# Lao PDR EST Policies and Initiatives

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#### **Outlines of Presentation**

- Country Background
- Policies
  - Environment
  - City planning
  - Transport planning
  - Health Prevention and Promotion
- Initiatives
  - Objectives outlined in the Aichi Statement (Country Response Sheet)
- Case Study: Vientiane Sustainable Transport Initiatives (VISTI)

## Country Background

#### **Country Background**



- Land Area : 236,800 km2
- Population: 5.62 millions
- Population density: 22 persons/km2 (2.5%)
- Located in South East Asia
- Border with Vietnam, China, Myanmar, Thailand and Cambodia
- The economy Base is Agriculture accounting for 50% of GDP

## Policies

#### **National Environment Policy**

#### Science Technology and Environment Agency (STEA)

#### National Environmental Committee (NEC)

- Vice Prime Minister is Chairman
- President of STEA is deputy chairperson,
- Vice Minister from line Ministries are members including vice ministers for MCTPC and MOH....
- A. National Environmental Strategy 2020 and Action Plan 2010
- B. Environmental Protection Law
- C. Environmental Impact Assessment (EIA) Regulations

#### **Environmental Action Plan 2006-2010**

#### Goal and Objective

- To develop and improve instruments and the foundation for environmental protection by creating policy, strategy, legal framework and other measures for national environmental management
- To establish EMUs and provision of sufficient staff to enable the units to operate effectively.
- To integrated environmental study into formal and non-formal education, including vocational training; and to raise public awareness on environmental matters; and promote public participation in environmental management.

#### **Urban Planning Policy**

- Urban Planning Laws
- Urban Planning Regulations no. 1366/MCTPC
- Transport in Big City by Hierarchy and Its Environmental Protection
  - Capital City
  - Secondary City
  - Thirdly City
- Promotion of the three City Clean (AWGESC) pilots projects
  - C-land (Xayabury),
  - C-air (Luangprabang) and
  - C-water (Vientiane capital)

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#### **Transport Sector Strategy 2006-2020**

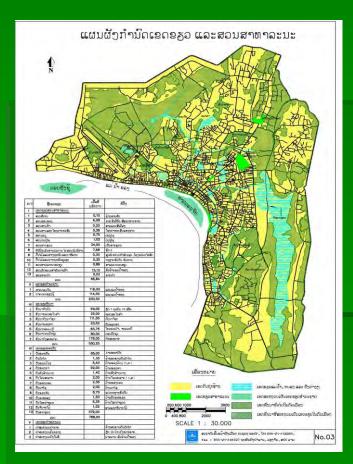
- A. Laws and Regulations
  - Road, Transport, Traffic Laws
  - National Road Safety Strategy and Action Plan
- B. National Transport Committee (NTC)
  - Vice Minister of MCTPC is Chairman
  - Vice Ministers of Ministry of Finance, Minister of Industry and Trade are deputy chairpersons,
  - High ranking officers from line Ministries are members including MOH, MOFA, MPS, STEA....
- C. National Road Safety Council (NRSC)
  - Deputy Prime Minister, Chairman
  - Minister of MCTPC, Public Security, Dep. Chairmen
  - Minister of Public Health, Education, Information and Culture are Members
  - Director General Transport Department, Secretary

## **EST Initiatives**

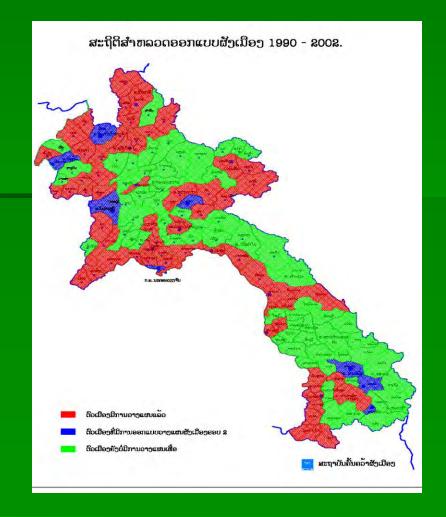
#### **Public Health**

- National Public health Strategy 2020
- Hygiene Prevention and Health Promotion Law
- Public health and road safety are integrated in the National Road Safety Strategy and Action Plan, there are 15 sector projects
- Coordinating mechanism between MOH, MCTPC, MPC and STEA on public health and safety issues: NRSC, NEC....
- MOH only collects information on road accidents from the hospitals and traffic police to show the adverse health impacts (i.e. disease, injury and death due to vehicular emissions (e.g. PM, NOx, HC, Pb, etc.), noise, traffic crashes and other factors related to transport
- TV, Radio, Newspaper used as effective public awareness campaigns and information dissemination mechanism on public health impacts caused by transport and traffic

#### **Land Use Planning**



National initiatives for Urban Green and Park (UGP) Example of Urban Master Plan



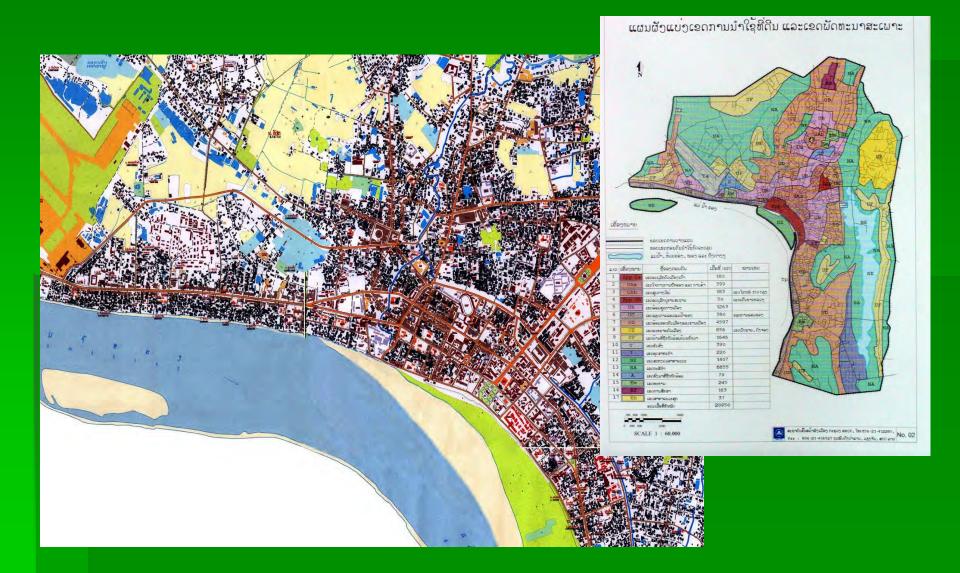
Capital Province-District Land Use Planning by URI in 1990-2002

Red= 66 (had land use planning)

Blue=12 (second around of land use planning)

Green=64 (has no land use planning)

## Vientiane Capital City, Mapping, Land Use Master Plan



# National initiatives for UGP Green and Urban in Central of VTE



Green 50 %: Residential 50% (Green included urban wet land, green space, tree, etc.)

### National initiatives for UGP

#### **Park in Vientiane Urban Center**

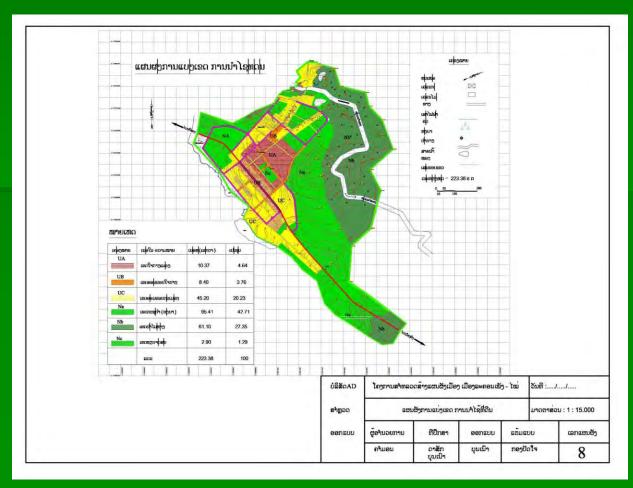


## District Urban Master Plan, Land Use Planning Consultation with Community









#### Area of Land, Number and Area per Capita

- Difficult to identify that how many land and area of G&P. In case of Vientiane Urban Center,,,
- There is no any survey team and does not control in G&P inventory
- Also what areas per capita does not clearly, but as general initiate estimated under urban planning that show below:

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Vientiane = 6.7\% (184 p/ha)
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Parkse = 4.82% (251 p/ha)

Oudomxay = 7.42% (102 p/ha)

Khongsadone = 0.92% (732 p/ha)

## Implications of UGP Promotion issues



















## **Implications of UGP Promotion issues**







#### Vehicle Emissions Control & Standards &IM (1)









#### Vehicle Emissions Control & Standards &IM (2)



**Private Vehicle Inspection Center** 

### Public Transport Planning, TDM & NMT (1)





Bus Terminal Expansion, previously only one Bus Terminal in Vientiane



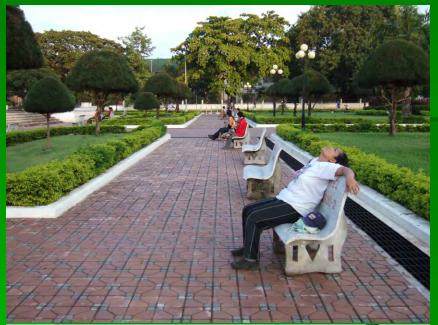
### Public Transport Planning, TDM & NMT (2)



JICA Funded Comprehensive Transportation Study, will be commenced by late 2005 but has been delayed until now



### Public Transport Planning, TDM & NMT (3)



Public Park Improvements in Vientiane capital





### Public Transport Planning, TDM & NMT (4)



BRT and NMT Seminar, June 28, 2005

# **Environment & People Friendly Urban Infrastructures**

Vientiane Urban Development Administration Authority (VUDDA)

- Weekly Village Cleaning



## Road Safety/Maintenance (1)

- Road Safety Strategy for Laos, April 2005

- Short-term: 2005

- Middle-term: 2006-2007

- Long-term: 2008-2010

- National Road Safety Committee

- 15 Projects
- Road Maintenance Fund



### Road Safety/Maintenance (2)







Rally and Stage

## Road Safety/Maintenance (3)



## Road Safety/Maintenance (4)



School Visits



# Roadside Air Quality Monitoring & Assessment

- Drafting decree ambient standard
- Drafting guidelines on emission standard
- Some monitoring equipments were purchased

## **Traffic Noise Management**





Horn < 100 db



# Vientiane Sustainable Transport Initiatives (VISTI)

## **VISTI Project Components**

- 1. Bus Rapid Transit (BRT)
- 2. Pedestrian upgrades
- 3. Cycleway development
- 4. Bicycle taxis
- 5. Vehicle restrictions and land-use measures



## **Overall Financing Sources**

Organisation	Contribution (US\$)
Global Environment Facility	US\$ 999,150
Lao Ministry of Communication, Transport, Construction, and Post	US\$ 355,350 (in-kind)
UN Centre for Regional Development (UNCRD)	US\$ 175,000
Clean Air Initiative for Asian Cities (CAI-Asia)	US\$ 176,000
Japanese International Cooperation Agency (JICA)	US\$ 310,000
German Technical Cooperation (GTZ)	US\$ 15,520
Development bank (financing for full construction)	US\$ 23,534,500
Total	US\$ 25,565,520

# **Overall Financing Sources (Cont.)**

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# **Financing by Project Component**

Project component	GEF (US\$)	Co-financing (US\$)	Total (US\$)
Project development activities	\$ 0	\$ 18,820	\$ 18,820
BRT component	\$ 647,930	\$ 21,900,550	\$ 22,548,480
Pedestrianisation component	\$ 158,400	\$ 489,500	\$ 647,900
Cycle way component	\$ 26,250	\$ 660,750	\$ 687,000
Pedicab component	\$ 123,750	\$ 226,650	\$ 350,400
TDM / land-use component	\$ 16,820	\$ 1,112,000	\$ 1,128,820
Dissemination and outreach	\$ 9,600	\$ 158,100	\$ 167,700
Project evaluation	\$ 16,400	\$ 0	\$ 16,400
Totals	\$ 999,150	\$ 24,566,370	\$ 25,565,520

### **Expected Short-term Outcomes**

#### Short-term (1-4 years)

Public
transport
BRT plan
(including plans
on demand
analysis,
communications
operations,
infrastructure,
business
structure,
marketing, and
implementation)

#### Phase I corridor constructed

#### Pedestrians |

Pedestrianisation plan for Mekong riverfront area and Demonstration of Vientiane Chinatotwn

Small-scale demonstration of pedestrianisation

Study on applications of shared space in residential areas

#### Bicycles

Cycle way plan

bicycle integration at public transport station

Pedicab plan

Small-scale pedicab demonstration

#### Motorised vehicles

Scoping study on viable vehicle restriction measures (including parking reduction, parking fees, road charges. circulation restrictions, fuel pricing, and ownership fees)

Implement pilot TDM programme

Dissemination of MSP results to other cities

Independent evaluation of MSP process

#### **Expected Medium & Long-term Outcomes**

#### Medium-term (5-9 years) Public Motorised transport Pedestrians Bicycles vehicles Full Full Phase II of cycle Implementation of implementation pedestrianisation way network selected of Phase II and of riverfront area completed restrictions on Phase III of the motorised vehicle BRT plan Full Full pedicab usage pedestrianisation system in place of Chinatown area

#### Longer-term (10 years and beyond)

Continued sharing Planning of adopted Implementation of of Vientiane's → measures in other → measures in other experience cities of the region cities of the region

## **Work Plan**

Project activity	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Capacity building with local officials										
Project development / submission of MSP proposal	E									
Demand analysis (JICA)										
Training sessions with local officials										
Issuing of consultant contracts										
BRT plan										
Pedestrianisation plan					LI					
Cycle way plan										
Pedicab plan										
TDM plan	-				-					
Land-use study				4.7						
Phase I construction (i.e. pilot demonstrations)										
Project evaluation										
Dissemination of lessons learned to other cities					(					
Phase II construction	11 1									
Phase III construction										

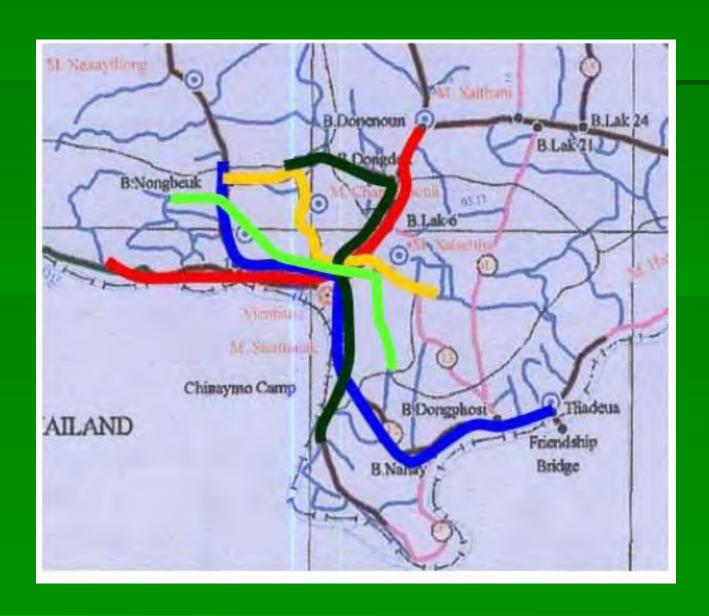
## South East Asian (SEA) Games

Vientiane is hosting the 2009 Southeast Asian Games

The Vientiane Sustainable Transport Initiative will serve as the principal planning mechanism for addressing athlete and visitor transport during the Games



### **Preliminary BRT Structure for Vientiane**



## Phase I Area for Pedestrianisation



## **Creating a New Riverfront Area**



The tourist potential of the riverfront can be enhanced by creating a pedestrian paradise



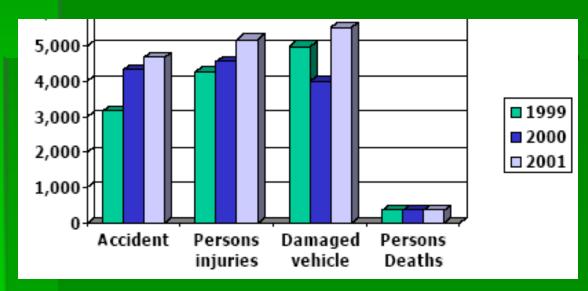


Car noise, traffic, and illegally parked vehicles all harm the local tourist economy

## Reducing Accidents in Vientiane

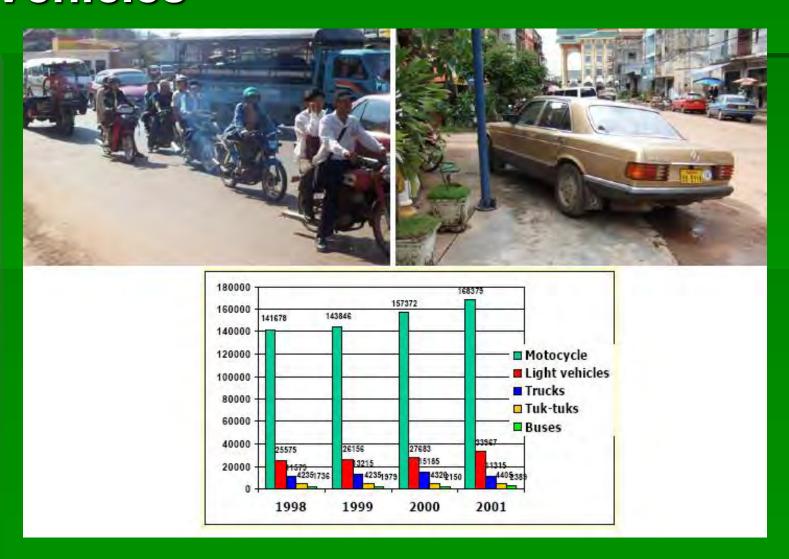
Project will also seek to significantly reduce accidents and injuries in Vientiane



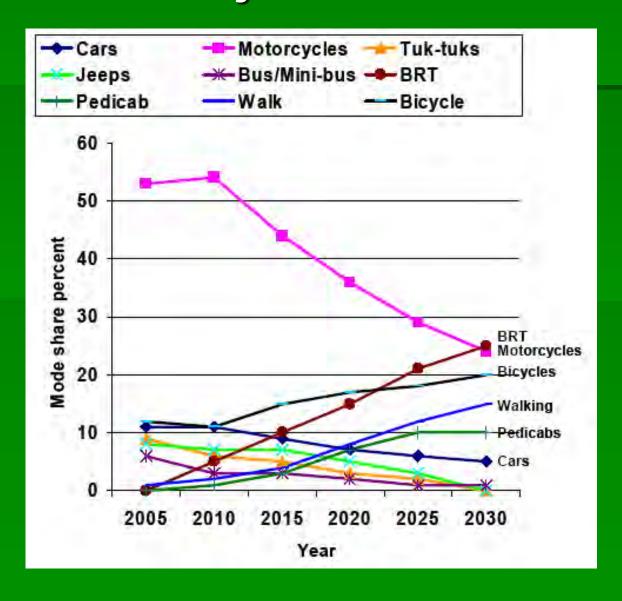


Vientiane Accident Rate

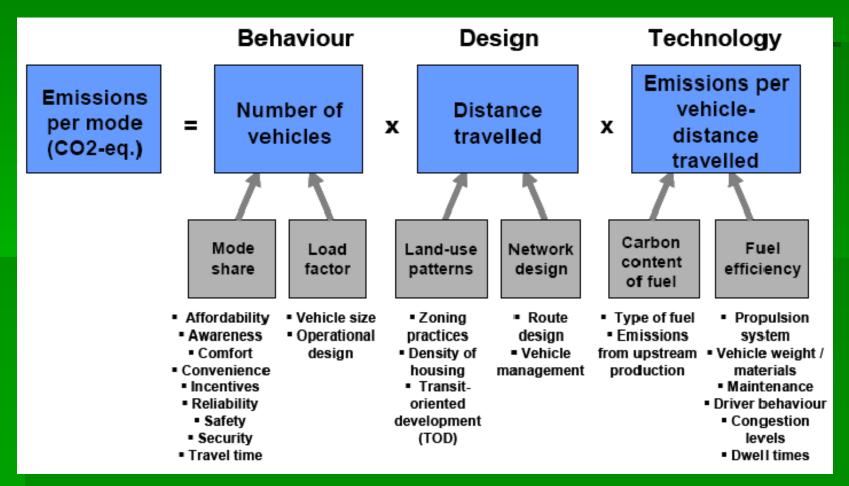
# Reversing the Growth of Private Vehicles



## **Mode Shift Objectives**

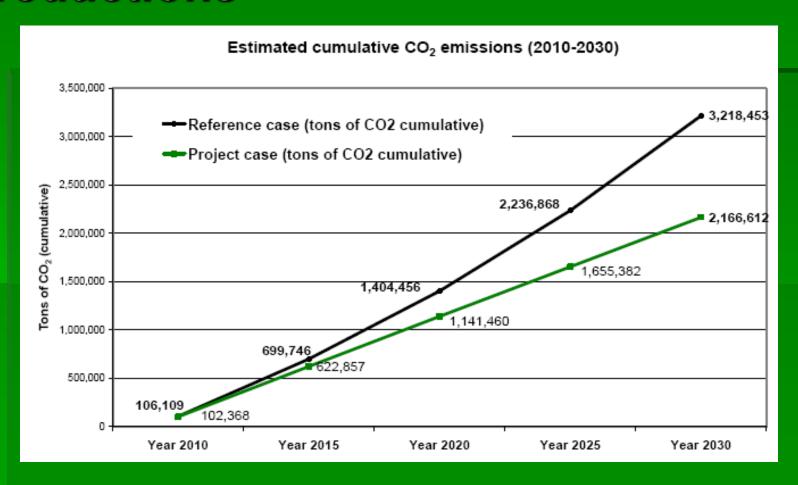


# **Expected** greenhouse gas emission reductions



Source: Wright and Fulton, 2005.

# Expected greenhouse gas emission reductions



Project will result in a reduction of over 1 million metric tons of CO2 during a 20-year period

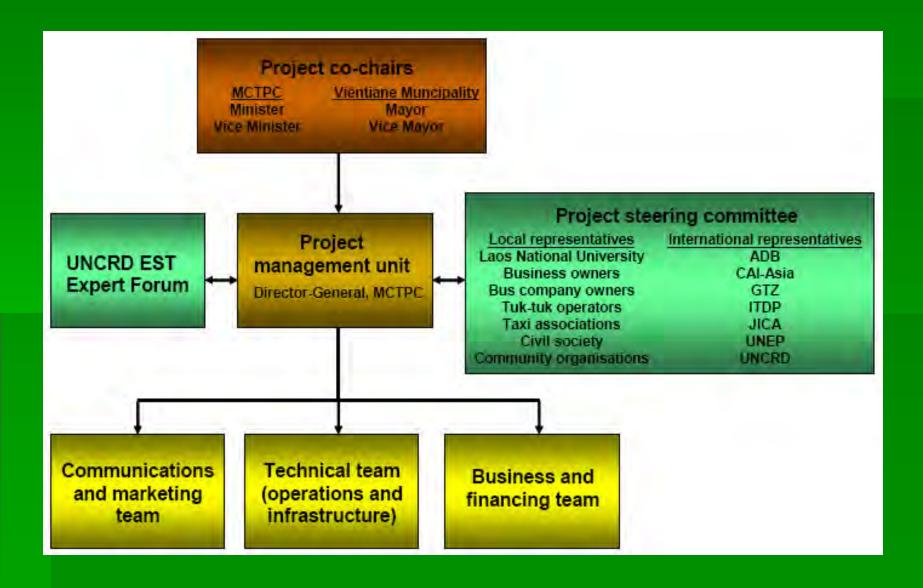
## **Sharing Vientiane's Experience**

With the help of UNCRD, the experience of the VISTI will be shared with other cities in the region

Vientiane will become a world leading example of sustainable transport options

Country	City	Population
Laos	Savannakhet	156,000
	Luang Prabang	110,000
Cambodia	Phnom Penh	1,114,000
	Batdambang	195,000
	Siem Riep	142,000
China (Yunnan Province)	Qujing	225,800
	Gejiu	219,000
	Dali	175,000
Thailand	Samut Prakan	390,000
	Udon Thani	227,000
	Chiang Mai	173,000
	Lampang	152,000
	Khon Kaen	145,000
	Nakhon Pathom	124,000
Vietnam	Haiphong	572,000
	Danang	446,000
	Hue	267,000
	Nha Trang	265,000
	Can Tho	248,000

## Project Organizational Structure



# Thank you for your attention!