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Transport, Traffic & Land Use: changing roles for local government

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Abstract:

There are a number of important changes occurring in local government which have the potential to significantly influence the role which this level of government plays through its influence on transport and land use. These changes include: larger local government units and the consequent tendency towards a strategic outlook; the withdrawal of State or central governments from some areas creating a vacuum which local governments may move to fill; a tendency towards partnership arrangements for major projects which may involve all levels of government; and (in Victoria, at least) the requirement for compulsory competitive tendering.

This paper examines the effects of these factors in three areas:

- Integration of land use development and transport provision. Notwithstanding a lot of talk and fine motives, we argue that the potential value to the community of a greater integration of land use and urban planning has not been realised. We suggest that local government, with its local understanding and responsibility and access to most of the important instruments of policy, is in a strong position to achieve better results. Greater attention to detail in implementation good urban design has often been an important missing element.
- Public transport. While some local authorities in Australia and New Zealand have a very significant role in public transport, most do not. However, local government is likely to play a larger role in the future, extending beyond community transport to involvement in such aspects as bus routes and timetables, responsibility for certain infrastructure, e.g. railway stations, and a revised community bus role.
- Road safety. Local government has always had an important role in road safety, but this is likely to increase in the future. Land use development and decisions related to control (or lack of control) of access greatly affect safety, and these decisions are a key local government responsibility. The potential for the application of road safety audits to development proposals, as well as other stages in the road design process, is also emergent.

Keywords:

land use development, local government, bus routes, control of access, safety, local government responsibility, road design process, traffic management, public transport.

TRANSPORT, TRAFFIC AND LAND USE: Changing Roles for Local Government

K W Ogden and W R Chandler

Introduction

This address had its genesis in a Masters thesis prepared at Monash University by Chandler (1994) which reviewed past actions related to the interaction between transport and land use in Victoria. The thesis concluded, firstly, that there had not been spectacular success in integrating transport and land use decisions and that, secondly, the chances of success would likely be greater if Local Government played a more significant and effective role.

This presentation addresses the above issues, but also has a wider canvas. In Victoria, and New Zealand, significant changes in the structure and role of local government have recently been made, and other Australian States are likely to follow similar paths. Broadly, the changes feature larger Local Government entities, with greater resources and a broader and more capable skill-base, with a more strategic, less parochial outlook, which will target issues and responses more strategically.

It is timely to address the role of local government in transport and traffic issues, and our aim is to contribute to what could well be a vigorous debate. In this address, we explore the possibilities in three areas, as follows, and for each, we make specific suggestions about ways in which local government may change its role. The three areas are:

- Interaction between transport and land use planning.
- Local Government's role in public transport.
- Traffic management and road safety.

Firstly, however, to set the scene, it is important to elaborate on our view of the emerging role of Local Government generally and in relation to the subject of this paper..

THE ROLE OF LOCAL GOVERNMENT

When considering transport policy in Australia, emphasis is often focused on the role played by State and Commonwealth Governments, and the private sector; in New Zealand, similarly, it is the national Government and the private sector that usually feature. This is understandable, because of specific constitutional and traditional responsibilities those levels of government have in relation to each other, and with the private sector. However, Local Government, and in New Zealand also regional organisations, can, and do have a rather more influential

actual role in transport planning and implementation than is sometimes realised, or admitted.

In Australia, land use planning is a shared responsibility between the State Governments and Local Government, although the Federal Government can also exercise its influence. The Federal interest in cities has oscillated, on a fairly long cycle. State land use policies and controls vary considerably but, in most instances, it is Local Government that makes the decisions about detailed land uses and activities. Even decisions about major projects which have regional or State significance invariably have local consequences which are the responsibility of Local Government.

It should not be surprising, therefore, to realise that regardless of where the actual responsibilities lie, it is at the Local Government level that most land use/transport decisions are actively brought to fruition, delayed, or rejected. Despite a long-standing recognition of the complexity and importance of the interrelationship between land use and transport planning, the blame for action or inaction is placed on Local Government. The blame is often not deserved.

As identified in the introduction, Local Government is in a state of flux. This provides a major opportunity to reassess the role of Local Government in achieving the better integration of land use and transport.

In some cases, changes to Local Government legislation have given greater opportunities for councils to be more enterprising, to take entrepreneurial initiative. Some councils are already becoming more directly involved in achieving better land use/transport integration through both their land use decisions (eg development control and strategic land acquisition) and transport involvement (eg community bus services, liaison with public transport authorities about the development and use of railway stations). But the possibilities have been barely been touched.

Because of its scale, and fundamental interest in property and access, the scope for Local Government to achieve and maintain a robust data base is significant.

Local Government has a central role in 'the street' where the mix of land use functions requires a degree of sensitivity usually not possible by other levels of government. Although it cannot be pursued in detail in this paper, there is an established and growing commitment to the importance of *urban design*. This concept is obviously related to land use planning, but goes further in detail to embrace both the functional and aesthetic dimensions of the public realm, which is usually dominated by 'the street'.

Other approaches are also being developed where an explicit aim is to address the challenge of ecological sustainability. These approaches have broad implications, but are most amenable to creative change at the local level.

In the ongoing debate about the future governance of Australia and New Zealand, there is a great deal of emotion and nostalgia overwhelming rational consideration of appropriate levels of government, and their relationships. There appears to be a general agreement that a National government is fundamental, and that some form of local government - the level of government closest to the people - must be retained. The role of state government and regional government is more problematic. Jeff Kennett, Premier of Victoria, is quoted as saying "...that to reduce the cost of government in Australia, then State Governments are the most obvious to go". But not in his time!

Local Government is, by definition, parochial, primarily representing the specific interests of the ratepayers - with or without heed to the interests of the wider community. That is both its strength and its weakness. It is important that this primary characteristic is not lightly dismissed, considering the fact that the other levels of government also have their strengths and weaknesses in a not dissimilar manner.

Local Government has an intimacy not possible with the higher tiers. Local councillors and alderpersons are more regularly seen in their electorate - opening fairs, chairing meetings, looking at properties the subject of planning applications, and doing the myriad of things that local politicians do. They are usually more accessible, they can consider the smallest detail of concern, and they can give intimate feedback in relation to decisions made.

Local Government has an immediacy which cannot be matched by the other levels of government. Matters can be very promptly put on the agenda papers and dealt with, with as little or as much research and consideration as is considered necessary. Although Local Government may undertake lengthy research policy studies, the more frequent occurrence is to call on a report from the appropriate officer, taking only days or weeks, rather than months.

So what is the problem? Sometimes Local Government reacts to very localised concerns, and makes decisions which satisfy perhaps as few as one ratepayer, without seriously addressing the wider implications. Likewise, the council may make a pre-emptive decision which does not have the benefit of scrutiny over time, as would usually occur with policy formulation and legislation at the higher levels of government. This does not presume that the quality of the decisions is, necessarily, any better or worse.

No doubt, some will argue that Local Government is like the curate's egg - bad in parts, and therefore suspect overall. The hypothesis in this paper is that Local Government is a very important institution. The challenge is to develop its strengths, minimise the effects of its weaknesses and, when we are not sure which applies, to encourage best practice by giving the benefit of the doubt!

Some of the practices and infrastructure for administration and operations for Local Government have become outmoded. Despite some of the important themes

of this conference, it is a long time since its responsibilities were focused only on 'roads, rubbish, rates'. There is now serious consideration of involvement in employment, retailing, communications, and education. There is a wide range of functions that Local Government can be involved in, consistent with achieving democratic control at the level of government closest to those most effected. Land use/transport integration is one of these.

Despite its obvious short-comings (parochial outlook; lack of resources; etc), it can be argued that Local Government has a better record, and better potential to achieve the necessary integration between land use and transport than the other levels of government. There are also interesting examples emerging where groupings of councils are co-operating to achieve better efficiency and effectiveness in service delivery. To assist the achievement of better integration, the following actions are necessary:

- Recognition that Local Government has the interest, ability, and responsibility
 to play an important role in decision-making related to other agencies and the
 private sector, as well as its own land use and traffic management operations.
- Commitment by Local Government to effective and efficient public consultation and participation in the decision-making processes as an integral part of its activities, not as an added extra..
- Recognition that if local residents and ratepayers are better informed, then they will be more able to constructively participate in decision-making processes.
- Substantial increase in the necessary skills and use of technology which can enable the community to better understand and communicate their needs and desires in relation to land use/transport matters.

TRANSPORT / LAND USE INTERACTION

The subject of land use and transport interaction is not new. So is it possible to say anything new? We believe it is. Not so much because of new technological or analytical insights, but because of the radical changes that have been and are occurring in the governance of our countries as we approach the turn of the century.

It is our contention that bold proposals are needed to match the radical changes that have already occurred. It is not a matter of radical change from the front, it is a question of whether the traditional professional players in the land use/transport integration game have much relevance in leading the debate and the action into the next millennium. As a contribution to the debate, we propose the following specific areas where Local Government can play a useful and effective role in achieving better land use/transport integration.

Land use planning and development control

The work of Chandler (1994) has shown that, for all the past rhetoric about the need to integrate transport investment and operational decisions with land use planning and development decisions, the reality is that they are poorly integrated. Chandler suggested that a key missing component in the past has been the leadership role which Local Government with a strategic vision could provide.

Applying this lesson, we suggest that it is important for Local Government to attempt to ensure that new development and (perhaps more importantly) redevelopment takes place in areas which are well served with transport links, including public transport links.

For example, in Melbourne, there is a significant area encompassing much of the inner suburbs which is well-served with extensive tram, light rail and heavy rail infrastructure. Often this infrastructure is under-utilised. A 'win-win' outcome results if redevelopment within these inner-suburban areas is strategically focused along tram routes and near railway stations: the redevelopment generates patronage, the patronage leads to service improvements, and the service improvements contribute to the viability and attractiveness of the project

This is of course just stating the obvious, and repeating a story which has been told many times. But the reality is that redevelopment is still occurring at locations which are not well-served with public transport, and public transport resources are spread too thinly. Why? Local Government, through its strategic land use planning process can facilitate a greater degree of integration, where transport planning and service delivery provides seamless mode integration, including the ubiquitous pedestrian mode.

Urban design, environmental management, and economics of amenity.

Transport expenditures represent a substantial proportion of development costs. Transport infrastructure and facilities are a major part of the urban environment. They impact, for better and worse, on most of our daily living. In practice, good design has often been seen as being too costly, an optional extra. That is a misconception born out of the desire for cheap solutions in the short-term.

It is increasingly recognised that if high quality urban design and environmental management are *integrated* with the design and provision of transport facilities in a holistic manner, then better overall economics result and improved amenity is achieved. Local government is in a unique position to ensure that such holistic design philosophies are employed.

For example, the high cost of retro-fitting noise barriers on urban freeways is substantial, and a considerable aesthetic and functional compromise. The lessons are relevant to both new and redevelopment areas.

Parking rates and controls.

For many years, the philosophy behind parking provision has been to ensure that the parking demand generated by a particular development proposal can be accommodated off-street, usually in areas provided as part of the development. An exception is in the central city if it is well-served by public transport - in the interests of a broader policy which recognises the intrinsic benefits to the city of encouraging public transport in areas where it can make a difference.

With the increased complexity of land use developments and the traffic/parking demands they generate, this philosophy needs to be reinterpreted. Land use distinctions are becoming blurred: often there are several different land uses on one site; land uses change frequently; some developments are aimed at markets which will be properly served by public transport or are expected to be used by people with a lower than normal rate of car ownership and use; and the hours of use of facilities are becoming less predictable, with different generators peaking at different times of the day.

In response to these changes, parking provision should be assessed more on an area-wide basis than a site-by-site basis. For example, we should look at the parking needs of a regional centre as a whole, not necessarily at the summation of the demands created by each individual property, and local government should have the power to interpret parking rates in a holistic sense, having regard to the transport, amenity, and planning outcomes for the area as a whole.

Multi-modal transport/land use corridors.

Opportunities arise from time to time in cities to adopt a broad-ranging redevelopment strategy for a whole corridor.

The benefits are maximised if such redevelopment occurs on an integrated basis, taking account of both land use developments and the transport systems which serve them. An example perhaps best illustrates the point. In Melbourne, the Upfield railway line was for many years considered likely to be closed. It was lightly patronised, had poor service levels, and for much of its length paralleled a tram/light rail route in Sydney Road. Investment in the line had virtually ceased, and the infrastructure had run down (some of it had heritage value!). However, in 1995, the Victorian Government, for various reasons, decided to retain the line. This has opened the possibility for a major review of the whole corridor, involving transport services (the railway, the parallel tram route, bus feeder services, traffic management in Sydney Road, service and goods access to premises in the corridor, etc.). However, ideally, such a review should take account also of land use developments in the corridor, and integrate such developments with the proposed transport changes. These development opportunities include a substantial tract of Commonwealth-owned land, development opportunities at and near railway

stations, and a key intersection where Sydney Road intersects the Melbourne Ring Road.

In this case, these elements have come together in a way that poses both challenges and a great opportunity to develop a strategic approach to the development of the corridor and the transport services in it. Such opportunities are rare, but by no means unique. Where they do occur, we suggest that Local Government, with its particular responsibilities, local knowledge and powers, is best placed to take the leadership role in advancing such strategic multi modal transport/land use corridor planning.

PUBLIC TRANSPORT

Community transport.

With some notable exceptions, such as Brisbane, Auckland and Wellington, local government in Australasia is not involved in the provision of public transport services to a great extent.

An exception is the provision of community transport services. These are typically small or medium sized buses, operated by local government, to serve community centres such as elderly citizens centres, hospitals, etc. These services have arisen in response to a perceived demand for "welfare" related public transport, which has not been able to be met by regular route bus operators. As such we suggest that this is a particular case of a more general observation that route bus services tend to be not particularly sensitive to specific local needs, whether by particular groups or by the public at large. Moreover, in some communities, the very existence of the community bus makes the provision of a commercial bus or taxi service (which would be available to the whole community) unviable.

In this context, it is relevant to note recent moves in several cities to break down the monolithic, centrally-controlled bus systems and replace them with more locally oriented services together with pricing/management structures that reward operators for providing services. This process is well under way throughout New Zealand, and is in train in Adelaide, Perth and Melbourne. We suggest that to the extent that it is successful, the rationale behind local government provided community bus operations will reduce.

As local government withdraws to its core functions, and increasingly outsources peripheral functions, the appropriateness of local government as a *provider* of public transport services will be increasingly questionable.

We suggest therefore that local government needs to be actively involved with local bus operators and regulatory/licensing authorities with a view to the development of adequate local bus services, and that local government provided community buses may become a thing of the past.

Bus route/terminal planning.

Our second suggestion in relation to local government involvement in public transport actually follows from the above. We suggest that local government, where it does not already do so, be pro-active in developing links with local bus operators. Local government may play a useful role in such aspects as advising (with its particular local knowledge) on routes and times of day of operation, It can facilitate bus services through adequate traffic management. (Conversely, it can frustrate such operations, e.g. with street closures or street furniture which makes if difficult or impossible for a bus to use a street. A recent example quoted to us by a bus operator involved a roundabout which was designed in such a way that only a smaller vehicle with a shorter wheelbase could negotiate it. The bus company operating services on that route had to replace the relatively modern buses it was using with 20-year old buses, because they were the only ones in its fleet that could use the roundabout!)

Similarly, as mentioned above, local government can contribute to better bus service. through insisting (through the development approval process) on adequate and well located bus facilities and passenger interchanges at regional centres.

There is scope, as the power and authority of centrally-controlled bus authorities recedes, for a greater input from local government into the planning of bus routes and the provision of adequate bus terminals.

Management and ownership of facilities.

These arguments raise the question of whether there is a role for local government in actually owning and/or operating public transport infrastructure (where it does already do so).

In our view, there is much to be said in favour of local government taking responsibility for certain items of fixed infrastructure, in particular bus stops, railway stations, and passenger interchanges.

Each of these serves essentially a local market, and therefore are local assets. There is the opportunity for a high degree of local focus through such aspects as thematic design, colour, etc. Responsibility for security, access by patrons, control of graffiti, and car parking (e.g. at railway stations) is arguably more appropriately vested in the local authority than in the system operator.

We anticipate the reaction that local government would see this as a State service being fobbed of on local government with no financial compensation. However, while we appreciate the strength of the concern, we would hope that the issue could be addressed on its merits; the issue of the resolution of vertical fiscal imbalance between the three levels of government in Australia is much broader than transport although we would add that solving this problem is a pre-requisite to solving a whole range of transport problems, one of which may be the ownership and/or control of public transport infrastructure.

Bus routes in new subdivisions.

Arguably the most important time for providing a good quality and frequency of bus service in residential areas is right at the beginning, as the subdivision is developed. If there is a good bus service provided, car dependency may be reduced for at least some households. Once a household becomes a multi-car household, there is little chance that residents will become regular bus users.

However, a major impediment to the early provision of bus services is the layout and timing of construction of roads which front the bus routes. This rises two issues.

Firstly, the outline development plan for the area should be such that each developer, as they develop their areas, are required to develop an arterial or sub-arterial road network which is continuous, which allows convenient bus routes such that all dwellings are within, say, 400 m of a bus route, and which directly serves appropriate destinations such as regional centres and transport interchanges.

Secondly, the reality is that if different parcels of land are in different ownership, they will be brought onto the market in disparate order. The effect of this is that there may be a period of time (perhaps lasting several years) in which there are gaps in the road network. These can be devastating from the viewpoint of providing an adequate through-routed bus service, quite apart from any disruptions to general traffic flow.

Local government may well therefore consider whether it can and should play a role in filling these gaps, i.e constructing the missing piece of road at its own expense, and recouping the costs from the developer when the development eventually takes place

TRAFFIC MANAGEMENT AND ROAD SAFETY

Local government has long had responsibility for aspects of traffic management and road safety. This responsibility continues, albeit in an ever evolving form We highlight here just a few issues in the road safety and traffic area which seem to us to be especially cogent.

Road safety audit.

The cost-effectiveness of this process seems to be well-established, and New Zealand and Australia are at the forefront of world developments; the Austroads (1995) publication on road safety audit probably represents the current state of the art. We would make two points in relation to road safety audit and local government.

Firstly, where local government has not taken the initiative in road safety audit, or been required to be involved, it should consider doing so.

Mostly, road safety audit applies at the design stage, and it is this area where it is likely to be of greatest benefit to local government, because in the main the roads for which local government is responsible have a long reconstruction cycle; if there are unsatisfactory elements designed and built into them, they will be there for a very long time, and/or be very costly to remove. Hence, the payoff from an appropriate level of safety audit at the concept and detail design stage is likely to be high:

Secondly, there is one aspect of road safety audit which is not widely practised, but where local government has a special responsibility and opportunity, and that is the audit of development proposals.

The requirements are outlined in Austroads (1995), but essentially relate to access to the site (e.g. sight distances, queuing on the major road), internal circulation, and pedestrian safety. As with other forms of audit, `prevention is better than cure', and the potential for quite important benefits as a result of very modest expenditure is high. The likely application is that a developer would be required to submit a road safety auditor's report with the development application, as a condition of gaining a planning or building permit.

Safer roads.

Accident black spot programs have focused on remedial or pro-active treatments of sites or routes which exhibit features which contribute to accidents. For the most part, these have been on the higher volume roads, especially State highways. There are many kilometres of secondary and local roads which may exhibit these features, and which should form the focus of action by the local authorities responsible for them.

The range of actions is extensive: shoulder sealing for example has been shown to be cost-effective down to quite low traffic volumes; provision of guard fencing - and importantly the replacement of sub-standard guard fencing, provision of adequate warning signs, provision of adequate delineation such as raised pavement markers and guide posts, etc (Ogden, 1996).

The two key points here are the need to acknowledge and act upon the responsibility to ensure a safe road network within each municipality, and the benefits of developing a systematic road safety strategy to ensure that work is programmed and executed in a cost-effective fashion.

Local authorities should be aware of their legal responsibilities in the provision of safe roads, and the view of the courts in relation to agencies which cannot demonstrate appropriate processes of management (Austroads, 1995).

Management of the urban secondary arterial network.

In most urban areas in Australia, the State road and traffic authority is responsible for what may be called the primary arterial road network. Often local government has an input to decisions about the management of this network (e.g. clearway provisions), but is increasingly on its own when it comes to the secondary arterial network. It is vital to recognise that this secondary arterial network is a key component of the total regional road network, and its management needs to taken account of regional as well as local needs. The appropriate management of particular elements of the secondary arterial network can only be resolved on a case by case basis. Some will be of such significance that they are treated in the same way as the primary arterial network with clearways, signal progression, control of access, etc. For others, local access and amenity considerations will be more important, and they may be subject to `environmental adaptation'.

The road user is generally unaware that some arterials are designated as primary and others as secondary (or whatever local term may be used). They are regarded a trunk routes catering for larger traffic flows and longer distances.

Local government may be called upon to play a larger role in planning and operational decisions concerning the secondary arterial road network. This role needs to recognise the balance between local and regional needs, as State road and traffic authorities tend to focus their attention on a smaller proportion of the total arterial network.

Traffic calming.

Traffic calming, or local area traffic management, has long been practised by Australasian local government, to the extent that there are probably few areas which could benefit from the application of these treatments which have not in fact been so-treated. The question now is, what's next? Is this era now passing into history, or do we need to develop the next stage of traffic calming? (Brindle, 1991)

We incline to the latter view. Technology (e.g. speed cameras) may be able to achieve the same ends as the physical devices we have used to date. There has

always been some resistance to traffic calming, particularly its harsher forms, and we will probably see pressures to remove or modify existing treatments.

How many of today's local schemes would be necessary if we had an obeyed or enforced 50 km/h local street speed limit? Or a 40 km/h speed limit? We don't have answers to these questions, but believe that the questions are valid, and that there will be an on-going need for appropriate review and reappraisal of techniques for the management of speed in local streets.

Clearly, as local government is primarily or exclusively responsible for local streets, local government must be at the forefront of the reform and rethinking of the role of traffic calming.

CONCLUSION

In this paper we have examined some of the emerging issues for local government in relation to transport and traffic. This can be a expansive subject. A wider-ranging paper is available which accompanies this address (Chandler and Ogden, 1996). Local government is changing, the expectations of the community are changing, and the opportunities for road and traffic authorities are changing. In this environment, it is appropriate to think again about the role of local government. We hope that the ideas outlined in this paper stimulate and contribute to the debate about that role.

In particular, we argue that:

- Effective land use/transport integration is *critical* to achieving and maintaining vital and viable urban areas:
- There *is* a considerable gulf between the rhetoric of land use/transport integration and the everyday reality;
- The most urgent improvements and changes needed are *institutional* rather than technical or economic in nature.
- A more genuinely *holistic* and interdisciplinary approach is critical, in political decision-making, professional practice, and education.
- Local Government, despite its inherent limitations, has untapped potential.to achieve the necessary 'whole-of-government' approach required, in a climate where the other level(s) of government continue to demonstrate their inability to adequately integrate land use and transport.

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