

ZENITH: SOLVING THE PUBLIC TRANSPORT CHALLENGES OF TODAY AND TOMORROW

Increasingly transport planners are seeking to maximise the utility and efficiency of public transport. With the ever-changing nature of cities, technology, and mobility options, transport planners and decision-makers need the right information at their fingertips.

Transport models are powerful tools that can be used to assist with the prioritisation of infrastructure, understanding the benefits and beneficiaries of major projects, and to evaluate the effectiveness of selected policy interventions.

Zenith is Veitch Lister Consulting's suite of strategic transport models, representing all major metropolitan regions across Australia. They are the most widely used transport models in the country and have been used by state and local governments for over 30 years in the planning of public transport, major infrastructure projects and land use changes.





A powerful tool to forecast public transport demand

Zenith models are comprehensive and constantly expanding travel demand models. They are distinguished by their capacity to accurately simulate public transport systems and services.

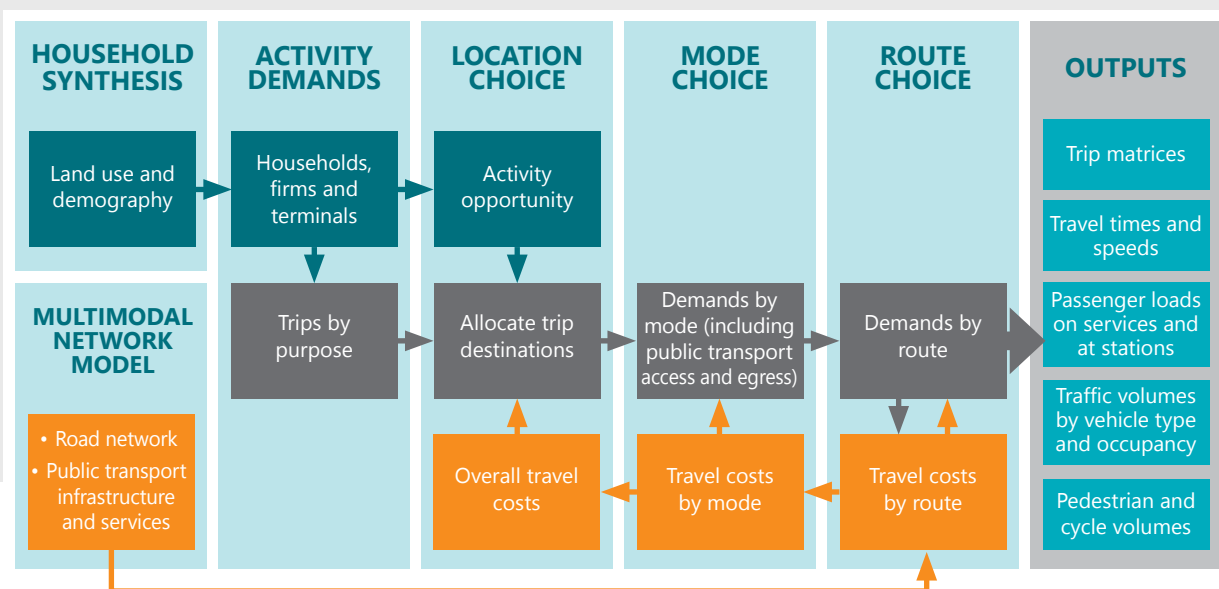
The models can easily be customised to the needs of specific applications and are responsive to a large scope of variables relevant to transport planners and policy makers.

Hundreds of projects across Australia have benefited from Zenith's powerful capabilities, including regional planning studies, metro rail projects, public transport service planning studies, major road projects, and toll road studies.

Zenith models are available through a consulting relationship or for use under licence.

How does Zenith work?

The Zenith model process is comprehensive. Our clients find the outputs to be highly valuable and practical.



Zenith models simulate all travel undertaken during an average weekday. Given a scenario of land use and demographic change, the models reflect the level of participation in a range of activities across the region and the frequency of travel to them, as well as the choice of destination, mode and route.

Public transport features of Zenith

MODERN AND BESPOKE

Zenith models are developed and maintained in-house so we can easily address specific client needs. They are further validated for each project based on available data or data provided by the client.

Our research and development team regularly update Zenith software to ensure continual innovation. Recent enhancements include the capability to model Demand Responsive Transit (DRT), Autonomous Vehicles (AVs), and Mobility-as-a-Service (MaaS).

COMPREHENSIVE AND MULTI-MODAL

The models include all public transport modes, routes, route variants and stops as well as access modes, including active travel and Park and Ride and Kiss and Ride.

MULTI-PERIOD

All Zenith models include four periods, distinguishing between the morning and afternoon peaks as well as the interpeak and off-peak.

CONSIDERATION FOR CROWDING

The Zenith models include the cost of overcrowding on public transport, which can affect travellers' choice of mode, destination, route and stop. As a result, the likely demand and economic benefit of capacity-increasing public transport projects can be assessed.

DETAILED ORIGIN DESTINATION ANALYSIS

The select link analysis function helps to determine where people are coming from or going to, and what mode they use for each leg of their trip.

DISAGGREGATE TRAVEL ZONES

All Zenith models can be run at sub-SA1 travel zones. This is essential in public transport studies where accessibility is a major factor.

DISAGGREGATE TRAVEL MARKET SEGMENTATION

Zenith models include data showing travel by residents and visitors. Results are segmented by numerous journey purposes and car ownership levels.

What sets VLC apart?

MODEL DEVELOPMENT

To help solve our clients' complex problems, we can use our own Zenith models, we can work with a client's own model and assist in the development of their capabilities and tools, or alternatively we can develop a new, customised model.

DEEP CAPABILITIES

We have a reputation for providing work of the highest quality and level of accuracy. Our focus is on providing solutions that are both practical and technically robust. We are proud to be an experienced team of people who also have an eye for innovation.

SPECIALISATION AND INDEPENDENCE

As a specialist consultancy, we strive to be best in class in the area of transport planning. We do not operate in the engineering or construction space. As a result, we are focussed as well as truly independent.

FUTURE LOOKING

Our Future Transport Lab provides research, analytics and expert advice to clients who are looking to navigate the disruptions underway in mobility and transport and are seeking to inform their decisions with data-driven insights and solutions.





- › TRANSPORT ANALYTICS & FORECASTING › TRANSPORT ECONOMICS › TRANSPORT PLANNING
- › FUTURE TRANSPORT LAB › PLANWISELY › EXPERT ADVISORY › OOH AUDIENCE INSIGHTS

About Veitch Lister Consulting

VLC was founded in 1986 with one objective: provide tools and insights that help our clients plan the cities of the future. This remains our singular purpose today, driven by a culture grounded in transparency, the pursuit of excellence and the desire to innovate. Our team of transport planners, engineers, modellers, economists and analysts deliver transport solutions that facilitate growth and prosperity for our clients and our communities.

To engage VLC in your next project or for general enquiries, please contact enquiries@veitchlister.com.au.

veitchlister.com.au

vlc 
Veitch Lister Consulting ^{Pty Ltd}