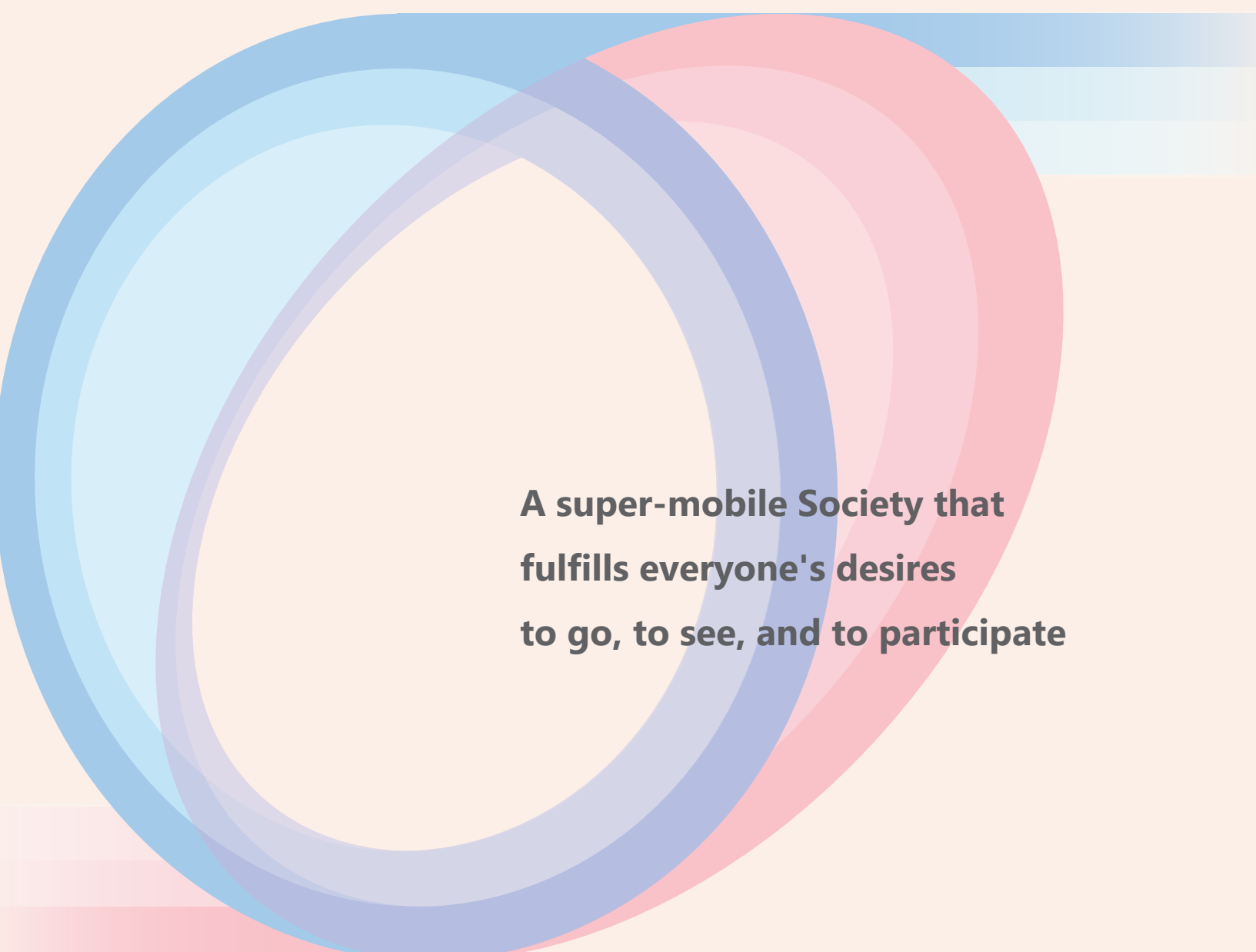




Nagoya University COI-NEXT
My-mobility Co-creation Center



**A super-mobile Society that
fulfills everyone's desires
to go, to see, and to participate**



Japan Science and Technology Agency

The Program on Open Innovation Platforms for Industry-academia Co-creation (COI-NEXT)

Vision

A super-mobile Society that fulfills everyone's desires to go, to see, and to participate

This center aims to realize a super-mobile society where even those who do not use their own cars have equitable access to opportunities for social participation. Most regions of Japan, including the Tokai region, have car-dependent transportation systems. As the social costs associated with excessive car use rise, people who do not use private cars—whether because they cannot drive or simply choose not to—face difficulties in their daily mobility and are deprived of opportunities to be active. In such areas, we aim to create a “super-mobile society” that fulfills everyone’s desires to go where they want, meet the people they want to see, and participate in what they want to do; a society where even those who do not own a car have equitable opportunities for social participation and experience minimal stress when traveling.



Targets

Development of local mobility technologies that enable stress-free travel without the need for a private car

Establishing social systems capable of introducing and sustaining local mobility systems that pave the way for the future

Creating towns and communities where people can lead lives full of well-being



Greetings

Regional public transportation is in decline, making it increasingly difficult to get around our communities without a private car. The My-mobility Co-creation Center will pioneer a completely new type of local mobility through new technologies such as autonomous driving and revolutionary new business models.

Designated Professor **Takayuki Morikawa**
Project Leader (PL)
GREMO,
Institutes of Innovation for Future Society,
Nagoya University,
Tokai National Higher Education and Research System



My-mobility Co-creation Field

The co-creation field is being developed in the Tokai region to realize our vision, with the goal of eventually promoting and expanding these projects throughout the rest of Japan.

Gifu City, Gifu Prefecture

Gifu "Yuran (Exploring) City" Revitalization Project

Regional innovation to revitalize the "Yuran (Exploring) City" concept with automated buses to enhance urban mobility.

Nagoya City and Kozoji New Town, Kasugai City, also in Aichi Prefecture

Nagoya North-East Corridor Project

Regional innovation combining autonomous driving, on-demand transit, MaaS, and other initiatives in the corridor connecting Nagoya Station and Kasugai City's Kozoji New Town.

CBD of Gifu City Kawaramachi District

Gifu Station

JR Tokaido Line

Metetsu Main Line

Eki-Shiro District

Ozone Station

CBD of Nagoya

Nagoya Station

Kintetsu Nagoya Line

Nanyo District

Aonami Line

Atsuta District minato AQUUS

Jingū-mae Station

Kozoji New Town

Regular bus

Kozoji Station

Shidami District

JR chuo Line

Dual-mode bus

Linear Chuo Shinkansen

Nanyo District of Nagoya City, Aichi Prefecture

Nagoya South-West Corridor Project

Regional innovation through data-driven MaaS programs, including resident-led co-creation of mobility service, urban bike-sharing services, and a variety of coupons for local shopping areas.

Eki-Shiro District of Nagoya City, Aichi Prefecture

Historic Commercial District Revitalization Project

Regional innovation through the introduction of advanced mobility systems, such as autonomous driving, that incorporate technologies to enhance the value of travel in the historical commercial Eki-Shiro District, located between Nagoya Station and Nagoya Castle.

Okino-Erabujima Island, Kagoshima Prefecture

Community co-creation hub project on remote islands

On remote islands, where people live in close proximity and there is great potential for diverse interactions and learning, this regional innovation initiative redefines mobility as social infrastructure that connects people to people, people to their communities, and people to learning. Through high school students' inquiry-based study projects and co-creation with local communities, the aim is to generate new value in the local community.

Research and development to realize the vision

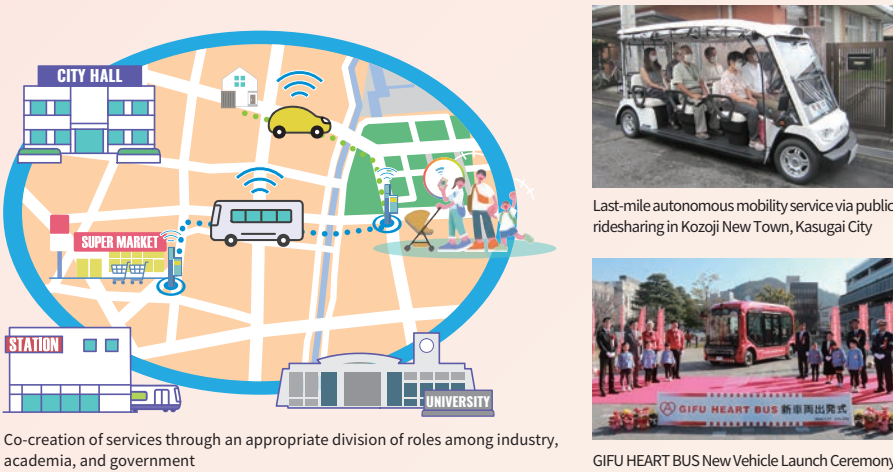
To realize the vision, it is necessary to develop local mobility technologies that enable stress-free travel without the need for private cars, establish social systems that facilitate the implementation and sustainability of local mobility systems, and create towns and communities where people can participate in activities that promote well-being. At this research center, we are engaged in research and development to achieve these goals.

A mobility service created by the entire local community

Development of a local mobility model through co-creation of services

Through repeated demonstration experiments involving industry-academia-government collaboration, we aim to establish a sustainable local mobility model through co-creation of services.

#Co-Creating Value #Open innovation #Urban planning



Making mobility fun with ICT technology

Development of a multi-modal infotainment system to enhance the value of travel time

We aim to develop cyber-physical life content that enhances the value of mobility itself, as well as the platform interfaces that deliver it.

#3D geographic information
#Cyber-physical
#Multi-modal interface
#Lifestyle contents
#AI responses

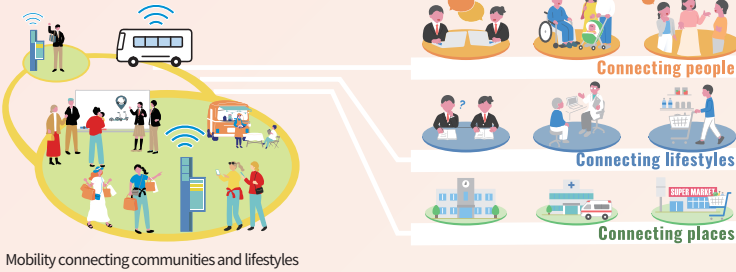


Co-creation of local circular mobility systems

Exploring communities and lifestyles that can adapt to social change

We view mobility as a foundation that supports activity, interaction, and value creation. Through data-driven analysis and co-creation with local communities, we envision a sustainable and inclusive communities and lifestyles centered on mobility hubs; hubs for co-creation of local communities that connect people to people and people to their communities.

#Mobility hub #Local Co-creation #Hyper Mobility Quest
#Period for Inquiry-Based Cross-Disciplinary Study #Urban planning
#Urban formation



Autonomous driving

Development of an autonomous driving local mobility system

We aim to realize autonomous driving mobility to support short-distance travel around one's home and to the nearest train station or bus stop.

#Autonomous driving mobility for individuals
#Tertiary (last-mile) transportation services

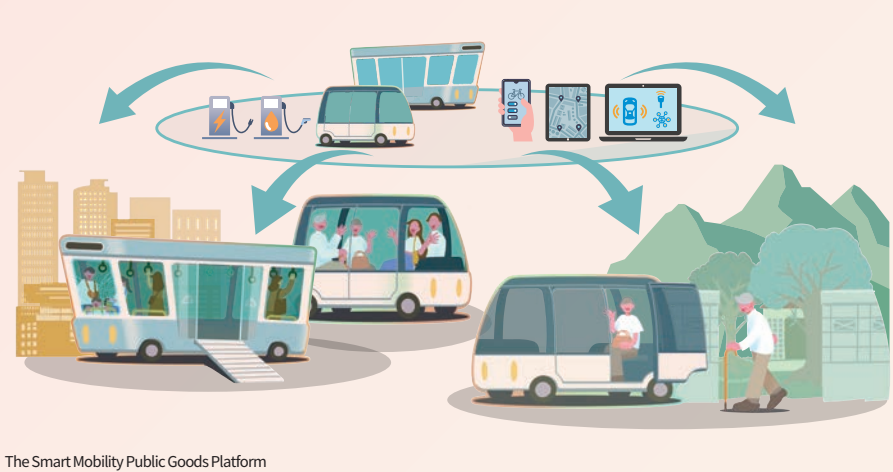


Make local mobilities sustainable

Building a public goods platform for sharing assets in local mobility systems

With the goal of building sustainable local mobility, we aim to establish the "Smart Mobility Public Goods Platform," which will enable the joint procurement of mobility services utilizing autonomous driving technology.

#Real assets #Public Goods #Pre-competitive domain #Proof of concept

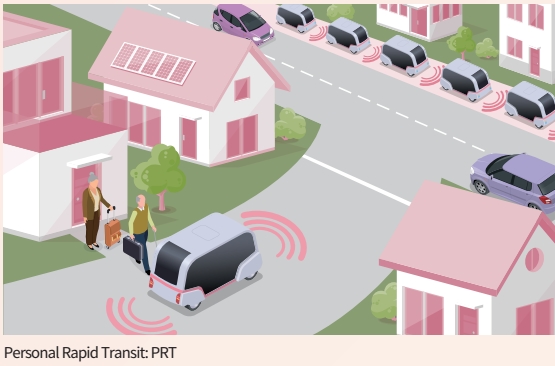


For comfortable travel

Development of a Door-to-Door Personal Rapid Transit (D2D-PRT) system

We aim to develop and implement the world's first Door-to-Door Personal Rapid Transit (D2D-PRT) system.

#Personal Rapid Transit
#Traffic flow simulations

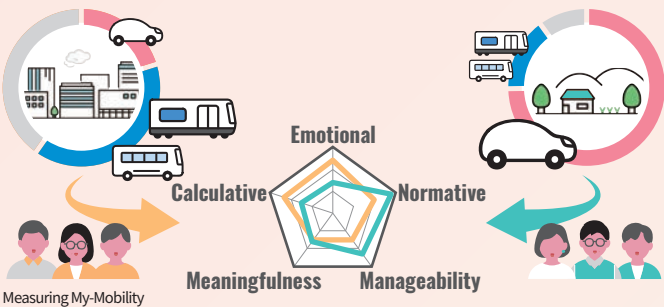


Social acceptability

Evaluating multifaceted value provided by a super-mobile society

We will develop methods for evaluating and validating the multifaceted impact that improvements in mobility have on people's life. We will use the insights gained to support other research and development themes.

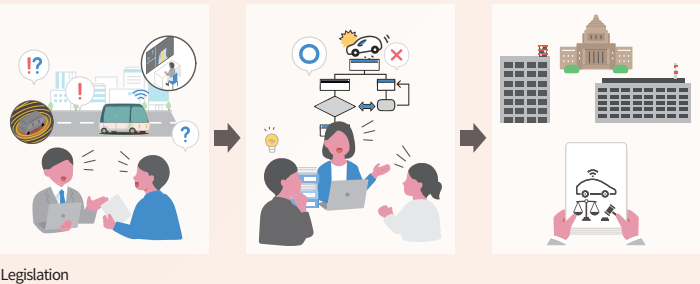
#Well-being assessment #Measuring My-Mobility



Clarifying legal issues associated with the implementation of advanced mobility and other technologies

Legal practitioners will collaborate with experts in other research and development themes, such as advanced technologies and transportation policy, to identify issues and analyze problems, and will make specific proposals for the legal framework that will be needed in the future.

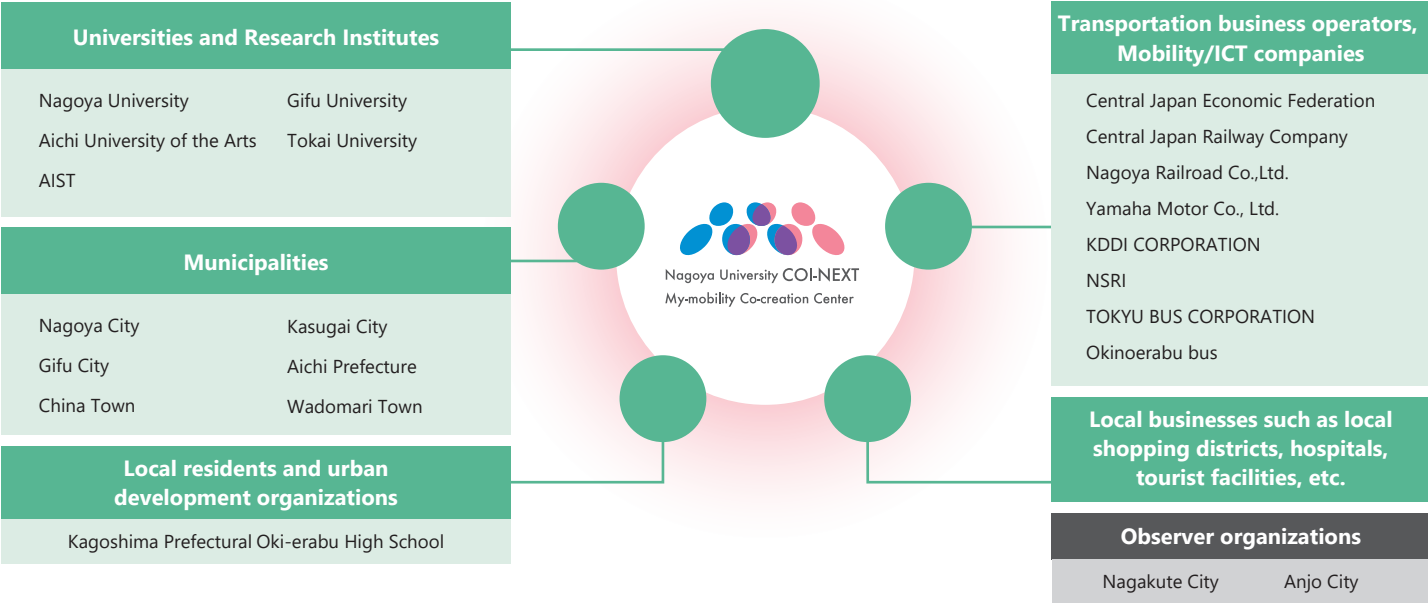
#Legislation #Legal issues related to advanced technologies



My-mobility Co-creation Platform

The center is building a co-creation platform involving a diverse range of stakeholders, including universities, research institutes, transportation companies, mobility and ICT companies, local governments, local businesses such as local shopping districts, hospitals, tourist facilities, and local residents.

The center is led by members of the Global Research Institute for Mobility in Society (GREMO), one of Japan's largest comprehensive mobility research institutes, and is based on the experience gained during Nagoya University's COI (completed in FY2021). The Institute is working closely with the Chubu Economic Federation, the two major transportation operators in the Chubu region, and local governments to develop innovation in local mobility.



Activity bases and research infrastructure

The National Innovation Complex (NIC), located on Nagoya University's Higashiyama Campus, is equipped with experimental facilities and equipment related to mobility, one of Nagoya University's strengths, and provides a venue for innovation.



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Nagoya University COI-NEXT
My-mobility Co-creation Center
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Recruiting project participants

The COI-NEXT My-mobility Co-Creation Center at Nagoya University is looking for partners who want to work together with us to realize our vision!

Eligibility

- Organizations and municipalities facing local mobility challenges
- Businesses and R&D institutions that wish to participate in the activities of the center

Web Site

