

# StreetPro Navigation Premium

Version 2019.03.0

Release Notes



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# 1 - Introduction

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## Overview

This document outlines what's new in the datasets, the data statistics, and the known issues, if any, for the current data release. For the latest product features and other details, see the StreetPro Navigation Premium Product Guide, which is available at:

<http://www.pbinsight.com/support/product-documentation/details/streetpro-navigation>

## Product Variants

The StreetPro® suite consists of four related products:

### *StreetPro Display*

**StreetPro Display** (1:10,000 scale) combines the most comprehensive national road network in the world with a large-scale digital map base. Street networks are chained for fast rendering with no loss of detail and split by road classification layers to enhance map display. Multiple layers of information including railways, international and administrative boundaries, urban areas, comprehensive geographical points of interest, coastlines, waterbodies, land cover and gazetteers provide a foundation for map production and enable fast display of background reference maps. Equal maintenance of both metropolitan and regional areas ensures consistent coverage on a national scale. StreetPro Display enables complete, country-wide mapping for more than 100 countries.

Visit <https://www.pitneybowes.com/us/data/street-data/contextual-map-data.html> for more details.

### *StreetPro Classic*

**StreetPro Classic** (1:10,000 scale), combines all the **StreetPro Display** features with authoritative address ranges on each segment, providing a foundation for:

- Map production
- Routing (where absolute route accuracy is not required)
- Low volume geocoding
- Low resolution reverse geocoding
- Business analysis and more

Visit <https://www.pitneybowes.com/us/data/street-data/address-data.html> for more details.

### **StreetPro Navigation Premium**

**StreetPro Navigation Premium** (1:10,000 scale) combines all the **StreetPro Classic** features with premium navigational information that adds the ability to calculate the most precise, efficient route between points on a road network, taking average *speed profiles* for time of day and *vehicle height, width, and weight restrictions* into account.

Visit <https://www.pitneybowes.com/us/data/street-data/road-travel-data.html> for more details.

### **StreetPro Traffic**

**StreetPro Traffic**(1:10,000 scale) aligns probe data collected from mobile and navigation devices with StreetPro street segments to provide indicative traffic volumes by time of day, day of week and month. This add-on pack is compatible with **StreetPro Navigation Premium**.

Visit <https://www.pitneybowes.com/us/data/street-data/traffic-data.html> for more details.

# 2 - What's New

## In this section

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What's new in this version

7

## What's new in this version

Following are the country specific updates that have been implemented in this release:

### **Brazil**

- More than 1000000 km of new roads added across the country.
- The quality of traffic restrictions have been improved in around 10000 intersections across the country.
- House Number Ranges on 20000 km streets in Brazil have been updated using Address Points to calibrate these ranges.
- Around 1700 km street name prefixes have been updated.
- Street names have been updated for 20000 km of road geometry.
- As part of coverage growth in ADA, lane information (ADA-LaneAtJunction) was added to over 1300000 junctions.

### **France**

- Approximately 128000 km of new, mostly lower class roads have been added across the country.
- Turn restrictions have been updated for approximately 11800 junctions.
- House Number Ranges have been created and updated for around 30000 km of road geometry, based on fresh Address Point data.
- Street Names have been added and updated on approximately 12000 km of roads across the country.
- As a part of further extension of ADA-LaneAtJunctions, lane information has been added to over 80000 Junctions. Truck Speeds have been corrected on 746 km of roads based on recent sources.

### **Germany**

- Approximately 50000 km of new, mostly lower class roads, have been added across the country.
- Speed Restrictions have been updated for 25579 km of roads.
- Approximately 1600 junctions received updated turn restrictions.
- As part of further coverage growth in ADA, lane information (ADA-LaneAtJunction) was added to over 90000 junctions.

### **Ireland**

- As part of further coverage growth in ADA, lane information (ADA-LaneAtJunction) was added to over 4400 junctions.
- House Number Ranges have been created and updated, based on fresh Address Point data.

### **India**

- India has been added as a new country in the StreetPro Navigation Premium Product.

## Indonesia

- Indonesia has been added as a new country in the StreetPro Navigation Premium Product.

## Italy

- Approximately 43000 km of new, mostly lower class roads have been added across the country.
- Street Names have been updated for close to 18500 km of road geometry.
- House Number Information have been updated for more than 24000 km of road geometry.
- As part of further coverage growth in ADA, lane information (ADA-LaneAtJunction) was added to over 60000 junctions.
- Our data contained a legacy attribute of road geometry, called "Street Code". This attribute was captured in a very inconsistent way, and was not maintained either. Because of that, it is been removed from our data.
- Speed Restrictions have been updated for 14528 km of roads, mainly roads of the 2 highest Net 2 Class classes in the northern part of the country.

## Mexico

- The quality of the traffic restrictions has been improved with a focus on Mexico-City, Guadalajara, and Monterey.
- House Number Ranges on around 80254 km streets in MEX have been updated using Address Points to calibrate these ranges.
- Around 9000 km of roads (mostly back and forest roads) have been added across the country.
- As part of further coverage growth in ADA, speed limits (ADA-SpeedRestriction) have been added/updated on around 10000 km of roads. More than 60000 km of new geometry added in targeted areas.

## Spain

- Approximately 144000 km of new, mostly lower class roads have been added across the country.
- Turn restrictions have been updated for approximately 2300 junctions.
- Street Names have been updated for more than 26550 km of road geometry.
- House number information has been updated for more than 19000 km of road geometry.
- As part of further coverage growth in ADA, lane information (ADA-LaneAtJunction) have been added to over 94000 junctions.
- Speed Restrictions have been updated for 935 km of roads based on recent local government sources.

## Thailand

- The quality of traffic restrictions have been improved in around 1200 intersections across the country, mainly in Bangkok.
- More than 13000 km of new roads have been added across the country.
- The legal default Speed Restriction update has been completed.

## Hong Kong

- Around 200 km of roads across the country have been updated.



## Singapore

- Official Street Code is a legacy attribute on Road Elements. This attribute was captured in a very inconsistent way, and was not maintained either. Its content has therefore been deleted for the entire country.
- The legal default Speed Restriction update has been completed.
- Around 1500 km of roads have been added.

## United Kingdom

- Street Names have been added and updated on approximately 470 km of roads across the country.
- Approximately 15000 km of roads have been added across the country.
- As part of further coverage growth in ADA, lane information (ADA-LaneAtJunction) was added to over 84000 junctions.
- House Number Ranges have been created and updated, based on fresh Address Point data.

## Vietnam

- More than 90000 km of new roads have been added across the country.
- Street names have been updated on approximately 29540 km across the country.
- More than 5500 km of roads have been realigned to their correct position.
- Official Street Code is a legacy attribute on Road Elements. This attribute was captured in a very inconsistent way, and was not maintained either. Its content has therefore been deleted from the few hundreds of Road Elements on which it was present in Vietnam.

# 3 - Data Statistics

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## Overview

This section provides the feature counts and street length information for all the countries covered in this release.

## Brazil

### Layers Count Table

Table	Description	Count 2018.03.0	Count 2019.03.0
streets	Street objects with navigational attributes	8,691,920	9,227,162
nodes	Street junctions/nodes	6,384,484	6,800,505
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	233,259	516,232

### Streets Feature Count Table

Column	Value/Description	Counts 2018.03.0	Counts 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	438,363	373,604
	2: Modelled Speed Limit	8,253,557	8,853,558
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	2,540	31,354

Column	Value/Description	Counts 2018.03.0	Counts 2019.03.0
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	280	840
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	1,510	5,729

## Streets Length Table

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	259655.7	253298.8
C	Local connecting road, non-toll	231620973.6	233142419
D	Local road , non-toll	707963316.2	740139440.3
E	Local road, toll	130189.2	138297
F	Local connecting road, toll	172165.2	172280.5
G	Major road, toll	2067827.4	2093412.5
H	Ferry	14258992.4	14405886.9
I	Major road, non-toll	51750055.3	52186626.3
L	Local (important) road, non-toll	33999616.1	34204332.1
M	Motorway, non-toll	473400	472682.2
N	Motorway, toll	375388.6	376171.7
P	Other major road, non-toll	44662295.7	44864551.4

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
Q	Other major road, toll	384223.9	393107.4
R	Local (minor) road, non-toll	307369255.4	562845953.6
S	Secondary road, non-toll	89788395	89998004.5
T	Secondary road, toll	203701.4	208183.6
U	Other road, non-toll	80196.4	2321.3
W	Local (important) road, toll	7434.8	7293.1
Z	Pedestrian	6572819.8	6436123.8

## France

### Layers Count Table

Table	Description	Count 2018.09.0	Count 2019.03.0
streets	Street objects with navigational attributes	13,584,635	9,227,162
nodes	Street junctions/nodes	11,799,939	6,800,505
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	677,375	516,232

## Streets Feature Count Table

Column	Value/Description	Counts 2018.09.0	Counts 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	3,393,423	373,604
	2: Modelled Speed Limit	10,191,212	8,853,558
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	36,203	31,354
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	4,014	840
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	151,950	5,729

## Streets Length Table

Road Class	Description	Street Length 2018.09.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	1389303.3	253298.8
C	Local connecting road, non-toll	261638670.4	233142419
D	Local road , non-toll	254310224	740139440.3
E	Local road, toll	2753.8	138297
F	Local connecting road, toll	68153.3	172280.5
G	Major road, toll	784334.3	2093412.5
H	Ferry	7534425.1	14405886.9

Road Class	Description	Street Length 2018.09.0 (in km)	Street Length 2019.03.0 (in km)
I	Major road, non-toll	30347891.4	52186626.3
L	Local (important) road, non-toll	8247243.6	34204332.1
M	Motorway, non-toll	6936139.8	472682.2
N	Motorway, toll	16832367.4	376171.7
P	Other major road, non-toll	45219922.6	44864551.4
Q	Other major road, toll	544114.8	393107.4
R	Local (minor) road, non-toll	772472270.4	562845953.6
S	Secondary road, non-toll	95722227.4	89998004.5
T	Secondary road, toll	219814.1	208183.6
U	Other road, non-toll	256.2	2321.3
W	Local (important) road, toll	2165.1	7293.1
Z	Pedestrian	104787850.1	6436123.8

# Germany

## Layers Count Table

Table	Description	Count 2018.09.0	Count 2019.03.0
streets	Street object with navigational attributes	10,604,563	11,223,302
nodes	Street junctions/nodes	8,896,574	9,391,787
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	502,266	1,105,589

## Streets Feature Count Table

Column	Value/Description	Count 2018.09.0	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	1,811,026	1,805,358
	2: Modelled Speed Limit	8,793,537	9,417,944
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	23,138	24,947
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	1,744	1,977
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	81,868	134,070



## Streets Length Table

Road Class	Description	Street Length 2018.09.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	141744.6	141781
C	Local connecting road, non-toll	176504219	176531676.7
D	Local road , non-toll	59054709.9	59040481.3
E	Local road, toll	59.2	0
F	Local connecting road, toll	15313.1	15313.1
G	Major road, toll	19499.3	16396.2
H	Ferry	3212785.8	3212920.6
I	Major road, non-toll	48045355	47958388.4
L	Local (important) road, non-toll	5235247.2	5233298.9
M	Motorway, non-toll	27353256.7	27573886.9
N	Motorway, toll	0	0
P	Other major road, non-toll	23693760.3	23683287.1
Q	Other major road, toll	0	0
R	Local (minor) road, non-toll	852145960.4	895625486.4
S	Secondary road, non-toll	67466618.7	67525049.8
T	Secondary road, toll	23039	23039.1
U	Other road, non-toll	28128.5	27680.4

Road Class	Description	Street Length 2018.09.0 (in km)	Street Length 2019.03.0 (in km)
W	Local (important) road, toll	0	0
Z	Pedestrian	86059650.7	116763118.5

## Great Britain

### Layers Count Table

Table	Description	Count 2018.09.0	Count 2019.03.0
streets	Street object with navigational attributes	6,374,045	6,692,531
nodes	Street junctions/nodes	5,184,889	5,878,607
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	389,450	1,084,161

### Streets Feature Count Table

Column	Value/Description	Counts 2018.09.0	Counts 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	1354549.00	1440530
	2: Modelled Speed Limit	5019496.00	5252001

Column	Value/Description	Counts 2018.09.0	Counts 2019.03.0
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	20530.00	19455
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	6878.00	6545
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	53576.00	380302

## Streets Length Table

Road Class	Description	Counts 2018.09.0	Counts 2019.03.0
A	Local (minor) road, toll	22.3	22202.5
C	Local connecting road, non-toll	34906.01	34917015.4
D	Local road , non-toll	68171.56	68162235.9
E	Local road, toll	2.37	2372.9
F	Local connecting road, toll	4.82	4825.8
G	Major road, toll	25.11	25113.7
H	Ferry	11933.69	12105975.9
I	Major road, non-toll	9850.63	9852688
L	Local (important) road, non-toll	76358.3	76364940.9

Road Class	Description	Counts 2018.09.0	Counts 2019.03.0
M	Motorway, non-toll	7470.61	7487918.7
N	Motorway, toll	86.57	69255
P	Other major road, non-toll	20681.82	20698256.7
Q	Other major road, toll	39.27	38485
R	Local (minor) road, non-toll	337547.13	368821185.8
S	Secondary road, non-toll	30728.21	30751001.8
T	Secondary road, toll	9.62	9621.3
U	Other road, non-toll	8.07	715.1
W	Local (important) road, toll	2.99	2988.3
Z	Pedestrian	63708.84	48942461.2

## Indonesia

### Layers Count Table

Table	Description	Count 2019.03.0
streets	Street objects with navigational attributes	4,438,629
nodes	Street junctions/nodes	3,489,935
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	165,079

## Streets Feature Count Table

Column	Value/Description	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	457,926
	2: Modelled Speed Limit	3,980,703
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	24,947
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	1,977
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	134,070

## Streets Length Table

Road Class	Description	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	69167
C	Local connecting road, non-toll	23671935.5
D	Local road , non-toll	26974619.2
E	Local road, toll	17292.8
F	Local connecting road, toll	83164.8
G	Major road, toll	210439.6
H	Ferry	63016839.9

Road Class	Description	Street Length 2019.03.0 (in km)
I	Major road, non-toll	18435686
L	Local (important) road, non-toll	12104901.1
M	Motorway, non-toll	63460.2
N	Motorway, toll	3073583.9
P	Other major road, non-toll	20566556
Q	Other major road, toll	178045.4
R	Local (minor) road, non-toll	824042068.4
S	Secondary road, non-toll	3956670
T	Secondary road, toll	45671.8
U	Other road, non-toll	72180.6
W	Local (important) road, toll	15351.4
Z	Pedestrian	19568850.6

## India

### Layers Count Table

Table	Description	Count 2019.03.0
streets	Street objects with navigational attributes	21,803,061

Table	Description	Count 2019.03.0
nodes	Street junctions/nodes	17,228,555
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	4,387,368

## Streets Feature Count Table

Column	Value/Description	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	900,067
	2: Modelled Speed Limit	20,902,994
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	NA
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	NA
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	NA

**Note:** The “MAX\_HEIGHT, MAX\_WEIGHT, and MAX\_WIDTH” information for India is not available in the source datasets.

## Streets Length Table

Road Class	Description	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	175895.9

Road Class	Description	Street Length 2019.03.0 (in km)
C	Local connecting road, non-toll	320169188
D	Local road , non-toll	40142205.4
E	Local road, toll	55131.2
F	Local connecting road, toll	1414119
G	Major road, toll	3695297.8
H	Ferry	3089841.8
I	Major road, non-toll	49265233.7
L	Local (important) road, non-toll	478573762.2
M	Motorway, non-toll	63580.8
N	Motorway, toll	2182184.6
P	Other major road, non-toll	62612790.8
Q	Other major road, toll	1927100.7
R	Local (minor) road, non-toll	3498228947
S	Secondary road, non-toll	133278288.6
T	Secondary road, toll	2638058.7
U	Other road, non-toll	2541.2
W	Local (important) road, toll	123694.5
Z	Pedestrian	12507577.5



# Ireland

## Layers Count Table

Table	Description	Count 2018.03.0	Count 2019.03.0
streets	Street objects with navigational attributes	661,263	706,019
nodes	Street junctions/nodes	599,297	640,967
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	3,970	39,538

## Streets Feature Count Table

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	74,980	74,673
	2: Modelled Speed Limit	586,283	631,346
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	824	1,217
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	5	5
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	1,742	2,372

## Streets Length Table

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	4424.3	4424.5
C	Local connecting road, non-toll	12337325.9	12344211
D	Local road , non-toll	13606053.3	13595170
E	Local road, toll	0	0
F	Local connecting road, toll	7665.3	7665.8
G	Major road, toll	26176.9	26177.6
H	Ferry	1510719.6	1636056
I	Major road, non-toll	1750099.3	1750864
L	Local (important) road, non-toll	7907837.7	7923354
M	Motorway, non-toll	1625206	1626467
N	Motorway, toll	324362.2	324367.3
P	Other major road, non-toll	3236416.5	3254986
Q	Other major road, toll	4437.2	4437.5
R	Local (minor) road, non-toll	74124972.8	80301565
S	Secondary road, non-toll	853724	837521
T	Secondary road, toll	15980.1	15980.7
U	Other road, non-toll	194	0

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
W	Local (important) road, toll	1409.1	1409.2
Z	Pedestrian	912567.1	976171.2

## Italy

### Layers Count Table

Table	Description	Count 2018.03.0	Count 2019.03.0
streets	Street objects with navigational attributes	9,136,441	706,019
nodes	Street junctions/nodes	7,876,141	640,967
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	352,253	39,538

### Streets Feature Count Table

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	1,971,481	1,826,012
	2: Modelled Speed Limit	7,164,960	7,923,004

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	568	19,656
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	22	4,738
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	416	76,164

## Streets Length Table

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	443302.5	450604
C	Local connecting road, non-toll	141694005	141920571
D	Local road , non-toll	130934965	130816569
E	Local road, toll	4053.2	4497
F	Local connecting road, toll	317808.1	320900
G	Major road, toll	199760.7	200665
H	Ferry	40749784	40750983
I	Major road, non-toll	9079106.5	9125334
L	Local (important) road, non-toll	11439849.1	11468446
M	Motorway, non-toll	3641823.2	3643261
N	Motorway, toll	11054241	11057171

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
P	Other major road, non-toll	15412404.6	15477028
Q	Other major road, toll	400358.8	404043
R	Local (minor) road, non-toll	578982197	636608946
S	Secondary road, non-toll	29245154.4	29305188
T	Secondary road, toll	351895.6	358845
U	Other road, non-toll	272147.5	2931
W	Local (important) road, toll	1323.7	1325
Z	Pedestrian	57029442.5	73908779

## Mexico

### Layers Count Table

Table	Description	Count 2018.03.0	Count 2019.03.0
streets	Street objects with navigational attributes	7,227,285	7,722,898
nodes	Street junctions/nodes	5,538,405	5,923,827
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	78,325	1,028,561

## Streets Feature Count Table

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	520,855	423,746
	2: Modelled Speed Limit	6,706,430	7,299,152
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	6,989	109,019
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	6,137	69,123
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	5,779	80,564

## Streets Length Table

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	241112.8	258253.4
C	Local connecting road, non-toll	267312525	267458480.2
D	Local road , non-toll	180497436	180512390.2
E	Local road, toll	34045.7	34340
F	Local connecting road, toll	251991.8	250736.1
G	Major road, toll	8761445.9	8978073
H	Ferry	1279179.6	1279438.4

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
I	Major road, non-toll	17149737.2	17035815.3
L	Local (important) road, non-toll	14192288.2	14204525
M	Motorway, non-toll	266764.4	266690.4
N	Motorway, toll	5862140.7	5964974.9
P	Other major road, non-toll	41065079.4	41407751.9
Q	Other major road, toll	2253787.8	2347452.8
R	Local (minor) road, non-toll	454924981	524647401.2
S	Secondary road, non-toll	53825313.4	53938562.5
T	Secondary road, toll	359733.5	371117.7
U	Other road, non-toll	182875.4	1948
W	Local (important) road, toll	19469.7	19208.4
Z	Pedestrian	6914407.3	4949197.4

## Thailand

### Layers Count Table

Table	Description	Count 2018.03.0	Count 2019.03.0
streets	Street objects with navigational attributes	2,705,462	2,954,827

Table	Description	Count 2018.03.0	Count 2019.03.0
nodes	Street junctions/nodes	2,204,920	2,410,181
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	59,461	145,060

## Streets Feature Count Table

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	832,704	382,891
	2: Modelled Speed Limit	1,872,758	2,571,936
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	NA	NA
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	NA	NA
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	NA	NA

**Note:** The “MAX\_HEIGHT, MAX\_WEIGHT, and MAX\_WIDTH” information for Thailand is not available in the source datasets.

## Streets Length Table

Road Class	Description	Street Length 2019.03.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	7797.3	8253.6



Road Class	Description	Street Length 2019.03.0 (in km)	Street Length 2019.03.0 (in km)
C	Local connecting road, non-toll	34305483.5	34485400
D	Local road , non-toll	72035398.9	71972925
E	Local road, toll	2700.5	2700.6
F	Local connecting road, toll	45258.7	45517.9
G	Major road, toll	19177.8	27438.7
H	Ferry	1064389.5	1063660
I	Major road, non-toll	7596472	7549342
L	Local (important) road, non-toll	9388203	9514208
M	Motorway, non-toll	181560.9	237388.6
N	Motorway, toll	683754.8	728210.1
P	Other major road, non-toll	21832620.5	22224906
Q	Other major road, toll	114158	123872.4
R	Local (minor) road, non-toll	645509468.8	6.66E+08
S	Secondary road, non-toll	5525588.3	5371416
T	Secondary road, toll	37362.7	37365.9
U	Other road, non-toll	15480.6	5112.9
W	Local (important) road, toll	14549.6	14549.8
Z	Pedestrian	1943803	2008112

# Hong Kong

## Layers Count Table

Table	Description	Count 2018.03.0	Count 2019.03.0
streets	Street objects with navigational attributes	84,486	89,021
nodes	Street junctions/nodes	71,034	74,424
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	7,706	46,714

## Streets Feature Count Table

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	58,454	51,394
	2: Modelled Speed Limit	26,032	37,627
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	NA	NA
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	NA	NA
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	NA	NA

**Note:** The “MAX\_HEIGHT, MAX\_WEIGHT, and MAX\_WIDTH” information for Hong Kong is not available in the source datasets.

## Streets Length Table

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	36407.1	37925
C	Local connecting road, non-toll	255743.6	262986.3
D	Local road , non-toll	487132.1	518806.5
E	Local road, toll	3567.6	3567.8
F	Local connecting road, toll	2147.8	2148
G	Major road, toll	12579	12579.9
H	Ferry	625283.9	768967.8
I	Major road, non-toll	52132.5	62397.3
L	Local (important) road, non-toll	96543	96639.9
M	Motorway, non-toll	269494.8	338780.6
N	Motorway, toll	90414.6	90547.1
P	Other major road, non-toll	279945.9	281534.6
Q	Other major road, toll	21193.7	21197.7
R	Local (minor) road, non-toll	3265991	3295253
S	Secondary road, non-toll	301981.7	305822.2
T	Secondary road, toll	8603.5	8745

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
U	Other road, non-toll	5170	0
W	Local (important) road, toll	265.4	260.1
Z	Pedestrian	612153.3	652823.5

## Singapore

### Layers Count Table

Table	Description	Count 2018.03.0	Count 2019.03.0
streets	Street objects with navigational attributes	116,002	143,182
nodes	Street junctions/nodes	96,459	118,281
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	19,763	55,333

### Streets Feature Count Table

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	65,249	60,980
	2: Modelled Speed Limit	50,753	82,202

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	NA	NA
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	NA	NA
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	NA	NA

**Note:** The “MAX\_HEIGHT, MAX\_WEIGHT, and MAX\_WIDTH” information for Singapore is not available in the source datasets.

## Streets Length Table

Road Class	Description	Street Length 2019.03.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	10338.6	9818.4
C	Local connecting road, non-toll	591965.7	593445
D	Local road , non-toll	511473.8	519088.4
E	Local road, toll	4138.8	4129.5
F	Local connecting road, toll	10278.8	10279.3
G	Major road, toll	2076.1	2076.2
H	Ferry	242719.8	248929.7
I	Major road, non-toll	2803.9	2804
L	Local (important) road, non-toll	214527.2	213163.2
M	Motorway, non-toll	299560.4	299661.6

Road Class	Description	Street Length 2019.03.0 (in km)	Street Length 2019.03.0 (in km)
N	Motorway, toll	67744.8	67755.7
P	Other major road, non-toll	373629.7	373513.3
Q	Other major road, toll	10098.4	10105.9
R	Local (minor) road, non-toll	3008021	5592064
S	Secondary road, non-toll	260889.2	264189.9
T	Secondary road, toll	19965.1	19793.2
U	Other road, non-toll	23040.9	292.8
W	Local (important) road, toll	1391.7	1391.8
Z	Pedestrian	1402744	764776.4

## Spain

### Layers Count Table

Table	Description	Count 2018.09.0	Count 2019.03.0
streets	Street objects with navigational attributes	9,538,900	9,626,797
nodes	Street junctions/nodes	7,747,774	7,825,745
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	1,999,037	2,000,361

## Streets Feature Count Table

Column	Value/Description	Counts 2018.09.0	Counts 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	1,248,856	1,246,302
	2: Modelled Speed Limit	8,290,044	8,380,495
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	62043	63,173
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	65548	66,915
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	2179	2309

## Streets Length Table

Road Class	Description	Street Length 2018.09.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	238213.4	238695.2
C	Local connecting road, non-toll	156867260	156895747.2
D	Local road , non-toll	46987649.4	46975777
E	Local road, toll	3275.8	3275.8
F	Local connecting road, toll	146352	146736.7
G	Major road, toll	88564.1	88396.3
H	Ferry	27935645.2	27935691.1

Road Class	Description	Street Length 2018.09.0 (in km)	Street Length 2019.03.0 (in km)
I	Major road, non-toll	2411733.5	2403836.8
L	Local (important) road, non-toll	10729878.9	10730009.5
M	Motorway, non-toll	22787356.5	22801722
N	Motorway, toll	5290644	5290722.1
P	Other major road, non-toll	14504218.3	14508276.4
Q	Other major road, toll	232692.6	233322.2
R	Local (minor) road, non-toll	615902186	617424521.2
S	Secondary road, non-toll	41536099	41557441.2
T	Secondary road, toll	228659.3	229005.1
U	Other road, non-toll	40641.2	40528.9
W	Local (important) road, toll	2802.2	2802.2
Z	Pedestrian	518301104	526020243.6



# Vietnam

## Layers Count Table

Table	Description	Count 2018.03.0	Count 2019.03.0
streets	Street objects with navigational attributes	1,567,889	2,407,740
nodes	Street junctions/nodes	1,260,305	1,927,653
restrictions	Traffic restrictions and restrictions associated with Logistics (Vehicle Height, Weight and Width)	12,826	17,347

## Streets Feature Count Table

Column	Value/Description	Count 2018.03.0	Count 2019.03.0
SPEED_VERIFIED	1: SignPost Speed Limit	391,741	441,278
	2: Modelled Speed Limit	1,176,148	1,966,462
MAX_HEIGHT	Street objects with restrictions on Maximum Vehicle Height	NA	NA
MAX_WIDTH	Street objects with restrictions on Maximum Vehicle Width	NA	NA
MAX_WEIGHT	Street objects with restrictions on Maximum Vehicle Weight	NA	NA

**Note:** The “MAX\_HEIGHT, MAX\_WEIGHT, and MAX\_WIDTH” information for Vietnam is not available in the source datasets.

## Streets Length Table

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
A	Local (minor) road, toll	37153.2	37046.3
C	Local connecting road, non-toll	19468551.8	20161582
D	Local road , non-toll	1005387.9	1040844
E	Local road, toll	0	0
F	Local connecting road, toll	1110	1109.9
G	Major road, toll	104606.7	104823.1
H	Ferry	454796.9	455290.5
I	Major road, non-toll	6680999.6	7123457
L	Local (important) road, non-toll	2315848.4	2552102
M	Motorway, non-toll	915492.6	1222200
N	Motorway, toll	352874	352877.7
P	Other major road, non-toll	9209170.3	9451017
Q	Other major road, toll	56905.2	57075
R	Local (minor) road, non-toll	303815177.4	4.16E+08
S	Secondary road, non-toll	6362906.1	6644112
T	Secondary road, toll	3578.4	3578.5

Road Class	Description	Street Length 2018.03.0 (in km)	Street Length 2019.03.0 (in km)
U	Other road, non-toll	8911.2	15076.2
W	Local (important) road, toll	620.4	636.3
Z	Pedestrian	2394264.5	3266875

# 4 - Known Issues

## In this section

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Known Issue

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## Known Issue

There is no known issue in the data for the current release.

# 5 - Copyright/Licensing Information

## In this section

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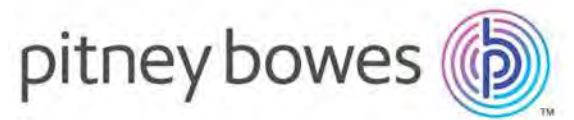
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