Incorporating Transport Data Requirements in Housing Surveys

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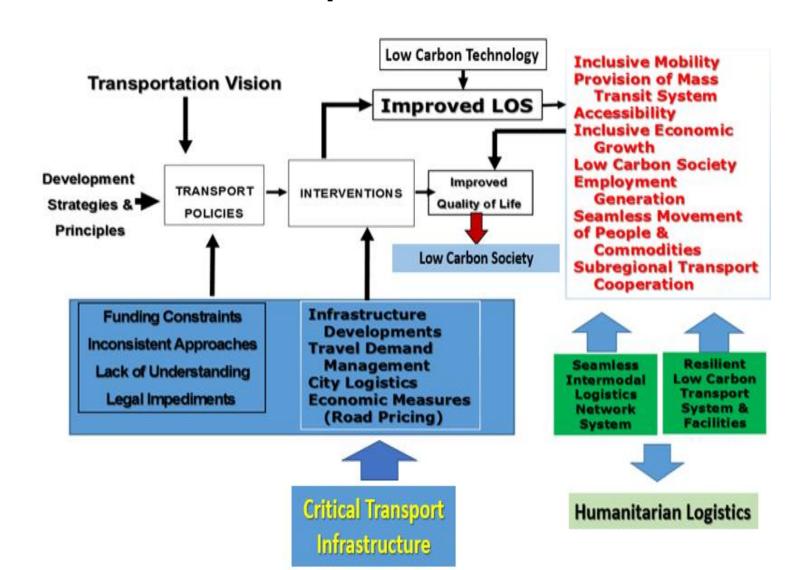
Introduction

- Inclusion of trip information in household surveys has long been recognized but yet to be practiced
- Person Trip Information and Commodity Flows
- Knowledge on these data can support more responsive and appropriate strategies for intermodal logistics systems
- This paper proposes the inclusion of transport data in household surveys and Philippine Census



Transport Policy Framework

- behavioral data of the users in intermodal transport system
- consider IT implications on data (e.g., apps)
- highlight the need for household-level data pertinent to commodity flows

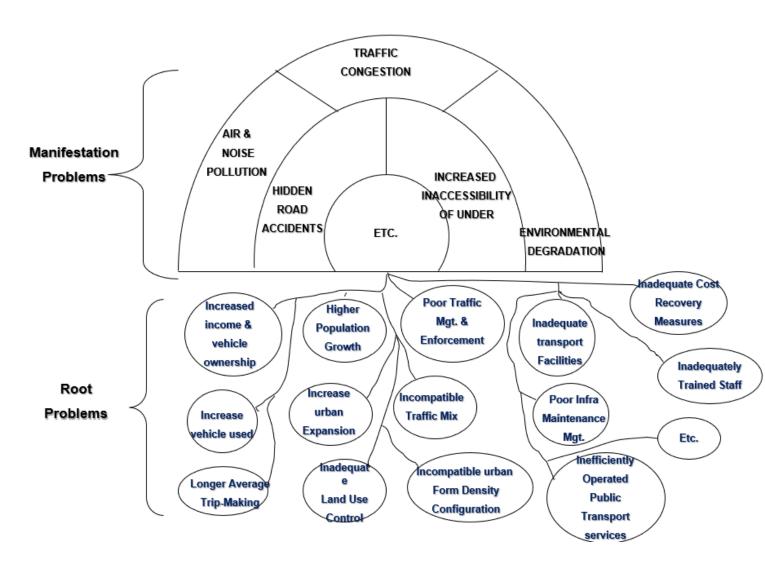




Source: Adopted from Dr. Cal

Urban Transport Manifestations and Root Problems

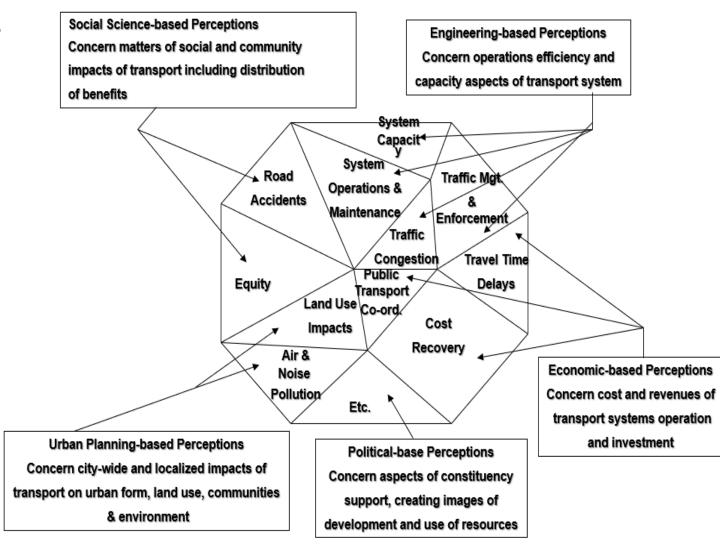
 Household- and individual-level data will lead to better understanding of root problems and formulate appropriate and relevant transport initiatives





Multiple Dimensions and Perceptions of Urban Transport Problems

- intertwining relationships of transport variables necessitate incorporating transport data in housing surveys (e.g., Philippine Census
- household-level data to facilitate formulation of logistics policies at urban areas
- information on household commodity behavior support measures to regulate delivery apps and ensure road safety for transport delivery

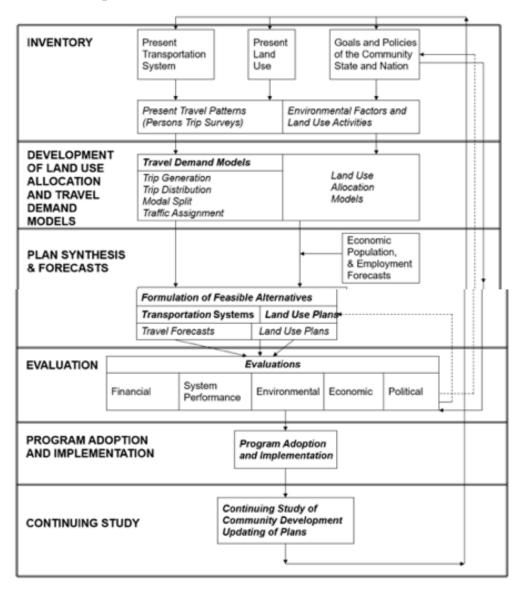




Source: Lidasan, Transport Planning Lectures

Urban Land Use-Transport Planning Process

- shows at what stage of the process household- or individual-level data is needed
- importance of household-level trip data
 - provide socio-economic profile of households and study areas
 - characterize travel behavior and trip patterns of household members
 - support formulation of land-use transport models
 - predict modal choices or shares
 - assess effectiveness of travel demand measures
 - support more responsive and more accurate census





Identification of Transport Data for Inclusion in Housing Surveys

Information Obtained from a Person Trip Survey

Household Level	Socioeconomic characteristics that describe the profile of the households: structure, vehicle ownership, household income levels, license-held, places of residence, etc.
Individual Member Level	Socioeconomic characteristics of the individual members, 5 years of age and over, such as age, sex, occupation, employment, work/school address, individual member income, etc.
Trip Information	 Characteristics of the weekday and weekend trips of the individuals interviewed Data to be collected: trip origin and destination (O-D), trip purpose, travel mode, transfers and time of departure and arrival
Perception	 Getting the views of household members interviewed on certain present conditions of traffic, public transport and strategies. At times, perceptions on willingness-to-pay (WTP) and capacity-to-pay) on new public transport systems may be included.



Source: JICA, MUCEP Manual, 2013

Identification of Transport Data for Inclusion in Housing Surveys

- 2 Categories of Person-Trip Survey
 - Revealed Preference (RP)
 - Stated Preference (SP)
- Disaggregate Modeling (esp. Discreet Choice)
- Panel or Longitudinal Data for Census
- Practice in Other Countries
 - US: O-D, value, weight, transport modes, types of commodities; census on exports and imports, household consumptions
 - Japan: domestic and international passengers and freight surveys at national levels



Conclusions

- There is an urgent need to incorporate transport data in household surveys and regular census.
- Transport data, including commodity flows, will provide better understanding of travel behavior and trip patterns of households.
- This will further support formulation of more appropriate and more responsive transport policies and strategies.

