



# Towards Greener Transport in Taipei

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**Climate Change** - Green House Effect, Extreme Weather

**Aging Society** - Barrier-free Transport, Social Equity

**Globalization and Urbanization**

**Compact City** - 3Ds; Density, Diversity, Design

衝擊與挑戰

IMPACT & CHALLENGE



## Megatrends



### Globalization & Urbanization

- Global players / trade volume increase
- 2030: 60% of population in cities
- High density living demands for new patterns in infrastructure



### Demographic Change

- 65+ generation will nearly double by 2030 (from 7% to 12%)\*
- Need for adequate infrastructures as well as health- and elder care



### Climate Change

- Cities responsible for ~80% GHG
- Need for resource efficiency and environmental care

\* In 2025, Taipei will become aged society (65+ from 13% to 20%)

## Sustainable Urban Development

- **Cities are competing globally** to make their urban areas attractive to live and to invest in

Competitiveness

**Governance**

Environment

Quality of Life

- **Challenge to balance** between competitiveness, environment and quality of life, and to **finance** infrastructure solutions
- Achieve committed CO<sub>2</sub> targets

# Asian Green City Index

Economist Intelligence Unit

The Economist



Source : SIEMENS

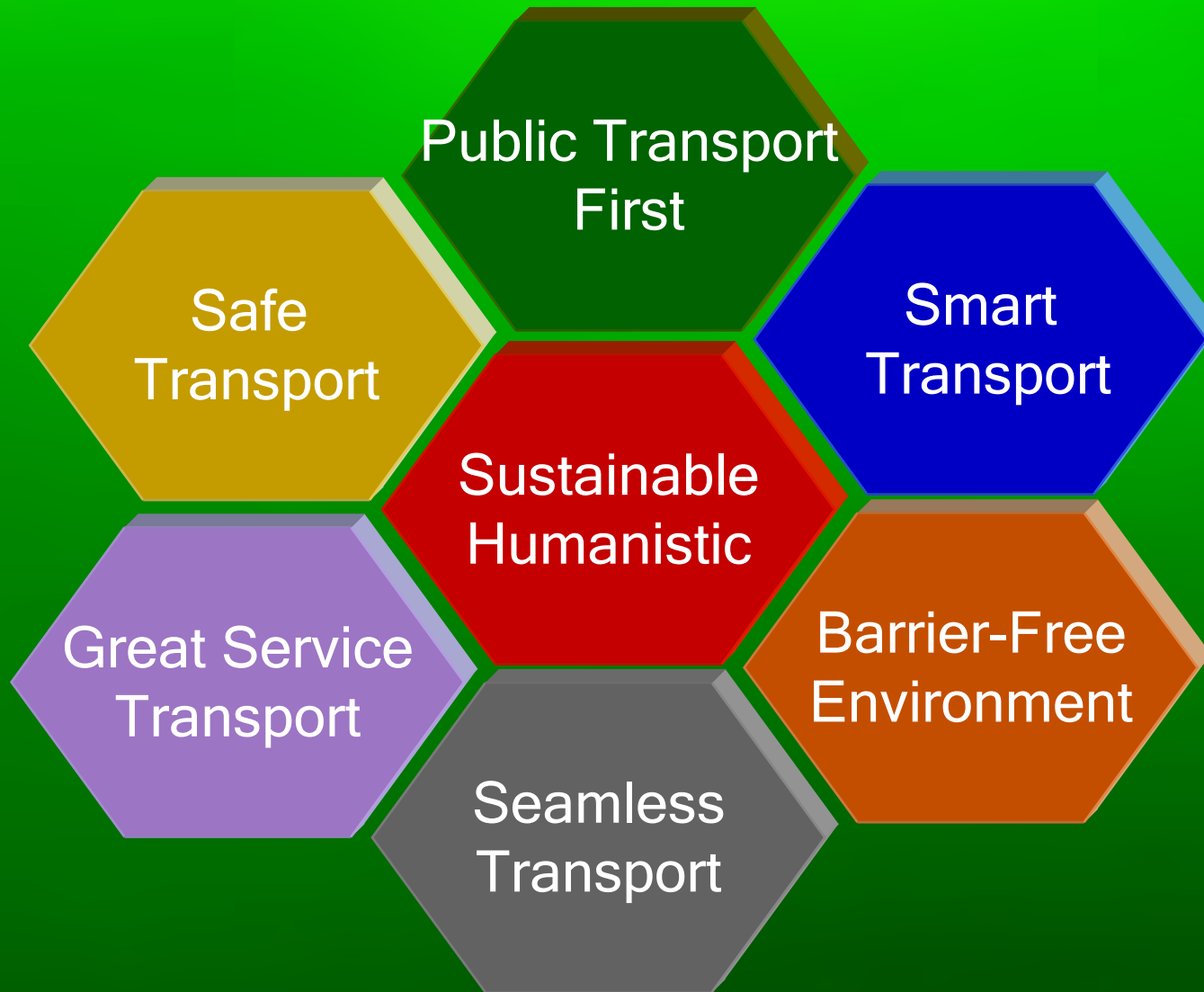


**Vision without action is a daydream, Action without vision is a nightmare.**

**- Japanese Proverb**

**願景 VISION**

# Vision





**G**reat : Great Service 優質

**R**eliable : Reliable Service 可靠

**E**nvironmental : Environmental Service 環保

**E**quity : Equity Service 公平

**N**etwork : Network Service 友善

- MOTC, Oct. 2011

綠色運輸 GREEN TRANSPORT

# San Francisco Urban Environmental Accords

United Nations Environment Programme  
World Environment Day, June 5th, 2005

- *Adopt a citywide greenhouse gas reduction plan that reduces the jurisdiction's emissions by twenty-five percent by 2030, and which includes a system for accounting and auditing greenhouse gas emissions.*
  - *7 Issues*
  - *21 Action Plans*



# San Francisco Urban Environmental Accords

United Nations Environment Programme  
World Environment Day, June 5th, 2005

- **Transportation**

**Action 13** *Develop and implement a policy which expands affordable public transportation coverage to within half-a-kilometer of all city residents in ten years.*

**Action 14** *Pass a law or implement a program that eliminates leaded gasoline (where it is still used); phases down sulfur levels in diesel and gasoline fuels, concurrent with using advanced emission controls on all buses, taxis, and public fleets to reduce particulate matter and smog-forming emissions from those fleets by fifty per cent in seven years.*

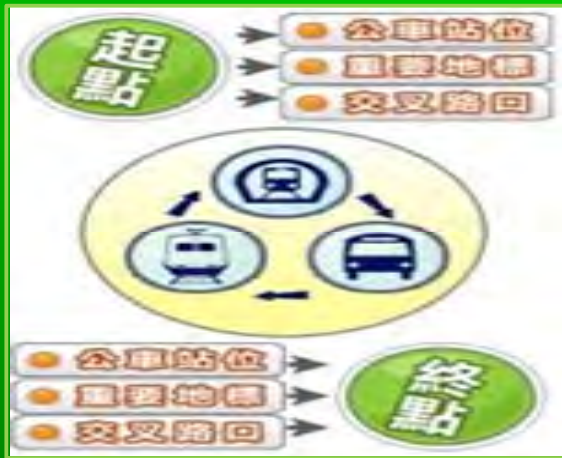
**Action 15** *Implement a policy to reduce the percentage of commute trips by single occupancy vehicles by ten per cent in seven years.*



**WHERE ARE WE NOW?**

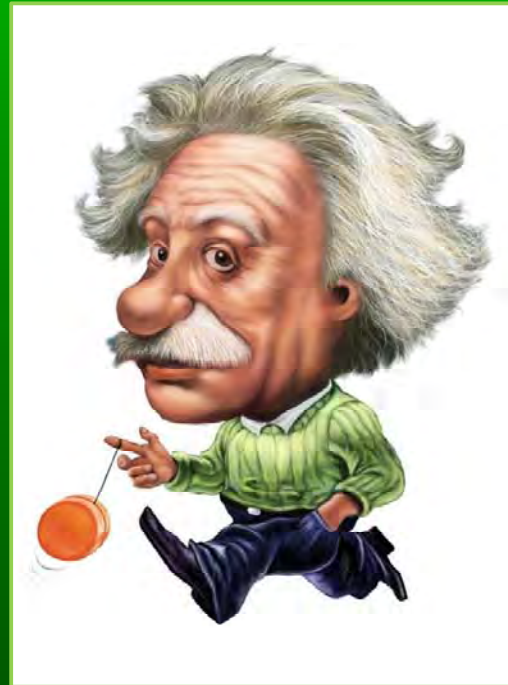
# About the Daily Trip ...

- ? Travel Time vs. Travel Cost
- ? Flexibility, Convenience
- ? Comfort, Privacy
- 
- 
- ! Environment Protection



Mobility

Accessibility





- Establish Energy Efficient & Low Carbon City Transport System
- Create Sustainable Urban Environment
- Promote Public Transport Services
- Implement Travel Demand Management, TDM

## 政策方向 POLICY DIRECTIONS



- Improve Green Transport Infrastructure
- Develop Green Transport City
- Encourage Green & Intelligent Technologies
- Implement Travel Demand Management
- Support Green Lifestyle

## 策略 STRATEGIES

# Strategies



## Improve Green Transport Infrastructure

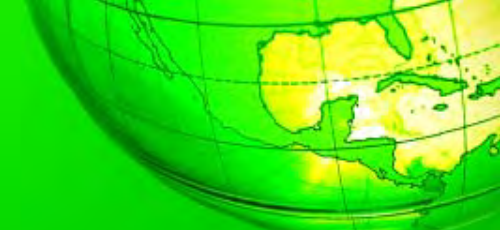
- Complete Rail-based MRT System
- Organize Multimodal Transfer Hubs
- Upgrade EBL Network
- Build City Bike Lane Network
- Widen Sidewalks
- Develop Blue Highway

# Taipei MRT Route Map



# Seamless Transport

## Multimodal Transfer Hubs



### 北區

- 圓山交通廣場
- 通勤需求

### 東區

- 市府轉運站
  - ✓ 桃園、機場、宜蘭部分西部走廊城市
- 南港轉運站
  - ✓ 通勤與東部地區之需求
  - ✓ 基隆、花蓮、台東



### 西區

- 臺北轉運站
- 西部走廊主要城市

### 南區

- 動物園轉乘站
- 新店、中永和





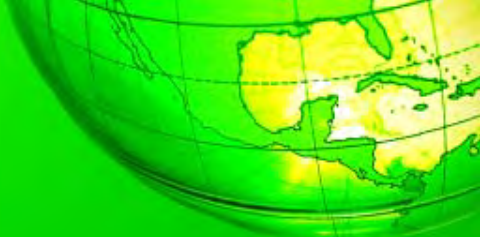
# EBL (Pre-BRT) System



# Development of Taipei City Bike Lane Network



# City Bike Lane Network



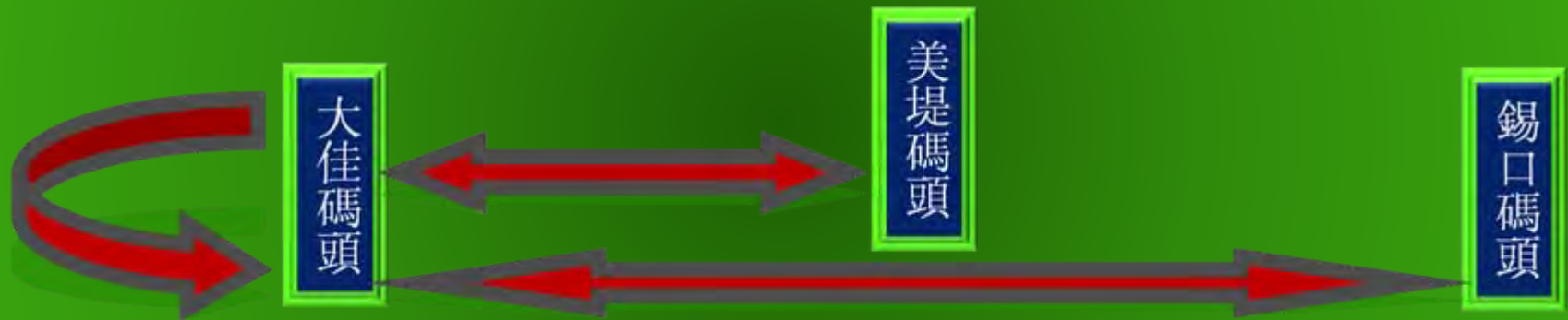
# Widen Sidewalks



# Blue Highway - Water Taxi



Inland Waterways - Tamsui River Connecting Cities



# Strategies



## Develop Green Transport City

- Build High Density TOD City
- Integrate Public Transport
- Reform Bus Network
- Promote Low-floor & Low-emission Buses
- Introduce Pedestrian-Oriented & Bike-Oriented City

# Integrate Land Use & Transport



Compact Development

+

Public Transport

+

TDM

= ?? %

Energy & Emission Saving

# Spectrum of Public Transport



石牌站 → 天母 STV 公共電視台  
跳表120元  
每人30元  
省90元  
台北 北市計程車並乘制 最快九月上路 晚間新聞  
車門側面 擋風玻璃  
共乘計程車  
共同 計程車

## DRTS

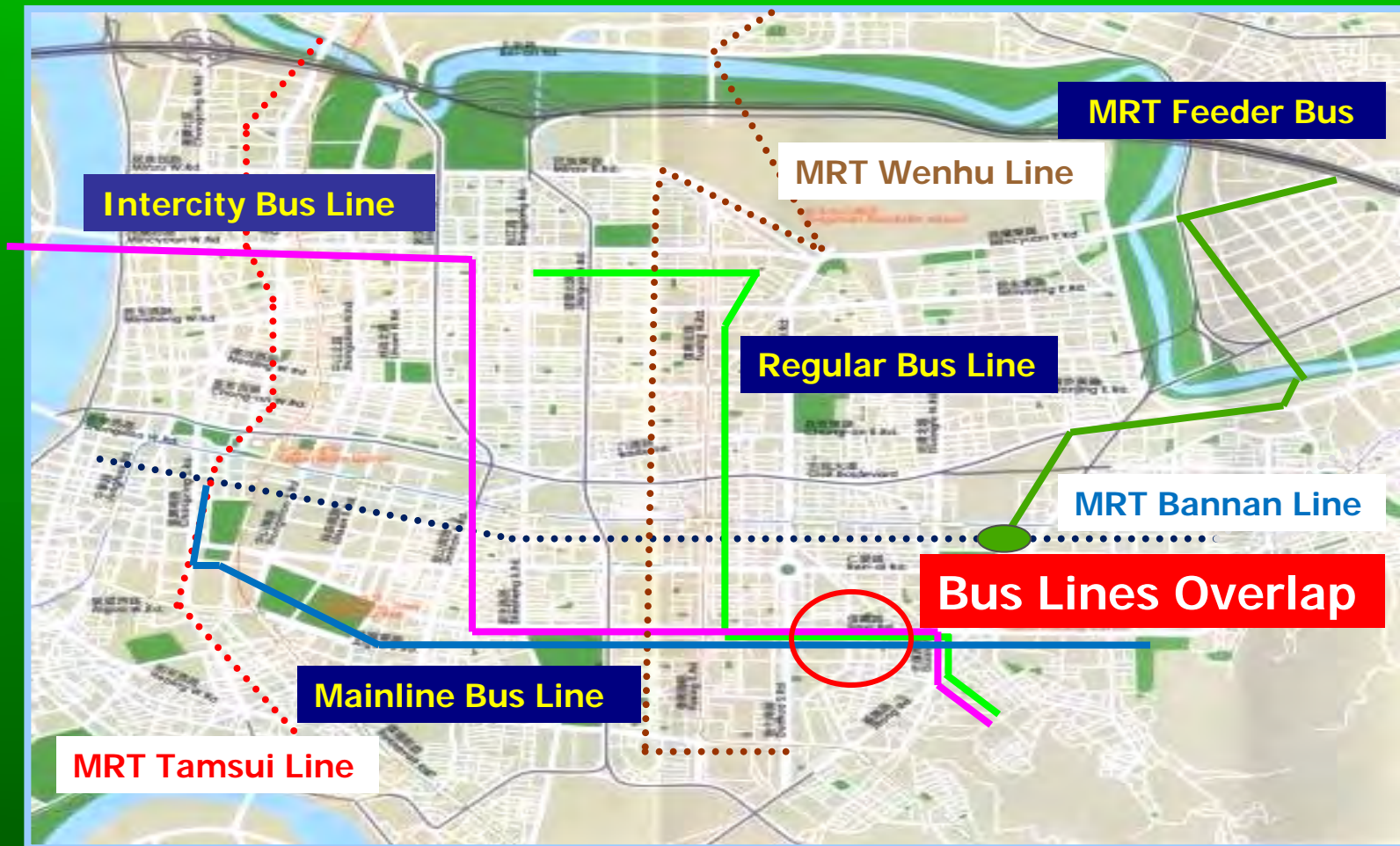
需求反應式運輸服務中心  
DEMAND RESPONSIVE TRANSPORT SERVICE CENTER





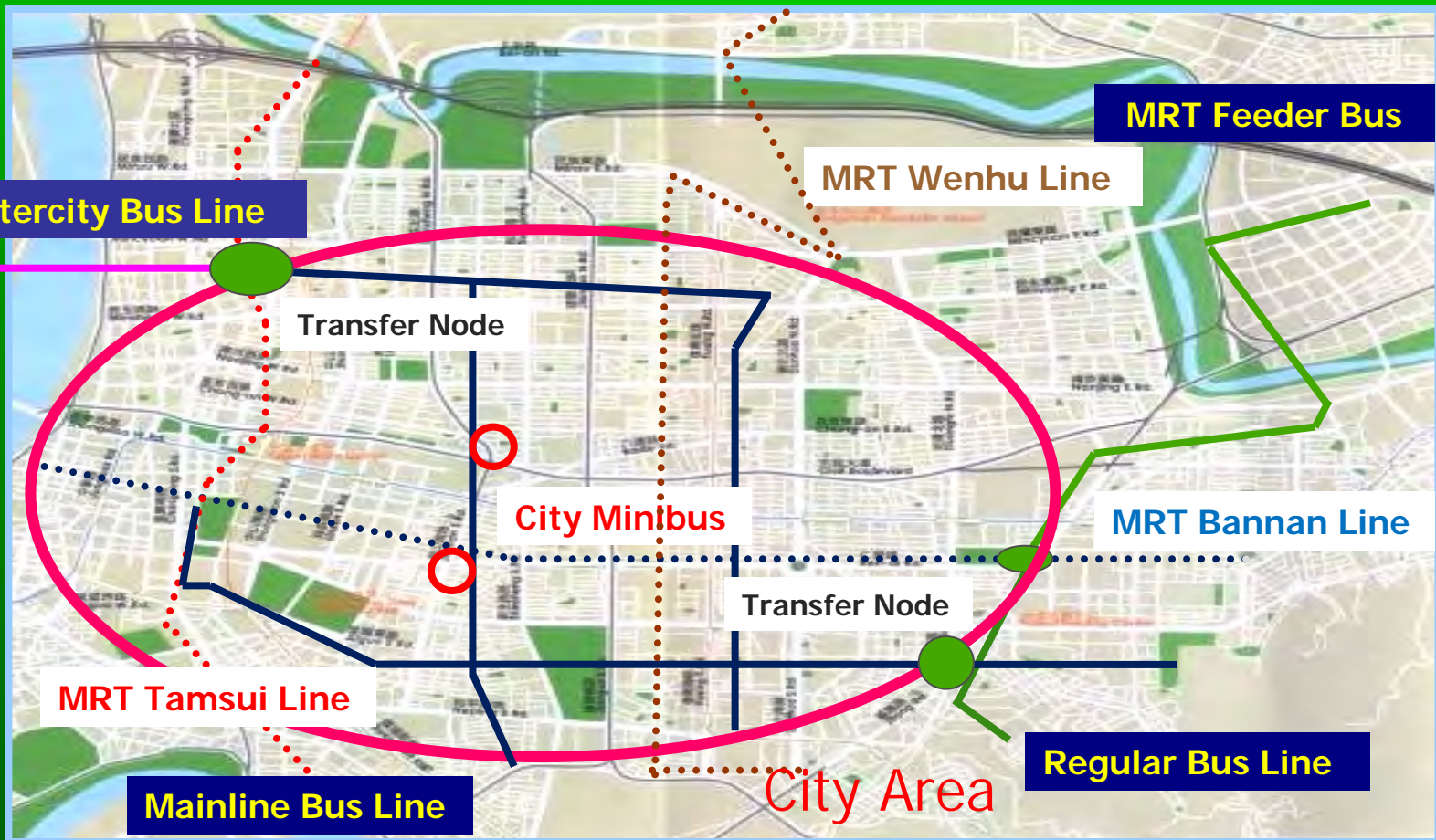
# Reform Bus Network

## Status Quo of Bus Network



# Reform Bus Network

## Future Bus Network



# Low-floor & Low-emission Bus



# Public Bike-Sharing System - YouBike



 **bike** 微笑單車

Share

162  
Stations  
5,350  
Bikes

Esteem

Automated  
Rental  
Service

Courtesy



A2B  
Bike Rental

Seamless Transport, Last Mile Service

# Strategies

## Encourage Green & Intelligent Technologies

- ATIS Web
- e-Bus System 5284
- Parking Information System
- Public Bike-Sharing Information System
- Smartphone App - Easy Going Taipei (臺北好行)



# Advanced Traveler Information System ATIS Web




**臺北市即時交通資訊網**
聯絡我們 常見問題及操作說明 手機/PDA English 臺北好行

最新消息 公車路線查詢 導航 交通資訊 國際資訊 相關網站 YouBike微笑單車 內科專區 登入

站牌查詢 例: 車站

路線查詢 例: 606

捷運站查詢 例: 忠孝復興

地標查詢 例: 101

交岔路口查詢

路名一:

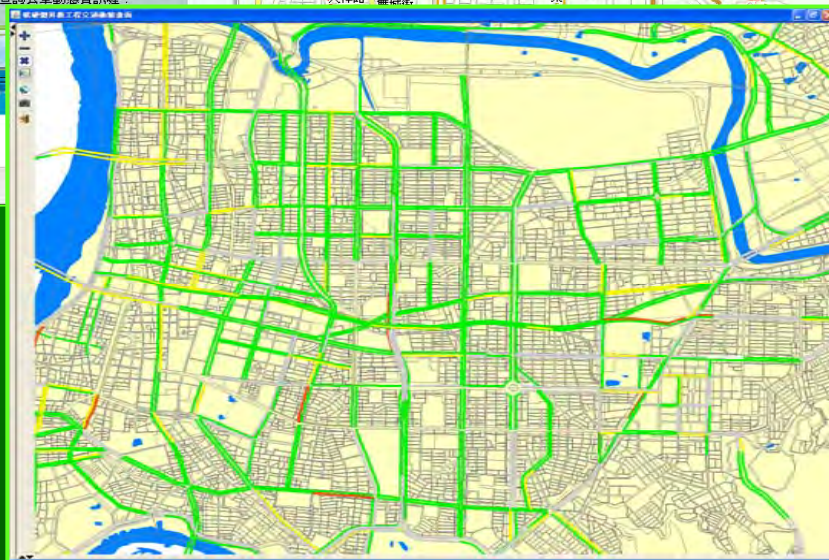
路名二:

**公車路線查詢小技巧**  
 歡迎使用本系統！  
 您可以透過公車站牌、公車路線、捷運站、地標及交岔路口查詢公車動態資訊喔！



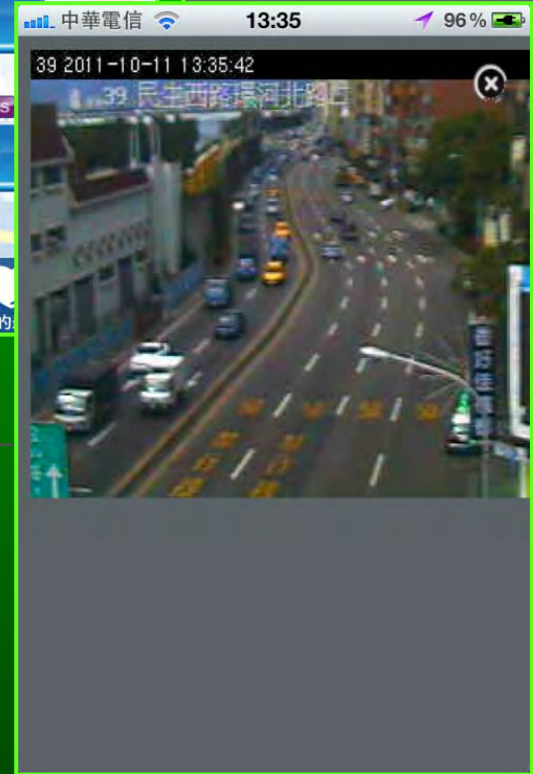

**臺北市即時交通資訊網**  
 我的最愛 中文 English

 最新消息	 公車動態	 路況事件
 CMS 資訊可變標誌	 道路速率	 停車場
 計程車	 捷運站	 微笑單車
 藍色公路	 城際資訊	 所在定位

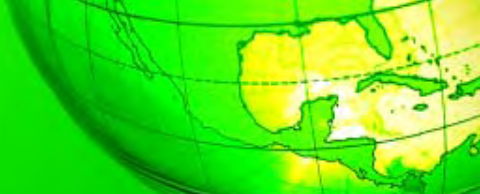


# ATIS

## Smartphone APP



# e-BUS 5284





# Parking Information System Smartphone APP



# YouBike Information System Smartphone APP



# Taxi Book/Reserve Smartphone APP



# Easy Going Taipei (臺北好行) Smartphone APP



# Strategies



## Implement Travel Demand Management

- Establish Pricing Mechanism
- Develop Web-based Carpooling Program
- Integrate Ticketing Scheme - EasyCard

# Parking Charges



# Carpool Program

## Let's Ride Together



中華電信 9:40 70%

carpool.ntpc.gov.tw

桃北北宜基共乘網  
Let's Ride Together

馬年大吉  
Happy New Year

熱門共乘群組

- 台北市 | 內湖科學園區
- 桃園縣 | 附近交通圈
- 新北市 | 汐止東方科學園區
- 台南市 | 南寮科學工業區

最新路線

- [固定通勤] 新北市永和-- 台北市信義區**刊登日期: 2014-08-04 11:18:27  
地點: 四號公園-- 市府、聯合報、國父紀念館
- [固定通勤] 宜蘭縣宜蘭-- 台北市中正區**刊登日期: 2014-07-30 11:35:01  
地點: 宜蘭縣政府-- 古亭捷運站
- [單次共乘] 新北市新莊-- 屏東縣屏東**刊登日期: 2014-07-25 10:23:18  
地點: 興化國小附近-- 屏東火車站附近
- [固定通勤] 台北市內湖區-- 臺南市安樂區**刊登日期: 2014-07-24 15:33:07  
地點: 瑞光路-- 大衛營
- [固定通勤] 宜蘭縣蘇澳-- 台北市信義區**刊登日期: 2014-07-22 15:25:20  
地點: 蘇澳交流道-- 市政府

最新消息

- [2014/03/10] 共乘搜尋功能已修復
- [2014/03/06] 共乘搜尋功能尚在修復中，目前僅能查詢7日內共乘相關訊息，功能修復完成後將另行公告
- [2014/02/10] 戶政系統已修復，開始恢復會員審核，惟戶政系統仍不穩定，倘有系統無法正常審核之情況，尚請見諒
- [2014/02/06] 因戶政檢核系統故障，暫停會員資料審核，修復時間未定，系統完成後將另行公告，造成不便，請見諒
- [2014/01/29] 內政部戶役政資訊系統進行系統版本更新作業，共乘網暫行公告(103年01月29日~103年02月05日)

多縣市共乘群組區

瀏覽人次: 488318 人  
總會員數: 0 人  
綠色指標: 15497 人  
目前任務總數: 6011 筆

相關連結

- 新北市政府環保局
- 臺北市政府環保局
- 臺北市交通資訊
- 新北市政府警察局
- 台北市警察局
- 新北市政府警察局
- 新北市政府警察局
- 新北市政府警察局
- 新北市政府警察局



# EasyCard

- 👉 an e-payment platform.
- 👉 Over 46 million Cards, over 5 million transactions per day.





# Strategies



## Support Green Lifestyle

- Encourage Public Transport Use
- EasyCard Users 20% Off for Bus
- 2-Way Transfer Discount Between Bus & MRT
- First-half Hour Free for YouBike
- Public Transport Fare Subsidy for Adults, Students, Senior Citizens & Handicapped
- Thoughtful, Warm-Hearted Public Transport Services



***Green Transport – Are We there yet?***

**WHERE DO WE WANT TO GO?**



**What 's Next for the future Taipei?**

許臺北一個... ..的未來?

# What do you see?



# What else do you see?





*An advanced city is not one where even the poor use cars, but rather one where even the rich use public transport or bicycles....*

*Enrique Peñalosa*

Former mayor of Bogotá, Colombia

一個進步的城市，不是窮人也有汽車的地方，而是有錢人都都使用公共運輸或腳踏車的地方。

恩里克 潘納羅薩

前波哥大市長

# Moving Towards Green Transport

*In the future, a transport system based on EasyCard payment platform integrating the MRT, low-floor & low-emission buses, City Minibuses, Taxi, YouBike, and other forms of public transport will be built with the last mile of seamless connection completed, and moving Taipei towards an even greener, safer and more livable city.*



# Thank You

謝謝聆聽 敬請指教

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