

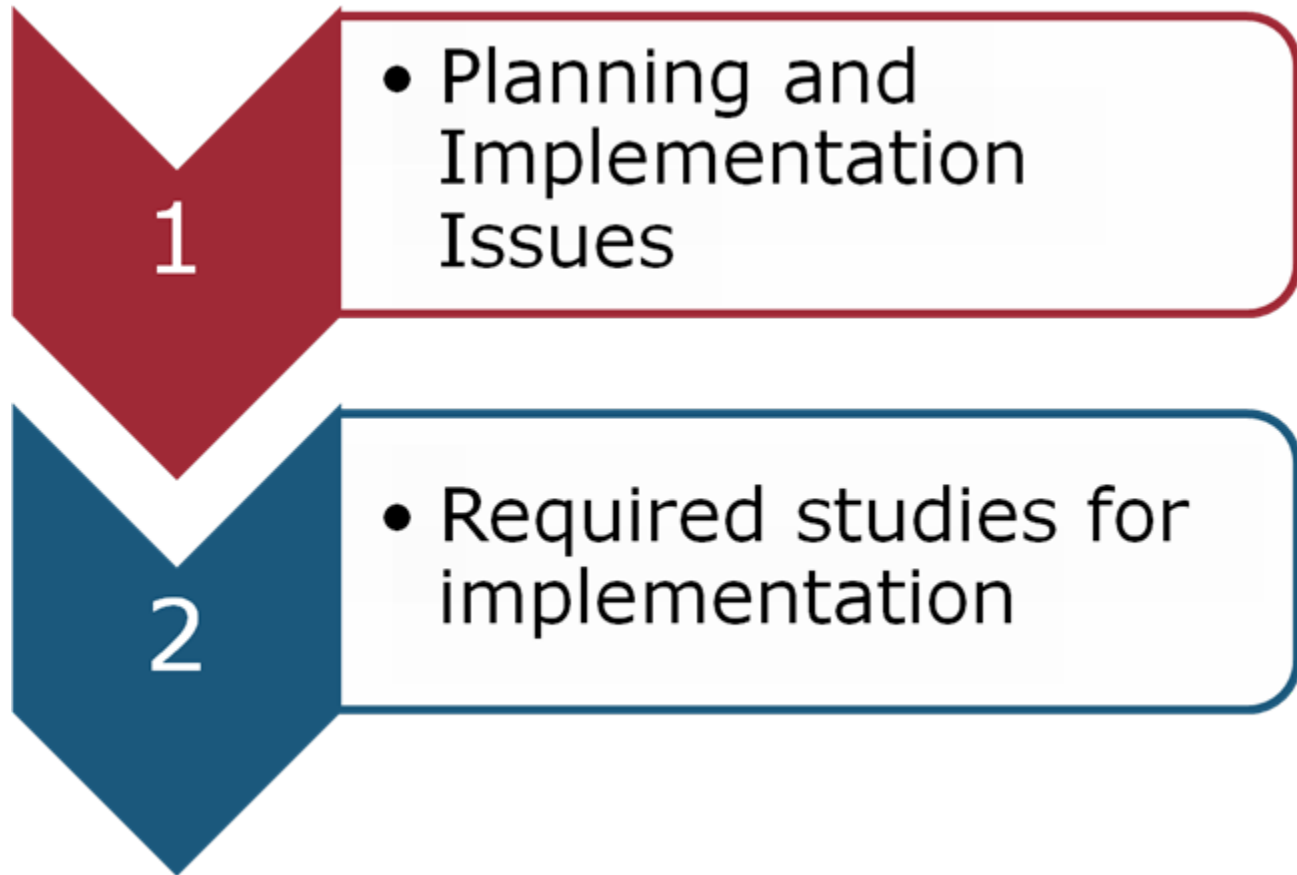
Required Study for Implementation of Public Transportation

1st ATRANS Symposium on Transport Crisis in Thailand

Panel Discussion on

**"SEED AND NEED FOR URBAN MOBILITY STUDY
IN ASIAN REGION"**

Dr.Rungsun Udomsri
Department of Civil Engineering
Chiang Mai University



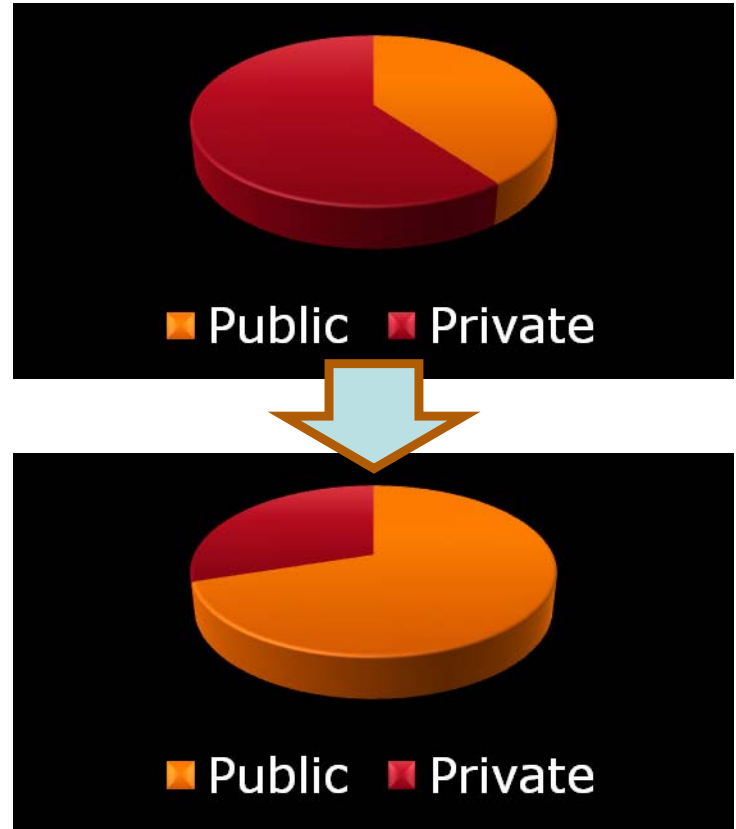
Discussion outline

Sustainable Development



บนดิน บนดิน	รถประจำทาง (Bus)	รถประจำทางด่วนพิเศษ (Bus Rapid Transit, BRT)	รถรางไฟฟ้า (Tram or Streetcar)
			
	รถไฟรางเดี่ยว (Mono Rail)	รถไฟรางเบา (Light Rail Transit, LRT)	รถไฟรางหนัก (Heavy Rail Transit, HRT)
ยกระดับหรือใต้ดิน ยกระดับหรือใต้ดิน			

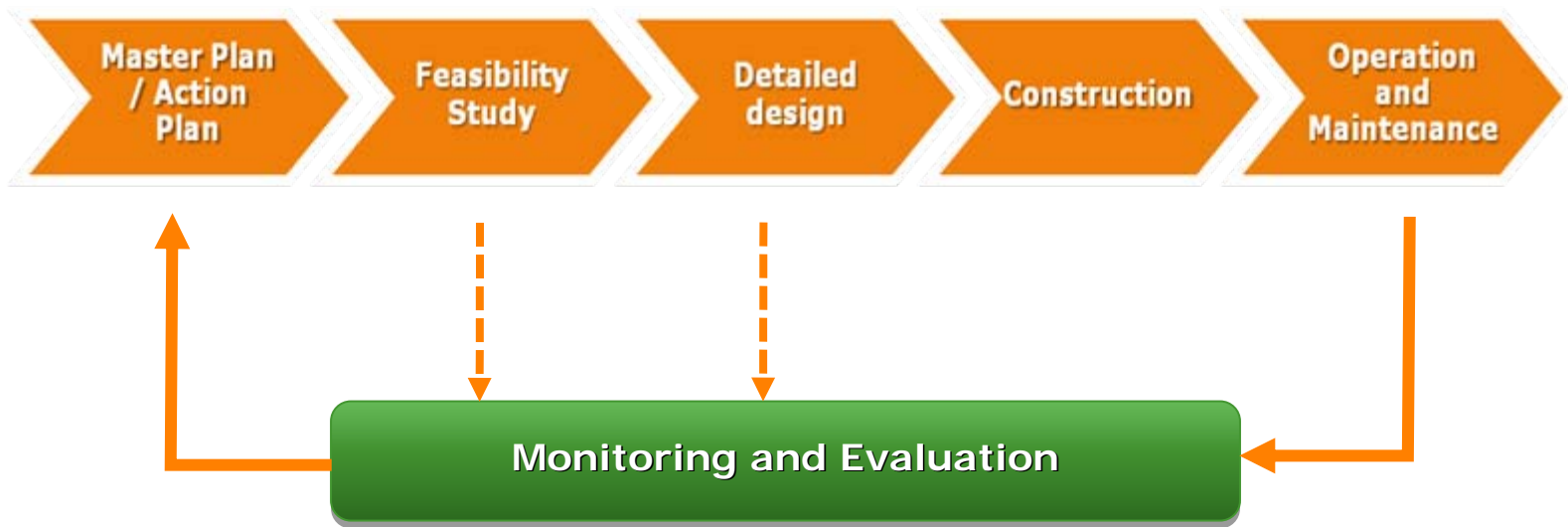
Increase Public Transport Share



Public Transportation : Solution for traffic and transportation improvement

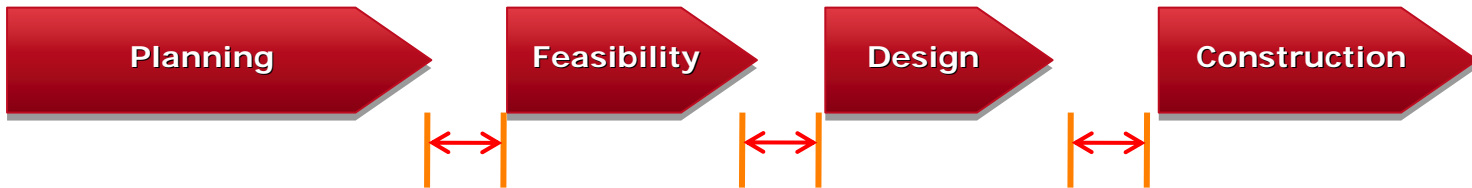


Required study for implementation

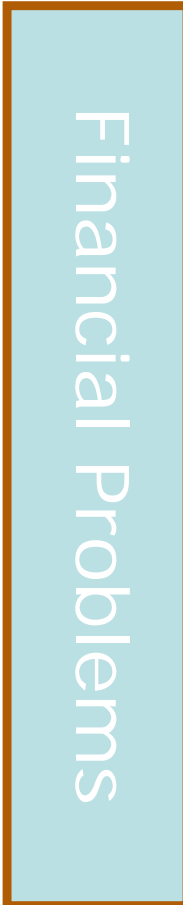


Planning and Implementation Transport Project

Yr. 1n



Financing gaps



Implementation Transport Project in Thailand

1978

2008

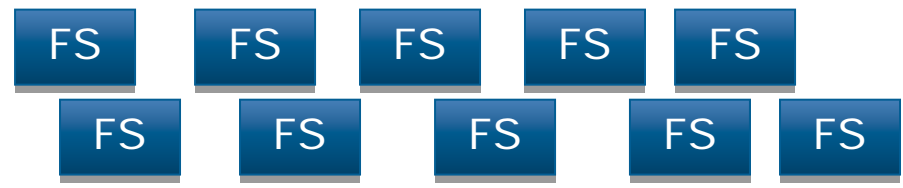
..n yr.



Planning



Feasibility



Design

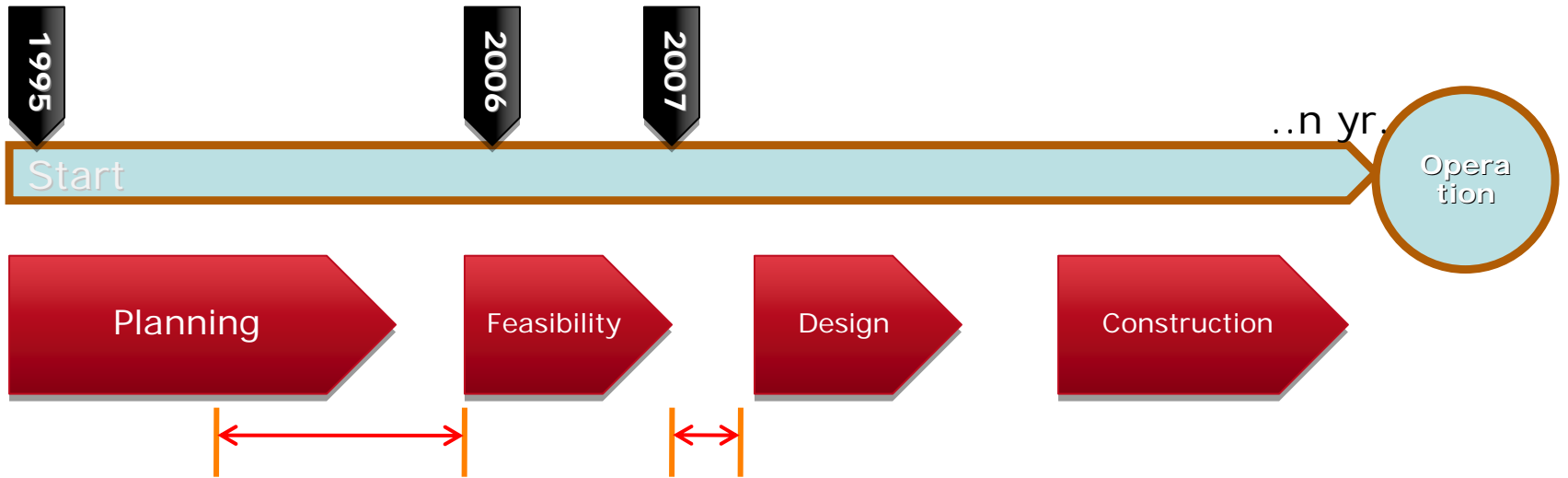


Construction

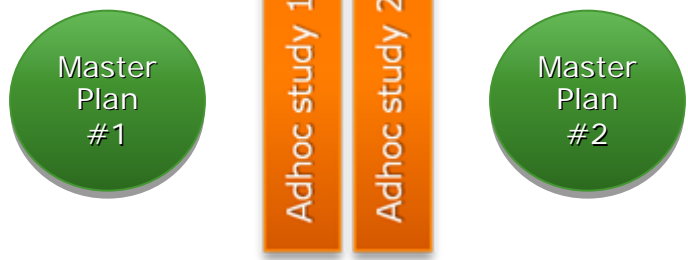


BTS-MRTA-BRT

Bangkok's Mass Transit Project



Financing gaps



- Economic crisis
- Financial problem
- Policy implementation change



An Example : Chiangmai's Mass Transit Project



(Reduce) Financing gap



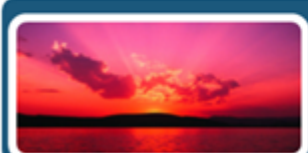
(Enhance) Consistency of Policy and Implementation Plan



(Require) Comprehensive studies for Implementation

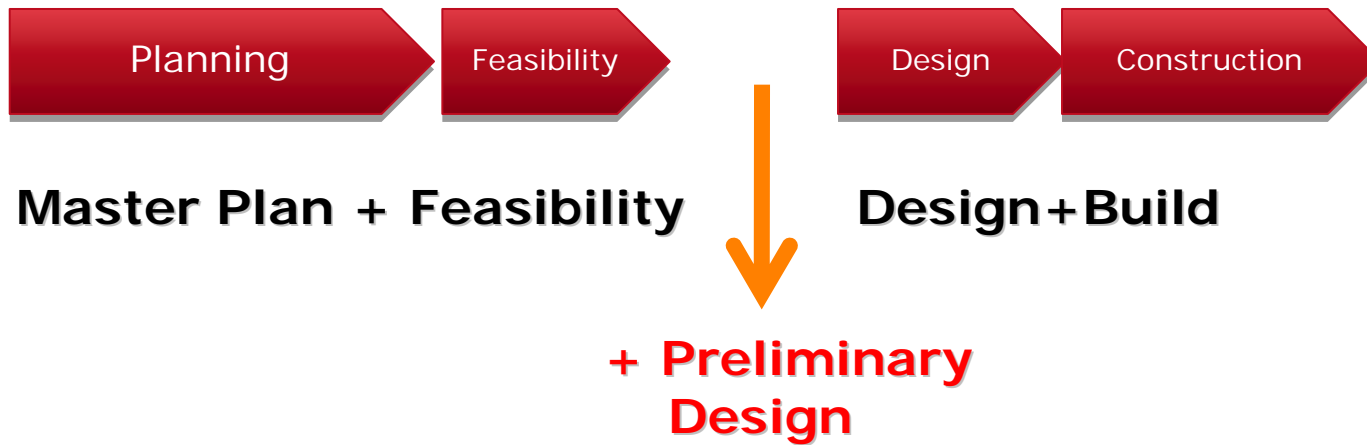
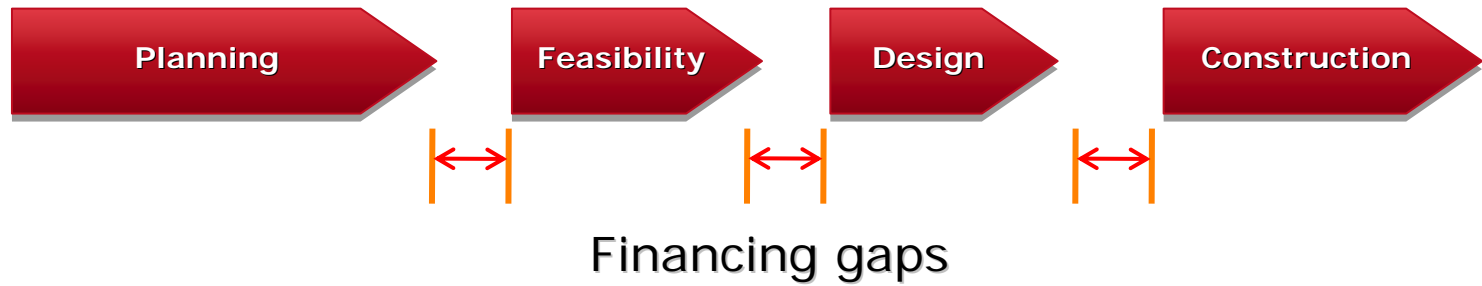


(Integrate) Planning and Implementing Coordination



(Support) Public participation

Key issues for transport project implementation



Solving financing gap

Framework of Required Study

Master Plan Content

Vision

Policy strategies

Alternatives evaluation

Project package

Principal plan

Action plan

Required Studies

Engineering

Environment

Economic Justification

Financial resource

Implementing
Organization

Public Private Participation

Required study for Master Plan

Feasibility Content

Project formulation

Alternatives evaluation

Project Feasibility

Implementation plan

Required Analysis

Engineering Design

Impacts Analysis

Economic Justification

Financial capacity

Implementing bodies

Public Private Participation

Required study for feasibility

Detailed Design Content

Engineering Design

Cost estimation

Construction Planning

Tendering process

Implementation body

Financial

Required Documents

Engineering Drawings & specifications

Tender Documents

Financial & Cash flow

Required study for detailed design

Construction and Installation Content

Bidding and Tendering

Infrastructure construction and supervision

Equipment installation and commissioning

Training and documentation

Pre-test operation and adjustment

Open service to public

Required study for Construction

Operational Studies

Organization

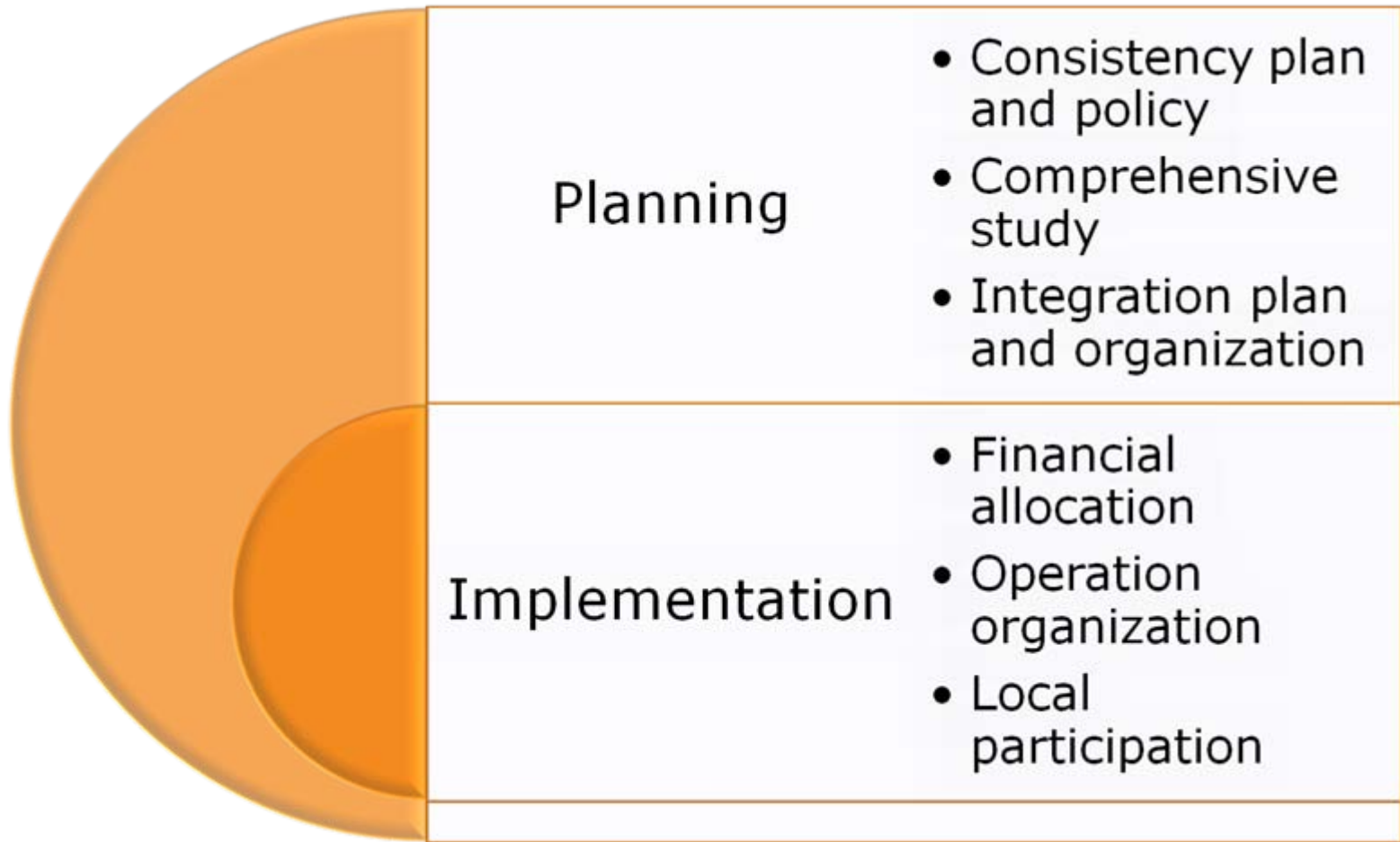
Operational strategies

Management & Control

Financial support

Local participation

Required study for Operational



Concluding Remarks