

Big Roads, No Transport-

Community Mapping for Transport Improvements

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ABSTRACT

The transport system is generally designed by experts such as engineers, transport providers, and planners. The transport plans and proposals are then made available to the community as a draft for consultation. The process can be characterised as: *experts-plan-consultation*. This paper reports on recent studies in 3 marginalised communities where residents were engaged through community mapping to design their preferred transport system. The community mapping process inverted the planning process stated above and instead generated transport plans from consultation. The plans were then delivered to experts for their response. This process was: *consultation-plan-experts*.

The community mapping technique applied in these 3 communities responded to the consultation fatigue and frustration expressed by residents who had been involved in over a decade of interventions in their communities with limited resultant transport improvement. Community mapping drew on local knowledge and allowed residents to identify solutions to transport issues. Consultations had previously focussed on residents identifying transport issues, not transport solutions.

The community mapping technique also explored the link between transport access, transport disadvantage and social disadvantage through documentation of the stories and experiences of transport users. In addition to the classic indicators of disadvantage (such as poverty), the research provided evidence that transport disadvantage manifests as social disadvantage in these communities. Transport disadvantage (the result of unmet transport need from relatively low rates of car ownership, inaccessible public transport services, unresolved road and pedestrian/cycle networks and poor quality transport infrastructure) like other forms of social disadvantage, limits the potential of residents and the areas. Residents' stories of the impact of the transport system and poor transport access on their lives provide powerful evidence of the link between transport disadvantage and social disadvantage.

The studies' community mapping process and the creative presentation of findings and recommendations resulted in Commonwealth, State and Local Government and local and state-wide media interest. Many of the 3 community's recommendations for transport improvements are being implemented by Government and non-Government organisations.

INTRODUCTION

For many years, residents and service providers have identified poor transport (public transport, both services and infrastructure and the road and pedestrian network) as inhibiting the development of the Goodna, Gables and Carole Park communities. In 2004, Griffith University undertook to work with community members in Goodna and Gables to design and map a preferred transport system. In

2005, Brisbane City Council invited Griffith University to repeat the Goodna and Gales study in the neighbouring community of Carole Park. Central to the studies was a process of community engagement known as community mapping.

Overview of Community Mapping

Community mapping has traditionally been used to describe features of neighbourhoods important to residents. For example, residents might identify local iconic buildings and locate them on a map of their area. The technique is not generally used in conflicted and contested arenas such as transport planning. Community mapping was employed in these studies because:

- The community members have an interest in transport improvement (as articulated through a decade of community consultations),
- Transport (services, infrastructure and network) is a spatial issue, readily ‘mapped’,
- There is a history of effective project based collaboration in Goodna, Gales and Carole Park (local people are working in action groups, across sectors identifying and implementing solutions to local problems), and
- Residents in the 3 communities are mobilised for local transport improvements (each community had resident-based transport working groups at the time of the studies).

The Places- Goodna, Gales and Carole Park

Goodna, Gales and Carole Park are neighbouring suburbs located at the boundary of Ipswich and Brisbane City Councils. The communities are variously impacted by their location on major road corridors. The impact can be summarised as ‘big roads, no transport’, as there is limited local transport benefit to residents of these communities located on these roads and there are significant disadvantages.

The Ipswich Motorway divides the main residential areas of Goodna and Gales from their respective railway stations and from the Brisbane River and recreational facilities. Limited east-west connections in the local road network results in many Goodna and Gales drivers using the Ipswich Motorway for local shopping and service trips. This compounds the existing congestion and exacerbates the risks of the Ipswich Motorway.

Carole Park is a triangle bounded by the Logan Motorway, Centenary Highway and the Carole Park and Wacol Industrial Estates. Residents report noise and emission impacts from proximity to these major roads and inadequate noise barriers and screening.

The UK Government’s Social Exclusion Unit (2002) notes that as well as social disadvantages, there are adverse environmental effects of road-based transport policies on communities through increased driver, passenger and pedestrian death rates, high pollution levels, and isolation due to busy roads. Transport disadvantage may take forms other than transport service or access issues. For Carole Park in particular, the noise impacts of the Logan Motorway and Centenary Highway are continuously reported by residents as seriously impacting their lives. Goodna and Gales are communities divided from key services by the Ipswich Motorway, residents also report fear of the Ipswich Motorway.

Goodna, Gales and Carole Park combined house about 4500 residents and have high unemployment rates of 16.5%, 16.9% and 24% respectively. Each community has relatively high levels of public housing. Together, these communities have a key role in the metropolitan area as places of low cost public and private housing with an emerging private sector interest due to the relatively low price of land and housing and proximity to major new residential communities at Forest Lake and Springfield.

Mobilised Communities

While marginalised by their location on the edge of industrial estates and major transport corridors, and their characterisation by Government programs as ‘disadvantaged’, these are relatively organised and active communities with many residents forming groups across sectors to address critical issues in their communities. Throughout the study, a group of residents from Goodna and Gailes and representatives of the three spheres of Government and non-Government service providers met regularly as the ‘Goodna Communities Moving Forward’ forum. Sub-groups such as Domestic and Family Violence, Young People, Training and Employment and Transport Options reflect the key community issues. Members of the Goodna and Gailes Forum’s Transport Options Working Group agreed to guide the Griffith University community mapping for transport improvements study.

Similarly, the Carole Park Transport Action Group formed to address transport issues in that community. The group comprises residents, service providers, the State Government Departments of Transport, Housing, Communities and Brisbane City Council representatives. The Carole Park Transport Action Group members also agreed to guide the University’s community mapping for transport improvements study.

The long history of area-specific planning processes in these 3 communities has provided many residents with experience of Government planning processes and consultative action groups have formed which are articulate, functional groups knowledgeable of the constraints of the decision making processes of Government.

STUDY METHODS

A range of qualitative and quantitative methods were used to describe and analyse the transport system (both transport network and services and transport access issues for residents), to profile the communities and transport disadvantaged groups and to identify transport solutions for the 3 communities.

The three stages of the study were data collection, data analysis and community mapping.

Data Collection and Data Analysis

To gather and analyse transport related information the studies involved:

- Reviewing a decade of area-specific consultations, plans and projects in the 3 communities including an audit of outstanding recommendations. These consultations consistently identified transport improvement (from more buses and bus shelters to the expansion of the Ipswich Motorway) as a high priority.
- Talking to individuals- key stakeholder interviews, and ‘kitchen table’ discussions.
- Working with groups- attending community meetings, undertaking community mapping workshops and focus groups.
- Identifying relevant community characteristics from Australian Bureau of Statistics Census data.
- Participant observation- public conversation, moving around the communities and researcher’s notes.
- Photo diary- photos and short films of transport paths and infrastructure.
- Reviewing literature on transport and social disadvantage.
- Identifying Queensland Transport’s position on unmet transport need.
- Analysing relevant local transport information such as train and bus timetables and bus routes and destinations, community and private transport options.
- Reviewing reports of community transport projects, and unmet transport need in south east Queensland.

- Internet searches for community transport and alternative public transport services information.
- Ground truthing research findings through review meetings with community representatives.

COMMUNITY MAPPING

A number of interactive workshops were conducted in local community centres to identify and locate transport issues and solutions on maps of the local area. The engagement of community members and local service providers through the community mapping process assisted the articulation of transport issues and transport solutions and proved the skill and readiness of local residents to design a preferred local transport system.

Identifying the Base Map

To assist in identifying a suitable base map, the researcher consulted a small number of residents on the extent of key destinations and transport interchanges. A draft base map was then provided to residents for their comments. Initially, a cadastral map outlining house lots and key features was presented to residents as a base map for the studies. This map was not detailed or 'user friendly' enough to orient residents (even long time residents) to the area as it lacked local features and landmarks significant to local transport users.

In response to the confusion caused by the cadastral map, the researcher provided a 'hand drawn' conceptual map of the area, incorporating the spatial extent of local transport issues and other features identified by residents as significant to local transport. Produced at A1 size, these were the base maps for the studies.

Community Mapping Workshops

Workshop participants were asked to reflect on their experience of walking and cycling, using public transport and driving and being driven in their communities. Issues were located on maps including common travel routes (for walking/cycling, bus/train and driving) and barriers to the different travel modes. Where issues could not be readily mapped (such as the need for more frequent buses) these issues were recorded.

In the same workshops, community members were asked to identify and map solutions to the transport issues and barriers they identified. These workshops of residents, service providers and service clients produced a series of community generated 'transport solutions' maps for the different transport modes (walking and cycling, public transport, and driving). These maps were layered to generate one map of community based transport solutions. This map contained information not possible for non-local researchers or experts to identify such as informal paths, and important local destinations.

With the agreement of community members, this map was then enhanced with the addition of features identified in past area-specific transport related consultations, current transport proposals for the area and the researcher's observations. The final map was then reviewed with community members.

Figure 1 is a result of the community mapping process. The figure shows an A1 poster produced for the Carole Park study that incorporates the study context, process and recommendations. A similar poster was produced for the Goodna and Gables study. These posters are in local Government officers and non-Government community centres in the area.

Other products of the studies also proved valuable in communicating local transport issues and solutions such as:

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- Photo diary of images of the areas' transport paths and other transport infrastructure of good and poor quality. The images proved useful in meetings with Government officers who did not know the local transport context and highlighted issues and possible solutions.
- Local media articles and photos. Media releases were prepared and distributed and local people from the transport action groups were nominated as media contacts.
- A3 copies of the community maps of transport solutions. These A3 maps were distributed to community groups, local politicians, transport and other funding agencies.
- Tables of recommendations including a 'status' column reflecting the responses of experts to the community's transport plans.

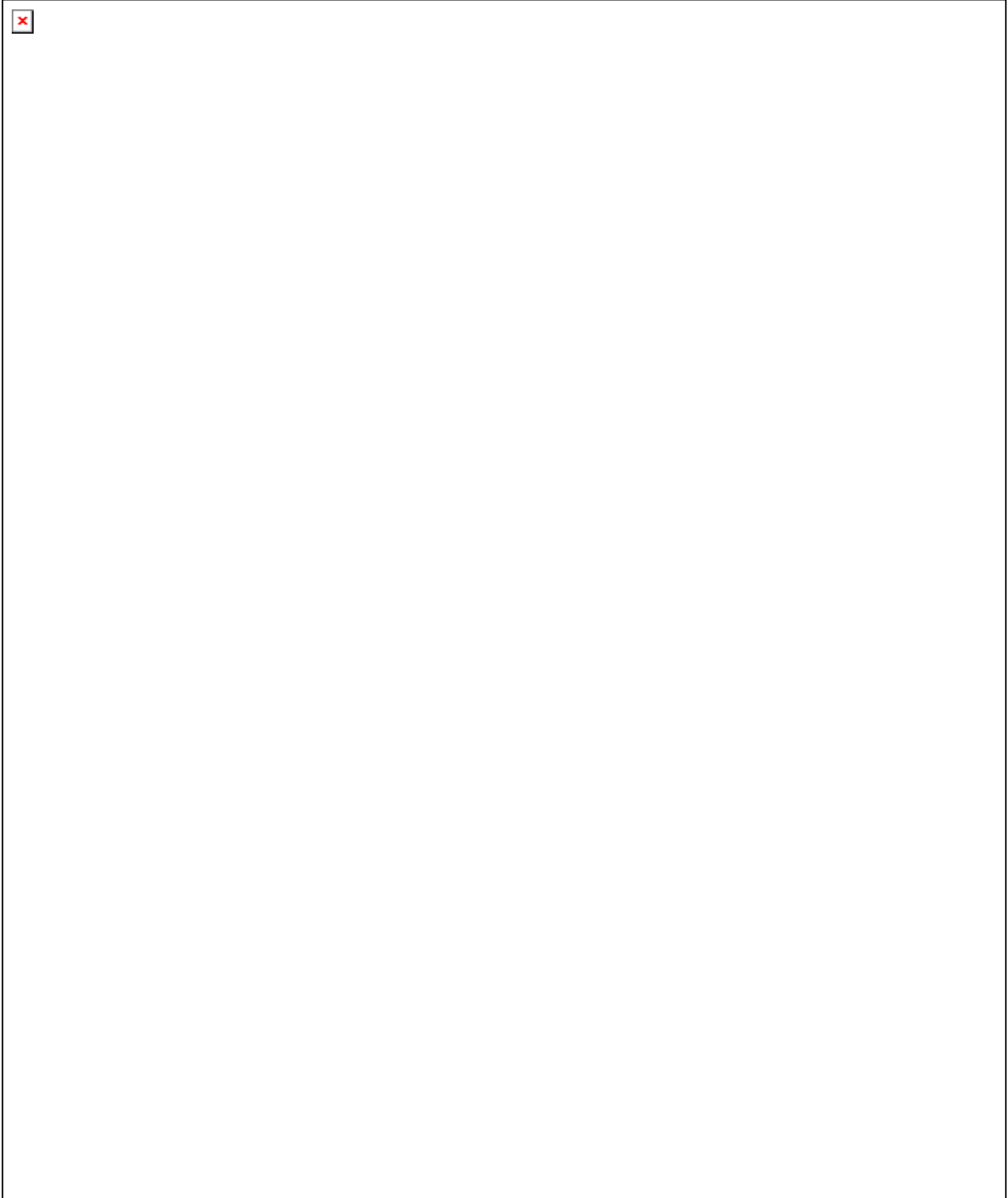


Figure 1 'Still Waiting' Carole Park Community Mapping for Transport Solutions Poster

THE TRANSPORT DISADVANTAGED

The National Road and Motorists Association (NRMA) in a 1995 report on transport access, found that transport disadvantage occurs for:

- People with physical disabilities
- People with intellectual disabilities
- People in isolated areas
- Less mobile elderly
- Public transport dependent people at times when it is not available
- Youth and students
- Children
- Unemployed
- Migrants
- Single parents
- Low income households (NRMA, 1995:35)

In their study of the 'transport disadvantaged' in Scotland, Hine and Mitchell (2001) found that transport disadvantage occurs for these groups (such as those listed in the section above) because of 'physical, temporal, economic, spatial and psychological' barriers (2001:330).

The studies of the Goodna, Gables and Carole Park communities found strong evidence of transport disadvantage and associated social disadvantage as residents experienced difficulty accessing daily services and employment due to relatively poor quality transport services.

The focus groups, workshops and key stakeholder interviews undertaken for the studies, suggest that the barriers identified by Hine and Mitchell (physical, temporal, economic, spatial and psychological 2001:330) are evident for residents and service users in Goodna, Gables and Carole Park as highlighted by the following observations (Johnson and Herath, 2004 and Johnson, 2005).

Physical Barriers

- *You need to take 2 flights of steep stairs after over 1 kilometre walking to get from Gables to the Gables railway station.*
- *The Goodna station and shops are 1.4 kilometres from the Goodna public housing area and the Goodna Community Health Centre. There is no shelter or seating along the way.*
- *It is over a 1km isolated walk to the Wacol and Gables railway stations from Carole Park, yet these are the only way out on public transport in the evenings and on Sunday and public holidays.*
- *You can't drive from Gables to the Gables railway station because the exit from Gables is beyond the entry to the station. It's too far to walk.*

Temporal Barriers

- *You can't get by bus or train for the first shift at factories in Carole Park and Wacol, there are no buses on a Sunday, and none on a Saturday afternoon.*
- *A resident travelling 2 hours one way to Acacia Ridge from Gables by public transport to a 2 hour job (4 hours travel for 2 hours employment, covering a return distance of about 20 km)*
- *An Ipswich resident travelling 2 hours 20 minutes one way from Ipswich by public transport to Goodna to access a 2 hour therapy session at the Goodna Community Health Centre (over 4 1/2 hours travel for 2 hours of treatment only available to her in Goodna).*

Economic Barriers

- *The CODI (Coordinating Organisation for the Disabled in Ipswich) bus is too dear for pensioners (\$12.00 return from Goodna to hospital or shops).*
- *The suburbs have high unemployment (over 16%) and over 30% of the population is under driving age.*
- *Job Network providers buying bicycles for unemployed people so they can get to jobs (there are local industrial jobs, but no local transport to match the locations or the hours).*
- *With no bus service on Sundays and public holidays or any week-day or Saturday evenings, taxis become the most convenient way to travel for those without private transport. Taxis are an expensive alternative to public transport.*

Spatial Barriers

- *It is easier to get by public transport from Goodna and Gales to the Brisbane CBD (about 30kms away) than to the neighbouring industrial areas (3-10kms away).*
- *It is not possible to use public transport to get to the Carole Park and Wacol Industrial estates for the first factory shifts (first train arrives too late).*
- *It is faster to walk on the bush track to the Redbank Plaza shopping centre (3kms away) than to get the bus from many areas of Goodna.*

Psychological Barriers

- *'I've been waiting for the bus for an hour and it didn't even come'. Goodna Community Health Centre client, one hour late for a 2 hour appointment.*
- *'Lack of transport contributes to boredom and other issues for young people in Goodna'. Goodna Service Integration Project, 2002.*
- *We are scared of walking from Wacol Station because cars often flashed their lights and make rude signs at us (particularly the young girls in the group).*
- *No weekly after dark, Saturday afternoon or Sunday services means we're bored and 'stuck at home'. Young Carole Park resident.*

STUDY RECOMMENDATIONS

Recommendations for transport improvements were presented on the community generated maps and in tables. The recommendations were grouped into three sections: physical improvements, service improvements and transport leadership/local engagement. The recommendations are not in priority order as community members nominated all recommendations of equal priority.

Table 1 is an extract of the recommendations of the Goodna and Gales Community Mapping for Transport Improvements Study (Johnson and Herath, 2004:48). Where possible, the recommendations table details the response of the experts to the community solutions (the recommendations). This gives the table comprehensiveness not usually found in transport plans.

CONCLUSION- THE VALUE OF COMMUNITY MAPPING

The Goodna, Gales and Carole Park studies proved the value of community mapping for conflictual and contested arenas such as transport planning. The contemporary nature of the community mapping process, that is, its 'newness' and creativity attracted interest from residents and Government officers. The process in many ways responded to the consultation fatigue and local frustration experienced after a decade of planning with limited resultant transport improvement for these communities. These frustrations were shared by residents and Government officers and this created an environment of cautious collaboration for transport improvements. Government officers were willing to listen to the concerns and solutions of residents and the University provided

facilitation and a brokering role to ensure an iterative relationship between local and expert knowledge.

Table 1 Extract of Recommendations of the Goodna and Gales Community Mapping for Transport Improvements Study

No.	Recommended Activity	Issue	Source of Recommendation	Status of Recommended Activity
R1	Construct Flyover at Ipswich Motorway at Gales (extending Old Logan Road across the Motorway to Brisbane Tce).	The Gales community would be able to access their railway station and the riverside recreational facilities. They would also be able to leave their suburb without complicated merging at 100km onto the Ipswich Motorway.	Ipswich Motorway Study (Dept of Main Roads) Gales resident consultations	Awaits Federal funding for Ipswich Motorway upgrade though, could be funded from \$66 million already allocated by Federal Govt to State Govt for Motorway modifications.
R2	Construct vehicle/bus/walk/cycle access to Redbank Plaza from Goodna.	The current access is inadequate and requires that residents use the Ipswich Motorway for this local trip.	Goodna, Gales Community Action Plan (Dept of Housing)	Construction of the extension of Smiths Road to Chalk Street (via Cross Street) to connect Goodna to Redbank Plaza is a condition of the Cunningham Rise development (Stage 2). With increasing house and land values in the Goodna area, the developers may undertake Stage 2, which would provide funding for the connection to Redbank Plaza.
R3	Resolve the existing walking/cycle path through old rifle range site to Redbank Plaza. Maintain it or close it (once other walking/cycling access built).	The walking/cycling path is unsealed and isolated. It is unlit and perceived by local residents to be dangerous.	Researchers observations and Photo diary Goodna consultations	The path is not fully sealed and is isolated from view (See photo at Attachment D). The State Government conducted a study to identify the future of the Rifle Range site which the path traverses. The study recommended some limited residential development near the existing path. The recommendations for the future of the old Rifle Range site have yet to be actioned by the Department of Natural Resources and Mines.

The community mapping studies also highlighted the value of creative presentation in communicating complex planning issues and solutions to both community members and experts. In addition to the maps, a short film (DVD) of Carole Park’s walking and cycling paths, bus and transport infrastructure was a powerful communication of local transport experience. The viewing of this film triggered responses from Commonwealth, State, Council and non-Government funding

and service providers (both transport and non-transport). The construction of a path to the local railway station from Carole Park is currently being negotiated and entry and directional signage projects will commence shortly in that suburb.

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