

Comparative Urban Development for Sustainable Cities in Japan and Thailand

Case study of Tsukuba Express

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Idea of Transport oriented development with Tsukuba Express(TX)

- Japan promoted public transportation oriented urban development for decades, for example Tama New Town and Garden cities along private railways.
- Urban development has been carried out in combination with TX as well

ニュータウンの骨格構造

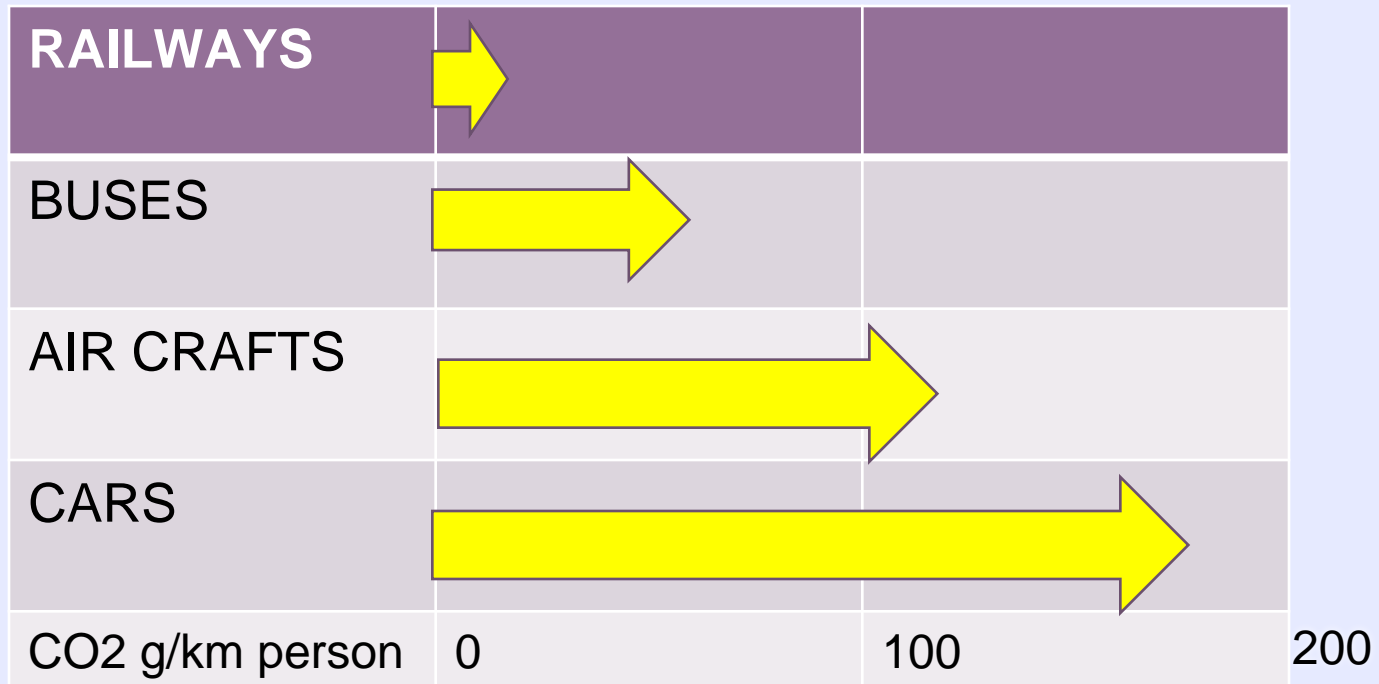
The map illustrates the skeletal structure of New Town, showing a central red core area and green peripheral zones, connected by a network of roads and railways. The central red area is surrounded by green zones, which are further connected by a network of roads and railways. The map also shows the location of various stations and landmarks, such as the New Town Station and the New Town Center.



- Two railways with 8 stations
- Three Trunk roads east and west bound with streets connecting north and south residential area
- Parks and Green belt arranged for the relaxation

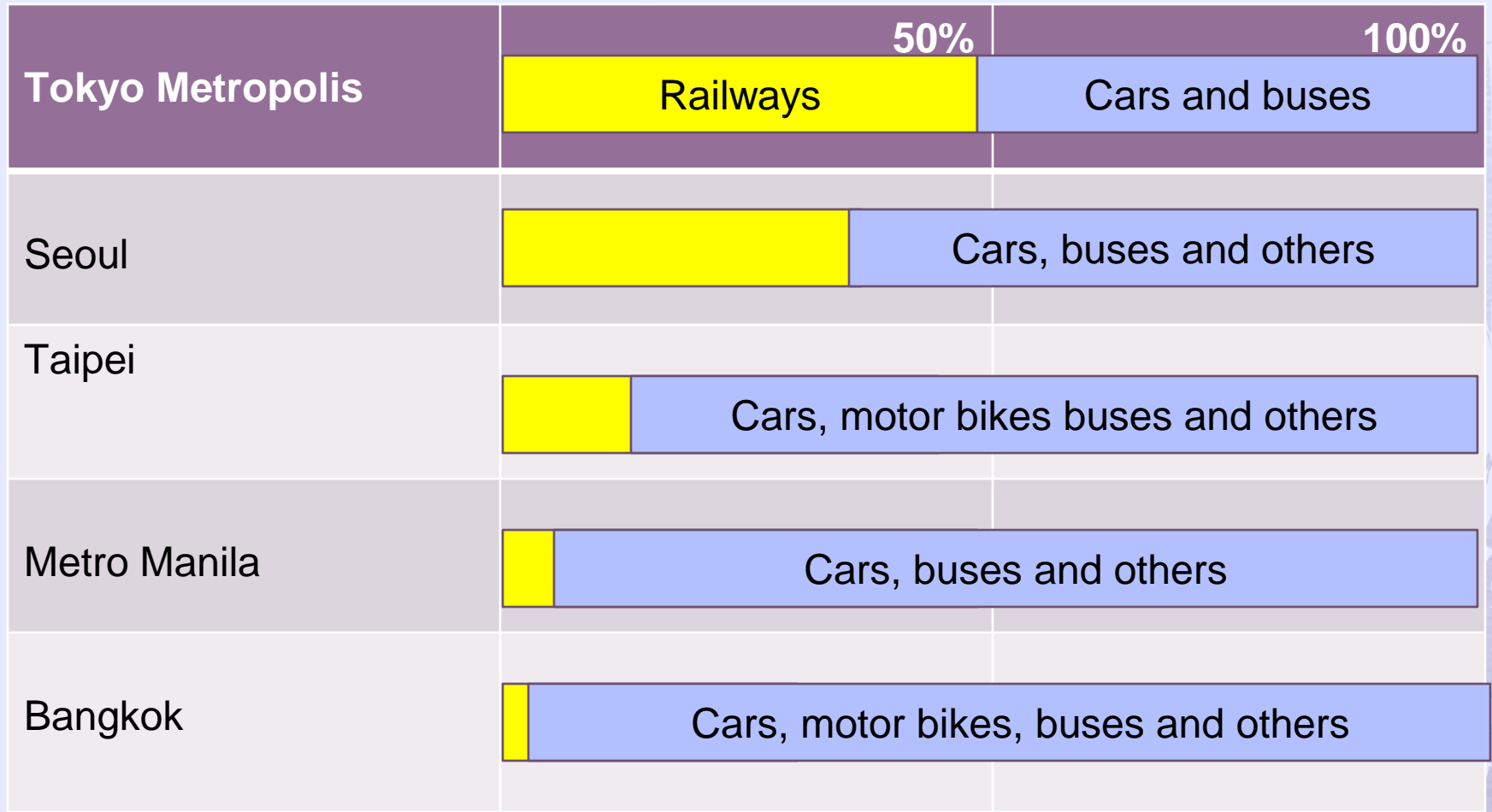
CO2 emission for 1 passengers

(Japanese case: Conversion into CO2:unit g/km)
as of 2006



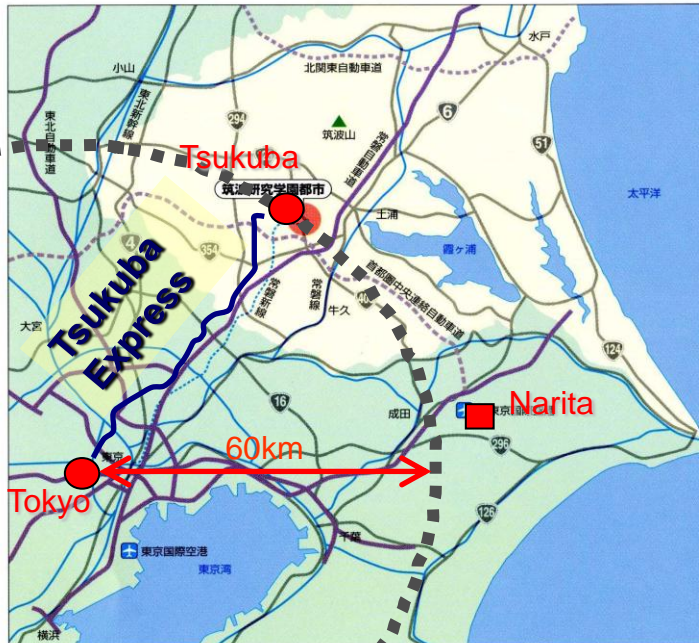
Allotment of Passengers by Transportation

as of 2004



Tsukuba Express Railway Project

Location



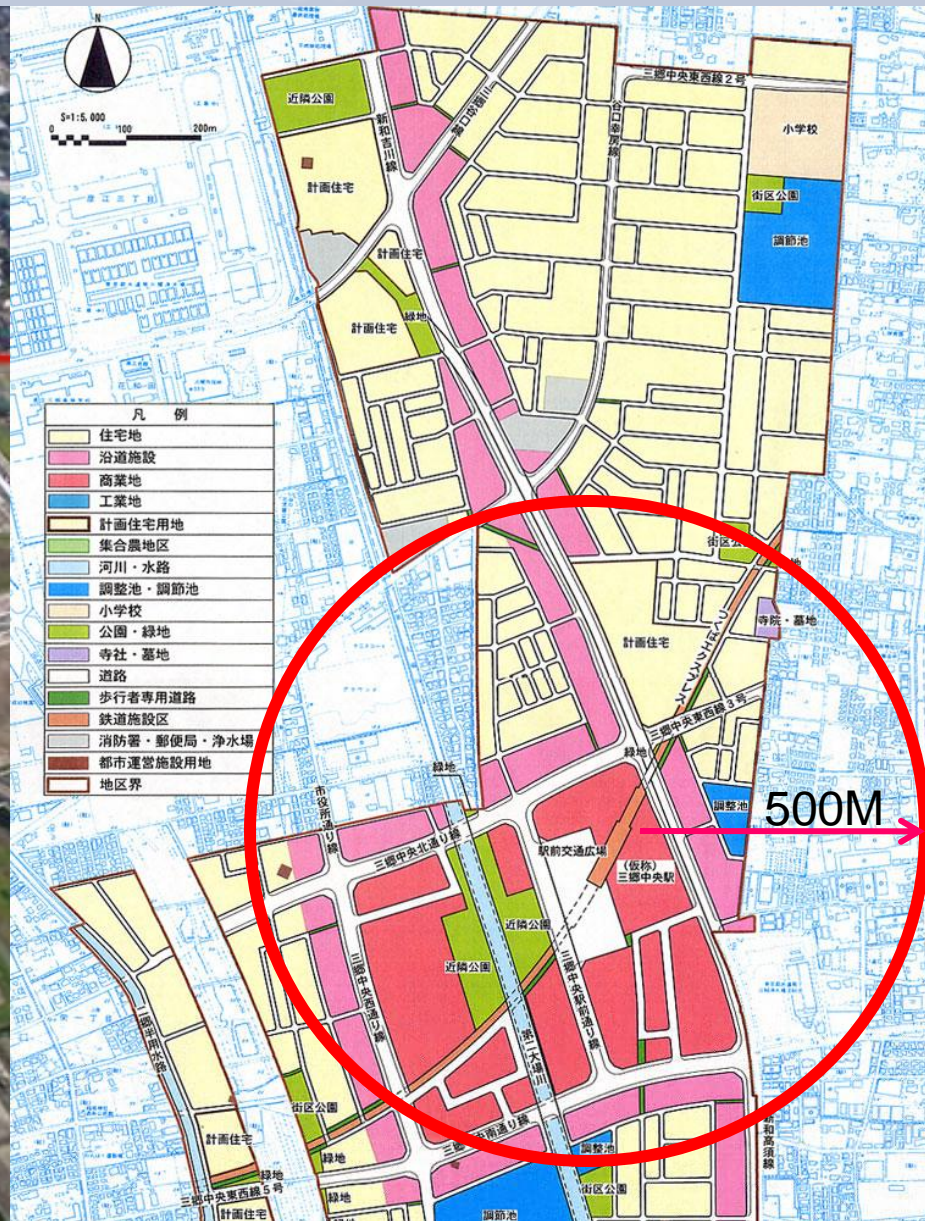
Land development along the line



LR Project along TX

Name of a Project	Implement	Acreage(ha)	Project Approval
Yashio Nannbu Nishi	Saitama pre.	99	1997
Yashio Nannbu Chuou	UR	72	1997
<u>Misato Chuou</u>	UR	115	1998
Undou Koen Shuuhun	Chiba pre.	232	1999
Nagareyama Shin shigaiti	UR	286	2000
<u>Kashiwa Hokubu Chuou</u>	Chiba pre,	273	2000
Kashiwa Hokubu Higashi	UR	170	2001
Moriyaeki shuuhun	Moriya muni.	39	1995
Moriya Higashi	Association	40	1986
Kayamaru	UR	293	2001
Katsu shiro	UR	485	2001
And 4 projets more			

Misato Chuo LR Project (115 ha, Misato City)





Facilities and buildings

Kashiwa no Ha Smart City

Concept of the City

(1) Environmental Friendly City

- Centralized Energy management system in the Area
- Energy saving, Energy creation, Energy stock
- New transportation system with low carbon

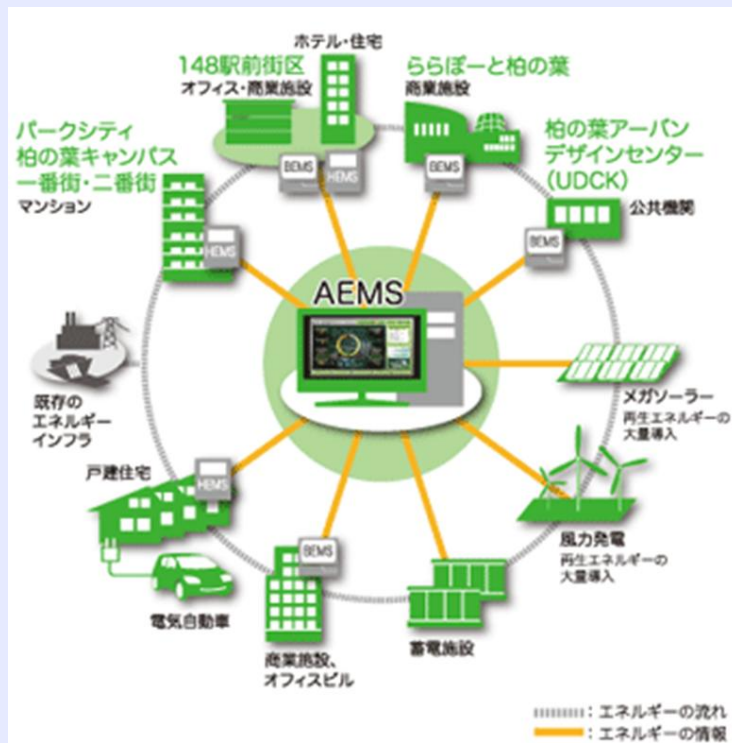
(2) Long life and health City

(3) New Industrial Creative City



Energy Management System

1. Area Energy Management System (AEMS)
 - Reduction of CO2 by exchanging of energy and utilization of unused energy



Kashiwa no Ha



LR Project in Thailand (8 Projects Approved)



Nan (47ha)

Lanmpang(10ha)

Phitsanulok(21ha)

Suphanburi(31ha)

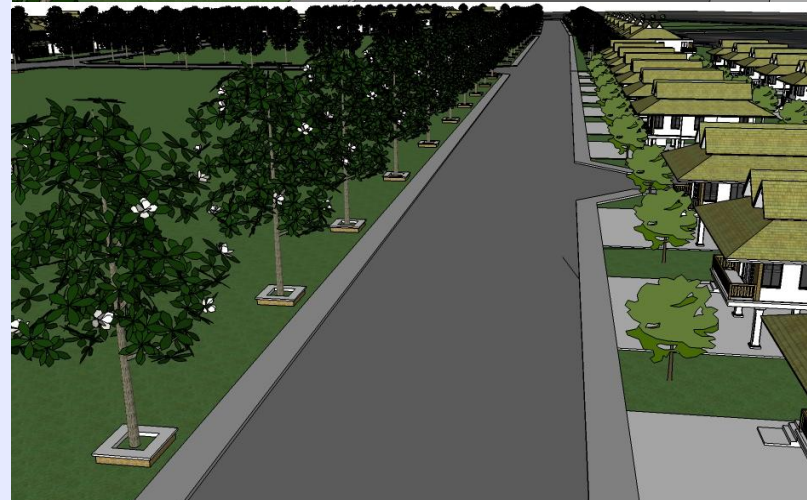
Rama9Park(9ha)

Samutprakarn(30ha)

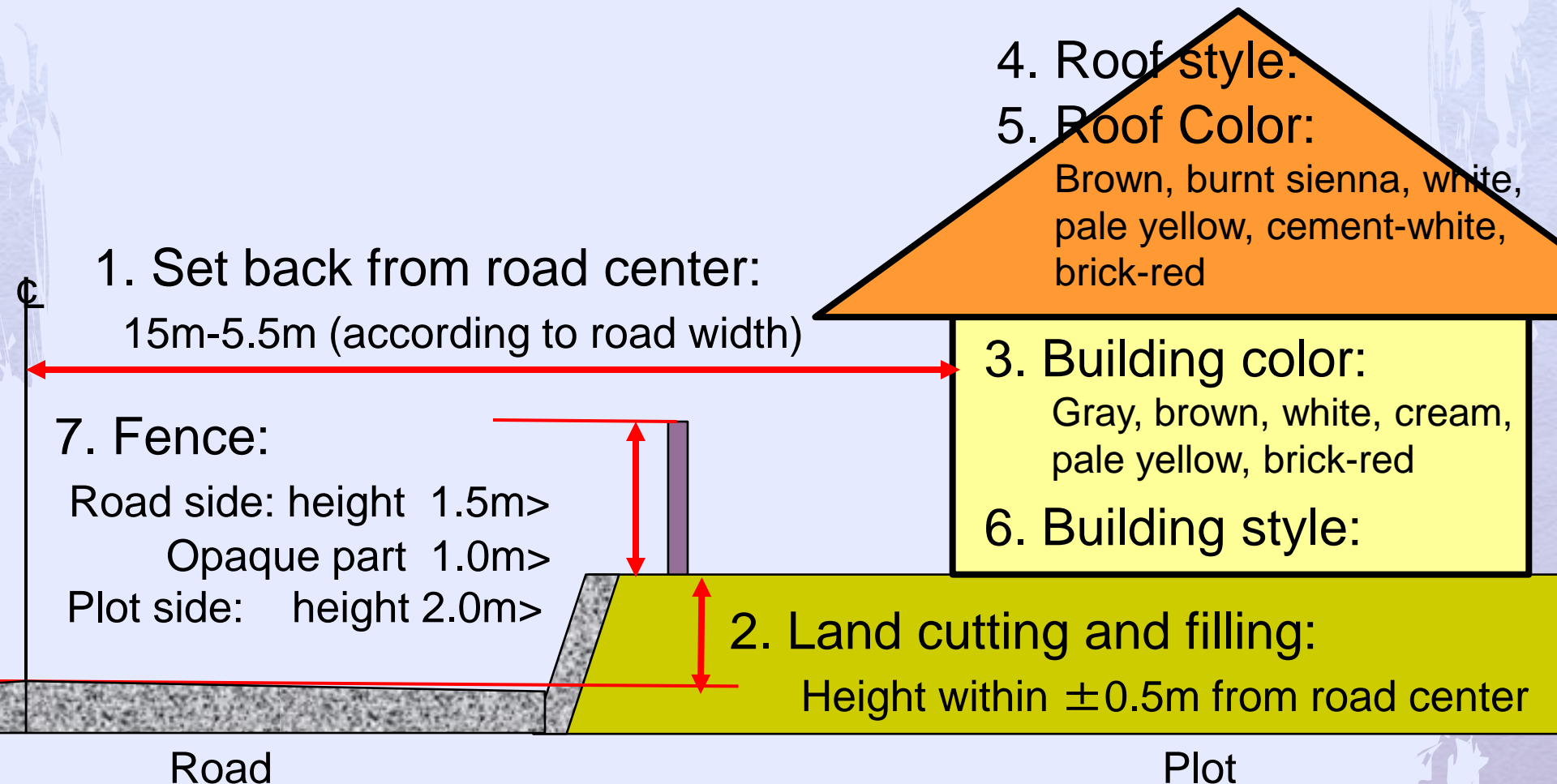
Yala(54ha)

Narathiwat(22ha)

Nan LR Project



Building promotion and control in Nan project area (Draft)



Organization: LR Association (Gentlemen's agreement)

Conclusion

- ◆ The function of transportation by mass transit of inner Bangkok is improving.
- ◆ However, efficiency of mass transit reduces without development of surrounding area of a station with infrastructure following appropriate land use plan.
- ◆ The surrounding area of a station with well organized infrastructure has high potential as it attracts many people because of convenience for shopping and transportation .

Proposal

1. Railway oriented Development

- Contribute effectively to the development of compact city aiming at sustainable BKK.

2. Application of LR

- To develop infrastructure according to city planning by application of LR in terms of cost sharing by public and private
- To sell reserve lands to developers so as to build up facilities necessary for daily life

Thank you for your attention