

## GIS mapping + spatial analysis

InfraPlan staff are proficient in spatial representation and statistical analyses using Geographic Information Systems (GIS). Project deliverables often require or greatly benefit from the application and interpretation of these systems, with InfraPlan demonstrating experience in producing high quality, accurate and legible outputs. Any data provided by the client, obtained online from government or private sources and the ABS can be supplemented by InfraPlan's dynamic expertise to ensure the spatial representation(s) of complex data is accurate and well-researched.

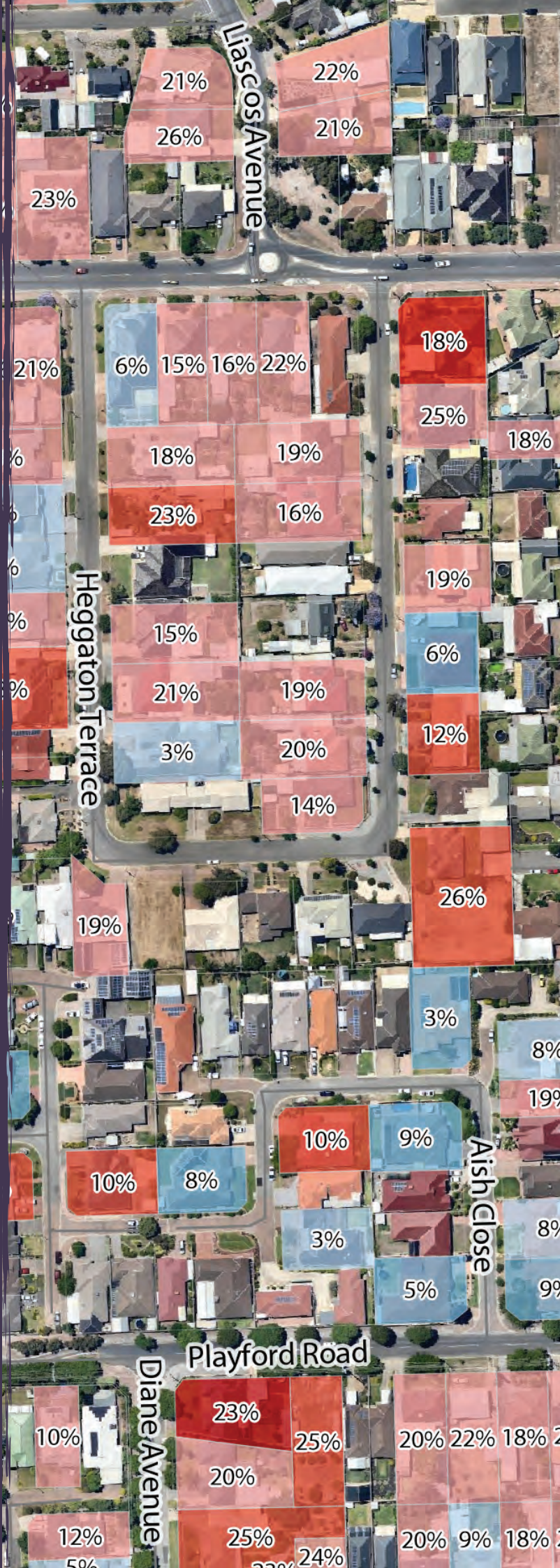
Professional, legible and engaging maps combine science with art. By compiling various spatial datasets together with our design expertise, we can build unique maps and GIS files that enable contextual understanding of an area.

From this, gaps and opportunities can be systematically developed in conjunction with qualitative data, such as that collected through consultation.

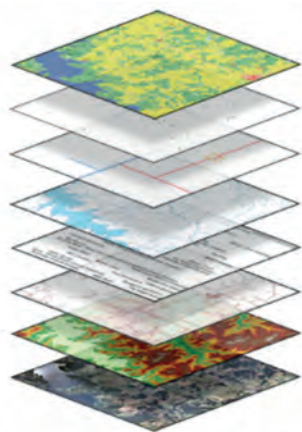
The map on this page integrates geocoded aerial photographs with various data sets from different sources to illustrate and convey complex transport and land use information in an effective and user-friendly manner.

### Our services include:

- + Collection and compilation of various spatial and statistic datasets.
- + Mapping of data.
- + Route and network design that can be delivered as a GIS compatible format for monitoring and updating by the client (shapefile).
- + Density, journey to work and other ABS data mapping.
- + Extraction and analysis of data within a defined catchment area.
- + High quality vector and raster outputs.
- + Heat mapping.
- + Infographics of extracted data.
- + Stitching of numerical and spatial data.







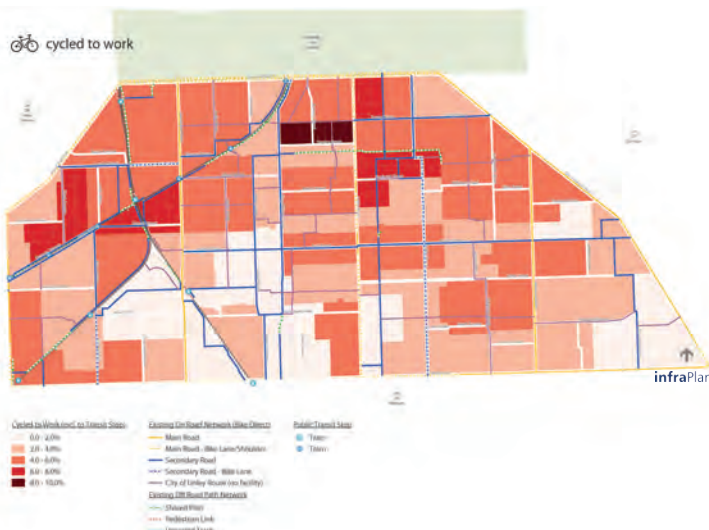
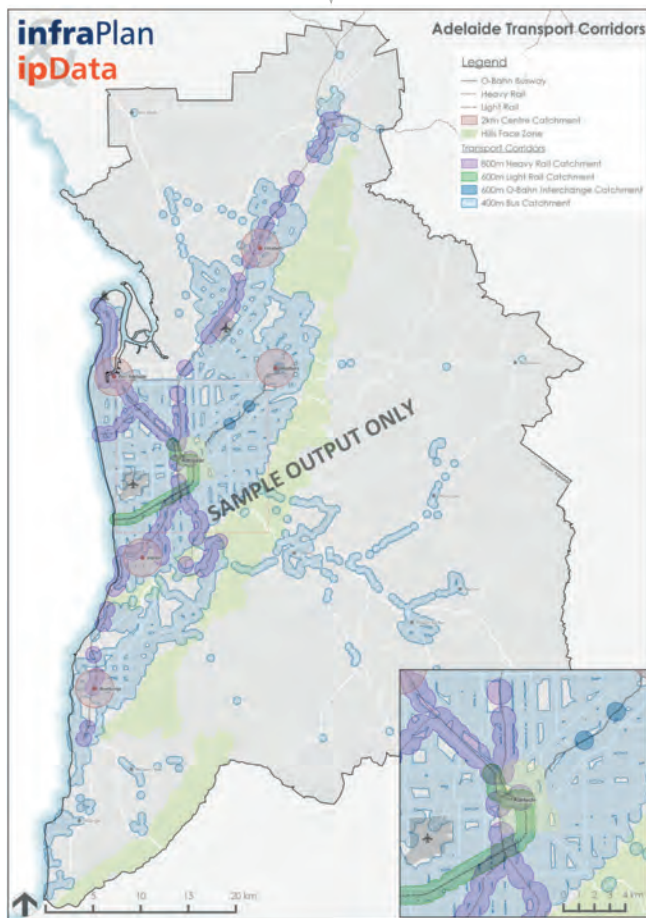
Transport infrastructure

Public transport catchments

Centres (trip generators)

General land use

Regional boundaries

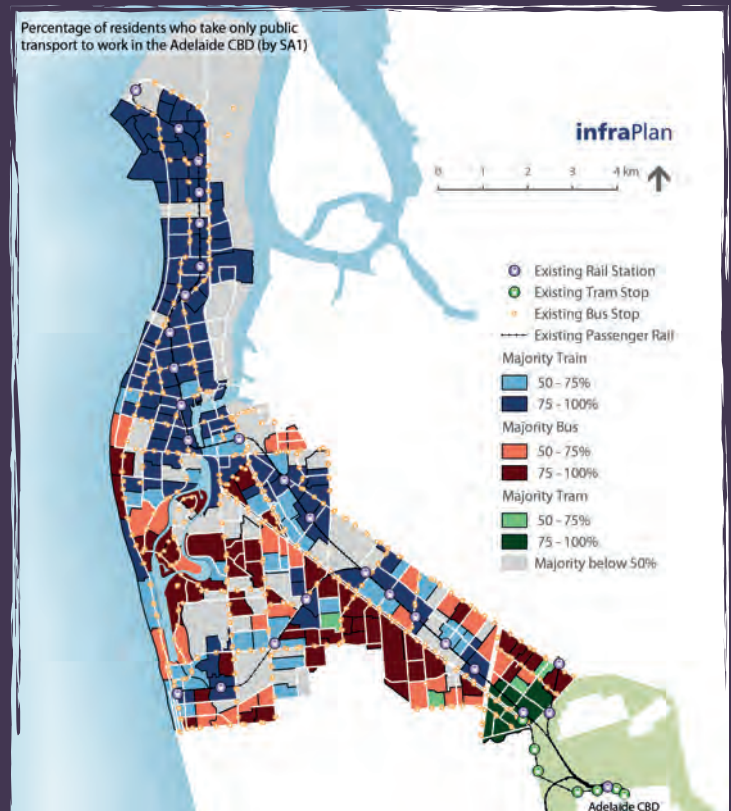


## case study

The area shown below is dissected by a number of arterial roads, a motorway and rail line. Linear infrastructure such as this can form physical and psychological barriers for pedestrians, cyclists and motorists, reducing the permeability of communities and can have an influence over the way people move and/or plan to move throughout an area.

Detailed analysis of method of journey to work data (Census) integrated with transport infrastructure network data can show the behavioural impact that linear barriers have on travel mode choice. As an example, the map shows where bus, train or tram was the primary mode of travel to the Adelaide CBD for work. It illustrates the impacts linear barriers can have on the reach of those travel modes. Specifically, either side of the central NW road is of stark contrast. The south-side is mostly bus travel (red) and the north-side is mostly train travel (blue).

It's also valuable to note the tram's primary catchment (green) and how its location within the road corridor may reduce the impact of the road as a barrier.



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