








Public Transport Accessibility Level (PTAL) for TfNSW

The Public Transport Accessibility Level (PTAL) Model calculates December 2019 and December 2020 public transport accessibility for every 2016 ABS Mesh Block in New South Wales. The TfNSW PTAL model is based on the Transport for London (TfL) PTAL. The full details of the TfL PTAL model can be found [here](#).

The PTAL model calculates an accessibility score (ptai) for every NSW Mesh Block and hour of day. The ptaí is based on walking distance and time to nearby public transport stops as well as frequency of public transport of services at each stop. The PTAL description (ptal) is then assigned based on the score. Table 1 provides score intervals.

Table 1: PTAL intervals and PTAL Descriptions

PTAL	Range of Index	Description	Map Colour
1	0.01 - 5.00	1-Low	
2	5.01 - 10.00	2-Low-Medium	
3	10.01 - 15.00	3-Medium	
4	15.01 - 20.00	4-Medium-High	
5	20.01 - 25.00	5-High	
6	25.01 and Above	6-Very High	
7	NULL	7-No Coverage	

If a Mesh Block did not receive any score, the implication is that there is no public transport coverage for that Mesh Block for the given hour band. The full, original 2016 ABS Mesh Block layer is included and can be used to identify specific No Access polygons.

The first PTAL model input is the NSW General Transit Feed Specification (GTFS) data set. GTFS data provides public transport timetable and frequency information for every public transport stop, aka Transit Stop Number (TSN). Timetable information used in the PTAL model is based on available public transport services on a Tuesday in December 2019 and 2020.

The second input is an origin / destination distance matrix, calculated along the pedestrian network from every Mesh Block centroid to all surrounding public transport stops.

The following parameters are used to assign a ptaí score.

1. All Bus stops within 400m walking distance of a Mesh Block centroid.
2. All Train / Ferry / Light Rail stations within 800m walking distance of a Mesh Block centroid.
3. Walk Speed is 4 Km/h

Assumptions:

1. Tuesday represents a typical weekday travel day
2. School buses are excluded from the analysis
3. The shortest path to public transport spot is the optimal path