

Strategies for Improving Jitneys as a Public Transport Mode

By

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Abstract

The main argument of this thesis is that, with improved service and reliability, jitneys can play a vital role in the public transportation ^{sector} in San Juan, both in congested and low-density areas, and as a feeder service to Tren Urbano.

It begins by explaining why jitneys can be attractive - because of their small size, speed and flexibility, and what problems they face in San Juan - increasing traffic congestion and operating costs. This has resulted in poorer service quality and reliability, and gradual decline in Jitney's popularity over the years. This has hurt their ability to compete effectively with other modes of transportation, namely private automobiles. However, relatively low infrastructure and vehicle costs have helped them maintain self-sufficiency and survive in the competitive market without government subsidy.

To understand how other jitney systems work, this thesis studies similar services in Caracas, Bueno Aires, Manila, Hong Kong, Kuala Lumpur, Miami and New York. It looks at the form of jitney organizations, increasing and decreasing demands for service compared to other modes of transportation, fare collection system, and regulations relevant to jitneys. Then, it applies lessons

learned from other jitney systems around the world to San Juan case and evaluates alternative strategies for improving the publico system.

It looks at alternative strategies for improving the Publico System with the aim to (1) improve and restructure publico system as a viable public transport mode, (2) improve overall accessibility and connectivity, (3) develop strategies to reduce public expenditure on public transport in SJMA. It considers different strategies for improvement; i.e., improvement within current model, movement to a hybrid service model, and movement to a contracted service model.

The thesis concludes with recommendations for applying different models to a variety of route options. In its recommendations, it analyzes strengths and weaknesses of different options.

It proposes that a set of “experimental strategies” should be implemented immediately on weak public routes, potential feeder routes and on routes that will be directly impacted by Tren Urbano. It calls for aggressive government intervention in purchasing new vehicles, implementing fare integration, allowing owners to hire drivers and providing a limited-term contract to operators on routes directly affected by Tren Urbano. The experiments should be monitored closely and assesses to see whether the same strategies can be applied to other routes and markets. In the event the proposed strategies are not adequate or do not produce the desired results, the government has the option to use Siemens to operate or contract out a separate feeder service to Tren Urbano.

Keywords: jitney, publico, transport, mode, Tren Urbano, jeepney, colectivo, publico Light Buses, PLB, minibus, Van, Bueno Aires, Manila, Hong Kong, Kuala Lumpur, Miami, New York

Introduction:

In many parts of the developing world, jitneys provide a major source of public transportation without government subsidy. Due to their low investment cost, low infrastructure and maintenance cost and low skill requirement, they are privately owned and operated. They provide demand responsive service for the benefit of customers.

In severely congested metropolitan areas, jitneys can serve as alternatives to bus and private automobiles. High operating speed and small size give them the comparative advantage over buses. They provide higher frequency service during peak hours. They are also flexible in which routes they take allowing drivers to deviate from main route upon passenger request.

Over the years, jitneys' popularity in San Juan has declined. Jitneys usually start out with high profits and low government regulations. This is followed by a period of reckless driving, and unsafe passenger loading and unloading practices while competing with buses and other vehicles. Government intervenes with strict regulations, which results in lowering profits. Service quality and reliability declines.

Thesis objectives:

The purpose of this thesis is to develop and evaluate potential strategies for improving jitneys as a viable public transport mode and to apply them to San Juan publico case. The specific objectives are as follows.

1. To describe aspects of publico service that are in need of improvements.
2. To identify alternative markets and roles for the publico system by describing how publicos can contribute to the overall objectives of providing high quality public transport services in San Juan Metropolitan Area (SJMA).
3. To identify and analyze different government intervention strategies based on case studies of other jitney systems around the world.
4. To apply lessons learned from the case studies by proposing and evaluating alternative intervention strategies for improving the publico system.

Conclusion:

This thesis identified problems and challenges most jitney systems face. Although they operate more efficiently than publicly operated buses their unsafe and aggressive driving practices and direct competition with buses has resulted in increased government regulation on their operation. Most authorities are reluctant to help improve jitney services for fear that it will disrupt normal transit operations. Over the years several factors have affected jitney performance in San Juan. Operating costs have increased. There is increased congestion on the streets. As a result, service quality and reliability is suffering. Thus, even though they do not require government subsidy, it

has hurt their ability to compete with other modes of transportation that receive subsidy. From rider's perspective, the lack of reliable off-peak hour services and public information on fares and routes has hurt their ability to attract new riders. The fleet is aging and poorly maintained and there is no incentive to for operators to buy new vehicles or improve services.

Despite problems, there are potential roles jitneys can play in then future of public transportation in San Juan. Because they operate more efficiently than full size buses, they have the potential to supplement regular transit services. Their ability to vary the level of service according to demand allows them to achieve higher service productivity and efficiency. Their small size allows them high maneuvering ability in congested areas, and their better acceleration capability bring them up to par with private automobiles. Their low cost structures with minimal overhead, without the need to maintain fixed facilities makes them a viable "low cost" alternative in providing public transport services. Unlike publicly operated transit services, which are often highly unionized, contracting out services to a sub-set of jitney operators allows the authorities to solicit transit services at a lower cost. Furthermore, jitneys have the ability to provide service in low-density neighborhoods where traditional transit is more costly and difficult to provide. Jitneys have the potential to provide high quality service in suburban neighborhoods where the market exists for an exclusive type of service. Finally, the jitneys have the potential to provide effective feeder service to line-haul transit modes. The evidence from the case studies suggests that market exist for jitneys to provide feeder service to rail transit.

Background:

The research first identifies the “critical areas” of the current publico system that need improvement. The “critical areas” of intervention are areas of the publico system that may need restructuring or government intervention if the system is to remain viable in the long term, especially when Tren Urbano becomes operational. It studies the market within San Juan to understand the demand for publico service. Then it does case studies of similar jitney systems in Caracas, Buenos Aires, Manila, Hong Kong, Kuala Lumpur, Miami and New York City.

Results:

Discussion: