

# **ATRANS**

3<sup>rd</sup> Symposium

26-27 August 2010

Imperial Queen's Park Hotel

Bangkok

**Accessibility of Public Transport  
and TOD in View of State  
Railway of Thailand**

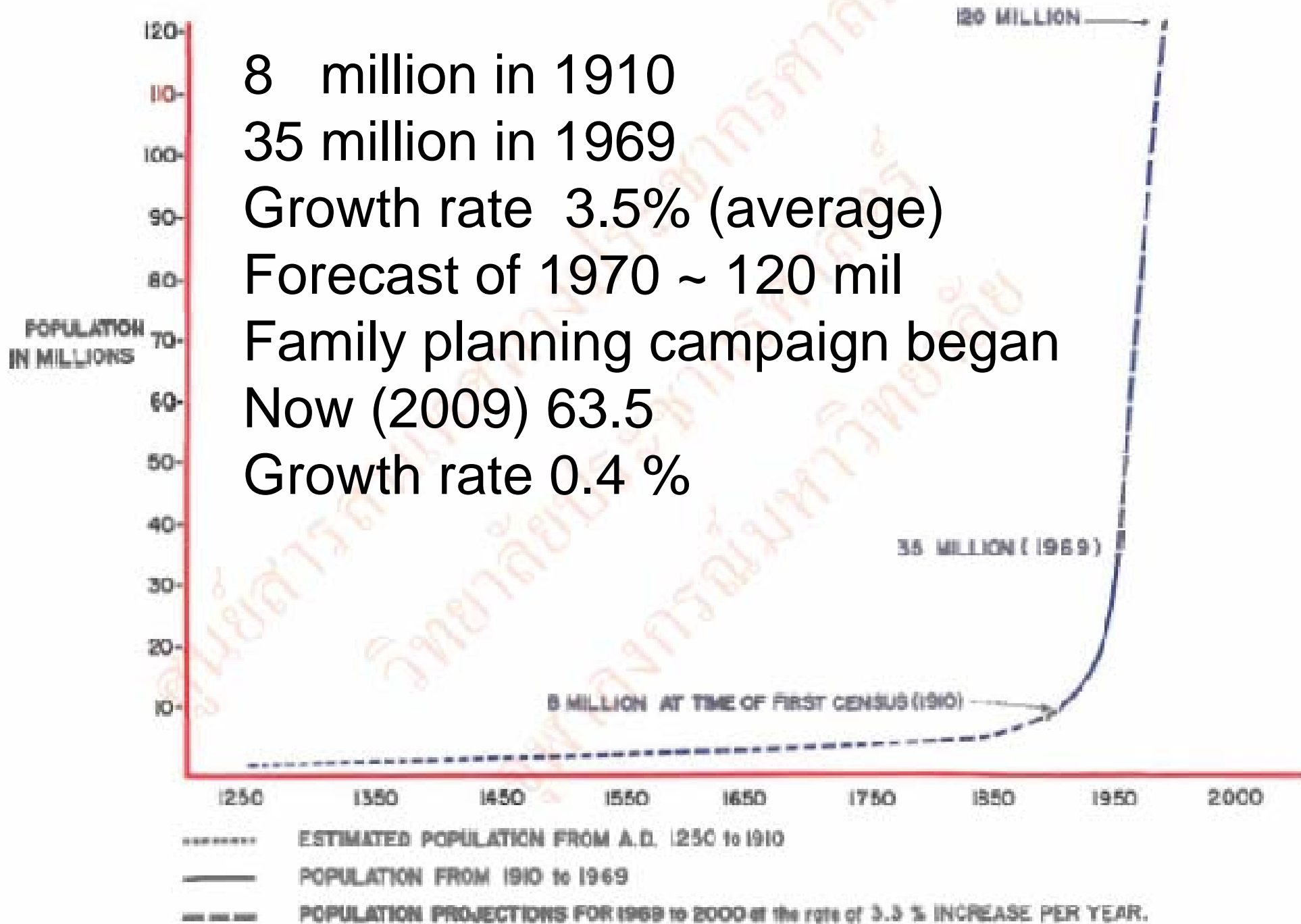
# Some fundamental facts about TOD

- Transport is derived demand (i.e. land use determines traffic demand)
- Public transports will not come to you, you have to go to them (need management & planning)
- Railway is a rail-bound public transport (railway will not come to you, you have to go to railway – need even more management)
- How to manage public's access to public transport is therefore essential
- Among them, walking is the most essential and economical element
- Demand Side Management (DSM) is therefore as important as Supply Side Management (SSM)

# DSM: The Existing Conditions

- Thailand is a new society (population was 8 million in 1910)
- The nationwide urbanization is “Ribbon Development” with 31 % urban population
- Land use and city structure are not quite appropriately planned and enforced
- Development of “flat city” creating urban sprawl, unfavorable for public transport
- Walking environments (controllable and uncontrollable) are not friendly

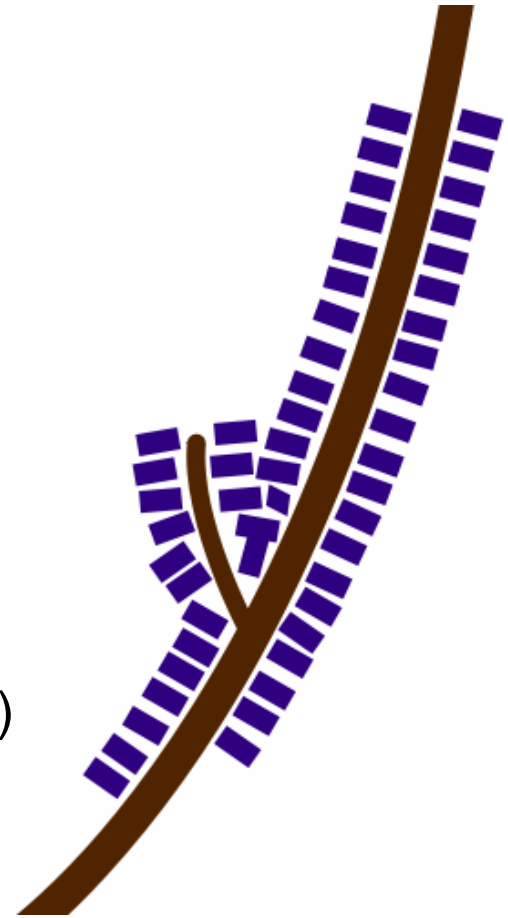
# THAILAND'S POPULATION GROWTH A.D. 1250 to 2000



# Ribbon Development / urbanization

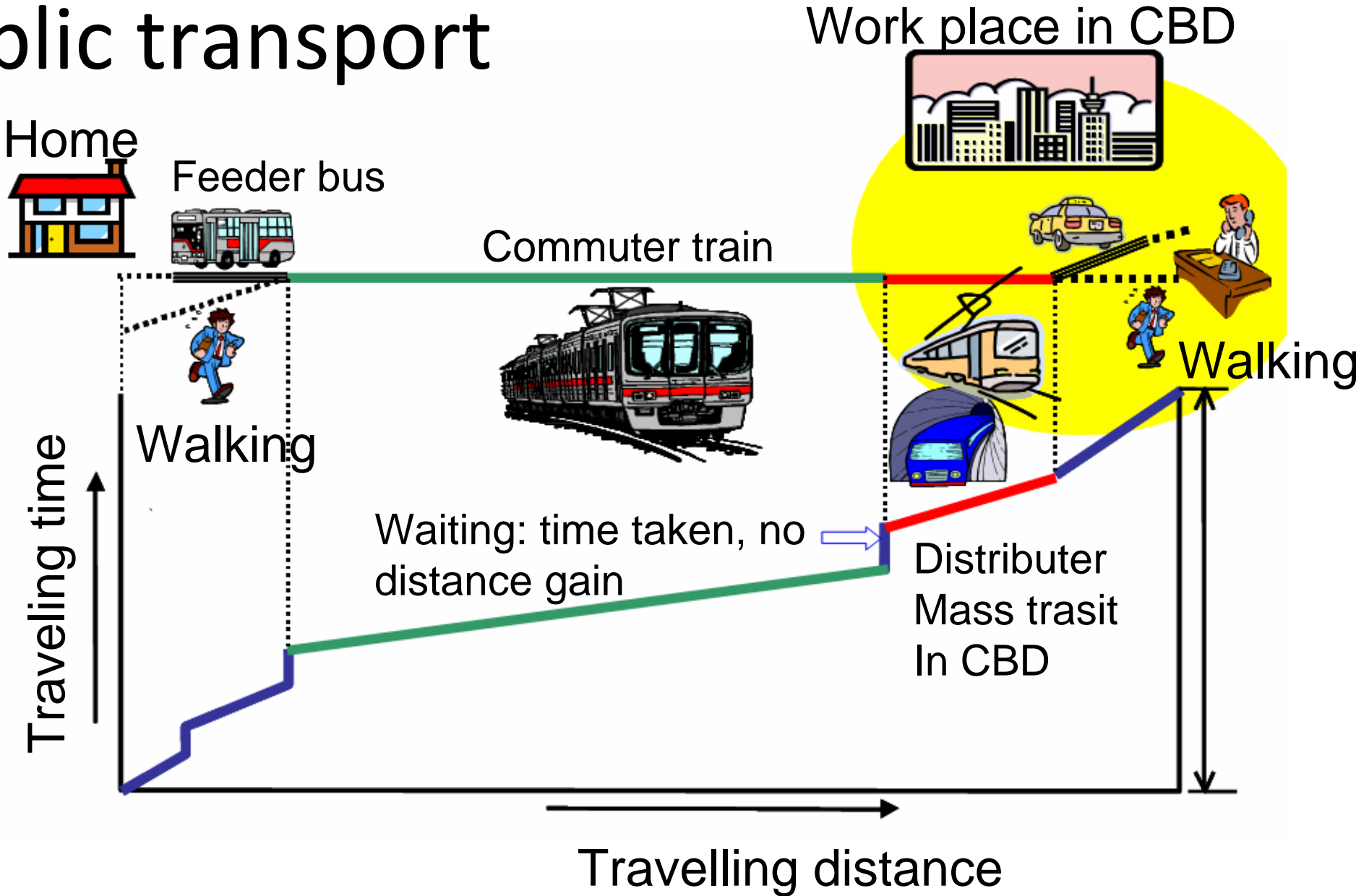
## Urban population

Japan	66%	Possessing High Speed Train
France	76%	
UK	80%	
Germany	88%	
Spain	77%	
China	47%	(600 m. approx.)
Thailand	31%	Dream to possess HST?
Vietnam	21%	



**“Scattered human settlement is not a place where public (mass) transport can appropriately function”**

# Walking is essential for people who want to leave car at home and take public transport



# Threats that Need Elaborate Care



Warm weather indulges walking than hot and humid tropical climate



Strong and closed fence secure those inside but not the ones walking outside





**“Motorcycle everywhere”  
caused by  
unfriendly  
walking  
environment**

**Inappropriate  
land use and city  
planning cause  
walking  
inconvenient**





# Unfriendly Walking Environment - Barrier Free Walkway ?



## Footpath in Bangkok



# Pedestrian Right of Way – Law Enforcement

ไม่ข้ามทางม้าลาย ระวังจะถูกจับ ปรับ !!

ส่วนการจับปรับนั้น วันที่ **1** ส.ค. จะเริ่มบังคับใช้กฎหมายอย่างเข้ม



พล.ต.ต. วีระพัฒน์ ต้นศรีสกุล  
ผู้บังคับการตำรวจจราจร

กฎหมายจราจรได้วางหลักเกณฑ์ไว้ว่า “หากผู้ขับขี่ไม่ปฏิบัติตามสัญญาณจราจรและเครื่องหมายจราจรที่ติดตั้งไว้หรือทำให้ปรากฏในทางข้าม (ทางม้าลาย) หรือที่พนักงานเจ้าหน้าที่แสดงให้ทราบ (สัญญาณมือ) เป็นความผิดมีโทษปรับไม่เกิน **1,000** บาท”

In America, pedestrians have the right of way to.....

Florida has a law that a driver must stop if a pedestrian is in the roadway .....



**Sky-walk not only providing shelter but also a barrier free walkway to get access to railway station**



**Providing Sun light shelter is essential for walking in tropical climate**

# Friendly Walking Environment - Clear Signage





**Bangkok is regarded “a flat city”**

Thai love living “touching the soil” in detached house. High density land use is made only in the heart of CBD of Bangkok.





# Urban Sprawl & Traffic Jam!

**Countryside on  
the way to and  
around  
Suvarnabhumi  
airport quickly  
disappeared !**





**Traffic Jam  
everywhere !  
Inside the city and on  
major corridors  
linking CBD and  
residential area.**



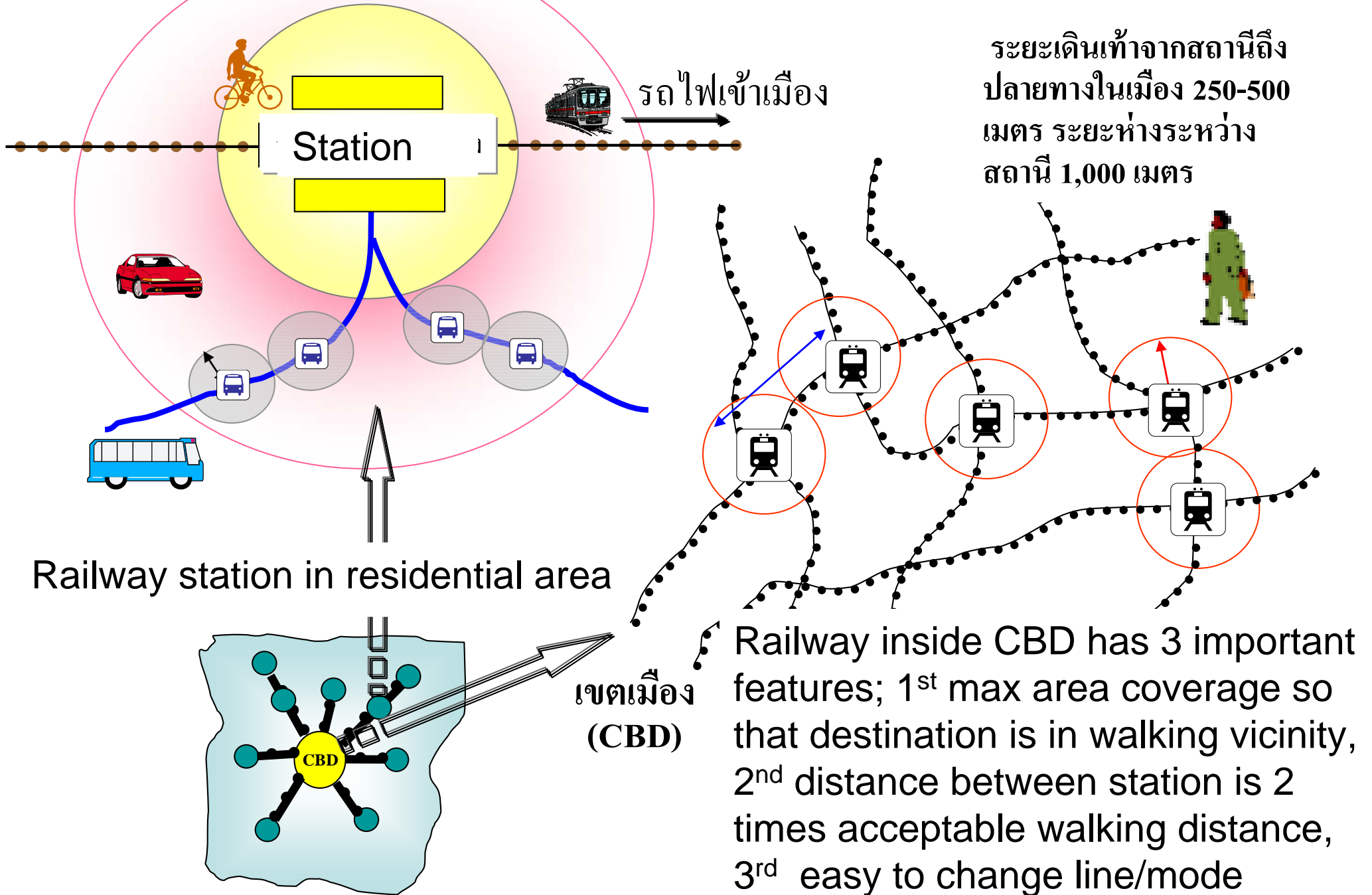
Minivans (and cars) suit scattered human settlement community better than mass transport system. When minivans for public service were legalized, not only bus system suffered; but also railway.



# Could BRT be Successful without Demand Side Management (land use re-adjustment) ?

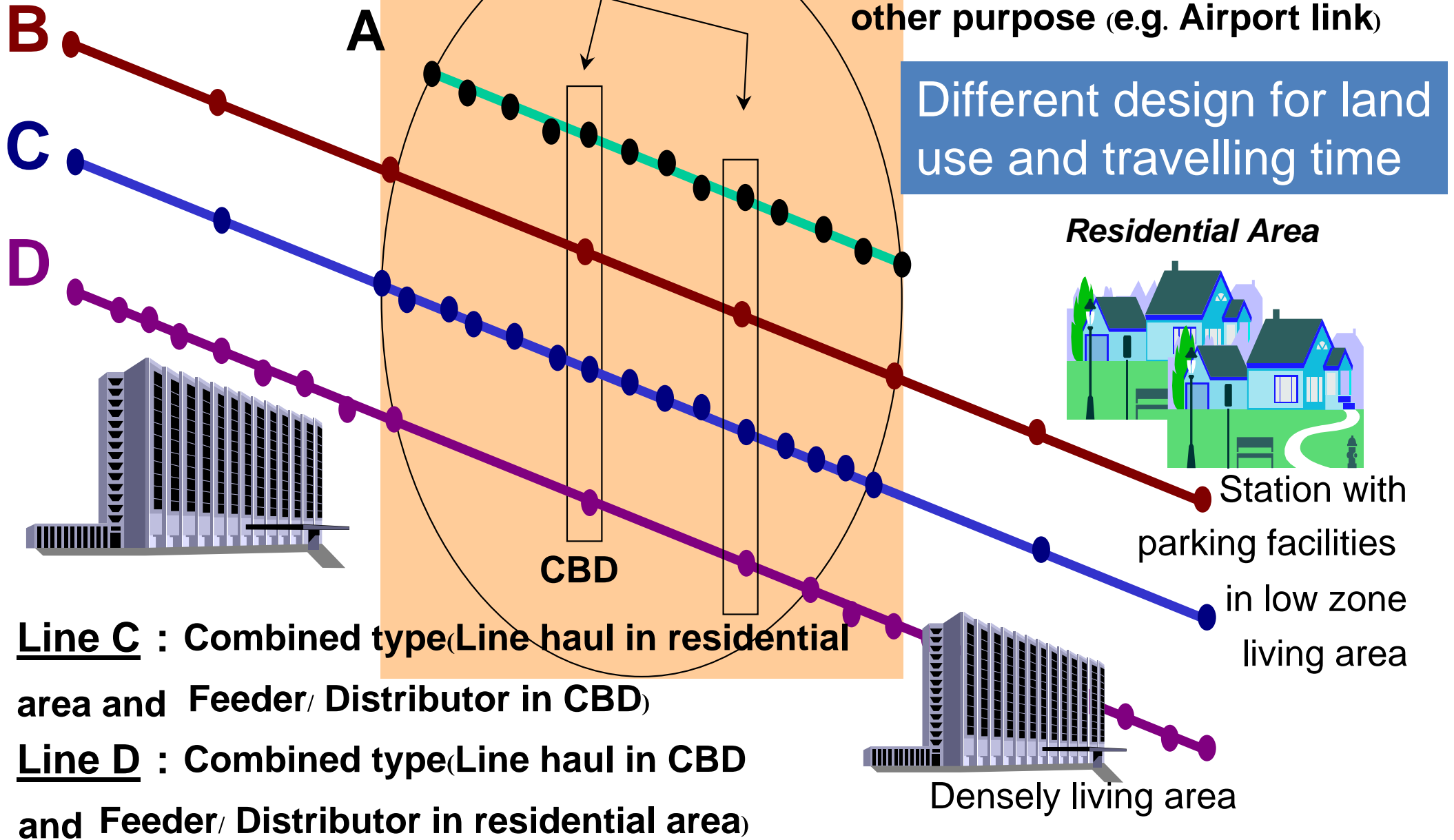


# SSM: Planning the Railway Network



**Line A** : Feeder/ Distributor type urban railway in CBD

**Line B** : Extended Line haul to serve remote residential area or other purpose (e.g. Airport link)



**Line C** : Combined type (Line haul in residential area and Feeder/ Distributor in CBD)

**Line D** : Combined type (Line haul in CBD and Feeder/ Distributor in residential area)



## BANGKOK Mass Transit

**BTS Skytrain (1999)**

- Sukhumvit Line
- Silom Line

**MRTA Subway (2004)**

2007 © UrbanRail.Net (R. Schwandl)

Lacking of efficient commuter train system and insufficient area coverage inside CBD, rail could not yet succeed in convincing people to leave cars at home

Minivan shuttle to extend BTS service foot print



# Current Stance of Public Transport in Thailand

- Ridership of BTS sky train is 550,000 person per day
- Ridership of MRTA/BMCL underground is 200,000 per day (accumulated loss is 10,000 m฿ approx.)
- Ridership of BRT (free trial run) is 15,000? person daily, mostly from bus riders (differ from plan which expect the mode shift from car users)
- BMA bus is carrying 1,600,000 person daily (yr 2008), declining and running at loss (some 10 m฿ daily)
- ARL ridership (free trial run) 25,000 person per day

# Future works

## Demand side (can not be done by single authority)

- Knowledge-led development
- Land use reform- more TOD-oriented, stabilizing CBD, reduce urban sprawl etc.
- Provision of parking facilities (cars and bicycle), barrier free access and friendly walkway etc.

## Supply side (can be done by a single authority)

- More commuter train system
- More mass transit system
- Friendly system for users- common ticket, system integration, short walking distance etc.

Without directive from any authority, land use reform is taking place around BTS's Rachatevee Station. High rise condominium is forming a high density living area in city of Bangkok.