OMA MOVE

Measurement of Outdoor Visibility and Exposure

Opportunity To See (OTS)

The Zenith Travel Modelling System

The Zenith Travel Modelling System was developed by Veitch Lister Consulting (VLC) and is primarily used for transport infrastructure planning. For MOVE (Measurement of Outdoor Visibility and Exposure) the system generates the potential audiences of outdoor advertising; people with the Opportunity To See (OTS) outdoor advertising faces.

The Zenith travel model uses a collation of statistical data from a range of sources to control its outputs, including Australian Bureau of Statistics (ABS) Census, government Household Travel Surveys (HTS), transport network information and land use information. Using this information, the Zenith travel model allocates trips according to more than 6,500 separate geographical areas called travel zones within a given market.

In this process, the Zenith travel model identifies the start, route and end points of all trips taken by Australians each day, as well as the mode, purpose and demographic profile for these trips.

Zenith is regularly audited by various governments to ensure its accuracy. This involves validating the Zenith travel model outputs against published data, such as traffic and pedestrian counts, and public transport commuter numbers.

The Zenith travel model applies a four step process to allocate trips within each of the five MOVE markets:

Step 1 – How many trips exist in the market?

Trip Generators: indicate the number of trips that will be generated by each travel zone. These are determined by factors such as household size, level of car ownership and number of dependents. Travel behaviour derived from the government HTS and population data from the ABS Census is used to generate this information.

Step 2 – Where does each trip go?

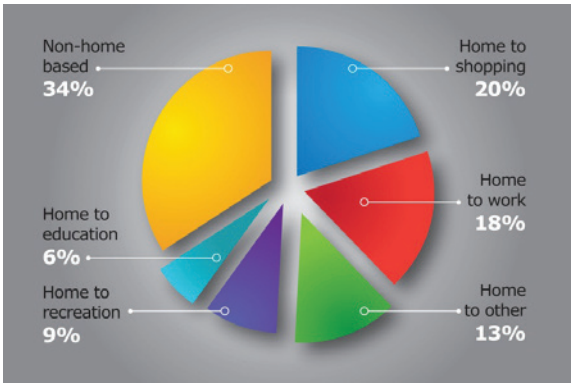
Trip Distribution: occurs for each trip identified to give a complete picture for travel within each market. To achieve this, each travel zone also has 'Trip Attractor' data allocated to define the nature of trips such as shopping, employment, social, personal business and educational. A variety of government and other data is also used to generate the land use of each travel zone.

Step 3 – What mode was used for each trip?

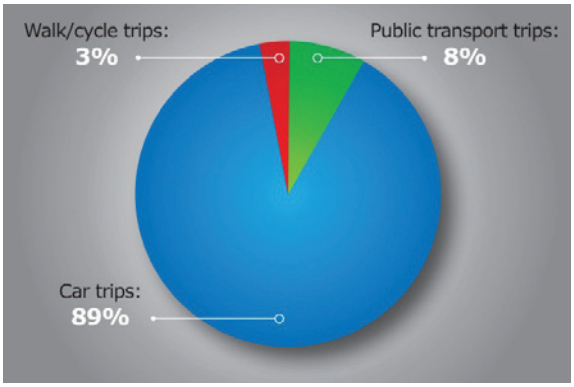
Travel Mode: transport availability, transport infrastructure and the government HTS are used together to determine which mode is used for a trip. Factors such as availability, time and cost will affect mode choices.

Step 4 – Which route will each trip take?

Trip Assignment: the route over which a trip will be undertaken. The Zenith travel model contains detailed information regarding the capacity of each mode and route and can therefore allocate the route of each trip.



The above pie chart is an example of the types of trips taken in just one of the travel zones – the suburb of Vermont, Melbourne – using the Zenith travel model.



Looking again at Vermont, the above pie chart shows the breakdown between trips made by private vehicle, public transport and walking/cycling.