

National Capacity Building Workshop on Sustainable and Inclusive
Transport Development

Current Status of Urban Transport System in Vientiane Capital



3-4TH JULY 2014
VIENTIANE CAPITAL, LAO PDR

BY MR. PHONGSAVANH INTHAVONGSA
DEPARTMENT OF ROAD-BRIDGE AND TRANSPORT
FACULTY OF ENGINEERING, NUOL

Contents



- I. Background
- II. Transport Policy
- III. Infrastructure
- IV. Current Traffic situation
- V. Public Transport
- VI. Traffic Management

I. Background(1)

-Geography:(2013)

Area: 236,800 km²
 Population: 6,644,009 persons
 Population Density: 28 persons/km²
 GDP per capital 1396 USD
 Growth Rate GDP 7.9 %
 Total Share of GDP
 - Agriculture:26.0%
 - Industry :31.2%
 - Services :37%
 Total : 94.3%

-Length of Border : Total 5,083km

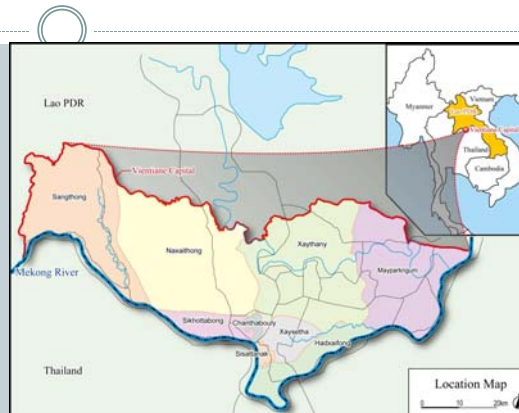
North : P.R China 505 km
 South: Kingdom of Cambodia 535 km
 East : S.R Vietnam 2,069 km
 North-West: U. Myanmar 236 km
 West : Kingdom of Thailand 1,835 km



I. Background(2)

Vientiane capital, Lao PDR

- Population: 810,846 people
- Area: 3920 km²
- Urban Transport System
 - No Mass Transit System
 - Urban Bus and Para transit System



II. Policy-Urban Transport System

- Public Road Law
- Land Transport Law
- Land Traffic Law
- Decree on Penalty

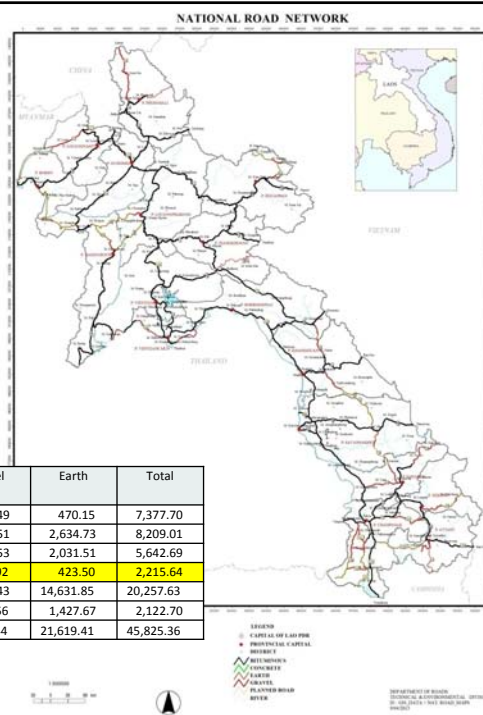
III. Infrastructure(1)

Vientiane Capital Urban Road Network

	Length(KM)
- Concrete	72.18
- Asphalt Concrete	46.34
- Paved	191.78
- Gravel	179.19
- Earth	98.18
Total	587.67

Type of Road Network in Lao PDR

Road Types	Concrete	Asphalt Concrete	Paved	Gravel	Earth	Total
National Roads	48.03	600.44	4,630.59	1,628.49	470.15	7,377.70
Provincial Roads	39.10	37.90	901.77	4,595.51	2,634.73	8,209.01
District Roads	8.56	7.50	276.59	3,318.53	2,031.51	5,642.69
Urban Roads	113.46	87.21	682.54	908.92	423.50	2,215.64
Rural Roads	1.50	184.85	5,439.43	14,631.85	20,257.63	
Special Roads	10.88	2.43	212.16	469.56	1,427.67	2,122.70
Total	221.53	735.48	6,888.49	16,360.44	21,619.41	45,825.36



Source: Department of Road, MPWT(2013)

III. Infrastructure(2)

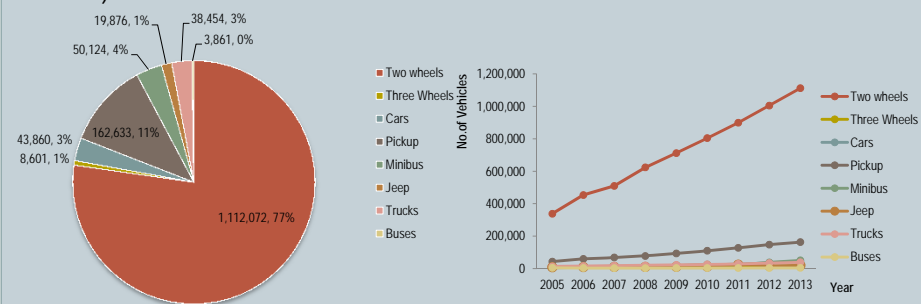
Main Road Network in Vientiane capital



IV. Current Traffic situation(1)

The Traffic Growth in Lao PDR

- Total No. of Vehicles officially registered increased about 16.45% between the year 2005 – 2013.
- Motorcycle(Two Wheels and Three Wheels) has the highest share of 78%, while Light Vehicles are 19% (Cars, Pick up, Minibus and Jeep), Heavy vehicles are 3%(Trucks and Buses).

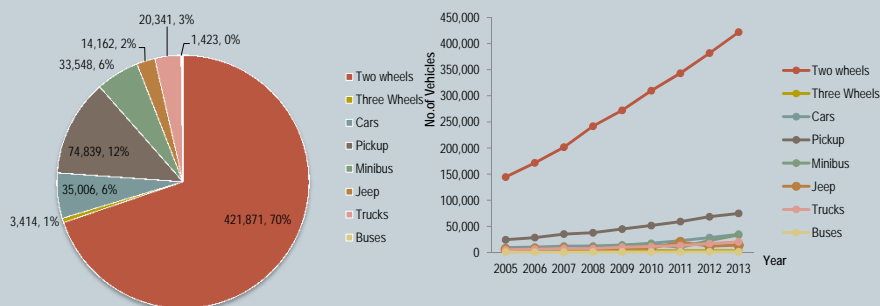


Note: Not including Army, Police, International Organization and Foreigners

IV. Current Traffic situation(2)

The Traffic Growth in Vientiane capital

- Total No. of Vehicles officially registered increased about 15.03% between the year 2005 - 2013
- Motorcycle(Two Wheels and Three Wheels) has the highest share of 70.34%, while Light Vehicles are 26.06% (Cars, Pick up, Minibus and Jeep), Heavy vehicles are 3.06%(Trucks and Buses).

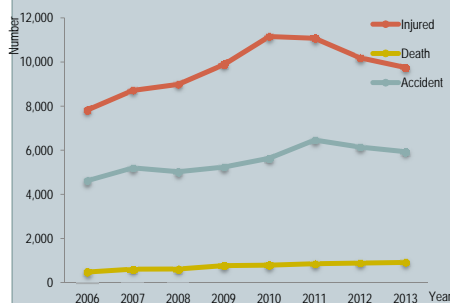


Note: Not including Army, Police, International Organization and Foreigners

IV. Current Traffic situation(3)

Traffic Accident Situation in Lao PDR.

- Death Rate per 100,000 population=11.85
- Death Rate per 10,000 vehicles = 7.89
- Death Rate per accident = 13.25%



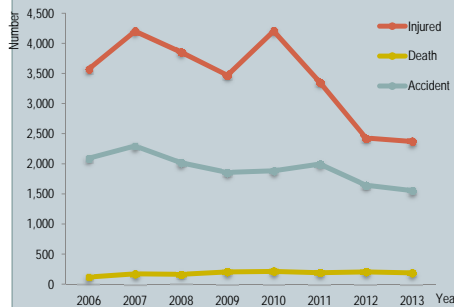
Year	Population	Vehicle Registration	Fatalities	Accident
2006	5747,587	568,290	480	4,620
2007	5873,016	641,081	608	5,198
2008	6000,380	768,606	616	5,025
2009	6127,911	886,348	765	5,233
2010	6256,197	1008,788	790	5,638
2011	6385,057	1141,858	856	6,462
2012	6514,432	1288,700	888	6,146
2013	6644,009	1439,481	910	5,931

Year	Road traffic Fatality rates		
	100,000 ppopulation	Registered vehicles (10,000 vehicles)	Accident
2006	8.35	8.45	10.39%
2007	10.35	9.48	11.70%
2008	10.27	8.01	12.26%
2009	12.48	8.63	14.62%
2010	12.63	7.83	14.01%
2011	13.41	7.50	13.25%
2012	13.63	6.89	14.45%
2013	13.70	6.32	15.34%

IV. Current Traffic situation(4)

Traffic Accident Situation in Vientiane

- Death Rate per 100,000 population= 23.81
- Death Rate per 10,000 vehicles = 4.76
- Death Rate per accident = 9.72%



Year	Population	Vehicle Registration	Fatalities	Accident
2006	711,919	231,869	119	2,091
2007	725,820	275,473	171	2,295
2008	740,010	319,511	165	2,015
2009	754,384	365,903	203	1,857
2010	768,743	419,167	212	1,884
2011	783,032	472,079	191	1,994
2012	797,130	535,535	205	1,644
2013	810,846	604,604	189	1,554

Year	Road traffic Fatality rates		
	100,000 ppopulation	Registered vehicles (10,000 vehicles)	Accident
2006	16.72	5.13	5.69%
2007	23.56	6.21	7.45%
2008	22.30	5.16	8.19%
2009	26.91	5.55	10.93%
2010	27.58	5.06	11.25%
2011	24.39	4.05	9.58%
2012	25.72	3.83	12.47%
2013	23.31	3.13	12.16%

IV. Current Traffic situation(5)

Cause of Accident

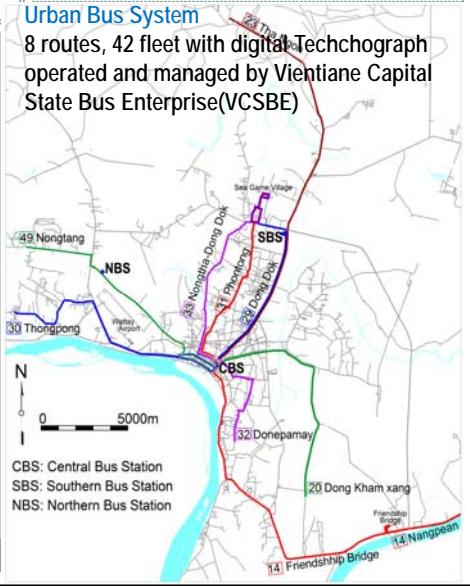
- Direct human causes
 - Maximum Speed Limit
 - Improper passing
 - Failure to yield right
 - Failure to temporary stop/slow down/turn
 - Disregarding traffic signal/marking
 - Un knowledge
- Indirect human causes
 - Drunkenness
 - Sleepy

V. Public Transport (1)



Urban Bus System

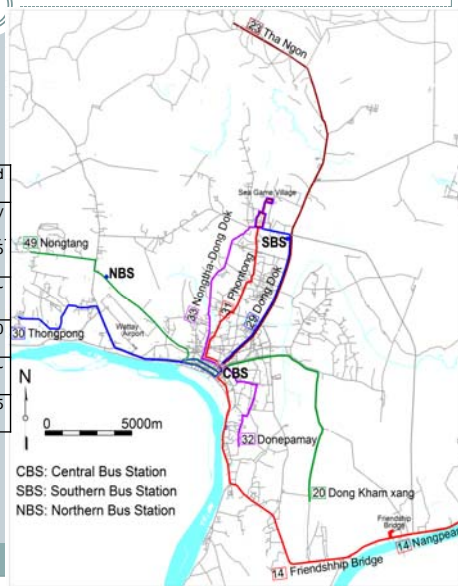
8 routes, 42 fleet with digital Techchograph operated and managed by Vientiane Capital State Bus Enterprise(VCSBE)



V. Public Transport (2)

Bus Route Within Vientiane Capital(VCSBE)

No.	Route	Fare (kip)	CBS departure time and headway
14	CBS – Friendship Bridge	6,000	5:50 – 18:00, every 15–20 minutes
23	CBS – SBS - Tha Ngon	5,000	5:50 – 17:30, every 25 minutes
29	CBS – SBS - Dong Dok – Sea Game Village (SGV)	3,000	6:30 – 18:00, every 15 – 20 minutes
31	CBS – Phontong – Dong Dok – SGV	3,000	6:00 – 17:20, every 20 minutes
33	CBS – Nongtha – Dong Dok – SGV	3,000	6:10 – 17:20, every 30 – 60 minutes
49	CBS – Sikay – Nongtang	4,000	6:15 – 17:30, every 35 minutes



V. Public Transport (3)

Para-Transit System

Operated and managed by Association (DPWT)



Motorcycle Taxi



Tuk-Tuk and Jumbo



Sonteo



Taxi

V. Traffic Management

- Traffic congestion on main road occur in morning peak and Evening peak
 - Highly increasing of private vehicle used
 - On-street parking – illegal parking
- Uncoordinated traffic lights system, unadjusted to the current traffic flows,
- Lack of enforcement,
- Parking lots within Core Area is not enough space(Land used and Building development)

