

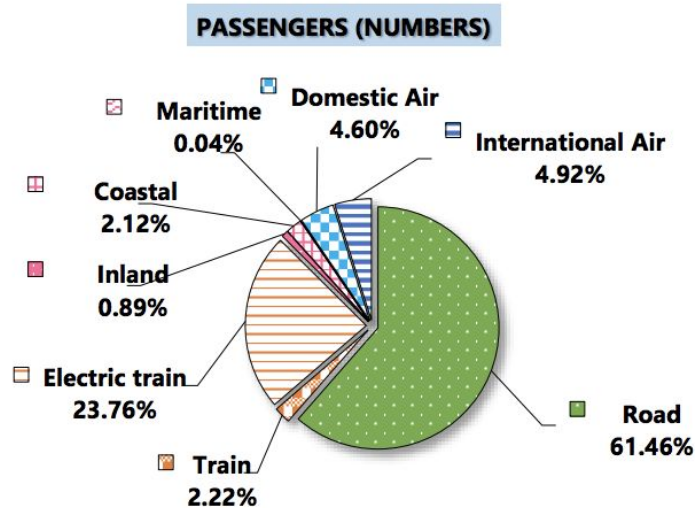
TRANSPORTATION IN THAILAND

Supanuth	Peganant	6104640161
Thanyawit	Chaiyakul	6104640492
Panachai	Ngaechoenkul	6104640732
Ussanai	Banjongsil	6104641565



Introduction and Project's Background

There are several modes of transportation in Thailand that comes in with different shapes and sizes, which are provided to meet with various customers' need.



According to the graph,
The majority numbers of the percentage are Road, Domestic and International air, and Electric train, following by others.

Source : Transport statistic 2018, Ministry of Transport

Introduction and Project's Background



Sources of data

Primary Data

- Interview and Observation Method
- Based on surrounding experience (Thai people usually go back to hometown during long weekends or holidays)

Secondary Data

- Website (Google trends)
- Published Materials from Government Statistics (Department of Transportation)

Briefs of analytical methodologies

Phase 1 : Baselining

- Baseline current activity and identify issues and concerns in Thailand
- Review innovation about transportation in Thailand

Phase 2 : Define and align objectives

- Align objectives and define targets
- Define what is appropriate for gathering the data towards transportation in Thailand

Phase 3 : Gathering and Analyzing

- Gathering raw data from research of Bank of Thailand and Google Trends
- Normalize raw data in Excel and run regression in both excel and stata to compared
- Use the data from regression to conduct graph in excel to make the clear picture

Phase 4 : Summarizing

- Summarize the result and make a policy recommendation

Briefs of analytical methodologies



SUMMARY OUTPUT									
<i>Regression Statistics</i>									
Multiple R	0.883949								
R Square	0.781366								
Adjusted R	0.775831								
Standard E	0.220371								
Observatio	163								
<i>ANOVA</i>									
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>				
Regression	4	27.42223	6.855556	141.1671	4.32E-51				
Residual	158	7.67302	0.048563						
Total	162	35.09524							
	<i>Coefficient</i>	<i>Standard Err</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>	
Intercept	0.635596	0.075509	8.417488	2.18E-14	0.486459	0.784733	0.486459	0.784733	
X Variable	0.13068	0.044993	2.90443	0.004207	0.041814	0.219546	0.041814	0.219546	
X Variable	0.253023	0.019449	13.00934	9.16E-27	0.214609	0.291438	0.214609	0.291438	
X Variable	-0.12133	0.069056	-1.75696	0.080862	-0.25772	0.015063	-0.25772	0.015063	
X Variable	0.151403	0.041749	3.626476	0.000387	0.068944	0.233862	0.068944	0.233862	

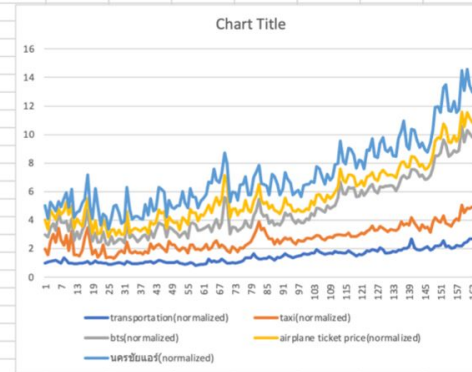


Source	SS	df	MS	Number of obs	=	163
Model	27.4222258	4	6.85555646	F(4, 158)	=	141.17
Residual	7.67301923	158	.048563413	Prob > F	=	0.0000
Total	35.0952451	162	.216637315	R-squared	=	0.7814
				Adj R-squared	=	0.7758
				Root MSE	=	.22037

var12	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
var13	.1306801	.0449934	2.90	0.004	.0418141	.2195462
var14	.2530235	.0194494	13.01	0.000	.2146092	.2914378
var15	-.1213289	.0690562	-1.76	0.081	-.2577213	.0150635
var16	.1514033	.0417494	3.63	0.000	.0689443	.2338622
_cons	.6355959	.075509	8.42	0.000	.4864587	.7847331

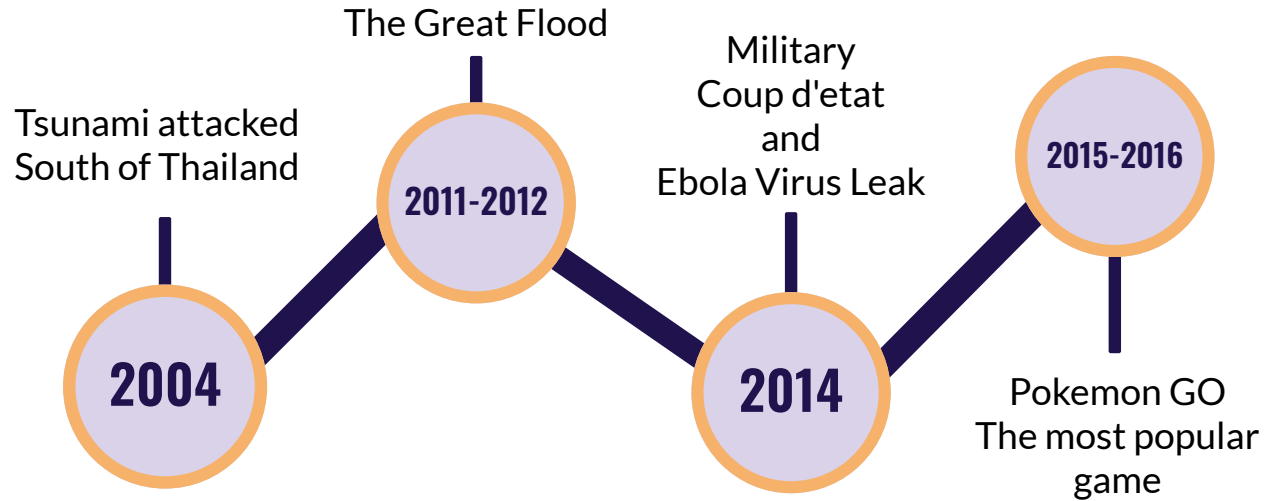
Briefs of analytical methodologies

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1		transportat	transportat	taxi(normal	airplane tic	airplane tic	airplane tic	airplane tic	airplane tic	airplane tic	airplane tic	airplane tic	airplane tic							
2	2004-08	91.2	1	1	1	1	1	1	1	1	1	1	1							
3	2004-09	98.4	1.078719	0.5	1.214286	0.559322	0.757576		4	17	33	25								
4	2004-10	102.5	1.123232	1.375	0.928571	1.305085	0.515152		11	13	77	17								
5	2004-11	106.3	1.165113	1.875	0.714286	0.59322	0.606061		15	10	35	20								
6	2004-12	108.0	1.18419	1.25	0.857143	0.762712	0.575758		10	12	45	19								
7	2005-01	95.8	1.050214	2.375	1.214286	0.169492	0.515152		19	17	10	17								
8	2005-02	91.1	0.998684	1.625	1.214286	0.542373	0.545455		13	17	32	18								
9	2005-03	122.8	1.346124	0.875	1.571429	0.864407	0.848485		7	22	51	28								
10	2005-04	108.7	1.191536	1.75	1	1.322034	0.666667		14	14	78	22								
11	2005-05	90.5	0.991777	0.875	1.357143	1.169492	0.515152		7	19	69	17								
12	2005-06	89.5	0.980923	2.25	0.857143	0.932203	1.181818		18	12	55	39								
13	2005-07	84.3	0.924131	0.625	1	0.881356	0.757576		5	14	52	25								
14	2005-08	85.3	0.935424	0.625	1.642857	0.898305	0.454545		5	23	53	15								
15	2005-09	90.1	0.988159	0.5	1.214286	1.118644	0.818182		4	17	66	27								
16	2005-10	91.6	1.004605	0.875	1.428571	0.254237	1.666667		7	20	15	55								
17	2005-11	93.1	1.020283	1.75	0.857143	1.033898	0.818182		14	12	61	27								
18	2005-12	101.4	1.116111	2.375	1.285714	0.728814	1.666667		19	18	43	55								
19	2006-01	86.0	0.94255	1.5	0.785714	0.932203	0.757576		12	11	55	25								
20	2006-02	88.6	0.970837	0.625	0.928571	0.559322	1.030303		5	13	33	34								
21	2006-03	104.3	1.143186	0.75	1.214286	0.864407	2.242424		6	17	51	74								
22	2006-04	92.1	1.010087	0.375	1.071429	0.559322	2		3	15	33	66								
23	2006-05	91.8	1.006469	0.625	0.857143	0.627119	0.545455		5	12	37	18								
24	2006-06	91.5	1.003289	1.25	0.928571	0.864407	0.393939		10	13	51	13								
25	2006-07	88.4	0.969631	0.375	1	1.135593	0.757576		3	14	67	25								
26	2006-08	82.7	0.906699	0.5	0.857143	0.542373	0.545455		4	12	32	18								
27	2006-09	83.3	0.912839	0.5	1.428571	0.474576	0.878788		4	20	28	29								
28	2006-10	84.6	0.926982	0.375	1.071429	0.966102	1.636364		3	15	57	54								
29	2006-11	90.3	0.989694	0.5	1	0.440678	2.121212		4	14	26	70								
30	2006-12	94.0	1.030479	0.75	0.928571	0.610169	1.151515		6	13	36	38								
31	2007-01	89.2	0.978292	0.875	0.785714	0.355932	0.757576		7	11	21	25								
32	2007-02	84.0	0.920952	0.75	0.714286	0.644068	0.909091		6	10	38	30								
33	2007-03	100.2	1.098564	1.375	1.285714	0.830508	1.727273		11	18	49	57								
34	2007-04	93.8	1.028615	0.75	1	0.305085	1.636364		6	14	18	54								
35	2007-05	85.2	0.934327	0.75	1.285714	0.322034	0.757576		6	18	19	25								
36	2007-06	85.7	0.939042	0.875	0.928571	0.677966	0.848485		7	13	40	28								
37	2007-07	85.4	0.93663	0.75	0.785714	0.898305	0.909091		6	11	53	30								
38	2007-08	90.4	0.991339	0.75	0.928571	0.559322	0.878788		6	13	33	29								
39	2007-09	89.5	0.981362	0.625	1.285714	0.491525	0.666667		5	18	29	22								
40	2007-10	98.5	1.080364	0.75	1.142857	0.508475	1.606061		6	16	30	53								
41	2007-11	97.6	1.070497	0.625	0.928571	0.423729	1.30303		5	13	25	43								
42	2007-12	99.7	1.092863	1.25	0.928571	0.627119	1.636364		10	13	37	54								
43	2008-01	90.3	0.990462	1	0.785714	0.898305	0.969697		8	11	53	32								
44	2008-02	98.5	1.079487	1.125	1.071429	0.576271	0.909091		9	15	34	30								



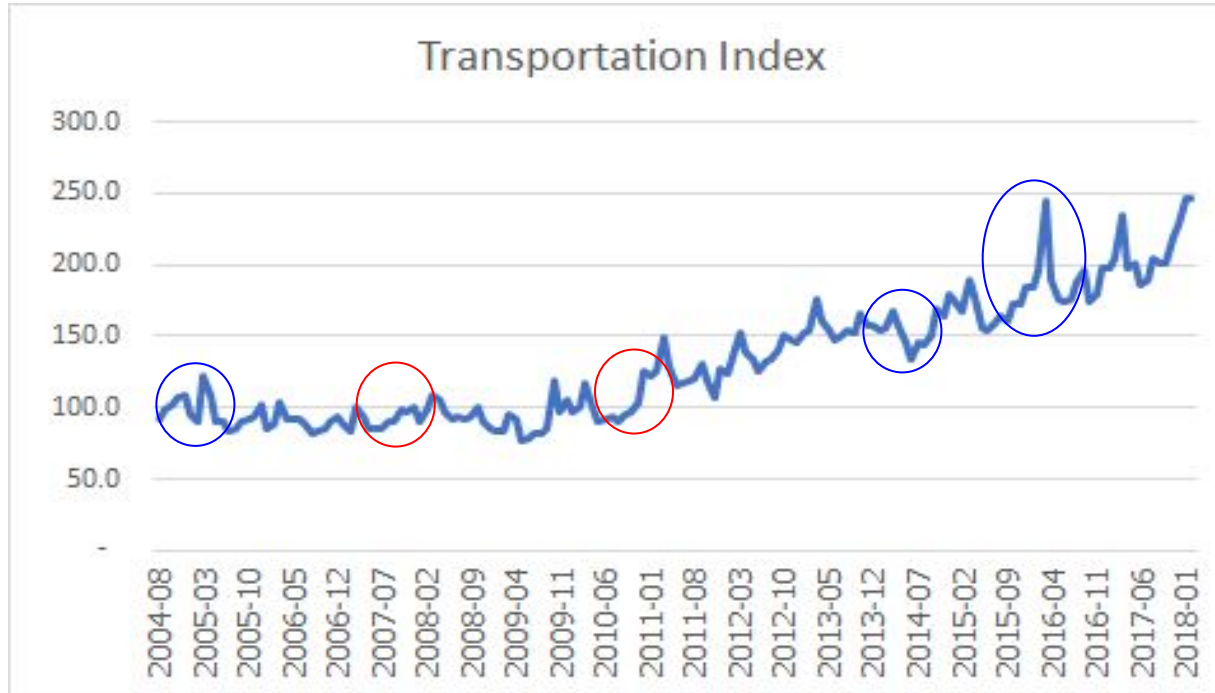
Results

These are obvious news and crisis that were revealed to represent the impact on transportation.



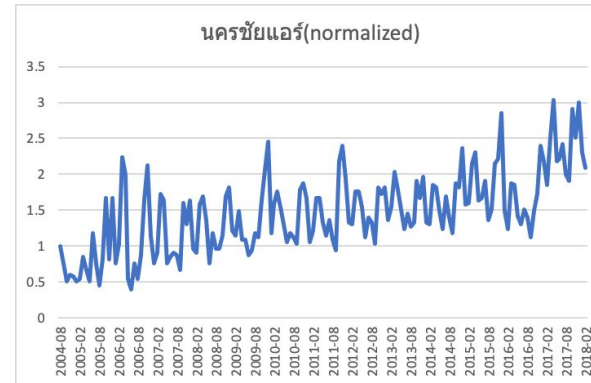
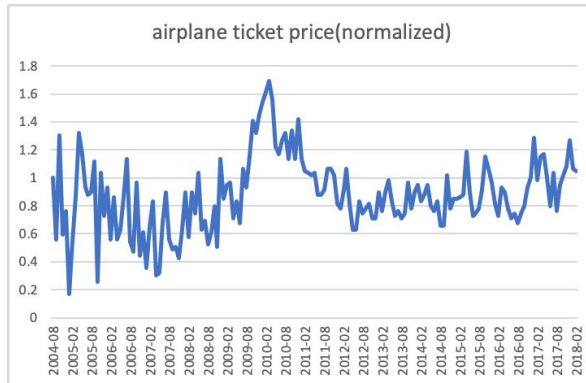
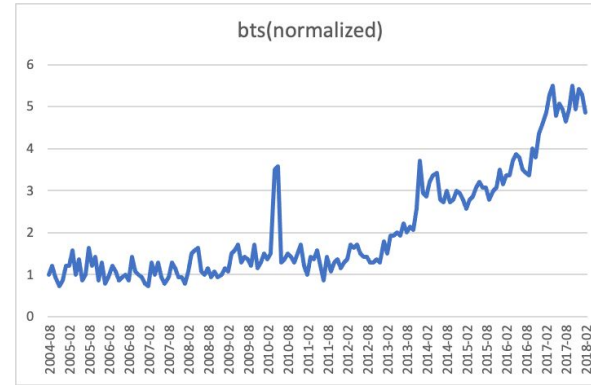
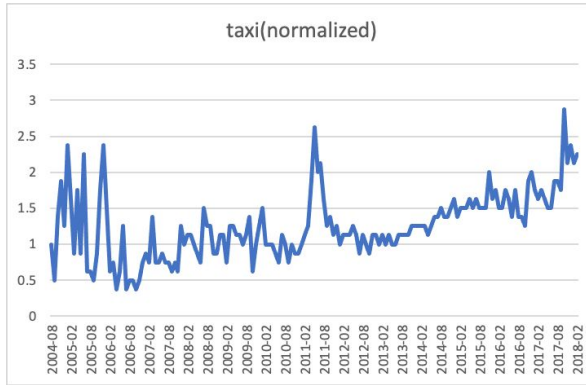
Results

Transportation indexes, used as a conventional indicator



Results

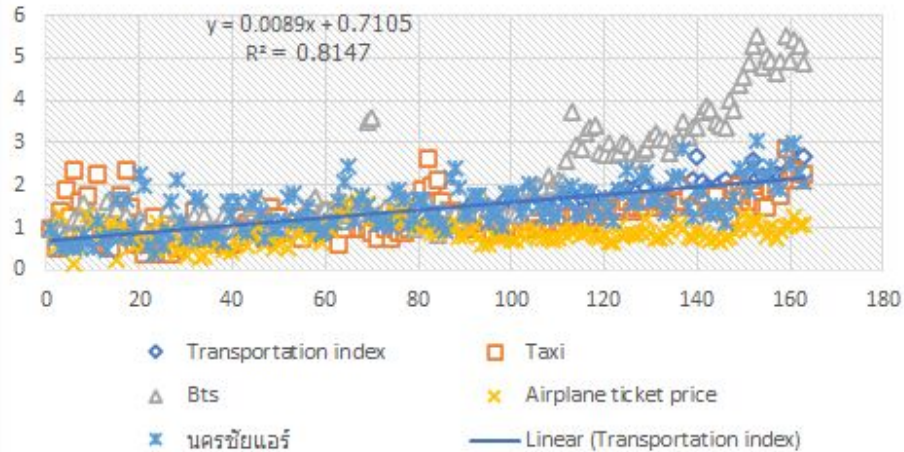
Taxi, BTS, Airplane ticket, and Nakorn Chai Air are used as alternative indicators



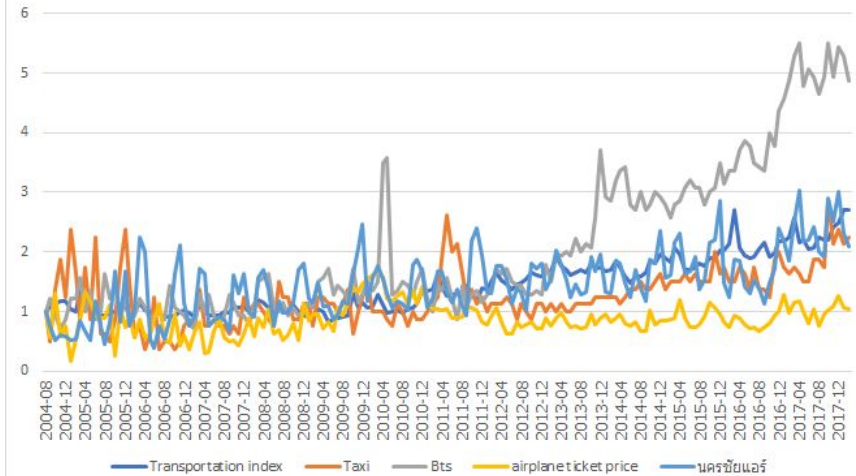
Results

Relationships between conventional and alternative indicators

Conventional and alternative indicators

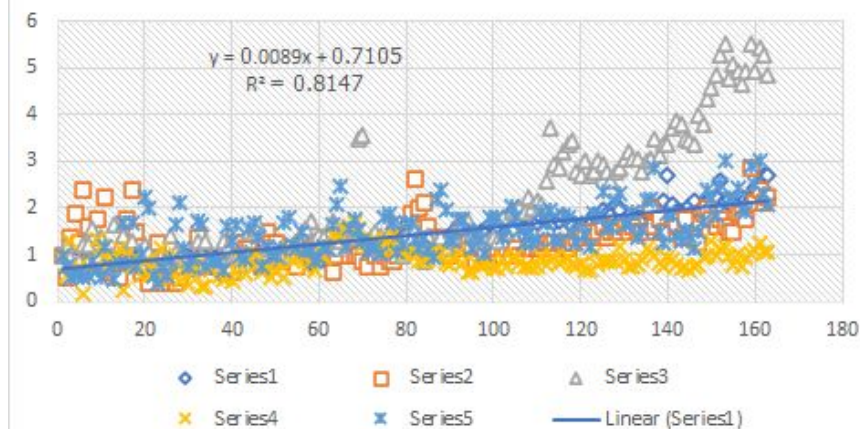


Trends of conventional and alternative indicators



Key findings

Chart Title



Source	SS	df	MS	Number of obs	=	163
Model	27.4222258	4	6.85555646	F(4, 158)	=	141.17
Residual	7.67301923	158	.048563413	Prob > F	=	0.0000
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_cons	.6355959	.075509	8.42	0.000	.4864587	.7847331

Summary and Policy Recommendation

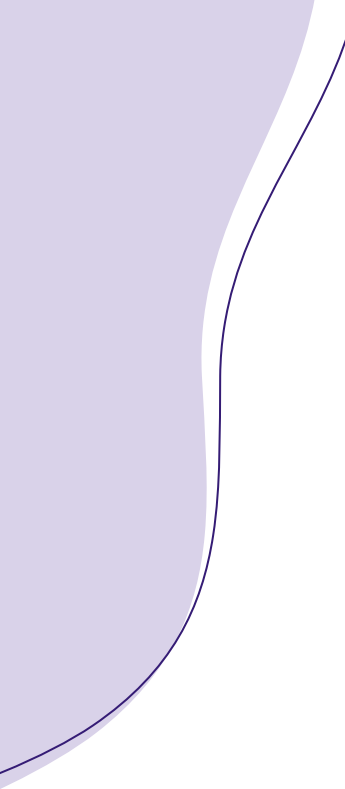


Summary

- The most used transport is the transport is on-the-road transports
- The traffic and the roads do not support every on-the-road transport at all
- People who can afford a car do not use any public transports and it leads to the traffic jam

Policy Recommendation

- Make public transports effective, prepared, and adequate for Thai people in order to solve traffic problems
- Google Trend can act as a forecaster of what will be a new trend in an upcoming time



**THANK YOU AND
IT'S Q&A TIME!**