



A Lifetime of Walking

Poverty and Transport in Wuhan, China

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Context

- # Key economic center of Central China (4m?)
 - # Wuhan Urban Transport Project
 - Ed Dotson Manager
 - Under implementation (2004 ongoing)
 - # Assess and refine responsiveness of Bank financed urban transport interventions to the needs of the most vulnerable
 - Lucie McNeill, Li Xiaoyun, Wuhan University Economic Research Institute. Professor Zhong Shuiying
 - # Data collected, study conducted in 2003
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Poverty in Wuhan

- # Focus on absolute poor: product of changing times
 - Income assisted residents (to 210Y/month) mostly retirees, laid-off/unemployed: 3K ('96) to 156K ('02)
 - Floating population, migrants with no *hukou* (10+% of population, ~15% below 210Y/month)
 - # Relative equity issues
 - Use of existing road space, length of commute, new infrastructure investments, land-rights
 - NOT focus of this study
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Methods: Focus Groups

- # 16 focus groups of ‘vulnerability-driven’ populations
 - Working poor, unemployed, migrants, seniors, project-resettled
 - Identified with assistance of civic authorities, recruited independently
 - Gender disaggregated, geographically diverse (urban, periurban)
 - # 2 focus groups of ‘mode-driven’ populations
 - Freight carriers: handcarts/poles/backs, bicycles/motorcycles
 - Recruited on-site from a large wholesale market
 - # Individual interviews with 8 persons with special needs (4 female)
 - Disproportionately poor
 - Physical, mental, visually and hearing challenged
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Protocols

- # Discussion of travel patterns
 - Routine trip characterization, choices and determinants; probes for difficulties, costs and problems
 - Special unusual trips
 - # Issues for each key mode: issues discussed in order raised by group, ensuring (eventual) coverage of
 - Safety, intersection crossings, distances, infrastructure availability and condition, costs, regulation and enforcement
 - # Unmet needs and opportunities eliminated because of transport
 - Desired trips not made, opportunities (jobs, education) not accessed, emergency services
 - # Recommendations
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Basic characteristics

- # Spend 7.6% of income on transport; 56% on food/necessities (Wuhan average 38%),
 - # 42% own bicycles, 11% own trishaws, 3% own motorcycles:
 - # Walking was primary mode for all women, all men living in the center
 - # Bus was next most important, primary mode for men living in peri-urban areas
 - # Bicycle was also important though in sample less so than walking and buses
 - # Non-routine trips (health care, holidays) made using taxis (preferred), bus and walking
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Walking

Transport infrastructure

- Importance of secondary road system: critical 'last mile' often in bad repair, poorly maintained (road, drainage and lights)
 - Residents outside the center city particularly affected
- Intersection designs unsafe and inconvenient
- Importance of street furniture: trees, benches, public toilets
- State of sidewalks: garbage, vehicles parked, commerce

Safety: on sidewalks (manhole covers, when forced by clutter onto street) and at intersections

Regulations, management and enforcement

- Sidewalk management
 - Role of the police: pedestrian crossings not enforced
 - Consultation on decision-making
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Public transport

Safety

- Aggressive drivers competing 'in the market' leading to dangerous driving in city center
- Bus-stops particularly dangerous

Fares and charges

- Disabled/seniors with entitlements often ignored
- Cost of transfers: particularly for those outside center
- If fare policies exclude bus option they often eliminate job opportunities

Access

- City center 'over-served', congested
- Access poor outside central city in the periphery

Condition of the buses

Social exclusion and discrimination: women, migrants, disabled particularly impacted

Bicycles

Security

- Bike theft single-biggest barrier to use among the poor
- Secure bicycle parking facilities limited and expensive
- Inadequate attention to stolen bicycle trade

Safety

- Missing links in bicycle friendly street system (crossings, critical streets without bicycle lanes), bus stops
- Condition of secondary road system

New infrastructure: boon or bane?

- 'Improvements' in road system (such as overpasses) do not always consider needs of bicyclists
 - Road widening often eliminates bicycle lanes
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Women are more vulnerable

- # Structural factors influence decisions
 - Informal sector, unstable employment, wage gap
 - Play traditional gender role even if they work outside the home (care of HH, child, elderly)
 - Often limit themselves to work near home and more likely to walk
 - # Security key concern: harassment at night
 - Inadequate street lights off main roads
 - Buses and bus stops, underpasses
 - # Infrastructure design issues
 - High steps on buses and overpasses, hand rails on buses, wide intersections, steep overpasses
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Migrants Particularly Vulnerable

- # Social exclusion and discrimination accentuates impacts
 - ‘Easy marks’: abused even when aggrieved party
 - Fear and complaints of police
 - Cheated/ discriminated against by bus drivers
 - # Financially the most vulnerable: access to all services limited
 - No access to taxis even in health-care, other emergencies,
 - Recent paratransit ban hit them hard as users and drivers
 - # Freight carriers: hard job, police make it harder
 - Central city time restrictions
 - Police harassment
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Disabled: doubly disadvantaged

- # Make fewer trips to access health care, errands
 - Walking, transit, some access disabled friendly rickshaws
 - # Many streets are designed in an inclusive manner, but
 - Sidewalk management essential (missing manhole covers, curbs, kiosks)
 - Bus design (handrails, announcements, screens)
 - # **Dignity** and social discrimination
 - Bus drivers (honoring subsidy cards, general behavior)
 - Police
 - # Vulnerable to policy changes: ban on paratransit
 - Many were drivers
 - Rickshaws sole source of mobility for some
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Peri-urban residents

- State of road system outside city center
 - Bus routes and access outside the center
 - Bus fare policies, ‘transfers’ limit job opportunities
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Recommendations

■ Infrastructure

- Secondary road system: condition, lights, drainage
- Street furniture: toilets, trees, benches
- Sidewalk management: obstructions (commerce and vehicles), maintenance

■ Intersections

- Need for improved pedestrian-focused traffic management
- Stopwatches for pedestrian times, adequate green times, mid-street protection
- Overpasses preferred to dirty, smelly unsafe underpasses
- Enforcement of pedestrian priority at pedestrian crossings

■ Bicycle infrastructure

- Attention to bicycle friendly network, particularly with new improvements
 - Urgent need and high demand for secure bicycle parking
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Recommendations

- # Bus operations and regulation
 - Competition 'in the market' has on-street safety implications
 - Routing structure needs revision: decongestion in central city, additional access outside city center
 - Fares: transfer policies, subsidies
 - Inclusive design
 - # Targeted subsidy for health-care emergency access trips could have high benefit
 - # Sensitization and education
 - Police: pedestrians, cyclists, migrants, unsafe drivers
 - Bus drivers: migrants, disabled, elderly
 - # Consultation would make decision-makers more aware of needs and constraints of the poor
 - Face to face interaction given high value
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Conclusions

- # Vulnerable too often an afterthought
 - Design, operations, maintenance and policy
 - Small inexpensive steps can have high impact
 - # Dignity and respect
 - Police have the potential to play a more positive role
 - Education sensitization: not about money
 - # No substitute for ‘being there’
 - Participatory process has high value
 - Decision-makers would benefit from listening, from ‘being there’
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