

# PROVISION OF LOCAL BUS SERVICES IN JAPAN: FOCUSING ON THE ROLES FOR LOCAL GOVERNMENTS AND NONPROFIT ORGANISATIONS

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## ABSTRACT

Japan's bus deregulation program (coach and local) was carried out in February 2002. Its main point was to loosen or eliminate Demand-Supply Balancing (Jukyu-Chosei.) This regulation was a licensing system and functioned as entry/exit regulation. It defended incumbents (approximately 360 operators) and did not let potential entrants respond to increasing demand for some services. It also forced the incumbents to cross-subsidise non-commercial services. In other words, the incumbents were allowed to enjoy a situation of local monopoly but forced to maintain non-commercial services.

Although five years have passed since the deregulation, we have not seen major changes in the structure of the local bus market, as there have been few entrants. On the other hand, the incumbents are apt to abandon non-commercial services, because they now have freedom of exit and cross-subsidisation is no longer sustainable. The supply of commercial services can be left to the market mechanism, but the problem is who is in charge of maintaining non-commercial but indispensable services, especially in rural areas.

This is why the deregulation has had impact on the transport policy by local governments. In fact, local governments all over Japan have been more involved in policies for public transport. But many of them are now facing a budget deficit and need to cut expenditures, including subsidies for bus services. Thus, nonprofit organisations (NPOs) are also expected to play a crucial role in the local transport market, like community transport in England. Some NPOs have been founded by the inhabitants and have tried to form a partnership with bus operators, local governments, shops, hospitals and so on in their local communities.

The aim of this paper is to analyse the roles for NPOs in the local bus market, in comparison with those for local government. First, we describe the Japanese local bus market before and after the deregulation. Secondly, we consider the roles for local governments and NPOs in the local bus market. Next, we analyse some pioneering cases. In conclusion, we give a future prospect of local bus service provision in Japan, from the viewpoint of partnerships among local governments, private operators and NPOs.

## KEYWORDS

Bus deregulation, Non-commercial services, Local governments, Nonprofit organisations, Partnerships

## **INTRODUCTION**

Japan's bus deregulation program (intercity and local) was carried out in February 2002. Its main point was to loosen or eliminate Demand-Supply Balancing (Jukyu-Chosei.) This regulation was a licensing system and functioned as entry/exit regulation. It defended incumbents (approximately 360 operators) and did not let potential entrants respond to increasing demand for some services, e.g. in newly developed suburban areas. It also forced the incumbents to cross-subsidise non-commercial services. In other words, the incumbents were allowed to enjoy a situation of local monopoly but forced to maintain non-commercial services.

Although five years have passed since the deregulation, we have not seen major changes in the structure of the local bus market, as there have been few entrants. On the other hand, the incumbents are apt to abandon non-commercial services, because they now have freedom of exit and cross-subsidisation is no longer sustainable. The supply of commercial services can be left to the market mechanism, but the problem is who is in charge of maintaining non-commercial but indispensable services, especially in rural areas.

This is why the deregulation has had impact on the transport policy by local government. In fact, local governments all over Japan have been more involved in policies for public transport. But many of them are now facing a budget deficit and need to cut expenditures, including subsidies for bus services. Thus, nonprofit organisations (NPOs) are also expected to play a crucial role in the local transport market, like community transport in England.

The aim of this paper is to analyse the roles for local governments and NPOs in the local bus market, in an analytical framework for the supply of bus services. First, we develop a framework, classifying the supply into four levels (policy, strategy, tactics and operation.) Secondly, we consider the bus strategy by local governments. Recently, "community buses" planned by local governments are getting more and more popular. We investigate the roles for local governments in the strategy, tactics, and operation of community buses. Next, we consider the bus strategy by NPOs by analysing a pioneering case. In conclusion, we give a future prospect of local bus service provision in Japan, from the viewpoint of partnerships among local governments, private operators and NPOs.

## **ANALYTICAL FRAMEWORKS FOR THE SUPPLY OF LOCAL BUS SERVICES**

Some previous studies have suggested that the supply of public transport services consists of several long-term and short-term levels. In this section, we survey these studies and develop our analytical framework for the Japanese local bus market.

### **Literature Survey**

Nakamura (2006) classifies the supply of urban bus services into three levels. This framework is induced from the status quo of Japanese urban bus services. Nakamura's (2006) denominations are shown in Table 1.

This framework focuses the management level on cost burdening. The problem of cost burdening, especially subsidisation from local government, has been also growing in Japan's urban bus market in Japan, although the market has looked thick and profitable for a long time.

**Table 1: Planning, Management and Operation in Bus Transport**

Planning (Keikaku)	Decision on the service characteristics (route, headway, fare, <i>etc.</i> )
Management (Unei)	Implementation of the plan, including cost sharing with non-fare revenues ( <i>e.g.</i> subsidies)
Operation (Unkou)	Daily operation (vehicle rostering, personnel management, <i>etc.</i> )

Source: Nakamura (2006) pp.172-176

Van de Velde (1999) classifies planning and control of public transport into three levels, as Table 2 shows. This is called “STO framework” and developed from business management theory, although it is applied to transport policy of local government, not to business strategy of private operators.

**Table 2: Levels of Planning and Control in Public Transport**

Decision level and its general description	Decisions	
	Software	Hardware
<b>Strategic</b> What do we want to achieve? (Long term, 5 years)	<b>General aims</b> Transport policy, Market share, Profitability <b>General service characteristics</b> Areas, Target groups, Intermodality	
<b>Tactical</b> Which services can help to achieve these aims? (Medium term, 1-2 years)	<b>Detailed service characteristics</b> Fares Image Additional services	<b>Detailed service characteristics</b> Vehicles Routes Timetable
<b>Operational</b> How to produce these services? (Short term, 1-6 months)	<b>Sales</b> Selling activities Information to the public	<b>Production</b> Infrastructure management Vehicle rostering & maint. Personnel rostering & mngt.

Source: van de Velde (1999) p.148

Kolderie’s (1986) study is focused on the privatisation of a public service, including public transport. He implies that provision and production of a public service have different concepts, as shown in Table 3.

Kolderie (1986) investigates the possibility of privatisation of both provision and production. Production has been privatised all over the world, especially when contracting out or competitive tendering can be effective. But privatisation in provision has not always been the case, because for example, policy making, franchising and subsidising would be the remaining roles for governments, even in the deregulated market. To maintain non-commercial but indispensable bus services, the roles for local government in their provision (*e.g.* financing and subsidising) will be more and more crucial.

**Table 3: Provision and Production of Public Service**

Provision	policy making, deciding, buying, requiring, regulating, franchising, financing, subsidising
Production	Operating, delivering, running, doing, selling, administering

Source: Kolderie (1986) p.286

### **Our Framework**

Based on these frameworks and the status quo of local transport policy in Japan, we can develop our own analytical framework. We classify the supply of local bus service into four levels, as depicted in Table 4.

The transport policy level formulates general aims of local transport policy. The policy is not only dedicated to bus transport, but also to all the modes in the area, e.g. private cars, railways, bicycles, and road haulages. Thus it considers intermodality. The policy is determined by the local government. In Japan, these years, more municipalities (city governments) have established the Department of Transport Policy and begun to consider all the transport modes and intermodality in the area.

While transport policy is developed toward all the modes, the strategy for each mode should be developed, in consideration for intermodality. The bus strategy is one of them. It considers which bus services can help achieve the aims set in the transport policy and determines their characteristics, e.g. fares, image, vehicles, routes and timetable. In Japan, the service characteristics (routes and timetable in particular) are reviewed about every three to five years. Therefore the bus strategy generally lasts three to five years. As for commercial services, these service characteristics are set by private bus operators in view of profitability, basically apart from the policy. But the characteristics of non-commercial services are determined mainly by the local government, when it is in charge of maintaining them.

The bus tactics is involved in provision of local bus services, especially financing and subsidising. In other words, in order to implement the bus strategy and keep the buses running, cost burdening is crucially important. This includes combination of fare revenue with non-fare revenue, e.g. subsidies from the local government. In Japan, these subsidisation contracts in general expire a year. Accordingly, we suppose the tactics to be renewed every year.

The bus operation includes, as Nakamura (2006) points out, day-to-day production of bus services, e.g. infrastructure management, vehicle rostering and personnel management. And van de Velde (1999) suggests that the day-to-day operation includes sales (selling activities and information to the public.) Decisions at the operational level are short-term, i.e. 1-6 months.

**Table 4: Levels of the supply of local bus service in Japan**

Decision level and its general description	Decisions							
	Software	Hardware						
<p><b>Transport Policy</b> What do we want to achieve? (Very long term, 5-10 years)</p>	<p><b>General aims</b> Transport policy, Market share, Budget <b>General service characteristics</b> Areas, Target groups, Intermodality</p>							
<p><b>Bus Strategy</b> Which <i>bus</i> services can help to achieve these aims? (Long term, 3-5 years)</p>	<p><b>Characteristics of bus service</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px dashed black; padding: 5px;">Fares</td> <td style="width: 50%; padding: 5px;">Vehicles</td> </tr> <tr> <td style="border-right: 1px dashed black; padding: 5px;">Image</td> <td style="padding: 5px;">Routes</td> </tr> <tr> <td style="border-right: 1px dashed black; padding: 5px;">Additional services</td> <td style="padding: 5px;">Timetable</td> </tr> </table>		Fares	Vehicles	Image	Routes	Additional services	Timetable
Fares	Vehicles							
Image	Routes							
Additional services	Timetable							
<p><b>Bus Tactics</b> How to <i>provide</i> these services? (Medium term, 1 year)</p>	<p><b>Cost burdening</b> Forecast on the fare revenue Financing Subsidising</p>							
<p><b>Bus Operation</b> How to <i>produce</i> these services? (Short term, 1-6 months)</p>	<p><b>Sales</b> Selling activities Information to the public</p>	<p><b>Production</b> Infrastructure management Vehicle rostering &amp; maint Personnel rostering &amp; management</p>						

## ROLES FOR LOCAL GOVERNMENTS

### Impacts of “Community Bus” Services

In Japan, local governments’ involvement in bus transport has two pedigrees. One is “municipal buses.” They are operated by local public enterprises in 45 large and medium-sized cities. These enterprises are suffering from a budget deficit because of their high-cost (high-wage) structure. Municipal buses have tended to be privatised.

The other pedigree is subsidy policy for non-commercial services in rural areas. This dates back to early 1970s, when motorisation by private cars arrived in Japan and the problem of abolishing non-commercial services became serious. Central and local governments together formed subsidisation schemes.

The turning point arrived in the mid-1990s. “Moo-bus” was planned by the government of Musashino City, which is located in Tokyo’s suburbs. Its operation was contracted out to the incumbent bus operator. This service looked brand-new with small vehicles, a circle route and the low fare of 100 yen. It proved to be successful and became a model for the bus strategies by local governments all over Japan. This kind of bus service is called “Community Bus” in Japanese-English.

Community buses are operated not only in large metropolitan areas but also in rural areas, in place of simple subsidisation to non-commercial services operated by bus companies. That is, when a community bus service takes over the non-commercial one operated by a private bus company, the local government redesigns the service by restructuring the service characteristics set by the incumbent operator. Community bus services supplied by the local

government complement commercial bus services supplied by private operators. The features of the strategy, tactics and operation of community bus are generalised in Table 5.

**Table 5: Levels of the supply of community bus service**

<b>Strategy</b>	<b>Service characteristics</b> Characteristics of the bus service are determined by the local government, by reference to the services abolished or existent.	
<b>Tactics</b>	<b>Cost burdening</b> The local government pays the initial cost (vehicles, infrastructure, <i>etc.</i> ) and a deficit in the operation cost.	
<b>Operation</b>	<b>Sales</b> Local government is in charge of selling activities and public relations.	<b>Production</b> Daily bus operation is contracted out to a private bus operator.

### **What are the Roles for the Local Governments?**

Our framework supposes that the bus strategy is developed according to the local transport policy. In general, local governments have had little attention to transport policy and they have not articulated its general aims. But now, as we pointed out, many municipalities have the Department of Transport Policy, considering all the transport modes in the area, and the relations of transport policy to other policies (social inclusion for elderly people, downtown revitalisation, etc.)

At the tactical level, in order to keep the community bus running, local governments need to raise the cost-effectiveness of subsidisation. This relates to the operational level, utilising contracting out to the private bus operators. Introduction of a competitive tendering would be effective and vitalise the whole local bus market, as it would offer opportunities for potential entrants, e.g. chartered bus and taxi operators to enter the market.

## **ROLES FOR NONPROFIT ORGANISATIONS**

### **Emergence of Nonprofit Organisations in the Local Bus Market**

Nonprofit organisations (NPOs) now receive attention in many kinds of social activities, e.g. town planning and social welfare. Transport is not an exception. In the local transport market, if the incumbent abandons a non-commercial but indispensable service on one hand, but the local government can not afford to maintain it on the other hand, we can expect a NPO to help supply it. In other words, where neither local government nor a bus operator can maintain the service, a NPO could form a partnership with local government and an operator to keep the bus running.

Seikatsu-bus, which is operated in a suburban area of Yokkaichi City, Mie Prefecture, is a pioneering case. Yokkaichi is a medium-sized city with 300,000 inhabitants. In 2002, the incumbent bus operator abolished the service connecting the area to the city center. Then a leader of a neighbourhood association (Chonaikai) gathered a working group to revive it. The group consisted of leaders in Chonaikai, an employee of the incumbent, and a city official. This group was the origin of the partnership among the inhabitants, bus operator and city

government. They established a NPO and successfully revived the service. The features of Seikatsu-bus at each level of decision making are as follows;

At the strategic level, the NPO did not follow the transport policy by the city government, as the government had little vision of public transport policy. This is why the NPO determined the service characteristics by modifying those of the abolished service. The question was “Which bus service can replace the abolished service, and attract the inhabitants?”

At the tactical level, cost burdening is the most serious problem. The NPO receives financial supports from shops, hospitals, inhabitants, and the city government. First, as most passengers were expected to be elderly people and their purpose of taking the bus would be shopping and going to the hospital, some of the cost should be borne by the shops and hospitals in the area. Thus the NPO asked them for financial support. Secondly, it also asked inhabitants to help maintain the service, as well as to take the bus. The commuter pass is called “Supporter Pass (Ouen-ken),” in order to encourage non-passengers to buy the passes. Thirdly, it applied for subsidy to the city government. As we pointed out, the government did not have vision of public transport policy, but soon appreciated the activities of the NPO and started subsidisation. The government is now seriously involved in developing its own transport policy, and the bus service has become a vital part of the policy.

The bus operation is contracted out to the incumbent. The operator once abolished the service, but has now built up trust with the NPO.

### **What are the Roles for the Nonprofit Organisations?**

NPOs will play more and more crucial roles in Japanese local bus market, as local governments suffer from a budget deficit and bus operators can no longer cross-subsidise non-commercial services. From the case of Seikatsu-bus, NPOs can learn lessons on the bus strategy, tactics and operation.

At the strategic level, the NPO may determine the service characteristics without referring to the transport policy, if the local government has little attention to the policy for public transport. In this case, the main question is not “Which bus service can help achieve general aims set by the transport policy?” but for example, “Which bus service can help and attract inhabitants?”

At the tactical level, cost burdening is of course a serious problem. Maintenance of the bus service depends on how the NPO can collect money. It should not rely solely on the subsidies from local government, but also on everyone who wants to keep the bus going. For example, the donations from shops, hospitals and inhabitants are very important non-fare revenues.

At the operational level, it is noteworthy that in general, NPOs can not operate buses, i.e. employ and manage drivers, purchase and maintain vehicles, etc. But they can concentrate their activities on implementing the strategy and tactics, while they contract out the operation to private bus operators.

**Table 6: Levels of the supply of bus service by a nonprofit organisation**

<b>Strategy</b>	<b>Service characteristics</b>	
	Characteristics of the bus service are determined by the NPO, with a help of bus operator but sometimes not by reference to transport policy by local government.	
<b>Tactics</b>	<b>Cost burdening</b>	
	The NPO collects money (and ideas) from everyone concerned about public transport in the area. (shops, hospitals, inhabitants, local government, <i>etc.</i> )	
<b>Operation</b>	<b>Sales</b>	<b>Production</b>
	The NPO is in charge of selling activities and public relations.	Daily bus operation is contracted out to a private bus operator.

## CONCLUDING REMARKS

In Japan, until 2002, maintenance of non-commercial but indispensable bus services mainly depended on Demand-Supply Balancing by the central government and cross-subsidisation by the incumbent operators. The deregulation changed this situation and now local governments need think strategically about their bus transport. But, because of a budget deficit, they can not assume all the responsibility alone, and NPOs would emerge in the local bus market to help supply the service.

Thus, under the deregulated environment, in order to keep the bus running, partnerships among local governments, private operators and nonprofit organizations (i.e. collecting money, ideas, and efforts from them) are indispensable. In some cases, other partners should join in the partnership. For example, in some cities, the Chamber of Commerce develops and implements the bus strategy, as it recognises bus transport as a tool for the downtown revitalisation.

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