Annual Traffic Census Report 2019

Amendment Revision No. 3

Typographical and printing errors as shown in the following pages are rectified. Relevant amended pages are attached.

Pages iii, 7, 8, 10, 11, 14, 43,48.

Page B-2.

Page C-5.

Page L-3.

Page A1-22.

Pages A4-4, A4-14.

SUMMARY

During the year 2019, the annual average daily traffic (A.A.D.T.) in the territory showed the following changes as compared with that of 2018:

General

There were 794 366 vehicles licensed in Hong Kong at the end of 2019, representing an increase of 1.27% when compared with the corresponding figure in 2018. This total accounted for 90.4% of the number of registered vehicles. The highest percentage increase was found in Motor Cycle, with a growth of 6.1%. There were 573 932 private cars licensed at the end of 2019. The number of franchised buses licensed was 6 177, an increase of 0.4% over 2018. The total number of goods vehicles licensed in 2019 was 115 153, showing a decrease of 2.1% over 2018.

During the year, road travel in the territory amounted to 38.44 million vehicle-kilometres per day. Of this total, 5.94 million vehicle-kilometres occurred on Hong Kong Island while 9.05 million vehicle-kilometres and 23.45 million vehicle-kilometres occurred in Kowloon and the New Territories respectively. The average kilometrage per day per licensed vehicle was 48.64 km. 48.57 km

5.89 million

38.39 million

Due to the social events from June to December 2019, many major roads in various districts in the urban area (e.g. Central, Queensway, Wan Chai, Causeway Bay, Tsim Sha Tsui, Mong Kok, Shum Shui Po, Wong Tai Sin, Yuen Long, etc.) were closed due to road blockage or were affected by special traffic arrangement during the period. Abnormal traffic conditions at many counting stations were observed in June to December 2019. The traffic data for the counting stations presented in the report should therefore be interpreted with caution.

Hong Kong Island

Traffic flows across the External Cordon (urban area boundary) showed an increase of 0.5% and the Internal Cordon (enclosing Central District) showed an increase of 7.1%. Traffic flows across screenlines F-F (at the eastern end of Central District) on Hong Kong Island, screenline G-G (located at the eastern end of Causeway Bay) and screenline I-I (between Shau Kei Wan and Chai Wan) showed increases of 14.2%, 3.8% 6.1% and 0.3% in traffic flows respectively, while screenline H-H (separate the peak from the rest of Hong Kong Island) showed decrease of 1.9% in traffic flow.

Kowloon

The survey indicated decrease in traffic traveling in Kowloon Peninsula. Traffic flows across screenline C-C bisecting the Kowloon Peninsula in the east-west direction

A.A.D.T. across All Cordons and Screenlines

Cordon / Screenline	2018	2019	Change as % of 2018
H.K. Ext. Cordon	150 800	151 570	+0.5
H.K. Int. Cordon	503 460	539 070 5	12 160 +7.1 +1.7
Kln. Ext. Cordon	707 940	730 790	+3.2
T.Y. Ext. Cordon	434 440	448 130	+3.2
Screenline A-A	521 300	511 300	-1.9
Screenline C-C	574 340	572 620	-0.3
Screenline F-F	259 870	296 650 26	69 740 +14.2 +3.8
Screenline G-G	213 210	226 110	+6.1
Screenline H-H	28 510	27 960	-1.9
Screenline I-I	80 470	80 680	+0.3
Screenline K-K	366 860	372 030	+1.4
Screenline R-R	370 480	367 630	-0.8
Screenline S-S	316 110	322 030	+1.9
Screenline T-T	233 880	240 390	+2.8
Screenline Y-Y	140 900	142 450	+1.1

Peak Hour Traffic Flows across All Cordons and Screenlines

Cordon / Screenline	2018	2019	Change as % of 2018
H.K. Ext. Cordon	9 814	9 930	+1.2
H.K. Int. Cordon	32 122	34 311	2 235 +6.8 +0.4
Kln. Ext. Cordon	46 347	47 914	+3.4
T.Y. Ext. Cordon	28 313	28 185	-0.5
Screenline A-A	32 431	32 388	-0.1
Screenline C-C	35 171	35 378	+0.6
Screenline F-F	16 788	19 537	7 461 +16.4 +4.0
Screenline G-G	12 868	14 071	+9.3
Screenline H-H	2 252	2 076	-7.8
Screenline I-I	5 128	5 241	+2.2
Screenline K-K	23 683	24 027	+1.5
Screenline R-R	25 867	25 307	-2.2
Screenline S-S	21 313	22 151	+3.9
Screenline T-T	15 700	16 749	+6.7
Screenline Y-Y	9 376	9 480	+1.1

3.3.1 Cordons and Screenlines - Hong Kong Island

(a) Hong Kong External Cordon

On an average 24-hour day, 151 570 vehicles crossed the cordon separating the northern part and southern part of Hong Kong Island, representing an increase of 0.5% compared with the A.A.D.T. of 150 800 in 2018. The distribution of traffic among the various roads crossing the cordon on weekdays (Monday to Friday) is shown in FIGURE 3-1. Of the total movements on weekdays, 57.6% were via the Wong Nai Chung Gap Road - Aberdeen Tunnel corridor while 34.8% were via the Pok Fu Lam Road – Smithfield - Victoria Road corridor. The remaining 7.6% movements were via Tai Tam Road and Lin Shing Road.

(b) Hong Kong Internal Cordon

The A.A.D.T. across this cordon which encloses the Central Business District (CBD) of Hong Kong Island increased by 7.1% from 503 460 in 2018 to 539 070 in 2019. The distribution of vehicular flows among the various routes

1.7%

crossing the cordon on weekdays (Monday to Friday) is illustrated in FIGURE 3-2. Of the total movements on weekdays, 51.9% were via the eastern corridor of Harcourt Road, Queensway and other minor roads while 21.6% 20.5% were via the southern corridor comprising mainly Garden Road and Cotton Tree Drive. The western corridor via Connaught Road, Des Voeux

Road, Queen's Road and other minor roads took 27.6% of the total traffic volume across the cordon.

(c) Screenline F-F

This screenline separates Central, its adjacent "mid-levels" and the Peak from Wan Chai and Happy Valley. The A.A.D.T. increased by 14.2% from 259 870 in 2018 to 296 650 in 2019.

(d) Screenline G-G 269740

This screenline separates Causeway Bay from North Point. The A.A.D.T. increased by 6.1% from 213 210 in 2018 to 226 110 in 2019.

(e) Screenline H-H

This screenline separates the Peak from the rest of Hong Kong Island. The A.A.D.T. decreased by 1.9% from 28 510 in 2018 to 27 960 in 2019.

(f) Screenline I-I

This screenline separates Shau Kei Wan and Chai Wan. The A.A.D.T. increased by 0.3% from 80 470 in 2018 to 80 680 in 2019.

49.3%

(b) Screenline R-R

This screenline (formerly called Rural Screenline) divides Tsuen Wan/Sha Tin and the North West New Territories. It recorded an A.A.D.T. of 367 630 in 2019, representing a decrease of 0.8% over 2018.

(c) Screenline S-S

This screenline measures traffic movements between Yuen Long / Tuen Mun and the rest of the New Territories. The A.A.D.T. recorded in 2019 was 322 030, an increase of 1.9% over 2018.

(d) Screenline T-T

This screenline measures traffic flows between the North District and the rest of the New Territories. The A.A.D.T. recorded in 2019 was 240 390, representing an increase of 2.8% when compared with the corresponding figure in 2018.

(e) Screenline Y-Y

This screenline separates Yuen Long from Tuen Mun. The A.A.D.T. recorded in 2019 was 142 450, an increase of 1.1% over 2018.

3.4 VEHICLE-KILOMETRAGE

Vehicle-kilometrage is calculated for each road type as the product of the weighted average of A.A.D.T.s and the road length. The summation for all road types provides an estimate of the gross amount of travel. The results are summarized in the following table:

2018 and 2019 Average Daily Vehicle-kilometre on Roads Covered in the Annual Traffic Census

Region	Road Network	Average Daily V	ehicle-Kilometre
		2018	2019
Hong Kong Island	Major	4 933 249	4 856 454 4 808 018
	Minor	1 067 857	1 082 420
Sub-total		6 001 106	5 938 874 5 890 438
Kowloon	Major	7 464 204	8 010 289
	Minor	1 065 993	1 039 537
Sub-total		8 530 197	9 049 826
New Territories	Major	20 915 781	20 732 342
	Minor	2 804 469	2 714 257
Sub-total		23 720 250	23 446 599
Total		38 251 552	38 435 299 38 386 863

38.39 million 0.35%

During the year, an average daily total of 38.44 million vehicle-kilometres occurred in the territory as a whole, representing a 0.48% increase over 2018. The figures for major and minor road links are 33.60 million and 4.84 million respectively, which indicate the much higher volume of travel and thus the relative importance of the major road network.

1.8%

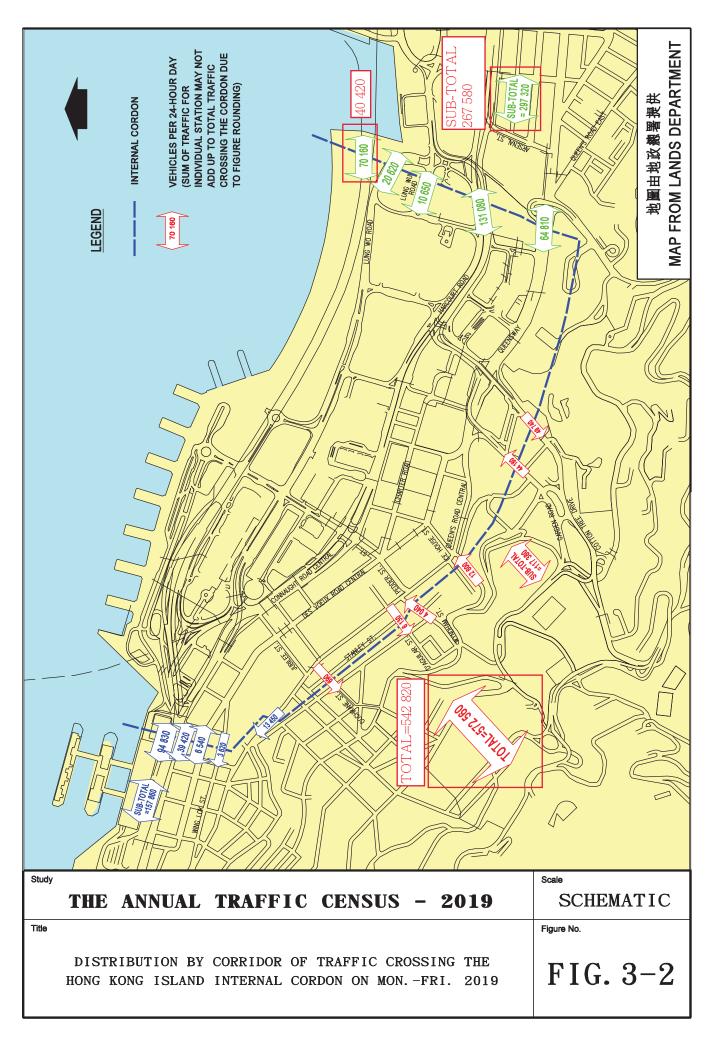
33.55 million

Analysed by district, the total daily vehicle-kilometrage on Hong Kong Island, in Kowloon and the New Territories decreased by 1.0%, and increased 6.1% and decreased 1.2% respectively when compared with 2018.

38.39 million

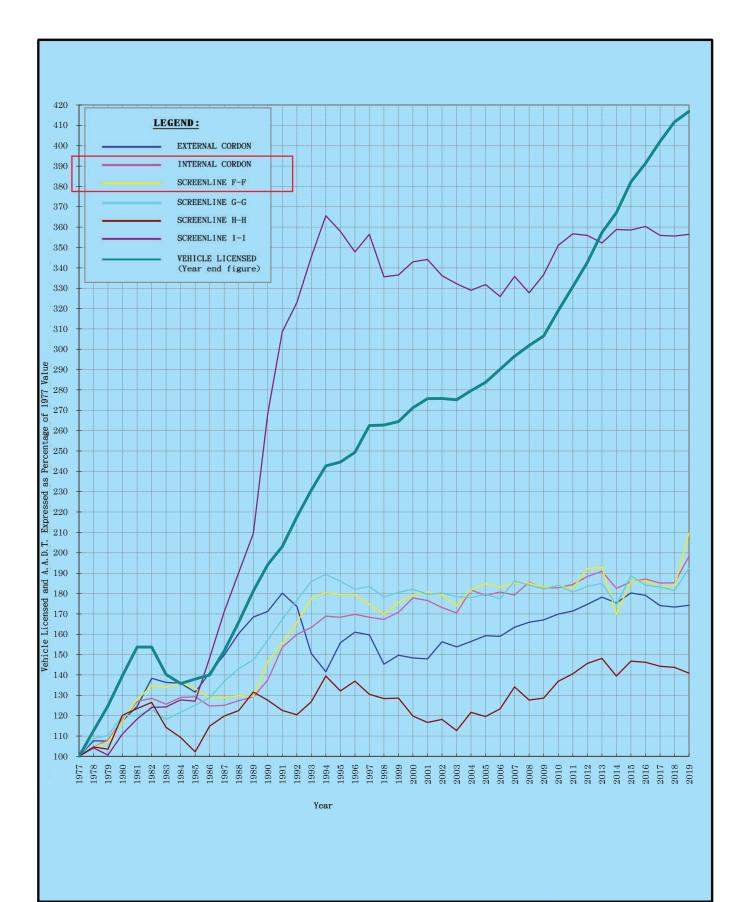
As there were 790 336 vehicles licensed in Hong Kong in the middle of the year, the 38.44 million vehicle-kilometres for the territory represents an average travel distance of 48.64 km per day per licensed vehicle in 2019, a decrease of 1.24% over 2018. 48.57 km

1.38%



- (ad) In 2017, the number of licensed vehicles was 2.8% higher than that of 2016. Screenline Y-Y measures traffic movements between Yuen Long / Tuen Mun showed the greatest increase of 4.1% as compared with 2016. Annual growth for the rest of the screenlines ranged from -2.9% to +1.9%.
- (ae) In 2018, the number of licensed vehicles was 2.4% higher than that of 2017. Screenline R-R measures traffic movements of North end of Tsuen Wan and Sha Tin showed the greatest increase of 10.0% as compared with 2017. Annual growth for the rest of the screenlines ranged from 1.4% to +4.1%.
- (af) In 2019, the number of licensed vehicles was 1.3% higher than that of 2018. Screenline F-F separates Central, its adjacent "mid-levels" and the Peak from Wan Chai and Happy Valley showed the greatest increase of 14.2% as compared with 2018. Annual growth for the rest of the screenlines ranged from -1.9% to +7.1%.

Screenline G-G (located at the eastern end of Causeway Bay) showed the greatest increase of 6.1% as compared with 2018. Annual growth for the rest of the screenlines ranged from -1.9% to +3.8%.



ı	Study	Scale
	THE ANNUAL TRAFFIC CENSUS - 2019	AS SHOWN
	Title	Figure No.
	COMPARISON OF GROWTH IN VEHICLE LICENSED AND SCREENLINE/CORDON VOLUMES - HONG KONG ISLAND	FIG. 6-4

Appendix B - AADT of Counting Stations - ordered by Station Nos.

Stn. No.	Stn. Type	Road Type	Road Name	From	То	A. 2018	ADT 2019	Change of 2019 as % of 2018
1031	A	UT	Central-Wanchai Bypass – Central Section	CWB western end portal	Wan Chai Exit	-	63,800	36,890 -
1032	A	UT	Central-Wanchai Bypass – Causeway Bay Section	Wan Chai Exit	merging point to IEC	-	41,490	-
1101	A	LD	Mount Butler Rd	Tai Hang Rd	End	4,540	4,350	-4.2
1102	A	LD	Cheung Lee St	Hong Man St	Kut Shing St	4,500	4,320	-3.9
1103	A	LD	Stanley Village Rd	Tai Tam Rd	Stanley New St	11,620	11,950	+2.8
1104	A	LD	Wing Lok St	Des Voeux Rd W	Bonham Strand	3,620	3,720	+2.8
1105	A	LD	Conduit Rd	Kotewall Rd	Glenealy	13,980	13,260	-5.1
1107	A	LD	Tung Lo Wan Rd	Causeway Rd	Moreton Terrace	18,040	18,060	+0.1
1108	A	LD	Justice Drive	Queensway	Supreme Court Rd	25,170	23,160	-8.0
1109	A	LD	Ocean Park Rd	Wong Chuk Hang Rd	Ocean Park	19,610	20,170	+2.9
1202	С	EX	Island Eastern Corridor	Healthy St INT western end	Healthy St INT eastern end	87,670	89,180	+1.7
1203	С	UT	Island Eastern Corridor up-ramp W-B	King's Rd	Healthy St INT western end	10,570	12,760	+20.8
1204	C	PD	Shek Pai Wan Rd	Victoria Rd	Wah Fu Rd	33,340	32,240	-3.3
1205	С	PD	Hill Rd FO <h114></h114>	Pok Fu Lam Rd	Connaught Rd W.	13,980	15,180	+8.5
1206	C	PD	Queen's Rd W	Eastern St	Western St	7,230	7,330	+1.4
1207	С	PD	Connaught Rd Central and West (GL)	Queen St	Cleverly St	29,320	34,210	+16.7
1208	C	PD	Connaught Rd C	Gilman St	Queen Victoria St	113,420	95,320	-16.0
1209	C	PD	Garden Rd	Cotton Tree Drive	Upper Albert Rd	22,530	23,070	+2.4
1210	C	PD	Hennessy Rd	Johnston Rd	Fenwick St	32,090	29,950	-6.7
1211	C	PD	Hennessy Rd	Stewart Rd	Tin Lok Lane	22,200	21,300	-4.1
1212	С	PD	Irving St & Pennington St	Leighton Rd	Yee Wo St	11,320	12,290	+8.5
1213	C	PD	Causeway Rd	Tung Lo Wan Rd	Shelter St	30,660	30,490	-0.5
1214	C	PD	King's Rd	Fortress Hill Rd	North Point Rd	22,110	25,280	+14.4
1215	С	PD	Causeway Bay FO <h225> S-B</h225>	Victoria Park Rd E-B	Gloucester Rd	15,050	12,540	-16.7
1216	C	PD	Gordon Rd	Hing Fat St	Electric Rd	24,730	24,610	-0.5
1217	С	PD	Tong Shui Rd & FO <h127></h127>	Island Eastern Corridor	Chun Yeung St	9,190	8,630	-6.1
1218	С	PD	Island Eastern Corridor down-ramp E-B	Healthy St INT western end	Java Rd	8,440	9,290	+10.0
1219	C	PD	King's Rd	Java Rd	Greig Rd	25,500	28,400	+11.4
1220	C	PD	Chai Wan Rd	Tai Tam Rd	Wan Tsui Rd	19,140	18,490	-3.4

Appendix C - AADT of Counting Stations - ordered by Road Names

Road Name	From	То	Stn. No.	Road Type	Stn. Type	AA 2018	DT 2019	Change of 2019 as % of 2018
Castle Peak Rd - Tsuen Wan	Tai Ho Rd	Tai Chung Rd	5409	PD	С	31,560 *	31,620	+0.2
Castle Peak Rd - Tsuen Wan	Tsuen King Circuit	Sha Tsui Rd	5610	PD	С	46,550 *	45,120 *	-3.1
Castle Peak Rd - Tsuen Wan	Tsuen King Circuit	Tai Chung Rd	5410	PD	С	34,750 *	31,810	-8.5
Castle Peak Rd - Tsuen Wan ramps A & B	Tuen Mun Rd	Castle Peak Rd - Tsuen Wan	5267	PD	С	29,280	30,080	+2.8
Castle Peak Rd - Tsuen Wan, Ting Kau & Sham Tseng	Tuen Mun Rd	Sham Tseng	6209	RR	В	11,110	11,000	-1.0
Castle Peak Rd - Yuen Long	Yuen Long On Lok Rd	Kam Tin Rd	5019	RT	A	29,300	30,160	+2.9
Castle Rd	Robinson Rd	Seymour Rd	1861	LD	C	3,700 *	3,660 *	-0.9
Castle Rd	Seymour Rd	Caine Rd	1840	DD	C	3,390 *	3,360 *	-0.9
Causeway Bay FO <h225> S-B</h225>	Victoria Park Rd E-B	Gloucester Rd	1215	PD	С	15,050	12,540	-16.7
Causeway Rd	Hing Fat St	Tin Hau Temple Rd	1415	PD	С	21,060 *	19,560	-7.1
Causeway Rd	Shelter St	Hing Fat St	2214	PD	В	34,970	33,760	-3.5
Causeway Rd	Tung Lo Wan Rd	Shelter St	1213	PD	C	30,660	30,490	-0.5
Central-Wanchai Bypass – Causeway Bay Section	Wan Chai Exit	merging point to IEC	1032	UT	A	-	41,490	-
Central-Wanchai Bypass – Central Section	CWB western end portal	Wan Chai Exit	1031	UT	A	-	63,800	36,890 -
Cha Kwo Ling Rd	Lei Yue Mun Rd	Wai Yip St	3484	DD	C	25,620 *	26,910	+5.0
Cha Kwo Ling Rd	Wai Yip St	Ko Chiu Rd	4074	DD	C	15,580	15,690 *	+0.7
Chai Wan Rd	Church St	Island Eastern Corridor Approach	1615	PD	С	9,980 *	9,800 *	-1.7
Chai Wan Rd	Island Eastern Corridor Approach	Tai Tam Rd	1009	PD	A	25,120	25,220	+0.4
Chai Wan Rd	Tai Tam Rd	Wan Tsui Rd	1220	PD	C	19,140	18,490	-3.4
Chai Wan Rd	Wan Tsui Rd	Wing Tai Rd	1420	PD	C	18,730 *	18,890	+0.8
Chai Wan Rd	Wing Tai Rd	Sun Yip St	1254	DD	C	23,140	22,530	-2.6
Chap Wai Kon St	Bus Terminus	Siu Lek Yuen Rd	5104	LD	A	6,030	5,560	-7.7
Chatham Court	Kimberley Rd	Chatham Rd S	4605	LD	C	3,070	3,140	+2.2
Chatham Rd FO < K20>	Gascoigne Rd	Princess Margaret Rd	3615	PD	С	20,140 *	20,290 *	+0.7
Chatham Rd N	San Lau St	Wo Chung St	3412	PD	C	30,620 *	28,500	-6.9
Chatham Rd N	Wuhu St	Chatham Rd N (GL)	3212	PD	С	102,720	106,830	+4.0
Chatham Rd N	Wuhu St	Hong Chong Rd	4208	PD	В	117,080	116,630	-0.4
Chatham Rd N & Ma Tau Wai Rd	San Lau St	Chi Kiang St	4212	PD	В	32,260	30,920	-4.2

Precision level for overall vehicle-kilometrage

Based on the A.A.D.T.s of the core and coverage stations, the average daily vehicle-kilometrage for each region is estimated as follows:-

Region	Road Network	Average Daily
		Vehicle-Kilometre
Hong Kong Island	Major	4 856 454 4 808 018
	Minor	1 082 420
Sub-total		5 938 874 5 890 438
Kowloon	Major	8 010 289
	Minor	1 039 537
Sub-total		9 049 826
New Territories	Major	20 732 342
	Minor	2 714 257
Sub-total		23 446 599
Total		38 435 299 38 386 863

The 95% error margin for the whole territory is within an acceptable level, being 8.7% of the average daily vehicle-kilometre. In analysing the precision level of vehicle-kilometrage by road network, the 95% error margin for the whole major road network is about 9.5% of the average daily vehicle-kilometre while that for the whole minor road network is about 22.8%. Since the estimates for the minor road network are subject to a large sampling error, they should be interpreted with caution.

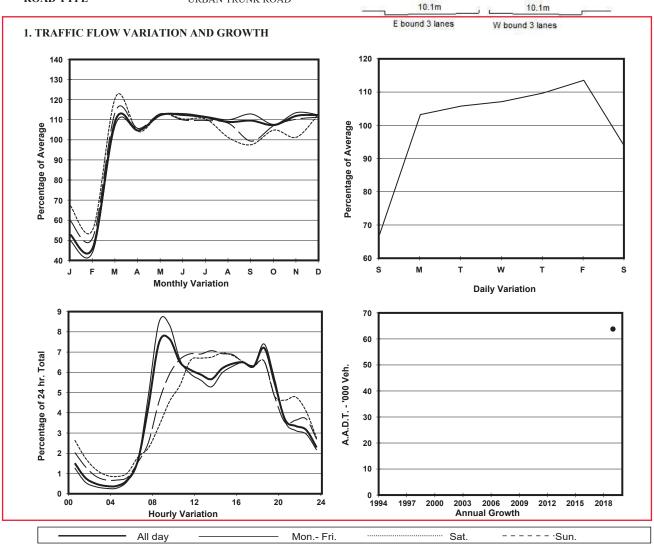
YEAR

CORE STATION ROAD NETWORK

1031MAJOR

2019

ROAD TYPE URBAN TRUNK ROAD (from CWB WESTERN END PORTAL to WAN CHAI EXIT)



2. TRAFFIC CHARACTERISTICS (BY DIRECTION)

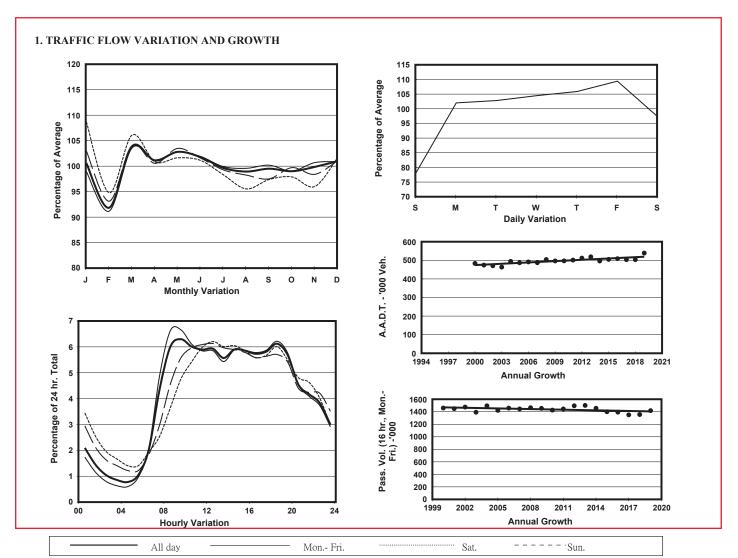
Parameter
EAST BOUND
A.A.D.T.
R 12 / 24 - %
R 16 / 24 - %
AM Peak Hour
One-way flow at AM peak hour
T - % (AM)
PM Peak Hour
One-way flow at PM peak hour
T - % (PM)
Prop.of commercial vehicles - 16 hr.

WEST BOUND
A.A.D.T.
R 12 / 24 - %
R 16 / 24 - %
AM Peak Hour
One-way flow at AM peak hour
T - % (AM)
PM Peak Hour
One-way flow at PM peak hour
T - % (PM)
Prop.of commercial vehicles - 16 hr

All - Day	Mon Fri.	Sat.	Sun.
34780	38400	32780	23260
75	76.7	71.5	65.6
91.1	92.4	87.9	85
0900-1000	0900-1000	0900-1000	0900-1000
2780	3400	1860	1000
-	8.4	-	-
1800-1900	1800-1900	1600-1700	1600-1700
2400	2700	2170	1520
-	2.6	-	-
-	4.9	-	-
29020	31760	28160	19920
77.6	78.5	76.2	72.3
92.7	93.4	91	89.4
0800-0900	0800-0900	0900-1000	0900-1000
2150	2660	1740	970
-	2.4	-	-
1800-1900	1800-1900	1800-1900	1800-1900
2200	2490	1900	1320
-	2.6	-	-
_	3.4	_	_

Stations on Cordon/Screenline

 $1001,\,1007,\,1031,\,2207,\,2208,\,2209,\,2210,\,2211,\,2212,\,2216,\,2217,\,2402,\,2403,\,2404,\,2405\,\,\mathrm{and}\,\,2408$



2. TRAFFIC CHARACTERISTICS (BY DIRECTION)

Parameter
OUT BOUND
A.A.D.T.
R 12 / 24 - %
R 16 / 24 - %
AM Peak Hour
One-way flow at AM peak hour
T - % (AM)
PM Peak Hour
One-way flow at PM peak hour
T - % (PM)
Prop.of commercial vehicles - 16 hr.

IN BOUND
A.A.D.T.
R 12 / 24 - %
R 16 / 24 - %
AM Peak Hour
One-way flow at AM peak hour
T - % (AM)
PM Peak Hour
One-way flow at PM peak hour
T - % (PM)
Prop.of commercial vehicles - 16 hr.

24 - %	69	70.6	65.5	63
14 - %	87.6	89.1	84	82.3
k Hour	0900-1000	0900-1000	0900-1000	0900-1000
y flow at AM peak hour	16720	18900	14240	9760
AM)	-	8.4	-	-
k Hour	1800-1900	1800-1900	1800-1900	1800-1900
y flow at PM peak hour	17170	18550	15800	13090
PM)	-	7.5	-	-
commercial vehicles - 16 hr.	-	7.2	-	-
IND				
•	265710	282800	258680	209900
4 - %	69.9	71.4	66.2	64.5
4 - %	87.8	89.2	84.2	83
k Hour	0900-1000	0800-0900	0900-1000	0900-1000
y flow at AM peak hour	17220	19680	15350	10510
AM)	-	9	-	-
k Hour	1800-1900	1800-1900	1800-1900	1800-1900
y flow at PM peak hour	15830	17040	14480	12500
PM)	_	6.9	-	-
commercial vehicles - 16 hr.	_	6.9	_	_

All - Day

273360

Mon. - Fri.

289740

Sat.

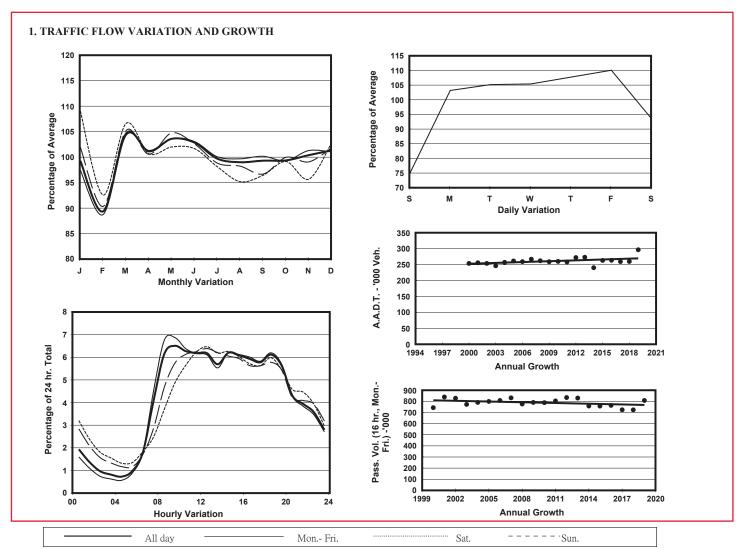
272010

Sun.

215920

Stations on Cordon/Screenline

 $1001,\,1007,\,1031,\,2203,\,2213,\,2217 \text{ and } 2408$

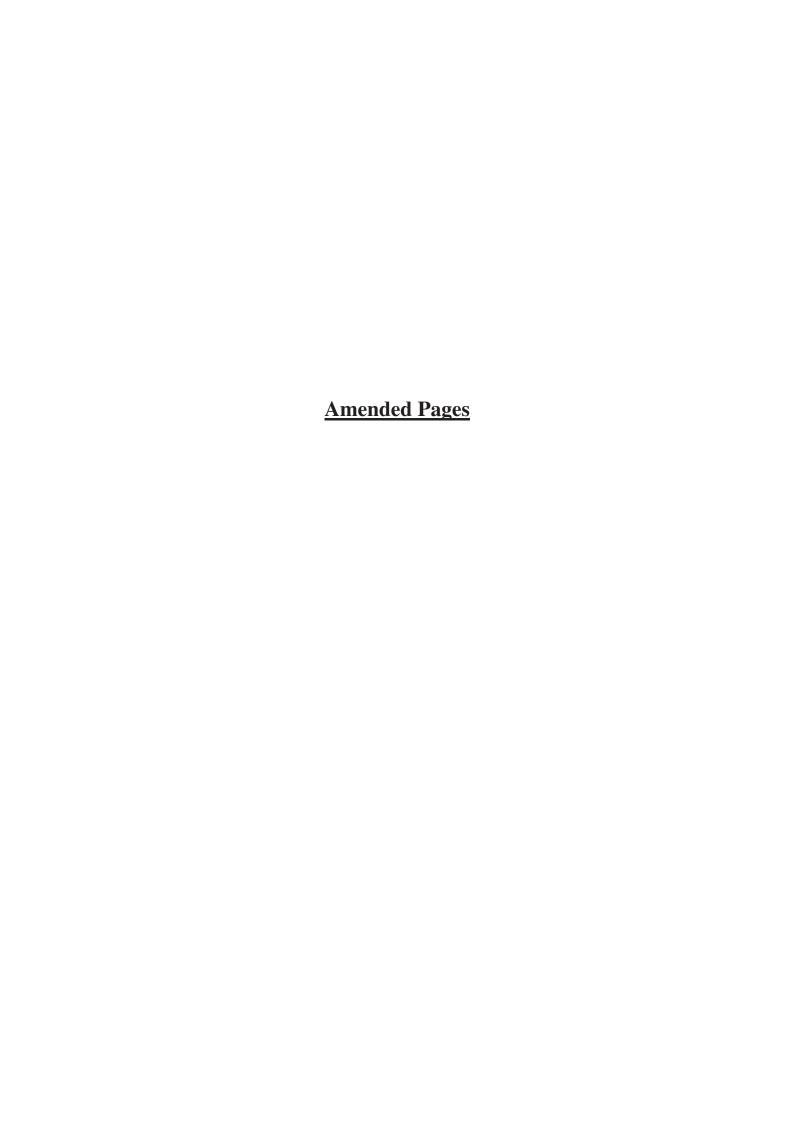


2. TRAFFIC CHARACTERISTICS (BY DIRECTION)

Parameter
EAST BOUND
A.A.D.T.
R 12 / 24 - %
R 16 / 24 - %
AM Peak Hour
One-way flow at AM peak hour
T - % (AM)
PM Peak Hour
One-way flow at PM peak hour
T - % (PM)
Prop. of commercial vehicles - 16 hr.

WEST BOUND
A.A.D.T.
R 12 / 24 - %
R 16 / 24 - %
AM Peak Hour
One-way flow at AM peak hour
T - % (AM)
PM Peak Hour
One-way flow at PM peak hour
T - % (PM)
Prop.of commercial vehicles - 16 hr

All - Day	Mon Fri.	Sat.	Sun.
150230	161530	144040	114600
71.4	73.1	67.4	64.4
88.5	90	84.7	82.6
0900-1000	0900-1000	0900-1000	0900-1000
9880	11400	7940	5200
-	9.1	-	-
1800-1900	1800-1900	1800-1900	1800-1900
9410	10230	8540	7060
-	7.2	-	-
-	7.7	-	-
146420	158310	137130	110580
70.9	72.3	67.1	65.9
88.8	90	85.2	84.6
0900-1000	0900-1000	0900-1000	0900-1000
9420	10580	8210	5770
-	6.9	-	-
1800-1900	1800-1900	1800-1900	1800-1900
8740	9590	7700	6410
-	7.2	-	-
-	7.4	-	-



SUMMARY

During the year 2019, the annual average daily traffic (A.A.D.T.) in the territory showed the following changes as compared with that of 2018:

General

There were 794 366 vehicles licensed in Hong Kong at the end of 2019, representing an increase of 1.27% when compared with the corresponding figure in 2018. This total accounted for 90.4% of the number of registered vehicles. The highest percentage increase was found in Motor Cycle, with a growth of 6.1%. There were 573 932 private cars licensed at the end of 2019. The number of franchised buses licensed was 6 177, an increase of 0.4% over 2018. The total number of goods vehicles licensed in 2019 was 115 153, showing a decrease of 2.1% over 2018.

During the year, road travel in the territory amounted to 38.39 million vehicle-kilometres per day. Of this total, 5.89 million vehicle-kilometres occurred on Hong Kong Island while 9.05 million vehicle-kilometres and 23.45 million vehicle-kilometres occurred in Kowloon and the New Territories respectively. The average kilometrage per day per licensed vehicle was 48.57 km.

Due to the social events from June to December 2019, many major roads in various districts in the urban area (e.g. Central, Queensway, Wan Chai, Causeway Bay, Tsim Sha Tsui, Mong Kok, Shum Shui Po, Wong Tai Sin, Yuen Long, etc.) were closed due to road blockage or were affected by special traffic arrangement during the period. Abnormal traffic conditions at many counting stations were observed in June to December 2019. The traffic data for the counting stations presented in the report should therefore be interpreted with caution.

Hong Kong Island

Traffic flows across the External Cordon (urban area boundary) showed an increase of 0.5% and the Internal Cordon (enclosing Central District) showed an increase of 1.7%. Traffic flows across screenlines F-F (at the eastern end of Central District) on Hong Kong Island, screenline G-G (located at the eastern end of Causeway Bay) and screenline I-I (between Shau Kei Wan and Chai Wan) showed increases of 3.8%, 6.1% and 0.3% in traffic flows respectively, while screenline H-H (separate the peak from the rest of Hong Kong Island) showed decrease of 1.9% in traffic flow.

Kowloon

The survey indicated decrease in traffic traveling in Kowloon Peninsula. Traffic flows across screenline C-C bisecting the Kowloon Peninsula in the east-west direction

A.A.D.T. across All Cordons and Screenlines

Cordon / Screenline	2018	2019	Change as % of 2018
H.K. Ext. Cordon	150 800	151 570	+0.5
H.K. Int. Cordon	503 460	512 160	+1.7
Kln. Ext. Cordon	707 940	730 790	+3.2
T.Y. Ext. Cordon	434 440	448 130	+3.2
Screenline A-A	521 300	511 300	-1.9
Screenline C-C	574 340	572 620	-0.3
Screenline F-F	259 870	269 740	+3.8
Screenline G-G	213 210	226 110	+6.1
Screenline H-H	28 510	27 960	-1.9
Screenline I-I	80 470	80 680	+0.3
Screenline K-K	366 860	372 030	+1.4
Screenline R-R	370 480	367 630	-0.8
Screenline S-S	316 110	322 030	+1.9
Screenline T-T	233 880	240 390	+2.8
Screenline Y-Y	140 900	142 450	+1.1

Peak Hour Traffic Flows across All Cordons and Screenlines

Cordon / Screenline	2018	2019	Change as % of 2018
H.K. Ext. Cordon	9 814	9 930	+1.2
H.K. Int. Cordon	32 122	32 235	+0.4
Kln. Ext. Cordon	46 347	47 914	+3.4
T.Y. Ext. Cordon	28 313	28 185	-0.5
Screenline A-A	32 431	32 388	-0.1
Screenline C-C	35 171	35 378	+0.6
Screenline F-F	16 788	17 461	+4.0
Screenline G-G	12 868	14 071	+9.3
Screenline H-H	2 252	2 076	-7.8
Screenline I-I	5 128	5 241	+2.2
Screenline K-K	23 683	24 027	+1.5
Screenline R-R	25 867	25 307	-2.2
Screenline S-S	21 313	22 151	+3.9
Screenline T-T	15 700	16 749	+6.7
Screenline Y-Y	9 376	9 480	+1.1

3.3.1 Cordons and Screenlines - Hong Kong Island

(a) Hong Kong External Cordon

On an average 24-hour day, 151 570 vehicles crossed the cordon separating the northern part and southern part of Hong Kong I sland, representing an increase of 0.5% compared with the A.A.D.T. of 150 800 in 2018. The distribution of traffic among the various roads crossing the cordon on weekdays (Monday to Friday) is shown in FI GURE 3-1. Of the total movements on weekdays, 57.6% were via the Wong Nai Chung Gap Road - Aberdeen Tunnel corridor while 34.8% were via the Pok Fu Lam Road – Smithfield - Victoria Road corridor. The remaining 7.6% movements were via Tai Tam Road and Lin Shing Road.

(b) Hong Kong Internal Cordon

The A.A.D.T. across this cordon which encloses the Central Business District (CBD) of Hong Kong I sland increased by 1.7% from 503 460 in 2018 to 512 160 in 2019. The distribution of vehicular flows among the various routes crossing the cordon on weekdays (Monday to Friday) is illustrated in FI GURE 3-2. Of the total movements on weekdays, 49.3% were via the eastern corridor of Harcourt Road, Queensway and other minor roads while 21.6% were via the southern corridor comprising mainly Garden Road and Cotton Tree Drive. The western corridor via Connaught Road, Des Voeux Road, Queen's Road and other minor roads took 29.1% of the total traffic volume across the cordon.

(c) *Screenline F-F*

This screenline separates Central, its adjacent "mid-levels" and the Peak from Wan Chai and Happy Valley. The A.A.D.T. increased by 3.8% from 259 870 in 2018 to 269 740 in 2019.

(d) Screenline G-G

This screenline separates Causeway Bay from North Point. The A.A.D.T. increased by 6.1% from 213 210 in 2018 to 226 110 in 2019.

(e) Screenline H-H

This screenline separates the Peak from the rest of Hong Kong Island. The A.A.D.T. decreased by 1.9% from 28 510 in 2018 to 27 960 in 2019.

(f) Screenline I-I

This screenline separates Shau Kei Wan and Chai Wan. The A.A.D.T. increased by 0.3% from 80 470 in 2018 to 80 680 in 2019.

(b) Screenline R-R

This screenline (formerly called Rural Screenline) divides Tsuen Wan/Sha Tin and the North West New Territories. It recorded an A.A.D.T. of 367 630 in 2019, representing a decrease of 0.8% over 2018.

(c) Screenline S-S

This screenline measures traffic movements between Yuen Long / Tuen Mun and the rest of the New Territories. The A.A.D.T. recorded in 2019 was 322 030, an increase of 1.9% over 2018.

(d) Screenline T-T

This screenline measures traffic flows between the North District and the rest of the New Territories. The A.A.D.T. recorded in 2019 was 240 390, representing an increase of 2.8% when compared with the corresponding figure in 2018.

(e) Screenline Y-Y

This screenline separates Yuen Long from Tuen Mun. The A.A.D.T. recorded in 2019 was 142 450, an increase of 1.1% over 2018.

3.4 VEHICLE-KILOMETRAGE

Vehicle-kilometrage is calculated for each road type as the product of the weighted average of A.A.D.T.s and the road length. The summation for all road types provides an estimate of the gross amount of travel. The results are summarized in the following table:

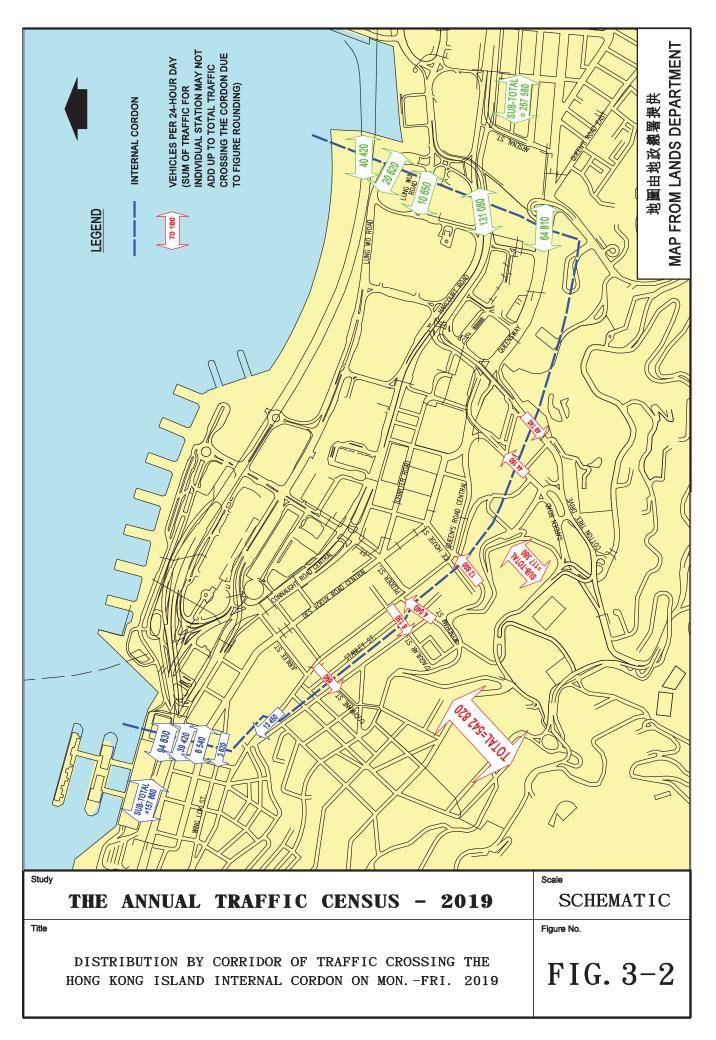
2018 and 2019 Average Daily Vehicle-kilometre on Roads Covered in the Annual Traffic Census

Region	Road Network	Average Daily Vehicle-Kilometre		
		2018	2019	
Hong Kong Island	Major	4 933 249	4 808 018	
	Minor	1 067 857	1 082 420	
Sub-total		6 001 106	5 890 438	
Kowloon	Major	7 464 204	8 010 289	
	Minor	1 065 993	1 039 537	
Sub-total		8 530 197	9 049 826	
New Territories	Major	20 915 781	20 732 342	
	Minor	2 804 469	2 714 257	
Sub-total		23 720 250	23 446 599	
Total		38 251 552	38 386 863	

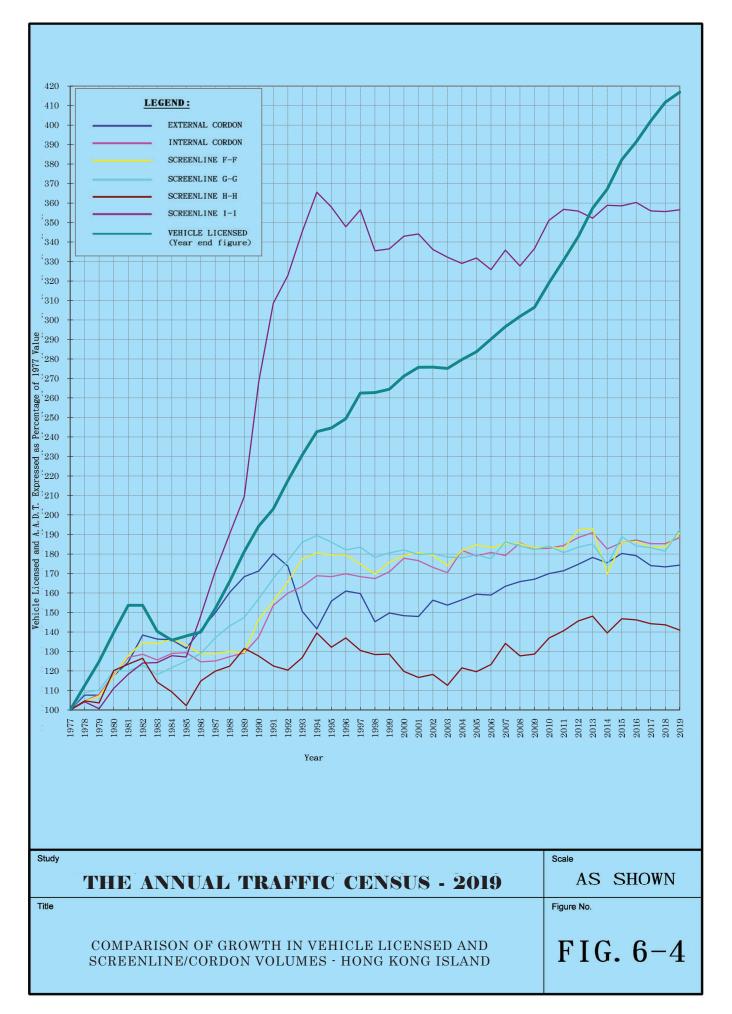
During the year, an average daily total of 38.39 million vehicle-kilometres occurred in the territory as a whole, representing a 0.35% increase over 2018. The figures for major and minor road links are 33.55 million and 4.84 million respectively, which indicate the much higher volume of travel and thus the relative importance of the major road network.

Analysed by district, the total daily vehicle-kilometrage on Hong Kong Island, in Kowloon and the New Territories decreased by 1.8%, and increased 6.1% and decreased 1.2% respectively when compared with 2018.

As there were 790 336 vehicles licensed in Hong Kong in the middle of the year, the 38.39 million vehicle-kilometres for the territory represents an average travel distance of 48.57 km per day per licensed vehicle in 2019, a decrease of 1.38% over 2018.



- (ad) In 2017, the number of licensed vehicles was 2.8% higher than that of 2016. Screenline Y-Y measures traffic movements between Yuen Long / Tuen Mun showed the greatest increase of 4.1% as compared with 2016. Annual growth for the rest of the screenlines ranged from -2.9% to +1.9%.
- (ae) In 2018, the number of licensed vehicles was 2.4% higher than that of 2017. Screenline R-R measures traffic movements of North end of Tsuen Wan and Sha Tin showed the greatest increase of 10.0% as compared with 2017. Annual growth for the rest of the screenlines ranged from 1.4% to +4.1%.
- (af) In 2019, the number of licensed vehicles was 1.3% higher than that of 2018. Screenline G-G (located at the eastern end of Causeway Bay) showed the greatest increase of 6.1% as compared with 2018. Annual growth for the rest of the screenlines ranged from -1.9% to +3.8%.



Appendix B - AADT of Counting Stations - ordered by Station Nos.

Stn.	Stn.	Road		_	_		ADT	Change of 2019 as %
No.	Type	Type	Road Name	From	То	2018	2019	of 2018
1031	A	UT	Central-Wanchai Bypass – Central Section	CWB western end portal	Wan Chai Exit	-	36,890	-
1032	A	UT	Central-Wanchai Bypass – Causeway Bay Section	Wan Chai Exit	merging point to IEC	-	41,490	-
1101	A	LD	Mount Butler Rd	Tai Hang Rd	End	4,540	4,350	-4.2
1102	A	LD	Cheung Lee St	Hong Man St	Kut Shing St	4,500	4,320	-3.9
1103	A	LD	Stanley Village Rd	Tai Tam Rd	Stanley New St	11,620	11,950	+2.8
1104	A	LD	Wing Lok St	Des Voeux Rd W	Bonham Strand	3,620	3,720	+2.8
1105	A	LD	Conduit Rd	Kotewall Rd	Glenealy	13,980	13,260	-5.1
1107	A	LD	Tung Lo Wan Rd	Causeway Rd	Moreton Terrace	18,040	18,060	+0.1
1108	A	LD	Justice Drive	Queensway	Supreme Court Rd	25,170	23,160	-8.0
1109	A	LD	Ocean Park Rd	Wong Chuk Hang Rd	Ocean Park	19,610	20,170	+2.9
1202	С	EX	Island Eastern Corridor	Healthy St INT western end	Healthy St INT eastern end	87,670	89,180	+1.7
1203	С	UT	Island Eastern Corridor up-ramp W-B	King's Rd	Healthy St INT western end	10,570	12,760	+20.8
1204	C	PD	Shek Pai Wan Rd	Victoria Rd	Wah Fu Rd	33,340	32,240	-3.3
1205	С	PD	Hill Rd FO <h114></h114>	Pok Fu Lam Rd	Connaught Rd W.	13,980	15,180	+8.5
1206	C	PD	Queen's Rd W	Eastern St	Western St	7,230	7,330	+1.4
1207	С	PD	Connaught Rd Central and West (GL)	Queen St	Cleverly St	29,320	34,210	+16.7
1208	C	PD	Connaught Rd C	Gilman St	Queen Victoria St	113,420	95,320	-16.0
1209	C	PD	Garden Rd	Cotton Tree Drive	Upper Albert Rd	22,530	23,070	+2.4
1210	C	PD	Hennessy Rd	Johnston Rd	Fenwick St	32,090	29,950	-6.7
1211	C	PD	Hennessy Rd	Stewart Rd	Tin Lok Lane	22,200	21,300	-4.1
1212	С	PD	Irving St & Pennington St	Leighton Rd	Yee Wo St	11,320	12,290	+8.5
1213	C	PD	Causeway Rd	Tung Lo Wan Rd	Shelter St	30,660	30,490	-0.5
1214	C	PD	King's Rd	Fortress Hill Rd	North Point Rd	22,110	25,280	+14.4
1215	С	PD	Causeway Bay FO <h225> S-B</h225>	Victoria Park Rd E-B	Gloucester Rd	15,050	12,540	-16.7
1216	C	PD	Gordon Rd	Hing Fat St	Electric Rd	24,730	24,610	-0.5
1217	С	PD	Tong Shui Rd & FO <h127></h127>	Island Eastern Corridor	Chun Yeung St	9,190	8,630	-6.1
1218	С	PD	Island Eastern Corridor down-ramp E-B	Healthy St INT western end	Java Rd	8,440	9,290	+10.0
1219	C	PD	King's Rd	Java Rd	Greig Rd	25,500	28,400	+11.4
1220	C	PD	Chai Wan Rd	Tai Tam Rd	Wan Tsui Rd	19,140	18,490	-3.4

Appendix C - AADT of Counting Stations - ordered by Road Names

Road Name	From	То	Stn. No.	Road Type	Stn. Type	AA 2018	DT 2019	Change of 2019 as % of 2018
Castle Peak Rd - Tsuen Wan	Tai Ho Rd	Tai Chung Rd	5409	PD	С	31,560 *	31,620	+0.2
Castle Peak Rd - Tsuen Wan	Tsuen King Circuit	Sha Tsui Rd	5610	PD	С	46,550 *	45,120 *	-3.1
Castle Peak Rd - Tsuen Wan	Tsuen King Circuit	Tai Chung Rd	5410	PD	С	34,750 *	31,810	-8.5
Castle Peak Rd - Tsuen Wan ramps A & B	Tuen Mun Rd	Castle Peak Rd - Tsuen Wan	5267	PD	С	29,280	30,080	+2.8
Castle Peak Rd - Tsuen Wan, Ting Kau & Sham Tseng	Tuen Mun Rd	Sham Tseng	6209	RR	В	11,110	11,000	-1.0
Castle Peak Rd - Yuen Long	Yuen Long On Lok Rd	Kam Tin Rd	5019	RT	A	29,300	30,160	+2.9
Castle Rd	Robinson Rd	Seymour Rd	1861	LD	C	3,700 *	3,660 *	-0.9
Castle Rd	Seymour Rd	Caine Rd	1840	DD	C	3,390 *	3,360 *	-0.9
Causeway Bay FO <h225> S-B</h225>	Victoria Park Rd E-B	Gloucester Rd	1215	PD	С	15,050	12,540	-16.7
Causeway Rd	Hing Fat St	Tin Hau Temple Rd	1415	PD	С	21,060 *	19,560	-7.1
Causeway Rd	Shelter St	Hing Fat St	2214	PD	В	34,970	33,760	-3.5
Causeway Rd	Tung Lo Wan Rd	Shelter St	1213	PD	C	30,660	30,490	-0.5
Central-Wanchai Bypass – Causeway Bay Section	Wan Chai Exit	merging point to IEC	1032	UT	A	-	41,490	-
Central-Wanchai Bypass – Central Section	CWB western end portal	Wan Chai Exit	1031	UT	A	-	36,890	-
Cha Kwo Ling Rd	Lei Yue Mun Rd	Wai Yip St	3484	DD	C	25,620 *	26,910	+5.0
Cha Kwo Ling Rd	Wai Yip St	Ko Chiu Rd	4074	DD	C	15,580	15,690 *	+0.7
Chai Wan Rd	Church St	Island Eastern Corridor Approach	1615	PD	С	9,980 *	9,800 *	-1.7
Chai Wan Rd	Island Eastern Corridor Approach	Tai Tam Rd	1009	PD	A	25,120	25,220	+0.4
Chai Wan Rd	Tai Tam Rd	Wan Tsui Rd	1220	PD	C	19,140	18,490	-3.4
Chai Wan Rd	Wan Tsui Rd	Wing Tai Rd	1420	PD	C	18,730 *	18,890	+0.8
Chai Wan Rd	Wing Tai Rd	Sun Yip St	1254	DD	C	23,140	22,530	-2.6
Chap Wai Kon St	Bus Terminus	Siu Lek Yuen Rd	5104	LD	A	6,030	5,560	-7.7
Chatham Court	Kimberley Rd	Chatham Rd S	4605	LD	C	3,070	3,140	+2.2
Chatham Rd FO <k20></k20>	Gascoigne Rd	Princess Margaret Rd	3615	PD	С	20,140 *	20,290 *	+0.7
Chatham Rd N	San Lau St	Wo Chung St	3412	PD	C	30,620 *	28,500	-6.9
Chatham Rd N	Wuhu St	Chatham Rd N (GL)	3212	PD	С	102,720	106,830	+4.0
Chatham Rd N	Wuhu St	Hong Chong Rd	4208	PD	В	117,080	116,630	-0.4
Chatham Rd N & Ma Tau Wai Rd	San Lau St	Chi Kiang St	4212	PD	В	32,260	30,920	-4.2

Precision level for overall vehicle-kilometrage

Based on the A.A.D.T.s of the core and coverage stations, the average daily vehicle-kilometrage for each region is estimated as follows:-

Region	Road Network	Average Daily
		Vehicle-Kilometre
Hong Kong Island	Major	4 808 018
	Minor	1 082 420
Sub-total		5 890 438
Kowloon	Major	8 010 289
	Minor	1 039 537
Sub-total		9 049 826
New Territories	Major	20 732 342
	Minor	2 714 257
Sub-total		23 446 599
Total		38 386 863

The 95% error margin for the whole territory is within an acceptable level, being 8.7% of the average daily vehicle-kilometre. In analysing the precision level of vehicle-kilometrage by road network, the 95% error margin for the whole major road network is about 9.5% of the average daily vehicle-kilometre while that for the whole minor road network is about 22.8%. Since the estimates for the minor road network are subject to a large sampling error, they should be interpreted with caution.

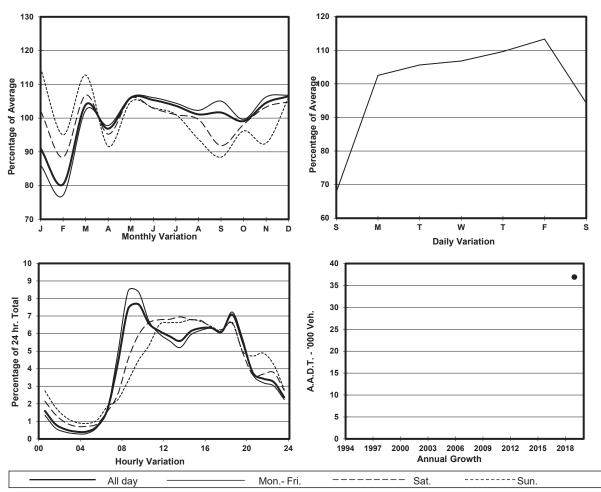
LINK CENTRAL-WANCHAI BYPASS – CENTRAL SECTION (from CWB WESTERN END PORTAL to WAN CHAI EXIT)

CORE STATION 1031 ROAD NETWORK MAJOR

ROAD TYPE URBAN TRUNK ROAD



1. TRAFFIC FLOW VARIATION AND GROWTH



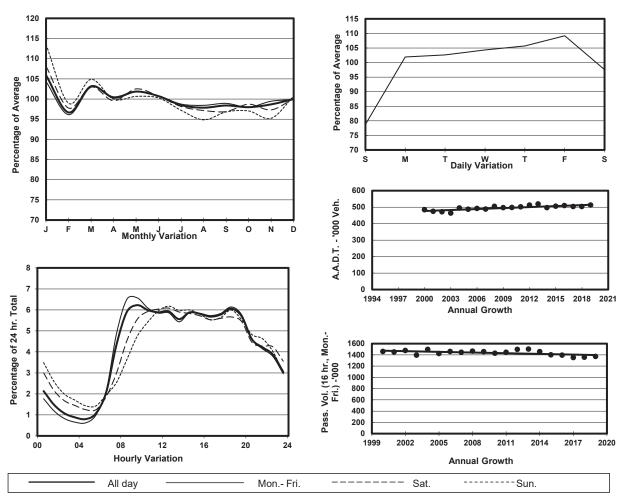
2. TRAFFIC CHARACTERISTICS (BY DIRECTION)

Parameter	All - Day	Mon Fri.	Sat.	Sun.
EAST BOUND				
A.A.D.T.	21620	23760	20600	14660
R 12 / 24 - %	75.2	76.9	71.8	66
R 16 / 24 - %	91	92.2	87.9	85.1
AM Peak Hour	0900-1000	0900-1000	0900-1000	0900-1000
One-way flow at AM peak hour	1750	2130	1210	640
T - % (AM)	-	8.4	-	-
PM Peak Hour	1800-1900	1800-1900	1600-1700	1800-1900
One-way flow at PM peak hour	1440	1600	1340	960
T - % (PM)	-	2.6	-	-
Prop.of commercial vehicles - 16 hr.	-	4.9	-	-
WEST BOUND				
A.A.D.T.	15270	16660	14890	10660
R 12 / 24 - %	75.9	76.9	74.5	70.3
R 16 / 24 - %	92.1	92.9	90.4	88.7
AM Peak Hour	0800-0900	0800-0900	0900-1000	0900-1000
One-way flow at AM peak hour	1090	1340	900	500
T - % (AM)	-	2.4	-	-
PM Peak Hour	1800-1900	1800-1900	1800-1900	1800-1900
One-way flow at PM peak hour	1170	1320	1030	730
T - % (PM)	-	2.6	-	-
Prop.of commercial vehicles - 16 hr.	-	3.4	-	-

Stations on Cordon/Screenline

 $1001,\,1007,\,1031,\,2207,\,2208,\,2209,\,2210,\,2211,\,2212,\,2216,\,2217,\,2402,\,2403,\,2404,\,2405 \text{ and } 2408,\,2404,\,2405,\,2404,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2405,\,2404,\,2404,\,2405,\,2404,\,24$

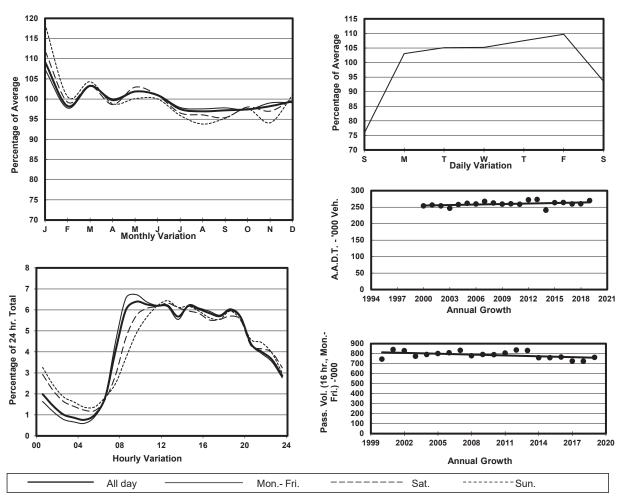
1. TRAFFIC FLOW VARIATION AND GROWTH



2. TRAFFIC CHARACTERISTICS (BY DIRECTION)

_				
Parameter	All - Day	Mon Fri.	Sat.	Sun.
OUT BOUND				
A.A.D.T.	260200	275120	259820	207320
R 12 / 24 - %	68.7	70.3	65.2	62.9
R 16 / 24 - %	87.4	88.9	83.8	82.2
AM Peak Hour	0900-1000	0900-1000	0900-1000	0900-1000
One-way flow at AM peak hour	15700	17640	13600	9400
T - % (AM)	-	8.4	-	-
PM Peak Hour	1800-1900	1800-1900	1700-1800	1800-1900
One-way flow at PM peak hour	16210	17460	15030	12540
T - % (PM)	-	7.8	-	-
Prop.of commercial vehicles - 16 hr.	-	7.4	-	-
IN BOUND				
A.A.D.T.	251960	267680	245430	200650
R 12 / 24 - %	69.4	70.9	65.6	64
R 16 / 24 - %	87.5	88.9	83.8	82.6
AM Peak Hour	0900-1000	0800-0900	0900-1000	0900-1000
One-way flow at AM peak hour	16190	18370	14500	10040
T - % (AM)	-	9.4	-	-
PM Peak Hour	1800-1900	1800-1900	1800-1900	1800-1900
One-way flow at PM peak hour	14810	15870	13610	11910
T - % (PM)	-	7.2	-	_
Prop.of commercial vehicles - 16 hr.	-	7.1	_	_
1				

1. TRAFFIC FLOW VARIATION AND GROWTH



2. TRAFFIC CHARACTERISTICS (BY DIRECTION)

Parameter EAST BOUND	All - Day	Mon Fri.	Sat.	Sun.
A.A.D.T.	137080	146900	131850	105990
R 12 / 24 - %	71.1	72.7	67.1	64.4
R 16 / 24 - %	88.2	89.7	84.4	82.5
AM Peak Hour	0900-1000	0900-1000	0900-1000	0900-1000
One-way flow at AM peak hour	8860	10140	7290	4840
T - % (AM)	-	9.2	-	-
PM Peak Hour	1800-1900	1800-1900	1800-1900	1800-1900
One-way flow at PM peak hour	8450	9130	7760	6510
T - % (PM)	-	7.8	-	-
Prop.of commercial vehicles - 16 hr.	-	8	-	-
WEST BOUND				
A.A.D.T.	132660	143200	123870	101330
R 12 / 24 - %	70.1	71.5	65.9	65.1
R 16 / 24 - %	88.3	89.6	84.5	84.1
AM Peak Hour	0900-1000	0900-1000	0900-1000	0900-1000
One-way flow at AM peak hour	8390	9370	7370	5300
T - % (AM)	-	7.5	-	-
PM Peak Hour	1800-1900	1600-1700	1800-1900	1800-1900
One-way flow at PM peak hour	7720	8450	6840	5810
T - % (PM)	-	7.4	-	-
Prop.of commercial vehicles - 16 hr.	-	7.8	-	-