

Transport Statistics 2018



Ministry of Transport September 2020

FOREWORD

This Thailand Transport Statistics publication made by cooperation between all agencies under Ministry of Transport and other related organization. It provides data on all transport modes for the year 2018 together with other key data.

This publication gives an overview of available data. More detailed data is available in our Transport data warehouse. They can be retrieved according to user requirements. Interested parties are invited to contact us.

Comments and suggestion on the publication are appreciated.

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September 2020

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Definition of Regions

Based on a common system of regional classification defined by Office of the National Economics and Social Development Council (NESDC). Thailand has 77 provinces and 7 regions as show in the table below.

Regions		Prov	inces	
1. Northeastern	1. Khon Kaen	2. Nakhon Phanom	3. Yasothon	4. Maha Sarakham
	5. Udon Thani	6. Sakon Nakhon	7. Ubon Ratchathani	8. Si Sa Ket
	9. Loei	10. Kalasin	11. Roi Et	12. Nongbua Lamphu
	13. Nong Khai	14. Nakhon Ratchasima	15. Buri Ram	16. Amnat Chareon
	17. Mukdahan	18. Chaiyaphum	19. Surin	20. Bueng Kan
2. Northern	1. Chiang Mai	2. Lampang	3. Uttaradit	4. Mae Hong Son
	5. Chiang Rai	6. Phrae	7. Lamphun	8. Nan
	9. Phayao	10. Nakhon Sawan	11. Phitsanulok	12. Kam Phaeng Phet
	13. Uthai Thani	14. Sukhothai	15. Tak	16. Phichit
	17. Phetchabun			
3. Southern	1. Phuket	2. Krabi	3. Satun	4. Phatthalung
	5. Surat Thani	6. Chumphon	7. Yala	8. Pattani
	9. Ranong	10. Nakhon Si Thammarat	11. Trang	12. Phangnga
	13. Songkhla	14. Narathiwat		
4. Eastern	1. Chon Buri	2. Rayong	3. Chanthaburi	4. Prachin Buri
	5. Chachoengsao	6. Trat	7. Nakhon Nayok	8. Sa Kaew
5. Western	1. Ratchaburi	2. Phachuap Khiri Khan	3. Suphan Buri	4. Samut Songkhram
	5. Kanchanaburi	6. Phetchaburi		
6. Central	1. Saraburi	2. Singburi	3. Chai Nat	4. Ang Thong
	5. Lop Buri	6. Phra Nakhon Sri Ayutthaya		
7. Bangkok and Vicinities (BKK & Vic.)	1. Bangkok Metropolis	2. Pathum Thani	3. Nakhon Pathom	4. Nonthaburi
	5. Samut Prakan	6. Samut Sakhon		

Commodity Classification

This Commodity Classification is derived from European International Classifications. All domestic freight transport tables use the Commodity Classification below:

Commodity Group	Commodities
1. Live Animals	All live animals including poultry
2. Rice	Paddy, milled, broken, glutinous rice and other rice
3. Maize	Maize
4. Cassava	Cassava roots, chips, pellets
5. Sugar Cane	Sugar Cane
6. Rubber	Natural Rubber
7. Wood, Timber	Logs, Lumber, Bamboo, Wood Products, Firewood, Charcoal, Cork
8. Other Agricultural Products	Cereals, Fresh Fruit, Fresh and Frozen Vegetables, Raw Textiles, Other Raw Animal and Vegetable Materials
9. Animal Fodder	Animal Food
10. Sugars	Raw Sugar, Refined Sugar, Molasses
11. Other Foodstuffs	Perishable Foodstuff, Fresh, Frozen, Preserved (Meat, Seafood, Dairy Products, Edible Fats, Eggs), Other Non-perishable Foodstuffs, Beverages, Stimulants, Spices, Oil Seeds and Oleaginous Fruit and Fats
12. Solid Mineral Fuels	Coal, Lignite, Coke
13. Petroleum Products	Crude Petroleum, Gasoline, Diesel, Kerosene, Jet Fuel, LPG, Lubricants, Others
14. Ores and Metal Wastes	Ores and Metal Waste
15. Metal Products	All Metal Products
16. Sand, Gravel, Clay and Slag	Sand, Gravel, Clay and Slags
17. Cement	Cement, White Lime
18. Other Minerals and Construction Materials	Brick, Tiles, Ceramics, Plasters, Stones Marble, Concrete, Chalk, Salt
19. Fertilizers	Natural and Chemical Fertilizers
20. Chemicals	All Chemical Products, Waste Paper
21. Equipment, Other Manufactured Articles	Machinery, Transport Equipment, Engines, Electrical Apparatus and Appliances, Glass, Ceramic Products, Leather, Textiles, Clothing, Furniture, Etc.
22. Miscellaneous Articles, Containers	Used Packing Containers, Empty Bottles, Unidentified Contents

Classification of Road Motor Vehicles

This Classification of Road Motor Vehicles is derived from the Department of Land Transport.

Vehicles registered under Motor Vehicle Act	Vehicles registered under Land Transport Act
1. Sedan (not more than 7 passengers)	1. Fixed Route Bus
2. Microbus & Passenger Van	2. Non-Fixed Route Bus (Bus for Hire)
3. Van & Pick Up	3. Private Bus
4. Motor Tricycle	4. Non-Fixed Route Truck, Trailer and Semi-Trailer (for hire or reward)
5. Interprovincial Taxi (Sedan)	5. Private Truck, Trailer and Semi - Trailer
6. Urban Taxi (Sedan)	6. Small Rural Bus (for public transport)
7. Fixed Route Taxi (on 4-Wheel chassis, displacement not more than 800 cc.)	
8. Motor Tricycle Taxi (Tuk Tuk)	
9. Hotel Taxi (Sedan)	
10. Tour Taxi (Sedan)	
11. Car for Hire (Sedan)	
12. Motorcycle	
13. Tractor	
14. Road Roller	
15. Farm Vehicle	
16. Automobile Trailer (for the afore-mentioned vehicles)	
17. Public Motorcycle	

Abbreviations for Indicating data not provided

Below is a list of the Symbols used in this report, along with their abbreviations.

Symbols	Abbreviations					
N/A	Not Available					
N/Col	Not Collected					
е	Estimated data					
f	Forecasting data					
р	Preliminary figure					
r	Revised figure					
х	Data unclassified or not computable					
С	Confidential data					

0. GENERAL

0.1 Development of Population

0.1.1 Development of Population by Region and Gender 2009 to 2018

(Thousands of People)

Region	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BKK & Vic.	10,237	10,326	10,377	10,456	10,539	10,624	10,708	10,765	10,832	10,891
- Male	4,884	4,920	4,938	4,972	5,009	5,046	5,083	5,105	5,133	5,158
- Female	5,353	5,406	5,439	5,483	5,530	5,578	5,625	5,660	5,699	5,732
Northern	11,770	11,788	11,783	11,803	11,826	11,846	12,072	12,079	12,098	12,116
- Male	5,807	5,812	5,808	5,812	5,820	5,827	5,934	5,934	5,939	5,943
- Female	5,964	5,976	5,976	5,990	6,005	6,019	6,138	6,146	6,159	6,173
Northeastern	21,496	21,573	21,586	21,697	21,775	21,846	21,916	21,945	21,989	22,015
- Male	10,730	10,767	10,769	10,821	10,857	10,888	10,916	10,923	10,938	10,940
- Female	10,766	10,807	10,817	10,876	10,919	10,958	11,000	11,023	11,052	11,076
Central	2,978	2,990	2,995	3,008	3,014	3,023	3,031	3,031	3,034	3,040
- Male	1,458	1,464	1,466	1,472	1,475	1,479	1,482	1,481	1,482	1,485
- Female	1,519	1,526	1,529	1,535	1,540	1,544	1,549	1,550	1,552	1,555
Eastern	4,558	4,616	4,664	4,721	4,773	4,833	4,903	4,952	5,003	5,056
- Male	2,252	2,280	2,302	2,329	2,354	2,383	2,417	2,440	2,464	2,489
- Female	2,306	2,335	2,362	2,392	2,419	2,450	2,486	2,512	2,539	2,567
Western	3,672	3,692	3,699	3,712	3,727	3,744	3,807	3,818	3,832	3,842
- Male	1,806	1,816	1,818	1,822	1,828	1,835	1,868	1,873	1,879	1,885
- Female	1,866	1,876	1,881	1,890	1,899	1,909	1,939	1,945	1,953	1,957
Southern	8,814	8,893	8,972	9,060	9,131	9,209	9,291	9,341	9,400	9,454
- Male	4,356	4,393	4,429	4,471	4,503	4,541	4,580	4,603	4,630	4,656
- Female	4,458	4,500	4,543	4,590	4,629	4,668	4,710	4,738	4,769	4,798
Total	63,525	63,878	64,076	64,457	64,786	65,125	65,729	65,932	66,189	66,414
- Male	31,293	31,452	31,529	31,701	31,846	31,999	32,281	32,358	32,465	32,556
- Female	32,232	32,426	32,547	32,756	32,940	33,126	33,448	33,574	33,724	33,858

Source : Department of Provincial Administration, Ministry of Interior

0.1 Development of Population

0.1.2 Population by Age range and Gender 2009 and 2018

						(Person)	(Percent)
		2009			Growth rate ⁽¹⁾		
Age range	Male	Female	Total	Male	Female	Total	2018 compared with 2009
Less than 1 year	380,216	357,501	737,717	334,969	315,862	650,831	-1.31
1-10 years	4,115,407	3,888,508	8,003,915	3,965,584	3,744,652	7,710,236	-0.41
11-20 years	4,893,774	4,662,515	9,556,289	4,240,219	4,026,793	8,267,012	-1.50
21-30 years	4,925,171	4,853,686	9,778,857	4,890,286	4,717,597	9,607,883	-0.19
31-40 years	5,269,417	5,408,458	10,677,875	4,972,888	4,968,323	9,941,211	-0.77
41-50 years	4,810,285	5,156,781	9,967,066	5,164,974	5,457,553	10,622,527	0.73
51-60 years	3,228,356	3,602,699	6,831,055	4,409,832	4,917,125	9,326,957	4.06
61-70 years	1,708,377	1,995,962	3,704,339	2,703,136	3,193,284	5,896,420	6.58
71-80 years	930,262	1,240,836	2,171,098	1,278,415	1,634,912	2,913,327	3.80
81-90 years	258,101	404,924	663,025	500,799	744,505	1,245,304	9.76
91-100 years	33,845	58,256	92,101	87,097	127,591	214,688	14.79
More than 100 year	4,598	6,629	11,227	8,023	9,458	17,481	6.19
Born in the Lunar year	1,063	1,231	2,294	49	53	102	-10.62
Total	30,558,872	31,637,986	62,196,858	32,556,271	33,857,708	66,413,979	0.75

Remark : (1) Growth rate = $\frac{1}{t} \left(\frac{n_t - n_0}{n_0} \right) \times 100$;

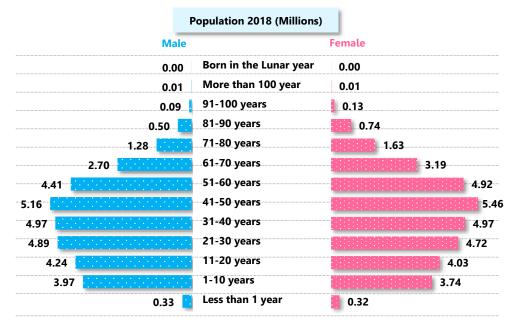
n₀ = Population of 2009 n_t = Population of 2018

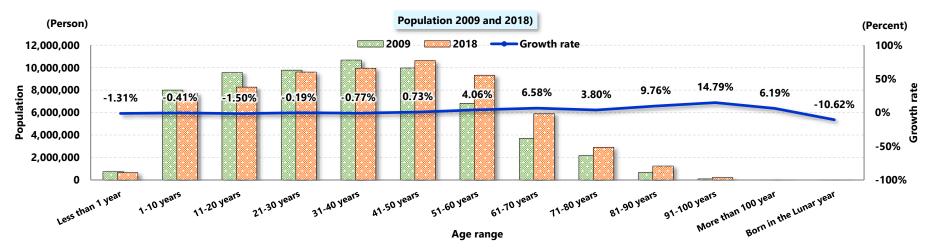
t = The period between 2009 to 2018

Source: Department of Provincial Administration, Ministry of Interior

0.1 Development of Population

0.1.2 Population by Age range and Gender 2009 and 2018 (Continued)





Source: Department of Provincial Administration, Ministry of Interior

0.2 Gross Product

0.2.1 Gross Domestic Product (at current market prices by economic activities) 2009 to 2018

(Millions Baht)

(Willions Ba										
Economic Activities	2009	2010	2011	2012	2013	2014	2015r	2016r	2017r	2018p
Agriculture	945,297	1,137,252	1,310,673	1,421,602	1,462,283	1,334,795	1,219,420	1,237,006	1,300,994	1,330,008
Agriculture, forestry and fishing	945,297	1,137,252	1,310,673	1,421,602	1,462,283	1,334,795	1,219,420	1,237,006	1,300,994	1,330,008
Non-agriculture	8,713,367	9,670,890	9,996,234	10,935,742	11,452,876	11,895,508	12,524,043	13,355,587	14,185,559	15,035,566
Industrial	3,457,818	4,012,004	3,987,898	4,273,733	4,420,724	4,526,819	4,592,338	4,792,403	5,033,817	5,282,490
Mining and quarrying	326,742	366,998	400,576	483,427	496,562	495,627	431,425	399,763	386,153	416,991
Manufacturing	2,845,650	3,343,011	3,278,536	3,456,693	3,563,122	3,648,058	3,762,150	3,960,862	4,186,823	4,375,689
Electricity, gas, steam and air conditioning supply	249,252	264,283	270,494	291,725	313,431	331,412	343,430	373,149	396,601	422,127
Water supply; sewerage, waste management and remediation activities	36,174	37,712	38,292	41,888	47,609	51,722	55,333	58,629	64,240	67,683
Services	5,255,549	5,658,886	6,008,336	6,662,009	7,032,152	7,368,689	7,931,705	8,563,184	9,151,742	9,753,076
Construction	271,258	302,792	306,622	340,956	344,786	337,043	379,940	400,421	394,720	410,800
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,381,998	1,516,327	1,570,715	1,709,703	1,729,206	1,816,182	1,966,439	2,187,470	2,383,488	2,595,442
Transportation and storage	578,826	607,153	616,470	666,331	693,603	720,581	779,135	864,601	918,722	954,633
Accommodation and food service activities	285,443	311,910	349,523	413,291	472,928	497,777	600,218	696,936	817,102	919,502
Information and communication	208,273	222,201	242,816	265,239	290,854	301,427	327,394	337,524	362,625	386,043
Financial and insurance activities	553,900	580,532	644,682	744,615	871,377	961,260	1,037,951	1,121,023	1,178,057	1,234,500
Real estate activities	278,727	294,125	306,174	317,770	319,055	324,590	332,488	354,607	377,351	401,002
Professional, scientific and technical activities	170,202	195,594	214,438	258,785	266,926	267,745	261,390	255,303	274,635	286,185
Administrative and support service activities	155,876	171,745	189,205	227,941	234,426	231,496	237,026	240,806	250,667	262,167
Public administration and defence; compulsory social security	606,399	640,207	681,051	732,534	765,985	802,790	843,417	881,905	917,087	956,832
Education	393,674	417,863	454,248	503,346	528,167	565,146	594,280	612,191	629,776	651,606
Human health and social work activities	193,354	206,441	219,165	235,802	250,812	270,681	288,404	307,440	324,344	348,227
Arts, entertainment and recreation	36,523	44,516	50,656	60,357	65,422	65,640	70,145	81,156	91,070	102,413
Other service activities	141,096	147,480	162,571	185,339	198,605	206,331	213,478	221,801	232,098	243,724
Gross domestic product (GDP)	9,658,664	10,808,142	11,306,907	12,357,344	12,915,159	13,230,303	13,743,463	14,592,593	15,486,553	16,365,574
GDP Per capita (Baht)	147,363	163,956	170,467	185,159	192,327	195,807	202,151	213,586	225,095	236,815
Population (1,000 persons)	65,543	65,921	66,329	66,739	67,152	67,568	67,986	68,322	68,800	69,107

Source : Office of the National Economic and Social Development Council

0.2 Gross Product

0.2.2 Gross Domestic Product (at current market prices by economic activities) Classified by Regions in 2018 edition

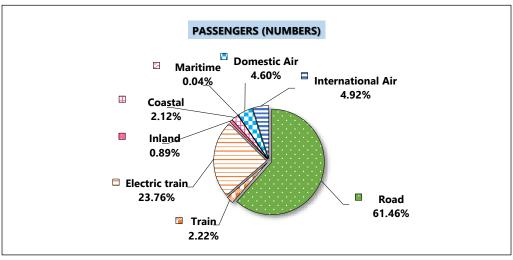
(Millions Baht)

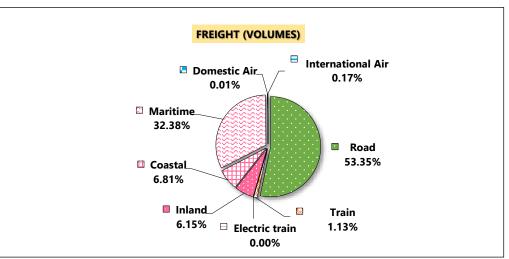
								(Millions Baht)
Economic Activities	Northeast	North	South	East	West	Central	BKK & Vicinities	Whole Kingdom
Agriculture	309,547	332,481	290,254	170,578	113,378	65,326	48,444	1,330,008
Agriculture, forestry and fishing	309,547	332,481	290,254	170,578	113,378	65,326	48,444	1,330,008
Non-agriculture	1,249,719	934,181	1,112,480	2,855,917	466,437	798,002	7,618,829	15,035,566
Industrial	336,461	249,468	212,703	1,986,757	191,864	507,270	1,797,967	5,282,490
Mining and quarrying	13,430	44,624	37,861	286,509	11,770	19,921	2,874	416,991
Manufacturing	291,330	178,981	140,059	1,526,089	119,676	441,495	1,678,060	4,375,689
Electricity, gas, steam and air conditioning supply	26,047	20,343	31,314	163,207	57,896	43,459	79,860	422,127
Water supply; sewerage, waste management and remediation activities	5,653	5,520	3,468	10,953	2,522	2,395	37,172	67,683
Services	913,258	684,713	899,777	869,160	274,574	290,732	5,820,862	9,753,076
Construction	66,696	53,266	46,138	42,388	22,260	13,550	166,501	410,800
Wholesale and retail trade; repair of motor vehicles and motorcycles	213,638	174,350	156,642	309,689	65,878	98,092	1,577,153	2,595,442
Transportation and storage	40,078	34,100	105,482	108,683	27,048	33,584	605,658	954,633
Accommodation and food service activities	21,880	31,497	220,343	89,334	22,230	4,944	529,274	919,502
Information and communication	12,773	12,462	12,958	11,011	4,106	4,197	328,535	386,043
Financial and insurance activities	117,189	82,431	72,964	63,130	27,018	25,132	846,636	1,234,500
Real estate activities	69,091	48,032	43,256	37,972	18,559	16,722	167,369	401,002
Professional, scientific and technical activities	960	1,457	2,478	30,488	442	9,784	240,576	286,185
Administrative and support service activities	5,141	9,185	25,069	22,271	4,840	5,120	190,540	262,167
Public administration and defence; compulsory social security	85,815	69,970	75,583	71,174	31,255	36,065	586,970	956,832
Education	203,157	104,173	87,454	39,187	29,857	22,963	164,814	651,606
Human health and social work activities	54,875	47,259	37,322	26,192	15,179	14,443	152,957	348,227
Arts, entertainment and recreation	4,620	3,773	3,516	3,197	2,084	1,288	83,934	102,413
Other service activities	17,346	12,756	10,571	14,442	3,816	4,848	179,945	243,724
Gross domestic product (GDP)	1,559,266	1,266,662	1,402,735	3,026,495	579,815	863,328	7,667,272	16,365,574
GDP Per capita (Baht)	83,856	110,897	147,115	508,568	158,206	271,759	457,399	236,815
Population (1,000 persons)	18,595	11,422	9,535	5,951	3,665	3,177	16,763	69,107

Source : Office of the National Economic and Social Development Council

0.3 Passenger and Freight Transport by Transport Mode 2018

Transport Mode	Road		ail	Water			Air					
Passenger and Freight			Electric train	Inland	Coastal	Maritime	Domestic	International	Total			
Passengers												
- Numbers												
- Person (Thousand)	1,022,205	36,994	395,120	14,739	35,259	644	76,462	81,789	1,663,210			
- Percent	61.46	2.22	23.76	0.89	2.12	0.04	4.60	4.92	100			
- Performance												
- Passenger-kilometers (Million)	715,798	5,907	2,768	N/Col	N/Col	N/Col	2,581,431	N/Col	3,305,904			
- Percent	21.65	0.18	0.08	N/Col	N/Col	N/Col	78.09	N/Col	100			
Freight												
- Volumes												
- Ton (Thousand)	483,760	10,232	0	55,739	61,798	293,682	96	1,545	906,851			
- Percent	53.35	1.13	0	6.15	6.81	32.38	0.01	0.17	100			
- Performance												
- Ton-kilometers (Million)	192,075	2,769	0	7,808	10,037	N/Col	34,790	N/Col	247,480			
- Percent	77.61	1.12	0	3.16	4.06	N/Col	14.06	N/Col	100			





Source : Ministry of Transport

0.4 Foreign Trade Imported and Exported by Transport Mode 2014 to 2018

<u>Import</u>					(Millions Baht)
Transport Mode	2014	2015	2016	2017	2018
Road	522,115	644,256	622,329	768,324	829,054
Rail	392	176	234	153	264
Water (Coastal, Maritime)	5,198,299	4,567,882	4,551,730	4,844,731	5,281,205
Air	1,680,577	1,690,965	1,711,080	1,971,325	1,950,655
Total	7,401,383	6,903,279	6,885,373	7,584,533	8,061,178

			(1	nousand Ions)
2014	2015	2016	2017	2018
12,395.92	15,137.73	15,331.63	17,331.37	16,301.57
3.81	1.64	1.83	3.26	2.98
149,834.14	154,172.88	160,139.35	162,088.57	177,662.29
360.59	208.69	241.57	255.60	299.96
162,594.47	169,520.93	175,714.38	179,678.78	194,266.81

<u>Export</u>					(Millions Baht)
Transport Mode	2014	2015	2016	2017	2018
Road	625,918	629,579	660,409	754,362	813,019
Rail	2,232	3,811	7,526	15,866	16,782
Water (Coastal, Maritime)	5,182,469	4,996,986	5,102,742	5,408,293	6,020,009
Air	1,498,406	1,593,300	1,778,048	1,826,006	1,891,095
Total	7,309,025	7,223,676	7,548,725	8,004,528	8,740,904

			Т)	housand Tons)
2014	2015	2016	2017	2018
24,427.89	18,457.98	18,861.77	18,621.13	19,639.54
75.66	124.27	221.20	320.92	398.96
117,436.07	173,774.92	130,629.44	113,139.63	127,541.38
270.49	310.70	269.76	289.82	336.11
142,210.10	192,667.87	149,982.17	132,371.50	147,915.99

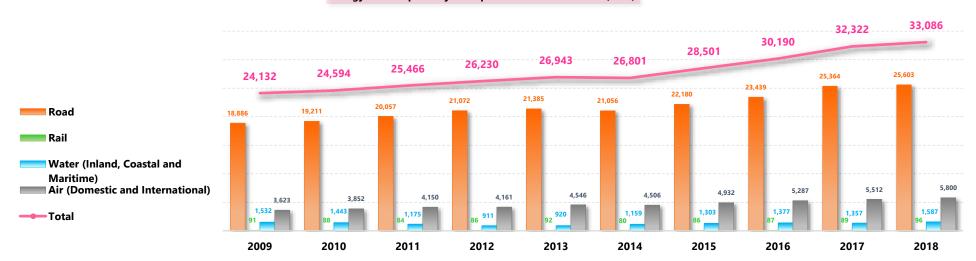
Source : The Customs Department

0.5 Energy Consumption by Transport Mode 2009 to 2018

(1	κt	oe

Transport Mode	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Road	18,886	19,211	20,057	21,072	21,385	21,056	22,180	23,439	25,364	25,603
Rail	91	88	84	86	92	80	86	87	89	96
Water (Inland, Coastal and Maritime)	1,532	1,443	1,175	911	920	1,159	1,303	1,377	1,357	1,587
Air (Domestic and International)	3,623	3,852	4,150	4,161	4,546	4,506	4,932	5,287	5,512	5,800
Total	24,132	24,594	25,466	26,230	26,943	26,801	28,501	30,190	32,322	33,086

Energy Consumption by Transport Mode 2009 to 2018 (ktoe)



Remark: ktoe = Thousand tons of oil equivalent

Source: Department of Alternative Energy Development and Efficiency, Ministry of Energy.

0.6 Greenhouse Gas Emissions by Transport Mode 2007 to 2018

(Thousand Tons)

Transport Mode	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Road	53,907.4	51,436.1	54,814.2	55,428.3	57,404.4	59,614.1	58,646.1	57,568.2	60,863.3	63,697.7	N/A	N/A
Rail	307.5	281.6	265.7	250.8	236.5	231.8	228.2	215.1	223.2	196.0	N/A	N/A
Water (Navigation (Domestic))	167.2	188.6	204.6	235.0	441.9	453.3	456.3	409.7	438.9	456.7	N/A	N/A
Air (Civil Aviation (Domestic))	894.5	909.9	921.4	982.3	1,071.8	1,264.1	1,353.6	1,672.4	1,991.3	2,310.1	N/A	N/A
Total	55,276.6	52,816.2	56,205.7	56,896.5	59,154.6	61,563.3	60,684.2	59,865.4	63,516.7	66,660.6	N/A	N/A

(Percent)

Turning and Manda						Growth	rate ⁽¹⁾					
Transport Mode	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Road		-4.58	6.57	1.12	3.57	3.85	-1.62	-1.84	5.72	4.66	N/A	N/A
Rail		-8.42	-5.65	-5.61	-5.70	-1.99	-1.55	-5.76	3.80	-12.19	N/A	N/A
Water (Navigation (Domestic))		12.80	8.48	14.86	88.04	2.58	0.66	-10.22	7.13	4.07	N/A	N/A
Air (Civil Aviation (Domestic))		1.72	1.26	6.61	9.11	17.94	7.08	23.55	19.07	16.01	N/A	N/A
Total		-4.45	6.42	1.23	3.97	4.07	-1.43	-1.35	6.10	4.95	N/A	N/A

Remark: Office of Natural Resources and Environmental Policy and Planning is currently in the process of preparing greenhouse gas emissions results in the transport sector from 2017-2018.

(1) Growth rate_b =
$$\left(\frac{Y_b - Y_a}{Y_a}\right) \times 100$$
;

Y_a = Greenhouse Gas Emissions of year a

Y_b = Greenhouse Gas Emissions of year b

Source: Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment.

0.7 Public Expenditure in the Transport Sector by Mode 2009 to 2018

(Millions Baht)

Transport Mode	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
- Administration (OPS, OTP)	825	871	792	815	993	1,156	963	1,028	1,474	1,237
Land Transport	92,812	69,518	99,459	113,263	124,767	125,682	136,956	178,947	188,692	200,280
- Road Transport (DLT, DOH, DRR, EXAT)	73,800	53,858	79,058	86,829	93,582	95,831	104,509	127,895	147,707	156,530
- Rail Transport (SRT, MRT)	18,362	15,640	19,093	21,866	26,591	26,577	28,947	45,702	35,951	38,077
- Mass Transit System (BMTA)	650	21	1,308	4,568	4,595	3,274	3,500	5,350	5,034	5,673
Water Transport (MD)	3,732	3,339	4,012	4,566	4,033	4,233	4,742	5,538	4,859	5,446
Air Transport (DOA, CATC)	1,049	1,042	1,593	1,332	1,712	1,944	1,945	2,380	3,744	6,427
Total Transport	98,417	74,771	105,856	119,976	131,505	133,015	144,606	187,893	198,769	213,390

Source : Bureau of the Budget

0.8 Accidents by Transport Mode

0.8.1 Reported Accidents and Number of Accidents Casualties (Injuries Dead and Missing) by Transport Mode 2014 to 2018

(Cases)

(Person)

(Person)

Transport Mode						
Road (1)(2)						
- Ministry of Transport						
Rail						
Water						
- Inland						
- Coastal						
- Maritime						
Air Transport						
Total						

Repo 015 8,920	2016 37,543	2017	2018
			2018
8,920	37 543		
	3.,543	42,744	45,916
15,367	17,874	18,667	19,579
362	409	370	349
16	32	26	24
7	12	15	9
7	11	6	7
2	9	5	8
5	12	9	13
9,303	37,996	43,149	46,302
	362 16 7 7 2 5	362 409 16 32 7 12 7 11 2 9 5 12	362 409 370 16 32 26 7 12 15 7 11 6 2 9 5 5 12 9

	Injuries									
2014	2015	2016	2017	2018						
19,900	24,605	32,175	35,492	37,676						
13,590	13,848	17,641	17,104	17,711						
257	164	260	113	96						
N/A	5	170	29	14						
N/A	0	111	17	7						
N/A	1	38	10	7						
N/A	4	21	2	0						
1	3	16	8	9						
20,158	24,777	32,621	35,642	37,795						

Dead and Missing									
2015	2015 2016 2017								
20,410	22,313	22,170	20,429						
2,427	2,824	2,754	3,051						
75	96	67	73						
6	50	16	64						
2	35	8	1						
3	2	2	5						
1	13	6	58						
2	5	2	7						
20,493	22,464	22,255	20,573						
	2015 20,410 2,427 75 6 2 3 1	2015 2016 20,410 22,313 2,427 2,824 75 96 6 50 2 35 3 2 1 13 2 5	2015 2016 2017 20,410 22,313 22,170 2,427 2,824 2,754 75 96 67 6 50 16 2 35 8 3 2 2 1 13 6 2 5 2						

Remarks : (1) ศูนย์อำนวยการความปลอดภัยทางถนน (ศปถ.)

(2) Injury Data Collaboration Center (IDCC), Ministry of Public Health.

Source : - ศูนย์อำนวยการความปลอดภัยทางถนน (ศปถ.)

- Injury Data Collaboration Center (IDCC), Ministry of Public Health.
- Information and Communication Technology Centre, Ministry of Transport.
- State Railway of Thailand
- Marine Department
- The Civil Authority of Thailand

1. ROAD TRANSPORT

1.1 Road Infrastructure

1.1.1 Length of Road Network in Thailand 2009 to 2018

Roads are administered by a number of agencies and no combined statistics are collected. Estimate of the total length of roads in 2018 is derived from the following sources.

(Kilometer)

Administered by	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ministry of Transport	51,802.773	52,069.354	51,817.606	96,059.555	98,957.733	99,060.218	99,319.886	99,618.317	99,975.546	99,998.652
- Department of Highways (DOH)	51,625.973	51,892.554	51,618.306	51,412.690	51,117.987	51,345.471	51,504.830	51,744.657	51,790.115	51,813.221
- Department of Rural Roads (DRR)	N/A	N/A	N/A	44,447.565	47,640.446	47,506.847	47,607.156	47,649.060	47,960.831	47,960.831
- Expressway and Rapid Transit Authority of Thailand (EXAT)	176.800	176.800	199.300	199.300	199.300	207.900	207.900	224.600	224.600	224.600
Ministry of Interior	N/A	354,465.500	357,223.005	356,488.150						
- Department of Local Administration (DLA)	N/A	352,465.500	352,465.500	352,465.500						
- Bangkok Metropolitan Administration (BMA)	N/A	2,000.000	4,757.505	4,022.650						
Total	51,802.773	52,069.354	51,817.606	96,059.555	98,957.733	99,060.218	99,319.886	454,083.817	457,198.551	456,486.802

1.1 Road Infrastructure

1.1.2 Length of Road Network Under DOH Jurisdiction by Category of Road Surface 2009 to 2018

(Kilometer)

Surface Type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Concrete	х	x	х	x	2,009.478	1,952.865	1,992.982	1,922.773	1,961.621	2,166.267
Asphalt	х	x	х	x	48,757.240	49,070.736	49,253.568	49,610.546	49,756.973	49,603.560
Unpaved	х	х	х	x	351.269	321.870	258.280	211.338	71.521	43.395
Total	51,625.973	51,892.554	51,618.306	51,412.690	51,117.987	51,345.471	51,504.830	51,744.657	51,790.115	51,813.221

Source: Department of Highways

1.1.3 Length of Road Network Under DRR Jurisdiction by Category of Road Surface 2009 to 2018

(Kilometer)

Surface Type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Concrete	N/A	N/A	N/A	1,220.193	1,533.060	1,639.038	1,718.829	2,008.241	2,293.869	2,314.599
Asphalt	N/A	N/A	N/A	38,360.406	41,275.859	41,510.676	41,976.437	43,181.923	44,087.766	44,666.104
Unpaved	N/A	N/A	N/A	4,866.966	4,831.527	4,357.133	3,911.890	2,458.896	1,579.196	980.128
Total	N/A	N/A	N/A	44,447.565	47,640.446	47,506.847	47,607.156	47,649.060	47,960.831	47,960.831

Source : Department of Rural Roads

1.1.4 Length of Road Network Under EXAT Jurisdiction by Category of Road Surface 2009 to 2018

(Kilometer)

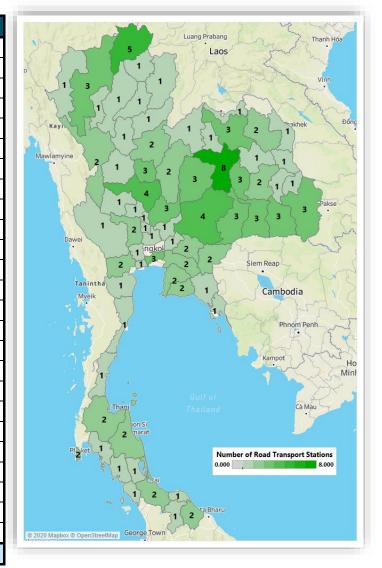
										, ,
Surface Type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Concrete	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Asphalt	176.800	176.800	199.300	199.300	199.300	207.900	207.900	224.600	224.600	224.600
Unpaved	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	176.800	176.800	199.300	199.300	199.300	207.900	207.900	224.600	224.600	224.600

Source: Expressway Authority of Thailand

1.1 Road Infrastructure

1.1.5 Number of Road Transport Stations by Province 2018

No.	Province	Number	No.	Province	Number	No.	Province	Number
1	Amnat Chareon	1	27	Nakhon Pathom	1	53	Rayong	2
2	Ang Thong	1	28	Nakhon Phanom	1	54	Roi Et	2
3	Bangkok Metropolis	3	29	Nakhon Ratchasima	4	55	Sa Kaew	2
4	Bueng Kan	0	30	Nakhon Sawan	4	56	Sakon Nakhon	2
5	Buri Ram	3	31	Nakhon Si Thammarat	2	57	Samut Prakan	0
6	Chachoengsao	2	32	Nan	1	58	Samut Sakhon	1
7	Chai Nat	1	33	Narathiwat	2	59	Samut Songkhram	0
8	Chaiyaphum	3	34	Nong Khai	1	60	Saraburi	1
9	Chanthaburi	1	35	Nongbua Lamphu	1	61	Satun	1
10	Chiang Mai	3	36	Nonthaburi	0	62	Si Sa Ket	3
11	Chiang Rai	5	37	Pathum Thani	0	63	Singburi	1
12	Chon Buri	2	38	Pattani	1	64	Songkhla	2
13	Chumphon	1	39	Phachuap Khiri Khan	1	65	Sukhothai	1
14	Kalasin	1	40	Phangnga	0	66	Suphan Buri	2
15	Kam Phaeng Phet	1	41	Phatthalung	1	67	Surat Thani	2
16	Kanchanaburi	1	42	Phayao	1	68	Surin	3
17	Khon Kaen	8	43	Phetchabun	2	69	Tak	2
18	Krabi	1	44	Phetchaburi	1	70	Trang	1
19	Lampang	1	45	Phichit	3	71	Trat	1
20	Lamphun	1	46	Phitsanulok	2	72	Ubon Ratchathani	3
21	Loei	1	47	Phra Nakhon Sri Ayutthaya	1	73	Udon Thani	3
22	Lop Buri	3	48	Phrae	1	74	Uthai Thani	1
23	Mae Hong Son	1	49	Phuket	2	75	Uttaradit	1
24	Maha Sarakham	3	50	Prachin Buri	2	76	Yala	1
25	Mukdahan	1	51	Ranong	0	77	Yasothon	1
26	Nakhon Nayok	1	52	Ratchaburi	2		Total	126



Source : Ministry of Transport

1.2.1 Cumulative Number of Registered Vehicles 2009 to 2018 Under Motor Vehicle Act 1979 (Classified by Type of Vehicle)

(As of 31 December of Each Year)

(Vehicle)

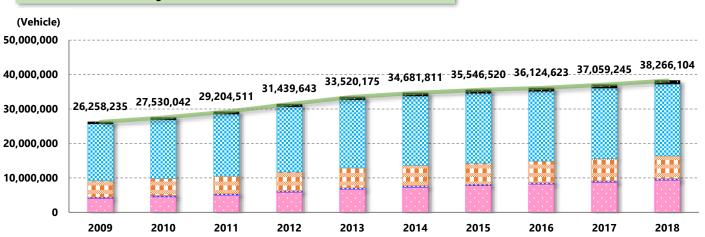
Type of Vehicle	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sedans	4,078,547	4,496,828	5,001,442	5,856,454	6,736,562	7,284,259	7,742,434	8,197,012	8,740,890	9,362,259
Microbuses and Passenger Pick-ups	383,684	392,354	403,321	417,529	430,188	433,128	428,403	422,221	425,320	423,166
Vans and Pick-ups	4,696,897	4,894,655	5,137,564	5,437,988	5,734,302	5,954,226	6,135,571	6,277,527	6,437,291	6,614,402
Motorcycles	16,549,307	17,156,712	18,018,066	19,023,751	19,853,157	20,141,213	20,308,201	20,276,806	20,501,439	20,887,785
Others	549,800	589,493	644,118	703,921	765,966	868,985	931,911	951,057	954,305	978,492
Total	26,258,235	27,530,042	29,204,511	31,439,643	33,520,175	34,681,811	35,546,520	36,124,623	37,059,245	38,266,104

(Percentage)

Type of Vehicle	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sedans	15.53	16.33	17.13	18.63	20.10	21.00	21.78	22.69	23.59	24.47
Microbuses and Passenger Pick-ups	1.46	1.43	1.38	1.33	1.28	1.25	1.21	1.17	1.15	1.11
Vans and Pick-ups	17.89	17.78	17.59	17.30	17.11	17.17	17.26	17.38	17.37	17.29
Motorcycles	63.03	62.32	61.70	60.51	59.23	58.07	57.13	56.13	55.32	54.59
Others	2.09	2.14	2.21	2.24	2.29	2.51	2.62	2.63	2.58	2.56
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Cumulative Number of Registered Vehicles 2009 to 2018 Under Motor Vehicle Act





Source : Department of Land Transport

1.2.2 Newly Number of Registered Vehicles 2009 to 2018 Under Motor Vehicle Act 1979 (Classified by Type of Vehicle)

(As of 31 December of Each Year)

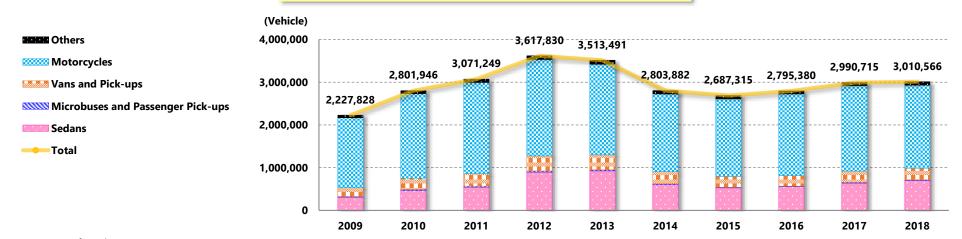
(Vehicle)

Type of Vehicle	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sedans	309,150	465,738	541,681	894,183	923,899	603,843	526,764	552,947	638,030	698,743
Microbuses and Passenger Pick-ups	16,842	23,568	24,962	28,122	25,249	19,407	14,088	13,134	18,795	15,317
Vans and Pick-ups	206,068	263,500	293,635	351,721	350,360	281,719	255,237	245,437	262,995	273,264
Motorcycles	1,635,807	1,978,907	2,134,377	2,257,376	2,121,977	1,819,371	1,815,000	1,914,131	2,001,130	1,942,494
Others	59,961	70,233	76,594	86,428	92,006	79,542	76,226	69,731	69,765	80,748
Total	2,227,828	2,801,946	3,071,249	3,617,830	3,513,491	2,803,882	2,687,315	2,795,380	2,990,715	3,010,566

(Percentage)

Type of Vehicle	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sedans	13.88	16.62	17.64	24.72	26.30	21.54	19.60	19.78	21.33	23.21
Microbuses and Passenger Pick-ups	0.76	0.84	0.81	0.78	0.72	0.69	0.52	0.47	0.63	0.51
Vans and Pick-ups	9.25	9.40	9.56	9.72	9.97	10.05	9.50	8.78	8.79	9.08
Motorcycles	73.43	70.63	69.50	62.40	60.40	64.89	67.54	68.47	66.91	64.52
Others	2.69	2.51	2.49	2.39	2.62	2.84	2.84	2.49	2.33	2.68
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Newly Number of Registered Vehicles 2009 to 2018 Under Motor Vehicle Act



Source : Department of Land Transport

Cumulative Number of Registered Vehicles 2009 to 2018 Under Land Transport Act 1979 (Classified by Type of Vehicle)

(As of 31 December of Each Year)

0.65

100.00

0.80

100.00

0.26

100.00

(A3 01 31 December of Each Tear)										(Venicie)
Type of Vehicle	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bus : Total	127,553	131,735	134,973	137,609	139,847	144,773	152,857	157,015	159,189	162,975
- Fixed Route Bus	84,714	87,547	89,085	88,902	87,514	86,441	85,758	83,803	78,894	75,835
- Non-Fixed Route Bus	32,270	33,346	34,824	37,467	40,843	46,536	55,130	60,992	67,633	74,113
- Private Bus	10,569	10,842	11,064	11,240	11,490	11,796	11,969	12,220	12,662	13,027
Truck : Total	791,414	816,844	852,923	898,214	963,173	1,007,576	1,030,746	1,055,717	1,089,621	1,122,057
- Non-Fixed Route Truck	156,237	168,906	181,832	201,389	226,934	244,494	259,084	274,151	293,167	315,789
- Private Truck	635,177	647,938	671,091	696,825	736,239	763,082	771,662	781,566	796,454	806,268
Small Rural Bus	7,375	6,208	2,530	1,511	1,211	1,020	900	784	708	653
Total	926,342	954,787	990,426	1,037,334	1,104,231	1,153,369	1,184,503	1,213,516	1,249,518	1,285,685

(Vehicle)

(Percentage) Type of Vehicle 2010 2011 2012 2013 2014 2015 2016 2017 2009 2018 **Bus: Total** 13.77 13.80 13.63 13.27 12.66 12.55 12.90 12.94 12.74 12.68 - Fixed Route Bus 66.41 66.46 66.00 64.60 62.58 59.71 56.10 53.37 49.56 46.53 - Non-Fixed Route Bus 25.30 26.14 27.30 27.23 29.21 32.14 36.07 38.84 42.49 45.48 - Private Bus 8.29 8.23 8.20 8.17 8.22 8.15 7.83 7.78 7.95 7.99 Truck: Total 85.55 86.12 86.59 87.23 87.36 87.02 87.00 87.27 85.43 87.20 - Non-Fixed Route Truck 19.74 20.68 21.32 22.42 23.56 24.27 25.14 25.97 26.91 28.14 79.32 74.86 - Private Truck 80.26 78.68 77.58 76.44 75.73 74.03 73.09 71.86

> 100.00 Cumulative Number of Registered Vehicles 2009 to 2018 Under Land Transport Act

0.15

0.11

100.00

0.09

100.00

0.08

100.00

0.06

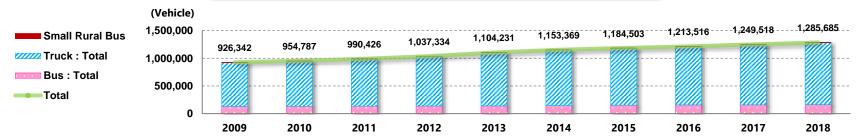
100.00

0.06

100.00

0.05

100.00



Source: Department of Land Transport

Small Rural Bus

Total

1.2.4 Cumulative Number of Registered Vehicles 2014 to 2018 Under Land Transport Act 1979 (Classified by Weight of Vehicle)

(As of 31 December of Each Year) (Vehicle)

	20	14	20	15	20	16	20	17	20	18
Weight of Vehicle (kg.)	Non-Fixed Route Trucks	Private Trucks								
Unknown	N/A	N/A	N/A	N/A	N/A	N/A	958	7,016	934	6,950
0 - 500	N/A	N/A	N/A	N/A	N/A	N/A	16	117	8	65
501 - 750	N/A	N/A	N/A	N/A	N/A	N/A	3	5	2	5
751 - 1,000	N/A	N/A	N/A	N/A	N/A	N/A	1	96	2	93
1,001 - 1,250	N/A	N/A	N/A	N/A	N/A	N/A	1	61	1	60
1,251 - 1,500	N/A	N/A	N/A	N/A	N/A	N/A	7	14	7	13
1,501 - 1,750	196	3,165	187	2,476	189	1,963	32	734	34	601
1,751 - 2,000	390	19,444	372	11,880	333	6,489	268	4,757	266	3,586
2,001 - 2,500	1,545	33,275	1,575	31,375	1,604	29,724	1,665	28,387	1,711	27,062
2,501 - 3,000	1,614	53,327	1,730	53,202	1,838	52,815	1,862	51,698	2,015	50,690
3,001 - 3,500	3,010	56,437	3,089	56,686	3,233	56,557	3,487	55,977	3,736	55,714
3,501 - 4,000	5,505	62,019	5,831	62,575	6,084	63,081	6,620	62,815	6,991	62,603
4,001 - 4,500	6,646	55,279	6,902	57,073	7,105	58,770	7,535	59,757	8,054	61,173
4,501 - 5,000	13,004	41,428	13,573	43,792	14,390	46,171	15,637	48,453	16,943	50,710
5,001 - 6,000	25,997	56,007	27,280	58,038	28,922	60,219	30,484	61,762	32,627	63,445
6,001 - 7,000	18,873	50,459	19,736	51,837	20,619	52,829	22,366	53,449	24,491	54,067
7,001 - 8,000	58,401	67,906	61,220	68,819	62,628	69,365	63,355	69,478	65,997	70,099
8,001 - 9,000	50,021	69,450	53,632	71,789	58,770	74,777	65,293	76,968	72,828	79,338
9,001 - 10,000	24,827	45,956	26,133	47,391	27,596	49,005	29,446	49,844	31,139	50,729
10,001 - 11,000	16,853	67,571	18,322	69,024	19,411	70,256	20,482	70,863	21,497	71,362
11,001 - 12,000	7,733	45,475	8,544	47,412	9,373	49,756	10,566	52,151	12,215	54,468
12,001 - 13,000	4,246	21,195	4,753	22,653	5,318	23,980	5,896	25,453	6,744	26,466
13,001 - 14,000	1,732	7,018	1,925	7,387	2,100	7,836	2,251	8,121	2,400	8,344
more than 14,000	3,901	7,671	4,280	8,253	4,638	7,973	4,936	8,478	5,147	8,625
Total	244,494	763,082	259,084	771,662	274,151	781,566	293,167	796,454	315,789	806,268

Source : Department of Land Transport

1.2.5 Newly Number of Registered Vehicles 2009 to 2018 Under Land Transport Act 1979 (Classified by Type of Vehicle)

(As of 31 December of Each Year)

(Vehicle)

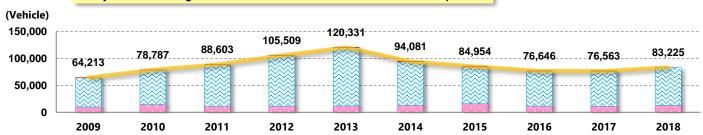
Type of Vehicle	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bus : Total	9,930	14,225	11,199	11,542	11,785	13,114	15,966	11,482	11,006	12,820
- Fixed Route Bus	6,118	10,122	6,708	5,524	4,603	4,419	4,393	2,715	2,289	2,453
- Non-Fixed Route Bus	3,105	3,455	3,847	5,383	6,407	7,960	10,889	8,042	7,941	9,615
- Private Bus	707	648	644	635	775	735	684	725	776	752
Truck : Total	54,013	64,299	77,219	93,935	108,529	80,963	68,981	65,163	65,556	70,405
- Non-Fixed Route Truck	11,889	16,161	18,350	27,729	32,829	24,521	22,654	22,960	25,452	29,336
- Private Truck	42,124	48,138	58,869	66,206	75,700	56,442	46,327	42,203	40,104	41,069
Small Rural Bus	270	263	185	32	17	4	7	1	1	0
Total	64,213	78,787	88,603	105,509	120,331	94,081	84,954	76,646	76,563	83,225

(Percentage)

Type of Vehicle	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bus : Total	15.46	18.06	12.64	10.94	9.79	13.94	18.79	14.98	14.38	15.40
- Fixed Route Bus	61.61	71.16	59.90	47.86	39.06	33.70	27.51	23.65	20.80	19.13
- Non-Fixed Route Bus	31.27	34.79	38.74	46.64	54.37	60.70	68.20	70.04	72.15	75.00
- Private Bus	7.12	4.56	5.75	5.50	6.58	5.60	4.28	6.31	7.05	5.87
Truck : Total	84.12	81.61	87.15	89.03	90.19	86.06	81.20	85.02	85.62	84.60
- Non-Fixed Route Truck	22.01	25.13	23.76	29.52	30.25	30.29	32.84	35.23	38.82	41.67
- Private Truck	77.99	74.87	76.24	70.48	69.75	69.71	67.16	64.77	61.18	58.33
Small Rural Bus	0.42	0.33	0.21	0.03	0.01	0.00	0.01	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Newly Number of Registered Vehicles 2009 to 2018 Under Land Transport Act





Source : Department of Land Transport

1.2.6 Number of Passenger Transport Operator Licenses 2014 to 2018 (Classified by Type of Vehicle)

(Issue)

Type of Vehicle	2014	2015	2016	2017	2018
1. Fixed Route Bus	2,961	2,932	2,843	3,033	2,999
Domestic	2,947	2,918	2,828	3,018	2,984
- Category 1 (Bangkok Metropolitan Area / Municipality)	602	595	577	639	646
- Category 2 (Connecting Bangkok and Region)	204	200	184	204	204
- Category 3 (Inter-Province Links)	526	511	497	505	501
- Category 4 (Routes within the Province)	1,615	1,612	1,570	1,670	1,633
International	14	14	15	15	15
2. Non - Fixed Route Bus	22,203	29,589	33,600	37,670	42,499
Domestic	21,890	29,167	33,153	37,195	42,006
International	313	422	447	475	493
3. Private Bus	6,440	6,566	6,744	7,042	7,322
Domestic	6,437	6,561	6,738	7,034	7,314
International	3	5	6	8	8
4. Small Rural Bus	59	46	33	33	14
Total	31,663	39,133	43,220	47,778	52,834

Source : Department of Land Transport

1.2.7 Number of Freight Transport Operator Licenses 2014 to 2018 (Classified by Type of Vehicle)

(Issue)

Type of Vehicle	2014	2015	2016	2017	2018
1. Non - Fixed Route Trucks	18,096	19,839	21,833	24,922	28,700
- Domestic	17,140	18,705	20,499	23,404	26,936
- International	956	1,134	1,334	1,518	1,764
2. Private Trucks	366,994	365,851	360,667	356,772	356,321
- Domestic	366,837	365,687	360,486	356,585	356,124
- International	157	164	181	187	197
Total	385,090	385,690	382,500	381,694	385,021

Source : Department of Land Transport

1.3 Travelled Vehicle-kilometer

1.3.1 Travelled Vehicle-kilometer by Type of Vehicle 2014 to 2018

(Million Vehicle-kilometers)

Type of Vehicle	2014	2015	2016	2017	2018
Passenger	117,818	122,297	127,212	132,188	132,390
-Car and Taxi	106,465	110,769	114,953	120,038	119,850
- Light Bus	4,627	4,605	4,895	4,950	5,148
- Medium Bus	2,902	3,028	3,260	3,234	3,361
- Heavy Bus	3,823	3,895	4,104	3,966	4,031
Freight	89,796	93,612	97,620	99,019	101,983
- Light Truck	56,020	58,814	60,524	62,264	63,674
- Medium Truck	11,489	11,821	12,418	12,302	12,770
- Heavy Truck	9,156	9,289	9,821	9,721	9,904
- Full Truck	7,178	7,418	7,999	8,023	8,479
- Semi Truck	5,953	6,270	6,858	6,708	7,156
Motorcycle	40,421	40,273	41,097	41,659	42,543
Total	248,034	256,182	265,929	272,866	276,917

Source: Bureau of Traffic Safety, Department of Highways.

1.3 Travelled Vehicle-kilometer

1.3.2 Travelled Vehicle-kilometer by Type of Road and Type of Vehicle 2018

(Million Vehicle-kilometers)

Type of Vehicle ⁽¹⁾		Total			
	Primary ⁽²⁾	Secondary ⁽²⁾	Provincial ⁽²⁾	Inter-city Highways ⁽³⁾	Total
Car and Taxi	38,349	36,407	40,618	4,475	119,850
Light Bus	1,660	1,606	1,780	102	5,148
Medium Bus	1,076	1,078	1,119	89	3,361
Heavy Bus	1,648	1,213	1,089	81	4,031
Light Truck	18,952	17,978	24,741	2,003	63,674
Medium Truck	4,132	3,480	4,438	721	12,770
Heavy Truck	3,610	2,732	3,074	489	9,904
Full Truck	3,398	2,430	2,381	270	8,479
Semi Truck	3,274	1,886	1,633	363	7,156
Motorcycle	8,007	12,274	22,262	0	42,543
Total	84,106	81,083	103,135	8,593	276,917

Remarks: (1) Definition of Vehicle Type

Car and Taxi : Sedans Light Bus : 4 Wheel Bus

- Heavy Bus : 6 Wheel Bus

- Light Truck : 4 Wheel Truck or Pick - up

- Medium Truck : 6 Wheel Truck

- Heavy Truck : 10 Wheel Truck or Truck with Trailer or with Semi - trailer

(2) National Highways

- Primary is 1 and 2 digit

- Secondary is 3 digit

- Provincial is 4 digit

(3) Inter-city Highways

- Highway No.7 (M7): Bangkok - Chon Buri - Pattaya - Map Ta Phut Motorway

- Highway No.9 (M9): Kanchanaphisek Road, Bang Pa-in - Bang Phli Section

Source: Bureau of Traffic Safety, Department of Highways.

1.3 Travelled Vehicle-kilometer

1.3.3 Travelled Vehicle-kilometer by Region and Type of Vehicle 2018

(Million Vehicle-kilometers)

(PCU-kilometer)⁽¹⁾

	Type of Vehicle										
Region	Car and Taxi	Light Bus	Medium Bus	Heavy Bus	Light Truck	Medium Truck	Heavy Truck	Full Truck	Semi Truck	Motorcycle	Total
Bangkok Metropolis	24,638	848	656	934	8,487	2,519	1,991	1,266	1,180	3,845	46,363
Northern	21,183	834	494	532	13,458	1,946	1,374	1,218	972	10,586	52,596
Northeastern	28,313	1,072	733	882	16,462	2,988	2,034	1,925	1,687	11,657	67,753
Central	9,513	636	452	586	3,528	1,318	1,220	1,266	1,001	2,309	21,829
Eastern	13,357	732	439	562	7,680	1,902	1,487	1,369	1,211	3,556	32,295
Western	7,565	378	264	305	5,438	894	780	679	420	3,398	20,122
Southern	15,281	649	322	231	8,621	1,204	1,019	756	683	7,193	35,958
Total	119,850	5,148	3,361	4,031	63,674	12,770	9,904	8,479	7,156	42,543	276,917

•	
	Total
	55,003,748,950
	54,277,811,834
	73,613,800,494
	28,160,195,487
	39,320,175,410
	22,317,885,526
	36,915,553,412
	309,609,171,113

Remark: (1) PCU-kilometer: Passenger Car Unit - kilometer

Convert vehicle type to passenger car unit, details as following

- Car and Taxi = 1 PCU
- Light Bus = 1.5 PCU
- Medium Bus = 1.5 PCU
- Heavy Bus = 2.1 PCU
- Light Truck = 1 PCU
- Medium Truck = 2.1 PCU
- Heavy Truck = 2.5 PCU
- Full Truck = 2.5 PCU
- Semi Truck = 2.5 PCU
- Motorcycle = 0.333 PCU

Source: Bureau of Traffic Safety, Department of Highways.

1.4 Road Freight Transport

1.4.1 Domestic Road Freight Transport by Commodity Group 2014 to 2018

(Thousand Tons)

(Million Ton - kilometers)

				(asana rons,				(IVIIIIOII TOII	,
Commodity Group	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
1. Live Animals	2,398	2,483	2,400	2,444	2,422	1,569	1,624	1,560	1,598	1,593
2. Rice	26,972	27,919	27,934	27,889	27,912	17,419	18,031	17,668	17,855	17,922
3. Maize	4,612	4,775	4,701	4,731	4,716	1,251	1,294	1,264	1,283	1,285
4. Cassava	30,385	31,453	30,647	31,034	30,837	12,563	13,005	13,217	13,073	13,266
5. Sugar Cane	98,127	101,575	105,755	103,073	104,437	9,964	10,314	10,862	10,529	10,796
6. Rubber	4,036	4,178	3,986	4,089	4,037	2,141	2,217	2,534	2,347	2,464
7. Wood, Timber	5,455	6,646	6,581	6,569	6,575	3,737	3,868	3,715	3,797	3,790
8. Other Agricultural Products	16,481	17,060	17,936	17,406	17,676	13,323	13,791	13,080	13,470	13,392
9. Animal Fodder	3,743	3,874	3,029	3,513	3,267	1,708	1,768	1,612	1,704	1,673
10. Sugars	10,835	11,216	11,686	11,381	11,536	2,646	2,739	2,868	2,796	2,859
11. Other Foodstuffs	9,899	10,247	10,367	10,284	10,327	6,060	6,273	6,202	6,233	6,274
12. Solid Mineral Fuels	29,009	30,029	29,729	29,860	29,793	10,294	10,656	10,560	10,599	10,675
13. Petroleum Products	30,917	32,003	31,763	31,854	31,807	16,760	17,349	17,221	17,268	17,401
14. Ores and Metal Wastes	34,988	36,217	37,970	36,905	37,447	7,882	8,159	7,328	7,797	7,627
15. Metal Products	25,298	26,187	25,716	25,953	25,832	18,076	18,711	18,553	18,615	18,753
16. Sand, Gravel, Clay and Slag	51,454	53,261	50,898	52,188	51,532	10,260	10,621	10,170	10,415	10,384
17. Cement	23,037	23,846	23,490	23,664	23,576	9,964	10,314	10,863	10,529	10,796
18. Other Minerals and Construction Materials	21,699	22,461	22,765	22,556	22,662	10,602	10,974	10,109	10,593	10,441
19. Fertilizers	3,610	3,737	3,957	3,824	3,892	2,188	2,265	2,646	2,422	2,559
20. Chemicals	2,321	2,402	2,258	2,338	2,297	1,055	1,092	915	1,018	974
21. Equipment, Other Manufactured Articles	19,889	20,588	20,784	20,654	20,720	10,704	11,080	10,311	10,739	10,617
22. Miscellaneous Articles, Containers	9,856	10,202	10,532	10,387	10,460	17,163	17,766	15,851	16,933	16,532
Total	465,020	482,358	484,884	482,596	483,760	187,330	193,911	189,110	191,613	192,075

Remark: Data are estimated based on the Land Transport Department 1996 survey data, agricultural production, industrial production, mineral production and petroleum product consumption. Source: Information and Communication Technology Centre, Ministry of Transport.

1.5 Road Accident

1.5.1 Road Accidents and Casualties by Province 2014 to 2018

(Cases)

(Person)

(Person)

No.	Province
1	Bangkok Metropolis ⁽¹⁾
2	Krabi
3	Kanchanaburi
4	Kalasin
5	Kam Phaeng Phet
6	Khon Kaen
7	Chanthaburi
8	Chachoengsao
9	Chon Buri
10	Chai Nat
11	Chaiyaphum
12	Chumphon
13	Chiang Rai
14	Chiang Mai
15	Trang
16	Trat
17	Tak
18	Nakhon Nayok
19	Nakhon Pathom
20	Nakhon Phanom
21	Nakhon Ratchasima
22	Nakhon Si Thammarat
23	Nakhon Sawan
24	Nonthaburi
25	Narathiwat
26	Nan
27	Buri Ram

Reported Accidents (1)								
2014	2015	2016	2017	2018				
168	216	203	153	120				
238	281	164	186	177				
182	149	329	997	373				
350	352	301	283	348				
508	859	440	854	846				
191	167	216	305	381				
267	188	382	536	689				
146	182	310	315	255				
339	409	480	562	723				
103	106	121	181	159				
91	542	2,133	1,878	1,887				
160	140	224	224	259				
402	453	640	828	598				
522	2,228	2,201	1,748	1,839				
255	294	261	259	273				
120	292	470	379	383				
184	167	276	264	281				
87	253	315	128	311				
788	755	1,126	1,670	2,036				
524	417	596	949	1,305				
606	653	737	863	953				
339	284	638	430	660				
539	488	375	409	296				
115	157	205	193	206				
490	427	621	342	472				
193	401	702	970	2,079				
298	281	620	354	250				

Injuries ⁽¹⁾							
2014	2015	2016	2017	2018			
28	65	54	96	136			
204	253	89	118	99			
110	108	261	857	358			
247	314	241	151	218			
437	708	341	748	743			
48	51	88	133	141			
235	134	366	456	623			
32	32	43	66	114			
153	190	275	172	91			
55	69	78	90	72			
85	553	2,262	1,984	1,881			
67	51	57	83	102			
161	196	369	445	181			
367	2,033	2,062	1,677	1,679			
164	158	152	136	165			
81	279	459	360	356			
109	114	141	107	156			
87	275	310	72	245			
703	642	1,074	1,607	1,970			
547	381	570	920	1,252			
138	238	215	230	193			
316	289	707	345	410			
226	210	98	99	106			
15	37	54	48	70			
467	421	660	347	502			
183	460	702	986	2,171			
279	285	698	381	274			

Dead ⁽²⁾								
2014	2015	2016	2017	2018				
805	722	852	875	837				
160	192	201	191	164				
334	312	340	349	307				
227	212	263	264	284				
261	245	260	247	198				
565	577	558	529	449				
818	738	857	854	762				
326	331	335	371	340				
818	738	857	854	762				
129	135	130	119	122				
234	194	269	273	275				
255	215	199	201	190				
576	496	495	513	443				
629	547	663	653	569				
219	220	234	229	217				
81	73	105	95	89				
233	158	178	178	142				
109	99	141	106	112				
386	397	448	373	376				
147	152	172	153	139				
907	929	961	945	976				
497	528	492	468	432				
484	417	385	424	346				
202	250	290	259	259				
166	139	163	166	127				
128	98	115	98	129				
451	370	458	496	429				

1.5 Road Accident

1.5.1 Road Accidents and Casualties by Province 2014 to 2018 (Continued)

(Person)

(Person)

No.	Province
28	Bueng Kan
29	Pathum Thani
30	Phachuap Khiri Khan
31	Prachin Buri
32	Pattani
33	Phra Nakhon Sri Ayutthaya
34	Phayao
35	Phangnga
36	Phatthalung
37	Phichit
38	Phitsanulok
39	Phetchaburi
40	Phetchabun
41	Phrae
42	Phuket
43	Maha Sarakham
44	Mukdahan
45	Mae Hong Son
46	Yasothon
47	Yala
48	Roi Et
49	Ranong
50	Rayong
51	Ratchaburi
52	Lop Buri
53	Lampang
54	Lamphun

Reported Accidents (1)								
2014	2015	2016	2017	2018				
378	83	128	255	572				
354	219	642	1,184	476				
292	363	337	326	264				
135	171	814	1,501	1,052				
76	110	155	135	167				
203	271	313	301	359				
342	224	214	252	172				
58	92	106	123	133				
166	195	193	184	210				
134	190	655	1,324	2,056				
308	386	431	467	399				
174	237	217	275	264				
680	785	1,440	1,795	977				
263	241	227	215	254				
111	151	202	240	174				
221	275	242	430	287				
333	359	535	1,103	1,370				
333	280	219	691	633				
159	222	335	408	444				
64	157	406	425	508				
305	298	390	456	461				
99	74	172	603	473				
81	181	125	118	193				
585	1,016	1,169	1,012	604				
172	161	357	452	1,121				
214	265	325	286	287				
264	314	430	535	465				

Injuries ⁽¹⁾							
2014	2015	2016	2017	2018			
373	62	100	194	523			
264	207	404	922	176			
150	144	141	146	108			
70	117	756	1,470	1,000			
48	74	59	69	81			
70	50	86	100	166			
305	164	100	140	115			
32	57	50	66	63			
78	95	116	82	131			
91	154	631	1,279	2,045			
252	332	335	331	225			
86	133	115	140	121			
710	806	1,486	1,810	707			
155	140	114	109	139			
53	130	146	140	104			
103	182	105	249	104			
327	366	527	1,136	1,403			
340	306	226	680	632			
227	267	391	569	645			
60	157	532	527	619			
310	293	434	317	246			
131	76	168	601	465			
77	160	112	55	54			
684	1,344	1,616	1,348	730			
136	138	318	193	968			
160	232	173	227	220			
248	320	420	515	403			

Dead ⁽²⁾									
2014	2015	2016	2017	2018					
90	63	97	104	96					
268	276	366	343	346					
278	288	287	259	247					
271	276	262	267	232					
89	90	129	128	112					
341	342	376	345	367					
133	129	162	150	114					
98	96	83	95	83					
163	162	166	173	154					
182	151	160	189	182					
398	359	360	362	362					
214	224	217	220	199					
341	349	381	327	350					
160	130	153	132	163					
172	147	143	172	144					
247	218	259	275	241					
80	76	108	111	100					
40	37	43	45	37					
113	118	164	159	148					
68	70	84	87	81					
383	337	337	396	295					
45	36	44	74	45					
475	456	494	492	474					
338	360	339	327	299					
271	312	372	365	316					
242	261	284	250	237					
171	169	178	164	154					

1.5 Road Accident

1.5.1 Road Accidents and Casualties by Province 2014 to 2018 (Continued)

((Са	S	es

(Person)

(Person)

No.	Province
55	Loei
56	Si Sa Ket
57	Sakon Nakhon
58	Songkhla
59	Satun
60	Samut Prakan
61	Samut Songkhram
62	Samut Sakhon
63	Sa Kaew
64	Saraburi
65	Singburi
66	Sukhothai
67	Suphan Buri
68	Surat Thani
69	Surin
70	Nong Khai
71	Nongbua Lamphu
72	Ang Thong
73	Amnat Chareon
74	Udon Thani
75	Uttaradit
76	Uthai Thani
77	Ubon Ratchathani
	Total

	Repo	rted Accide	ents ⁽¹⁾	
2014	2015	2016	2017	2018
380	384	274	284	391
370	1,108	470	209	216
659	450	327	371	343
356	313	277	303	341
90	90	102	101	448
205	253	308	670	691
193	135	401	642	596
607	568	718	744	717
108	84	156	220	361
355	385	379	392	292
277	351	559	671	648
179	191	206	250	267
687	694	1,077	1,040	2,156
3,455	3,535	3,624	3,193	3,486
137	307	353	436	417
85	75	134	211	204
164	403	113	173	108
83	105	122	118	128
116	48	92	82	130
544	420	594	726	459
239	113	176	141	171
180	240	255	181	562
174	207	961	230	250
24,352	28,920	37,543	42,744	45,916

				(1 613011)
		Injuries (1)		
2014	2015	2016	2017	2018
293	280	131	193	338
316	1,133	432	165	51
568	248	79	137	126
373	281	270	255	302
45	42	44	59	447
104	188	172	601	676
284	179	442	693	615
601	534	697	699	613
114	68	148	102	130
354	365	300	257	131
243	342	550	661	634
129	169	198	193	162
538	626	958	991	2,121
3,612	3,638	3,727	3,271	3,571
83	252	117	177	125
60	69	116	149	154
156	390	87	62	71
53	69	45	55	67
107	12	48	30	47
358	233	265	321	120
214	94	170	109	139
172	255	283	148	489
39	86	809	35	46
19,900	24,605	32,175	35,492	37,676

		(2)		(1 613011)
		Dead ⁽²⁾		
2014	2015	2016	2017	2018
197	184	223	265	232
257	262	311	317	340
319	338	342	359	319
462	440	462	410	385
46	68	62	70	62
352	291	354	348	313
38	49	53	49	52
204	189	161	175	164
194	184	274	230	259
333	301	340	405	310
74	86	109	93	83
191	162	140	150	175
376	378	360	326	364
446	429	409	428	337
373	385	416	383	337
134	122	156	167	101
104	119	125	122	105
91	104	98	105	101
66	70	72	70	89
482	347	419	479	382
164	183	172	136	171
102	98	109	105	111
539	605	677	684	584
21,362	20,410	22,313	22,170	20,429

Source : (1) ศูนย์อำนวยการความปลอดภัยทางถนน (ศปถ.)

(2) Injury Data Collaboration Center (IDCC), Ministry of Public Health.

1.6 Energy Consumption

1.6.1 Road Energy Consumption

(Physical unit)

Type of Energy	unit	2014	2015	2016	2017	2018
Petroleum products	million litres	23,329	24,789	26,524	29,072	29,578
Natural gas	MMscf. ⁽¹⁾	115,580	110,909	101,053	88,569	80,001
Electricity	Gwh ⁽²⁾	N/A	N/A	N/A	N/A	N/A

(ktoe)⁽³⁾

Type of Energy	2014	2015	2016	2017	2018
Petroleum products	18,262	19,498	20,996	23,214	23,669
Natural gas	2,794	2,682	2,443	2,142	1,934
Electricity	N/A	N/A	N/A	N/A	N/A
Total	21,056	22,180	23,439	25,356	25,603

Remarks: (1) MMscf. = million standard cubic feet

(2) Gwh = Gigawatt - hour

(3) ktoe = Thousand tons of oil equivalent

Source : Department of Alternative Energy Development and Efficiency, Ministry of Energy.

2. RAIL TRANSPORT

2.1.1 Length of Railway Network in Thailand 2009 to 2018

(Kilometer)

Department and Line	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Train (State Railway of Thailand (SRT)) ⁽¹⁾	4,507.884	4,507.884	4,507.884	4,507.884	4,507.884	4,507.884	4,507.884	4,507.884	4,507.884	4,507.884
- Northern Line	975.029	975.029	975.029	975.029	975.029	975.029	975.029	975.029	975.029	975.029
- North East Line	1,143.150	1,143.150	1,143.150	1,143.150	1,143.150	1,143.150	1,143.150	1,143.150	1,143.150	1,143.150
- Eastern Line	699.138	699.138	699.138	699.138	699.138	699.138	699.138	699.138	699.138	699.138
- Southern Line	1,625.284	1,625.284	1,625.284	1,625.284	1,625.284	1,625.284	1,625.284	1,625.284	1,625.284	1,625.284
- Mahachai - Mae Klong Line	65.283	65.283	65.283	65.283	65.283	65.283	65.283	65.283	65.283	65.283
Electric train	45.700	74.200	79.700	79.700	85.000	85.000	85.000	108.000	109.800	124.800
SRT (Light Red Line)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.000
Airport Rail Link (ARL)	0.000	28.500	28.500	28.500	28.500	28.500	28.500	28.500	28.500	28.500
Mass Rapid Transit Authority of Thailand (MRT)	20.000	20.000	20.000	20.000	20.000	20.000	20.000	43.000	44.000	44.000
- Chaloem Ratchamongkhon (Blue Line)	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	21.000	21.000
1. Bang Sue - Hua Lamphong	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000
2. Bang Sue - Tao Poon	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000
- Chalong Ratchadham (Purple Line)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	23.000	23.000	23.000
1. Bang Yai - Tao Poon	0.000	0.000	0.000	0.000	0.000	0.000	0.000	23.000	23.000	23.000
Bangkok Mass Transit System Public Company Limited (BTS)	25.700	25.700	31.200	31.200	36.500	36.500	36.500	36.500	37.300	37.300
- BTS Sky Train Sukhumvit Line	16.500	16.500	22.000	22.000	22.000	22.000	22.000	22.000	22.800	22.800
1. Mo Chit - On Nut	16.500	16.500	16.500	16.500	16.500	16.500	16.500	16.500	16.500	16.500
2. On Nut - Bearing	0.000	0.000	5.500	5.500	5.500	5.500	5.500	5.500	5.500	5.500
3. Bearing - Samrong	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.800	0.800
4. Samrong - Samut Prakan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
- BTS Sky Train Silom Line	9.200	9.200	9.200	9.200	14.500	14.500	14.500	14.500	14.500	14.500
1. National Stadium - Saphan Taksin	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000
2. Saphan Taksin - Wongwian Yai	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200
3. Wongwian Yai - Bang Wa	0.000	0.000	0.000	0.000	5.300	5.300	5.300	5.300	5.300	5.300
Total	4,553.584	4,582.084	4,587.584	4,587.584	4,592.884	4,592.884	4,592.884	4,615.884	4,617.684	4,632.684

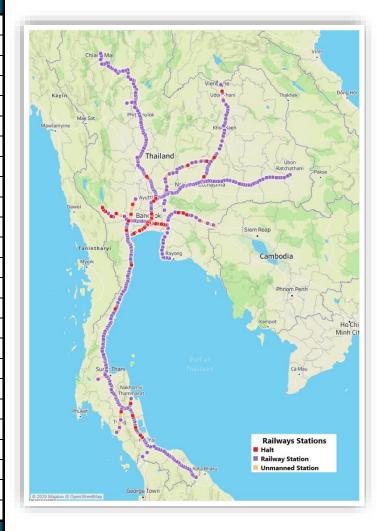
Remark: (1) Single Track = 3,618.784 kilometers, Double Track = 251.830 kilometers, Triple Track = 106.719 kilometers, Mae Klong Line = 65.823 kilometers Calculate the actual length of distance by 3,618.784 + (251.830*2) + (106.719*3) + 65.823 = 4,507.884 kilometers

Source: - State Railway of Thailand, Airport Rail Link, Mass Rapid Transit Authority of Thailand, The Office of Transport and Traffic Policy and Planning, Information and Communication Technology Centre, Ministry of Transport.

- Bangkok Mass Transit System Public Company Limited

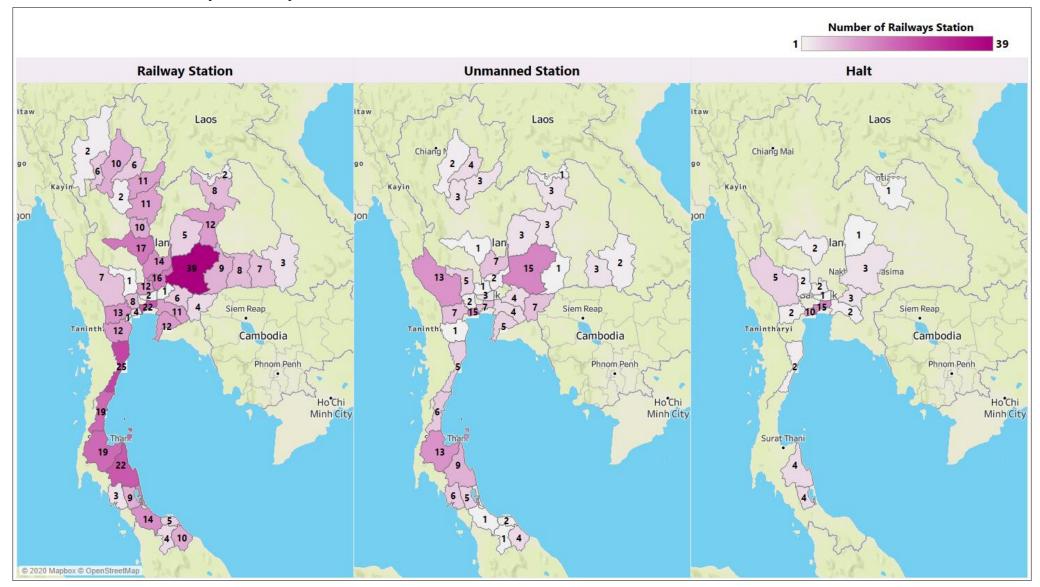
2.1.2 Number of Railways Stations by Province 2018

No.	Province	Number	No.	Province	Number	No.	Province	Number
1	Amnat Chareon	0	27	Nakhon Pathom	10	53	Rayong	0
2	Ang Thong	0	28	Nakhon Phanom	0	54	Roi Et	0
3	Bangkok Metropolis	44	29	Nakhon Ratchasima	57	55	Sa Kaew	11
4	Bueng Kan	0	30	Nakhon Sawan	20	56	Sakon Nakhon	0
5	Buri Ram	10	31	Nakhon Si Thammarat	35	57	Samut Prakan	0
6	Chachoengsao	17	32	Nan	0	58	Samut Sakhon	29
7	Chai Nat	0	33	Narathiwat	14	59	Samut Songkhram	1
8	Chaiyaphum	9	34	Nong Khai	3	60	Saraburi	18
9	Chanthaburi	0	35	Nongbua Lamphu	0	61	Satun	0
10	Chiang Mai	2	36	Nonthaburi	0	62	Si Sa Ket	10
11	Chiang Rai	0	37	Pathum Thani	6	63	Singburi	0
12	Chon Buri	17	38	Pattani	7	64	Songkhla	15
13	Chumphon	25	39	Phachuap Khiri Khan	32	65	Sukhothai	5
14	Kalasin	0	40	Phangnga	0	66	Suphan Buri	8
15	Kam Phaeng Phet	0	41	Phatthalung	18	67	Surat Thani	32
16	Kanchanaburi	25	42	Phayao	0	68	Surin	8
17	Khon Kaen	15	43	Phetchabun	0	69	Tak	0
18	Krabi	0	44	Phetchaburi	13	70	Trang	9
19	Lampang	12	45	Phichit	10	71	Trat	0
20	Lamphun	6	46	Phitsanulok	11	72	Ubon Ratchathani	5
21	Loei	0	47	Phra Nakhon Sri Ayutthaya	15	73	Udon Thani	12
22	Lop Buri	21	48	Phrae	10	74	Uthai Thani	0
23	Mae Hong Son	0	49	Phuket	0	75	Uttaradit	14
24	Maha Sarakham	0	50	Prachin Buri	13	76	Yala	5
25	Mukdahan	0	51	Ranong	0	77	Yasothon	0
26	Nakhon Nayok	1	52	Ratchaburi	22		Total	682



Source : State Railway of Thailand

2.1.2 Number of Railways Stations by Province 2018 (Continued)



Source : State Railway of Thailand

2.1.3 Number of Electric Train Stations by Department and Line 2020

Department and Line	No. of Electric Train Stations
Electric train	
Airport Rail Link (ARL) (Suvarnabhumi - Phaya Thai)	8
Mass Rapid Transit Authority of Thailand (MRT)	53
- Chaloem Ratchamongkhon (Blue Line) (1)	38
1. Bang Sue - Hua Lamphong	18
2. Bang Sue - Tao Poon	1
3. Hua Lamphong - Lak Song	11
4. Tha Phra - Tao Poon	8
- Chalong Ratchadham (Purple Line) (1)	16
1. Khlong Bang Phai - Tao Poon	16
Bangkok Mass Transit System Public Company Limited (BTS)	48
- BTS Sky Train Sukhumvit Line (1)	36
1. Mo Chit - On Nut	17
2. On Nut - Bearing	5
3. Bearing - Samrong	1
4. Samrong - Kheha	8
5. Mo Chit - Khasetsart University	5
- BTS Sky Train Silom Line ⁽¹⁾	13
1. National Stadium - Saphan Taksin	7
2. Saphan Taksin - Wongwian Yai	2
3. Wongwian Yai - Bang Wa	4

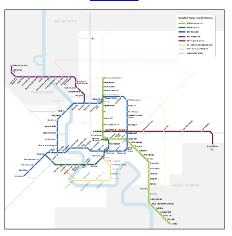
Remark: (1) Including Interchange Station

Source : - Airport Rail Link

- Mass Rapid Transit Authority of Thailand
- Bangkok Mass Transit System Public Company Limited
- แผนที่เล้นทางรถไฟฟ้าในกรุงเทพมหานครและปริมณฑล (https://th.wikipedia.org/wiki/รถไฟฟ้าในกรุงเทพมหานครและปริมณฑล)
- แผนที่ Bangkok Mass Transit จากกลุ่มสาขาวิชาโลจิสติกส์และระบบขนส่งทางราง คณะวิศวกรรมศาสตร์ มหาวิทยาลัยมหิดล (https://www.eg.mahidol.ac.th/dept/clare/images/2020/05-Metro_Map-090620-Ver4.0-N17_compressed.pdf)

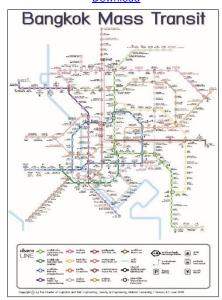
Electric Train route map in Bangkok and Vicinities (As of 2020)

<u>Download</u>



Bangkok Mass Transit (Full version)

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2.2 Rail Tractive & Rolling Stock

2.2.1 Number of Tractive Stock by Type of Traction 2009 to 2018

(Count)

- 4- 4				Fisc	al Year (Octo	ber - Septeml	per)			(Count)
Type of Traction	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Train	510	506	501	499	499	499	506	509	488	488
State Railway of Thailand (SRT)	510	506	501	499	499	499	506	509	488	488
Steam Locomotives	5	5	5	5	5	5	5	5	5	5
- Wood Burning	2	2	2	2	2	2	2	2	2	2
- Oil Burning	3	3	3	3	3	3	3	3	3	3
Diesel Locomotives	269	265	260	258	258	258	265	268	252	252
- Electric	236	234	229	227	227	227	236	246	236	236
- Hydraulic	33	31	31	31	31	31	29	22	16	16
Diesel Railcars	236	236	236	236	236	236	236	236	231	231
- Power Cars	203	203	203	203	203	203	203	203	201	201
Bogie Power Diesel Railcar with Driving Cab.	114+18 ⁽¹⁾	112+20 ⁽¹⁾	110+20 ⁽¹⁾	110+20 ⁽¹⁾						
Air-Conditioned Power Diesel Railcar with Driving Cab.	44	44	44	44	44	44	44	44	44	44
Air-Conditioned Power Diesel Railcar Non-Driving Cab.	26+1 ⁽¹⁾									
- Trailers	33	33	33	33	33	33	33	33	30	30
Bogie Trailer Diesel Railcar with Driving Cab.	33	33	33	33	33	33	33	33	30	30
Bogie Trailer Diesel Railcar Non-Driving Cab.	0	0	0	0	0	0	0	0	0	0
Electric train	132	150	150	160	160	160	160	202	202	202
Airport Rail Link (ARL)	0	18	18	18	18	18	18	18	18	18
Electric Multiple Unit	0	18	18	18	18	18	18	18	18	18
Mass Rapid Transit Authority of Thailand (MRT)	38	38	38	38	38	38	38	80	80	80
Chaloem Ratchamongkhon (Blue Line)	38	38	38	38	38	38	38	38	38	38
Chalong Ratchadham (Purple Line)	0	0	0	0	0	0	0	42	42	42
Bangkok Mass Transit System Public Company Limited (BTS)	94	94	94	104	104	104	104	104	104	104
Electric Multiple Unit	94	94	94	104	104	104	104	104	104	104
Total All	642	656	651	659	659	659	666	711	690	690

Remark: (1) Diesel Railcars for use in the Mae Klong route.

Source: State Railway of Thailand, Airport Rail Link, Mass Rapid Transit Authority of Thailand, Bangkok Mass Transit System Public Company Limited

2.2 Rail Tractive & Rolling Stock

2.2.2 Railway Rolling Stock for Passenger Cars and Freight Cars 2009 to 2018

(Vehicle, Coaches)

- m				Fis	cal year (Octo	ber - Septemb	er)			
Rolling Stock	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Train	8,057	7,307	7,285	6,897	6,907	6,907	6,357	6,100	6,353	6,313
State Railway of Thailand (SRT)	8,057	7,307	7,285	6,897	6,907	6,907	6,357	6,100	6,353	6,313
Passenger Rolling Stock (in book)	1,260	1,238	1,269	1,260	1,260	1,260	1,257	1,200	1,315	1,313
- Ordinary Passenger Cars	724	704	711	713	713	713	713	687	687	687
- Bogie Second Class Day & Night Coaches	83	83	75	68	68	68	68	65	65	65
- Restaurant Cars	59	59	59	59	59	59	59	59	68	68
- Air-Conditioned Passenger Coaches	252	252	284	284	284	284	283	259	365	364
- Bogie Full Van	88	86	86	79	79	79	77	73	73	72
- Bogie Reserved Saloon	3	3	3	3	3	3	3	3	3	3
- Others	51	51	51	54	54	54	54	54	54	54
Goods Rolling Stock (Freight Cars) (in book)	6,797	6,069	6,016	5,637	5,647	5,647	5,100	4,900	5,038	5,000
- Covered Goods Wagons	2,217	1,725	1,693	1,585	1,585	1,585	1,164	937	937	910
- Bogie Covered Goods Wagons	326	325	311	304	304	304	297	294	294	294
- 4 Wheeled	1,081	891	884	737	737	737	623	520	512	501
- 8 Wheeled	3,168	3,123	3,123	3,006	3,016	3,016	3,011	3,144	3,290	3,290
- 12 Wheeled	5	5	5	5	5	5	5	5	5	5
Electric train	57	88	88	88	88	88	88	151	151	151
Airport Rail Link (ARL)	0	31	31	31	31	31	31	31	31	31
Electric Multiple Unit	0	31	31	31	31	31	31	31	31	31
Mass Rapid Transit Authority of Thailand (MRTA)	57	57	57	57	57	57	57	120	120	120
Chaloem Ratchamongkhon (Blue Line)	57	57	57	57	57	57	57	57	57	57
Chalong Ratchadham (Purple Line)	0	0	0	0	0	0	0	63	63	63
Bangkok Mass Transit System Public Company Limited (BTS)	141	153	153	174	188	208	208	208	208	208
Electric Multiple Unit	141	153	153	174	188	208	208	208	208	208
Total All	8,255	7,548	7,526	7,159	7,183	7,203	6,653	6,459	6,712	6,672

Source: State Railway of Thailand, Airport Rail Link, Mass Rapid Transit Authority of Thailand, Bangkok Mass Transit System Public Company Limited

2.2 Rail Tractive & Rolling Stock

2.2.3 Capacity of Rolling Stock for Passenger in Fixed Assets in the Railway Network 2009 to 2018

(No. of Seats)

D				Fisc	al year data (Oct	ober - September	·) ⁽¹⁾								
Passenger Carriages	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018					
1. Ordinary Carriages	22,884,634	22,122,006	21,149,970	20,699,306	19,745,194	18,154,122	17,339,224	16,494,362	17,252,000	17,458,002					
- 1st Class	141,744	135,146	136,224	133,544	133,560	126,926	134,780	134,994	160,174	160,584					
- 2nd Class	2,997,258	2,897,540	2,845,054	2,855,174	2,762,366	2,613,036	2,399,300	2,365,304	2,885,122	2,960,322					
- 3rd Class	19,745,632	19,089,320	18,168,692	17,710,588	16,849,268	15,414,160	14,805,144	13,994,064	14,206,704	14,337,096					
2. Rail - Car Trailers (Drc.)	10,409,608	10,861,688	11,189,172	11,533,944	12,131,482	12,046,664	12,220,416	12,481,510	12,721,492	12,748,974					
- 2nd Class	1,661,698	1,572,394	1,541,348	1,554,378	1,435,004	1,447,422	1,479,760	1,657,900	1,634,738	1,623,518					
- 3rd Class	8,747,910	9,289,294	9,647,824	9,979,566	10,696,478	10,599,242	10,740,656	10,823,610	11,086,754	11,125,456					
Total	33,294,242	32,983,694	32,339,142	32,233,250	31,876,676	30,200,786	29,559,640	28,975,872	29,973,492	30,206,976					

Remark : (1) Data from Star 2 system Source : State Railway of Thailand

2.3.1 Rail Passenger

2.3.1.1 Rail Passenger Transport by Department and Line 2009 to 2018

(No. of Passenger)

Department and Line	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Train (State Railway of Thailand (SRT))	46,525,505	44,534,576	44,053,652	41,760,837	37,343,150	36,424,671	35,126,683	33,630,605	35,433,376	36,993,567
Electric train	204,707,753	209,211,660	248,211,956	288,882,705	310,576,459	328,852,288	344,185,192	361,401,628	382,693,680	395,119,679
Airport Rail Link (ARL)	0	1,181,192	11,823,406	14,167,310	15,375,520	16,991,930	19,312,903	21,128,530	22,509,560	23,624,285
Mass Rapid Transit Authority of Thailand (MRT)	63,749,784	64,927,497	69,040,480	80,602,327	86,435,968	92,437,991	95,018,696	103,225,663	119,116,926	131,355,923
- Chaloem Ratchamongkhon (Blue Line)	63,749,784	64,927,497	69,040,480	80,602,327	86,435,968	92,437,991	95,018,696	100,151,274	107,489,936	113,711,335
- Chalong Ratchadham (Purple Line)	0	0	0	0	0	0	0	3,074,389	11,626,990	17,644,588
Bangkok Mass Transit System Public Company Limited (BTS)	140,957,969	143,102,971	167,348,070	194,113,068	208,764,971	219,422,367	229,853,593	237,047,435	241,067,194	240,139,471
Total	251,233,258	253,746,236	292,265,608	330,643,542	347,919,609	365,276,959	379,311,875	395,032,233	418,127,056	432,113,246

Source: State Railway of Thailand, Airport Rail Link, Mass Rapid Transit Authority of Thailand and Bangkok Mass Transit System Public Company Limited

2.3.1 Rail Passenger

2.3.1.2 Rail Passenger/Passenger-kilometer Transport by Distance Classes and Type of Ticket 2014 to 2018

(No. of Passenger)

(Thousand Passenger-kilometers)

				(140.	of Passenger)
Distance Classes and Type of Ticket	2014	2015	2016	2017	2018
1 - 50 Km	12,374,327	11,586,972	10,473,538	11,077,229	15,163,280
- 1st Class	-	1.00	3.00	4.00	0.00
- 2nd Class	33,544	38,367	90,529	119,427	96,797
- 3rd Class	12,340,783	11,548,604	10,383,006	10,957,798	15,066,483
51 to 150 Km	9,648,945	9,613,136	8,970,618	9,264,723	8,258,006
- 1st Class	327	449	1,119	682	1,464
- 2nd Class	139,968	163,479	183,061	212,600	269,934
- 3rd Class	9,508,650	9,449,208	8,786,438	9,051,441	7,986,608
151 to 250 Km	2,304,937	2,324,024	2,346,514	2,537,093	2,116,369
- 1st Class	1,939	1,332	1,595	3,167	8,416
- 2nd Class	122,390	134,091	150,340	200,620	258,129
- 3rd Class	2,180,608	2,188,601	2,194,579	2,333,306	1,849,824
251 to 500 Km	3,754,147	3,641,886	3,638,406	3,890,524	3,448,981
- 1st Class	12,959	12,819	14,294	18,839	18,045
- 2nd Class	797,906	829,717	910,288	1,050,509	1,116,731
- 3rd Class	2,943,282	2,799,350	2,713,824	2,821,176	2,314,205
501 to 1,000 Km	4,284,256	3,989,888	3,996,461	4,366,636	3,821,216
- 1st Class	81,086	84,434	86,868	108,736	101,046
- 2nd Class	1,944,640	1,829,942	1,872,940	2,212,662	2,204,642
- 3rd Class	2,258,530	2,075,512	2,036,653	2,045,238	1,515,528
1,001 to 1,200 Km	465,201	439,412	431,744	419,552	355,029
- 1st Class	4,072	3,892	3,434	3,307	4,362
- 2nd Class	151,653	134,685	122,164	126,642	162,447
- 3rd Class	309,476	300,835	306,146	289,603	188,220
Mae Klong	3,592,858	3,531,365	3,773,324	3,877,619	3,830,686
- 3rd Class	3,592,858	3,531,365	3,773,324	3,877,619	3,830,686
Total	36,424,671	35,126,683	33,630,605	35,433,376	36,993,567

			,	
2014	2015	2016	2017	2018
303,096	282,345	258,768	269,768	415,176
-	0.04	0.06	0.11	0.00
1,200	1,372	3,658	4,835	3,423
301,895	280,974	255,110	264,933	411,753
801,430	800,561	747,832	766,520	690,961
28.48	47.63	136.01	66.30	164.61
12,572	14,624	16,407	19,416	24,673
788,829	785,890	731,289	747,038	666,123
445,716	415,576	453,012	487,697	412,885
409	207	340	635	1,557
24,691	25,044	30,396	40,709	51,666
420,616	390,325	422,276	446,352	359,663
1,435,155	1,389,400	1,388,034	1,480,146	1,329,390
5,840	5,790	6,420	8,413	7,989
332,843	344,333	376,500	433,365	456,465
1,096,473	1,039,276	1,005,114	1,038,367	864,936
2,912,793	2,696,460	2,713,673	2,985,748	2,617,713
58,203	60,325	62,319	78,147	72,690
1,364,713	1,277,896	1,309,495	1,554,989	1,545,551
1,489,877	1,358,239	1,341,859	1,352,612	999,472
509,188	480,127	470,588	456,935	382,934
4,485	4,279	3,756	3,618	4,771
164,644	146,222	132,128	136,222	174,783
340,059	329,627	334,704	317,095	203,381
65,741	68,955	74,952	73,638	57,476
65,741	68,955	74,952	73,638	57,476
6,473,119	6,133,426	6,106,858	6,520,452	5,906,537

Source : State Railway of Thailand

2.3.1 Rail Passenger

2.3.1.3 Rail Passenger Transport by Province of Origin and Destination 2018

(No. of Passenger)

(No. of Passenger)

			(No. of Passenger)
No.	Province	Origin	Destination
1	Bangkok Metropolis	11,389,807	11,247,603
2	Buri Ram	838,977	842,694
3	Chachoengsao	1,357,275	1,147,814
4	Chaiyaphum	35,643	32,726
5	Chiang Mai	379,058	438,504
6	Chon Buri	68,651	78,144
7	Chumphon	653,164	645,173
8	Kanchanaburi	429,123	478,970
9	Khon Kaen	249,300	256,808
10	Lampang	144,715	136,088
11	Lamphun	69,059	68,409
12	Lop Buri	996,288	1,008,354
13	Nakhon Pathom	906,392	811,894
14	Nakhon Ratchasima	1,877,184	1,888,824
15	Nakhon Sawan	684,575	690,678
16	Nakhon Si Thammarat	813,980	811,792
17	Narathiwat	1,210,793	1,171,437
18	Nong Khai	184,637	201,643
19	Pathum Thani	590,459	536,223
20	Pattani	209,632	201,495
21	Phachuap Khiri Khan	632,368	673,657
22	Phatthalung	511,596	523,798
23	Phetchaburi	233,723	241,130

		(No. of Passenger)				
No.	Province	Origin	Destination			
24	Phichit	514,481	511,750			
25	Phitsanulok	631,191	639,435			
26	Phra Nakhon Sri Ayutthaya	1,930,565	1,866,475			
27	Phrae	160,309	155,826			
28	Prachin Buri	504,445	482,596			
29	Ratchaburi	408,077	408,099			
30	Sa Kaew	159,209	198,473			
31	Samut Sakhon	1,320,859	1,737,350			
32	Samut Songkhram	230,171	57,779			
33	Saraburi	590,328	582,116			
34	Si Sa Ket	1,173,867	1,191,903			
35	Songkhla	1,193,444	1,231,298			
36	Sukhothai	6,869	12,179			
37	Suphan Buri	1,271	6,656			
38	Surat Thani	605,904	658,830			
39	Surin	727,856	731,836			
40	Trang	222,621	213,015			
41	Ubon Ratchathani	557,203	574,917			
42	Udon Thani	211,052	213,911			
43	Uttaradit	584,089	578,260			
44	Yala	793,357	806,983			
45	Other	0	22			
	Total	36,993,567	36,993,567			

Source : State Railway of Thailand

2.3.2 Rail Freight

2.3.2.1 Rail Freight Transport by Freight Car 2014 to 2018

(Ton)

Freight Car	2014	2015	2016	2017	2018
1. Bogie Oil-Tank Wagon, Bogie LPG Tank Wagon	2,228,319	2,642,126	2,417,992	2,296,737	1,946,869
2. Bogie Cement Hopper Wagon	578,547	805,277	1,509,902	1,726,540	1,868,167
3. Bogie Container Flat Wagon	7,818,966	7,833,202	7,507,792	7,265,257	5,953,646
4. Other Bogie Wagon	175,784	106,978	501,401	406,362	463,051
Total	10,801,616	11,387,583	11,937,087	11,694,896	10,231,733

Source : State Railway of Thailand

Rail Freight 2.3.2

2.3.2.2 Rail Freight/Freight-kilometer Transport by Commodity Group 2014 to 2018

(Thousand Tons)

Commodity Group	2014	2015	2016	2017	2018
1. Live Animals	0.41	0.00	0.00	0.00	0.00
2. Rice	0.00	0.00	0.00	0.00	0.00
3. Maize	0.02	0.00	0.00	0.00	0.00
4. Cassava	4.49	2.72	2.71	2.91	0.15
5. Sugar Cane	0.00	0.00	0.00	0.00	0.00
6. Rubber	0.00	0.00	0.00	0.00	0.00
7. Wood, Timber	0.04	0.05	0.00	0.00	0.00
8. Other Agricultural Products	0.67	0.30	0.04	0.04	0.03
9. Animal Fodder	1.01	1.60	4.48	3.01	0.24
10. Sugars	0.98	0.60	0.52	0.67	0.00
11. Other Foodstuffs	28.67	25.00	6.11	5.80	0.47
12. Solid Mineral Fuels	0.02	0.00	0.00	0.00	0.00
13. Petroleum Products	2,268.93	2,656.76	2,478.82	2,321.14	1,949.64
14. Ores and Metal Wastes	0.02	0.00	0.00	0.20	0.00
15. Metal Products	0.00	0.00	0.00	0.00	0.00
16. Sand, Gravel, Clay and Slag	0.00	0.00	0.00	0.00	0.00
17. Cement	583.33	809.74	1,549.45	1,744.89	1,870.83
18. Other Minerals and Construction Materials	0.00	0.03	0.00	0.00	2.80
19. Fertilizers	0.00	0.00	0.03	0.00	0.00
20. Chemicals	0.00	0.00	0.00	0.00	0.00
21. Equipment, Other Manufactured Articles	36.03	13.50	12.54	272.41	439.54
22. Miscellaneous Articles, Containers	7,876.99	7,877.26	7,882.39	7,343.82	5,968.02
Total	10,801.62	11,387.58	11,937.09	11,694.90	10,231.73

	(Million Ton-kilometers)									
2014	2015	2016	2017	2018						
0.06	0.00	0.00	0.00	0.00						
0.00	0.00	0.00	0.00	0.00						
0.02	0.00	0.00	0.00	0.00						
4.27	2.57	2.49	2.68	0.14						
0.00	0.00	0.00	0.00	0.00						
0.00	0.00	0.00	0.00	0.00						
0.06	0.05	0.00	0.00	0.00						
0.32	0.30	0.03	0.03	0.03						
0.37	0.49	1.24	1.13	0.04						
0.88	0.55	0.47	0.60	0.00						
18.45	16.14	4.41	3.70	0.45						
0.03	0.00	0.00	0.00	0.00						
1,039.84	1,230.86	1,168.38	1,134.94	979.29						
0.00	0.00	0.00	0.02	0.00						
0.00	0.00	0.00	0.00	0.00						
0.00	0.00	0.00	0.00	0.00						
158.38	232.84	403.35	488.97	523.49						
0.00	0.01	0.00	0.00	0.87						
0.00	0.00	0.02	0.00	0.00						
0.00	0.00	0.00	0.00	0.00						
11.55	7.88	7.19	38.06	50.62						
1,060.70	1,053.65	1,058.96	1,176.00	1,214.21						
2,294.93	2,545.33	2,646.55	2,846.14	2,769.13						

Source : State Railway of Thailand

2.3.2 Rail Freight

2.3.2.3 Rail Freight Transport by Commodity Group and Region of Origin and Destination 2018

(Thousand Tons)

				Origin Reg	jion			
Commodity Group	Bangkok and Vicinities (BKK & Vic.)	Northern	Northeastern	Central	Eastern	Western	Southern	Total
Animal Fodder	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.24
Cassava	0.03	0.00	0.00	0.00	0.00	0.12	0.00	0.15
Cement	0.00	0.00	0.00	1,870.83	0.00	0.00	0.00	1,870.83
Equipment, Other Manufactured Articles	1.43	0.82	2.06	433.03	0.00	1.63	0.57	439.54
Miscellaneous Articles, Containers	2,444.09	0.00	547.91	0.01	2,336.66	12.64	626.71	5,968.02
Other Agricultural Products	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Other Foodstuffs	0.02	0.00	0.00	0.00	0.00	0.45	0.00	0.47
Other Minerals and Construction Materials	0.00	0.00	0.00	2.80	0.00	0.00	0.00	2.80
Petroleum Products	0.00	812.60	0.00	549.70	587.35	0.00	0.00	1,949.64
Total	2,445.61	813.42	550.22	2,856.36	2,924.01	14.84	627.28	10,231.73

(Thousand Tons)

				Destination R	Region			
Commodity Group	Bangkok and Vicinities (BKK & Vic.)	Northern	Northeastern	Central	Eastern	Western	Southern	Total
Animal Fodder	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.24
Cassava	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.15
Cement	0.00	188.94	541.22	567.96	480.20	0.00	92.50	1,870.83
Equipment, Other Manufactured Articles	418.98	0.66	16.74	0.69	0.00	0.53	1.95	439.54
Miscellaneous Articles, Containers	1,655.05	0.35	55.46	0.00	3,724.72	74.79	457.64	5,968.02
Other Agricultural Products	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Other Foodstuffs	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.47
Other Minerals and Construction Materials	0.00	0.18	1.51	1.12	0.00	0.00	0.00	2.80
Petroleum Products	0.00	591.35	545.69	0.00	812.60	0.00	0.00	1,949.64
Total	2,074.27	781.47	1,160.62	569.77	5,017.52	75.33	552.75	10,231.73

Source : State Railway of Thailand

2.3.2 Rail Freight

2.3.2.4 Rail Freight Transport by Origin and Destination Region 2018

(Thousand Tons)

Outsia Bassian	Destination Region								
Origin Region	BKK and Vic.	Northern	Northeastern	Central	Eastern	Western	Southern	Total	
BKK and Vic.	0.00	0.55	0.36	0.00	2,324.19	74.95	45.56	2,445.61	
Northern	0.26	0.07	0.33	0.00	812.60	0.09	0.07	813.42	
Northeastern	3.92	0.34	1.90	0.29	543.54	0.11	0.11	550.22	
Central	417.80	505.81	790.41	569.41	480.20	0.07	92.66	2,856.36	
Eastern	1,592.49	274.66	366.74	0.00	668.00	0.00	22.11	2,924.01	
Western	12.89	0.04	0.75	0.07	0.00	0.00	1.10	14.84	
Southern	46.91	0.00	0.13	0.00	188.99	0.11	391.13	627.28	
Total	2,074.27	781.47	1,160.62	569.77	5,017.52	75.33	552.75	10,231.73	

(Million Ton-kilometers)

Origin Bassian				Des	tination Region			
Origin Region	BKK and Vic.	Northern	Northeastern	Central	Eastern	Western	Southern	Total
BKK and Vic.	0.00	0.15	0.11	0.00	274.07	10.12	35.12	319.56
Northern	0.12	0.01	0.21	0.00	440.94	0.04	0.08	441.39
Northeastern	1.11	0.18	0.16	0.05	339.64	0.04	0.11	341.29
Central	42.59	266.74	318.48	55.75	67.18	0.02	90.41	841.17
Eastern	187.79	104.58	198.20	0.00	52.07	0.00	15.99	558.62
Western	1.74	0.02	0.35	0.02	0.00	0.00	0.86	2.99
Southern	35.89	0.00	0.12	0.00	135.23	0.05	92.81	264.11
Total	269.22	371.68	517.63	55.81	1,309.14	10.26	235.38	2,769.13

Source : State Railway of Thailand

2.3.2 Rail Freight

2.3.2.5 Rail Freight Transport by Province of Origin and Destination 2018

(Ton)

(Ton)

			(10h)
No.	Province	Origin	Destination
1	Bangkok Metropolis	2,445,606.11	2,074,274.73
2	Chachoengsao	0.00	480,204.06
3	Chiang Mai	198.28	48,895.54
4	Chon Buri	2,924,008.14	4,537,315.37
5	Chumphon	49,720.71	5,160.14
6	Kanchanaburi	12,642.96	74,792.28
7	Khon Kaen	172,539.86	498,630.38
8	Lampang	24.03	227,713.46
9	Lamphun	0.00	75,323.73
10	Lop Buri	232.33	66.09
11	Nakhon Ratchasima	25,346.32	6,539.10
12	Nakhon Sawan	240.34	275,100.56
13	Nakhon Si Thammarat	299,135.22	27,015.72
14	Narathiwat	0.00	220.31
15	Nong Khai	161,470.34	15,810.69

No.	Province	Origin	Destination
16	Pattani	0.00	250.36
17	Phachuap Khiri Khan	594.85	66.09
18	Phetchaburi	242.34	186.26
19	Phitsanulok	812,908.65	154,339.91
20	Phra Nakhon Sri Ayutthaya	330.47	569,304.99
21	Ratchaburi	1,363.94	282.40
22	Saraburi	2,855,799.53	396.56
23	Songkhla	52,050.81	443,284.76
24	Surat Thani	224,444.92	66,539.70
25	Surin	0.00	60,512.76
26	Trang	1,926.74	10,279.22
27	Ubon Ratchathani	0.00	240,778.04
28	Udon Thani	190,862.02	338,351.62
29	Uttaradit	44.06	98.14
	Total	10,231,733.00	10,231,733.00

Source : State Railway of Thailand

2.3.2 Rail Freight

2.3.2.6 Rail Freight Transport by Hazard Classes 2014 to 2018

(Thousand Tons)

Classes of Hazardous Freight	2014	2015	2016	2017	2018
Explosives ⁽¹⁾	0.00	0.04	0.14	0.03	0.00
Gases, Compressed, Liquefied, Dissolved	816.72	838.57	746.00	711.64	587.35
Inflammable Liquids ⁽²⁾	1,452.21	1,818.19	1,732.82	1,609.50	1,362.29

(Thousand Ton-kilometers)

Classes of Hazardous Freight	2014	2015	2016	2017	2018
Explosives ⁽¹⁾	0.00	4.79	5.11	1.16	0.00
Gases, Compressed, Liquefied, Dissolved	377,795.78	386,636.13	340,109.60	324,543.53	268,935.53
Inflammable Liquids ⁽²⁾	662,043.74	844,222.61	828,274.70	810,398.08	710,353.54

Remarks: (1) Amount carried are confidential by the Military.

(2) Only Crude Oil, Benzine, Diesel and Bunker Oil.

Source : State Railway of Thailand

2.4 Rail Accident

2.4.1 Rail Accidents/Incidents by Casualties and Nature of danger 2018

	(Cases)	(Person)	(Person)
Nature of danger	Reported Accidents	Injuries	Dead
1. The train derailed	57	0	0
- In the station area	47	0	0
- Between stations	10	0	0
2. Vehicles collide with convoy	51	30	11
- In the station area	6	1	2
- Between stations	45	29	9
3. The convoy of cars slash / hit people	88	39	51
- In the station area	14	10	6
- Between stations	74	29	45
4. People fall / jump from the train.	35	24	11
- In the station area	17	11	6
- Between stations	18	13	5
5. Other dangerous events	118	3	0
- Actions of villains	12	3	0
- The rail device is damaged.	0	0	0
- Animal Collision	83	0	0
- Natural disasters	23	0	0
Total	349	96	73

Source : State Railway of Thailand

2.5 Energy Consumption

2.5.1 Rail Energy Consumption for Transport sector 2014 to 2018

(Physical unit)

Type of Energy	unit	2014	2015	2016	2017	2018
Petroleum products	Million litres	82	88	89	88	90
Natural gas	MMscf.	0	0	0	0	0
Electricity	Gwh	105	108	113	215	216

(ktoe)

Type of Energy	2014	2015	2016	2017	2018
Petroleum products	71	76	77	76	78
Natural gas	0	0	0	0	0
Electricity	9	10	10	18	18
Total	80	86	87	94	96

Remarks: MMscf. = million standard cubic feet

Gwh = Gigawatt - hour

ktoe = Thousand tons of oil equivalent

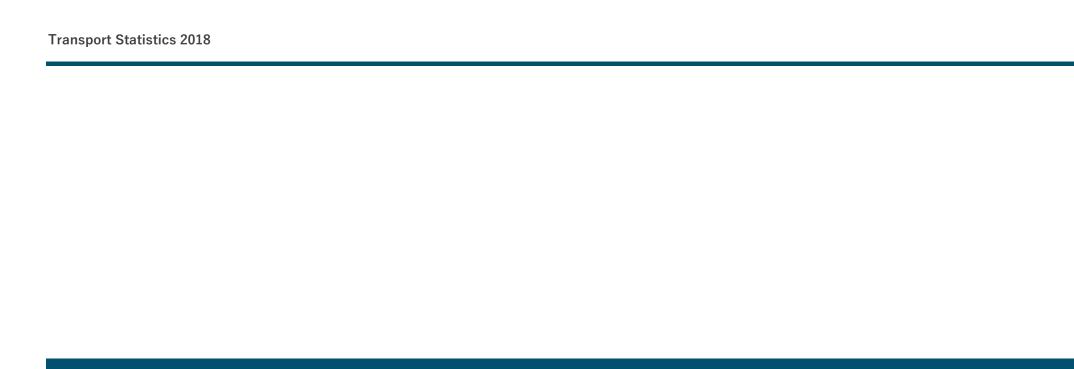
Source: Department of Alternative Energy Development and Efficiency, Ministry of Energy.

2.5.2 Energy Consumption for Tractive Stock by Type 2014 to 2018

(Thousand litres)

Туре	2014	2015	2016	2017	2018
Diesel oil	68,220	68,523	63,884	67,473	68,463
Diesel railcar oil	12,704	13,906	14,070	13,722	13,512

Source: State Railway of Thailand



3. INLAND WATERWAYS TRANSPORT

3.1 Inland Waterways Infrastructure

3.1.1 Length of Inland Waterways 2018

(Kilometer)

No.	Name of Inland Waterways	Already Exploring	Non-Exploring	Military Areas	Total
1	NOI RIVER	170.791	0.000	0.000	170.791
2	LOP BURI RIVER	95.829	0.000	0.000	95.829
3	THA CHIN RIVER	323.683	0.000	0.000	323.683
4	CHAO PHRAYA RIVER	383.794	0.000	0.000	383.794
5	SAKAE KRANG RIVER	28.000	0.000	0.000	28.000
6	BANG PAKONG RIVER	245.509	0.000	0.000	245.509
7	MAE KLONG RIVER	138.191	0.000	0.000	138.191
8	PHETCHABURI RIVER	125.000	0.000	106.222	231.222
9	NAKHON NAYOK RIVER	115.528	0.000	0.000	115.528
10	SONGKHRAM RIVER	42.000	462.960	0.000	504.960
11	PRAN BURI RIVER	6.000	119.000	62.012	187.012
12	KOK RIVER	59.000	100.059	0.000	159.059
13	ING RIVER	0.000	297.924	8.000	305.924
14	YOM RIVER	389.000	282.837	66.000	737.837
15	WANG RIVER	384.000	0.000	93.792	477.792
16	YUAM RIVER	0.000	136.000	106.652	242.652
17	NAN RIVER	600.000	0.000	243.656	843.656
18	PA SAK RIVER	162.000	447.000	140.147	749.147
19	NAM MAE CHAEM	0.000	89.946	24.000	113.946
20	WANG MA RIVER	0.000	60.394	0.000	60.394
21	TAK DAET RIVER	0.000	55.004	0.000	55.004
22	KHUAN RIVER	0.000	26.881	0.000	26.881
23	PRASAE RIVER	5.000	84.254	0.000	89.254
24	KHLONG YAI RIVER	43.000	31.048	0.000	74.048
25	NGIM RIVER	0.000	33.000	27.970	60.970
26	KHWAE NOI RIVER (KANCHANABURI)	77.000	173.168	0.000	250.168
27	KHWAE YAI RIVER	80.000	36.000	273.596	389.596
28	MUN RIVER	241.000	617.000	41.298	899.298
29	CHANTHABURI RIVER	46.000	19.425	0.000	65.425
30	NAM MAE KUANG	0.000	95.017	20.000	115.017

3.1 Inland Waterways Infrastructure

3.1.1 Length of Inland Waterways 2018 (Continued)

(Kilometer)

No.	Name of Inland Waterways	Already Exploring	Non-Exploring	Military Areas	Total
31	KHLONG CHA-UAT	0.000	75.780	0.000	75.780
32	THA TAPHAO RIVER	37.000	6.164	0.000	43.164
33	LI RIVER	130.000	69.000	15.616	214.616
34	LAO RIVER	68.000	132.000	6.321	206.321
35	LANG SUAN RIVER	17.000	76.094	0.000	93.094
36	SAWI RIVER	0.000	86.183	0.000	86.183
37	LOEI RIVER	131.000	56.000	59.176	246.176
38	PHUM DUANG RIVER	0.000	74.105	0.000	74.105
39	TAPI RIVER	0.000	265.000	3.755	268.755
40	PAK PHANANG RIVER	29.131	0.000	0.000	29.131
41	SAI BURI RIVER	0.000	186.998	0.000	186.998
42	BANG NARA RIVER	0.000	57.900	0.000	57.900
43	CHI RIVER	310.000	712.000	13.105	1,035.105
44	PATTANI RIVER	57.000	124.292	41.000	222.292
45	PING RIVER	421.000	73.000	240.963	734.963
46	TAK BAI RIVER	0.000	16.865	0.000	16.865
47	TRANG RIVER	16.000	132.936	0.000	148.936
48	PHICHIT RIVER	0.000	128.645	0.000	128.645
49	TRAT RIVER	16.780	0.000	0.000	16.780
50	LAM NAM PHONG	0.000	271.251	28.000	299.251
51	HANUMAN RIVER	0.000	33.784	0.000	33.784
52	KHEK RIVER	0.000	67.000	102.018	169.018
53	HUAI LUANG	0.000	285.012	7.000	292.012
54	PHRA PRONG RIVER	0.000	171.694	0.000	171.694
55	KHAO SAMING RIVER	36.000	7.953	0.000	43.953
56	KHWAE NOI RIVER (PHITSANULOK)	0.000	258.000	15.307	273.307
57	BEE KRI RIVER	0.000	0.000	46.960	46.960
58	KONG RIVER	0.000	0.000	75.012	75.012
59	PAI RIVER	18.000	67.000	74.844	159.844
	TOTAL	5,047.236	6,601.573	1,942.422	13,591.231

Remark : Revised as of March, 2019 Source : Marine Department

3.2 Inland Waterways Fleet

3.2.1 Number of Inland Waterways Fleet by Type of Vessel 2009 to 2018 (Registered)

(No. of Vessel)

Type of Vessel	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Self-Propelled Vessel	45,045	45,549	46,121	46,731	47,362	48,146	49,014	49,729	50,667	51,621
General Cargo	26,173	26,277	26,564	26,852	27,077	27,326	27,489	27,574	27,777	28,012
Passenger Ship	12,109	12,342	12,535	12,637	12,786	13,004	13,421	13,813	14,276	14,652
Passenger and Cargo	928	972	987	1,054	1,077	1,134	1,186	1,251	1,271	1,294
Reefer Cargo Vessel	22	22	22	22	22	22	23	23	24	24
Oil Tanker	30	30	31	31	32	32	32	32	33	33
Tug (Push and Pull)	1,233	1,253	1,263	1,273	1,290	1,327	1,340	1,355	1,375	1,399
Others	4,550	4,653	4,719	4,862	5,078	5,301	5,523	5,681	5,911	6,207
Non-Self-Propelled Vessel	2,189	2,225	2,273	2,406	2,516	2,623	2,706	2,835	2,943	3,024
Steel Barge/Raft	1,981	2,016	2,064	2,188	2,298	2,403	2,485	2,611	2,715	2,794
Wooden Barge/Raft	208	209	209	213	213	215	216	219	219	221
Others	0	0	0	5	5	5	5	5	9	9
Total	47,234	47,774	48,394	49,137	49,878	50,769	51,720	52,564	53,610	54,645

Number of Inland Waterways Fleet by Type of Vessel 2009 to 2018 (Registered)



Source : Marine Department

3.2 Inland Waterways Fleet

3.2.2 Number of Inland Waterways Fleet by Type of Vessel and Gross Tonnage 2018 (Registered)

(No. of Vessel)

Town of Versal	Gross Tonnage								
Type of Vessel	0.0-5.0	5.1-20.0	20.1-50.0	50.1-100.0	100.1-200.0	200.1-500.0	500.1-1,000.0	> 1,000	Total
Self-Propelled Vessel	35,075	9,948	4,837	894	707	127	19	14	51,621
General Cargo	16,575	6,238	3,822	668	629	74	1	5	28,012
Passenger Ship	12,744	1,316	435	99	25	18	9	6	14,652
Passenger and Cargo	956	251	54	20	8	5	0	0	1,294
Reefer Cargo Vessel	19	3	0	0	2	0	0	0	24
Oil Tanker	0	1	11	5	3	6	7	0	33
Tug (Push and Pull)	572	735	79	10	2	1	0	0	1,399
Others	4,209	1,404	436	92	38	23	2	3	6,207
Non-Self-Propelled Vessel	67	988	605	277	787	287	5	8	3,024
Steel Barge/Raft	52	900	534	258	767	270	5	8	2,794
Wooden Barge/Raft	9	86	70	19	20	17	0	0	221
Others	6	2	1	0	0	0	0	0	9
Total	35,142	10,936	5,442	1,171	1,494	414	24	22	54,645

Source : Marine Department

3.3.1 Inland Waterways Passenger

3.3.1.1 Inland Waterways Passenger Transport by Province 2014 to 2018

(Person)

(Trip)

No.	Province	2014	2015	2016	2017	2018
1	Amnat Chareon	3,640	3,640	3,640	5,424	5,290
2	Ang Thong	93,072	93,072	93,072	93,072	N/ Col
3	Bangkok Metropolis	3,605,697	3,980,750	5,080,090	4,719,100	6,354,240
4	Bueng Kan	N/ Col	N/ Col	N/ Col	43,200	43,200
5	Chachoengsao	77,794	443,000	229,176	232,509	115,251
6	Chai Nat	446,040	581,040	1,006,200	1,183,200	1,343,106
7	Chiang Mai	102,814	203,232	94,811	95,133	104,451
8	Chiang Rai	691,941	908,234	1,228,108	1,174,168	1,226,469
9	Kalasin	65,300	65,300	345,204	96,056	48,016
10	Kanchanaburi	67,662	375,112	415,616	355,664	508,842
11	Khon Kaen	42,600	42,600	375,060	127,720	46,233
12	Lampang	N/Col	N/ Col	N/ Col	N/ Col	11,586
13	Lamphun	N/ Col	N/ Col	N/ Col	N/ Col	9,455
14	Loei	42,000	42,000	42,000	38,304	37,728
15	Mae Hong Son	29,416	50,112	21,168	18,536	10,976
16	Mukdahan	68,740	68,740	68,740	68,740	78,660
17	Nakhon Pathom	106,752	97,080	106,140	117,264	135,120
18	Nakhon Phanom	51,060	51,060	51,060	51,060	47,544
19	Nakhon Sawan	523,615	574,936	590,004	605,590	1,057,256
20	Nong Khai	36,240	46,800	36,240	56,160	56,160

				(1rip)
2014	2015	2016	2017	2018
840	840	840	1,808	1,674
20,368	20,368	20,368	20,368	N/ Col
186,781	242,430	269,130	258,674	258,600
N/ Col	N/ Col	N/ Col	2,160	2,160
5,306	27,254	19,132	20,480	11,916
35,712	35,712	34,800	40,080	73,080
13,032	8,642	12,364	12,139	14,809
63,357	66,394	91,902	77,935	82,307
5,620	5,620	35,185	8,077	5,638
17,825	70,164	78,064	70,232	97,506
3,848	3,848	43,464	15,136	5,332
N/ Col	N/ Col	N/ Col	N/ Col	1,418
N/ Col	N/ Col	N/ Col	N/ Col	1,426
4,200	4,200	4,200	4,272	4,224
3,677	6,264	2,646	2,317	2,057
1,348	1,348	1,348	1,348	1,650
4,536	4,112	4,176	3,696	3,384
12,840	12,840	12,840	12,840	1,698
115,136	84,606	90,147	99,390	158,878
3,624	4,680	3,624	5,040	5,040

3.3.1 Inland Waterways Passenger

3.3.1.1 Inland Waterways Passenger Transport by Province 2014 to 2018 (Continued)

(Person)

(Trip)

No.	Province	2014	2015	2016	2017	2018
21	Nonthaburi	252,000	228,000	628,800	888,480	1,414,800
22	Pathum Thani	228,000	252,000	228,000	228,000	N/ Col
23	Phra Nakhon Sri Ayutthaya	302,048	302,048	302,048	302,048	167,440
24	Ratchaburi	1,215,024	1,196,784	1,310,900	1,036,944	950,592
25	Samut Sakhon	2,281,320	2,279,520	2,279,520	2,279,520	1,916,920
26	Samut Songkhram	53,568	57,431	57,431	58,712	270,400
27	Suphan Buri	40,800	28,800	40,800	46,200	50,850
28	Tak	98,698	58,063	51,843	51,243	46,252
29	Ubon Ratchathani	97,820	162,620	162,620	234,048	81,208
30	Uthai Thani	239,613	195,596	605,349	720,150	687,244
31	Uttaradit	8,508	8,508	8,508	8,508	16,831
	Total	10,871,782	12,396,078	15,462,148	14,934,753	16,842,120

2014	2015	2016	2017	2018
33,880	33,880	55,760	71,560	163,680
15,600	15,600	15,600	15,600	N/ Col
38,192	38,192	38,192	38,192	18,704
172,104	169,824	202,620	150,184	139,632
74,880	74,880	74,880	74,880	42,288
2,801	2,970	2,970	3,024	27,040
2,064	1,440	2,064	2,424	2,898
3,472	4,175	2,910	3,128	2,615
14,356	14,356	14,356	21,304	11,054
90,462	92,887	120,486	109,290	93,646
120	120	120	120	840
945,981	1,047,646	1,254,188	1,145,698	1,235,194

Remark: Survey data of passenger ships / tourist ports.

Source : Marine Department

3.3.2 Inland Waterways Freight

3.3.2.1 Inland Waterways Freight/Freight-kilometer Transport by Commodity Group 2014 to 2018

(Thousand Tons)

(Million Ton-kilometers)

(Thousand									(-kiloilletei <i>s)</i>
Commodity Group	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
1. Live Animals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Rice	2,766.01	3,105.02	2,677.51	3,681.35	3,067.24	550.73	470.65	363.47	470.41	403.82
3. Maize	1,131.00	234.80	478.62	563.60	448.53	215.68	27.82	57.78	62.14	55.07
4. Cassava	2,301.60	2,209.70	4,618.52	5,889.20	3,283.64	431.52	323.59	675.91	863.06	479.75
5. Sugar Cane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Rubber	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7. Wood, Timber	104.14	233.39	227.09	136.72	171.88	5.09	24.66	25.64	16.82	15.91
8. Other Agricultural Products	0.00	0.00	0.00	0.00	228.80	0.00	0.00	0.00	0.00	33.14
9. Animal Fodder	523.40	1,190.00	1,399.44	768.20	911.44	102.40	173.06	204.95	112.66	132.87
10. Sugars	1,264.40	1,274.00	1,158.43	1,097.60	1,727.16	183.07	199.15	186.52	163.22	241.84
11. Other Foodstuffs	3,069.70	2,272.94	0.60	0.00	80.00	554.44	325.02	0.02	0.00	10.57
12. Solid Mineral Fuels	12,083.00	13,243.80	13,130.56	11,733.40	14,926.51	2,253.14	1,939.54	1,925.02	1,720.70	2,188.97
13. Petroleum Products	257.73	497.50	386.80	302.56	378.37	32.75	65.13	51.08	39.99	50.00
14. Ores and Metal Wastes	1,279.60	1,738.13	2,048.42	1,660.20	1,913.21	247.91	241.11	289.59	234.90	277.25
15. Metal Products	223.68	265.20	414.39	734.60	617.03	34.83	19.92	43.28	91.82	79.20
16. Sand, Gravel, Clay and Slag	12,807.08	12,003.06	10,876.16	11,930.57	13,096.19	1,196.81	1,524.91	1,368.88	1,521.19	1,677.02
17. Cement	7,741.81	8,562.92	9,870.26	10,106.75	10,545.06	1,374.56	1,226.26	1,419.73	1,460.49	1,527.31
18. Other Minerals and Construction Materials	16.91	7.72	9.72	43.32	6.40	1.38	1.16	1.01	6.35	0.95
19. Fertilizers	4,376.60	3,889.80	2,882.40	4,159.00	4,204.70	784.48	570.08	421.98	609.92	616.08
20. Chemicals	104.20	90.80	88.00	216.00	101.92	17.39	13.45	12.63	29.71	14.02
21. Equipment, Other Manufactured Articles	0.00	2.05	2.18	2.51	0.59	0.00	0.30	0.40	0.40	0.09
22. Miscellaneous Articles, Containers	62.00	86.60	57.68	0.00	30.76	7.24	14.90	8.49	0.00	4.33
Total	50,112.86	50,907.43	50,326.78	53,025.58	55,739.44	7,993.44	7,160.72	7,056.38	7,403.77	7,808.17

Source: Marine Department, Information and Communication Technology, Ministry of Transport.

3.3.2 Inland Waterways Freight

3.3.2.2 Inland Waterways Freight Transport by Province of Origin and Destination 2018

(Ton)

No.	Province	Origin	Destination
1	Ang Thong	13,775,668	16,600
2	Ayutthaya	18,881,214	22,199,354
3	Bangkok Metropolis	198,608	6,961,648
4	Chachoengsao	0	105,464
5	Chon Buri	21,404,180	15,215,816
6	Narathiwat	0	22,840
7	Nonthaburi	44,736	997,170
8	Pathum Thani	634,280	3,620,012
9	Phetchaburi	0	19,360
10	Prachuap Khiri Khan	181,048	0
11	Rayong	27,184	0
12	Samut Prakan	525,958	5,199,178
13	Songkhla	0	56,878
14	Surat Thani	66,560	406,916
15	Other	0	918,200
	Total	55,739,436	55,739,436

Source: Marine Department, Information and Communication Technology, Ministry of Transport.

3.4 Inland Waterways Accident

3.4.1 Inland Waterways Accidents and Casualties by Province 2014 to 2018

(Person

(Person)

No.	Province
1	Bangkok Metropolis
2	Chiang Rai
3	Kanchanaburi
4	Nonthaburi
5	Phitsanulok
6	Phra Nakhon Sri Ayutthaya
7	Phrae
8	Samut Prakan
9	Samut Songkhram
10	Surat Thani
11	Tak
	Total

Reported Accidents								
2014	2015	2016	2017	2018				
N/A	7	5	2	5				
N/A	0	0	1	1				
N/A	0	0	0	0				
N/A	3	0	2	0				
N/A	0	1	0	0				
N/A	1	3	3	3				
N/A	0	1	0	0				
N/A	3	3	3	0				
N/A	2	0	7	0				
N/A	0	4	0	2				
N/A	0	0	1	0				
N/A	16	17	19	11				

Injuries							
2014	2015	2016	2017	2018			
N/A	0	68	0	4			
N/A	0	0	0	0			
N/A	0	0	0	0			
N/A	0	0	2	0			
N/A	0	0	0	0			
N/A	0	43	0	1			
N/A	0	0	0	0			
N/A	0	0	0	0			
N/A	0	0	11	0			
N/A	0	0	0	2			
N/A	0	0	4	0			
N/A	0	111	17	7			

				(
Dead and Missing									
2014	2015	2016	2017	2018					
N/A	0	1	1	0					
N/A	0	0	2	1					
N/A	0	0	0	0					
N/A	0	0	0	0					
N/A	0	4	0	0					
N/A	1	28	0	0					
N/A	0	1	0	0					
N/A	0	0	2	0					
N/A	1	0	1	0					
N/A	0	1	0	0					
N/A	0	0	0	0					
N/A	2	35	6	1					
				•					

Remark: Accidents are counted as follows

- It is an accident such as a ship collide.
- It is an incident if someone dies or is lost.
- It is an incident if more than 10 people are injured.
- except the boat/pontoon that is with the port is not operating in service

Source : Marine Department

3.5 Energy Consumption

3.5.1 Inland Waterways Energy Consumption for Transport sector 2014 to 2018

(Physical unit)

Type of Energy	unit	2014	2015	2016	2017	2018
Petroleum products	Million litres	162	173	181	222	225
Natural gas	MMscf.	0	0	0	0	0
Electricity	Gwh	0	0	0	0	0

(ktoe)

Type of Energy	2014	2015	2016	2017	2018
Petroleum products	140	149	156	191	194
Natural gas	0	0	0	0	0
Electricity	0	0	0	0	0
Total	140	149	156	191	194

Remarks : MMscf. = million standard cubic feet

Gwh = Gigawatt - hour

ktoe = Thousand tons of oil equivalent

Source: Department of Alternative Energy Development and Efficiency, Ministry of Energy.



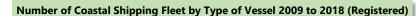
4. COASTAL SHIPPING TRANSPORT

4.1 Coastal Shipping Fleet

4.1.1 Number of Coastal Shipping Fleet by Type of Vessel 2009 to 2018 (Registered)

(No. of Vessel)

Type of Vessel	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Self-Propelled Vessel	32,201	35,177	40,090	44,726	48,148	52,785	64,332	67,925	70,705	73,002
General Cargo	2,653	2,715	2,760	2,784	2,808	2,859	2,972	3,032	3,071	3,113
Passenger Ship	9,637	10,416	11,221	11,944	12,938	14,244	15,634	17,230	18,605	19,825
Passenger and Cargo	523	529	535	540	549	576	590	600	607	614
Container Ship	19	24	28	31	38	41	44	45	52	55
Reefer Cargo Vessel	11	11	11	11	12	12	12	12	12	12
Oil Tanker	223	235	243	248	259	270	280	293	308	319
Gas Carrier	59	61	63	66	70	72	73	75	79	80
Oil / Gas Tanker	9	11	14	15	15	16	19	20	20	21
Fishing Vessel	9,506	11,189	14,787	18,115	20,063	22,703	31,645	32,708	33,184	33,238
Tug (Push and Pull)	910	954	988	1,021	1,064	1,110	1,166	1,216	1,295	1,347
Others	8,651	9,032	9,440	9,951	10,332	10,882	11,897	12,694	13,472	14,378
Non-Self-Propelled Vessel	2,898	3,009	3,098	3,193	3,342	3,465	3,576	3,687	3,809	3,898
Steel Barge/Raft	2,860	2,960	3,047	3,138	3,285	3,408	3,513	3,621	3,742	3,831
Wooden Barge/Raft	30	36	36	36	36	36	36	37	37	37
Others	8	13	15	19	21	21	27	29	30	30
Total	35,099	38,186	43,188	47,919	51,490	56,250	67,908	71,612	74,514	76,900





Source : Marine Department

4.1 Coastal Shipping Fleet

4.1.2 Number of Coastal Shipping Fleet by Type of Vessel and Gross Tonnage 2018 (Registered)

(No. of Vessel)

Town of Vessel					Gross Tonnage				
Type of Vessel	0.0-5.0	5.1-20.0	20.1-50.0	50.1-100.0	100.1-200.0	200.1-500.0	500.1-1,000.0	> 1,000	Total
Self-Propelled Vessel	38,180	18,704	9,080	4,336	1,359	726	225	392	73,002
General Cargo	769	882	590	265	246	198	62	101	3,113
Passenger Ship	8,925	8,472	1,639	534	138	95	11	11	19,825
Passenger and Cargo	310	120	72	32	21	32	9	18	614
Container Ship	1	12	0	0	0	0	11	31	55
Reefer Cargo Vessel	0	3	2	2	2	2	0	1	12
Oil Tanker	0	6	9	15	42	67	42	138	319
Gas Carrier	0	0	0	0	0	1	44	35	80
Oil / Gas Tanker	0	0	0	0	0	0	1	20	21
Fishing Vessel	18,623	6,424	4,554	2,841	695	95	5	1	33,238
Tug (Push and Pull)	11	228	514	361	122	106	5	0	1,347
Others	9,541	2,557	1,700	286	93	130	35	36	14,378
Non-Self-Propelled Vessel	34	54	106	68	173	1,395	1,398	670	3,898
Steel Barge/Raft	2	41	101	66	170	1,388	1,394	669	3,831
Wooden Barge/Raft	13	5	3	2	3	7	4	0	37
Others	19	8	2	0	0	0	0	1	30
Total	38,214	18,758	9,186	4,404	1,532	2,121	1,623	1,062	76,900

Source : Marine Department

4.2 Coastal Shipping Passenger and Freight

4.2.1 Coastal Shipping Passenger

4.2.1.1 Coastal Shipping Passenger Transport by Province 2014 to 2018

n) (Trip)
ı) (Tri

						(Person)
No.	Province	2014	2015	2016	2017	2018
1	Chanthaburi	28,204	92,500	197,112	180,328	205,384
2	Chon Buri	3,792,140	3,183,776	3,183,776	3,183,776	4,206,712
3	Chumphon	201,205	241,641	209,356	306,855	387,144
4	Krabi	1035160	4,486,370	4,671,492	5,099,730	4,566,234
5	Nakhon Si Thammarat	3,620,408	4,273,808	4,273,808	4,273,808	574,140
6	Narathiwat	902,340	1,164,520	983,600	1,027,912	961,826
7	Phachuap Khiri Khan	113,472	113,472	98,968	1,019,960	643,796
8	Phangnga	622,692	622,692	622,692	1,004,676	1,672,464
9	Phatthalung	50,560	50,560	50,560	50,560	31,692
10	Phetchaburi	2,320	2,320	2,320	2,320	8,568
11	Phuket	1,947,389	6,204,266	6,972,430	8,327,438	8,471,312
12	Ranong	473,600	473,600	473,600	640,100	1,257,740
13	Rayong	137,880	136,592	137,880	137,880	2,221,600
14	Satun	334,472	334,472	342,220	529,010	622,260
15	Songkhla	3,960,568	3,960,568	3,960,568	3,960,568	1,864,080
16	Surat Thani	1,216,768	1,632,576	1,574,384	1,574,384	1,547,368
17	Trang	70,296	117,404	121,952	129,530	99,180
18	Trat	1,802,280	1,802,280	1,802,280	1,802,280	3,612,640
	Total	20,311,754	28,893,417	29,678,998	33,251,115	32,954,140

				(Trip)
2014	2015	2016	2017	2018
1,440	7,536	14,704	14,478	16,008
27,912	22,012	22,012	22,012	122,720
1,895	1,808	1,876	2,119	3,240
50,560	84,420	83,135	106,568	292,050
102,126	110,464	110,464	110,464	38,276
67,778	67,052	68,190	69,795	59,081
14,568	14,568	3,560	58,243	37,718
38,428	38,428	38,428	48,020	88,563
6,320	6,320	6,320	6,320	5,282
320	320	320	320	1,428
77,694	199,158	244,020	362,763	254,556
37,304	37,304	37,304	47,354	96,090
2,672	2,802	2,672	2,672	57,160
3,448	3,448	6,883	13,350	14,476
29,420	29,420	29,420	29,420	28,176
15,424	14,072	14,584	14,584	55,572
3,888	6,965	7,051	7,307	5,672
20,880	20,880	20,880	20,880	31,080
502,077	666,977	711,823	936,669	1,207,148

Source : Marine Department

4.2 Coastal Shipping Passenger and Freight

4.2.2 Coastal Shipping Freight

4.2.2.1 Coastal Shipping Freight Transport by Commodity Group 2014 to 2018

(Thousand Tons)

(Million Ton-kilometers)

2018

2017

				(ousand rons)				
Commodity Group	2014	2015	2016	2017	2018	2014	2015	2016	
1. Live Animals	2	0	0	0	0	0.08	0.00	0.00	
2. Rice	162	273	286	265	315	95.12	174.24	180.46	
3. Maize	180	200	173	196	221	126.87	139.57	122.28	
4. Cassava	2	18	28	5	10	1.70	10.61	8.26	
5. Sugar Cane	0	0	0	0	0	0.00	0.00	0.00	
6. Rubber	0	0	64	86	7	0.00	0.00	4.62	
7. Wood, Timber	59	184	77	47	26	19.45	77.75	29.05	
8. Other Agricultural Products	776	693	759	454	511	333.40	301.04	331.75	
9. Animal Fodder	99	142	138	144	316	69.41	98.77	91.06	
10. Sugars	0	0	33	16	0	0.00	0.00	8.05	
11. Other Foodstuffs	54	35	56	62	113	21.73	11.46	26.89	
12. Solid Mineral Fuels	4	0	18,238	19,806	0	0.87	0.00	2,869.00	
13. Petroleum Products	34,647	39,424	19,090	20,788	39,096	6,305.31	6,339.41	3,519.51	
14. Ores and Metal Wastes	100	0	0	0	6	3.70	0.00	0.00	
15. Metal Products	795	457	765	660	870	155.63	86.88	147.82	
16. Sand, Gravel, Clay and Slag	22	40	39	85	117	3.44	13.81	14.71	
17. Cement	201	222	258	303	526	102.78	109.64	118.74	
18. Other Minerals and Construction Materials	183	356	292	333	291	93.84	197.38	147.97	
19. Fertilizers	79	17	60	51	28	21.11	10.46	9.42	
20. Chemicals	1,124	1,002	823	559	941	106.79	92.25	81.99	
21. Equipment, Other Manufactured Articles	6	3	3	5	52	1.39	2.01	1.34	
22. Miscellaneous Articles, Containers	8,178	8,804	9,711	16,984	18,352	845.65	865.46	973.75	
23. Unknown	0	1	0	0	0	0.00	0.10	0.00	
Total	46,673	51,872	50,894	60,850	61,798	8,308.28	8,530.83	8,686.67	

0.08	0.00	0.00	0.00	0.00
95.12	174.24	180.46	168.08	170.43
126.87	139.57	122.28	137.29	156.09
1.70	10.61	8.26	0.24	3.33
0.00	0.00	0.00	0.00	0.00
0.00	0.00	4.62	35.75	0.26
19.45	77.75	29.05	12.86	6.48
333.40	301.04	331.75	203.90	225.08
69.41	98.77	91.06	96.02	125.97
0.00	0.00	8.05	5.14	0.00
21.73	11.46	26.89	26.23	50.12
0.87	0.00	2,869.00	3,409.70	0.00
6,305.31	6,339.41	3,519.51	3,978.54	7,110.26
3.70	0.00	0.00	0.00	0.69
155.63	86.88	147.82	122.61	159.17
3.44	13.81	14.71	19.39	43.65
102.78	109.64	118.74	129.28	226.84
93.84	197.38	147.97	144.16	124.77
21.11	10.46	9.42	4.33	1.30
106.79	92.25	81.99	71.18	113.05
1.39	2.01	1.34	1.34	13.76
845.65	865.46	973.75	1,247.24	1,506.14
0.00	0.10	0.00	0.00	0.00
8,308.28	8,530.83	8,686.67	9,813.27	10,037.41

Source: Marine Department, Information and Communication Technology, Ministry of Transport.

4.2 Coastal Shipping Passenger and Freight

4.2.2 Coastal Shipping Freight

4.2.2.2 Coastal Shipping Freight Transport by Province of Origin and Destination 2018

(Ton)

			(Ion)		
No.	Province	Origin	Destination		
1	Bangkok Metropolis	3,896,982.42	14,681,976.37		
2	Chachoengsao	59,979.43	1,361,026.01		
3	Chon Buri	33,856,408.90	10,256,380.09		
4	Chumphon	117,200.00	385,273.83		
5	Krabi	7,156.37	2,402.00		
6	Nakhon Si Thammarat	338,584.42	17,922.94		
7	Narathiwat	0.00	3,600.00		
8	Pathum Thani	8,670.00	23,932.03		
9	Pattani	0.00	2,993.27		
10	Phachuap Khiri Khan	691,340.57	5,637.02		
11	Phetchaburi	0.00	10,691.00		
12	Phra Nakhon Sri Ayutthaya	152,498.66	220,779.34		
13	Phuket	0.00	173,141.99		
14	Ranong	1,419.56	0.00		
15	Ratchaburi	3,054.04	0.00		
16	Rayong	14,200,212.45	2,296,693.51		
17	Samut Prakan	6,241,938.14	15,817,685.59		
18	Samut Sakhon	27,620.97	4,727,776.78		
19	Samut Songkhram	57,688.62	1,762,896.38		
20	Songkhla	92,276.75	3,641,430.38		
21	Surat Thani	1,802,842.22	6,234,209.32		
22	Other	241,808.12	171,233.84		
	Total	61,797,681.66	61,797,681.66		

Source : Marine Department

4.3 Coastal Shipping Accident

4.3.1 Coastal Shipping Accidents and Casualties by Province 2014 to 2018

nı	

- (Pe	rc	^	n	١

(Person)

No.	Province
1	Chanthaburi
2	Chon Buri
3	Chumphon
4	Krabi
5	Nakhon Si Thammarat
6	Phachuap Khiri Khan
7	Phangnga
8	Phetchaburi
9	Phuket
10	Ranong
11	Rayong
12	Samut Prakan
13	Samut Sakhon
14	Satun
15	Songkhla
16	Surat Thani
17	Trat
	Total

	Reported Accidents									
2014	2015	2016	2017	2018						
N/A	0	0	0	0						
N/A	0	5	2	0						
N/A	0	0	0	0						
N/A	0	5	3	0						
N/A	1	0	0	0						
N/A	0	0	0	0						
N/A	2	0	0	0						
N/A	0	0	0	1						
N/A	4	1	2	3						
N/A	0	0	0	0						
N/A	0	0	2	0						
N/A	0	2	0	2						
N/A	0	0	0	2						
N/A	0	0	0	0						
N/A	0	2	0	0						
N/A	3	2	0	0						
N/A	0	0	1	0						
N/A	10	17	10	8						

				(Person)
		Injuries		
2014	2015	2016	2017	2018
N/A	0	0	0	0
N/A	0	0	5	3
N/A	0	0	0	0
N/A	0	8	4	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	0	0	0	1
N/A	0	30	0	3
N/A	0	0	0	0
N/A	0	0	1	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	1	0	0	0
N/A	0	0	0	0
N/A	1	38	10	7

				(Person)
	Dea	ad and Mi	ssing	
2014	2015	2016	2017	2018
N/A	0	0	0	0
N/A	0	1	0	2
N/A	0	0	0	0
N/A	0	1	0	0
N/A	1	0	0	0
N/A	0	0	0	0
N/A	1	0	0	0
N/A	0	0	0	3
N/A	0	0	1	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	0	0	0	0
N/A	1	0	0	0
N/A	0	0	1	0
N/A	3	2	2	5
				·

Remark: Accidents are counted as follows

- It is an accident such as a ship collide.
- It is an incident if someone dies or is lost.
- It is an incident if more than 10 people are injured.
- except the boat/pontoon that is with the port is not operating in service

Source : Marine Department

5. MARITIME TRANSPORT

5.1 Maritime Fleet

5.1.1 Number of Maritime Fleet by Type of Vessel 2009 to 2018 (Registered)

(No. of Vessel)

Type of Vessel	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
General Cargo	125	129	133	142	147	151	153	155	160	162
Passenger Ship	6	6	6	6	6	6	6	7	7	7
Passenger and Cargo	1	1	1	1	1	1	1	1	1	1
Container Ship	8	8	8	8	10	10	10	10	10	12
Reefer Cargo Vessel	13	14	14	14	14	14	14	15	15	17
Oil Tanker	6	6	6	8	12	13	14	16	18	18
Gas Carrier	13	14	16	17	18	18	18	21	23	26
Oil and Gas Tanker	4	5	5	6	6	6	7	10	13	15
Others	6	6	7	8	9	11	15	16	18	20
Total	182	189	196	210	223	230	238	251	265	278

Source : Marine Department

5.1 Maritime Fleet

5.1.2 Number of Maritime Fleet by Type of Vessel and Gross Tonnage 2018 (Registered)

(No. of Vessel)

Time of Vessel		Gross Tonnage							
Type of Vessel	0.0-5.0	5.1-20.0	20.1-50.0	50.1-100.0	100.1-200.0	200.1-500.0	500.1-1,000.0	> 1,000	Total
General Cargo	39	17	14	0	0	1	1	90	162
Passenger Ship	0	4	2	0	1	0	0	0	7
Passenger and Cargo	0	0	0	0	0	0	0	1	1
Container Ship	0	0	0	0	0	0	0	12	12
Reefer Cargo Vessel	0	0	0	0	0	0	0	17	17
Oil Tanker	0	0	0	0	0	0	0	18	18
Gas Carrier	0	0	0	0	0	0	0	26	26
Oil and Gas Tanker	0	0	0	0	0	0	0	15	15
Others	1	1	4	0	0	0	0	14	20
Total	40	22	20	0	1	1	1	193	278

Source : Marine Department

5.2 Maritime Freight

5.2.1 International Shipping Freight Transport by Commodity Group 2014 to 2018

(Thousand Tons)

Commodity Group	2014	2015	2016	2017	2018
1. Live Animals	0	0	0	0	0
2. Rice	84	3	2	9	14
3. Maize	0	0	0	0	0
4. Cassava	100	19	41	0	0
5. Sugar Cane	0	0	0	0	0
6. Rubber	315	221	259	215	188
7. Wood, Timber	3,395	2,568	994	1,471	1,333
8. Other Agricultural Products	279	166	127	383	456
9. Animal Fodder	13	37	25	28	32
10. Sugars	2,554	1,045	220	129	109
11. Other Foodstuffs	688	539	781	747	790
12. Solid Mineral Fuels	8,171	7,536	8,156	7,073	6,798
13. Petroleum Products	62,158	69,737	68,859	74,626	84,353
14. Ores and Metal Wastes	426	333	341	595	1,151
15. Metal Products	5,598	4,950	5,981	4,767	4,608
16. Sand, Gravel, Clay and Slag	986	1,131	715	1,119	1,033
17. Cement	4,158	4,468	4,316	1,311	1,755
18. Other Minerals and Construction Materials	11,615	9,643	8,172	7,933	9,126
19. Fertilizers	35	21	16	12	3
20. Chemicals	4,900	5,073	5,961	5,915	7,171
21. Equipment, Other Manufactured Articles	5,322	1,976	3,444	3,152	1,203
22. Miscellaneous Articles, Containers	41,140	57,348	62,533	67,956	60,249
23. Unknown	31,176	41,613	40,952	38,425	51,510
Total	183,113	208,427	211,894	215,869	231,884

Source : Marine Department

5.2 Maritime Freight

5.2.2 Maritime Freight Transport by Country/Province of Origin and Destination 2018

(Ton)

(Ton)

1 2	Country/Province Thailand Bangkok Metropolis Chashanness	Origin 82,176,569.20	Destination 179,947,302.52
1 2	Bangkok Metropolis		179,947,302.52
2	•	1.052.001.25	
	Chashaanssa	1,053,991.35	17,915,880.51
3	Chachoengsao	1,553.77	110,373.16
-	Chon Buri	43,491,582.58	98,563,291.66
4	Krabi	2,222,804.45	8,200.00
5	Nakhon Ratchasima	0.00	52.70
6	Nakhon Si Thammarat	2,244,435.98	0.00
7	Narathiwat	338,500.00	8,010.00
8	Pattani	70,514.24	2,500.27
9	Phuket	731,986.34	117,312.61
10	Phachuap Khiri Khan	119,612.08	2,212,805.79
11	Ranong	625,270.02	408,955.04
12	Rayong	14,181,675.14	57,160,173.32
13	Samut Prakan	125,343.40	960,028.59
14	Samut Sakhon	4,982.76	45,971.45
15	Samut Songkhram	16,750.00	126,307.03
16	Satun	51,389.44	455,506.76
17	Songkhla	10,284,649.29	979,987.00
18	Surat Thani	4,789,332.00	535,872.31
19	Trang	1,423,472.03	323,547.55
20	Trat	398,724.34	2,451.94
21	Other provinces	0.00	10,074.86
	Overseas	149,707,611.41	51,936,878.10
22	Africa	1.17	3,632.11
23	Algeria	257,966.32	0.00
24	Angola	498,466.80	0.00
25	Argentina	998,755.51	0.00
26	Australia	5,156,303.00	206,391.60

No.	Country/Province	Origin	Destination
	Overseas	149,707,611.41	51,936,878.10
27	Austria	73,552.62	15,594.60
28	Bahrain	166,502.70	7,406.00
29	Bangladesh	100,334.60	2,808,859.56
30	Belgium	63,010.39	0.00
31	Bolivia	125,942.00	0.00
32	Bosnia and Herzegovina	0.00	9.00
33	Brazil	2,992,138.71	8,281.86
34	Brunei	1,088,409.23	23,596.90
35	Cambodia	1,185,150.97	2,596,078.91
36	Canada	254,658.12	1.37
37	Chile	25,660.99	79,597.48
38	China	8,746,747.21	5,203,574.91
39	Croatia	77,000.87	0.00
40	Cyprus	0.00	35.81
41	Denmark	19,667.00	0.00
42	Djibouti	8,415.08	0.00
43	Egypt	405,402.83	28.30
44	England	379,613.60	0.00
45	Estonia	33,750.00	0.00
46	Federated States of Micronesia	94,139.65	0.00
47	Finland	57,426.00	0.00
48	France	11,318.00	20,000.00
49	Gabon	1,305.20	558.20
50	Germany	0.00	2,082.04
51	Guyana	0.00	1,650.69
52	Hong Kong	3,616,299.14	2,600,416.41
53	Iceland	51,219.71	0.00

5.2 Maritime Freight

5.2.2 Maritime Freight Transport by Country/Province of Origin and Destination 2018 (Continued)

(Ton)

			(Ton)
No.	Country/Province	Origin	Destination
	Overseas	149,707,611.41	51,936,878.10
54	India	725,230.19	894,962.73
55	Indonesia	25,557,013.35	3,435,424.88
56	Iran	739,105.78	311,661.18
57	Israel	76,600.00	0.00
58	Italy	31,569.40	0.00
59	Japan	5,594,064.95	2,397,514.99
60	Jordan	43.79	0.00
61	Kenya	0.00	466.70
62	Kiribati	38,331.00	0.00
63	Korea	5,011,925.01	466,847.34
64	Kuwait	693,887.56	9,766.88
65	Latvia	168,037.50	0.00
66	Liberia	126,211.20	0.00
67	Libya	172,216.20	0.00
68	Lithuania	85,800.00	0.00
69	Malaysia	10,130,979.33	5,971,675.95
70	Maldives	18,737.85	28,034.93
71	Malta	307.27	0.00
72	Marshall Islands	128,997.06	47,678.28
73	Mauritius	303,057.60	100,000.00
74	Myanmar	369,753.35	704,494.71
75	Netherlands	2,160.00	2,415.40
76	New Zealand	32.00	0.00
77	Nigeria	681,277.09	0.00
78	Norway	217,028.00	0.00
79	Oman	172,871.40	17,750.09
80	Pakistan	173,200.00	2,834.09

			(10)
No.	Country/Province	Origin	Destination
	Overseas	149,707,611.41	51,936,878.10
81	Papua New Guinea	252,298.99	36,254.00
82	Peru	7,134.00	0.00
83	Philippines	1,482,002.65	1,790,001.62
84	Qatar	6,070,860.27	389,699.51
85	Romania	57,401.71	2,434.02
86	Russia	2,170,900.63	75.26
87	Saudi Arabia	12,220,641.37	17,857.32
88	Seychelles	24,689.01	0.00
89	Singapore	18,609,791.03	13,538,925.32
90	Solomon Islands	10,227.59	0.00
91	Somalia	1,002.21	10,508.00
92	South Africa	72,188.52	5,564.57
93	Spain	1,589.79	10,500.00
94	Sri Lanka	350,181.28	81,265.22
95	Taiwan	980,773.25	875,769.34
96	Trinidad and Tobago	58,036.73	0.00
97	Turkey	481,988.88	0.00
98	Tuvalu	34,138.05	0.00
99	U.S.A.	3,617,200.75	40,740.19
100	Ukraine	472,579.04	0.00
101	United Arab Emirates	13,215,319.52	186,312.53
102	Vietnam	6,726,143.06	5,587,277.12
103	Other Countries	5,082,928.85	1,394,370.19
		ı	

Source : Marine Department

5.3 Maritime Accident

5.3.1 Maritime Accidents and Casualties by Province 2014 to 2018

(Shi	ps)

(Person

(Person)

No.	Province	
1	Chon Buri	
2	Chumphon	
3	Krabi	
4	Nakhon Si Thammarat	
5	Phangnga	
6	Phuket	
7	Rayong	
8	Surat Thani	
9	Trat	
	Total	

	Repo	rted Acci	dents							
2014	2015	2016	2017	2018						
N/A	1	0	2	1						
N/A	0	0	1	0						
N/A	0	2	0	0						
N/A	0	2	0	1						
N/A	0	2	0	1						
N/A	0	2	1	5						
N/A	0	0	0	4						
N/A	2	5	0	0						
N/A	0	2	1	0						
N/A	3	15	5	12						

	Injuries									
2014	2015	2016	2017	2018						
N/A	0	0	2	0						
N/A	0	0	0	0						
N/A	0	2	0	0						
N/A	0	0	0	0						
N/A	0	18	0	0						
N/A	0	1	0	0						
N/A	0	0	0	0						
N/A	4	0	0	0						
N/A	0	0	0	0						
N/A	4	21	2	0						

				(1 (13011)
	Dea	d and Mi	ssing	
2014	2015	2016	2017	2018
N/A	1	0	0	0
N/A	0	0	4	0
N/A	0	1	1	0
N/A	0	0	0	1
N/A	0	2	0	4
N/A	0	6	0	49
N/A	0	0	0	4
N/A	0	4	0	0
N/A	0	0	1	0
N/A	1	13	6	58

Remark: Accidents are counted as follows

- It is an accident such as a ship collide.
- It is an incident if someone dies or is lost.
- It is an incident if more than 10 people are injured.
- except the boat/pontoon that is with the port is not operating in service

Source : Marine Department

5.4 Energy Consumption

5.4.1 Maritime Energy Consumption for Transport sector 2014 to 2018

(Physical unit)

Type of Energy	unit	2014	2015	2016	2017	2018
Petroleum products	Million litres	1,083	1,226	1,297	1,239	1,480
Natural gas	MMscf.	0	0	0	0	0
Electricity	Gwh	0	0	0	0	0

(ktoe)

Type of Energy	2014	2015	2016	2017	2018
Petroleum products	1,019	1,154	1,221	1,166	1,393
Natural gas	0	0	0	0	0
Electricity	0	0	0	0	0
Total	1,019	1,154	1,221	1,166	1,393

Remarks : MMscf. = million standard cubic feet

Gwh = Gigawatt - hour

ktoe = Thousand tons of oil equivalent

Source: Department of Alternative Energy Development and Efficiency, Ministry of Energy.

6. AIR TRANSPORT

6.1 Air Infrastructure

6.1.1 Airports by Location, Runway

			Location			Runway	Apron		Airport Capacity	Passen	ger Terminal	Car park
No.	Airport	Lat	Long	Elevation (M.)	Area (Rai)	(M.)	(Sqm.)	No. of aircraft per day	Aircraft size and Dock	(Sqm.)	Person/hour (Departure + Arrival)	No. of car
1	Mae Hong Son	19 18 06.17503	97 58 30.19778	270	269	30 * 2,000	20,910	32	B737 - 2, ATR - 2, H - 3	8,140	300	280
2	Lampang	18 16 19.62007	99 30 14.62486	243	506	30 * 1,975	30,500	48	B737 - 4, ATR - 1, H - 2	5,300	300	100
3	Phrae	18 07 54.17004	100 09 52.62394	163	516	30 * 1,500	10,800	16	ATR 72 - 2, H - 2	1,550	150	60
4	Nannakhon	18 48 28.48955	100 47 00.31118	208	1,070	45 * 2,000	23,500	8	B737 - 4	5,750	300	170
5	Phitsanulok	16 46 58.56111	100 16 44.84842	44	1,380	45 * 3,000	41,250	24	B737 - 2, Aerobridge 1 (Airbus 1)	26,050	1,000	260
6	Phetchabun	16 40 33.70691	101 11 42.38674	137	4,121	45 * 2,100	22,228	32	B737 - 2, ATR 72 - 2, H - 2	11,000	450	165
7	Tak	16 53 45.55339	99 15 13.42428	144	1,300	30 * 1,500	10,800	48	ATR - 6	320	24	140
8	Mae Sot	16 41 59.39692	98 32 36.54166	210	770	30 * 1,500	10,800	16	ATR72 - 3	2,000	200	165
9	Ubon Ratchathani	15 15 04.59401	104 52 12.82123	120	3,876	45 * 3,000	32,400	40	40 B737 - 4, Aerobridge 2, B747 - 1		1,000	300
10	Udon Thani	17 23 11.17038	102 47 17.69278	176	2,000	45 * 3,000	81,000	40	40 A300 - 3, B373 - 5, B747 - 2, Aerobridge 2		1,200	300
11	Khon Kaen	16 27 52.38766	102 46 56.18979	192	1,113	45 * 3,050	42,900	32	32 A300 - 3 / B747 - 2, Aerobridge 2		1,000	500
12	Sakon Nakhon	17 11 42.50580	104 07 07.05547	160	1,000	45 * 2,600	25,000	16	B737 - 2	5,455	300	150
13	Loei	17 26 20.87567	101 43 19.43203	253	1,429	45 * 2,100	13,500	16	B737 - 2	2,500	250	100
14	Nakhon Ratchasima	14 56 58.18798	102 18 45.85788	229	4,625	45 * 2,100	27,455	32	B373 - 4	5,500	450	180
15	Nakhon Phanom	17 23 07.22133	104 38 30.79611	173	4,500	45 * 2,500	35,512	24	B373 - 3, H - 2	4,800	300	140
16	Buriram	15 13 36.35564	103 15 04.40755	180	2,500	45 * 2,100	27,450	16	B373 - 6	3,800	400	100
17	Roi Et	16 07 00.33696	103 46 25.67421	137	2,685	45 * 2,100	27,455	32	B373 - 2, ATR 72 - 2, H - 4	3,500	300	160
18	Hua Hin	12 37 49.14750	99 57 12.39930	0	450	35 * 2,100	12,800	8	B373 - 2	3,600	300	90
19	Ranong	09 46 39.44283	98 35 07.74324	14	2,447	45 * 2,000	21,600	24	B373 - 3	4,000	300	250
20	Chumphon	10 42 40.33180	99 21 42.16040	6	2,485	45 * 2,100	17,000	32	B373 - 2, ATR 72 - 2, H - 2	5,400	300	120
21	Surat Thani	09 08 10.09379	99 08 20.54531	6	3,225	45 * 3,000	45,000	40	A 300 - 4, B737 - 1 Aerobridge 1 , H - 4	14,000	800	210
22	Nakhon Si Thammarat	08 32 22.62010	99 56 41.01029	4	1,814	45 * 2,100	34,000	32	B737 - 9	5,400	450	150
23	Trang	07 30 31.02122	99 36 56.78869	18	1,659	45 * 2,100	20,400	16	B737 - 4	3,000	300	210
24	Pattani	06 47 08.5450	101 09 13.0850	2	807	40 * 1,400	3,600	8	ATR 72 - 1	530	80	12
25	Narathiwat	06 31 23.66015	101 44 41.42645	5	1,137	45 * 2,500	23,625	32	A300 - 1, B737 - 2, ATR - 1, H - 2	4,500	300	350

6.1 Air Infrastructure

6.1.1 Airports by Location, Runway (Continued)

			Location			Runway	Apron		Airport Capacity	Passen	ger Terminal	Car park
No.	Airport	Lat	Long	Elevation (M.)	Area (Rai)	(M.)	(Sqm.)	No. of aircraft per day	Aircraft size and Dock	(Sqm.)	Person/hour (Departure + Arrival)	No. of car
26	Krabi	08 06 00.58546	98 59 07.12569	21	2,620	45 * 3,000	73,305	32	B747 - 4, B737 - 6, Aerobridge 2	16,000	1,000	420
					_,-,	,			, , , , , , , , , , , , , , , , , , ,	10,200	500	
27	Pai	19 22 23	98 25 59	507	77	23 * 900	1,800	10	Small planes - 2	500	48	
28	Mae Sariang	18 10 55.38	97 55 40.4	332	195	18 * 750	1,800	10	Small planes - 2			
	Bangkok Don									22,266 (Dom)	3,280 (Dom)	
29	Mueang International Airport	ueang International 13 54 52	100 36 20	3	3,881	60 * 3,700	860,000	50	B747	109,033 (Inf 1) 106,586 (Int 2)	7,500 (Inf)	4,627
30	Bangkok Suvarnabhumi International Airport	13 41 09	100 44 56	1	19,251	60 * 3,700 60 * 4,000	1,053,00	76	A380	182,000	3,720 (Dom) 10,900 (Int)	15,677
31	Chiang Mai	18 46 17	98 57 46	316	1,095	45 * 3,100	105,500	24	B747	18,000 (Dom) 15,450	3,000 (Dom)	447
										(Int)	2,000 (Int)	
32	Hat Yai	06 55 58	100 23 42	28	56,461	45 * 3,050	56,461	20	B747	14,656	865 (Dom)	528
32	Tiut Tui	00 33 30	100 25 42	20	30,401	45 5,050	30,401	20	5747	14,030	633 (Int)	320
33	Mae Fah Luang - Chiang Rai International	19 57 08	99 52 59	390	3,627	45 * 3,000	28,800	14	B747	15,160	1,240	200
34	Phuket	16596	98 18 33	25	1,447	45 * 3,000	94,800	20	B747	23,369	1,750 (Dom) 1,560 (Int)	520

Source : Department of Airports

6.2 Air Fleet

6.2.1 Number of aircraft 2018

(Count)

Type of Aircraft Registration	No. of aircraft
HS-Commercial Aircraft	415
HS-Private Aircraft	225
U-Ultralight Private Aircraft	68
Total	708

(Count)

HS-Commercial Aircraft	No. of aircraft
Schedule Airline MTOW ⁽¹⁾ > 5,700 kg.	319
Schedule Airline MTOW ⁽¹⁾ < 5,700 kg.	5
Non-Schedule Airline MTOW ⁽¹⁾ > 5,700 kg.	13
Non-Schedule Airline MTOW ⁽¹⁾ < 5,700 kg.	13
NCA ⁽²⁾ -Helicopters	28
NCA ⁽²⁾ -Balloons	8
NCA ⁽²⁾ -Test flights	5
NCA ⁽²⁾ -Training flights	21
NCA ⁽²⁾ -Aerial work	3
Total	415

Remark: (1) MTOW: Maximum takeoff weight

(2) NCA: Non-Schedule Commercial Air Transport

Aircraft Registration as of 18 April 2019

Source: The Civil Aviation Authority of Thailand

6.3.1 Aircraft Movement

6.3.1.1 Domestic Aircraft Movement by Airport 2014 to 2018

(Trip)

						(Trip)
No.	Airport	2014	2015	2016	2017	2018
1	Mae Hong Son	2,698	1,884	2,607	1,832	1,940
2	Lampang	2,510	4,393	4,809	4,652	4,636
3	Phrae	554	804	1,203	1,334	1,460
4	Nannakhon	2,044	4,036	4,124	3,446	3,976
5	Phitsanulok	4,414	5,112	3,976	5,305	5,314
6	Phetchabun	20	34	6	4	56
7	Tak	0	0	0	0	0
8	Mae Sot	2,093	2,662	2,784	3,004	2,926
9	Ubon Ratchathani	7,815	10,947	11,698	12,050	11,800
10	Udon Thani	13,733	16,996	15,846	17,900	18,851
11	Khon Kaen	6,890	10,363	12,263	13,068	13,416
12	Sakon Nakhon	1,490	3,333	2,676	2,914	2,834
13	Loei	1,067	2,591	2,639	2,696	2,488
14	Nakhon Ratchasima	56	160	102	150	191
15	Nakhon Phanom	1,463	2,274	2,923	2,798	3,452
16	Buriram	480	1,508	2,269	2,609	3,197
17	Roi Et	1,038	3,074	3,222	3,520	3,719
18	Hua Hin	816	759	550	246	193
19	Ranong	1,382	1,503	1,487	1,608	2,532
20	Chumphon	1,590	1,562	1,502	1,486	2,034
21	Surat Thani	9,816	11,986	12,318	13,621	12,952
22	Nakhon Si Thammarat	18,842	19,299	18,970	18,104	17,005
23	Trang	3,619	4,076	4,302	5,176	4,412
24	Pattani	0	0	0	0	0
25	Narathiwat	806	1,585	2,031	1,884	1,474

6.3.1 Aircraft Movement

6.3.1.1 Domestic Aircraft Movement by Airport 2014 to 2018 (Continued)

(Trip)

No.	Airport	2014	2015	2016	2017	2018
26	Krabi	14,975	17,068	16,522	18,094	17,780
27	Pai	512	560	622	212	484
28	Mae Sariang	0	0	0	0	0
29	Bangkok Don Mueang International Airport	124,414	158,377	166,531	167,766	172,853
30	Bangkok Suvarnabhumi International Airport	67,505	69,662	78,172	89,110	91,967
31	Chiang Mai	42,737	49,821	53,642	55,265	57,077
32	Hat Yai	20,451	22,782	26,162	27,882	25,786
33	Mae Fah Luang - Chiang Rai International	10,533	12,866	14,089	16,654	18,098
34	Phuket	36,705	42,067	49,804	54,190	55,524
	Total	403,068	484,144	519,851	548,580	560,427

Source: Department of Airports, The Civil Aviation Authority of Thailand.

6.3.1 Aircraft Movement

6.3.1.2 International Aircraft Movement by Airport 2014 to 2018

(Trip)

No.	Airport	2014	2015	2016	2017	2018
1	Mae Hong Son	0	0	0	0	0
2	Lampang	0	0	0	0	0
3	Phrae	0	0	0	0	0
4	Nannakhon	0	0	0	0	0
5	Phitsanulok	0	0	0	0	0
6	Phetchabun	0	0	0	0	0
7	Tak	0	0	0	0	0
8	Mae Sot	206	0	1	56	114
9	Ubon Ratchathani	0	0	0	2	0
10	Udon Thani	0	12	0	2	5
11	Khon Kaen	0	0	0	1	0
12	Sakon Nakhon	0	0	0	0	0
13	Loei	0	0	0	0	0
14	Nakhon Ratchasima	0	0	5	2	3
15	Nakhon Phanom	0	0	0	0	0
16	Buriram	0	0	0	0	0
17	Roi Et	0	0	0	0	0
18	Hua Hin	17	45	53	36	273
19	Ranong	0	0	0	0	0
20	Chumphon	0	0	0	1	13
21	Surat Thani	703	1,280	1,514	1,778	1,050
22	Nakhon Si Thammarat	0	0	0	0	0
23	Trang	0	0	0	0	0
24	Pattani	0	0	0	0	0
25	Narathiwat	0	4	8	8	12

6.3.1 Aircraft Movement

6.3.1.2 International Aircraft Movement by Airport 2014 to 2018 (Continued)

(Trip)

No.	Airport	2014	2015	2016	2017	2018
26	Krabi	7,455	11,623	12,259	11,474	11,038
27	Pai	0	0	0	0	0
28	Mae Sariang	0	0	0	0	0
29	Bangkok Don Mueang International Airport	41,759	59,589	70,586	80,303	92,754
30	Bangkok Suvarnabhumi International Airport	231,071	256,653	270,892	276,739	293,434
31	Chiang Mai	10,590	14,669	15,037	16,349	20,881
32	Hat Yai	1,759	1,723	1,852	2,034	3,252
33	Mae Fah Luang - Chiang Rai International	314	312	429	852	1,834
34	Phuket	33,480	36,876	46,358	49,687	62,736
	Total	327,354	382,786	418,994	439,324	487,399

Source : Department of Airports, The Civil Aviation Authority of Thailand.

6.3.2 Air Passenger

6.3.2.1 Domestic Air Passenger Transport by Airport 2014 to 2018

(Person)

						(Person)	
No.	Airport	2014	2015	2016	2017	2018	
1	Mae Hong Son	34,578	39,740	55,368	61,432	63,328	
2	Lampang	120,520	261,744	290,584	280,062	268,638	
3	Phrae	23,853	48,673	73,076	81,511	88,971	
4	Nannakhon	114,474	349,264	376,494	349,956	428,202	
5	Phitsanulok	475,587	555,431	493,338	603,568	672,084	
6	Phetchabun	30	76	0	0	1,082	
7	Tak	0	0	0	0	0	
8	Mae Sot	92,979	144,598	175,672	178,001	188,703	
9	Ubon Ratchathani	1,078,630	1,466,623	1,726,269	1,791,689	1,833,240	
10	Udon Thani	1,682,581	2,214,754	2,337,617	2,577,506	2,651,309	
11	Khon Kaen	957,446	1,280,942	1,509,234	1,703,356	1,819,013	
12	Sakon Nakhon	199,529	425,453	347,360	378,717	383,551	
13	Loei	55,478	234,419	261,280	270,284	262,906	
14	Nakhon Ratchasima	41	3,152	78	6,966	10,918	
15	Nakhon Phanom	220,414	298,015	372,026	419,311	439,820	
16	Buriram	17,612	117,710	198,565	220,856	340,692	
17	Roi Et	69,998	284,667	334,955	395,609	432,704	
18	Hua Hin	11,442	12,396	11,857	2,713	94	
19	Ranong	63,901	90,206	102,483	121,472	214,250	
20	Chumphon	54,662	93,412	93,948	87,945	163,815	
21	Surat Thani	1,242,280	1,704,810	1,821,278	1,991,845	1,961,765	
22	Nakhon Si Thammarat	1,115,688	1,243,684	1,507,864	1,500,013	1,491,046	
23	Trang	529,365	612,019	648,979	799,277	691,270	
24	Pattani	0	0	0	0	0	
25	Narathiwat	118,710	163,974	239,432	256,558	213,411	

6.3.2 Air Passenger

6.3.2.1 Domestic Air Passenger Transport by Airport 2014 to 2018 (Continued)

(Person)

No.	Airport	2014	2015	2016	2017	2018
26	Krabi	1,670,173	2,130,215	2,274,642	2,454,593	2,531,733
27	Pai	4,399	5,481	6,067	2,110	1,779
28	Mae Sariang	0	0	0	0	0
29	Bangkok Don Mueang International Airport	15,552,330	21,127,871	23,316,023	23,934,742	24,801,444
30	Bangkok Suvarnabhumi International Airport	8,257,072	8,668,241	9,814,839	11,283,632	11,818,243
31	Chiang Mai	5,307,591	6,457,192	7,345,544	7,926,447	8,323,313
32	Hat Yai	2,927,005	3,405,879	3,750,965	4,080,009	3,905,877
33	Mae Fah Luang - Chiang Rai International	1,349,667	1,718,456	2,028,679	2,383,172	2,640,306
34	Phuket	4,976,252	5,896,088	6,996,156	7,652,285	7,818,558
	Total	48,324,287	61,055,185	68,510,672	73,795,637	76,462,065

Source : Department of Airports, The Civil Aviation Authority of Thailand.

6.3.2 Air Passenger

6.3.2.2 International Air Passenger Transport by Airport 2014 to 2018

(Person)

No.	Airport	2014	2015	2016	2017	2018
1	Mae Hong Son	0	0	0	0	0
2	Lampang	0	0	0	0	0
3	Phrae	0	0	0	0	0
4	Nannakhon	0	0	0	0	0
5	Phitsanulok	0	0	0	0	0
6	Phetchabun	0	0	0	0	0
7	Tak	0	0	0	0	0
8	Mae Sot	3,363	0	0	2,093	4,770
9	Ubon Ratchathani	0	0	0	5	0
10	Udon Thani	0	43	0	172	0
11	Khon Kaen	0	0	0	0	0
12	Sakon Nakhon	0	0	0	0	0
13	Loei	0	0	0	0	0
14	Nakhon Ratchasima	0	0	11	0	10
15	Nakhon Phanom	0	0	0	0	0
16	Buriram	0	0	0	0	0
17	Roi Et	0	0	0	0	0
18	Hua Hin	82	112	150	67	34,685
19	Ranong	0	0	0	0	0
20	Chumphon	0	0	0	3	0
21	Surat Thani	79,385	152,526	213,286	255,013	146,862
22	Nakhon Si Thammarat	0	0	0	0	0
23	Trang	0	0	0	0	0
24	Pattani	0	0	0	0	0
25	Narathiwat	0	0	2,289	2,306	3,445

6.3.2 Air Passenger

6.3.2.2 International Air Passenger Transport by Airport 2014 to 2018 (Continued)

(Person)

No.	Airport	2014	2015	2016	2017	2018
26	Krabi	1,030,139	1,559,294	1,817,410	1,889,645	1,662,031
27	Pai	0	0	0	0	0
28	Mae Sariang	0	0	0	0	0
29	Bangkok Don Mueang International Airport	5,795,185	8,833,544	10,998,293	13,462,715	15,688,588
30	Bangkok Suvarnabhumi International Airport	36,034,941	42,329,769	44,576,708	48,274,664	50,665,749
31	Chiang Mai	1,162,989	1,799,419	1,917,965	2,081,971	2,648,192
32	Hat Yai	216,164	232,968	251,477	277,859	352,746
33	Mae Fah Luang - Chiang Rai International	21,992	22,885	30,709	112,166	226,900
34	Phuket	4,881,141	5,572,271	7,356,680	8,354,295	10,354,541
	Total	49,225,381	60,502,831	67,164,978	74,712,974	81,788,519

Source : Department of Airports, The Civil Aviation Authority of Thailand.

6.3.3 Air Freight

6.3.3.1 Domestic Air Freight Transport by Airport 2014 to 2018

(Ton)

No.	Airport	2014	2015	2016	2017	2018
1	Mae Hong Son	11	0	0	0	0
2	Lampang	35	48	108	106	34
3	Phrae	0	0	0	0	0
4	Nannakhon	16	22	53	29	0
5	Phitsanulok	255	951	1,097	458	144
6	Phetchabun	0	0	0	0	0
7	Tak	0	0	0	0	0
8	Mae Sot	0	3	22	0	0
9	Ubon Ratchathani	1,818	2,465	2,303	1,684	726
10	Udon Thani	3,591	3,680	3,369	2,452	1,330
11	Khon Kaen	1,768	1,726	2,084	1,370	682
12	Sakon Nakhon	29	108	278	271	85
13	Loei	0	0	17	24	24
14	Nakhon Ratchasima	0	0	0	0	0
15	Nakhon Phanom	0	0	0	0	0
16	Buriram	0	0	0	0	0
17	Roi Et	1	6	88	36	58
18	Hua Hin	0	0	0	0	0
19	Ranong	0	3	15	0	0
20	Chumphon	0	0	0	0	0
21	Surat Thani	1,570	1,601	1,575	1,032	1,145
22	Nakhon Si Thammarat	1,226	914	1,110	825	634
23	Trang	420	441	426	406	291
24	Pattani	0	0	0	0	0
25	Narathiwat	0	0	0	0	0

6.3.3 Air Freight

6.3.3.1 Domestic Air Freight Transport by Airport 2014 to 2018 (Continued)

(Ton)

No.	Airport	2014	2015	2016	2017	2018
26	Krabi	2,026	2,279	2,276	1,542	1,648
27	Pai	0	0	0	0	0
28	Mae Sariang	0	0	0	0	0
29	Bangkok Don Mueang International Airport	11,773	14,212	12,978	10,680	8,245
30	Bangkok Suvarnabhumi International Airport	39,842	40,367	46,134	44,224	39,731
31	Chiang Mai	16,672	16,853	17,175	16,038	12,998
32	Hat Yai	9,286	9,690	9,043	9,562	8,434
33	Mae Fah Luang - Chiang Rai International	3,557	4,490	4,720	4,287	3,532
34	Phuket	17,647	14,060	14,667	15,653	15,888
	Total	111,544	113,918	119,540	110,677	95,631

Source : Department of Airports, The Civil Aviation Authority of Thailand.

6.3.3 Air Freight

6.3.3.2 International Air Freight Transport by Airport 2014 to 2018

(Ton)

No.	Airport	2014	2015	2016	2017	2018
1	Mae Hong Son	0	0	0	0	0
2	Lampang	0	0	0	0	0
3	Phrae	0	0	0	0	0
4	Nannakhon	0	0	0	0	0
5	Phitsanulok	0	0	0	0	0
6	Phetchabun	0	0	0	0	0
7	Tak	0	0	0	0	0
8	Mae Sot	0	0	0	0	0
9	Ubon Ratchathani	0	0	0	0	0
10	Udon Thani	0	0	0	0	0
11	Khon Kaen	0	0	0	0	0
12	Sakon Nakhon	0	0	0	0	0
13	Loei	0	0	0	0	0
14	Nakhon Ratchasima	0	0	0	0	0
15	Nakhon Phanom	0	0	0	0	0
16	Buriram	0	0	0	0	0
17	Roi Et	0	0	0	0	0
18	Hua Hin	0	0	0	0	0
19	Ranong	0	0	0	0	0
20	Chumphon	0	0	0	0	0
21	Surat Thani	1	1	1	5	0
22	Nakhon Si Thammarat	0	0	0	0	0
23	Trang	0	0	0	0	0
24	Pattani	0	0	0	0	0
25	Narathiwat	0	0	0	0	0

6.3.3 Air Freight

6.3.3.2 International Air Freight Transport by Airport 2014 to 2018 (Continued)

(Ton)

No.	Airport	2014	2015	2016	2017	2018
26	Krabi	0	0	0	2	4
27	Pai	0	0	0	0	0
28	Mae Sariang	0	0	0	0	0
29	Bangkok Don Mueang International Airport	11,935	22,310	40,988	46,987	46,862
30	Bangkok Suvarnabhumi International Airport	1,190,376	1,187,055	1,258,288	1,392,722	1,454,025
31	Chiang Mai	1,039	1,501	1,299	1,207	1,618
32	Hat Yai	0	0	0	0	10
33	Mae Fah Luang - Chiang Rai International	0	0	0	0	0
34	Phuket	21,841	23,498	28,484	36,473	42,371
	Total	1,225,192	1,234,365	1,329,061	1,477,396	1,544,890

Source : Department of Airports, The Civil Aviation Authority of Thailand.

6.4 Air Accident

6.4.1 Air Accidents and Casualties 2014 to 2018

Air Accidents
Reported Accidents (Cases)
Dead (Person)
Serious injury (Person)
Minor injury (Person)

2014	2015	2016	2017	2018
4	5	12	9	13
1	2	5	2	7
1	3	2	7	6
0	0	14	1	3

Remark : ข้อมูลจากสถิติการเกิดอุบัติตามภาคผนวก 13 ปี 2557-2561

Source : สำนักงานคณะกรรมการสอบสวนอุบัติเหตุและอุบัติการณ์ของอากาศยาน (สสอ.) กระหรวงคมนาคม

6.5 Energy Consumption

6.5.1 Domestic Air Energy Consumption for Transport sector 2014 to 2018

(Physical unit)

Type of Energy	unit	2014	2015	2016	2017	2018
Petroleum products	Million litres	765	896	1,001	926	993
Natural gas	MMscf.	0	0	0	0	0
Electricity	Gwh	0	0	0	0	0

(ktoe)

Type of Energy	2014	2015	2016	2017	2018
Petroleum products	625	732	818	757	856
Natural gas	0	0	0	0	0
Electricity	0	0	0	0	0
Total	625	732	818	757	856

Remarks : MMscf. = million standard cubic feet

Gwh = Gigawatt - hour

ktoe = Thousand tons of oil equivalent

Source : Department of Alternative Energy Development and Efficiency, Ministry of Energy.

6.5 Energy Consumption

6.5.2 International Air Energy Consumption for Transport sector 2014 to 2018

(Physical unit)

Type of Energy	unit	2014	2015	2016	2017	2018
Petroleum products	Million litres	4,748	5,138	5,467	5,817	6,103
Natural gas	MMscf.	0	0	0	0	0
Electricity	Gwh	0	0	0	0	0

(ktoe)

Type of Energy	2014	2015	2016	2017	2018
Petroleum products	3,881	4,200	4,469	4,755	4,944
Natural gas	0	0	0	0	0
Electricity	0	0	0	0	0
Total	3,881	4,200	4,469	4,755	4,944

Remarks : MMscf. = million standard cubic feet

Gwh = Gigawatt - hour

ktoe = Thousand tons of oil equivalent

Source: Department of Alternative Energy Development and Efficiency, Ministry of Energy.