The Development of Smart Mobility in Taiwan's Main Cities: Application of AloT on Smart Public Transportation

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#### Smart City Index -IMD

The first time that Taipei City has been in the top 20 globally.

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Zurich	1	AAA	AAA	AA	1	—
Oslo	2	AA	AA	А	2	—
Canberra	3	AA	AAA	А	3	_
Geneva	4	AAA	AAA	AA	9	+5▲
Singapore	5	А	А	А	7	+2▲
Copenhagen	6	AA	AA	А	4	-2▼
Lausanne	7	AA	AA	А	5	-2▼
London	8	А	BBB	AA	6	-2▼
Helsinki	9	AA	AA	А	8	-1▼
Abu Dhabi	10	BB	BB	BB	13	+3▲
Stockholm	11	А	А	А	10	-1▼
Dubai	12	BB	BB	BB	17	+5 🔺
Beijing	13	BB	BB	BB	12	-1▼
Hamburg	14	BBB	BBB	BBB	11	-3▼
Prague	15	А	А	А	14	-1▼
Taipei City	16	А	BBB	А	29	+13▲
Seoul	17	AA	BBB	AAA	16	-1▼
Amsterdam	18	А	BBB	А	15	-3▼
Shanghai	19	BB	BB	BB	25	+6 🛦
Hong Kong	20	А	BBB	AAA	19	-1▼
Munich	21	А	А	А	20	-1▼
Sydney	22	А	BBB	А	18	-4 🔻

#### Smart City Index -IMD

# Taipei City has excellent performance in online scheduling and ticket sales.

#### Mobility

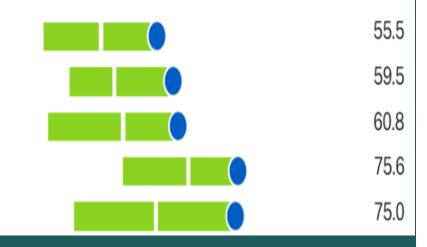
Car-sharing Apps have reduced congestion

Apps that direct you to an available parking space have reduced journey time

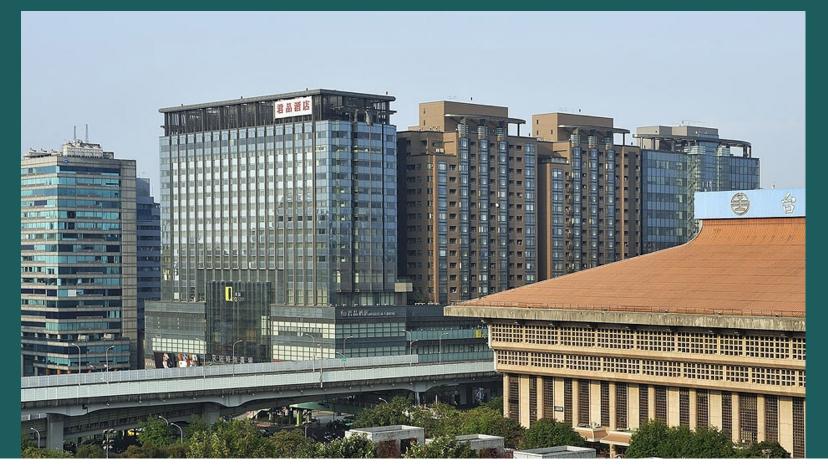
Bicycle hiring has reduced congestion

Online scheduling and ticket sales has made public transport easier to use

The city provides information on traffic congestion through mobile phones



- Public Transportation-
  - □ Taipei Train App (台鐵e訂通)
  - □ Taipei Metro Go App- 相約列車
  - Taipei High-speed Rail App (台灣高鐵 T Express)



Smart Bus Stop

**D** YouBike 2.0/2.0E





#### Smart Mobility Experiences: Kaohsiung City

• Public Transportation-

 Humanism Smart Metro System
Kaohsiung Light Rail (高雄輕軌): Vehicle-Road Collaboration and Image Recognition (輕軌車路協同與影像辨識)
AI Traffic Hazard Recognition and Statistics

#### Smart Mobility Experiences: Kaohsiung City



#### Smart Mobility Experiences: Kaohsiung City







#### Smart Mobility Experiences: Electronic payment system



#### Smart Mobility Experiences: Electronic payment system



#### Applications of AloT technologies on Smart Mobility

- Using Al techs to analysis the information through Big Data of traffic and public transportation passengers.
- Analyzing the moving patterns of passenger.
- Automatic Payment based on the moving pattern from passengers.

## Prospects for future development of Smart Mobility: A legal Perspective

 Privacy Protection: Cybersecurity & Privacy
Organisation for Economic Co-operation and Development (OECD):

**Privacy Guideline Series** 

 WEF The Centre for Urban Transformation & G20 Global Smart Cities Alliance: Privacy Protection Mechanism

## Prospects for future development of Smart Mobility: A legal Perspective

- EU General Data Protection Regulation (GDPR):
  - Automated individual decision-making, Profiling, right to data portability etc.
- Taiwan's Privacy Protection Regulation