

# SMART CITIES SHAPED BY BUSES

---



October 8<sup>th</sup>, 2019

Michinori Holdings, Inc.

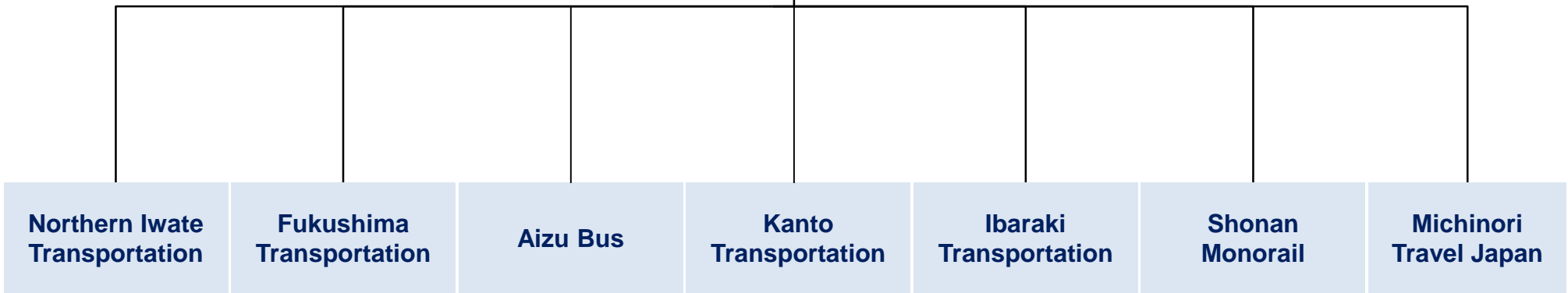
# Introduction of Michinori Group



## Michinori Group

**Michinori Holdings, Inc.**

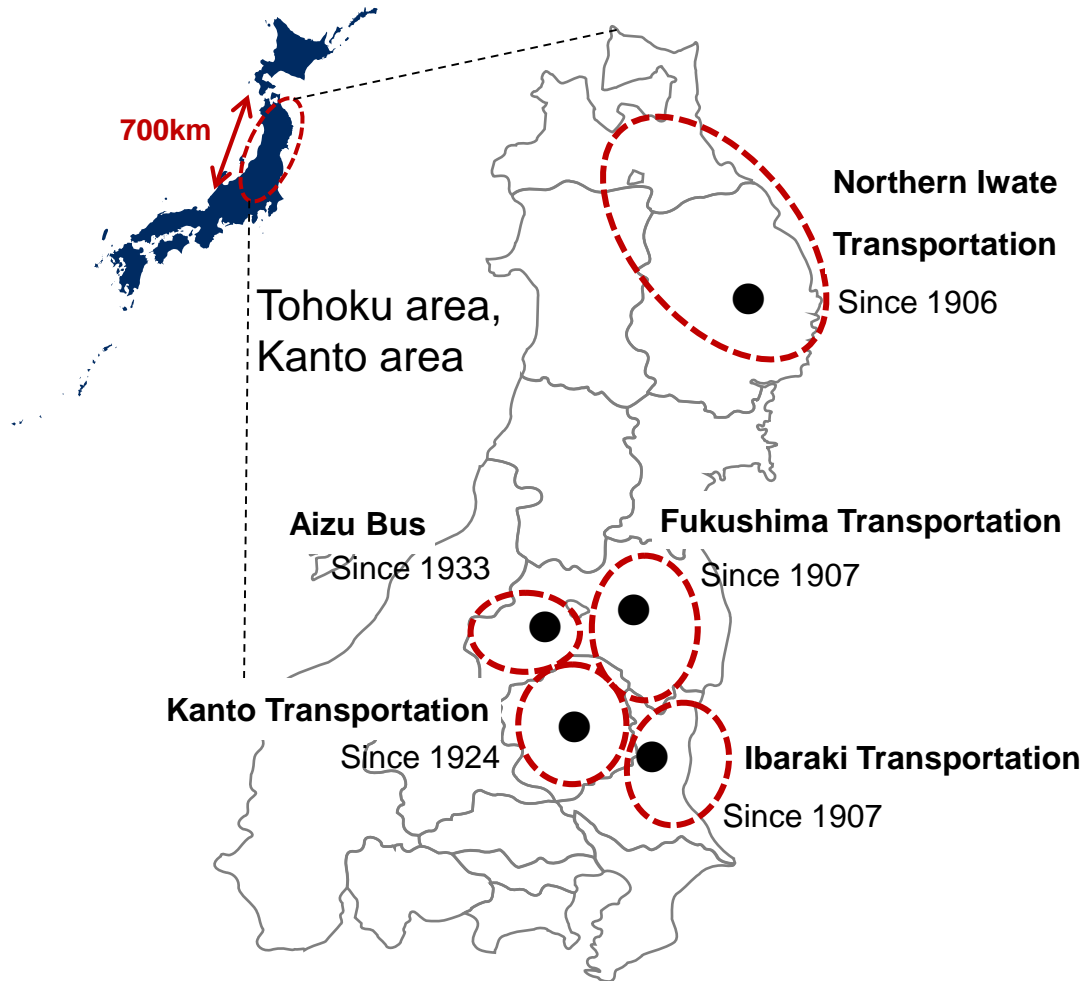
100%



	Northern Iwate Transportation	Fukushima Transportation	Aizu Bus	Kanto Transportation	Ibaraki Transportation	Shonan Monorail	Michinori Travel Japan	Total
Employees	866	897	464	1,113	1,414	124	5	4,896
Vehicles (Bus)	413	551	196	617	640			2,417
Vehicles (Others)	1 tourist boat 16 cars (car-sharing, rental)	6 trains (total 14 carriages)	99 cars (taxi)		105 cars (taxi) 197 cars (rental)	7 trains (total 21 carriages)		

# Michinori's city bus business

## Coverage area



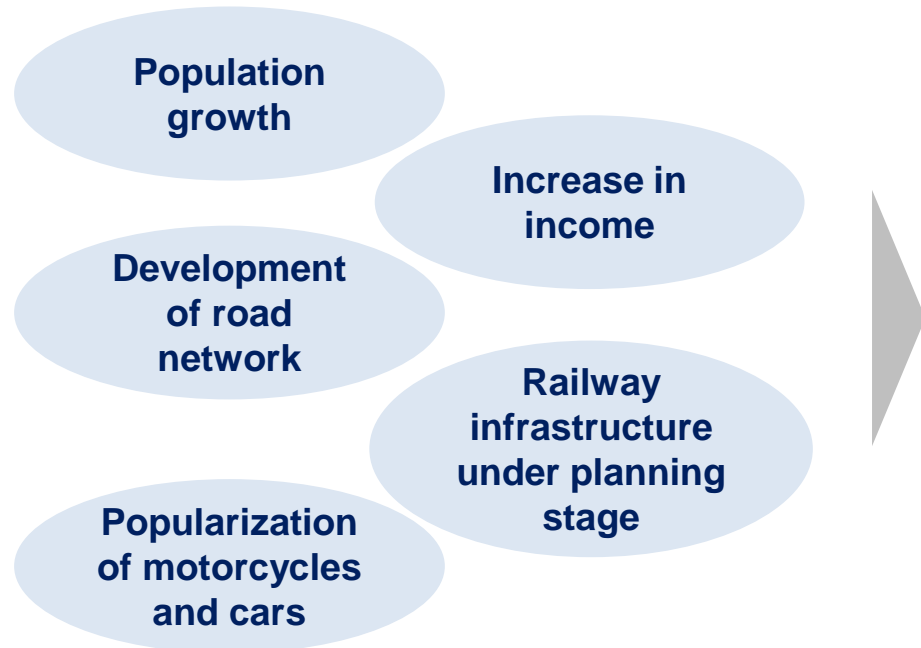
## Business scale

Number of bus drivers	2,164 people
Number of buses	1,565 buses
Number of bus depots	62 locations
Number of municipals covered	102 municipals
Distance travelled annually	59 million kilometers
Number of passengers annually	50.3 million passengers

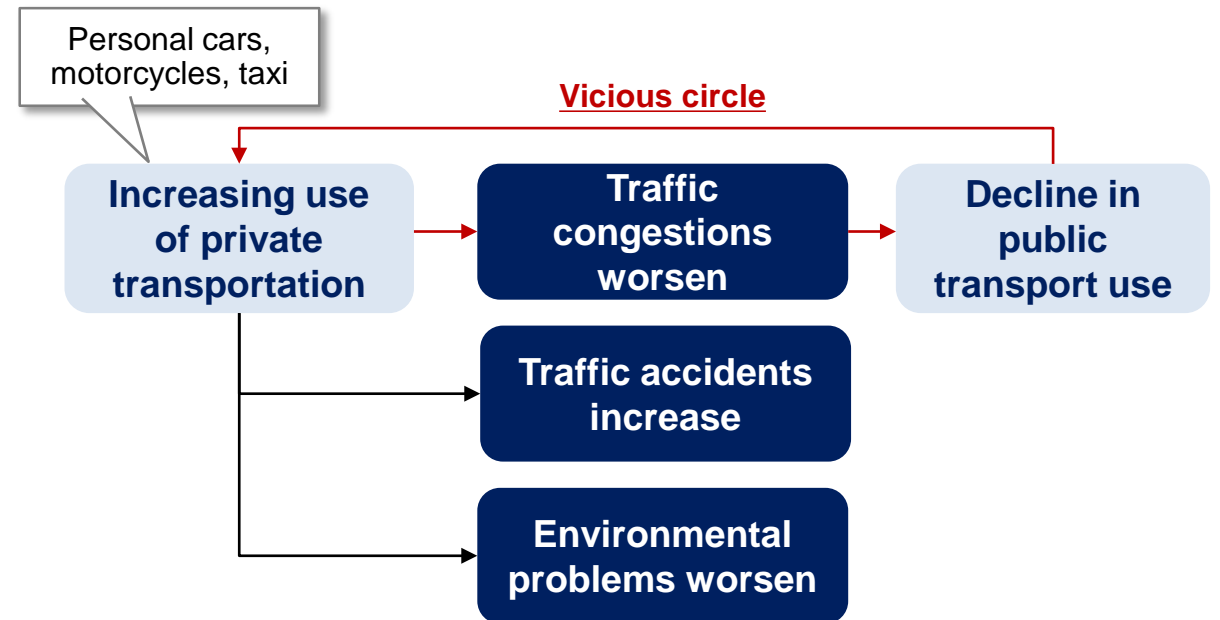
# Problems of ASEAN metropolis

- ◆ In major ASEAN cities, chronic traffic congestions, increased traffic accidents and environmental pollution are main social problems

## Back ground

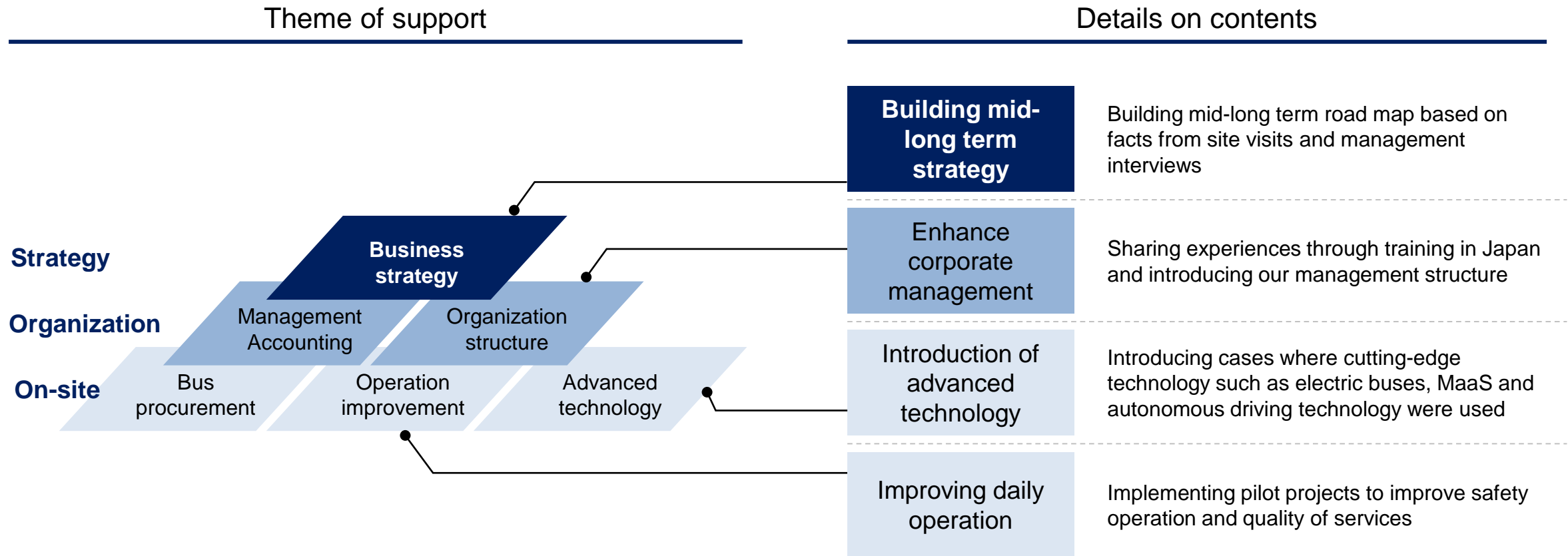


## Structure of issues in ASEAN major cities



# Activities in Hanoi: Management supports for bus operator

- ◆ Under JICA’s public-private partnership program, Michinori group has provided management supports to a state-owned bus operator in Hanoi
- ◆ Supports were made over a wide range of topics, from building mid to long term strategy to improve on-site operations





# Activities in Hanoi: Supports to improve operation management

- ◆ Provided supports in implementing daily monitoring routine, alcohol inspection in particular to enhance operation management

## Supports in implementing daily routine

### Vehicle inspection before departure

- Provided check-list used in Michinori
- Created own check-list with reference to the above and conduct 15 minute inspection daily



### Drivers monitoring before departure (“Tenko”)

- Introduced “tenko” method before departure used in Michinori
- Drivers always conduct face-to-face reporting before departure
- Monitoring drivers’ health condition and sharing information on road conditions at this session



## Supports in implementing alcohol-check operation

- Supported in selecting and recommending appropriate manufacturers and equipment
- Supported in negotiations with manufacturers to lend alcohol detectors for trial use
- Continue to support in providing know-how on actual operation, education and training after installation
- As a result, the awareness of drivers regarding safe driving has been improved

Major local newspaper also reported on this first experiment of alcohol check in bus operation



Tuyến BRT là tuyến buýt đầu tiên “test” nồng độ cồn lái xe trước khi vào ca làm việc

**BRT là tuyến buýt đầu tiên “test” rượu bia lái, phụ xe**  
 Nằm trong chương trình hợp tác giữa Tổng Công ty Vận tải Hà Nội - Transerco và Công ty Michinori (Nhật Bản), từ ngày 1/7/2019 tất cả lái, phụ xe vận hành trên tuyến buýt BRT trước khi được giao xe vận hành trên đường đều được kiểm tra chất gây nghiện. Đây là chương trình thử nghiệm áp dụng một số tiêu chí vận hành xe buýt tại Nhật Bản có tên gọi là “Kiểm danh, kiểm tra nồng độ cồn và kiểm tra phương tiện trên tuyến BRT”. Theo ông Nguyễn Thủy, Giám đốc Kinh doanh Xe buýt nhanh BRT - Transerco (đơn vị vận hành), quy trình này gồm có 4 nội dung, gồm: Điểm danh đầu ca (kiểm tra trang phục, phụ hiệu lái, phụ xe); Kiểm tra, đo nồng độ cồn; Thông báo những lưu ý đối với lái, phụ xe); Kiểm tra phương tiện đầu ca; Bàn giao xe giữa ca, cuối ngày. Lãnh đạo Tổng Công ty Vận tải Hà Nội cho biết, khi triển khai chương trình này, toàn bộ lái phụ xe được kiểm soát nồng độ cồn hàng ngày, nếu vi phạm lập tức bị đình tài ngay, BRT là tuyến buýt đầu tiên đang triển khai chương trình này.

# Activities in Hanoi: Organizing seminar on public transport development

- ◆ For the development of public transportation in Hanoi city, the seminar was held with the presence of government agencies, local authorities and bus operators of both Japan and Vietnam
- ◆ The seminar was broadly reported in various local news and media and had fostered interest in public transportation

## Contents and presenters

<p><b>Issues with public transportation in Hanoi</b></p>	<p>Director of Hanoi Public Transport Management and Operation Center</p>
<p><b>Efforts by bus operator</b></p>	<p>Deputy General Director of Hanoi largest bus operator</p>
<p><b>Methods to promote using public transport</b></p>	<p>Director of Policy Bureau, Ministry of Land, Infrastructure, Transport and Tourism of Japan</p>
<p><b>Sharing experiences of Michinori</b></p>	<p>Group CEO of Michinori Holdings</p>

## Images of the seminar and local articles



Hội thảo được kỳ vọng sẽ đem lại nhiều thông tin bổ ích, giúp Hà Nội phát triển giao thông công cộng trong tương lai

# Activities in Hanoi: Sharing ideas on private transportation restriction

- ◆ Introducing to local authorities some actual methods which have been used to restrict private vehicles in some countries

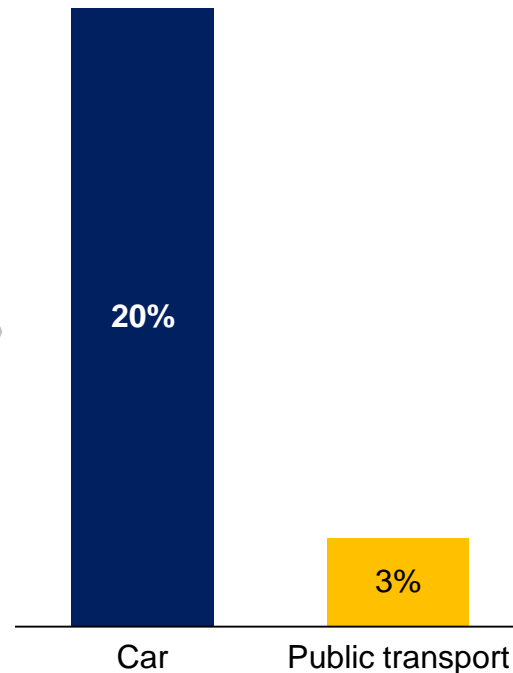
Comparison of commuting cost for public and private transportation in Tokyo

Example of road pricing in London center

## Some facts about Tokyo

## Proportion of commuting expenses in annual income

Average annual income <sup>1)</sup>	6.12 million Yen
Average commuting cost by car <sup>2)</sup>	1.24 million Yen/year
Average commuting cost by public transportation <sup>3)</sup>	0.18 million Yen/year



## Overview of policy



- Cars entering city center area will be charged approximately 8 pound
- Emergency purposed vehicle such as ambulance is exempted
- Citizens are exempted 90%

1) Statistical data from Ministry of Internal Affair and Communications

2) Under assumption of commuting by new 1.500CC car. Breakdown: Parking cost: 0.75Mn Yen (at home and at office), car depreciation cost: 0.2Mn Yen, gasoline cost: 0.13Mn Yen, Tax: 0.04Mn Yen, Vehicle inspection cost: 0.04Mn Yen, Insurance fee: 0.08Mn Yen

3) Survey of average commuter pass fee, Hataraku Mirai Institute

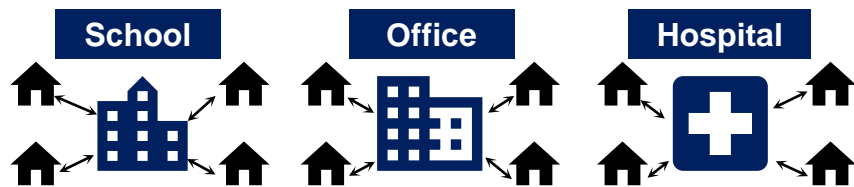
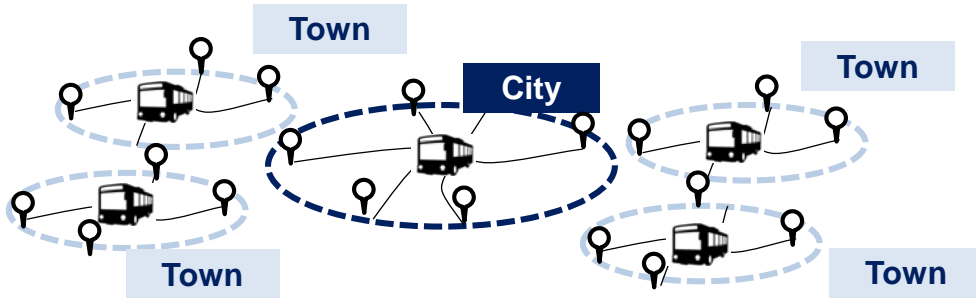


# Smart city transportation network

- ◆ By consolidating fragmented transportation networks, we can build an efficient public transportation network in wider areas

## Present

Traffic network is fragmented, divided by areas and purposes



Unification of public transport networks

## Future

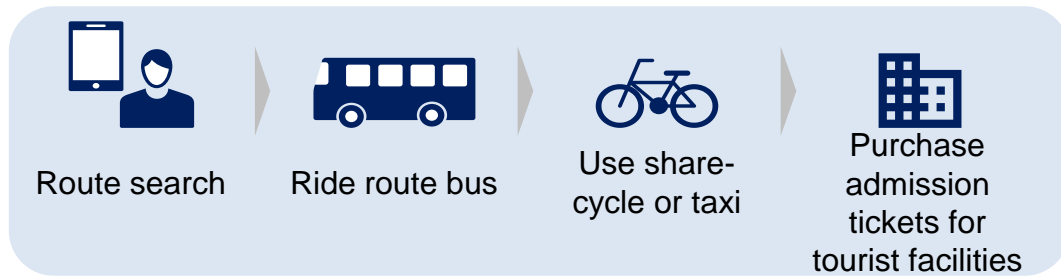
Building an efficient public transport network in wider areas

Digital Integration  
⇒ MaaS

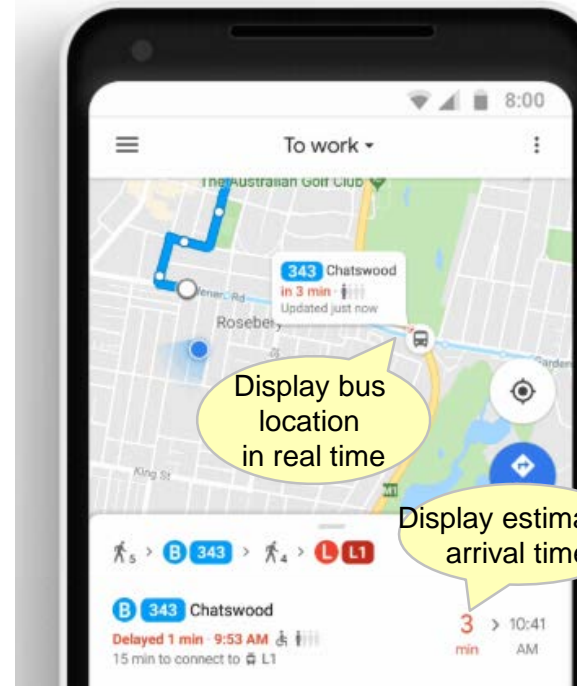
# Implementation of MaaS

◆ Michinori group is one of the first in Japan to implement MaaS

## Michinori's smartphone application



## Real-time display in Google Map



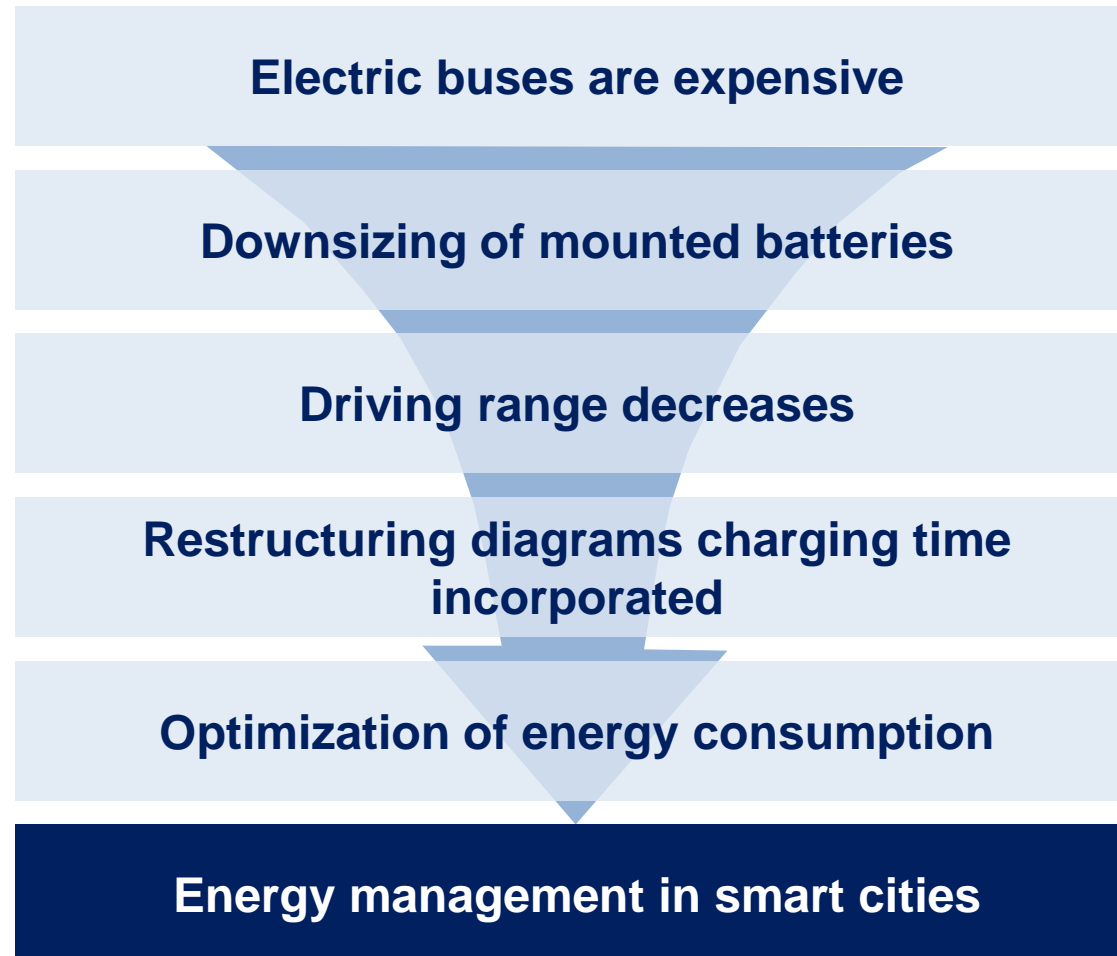
**Michinori's open data has made real-time display information possible**

## MaaS

In Hitachi city (population of 190,000 people), Michinori has started creating a MaaS with a major company (Hitachi) and local government (Hitachi city)

# Electrification of buses and energy management

- ◆ Smart cities can be developed by energy management of electric buses



**info@michinori.co.jp**