

IPENZ Transportation Group Conference
Auckland, 27-30, 2011

Sustainable Mobility: Scenario Beyond the Technology and Road Pricing

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Agenda

- * Taiwan ETC System
- * ITS Vision
- * Sustainable Mobility: Dream and Scenario
- * Needs for Research and Planning
- * Concluding Remarks

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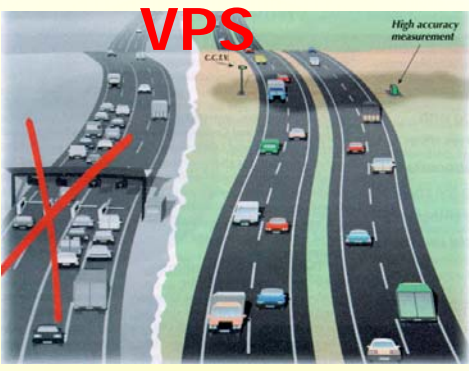
ETC System in Taiwan

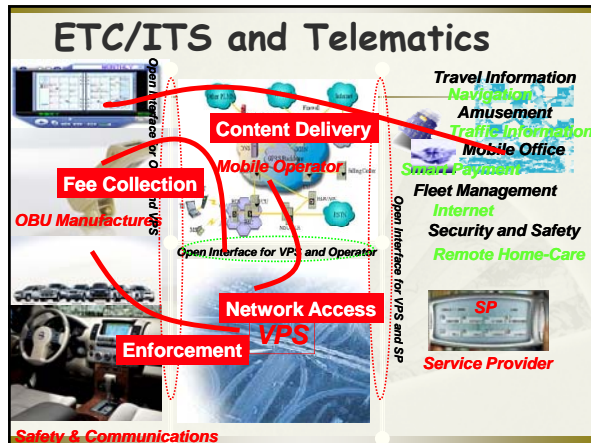
- Feb 10 2006, National Freeway Bureau has through a **PPP approach** lauched ETC system.
 - Network: 980km
 - Toll Stations: 23
 - Total Lanes: 334
 - ETC Lanes: 2~4 Lanes/Station
 - OBU equipped: 1,100,000
 - Market Share: Cars 36% Bus & Truck 87%
 - Transactions: 500 mi since operation
 - Social Benefits: \$0.15/trip \$75mi



Distance-based Charging Scheme on 2011

VPS





Vision on ITS Development

- * ITS: Intelligent Transport Sustainability + Integrated Transport Solution
- * Travelers make the best choice on departure time, mode, route, and destination with the real time information and appropriate pricing schemes.



Dream and Scenario



Scenario I



O-D Information



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Road Pricing: \$8.00



Scenario II



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O-D Information



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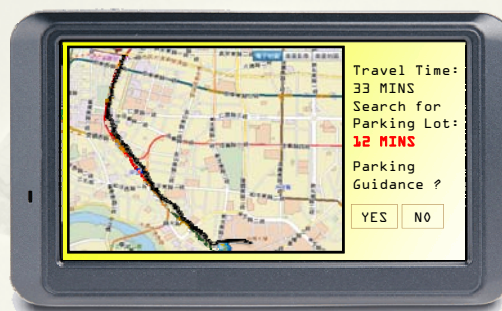


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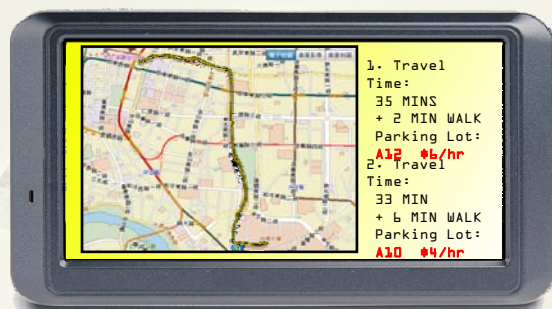
The Shortest Path (Based on Distance)



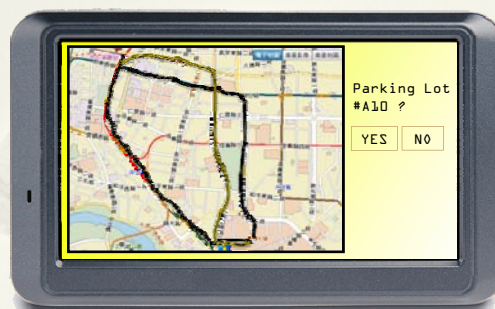
The Shortest Path Based on Travel Information in the past two weeks



The Shortest Path Based on Real Time Information



These Three Paths Represent Innovation of ITS Technologies



We have other smart choices with ITS technologies



There is subway station



There are bus stops



OR, you may select a taxi



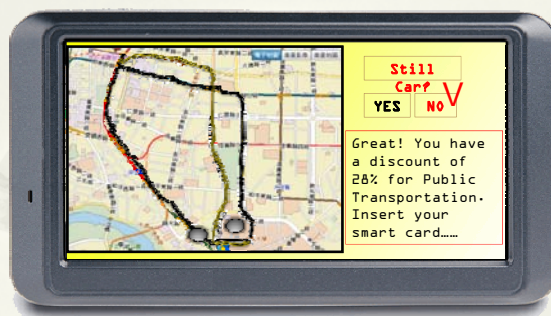
NO, I would like to have my car!



Have a Safe and **Green Journey**



OR, I have changed my mind...



Keywords of the Dream and Scenario

- * External Effect: Benefits and Costs
- * Alternatives: Public Transport Options
- * Demand Management
- * Sustainable Energy and Climate Change

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Smart Corridor: Potential Implementation

- * Deployment of Distance-based ETC
- * Telematics + ITS
- * Travel Time Prediction
- * Infrastructure and Information Contents
- * Multi-modal Integration



公路局地圖
高速公路網

Needs for Research and Planning

- * Travel Behaviors
- * Dynamic Assignment and Prediction Capability
- * Internalization of External Effects
- * Pricing and Tax Schemes
- * Vehicle and Infrastructure Integration
- * Education and Public Outreach

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Thanks

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The 11th ITS Asia Pacific Forum
Kaohsiung, Taiwan, June 8~10, 2011
2011 ITS Symposium, Taipei, June 11, 2011