



LOW-SPEED ELECTRIC VEHICLES (LSEV) IN CHINA

MARKET BOOM, CONSUMER BEHAVIORS, ENERGY AND
ENVIRONMENTAL IMPACTS

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QUICK BIO ABOUT ME

- 2nd year Ph.D student at ITS, working with Prof. Sperling and Wang Yunshi, 2015-
- Bachelor degree in Vehicle Engineering from Tsinghua University, China, 2014
- One year gap working with Prof. Ouyang Minggao, Wang Hewu at Tsinghua, 2015
- Research interests: transportation technology assessment; energy, environmental aspects of transportation

THE BIG QUESTIONS I AM ASKING

LSEVs:

- Smaller, slower, cheaper electric vehicles;
- Speed 40~70km/h, range no more than 100km;
- Price \$2000~\$12000 vs Cheap new gasoline vehicles \$5000;
- Out of control of government (no registration), no government support;
- Total LSEVs sale 700,000 in 2015, Production of 347,000 in Shandong in 2015.



The Production of LSEVs in Shandong Province



THE BIG QUESTIONS I AM ASKING

1. Why the LSEVs market boom and who are the main purchasers?
2. What are the mains factors that influence people to make the purchase?
3. What are LSEV users' travel behaviors? How will LSEVs influence environmental and energy aspects?
4. How should the government regulate LSEVs into the current transportation system?
How should the government register LSEV? As a vehicle, motorcycle or Chinese Rural Vehicles (CRVs). Any relationships between LSEVs, bikes, e-bikes, CRVs, normal vehicles and motorcycles?

QUICK METHODS AND DATA

- Literature Review (English and Chinese, limited information)
- Interview and Survey (farmers, users, manufacturers)
 - Users' Demographic information
 - Purchase motives, company and brand recognition
 - Charging patterns, usage characteristics, user experience, travel behaviors
- Mathematical Modeling (Build models to assess factors that affect purchase decisions, their environmental and energy use impacts)

DELIVERABLES AND EXPECTED RESULTS

Research Report and Journal Papers

- First comprehensive assessment (in English or Chinese) of LSEVs and this remarkable industry in China
- Help understand related vehicle technology, current market demands and trends of LSEVs, provide valuable information for government policy making and LSEV manufacturers



THANK YOU FOR YOU VALUABLE TIME.
ANY QUESTIONS?

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