



# Taipei Metro System

Green Design and The City

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Fall 2009

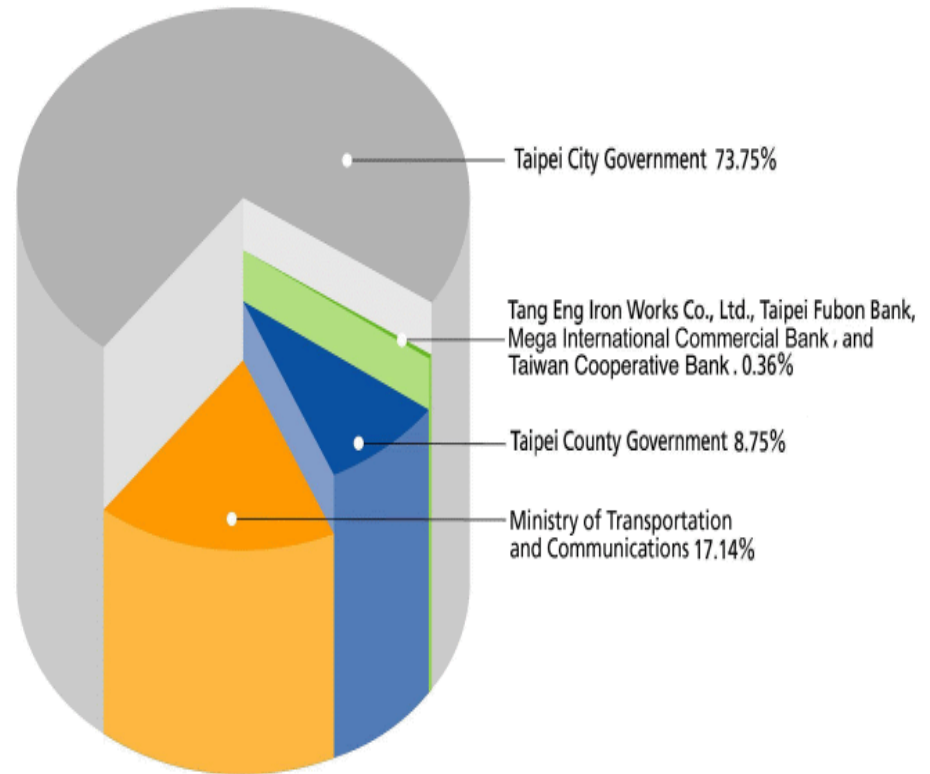
# Where is Taipei?



# Taipei Metro System



- 1996
- Taipei Rapid Transit Corporation: founded jointly by Taipei City Government, Ministry of Transportation and Communication, Taipei County Government and other private organizations
- 2 Systems: Medium Capacity and High Capacity



Source: TRTC

# Metro Guide



- Route Map: 9 lines
- Service Hours: 6am~midnight; average headway: 3~8 min
- Ticket Fares: 20 NTD~65 NTD/ single trip



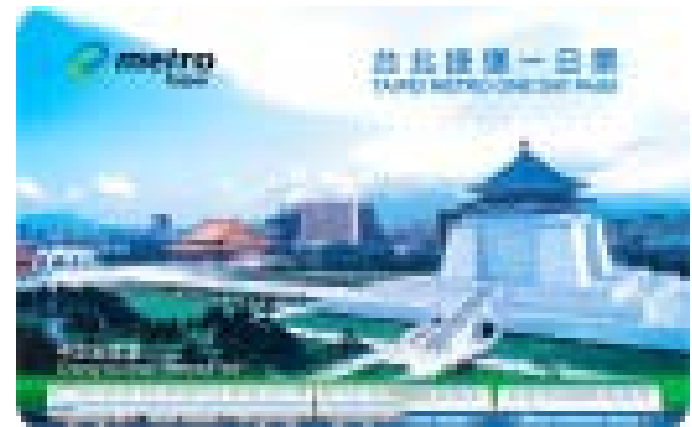
# Metro Guide



- Metro Tickets:
- EasyCard



- One Day Pass



- IC Single-Journey Ticket

# MRT Stations:

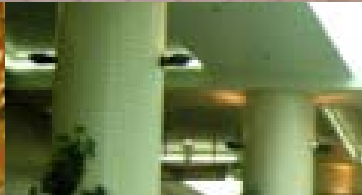
- Features/Characteristics:
  - a. Two main transfer stations



# MRT Stations:

- Features/Characteristics:
  - b. Real-time reporting of schedules
  - c. Four major languages voice-reporting at stations
  - d. Waiting zones for women
  - e. Art galleries; street of bookstores
  - f. Underground shopping streets

# MRT Stations:

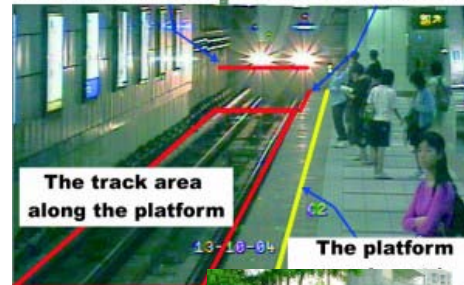


# MRT Stations

- Features/Characteristics:
  - g. Soundproofing barriers
  - h. Platform doors & track intrusion detection system



The track around platform end door      The gap between train and platform end door



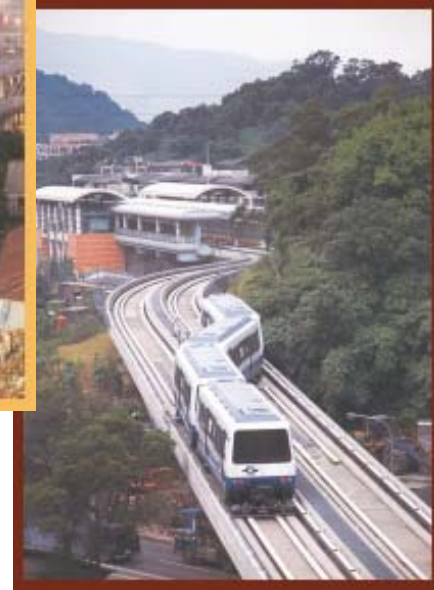
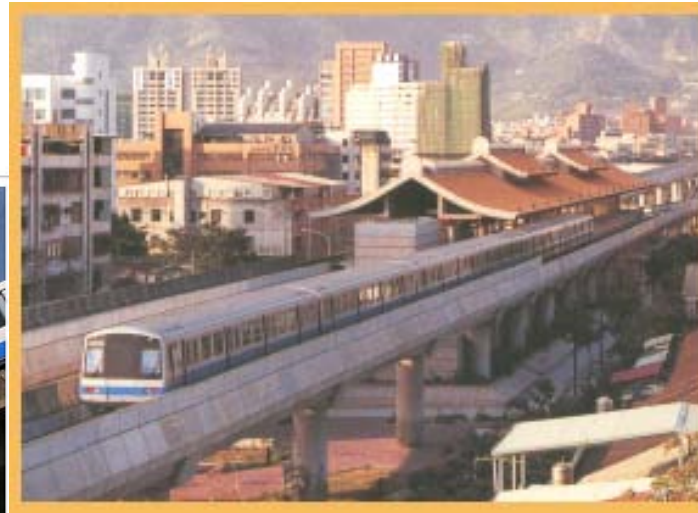
# MRT Stations:

- Features/Characteristics:
  - i. One-ticket-for-all: EasyCard
  - j. Double-decker bicycle racks



# MRT Stations:

- Surrounding Areas:
  - a. City center, business/economic activities, shopping malls, schools, major tourist sites
  - b. Scenic views
  - c. Buses



Taipei Metro



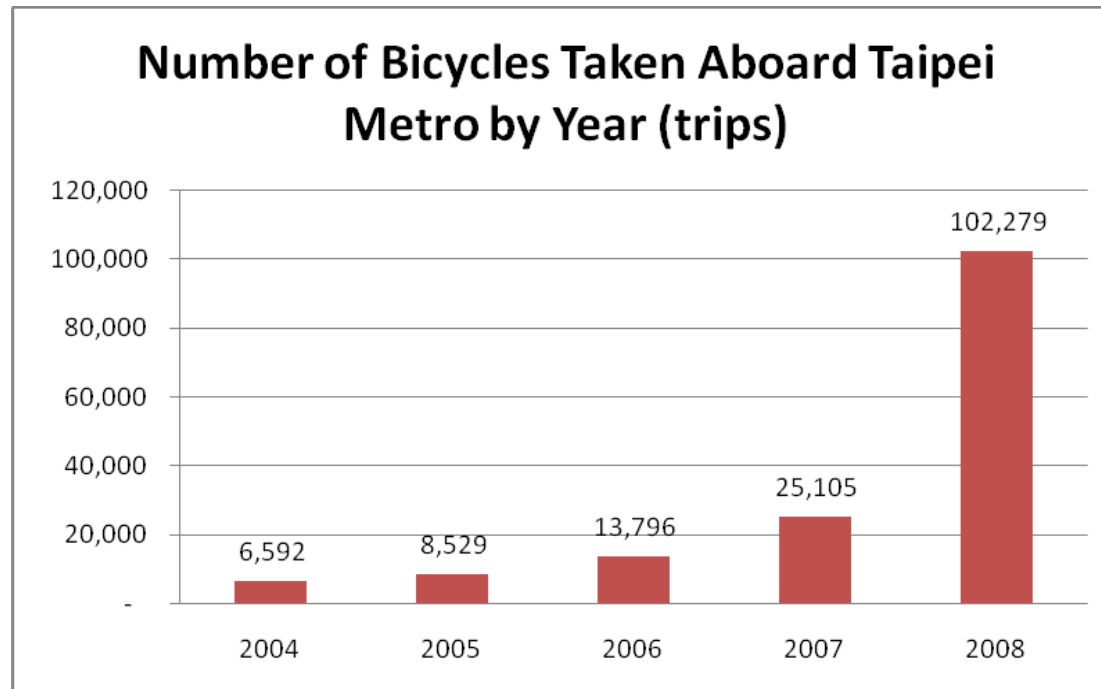


# MRT Stations:



# MRT Stations:

- Toward Sustainability:
  - a. Bikes on trains: 2004; weekends and holidays; 80NTD

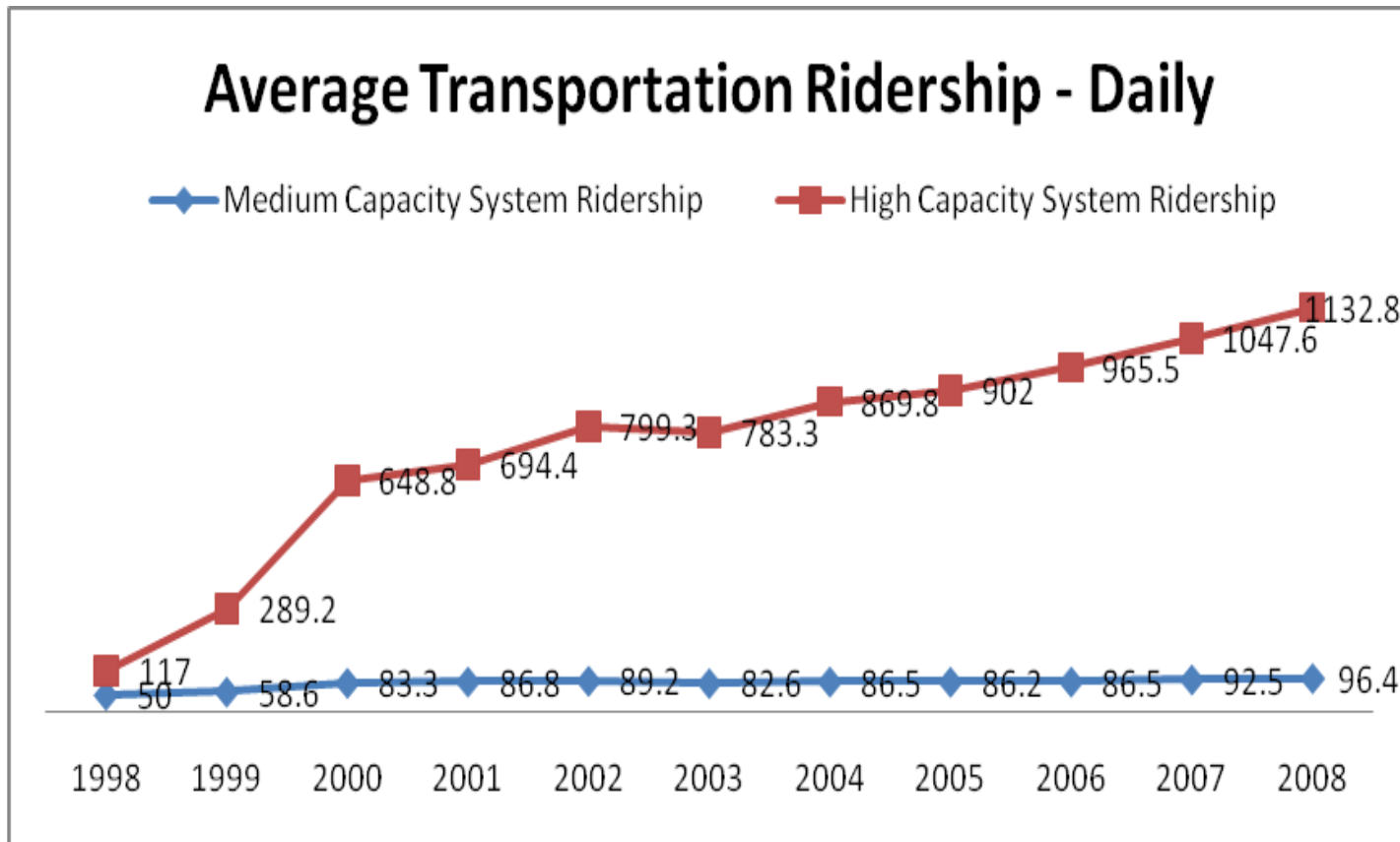


# MRT Stations:

- Toward Sustainability:
  - b. Energy reduction goal: internal energy reduction policy & Taipei City Government's energy reduction targets
  - c. Improved lighting: LED lights

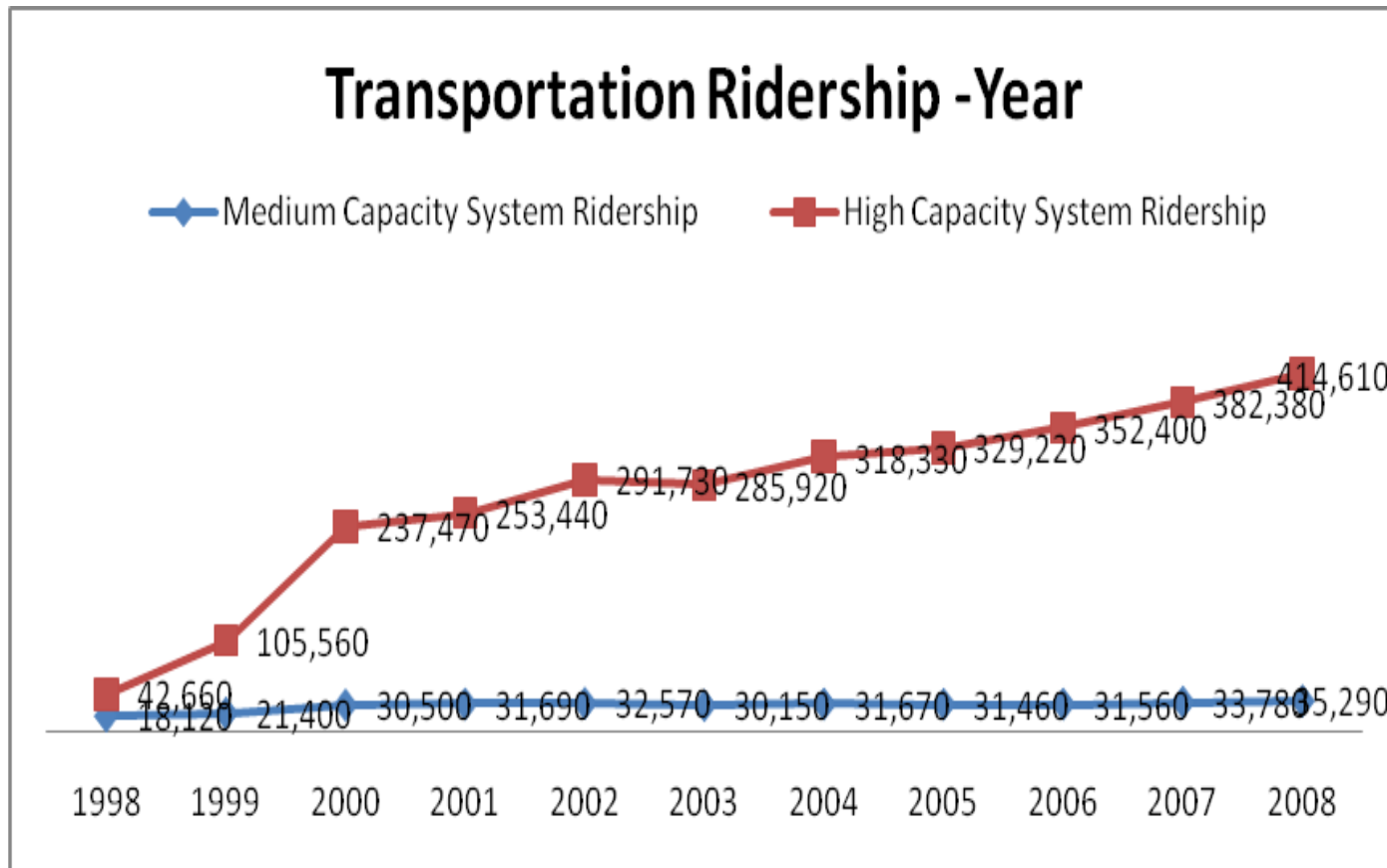


# Related Statistics: Ridership Counts (ten thousand trips)



Source: TRTC

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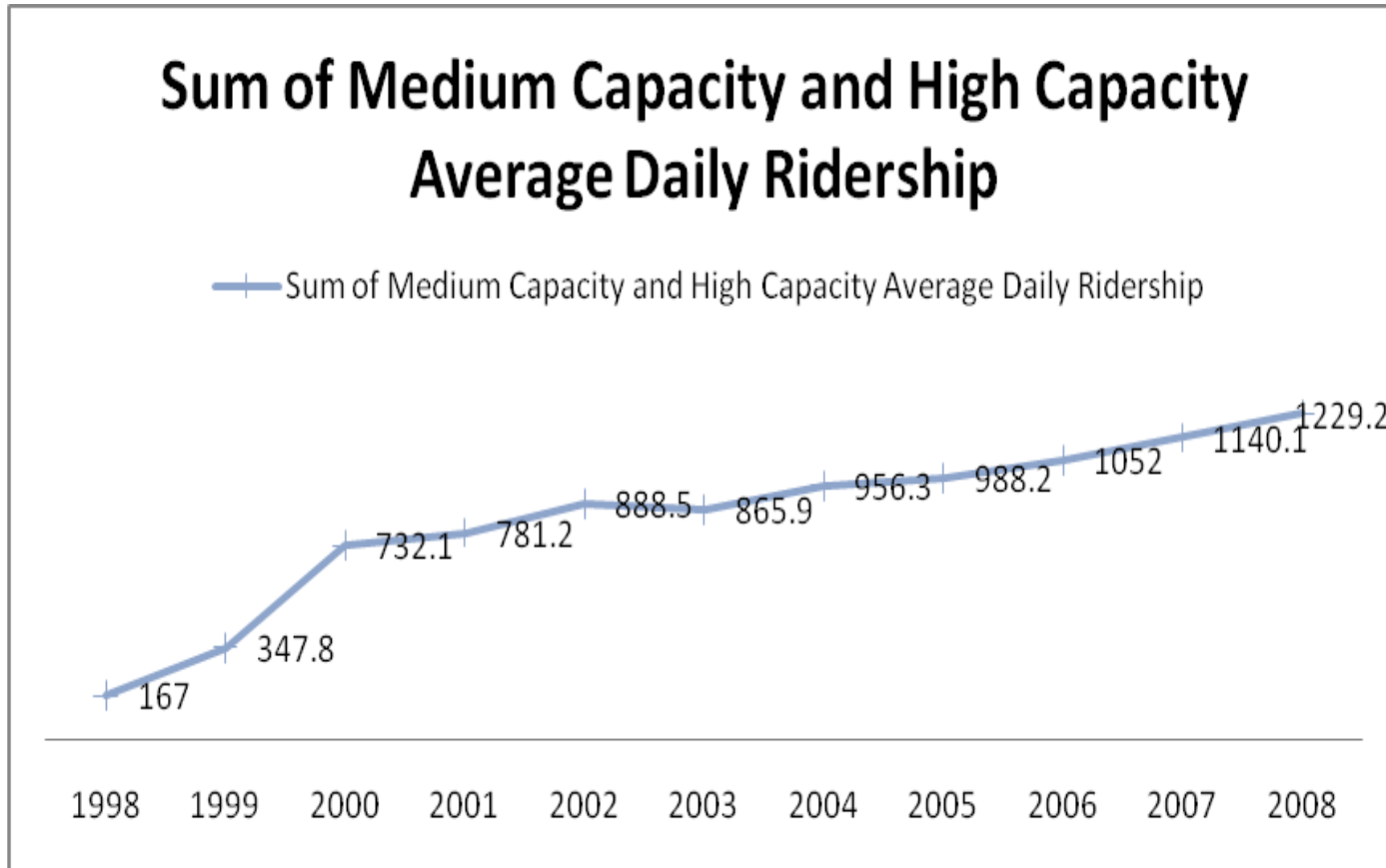


Source: TRTC

# Related Statistics: Ridership Counts (ten thousand trips)



## Sum of Medium Capacity and High Capacity Average Daily Ridership



Source: TRTC

# Taipei Metro System and Transit System:



a. Metro  $\leftrightarrow$  Buses

- Discount measures

b. Metro  $\leftrightarrow$  other modes of transportation:

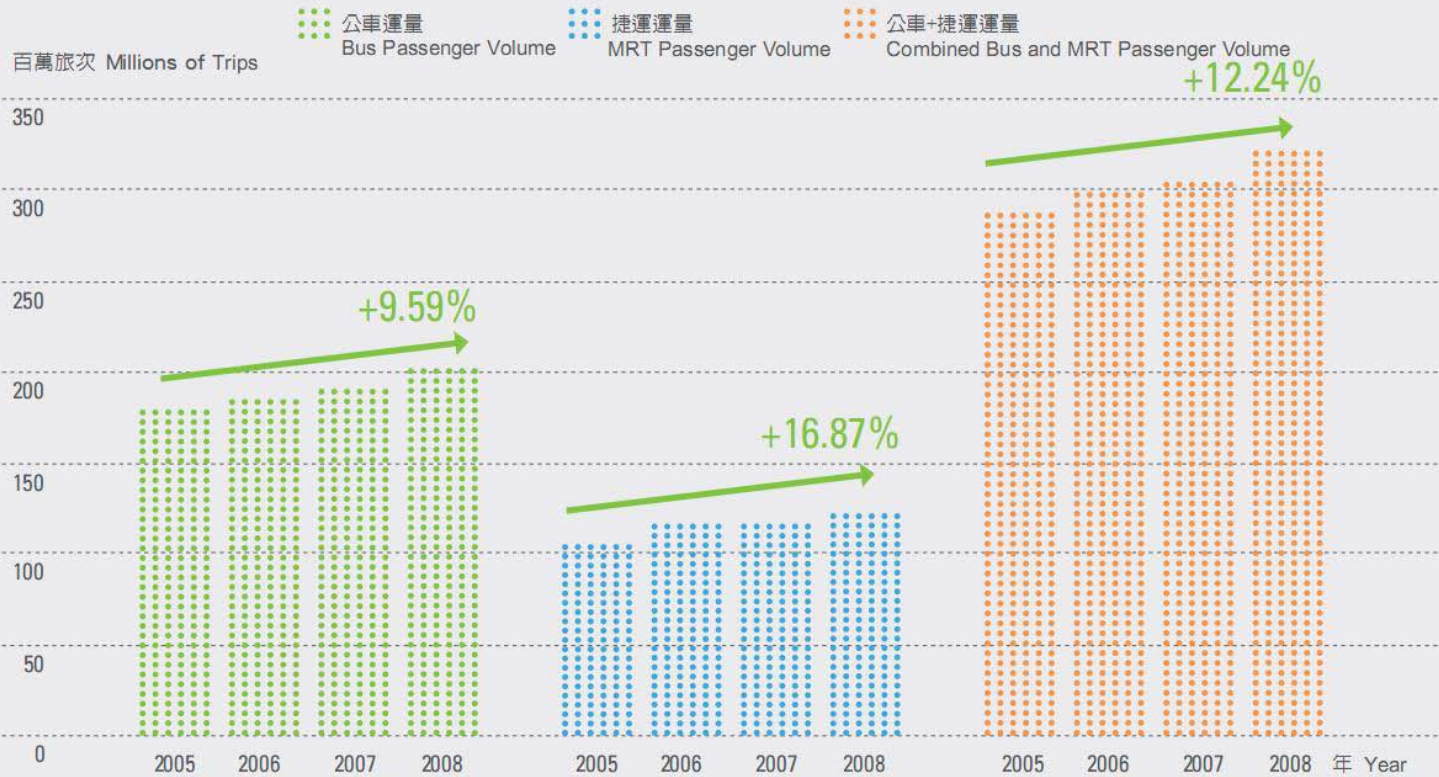
- Taiwan High Speed Railway
- Taiwan Railway
- Coaches
- Gondola



# Taipei Metro System and Transit System:



Public Transportation Volume Status in the Taipei Metropolitan Area



註：各運量成長率之比較基期為 2005 年。 Note: The rates of increase are based on the volumes recorded in 2005.

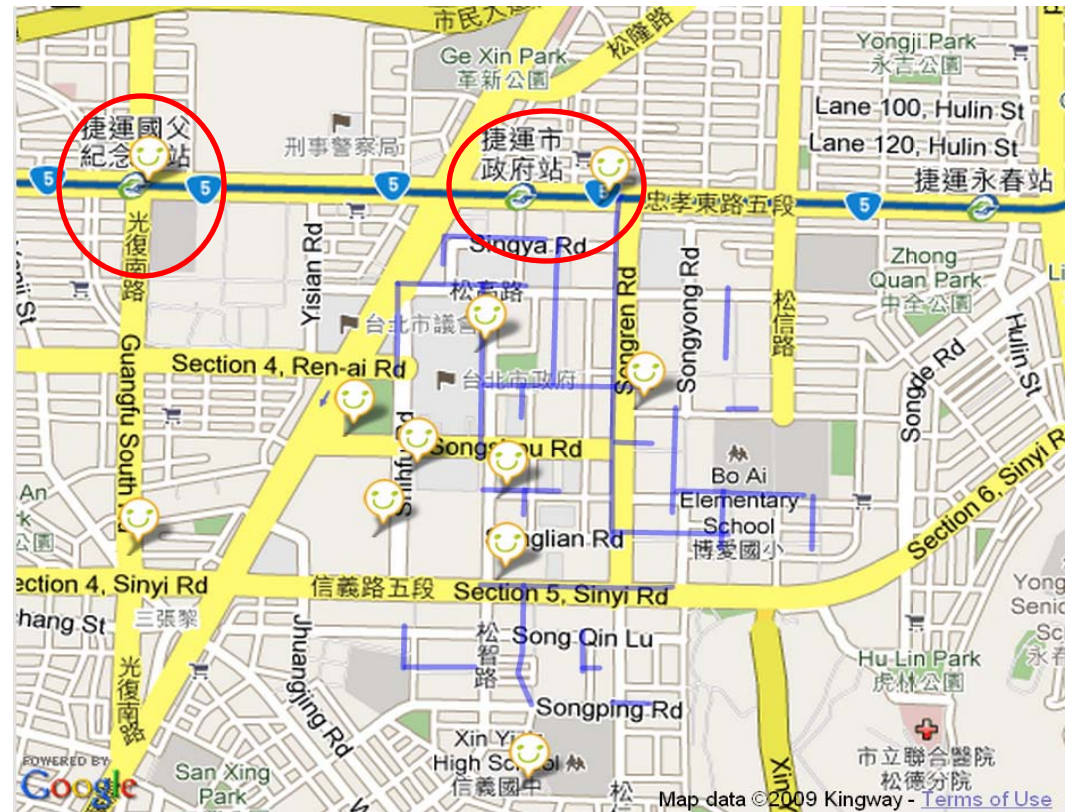
Source: TRTC

# Taipei Metro System and Transit System:



## c. Metro ↔ YouBike

- Taipei City Gov. & Giant
- Automated Sys.
- Xinyi Distrit only
- YouBike locations & paths:



Map data ©2009 Kingway - Terms of Use

Source: YouBike

# Taipei Metro System and Transit System:



c. Metro ↔ YouBike



## YouBike Usage Rates

|                 | Short-Term Card  | Long-Term Card   |
|-----------------|--|--|
| Rate            | The first 30 minutes of each session is free then \$10 for each additional 15 minutes. |  |
| Basic Rate      | 1 Day NT 40<br>5 Days NT 150   | 1 Month NT 500<br>6 Months NT 1000<br>1 Year NT 1500         |
| Mean of Payment | Credit Card  | No deposit needed (provide two forms of ID for photocopying) |
| Deposit         | NT \$3000<br>(for authorization only, not charge)                                      | NT \$0   |
| Where to Apply  | Information Service Kiosk  | Register in person at Service Center                         |

# Possible Improvements of MRT



- Signs
- Platforms
- Space Management
- Bikes
- Service Hours



# SWOT Analysis of Taipei Metro



## Strengths

- a. Faster, cheaper, more comfortable, more convenient
- b. Services
- c. Create equity
- d. Changes & Developments
- e. Time control

## Weaknesses

- a. Not elderly-friendly
- b. Latest newly operating lines: mishaps, difficulties, challenges; drop in confidence and satisfaction

# SWOT Analysis of Taipei Metro



## Opportunities

- a. Awareness of environmental sustainability
- b. Human conscious/behaviours
- c. Oil prices
- d. Gov.'s efforts:
  - 2009 Deaflympics at Taipei
  - 2010 Taipei International Flora Expo

## Threats

- a. Renewing buses
- b. Lower fares for buses; free for elderly
- c. Variety of bus lines
- d. Gov.'s achievements

# Personal Experience



Home  
Schools  
Workplaces  
Entertainments



# International Award

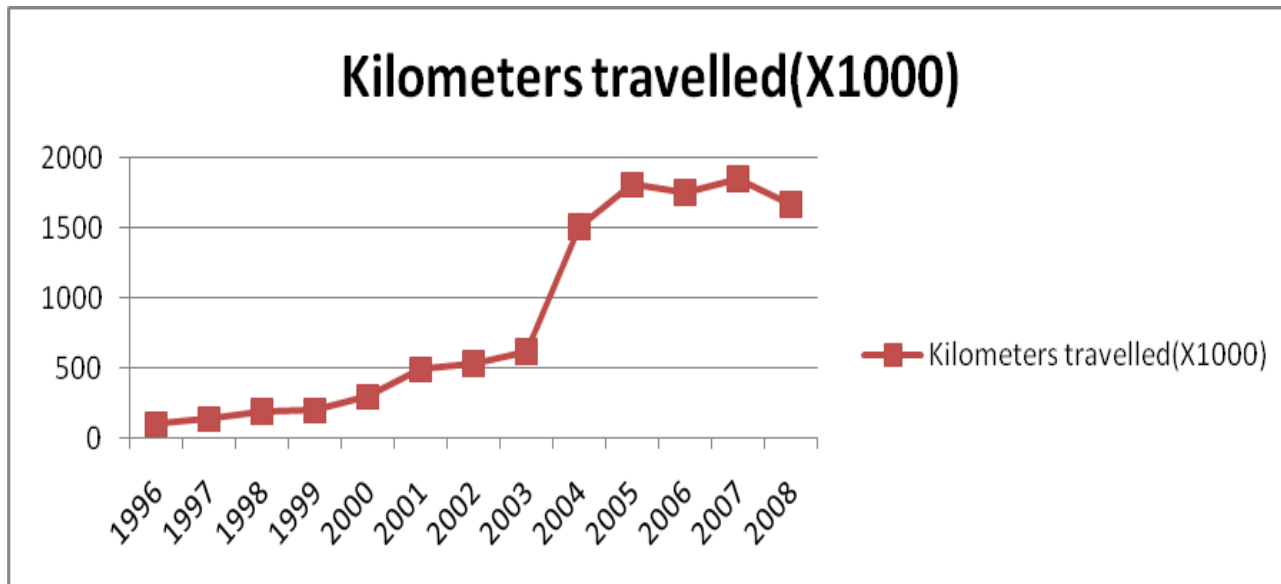


Taipei Metro Reliability Ranked Number One for Four Years Running

- Railway and Transport Strategy Center (RTSC) at Imperial College London's Nova/CoMET consortiums
- 26 members
- 2004~2007

# International Award

- Incident causing more than five minutes of delayed/avg. kilometers travelled



Source: TRTC

# Thank You!

Q & A