

6th Regional EST Forum
India, 4-6 Dec 2011

**Efforts on Environmentally Sustainable Transport
“EST” in Laos**

Lao PDR

04 Dec 2011

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Outline

1. Background
2. History of EST in Laos
3. Progress of EST Strategy & Action Plan
4. Current Activities

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1. Background (1)



- Hub of GMS & ASEAN
- Landlocked Country
- Land Area: 236,800 km²
- Population: 6,127,910
- GDP per capita: 914 USD
- Vehicles: 1,000,000 Units

Source: Lao Dpt of Statistics (2009)

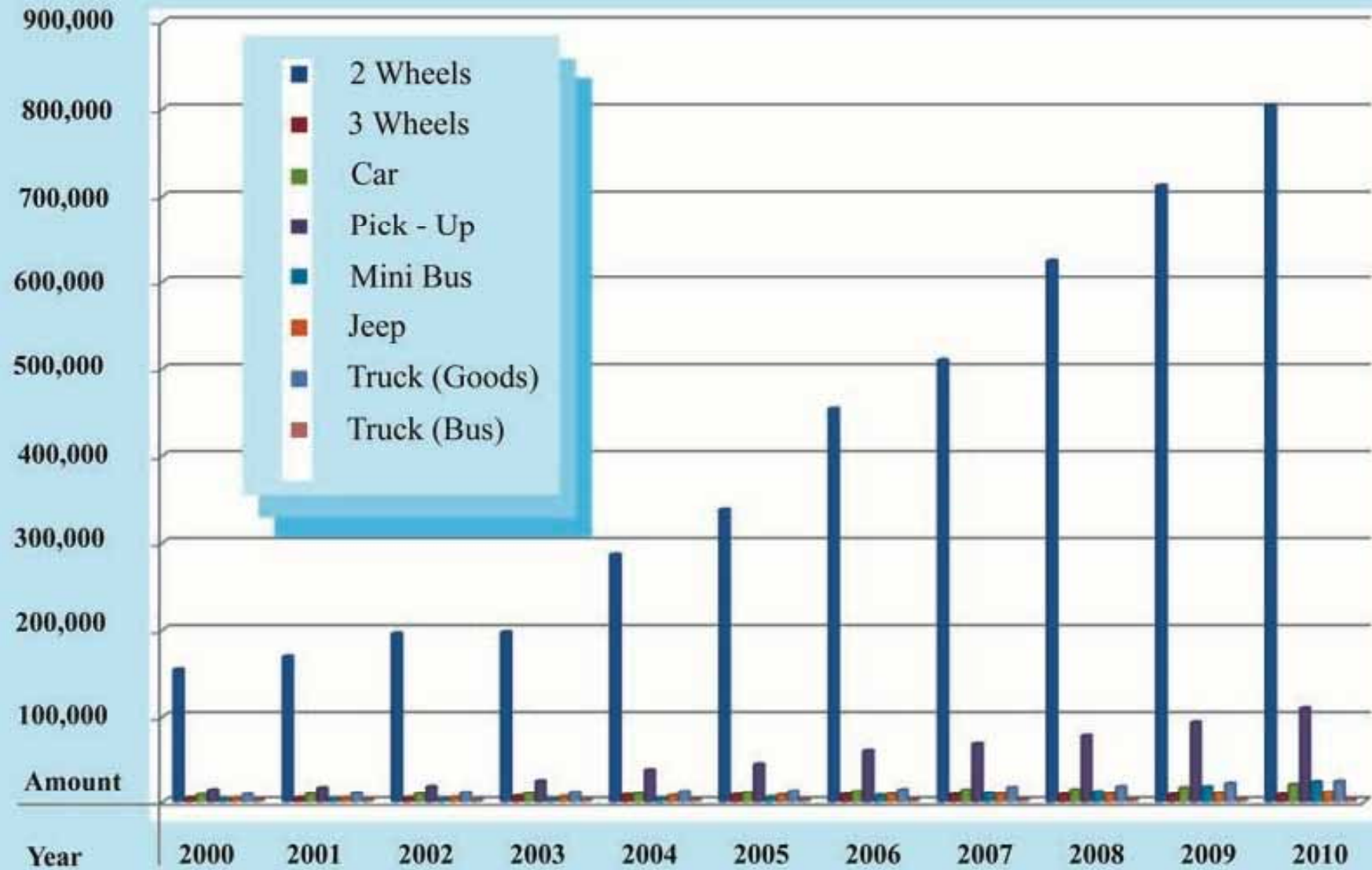
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ສະຖິຕິການຂຶ້ນທະບຽນ ພາຫະນະ ຂອງແຕ່ລະແຂວງ ໃນຂອບເຂດທົ່ວປະເທດ ຮອດເດືອນ 12/2010 Vehicle Registration Statistics in Lao PDR, December 2010 (by year)

Year	Vehicle Type									Percentage
	Motorcycle		Ligh Vehicle				Truck			
	2 Wheels	3 Wheels	Cars	Pick-up	Mini Bus	Jeep	Goods	Bus	Total	
2000	153,781	4,347	8,045	15,074	2,199	3,970	8,424	1,831	197,671	
2001	168,379	4,405	8,995	17,581	2,603	4,355	10,559	1,899	218,776	11%
2002	195,353	4,405	9,428	19,042	2,691	4,584	11,346	2,042	248,891	14%
2003	196,963	6,407	9,696	25,490	2,729	5,832	11,841	2,164	261,122	5%
2004	285,740	7,871	10,063	38,214	3,777	6,949	13,085	2,179	367,878	41%
2005	337,719	8,043	11,204	45,029	4,862	7,909	13,441	2,199	430,406	17%
2006	453,158	8,441	12,939	60,352	7,236	8,668	15,296	2,200	568,290	32%
2007	509,421	8,518	14,792	68,360	10,355	9,399	17,994	2,242	641,081	13%
2008	623,310	8,460	15,203	77,616	12,675	9,752	19,070	2,520	768,606	20%
2009	711,800	8,624	17,671	93,080	18,634	10,801	23,031	2,707	886,348	15%
2010	804,087	8,542	21,638	109,362	24,727	12,155	25,452	2,825	1,008,788	14%

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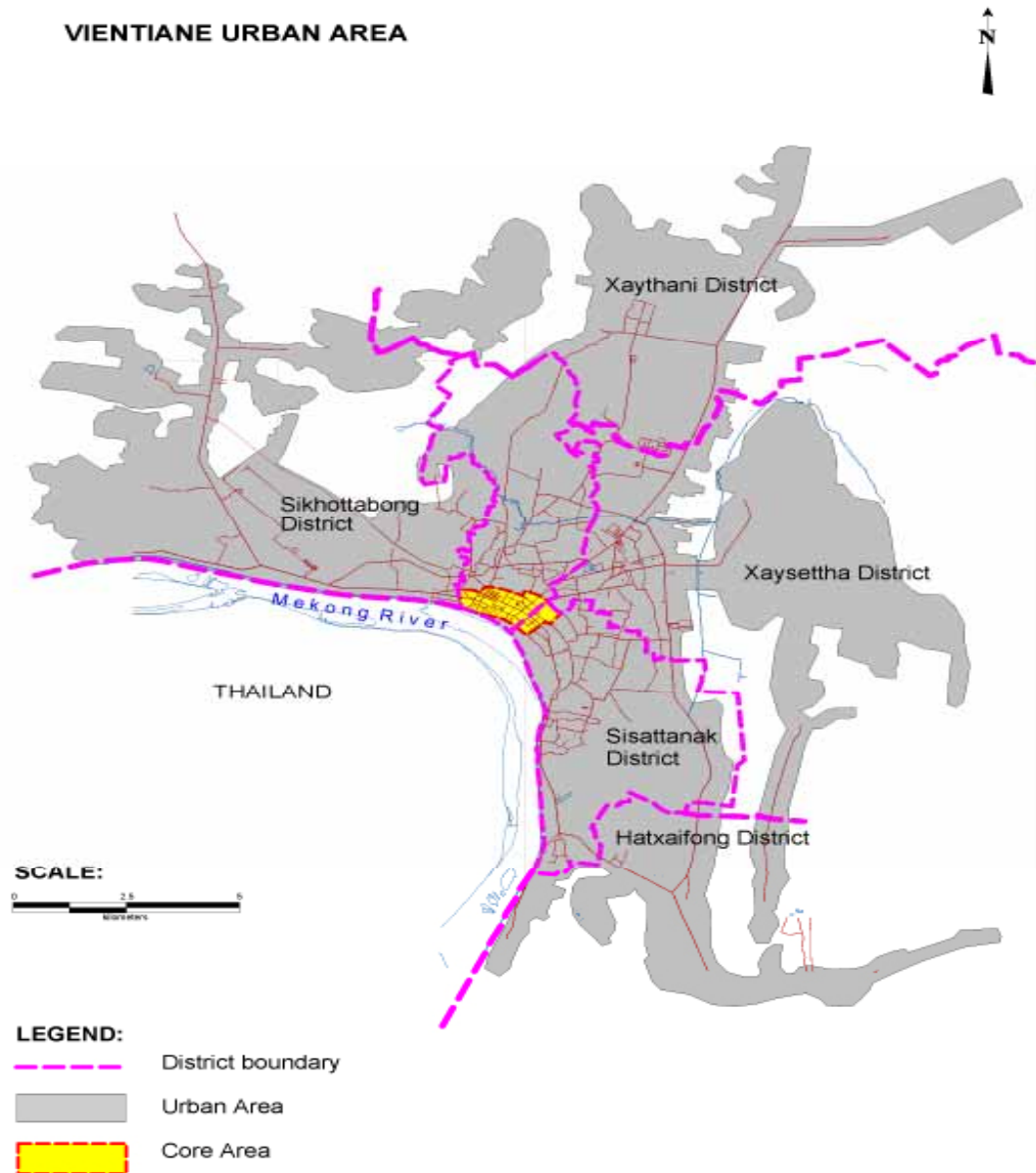
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VIENTIANE URBAN AREA



1. Background (2)

- Capital City: Vientiane
- Land Area: 4,000 km²
- Population: 750,000
- GDP per capita: 1,755 USD
- Vehicles: 419,167 units



Source: Lao Dpt of Statistics (2010)

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1. Background (3)

Almost half of the total vehicles

No.	Provinces	Vehicle Type								Total
		Motorcycle		Light Vehicle				Truck		
		2 Wheel	3 Wheel	Car	Pick-up	Mini Bus	Jeep	Goods	Bus	
1	Vientiane Capital	309,659	3,439	17,683	51,618	15,955	8,425	11,482	906	419,167
2	Pongsaly	6,213		21	846	32	57	67	58	7,294
3	Laungnamtha	14,447	18	224	1,580	388	185	317	90	17,249
4	Oudomsay	19,108	168	96	1,998	277	275	445	286	21,253
5	Borkeo	17,868	107	117	2,047	215	94	191	65	20,704
6	Laungprabang	45,821	737	563	5,302	1,280	338	482	220	54,743
7	Xaiyabouly	35,658	77	95	3,377	102	91	791	23	38,214
8	Houaphan	23,177	14	118	1,180	111	194	648	133	25,575
9	Xiangkhouang	22,822	254	246	2,949	388	242	916	83	27,900
10	Vientiane Pro.	38,736	203	296	6,168	750	261	2,350	52	48,816
11	Borikhamxay	20,137	141	213	2,875	379	176	584	86	24,591
12	Khammouane	26,414	678	356	5,439	740	414	2,093	117	36,251
13	Savannakhet	124,181	1,392	899	13,054	2,803	615	2,659	239	145,842
14	Salavanh	16,803	149	49	2,314	172	87	400	28	20,002
15	Champasack	74,754	1,093	561	7,805	1,016	553	1,661	369	87,812
16	Sekong	4,546	20	45	629	32	70	173	19	5,534
17	Attapeu	5,743	52	56	581	87	78	193	51	6,841
Total		804,087	8,542	21,638	109,362	24,727	12,155	25,452	2,825	1,008,788
		812,629		167,882				28,277		

Vehicle Registration by Province

Remark:

In addition registration has been made for UN, Diplomatic, Tourist & Institute of Finance Vehicles, but not included in the statistic.

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2. History of EST in Laos

- UNCRD supports since 2004
- 2008 Division of Transport Techniques and Environment “DTE” was established

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3. Progress of EST Strategy and Action Plan (1)

- Completed the DRAFT
- Screening meeting with the National Environment Committee 24 May 2011 chaired by Deputy Prime Minister
- Government is considering for Official Endorsement in the near future

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LAO PEOPLE'S DEMOCRATIC REPUBLIC
PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY



The National Strategy and Action Plan on Environment Sustainable Transport, Lao PDR



3. Progress of EST Strategy and Action Plan (2)

EST Consists of 9 Thematic Areas

1. Ambient Air Quality Monitoring and Management
2. Vehicle Emission Control
3. Inspection and Maintenance (I/M) of Vehicle
4. Regulation of Fuel Quality and Standard
5. Transport Planning and Travel Demand Management
6. Environmentally and People Friendly Urban Transport Infrastructure Development
7. Traffic Noise Monitoring
8. Information and Public Awareness
9. Gender and Transportation

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3. Current Activities

- Implementing Vientiane Urban Transport Master Plan (completed 2008)
- NAMA in Transportation
- CO2 Reduction in Freight Transport
- Vientiane Sustainable Transport Project
- ASEAN Vehicle Type Approval
- Electric Vehicle
- Master Plan on Traffic Safety Park & Vehicle Inspection Centers

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3.1 Implementing Urban Transport Master Plan (1)



10 Mar 2011, Signing Ceremony of Exchange of Notes between Japanese Ambassador and Minister of Foreign Affairs

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3.1 Implementing Urban Transport Master Plan

- JICA continues to support in procurement of 42 “45 seated” buses to be delivered April 2012
- 3 Years of Technical Cooperation to be started September 2011 for
 - Department of Transport
 - Vientiane Department of Public Works and Transport
 - Vientiane State Bus Enterprise

rum



Road Network Development Projects (50 Projects)

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3.2 NAMA on Transportation in Lao PDR

- Ministry of Environment-Japan supporting
 - Simulation of Bus Rapid Transit Routes
 - Co2 Reduction Estimation
 - Possible CDM projects

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3.3 CO₂ Reduction on Freight Transportation

- Ministry of Economic, Trade and Industry-Japan supporting
 - Employing Digital Tachograph (Black Box)
 - 3 Months: 1 Month Testing, 1 Month Warning, 1 Month Training
 - 2 small size trucks in Laos

3.4 ADB Vientiane Sustainable Transport Project

- Pre-feasibility
- Three components:
 - Traffic Management
 - Public Transport
 - Institutional

Study Area – Core Area

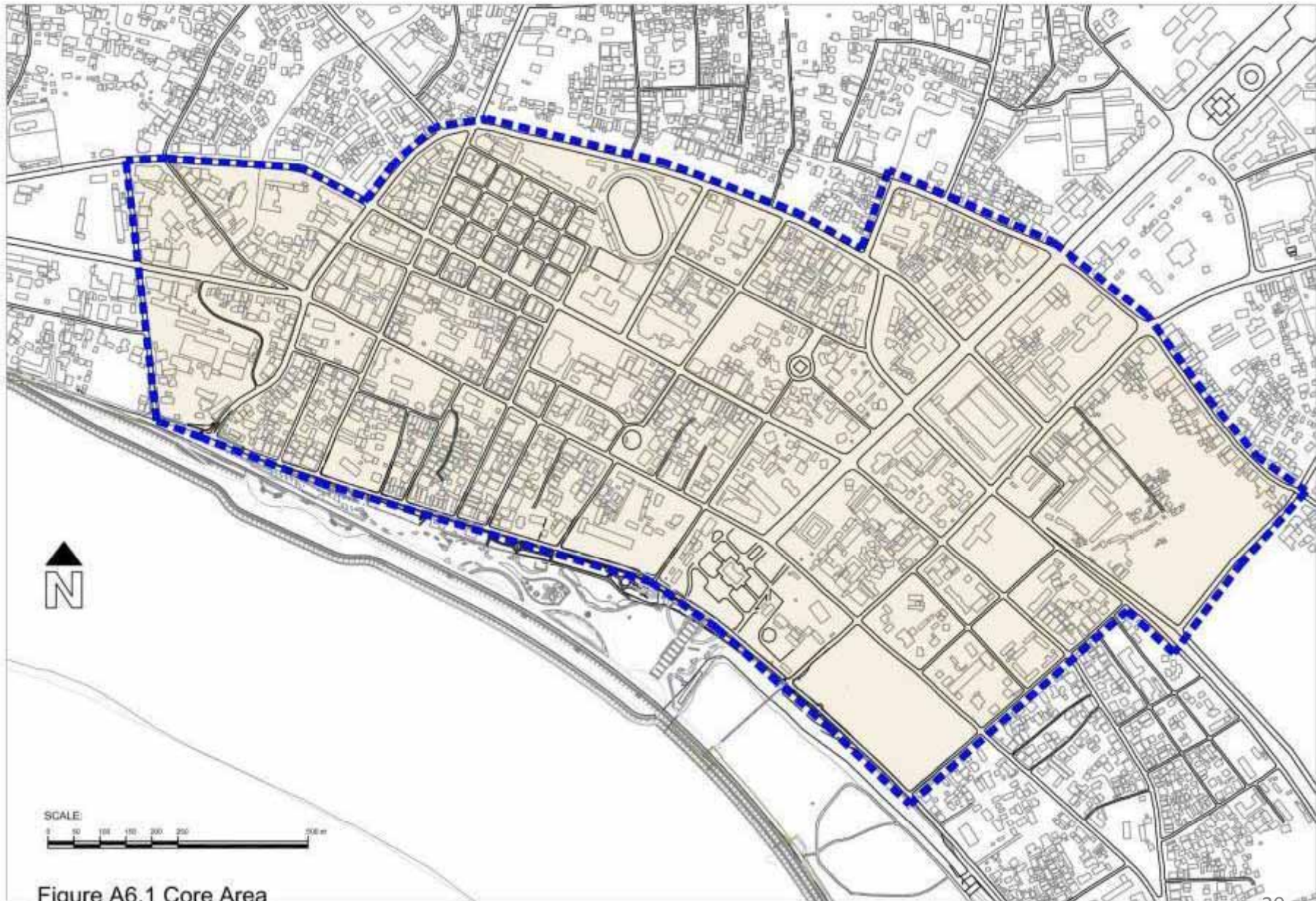


Figure A6.1 Core Area

Traffic Management

▪ Strategy

- Employ TDM measures to reduce trips into core area
- Encourage public transport usage
 - convenient linkage between car parks and bus routes
- Revise parking arrangements and improve enforcement
- Improve pedestrian facilities
- Protect environment in historic core area

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Traffic Management Strategy

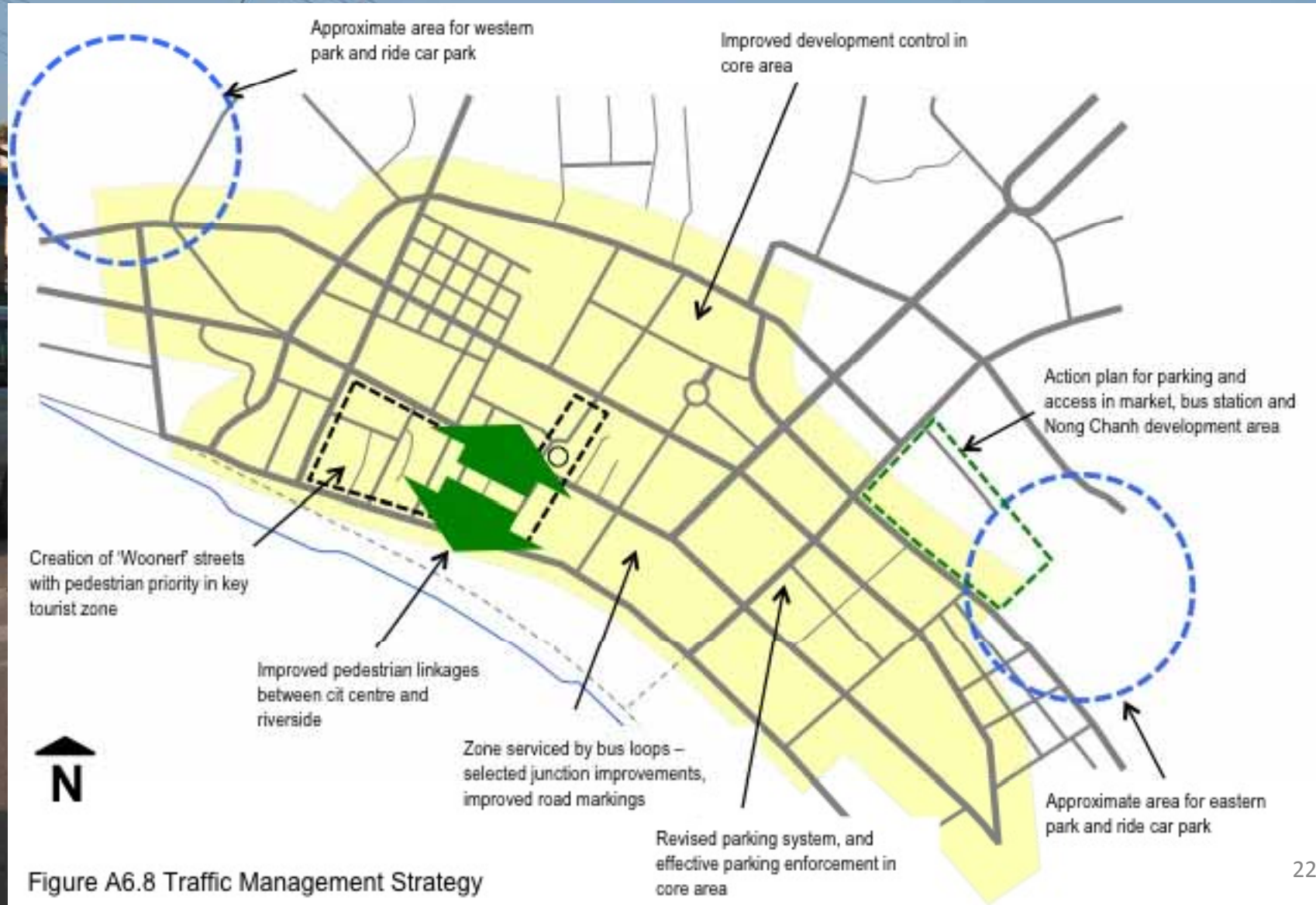


Figure A6.8 Traffic Management Strategy

Traffic Management

Proposals

- Multi-storey car-park(s) for 'Park and Ride'
- New scheme for on-street parking, including fees and enforcement by parking control officers
- Pedestrian priority streets in tourist zone
- Light-controlled pedestrian crossings
- Improved traffic light equipment and control centre
- Junction and road improvements
- Traffic management action plan for Nong Chanh

Public Transport

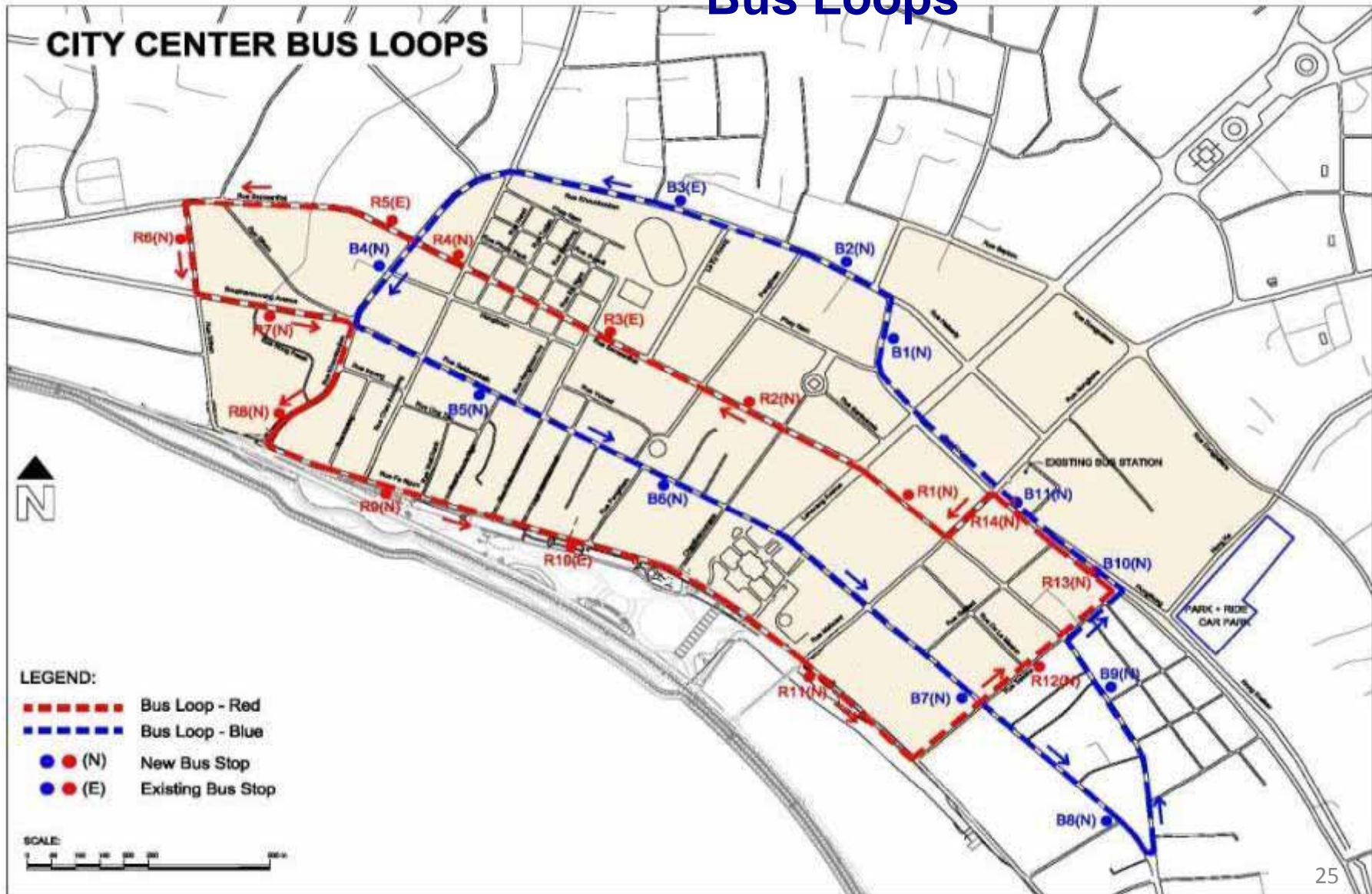
▪ Pilot Bus Routes

- Providing 'Park and Ride' from car parks at edge of core area
- Small, comfortable, energy-efficient buses
- Two routes within 150m of any point in the core area
- Buses every 5 – 6 minutes

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Bus Loops



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Typical Small Buses

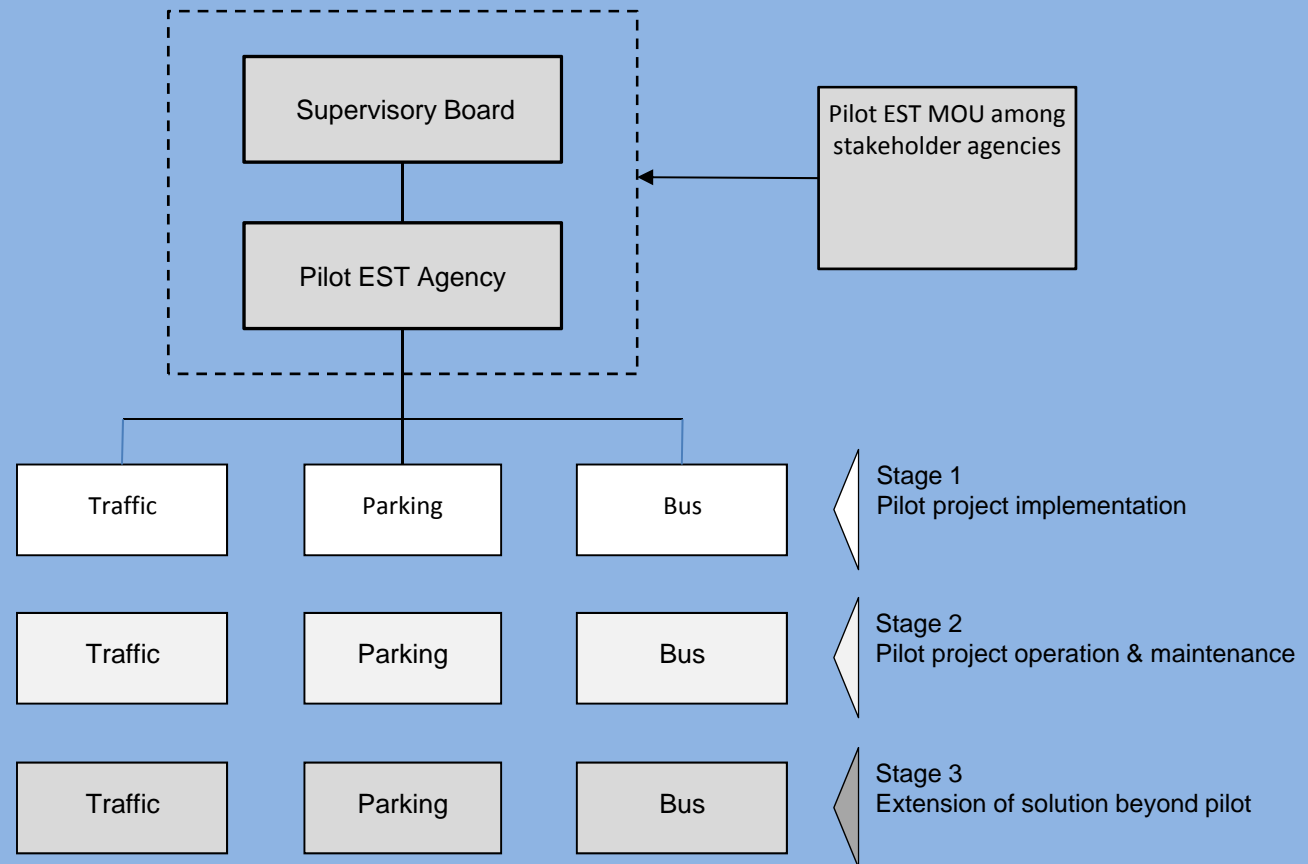


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Sustainable Transport Management

Pilot Institutional Structure:



EST=environmentally sustainable transport ; MOU=memorandum of understanding.

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3.4 Progress of ADB VSUTP (1)

- **Preparation for the PPTA MOU**
 - Duration: 7 Months, 800,000 USD, Nov 2011
 - Implementing: 30 MIL USD
- **2 Additional TAs (Technical Assistance) for 2 Months**
 - NMT (Non-Motorized Transit)
 - CCF (Climate Change Fund)

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3.4 Progress of ADB VSUTP (2)

- **NMT**
 - Capacity Building for NMT Planning
 - Preliminary Design for NMT Implementation
 - Funding for NMT Implementation

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3.4 Progress of ADB VSUTP (3)

- **CCF**
 - Institutional Improvement
 - Feasibility Studies
 - Demonstration Projects
 - Funding Mechanism for CDM

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3.5 ASEAN Vehicle Type Approval

- Lao PDR is not member of UNECE Convention
- Regularly participates in ASEAN and JASICS Meetings
- Etc.

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3.6 Electric Vehicles (JICA)

- 4 Years project
- Focusing on 2 Tourism Cities: Vientiane & Luangprabang
- Preliminary Survey will start Jan 2012 for 6 months
- Pilot Model Project
- Full Implementation until 2014

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3.7 Master Plan for Traffic Safety Parks and Vehicle Inspection Centers Development

- **01 Dec 2011, MOU Signed between DOT and KOLAO**



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Thank-you