



What to think about in collaboration with residents for better transport?

CIRIEC CONGRESS

WORKSHOP C : Public / Social Economy Partnerships

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Why public transport matters?

- **Private cars** are the most popular mobility in rural areas
- However, some people do not have mobility
 - **Students and the elderly**
- Prepare for the future
 - When people are aging and can no longer drive
 - Public transport services may not be available when necessary.

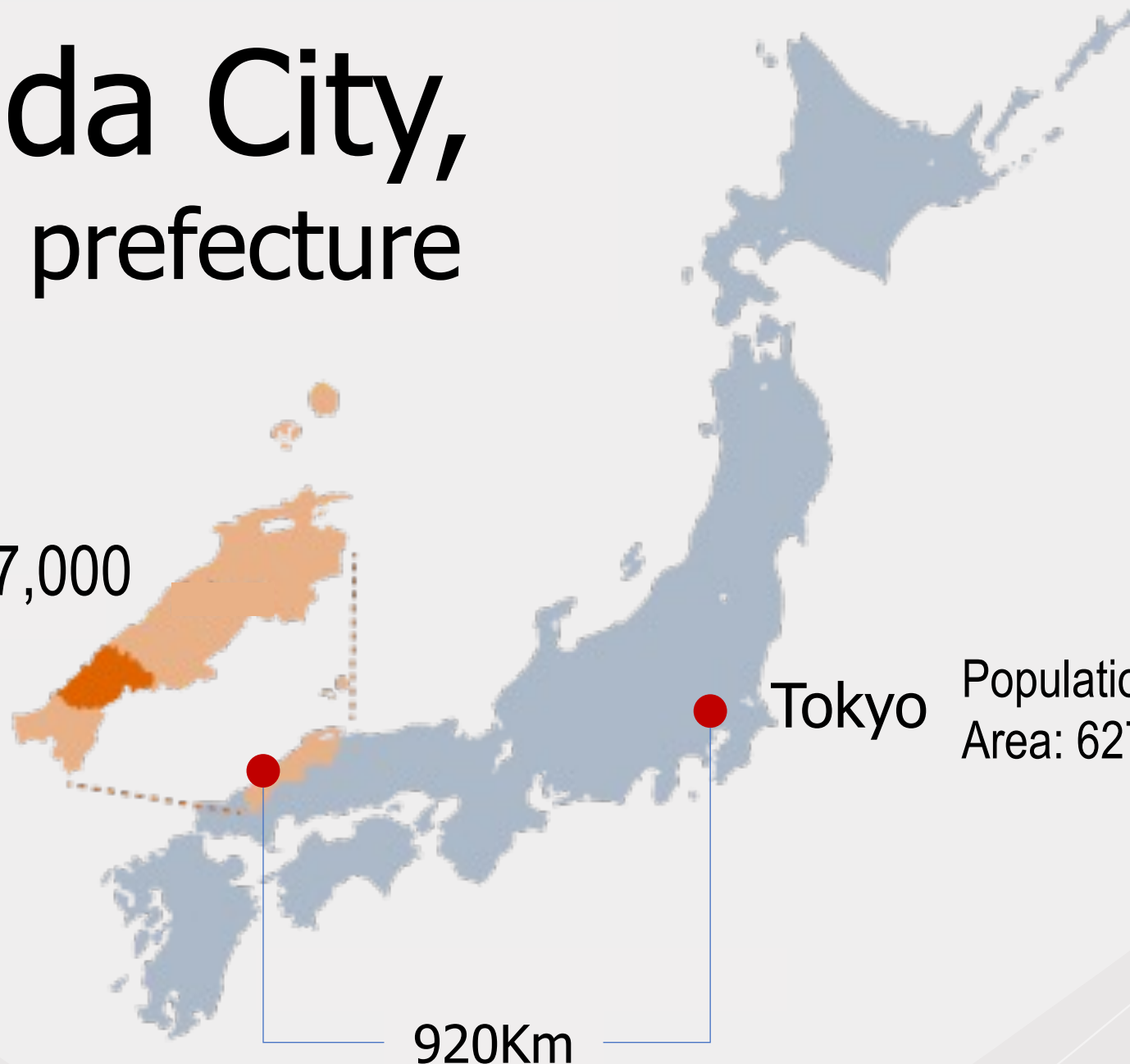


Evolution of Transport Planning

	Road Transport Act	Public Transport Revitalisation Act	
	2002	2007, 2014	2020
Transport mode covered	Bus	Mainly bus	Mobilize all transport resources in the area
Transport planning	None	Municipalities can develop plans	Mandatory planning by local governments
Council	Voluntary Councils		Legally binding councils
Council members	Municipalities, The Ministry, Bus operators, and others		Municipalities, The Ministry, Police, Representatives of Residents , and others

Hamada City, Shimane prefecture

Population : 57,000
Area: 690 km²

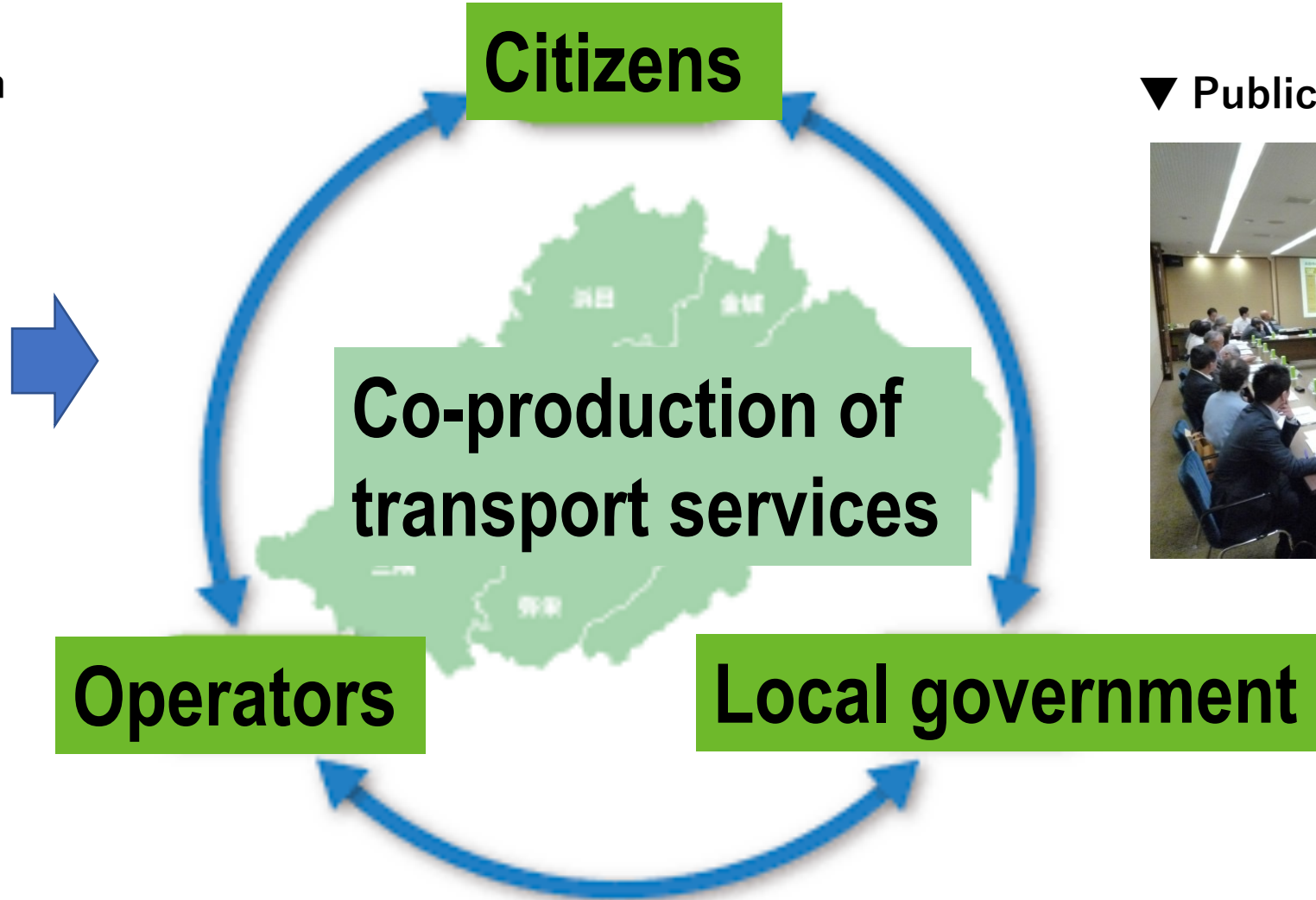


Tokyo Population : 9.7million
Area: 627 km²

920Km

Collaboration with Stakeholders

▼ Local transport plan



▼ Public Transport Council



- In the transport plan, they say they will provide transport services through co-creation, co-maintenance, and co-fostering.

Background of research

- **Promotion of Partnerships**

- Multiplying partnerships between the citizens, SSE organizations, and the public sector

- **Challenges and Issues**

- While there is an established body of research on the changing nature of government and third sector relationships, **there still exists a scope to investigate the more wide sets of partner constellations in depth.** (Bance ed, 2020).



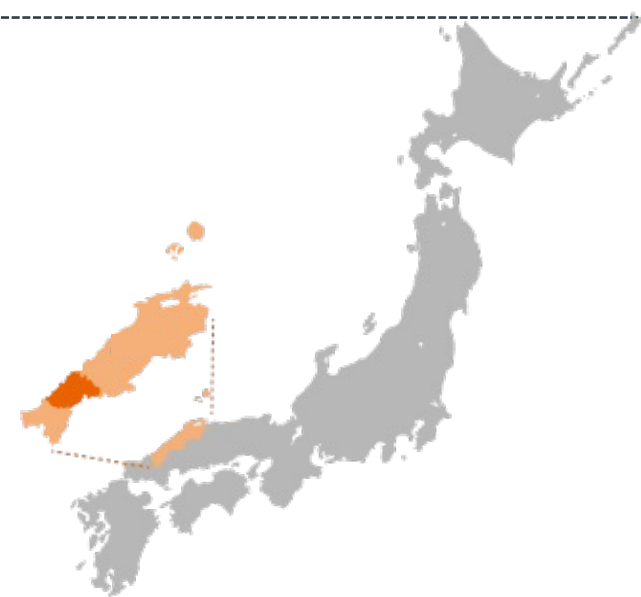
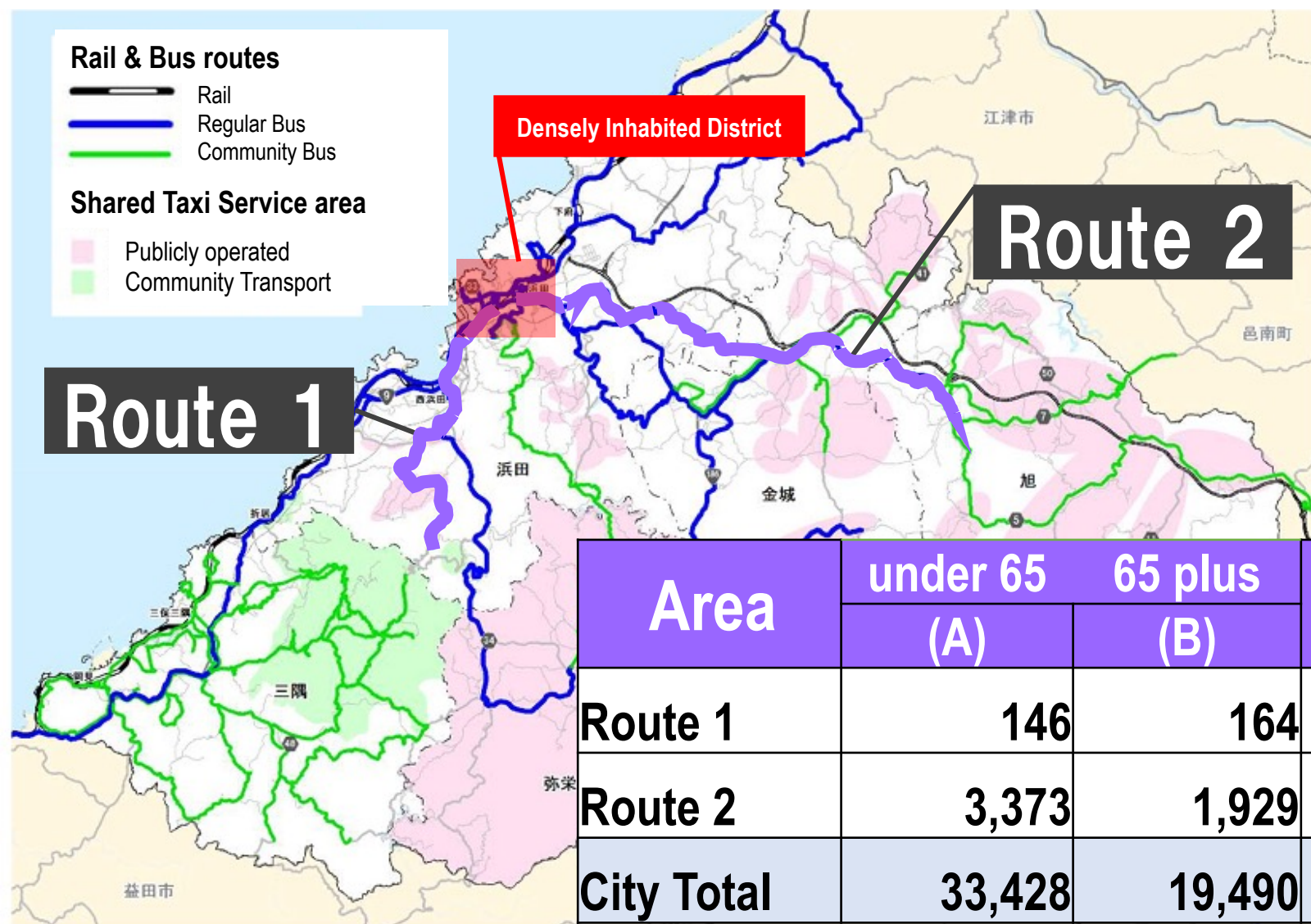
- **Promotion of Partnerships**

- The Japanese government has introduced partnerships and collaboration systems in the Transport sector

- **Challenges and Issues**

- **Does Public Involvement itself guarantee to deliver services they need?**

Survey Area



Area	under 65	65 plus	Total population (C)	Rate of aging B/C
	(A)	(B)		
Route 1	146	164	310	53%
Route 2	3,373	1,929	5,302	36%
City Total	33,428	19,490	52,918	37%

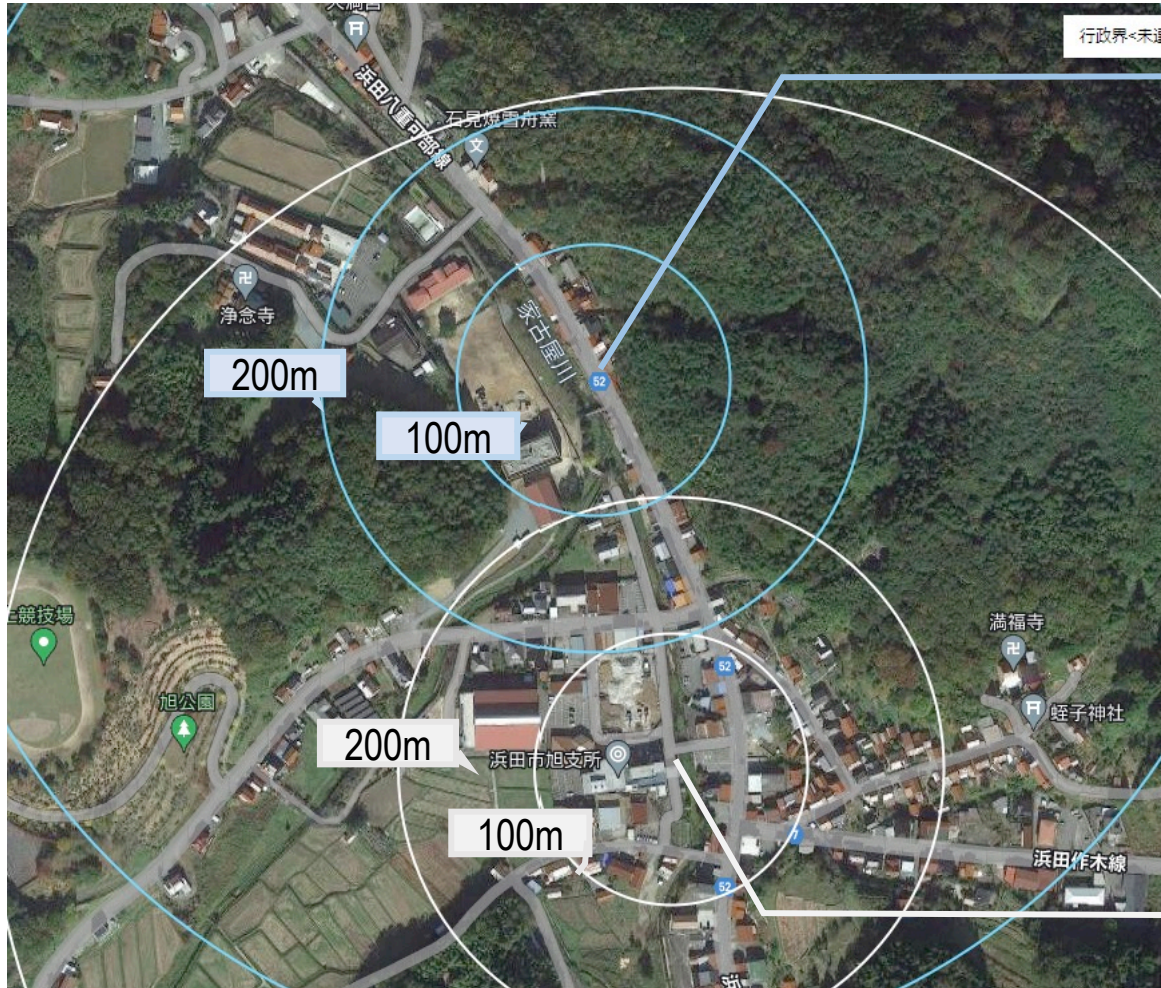
Regular bus services (privately operated) abolished in Dec. 2020

Image of the area 1



- Several houses exist around the bus stop.

Image of the area 2



Bus Stop



Bus Stop



- Several bus stops exist in the village centers along the main road

Alternative means of Transport



Community Bus

- Regular bus service operated by the city
- Fixed routes, fixed timetables, and designated stops
- **Frequency**
 - Daily
 - approx. five services/day
- **Fare:** 200Yen



Shared Taxi (operated by the city)

- Unlike regular taxis, they run according to the schedule and designated destinations.
- Reservation required
- **Frequency**
 - 1~3days/week (Non-daily)
 - Reservation required
- **Fare:** 500Yen



Community Transport

- Shared taxi service **provided by the volunteers of residents and NPOs**
- **Frequency:**
 - Weekdays
 - Reservation required
- **Fare :** approx.200Yen
(based on the actual fuel cost)

Questionnaire survey

Survey period

Jul. 2020

Method for distribution

Distributed to all households
through neighborhood associations

Method for collection

Collected by mail

**The number of copies
distributed**

949

**The number of copies
collected (%)**

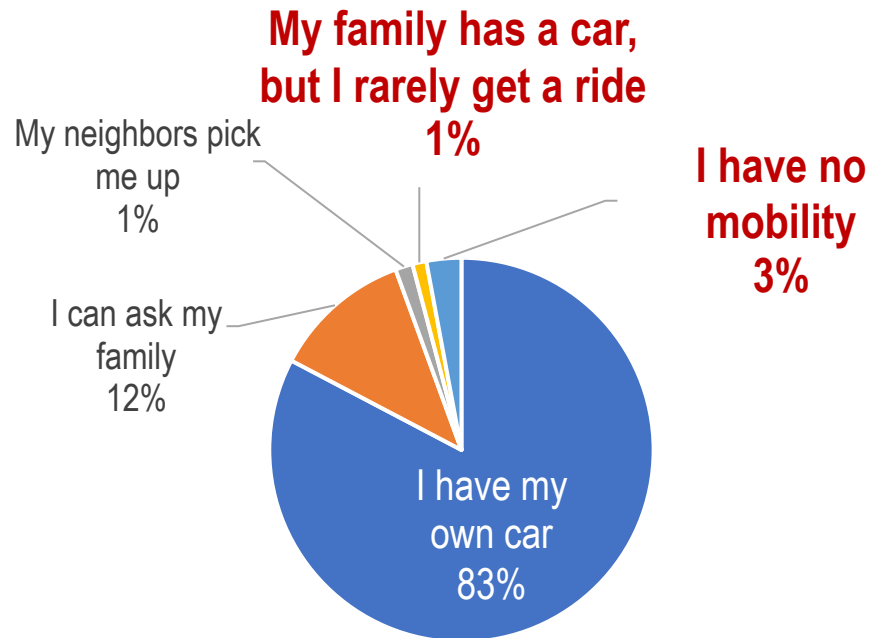
347 (36.6%)

Purpose of the survey

Analysis of residents' preference for
transport

Result of Reply

Mobility of respondents (N=341)



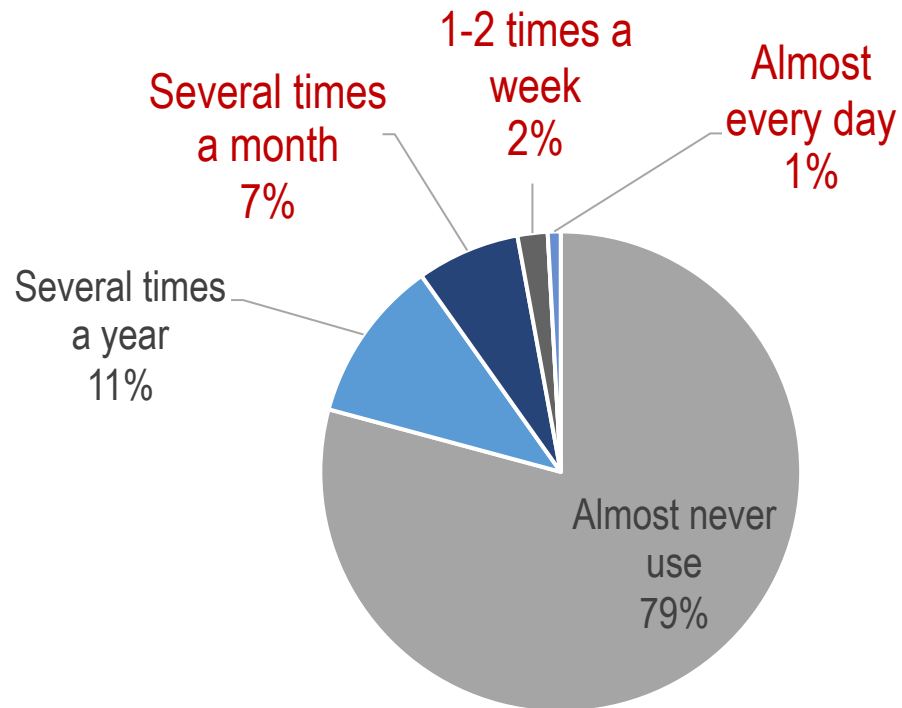
Complaints for bus service

	Number of respondents	%
Cannot carry heavy loads	150	33%
Service frequency is low	118	26%
Bother to look at the timetable	62	14%
Hard to walk to/from the bus stop	56	12%
Must act according to the schedule	53	12%
Must wait with enduring the wind, rain, heat, and cold	16	3%
The fare burden is heavy	3	1%
Other	0	0%

- A certain number of people who do not have mobility
- People think the bus service is inconvenient

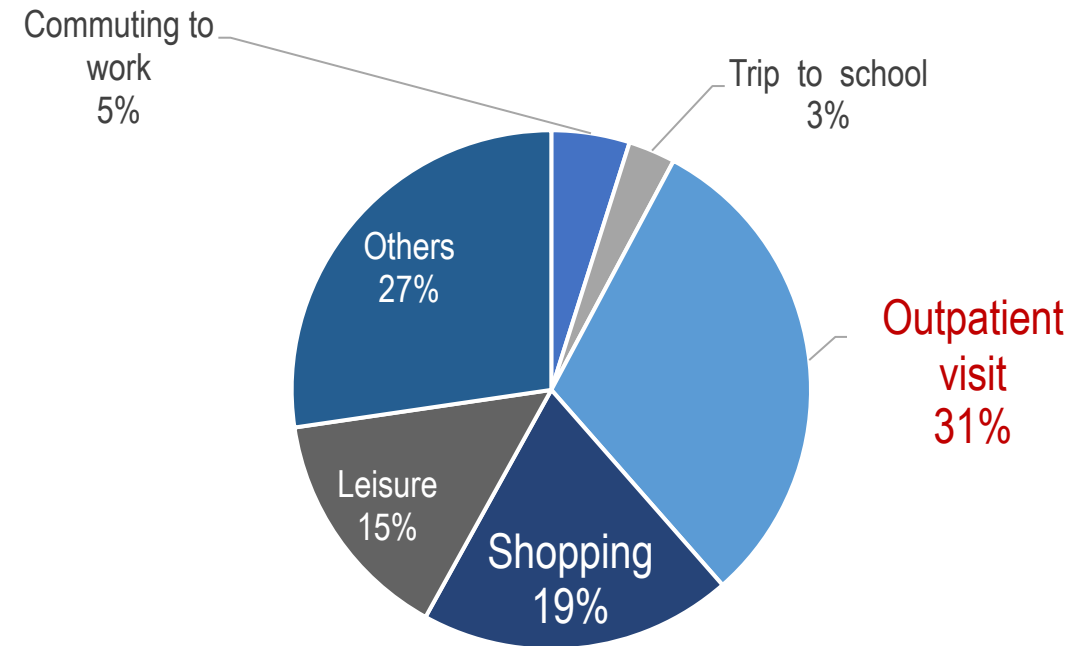
Result of Reply

Frequency of bus usage (N=346)



Purpose of bus use (N=205)

* multiple answer



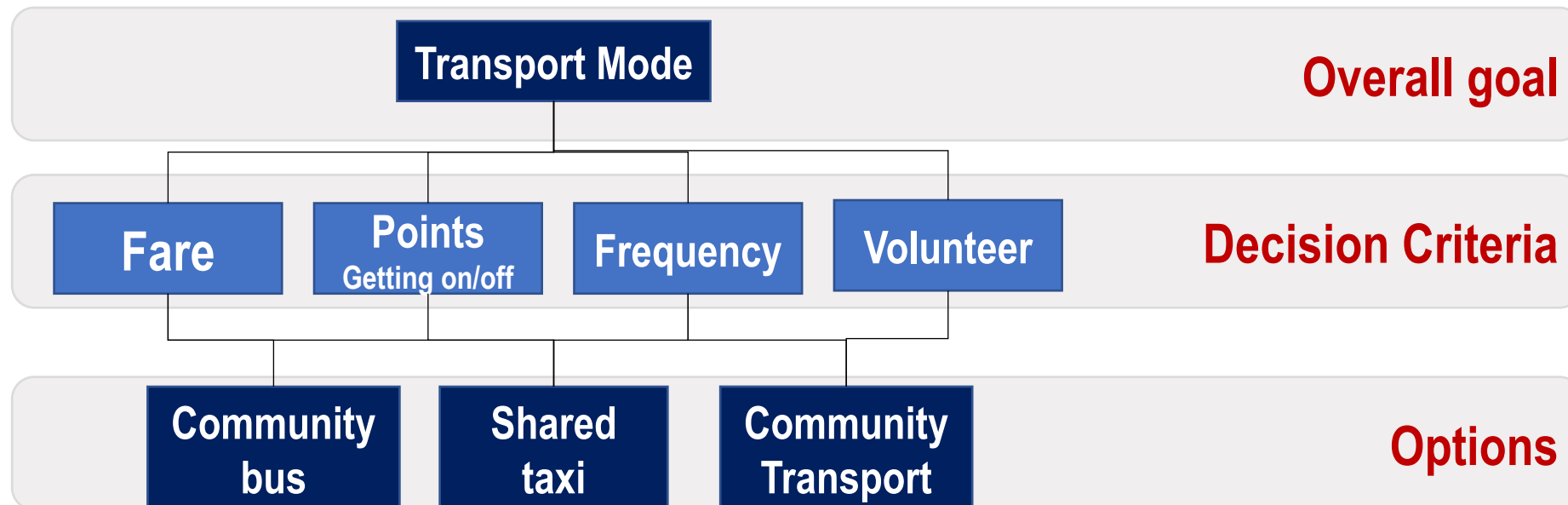
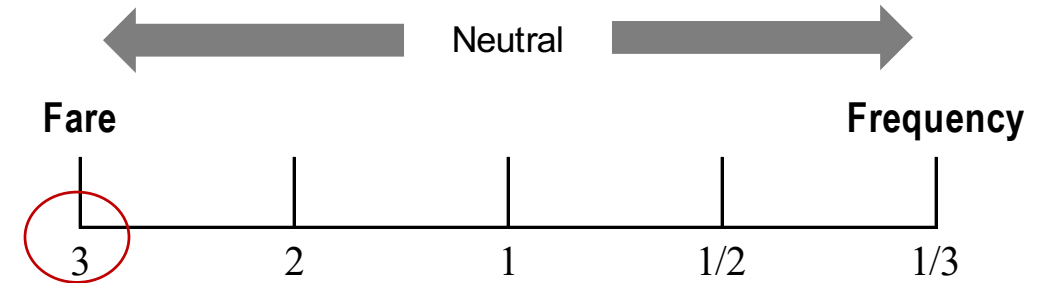
- Those who do not have mobility
 - tend to use the bus relatively often
 - use the bus for outpatients and shopping

AHP (Analytic Hierarchy Process) Analysis

- AHP has been applied mainly in the field of operations research
- AHP models the decision-making problem as a hierarchy.

▼ Image of Questionnaire

Which is more important?



Summary of Analysis

Evaluation of Options

Sample with
C.I.<0.1

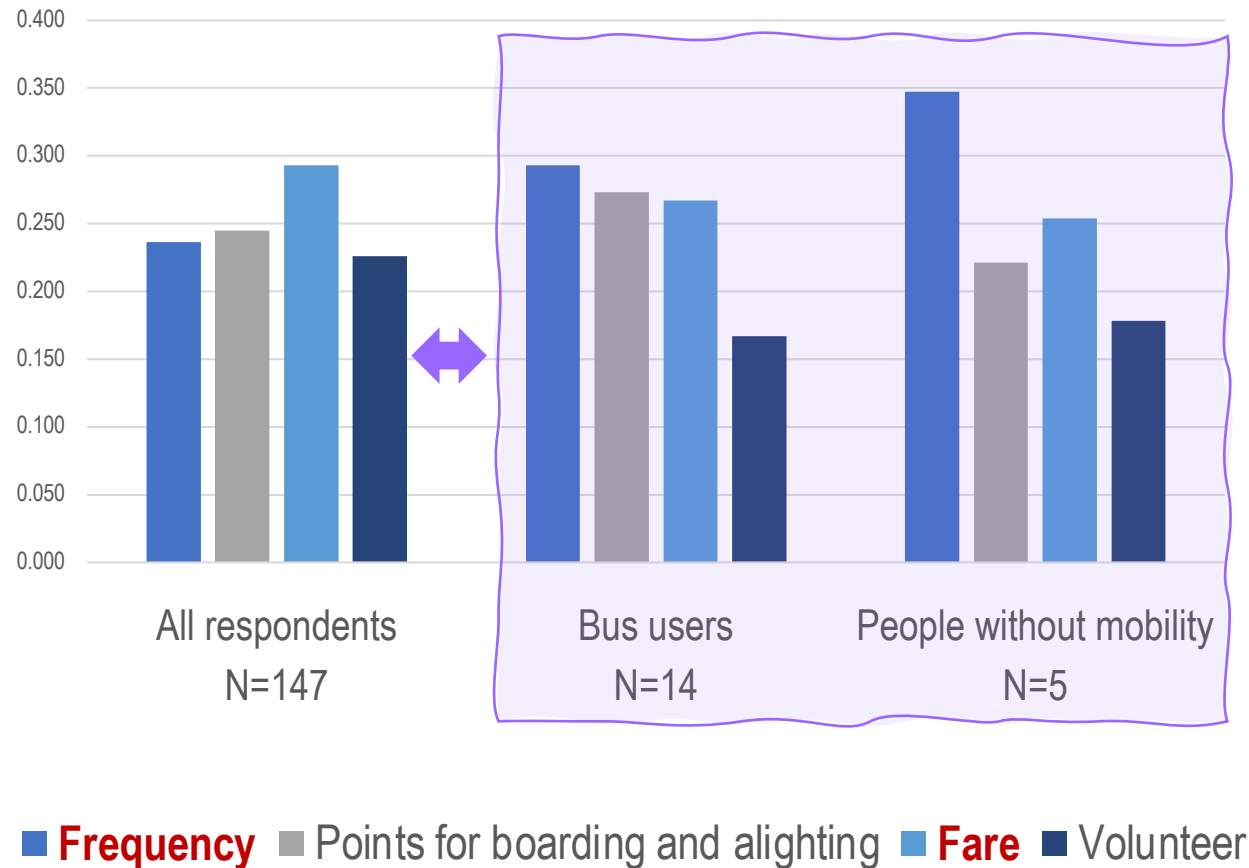


1. Respondents as a whole
(most people have their own car) **highly**
evaluated “Community
Transport”

2. Bus users
(most people without mobility) **highly**
evaluated the “Bus”

Summary of Analysis

Importance of Decision Criteria



1. The results show that "**the amount of fare burden**" is the most important for **all respondents**.
2. **Bus users** (most people don't have mobility) emphasize the "**Frequency**".
3. **For them**, the importance of a "**volunteer-based system**" is low.

➤ Transport needs are different between private car users and public transport users.

Implications

- **Transport planning in collaboration with citizens has become widespread**
- **Without listening to the voices of the people who use it, we cannot plan the appropriate means of transport.**
- **Perfunctory public involvement is not good enough for anyone**
- For better transport planning, it is necessary to check whether they can grasp the needs of people who need transport.