

## CAPABILITY: Network planning



Our results are seen in increased public transport use, improved customer satisfaction and improved value for money for government.

### Overview

Transport networks are the life blood of our cities. They reach out across the urban landscape like the veins and arteries of the body, delivering people, goods and services to our community and driving productivity.

Keolis Downer aims to offer communities multimodal mobility solutions that are simple, efficient and seamless. By designing transport networks that people want to use, we are able to break down the barriers to public transport use and drive increases in patronage.

We have over 100 years' experience designing and operating transport networks

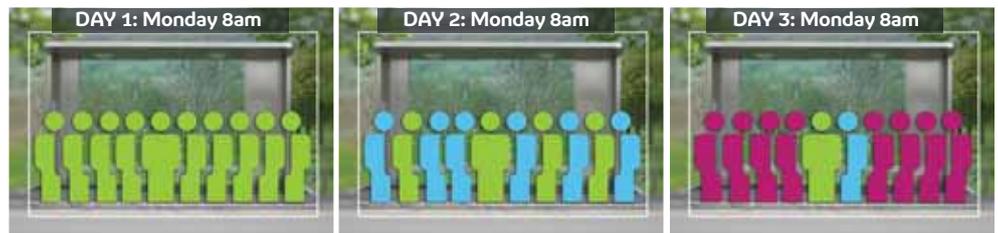
### A foundation in experience - Keoscope

Our understanding of travel patterns is based on over 100 years' experience delivering passenger transport solutions in France, Australia and elsewhere. Over recent decades, the Keolis and Downer businesses have been able to grow beyond their traditional markets and to form a new partnership in Australia that brings together our deep local knowledge and world-class experience.

Within Keolis, 100 years of transport operations experience has been captured in our Keoscope framework. This bank of knowledge addresses some of the sacred cows of transport planning and has allowed us to breakdown misconceptions and deliver transport networks that deliver for modern lifestyles.

**Misconception:** Commuters use the same form of transport everyday.

**Fact:** Over 3 days, 90 percent of commuters will change their journey. These changes could be due to changing weather, sporting commitments or a sleep-in. These changes mean the travel needs also change, with the potential for a new ticket, timetable or route.



Within 3 DAYS: 24 different people Within 1 MONTH: 150 different people

### Designing world class networks to match local needs - Neolis

Keolis Downer embraces the Neolis process for community consultation, network analysis and redesign. Neolis was developed by Keolis and has been applied and refined by application around the world.

Through the Neolis approach we collaborate with the community to design transport networks that match travel demands. This customer-focused, ground-up approach to network design is revolutionary and can go against established thinking on the provision of transport.

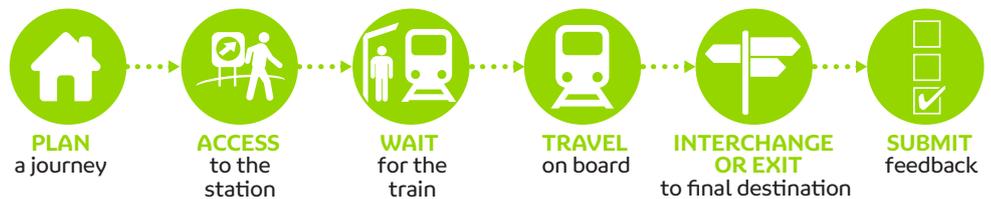


Rethinking  
Transport  
Networks

Our goal is to accommodate demand for transport with an appropriate service, rather than to add new services to the edges of a network. This approach best matches demand and ensures value for money. Our results are seen in increased public transport use, improved customer satisfaction and improved value for money for government.

The Neolis approach is part of our commitment to partner with governments and public transport authorities to understand the changing needs of cities and their inhabitants to match the provision of transport to changing lifestyles and growth. The Neolis approach should be applied every five to eight years (to cater for demographic change) or sooner where there is an obvious need, such as substantial population growth, urban renewal, technological or economic change.

In the first five years following the deployment of light rail and Neolis-based network redesign, the Bordeaux transport network experienced a 40% increase in use. We have committed to a further 34% increase over the next 8 years in a new contract signed in 2014



Delivering on  
the needs of  
passengers

The level of community engagement and consultation inherent in the Neolis approach is well regarded by communities and their leaders. The transparency of the process helps people understand why changes, that are better for the overall network, are necessary. Prior to any changes taking place, the impacts of potential changes must be fully assessed, any service reductions fully understood and discussed with the community. Only after this occurs, can a balanced solution be developed and proposed to decision makers for assessment and potential adoption.

Government is then able to make an informed choice about the future network, balancing the needs of the community and the opportunity of reform.

As well as the community, staff are key players in the process. Transport operators, including drivers and customer service staff, know the network better than most and their ideas are integrated into the design of the new network. This helps these 'local experts' feel part of the process and enhances their ownership of the ultimate outcome.

It is essential to look beyond a single mode of transport as the average journey to work uses 1.7 modes of transit

Neolis has been applied in Bordeaux where the reworked network experienced growth of 40%. In Dijon, public transport use grew by more than 20 percent in the first year, with 10 percent in each of the following years, after the introduction of light rail and a Neolis network redesign. While patronage growth following the redesign of a network will vary, the potential to deliver increased public transport use is clear.

Proven results  
on Australian  
networks

We have spent years improving and refining these tools and have seen them rejuvenate networks and grow patronage, particularly where we operate multiple modes.

The Keoscopic research and the Neolis approach have informed timetable development for our two Australian light rail networks but Keolis Downer's true capacity for network design has not been fully realised in Australia or New Zealand. In partnership with government, Keolis Downer seeks opportunities to deploy Neolis to network planning for an entire geographical region.