Public Psychology Lab., University of Tsukuba

March 2024

Strategic Innovation Program (SIP) Phase 3
Building a Smart Mobility Platform/

Research and Development on Local Transportation Community Formulation and Human Resource Development Program with Narrative Approaches

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⑬ Social systematization of automated driving

⑮-2 Building a business/data community for implementation of local mobility

⑱ Practical research and dissemination development activities to typify and identify areas utilizing local mobility resources

⑮-1 Mobility Knowledge Center Established andConferences

⑲ Human resource development for social implementation of services

3. Future Direction

1. Project Overview: Background

- The current state of regional public transport in Japan is undeniably stagnant and requires major social system reform. Here, White Epston called the **common story governing** psychiatric **patients the** **“dominant story** (illusionary story)” **.**
- However, Epston said that this could be viewed as a **"narrative”**. The Narrative Approach aims to **create and discover "alternative story** (i.e., the other story) " (i.e., stories that are different from the **dominant story that is the source of suffering)** by exploring the psychological state that has become rigid and controlled by the **dominant story**. In recent years, the narrative approach has been utilized in the fields of medical and clinical psychology, social work, career consulting, and justice.
- Therefore, we believe that **rethinking the dominant story of regional public transport** as a **“narrative"** and **exploring alternative stories** that take into account the possibilities of new technologies will be the **"catalyst"** for **community building to improve regional public transport.** This is the concept that forms the basis of our research project.

1. Project Overview: Aims

issue 12

Extraction of requirements for vehicles, infrastructure, etc. that contribute to mobility re-design

Advance the study of vehicle and infrastructure requirements and business models based on Green slow mobility /automated driving test at several locations in Japan.

issue 13

Social systemization of automated driving

Aiming to establish a standard index for evaluating the social acceptance of autonomous vehicles. Conduct surveys and organize competitions with particular focus on autonomous bus exteriors.

issue 15-2

Regional Mobility Community Building

Toward Building Local Communities for Regional Mobility
Data community formation and attitudinal and behavioral change analysis of mobility personnel, etc.

issue 18

Making the most of local mobility resources

Practical research to typify and identify regions

Based on the action research, we will develop a regional typology for smart mobility implementation,
Aim to create and disseminate guidelines by regional mobility characteristics

issue 15-1

Establishment of Mobility Knowledge Center and Organizing Mobility Conferences

As a hub for know-how accumulation and human resource development for regional mobility, etc.
Verify functional requirements and operational model to establish a mobility knowledge center.

issue 19

Human resource development for implementation of mobility services

Toward the development of mobility producers required in the implementation of mobility services
Organize the requirements for these qualities, build a training program, and hold conferences.

Our future goal:
As the way urban space and mobility services should be,
A society without mobility divide where everyone can move freely, independently, safely, comfortably, and in a way that is friendly to the environment, others, and the community.

1. Project Overview: Research and Development

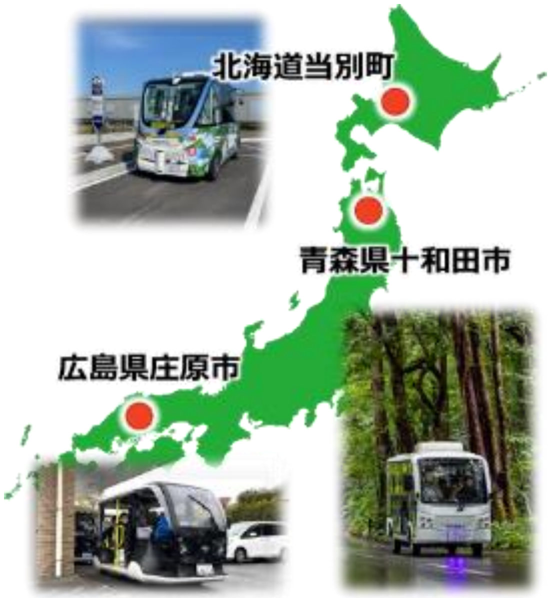
narrative approach

Common themes within the consortium

Experience know-how and processes that are invisible to the outside world by participating the community as an "actor”. Visualize these findings as “narratives" and accumulate and utilize them in the Mobility Knowledge Center

Efforts in the Demonstration Field

issue 12 issue 13 issue 18 issue 15_{-2}



Accumulating Stories on narrative approach.

Know-how and Human Resources

Mobility Knowledge Center

issue 15_{-1}

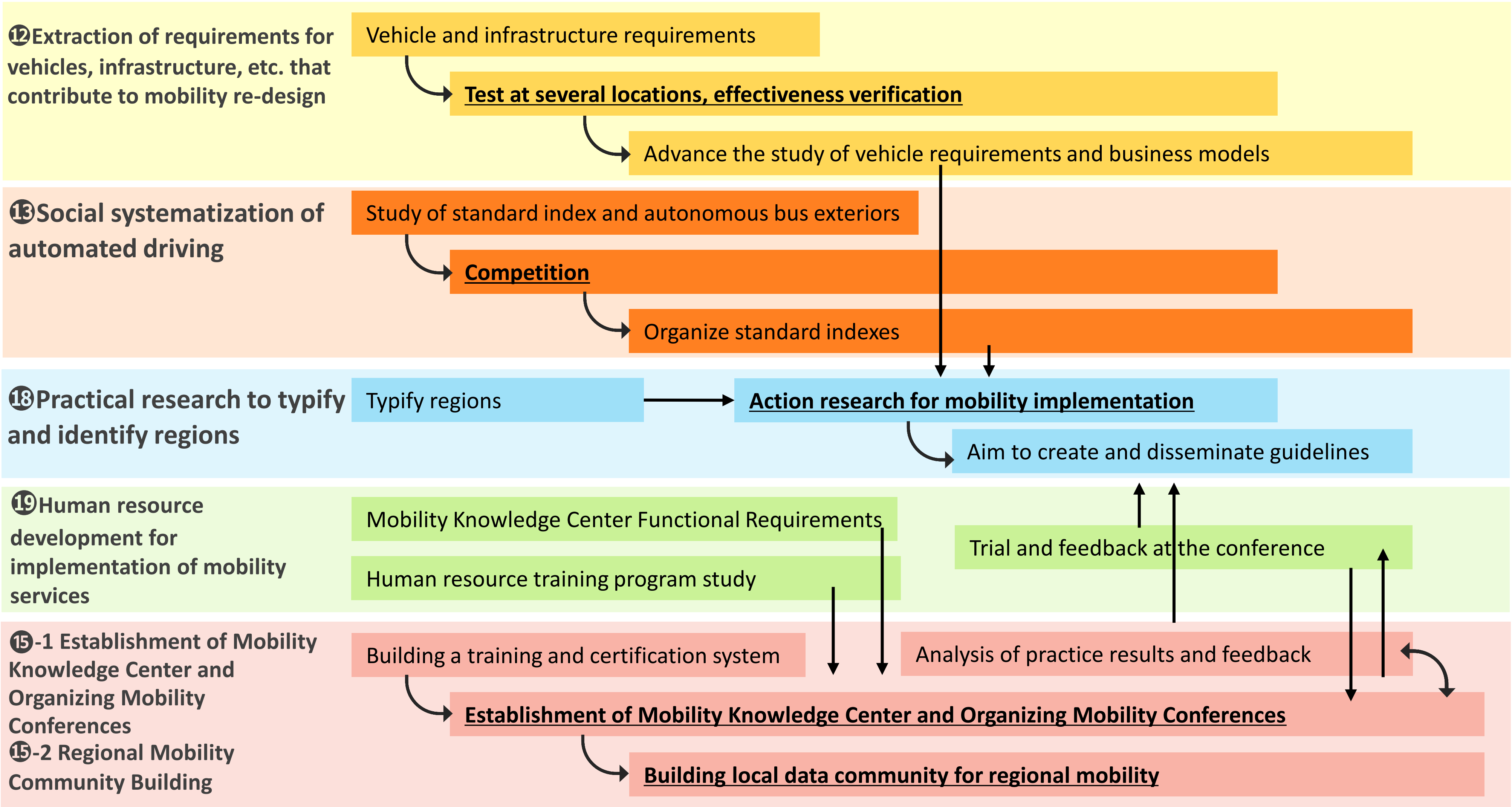
enforcement

issue 19

Human Resource Development Program

1. Project Overview : Process flow

All outputs ➡
Human resource development for implementation of mobility services and Building local community
Accumulation of effective and highly applicable knowledge that is narrative
Building a system that enables sustainable development(business model study)



⑫Extraction of requirements for vehicles, infrastructure, etc. that contribute to mobility re-design

- Vehicle and infrastructure requirements
- **Test at several locations, effectiveness verification**
- Advance the study of vehicle requirements and business models

⑬Social systematization of automated driving

- Study of standard index and autonomous bus exteriors
- **Competition**
- Organize standard indexes

⑱Practical research to typify and identify regions

- Typify regions → **Action research for mobility implementation**
- Aim to create and disseminate guidelines

⑲Human resource development for implementation of mobility services

- Mobility Knowledge Center Functional Requirements
- Human resource training program study
- Trial and feedback at the conference

⑮-1 Establishment of Mobility Knowledge Center and Organizing Mobility Conferences
⑮-2 Regional Mobility Community Building

- Building a training and certification system
- Analysis of practice results and feedback
- **Establishment of Mobility Knowledge Center and Organizing Mobility Conferences**
- **Building local data community for regional mobility**

1. Project Overview : Target

SIP Phase 3 Interim (FY2025)

(12) Implementation of Regional Mobility Support System Specifications
(15) Establishment of Mobility Knowledge Center

At the end of the third phase of the SIP (FY2027)

(13) Release of a reference roadmap for the implementation of regional mobility-support system in several cities.
(18)Development of guidelines for social implementation of regional mobility services at several regions
(19) Education and Training of 15 or more regional mobility producers

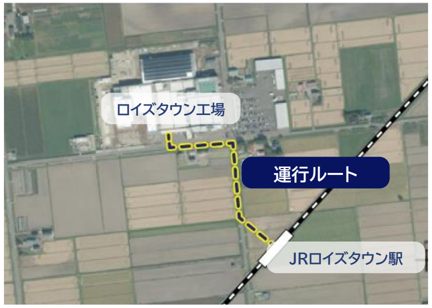
2. R&D Results

⑫Extraction of requirements for vehicles and infrastructure, etc. that conducive to Re-Design

▧ Demonstration Operation ①: Tobetsu Town, Hokkaido (Demonstration Field: Rural Area & Tourist Transportation)

◆FY2023 (20 days operation in total)

- Date of operation:
(Test ride for stakeholders only) June 28 (Wed.) and 29 (Thu.), 2023
(General test ride) Friday, June 30 - Monday, July 17 (National Holiday)
- Automated vehicle: ARMA, 1unit
- Operation hours: 10:00-16:30
- Route: JR ROYCE' Town Sta. - ROYCE' Town Factory (500m)
- Frequency of operation: 3-5 shuttles per hour



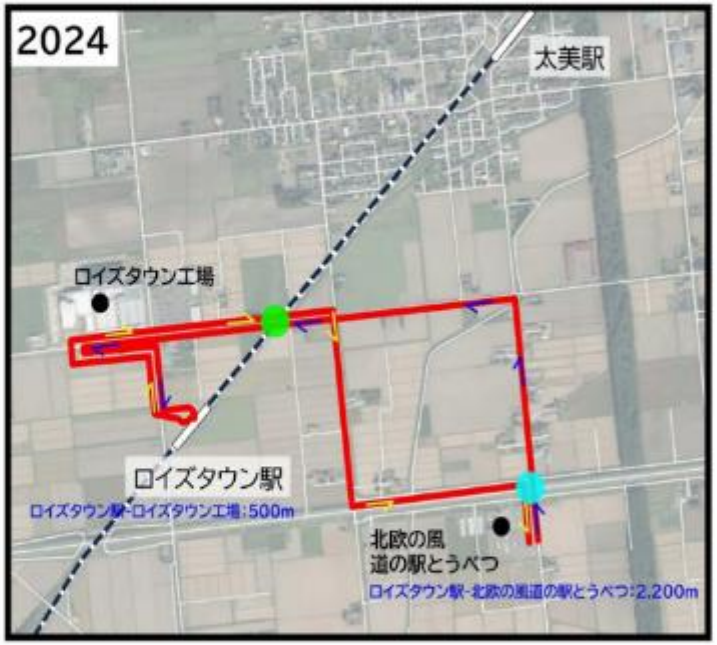
◆FY2024 (plans)

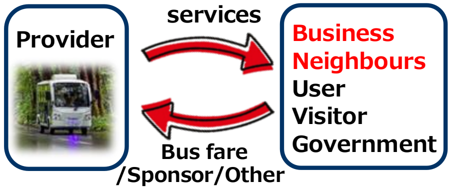
- Date of operation: August-September 2024 (approx. 30 consecutive days)
- Automated vehicle: EVO, 1unit
- Operation hours: 10:00-16:30
- Route: JR ROYCE' Town Sta. - ROYCE' Town Factory – Michi-no-Eki Tobetsu (2.2km)

*We would like to demonstrate the cooperation of road vehicles at the intersection just before crossing the National Route 337.

In this R&D, we plan to conduct an evaluation before & after and during the demonstration.

a. Measurement of social acceptability (before & after the demonstration)
b. Business model study (during the demonstration period)
c. Evaluate vehicles, routes, nodular point, etc. (after demonstration)


2024
太美駅
ロイズタウン工場
ロイズタウン駅
ロイズタウン駅-ロイズタウン工場:500m
北欧の風
道の駅とうべつ
ロイズタウン駅-北欧の風道の駅とうべつ:2,200m



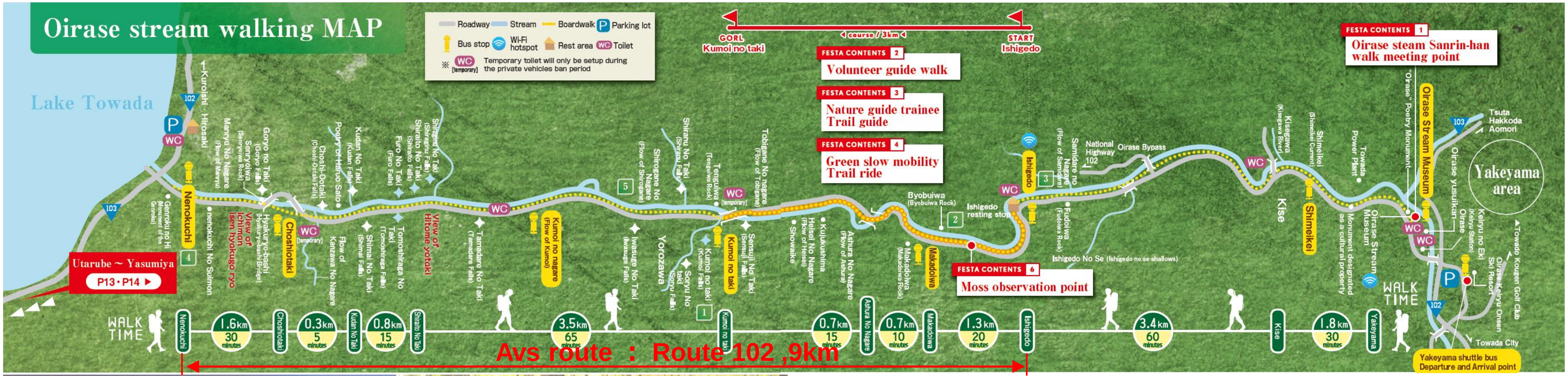
Business
Neighbours
User
Visitor
Government

Model	Value	Form of financing	Approach
P to B	sending off a customer	sponsorship money & naming rights	Dissemination of effectiveness
P to N	comfortable to live	fundraising & donation	Promotion of understanding
P to U	means of transportation	bus fare	Promotion of utilization
P to V	means of transportation	bus fare & admission fee	Promotion of utilization
P to G	regional sustainability	subsidies & deficit compensation	Promotion of understanding

2. R&D Results

⑫Extraction of requirements for vehicles, infrastructure that contribute to re design

▧ Demonstration Operation 2: Towada City, Aomori (Rural and Tourist Transportation)


Oirase stream walking MAP
Roadway
Stream
Boardwalk
Parking lot
Bus stop
Wi-Fi hotspot
Rest area
Toilet
※ WC [temporary] Temporary toilet will only be setup during the private vehicles ban period
Lake Towada
Utarube ~ Yasumiya
P13・P14 ▶
GORL
Kumoi no taki
◀course / 3km◀
START
Ishigedo
FESTA CONTENTS 1
Oirase steam Sanrin-han walk meeting point
FESTA CONTENTS 2
Volunteer guide walk
FESTA CONTENTS 3
Nature guide trainee Trail guide
FESTA CONTENTS 4
Green slow mobility Trail ride
FESTA CONTENTS 6
Moss observation point
Nenokuchi
Choshiotaki
Kumoi no nagare
Kumoi no taki
Makadoiwa
Ishigedo
Shimeikei
Kise
Oirase Stream Museum
Yakeyama area
Tsuta Hakkoda Aomori
Towada City
Yakeyama shuttle bus Departure and Arrival point
National Highway 102
Oirase Bypass
Byobuiwa (Byobuiwa Rock)
Ishigedo resting stop
Ishigedo No Se (Ishigedo no se shallows)
WALK TIME
Nenokuchi
1.6km 30 minutes
Choshiotaki
0.3km 5 minutes
Kudan No Taki
0.8km 15 minutes
Shiraito No Taki
3.5km 65 minutes
Kumoi no taki
0.7km 15 minutes
Ashura No Nagare
0.7km 10 minutes
Makadoiwa
1.3km 20 minutes
Ishigedo
3.4km 60 minutes
Kise
1.8km 30 minutes
Yakeyama

Avs route ： Route 102 ,9km

◆FY2023 (Green Slow Mobility)

- Date : 22 days , mainly on Fridays, Saturdays, and Sundays between January and March 2024.
- Vehicle: 1unit , TAJIMA-NAO-8J (modified vehicle)
- Time : 2 runs from 9:30 to 11:30 and 12:30 to 14:30
- Route: Oirase Stream museum – Kumoi no taki Waterfall
- Content: Trekking bus tour while traveling by Green Slow Mobility. Enjoy Oirase gorge in winter with a Green Slow Mobility.
- Number of participants: 140

https://winter.greenslow-oirase.com/

◆FY2024 (AVs)

- Date: 7 days from October 21 to 27, 2024.
- Vehicle: Undecided (assuming small vehicles)
- Time: weekdays 10:00-16:00, holidays 9:00-16:00, one per hour
- Route: Ishigedo Rest Area - Kenokuchi, 9 km
- Content: Considering AVs that crosses Oirase's sightseeing contents (Oirase Open Air Museum).

グリスロで楽しむ
奥入瀬渓流
冬のネイチャーツアー

GREEN SLOW MOBILITY

Upper left: Stakeholder WS
Lower: Web page opened and tours offered

2. R&D Results

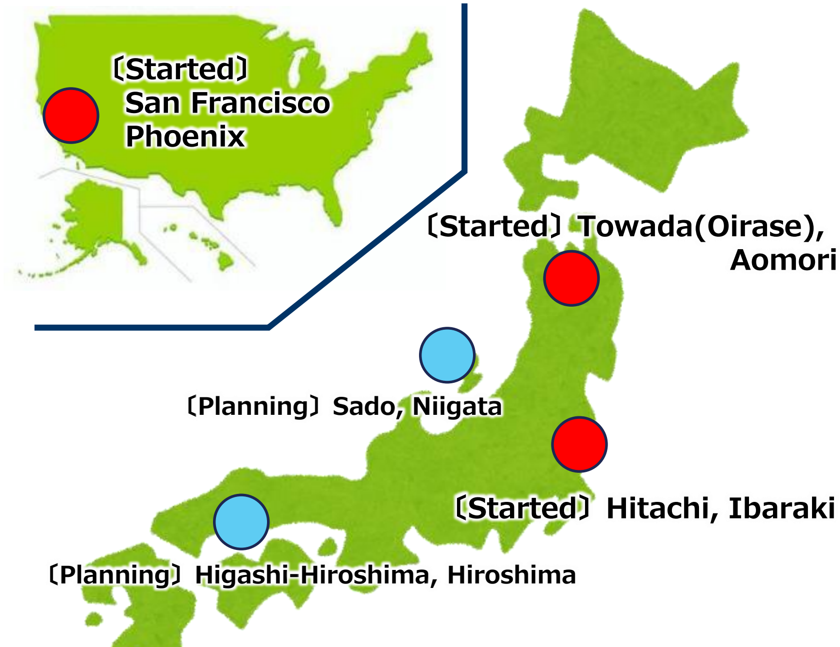
⑬Social systemization of automated driving

▧ Survey : Proposal for a “unified index” to measure social acceptance

□ Develop a draft social acceptance index (unified index) for AV buses (LV2 or higher)

□ Verify the validity of the index by applying it to questionnaires at experimental test in multiple regions.

＜Survey area (Including planning area)＞


〔Started〕 San Francisco Phoenix
〔Started〕 Towada(Oirase), Aomori
〔Planning〕 Sado, Niigata
〔Started〕 Hitachi, Ibaraki
〔Planning〕 Higashi-Hiroshima, Hiroshima

*About the survey targets (Based on number of people distributed)
・Oirase : Green Slow Mobility User (140 people)
＋Citizens of Towada city (2,809 households)
・Hitachi City : Companies along / neighboring the BRT line (12,000)
・San Francisco / Phoenix : Web survey

＜Example of survey questions designed as a unified indicator of social acceptance＞

Questions	Options
At what stage do you think automated driving system technology should be introduced into society? Please answer one	Should be introduced after it is "completely safe" Should be introduced after it becomes "safer than humans" Should be introduced after it is "as safe as humans" Should be introduced even "less than human safety performance" Should not be introduced under any circumstances
How much do you agree with the following items for AVs?	I would use an AV if it is shared. I would use an AV if it is individual. I would not use an AV. I agree to introduce AVs to ○○ City.
For each statement, indicate your degree of agreement regarding travel by AVs.	Pleasant / Relaxing / Comfortable / Safe / Easy / Fast / Cheap

Area Wanted

We are looking for regions that are willing to cooperate with us as targets for the Unified Social Acceptance Index Survey for Automated Buses. Areas that are planning to conduct experiments but still have some time left before implementation are especially strongly encouraged to cooperate, as they could be eligible for the with-without survey.

Study about Requirements of Exterior for Autonomous Buses

■ Interview Survey

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23
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25
26
27

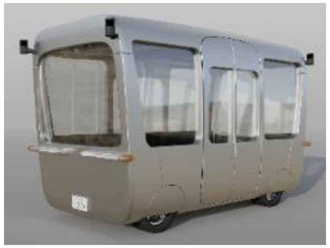
Which Avs do you like?
What is the reason？

Which Avs do you dislike?
What is the reason？

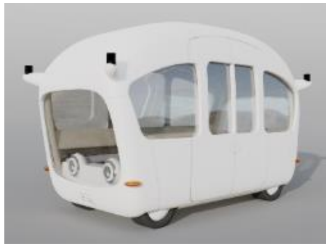
Based on the interview survey

■WEB Questionnaire Survey

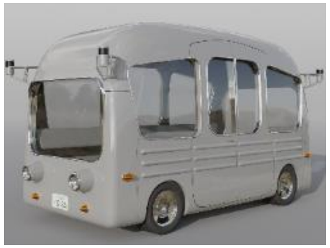
1.neutral



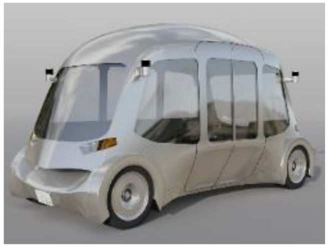
2.cute



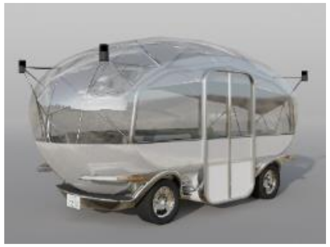
3.weak



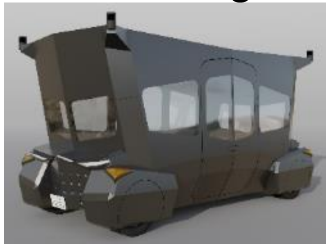
4.fast



5.futuristic



6.strong



■ Interview Survey with vehicle manufacturer and software companies :to understand cost and difficulty

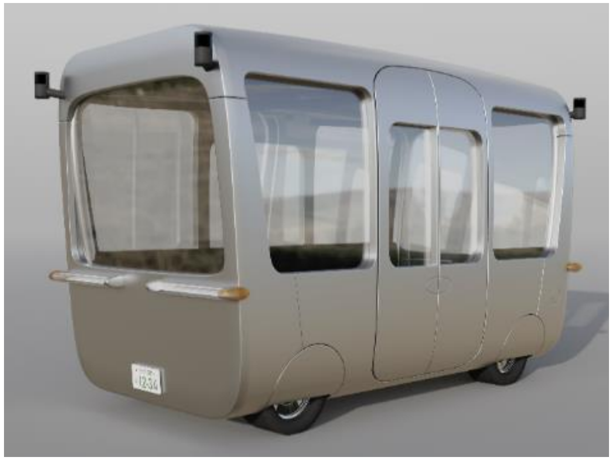
Proposing requirements of exterior for Autonomous Buses

■Competition:recruiting realistic images

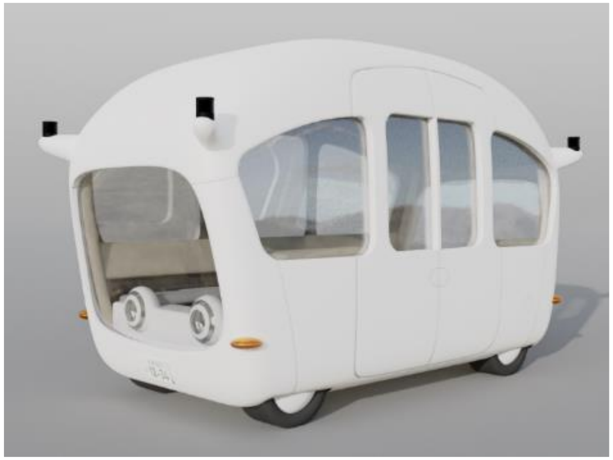
All processes are recorded and made **stories** as **episodes**, shared at **the MK Center**.

Image of Autonomous buses in the survey

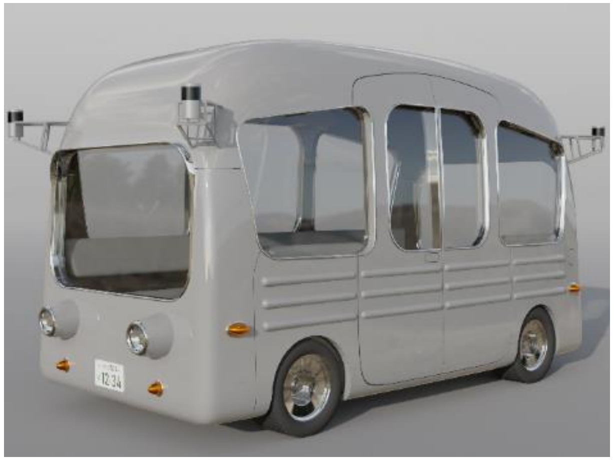
1. neutral



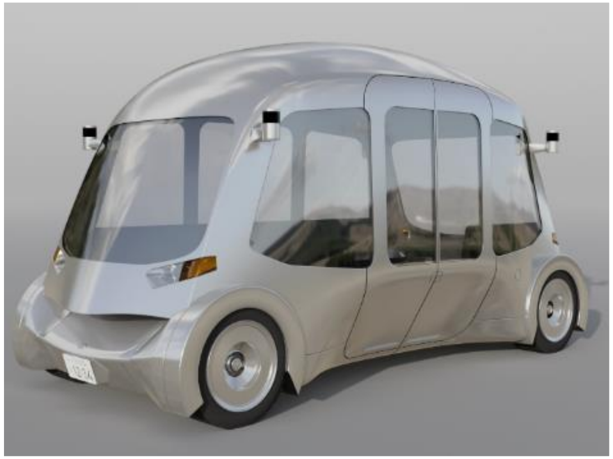
2.cute



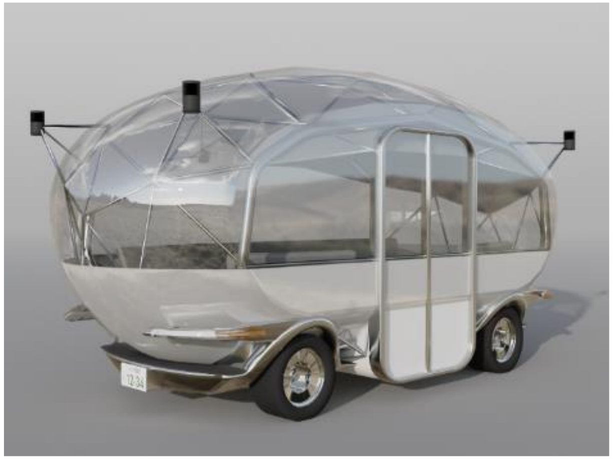
3.weak



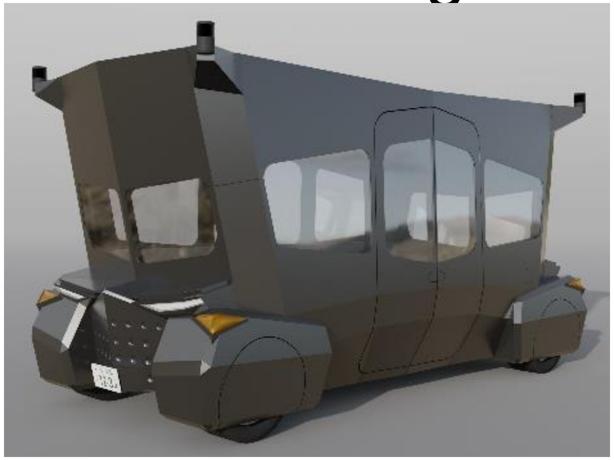
4. fast



5.futuristic



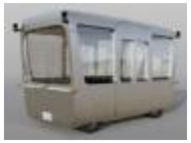
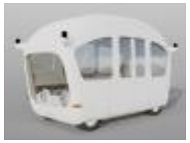
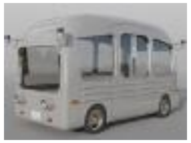
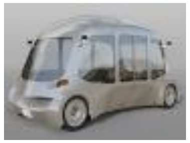
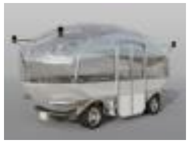
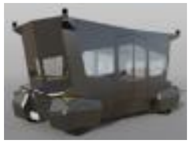
6. strong



Requirement for Autonomous buses used in the survey

Common requirements

Color: white, black, gray Capacity: 6 to 11 people Sensor: Riders installed in the four corners
Seat: Face-to-face (front and back symmetrical)

buses	neutral	cute	weak	fast	futuristic	strong
picture						
ability impression	○	○	△	○	◎	○
era impression	present	present	retro	present	futur	present
headlight	long slit eyes	cute round eye	round eye	fishing eye	long slit eyes	fishing eye
Keyword	square box shape simple	compact round curve simple	compact round old	streamlined simple spotty stylish	curve truss structure glazed	big Intimidation square rugged
length wight Hight	L:4.3m W:2.1m H:2.7m	L:4.3m W:2.1m H:2.7m	L:4.4m W:2.1m H:2.6m	L:4.7m W:2.2m H:2.6m	L:5.0m W:2.1m H:2.7m	L:4.6m W:2.3m H:2.7m
Reference vehicle	GACHA 	MiCa 	Midget 	GRT 	Apolong 	Aurrigo

Evaluation of the impression of the exterior of autonomous buses and how this impression elicits cooperative behavior

Survey items

seven-point scale

Category	Survey items
attribute	age・gender・region
Attitude to transpotation	How much do you like the to travel by the following items of transportation? train /bus /my car /bicycle /on foot
Agreement	How much you agree with the autonomous buses?
Intention to use	How often would you like to use an autonomous buses?
Avs trust	How much do you trust the fol s about technologies and organizations? AVs technology / administ /s social system /AVs development company
risk recognition	How well do you know ab es? How scary do you think au are?
preference	How much do you like the buses?
ride	How do you want to ride?
impression	How do you feel this bus is about the following items? cute/ tic/strong/weak/scar re/da
region	How suitable your think in your city?
AVs attitude	When you meet the autonomous buses, how much do you feel about the following? happy /unfortunate /It can't be
AVs cooperative behavior	How do you "watch over" auto s? How do you "avoid street parking" on routes where autonomous buses run? How do you "give way" to an autonomous buses? How do you "overtake" an autonomous buses?
traffic jam	How mu about the following items, if the autonomous bus run at 20km/h and a traffic jam occurs? angry /get annoyed /disagreeable ※explain with picture
stuck	How much do you feel about the following items, if the autonomous get stuck at an intersection? angry /get annoyed /disagreeable ※explain with picture

like
…difference each person

happy

unfortunate

It can't be help

Watch over

avoid street parking

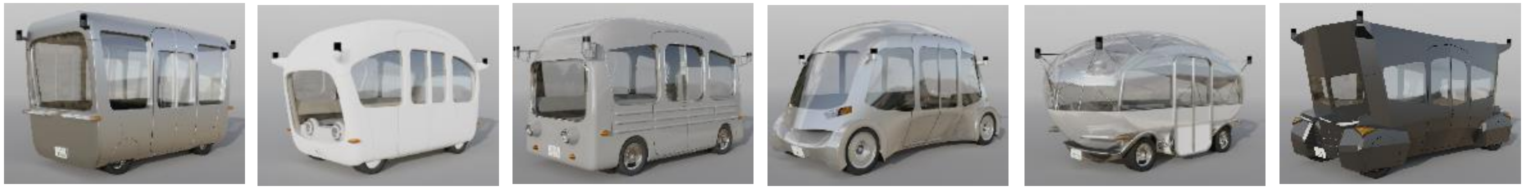
give away

overtake

ask each of the 6 buses

AVs attitude and AVs cooperative behavior by 6 buses

One-way analysis of variance of attitude and cooperative behavior by exterior for 6 Autonomous buses



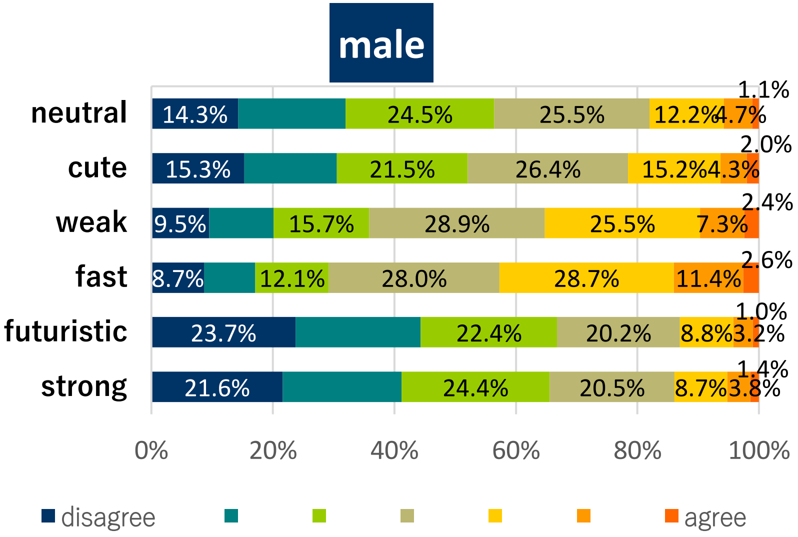
buses Attitude Cooperative behavior	neutral		cute		weak		fast		futuristic		strong	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
happy	3.55	1.56	4.04	1.66	3.87	1.57	4.02	1.58	3.54	1.72	3.32	1.65
unfortunate	2.95	1.43	2.81	1.43	2.86	1.44	2.82	1.39	3.59	1.69	3.21	1.60
It can't be help	4.65	1.41	4.78	1.44	4.61	1.43	4.57	1.40	4.59	1.49	4.47	1.50
watch over	4.45	1.40	4.62	1.45	4.52	1.40	4.52	1.39	4.32	1.48	4.21	1.49
avoid street parking	4.61	1.45	4.67	1.48	4.62	1.48	4.65	1.44	4.55	1.53	4.53	1.49
give way	4.43	1.48	4.58	1.48	4.51	1.46	4.47	1.47	4.40	1.52	4.33	1.53
overtake	3.63	1.66	3.56	1.70	3.54	1.65	3.53	1.65	3.06	1.56	3.63	1.67

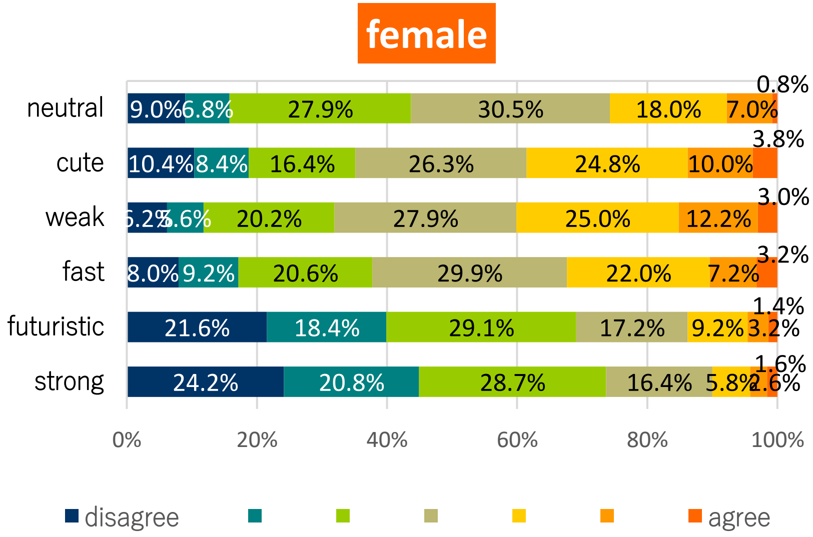
most positive and negative in 6 buses

Autonomous buses preference by gender

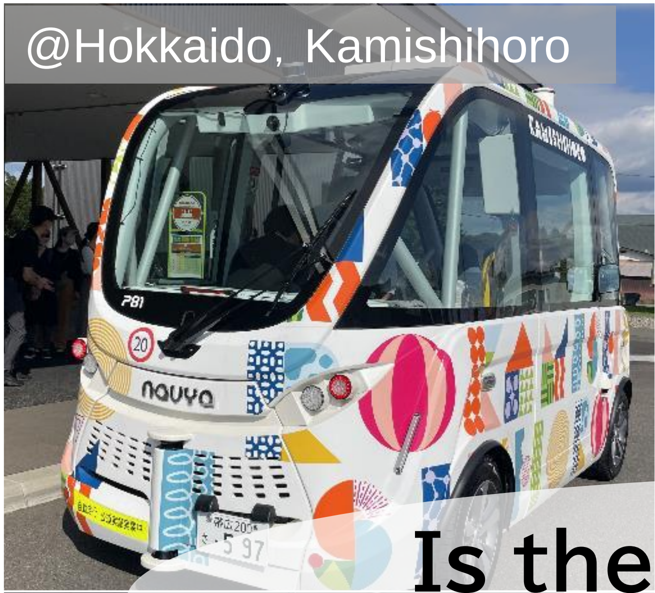
t-test of preference by gender for 6 Autonomous buses

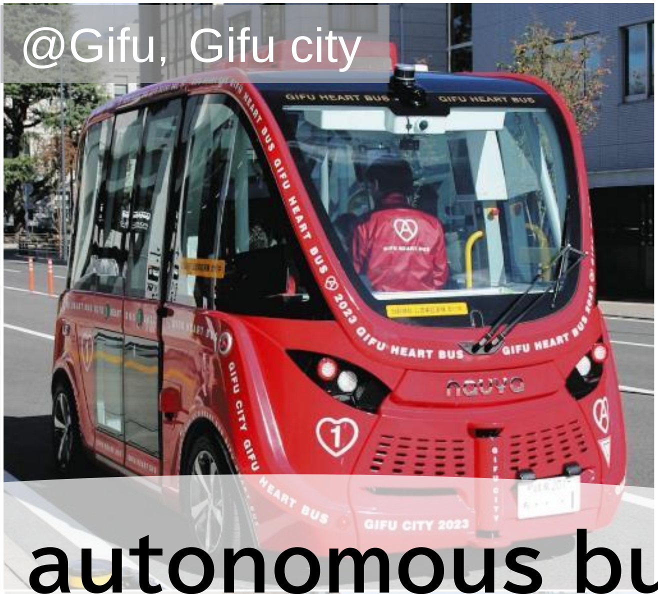
Autonomous buses	male N=999		female N=501		t	significance probability
	M	SD	M	SD		
neural	3.22	1.430	3.66	1.333	-5.701	<.001**
cute	3.32	1.499	3.92	1.555	-7.207	<.001**
weak	3.82	1.473	4.08	1.409	-3.334	<.001**
fast	4.04	1.490	3.83	1.436	2.640	<.001**
futuristic	2.83	1.460	2.89	1.445	-0.733	0.464
strong	2.92	1.475	2.73	1.410	2.404	0.016*

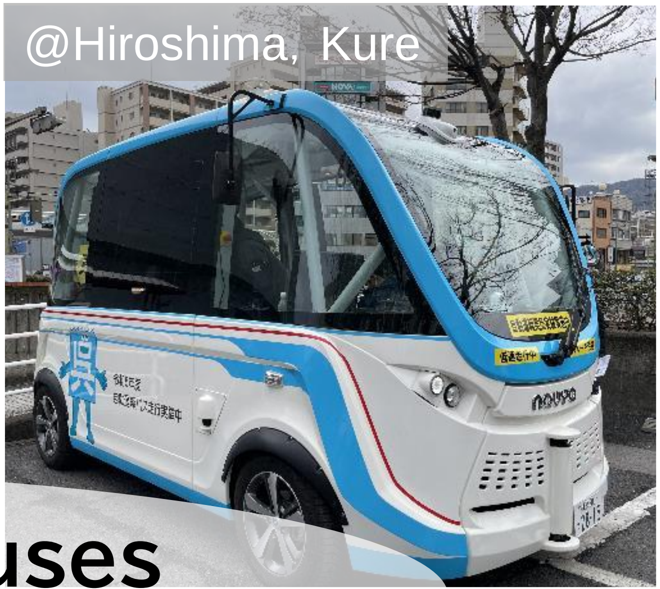




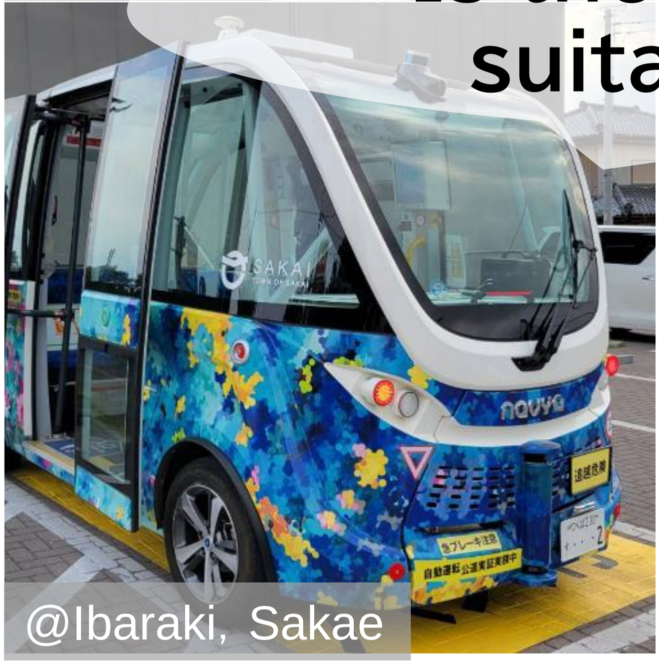
Future plan:
Evaluating the color and wrapping.

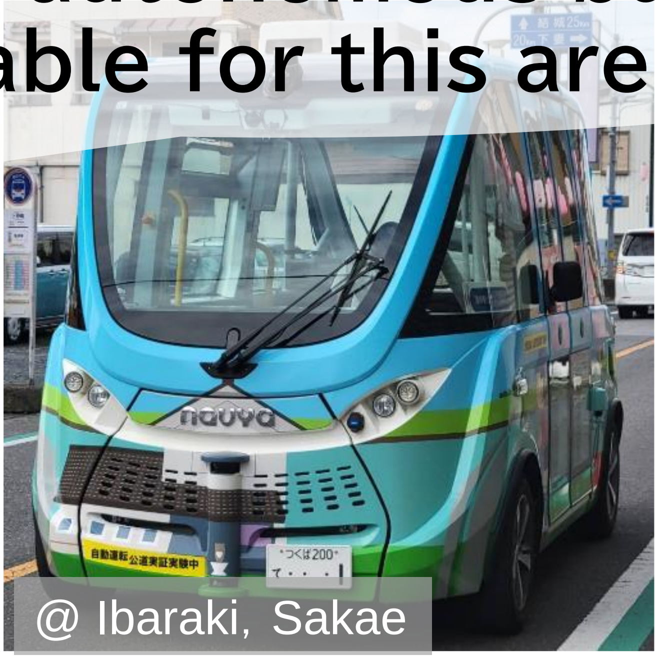

@Hokkaido, Kamishihoro

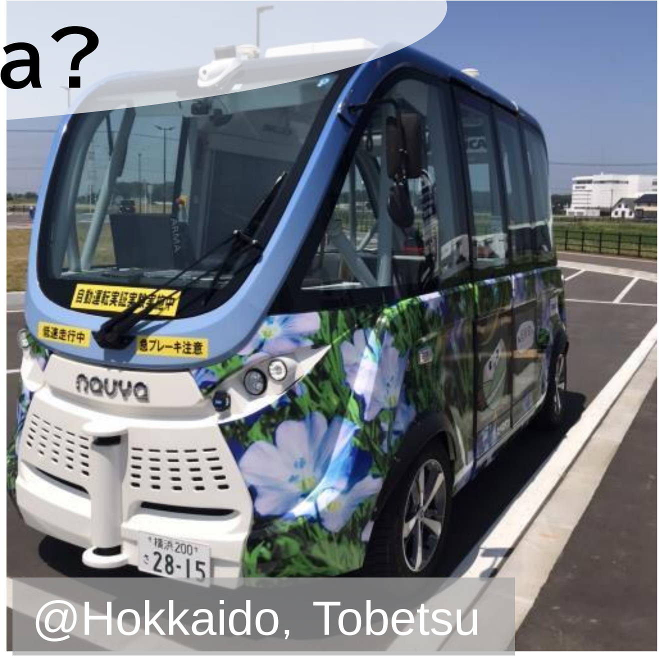

@Gifu, Gifu city


@Hiroshima, Kure

Is the autonomous buses suitable for this area?


@Ibaraki, Sakae


@ Ibaraki, Sakae


@Hokkaido, Tobetsu

2. R&D Results

⑮-2 Regional Mobility Community Building

Status of ▧ R5 study

◆Fiscal year 2023

Trial of organizing/managing a local mobility community

Shobara City, Hiroshima Prefecture:
- A community aim to utilize mobility with public and private sector members.
- Holding meeting monthly

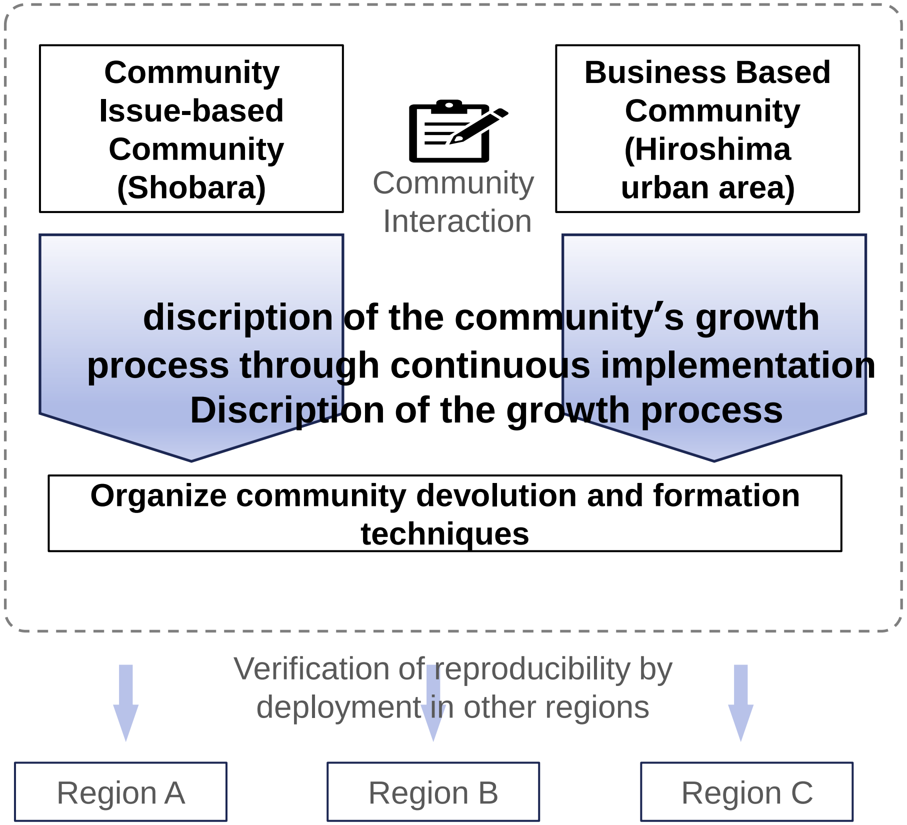
Local members
- Bus service company
- Local governments staffs
- Tourism DMOs
- Chamber of Commerce and Industry

Outside members
- Bus service company
- Regional/National government staffs
- Consulting Engineers

Hiroshima urban area:
- Business development community related to mobility.
- mainly in the private sector.

Members
- Bus/Railway/taxi/airline service company
- Trasit terminal operator (bus terminals/ and airports)
- Sharemobility service provider …etc.
- Conducted once every 2-3 months

◆Fiscal year 2024 and thereafter



Community Issue-based Community (Shobara)

Community Interaction

Business Based Community (Hiroshima urban area)

discription of the community's growth process through continuous implementation Discription of the growth process

Organize community devolution and formation techniques

Verification of reproducibility by deployment in other regions

Region A

Region B

Region C

2. R&D Results

⑱Practical research and dissemination activities to categorize and identify regions by utilizing regional mobility resources

Status of ▧ R5 study

◆Fiscal year 2023

Gathering of regional case studies of mobility utilization

Autonomous Car
Eiheiji Town, Shiojiri City, Maebashi City, Tobetsu Town, Gifu City, Sanda City, etc.

Green Slow Mobility, etc.
Oirase area, Sado City, Shobara City, Asahi Town, Toyama Prefecture, etc.

Representative Case Studies

- **▶Local companies are taking the initiative → Tobetsu Town**
- **▶Local organizations are taking the initiative → Shobara City**
- **▶Outside companies are involved in the project → Asahi Town**
- **▶Utilizing budgets other than transportation →Oirase area**

▼

Draft guidelines review

- **▶Background, issues**
- **▶Points for utilizing regional mobility**
  Points for each type of area
  Getting Started Guide
- **▶Stories of utilization**
  Background and stories of activities in major regions

◆Fiscal year 2024 and thereafter

Regional Interviews Questionnaire survey

Adjust with other cons. on guideline compilation policy

▼

Guideline review and compilation

▼

Action Research/Practice Support

▼

Dissemination and Development Activities

2. R&D Results

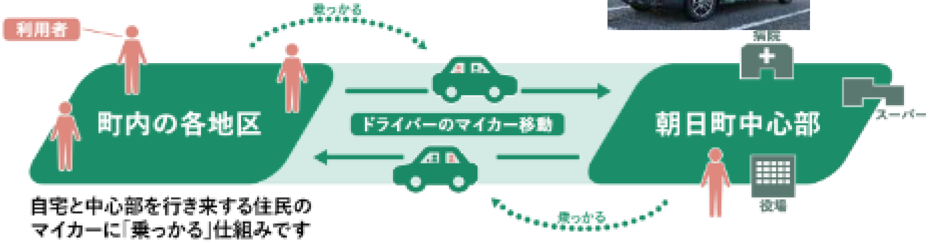
⑱Practical research and dissemination activities to categorize and identify regions by utilizing regional mobility resources

▧ Organizing representative cases

A case of a local company taking the initiative: Tobetsu Town, Hokkaido

ROYCE'

A case of an outside company coming in and working on the project: Asahi Town, Toyama Prefecture


利用者
乗っかる
町内の各地区
ドライバーのマイカー移動
朝日町中心部
病院
スーパー
役場
乗っかる
自宅と中心部を行き来する住民の
マイカーに「乗っかる」仕組みです

•HAKUHODO• ノッカル

Cases in which local organizations take the initiative: Shobara City, Hiroshima Prefecture

庄原 MaaS

庄原の観光・交通のご案内はお電話・LINEで!
090-8914-9768
庄原MaaS

Case of linking to budgets other than regional transportation: Oirase area, Aomori Prefecture

社会実験
グリスロで楽しむ
奥入瀬渓流
冬のネイチャーツアー
GREEN SLOW MOBILITY

2. R&D Results

⑱Practical research and dissemination activities to categorize and identify regions by utilizing regional mobility resources

▧ Draft guideline review: image of the structure

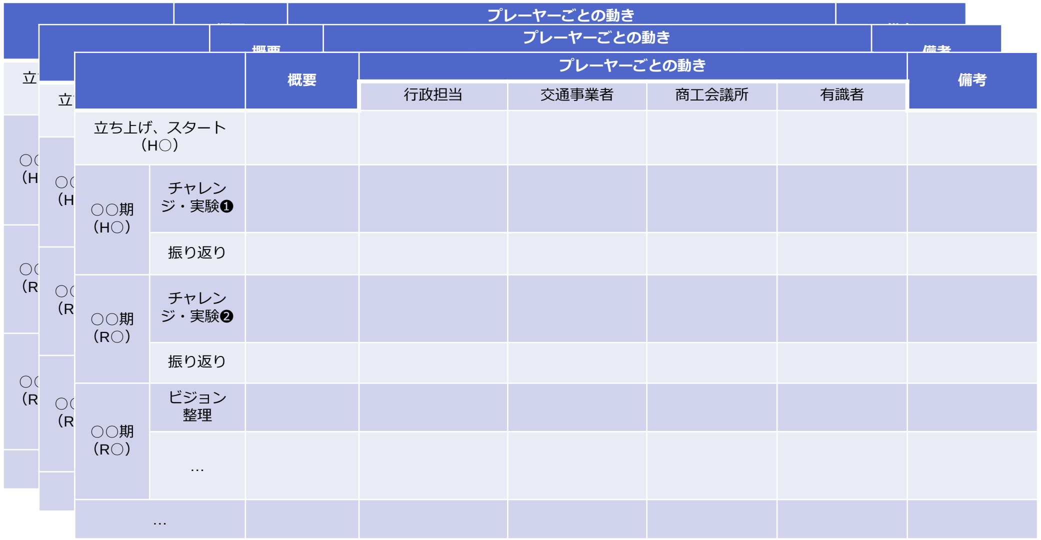
			summary	remarks
Objective	Local Community Issues and What we need from now on		-Declining population, labor shortages, and deficit coverage... -How do we build a supportive community?	
Point of View	Key points for community building in regional transportation management	Points for each regional pattern	-Rough Classification -Key points to consider when starting or proceeding for each of the main types	-Analyze and organize from the following examples and others -Consider organizing by diagnostic charts, etc.
		Key points for continuation and expansion	-Model for continuous development of initiatives -Key points in the main phases	-Analyze and organize from the following examples and others
Core content	Main case stories		-Narrative Stories ⇒Oirase Story ⇒Story by category ⇒Shobara Story ⇒Asahi Town Story ⇒Other short episodes	-The system is organized to allow reverse lookups to the above points, etc. -Consideration of a form on the website in which the episode can be seen by clicking on the overall flow.
Supplement	Maturity, moving toward a new phase		-We will summarize how such efforts will lead to the next stage of town and nation development, including examples from overseas.	

2. R&D Results

⑱Practical research and dissemination activities to categorize and identify regions by utilizing regional mobility resources

▧ Image of future analysis and study

Case study interviews, questionnaires, etc.
Organize materials, interview key persons, and organize stories.



		概要	プレーヤーごとの動き				備考
			行政担当	交通事業者	商工会議所	有識者	
立ち上げ、スタート（H○）							
○○期（H○）	チャレンジ・実験❶						
	振り返り						
○○期（R○）	チャレンジ・実験❷						
	振り返り						
○○期（R○）	ビジョン整理						
	…						
…							

turning a story into a narrative

CLASSIC TALES FROM GREEK AND ROMAN MYTHOLOGY

Organize and analyze

Guideline (1.0) compilation
Analysis and organization of knowledge across episodes
Diagnostic charts, organization of key points by region and phase
Information disclosure on website

Action Research and Practice Support

2. R&D Results

⑮-1 Establishment of Mobility Knowledge Center and holding conferences

▧ Status of R5 study

◆Fiscal year 2023

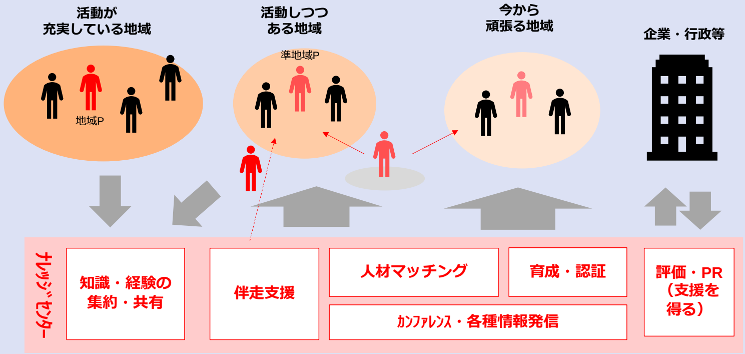
Investigation of organizational and community cases

Activities based on homepage etc.
Activities centered on human resource development.
Activities to support and develop the organization.

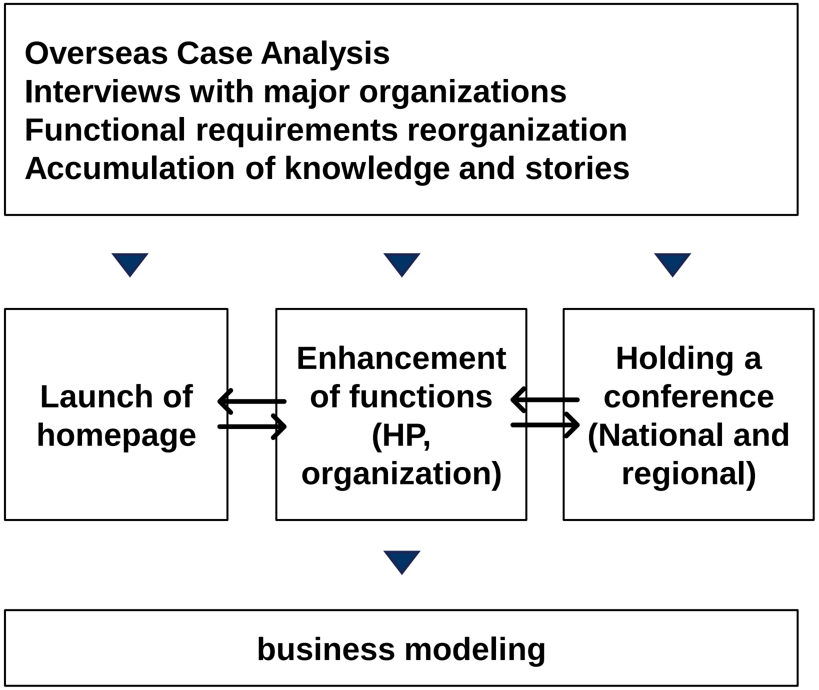
▼

Hypothesis of knowledge center functional requirements

Knowledge function ▶ Consolidation of knowledge and stories
Support functions for activities ▶ Support for local community activities, human resource development for activities, matching of human resources
Functions to disseminate information and promote collaboration ▶ Conference implementation, website
Mechanism for continuing activities ▶ Acquire self-propelled funds through impact visualization and PR



◆Fiscal year 2024 and thereafter



Overseas Case Analysis
Interviews with major organizations
Functional requirements reorganization
Accumulation of knowledge and stories

▼ ▼ ▼

Launch of homepage ⇄ **Enhancement of functions (HP, organization)** ⇄ **Holding a conference (National and regional)**

▼

business modeling

2. R&D Results

⑮-1 Mobility Knowledge Center Established and Conferences

▧ Survey of existing services as a reference for the Mobility Knowledge Center

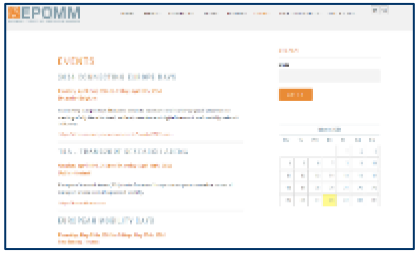
Web Content

Chiiki kokyokotsu no torisetsu
https://kotsutorisetsu.com/

Kumano Town “Kumano Mirai LABO,”
https://kumano-town.note.jp/

LIGARE
https://ligare.news/

Seminar/Conference Information



EPOMM ”Events”
https://epomm.eu/events

E-mail news

JCOMM ”Newsletter”
https://www.jcomm.or.jp/

Expert referral and matching

*Chubu District Transport Bureau”*Chiiki kotsu Manager”
https://wwwtb.mlit.go.jp/chubu/tsukuro/manager/index.html

Ministry of Internal Affairs and Communications “Chiikijoho Adviser Seido”
https://www.soumu.go.jp/menu seisaku/ictseisaku/ictriyou/manager.html

Ministry of the Environment “Kankyo Counselor”
https://edu.env.go.jp/counsel/

Human Resource Development Program

Saiseijyuku(Non-Profit Organization)
https://www.saiseijuku.net/

⑮-1 Mobility Knowledge Center Established and Conferences

▧ Mobility Knowledge Center Web Site Functional Proposal

Mobility KNOWLEDGE CENTER

function
1. Content distribution in blog format (Narrated episodes, introductions of people and organizations, videos, short cartoons, book introductions, etc.)
2. Introduction of seminar/conference information (Information on events organized by the consortiums in the SIP and seminars in Japan)
3. e-mail news (For HP updates and seminar/conference information)
4. Introduction of global mobility news (Consider distribution via website or e-mail)
5. Consultation service for local mobility issues (Expert referrals and personnel matching using the inquiry form)

Other contents under consideration: e-Learning, publication of regional mobility guidelines and policy tips, etc.

The contents to be posted on the website are expected to be across each consortium in the SIP.

2. R&D Results

⑮-1 Mobility Knowledge Center Established and Conferences

▧ Mobility Knowledge Center Draft Website

Local Mobility Wisdom

Let's know, let's find out! Let's have fun!

- World Mobility news
- Local Mobility Diagnostic Guidelines
- Recommended Books and WEB site introduction
- Local Mobility Tools
- …
- …

Before you try it … Cool down. Let's feel it.

- Barriers to the Mobility Sector
- Mobility Policy Tips
- A Story of Local Mobility
- Business and Essays
- Call for Episodes Share your experiences with us!

Let's try it. Regional Mobility Guideline

- Business Model Guidelines
- Automated Bus Guideline
- For Metropolitan Periphery
- For Locall Areas
- Community Formation
- Consultation service

Let 's learn, let's grow Let 's apply for your future!

- News: Seminars & Events
- Seminars and educational programs related to mobility
- Mobility Management e-learning
- Local Mobility Security Officer Training Program
- Information on subsidies from government agencies, etc.

2. R&D Results

⑲Human resource development for social implementation of services

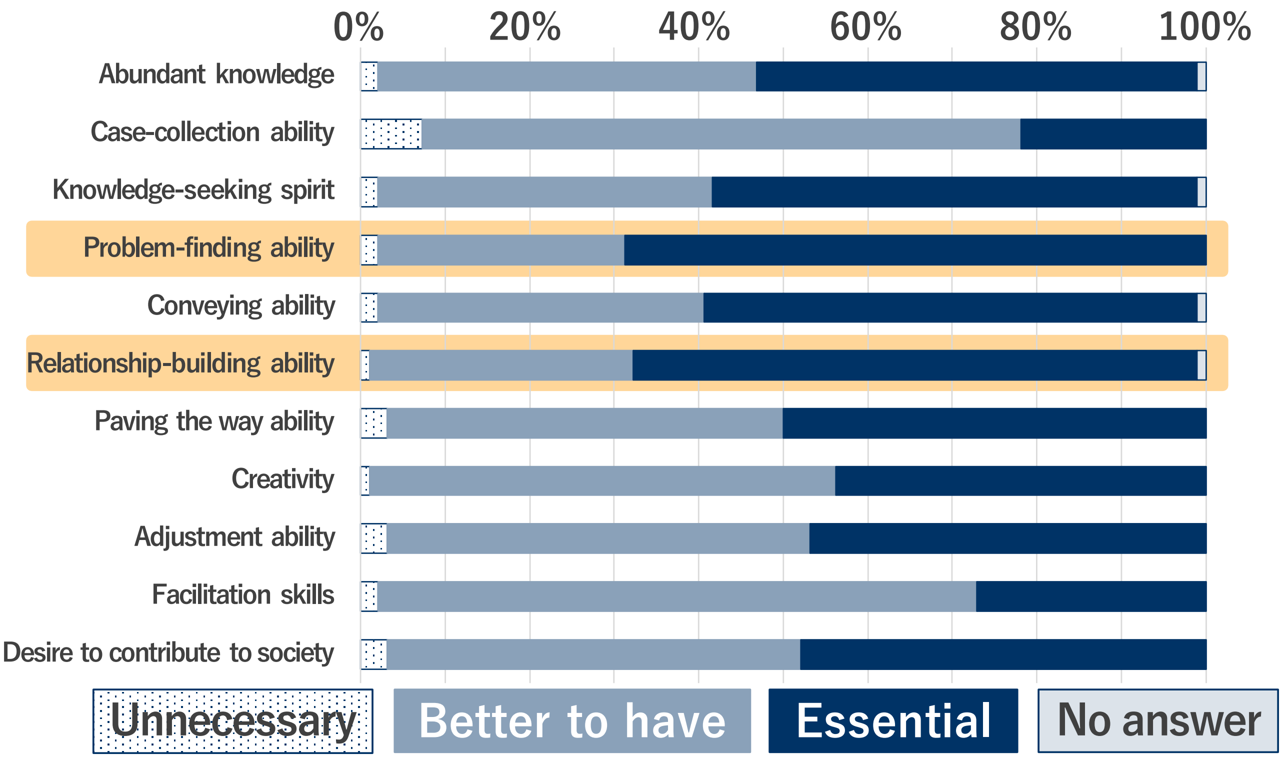
▧ Human Resource Development Research

What kind of personnel Is it required?

How does the ideal person shaped career?

How does Human Resources and Training program are working?

Which Training program is good?



* n=96 after removing respondents who answered 0 years of involvement in transportation-related fields

2. R&D Results

⑲Human resource development for social implementation of services

▧ Human Resource Development Research

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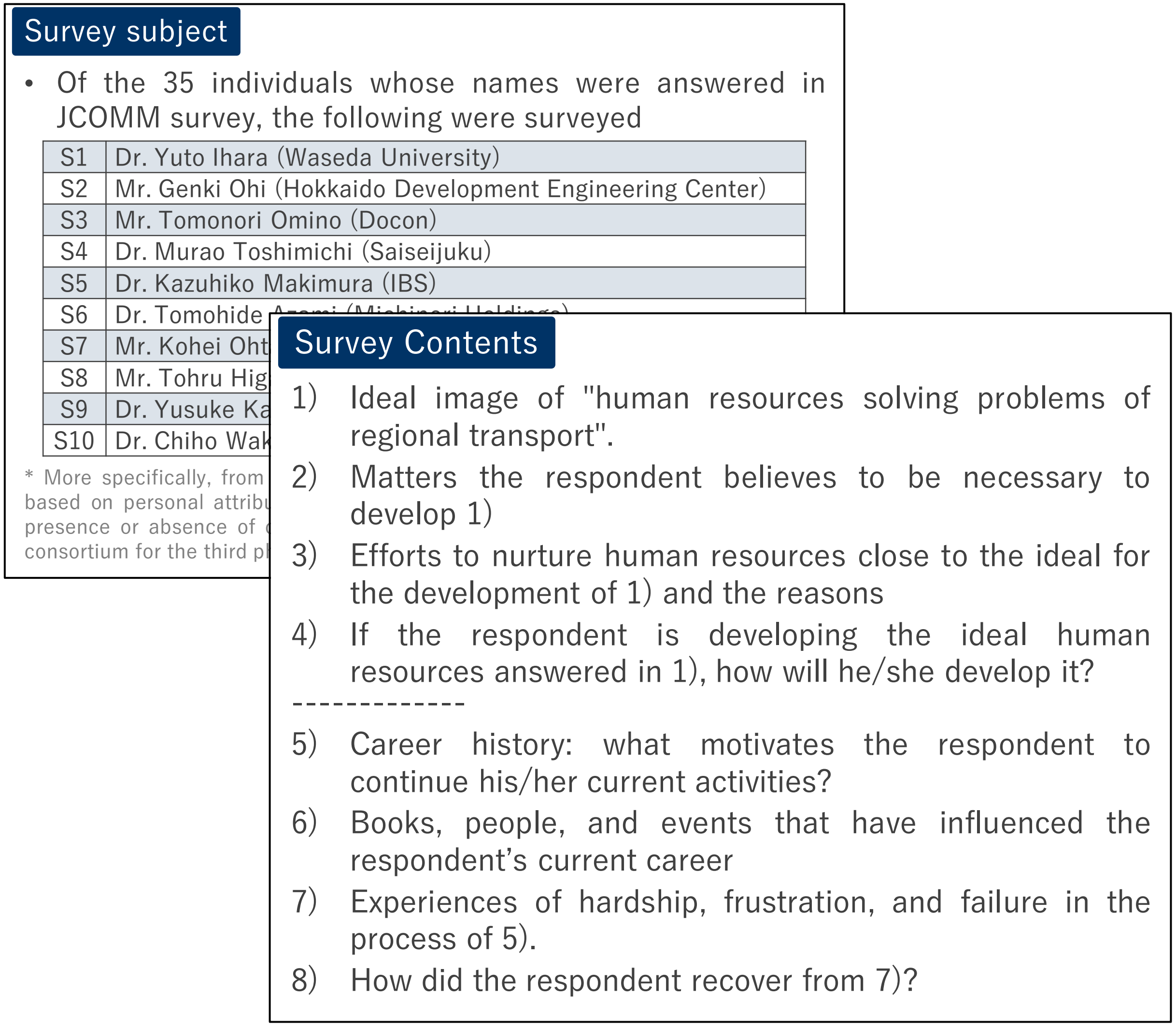


Survey subject

- Of the 35 individuals whose names were answered in JCOMM survey, the following were surveyed

S1	Dr. Yuto Ihara (Waseda University)
S2	Mr. Genki Ohi (Hokkaido Development Engineering Center)
S3	Mr. Tomonori Omino (Docon)
S4	Dr. Murao Toshimichi (Saiseijuku)
S5	Dr. Kazuhiko Makimura (IBS)
S6	Dr. Tomohide
S7	Mr. Kohei Oht
S8	Mr. Tohru Hig
S9	Dr. Yusuke Ka
S10	Dr. Chiho Wak

* More specifically, from
based on personal attribu
presence or absence of
consortium for the third pl

Survey Contents

1) Ideal image of "human resources solving problems of regional transport".
2) Matters the respondent believes to be necessary to develop 1)
3) Efforts to nurture human resources close to the ideal for the development of 1) and the reasons
4) If the respondent is developing the ideal human resources answered in 1), how will he/she develop it?

----

5) Career history: what motivates the respondent to continue his/her current activities?
6) Books, people, and events that have influenced the respondent's current career
7) Experiences of hardship, frustration, and failure in the process of 5).
8) How did the respondent recover from 7)?

Preliminary Report on Efforts to Develop Human Resources 2

What does he think, who will be responsible for solving regional public transportation issues.

Interviews will be conducted with 17 respondents.
Already administered to 6 individuals as of January 2024

Interview **Narrativization**
Are stored and shared at
Mobility Knowledge Center

Interviews

1) Ideal image of "human resources solving problems of regional transport".
2) Matters the respondent believes to be necessary to develop 1)
3) Efforts to nurture human resources close to the ideal for the development of 1) and the reasons
4) If the respondent is developing the ideal human resources answered in 1), how will he/she develop it?
5)Career history: what motivates the respondent to continue his/her current activities?
6)Books, people, and events that have influenced the respondent’s current career
7)Experiences of hardship, frustration, and failure in the process of 5).
8)How did the respondent recover from 7)?

Career profile of the candidate who will be responsible for solving regional public transportation issues.

5) What motivates you to continue your activities, career history

I think the driving force that ‘s driving me right now is that **you’re all telling me to do it, and that’s why I’m doing it.**

Mr. A

When I think about what I can do to make the world a better place, I **feel that it is a great blessing to hear people say, ”I want you to do this,” ”I want you to do this,” or ”I want you to think about this kind of initiative.**

When I was young, I didn’t think about such things at all.
I guess it wasn’t until I was over **40** that I started thinking about it, and **when I thought about what I could do in the next 20 years, I thought, ”Probably nothing.** But then, in the last five years, I guess I started to think, ”I really have to do something”

Career profile of the candidate who will be responsible for solving regional public transportation issues.

7) Stories of difficulties, frustrating experiences, or experiences that did not go well

I learned a lot at **city hall. Whenever I tried to do something, all kinds of people would get angry. Councils, city halls, cab companies, and so on.**

Mr. C

I builded a bus route that didn ‘t seem to be used by many people, but the mayor wanted to do.
The cab companies were angry at me. The council was angry at me, saying, ”Why are you doing this without any prior explanation?” The mayor was angry at me,too.
I was reprimanded with all three of them.

At that time, I had no understanding of the logic within City Hall, so I had to work very hard to builded a bus route. So I **learned a lot about the ins and outs of doing things at city hall.**

2. R&D Results

⑲Human resource development for social implementation of services

▧ Human Resource Development Research

What kind of personnel
Is it required?

How does the ideal person shaped career?

How does Human Resources and Training program are working?

Which Training program is good?

After examination

1 2 3 4 5

No.	Ability / Effort Name [Organizer's Name]	Abundant knowledge	Case-collection ability	Knowledge-seeking spirit	Problem-finding ability	Conveying ability	Relationship-building ability	Paving the way ability	Creativity	Adjustment ability	Facilitation skills	Desire to contribute to society
1	MM (Mobility Management) Technical Seminar [IBS]	4	5	4	4	4	4	4	5	4	3	5
2	JCOMM [JCOMM]	5	5	4	4	5	4	4	4	4	3	5
3	Saiseijuku, Basic Seminar [Saiseijuku]	5	4	5	3	4	4	4	4	4	4	3
4	Saiseijuku, Councilors' Seminar (Regional Public Transportation Policy Seminar) [Saiseijuku]	5	5	5	3	4	4	4	4	4	4	3
5	Saiseijuku, Councilors' Seminar (Regional Public Transportation Policy Seminar (Local Railways)) [Saiseijuku]	5	5	5	3	4	4	4	4	4	4	3
6	Saiseijuku, Technical Seminar [Saiseijuku]	5	5	5	1	5	4	4	4	4	4	3
7	Saiseijuku, Advanced Course [Saiseijuku]	5	4	5	5	5	5	5	5	5	5	4
8	Saiseijuku, Evening Seminar [Saiseijuku]	5	5	5	1	1	1	1	1	1	1	1
9	Regional Public Transportation School [VITAL LEAD]	4	4	2	4	2	2	3	3	2	1	2
10	MaaS Room [JCoMaaS]	4	4	4	3	2	3	3	4	3	2	3
11	JCoMaaS Research Meeting	4	4	4	4	3	3	3	4	3	3	4
12	Essential Seminar [Japan Transportation Planning Association]	5	5	5	4	2	3	4	4	2	1	5
13	"Urban and Transportation" Practical Seminar (formerly "New Era Seminar") [Japan Transportation Planning Association]	5	5	4	3	1	3	4	5	1	1	2
14	Lecture meeting of the study group on streetcar [Japan Transportation Planning Association].	5	5	5	4	3	3	5	5	2	2	4
15	Training seminar for promoters of regional transportation environment measures [Eco-Mo Foundation]	4	5	4	5	4	5	5	5	3	3	4
16	Seminar on revitalization of regional bus transport [Eco-Mo Foundation]	2	5	4	4	2	4	4	4	4	2	4
17	Kotsu machizukuri [JCTC]	5	5	5	5	5	5	5	5	4	4	4
18	Transport Policy Seminar [JTTRI]	5	5	5	4	3	3	4	4	3	2	4
19	Q-support network study meeting [Network supporting local communities and transportation in kyushu]	5	5	5	5	4	5	5	4	5	5	5
20	Training for Human Resource Development of Regional Public Transport [Hokkaido District Transport Bureau]	5	2	4	1	4	4	5	2	2	2	4
21	Planning seminar [Hokuriku-Shin'etsu District Transport Bureau]	4	2	5	2	3	3	5	5	3	3	5
22	Seminar for acquiring basic knowledge [Hokuriku-Shin'etsu District Transport Bureau]	5	5	5	2	3	3	5	5	3	3	5
23	Regional public transportation seminar [Chubu District Transport Bureau]	4	3	5	3	3	3	5	5	3	3	4
24	Practical seminar on transportation [Chugoku District Transport Bureau]	uncollected										
25	Regional Public Transportation Seminar in Shikoku [Shikoku District Transport Bureau]	5	4	4	3	4	4	4	5	3	3	4
26	Seminar on Revitalization of Regional Public Transport [Kyushu District Transport Bureau]	5	4	4	4	3	4	4	4	3	3	4
27	Specialized Course: Street and Urban Transportation Facilities [Street Design and Kotsu machizukuri] [College of Land, Infrastructure, Transport and Tourism]	5	5	5	5	5	5	5	5	5	5	5
28	Specialized Course: Integrated Transportation System [Regional Mobility Strategies] [College of Land, Infrastructure, Transport and Tourism]	5	5	5	5	5	5	5	5	5	5	5
29	Specialized Course: Road Planning [Functions and Utilization] [College of Land, Infrastructure, Transport and Tourism]	uncollected										
30	Regional Public Transportation (I-III) [College of Land, Infrastructure, Transport and Tourism]	uncollected										
31	Public Transportation Study Meeting [Hyogo Prefecture]	4	4	3	4	1	1	3	3	3	1	4

2. R&D Results

⑲Human resource development for social implementation of services

▧ Human Resource Development Research

What kind of personnel Is it required?

How does the ideal person shaped career?

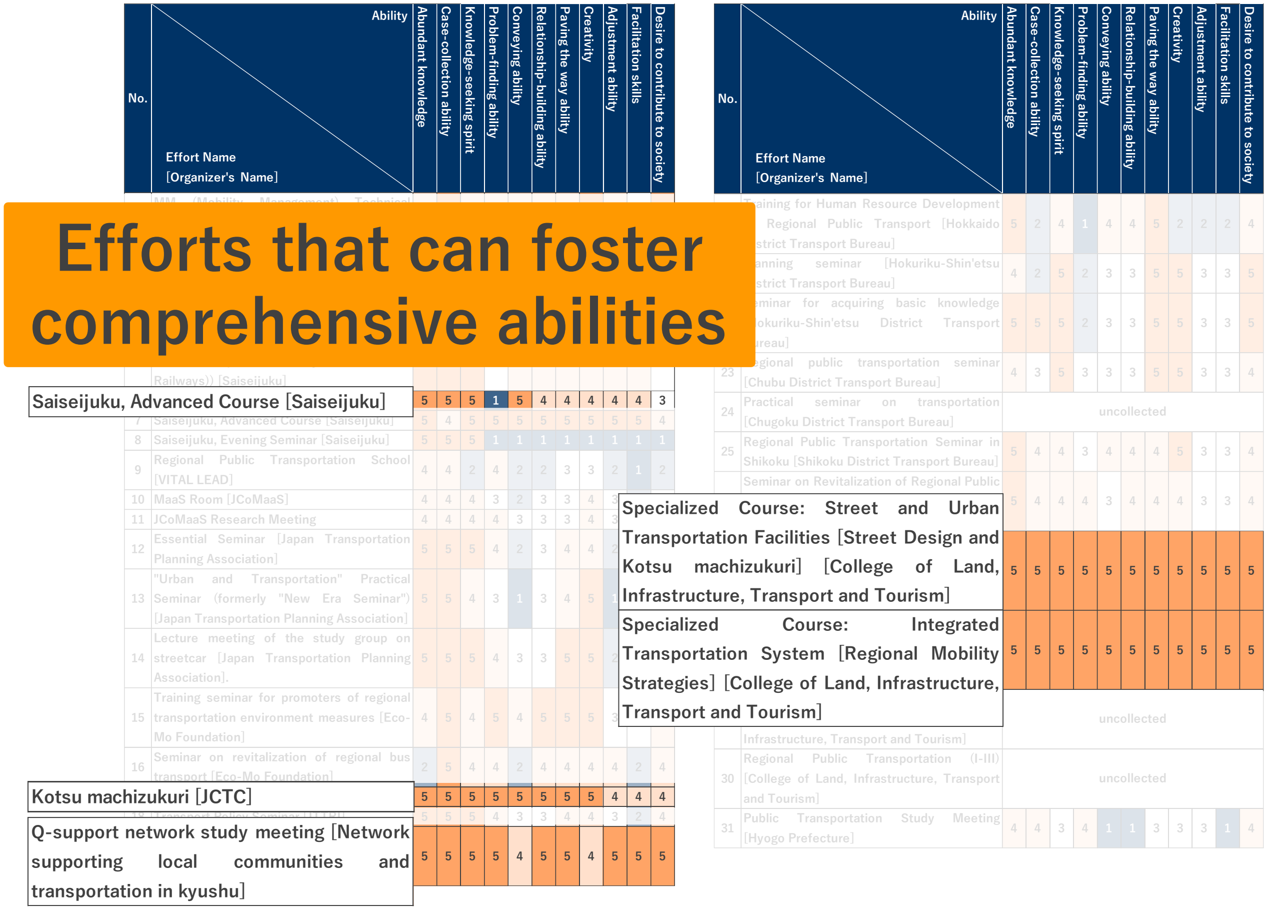
How does Human Resources and Training program are working?

Which Training program is good?

After examination

1 2 3 4 5

Efforts that can foster comprehensive abilities



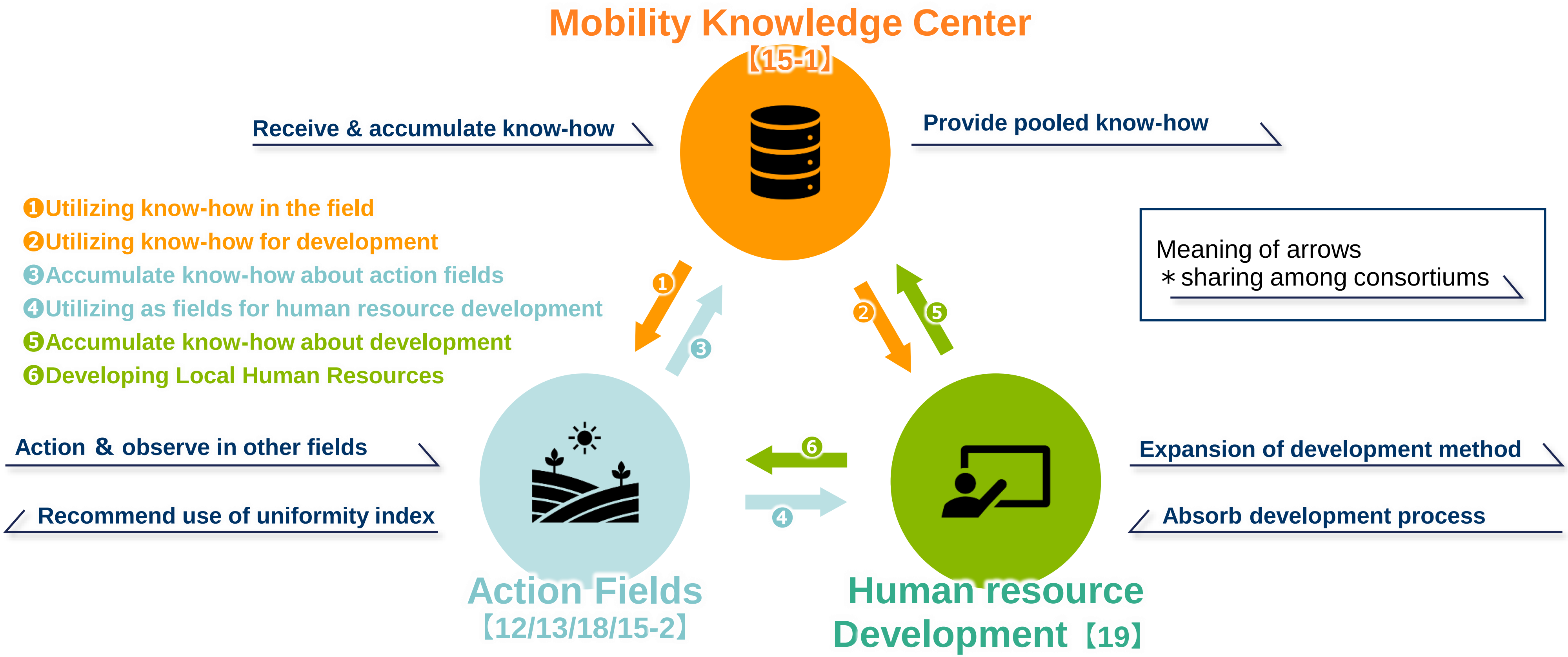
Effort Name [Organizer's Name]	Abundant knowledge	Case-collection ability	Knowledge-seeking spirit	Problem-finding ability	Conveying ability	Relationship-building ability	Paving the way ability	Creativity	Adjustment ability	Facilitation skills	Desire to contribute to society
Saiseijuku, Advanced Course [Saiseijuku]	5	5	5	1	5	4	4	4	4	4	3
Kotsu machizukuri [JCTC]	5	5	5	5	5	5	5	5	4	4	4
Q-support network study meeting [Network supporting local communities and transportation in kyushu]	5	5	5	5	4	5	5	4	5	5	5
Specialized Course: Street and Urban Transportation Facilities [Street Design and Kotsu machizukuri] [College of Land, Infrastructure, Transport and Tourism]	5	5	5	5	5	5	5	5	5	5	5
Specialized Course: Integrated Transportation System [Regional Mobility Strategies] [College of Land, Infrastructure, Transport and Tourism]	5	5	5	5	5	5	5	5	5	5	5

3. Future Direction

Issue 01 **Lack of action fields**
as material for typification and indicator construction

Issue 02 **Lack of target persons**
of human resource development as a mobility producer.

We need to collaborate with other consortiums, especially in sharing know-how, utilizing uniformity indexes, and sharing scenes of human resource development. The following figure shows an image



Mobility Knowledge Center
【15-1】

Receive & accumulate know-how

Provide pooled know-how

❶Utilizing know-how in the field
❷Utilizing know-how for development
❸Accumulate know-how about action fields
❹Utilizing as fields for human resource development
❺Accumulate know-how about development
❻Developing Local Human Resources

Meaning of arrows
＊sharing among consortiums

Action ＆ observe in other fields

Recommend use of uniformity index

Expansion of development method

Absorb development process

Action Fields
【12/13/18/15-2】

Human resource Development【19】

This paper includes the results of Cross-ministerial Strategic Innovation Promotion Program (SIP) 3rd Phase, “Development of Smart Mobility Platform” promoted by Council for Science, Technology and Innovation, Cabinet Office. (Project Management Agency : New Energy and Industrial Technology Development Organization (NEDO) (Project Code JPNP23023))