Bus Rapid Transit in Jakarta, Indonesia: Successes and “Lessons Learned”

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TransJakarta’s BRT Characteristics

- 12.9 km trunk corridor on main corridor through city center
- 2nd Line Under Construction
- 14 Corridors Identified
- Fully physically segregated bus lanes
- Fare collection at enclosed stations rather than on bus
- Bus operator paid by the bus kilometer
- Bus operation is “private”
BRT Corridor 1 (& 2)

Key
- BRT Line 1
- BRT under construction - 2004
- Rail lines used by commuters
- Major roads

BRT Jakarta Lessons Problems Success
Jakarta’s Planned 14 BRT Corridors
Smart card fare collection

BRT
Jakarta
Jkt BRT
Success
Problems
Lessons
Success Points

- Implemented rapidly (8 months)
- Public supports
- 1-hour reduction in travel time at peak for TransJakarta passengers
- Operational cost covered by fare revenue after 6 months

Political demonstrators, well-known for blocking traffic, let the busway through. Busway ridership surged during the 2004 campaigns.
Previous mode used by BRT Passengers

- Non-AC Bus: 35%
- Air-conditioned (AC) Bus: 32%
- Private Car: 14%
- Motorcycle: 6%
- Walking: 6%
- Paratransit: 0%
- Bajaj (3-wheeled taxi): 1%
- Taxi: 5%
- Train: 1%
That’s a way to get us out of our cars!
(Even I used to drive in Jakarta!)
TransJakarta Succeeded in Giving Public Transport a Better Image
Security against pickpockets was a key to attracting upper and middle income
TransJakarta Breaks Even

Annex 5: Revenue vs O/M cost

- Problem
- Success
- Lesson

Jkt BRT

BRT

Jakarta

Jkt BRT

Success

Problems

Lessons
Governor Got Some Political Benefit (for better or worse)

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“Lessons”

- No clear or enforced structure of making decisions
- Contracting and procurement non-competitive and non-transparent!
- System was designed with no reference to potential demand.
- System capacity only 8000 pphpd when total bus demand in corridor was about 12000.
- System only captures 1/3 of potential demand.
- Ticketing system disfunctional and non-transparent
Institutional Issues

- Budget went through Department of Transportation. (DisHub)
- Nominal Authority was head of the busway coordination team (Tim Coordinasi). (ITDP input was to this body)
- All procurement, contractual, and ultimately technical decisions were made by DisHub. Influence of coordination team was not so strong.
Contracting Issues

- Bus Procurement done by government (DisHub) rather than private operators w/out competitive bid in non-transparent way. Price high and bus sub-optimal.

- Ticketing system equipment and software also procured by DisHub. The system is almost useless for fiscal control and ridership monitoring.

- Operating contract awarded w/out competitive bid to consortium of existing operators and govt owned taxi company. (operating cost/km are too high)
**Problems w/ the Buses**

- 12 meter non-articulated is too small
- 1 floor-level / platform-level door is too few
- Overweight, damaging the road and consuming too much fuel
- Cost too much
- Euro I (not exactly clean)
- Non-owner operated means maintenance is an issue
Station Issues

Single door, single station at each stop dramatically reduces capacity

Designed to protect the bus, not the passenger. A few minor accidents.
Station design and operating schedule main capacity problem

- Bus queuing due to slow boarding times
- Also caused by weak schedule enforcement
- A passing lane and a second station at each stop could triple capacity
“Blok-M” Bus Terminal badly designed: a major bottleneck
“Blok M” Terminal Alighting & Boarding Problems
Fortunately, mistakes reasonably easy to fix.
Kota terminal alighting & boarding

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Enforcement is good, but roundabouts are difficult to control
Peak Hour Demand: 2000 pax/hr 4900 pax/hr 8000 pax/hr 10,000 pax/hr 12,000 pax/hr
Pedestrian facilities

- Typical pedestrian ramp
- Primary route from train station to Kota busway terminal

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Pavement Damage: Should have used concrete and lighter buses
Lessons Learned

- Essential that the decision maker empowers people who are technically competent
- Building supporting institutions and regulatory structure is more difficult than physical BRT design issues
- Public and local NGOs can play a role in pressing govt to fix problems