Smart Mobility of Key Urban Areas in Taiwan

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Taiwan at a Glance and Three Metropolitan Areas

**Taipei**
Capital and the mobility center of Taiwan
- High usage of public transportation
- The largest and most integrated mobility network
- Constantly growing population
Need of mobility technology!

**Kaohsiung**
Constantly sunny southern city
- Harbors, factories, and industrial zones cause pollution problems
- City’s EV, green energy and zero-emission goals
- High volumes of solar panels
EV charging is rising!

**Tainan**
One of the earliest colonized cities
- Long history of various colonizations
- Outdated and chaotic urban infrastructure
- Popular tourist attractions and high peaks of tourists
- High percentage of private ownership of vehicles and scooters
Illegal parking!

- Area: 36,000 km²
- 22 Administrative Regions
- Population: 23 million
- Capital: Taipei
- Urbanization Rate: 79.7%

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The Largest and Most Integrated Mobility Network in Taiwan

Taipei Main Station 6 Major Transport Connections

1. High-Speed Railway  
2. Taiwan Railway  
3. Taxi/Hail Ride  
4. Sharing Bike  
5. MRT  
6. Bus

It is also connected to many aboveground malls, underground malls, squares, seating areas, parks, and more
Laws, Policies, and Institutions Governing Smart Mobility in Taiwan

To hear, review and decide on the RFPs and budgets and to review and evaluate the completion of projects.

Freely choose and negotiate with the city partners to submit RFPs

Pool of private companies and industry players

22 administrative regions in Taiwan

Matchmaking and selection process

Freely choose and negotiate with the city partners to submit RFPs

Announcing national smart city policies and goals

Drafting and finalizing projects and implementation plans

Implementers and the working teams
Private Players and Their Smart Mobility Solutions

Taiwan International Development Co.

TURING

TURING

noodoe EV
Illegal parking in Tainan

• 2015: top traffic violation among all (50%) & “Zero Tolerance for Illegal Parking” policy
• 2018: still #1 (33%)

How it started in Tainan

• > 2500 new roadside parking
• > 2000 smart parking poles
• > 3900 geomatic sensors
• > 150 ticketers
• Central control room/war room
• Profit-sharing and feedback regime

What’s next for TIDC and Tainan

• + more new parking
• + EV and scooter parking
• < 80 ticketers
• Expansion to more cities in Taiwan
• Continuation of solution improvement
Turing – Autonomous Driving in Taipei

Challenges of Autonomous Driving
- Inadequate infrastructure and technology
- High initial costs
- Stable 5G connection
- Traffic safety concerns
- Lack of public trust

Experience with Taipei City Government
- 5-year project around Taipei 101
- Multi-scenario testing including various road hazards and weather conditions
- Granted government-provided roads and tracks for testing
- Cooperate on reservations, operation schedules, and media exposure

What’s next for Turing
- Two targets: slow-speed vehicles and closed-circuit areas
- Increased academic research and R&D application
- Expanding in North America, Japan, Thailand and more
Noodoe – EV Charging in Kaohsiung

EV charging challenges

• Chicken and egg dilemma
• Electricity supply
• Finding suitable sites for stations
• Lack of incentives to purchase EVs
• Disorderly CPO ecosystem

Noodoe’s current working model in Taiwan

• Private ownership of EV charging stations with public access
• Subsidies and tax benefits
• 24/7 open access, operation, and management

Noodoe’s success and expansion

• Expanding in the US., Canada, Mexico, Thailand, and more
• Serves as the big brain for all the EV charging stations worldwide
Suggestions and Final Remarks

Infrastructure
Survey
Cooperation
Market Research
Laws
Capital
Electricity Supply
Free Market
Standardization
Thank you

Terima Kasih

谢谢！

Salamat

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