

Overview of Nishitetsu Bus



Presented by. Tsuyoshi Kumai
Manager , Bus Division , Nishi-Nippon Railroad Co.,Ltd

Nishi-Nippon Railroad Co.,Ltd.
31st / October / 2013

Profile of Nishitetsu Group



Bus Business



Railways



Real estate for rent



Real estate for sale



Logistics



Leisure Services



Hotel



Distribution sector



Others

Management Index of Nishitetsu Group



● Nishi-Nippon Railroad Co.,Ltd

| | |
|-------------------|--|
| · Founded | December 17.1908 |
| · Incorporated | September 22.1942 |
| · Capital (Paid) | ¥ 26,157 million (about \$ 261.57 million) |
| · Sales | ¥ 135,128 million (about \$ 1,351.28 million) |
| · Ordinary Profit | ¥ 11,932 million (about \$ 119.32 million) |

【\$ 1 ≙ ¥ 100 , (2012.4 ~ 2013.3)】

● Nishitetsu Group

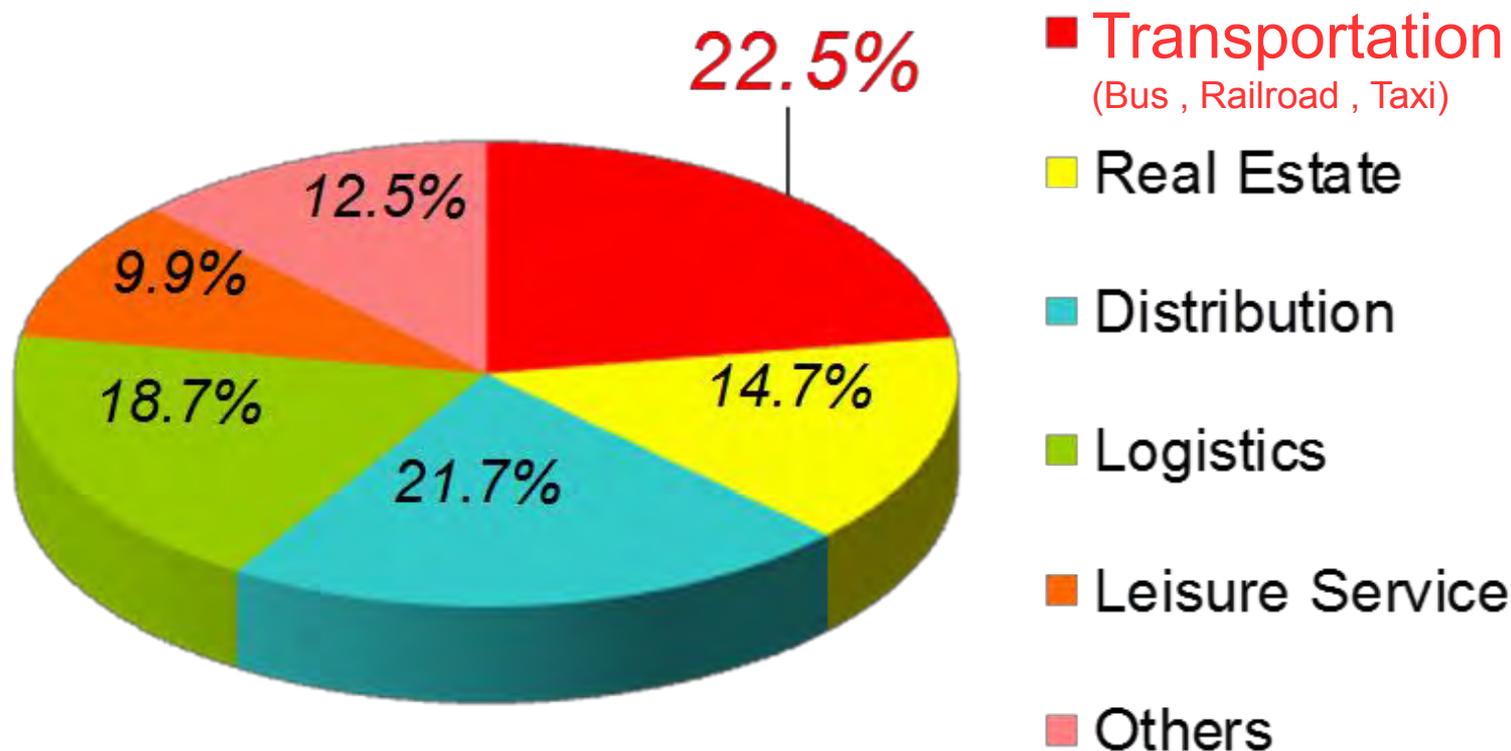
| | |
|-----------------------|---|
| · Group Companies | 80 Companies , 1 Incorporated School (including Nishi-Nippon Railroad Co.,Ltd) |
| · Number of Employees | 17,497 |
| · Sales | ¥ 338,387 million (about \$ 3,383.87 million) |
| · Ordinary Profit | ¥ 16,189 million (about \$ 161.89 million) |
| · Business Activities | Bus , Railroad , Taxi , Rental Real Estate , Subdivision Real Estate , Distribution , Logistics , Hotel , Travel , Amusement , Restaurant , Advertisement , IC Card , Vehicle Maintenance , Construction , Metal Recycling |

【\$ 1 ≙ ¥ 100 , (2012.4 ~ 2013.3)】

Operating Revenue of Nishitetsu Group



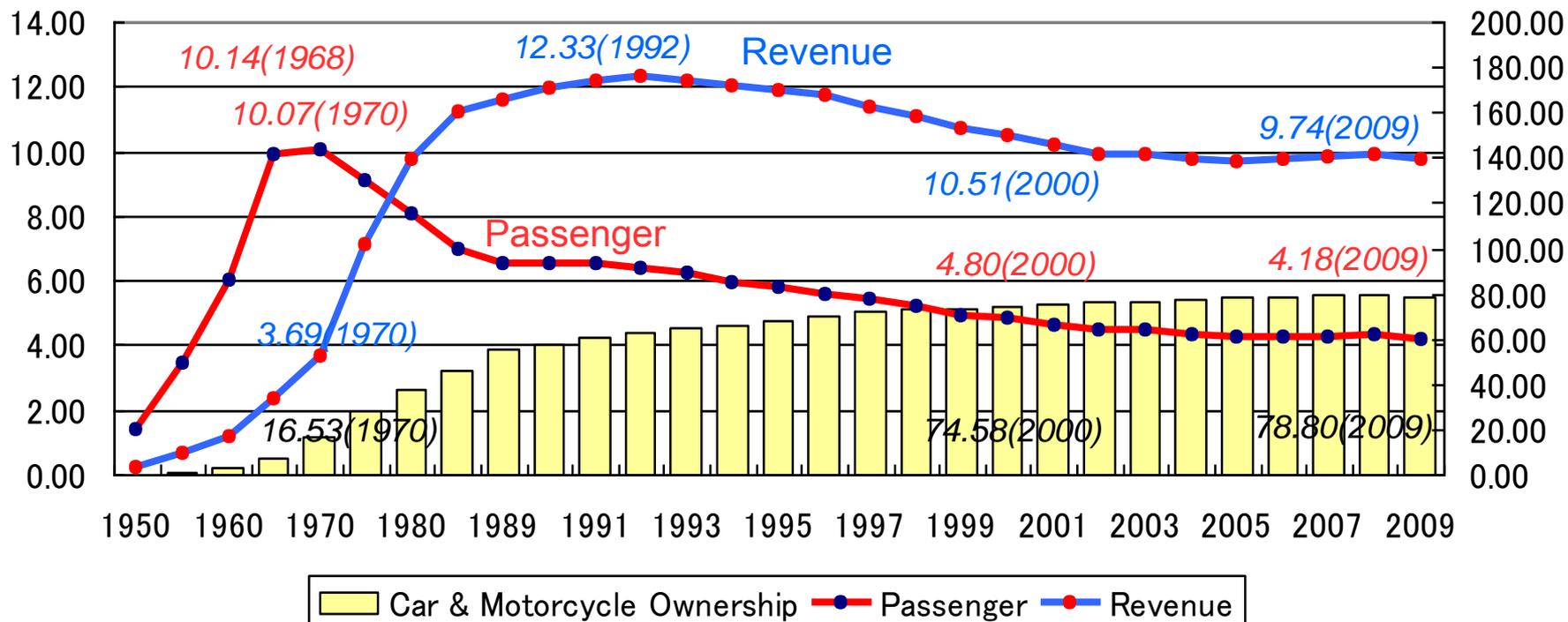
Component ratio of Operating Revenue (2012.4 ~ 2013.3)



Total Revenue **¥ 338,387 million** (about \$ 3,383.87 million)

(Omnibus & Chartered Bus Business **¥50,580 million** [about \$ 505.8 million])

Transition of Number of Passenger , Revenue and Vehicle Ownership in Japan (1950~2009)

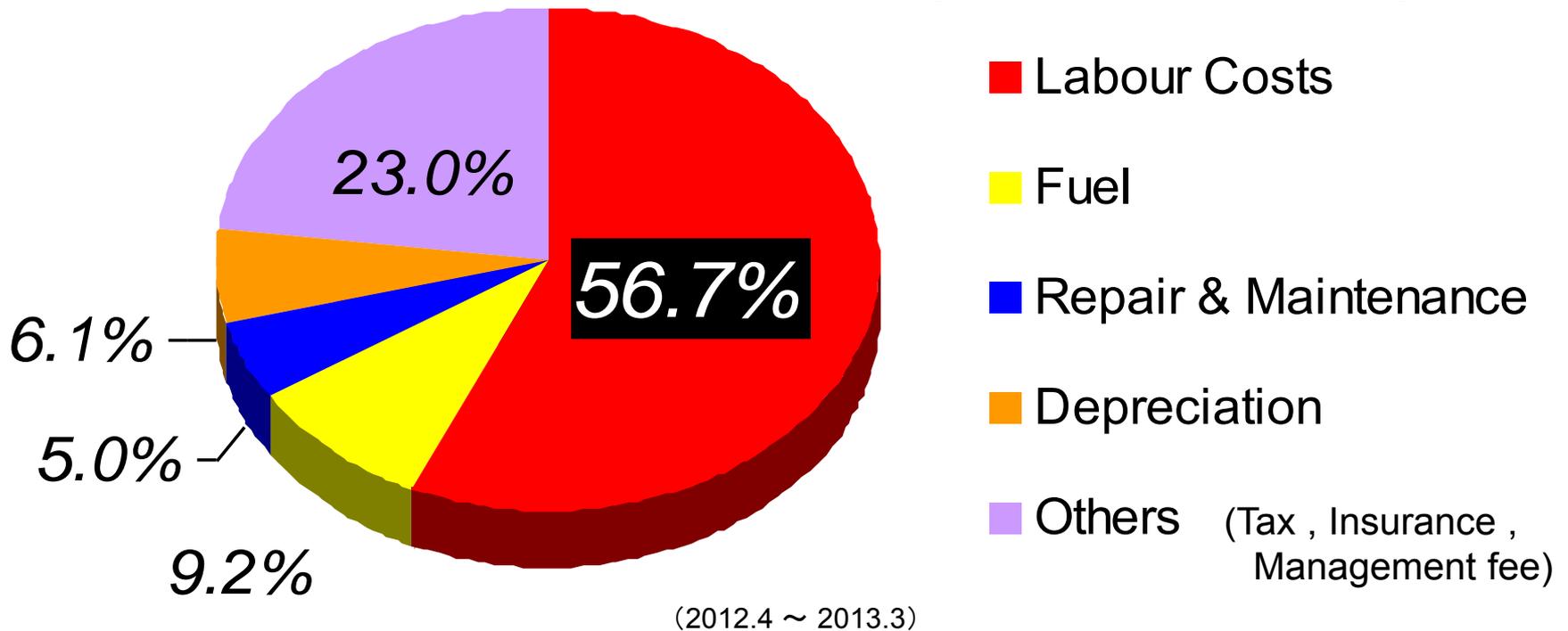


(Unit: 1million vehicles , 100million passengers , 10billion Yen)

⇒ Passenger had increased until 1968, but after 1969 , it has decreased owing to progress of motorization.
 But , revenue had increased until 1992 owing to raise in fares.

Operating Cost of Bus Business

Component ratio of Average Operating Cost of Japanese Bus Companies



Most of City Bus & Highway Bus in Japan are a one-man bus to keep labor costs down.

For keeping labor costs down

The method of operating Bus has become from two-man (driver & conductor) bus to a one-man bus gradually to reduce operating costs.

In the past



Conductor

Conductor sell the ticket inside the most of buses.

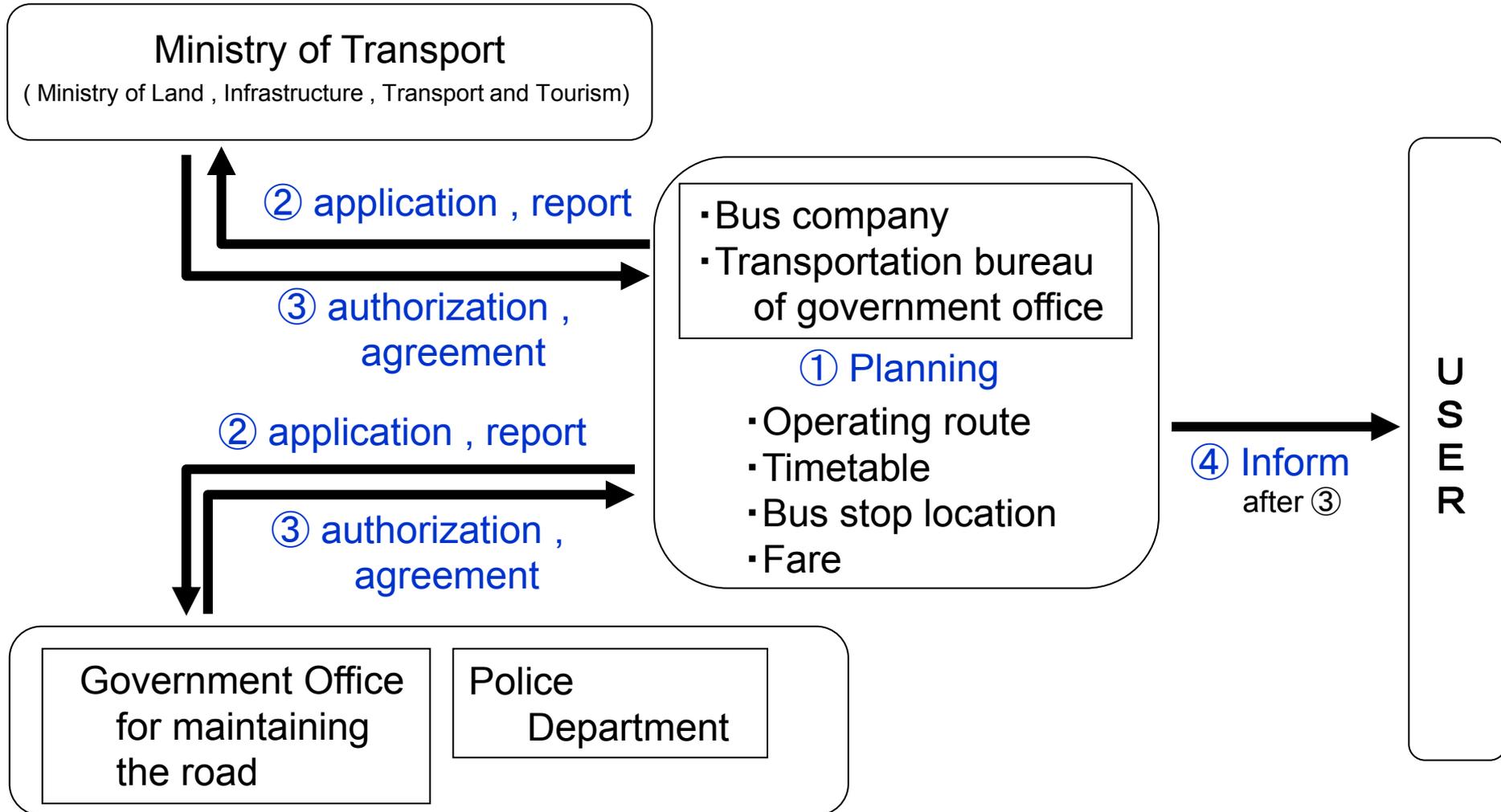
Now

Fare box
inside
the bus



Fare box install beside the exit inside the bus to collect the fare , the driver collect the fare.

Process of start operating new route



Installing Bus stop

Bus operators can get on and off passengers at only bus stops.

Bus operators are prohibited to get on and off passengers at except for Bus stops.



Bus shelter



Information panel



BUS CUT

In most cases , the space for stopping to get on and off passengers (BUS CUT) is setting up by government office.

Most of Bus stops are installed by bus operator. Bus operator have to inform about timetable and operating route for user at each bus stops.

Overview of Bus Business

City Bus



Highway Bus



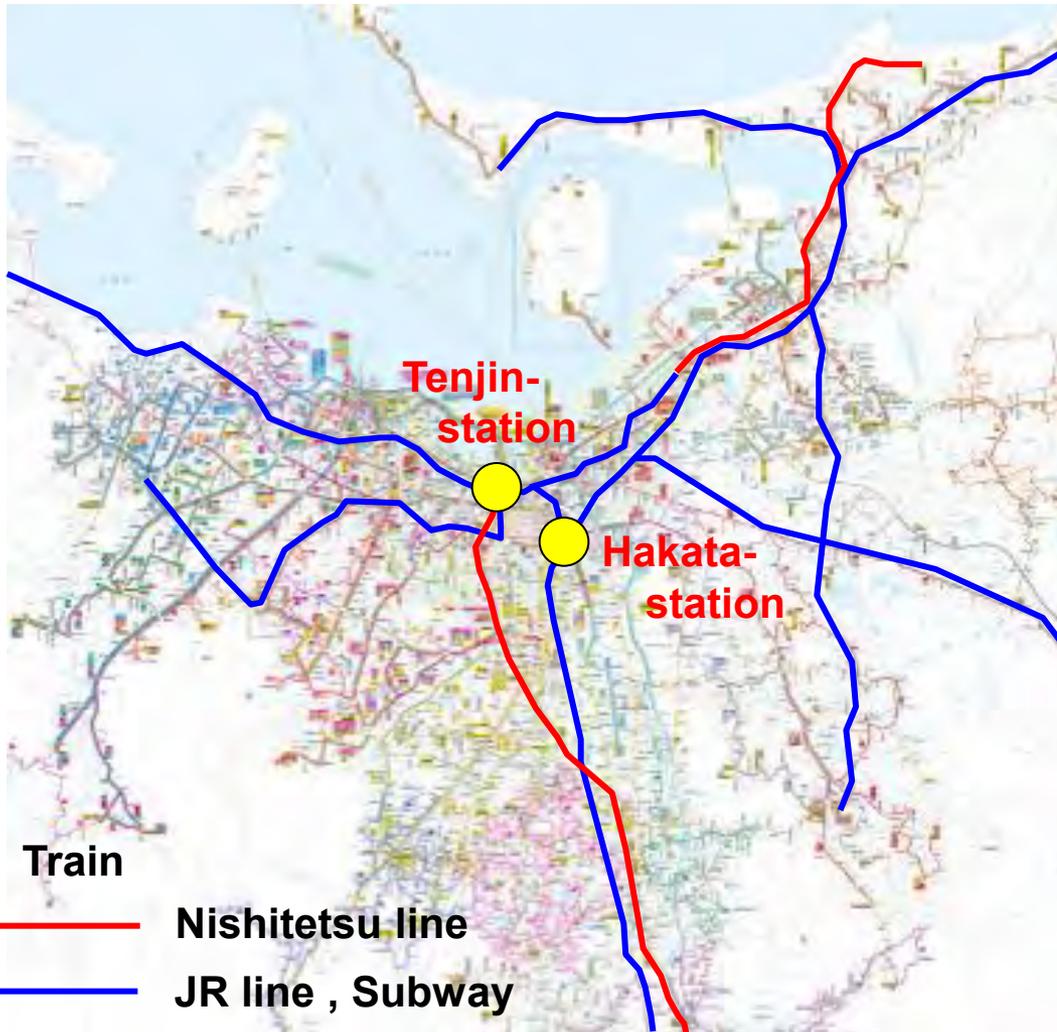
Chartered Bus



| | No. of Vehicles | People Transported (million) | Carrier Revenue (million yen) | Travel Distance (million km) |
|------------------------|-----------------|---------------------------------|----------------------------------|---------------------------------|
| City Bus & Highway Bus | 2,873 | 266.85 | 48,530 | 152.53 |
| Chartered Bus | 120 | 1.51 | 2,050 | 5.26 |
| Total | 2,993 | 268.36 | 50,580 | 157.79 |

Passengers in Fukuoka Area account for 62% of all passengers. (about 165 million people) (2012.4 ~ 2013.3)

Transport Network in Fukuoka Area



About transport network in Fukuoka Area

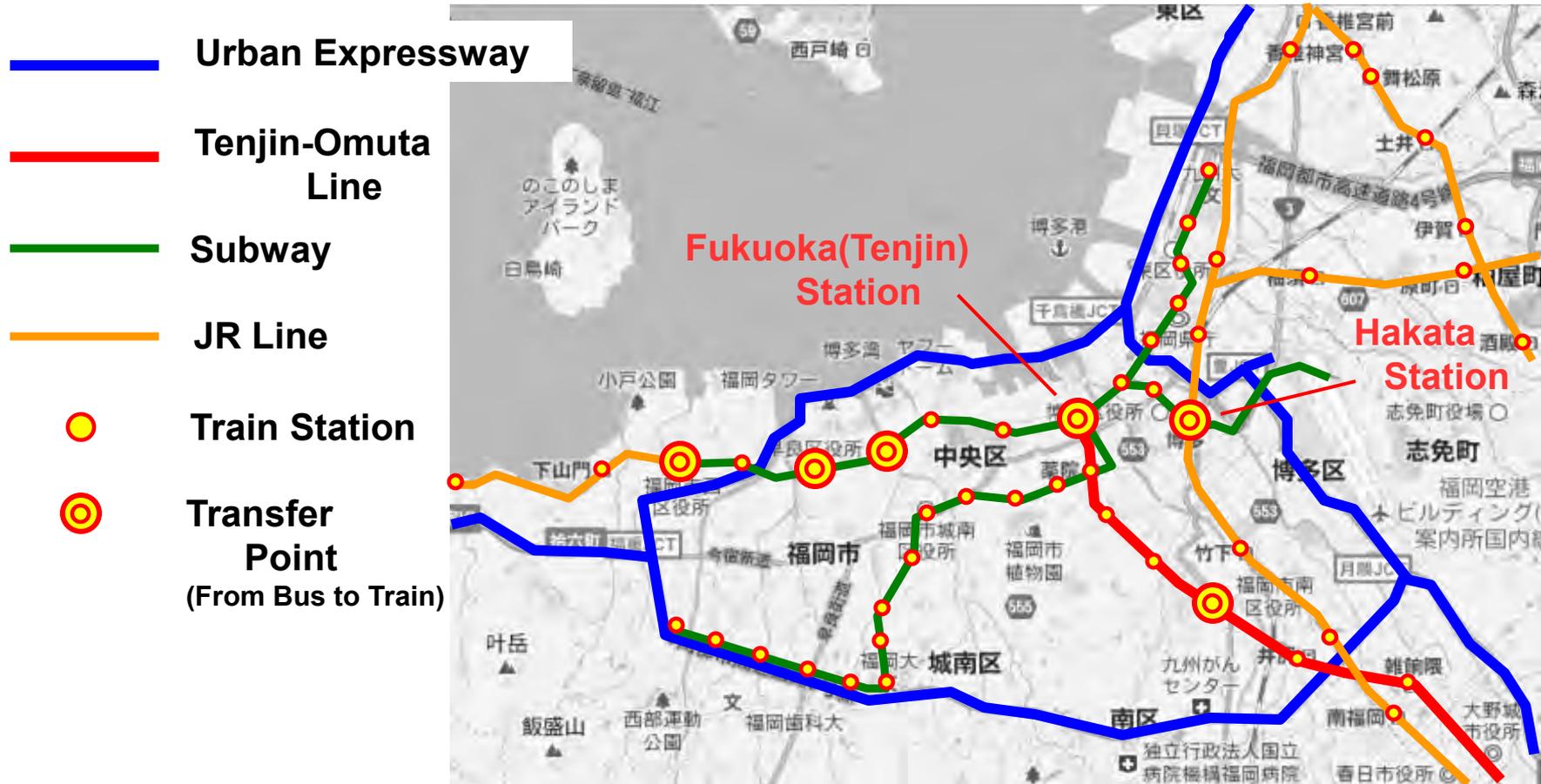
- Numbers of railway lines are fewer than in Tokyo area or Osaka area.
- Bus network has been well developed in Fukuoka area.

Sharing rate of method of transport in Fukuoka city (2005)

| | |
|------------|-------------|
| Car | 42.2% |
| Walk | 18.6% |
| Railway | 14.1% |
| Bicycle | 12.5% |
| Bus | 8.3% |
| Motorcycle | 3.1% |
| Taxi | 1.1% |

Operation via Urban Expressway

The Urban Expressways are improved in Fukuoka City . Nishitetsu is operating buses via Urban Expressways .



Operation via Urban Expressway

The buses which are operating via Urban Expressway



Operation via Urban Expressway

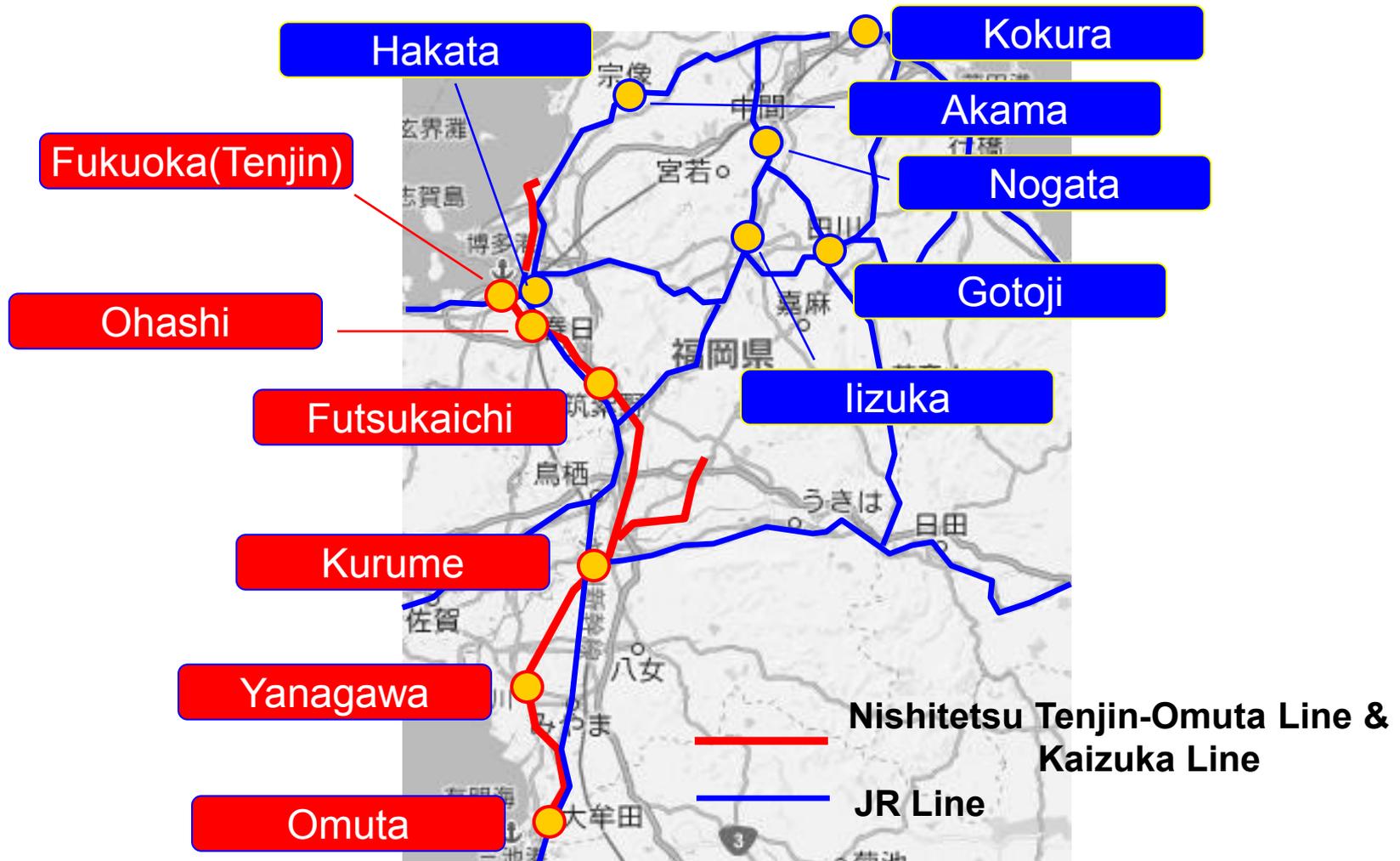
Comparison of Time required and Fare



| | Route (Nokata to Tenjin) | Time required (Daytime) | Fare (One way) |
|--|--|---|---|
| | Bus via urban expressways | 28 minutes \swarrow (\blacktriangle 7 minutes) | ¥ 350 \swarrow (\blacktriangle ¥150) |
| | Transfer from Bus to Subway at Meinohama Station | 35 minutes (17+5+13) | ¥ 500 (210+290) |
| | Local Bus | 44 minutes | ¥ 440 |

Using bus via Urban Expressways is faster than transferring from bus to train.

Main Transfer point of Bus to Train



Transfer terminal of Bus & Train

Hakata Bus Terminal



Kokura-Station Bus Center



Nishitetsu Kurume Bus Center



Nogata Bus Center



Policy for Transfer Passengers

Drawing up Bus timetables in consideration of Train timetables

Train to Bus

| Train Arrival | ⇒ | Bus Departure |
|---------------|---|---------------|
| 17:55 | ⇒ | 18:00 |
| 18:25 | ⇒ | 18:30 |
| 18:55 | ⇒ | 19:00 |
| ⋮ | | ⋮ |

Bus to Train

| Bus Arrival | ⇒ | Train Departure |
|-------------|---|-----------------|
| 7:25 | ⇒ | 7:35 |
| 7:40 | ⇒ | 7:50 |
| 7:55 | ⇒ | 8:05 |
| ⋮ | | ⋮ |

Ohashi



Kurume



Bus operating time are adjusted to train operating time to enhance convenience for transfer passengers.

Nishitetsu Tenjin-Omuta Line



● Nishitetsu Tenjin-Omuta Line

| | |
|---|----------------------------|
| Operating Distance | 95.1km |
| No.of.Station | 62 |
| No.of People Transported (Daily Average) | 92 million 0.25 million |
| Operating Revenue | 20.4 billion |

Policy for Transfer Passengers

Ticket for Transfer Passengers

Set of discount ticket (Bus & Train)



IC card (available in both Bus and Train)



Provision of Information for Transfer Passengers

Display inside of Bus



Train timetable after arrival



Information panel inside of Train

map printed location of bus stop around station



Unlimited-Ride Ticket & Pass

To enhance the convenience of passengers , we are selling the valuable ticket & pass .

「Downtown Fukuoka One-Day Pass」



Unlimited ride ticket which is available in downtown area

「GRAND PASS 65」

Unlimited ride Pass for people of 65 and above



「ECOLE CARD」

Unlimited ride Pass for students



「FUKUOKA 1DAY PASS」



Unlimited ride ticket which is available for Bus and Train

「SUNQ PASS」

Unlimited ride Pass for highway bus passengers



Activities for Speed up and on-time performance

Exclusive lanes and priority lanes



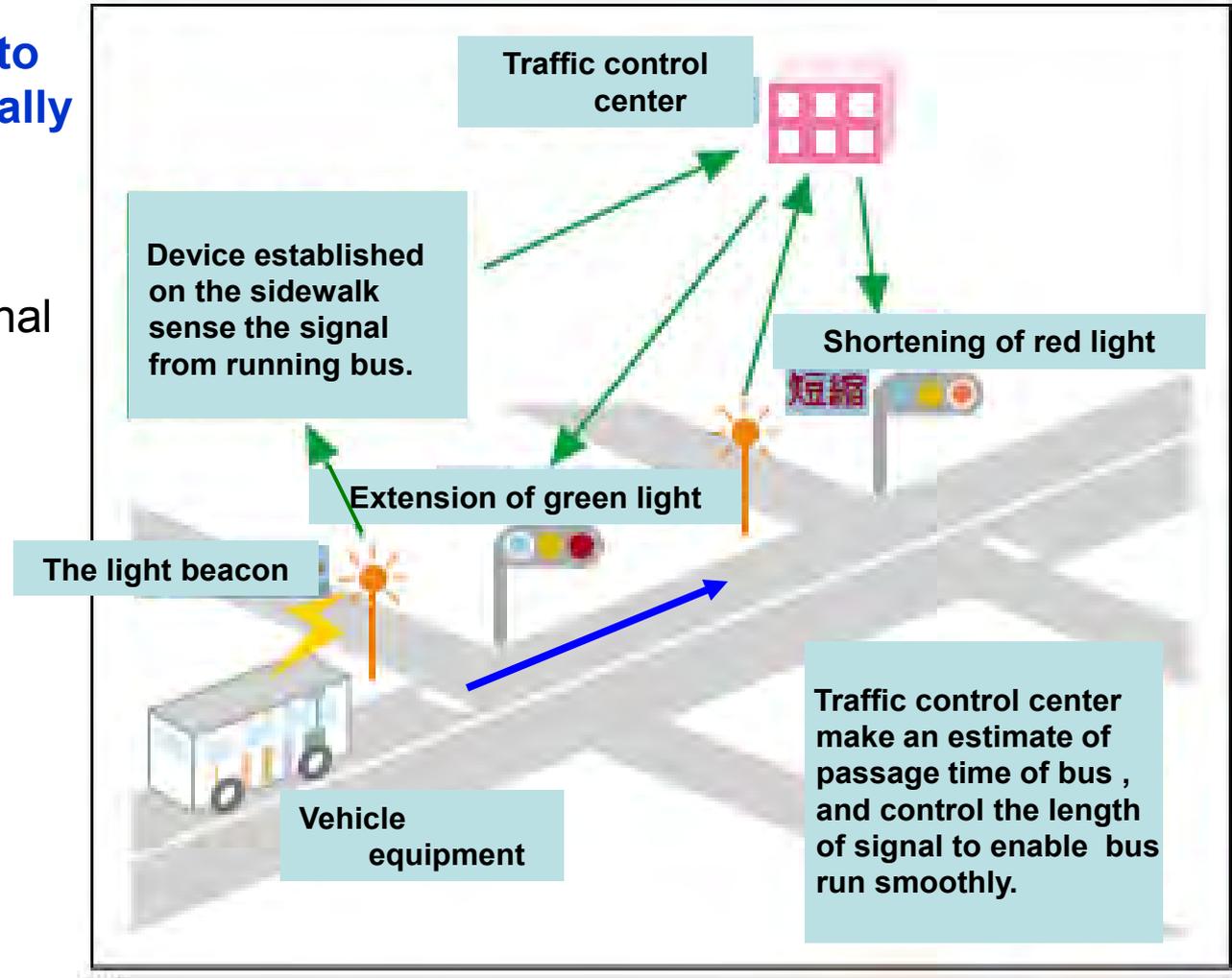
The lane near the sidewalk is exclusive lane during rush hours .

⇒ **The Buses can be operated smoothly without being influenced by traffic jam .**

PTPS (Public Transportation Priority System)

The supporting system to make bus run preferentially

⇒ Traffic control center control the length of signal in accordance with the location of bus.



IT services for customers

Web-site

Provide information of timetable, fare, route, location of bus stop

“BUS NAVI” (Bus location system)

Provide information of present position and operating situation of buses in real time

The screenshot shows the 'Time Schedule' page for 'BUS & TRAM'. It includes a search bar for 'Tenjin Area' and 'Hakata Station Area'. Below is a table with columns for Day, Arr, Time, Fare, From, (No.), Destination, Via, To, and Event/Map. A map of 'Bus stops in Tenjin' is also visible, showing various bus stop locations on a street map.

| 香推 方面 | | | | 9:10 現在の状況 | | | | | |
|-------|-----------|------------------|-------|------------|-----|-----------|------------------|-------|------|
| 番号 | 行先 | 籍田 | 予定時刻 | 現在地 | 番号 | 行先 | 籍田 | 予定時刻 | 現在地 |
| 24C | 土井宮集所 | 都庁高速 香推方面 香推方面入口 | 09:10 | 香推方面 | 24 | 土井宮集所 | 都庁高速 香推方面 香推方面入口 | 09:15 | 地味前 |
| 22N | 香推浜宮集所 | 都庁高速 香推方面 香推方面入口 | 09:11 | 香推方面 | 27B | みどりが丘団地入口 | 都庁高速 香推方面 香推方面入口 | 09:16 | 4停前 |
| 27B | みどりが丘団地入口 | 都庁高速 香推方面 香推方面入口 | 09:10 | 1停前 | 22N | 香推浜宮集所 | 都庁高速 香推方面 香推方面入口 | 09:21 | 2停前 |
| 23 | 下原 | 6番集所 | 09:13 | 2停前 | 4 | 土井宮集所 | 都庁高速 香推方面 香推方面入口 | 09:25 | 10停前 |
| 28B | 土井団地 | 都庁高速 香推方面 香推方面入口 | 09:14 | 3停前 | 28B | 土井団地 | 都庁高速 香推方面 香推方面入口 | 09:25 | 地味前 |

Bus shelter



Available with cellular phone



IT services for customers

We have own smart card called “nimoca”

nimoca : Rechargeable Contactless IC card



Bus riding gate



Bus alighting gate



Station ticket gate



Ticket counter

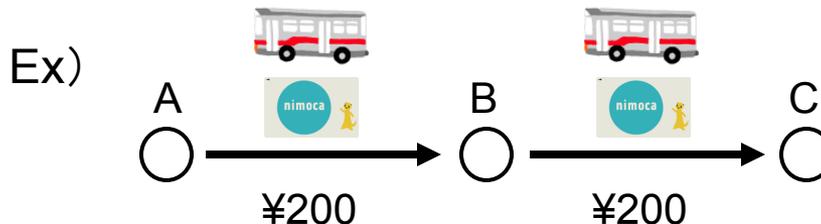


Service with smart card

Utilization of data of smart card

Transit discount service

Fare is discounted due to pay by smart card while transit bus and bus.



$$\text{¥200} + \text{¥200} - \text{¥80} = \text{¥320}$$

In case of paying by smart card when taking from B to C after from A to B, fare from B to C is discounted.

(In this case, discount is 80 yen)

Utilization of data of smart card

Installing smart card system enable to collect the data (number of getting on and off person at each bus stop, or number of passenger each buses). We use the data to examine restructuring of the bus network.

(Ex) Number of getting on and off person at each bus stops

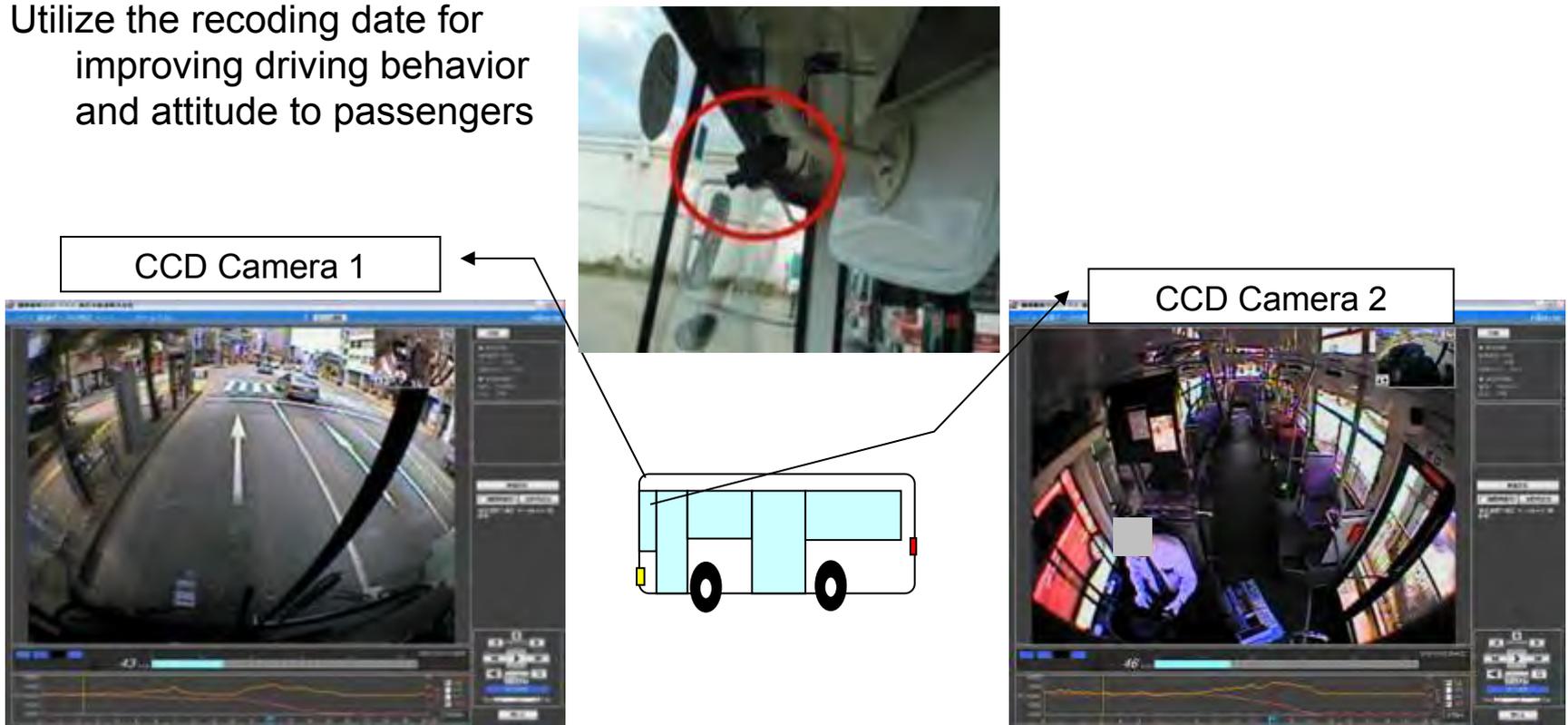
| | A | B | C | D | E | F | total |
|-------|---|---|---|----|----|----|-------|
| A | | | 8 | 13 | | 22 | 43 |
| B | | | | 5 | 21 | 11 | 32 |
| C | | | | | 3 | 15 | 18 |
| D | | | | | | 6 | 6 |
| E | | | | | | | |
| F | | | | | | | |
| total | | | 8 | 18 | 24 | 67 | 117 |

Policy for Safety

Utilization of “Drive Recorder”

Drive Recorder : Equipment which records driving situation automatically

Utilize the recording data for improving driving behavior and attitude to passengers



Policy for Safety

Utilization of “Digital tachograph System”

Digital tachograph System : Equipment which records driving speed and the times of sudden braking automatically



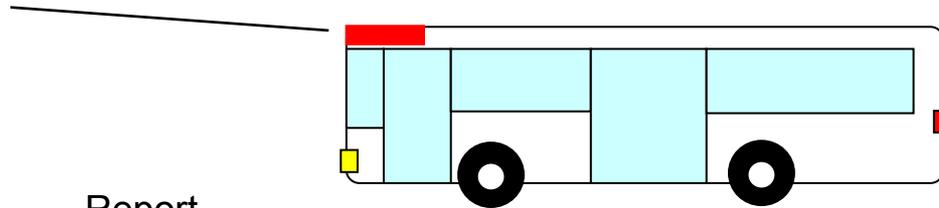
Mounted Recording Equipment



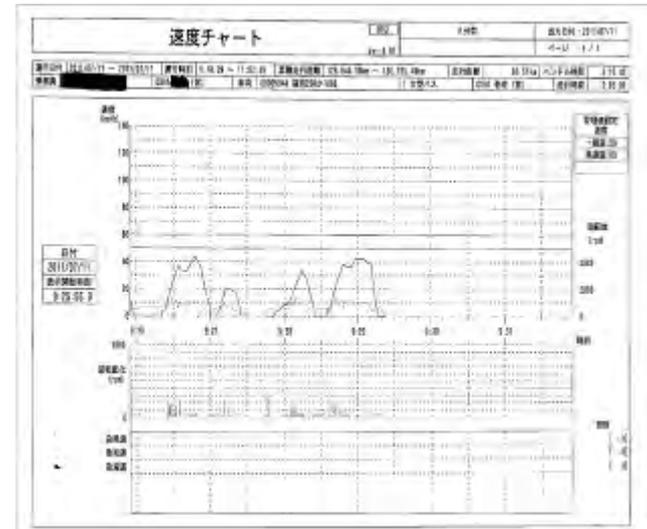
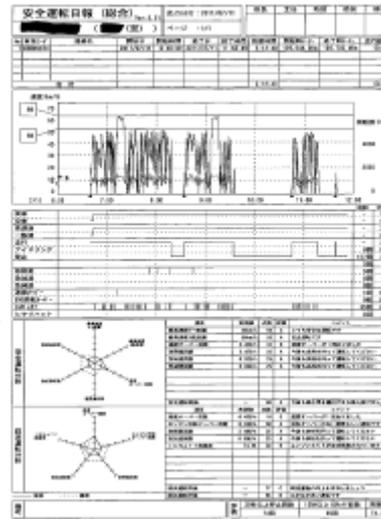
Memory card



Bus Terminal / Analysis Centre



Report



Policy for Safety

Pre crash safe system

If the distance to preceding vehicle is too short , the system alarm the driver with buzzer or vibrator , and brake automatically to avoid crashing .



The laser radar sensor of apparatus monitor the distance to preceding vehicle .



Apparatus for alarming

Conduct activity to passengers to prevent accident

Floor mat with buzzer is installed at entrance to prevented the passenger from getting caught in the door.



Poster for enlightening



Floor mat with buzzer

Policy for Safety

Establishment of training school

The training school to teach the driver safe driving skill and polite attitude toward passengers is established , the experts teach periodically.

The exterior



Training course



Teaching by expert



Fire drill against engine firing



Vehicle Maintenance

- Daily check by a crew before departure



- Periodical check by a mechanic (every 45 days)



Policy for Environment

- Encouraging the engine cut (“Idling stop”) → Turn off the engine for fuel savings while waiting for traffic lights
- Utilization of Digital Tachograph System
effect 2.93 km/ℓ (2004) ⇒ 3.23 km/ℓ (2012)
→ Digital Tachograph System evaluate the cutting condition of engine . Administrators instruct drivers using the report to encourage engine cut.
- CNG Bus ...6bus
- Hybrid Bus ...16buses

(Compressed Natural Gas)



Policy for Handicapped , Pregnant woman and Elderly



Bus with slope
(for wheelchair user)



Seat for a person in a wheelchair
(foldable seat)

Priority seat for handicapped , the elderly
and Pregnant woman



Bus Terminal

Nishitetsu Tenjin Bus Center



Hakata Bus Terminal



Bus Terminal

| | Nishitetsu Tenjin Bus Center | Hakata Bus Terminal |
|--|--|---|
| <p>Now</p>  |  |  |
| <p>old days</p>  |  |  |
| Service Started | 1961.12 | 1965.8 |
| No.of Gate | 9 | 26 |
| No.of arrival & departure | 1800 / day | 3500/day |
| No.of passengers | 20,000/day | 60,000 /day |
| Investor | Nishitetsu 100% | Nishitetsu 67.95% JR kyushu 21.00% Others 11.05% |

Nishitetsu Tenjin Bus Center

3F Intercity Bus Terminal



2F Railway Station



Department Store



Parking



| | | |
|----|-----------------|--------------------------------------|
| 9F | Dept. Store | Gallery/Hall |
| 8F | Dept. Store | Parking |
| 7F | Dept. Store | Parking |
| 6F | Dept. Store | Parking |
| 5F | Dept. Store | Parking |
| 4F | Dept. Store | Taxi Bay / Parking |
| 3F | Dept. Store | Intercity Bus Terminal |
| 2F | Railway Station | |
| M | Railway Station | |
| 1F | Dept. Store | Station Plaza Police Station etc. |
| B1 | Dept. Store | |
| B2 | Dept. Store | |
| B3 | Bicycle Parking | |

Hakata Bus Terminal

Bus Terminal



Shop



| | | |
|----|--------------|------|
| 9F | Office | |
| 8F | Shop | |
| 7F | Shop | |
| 6F | Shop | |
| 5F | Shop | |
| 4F | Shop | |
| 3F | Bus Terminal | Shop |
| 2F | Bus Terminal | Shop |
| 1F | Bus Terminal | Shop |
| B1 | Shop | |

Nishitetsu Hakata Bus Operation Office

Hakata Bus Operation Office manages bus operations, drivers, and conditions of vehicles.



Exterior



About Hakata Bus Operation Office

| | |
|--------------------------------|--------|
| No. of operating routes | 15 |
| No. of managers & mechanics | 14 |
| No. of drivers | 103 |
| No. of vehicles | 67 |
| No. of passengers (per day) | 17,588 |
| Travel distance (per day) (km) | 11,453 |

(As of June 2013)

The Bus “HAKATA” runs about 1,100km between Fukuoka and Tokyo in about 14 and a half hours.

Contents of Managers' Work

Managing bus operations

- Check whether buses are operating in line with the timetable.
- Giving drivers directions about bus operations.
- Grasp road conditions and traffic situations on the operating routes.

Managing drivers

- Drawing up drivers' work schedules.
- Personal management (assessment of work attitude, taking care of health conditions).
- Instructions and education for driving operations and attitude toward passengers.

Managing vehicles

- Drawing up schedule of buses to be used.
- Check conditions of buses and their maintenance.
- Maintenance inside buses (cleaning, equipments)

Others

- Daily management regarding income from bus operations.
- Handling trouble (traffic accident, etc.)
- Daily management regarding bus stops and service facilities.

Managing Bus Operations



“Staff” describes operating routes and timetables for drivers.

Drivers have to take “Staff” with them and operate the bus in line with “Staff”.



Sobriety test before driving using a breath analyzer.

A manager has to confirm that drivers are not under the influence of alcohol.



| 05:23 現在 | 路線時刻表 | 乗車料 | 運賃 | 備考 |
|---|---|------|-----------|-----------|
| 15:02 - 15:07 現在地へ移動済 | 高鉄大橋駅 [62] 天神・鳥羽町 流辺通一丁目FM福岡駅前 七口竹葉南側 | 220円 | 運賃 時刻表 | 運行 ル→回 |
| 15:07 - 15:42 現在地へ移動済 (流辺通一丁目) 駅分譲 | 高鉄大橋駅 [49] 天神・鳥羽町 流辺通一丁目FM福岡駅前 七口竹葉南側 | 220円 | 運賃 時刻表 | 運行 ル→回 |
| 15:02 - 15:47 現在地へ移動済 (高鉄大橋) 駅分譲 | 高鉄大橋駅 [40] 那の津西丁目 流辺通一丁目FM福岡駅前 七口竹葉南側 | 220円 | 運賃 時刻表 | 運行 ル→回 |
| 15:09 - 15:54 現在地へ移動済 (上笠原) 駅分譲 | 高鉄大橋駅 [62] 那の津西丁目 流辺通一丁目FM福岡駅前 七口竹葉南側 | 220円 | 運賃 時刻表 | 運行 ル→回 |
| 15:47 - 15:02 現在地へ移動済 (那珂川基置側) | 高鉄大橋駅 [62] 那の津西丁目 流辺通一丁目FM福岡駅前 七口竹葉南側 | 220円 | 運賃 時刻表 | 運行 ル→回 |

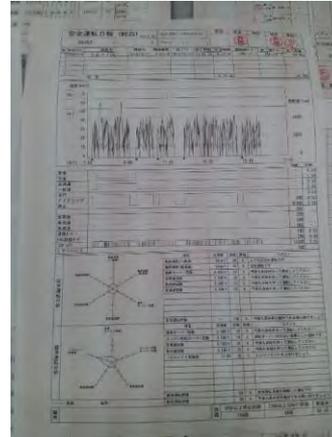
Managers check traffic conditions and operating situations by utilizing information on websites.

Roll call and instructions to drivers must be conducted by a manager before departure.



Managing Drivers

Table indicating drivers' working time and operating

Digital tachograph

Digital tachograph is installed inside buses and record driving speed and the time of sudden braking automatically.

Managers check the records.

Operating Record



Managers provide drivers with instructions and education to improve their driving operations and attitude toward passengers.



Managers check the record (operating conditions, etc.) filled in by drivers.



Managing Vehicles, and Others

Drivers' inspection before departure



Mechanics' inspection



A garage is equipped on the premises.

Drivers have to report the inspection record to their manager.

Cleaning inside a bus by cleaning staff



Cleaning a bus stop



Counting up the operating income after operations



Nishitetsu Training School

Nishitetsu owns its training school where expert instructors periodically provide educations and training regarding driving skills and polite attitude toward passengers.

Training Programs

- Training for new employees and new drivers who have just obtained a bus driver's license.
- Training for drivers who caused an accident.
- Training for drivers whose attitude toward passengers seems impolite.
- Driving aptitude diagnosis for all drivers.
- Check for all drivers' fundamental driving skills.

Contents of Training

- Practical skill training and classroom lectures about safe driving.
- Practical skill training and classroom lectures regarding how to treat passengers politely.
- Classroom lectures about traffic regulations.

Nishitetsu Training School

Exterior



Building with accommodations and a dining room.

Training Course (S-shape Course)



Training for driving on narrow roads.

Training by Expert Instructors



Training for getting used to the size of the bus.

Fire Drill against Engine Firing



Training for handling trouble and driving in the abnormal weather.



Thank you for your attention