

## **Introduction**

Strategic transport studies have been undertaken by many local governments in Australia to improve regional transport services and infrastructure. A key process incorporated in such studies is to conduct community consultation seeking stakeholders' views on local and regional issues, suggestions for future development options, and responses to government alternative plans. Without such a process, the results produced by such studies are often unable to meet the expectations of most stakeholders and may not adequately serve the transport needs within the region.

Community consultation has been the means frequently used by governments to plan regional transport infrastructure and services, and to assess their associated local and potential impacts on community activities, land use patterns and environment protection. As different community groups may view the impacts from different perspectives, it is important for governments to consider stakeholders opinions, prepare alternative plans and make decisions on the transport projects that are beneficial to the majority of communities. Conducting community consultation to assist transport decision-making has become a common practice in most levels of government. Examples include Building Sydney Eastern Distributor (Stone 1992), and Minnesota Department of Transport building a bridge across the Mississippi at I-35E into the Twin cities (Lewis 2000).

This paper examines the role of community consultation in assisting regional strategic transport studies. The St George Regional Transport Future Directions Study in Sydney is one such example. It had a specific focus of seeking public transport improvement options for the region. This paper starts with discussing community consultation in general and Councils views on it, and follows by introducing the characteristics of the St George Study.

During the course of the Study, a number of workshops in terms of community consultation were organised. Not only were many suggestions for transport improvements collected, but also was feedback sought on the results of transport modelling. How community consultation informs "technicians" who mainly carry out transport modelling are also discussed in this paper.

## **Community consultation**

There are many examples where community groups can exert an influence on government decisions on building transport infrastructure. When neighbourhoods rally to block the permits or stop the bulldozers moving into the construction site (Fiszbein 1997), it is often the consequence of inadequate consultation with communities. Without appropriate consultation, transport infrastructure projects initiated by governments would not be able to proceed and the future of regional transport systems would not possibly be guaranteed.

## **Integration of Community Consultation in Strategic Transport Planning**

*Blake Xu*

To ensure the success of a transport infrastructure project, the support of local communities is needed. Building consensus with communities and shaping the project plan to mirror community concerns are examples of the means to gain such support. The emergence of consensus building as a method of deliberation has provided the opportunity to address complex, controversial public issues when multiple interests are at stake (Innes 1996). A consensus however is difficult to reach if the views on the quality of transport services and infrastructure, and the environmental impacts of using transport systems are in conflict and where an opportunity to exchange such views does not arise.

A common practice for governments to build consensus is to conduct community consultation. Community consultation is a process where the views, opinions, concerns and reactions from the community representatives or stakeholders are sought (Hannaford and Cole-Edelstein 1998). It is an important process in strategic transport planning (Austroads 1998). Community representatives or stakeholders are those who have a stake in the outcome of the activities to be undertaken (Austroads 1998). Community consultation is often conducted in the form of workshops participated in by a representative group of communities. The advantage of such consultation is that stakeholders can argue their cases with each other rather than simply lobby governments in isolation. This can result in both sides compromising on fixed positions or at least recognising the viewpoints of the opposition (Waugh et al 1998). A consensus is expected at the end of discussing alternative views.

Communities play an overseeing role over government regional plans. When communities are uncertain of the impacts of government projects on their daily life and activities, they may want to discourage the government from proceeding with the projects and want those projects perceived as having negative impacts to be stopped. Essentially, stakeholders are usually enthusiastic in expressing views and comments on the use, management and pricing of planned transport services and infrastructure they are concerned with. For instance, stakeholders are often concerned with cases in which land use allocations are seen as controversial. Land developers may be interested in street and highway improvement for this may influence their decisions to purchase and subdivide land (US Department of Transport 1980). As important stakeholders, the participation of emergency services such as police and fire brigade can also help identify problems that may be caused when constructing streets, highways and bridges. This shows the importance of stakeholders influence on decision-making. Stakeholders participation or community participation in the decision-making process enriches the community consultation process. Community consultation including the component of community participation into the early stages of the project development can assist in minimising the risks of costly remedies further down the track.

Community consultation should not be confused with community surveys. Consultation participants are representatives instead of samples of community groups. Consultation results are not dependent on quantity of participants but dependent on the quality of suggestions and comments made during the process. Surveys, on the other hand, count the frequency of suggestions. The higher the frequency, the more important the

## **Integration of Community Consultation in Strategic Transport Planning**

*Blake Xu*

suggestion. The consultation process however may include the instrument of survey when necessary to identify the importance of suggested alternative plans.

### **Councils**

The Local Government Act in Section 7 requires that Councils “provide goods, services and facilities, and to carry out activities appropriate to the current and future needs of local communities and of the wider public” (NSW State Government 1993). Councils therefore have the obligation to provide better community supportive outcomes and better understanding of the consequences of decisions, particularly in the long term. They are responsible for maintaining local roads, managing local transport plans and making suggestions for improving regional transport services and infrastructure on behalf of local communities (Austroads 2000). To create an amicable transport environment in a region, Councils should not be shortsighted by daily traffic problems but rather be encouraged to think strategically when developing transport plans. To achieve this goal, transport professionals not only need to develop transport knowledge, but also need to look outside their normal boundaries of interest, expertise and comfort and listen to opinions and suggestions of the groups and organisations whose activities are affected. Conducting community consultation can be an effective way to assist in this process.

Community consultation is basically a collective learning process for Councils where all points of view can be heard. When communities are invited to participate in the decision making meetings, “community ownership of the vision” can be created. Benefited from community consultation, the transport management and planning goals, objectives, priorities and performance measures developed by Councils can better suit the needs of wide communities. Subsequently, other strategies relevant to the needs of the communities benefit from the development process for a transport strategy.

Community consultation also provides an opportunity for Councils to explain the significance of major transport projects initiated by governments to communities, share the views about what the problems are, what improvements are necessary and what the effects will be. The purpose is to gain the co-operation and support of the communities (Hannaford and Cole-Edelstein 1998) and to seek further community participation. Notwithstanding, the biggest challenge for Councils organising community consultation is to provide enough opportunities and involvement, along with the contextual information that will facilitate the public’s understanding.

To better serve local community needs, Councils also have a responsibility to represent the communities at State and Federal levels. Community consultation meetings can provide an appropriate forum for communities to seek support from governments and discuss funding options for improving regional transport services and infrastructure. The meetings also provide an opportunity for governments to hear community views from all sides and supply information needed by governments in assessing how to balance the local needs with other regions before making a real commitment.

## St George Regional Transport Future Directions Study

The St George region is located immediately north and west of the Georges River and Botany Bay in Sydney and comprises the Rockdale, Kogarah and Hurstville Councils. Recently, the region has experienced increasing population densities, expanded shopping centres and changing land use patterns. Without exception, the region also experiences traffic congestion like any other urban region. In particular, the region has been highly affected by through-traffic along the south-north corridors linking the Sutherland Illawarra area and the Sydney CBD, and the west-east corridors linking the Airport, Port Botany and Sydney's industrial areas. The through traffic, together with local traffic, has led to a deterioration in the level of amenity for approximately 210,000 residents living in the St George region, especially for those adjacent to the major roads. Issues of inadequate commuter car parking at railway stations have also emerged.

The population in relation to rail services within each Council is presented in Table 1. Percentages of commuters using train to travel were relatively low.

**Table 1 The population and train commuters within 1 km of station in 1996**

Council	The population	% of the council population	Train commuters	% train commuters of the population
Rockdale	47,027	55.4	4,780	10.2
Kogarah	26,216	55.1	3,241	12.3
Hurstville	39,017	59.7	4,853	12.4

(Source: Australian Bureau of Statistics 1997)

Dealing with community pressures to reduce road traffic, individual Councils have proposed their own initiatives and developed policies to accommodate local situations. To curb increasing car use, Councils have manipulated the instruments such as the car parking levy, the Development Control Plan (DCP), and residential parking schemes. However these tactics are limited in their effects. It has been realised that traffic situations are not substantially ameliorated if traffic issues are not addressed in an overall context.

In 1999 Hurstville Council sought the support of NSW Roads and Traffic Authority (RTA) for a transport study. During initial discussions it was realised that transport issues were more regional in nature than local. A Regional Transport Study was then formally established to include the other two St George Councils - Kogarah and Rockdale. The Study was viewed as a regional complement to the 1999 published NSW Integrated Transport Plan for Sydney - "Action for Transport 2010".

The Study was set within a regional context rather than just focussing on local traffic issues. The Study objective was to shift car use to public transport use and consequently

## Integration of Community Consultation in Strategic Transport Planning

Blake Xu

reduce traffic congestion in the region. Broader issues were discussed such as identifying strengths and deficiencies of the existing public transport system, addressing social and environmental issues and assessing land use impacts on transport. The Study however had a particular focus on the identification of public transport services and infrastructure improvement options including bus, rail and ferry for the region.

Representatives from the three Councils formed the Project Management Group. A consortium of experienced consultants were engaged to undertake the Study. The project began in June 2000 and was completed in December 2000. The Draft St George Regional Transport Strategy developed as the final outcome of this Study was officially launched in NSW State Parliament House in early March 2001.

### Conducting the consultation

At the outset, it was realised that community consultation was the key to the success of the Study. The call for community consultation was published in the local newspaper. Organisations, communities and individuals were invited to participate in this Study and encouraged to express their views to their respective Councils. The Councils also sent invitational letters attached with the consultation meeting information to their Councillors, government departments and community active groups identified in Councils' community databases. In some cases, telephone was used to invite community groups representatives and confirm their attendance.

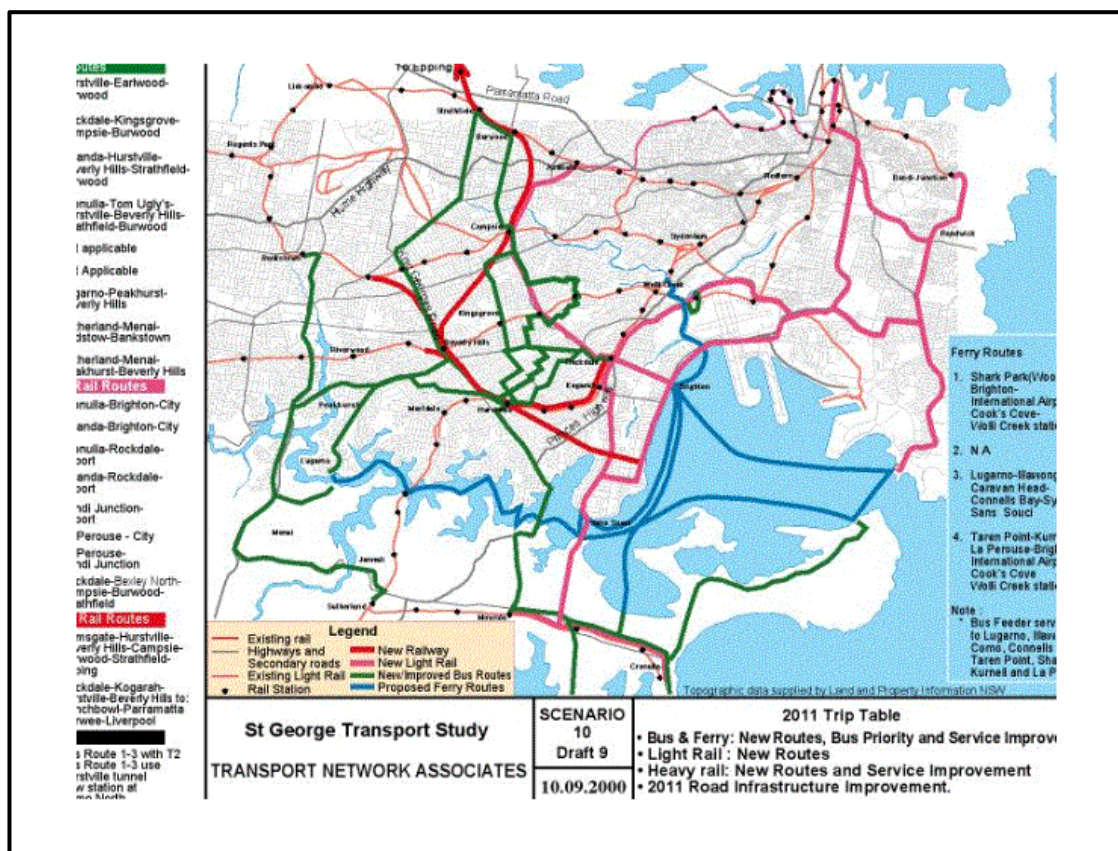
Four workshops were scheduled for the community consultation. The initial schedule was between July and October 2000. But hosting the Sydney Olympic Games affected the process. The first two workshops were operated as planned, but the rest of two workshops were postponed and rescheduled to the November and December. Following the first two workshops, letters were sent to all stakeholders, informing them when they could expect to attend further meetings and when they could review the Study results. Specifically, all workshops started at 6:30 pm at the chosen days and ran for about three hours. The Councils took turns in hosting the workshops.

*Workshop 1* focused on introducing the Study objectives and plan to government stakeholders. Participants included government department representatives, local Members of Parliament, local Mayors, General Managers, and Councillors. At this stage, community groups were not invited. A RTA representative was invited to highlight the significance of the Study in the context of the Sydney Metropolitan Transport Plan. The participants were then divided into three discussion groups and suggestions for improving existing public transport and building new public transport corridors across the St George region were made.

*Workshop 2* focused on introducing the Study objectives and plan to community stakeholders. Government representatives were not included. A short film about the St George traffic history was shown to provide participants with a historical overview of the issues. While community concerns on safety associated with using public transport and limited car parking spaces at train stations were expressed, suggestions for

improving public transport services and building new public transport corridors were the primary focus.

Suggestions from the two workshops for improving public transport services and introducing public transport corridors across the region were compiled and duplicates from different discussion groups were eliminated. Suggested public transport infrastructure options, included new bus routes, new ferries and new railway lines across the St George region. These suggestions were to be examined under regional development scenarios. Ten scenarios were established out of these infrastructure suggestions with variations combining short-term and long-term goals as shown in Figure 1. The base case scenario was set in year 2000; the rest of the scenarios were set in year 2001 and year 2011 respectively.



**Figure 1 One of the Scenarios**  
(Source: Transport Network Associates 2000)

Suggestions for improving public transport were examined in terms of demand modelling under the ten scenarios. However, some suggestions made by communities were not able to be modelled due to existing modelling capacity, but were still important to improving public transport services and their attractiveness. These included improving train station lighting, train safety, interchange between bus and train, and commuter car parking. The Project Management Group decided such service

## Integration of Community Consultation in Strategic Transport Planning

*Blake Xu*

improvement would be better addressed in the final Strategy document and directly report them as recommendations in service improvement plans.

*Workshop 3* focused on presenting and interpreting the results of the demand modelling to all stakeholders, including the Councils staff, government departments and community group representatives. The Councils neighbouring the St George region were also invited. Suggested public transport improvements and infrastructure options were evaluated. Some of these alternatives were retained and some were dropped as a result of demand modelling. A survey of participants opinions was also conducted on the modelling results in terms of the three public transport modes - bus, train and ferry, with demands attached on each network section over peak periods in maps. Subsequently these alternative suggestions were ranked in terms of importance. In addition, some comments on improving the modelling process were also made.

*Workshop 4* focused on presenting the modified modelling results to all stakeholders and encouraging them to discuss an implementation plan for the suggested public transport infrastructure and traffic measures that could be beneficial to public transport. Financial options were also sought. The final Strategy would be used by the Councils to lobby State and Federal Governments for transport service and infrastructure funding. The Councils also requested the support from State Government on a set of transport measures to achieve the broader goals of the efficient use of resources, improved accessibility, safety and environmental protection.

### Understanding the characteristics

This community consultation demonstrated several characteristics. The Study began with what was considered the ideal transport situation for the region. The workshops were designed to allow stakeholders to draw upon their local knowledge and “picture” the future public transport system for the region. The picture was eventually presented in the 10 scenarios without giving too much attention to operational details. The suggestions included in each scenario were then examined in the process of demand modelling. Some suggestions were considered feasible if there was an adequate potential for demand in the peak periods. For example, suggestions for introducing ferry services into the Botany Bay were innovative and those services were found to have apparently viable potential patronage along their routes. A distinct characteristic of the community consultation is the ongoing community participation in both making the suggestions and assessing the model results in terms of ranking the alternatives.

Traditional processes for organising community consultation are slightly different. Usually a specific transport infrastructure plan is prepared before hand in terms of project purpose and location. Community consultation is then conducted to smooth the building process of the infrastructure. That is, governments initiate new transport infrastructure plans to stakeholders who in turn respond with either positive or negative comments through community consultation. If some stakeholders are unsatisfied with any aspect of government plans, they can demand alternatives. Governments then prepare several plans and evaluate environmental and social impacts of each plan to

## **Integration of Community Consultation in Strategic Transport Planning**

*Blake Xu*

genuinely address stakeholders' concerns before making the final choice. This type of community consultation is more closely related to specific planning stages of transport infrastructure than strategic planning stages that require "pictures". For the St George region, this more traditional form of community consultation may be used if specific plans in terms of route location choice for the new public transport infrastructure are to be implemented.

Adopting transit-lanes and reducing service head ways to increase public transport services attractiveness were also suggested during this community consultation, together with a few suggestions for improving cycling paths and pedestrian pavements and commuter car parks which would potentially encourage car users to transfer at train stations to use public transport. Another interesting aspect of this community consultation was that communities might expect that such a study could solve all the problems they are concerned with transport use. They made comments on poor service liability, poor traffic facilities and staff attitudes. The Strategy developed from this Study provided suggestions to the State transport authorities to improve their operational plans and provided bases for the Councils to develop local traffic plans to further address the traffic issues.

Integrated regional transport studies have become more desirable recently as they are able to consider all transport modes and address the issues of co-ordinating them physically and even between authorities in terms of timetables and pricing (May and Roberts 1995). Integrated regional transport studies also look into other tactics such as changing travellers' behaviour to reduce traffic congestion. In this context this Study would not be considered a real "integrated" study but rather a regional transport infrastructure strategic study.

The effects of this type of community consultation adopted in this Study are measureable. Such community consultation is not only useful to strategic transport decision makers who need to take into account the views and suggestions of stakeholders participating in the strategic planning process, but it is also useful to transport planning professionals such as transport modellers in terms of dealing with issues of concern to communities and improving the models' capability to suit strategic transport planning needs.

### **Demand modelling**

In any strategic transport study, demand is the key to justify the request for new transport infrastructure. Demand is the outcome of the technical process of demand modelling included in such studies. However, the process is not isolated from community consultation.

This community consultation and the demand modelling process were inter-related. The community consultation process was designed to elicit the needs of stakeholders in terms of transport infrastructure and service improvement. Stakeholders, particularly local community groups, often have better knowledge about local transport and traffic



## **Integration of Community Consultation in Strategic Transport Planning**

*Blake Xu*

issues, and therefore are better equipped to make suggestions for regional improvements.

Some suggestions made during a community consultation process may not be quite obvious from the “technicians” perspective. When “technicians” lack understanding of community needs, the issues addressed in modelling may not be those mainly concerned by communities and the modelling results may not be widely acceptable. The “technicians” may examine the alternatives of interest only to themselves. The modelling challenge for the “technicians” is to bridge the gap between community needs and “technicians” modelling framework (Xu 1998; Xu and Smith 1998). Such community consultation process can assist in broadening the “technicians” perspective and provide suggestions unexpected by the “technicians” which may later be found the best alternatives. To greatly assist the “technicians”, community consultation should start before actual modelling work begins.

The views of stakeholders representing different communities however may be in conflict. Some views may be partial and narrow-focused. This really challenges the “technicians” capability. Representing community needs, but more likely influenced by political pressures, stakeholders expect the modelling process would be able to support the infrastructure projects they really want. This is the impact of political wills. The “technicians” need to take into account such political wills and public preferences in consultation.

From the stakeholders point of view, demand modelling is the show running behind the curtain and a black box to them. They are instead more interested in the modelling results. Modelling results require extensive discussions by interested citizens, elected officials, government agencies and private sectors (Beimborn 1995). When presenting the results to stakeholders, the “technicians” need to prepare the results in an easy-to-understand format and be careful to avoid the use of jargon. The infrastructure options regarded important by stakeholders during the initial consultation process need to be discussed during the presentation.

On the other hand, stakeholders play the role of a supervisor checking whether their suggestions have been well considered. The “technicians” need to be well prepared to answer any inquiry of some stakeholders who may stand against some service or infrastructure recommendations. The “technicians” need to demonstrate to stakeholders and communities that most stakeholders views, wills and preferences have been considered, and their needs are addressed on a regional basis. In some cases, they also need to explain why some suggestions are filtered, modified or combined and why some are put into either short-term or long-term categories. They need to convince stakeholders that the final recommendations coming up from the modelling process are the best options which are possibly obtained. Such two-way discussions involving “technicians” and stakeholders are important processes for the modelling results to be understood and accepted by the wider community.

For this St George Regional Study, the model used for estimating demand was the NETANAL which is essentially a Network Analysis Assignment model (Arthur Sims

# **Integration of Community Consultation in Strategic Transport Planning**

*Blake Xu*

2000). The Councils basically agreed that the change of land use patterns in the St George region was slow, attributed to the fact of the mature nature of land use markets. The process of assessing the impacts of land use patterns on transport is not considered in this Study. Instead, the “Trip Tables” from NSW DOT Transport Data Centre provide the predicted trips generated under future land use patterns. The demands for the suggested public transport infrastructure options were the direct results of assigning these trips of the “Trip Tables” into these alternatives.

This experience shows that the four-step model developed during the 1960’s still retains particular currency for strategic transport studies in the 21st century. While models such as activity-based models and behaviour-based models which incorporate land use scenarios and examine various policy measures, are particularly good at accommodating the political wills and public preferences, in reality there still exists a lag between these models and their applications. However, from the Councils’ point of view, decision-makers need to be aware of the pitfalls of current work being carried out, given that further exploration of better tools may exist.

## **Conclusion**

The benefits to Councils from the St George Regional Future Directions Study, are not just in terms of plans to improve existing public transport services and introduce new public transport infrastructure into the region, but also in terms of assisting the development of their local transport plans. This Study demonstrates that community consultation including community participation is an important instrument for local governments to use when regional strategic planning issues need to be addressed. A successful integration of community consultation into regional strategic transport planning in this Study is a good example. However the suggestions for improving public transport options in the region will eventually depend on an implementation plan and funding options. The three Councils currently look forward to responses from all stakeholders and communities on the Draft Strategy.

## **Acknowledgements**

The author wishes to acknowledge Mazz Appleton, Richard Jarvis and the anonymous referee who provided valuable advice on this paper.

The views expressed in this paper remain the responsibility of the author only.

# Integration of Community Consultation in Strategic Transport Planning

Blake Xu

## References

- Arthur Sims, (2000) *Sims Varley Traffic Systems*, <http://www.users.bigpond.com/ag.sims/NETANAL.htm>
- Australian Bureau of Statistics (1997) *CDA96 with MapInfo Software*, Australian Bureau of Statistics, and MapInfo Australia
- Austrroads (2000) *RoadFacts 2000 – An Overview of the Australian and the New Zealand Road Systems*, <http://www.austrroads.com.au>
- Austrroads, (1998) *Principles for Strategic Planning*, Austrroads Incorporated
- Beimborn, E. (1995) *A Transportation Modelling Primer*, <http://www.uwm.edu/Dept/CUTS/primer.htm>
- Fiszbein, A. (1997) The Emergence of Local Capacity: Lessons from Colombia, *World Development*, 25(7), 1029-1043
- Hannaford, J. And Cole-Edelstein, L. (1998) How community consultation can help us get transport right, *Proceedings of 22nd Australasian Transport Research Forum*, 22(2), 971-984
- Innes, J. (1996) Planning through Consensus Building: A New View of the Comprehensive Planning Ideal, *Journal of the American Planning Association*, 62(4), 460-472
- Lewis, J. (2000) *Strategic Management*, Transportation Research Board Millennium Paper, [http://www4.nationalacademies.org/trb/homepage.nsf/web/millennium\\_papers](http://www4.nationalacademies.org/trb/homepage.nsf/web/millennium_papers)
- May, A. And Roberts, M. (1995) The Design of Integrated Transport Strategies, *Transport Policy*, 2(2), 97-105
- NSW State Government (1993) *Local Government Act*, [http://www.austlii.edu.au/au/legis/nsw/consol\\_act/lga1993182](http://www.austlii.edu.au/au/legis/nsw/consol_act/lga1993182)
- Stone, C. (1992) Consultation in the Planning of a Major Road - The Case of Sydney's Eastern Distributor, *Citizen Participation in Government*, authored by Munro-Clark, Hale and Iremonger, 99-110
- Transport Network Associates (2000) *Scenarios - St George Regional Transport Future Directions Study*, Internal Information
- US Department of Transportation (1980) *A Guide for the Decision Maker: Transportation Planning for Your Community*, The National Transportation Library

## **Integration of Community Consultation in Strategic Transport Planning**

*Blake Xu*

Waugh, P.; James, R.; Charles, P. And Frape, G. (1998) Getting it right: using stakeholders to determine road network strategies, *Proceedings of 22nd Australasian Transport Research Forum*, 22(2), 1001-1016

Xu, B (1998) Incremental Planning, Paper of the 20<sup>th</sup> Conference of Australian Institutes of Transport Research, The University of Sydney

Xu, B. and Smith, N. (1998) Market-Oriented Bus Route Planning, *The Proceedings of 22<sup>nd</sup> Australasian Transport Research Forum*, Sydney, 22(2), 1033-1048