

northern expressway environmental report

D

Part D. Effects of the Northern Expressway

10. <u>Social and demographic profile</u>	10-1	18. <u>Visual analysis</u>	18-1
11. <u>Land use and zoning</u>	11-1	19. <u>Geology, soils and site contamination</u>	19-1
12. <u>Property</u>	12-1	20. <u>Surface water and groundwater</u>	20-1
13. <u>Transport</u>	13-1	21. <u>Air quality</u>	21-1
14. <u>Noise</u>	14-1	22. <u>Greenhouse gases</u>	22-1
15. <u>Vibration</u>	15-1	23. <u>Flora</u>	23-1
16. <u>Aboriginal heritage</u>	16-1	24. <u>Fauna</u>	24-1
17. <u>Non-Aboriginal heritage</u>	17-1		

10 Social and demographic profile

10.1 Introduction

This section discusses the social and demographic profile for the study area through which the proposed Northern Expressway will pass and the effect that the project route will have on the communities living within the area.

The Northern Expressway study area is largely located to the west of the urban areas of northern metropolitan Adelaide and includes:

- the townships of Angle Vale and Virginia and their rural hinterlands
- new housing areas south of Gawler and west of Elizabeth–Munno Para
- the rural communities of Ward Belt and the Gawler River
- the dispersed rural living communities in the Gawler Belt, Penfield Gardens and Macdonald Park areas.

Community consultation raised concerns about community access being severed from commercial activities closer to Main North Road. Access to the gliding facilities, horse training facilities and community services including schools was also raised. The issues of severance are discussed in this report and will continue to be addressed through further consultation and in the design process.

The social and demographic investigations have included:

- a literature review of documents relating to demographic and social matters, area planning and community development-related reports undertaken by State and local governments
- an analysis of demographic data from the ABS Census
- an analysis of data that relates to the SEIFA indexes
- consultation with the local governments of Salisbury, Playford, Light, Mallala and Gawler
- consultation with emergency services agencies including South Australian Police (SAPOL) and South Australian Metropolitan Fire Service (SAMFS).

10.2 Communities of interest

The study area can be described in terms of the following communities of interest (refer to Figure 10.1).

10.2.1 Gawler township and environs

Gawler was established in the early years of the colony of South Australia as a major centre of farm and transport manufacture. Much of this activity has now ceased but the town has continued to grow during the last 50 years with expansion to the south at Evanston and to the west into Gawler West and the Gawler Belt areas, where the Gawler Harness Racing Track and the Adelaide Soaring Club are located. Both facilities are supported by participants from outside the local area. In the last 10 years, there has been substantial development and the addition of younger families in the northern fringe suburb of

Hewett. Hewett and the rural living areas of Gawler Belt–Ward Belt would orientate themselves to Gawler.

10.2.2 Northern fringe suburbs

The northern suburbs of the City of Playford including Munno Para, Smithfield, Smithfield Plains, Davoren Park and Elizabeth West were largely developed in the 1950s and 1960s by the South Australian Housing Trust. Andrews Farm has been established more recently. These areas contain a mixture of younger and older households and are characterised by some significant pockets of socio-economic stress. Recent plans have been announced for major new development (Playford North) including urban renewal in the older areas. These areas would orientate themselves to Munno Para and Elizabeth.

10.2.3 Edinburgh

Edinburgh includes the defence establishments associated with the RAAF Base Edinburgh and the Defence Science and Technology Organisation (DSTO) laboratories, and motor vehicle manufacturing and suppliers associated with General Motors Holden. These areas contain a low residential population but high employment numbers, mainly associated with manufacturing, defence technology and on-base defence activities. The area covered by these activities is a significant 650 ha located in the central part of the study area requiring good access to major arterial routes and the Northern Expressway. Future plans have been announced for expanding defence activities in the area. This area would orientate itself to Salisbury and Elizabeth.

10.2.4 Rural living areas of Macdonald Park–Penfield Gardens

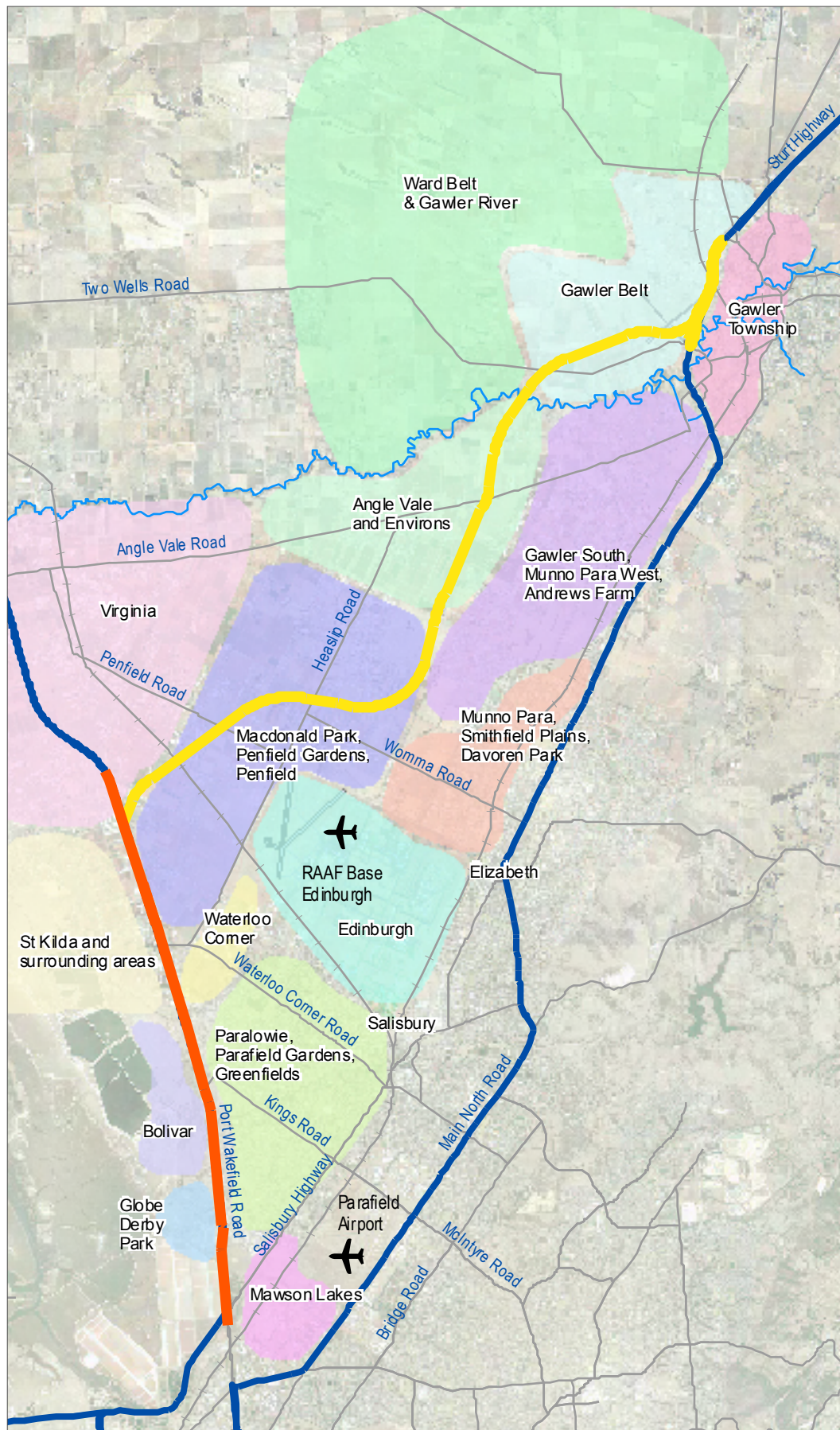
The rural living areas of Macdonald Park–Penfield Gardens lie between the northern fringe suburbs and Angle Vale. Residents in the area would have some affinity to centres such as Gawler, Munno Para and Elizabeth, as well as to Angle Vale, depending on need. It is understood that some students in the area attend local schools in Andrews Farm. All of the attractors apart from Angle Vale would be on the southern side of the proposed route. The location of RAAF Base Edinburgh and Edinburgh Parks creates a barrier to easy access to Hollywood Plaza and John Street in Salisbury, channelling traffic from the Penfield area instead to services and facilities located at Munno Para and Elizabeth.

10.2.5 Virginia township and hinterland

Virginia is a service town within the horticultural area providing retail, commercial and light industrial support to the surrounding community. The town's ageing population structure is being offset by new housing development and households that is not necessarily involved in the local industry and, because of proximity to Adelaide, has become more commuter-based. The community would orientate itself to Virginia.

10.2.6 Angle Vale township and hinterland

While serving the rural land uses that surround it, Angle Vale also has a significant population of residents who commute to employment elsewhere. The town is growing; it is characterised by a young family population and has a community focus with a primary school, community hall and local shopping centre. The hinterland to Angle Vale contains commercial agricultural operations including chicken/egg production, viticulture, horticulture and almond orchards. The Angle Vale communities would orientate themselves to Angle Vale.



0 2 km



Figure 10.1 Communities of interest

10.3 Social and demographic profile

The social and demographic profile within the study area has been drawn from the 35,000 residents who reside in the study area and can be characterised as follows:

- The established suburban and rural areas, with an ageing population base contrast strongly with significant new areas of residential development predominantly with larger families with children.
- There are marked differences in ethnic composition across the area, particularly between urban and rural areas. The key ethnic groups are Vietnamese, Italian and Greek.
- Edinburgh stands out as a particular area generating significant employment and with a small and distinct residential component based on the defence services.
- Car usage dominates as the mode of transport in the more affluent areas, but this is reversed in the low socio-economic suburbs. Fewer people travelled to work by bus or train than the State average.
- The employment base of the study area is concentrated in the more affluent suburbs such as Gawler Belt and Angle Vale, and the rural areas, with high levels of unemployment in Smithfield Plains, Davoren Park and areas close to Gawler.
- The occupational mix for the study area indicates agriculture and manufacturing/transport-related activities being dominant along with clerical, sales and trades. Professional occupations have a low representation.

10.4 Community and social infrastructure

The study area is well served by community infrastructure including:

- a range of health care facilities
- primary and secondary schools
- tertiary level education facilities
- libraries, community centres and meeting places
- recreation and sporting facilities:
 - Adelaide Soaring Club
 - Gawler Harness Racing Club
 - Northern Equestrian Centre
 - Adelaide International Raceway.

Much of this infrastructure is found on the eastern edge of the area in the centres of Gawler, Munno Para, Elizabeth and Salisbury. The proposed Northern Expressway therefore must allow east–west journeys at critical points along its alignment.

Public transport services in the study area are focused on serving the Adelaide–Gawler/Barossa rail line and the Elizabeth Regional and Munno Para District centres. Bus feeder services travel along Main North Road, Womma Road and Curtis Road to the Smithfield, Elizabeth and Salisbury rail stations.

No Metroticket bus services are provided on the north-west side of the proposed Northern Expressway.

10.5 Socio-economic indexes

The Australian Bureau of Statistics' Socio-economic Indexes for Areas (SEIFA) use a range of measures to rank areas based on their relative social and economic wellbeing. The Index of Relative Socio-Economic Advantage/Disadvantage, developed by the ABS for the 2001 Census, is a continuum of advantage to disadvantage.

There are suburbs of socio-economic advantage such as Edinburgh, Gawler Belt, Gawler River and Ward Belt. Some areas rank high in terms of disadvantage such as Smithfield Plains and Davoren Park, Munno Para West and Penfield. Overall, the study area is not regarded as an area of advantage and is ranked lower than the South Australian average when measured using the SEIFA Index of Relative Advantage/Disadvantage (915.7 compared with 973) in a range of 884.9 to 1013.8.

Table 10.1

SEIFA scores for derived suburb level areas, Northern Expressway

Derived suburb level areas ¹	Index of Advantage/ Disadvantage ²	Rank Advantage/ Disadvantage ³
Northern Expressway	915.7	
Andrews Farm	902.5	11
Angle Vale	950.8	5
Edinburgh (DSTO)	1013.8	2
Evanston, Hillier	889.6	12
Gawler Belt	981.1	3
Gawler River, Ward Belt	968.7	4
Gawler, Gawler West, Willaston, Hewett	920.9	7
Macdonald Park, Penfield Gardens	924.4	6
Munno Para West	870.0	14
Penfield	884.9	13
Smithfield Plains, Davoren Park	777.4	17
Virginia	904.3	10

Notes:

1. Suburb level areas are derived to indicate communities and may not include whole of suburbs. The data has been compiled from collector districts (CDs) that are close to or abutting the proposed Northern Expressway alignment. In the case of Port Wakefield Road because the alignment is in existence, CDs were chosen that directly abutted the road. The suburb areas for the new alignment from Port Wakefield Road to Gawler tend to be more extensive because of larger CDs and the need to capture broader characteristics associated with a totally new road alignment.
2. These indexes have been compiled from individual CDs making up the suburb area and the average taken.
3. Rank refers to the entire Northern Expressway route from Salisbury Highway to Virginia. Penfield and St Kilda share a ranking of 13.

Source ABS 2001 Census.

10.6 Effects of the project

10.6.1 Changes to access patterns

For many residents of the area the Northern Expressway will improve convenient and safe access to community and recreation activities. The northern areas will become more desirable for residential growth

and renewal if they are more accessible to other parts of Adelaide and the attractive areas beyond, particularly the Barossa and the coast.

The effects of the project on community accessibility will be more pronounced for those living on the northern and western sides of the proposed alignment than for those living in the built-up areas to the south and east.

The effects of the project are described for each community of interest area.

Gawler township and environs

While the Northern Expressway would improve access from Gawler to Adelaide, it will have some negative local consequences. Those living in Ward Belt (zoned rural and rural living) will find their access to Gawler via Two Wells Road is severed, forcing them to backtrack westwards to the nearest crossing of Two Wells Road, or to take a circuitous route on unsealed roads to enter Gawler via Mallala Road. This will approximately double distances and travel times.

Northern fringe suburbs

The Northern Expressway will have no significant adverse effect on accessibility for these suburbs.

Edinburgh

Access will be available to the Northern Expressway via Heaslip Road/Womma Road.

The City of Salisbury and City of Playford have plans for a major expansion of industrial/commercial activities on the western and northern perimeter of Edinburgh (Greater Edinburgh Parks) and access arrangements for this increased activity will require, future consideration.

Rural living areas of Macdonald Park–Penfield Gardens

While access to Adelaide will be significantly improved by the Northern Expressway, initial consultation has revealed concern that the proposed route severs Pethererton Road, which connects Macdonald Park with Andrews Farm. The alternative, Curtis Road, will make a longer journey for most local residents, adding one to one and a half minutes to journey times. Most significantly, children walking or cycling to St Columba College in Andrews Farm, particularly those living near the proposed route, will have a longer journey. The connection with Angle Vale will however be improved by the reduction of traffic, especially heavy vehicles, on Heaslip Road.

Virginia township and hinterland

Access to Gawler will be improved for the Virginia township, with little negligible negative effects.

Angle Vale township and hinterland

Access to Gawler and the Adelaide metropolitan area will be improved for the Angle Vale area, with little negative effect because each of the significant routes that connect Angle Vale with the metropolitan area will have grade-separated intersections.

10.6.2 Amenity

The major effects of the Northern Expressway will be on residents who are close enough to be affected by its externalities and in particular, noise and visual appearance. These are discussed in the following sections. The effects will reduce as the distance from the road increases. However, the impact will be a

matter of perception and will vary between individuals; they can cause significant stress for some people and communities particularly those who have chosen to live in this area for its quiet rural setting.

There will also be positive amenity benefits for local communities, most noticeably, the large reduction of traffic particularly heavy vehicles, using the Angle Vale and Heaslip roads and safety will improve. Current traffic volumes through Angle Vale are at dangerous levels and affect the amenity of the community.

10.6.3 Future growth

The existence of major new infrastructure has the potential to facilitate development.

Even with the Urban Boundary, communities are developing beyond the boundary in the outer metropolitan area, particularly in the Barossa, and the Mallala and Light Regional Council areas. The proximity of these areas to metropolitan Adelaide, the expansion of the northern suburbs' employment market, and the accessibility that will be created by the Northern Expressway, will create new incentives for growth of existing communities and the creation of new communities both in the northern metropolitan area and beyond in the adjacent region.

Growth will also be promoted within the townships of Virginia and Angle Vale, although the physical extent of the towns is limited by township zones. Importantly, this growth will be accompanied by increasing demand for urban services, particularly effluent and stormwater drainage.

The City of Playford and City of Salisbury have announced plans to investigate the future possibilities for a Greater Edinburgh Parks industrial/commercial expansion into the areas to the north and west of the RAAF Base Edinburgh. More land and enterprise opportunity available for employers will have positive or beneficial flow-on effects to communities in the study area.

10.6.4 Construction effects

The construction of the Northern Expressway will affect local access patterns due to road closures and traffic management delays.

10.7 Measures to minimise construction effects

A community engagement program will be developed to advise the community about any potential delays or access changes during construction. Early advice, signage and media information is likely to form part of this program to raise awareness and enable the community to seek alternate access (if required) during construction.

10.8 Conclusions

The Northern Expressway will improve accessibility for people living and working in the study area and region, but there are localised concerns, particularly in the rural living areas west of Gawler and in Macdonald Park. The overall improved accessibility will promote more development in the peri-urban area, including in Angle Vale and beyond.

The Northern Expressway will require specific management measures during planning, design, construction and operation to alleviate some significant property acquisition concerns about the effect on individual properties, property acquisition and access both across the route and to certain properties.

