Promoting Cycle and Ride and Local Community Bus Services

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Japan
Promoting Cycle & Ride and Local Community Bus Services

Saitama Misato Traffic Division
Assistant Manager Isao Ono
Profile of Misato City

Location: 20km from Tokyo
Population: 130,000
Area: 30.41km²
Highway repletion

Open Commercial facilities in the high sphere commercial zone, area A (14ha) in June, 2005

Open Tsukuba Express Line in autumn 2005.
1. Regional Community Bus
Background of Restructuring for a Route Bus Network

- Assignments among the whole bus transportation in this city
  ① Difficulty to keep on scheduling bus transportation in this city
  ② Bus service out of citizen’s traffic use purpose and needs
  ③ Most areas inconvenient for citizens due to bus stop located along main roads and long distance from bus users

- Required countermeasures
  1) Against traffic jam caused by driving to the railroad station for pick-up, and for safety commuting
  2) Against traffic jam at major intersections and for environment along the roads
  3) For solving inconvenient area in bus service and for securing commuting measures for citizen who has no other measures to commute

- Large dependency on own car

- Reviewing and restructuring public route bus network

- Promotion for shifting own car use into bicycle use and bus riding
Catch Copy of Restructuring Plan For Bus Network

More convenient in bus service
More vividly in town
Connected and expanded life space
Regional community bus service
Beginning from Misato
(in providing information)
Improvement Of The Current Bus Route

- Expanding to Shin-Misato Station
- Routing between Misato Danchi and Kanamachi Station
- Increasing in the number of bus connecting to the civic center
- Changing the route between Misato Station and Yoshikawa Station

Current route

Improved route
About Regional Community Bus

5 Stations for citizen’s traffic purpose
Misato Station, Shin Misato Station, Yoshikawa Station, Matsudo Station, Kanamachi Station

Accessible bus to the nearest Station by frequent bus service and short routing in the community
About Regional Community Bus

<An example of route>

Establishing the route not on the main road but on where citizens frequently walk.

Concept like transit mall

Fusing routing bus system and community bus system
Route Map For Regional Community Bus

- Start service from September to December 2002
  - Waseda East circulation
  - Waseda West circulation
  - Shin Misato East circulation
  - Bus service between Misato Station and Kanamachi Station (joint service by 2 companies)
  - Shuttle bus service between Shin Misato Station and Misato Station
  - Shuttle bus service between Shin Misato Station and Yoshikawa Station

- Start service from December 2003
  - Shin Misato South circulation
Bus Transportation Network In Misato After Restructuring

By restructuring bus route
 ○ Accessible to anywhere by only one time transfer
 ○ Accessible to public facilities within 3 minutes on foot from the nearest bus stop

(● : public facilities)

In front of Health welfare hall
Effects On Bus Service Based Upon Regional Community Bus

- Gained the first position among civil measures from citizen’s conscious investigation (46.1%)
- Secured user more than unexpected (195,000/month) and to increase citizen’s frequency of going out
- Decreased pick-up at rush hour by improved bus service (55% decrease at Misato Station)
- Effected on less traffic jam around station (50% loss at peak hour)
- Secured bus service almost keeping in time and “not delayed bus service” established
2. Cycling And Bus Riding
Promotion For Cycling And Bus Riding

Purpose for Establishment

1) Reinforced linkage between public transportation and bicycle
2) Improved convenience for the distant area to bus stop

Promotion for use of bicycle and bus

Establishing system which doesn't rely on privately owned motor vehicles too much
Transition Of Arranging Route

Current bicycle parking area (6 sites, capacity 500)

New bicycle parking area (7 sites, capacity 300)

800
Space And Arrangement Cost

**Space**

① Water bed, drainage, road space not in use, part of part
② Bus company’s business place, Bus turning area

**Arrangement cost**

Arranged by Misato city

**Promotion for use**

① Informing through circulation sheet in cooperated with each regional organization
② Through Misato-city web page, pamphlet
From The Investigation Of Cycling And Bus Riding User

Q. How frequent do you use bicycle parking area for use of bus service?

- Everyday: 54.1%
- Everyday on weekday: 31.1%
- Once a week: 6.6%
- Once or twice a month: 4.9%
- Not use: 1.6%
- Other: 1.6%
- No response: 0.0%
What is your purpose for using this bicycle parking area?

- Commuting: 75.4%
- Attending school: 11.5%
- Shopping: 6.6%
- Pleasure, favorite activities (i.e. hobby): 0%
- Hospital: 3.3%
- Other: 1.6%
- No response: 0%
From The Investigation Of Cycling And Bus Riding User

Q. How long does it take from the bicycle parking area to your house?

<table>
<thead>
<tr>
<th>Duration</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3</td>
<td>44.3%</td>
</tr>
<tr>
<td>3-5 minutes</td>
<td>36.1%</td>
</tr>
<tr>
<td>5-10 minutes</td>
<td>9.8%</td>
</tr>
<tr>
<td>10-15 minutes</td>
<td>6.6%</td>
</tr>
<tr>
<td>More than 15</td>
<td>3.3%</td>
</tr>
<tr>
<td>Other</td>
<td>0.0%</td>
</tr>
<tr>
<td>No response</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
From The Investigation Of Cycling And Bus Riding User

Q. What is your purpose for using bicycle to the bus stop?
Points For Hereafter (Cycling And Bus Riding) Arrangement

① Setting up at bus stop that is the boarder of a fare

② Changing bus stop (with bicycle parking area) into the bus stop that is the boarder of a fare

③ Setting bicycle parking area up at the bus stop for rapid bus service

④ Taking advantage of public bicycle parking area

⑤ Posting information in each bus

⑥ Improving comforts and safety at bicycle parking area
3. Cycling And Riding
Background Of Promotion For Arranging Bicycle Parking Area

- More than 30% of people live in Northern part of Misato city. Major transportation is bicycle or bus service to the Station.

- Arranging Bicycle Parking Area around the Station and enforcing countermeasure against bicycles left alone.
Current Situation Of Bicycle Parking Area

**Misato Station**
- Public: 5
- Private: 1
- Capacity: 5,307
- In use: 5,096
- Rate in use: 96.0%

**Shin Misato Station**
- Public: 2
- Capacity: 4,486
- In use: 4,725
- Rate in use: 105.3%
Creating For An Open Space Which Does Not Spoil Safety And Beauty Of The Station

- Bicycle users’ share of station users: 35.4%
- Bicycle Parking Area arrangement rate against station users: 36.3%

Leaving bicycles along could be few occurring

* Source: person trip investigation
Establishment Of Bicycle Repair Facilities

Established near rotary of JR Misato Station’s North Exit
● Office hour: 9:00〜17:00 (Monday through Friday)

◆ Service contents

Checking and repairing bicycles, Assembling and reselling recycled bicycles, periodical checking of rental bicycles

Repairing puncture, replacing light ball (not free of charge)

Arranging and checking brakes and ring (free of charge)
4. Promotion Plan Hereafter Public Transportation
From The Result Of Questionnaire About Citizen’s Bus Use

Regional community bus user questionnaire

a. Stressed point in bus use (plural answers are accepted.)

- Bus stop located near house: 42.9%
- Arriving quickly with short distance: 33.1%
- Lots of bus driven: 32.4%
- Long service duration from the early morning to late evening: 27.2%
- As scheduled on time: 25.2%
- No transfer requirement: 20.1%
- Less expensive in a fare than as it is so far: 16.4%
From The Result Of Questionnaire About Citizen’s Bus Use

Regional community bus user questionnaire

b. Major transportation measures before beginning of regional community bus service

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On foot</td>
<td>22.4%</td>
</tr>
<tr>
<td>By bicycle</td>
<td>29.8%</td>
</tr>
<tr>
<td>By car (self driving)</td>
<td>7.1%</td>
</tr>
<tr>
<td>By car (pick-up)</td>
<td>13.3%</td>
</tr>
<tr>
<td>By taxi</td>
<td>7.8%</td>
</tr>
<tr>
<td>Other</td>
<td>14.7%</td>
</tr>
<tr>
<td>No response</td>
<td>4.9%</td>
</tr>
</tbody>
</table>
From The Result of Questionnaire About Citizen’s Bus Use

② Kiss and riding user questionnaire

c. Opinion about own car use to the Station

- Preferring to the use of own car since choice is up to users
- Using own car due to no other ways to the station
- Desirable to shift into bus use
- Desirable to use bicycle for moving in a short distance
- Other
- No response

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer own car</td>
<td>20.6</td>
</tr>
<tr>
<td>Use own car</td>
<td>21.4</td>
</tr>
<tr>
<td>Shift into bus</td>
<td>29.4</td>
</tr>
<tr>
<td>Use bicycle</td>
<td>11.1</td>
</tr>
<tr>
<td>Other</td>
<td>12.7</td>
</tr>
<tr>
<td>No response</td>
<td>4.8</td>
</tr>
</tbody>
</table>
From The Result Of Questionnaire About Citizen’s Bus Use

② Kiss and riding user questionnaire

d. Do you shift from using own car to using bus if bus service is convenient?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing to use own car</td>
<td>75.4</td>
</tr>
<tr>
<td>May shift to using bus depending on how much improved</td>
<td>19.8</td>
</tr>
<tr>
<td>No response</td>
<td>4.8</td>
</tr>
</tbody>
</table>
Tendency Of Bicycle Parking Area Users

① Purpose for having used bicycle parking area today

- Attending school: 80.4%
- Commuting: 16.0%
- Shopping: 0.2%
- Pleasure: 0.2%
- Hospital: 1.1%
- Other: 2.1%
- No response: 0.2%
Frequency of bicycle use to the station

- More than 5 times a week: 85.9%
- 3–4 times a week: 9.7%
- Once or twice a week: 2.0%
- 3–4 times a month: 0.9%
- Once or twice a month: 0.5%
- 6–11 times a year: 0.3%
- 1–5 times a year: 0.5%
- Other: 0.2%
- No response: 0.2%

Tendency Of Bicycle Parking Area Users
Tendency Of Bicycle Parking Area Users

③ Time from house to bicycle parking area by cycling

- Within 5 minutes: 4.9%
- Within 10 minutes: 23.3%
- Within 15 minutes: 65.0%
- Within 20 minutes: 2.7%
- Within 25 minutes: 1.7%
- More than 25 minutes: 1.7%
- No response: 0.8%

(%)
Tendency Of Bicycle Parking Area Users

Station and transportation in use after Tsukuba Express is available

- 70.2% Access to the same station as it is
- 12.0% Access to the Misato central station by bicycle
- 8.1% Access to the Misato central station by bus
- 5.0% No Response
- 4.7% Other
Forecasting The Development Of TDM Policies In Misato

- Open Tsukuba-Express, Restructuring bus service with the open of RSC
- Adopting IC card
- Introduction of the system providing information mutually in public transportation
- Introduction of regional information system in the buses
- Promotion for bicycle use and bus riding
- Arranging bicycle parking area at Misato Central Station
- Establishing bus terminal with RSC and Delivery service
Restructuring The Bus Routes Along With The Open Large Commercial Facilities In TX • Inter A-area

- Concept of accessibility within 20 minutes to the Misato Central Station of Tsukuba Express Line
- Radial network to access to the nearest 6 Stations from the Inter A-area
- Setting rapid bus service during the attending school and commuting time
- Setting limited bus service on weekend and holidays for shopping customers (of Inter A-area)
Common IC Card For Bus, Introduction Of Various Fare Discount System

- Non-stop service to the Station
- Double bonus points
- Solving complicated payment system
- Improved time schedule on bus service
- Great possibility of the improvement for running bus service company
- Strategic route management with data accumulation

- Establishing more convenient bus system
- More vitalizing in public transportation use
- Control use of own car
- Control traffic jam around the route
Introduction Of The System Providing Information

- To get train information quickly at station space, bus inside, bicycle parking area
- To get rental bicycle information easily at station space
- To get bus information easily at shopping center near the station
Introduction Of The System Providing Regional Information Inside The Bus

- Presenting town guide through bus riding: bus is information source of town
  Full of information of events, public facilities, shopping place, festival, etc.
- Bus is the source of information of town
- Bus being approved by the citizen and supporting citizen’s activities
Promotion For Establishment Of Additional Cycling And Bus Riding Locations

Current location: 13
Capacity: 800

Additional location: 3
Capacity: 170

Total amount: 16
Capacity increased up to 970
Arranging Plan Of Bicycle Parking Area At Misato Central Station

- Two parking locations under the elevated railway
  - One is presented by Misato and a non-profit cooperation, Jitenshachushajoseibicenter, the other one is presented by railroad company.
  - Capacity: about 1,100
- Planning additional 1〜2 locations

Parking lot #1: 650m²
Parking lot #2: 590m²
Estimation For Changing The Range Of Cycling And Bus Riding

Before opening Tsukuba Express Line

After opening Tsukuba Express Line
Providing vacancy information of bicycle parking lot from peripheral roads

Beginning route bus service and promotion in advance (Misato Station, Misato Central Station, Shin Misato Station, Yoshikawa Station etc.) → Activation of public transportation use

Delivery service to neighbor users → Activation of public transportation use

Establishing bus terminal

Park and bus riding

Announcement for public transportation in advance
Introduction Of The System Providing Regional Information Inside The Bus

Bus terminal is established at RSC, Beginning route bus service connecting residential area with near Stations

Emerging Traffic jam around the commercial area

Activating public transportation use for shopping

RSC (shopping center in the suburbs)

On delivery

Empty-handed shopping easily and watching movies

From shopping facilities which you need a car into shopping facilities which you do not need a car

Commercial facilities offer luggage delivery service for customers who use railways and bus
For Realizing Well-balanced Transportation

Car navigation improved to provide us with a high degree of traffic information

Selecting own car that is easy to move but is with tension and limited free time

Construction of public transportation information service system

Selecting public transportation that makes it possible to use your moving time as a free time for self-enlightenment

Realizing well-balanced transportation which we can select the most convenient means from bus, railroad, walk, bicycle depending on the situation, and which we feel smooth, comfortable and symbiotic with traffic environment