

National Regional Traffic Activation Case Studies



March 2011
Institution for Transport Policy Studies

Introduction

This collection of case studies is a summary of detailed cases (micro data) obtained from interviews in municipalities as part of the "Information Gathering and the Provision of Web Information for the Activation of Regional Transportation" project with the support of the Nippon Foundation over the three years of FY2008-2010.

As the state of regional public transport becomes more and more difficult each year, and given the pressing need for local governments to revitalize and rehabilitate their regional public transportation systems, the "Revitalization and Rehabilitation of Local Public Transportation Systems Act" was implemented in October 2007. This law seeks that municipalities that are at the forefront of this issue take on the role of "regional public transport producers", examining the transportation needs of their regions, reviewing public transport from the perspective of its users, and playing a central role in the formulation of regional public transport plans.

Also, in the municipality survey conducted over the last three years by the Public Transport Support Center ("Questionnaire on the Provision of Information by the Public Transport Support Center"), it was clear that local government personnel in each region had a high need for information on "trends in other local governments" and "case studies of implemented measures".

This collection of cases studies is a collection of various measures related to public transport from Japan and overseas, to provide information on the revitalization and rehabilitation of regional public transport systems, for municipalities and other related stakeholders such as public transport users, residents, commercial facilities and businesses, hospitals and schools etc., in response to the roles and information needs of local government officials.

There are an innumerable variety of situations in the various regions, which cannot be resolved in a uniform manner, but it is important that consideration is given to those cases which are most similar to local conditions, and that a lot of ingenuity, expertise and lessons, as well as investigative processes are learned from these cases. This collection of case studies was prepared with these points in mind. It is important that local transportation is developed to suit the conditions of each region. Rather than directly applying the cases herein as they are, please use these as a reference for considering services and operations that match the specific characteristics of your region.

It is our hope that this collection of case studies of the reactivation and reform of local public transportation will provide tips for developing various initiatives, and that these examples will be useful in the formulation of measures that are fit for each region.

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Public Transport Support Center
Institution for Transport Policy Studies

FUREAI-Shuttle



Profile

In Niseko-cho, private bus routes doubled up with municipal welfare buses and school buses, but due to limited users and inefficiencies involved in doubling up on routes, these three buses were reorganized and integrated, to be restructured as the "Fureai Shuttle", a community bus which anyone can use.

Hokkaido>Niseko-cho

Population: 4,669 people

Area: 197.13/km²

Population Density: 23.68

people/km²

Operating Entity: Niseko-cho

Mode Community Bus	Status Operational	Implemented 2002
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Results

- Previously, school buses and welfare buses had a limited set of users, but community busses can be used
 without worry by anyone, greatly improving the convenience to users. Also, given that this consolidates a
 number of different bus systems, operational efficiencies can be achieved, reducing administrative costs.
- The number of bus users in Niseko-cho has increased significantly from around 26,100 people (total of bus routes, welfare buses, school buses) in the first half of FY2001 (April to September) before the introduction of the community bus, to about 28,200 people since its introduction in the first half of 2002.
- There was also an upward trend in the number of general public users (excluding children and students using for school commuting) in the three years since the introduction of the community buses, from 20,400 people in FY2002, to 24,200 people in FY2003, and 24,800 people in FY2004.
- From FY2007, in addition to introducing buses with carriers for bicycles (the first such trial in the nation), mini tours using community buses have been implemented in cooperation with the Tourism Association, and other measures have been taken to actively promote bus use for tourism. As a result of these measures, bus use in tourism has increased, and after sluggish use in FY 2005-2007, the number of annual users began to increase in 2008 (10.3% over 2007).

Note!

- In the re-purposing of the buses, the buses were allowed to stop anywhere at the passenger's request, as a limited service for the elderly and persons with disabilities, so that their convenience would not be reduced in comparison with the previous welfare buses (in some areas the regions where buses can stop anywhere at the passenger's request are limited).
- Also, so that convenience would not be reduced in comparison with the previous school bus service, the "Early
 Morning Fureai Shuttle" began operation. Unlike the route that this line takes in the daytime (loop line), this
 takes into consideration the needs of school commuters. This can also be used by people other than children
 and students.
- From 2007, transportation operators, local businesses and local residents came together to form the "Nisekocho Route Operation Committee", to consider measures to increase users of the Fureai Shuttle. As a result,
 given that there would be a plateau of users given the demographic trends among townspeople only, various
 measures were taken with the aim of expanding the use of buses by tourists (as many as 1.5 million per year),
 integrating the community buses with tourism.

More Info...

Niseko-cho Website (http://www.town.nosako.hokkaido.jp/jbus/#3)

Migon Aichi>Komaki



Profile

A 7-seater taxi transportation service operating around Tohkadai Newtown in Komaki. "Migon" is taken from the Japanese words "Minna de Wagon", meaning a wagon for everyone.

Its main feature is that it has the advantages of both passenger buses and taxis.

Population: 147,182 people

Area: 62.82 /km²

Population Density: 2342.92

people/km²

Operating Entity: Aoi Traffic Corp.

Mode hared Taxi

Status Operationa mplemented 2003

Results

- Migon began operations in the night time, when buses from JR Kasugai station to Tohkadai Newtown had stopped, and from the "Peach Liner" Tohkadai Center Station (new transport system connecting Komaki Station with Tohkadai Newtown, abolished in September 2006) to people's homes.
- While taxi fare from JR Kasugai station to Tohkadai Newtown cost 3,000-4,000 yen, using the Migon means that wherever you get off the bus you only pay 900 yen, and there is no need to be picked up by family etc.
- From Tohkadai Center, service in the evening is limited to Newtown and surrounding areas, for a fare of 300 yen. This is an important form of transportation for the elderly etc. who do their shopping in the Center district.
- Also, following the abolishment of the "Peach Liner", operation commenced between Komaki Station and Tohkadai Newtown, for a fare of 900 yen, regardless of where you get off on the bus route.
- From the roughly 7,700 users on all routes at the commencement of operations in 2003, this grew 1.7 times to about 12,800 users two years later in 2005. Convenience was further enhanced in March 2008, with the bus stop at JR Kasugai station moved to in front of the station, leading to an increase of 15% over the previous year of users from this station (April to October).

- Migon is a transit service which arose out of an awareness by Komaki City taxi operator "Aoi Traffic" on the
 issue of "what kinds of transit services are required by citizens", and they have implemented this business on
 their own, without any subsidies from government.
- "Aoi Traffic Corp." have the management philosophy of "creating a new passenger transport system from the view of the needs of local residents", and the Migon is an embodiment of a transport service which fits this philosophy.
- The features of the Migon service include 1) flat-rate fares, 2) shared ride, 3) limited regions and 4) door to door service, with the aim of providing a new community-based transport service with the benefits of both taxis and buses.
- "Aoi Traffic Corp." also operates bus routes connecting Tohkadai Newtown, JR Kasugai and Komaki stations, and in relation the movement needs for the company's buses, by making use of the most appropriate modes of transport for their users they have also been able to cater for demand late at night.

Toyoyama Town Bus



Profile

Planned by Toyoyama-cho, and operated by private businesses, routes outside of the town, such as to nearby central Nagoya and the Komaki Municipal Hospital are longer than routes that run throughout the town.

Aichi>Toyoyama-cho

Population: 13,565 people

Area: 6.19 /km²

Population Density: 2,191.44

people/km²

Operating Entity: Aoi Traffic and

Toyoyama-cho

Mode Community Bus	Status Operational	Implemented 2002
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Results

- Upward trend in users, with 47,000 users in 2005, 53,000 in 2006, and 57,000 in 2007.
- Toyoyama-cho is located in the suburbs of Nagoya, and the nearest railway station is Nishiharu station on the Nagoya Railroad Inuyama Line, about 4km away. Also, the Meitetsu bus route was discontinued in 2002. This means that the use of public transport for the mobility needs of citizens to the city center of Nagoya, and for the Komaki City Hospital in adjacent Komaki has been extremely inconvenient, but this has been improved with the introduction of the Toyoyama Town Bus.

- In order to understand the needs of residents, group interviews were conducted, along with surveys. Town officials went to public facilities such as community centers and health centers, and interviewed citizens in groups of 10. Through group interviews with housewives and the elderly at these locations, their needs were investigated as they spoke freely with each other. The adoption of the opinions of residents in this way led to the changing of routes in September 2006, and large scale timetable revisions in April 2008.
- In April 2008, in conjunction with a revision of timetables, the "Toyoyama-cho Public Transport Map" (see following page) was created to facilitate transit between the Toyoyama Town Bus and existing bus routes (Meitetsu Bus Nishiharu and Airport routes and Aoi Traffic Nagoya Airport Direct Bus).
- In September 2002, Aoi Traffic began the shared bus service, in accordance with Article 4 of the Road Transport Act. The planning and bearing of deficits for the operation are carried out by Toyoyama-cho as an Independent Town Business. Fare revenues are about 12 million yen per year, in relation to 42 million yen per year in expenses. The difference of 30 million yen per year is borne by the town.



Profile

With the reduction in users due to the increase of car ownership, conventional bus route operators became unprofitable, and discontinued service in May 2002. A Regional NPO leveraged auxiliary resources in the city to begin operation of a new community bus to operate in public transport blank spots.

Population: 303,845 people

Area: 205.16 /km²

Population Density: 1,481.01

people/km²

Operating Entity:

NPO Seikatsu-Bus Yokkaichi

Mode Community Bus

Status Inerational mplemented 2003

Results

- There has been an increasing trend in passengers since the start of operations of the new Community Bus. At
 its introduction in FY2003, there were an average of 70-80 users per day, but as of 2008, there were more than
 100 users per day. This was a significant increase over the 20-30 people per day average of the discontinued
 bus routes.
- The convenience for the elderly in daily life activities such as going shopping or to the hospital has improved significantly.

- The Mie Kotsu Tarusaka Route, which had been active since the 1940s, was abolished in May 2002 due to the unprofitability of its routes due to reduced users. This meant that the Hazu Ikaruga District (540 households, population of about 1,700 people) was about 2-3km from the nearest train station and bus route, resulting in a public transport blank spot. With the desire for the government to keep this route running not realized, the "NPO Seikatsu-Bus Yokkaichi" was established, with the goal of operating a community-based bus service. Operations were outsourced to Mie Kotsu.
- A route was set out which took in places necessary for everyday life, such as shops, hospitals, post offices, railway stations and civic centers. Also, to reduce the distance that the elderly need to walk to bus stops, bus stops were spaced at short distances of 200-300m, with the route zig-zagging through the region. The timetable is set so that it is convenient for shopping, stopping at the supermarket every 40-50 minutes.
- Operating expenditure is 900,000 yen, and this is financed by 100,000 yen in fare revenue, a 300,000 yen subsidy from the city, and 500,000 yen in sponsorship money from companies along the bus route. Personnel and office expenses are kept small thanks to the volunteer spirit of the NPO members.
- With the managing entity being an NPO, the enthusiasm of the people at the center of the organization that plan and implement those plans are another important element.

Kyoto>Kyoto

Daigo Community Bus



Profile

A community bus led by residents, from planning to operation. With local volunteers and outside experts playing a central role, a community bus was introduced in public transport blank areas in the suburbs of Kyoto.

Population: 1,474,811 people

Area: 827.9 km²

Population Density: 1,781.39

people/km²

Operating Entity:

Daigo Community Bus Citizens

Committee

Mode Community Bus

Status Operational

mplemented 2004

Results

- In 2004, 4 new community bus routes were established, centered around public transportation blank spots where access to bus stops on arterial routes is difficult. (an additional route was added in March 2008 for a total of 5 routes)
- All routes were set so as to complete round trips within one hour, and by patterning their timetables in this way it enhances the convenience for the users.
- The number of passengers has increased from the expected 500 people per day when the operation commenced to 1,400-1,500 people per day as of November 2008, and at one point there were cases of passengers having to be left behind at bus stops. (this has now been resolved with the establishment of the fifth route.)

- With the withdrawal of city buses, momentum increased among local residents for the operation of a community bus, and it was local residents that played a central role in planning, gaining approval and implementing the operation. The deregulation of busing in February 2001 was also a major factor in the successful implementation.
- Routes were set freely based on the opinions of citizens, and following the principles drafted by a committee of experts including "4 route service" (currently expanded to 5 routes), "no changes to end points and service intervals" and "areas that take 30 minutes or more are outside of the scope", and the locations of bus stops were as desired by residents. Coordination with residents near bus stops was also carried out by the residents themselves, allowing them to be smoothly established. This kind of community-based initiative created a sense of unity within the region, and also led to the promotion of bus use.
- Instead of a public transport system which operated on meeting costs with fare revenue alone, a "Partner Support" system was implemented to obtain funds from private companies along the bus route and the public, and a financial base was established with major companies on the route becoming main partners.

Hidakagawa-cho Public Transportation Restructuring



Profile

In order to respond to the reduction of major routes by private bus operators and to improve the convenience and efficiency of existing routes, Hidakagawa-cho effectively integrated bus routes with community buses and shared taxis, in a stage-by-stage approach to fulfilling the needs of residents and restructuring the public transportation system.

Wakayama>Hidakagawa-cho

Population: 11,123 people

Area: 331.61 km²

Population Density: 109.7

people/km²

Operating Entity: Hidakagawa-

cho

Mode	Status	Implemented
Bus/Taxi	Operational	2008

Results

- Through the restructuring efforts, it was possible to increase the frequency of bus routes on major lines used by high school students to go to school, extend the times of buses for going home from school, and enhance feeder services connecting main routes with community buses/shared taxis, to ensure greater consideration of residents that are unable to drive automobiles.
- Through measures to secure means of transportation, use for tourism and the social participation of the elderly and disabled can be expected.

Note!

- With the request from operators to discontinue services, and the growing need to review the limited current services, public transport was restructured by integrating arterial line buses with community buses and shared taxis.
- Improved convenience through the improvement of bus route services and the establishment of new shared taxis in response to demand from citizens.
- Improved efficiency by switching to shared taxis instead of buses with low demand.
- Bus stops were set in transit hubs in each area, and waiting environments are well maintained.

[Background]

- Hidakagawa-cho is located virtually in the center of Wakayama Prefecture, and is adjacent to Gobo City to the east, which is the central city in the region.
- This town was born out of the 2005 merger of Kawabe-cho, Nakatsu Village and Miyama Village, and has an
 elongated shape running from east to west, encompassing a vast region with long distances between
 residential areas and the city area.
- In such a geographical situation, private vehicles are the major form of transportation for residents, and the number of bus users had been on a downward trend year by year.
- As a result, the Gobo Nankai Bus, which operates many routes in the town, is advancing a review of existing
 routes, and in Hidakagawa-cho the town is switching to operating an alternative bus service.
- At the end of September 2008, the request was made by Gobo Nankai Bus, who operated a number of bus routes within the town, to reduce the main routes to Ryujin Tanabe city and connecting Kawabe, Nakatsu and Miyama with Gobo City, and to keep these routes to operating up to Kawaharago in the Miyama district.
- In order to respond to the reduction of main routes and to improve the convenience of existing routes, Hidakagawa-cho considered the problem of public transportation as an issue of the entire town, and took a sustainable approach to the restructuring of their transportation system.

Hidakagawa-cho Public Transportation Restructuring

[Details]

- ① Restructuring of Town Bus Routes (Implementing Entities: Hidakagawa-cho/Gobo Nankai Bus)
- As part of the restructuring, routes were secured for the concentrated use of school students in the mornings which had become an issue, and to secure buses to take students home from school.
- ② Community Bus/Shared Taxi Demonstration Project (Implementing Entity: Hidakagawa-cho)
- From October 2008, community buses were introduced in 4 routes to enable movement through the area, and to provide connections to the restructured routes. (of these, one of the routes has been reduced during the restructuring, and thus the operation is shared with adjoining Tanabe City.)
- In October 2008, two alternative routes operated by the town in place of abolished private bus routes, where the number of users had been low, were switched to shared taxi services.
- With the results of the residents survey, new shared taxis were established in June 2009 to connect with the above shared taxi service, to improve convenience for areas that were far away from bus stops.
- ③ Bus Stop and Bus Related Facility Improvement (Implementing Entities: Hidakagawa-cho/Gobo Nankai Bus)
- The transit hubs for bus routes, community buses and shared taxis are also the hubs of the community, and the Hongo Bus Stop in the Nakatsu district and the Kawaharago Bus Stop in the Miyama district were improved to provide more protection from wind and rain.
- The Kawarago Bus Stop, which had been in two separate locations for the two former routes was consolidated into a single location through these improvement measures.
- In addition, there was verification and improvement of confusing bus stops on the shoulders of the road etc.
- Measures to Promote the Use of Public Transport (Implementing Entities: Hidakagawa-cho/Gobo Nankai Bus/Operating Committee)
- Promote use through the creation and distribution of timetables, public transport route maps, transfer information and posters etc., and posting to the town website etc.
- ⑤ Promotion of Regional/User Participation (Implementing Entities: Hidakagawa-cho/Gobo Nankai Bus/Operating Committee)
- A system was developed to actively listen to the needs and suggestions of bus regions and users, and to encourage their participation in the operation of the bus service.

[History of Study]

- In August 2006, the Hidakagawa-cho Regional Transportation Study Committee was established to commence a study of regional traffic.
- In March 2008, the "Hidakagawa-cho Regional Public Transportation Activation Council" was established to investigate the operating routes and forms, understand usage status and needs, and to promote use and sustainable operation.
- In May 2008, a "Survey on Resident Bus Operation" for the entire town and a "School Commuting Survey" for Nakatsu/Miyama District Junior High School students were conducted.
- As a result, it became clear that because of the inconvenience of buses, parents were taking their children to
 and from school, and additional buses were added in the mornings when students commuting to school was
 at its most intensive, and last buses were extended to deal with club activities etc.
- In October 2009, with the cooperation of the Wakayama College of Technology, a questionnaire and interview survey of bus users were conducted, to understand the impact of restructuring and the degree of satisfaction of users.

Toyama Light Rail Toyama>Toyama



Profile

Under the comprehensive Toyama City public transport plan, the former JR West Toyama Port Line was developed into a light rail system (LRT) with the aim of establishing "Compact Urban Development Centered Around Public Transportation". This LRT is said to be the first such full scale introduction in Japan.

Population: 421,239 people

Area: 1,241.85km²

Population Density: 339.20

people/km²

Operating Entity: Toyama Light

Rail Co., Ltd.

Mode	Status	Implemented
Railway	Operational	2006

Results

- Along with the introduction of five new stations (including Toyama North Station), as well as barrier-free support for carriages and station facilities, the timetable was improved from previous 30 minute intervals to 10 minute intervals at peak hours.
- Compared to before opening, the number of daily users increased significantly after opening (October 2006) from 2,266 to 4,988 people, and on holidays (weekends and holidays) from 1,045 to 5,576 people.
- In a citizens survey after opening, about 90% of citizens evaluated the Toyama Light Rail well.
- In order to prepare for the future declining and ultra-aging population, Toyama City aims to realize "an active public transport system, beginning with the railway system, which integrates the various residential, commercial, business and social functions of the city along the rail lines, so as to develop a compact urban environment centered around public transportation".

Note!

- With the JR Hokuriku Line consecutive grade crossing construction project associated with the Hokuriku Shinkansen construction, the LRT proposal emerged after considering a variety of alternatives, including the raising of the Toyama Port Line and replacing it altogether with a bus system. As a result of review by Toyama City, it was decided to continue with the LRT and to transfer its management from JR West to the semi-public sector Toyama Light Rail, and for the public to bear the cost of facility development and carriage introduction etc.
- LRT development leverages the existing rail infrastructure, and is the first step in creating a city-wide public transportation network.

More Info...

- Toyama City Website (Public Transport Policy) http://www.city.tovama.toyama.jp/division/toshiseibi/koutsuseisaku/
- Toyama City Website (Public Transport Railway Residents)
 http://www.city.tovama.toyama.jp/division/toshiseibi/jutakusuisin.htm
- Toyama Light Rail Website http://www.t-lr.co.jp/
- Toyama Traffic Policy Research Group Website http://www1.tcnet.ne.jp/kusunoki/koutuken/t200.pdf
- Toyama Light Rail Record Editorial Committee, "The Birth of the Toyama Light Rail", Kajima Publishing, 2007
- Takeshi Fukayama,
- Analysis", Transport Policy Studies, Vol.10, NO.1, pp.22 -37, 2007

Wakayama Electric Railway Kishigawa Line



Profile

Following the withdrawal of existing operators due to a decrease in users, the prefecture and municipalities determined to provide financial support, and made a public offering for operators to take over operations anew. As a result, operators from outside of the prefecture participated, and the routes were able to be maintained.

Wakayama>Wakayama City

Population: Wakayama 375,591 people

Kinokawa 67,862 people

Area: Wakayama 209.23 km² Kinokawa 228.54 km²

Population Density: Wakayama 1,795.11 people/km² Kinokawa 296.94km2 people/km²

Operating Entity: Wakayama Electric Railway Co., Ltd.

Mode Status Implemented Railway Operational 2006

Results

- Okayama Electric Railway, which was selected in public offering, established the Wakayama Electric Railway to operate the Kishigawa Line. Also, after taking over operations, discussions were held to promote use under the "Kishigawa Line Steering Committee", made up of members from Wakayama Electric, Prefectural and local governments along the route, schools, residents organizations and the Chamber of Commerce. This line, which was near to being abolished, was able to be kept thanks to the efforts of various stakeholders, and many efforts have been made to establish it.
- In the first year after takeover, FY2006, the annual number of users was about 2.114 million people, exceeding the year prior to takeover, 2005, by about 190,000 people.
- As a result of cost effectiveness analysis by academics, the social benefit per year from the survival of the Kishigawa Line was estimated to be about 1.48 billion yen greater than if there had been a conversion to buses after the abolishment of the line (conversion rate was set at about 46%).

Note!

- This line was previously operated as the Kishigawa Line of the Nankai Electric Railway (Nankai Electric), but with decreasing users, operations in 2002 registered a loss of about 470 million yen, and in October 2003 Nankai Electric began examining their withdrawal as the operator of the Kishigawa Line, issuing a report to this effect to Wakayama Prefecture, Wakayama City and Kishigawa-cho (currently Kinokawa City). In response, the prefecture, city and town took measures to ensure the continuity of the Kishigawa Line, and the prefecture paid all costs for the railway land for the two municipalities as initial investment required for continuity, and also bore the cost of large scale substation repairs necessary for future operation, providing the two municipalities with sufficient funding to operate for 10 years.
- Assuming these burdens, the operator was published, and the Okayama Electric Railway was selected. After
 this, Okayama Electric Railway established the wholly owned Wakayama Electric Railway, which was granted
 free land for the railway from the two cities, and a voluntary conveyance of other rail assets from Nankai
 Electric, and the business was taken over from April 2006.
- After the start of operation, the "Kishigawa Line Steering Committee" was established to promote use. A
 variety of measures have been implemented to promote use, such as the operation of the "Ichigo (Strawberry)
 Train", designed after the strawberries that are the specialty of the area along the railway, and the operation of
 a "Toy Train", and the appointment of a cat as stationmaster, etc.
- Following the announcement of the abolition of the Kishigawa Line by Nankai in August 2004, activities to
 keep the railway were carried out by citizens organizations. These activities were broadcast on television, and
 led by residents of Nagayama Estate in the former Kishigawa-cho who appeared on television, the "Group for
 the Future of the Kishigawa Line" was officially launched. Thanks to being on television, members increased,
 and the group became even more active.

More Info...

• Wakayama Electric Railway Website: http://www.wakayama-dentetsu.co.ip/















