

## Data Specification for Traffic Data of Strategic / Major Roads

### Traffic Speed, Volume and Road Occupancy (Raw Data)

Data structure of the XML file for Traffic Speed, Volume and Road Occupancy (Raw Data) is as follows:

Item	Data Type	Description	Coding
date	date	Date of data	yyyy-mm-dd
periods	<b>period</b>	Two 30s-interval included	

Details about Data Type “**period**”

Item	Data Type	Description	Coding
period_from	time	Timestamp of data period starts	HH:mm:ss
period_to	time	Timestamp of data period ends	HH:mm:ss
detectors	<b>detector</b>	List of detector	

Details about Data Type “**detector**”

Item	Data Type	Description	Coding
detector_id	String	ID of the detector	
direction	string	Direction of the detector	<ul style="list-style-type: none"> <li>1. North</li> <li>2. East</li> <li>3. South</li> <li>4. West</li> <li>5. North East</li> <li>6. South East</li> <li>7. North West</li> <li>8. South West</li> </ul>
lanes	<b>lane</b>	List of each lane item	

## Details about Data Type "lane"

Item	Data Type	Description	Coding
lane_id	string	Since there are 4 lanes, 3 lanes and 2 lanes carriageway, different output will be generated depends on the number of lanes on the carriageway	<ul style="list-style-type: none"> <li>- With 4 Lanes           <ul style="list-style-type: none"> <li>1. Fast Lane</li> <li>2. Middle Lane 2</li> <li>3. Middle Lane 1</li> <li>4. Slow Lane</li> </ul> </li> <li>- With 3 Lanes           <ul style="list-style-type: none"> <li>1. Fast Lane</li> <li>2. Middle Lane</li> <li>3. Slow Lane</li> </ul> </li> <li>- With 2 Lanes           <ul style="list-style-type: none"> <li>1. Fast Lane</li> <li>2. Slow Lane</li> </ul> </li> <li>- With 1 Lane           <ul style="list-style-type: none"> <li>1. Fast Lane</li> </ul> </li> </ul>
speed	int	Traffic speed of lane	In km/h
Occupancy*	int	Occupancy of lane	In percentage (%)
Volume	int	Traffic volume of lane	
sd	decimal	Standard deviation of speed	Rounded to the nearest 1 decimal places
valid	string	Data validity Detector Online : Y, Detector Offline : N	Y / N

\*Occupancy is the percentage of time a zone is occupied by a vehicle

Data structure of the CSV file for Locations of Traffic Detectors is as follows:

<b>Item</b>	<b>Data Type</b>	<b>Description</b>	<b>Coding</b>
Device_ID	string	ID of the detector	AIDxxxxx
District	string	18 District Name	<ul style="list-style-type: none"> <li>1. Central &amp; Western</li> <li>2. Eastern</li> <li>3. Islands</li> <li>4. Kowloon City</li> <li>5. Kwai Tsing</li> <li>6. Kwun Tong</li> <li>7. North</li> <li>8. Sai Kung</li> <li>9. Sha Tin</li> <li>10. Sham Shui Po</li> <li>11. Southern</li> <li>12. Tai Po</li> <li>13. Tsuen Wan</li> <li>14. Tuen Mun</li> <li>15. Wan Chai</li> <li>16. Wong Tai Sin</li> <li>17. Yau Tsim Mong</li> <li>18. Yuen Long</li> </ul>
Road_EN	string	Road Name in English	
Road_TC	string	Road Name in Traditional Chinese	
Road_SC	string	Road Name in Simplified Chinese	
Easting	integer	X Coordinate of the detector in HK1980 Grid	
Northing	integer	Y Coordinate of the detector in HK1980 Grid	
Latitude	decimal	Latitude of the detector	
Longitude	decimal	Longitude of the detector	
Direction	string	Direction of the detector	<ul style="list-style-type: none"> <li>1. North</li> <li>2. East</li> <li>3. South</li> <li>4. West</li> <li>5. North East</li> </ul>

			6. South East 7. North West 8. South West
Rotation	string	Direction of the detector in degree	

Response Code:

HTTP code	Definition
200	Success.
400	Bad Request.
500	Internal Server Error.
503	The server is currently unavailable.

### Traffic Speeds of Road Network Segments (Processed Data)

Data structure of the XML file for Traffic Speeds of Road Network Segments (Processed Data) is as follows:

Item	Data Type	Description	Coding
date	date	Date of data	yyyy-mm-dd
time	time	Timestamp of data	HH:mm:ss
irn_version	string	Version number of the Intelligent Road Network	
segments	<b>segment</b>	List of each segment item	

Details about Data Type “segment”

Item	Data Type	Description	Coding
segment_id	string	ROUTE_ID in the CENTERLINE of the Intelligent Road Network	
speed	float	Current average speed	In km/h
valid	string	Data validity Online : Y, Offline : N	Y / N

Data structure of the CSV file for Road Network Segments is as follows:

Item	Data Type	Description	Coding
segment_id	string	ROUTE_ID in the CENTERLINE of the Intelligent Road Network	
road name	string	Name of Route	Route N

For the Segments' detail, Please refer to

[https://data.gov.hk/en-data/dataset/hk-td-tis\\_15-road-network-v2](https://data.gov.hk/en-data/dataset/hk-td-tis_15-road-network-v2)

Response Code:

HTTP code	Definition
200	Success.
400	Bad Request.
500	Internal Server Error.
503	The server is currently unavailable.