

Paper #33 Poster #34

Urban Expressway Authority's Challenge for Dissemination of EVs in Japan?



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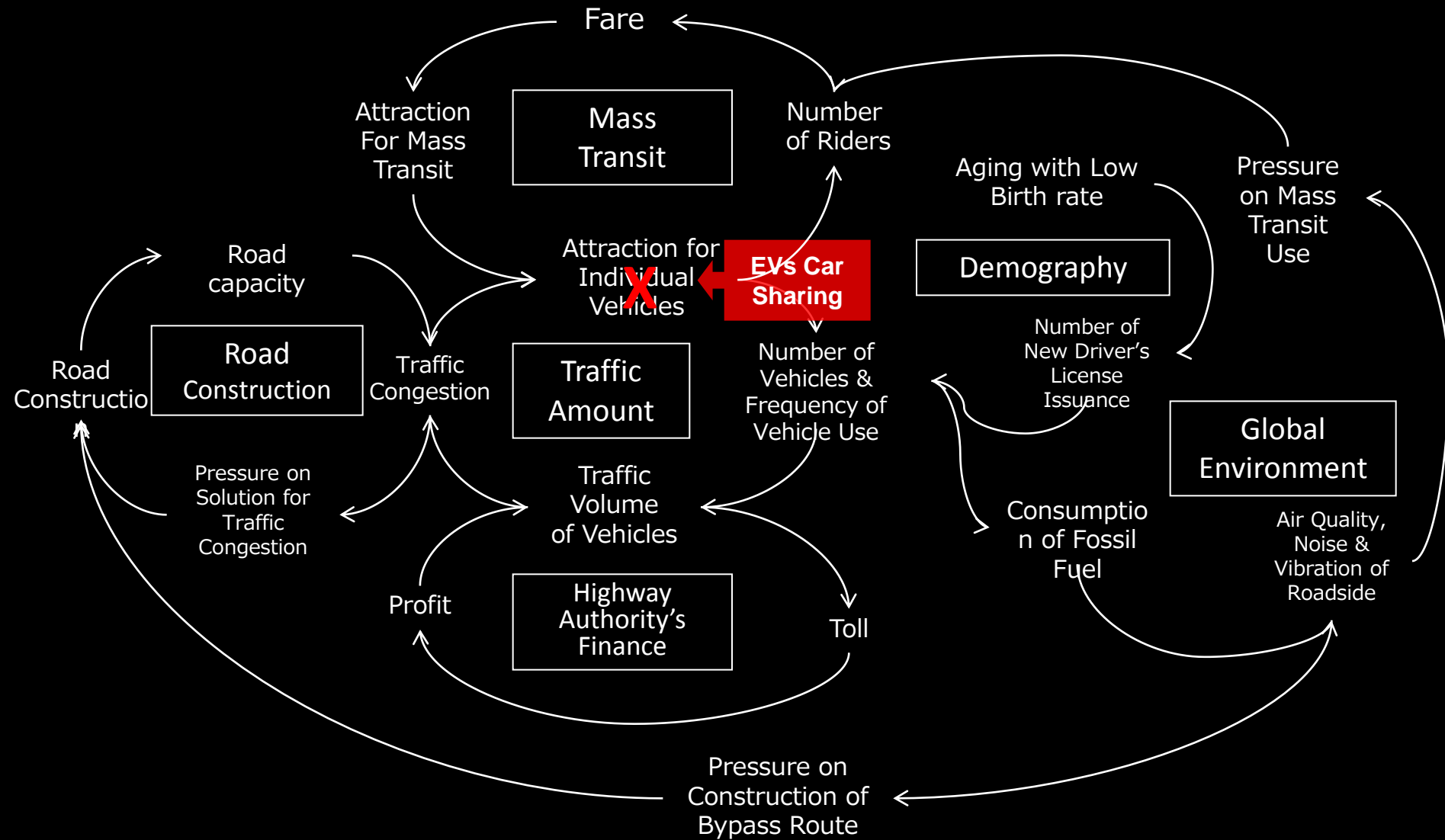


Figure 1: Analysis of the Current Status Quo of the Urban Expressway

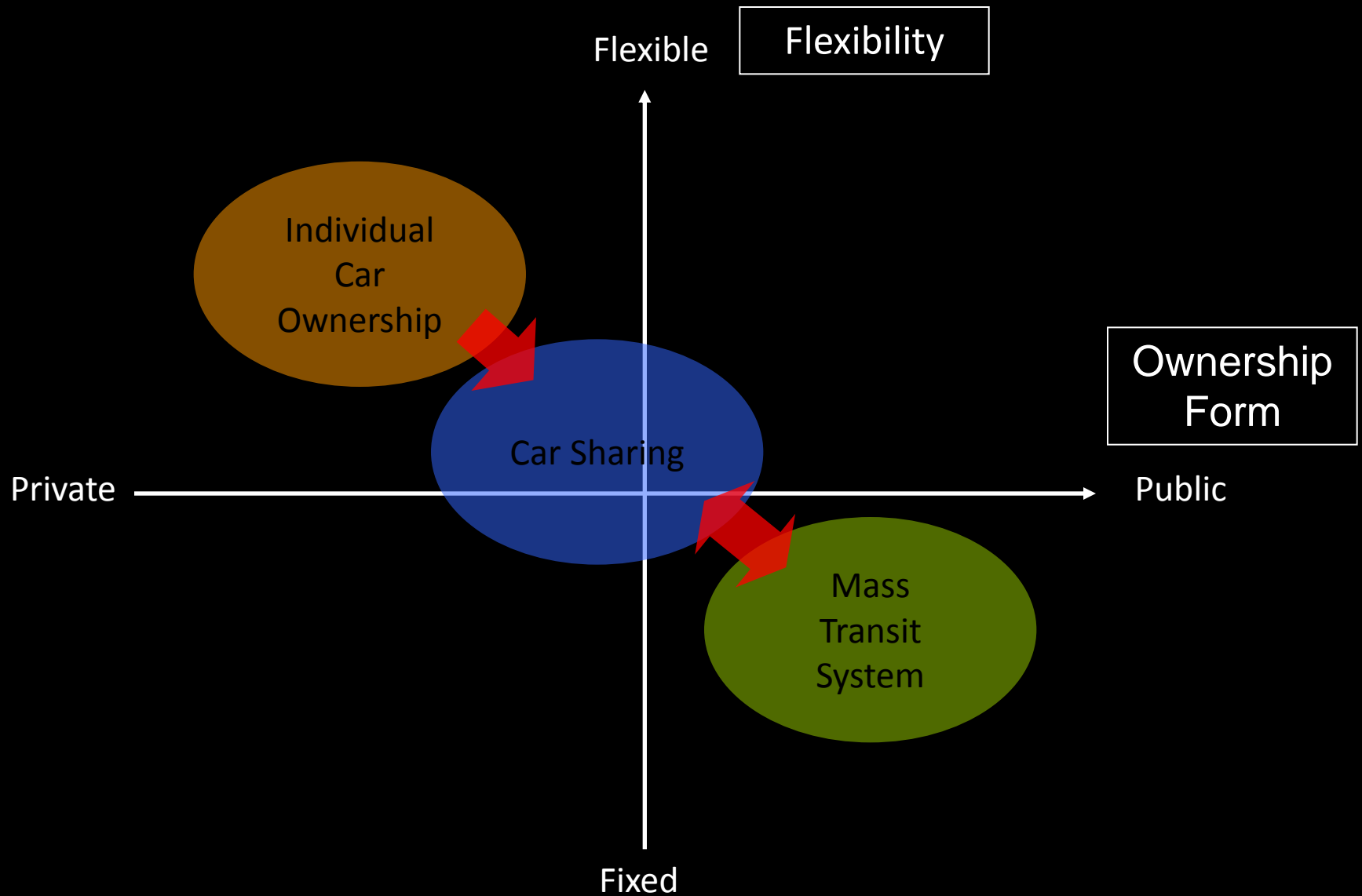


Figure 2: Positioning Map for the Transportation Modes



EV Model Car of HEC with the Rapid Battery Charger
at the Nakajima Parking Area along the Hanshin Expressway

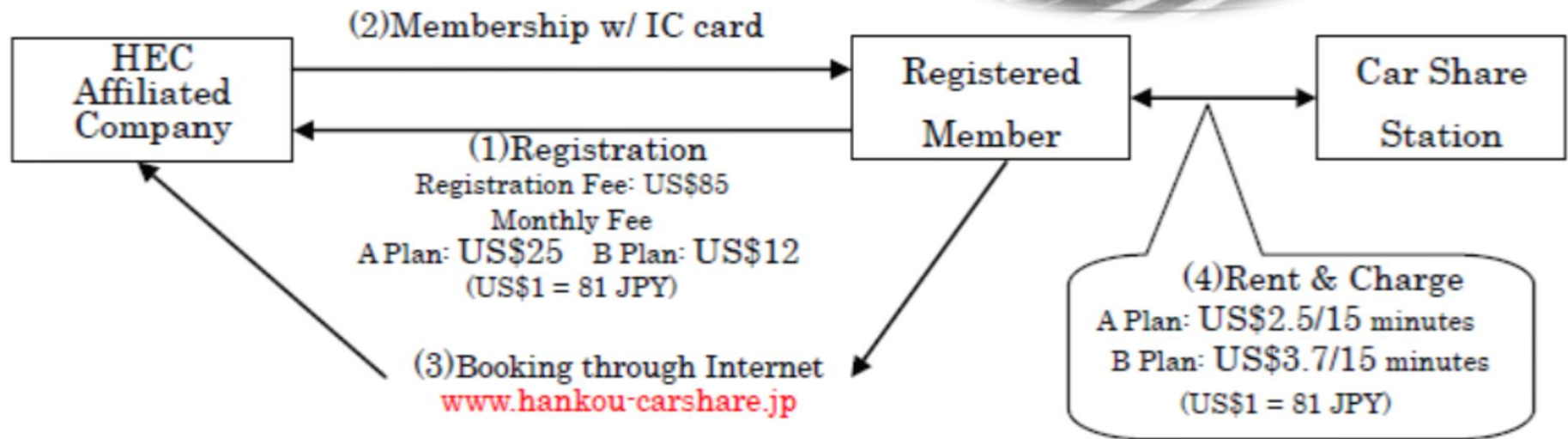
EV Car Sharing Project



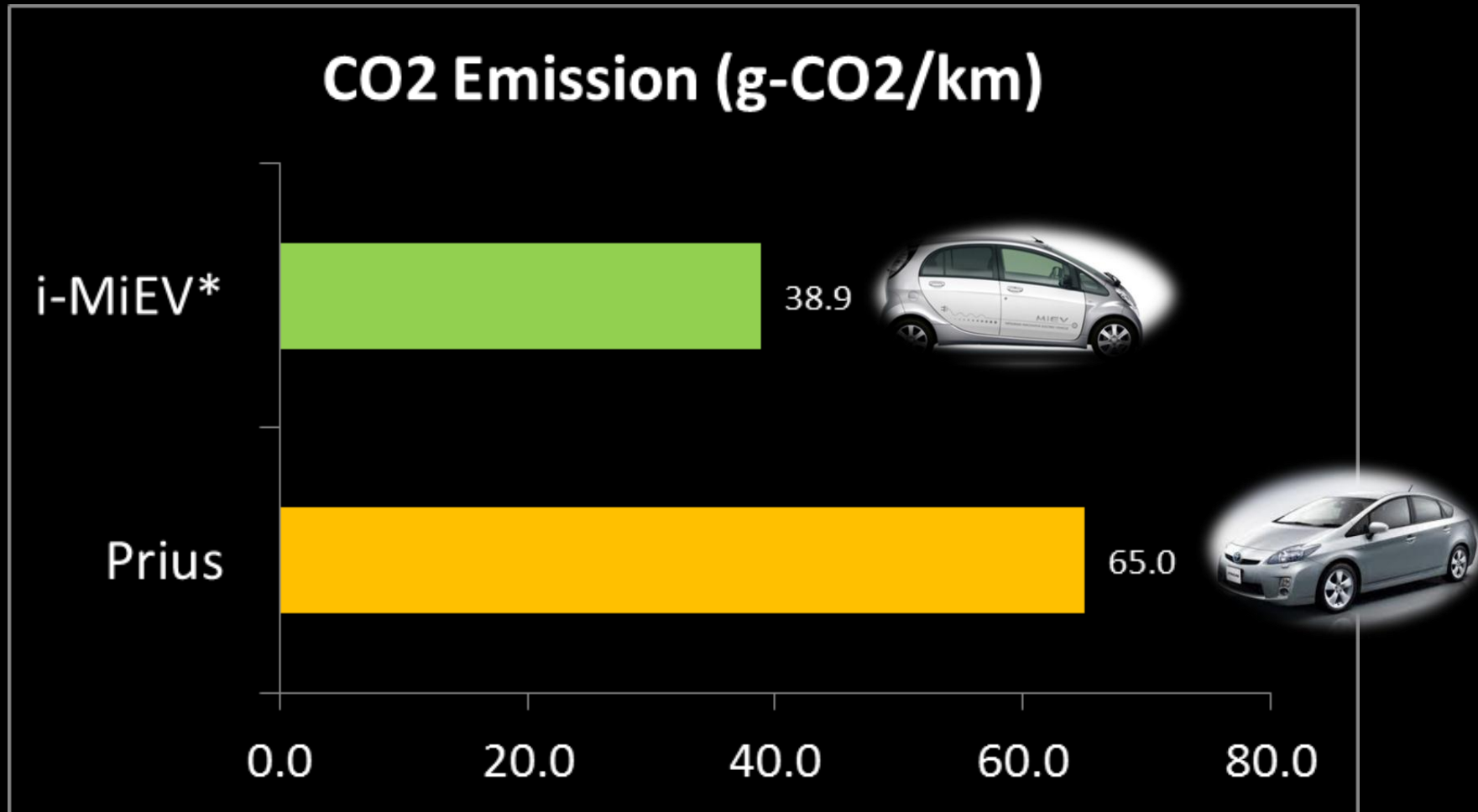
The car sharing station is located under the viaduct of the Hanshin Expressway.

Outline of EV Car Sharing Project

Membership System



Our Challenging Issue



*Electricity Consumption: 0.125 kwh/km

CO2 emission on the electric generation: $0.125 \times 0.311 \text{ t/kwh}^{**} = 38.9 \text{ g-CO2/km}$

** Basic Unit of Electric Generation issued by Ministry of Environment of Japan

Source: www.mlit.go.jp/jidosha

www.env.go.jp/earth/ghg-santeikohyo/material/denkihaishutu/list_ef_eps.pdf

www.ev-life.com

Key Success Factors of EV Car Sharing Project

- ✓ Transit Oriented Development
 - ✓ Increase in the Number of Rapid Battery Chargers for EVs
 - ✓ Reasonable Membership Fee and Charge System
 - ✓ Management of the Number of Registered Members and Shared Vehicles
 - ✓ Development of Regenerable Power Systems (Green Energies)
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- A grayscale photograph of a silver car parked at an electric vehicle charging station. A charging cable is plugged into the car's port. The background shows a parking lot with other vehicles and a building.