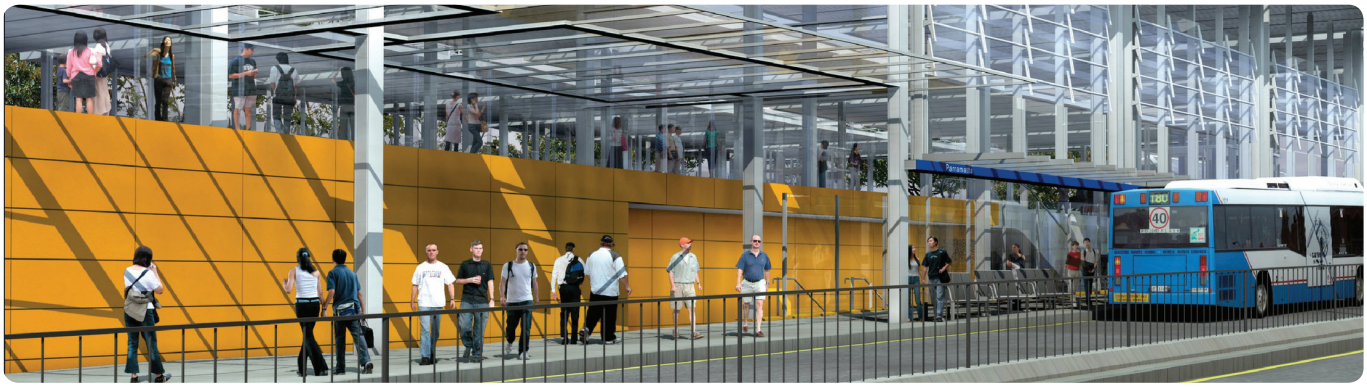
BTS InfoSheet

FEBRUARY 2012



Strategic Travel Model Standard Outputs

The Strategic Travel Model (STM) is a world class tool, operated by the Bureau of Transport Statistics (BTS), for projecting travel patterns in the Greater Metropolitan Area of Sydney under different land use, transport and pricing scenarios.

Standard outputs from the STM are available at five-yearly intervals from the latest Census year to a 30-year horizon, and include the following:

1. Tour Matrices

Tour matrices provide the travel demand estimates based on tours which include the journey from home to the primary destination and the return journey. These matrices include the 24-hour travel demand in separate CSV files by mode, each one split by travel purposes (work, business, primary, secondary, tertiary education, shopping and other) for an average workday[1]:

- Car Driver Tours
- Car Passenger Tours
- Taxi Tours
- Rail Passenger Tours
- Light Rail Passenger Tours
- Ferry Passenger Tours
- Bus Passenger Tours
- Bicycle Tours
- Walk Tours
- Rail-LRT-Ferry Tours[2]

2. Trip Matrices

Trip matrices provide travel demand estimates based on trips (i.e. from origin to destination) by selected modes (car driver, rail and bus) for all travel purposes[3] by the following four time periods:

- **AM Peak:** 7.00 am to 9.00 am
- **IP inter-peak:** 9.00 am to 3.00 pm
- **PM Peak:** 3.00 pm to 6.00 pm
- **EV evening/night:** the rest of the 24-hour day

1 Workday = Monday to Friday excluding public holidays
2 Note that the Rail-LRT-Ferry Tours file is the sum of the Rail, Light Rail and Ferry demand components, but the total is different because the Rail demand is pivoted off the 2006 Journey to Work (JTW) data.
3 No purpose breakdown is available.

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The content of the files is as follows:

- Car, Rail and Bus Trips by time period
- Road assignment statistics by time period
  - **auto**: includes passenger cars and trucks (light, rigid and articulated trucks) in PCU[4]
  - total vehicle travel time in hours
  - total vehicle travel distance in kilometres

Notes: The "auto" demand matrices are all factored down to 2-hour periods for assignment. The factors used for the demand expanded to the full periods are: 1 for AM Peak, 3 for IP inter-peak, 1.5 for PM Peak and 3 for EV evening/night.

3. Skim Matrices

The skim matrices show travel time, distance and cost origin-destination data by mode and by component where applicable. The content of the files is as follows:

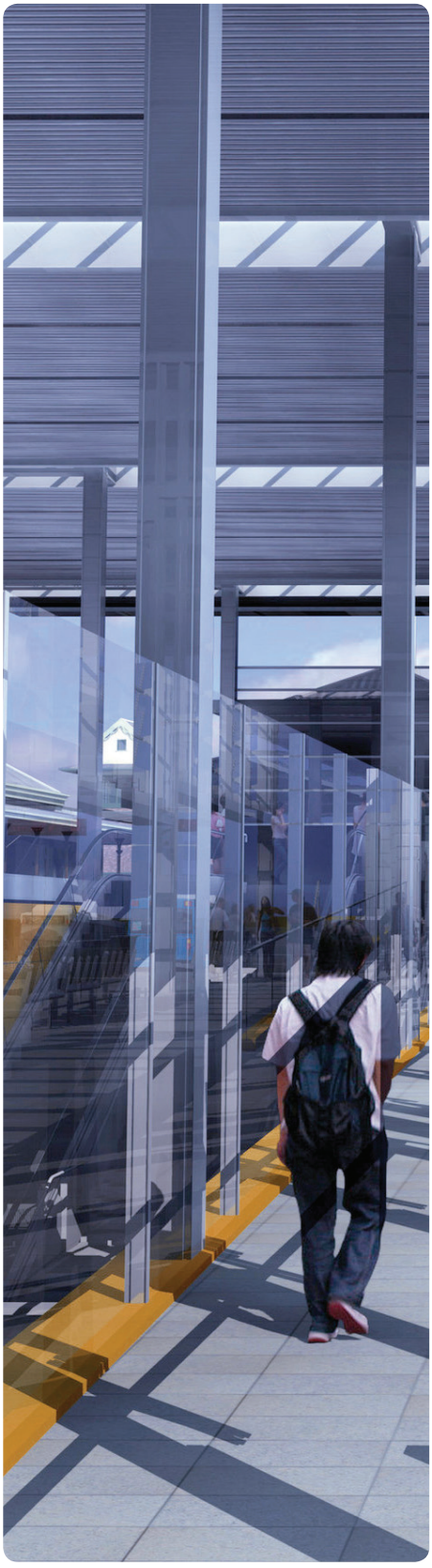
- Car Skims:
  - travel time (in minutes) by time of day period
  - travel distance (in km) by time of day period
  - non-refundable toll (in $) by time of day period
- PT Skims for all public transport modes combined:
  - **ivt:** in-vehicle travel time (all in minutes)
  - **aux:** auxiliary (i.e. access, egress by walk) travel time
  - **wait:** total wait time
  - **fwat:** first wait time
  - **nmbd:** number of boardings
  - **dist:** distance (in km)
  - **time:** generalised travel time

Note: The generalised travel time is a weighted combination of the travel time components. The factors currently used in the STM are:

time = ivt + 2.0 * aux + 2.0 * wait + 5.0 * nmbd

4 PCU = Passenger Car Unit

For further details, please visit the STM section in the BTS website.



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