

## **EXPLANATORY NOTES for 2005 Sydney Region Traffic Volume Publication**

AADT is the Annual Average Daily Traffic assessed as the total volume of traffic recorded at a specific road location (known as a traffic station) taken over a calendar year and divided by the number of days in that year.

Traffic survey stations are either designated as **sample (short survey duration)** stations or as **permanent (continuous survey duration)** stations. The **AADT type** is represented during a 24-hour period averaged over a year as the number of:

- **Axle pair** passes or
- **Vehicle** passes or
- **SCATS recorded vehicle** passes

For example, with axle pair passes, a typical car is represented by one axle pair, a three axle truck by one and a half axle pairs and a six axle semi trailer as three axle pairs.

It should be understood that AADTs measured by counting vehicles is not equivalent to AADTs measured by axle pair passes and that SCATS traffic volumes with very few exceptions cannot be converted into equivalent AADTs measured by counting vehicles.

**AADT values are presented as combined direction counts or as directional as indicated by a suffix to station number as:**

- N = Northbound
- S = Southbound
- E = Eastbound
- W = Westbound
- C = Combined directions

**AADT values at SCATS intersection sites are the sum of all the approaches.**

### **TRAFFIC COUNT STATIONS ORDERED BY SCREEN LINE NUMBER**

All traffic survey sites located on screen lines are listed as an Excel spreadsheet by station number and location description.

The delineation of screen lines and cordons enables the minimum number of stations to be selected for a complete census of inbound and outbound traffic crossing between zones defined by the screen lines and cordons. Screen lines and cordons are similar, except that cordons completely enclose selected areas, such as the City of Parramatta. Both screen lines and cordons were designed, where possible, to follow natural barriers to road communication such as railway lines and watercourses.

### **CONVERSION FACTORS / AXLE PAIRS TO VEHICLE EQUIVALENTS**

Year 2005 AADTs originally expressed as axle pairs are now also shown as vehicle equivalents where acceptable conversion factors can be assigned. AADT axle pair representation as a time series by year will be continued until equivalent series in terms of vehicles can be established that allows for sensible calculation of growth factors. Site-specific conversion factors will be posted on the Intranet as they become available.

Generalised conversion factors selected for RTA Sydney Region were 0.98 for major commuter routes, 0.94 for B Double routes (excluding freight routes) and 0.89 on Freight routes. These conversion factors should be taken as indicative values only and not as being site specific.

The conversion factor of 0.89 is only applied to non-radial routes (Foreshore Road and Pennant Hills Road) routes and to radial routes outside the main commuter belt (Hume Highway south of Liverpool and the Newcastle Freeway). Although some main radial routes feeding towards inner Sydney may show a large number of heavy vehicles, the conversion factor may be adequately taken as 1.0, given that their numbers are small in proportion to heavy commuter traffic, given uncertainty in AADT estimation and given that often AADT accuracy is only required to the nearest 100 units.

No conversion factors are presented for other urban road types, as reliable estimates are not yet available.

**PART 1** lists the stations and their AADTs by **combined direction** as an Excel spreadsheet, enabling sorting data by any field.

Colour coded fields distinguish between permanent vehicle count sites, permanent axle count sites, sample axle pair sites, SCATS sites and inactive sites (see **Legend**).

**PART 2A** lists the daily distribution of traffic volumes as **vehicles** by week at each Permanent Station for **each direction** of traffic flow. The listing includes the total, weekly counts and as expressed as a percentage of the whole of year count and summary statistics.

- AADT (Annual average daily traffic )
- AAWT (Annual average weekday traffic)
- AAWE (Annual average weekend traffic)
- AAPH (Annual average public holiday traffic )

**PART 2B** lists the daily distribution of traffic volumes as **axle pairs** by week at each **Permanent Station** for **each direction** of traffic flow. The listing includes the total, weekly counts and as expressed as a percentage of the whole of year count and summary statistics **AADT, AAWT, AAWE and AAPH**.

**PART 3A** lists the hourly distribution of traffic volumes as **vehicles** for a single week at each **Permanent Station** by the hour of day and day of week for **each direction** of traffic flow. The listing includes the total, average and percentages of hourly traffic volumes for weekdays, weekends and whole of year for each corresponding hour.

Single weeks of Hourly distribution were selected to exclude public holidays and other abnormal influences where possible. Nevertheless Hourly distributions may not be representative of annual average hourly traffic patterns.

Summary statistics presented at the foot of the Hourly distribution tables are:

- Daily, weekday, weekend and weekly totals
- **MAX** (Maximum hourly flows)
- **AWT** (Average Weekday Traffic)
- **AWE** (Average Weekend Traffic)
- **ADT** (Average Daily Traffic)

**PART 3B** lists the hourly distribution of traffic volumes as **axle pairs for** a single week at each **Permanent Station** by the hour of day and day of week for **each direction** of traffic flow. The listing includes the total, average and percentages of hourly traffic volumes for weekdays, weekends and whole of year for each corresponding hour.

Single weeks of Hourly distribution were selected to exclude public holidays and other abnormal influences where possible. Nevertheless Hourly distributions may not be representative of annual average hourly traffic patterns.

Summary statistics presented at the foot of the Hourly distribution tables are Daily, weekday, weekend and weekly totals, **MAX, AWT, AWE and ADT**.

**PART 4** lists the hourly distribution of traffic volumes as **axle pairs for** a single week at each **sample station** by the hour of day and day of week for **each direction** of traffic flow. The listing includes the total, average and percentages of hourly traffic volumes for weekdays, weekends and whole of year for each corresponding hour.

Sample stations only have a single week of hourly counts, excluding public holidays and other abnormal influences where possible. Nevertheless Hourly distributions may not be representative of annual average hourly traffic patterns.

Summary statistics presented at the foot of the Hourly distribution tables are Daily, weekday, weekend and weekly totals, **MAX, AWT, AWE and ADT**

## **MAP SYMBOLS EMPLOYED FOR TRAFFIC STATION LOCATIONS AND ASSOCIATED AADTS**

Major Screen lines are shown as numbered continuous red lines and Minor Screen lines as numbered dashed red lines.

Traffic Station locations and associated AADTs are indicated on the maps by a red dot, with a joining line to the **station number** above the line and **associated AADT value** below the line.

