1. TRANSPORTATION ISSUES IN DEVELOPING COUNTRIES

With rapid economic growth comes...

What is the social impact of Janmarg BRTS on marginalized groups?

How do stakeholders and planners interact and what are the consequences in achieving goals?

How are the objectives and priorities of Janmarg BRTS decided?

Typical traffic in Ahmedabad

2. BUS RAPID TRANSIT SYSTEMS (BRTS): A POTENTIAL SOLUTION

WHAT IS BRTS?

BRTS is a bus-based integrated system of stations, bus lanes, services, and intelligent transportation technologies.

WHY BRTS?

It is one of the most cost-effective options to provide high-capacity public transit.

3. TRANSPORT IN INDIA: MORE MOTORBIKES, LESS BUSES

The motor vehicle fleet has been doubling every four years the last three decades.

Many Indian cities are experiencing a cycle of decreasing bus ridership and reduced transit service.

In response, many transit users have switched to cheap two-wheeled motor vehicles.

4. JANMARG: “BEST PRACTICE” BRTS IN SOUTH ASIA

FEATURES AND NUMBERS:

- Median stations and bus lanes with low near-reasoning of traffic
- Road widening (right of way: 30-60m) along BRTS corridors
- Funded by the JNN Urban Renewal Mission(35%), State(15%), and City(50%)

$1,200 riders daily (and increasing)

58m bus lanes for Phase 1

$245m US: total cost of Phase 1 ($125m for first 15km)

30km of bus lanes for Phase 2 (in planning)

$87.5m US: total cost of Phase 2

75 bus stations total (after completion)

In contrast, Pune and Delhi BRTS received negative press and little public support.

5. METHODOLOGY

On site May 24 to July 27, 2010

4.2 recorded interviews: 28 individual, 14 group discussions

Assessment:

- Project/Co-directors
- BRTS office staff
- Janmarg Ltd.
- Ahmedabad Municipal Corporation
- City Commissioner
- City Transport Authority
- Ahmedabad Municipal
- ITDP (International
- Tech Support
- Planning
- Technical
- ITDP
- Other evidence:
- Exports
- Documents
- Interviews
- Public data
- Press releases
- News sources
- Direct observation

6. DECISION MODEL

PLANNING

- CEPT University
- Project Director
- Project Co-directors
- BRTS office staff

TECHNICAL SUPPORT

- Institute for Transportation Development Policy (ITDP)

PRE-EXISTING BUS OPERATIONS

Ahmedabad Municipal Transportation Services (AMTS)

7. PUBLIC PARTICIPATION: WHICH PUBLIC AND HOW?

OPENNESS

- Commissioner’s office open to inquiries, concerns, questions via phone or e-mail

DEMONSTRATION

- Prototype bus station
- 120km demonstration corridor
- Free service first month of operation

City and CEPT University took visitor comments and feedback; site helpful for user education

8. HOW JANMARG’S DESIGN EVOLVED FROM INTERACTIONS

CEPT University’s initial BRTS station design

- “Pune and Delhi BRTS model”
- Project coordinator decided to change design immediately upon return on-site, mid-construction
- Subsequent trips were made by CEPT and BRTS project directors
- ITDP advised a decision change but CEPT did not respond immediately
- Proposed raised median stations to exclude competing and inadequate facilities that caused problems in Pune and Delhi BRTS
- Need for better bicycle and walking infrastructures

CEPT University’s new BRTS station design

- ITDP revisited the station design change but CEPT did not respond immediately
- Proposed raised median stations to exclude competing and inadequate facilities that caused problems in Pune and Delhi BRTS
- Need for better bicycle and walking infrastructures

9. SOCIAL IMPACTS: THE GOOD AND THE BAD

Economic

- Modal switch detected
- 54% of BRTS riders used cars, motorbikes (less than before)
- Reduced traffic (esp. Sunday nights)

Environmental

- Potential for revenues from advertising space
- Operation costs
- Maintenance costs
- Negative press and little public support

Transportation

- Reduced pedestrian infrastructure present but inadequately designed
- 55% of the city bikes or walks

Socioeconomic

- Shorter, faster and more reliable than AMTS
- Cheaper fares (Rs. 2-16)
-但是 monthly expenditure on transport is Rs. 103
- Costs are lower for people as it encourages fast driving and unfriendly pedestrian environments
- System does not address the majority of trips that go to the city center

10. LESSONS LEARNT

Janmarg has greatly improved public transit and should be taken with pride by local Indians.

- Tells the rest of India that BRTS can work despite previous shortcomings in Pune and Delhi
- BRTS should not be the end of its own means
- Goals and objectives need to properly defined to evaluate planning decisions
- IVHS/ITDP can serve as a model for other developing countries
- “But rather a ”project” rather than a ”project”

ACKNOWLEDGMENTS AND REFERENCES

I would like to thank...