme (Spicer, 1990) which operates in Fremantle and Cockburn, W.A., has a full-time paid driver for its service funded by HACC.

Management of the integration at local level. It is possible for the integrated transport project to keep the financial cost contained if resources and volunteer help is available. Local or community level, by virtue of its name, implies that members of the community must be involved.

In two Annual Reports from the eastern states the coordinators recommend the need for management at a local or grass-roots level. Further, in one report from Bankstown, NSW (1990, p. 4) a Committee comprising local residents has taken on the role of broker. The Committee undertakes the tasks of matching vehicles to groups, collecting fees and reimbursing the bus owners. Pund (1986, p. 42) states that the local people in the Management Committee of the St. George project have been instrumental in solving several issues central to the establishment of the project. Although no actual service user is represented on the Committee, the employed staff have knowledge of the clients' transportation difficulties and needs. As Nolan (1987, p. 37) states, the provision of the service can best be identified and anticipated at local level, making the transport issue a "social planning concern".

Role and Funding at local, state and federal level. At a Search Conference (Clark, 1986, p. 44) representatives of community transport provision throughout the metropolitan area of Perth, agreed in principle that the local government authority and its welfare staff could undertake the role of coordinating the local community transport services.

At a Committee meeting of the Community Transport Forum ("HACC Input", 1990), which was attended by a representative of the HACC program, discussion centred on the need for coordination or pooling of transport resources, and the possible extension of the services provided by the HACC. These services were to include the hostels and nursing homes, on a cost recovery basis. Further, it was seen that funding would be less difficult to provide for coordination and administration services, than to purchase more modified community buses.

The WA State government should be seen as playing a "vital role in providing a means of organisation and direction to ensure that transport needs are met" (Morgan, 1987, p. vii). This role is provided by NSW, and the community transport organisations lobby the Public Transport Authority to provide a relevant community service where it is needed. In addition, the Authority also administers the HACC funds which are used to appoint coordinators in local areas to organise brokerage schemes. In many cases the funds of the HACC program are used to purchase a bus for the integration project.

Carnegie (1990, p. 4) states that most of the funding for the Bankstown Community Transport Incorporated is received from the Ministry of Transport through the HACC program. The HACC funding ensures in part the continuation of the coordination scheme. The transport service is able to extend its service provision beyond the HACC target group because of the Bankstown City Council's contribution of fuel and maintenance. The Council also covers registration and insurance of the two community transport vehicles. Further, Stone (1986, p. 11) asks, can the community transport service remain a separate entity operating as a welfare activity working on strategies to overcome the problems of funding and the increasing demand for its service.

It is recommended by Holsman (1982, p. 84) that the major responsibility should lie with the Councils and Community groups, which can deliver the provision of this service through a coordinator. The ultimate aim is for a better use of existing transport resources within the community.

Holsman (1982, p. 68) perceives the need for a substantial amount of funding, as the "prime determinant of the success or failure" of a programme such as the integration of community transport. Funding enables workers to be employed to examine comprehensively the needs of the transport disadvantaged and ensure that conditions placed on grants are not detrimental to the programme.

Payment for this service - is it a welfare solution? In an evaluation of the community bus service at the City of Stirling,

conducted by Richard (1989a, p. 14) it was found that 80 per cent of the passengers using that service agreed to a payment of fares. The responses given for the willingness to pay for this service varied from "no other transport available", "convenience of the service" and "housebound, if the service was no longer provided", give some indication that to extract some payment of a fare is not unrealistic for a community transport service which operates from door-to-door.

In Britain, Dial-a-Ride (Department of Transport ,1986, p. 23) provides a community service which operates door-to-door. The charge for this service differs from no-charge in some districts, to a call-out fee plus mileage. As stated by Richard (1989a, p. 14) given that the City of Stirling comprises 30 suburbs and covers an area of 11078.08 hectares, careful consideration needs to be made on the structure of a fare.

Vaisvila (1987, p. 90) emphasises that for reasons of dignity, a fare must be charged for community transport provision. It is vital that transport does not become a welfare solution. She sees the "welfare solution" such as using volunteer helpers as a solution which in the future may become an economic burden. She also states, that due to the unpredictability of the demand on a local transport service, the small "profit" margin which should be set so as not to deter the user, but still enable the operating costs to be covered, lies in the economies of scale.

The integrated transport schemes in New South Wales have varied charges for the users of their vehicles according to the length of

time the bus is being used and the distance the bus covers. The user group usually arranges for fuel replacement and the prices are set to cover the wear and tear, insurance and fuel (Pund, 1986, p. 26). In the case of users being unable to pay, the St. George project may waive payment pending the funds available and the financial situation of the group.

The Mid-Hunter Community Transport provider (1990, p. 50) modelled after the St. George project established a group membership in 1987 for its clients. This entitled them to monthly newsletters, a discount fare on group outings, and a voting right at the Annual General meeting. In addition, it also increased the group's lobby base and community representation.

The growth in the demand of community service and low levels of funding are causing the transport organisers some concern as only half of the cost of the service was recouped through the means tested fares. The various models of transport provision incur different costs and the fixed routes, as opposed to the costly demands of the responsiveness services, still need subsidies to continue (Stone, 1983, p. 21). Similar to conventional public transport, community transport must be seen as a service rather than a profit making enterprise.

Trial base scheme needed. It has been put forward by Nolan (1989, p. 36) that a regional coordinator be appointed on a trial basis. The responsibility of this person would be to establish a brokerage service with a delivery at the grass-roots level.

Extensive monitoring of the impact of this service can be undertaken by the Department of Transport. Vaisvila (1987, p. xv) further recommends that any trial should be followed by a cost benefit analysis which must be undertaken before a final commitment on transport provision is made. She also states that the Department of Transport would be in the best position to undertake this task.

Given that funding has been made available to the Department of Transport for the purpose of engaging the services of a regional community transport development officer(s), it appears that it needs only the appropriate model or opportunity to make the integration concept a reality (Nolan, 1989, p. 37).

A recent study undertaken in Perth by the South East Metropolitan Local Authorities Group (SEMLAG) (1989, Appendix H) on transport needs of the younger disabled, it was recommended that a brokerage role be developed, with the aim of using the available resources within the community. Twelve organisations have registered interest in becoming part of this integration scheme.

According to Richard (1989a, p. 16), some organisations within the City of Stirling have already begun on a small scale to work together during a crisis. For example, after a bus had broken down, and when the demand for transport could not be met with existing vehicles, it was possible to borrow another organisation's bus during those times that bus was not being used. Payment for this was replacement of petrol and the provision of a driver.

The concept of integration has the possibility of becoming a reality in Perth, but it needs the cooperation of all the players involved in the provision of community transport. Collaboration is needed at all levels of provision and this should include the funding bodies; local, state and federal government departments; the owners of the vehicles; and, the clients.

A degree of teamwork and patience is required by the service providers with regard to sharing the organisation's bus, the possibility of a different bus driver and a possible change to the usual service provisions of that organisation. Agreement on the issues uncovered in the literature such as, payment of fares, management of the transport service at local grass-roots level or through the Department of Transport, to use paid or volunteer drivers need to be discussed by all the players involved in the integration scheme. A degree of careful organisation is needed in recruiting the drivers and mobilising the vehicles and before any scheme is implemented, agreements to these issues should be pursued.

Community transport is often only a part of an overall package that is provided to the client (Clark, 1986, Appendix 3). An increase in the demand for this service may result in an inability to meet this expectation at times. In addition, Hodgkin (1989, p. 1008) states that, "the more desperate the problem, the more likely that a credible solution to it will be adopted".

Given that community transport provision is not yet at the desperate stage, Perth has the unique advantage of implementing the best model

or programme applicable to the local environment to meet the increase in demand for transport. What may be required is a scheme of integration to enable the service provider to meet that need. Before the scheme can come to fruition it needs the willingness and the means to make this project successful. This study will therefore undertake to inquire if there is a willingness on the part of the service provider operating within the bounded area to take part in a scheme of integration.

CHAPTER 3

Conceptual Framework

This chapter focuses upon how the research questions were generated for this study. It discusses the development of a conceptual model of a transport provider.

The conceptual framework was established to show the relationships between the variables and problems which related to the research question. The refinement of the framework draws heavily upon the literature review in the method of meta-analysis. The unit of analysis is each of the 26 agencies in this study providing community transport within the boundaries of the City of Stirling. Within this frame of reference there is a need to identify the perspectives and attitudes of the individuals in those units, towards the provision of one integrated community transport service.

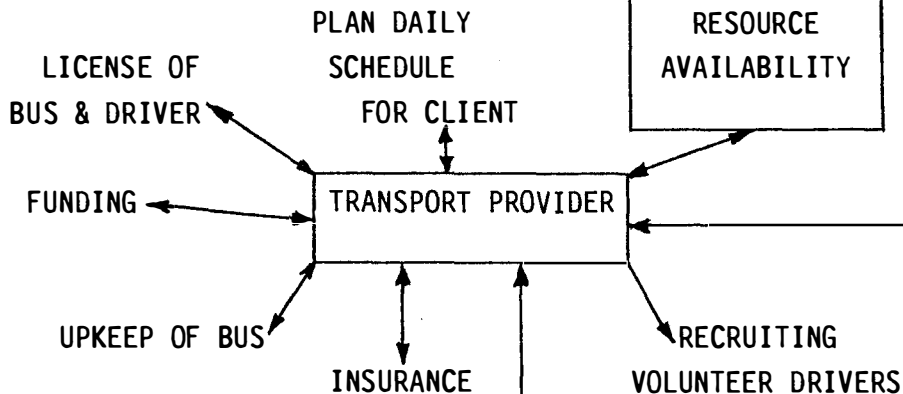
There are many factors which influence the provision of this service and the literature has revealed that the provision of community transport is complex. Figure 1 (see next page) delineates the conceptual framework of a community transport provider and outlines the factors which are influencing the delivery of community transport provision.

STAGE 1.

TRANSPORT NEED

RESOURCES

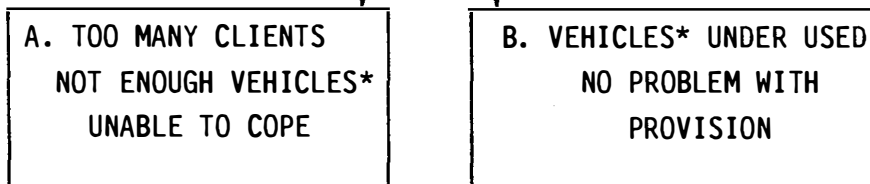
STAGE 2.



STAGE 3.

TRANSPORT PROVISION

STAGE 4.



STAGE 5.

3. INTEGRATION OF TRANSPORT PROVISION TO MEET THE OVERLAP.

Figure 1. Conceptual Framework of a Community Transport Provider.

Note. * Can be a small bus or volunteer's car.

The Stages of the Transport Provision.

Stage 1. It has been established from the literature that the human services are faced with ever increasing numbers of elderly and disabled in need of transport provision to enable them to gain access to medical attention, shopping for provisions and the opportunity to participate in physical and intellectual activities. Every opportunity to achieve access to alternative transport provision should be given to those people unable to use the conventional public transport system. As Kahn (1979, p. 163) states, "a person in need of services will seek them wherever possible". Given that the opportunity to access this service is possible, it may still be denied to that person if, the eligibility criteria does not apply to him or her or, if the human service is unable to cope with the demands of its clients due to the lack of available resources.

Stage 2. The provision of community transport is contingent upon a number of variables as depicted in the conceptual framework. In the first place, it identifies prerequisites in terms of securing resources such as funding, or vehicles. Subsequent to obtaining these resources, there is a further need to satisfy a number of requirements such as the eligibility criteria of the client. It must further deal with considerations such as: insurance, for both the driver and vehicle; volunteer driver recruitment, to meet the demands of the service roster; and, to access funds for upkeep of the bus or car to provide this service to the client.

Stage 3. Each human service organisation's input and output of its services is reliant, and restricted to the availability of its

resources. The provision of transport may be thought of as an outcome of satisfying the above criteria. To accomplish the provision of transport the service can take two different paths contingent to the conditions of its client eligibility, funding criteria, and resource availability.

Stage 4. At this stage of service provision the providers in Box A encounter variables influencing the service which may be; the limited funding source, which could affect the ability to employ such people as bus drivers and coordinators who are considered essential to facilitate the provision and supervision of the service; the lack of availability of vehicles, which may be a bus or a volunteer's car with driver; the changing client base, coupled with the need for the service provider to adapt to this change; and, the demands of the clients which may exceed the supply of vehicles.

A converse aspect of transport provision in Box B is the possibility of under utilisation of available vehicles due to the eligibility criteria placed on the clients of that organisation. It may be that only a limited number of clients are given access according to the organisations' capacity to deal with the clients. Further, if that organisation is catering to the transport needs of a specific client group, that group may be small in number which in turn would explain the under utilisation of its resources.

Stage 5. The human service organisations are operating in an era of economic restraint, where organisations are competing for the same funding resources irrespective of source and in a time of increasing

pressure to become more effective and efficient. Further, the pressure of the fragmentation may make it imperative to think of integrating or coordinating with other services for the continuation of that service to be possible.

Research questions

The issue of responsibility remains foremost in the minds of some of the service providers. But whose responsibility is transport provision? Given that a need for the provision of community transport has been established as seen in Chapter 2, is it a welfare, or transport issue? Why has it taken almost five years for the prospect of transport integration to reach Perth?

Although integrated community transport service models are available from overseas and the eastern states, as discussed earlier, there is a lack of available models of integration within the state of Western Australia. Perhaps, in Perth the opportunity for integration has not presented itself yet? Further, prior to the implementation of any model of integration it is imperative that identification of the clients' demands and the willingness of the service provider regarding integration are established.

There are many factors influencing the provision of community transport service, the research to investigate all of these factors would require time and resources beyond the scope of this study. For this reason, and because this was seen as most pressing, the resource availability was chosen as the primary focus of this study.

The identification of resource availability is paramount to the question of integration for the transport service, for it is precisely the availability of the resource of vehicles, that underlies the question of integration. The research questions fundamental to this study are stated as follows:

1. To what extent are the transport providers able to meet the demands of their clients?
2. To what extent are the organisation's transport vehicles fully utilised?
3. Are the transport service providers, operating within the City of Stirling, interested in becoming part of an integrated community transport service?

The assumption underlying the questions stated above is:

Will the integration of transport services, avoid or minimise the purchase of more vehicles to meet the expected increased demands on this service?

Integration may be seen to be an option of sharing the resources available between those providers with too many clients and not enough vehicles and, other organisations who are able to provide services to their clients and are willing to share their vehicles.

CHAPTER 4

Design of Research Methodology

In this Chapter the techniques of the qualitative meta-analysis and procedures used in this study are outlined and discussed. The method of data collection and the instrument used in this study are presented. The chapter concludes with the ethical considerations for the subjects.

Objectives of the Qualitative Meta-Analysis

In the present study it was seen that the essential components of the design were to select and gather relevant literature pertaining to community transport and models of successful integration of community transport provision from which to build a framework to formulate questions. A synthesis of findings from a discreet body of non-experimental studies, discussions, reports, conference, and workshop papers, journals and abstracts gathered for the period 1975 to the present, were drawn together in a matrix of qualitative meta-analysis.

This matrix concentrated primarily on local and national literature, but included are data from the United States of America, Britain and Europe. The findings of the meta-analysis gave insight to the problem, theories developed from this analysis may provide a possible framework for a model of integrated community transport. The objective of this matrix is to present to the reader, a large volume of qualitative information in a systematic and concise manner.

Deschamp (1983, Vol, 3, p.7) and Hyde, N. (1985, Vol, 1, p.303) successfully devised a procedure for drawing information from a large number of qualitative studies with different research modes, procedures and focus. In discursive literature reviews there is often present a high level of subjectivity. In this procedure both Deschamp and Hyde, were able to display essential characteristics of their research based on the quantitative meta-analysis devised by Glass, et al (1981, p. 232)

In this study, which has been adapted from Hyde (1985, Appendix 8, p. 1), the tables of the matrix will afford a systematic analysis of the related literature pertaining to the integration of community transport and studies concerning the frail aged and disabled. This analysis will provide substantial basis for discussion.

Based on Hyde's (1985, p. 4) study, the following steps were undertaken to obtain the related literature:

- delineation of the research area to be synthesised;
- identifying and obtaining the literature;
- summarising the literature;
- developing a coding schedule;
- coding the studies;
- synthesising the coded data into tables;
- analysing the tables; and,
- writing the results of the analysis.

This approach was seen to be the most efficient way of gathering and analysing the wide range of literature available on community transport, at this time.

Delineation of the research area to be synthesised. The definition of community transport encompassed such factors as, an alternative mode of travel, provided by non-profit organisations and community groups, which is flexible, adaptable and responds to the individual's needs by taking into consideration such factors as the passengers' ages, disability, their destination, and times of travel. A broad literature search was conducted to identify any study undertaken in this area.

Identifying and obtaining the literature. A computer search to identify the relevant literature was initialised at the Western Australian College of Advanced Education libraries of Churchlands, Nedlands and Mt. Lawley. The computer service included TRIS, ERIC, APAIS, ANB, NTIS and Dissertation Abstracts. The broad descriptors included: "transport", "community and paratransit", "aged", "elderly", "coordination", "integration", "frail adjuncted to aged", and "older adjuncted to adults".

A further computer search was conducted at the Department of Transport Research library. The department's extensive library includes reports, journals, and a data-base of community transport providers. Further, direct communication with the transport providers in the eastern states, resulted in obtaining additional

material. These however, were not research studies but Annual Reports and profiles of transport providers. The reference section of the reports and journals provided additional research material. Also, relevant studies were obtained from the Department of Health and a Research Consultancy in Perth.

Reading and summarising the literature. Each article obtained was recorded on a card index. A summary of each study was made to include details of the type of publication and then sorted according to the variables listed. From the literature identified, six articles were discarded because these did not contain the appropriate research material pertaining to the integration or coordination of community transport.

Developing a coding schedule and defining the coding criteria. A literature analysis technique adopted by Hyde (1985, p. 3) is the use of a coding schedule, the purpose of which is to provide a method of weighting or analysis of the components of the study according to a set of pre-determined factors. In this study the following variables are used:

Country of origin

Type of publication and country

Type publication and year

Focus of the article

Research findings or recommendations

Comparing these factors, for example across time and focus of inquiry, will permit an interpretation to be made on the progress and trends of the social climate at that time.

Data Collection for the Second Component of the Study

Geographic location of study. A local government authority was chosen to allow for a concise study. Holsman (1982, p. 73) concluded that a concentration on a single suburb or local authority would have given a better appreciation of local deficiencies of transport problems, rather than focus on the problems relating to mobility.

The City of Stirling with a locality area of 11078.08 hectares was considered to be an excellent location given that 16.4% of the 174,900 residents, are aged 60 years and over (City of Stirling, 1987-88 Annual Report, p. 2 and the 1986 census). In addition, there are numerous nursing homes, hostels and self-care units located throughout the City of Stirling, which may be deemed to be generating the need for transport.

Selection of Subjects. The subjects taking part in this study were the respondents to a community transport survey undertaken by the Department of Transport (DOT) in 1989. The DOT survey (Annual Report 1989, p. 32) was conducted to establish a data base of current service providers throughout the metropolitan area. This directory is expected to be of benefit to the DOT and all community transport providers, by enabling access to information of other providers in their local area.

It needs to be clarified that there may well be other transport providers operating within the City of Stirling community however, due to limited time and resources for this study, it was decided to use the information from the data base which confirmed the existence of the service providers within the specific bounded area. Those providers operating within the area of the City of Stirling, and responding to the DOT survey numbered 23.

Included in this study were six additional human service organisations which were sent a questionnaire. The Chairperson of the Transport forum requested that three of these organisations be included. The remaining three were chosen because these had not responded to the DOT survey. The rationale for this was to validate the existence of those organisations as transport providers and to determine why these did not respond to the DOT survey.

The administrator of a regional hospital located within the City of Stirling was contacted by telephone to inquire if the hospital had obtained the vehicle offered by the Ryder Cheshire Foundation for the transport of patients (Whitber, 1989, p. 22). This vehicle was to facilitate those patients who are transport disadvantaged and unable to come to the hospital for regular needed follow-up treatment. The administrator stated that the offer had not gone through and transport provision for the patients was still mainly by the special purpose taxi service. Although the administrator did not take part in the study, he did express great interest in participating in an integration scheme should one result from this study.

Instrument used in the data collection. In this study the instrument used for the data collection was a conducted interview. The design of this instrument (See Appendix B) included seven questions based on the Department of Transport's Community Transport Survey conducted in 1989. Given that six service providers had not responded to the DOT survey, but were to be included in this study, it was decided to include the seven questions to verify actual transport service provision.

The standard interview required the transport provider to give "yes" and "no" answers, nominate the appropriate choice(s) in multiple answer questions, or reply with brief responses to a series of questions.

The questions related to aspects of service provision which included the destination, who was using the service, the availability of the vehicles delivering the service, and the future anticipated demands for the service.

The items to be elicited by the instrument are broadly as follows:

The locality of service operation. To determine if the service provider operated within the specified bounded local community.

The mode of service provision. To determine the delivery mode of transport provision that is available to the client. Are the providers undertaking the transport provision using the vehicles belonging to the organisation, the staff, or someone else's vehicles?

The destination and users of the service. Whether the destination of the client is parallel with the destination of the clients in other organisations and those identified in the literature of other studies.

Funding and eligibility criteria. To determine if the eligibility criteria applied to the client of the service are as a result of funding, or membership of the organisation.

Availability of the bus(es) when not in use. To determine if a pattern of availability of vehicles could be seen during those times when a peak demand is placed on the transport service.

Meeting the demands of the clients. To determine if the service provider is able to meet the daily demands of its client group. This was an important question upon which the study focused the specific question of integration. The responses sought in the next sub-section addressed the service provider's willingness to share its vehicles.

Anticipating the future needs of the service. To determine if the service provider anticipates a change in the demand for its service and whether it has prepared strategies to deal with the change.

Interested in an integration service. To determine if the transport provider was interested in such a service. It would be explained to the provider, if they inquired, that the integration

service meant the sharing of their bus or volunteers' with other organisations within the study area and that reimbursement would need to be negotiated.

Pre-test of the Instrument

A pre-test of the instrument was conducted on six community transport providers operating outside the City of Stirling. As a result of this test a number of questions were modified in the instrument.

Procedure used in the Data Collection

On the completion of the sample selection, the person in charge of the transport provision was contacted by letter (see Appendix A) which explained the reason why, and for whom, the study was being conducted. In addition, the letter emphasised the importance of their cooperation. A stamped and self addressed envelope was included with this letter. The subject was asked to detach and return by mail, the provided slip which allowed them to nominate the method of interview, which could be either at their office or by telephone. A telephone follow-up was conducted a week after the nominated return date. In this follow-up, the transport providers were given the choice of an interview over the telephone at that time.

Research Ethics

The interviewees were:

- * given the option to participate in the present study.
- * given the assurance of confidentiality of their organisation which would be maintained in both the data collection and the research report.

- * assured that this research is a study, and in the event that problems associated with transport provision are identified, further research may need to be undertaken before a solution is formulated and adopted.

CHAPTER 5

Data Analysis and Findings

In this chapter the results of the collected standardised interviews are presented and analysed.

Contacting the Community Transport Providers. A total of 30 letters inviting the transport providers to participate in the study were distributed. This resulted in the return of 10 detachable forms requesting appointments. Of the remaining 20 subjects, 2 contacted the researcher direct, the remaining 18 were contacted by telephone one week after the closing date. Direct contact with the person in charge revealed that 3 human service organisations did not provide a transport service, one person requested to be taken off the DOT data base as the group no longer undertook transport provision, and the remaining 14 were interviewed via the telephone.

Locality of the service operation. Data collected from the 26 transport providers showed that only 5 (19.23%) of the services operate solely within the City of Stirling's (CoS) boundaries. Of the remaining 21 (80.77%), six services operate in the local suburbs surrounding the CoS and 14 (53.85%) operate throughout the metropolitan area. One organisation specified a trip to Mandurah or Serpentine (one-day trips) on a regular basis.

How is the transport service provided? It was evident from the data that 21 of the 26 organisations, provide more than one mode of

transport. One organisation has a fleet of buses and half of these are fitted with a hoists. Of the five remaining organisations, four provided the service with the help of volunteer drivers in their own cars and one organisation used its own bus with a volunteer driver.

Table 6 shows that 18 (69.23%) organisations are providing transport with the help of volunteer drivers with their own cars. Many of the volunteer drivers are elderly themselves. A representative of one organisation stated that there was a decline in the number of helpers, due to the elderly age of the volunteers. Three church communities have combined volunteer services in an attempt to improve the service delivery by providing a larger pool of volunteers to help people in need of transport.

Further, Table 6 shows that the most used mode of transport provision is by bus, either the organisation's own or someone else's bus with a volunteer or staff member driving. It can be seen that the staff of the providers are used in nearly one third of the organisations.

Two service providers use a combination of, the staff's cars, the Red Cross bus and subsidised taxis to transport clients. When an outing is planned and the taxi is not available, due to repairs or excessive demand on the service, the residents have to stay home. This supports the statement by the taxi coordinator in the literature review (Pearson, 1990), on the shortage of special taxis in Perth.

TABLE 6

HOW IS YOUR TRANSPORT SERVICE PROVIDED?

VEHICLE	DRIVER	ORGANISATIONS	PERCENTAGE	TOTAL
VOLUNTEER CAR	VOLUNTEER	18	69.23	26
ORGS BUS	VOLUNTEER	10	38.46	26
ORGS BUS	STAFF	10	38.46	26
NOT OWN BUS	VOLUNTEER	10	38.46	26
ORGS CAR	STAFF	8	30.77	26
NOT OWN BUS	PAID	8	30.77	26
ORGS CAR	VOLUNTEER	6	23.08	26
STAFF CAR	STAFF	5	19.23	26
ORGS BUS	PAID	4	15.38	26
SUBSIDISED TAXI	-	2	7.70	26
RED CROSS BUS	-	1	3.85	26

Note. * In this chapter in every table, each item has been calculated separately. For organisations taking part in this study n=26.

The hoist facility on the Red Cross bus is used by wheelchair bound clients at the hostel or nursing homes for the aged or disabled, so that they have access to transport for shopping or to go out to social events. The transport bus may need to be shared between a number of homes, hostels or the convalescent hospital. This is the case for two service providers where the bus is allocated as needed, on a weekly basis.

To whom is the service provided? Table 7 shows that the two major groups of users for 24 (92.31%) organisations are the elderly and disabled. Seven (26.92%) organisations provide transport to the youth. Two organisations cater to mixed age groups, two specifically providing transport for a church group and sick parishioners of any age.

When these findings are compared with the findings of the meta-analysis (Holsman et al, 1982; Clark, 1986; Pund, 1986, and Vaisvila, 1987) these show that the groups using community transport are very similar, that is, mainly the elderly and disabled person. Stone, et al, 1983, also noted that the demand for transport was growing beyond the elderly and disabled group to mothers with young children.

TABLE 7
CLIENTS OF THE TRANSPORT SERVICE

CLIENTS	ORGANISATIONS	PERCENTAGE	TOTAL
ELDERLY	24	92.31	26
DISABLED	24	92.31	26
YOUTH (10-18)	7	26.92	26
SINGLE PARENT & CHILDREN	4	15.38	26
AFTER SCHOOL CARE CHILDREN	3	11.54	26
YOUNG DISABLED (40+ years)	1	3.85	26

One organisation has a client group of young disabled people, confined to wheelchairs, living in a complex for the elderly to whom it provides transport. One organisation provides transport specifically to youth to take part in the religious and recreational activities which are offered. Travel is across several suburbs and public transport is not available at that time of night, when it is required.

What is the destination of the client? The data reveals that trips for recreational purposes (n=25, 96.15%) and social outings (n=24, 92.31%) are clearly the most catered for. Shopping trips are provided by 18 (69.23%) organisations. Trips to the hospital or for medical purposes are undertaken by 14 (53.85%) organisations. It was indicated that for many of the clients it was impossible to reach the hospital due to the need to travel across several suburbs. To use public transport meant travelling for many hours and taking several buses. Some clients are just not able to make that journey. Where buses are attached to the larger hospitals such as Fremantle, Royal Perth and Sir Charles Gairdner it is not possible for these to cope with the demand on that transport service. This is supported by the literature where seven frequencies were noted in Table 5 (see page 25-26).

Twelve (46.5%) organisations provide transport for educational purposes, five (19.23%) services take clients to church and two organisations provide transport for work. The library, a Sunday school, day-care centre, and the welfare office are destinations for three transport providers' clients who undertake these trips on a

regular basis. One organisation provides transport for their clients to reach all of the abovementioned destinations, including work.

Funding of the transport service. The organisations providing transport are categorised into six groups. There are ten religious transport providers of various denominations; eight nursing homes; four hostels or Associations for the disabled; three community groups; one convalescent hospital; and, one local authority.

The findings show that 15 (57.69%) organisations receive funding from a combination of sources. Of these, seven organisations are funded by the Lotteries Commission. Six of the seven, provide transport to the elderly and disabled and one specifically to the disabled. Clients of four providers live in nursing homes. The other three are members or clients of the organisations. Four organisations provide transport to the elderly and disabled, and two provide a service specifically to the disabled. These six receive funding from the State and/or federal government, however, only two receive funding from the HACC. The remaining four received funds from the various state and federal programmes which will not be mentioned to preserve the organisations' anonymity. Local government contributed towards the costs of three of the organisations.

Of those organisations with only one funding source, in five (15.38%) of these organisations the volunteers provide transport without any reimbursement and are happy to do so. Three organisations' funding sources are from outside fund-raising, two from the organisations' own fund raising, and one receives funds directly from the sponsoring

church. One organisation receives donations for its service from the users and one service charges for the use of its bus on a per kilometre cost, in addition to the levying of a bond fee.

Eligibility criteria of the user. Some organisations have a combination of eligibility criteria such as, the need to be elderly and disabled (due to the HACC eligibility criteria); are not able to use the public transport; do not have a relative to drive them; or, the need to be assessed by the organisations welfare officer. Ten (38.46%) of the organisations require transport users to be a resident of an aged persons or nursing home, or hostel. Two (7.69%) stipulate that the user be a resident of the City of Stirling. Six (23.08%) provide the service to any person in need. Four (15.38%) church groups provide transport only to the members of their congregation and four (15.38%) organisations require the user to be a member or client.

The strict eligibility criteria of the HACC funded organisations, which was thought to be the main reason for the restriction of transport provision to the clients, applies to only two organisations in this study. The data further indicated that to be eligible for community transport the client must be a member of a parish or club, or must be a resident of the home, hostel or hospital. Potential users in 13 (50%) of the responses would be referred to another transport provider if, the client did not fit the stipulated eligibility criteria. A disadvantage with the referral system can be the lack of knowledge of one provider about other transport providers within the local area. One person stated that occasionally that

service could respond to help, but not on a regular basis, and four organisations had to turn away the potential client because of the imposed eligibility criteria.

Availability of the bus when not in use. When the bus is not being used for transport of the clients, of the 15 bus owning organisations, eight of these vehicles stand idle in the parking area and two are stored at the driver's home. The closeness of the client's residence to the driver's home makes it economically viable as a pick-up point. One organisation has the bus put in for a service during idle time and also makes the vehicles available to the State Emergency Services and to groups for evening and weekend outings outside the normal office hours. One bus is used for the organisation's shopping trips and a work vehicle when clients are not being transported.

From Monday to Friday six of the organisations provide transport on demand or a roster. Five organisations have a peak demand time from Monday to Friday between eight a.m. and twelve noon and then again for the return journeys between one p.m. and six p.m. However, for six transport providers the demand on their service only peaks on Thursday morning between eight a.m. and twelve noon, which is due to the shopping trips which are provided by a number of the organisations. On Sunday morning between eight p.m. and twelve noon, the transport provision peaks for four providers to provide for client attendance at church services.

The data collected to determine a pattern during peak demand and availability of a vehicle in Table 8 shows that during a seven day period from the hours of eight a.m. and six p.m. there are one to three buses not in use and belonging to those organisations willing to share and integrate (see S below). Between the hours of six and eleven o'clock in the evening there are between one to four organisations with buses available per night. One organisation interested in integration, but not able to share, with a large fleet of buses does not use 20 of them during Saturday and Sunday.

TABLE 8

THE TIMES THE BUS IS NOT USED BY THE ORGANISATIONS

DAYS	MON.		TUES.		WED.		THURS.		FRI.		SAT.		SUN.	
	S - I		S - I		S - I		S - I		S - I		S - I		S - I	
All DAY	3	1	2	0	1	0	1	0	0	1	1	1	2	1
8-12am	0	1	0	0	1	0	0	0	2	0	1	1	0	0
12-1	0	0	0	0	2	1	1	1	2	0	2	1	1	1
1-6pm	0	1	0	2	0	2	1	2	1	2	1	2	1	1
6-11pm *	2	4	3	4	1	4	3	4	1	4	2	3	3	4

Note. *= One organisation willing to share two buses after office hours and weekends. S= Willing to share and integrate. I= Not willing to share, but do want to integrate.

In Table 8 are included the number of organisations with buses not willing to share, but which are interested in the integration scheme (see I above). The table displays the total number of organisations in each time period. The same organisation may appear twice in one day and again during the evening.

What happens to the clients when the providers are not able to meet their demands. Table 9 shows that 10 human service organisations resort to providing a taxi when unable to meet the demand on its service. A further five organisations stated that the client or resident would have to stay at home, because transport could not be provided and it was not possible to use the taxi. While five other organisations link in with other transport providers. Three organisations are able to call on a special Support group of volunteers who are able to help with transport.

TABLE 9

WHAT HAPPENS TO THE CLIENTS WHEN DEMANDS ARE NOT MET?

WHAT HAPPENS TO CLIENTS	ORGANISATIONS	PERCENTAGES	TOTAL
USE A TAXI	10	38.46	26
LINK WITH OTHER PROVIDER	5	19.23	26
STAY HOME	5	19.23	26
STAFF DRIVE THEM	3	11.54	26
USE RELATIVE	3	11.54	26
USE VOLUNTEERS	3	11.54	26
MAKE OWN ARRANGEMENTS	2	7.70	26
USE RED CROSS	1	3.85	26

Meeting the demands of the client group on a daily basis. On a daily basis 18 (69.23%) service providers are able to meet the demands of the client group. Table 10 shows why the remaining service providers are not able to meet the clients' demands, and why those organisations which are able to meet the demands of clients, cannot share resources. The lack of available transport resources such as a bus or a car, drivers and the lack of funding are the most frequently cited for those service providers not able or willing to share their resources.

Further, in Table 10 one of the groups of volunteers stated that, if they had possession of a bus it would be used every day and they would share this bus with other providers. Another group explained that due to the age of the elderly volunteers they would not be able to respond to regular calls for transport if, they were to share.

TABLE 10

WHY TRANSPORT PROVIDERS CANNOT MEET CLIENT DEMANDS

OR SHARE THEIR RESOURCES WITH OTHER ORGANISATIONS

ORGANISATIONS	CANNOT MEET DEMAND	CANNOT SHARE	TOTAL
NOT ENOUGH BUSES	5	5	26
NOT ENOUGH DRIVERS	6	3	26
NOT ENOUGH CARS	5	5	26
NOT ENOUGH FUNDING	5	3	26
NOT ENOUGH COORDINATION	2	2	26
NO BUS WITH HOIST FOR WHEELCHAIRS	2	-	26
VOLUNTEERS ARE ELDERLY THEMSELVES	-	3	26
VOLUNTEERS WITH LIMITED TIME	1	-	26
CONCERNED ABOUT INSURANCE COVER	-	2	26
ORGANISATION'S POLICY	-	1	26

Willingness to hire or loan their vehicle. In the group of five organisations able to meet the demands of clients and prepared to make their transport available to other organisations, three wanted to do so under the arrangement of reimbursement of fuel and two on the basis of a cost per kilometre. One service provider suggested a fixed fee for a half or a whole day's hire of the vehicle and another stated that payment for the hire of the driver would be sufficient as reimbursement.

Anticipating an increase in the demand for the service. The data revealed that 16 (61.54%) of the transport providers anticipated an increase in the demand for their services, thirteen of the providers had plans and strategies to meet this demand. These plans included the reduction of full day's booking of a bus to a half day; the recruiting of more and younger volunteers (n=5); borrowing buses from other complexes (n=1); and, liaising with other service providers. Two providers had plans to purchase a bus and one organisation planned to have a bus fitted with a wheelchair hoist. Further, one transport provider had plans to advertise the availability of their bus during the idle time, and one provider intended to make the organisation's staff more aware of the availability of the bus during the weekend.

Interested in integrating with the community transport service. Seventeen (65.38%) of the 26 transport providers are interested in becoming part of an integrated service. Table 11 presents a break down of these organisations and included in this table is the profile of the clients who are using the transport service. It further indicates whether the organisation has access to a bus. The data indicates that each of the organisations provide transport to the elderly and disabled. The profile of transport users further provides information on the eligibility criteria of the clients. The church group is the least restrictive in its eligibility criteria and provides transport to a wide range of people in need.

TABLE 11

COMMUNITY TRANSPORT PROVIDERSINTERESTED IN THE INTEGRATION SCHEME

PROFILE OF ORGANISATIONS	TOTAL 17	PROFILE OF CLIENTS	HAVE NO BUS
NURSING HOMES	6	A, B, E, F & G	2
CHURCH GROUPS	4	A, B, E, F, I & J	3
COMMUNITY GROUP	2	A, B, C & G	2
ASSOCIATIONS	2	A, B, G & I	1
LOCAL AUTHORITY	1	A, B, & D	-
HOSTEL	1	A, B & E	-
HOSPITAL	1	A, B & C	SHARE

Note: A=Elderly; B=Disabled; C=Residents of home; D=Residents of City of Stirling; E=People in need; F=Youth; and, G=Members of the Church or Association; H=Disabled over 40 years old; I=Single parent and family with children; and, J=Sick parishioners.

In Table 12 the reasons given for not becoming part of the integrated service by the nine remaining providers are broken down into the organisations and reasons for not wanting to become part of the scheme such as: the providers required more information before committing the organisation to any integration of services; the concern regarding insurance cover for the bus and driver; the concern of operational costs of the integration service; the coordinating aspect of this service would be a problem; there are not enough buses

and drivers for their own needs; the providers vehicles are used all the time; the provider was concerned about the wear and tear of their old bus, the organisation has a policy not to share; and, do not want to be involved in an organised service.

TABLE 12
COMMUNITY TRANSPORT PROVIDERS NOT INTERESTED IN THE SCHEME

PROFILE OF ORGANISATIONS	PROFILE OF CLIENTS	REASONS AND CONCERNS OF PROVIDERS
CHURCH	A, B, F & I	NEED MORE INFO. / WEAR & TEAR OF BUS
CHURCH	F	OLD BUS / INSURANCE OF BUS
CHURCH	A, B & F	USING SOMEONE ELSE'S BUS
HOME	A & B	LACK BUS & CARS / COORDINATION PROBLEM
HOME	A & B	COORDINATION PROBLEM
HOME	A & B	MANAGEMENT POLICY OF NOT SHARING
COMMUNITY	A & B	OPERATIONAL COSTS / NEED REIMBURSEMENT
COMMUNITY	A, B & E	ELDERLY VOLUNTEERS IN CARS CAN'T COPE
ASSOCIATION	B	NOT A TRANSPORT SERVICE

Note: A=Elderly; B=Disabled; C=Residents of home; D=Residents of City of Stirling; E=People in need; F=Youth; and, G=Members of the Church or Association; H=Disabled over 40 years old; and, I=Single parent and family with children.

The data indicated that 10 (38.46%) of the 17 providers who are interested in becoming part of the integration service are meeting

the demands of their clients. Further, it was revealed that of the 16 providers expecting an increase in the demand for the transport service, it was found that two of these organisations were willing and able to share resources. The findings showed that 13 (50%) of the providers interested in the integration of the transport service were also expecting an increase in the demands on their service. Integration may be looked upon by the service providers as a possible solution to the anticipated problem of the increase in the demand on its transport service.

It was observed that three of the transport providers, interested in becoming part of the integrated service owned their own bus and were willing to share their bus. Of these, two did not expect an increase in the demands for their service. A fourth organisation, in possession of its own bus, was not interested in integrating until an assurance could be made concerning the wear and tear of the bus. If that provider was given more information, a change of mind may be possible and this would increase the total to four providers willing to share their vehicles for the integration scheme. Further, the data indicated that nine of the 17 organisations interested in integration did not have a bus, but used volunteers, taxis or someone else's bus.

One volunteer group providing transport to the aged and disabled, indicated that they were interested in integrating and were also willing to share the volunteers and their cars for the integration scheme. They did not expect reimbursement for this service as they were funded by the State government, the Lotteries Commission and

their own fund raising. They also indicated that an increase in the demand for their service was anticipated and that they had no plans for meeting this demand.

In the final analysis it can be seen that nearly two thirds of the providers are interested in the concept of integration and four providers had a bus to share. A problem may arise with the nine providers not in possession of their own bus. This problem is one of supply and demand, which undoubtedly will occur for those in need of a bus at the same time on the same day. Should an integration service be implemented, negotiations would need to be entered into with the bus owners and the coordinator of the integration service to facilitate the users.

Summary

The major findings of the data analysis showed that 92% of the organisations interviewed provided transport to the elderly and the disabled. The provision of this service is undertaken by a variety of modes and 69% of the organisations provide transport with the help of volunteers using their own cars. Other modes of service provision may be a small bus driven by either a staff member, a paid driver or a volunteer. In general, 54% of organisations in possession of their own bus provide transport to take the clients to a medical or hospital appointment, with the majority of the clients using the transport for social outings, recreational or shopping trips.

The findings showed that 69% of the organisations are able to meet the demands of the clients, and 65% of the provider's spokesperson

indicated that they are interested in becoming part of an integrated transport service within the City of Stirling. For those 35% of service providers unable to meet the daily demands of the client the main reasons appear to be the lack of available resources, drivers, and funding.

Of the 54% of providers who own their bus(es), only 12% are willing to share their vehicles for integration purposes and 4% will share, but not integrate, until an assurance is made on compensation for the wear and tear to their bus. Finally, 4% are volunteers using their own cars, willing to share and want to integrate with the other community transport providers.

CHAPTER 6

Discussion and Conclusion

This chapter discusses and interprets the findings presented in relation to the research questions. Conclusions will be drawn from the findings of the meta-analysis and the material presented in Chapter 5.

The Provision of Community Transport

General comments. The results of the interviews with the community transport providers operating within the City of Stirling, confirm the existence of the elderly, frail aged and disabled person as transport disadvantaged and who are living in their own home, nursing homes and hostels. To enhance their quality of life the provision of mobility is undertaken by the majority of organisations with the help of the volunteers who drive their own car, and volunteers or staff who drive the organisations' buses.

This study was undertaken to gauge the attitude of the transport providers towards the aspect of integrating the community transport resources within the City of Stirling. As expressed earlier, the primary focus of this study was in the first instance, to determine the extent to which the transport providers are able to meet the needs of their clients. Secondly, to what extent is the service provider utilising its available vehicles and, lastly, are the providers willing to become part of an integrated service if one was to be established within the City of Stirling?

Integration and its implications. Whilst the data collected in this study shows a favourable response by organisations to becoming part of an integrated community transport service, it is important to comment that during the interviews with the providers, when a few of them asked the intent of integration, that no specific model of community transport integration was put forward to them. It was explained to them that the concept of integration incorporated the sharing of resources such as a bus, or volunteers and their cars, with other community transport organisations. In addition, reimbursement for this service to cover the wear and tear of the bus, and fuel replacement could be expected, but would need to be further negotiated.

A note of caution should be given in that, the results of this study needs to be considered in the context of an anticipated service. Given that no explicit framework or model was put forward concerning the detailed mechanism of an integrated service, the provider may choose, or decide not, to become part of that service after additional information concerning the provision of an integrated service is promulgated. It had been stressed during the interviews that this study was being conducted to establish information regarding the interest and willingness of the providers with regard to the concept of an integrated community transport service.

This study has revealed that of the seventeen providers, interested in the concept of an integrated community transport service, over half (9) do not own a bus. This finding is similar to the study by Clark (p. 48) where at the Search Conference in 1986, it was also

found that the organisations in favour of coordination did not have a bus. The findings in this study indicate that 34.6% of the providers who did not own their bus, but were interested in the prospect of integration, are expecting an increase in the demand for their services. It is put forward that the integration of transport provision may be seen, by those transport providers without a vehicle, to hold a possible solution to the anticipated increase for their transport demands.

As stated earlier, those at the Conference who did own a bus(es) when asked to share or pool that bus(es), were "vehemently opposed to it". The attitude of the service providers towards the concept of integration or coordination, although not changed over the last four years, appear not so intensely opposed to it as during the 1986 Conference. The reasons for not becoming part of the integrated scheme are still the same as those of 1986, that is, the concern of their organisation's being vehicle damaged through an accident; the driving standard of the drivers; and, the insurance problems associated with accidents or damage to the vehicle.

The providers are now interested in gaining more information about the scheme. As the data indicates, the providers are concerned about the possible implementing and the ongoing costs involved in this scheme; the coordination that may be involved; and, wear and tear on their organisations' vehicles. It is clear from the abovementioned concerns, that to enable a valid decision to be made on becoming part of this scheme, the transport provider needs to be presented with a framework, or a comprehensive structure of an integrated scheme.

Transport provision profile. The provision of the transport services to the clients in this study indicates that most (69%) of the services are reliant on volunteer drivers using their own cars. This is similar to the findings in the meta-analysis. Over a third (38%) of the organisations in this study, are assisted by volunteers who drive the bus, or car belonging to that organisation. The findings indicate that nearly two thirds of the transport provision is undertaken by volunteers in their own cars.

Of the 24 organisations providing transport to the elderly and disabled, 10 of these comprise church groups who offer their service with the help of volunteers and their cars. The findings also show that of the various transport disadvantaged groups, the youth also are in need of transport. This is due to the lack of transport at those times when public transport is not available. This service is undertaken mainly by the church groups. Eight organisations are providing transport to the youth so that they are able to attend Sunday school or participate in social activities. Of these, five church groups are extending transport to the youth, but only one group has a bus to provide such services. The other two church groups need to rely on someone else's bus and volunteers with cars.

The eight nursing homes providing transport are in a better position with regard to available buses. Only one of these does not possess its own bus. Five of the homes can meet the demands, but the three remaining are not able to meet the demands made on the service. This is due mainly to the lack of a hoist facility on the bus(es).

Findings further indicate that of the two groups of transport providers, that is the church and nursing home combined, only one organisation could not meet the demands placed on the service, whereas five (19%) of these organisations combined are expecting an increase on their demands. Clearly this indicates a need to plan for future provision by these two groups to cater for the expected increase.

For the service provider who is unable to provide transport to the person in a wheelchair, because there is no bus, or no bus with a hoist available, unless alternative transport provision is found the resident or client has to remain at the hostel, the nursing home or the hospital. It is assumed that the transport provider may see the integrated service as a means of gaining access to vehicles with the facilities of a hoist and that the problem concerning the lack of buses may be solved when coordination of the provision of transport is undertaken.

As the data indicates, with many of the volunteers being elderly themselves, any anticipated increase in the demand on the transport service will undoubtedly put a further strain on the delivery of those services. Thus, providers may need to look seriously at targeting a younger population to volunteer to undertake the delivery of services to those in need (Richard, 1989b, p. 1) or, the providers may need to consider using a bus to transport their clients so that few can transport many. This may result in a saving of fuel costs, particularly for the 15% of volunteer organisations who receive no reimbursement for their volunteer activities. It may also free many

volunteers, otherwise engaged with providing transport, to assist the clients with other service provisions.

The clients of the transport service. The community transport service for the majority of the organisations (92%), have a user group comprised mainly of the elderly and disabled persons. It is seen by the various government departments and the community organisations that this group is most in need of transport and are least able to realise this need. Findings have indeed substantiated this need, given the demands placed on the transport service in this study. The reports in the meta-analysis also indicate that first preference been is extended to the elderly and disabled group (Pund, 1986; Richard, 1989; SEMLAG, 1990; Schoenmaker, 1990; Carnegie, 1990 and the Mid-Hunter Community Transport, 1990).

The data has shown that the disabled person is clearly at a disadvantage if his or her place of residence does not have a transport vehicle with a hoist. One organisation providing transport to its residents, is unable to meet the transport demands of a group of younger (40+ year's old) disabled people residing at the home, because the bus is not fitted with a hoist. That organisation also anticipates an increase in its transport demands and although special taxis are used, these are not always available.

Eligibility criteria of the client. Findings in this study correspond with the findings in the literature, where most agencies or organisations have various eligibility criteria to enable the clients to receive that service. These criteria may vary between the

need to be a resident of the home, resident of the local authority or, to be a member of a church or organisation. Nearly a quarter (23%) gave transport to those just in need without imposing any eligibility criteria. By stipulating an eligibility criterion the providers are assured that they are targeting their intended clients in need of transport. However, this does not automatically signify that the transport service is reaching the entire target group. Potential clients may be unaware of their eligibility and therefore miss out on the service offered.

Destination of the client. The profiles and studies in the meta-analysis state, that the destination of the user is mainly to the hospital for medical treatment, shopping, or recreational and social outings. In this study the findings are similar. This study indicates that the percentage of people attending recreation (96%) and social outings (92%) is quite high, medical or hospital visits comprise just over half the client group.

The findings have indicated that the clients living at home who attend the hospital for medical treatment are taken mostly by a volunteer in a car, by Red Cross bus or the ambulance. The demand placed on the latter two services can mean a long wait for the client for their return journey. The provision of transport to the hospital is considered by many providers, both in Perth and the eastern states (Pund, 1986, Sicurella, 1987 and Whitber, 1989) as a problem which needs to be addressed at a state level. Given the complexity of the transport provision which includes the increase in the number of elderly patients attending the hospital for needed treatment; the

waiting time at the hospital for the appointments; and, the lack of parking space at many of the major hospitals.

The volunteer driver often has to drive across several suburbs and wait at the hospital for long periods for the client to complete his or her appointment. An option is for the drivers to come back later to collect their charges, this then frees the volunteers to transport other clients during this time. A more effective way could be to use a community bus to take a group of clients to the hospital and return them to a central point such as a shopping centre (Clark, 1986, p. 47). The hospital clients can then be transported home from the shopping centre by the volunteers in cars. In this way several volunteer drivers in cars are freed to transport other clients closer to home.

Several providers have indicated that much effort, by the staff and volunteers, has gone into helping the elderly and disabled gain access to the various recreational and social outings offered. In this way the well-being of the clients is increased and their lives are enriched. This supports the literature of Hyde (1986) and Graycar and Jamrozik (1989), who state that transport is necessary to access the opportunity to enjoy life.

Availability of the bus and the willingness to share. It was of interest to note that between two to three buses are available during the seven day week from 6 p.m. onwards from those organisations which are both willing to share their bus(es), and are interested in the concept of integration. Had this study had been conducted to address

the need of the transport disadvantaged youth in the City of Stirling it could be seen that a number of buses might be available to them at that time of night.

However, as this study was concerned with the elderly and disabled transport disadvantaged, perhaps the service providers may need to encourage their clients to utilise the bus during the evening. This is the case with one organisation which also encourages the use of its bus during the weekend. Given the findings in Table 6 (see p. 63) which shows that the transport service is provided mainly by the volunteer driver, it may be possible to utilise these available buses during the evening, particularly if volunteer drivers are energetic and enthusiastic. This is the case with one organisation which makes extensive use of the bus at night during the week and also at weekends (Richard, 1989, p. 16). As stated earlier, the elderly and disabled are an economic factor in today's society and should be given every opportunity to access the shopping centres, restaurants or the theatres where they too, would appreciate the opportunity to participate in the offered activities.

During the week from eight a.m. to six p.m., there are between two to five providers willing to share their bus(es) daily for the purpose of integration. The data in Table 8 (see p. 69) has indicated that there are only eight providers who are in possession of their own bus(es) and that not every provider is willing to share their bus(es). One service provider stated during the interview that the organisation was in the process of finalising the purchase of a bus

to be delivered by the end of 1990. This would then bring the total number to nine providers with buses available for possible sharing.

There are also seventeen organisations interested in the concept of integration. It may appear to be difficult to provide a successful integration service to all those providers in need of a bus when the numbers of available buses is so low. Although in successful integration schemes such as the St George project, Bankstown and Marrickville-Canterbury schemes, each scheme although limited in number, may have between 2 to 8 buses available for integration. The coordinators are further negotiating with other bus owners to join the scheme.

It therefore requires the skills of a coordinator to both facilitate the needs of the clients and encourage more bus owners to participate in the integration scheme (Sicurielle, 1987). It may also be possible to change the minds of those service providers who are in possession of their own bus(es) and who stated that they do not want to share, or become part of the integrated service. On analysing the reasons given by the service providers for not wanting to become part of the integrated service, as indicated in Table 12 (see p. 75) it was found that with seven of the providers, the issues concerning the integration scheme could possibly be resolved if, more information on the concept could be provided to them.

As the purpose of this study was to assess the initial willingness of the service provider to the concept of integration, the issues concerning service delivery, coordination, drivers, insurance and

reimbursement, still need careful investigation and negotiating with those providers interested in the concept. Once these issues are resolved, it may then be possible to persuade those seven organisations to share their resources, thereby increasing the pool of buses available to an integration scheme.

It was noted that three of the seven providers place their bus service on demand for their clients throughout the week, rather than having specific times during the day when the bus is used to transport the clients. It is assumed that during the week there could be times when these bus(es) are not being used by the organisations' clients and these may then be made available to the integration scheme by the three providers. The remaining four providers had a number of days, or part days where their organisation's bus(es) were not being used. These too could be made available to the scheme, given that the concerns of the providers about such issues as lack of buses, coordination and availability of bus drivers can be allayed.

Meeting the demands of the clients and future needs. All the organisations were compared on the factors of: meeting the needs of the clients; funding sources; and, the eligibility criteria of the clients. It was found that the only notable difference between those organisations wanting to share their bus(es), and those organisations who could not meet client needs, and were not able to share their resources, was a combination of several factors. These factors were the lack of available bus(es), of volunteer bus drivers, of volunteers and their cars, and the lack of funding as shown in

Table 10 (see p. 72). The HACC funding source and eligibility criteria do not appear to be the sole deciding factor in the organisations' decision to share their resources. It was noted that the two HACC funded organisations were also not able to meet the needs of their clients due to lack of resources and the other abovementioned factors.

Over sixteen of the transport providers are anticipating an increase in the demands for their service and thirteen of these had plans and strategies to cope with this demand. These plans however are heavily reliant on the goodwill of the volunteers, who are themselves as stated earlier, declining in numbers due to their age. Further, it included an anticipation to purchase additional buses, and the need to fit the organisation's bus with a hoist to accommodate the clients in wheelchairs and those unable to normally board the bus.

The findings indicate that there needs to be a rationalisation of the community transport resources. It is not only an economic argument, but rather one that needs to be addressed as it deals with a sector of society unable to fend for itself due to the costs involved and the sheer enormity of the provision of community transport by transport providers. These providers at times are finding it increasingly difficult to operate a transport service. This service which is seen by the religious and community groups, the local, state and federal authorities as most necessary to enable the elderly and disabled to remain independent in their own homes, and for the pursuit of social and recreational contact to enrich the lives of those people living in the hostels and nursing homes.

Conclusion

Observations which are based upon the findings of this study indicate that in the City of Stirling it is possible to introduce the concept of integration of transport services on a small scale. Today's economic state further promotes the receptiveness throughout the transport community of the possible benefits of the integration concept and where, the cost effective management of resources from the the funding bodies is continually fostered. It may be argued that with any new or innovative idea there will always be a division of opinions. Therefore, change can only be accomplished through the cooperation of all parties involved at the grassroots or community level. It should also be seen that final implementation requires the full cooperation of the transport community for the concept to work successfully.

The implementation of this concept needs the assistance of those with the knowledge of technical and policy matters concerning the overall aspects of community transport. Issues such as the licensing of the bus, assistance with insurance and the future policy of the government regarding this form of transport could be of concern to those contemplating integration. The Department of Transport is recommended by various researchers (Clark, 1986; Vaisvila, 1987 and SEMLAG, 1990) as being in the most advantageous position to offer such assistance. In addition, the assistance given by the Department within its official capacity will afford the integrated service credibility within the community, particularly during the early stages of implementation.

Given that the Welfare Department of the City of Stirling is already operating a service for transport disadvantaged people, it may be possible use this embryonic scheme to implement an extended scheme similar to the St George project.

There is no doubt that, in principle, a scheme leading to the implementation of transport integration could be designed. It is however, clear that to attempt to define a rigid framework for the operation of such a scheme falls beyond the scope of this research for the reasons previously stated. Instead what will be proposed is a flexible set of criteria which can be build upon as further research is completed on the integration scheme. Further, it is also apparent that two types of framework could be applied in the present circumstances. The first of these would be a small localised cooperative type scheme administered by the participating transport organisations. The second would be a more complex farther reaching scheme of the magnitude of the St George model requiring detailed coordination and administration on a regional basis.

Based upon the findings of this study and the data of the meta-analysis, it is proposed that a small integration scheme comprising of those transport providers in possession of their bus and willing to be part of the scheme, be tested within the locality of the City of Stirling. The rationale for the proposal is that successful schemes have begun on a small scale in the eastern states (Pund 1986; Sicurielle, 1987; and, Carnegie,1990) and interest has been shown among the funding bodies (The HACC and the Department of

Transport) in relation to improving community transport. As was stated by Nolan (1989), that funding has been made available through the DOT to test the concept of an integration scheme.

The players needed for this small scheme are a coordinator to act as a broker between the bus owner and the organisation in need of a bus. An office from which to manage the scheme, it is seen as advantageous to remain independent from the City of Stirling Council, but the scheme could operated under the umbrella of the Council. If funding is available from the HACC to purchase a small bus and full time driver to supplement the existing available buses throughout the community. If this is not possible then to recruit more volunteer drivers to enlarge the pool of drivers to help the present drivers with the anticipated increase in demand of their bus usage.

However, it is stressed that further research is needed on the various aspects of the integration before any implementation can take place. The area of most concern is the insurance of the bus and its passengers. Followed by the need to conduct research on the method of payment for the service. If transport providers are to be encouraged to join the integration scheme, payment as an incentive for this service is seen as crucial. However, the problem of the bus licence, as discussed earlier, still requires clarification and the DOT may be instrumental in solving this problem.

Of concern also is the consideration that integration per se may be a too ambitious approach to solving an apparent localised problem. Nevertheless, it is now clear that an urgent and growing requirement

exists within the community to commence addressing the overall client need rather than pursuing an ad hoc course in solving only today's immediate problems. The documented willingness of transport providers to share their resources provides an opportunity to pursue the integration approach particularly in view of the fact that thirteen transport providers have indicated an expected increase in the demand on their service.

* * *

APPENDIX A

Community Transport Forum

PO Box 8136, Stirling Street, Perth 6001

A study of community transport providers operating within the City of Stirling

Dear

The Community Transport Forum members are representatives of community based organisations which have identified problems with community transport and solved them through community action and consultation. The aim of the Forum is to ensure that existing resources are used effectively and efficiently. Its broad community base has enabled it to assist the Western Australian Department of Transport with the collection of information, and to liaise between community groups. You have previously received information regarding this.

The Forum is seeking your opinion to gain a greater insight into the operations and problems experienced by transport providers operating within the City of Stirling. To gather this information from you we have obtained the assistance of a research student from the Western Australian College of Advanced Education who wishes to undertake a structured interview with a nominated representative of your organisation. The results of these interviews could help to determine the future direction for the development and expansion of the role of community transport provision within the City of Stirling.

The interview can be conducted either in your office, or over the telephone. It is expected to take approximately 30 minutes. To make an appointment you may telephone the researcher direct on 446 1633 or return the detachable form hereunder in the enclosed pre-paid envelope.

Your early attention to this matter would be appreciated. Please ensure your reply has been submitted by Friday the 27th of July, 1990.

Thank you for your cooperation,

Sallie Davies
Chairperson, Community Transport Forum
Introducing:
Mrs Thremy Richard
WACAE Student

18 July, 1990

----- Please detach and return in the provided envelope.

I prefer to be interviewed: AT MY OFFICE BY TELEPHONE.....

My preferred appointment time is: DATE: TIME:

If this time is already booked please call me to arrange an alternative time.

NAME: TEL:

ORGANISATION:

APPENDIX B

[]

A study on the integration of existing community transport resources within the boundaries of the City of Stirling.

STANDARDISED INTERVIEW

STATEMENT AND QUESTIONS TO BE PUT TO COMMUNITY TRANSPORT PROVIDERS

Some of these Questions you may have answered already in the Department of Transport's Survey (November, 1989). For the benefit of this study and for the purpose of confirming that data would you please answer such questions again..

1. Does your transport service operate solely within the City of Stirling?

YES [] 1

NO [] 2

2. If NO, which other localities does the service operate in?

The surrounding local suburbs [] 1

The metropolitan area [] 2

Beyond the metropolitan area (Please specify)..... 3

3. How is your transport service provided?

Tick one or more

your organisation's bus with volunteer driver [] 1

your organisation's bus with paid driver [] 2

your organisation's bus with a staff member as a driver [] 3

someone else's bus with volunteer driver [] 4

someone else's bus with paid driver [] 5

your organisation's car with volunteer driver [] 6

volunteer's car with volunteer driver [] 7

OTHER (please specify). 8

4. To whom do you provide transport?

Tick one or more

Elderly [] 1

Disabled [] 2

Youth (10 -18) [] 3

Single parent with child/ren [] 4

After school care children [] 5

Other (Please specify). 6

5. What is the destination of your client?

Tick one or more

- Medical, or para-medical(podiatry, physiotherapy) ☐ 1
- Work ☐ 2
- Shopping ☐ 3
- Social ☐ 4
- Recréational ☐ 5
- Educational ☐ 6
- All of the above ☐ 7

Other (Please specify) 8

6. How is your transport service funded?

- Lotteries Commission ☐ 1
- your organisation's fund raising ☐ 2
- fund raising by outside group ☐ 3
- funds from church group ☐ 4
- local government ☐ 5
- state government ☐ 6
- federal government ☐ 7

Other (Please specify). 8

7. What are the eligibility criteria for the users of your transport service?

.

.

.

8. What is your policy regarding potential users who require transport, but do not fit your eligibility criteria? Are they:

- referred to another transport provider? ☐ 1
- unable to be helped and turned away? ☐ 2

Other (Please specify) 3

9. What happens to your clients when you can not meet their demands?

.

.

10. On a daily basis, are you able to meet the demands of the client group?
- YES [] 1
NO [] 2
11. If NO, to Question 10 is it because you lack . . . available buses? [] 1
 available drivers? [] 2
 available cars? [] 3
 funding? [] 4
 coordination? [] 5
 Other (please specify) 6
12. If you answered YES to Question 10, would you be able and willing to hire or loan your vehicles when not in use, to help other community transport providers to meet their transport demands?
- YES [] 1
NO [] 2
13. If you answered YES to Question 11, would you expect reimbursement?
- YES [] 1
NO [] 2
14. If YES, please specify in what way replacement of petrol [] 1
 cost per kilometre [] 2
 cost per hour [] 3
 cost per day [] 4
 Other (please specify). 5
15. If NO, to Question 11 is it because you lack . . . available buses? [] 1
 available drivers? [] 2
 available cars? [] 3
 funding? [] 4
 coordination? [] 5
 Other (please specify) 6
16. What happens to the bus(es) when not in use? Please specify.

17. During which of these times is your bus(es) not being used?

	ALL DAY	MORNING 8am- 12	NOON 12-1	AFTERNOON 1pm-6pm	EVENINGS 6pm- 11pm
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					

18 On what day, and at which time is there a peak demand placed on your transport service.

.....
.....

19. Do you anticipate an increase in the demand for your transport service?

YES [] 1
NO [] 2

20. If YES, what are your plans or strategies for meeting this demand?

.....
.....
.....

21. If an integrated Community Transport service were established within the City of Stirling, would you be interested in becoming part of this service?

YES [] 1
NO [] 2

22. If NO, what is the reason?

.....
.....
.....

THANK YOU FOR YOUR COOPERATION !!

APPENDIX C

TABLE 3.1

RESEARCH LITERATURE RELATING TO COMMUNITY TRANSPORT: BROKEN DOWN
BY TYPE OF PUBLICATION, AUTHOR, YEAR AND COUNTRY

TYPE OF PUBLICATION	AUTHOR	YEAR	COUNTRY
TRANSPORT REPORT	Nolan, A.	1987	WA
	Dept. of Transport	1987	WA
	Pund, G.	1986	ES
	Stains, S. G. & Gould, L.	1976	USA
ANNUAL REPORT	Holroyd Community Transport	1989	ES
	Marrickville-Canterbury		
	Community Transport Assoc.	1986/87	ES
RESEARCH REPORT	Vaisvila, O.	1987	WA
	Clark & Associates.	1986	WA
	Travers Morgan Pty Ltd	1987	WA
	South East Metropolitan		
	Local Authorities Group	1989	WA
	Holsman, A.J., Lonergan, N.G.		
	Kennedy, M.J. & Phibbs, P.J.	1982	ES
	R.J. Naird & Partners Ltd.	1986	ES
	McKnight, C., Pagano, A.M.,		
	Robins, L. & Johnson, C.	1982	USA
	Weaver, V.C.	1979	USA
	Colin Buchanan & Partners	1989Mar.	UK
	Colin Buchanan & Partners	1989Dec.	UK

(Table continued)

TABLE 3.1 (Continued)

TYPE OF PUBLICATION	AUTHOR	YEAR	COUNTRY
PROFILE OF AGENCY	Mosman Community Transport	1990	ES
	Bankstown Comm. Trans. Inc.	1990	ES
	Mid-Hunter Comm. Trans.	1990	ES
CONFERENCE PAPER	Dept. of Transport	1988	WA
	Search conference on Comm.		
	Trans. in Cities of Stirling		
	& Wanneroo.	1989	WA
	Stone, C.	1986	WA
	Hyde, J.	1986	ES
	Skinner, R.	1980	ES
WORKING PAPER	European Conference of		
	Ministers of Transport	1986	Euro
	Stone, C., Coffill, J.,		
	Halley, S. &		
	Preston-Stanley, J.	1983	ES
	Revis, J.	n.d.	USA
DISCUSSION PAPER	Cutler, D.A.	n.d.	USA
	Nolan, A.	1989	WA
TOTAL			29

Note: WA: Western Australia. ES: Eastern States. Euro: Europe
USA - America. UK: United Kingdom.

REFERENCES

Belnap, J. A. (1981). Transportation accessibility and quality of life for the urban elderly, A paper presented at the Annual Meeting of the Association of American Geographers,

Carnegie, J. (1990 January). Community transport operations profile. Bankstown, New South Wales.

City of Stirling (1987-88), Annual report.

City of Stirling, Population statistics report 1986 census.

Clark, N. Brous, D. & Ker, I. (1986 September). A framework for the coordination of local transport services. A report for the Home and Community Care program, Health Department of Western Australia.

Cohen, L. & Manion, L. (1980). Research methods in education, London, Croom Helm, (pp. 208-221).

Colin Buchanan & Partners (1989 March). Transport for the mobility handicapped in Berkshire (Final report), London.

Colin Buchanan & Partners (1989 December). Internal transport services study (Final report), Grampian Regional Council, Social Work Department.

Community transport in New South Wales (1989, June). Project profiles, Ministry of Transport.

Cutler, D. A. (nd). Reality of coordinating transportation services: Major issues. Bethesda, Maryland: Ecosometrics.

Deschamp, P. (1983). A study of teachers' intentions in planning. (Unpublished) Doctoral Thesis, Perth, WA: Murdoch University.

Department of Transport (1986). Door to door: A guide to transport for disabled people, 2nd Edition. London: Adlington Ltd.

Department of Transport, (1989). Annual report.

Edmunds, T. (1989). Annual report community transport group. Holroyd, New South Wales.

Glass, G.V., McGaw, B. & Smith, M.L. (1981) Meta-analysis in social research. Beverly Hills, CA: Sage.

Glew, K. (1990 May 18). Transport problems for nursing homes and hostels. Paper presented at the Community Transport Contact Lunch. East Perth, Western Australia.

Graycar, A. & Kinnear, D. (1982). The aged and the state: A working paper. Kensington, Australia: The University of New South Wales.

Graycar, A. & Jamrozik, A. (1989). How Australians Live: Social policy in theory and practice. Melbourne, Australia: The Macmillan Company.

Hasenfeld, Y. & Sarri, R. (1978). The management of human service. NY: Columbia University Press.

Hodgkin, K. (1989 September 20-22). Transport policy and research: Some examples of their interaction. Theme: Current Research Forum Papers, 14th Australasian Transport Research forum, 2, (pp 995-1011). Hosted by the Western Australian Department of Transport.

Holsman, A.J., Lonergan, N.G., Kennedy, M.J. & Phibbs, P.J. (1982, July). Transport provision and transport problems of the elderly and the handicapped in St George, Sydney. A report prepared for Kogarah Community Aid. Sydney: University of New South Wales, School of Geography.

HACC (Home and Community Care) Input. (1990 June). Community Transport Forum, Vol 1, 6 p. 2.

Home and Community Care Program (1988 April). National Guidelines. Canberra: Department of Community Services and Health.

Hyde, N.H. (1985). The development of a structural model for the analysis of school-based curriculum decision making. (Unpublished) Doctoral dissertation. Perth, WA: Murdoch University.

Hyde, J. (1986 May 14-15). The N.S.W. community transport program: Concept and reality in the context of the functions of the Urban Transit Authority. 11th Australian Transport Research Forum, 2, (pp 63-88). Darwin: Hosted by Northern Territory Department of Transport and Works.

Kahn, A.J. (1979). Social policy and social services. NY: Random House.

Keal, P.D. (1983, January). Community buses in South Australia. Department of Transport, Government of South Australia.

Kendig, H.L. & McCallum, J. (1986). Greying Australia, future impacts of population ageing. Canberra: Australian Government Publishing Service.

McKnight, C. Pagano, A.M. Robins, L. & Johnson, C. (1982). Economies of scale in transport for the elderly and the handicapped, US Transportation Research Board, Washington D.C.:Transportation Research Record 850.

Mid-hunter Community Transport (1990). Project profile, Cessnock, New south Wales.

Naird R. J. and Partners Pty Ltd (1986, November). Community transport study. (Final report). Kiama, New South Wales: Illawarra Region of Councils.

National Advisory Unit for Community Transport (1986). Working papers for the transport for disabled people: International comparisons of practice and policy with recommendations for change. European conference of Ministers of Transport. (pp 112-139) France: OECD Publications Service.

Nolan, A. (1987 January). Community transport: A review. (Policy Note 87/4). Western Australian Department of Transport.

Nolan, A. (1989 July). Issues and directions in community transport: A discussion. Western Australian Department of Transport.

Pund, G. (1986 June). Community transport and the St. George community transport project. (Unpublished report). Hurtsville, Australia.

Revis, J.S. (n.d.). Service coordination. Washington, D.C.: Institute of Public Administration.

Richard, T. (1989a October). The evaluation of the community bus service, Perth, WA: Published and circulated by the City of Stirling.

Richard, T. (1989b). An exploratory study to provide occasional child minding for pre-school children as an incentive for parents to volunteer for community work, Perth, WA: Published and circulated by the City of Stirling.

Scalici, A. (1985). Paratransit: An instructional module. Morgantown: West Virginia University.

Schoenmaker, D. (1990). Mosman community services transport profile. New South Wales.

Sicurielle, S. (1986/87) Marrickville-Canterbury Annual report. New South Wales.

Skinner, R. (1980 July 16). Community transport: Needs, alternatives, constraints in local transport, its relevance to people. Proceedings from a seminar organised by VCOSS Transport Task Force, (pp 11-37). Caulfield: Melbourne.

Transport needs of the younger disabled. (1989 December). A study commissioned by the South East Metropolitan Local Authorities Group.

Spicer, R. (1990, March 16). Dial-a-ride community transport for Fremantle and Cockburn. Paper presented at the Community Transport Forum Lunch meeting, Perth, Western Australia.

Stampoultzis, P. & Chambers, L. (1989 September 20-22). A computer system for building community bus pick-up routes. Theme: Current Research. Forum Papers, 14th Australasian Transport Research Forum 2, 769-781. Hosted by the Western Australian Department of Transport.

Stephens, M. (1988 March 31). Community Transport a Policy Perspective. A paper presented at the Community Transport Seminar for the Department of Transport, Western Australia.

Stone, C., Halley, S., Preston-Stanley, J. & Coffill, J. (1983, August). Community transport: A collection of working papers. Prepared for the Community Development Bureau.

Stone, C. (1986 May). Community transport in New South Wales: A response to inequity and disadvantage in public transport, A paper presented at the 21st. Australian Institute of Geographers Conference, Perth, Western Australia.

Stains, S. R. & Gould, L. (1976, July). Transportation for the elderly and handicapped; Inventory and Analysis. Indiana: Northwestern Indiana regional planning commission.

Thane, P. (1987). The growing burden of an aging population? Journal of Public Policy, Oct-Dec 7 (4), 373-387

Travis Morgan Pty Ltd (1987, October). Community transport study. A report for the Department of transport, Western Australia.

Vaisvila, O. (1987 May). Community Transport Survey. A community transport study in the South West (Perth) Metropolitan region conducted by the South West Metropolitan Local Authorities Management Group.

Weaver, V.C. (1979). Coordination of human service agency transportation: Evaluation method. Urban Transport Service Innovations, Special report 184. Chicago, Washington D.C.: Northeastern Illinois Regional Transportation Authority.

Whitber, R. (1989, April). Search conference on community transport in the Cities of Stirling and Wanneroo. Western Australia: The Northern Suburbs Social Development Council Transport Sub-committee.

BIBLIOGRAPHY

Crow, R.T. & Odewahn, C.A. (1987) Management for the Human Services. Englewood Cliffs, NJ: Prentice-Hall .

Jick, T.D. (1979). Mixing qualitative and quantitative methods: Triangulation in action, Administrative science quarterly, 24, 1, 602-611.

Hakim, C. (1987). Research design: Strategies and choices in the design of social research, London: Allen and Unwin.

Hyde, N.H. (1988 September). Educational research: Ethical issues and guidelines, (Unpublished) International Institute for Policy and Administrative Studies, Western Australian College of Advanced Education.