6-1-2010

Downunder update: The current status of community transport in Australia and an example of current innovation in transport logistics

Louis De Beer

Recommended Citation

SUMMARY

Key Words: transport; community; personalised public transport

Community Transport in Australia is developing quickly into a valid transport infrastructure and is possibly starting to assume the characteristics of Personalised Public Transport or even Demand Responsive Transport. This study provides an overview of the development of Community Transport in Australia and uses a case study to illustrate the possible areas of application of pre-booked, shared, scheduled and transport targeted to various groups of commuters. The model is also presented for evaluation as to scalability and being universally applicable. Overall, the study advocates for the recognition of Community Transport as a valid transport infrastructure and the inclusion thereof in public transport planning and policy.

PURPOSE OF THE STUDY

- To provide a definition of the concept of Community Transport as applied in the Australian context
- To provide an update on the progress of Community Transport in respect of growth and standardisation of Community Transport in Australia so as to indicate its progress as a recognisable transport infrastructure, including the growth and formation of peak- and industry associations in the various states of Australia dedicated to advancement of the concept of Community Transport as a transport infrastructure
- To showcase an advanced model of Community Transport Service Delivery so as to:
  - Advance the concept that Community Transport is recognisable as a valid transport infrastructure
  - Indicate benefits and solutions to current iterations of public transport by the integration of Community Transport in public transport planning and policy
Highlight features thereof which can develop into solutions for future gaps between the demand and supply of public transport specifically in the area of identifying, segmenting and aggregating demand for public transport.

Advance the concept that the model may be universally applicable.

**MATERIALS AND/OR METHODS**

An audiovisual presentation on PowerPoint setting out the contents of this paper will be presented to the conference.

**RESULTS OR EXPECTED RESULTS**

- To update the conference on the status of Community Transport in Australia and create an interest in the model of Community Transport proposed.
- To provide a rationale for the particular model of Community Transport as being scalable and being applicable to other geographical locations.
- To create an awareness of, and support for, the concept of Community Transport as a valid transport infrastructure and to advocate for its inclusion in transport planning and policy.

**DISCUSSION**

1. **Defining Community Transport in the Australian Context**

1.1. **Brief History of Community Transport**

There is little material available on the overall history of Community Transport in Australia, but from a Google search on the topic and visits to the websites of most of the providers of Community Transport in Australia, it would anecdotally appear that the earliest organisations started during the 1980’s and 1990’s as self help groups, such as community support groups for the frail aged and elderly, people with disabilities and other community based groups. The growth of these fledgling organisations was given some impetus by funding for transport supplied by Home and Community Care (“HACC”), which funding programme is a joint Commonwealth, State and Territory Initiative. This programme funds basic maintenance and support services to help frail older people and younger people with disabilities to continue living in their community.

1.2 **Brief History of LANDS Community Services**

Logan and Albert North Disability Services (“LANDS”) started in Logan, South of Brisbane, during 1993 as a support group for a group of persons with multiple sclerosis. The initial concept was that the members who could still drive would help those who could no longer do so. The initial coordinator of the group was Ann Langley, who still serves as Chairman of LANDS today. During 1994 the
group incorporated as a charitable association under Fair Trading Queensland and received funding for one vehicle from HACC.

Today LANDS has grown to have a client base of over 5,000 members, is contracted by various agencies to do 143,000 trips per year and operates in the Brisbane South and Logan regions which has 22% of the total HACC Target population in Queensland.

In order to do so LANDS operates a “Mobility Centre” which produces transport trip schedules for its own fleet of up to 45 vehicles, most of which are disability accessible. Moreover, LANDS has the capability to download transport trip schedules directly to the taxis of Yellow Cabs Co, the largest taxi fleet operator in Queensland and uses the buses from two bus companies where necessary.

2. Update: The Growth and Formation of Peak- and Industry associations in the States of Australia

2.1. Community Transport Organisation New South Wales (“CTO”)i

The CTO is the most established of the Community Transport peak bodies in Australia and has approximately 120 members. CTO is partly funded by the New South Wales State Government and presents a yearly conference for its members and associate members. The CTO has been instrumental in the setting up of the Community Transport peak bodies and industry associations in other states of Australia and is currently working to get Community Transport branded in order for it to be recognisable as a valid transport infrastructure. This branding is focussed on the branding of all Community Transport vehicles with the following logo:

![Community Transport Logo]

2.2. Victorian Community Transport Association (“VCTA”)ii

VICTARIOUS COMMUNITY TRANSPORT

VCTA is also well established, but does not receive state government funding and presents as annual conference

2.3. Queensland Community Transport Industry Association (“QCTIA”)iii

QCTIA is styled as an industry association, not a peak body, as it seeks to inform policy through various peak bodies, notably the Queensland Council of Social Services (“QCOSS”)iv and was established during 2009. QCTIA will be presenting its first conference in September 2010 at the Gold Coast in Queensland.
2.4. South Australia

South Australia has a steering committee tasked with the formation of a peak body for Community Transport in South Australia, which is funded by state government.

2.5. Community Transport Australia (“CTA”)

CTA is a fledgling project of the CTO and purposes to establish a national association made up of representatives from the various state Community Transport peak bodies and industry associations, to foster Community Transport peak bodies or industry associations in the other states and territories and to advance the cause of Community Transport as a valid transport infrastructure in Australia overall.

3. Case Study: LANDS Community Services- The Principles of the LANDS TransportOptions Model of Community Transport as Transport Infrastructure

3.1. The LANDS Definition of Community Transport

The main reason for the growth of LANDS is that we have taken a view that Community Transport is a viable transport infrastructure that can offer the benefits of average costing provided that it has sufficient infrastructure in any given area and provided that the needs of the target market can be sufficiently aggregated.

It is, in the first instance, software, then hardware. In this context then it is pre-booked, scheduled, shared and targeted.

We have therefore defined Community TransportOptions Model as follows:

“The Community TransportOptions model is a community transport infrastructure, which is pre-booked and shared, scheduled and targeted to individualised needs within a target group, utilising existing transport infrastructure where possible and creating and leveraging transport infrastructure where necessary to provide an effective, flexible and cost-effective model of service delivery which is universally applicable.”

We will break down some of the concepts in this definition under the headings that follow.

3.2. Community Transport Infrastructure
Buses and trains run on rigid schedules; taxis run on demand. As such both infrastructures cater to the bulk of demand but are unable to sufficiently respond to the hierarchy of individualised needs that exist within a growing sector of the target market. There is a gap in the market for Personalised Public Transport or Demand Responsive Transport, which need is increasingly being fulfilled by the Community Transport sector.

With the volume of Community Transport being provided in Australia and the growing need for more personalised transport services, or in the case of “Green Collar” transport, the better utilisation of resources, the time has now come for the recognition of Community Transport as a valid transport infrastructure to be included in transport planning.

LANDS aim has been to become an incumbent Community Transport infrastructure in the Brisbane South and Logan areas and as such has been able to offer the benefits of lower average costings ‘per seat’ to other agencies such as Queensland Ambulance Service, hospitals and other social service agencies, as well as the Brisbane City Council and the Logan City Council. At last count some 27 agencies are using LANDS’ transport services and both Brisbane City Council and Logan City Council are using its services.

LANDS has also afforded agencies the opportunity to broker the use of their vehicles against payment ‘in kind’ in terms of transport trips. Two agencies have placed vehicles into the LANDS fleet in terms of this offer.

3.3. Pre-booked

Conventional public transport has difficulties catering to peaks and troughs in demand for services, as they do not know what demand to expect on the day. This may result in transport infrastructure being under utilised in down time.

In using Community Transport the client pre-books, which allows for effective matching of resources with demand on the day of transport. It also allows for the effective utilisation of public transport and taxis in known downtime.

3.4. Shared

The transport infrastructure is shared in that it is the aim to aggregate the transport trips, with the following benefits:

- Cost sharing
- Resource sharing
- Optimal use of resources, i.e. less vehicles on the road

3.5. Scheduled

The LANDS TransportOptions model presupposes that all transport is scheduled, which schedule is prepared with enough lead time to ensure that enough resources are rostered to meet the demand and to ensure that the demand is aggregated, which ensures the sharing of resources.
The diagramme on the next page shows the Community Transport scheduling workflow in the LANDS TransportOptions Model:
The LANDS Planner scheduling system accommodates the following workflow in producing trip schedules, which may be directly downloaded to the LANDS vehicle, or to a taxi. Buses are booked manually. The diagramme on the next page shows how the LANDS scheduling system workflow:
3.6. Individualised Needs

LANDS’ Service is geared towards meeting the client’s individual needs, with the client being allocated a Mobility Code, (i.e. uses wheelchair) and a Mobility Alert such as where the client can only use a certain type of transport, and/or needs
personal assistance and/or his needs are time critical, such as dialysis patients of the hospital or Queensland Ambulance Service.

<table>
<thead>
<tr>
<th>Highest mobility and support needs</th>
<th>Assisted transport including:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● ShopAssist: Personalised assisted shopping services</td>
</tr>
<tr>
<td></td>
<td>● Personal, individual assisted transport to appointments and social support assistance while at the appointments</td>
</tr>
<tr>
<td>Transport in disability-accessible LANDS people movers with assistance by full-time LANDS trained drivers</td>
<td></td>
</tr>
<tr>
<td>Transport in LANDS smaller disability-accessible vans with assistance by trained volunteers</td>
<td></td>
</tr>
<tr>
<td>Transport in disability-accessible taxis</td>
<td></td>
</tr>
<tr>
<td>Transport in LANDS people movers or hired buses with assistance from trained drivers and/or volunteers</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group transport including:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● FlexiRide Shopping Services in leased full-size disability-accessible buses with assistance by LANDS full-time workers</td>
</tr>
<tr>
<td>● FlexiRide Shopping Services in LANDS disability-accessible buses with assistance by trained full-time drivers</td>
</tr>
<tr>
<td>● Social support outings in LANDS larger disability accessible buses with assistance by full-time trained drivers and two support workers</td>
</tr>
<tr>
<td>Transport in LANDS sedans or station wagons with assistance by trained volunteers</td>
</tr>
<tr>
<td>Transport in volunteer-owned sedans or station wagons at a reimbursed kilometre rate</td>
</tr>
<tr>
<td>Taxi vouchers and other assistance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lowest needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about available public and community transport options</td>
</tr>
</tbody>
</table>

3.7. Target Group/s

The current target group of LANDS coincides with the HACC target group in that it is focussed on clients who are frail aged and/or with disabilities, or younger people with disabilities that are living independently and are transport disadvantaged.

This target group has been expanded to job seekers and can be further expanded to:

- Children with disabilities
• Integrating with bus services and utilising the infrastructure to take commuters to bus stations from 5am to 7am and from 5pm to 7pm, which is due to be the subject of a trial in the foreseeable future in Brisbane.

• Accessible Tourism is possible, with LANDS having two vehicles available for use by national and international tourists and other agencies.

• Commercial Share Ride Schemes.

In future iterations the LANDS TransportOptions scheduling systems could be used to provide Personalised Public Transport schedules for bus companies for after hours point to point services and Share Ride Schemes for taxi companies. In this regard the model provides some good ‘Green Collar’ benefits in that it could ensure the better utilisation of transport resources and reducing congestion.

3.8. Using Existing Infrastructure

LANDS has entered into a partnership agreement with Yellow Cabs whereby it has access to the API's of the Yellow Cabs control and dispatch system and is able to prepare trip schedules which bypasses the Yellow Cabs Control Room and is downloaded directly to a vehicle from the LANDS system. In terms of this Agreement LANDS is able to schedule 3 persons (1 with a walking aid) into a Yellow Cab at any time of day or night. LANDS is furthermore able to download multi-person trip schedules to Yellow Cabs between 10 Am and 2 Pm daily, but all other bookings of multi-person vehicles have to be made manually to ensure availability.

LANDS also leases 40 seater disability accessible buses from bus companies for use in some of its programmes, such as the FlexiRide Shopping Service. In terms thereof up to 40 clients are picked up and dropped off at a shopping centre, with full assistance from a LANDS employee, after which the bus picks up another up to 40 clients and drops them at the same shopping centre, after which the first clients are taken home and so on.

3.9. Creating Infrastructure

LANDS’ Scheduling System, the LANDS Planner, is its greatest infrastructure and as it is written with an SQL database with a .Net interface, it is able to be used via the Internet, which makes the setup of Mobility Centres in other geographical locations possible. The use of mapping software and the use of in-vehicle navigation also further diminishes the need for local area knowledge.

LANDS has up to 45 vehicles in its fleet, most of which are disability accessible, including Mitsubishi Rosa buses, Toyota Coaster buses, Mercedes Sprinter people movers, Toyota Hiace Commuter people movers, Mercedes Vito Vans and Ford and Holden station wagons. In addition LANDS has a complement of volunteers using their own vehicles, which give the capability of a limited 24/7 assisted service for higher needs clients who cannot use taxis.

It is clear that the clients have a ‘hierarchy of needs’ and as such LANDS has had to respond to the needs of the clients and to ensure that the clients’ needs are met. As such, we find that when a client first enters the service, they would
prefer to use relatively unassisted forms of transport, but as their needs grow, they invariably need more support and this is where the response to their needs should be more individualised.

3.10. Leveraging Infrastructure

LANDS offers to other agencies that they can broker their vehicles to LANDS to become part of the LANDS infrastructure against payment ‘in kind’ in terms of transport trips offered. Two agencies, including Queensland Ambulance Service, currently make use if this offer and has done so to great advantage over a period of years.

In future this model can be expanded to individuals, i.e. a person may ‘donate’ his or her vehicle to LANDS when they cannot drive any more against LANDS providing transport against the value of that vehicle. This model has been used to great effect in the United States of America by ITNAmerica.

3.11. Effective and Flexible

The LANDS TransportOptions model provides the outline or basis for what could be a system of Personalised Public Transport, or Demand Responsive Transport as a possible alternative for even the use of private vehicles for regular commuting as it is a point to point service, personalised to the individual needs of the client with the benefits of resource- and cost sharing.

3.12. Cost Effective

The current LANDS TransportOptions model is cost effective while even using an Average Costing Model. With the planned improvements to the LANDS scheduling system it is intended to move towards a Marginal Costing Model, i.e. the trip schedules will be optimised with regard to operational efficiencies in the first place, with costing efficiency optimisation per trips schedule being the second priority.

CONCLUSION

We would like to create an interest in, and awareness of the progress of Community Transport in Australia and present a working model for critical appraisal by the members in conference, which would increase our learning and provide the members in conference with some practical ideas of application of aspects of the model in their areas of operation.

REFERENCES

i www.cto.org.au
ii www.vcta.org.au
iii www.qctia.org.au