Conducting Transportation Survey Research in China: International Research Team Experiences And Best Practices

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Problem Statement

- Chinese cities are changing so fast that existing data often must be supplemented with new surveys (sharper scope and temporal resolution)
- Special surveys required to answer specific questions (not generally included in large-scale HH travel surveys): household location choice, travel and activity patterns, vehicle type choice, and travel preferences
- Successful survey research requires attention to legal, cultural, and practical issues that are specific to China - especially for international research teams
Purpose of Paper and Sources

• In this paper, we discuss strategies for successful survey research in Chinese cities.
• Based on experience of authors, who have worked in China for a number of years – lessons learned on:
  – How to get access to respondents
  – Methods for getting high response rates
  – Reducing misunderstandings and implementation problems when third party surveyors are employed
• Cases from recent survey deployments in Shanghai, Jinan, and Kunming.
Rapid Growth and Change Quickly Make Travel Surveys Outdated

- Double-digit economic growth in China is making motor vehicle ownership available to many (~20-30% annual increase in ownership)
- E-bikes are an explosively growing new mode
- New transit systems (rail and BRT) also are being added in numerous cities
- Urban Expansion
- Result: rapid increase in traffic congestion, decline of walk and bike mode shares, increase in private auto, ebike, and transit use
Urban Growth Patterns Also are Changing Rapidly - Household, Land Use Data Quickly Out of Date

- Massive migration to coastal cities – not entirely documented (“floating population”)
- Redevelopment of CBDs and other major urban centers - displacement of households to suburbs
- “New town” (satellite city) development around the largest urban areas
- Emergence of mega-regions with networks of cities connected by fast transportation
- Economic transformations with industrialization, growth in high tech, growth in service industries
- Implication: Traditional decade-resolution household travel surveys inappropriate
Some Applications

- Rail-oriented Suburban Housing
- E-bike Use and Ownership
- Bike/E-bike Park-and-Ride
- Bike and Ped Road Interaction
Survey Issues

• Government surveys are becoming more common, but agencies often treat results as proprietary (even wrt other agencies)
  – Implication: if you want to do a study, gather the data yourself!

• Smaller cities may not have surveys, only partial/general surveys, or very small samples

• Surveys require an official Chinese partner

• Population does not have as long a history of being surveyed by researchers; possible concerns about surveillance
Lessons from Cases – Issues and Strategies for Success

• **Issue:** getting permission to survey

  • **Strategy** for success: get official sponsorship from Chinese agency; partner with Chinese University

• **Issue:** getting respondent participation

  • **Strategy** for success: offer small gifts such as bottles of water (gesture is more important than actual gifts, for both surveyors and respondents)
Issues and Strategies Cont.

• **Issue:** quality assurance when survey is conducted by third party survey team

• **Strategy:** train survey team to understand purpose of survey and reasons for design to reduce tendency to “revise in the field”; conduct practice runs; supervise closely and build in reviews; allow time and budget for corrective action if needed
Issues and Strategies Cont.

• **Issue:** getting candid responses to sensitive or personal topics

• **Strategy:** provide written assurance of confidentiality on official stationery; use survey design that provides for confidentiality (rather than one that requires removal of personal identifiers at a later stage); conduct interviews in private location of respondent’s choice
Issues and Strategies Cont.

- **Issue:** getting into the household can be tough (bureaucratic)
- **Strategy:** Does your survey require traditional stratified household sampling approach? Many of our studies are well suited for intercept approach. Certain aspects of China’s housing/transport system lend well to intercept surveys
Rapid-fire Intercept at Signal

Single EXIT Multiuse Parking

The New Courtyard
Some Approaches that Went Wrong

• Recruitment via telephone – excessively low response rates
• Intercept surveys in busy public locations (e.g. subway stations) – too harried, not private enough
• Hiring a professional survey team without specific stipulation that research design was mandatory, no changes allowed – team felt they knew better than researchers, did not follow survey protocol
• Forcing questions that surveyors didn’t fully understand or were uncomfortable asking – need buy-in
Is this different from anywhere else?

- Many of the issues in China are just issues with survey design and with people in general
- Some of the differences are restrictions on non-Chinese doing surveys, respondent sensitivity to potential (mis)use of survey information, and cultural expectation of gift offering BEFORE participating
- Potential for easier semi-random sampling
- Also greater need for supervision of survey firms than in West – different attitudes toward contracting or different history survey research?
Summary: Best Practices

• Official authorization letters from cooperating organizations or sponsors - convincing and trustworthy promises of respondent anonymity/confidentiality
• Offering small gifts to facilitate the first contact
• Extensive training for local teams administering the surveys including practice runs
• Specific mandates and supervision of survey team with time built in for corrections if needed
• Intercept surveys very cost-effective if appropriate