

Meeting Growth Area Infrastructure Investment Needs

A Benchmarking Analysis

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Builds on Previous Research

The National Growth Areas Alliance (NGAA) represents the fast growing suburbs on the outskirts of capital cities across Australia. Past research¹ has pointed to the opportunities from investment in NGAA areas, with the benefit including significant jobs creation, higher tax revenues and a permanent boost to national GDP of \$18bn per annum.

This research also demonstrated that NGAA council residents are disadvantaged because of:

- Poor access to jobs and services
- Lower incomes
- Lengthy travel times (to work), and
- High car dependency.

This latest benchmarking analysis builds on this earlier work and again demonstrates that the fast growing outer suburbs are significantly disadvantaged, having demonstrably poor access to health and transport infrastructure.

What the Analysis Considered

The analysis benchmarks, quantifies and costs road, rail and health infrastructure in fast growing areas on city outskirts nationally. Infrastructure examined included:

Category	Elements
Health	<ul style="list-style-type: none">• Hospitals and community based healthcare centres• Residential care (aged care)
Transport	<ul style="list-style-type: none">• State roads• Passenger rail tracks• Passenger rail stations

These were chosen as they are the priorities for communities in the fast growing outer suburbs around the nation.

Methodology

The methodology takes a consistent approach and uses available data to generate a broad scoping of the scale of the task. There will be more detailed factors which will influence the specific requirements in each state or region.

NGAA Member Council areas were benchmarked against a selection of more established neighbouring suburbs closer to city centres. The required expenditure per person to bring NGAA Council areas up to the level of the benchmark areas were applied to other outer growth areas to provide a more complete picture of the scale of the task, assuming that these areas have similar levels of infrastructure provision as NGAA areas.

¹ SGS Economics and Planning for NGAA, Cost Benefit Analysis of Investment in Growth Areas, 2009.

Health Infrastructure

The assessment of health infrastructure requirements included:

- Examining the number of jobs required to provide an equivalent level of provision per population in NGAA areas as in benchmark areas
- Converting job numbers to facility numbers
- Estimating facility costs using standard costings.

This assessment is intended as a broad scoping of the scale of the issue rather than a detailed case by case analysis. There will be more complex issues surrounding health infrastructure provision including varying catchment sizes, facility sizes and waiting lists to arrive at the precise requirements in specific localities.

Transport Infrastructure

The assessment of transport infrastructure requirements included:

- Using GIS measurement techniques, to identify rate of state road and passenger rail infrastructure provision per hectare of land in the benchmark areas
- Applying these rates to the area of NGAA councils that will be established urban areas by 2031
- Costing this quantity of infrastructure provision².

The transport estimates were developed using roads data (GIS layers) provided by state transport authorities, as well as a simplified national rail dataset (GIS layers). There may be some limitations in the interpretation of this data, as each state categorises the roads hierarchy differently, and it is difficult to precisely remove the influence of rail freight only lines.

Findings

\$73 billion is needed over the next 15 years (or \$4.9 billion p.a.) to address the estimated investment needs.

To achieve equivalent provision to the benchmark areas, the following investment is estimated to be needed to catch up (backlog) and then to keep up (need to 2031):

	Backlog	Backlog per capita	Need to 2031	Need to 2031 per capita
Health	\$ 1.9 billion	\$462	\$6.3 billion	\$1,023
Transport	\$48.3 billion	\$11,995	\$16.2 billion	\$2,654
Total	\$50 billion*	\$12,457	\$23 billion*	\$3,677

* Totals have been rounded to the nearest billion

This is comprised of:

² cost estimation benchmarks provided by SMEC Transport.

	Backlog	Need to 2031
Residential Care	\$ 0.4 billion	\$2.2 billion
Hospitals	\$1.5 billion	\$4.1 billion
Passenger Rail	\$4.7 billion	\$2.8 billion
State Roads#	\$43.6 billion	\$13.5 billion
Total	\$50 billion*	\$23 billion*

these include distributor/collector, subarterial, arterial and primary roads. They are regional level roads that are integral to economic growth.

* Totals have been rounded to the nearest billion

The outcomes of SGS' latest analysis for NGAA are conservative because:

- It makes no comment on the adequacy of service levels or capacity,
- Benchmark areas may also be underserved.
- Land costs were excluded,
- Conservative costings were used.

How this Work Fits with Other Infrastructure Estimates

A range of infrastructure studies³ have highlighted the ongoing need for infrastructure investment in order to promote a productive, sustainable and equitable nation. Estimates of the deficit in Australian Infrastructure have ranged from \$300 billion⁴ to \$700 billion⁵. Population growth is universally identified as one of the main drivers for infrastructure demand. Therefore the location of population growth can be considered a key focus for infrastructure investment needs, particularly in new communities where infrastructure networks are under developed or non existent.

What if the Investment Isn't Made ?

Previous research⁶ concluded that the disadvantage in outer growth areas will worsen if significant public funding commitments are not forthcoming. Other publications⁷ point to a growing divide within cities if investment is not made.

What Investment Would Provide

Investment would provide significant jobs creation, higher tax revenues and a permanent boost to national GDP of \$18bn per annum. The benefits stem from outcomes such as improved workforce participation, more local job opportunities and improved access to jobs and services elsewhere.⁸

³ Engineers Australia, 2010 and 2013; Infrastructure Australia, 2015; successive State of the Australian Capital Cities reports

⁴ Infrastructure Australia, National Infrastructure Plan, 2013

⁵ Infrastructure Partnerships Australia and Citibank, as cited in Price Waterhouse Coopers, Funding Australia's Infrastructure, is it as simple as ABC (undated)

⁶ SGS Economics and Planning for NGAA, Cost Benefit Analysis of Investment in Growth Areas, 2009.

⁷ Essential Economics, One Melbourne or Two, 2013 and Committee for Sydney, Adding to the Dividend, Ending the Divide, 2014.

⁸ SGS Economics and Planning for NGAA, Cost Benefit Analysis of Investment in Growth Areas, 2009. The investment and the benefits were from half closing the gap between NGAA areas and metropolitan host areas.