City of Melbourne Bicycle Network Metadata

The bicycle network is made up of the following layers:

Bicycle network

Is a vector layer containing all the possible links to be use by a bicycle plus connectors from the street to the centroid. It contains four fields:

RoadClass

Identifies the type of link, the table below describes the categories of each class code and a suggested modelling cost based on an average rider speed of 20 Km per hour.

ClassCode	Description	suggested modeling cost
1	Freeway	Length (m)* 60 minutes / 20,000 metres
2	Arterial Road	Length (m)* 60 minutes / 20,000 metres
3	Sub-Arterial	Length (m)* 60 minutes / 20,000 metres
4	Collector	Length (m)* 60 minutes / 20,000 metres
5	Local	Length (m)* 60 minutes / 20,000 metres
6	2wd	Length (m)* 60 minutes / 20,000 metres
11	Walking Track	Length (m)* 60 minutes / 20,000 metres
12	Shared Path	Length (m)* 60 minutes / 20,000 metres
14	Ferry	Length (m)* 60 minutes / 20,000 metres
21	Sharrow	Length (m)* 60 minutes / 20,000 metres
22	Standard bicycle lane	Length (m)* 60 minutes / 20,000 metres
23	Dooring protecting chevron	Length (m)* 60 minutes / 20,000 metres
24	Traffic protecting chevron	Length (m)* 60 minutes / 20,000 metres
25	Total protecte chevron (protect from dooring and traffic)	Length (m)* 60 minutes / 20,000 metres
26	Kerb side physically separated	Length (m)* 60 minutes / 20,000 metres
27	Shared tram platform	Length (m)* 60 minutes / 20,000 metres
28	Peak hour bike lane	Length (m)* 60 minutes / 20,000 metres
29	Shared Intersection (Bike Lane)	Length (m)* 60 minutes / 20,000 metres
30	Interesection	Length (m)* 60 minutes / 20,000 metres
31	Shared zones (off-road)	Length (m)* 60 minutes / 20,000 metres
32	Segregated paths	Length (m)* 60 minutes / 20,000 metres
91	Entrance conextor	0
92	Centroid Connector	500 minutes

See fig 1.0 for examples of class codes.

Direction
States if the link has any flow restrictions, the table below shows the description of each direction code.

Direction	Description
F	Forward
R	Reverse
B	Both ways

(Note: No reverse values where incorporated to this network)

Management

This field states the responsible authority identified in City of Melbourne road corridors layer. Links that do not overlap with this layer are identified as "undetermined" and links coded as connectors (91 or 92) do not have any attribute.

Width

Is a decimal field and states a standard width for this infrastructure category.

Cadastral centroids

Is a point layer used to represents each cadastre parcel identified in the CoM property boundaries dataset. It only contains a Nework Id attribute with the code of the city of Melbourne Property ID in the property boundaries layer.

This database does not include centroid for property boundaries with no identified access in ground floor in the property entrances database maintained by the rates office
In cases where a property was integrated multiple polygons only centroid for all the areas was generated for modelling purposes.

The network setting includes
- Global right turns restrictions: established in 15 seconds to the left and right turns to making the modelling more realistic.
- Direction restriction: directions restrictions where incorporated in the network, this attributes area stored in the "oneway" field in the Bicycle network layer.
- The Centroid connectors area penalized in the suggested attributes for modelling with 500 minutes, used to avoid riders taking shortcuts through connectors, any analysis between centroids will require to subtract this penalty.

Fig 1.0

Class Code	Description	Example 1	Example 2	Example 3
1	Freeway			
2	Arterial Road			
3	Sub-Arterial Road			
4	Collector Road			
5	Local Road			
6	2wd Road			
11	Walking Track			
12	Shared Path			
14	Ferry			
21	Sharrow			
22	Standard bicycle lane			
23	dooring protecting chevron			
24	Traffic protecting chevron			
25	Total protected chevron (protect from dooring and traffic)			

26	Kerb side physically separated			
27	Shared tram platform			
28	Peak hour bike lane			
29	Shared Intersection (Bike Lane)			
30	Intersection			
31	Shared zones (off-road)			
32	Segregated paths			