



Pre-determined Fare Structure for Rickshaws when Integrating with BRT Systems

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Introduction



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- Rickshaw trips: Short distance, flexible
- Rickshaw fare: determined through a bargaining process
- Integrated multi-modal transport systems
- Without fare integration of rickshaws with public transport there would not be the ultimate benefits/convenience of PT users
 - A passenger have to approach many pullers (one after another) until he finds one willing to carry him with his desired rate – this will create crowding and congestion in front of station, delay in transfer, and inconvenience of passengers.
- Unless a pre-determined fare structure is established for rickshaws, it would be impossible to implement an integrated fare system
- Objective: Understand the possibility of a pre-determined fare structure for rickshaws (to facilitate fare integration between rickshaws and BRT systems)



Review of Literature

PRE-DETERMINED FIXED FARE STRUCTURE FOR RICKSHAWS



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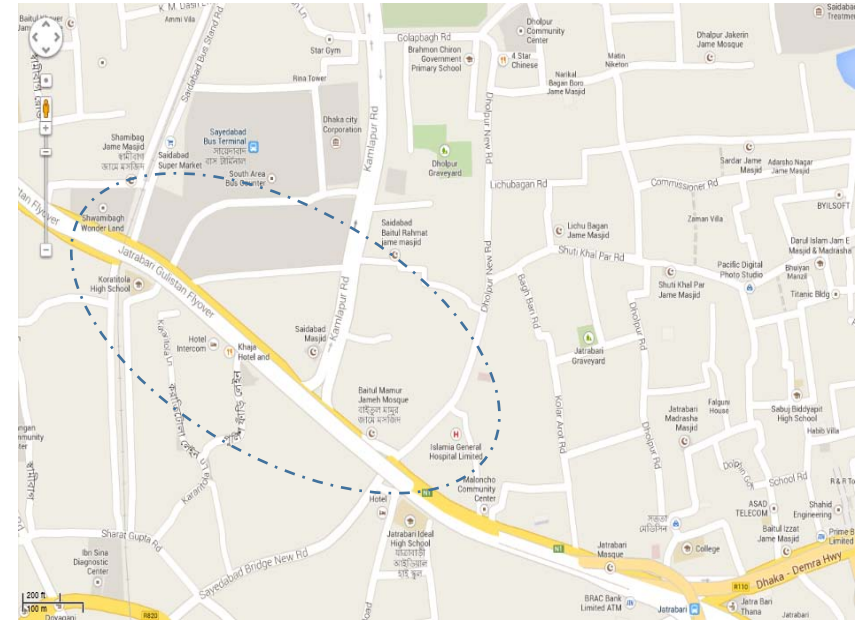
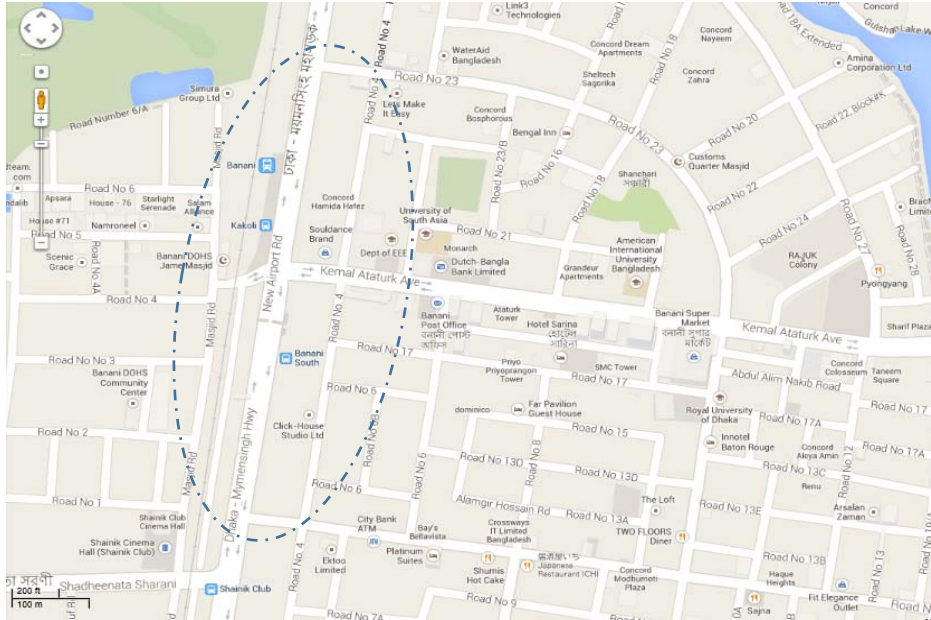
- Very few literature on this topic
- Distance-based
 - Predetermined (tentative) distance between two locations
 - Operate only within a locality or neighbourhood for short distances
- Travel time-based
 - A chart of pre-determined fare rate available in each rickshaw
 - All rickshaws nationalised, passengers pre-pay by purchasing 'tokens' (e.g. 'flexiload' phone-credit system)
- Criticisms: Speed of rickshaw varies (age/strength of puller, quality of rickshaw)

- Empirical study with 2 case study locations (prospective BRT station) in Dhaka city.
- 11 FGDs with different stakeholder groups and rickshaw pullers.
- Semi-structured open-ended interviews of 25 transport professionals/policymakers.

Case Study Locations



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Results from Case Study at Dhaka

NEEDED PRE-DETERMINED FARE STRUCTURE FOR RICKSHAWS?



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- Arguments both for and against
- Participants in user-based FGDs Vs puller-based FGDs

FOR:

- Convenience (no waiting/arguing)
- Pullers maintain a queue while waiting
- Female passengers: Bad comments

AGAINST:

Like bargaining (could charge more)

Interviews:

- Passenger know travel cost
- Pullers know how long to work
- Happened in a few areas e.g. Gazipur

Difficult to enforce

Difficult to determine correct fare

Rickshaw fare change constantly

Para-transit: Market demand/supply

Results from Case Study at Dhaka

POSSIBILITY OF PRE-DETERMINED FARE STRUCTURE?



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- In a particular route or between major locations in Dhaka:
 - Rickshaw fare is already becoming determined at an acceptable rate (for both the pullers and users) through the market force itself.
 - Fare between certain locations becomes settle for a period of time by the Demand-Supply of market.
- Possibility of arguments and disputes in the end of trip
- Example of Easyride operating at Mirpur
- Examples of pre-determined fare structure for rickshaws in cantonment DOHS and Kamalapur (several years ago)
- Rickshaw operation must be localised

Results from Case Study at Dhaka

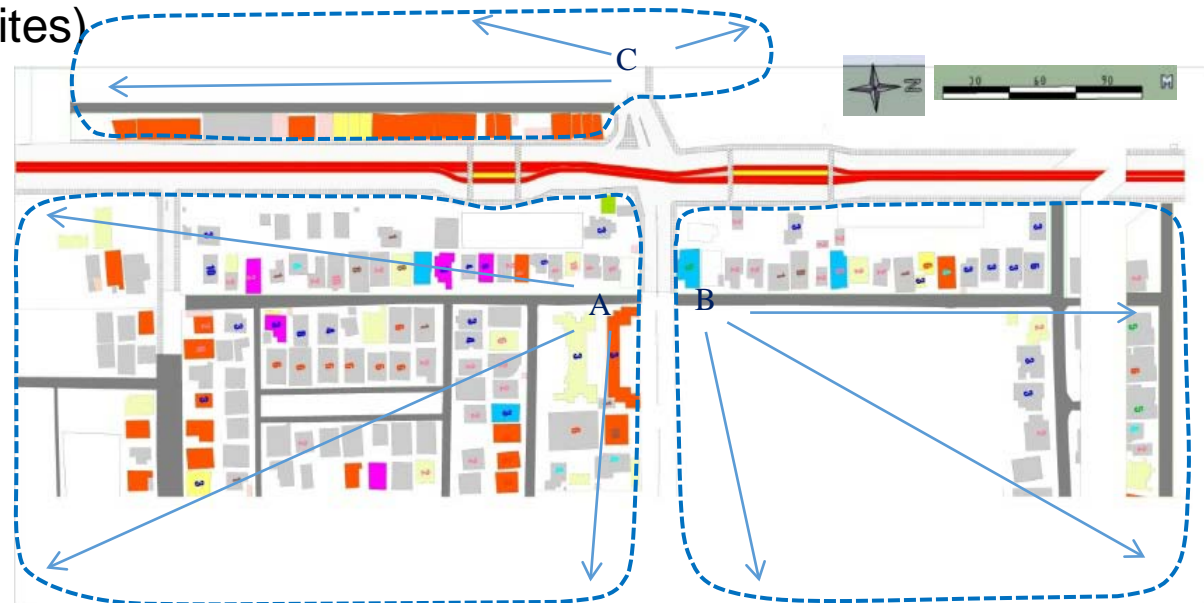
HOW TO DETERMINE A FIXED FARE STRUCTURE?



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FGDs Participants

- Fare based on distance between two locations
- Based on an agreed pre-determined (tentative) distance, not the true distance in km
- Possible only if rickshaws operate within a locality (different colour/design)
- LG + Stakeholders + pullers (owner's association / top of administration / social elites)
- Fare chart



Results from Case Study at Dhaka

HOW TO DETERMINE A FIXED FARE STRUCTURE?



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Interviews: 15 participants mentioned possible

- Rickshaw's operation localised (within neighbourhood)

Methods	Description	Respondent
Area/ locality Based	Hypothetically delineating the neighbourhood and a fixed rate for trips within the area or outside the area	5
Time Based	Measuring the time of rickshaw trip and determining a rate for per hour or minute	3
Distance Based	Identifying tentative distance between two locations; determining a fare for that trip	7

Results from Case Study at Dhaka

FARE RATES VARIABLE OR FIXED?



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- Two sets of fare structure: Peak hours Vs Off-peak
 - Issues/ problems: deciding on peak hours; how to enforce different rates; if a trip starts in off-peak but terminates in peak or vice-versa.
- A standard fare structure for throughout the day
- Maximum two adults and two accompanying infant children travelling together

Results from Case Study at Dhaka

PRE-DETERMINED FARE RATES WILL BE FOLLOWED?



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- Pullers may not follow; e.g. Auto-rickshaws, taxi
- Concerns of pullers group:
 - A small group of pullers may possible to unite
 - Pullers usually operate in different areas
 - Price of commodities has direct influence on rickshaw fare
- Suggestions:
 - Deploying a traffic warden at BRT station
 - Rickshaw owner's responsibility (to order the puller)
 - Strong law and effective enforcement
 - Awareness generation among the pullers

Interviews

- Participatory approach in decision-making process
- Enforcement + Willingness of pullers
- LG fix fare rate + Fare chart + Revise the fare rate regularly

Results from Case Study at Dhaka

HOW OFTEN THE FARE SHOULD BE REVISED?



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- Previous initiatives (e.g. Savar, Gazipur) did not function:
 - Fare structure was not revised regularly
 - Rickshaw fare usually increase with price of essential commodities
- Regular /periodic update and revisions of fare rates
 - When price of commodities increase
 - When price of fuel increase
 - During annual Budget
- 2-3 times per year would not be practical
- Majority suggested for revising once in each year

Results from Case Study at Dhaka

INTEGRATION OF RICKSHAW FARES WITH BRT SYSTEMS



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- A pre-determined fare structure for rickshaws – is a must.
- Rickshaw operate within a locality: possibility of pre-determined fare
- Pre-determined fare for rickshaws - integrating with the tickets of public transport system
- Mechanism for integrated fares: Suggested options are -
 - Rickshaw services provided by BRT operator within the locality (pullers would receive a monthly or daily salary)
 - A pre-paid tokens to pay the fare for rickshaw trips; which the pullers would reclaim his earning from the BRT company.
 - BRT tickets sold by pullers (as a vendor of BRT ticket seller), where passengers will pay the total price (for trips both on rickshaws and BRT) to the puller and get the BRT ticket while boarding rickshaw.

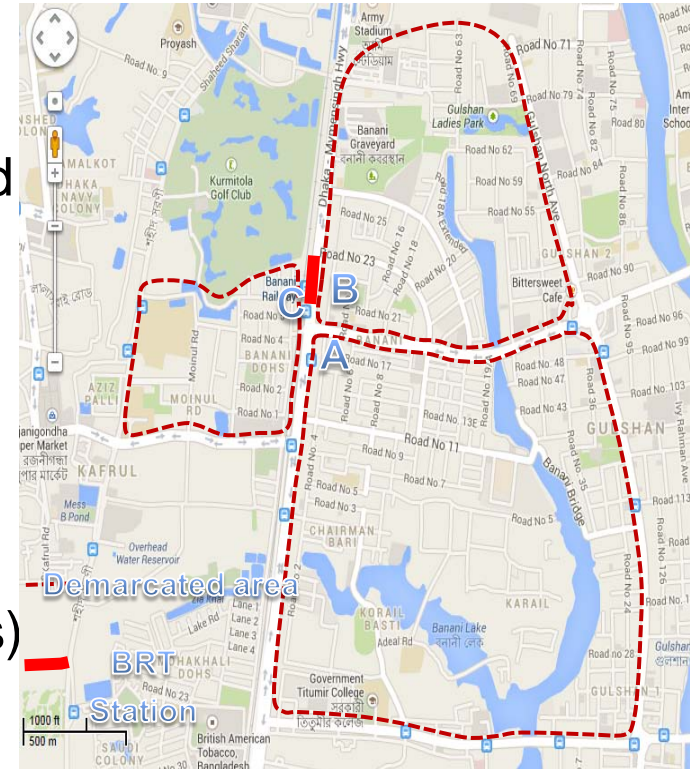
Results from Case Study at Dhaka

SUMMARY



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- For integrated fare system: pre-determine fare structure is essential for rickshaws
- Rickshaw operate within a locality /neighborhood
- Rickshaw fare based on tentative distance (between two locations) or a demarcated area within a distance
- Fare chart (large billboard at station/major points)
- Participatory approach, stakeholders (LG lead)
- Pullers' & owners' awareness and training + Monitoring & enforcement
- Revise fare rates each year



CONCLUSIONS



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- A potential solution for establishing a pre-determined fare structure for rickshaws to enable fare integration with urban PT systems.
- The outcome will generally enhance the use of informal transport mode in many developing cities.
- The results might be helpful in formulating policy for other informal modes.



Thank You

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