



Tsukuba Super Science City Initiative 6 Fields of Implementation

▼ Introduction to Efforts Related to Mobility/Delivery

Mobility/Delivery

Government

Healthcare

**Safety, Resilience
& Infrastructure**

**Digital Twin,
Urban Development**

Open Hub

Outline of Tsukuba City

Approx. 50km from Tokyo

Population : 250,000 residents
20,000 researchers
(including 8,000 PhD holders)

**150 Research Institutes
and Universities**

12,000 Foreign residents
(from 150 countries)



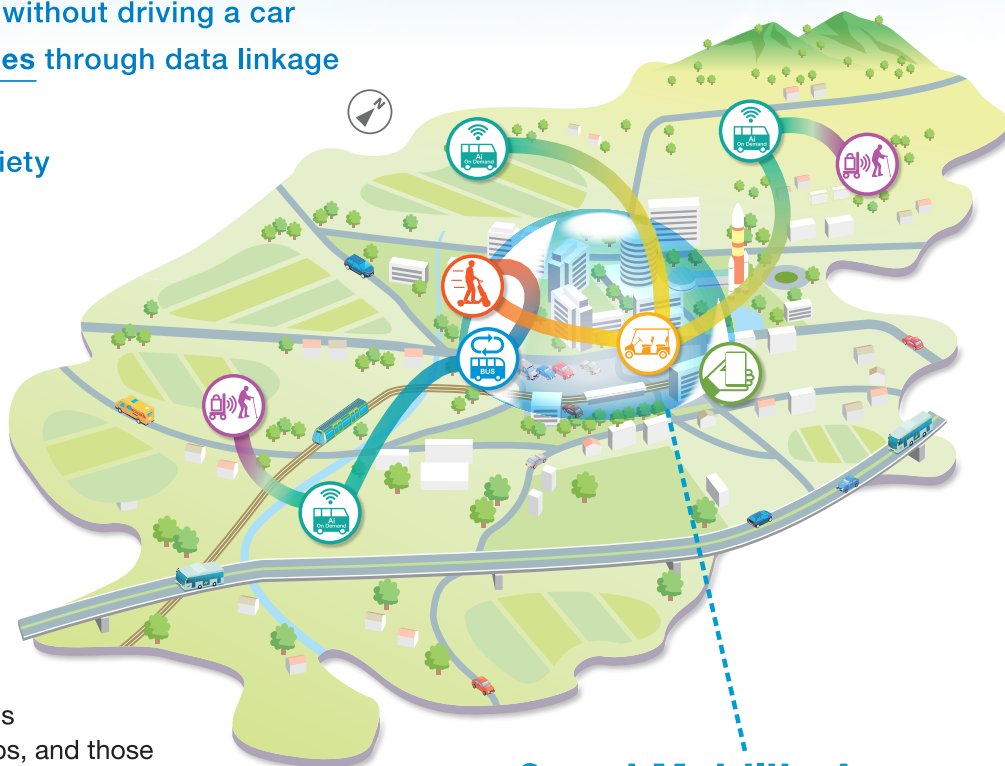
Transportation to Anywhere at Anytime

Tsukuba Smart Mobility

- Making it easier to get around without driving a car
- Integrate various mobility types through data linkage and spread to other fields
- Giving technology back to society

In the spirit of the SDGs, “Leave No One Behind,” where society as a whole embraces and supports each of its members, Tsukuba City, the largest science and technology hub in Japan, is promoting the social implementation of digital, robotics, and other cutting-edge technologies and the optimization of urban functions by bringing together the world’s most advanced science and technology.

While Tsukuba City has wide areas of inhabitable land, public transportation is not sufficiently developed in the suburbs, and those living in the suburbs must drive to reach city center. In the field of mobility and delivery, efforts are being made to realize freedom of movement, allowing people to combine various mobility options to suit their lifestyles and to move around without stress, no matter where they live.



Smart Mobility Area

“An area where science and technology are integrated into daily life and innovation is generated” in which Next-Generation Mobility overflows the city

Tsukuba Smart Mobility (Examples of Field Testing)



To Easier Get Around the Last Mile



Personal Mobility Sharing Service



In the city center, commercial facilities are spaced far apart, making it difficult to walk between them, leading to a loss of vitality. Personal mobility sharing services will be introduced to **improve circulation in the center of the city and enhance its appeal.**

We are also working to deregulate speed restrictions on personal mobility in order to enhance convenience and expand the movable areas.

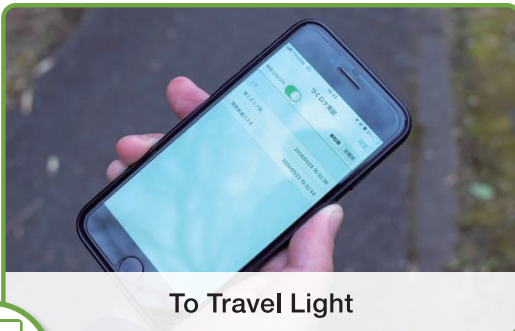


To Resolve the Bus Driver Shortage



Autonomous Bus

A shortage of drivers has become a major issue in maintaining the public transport system, reflected in reductions in the number of community bus services. **The introduction of autonomous buses will enable the creation of a safe and sustainable public transport network for the region.** The first step is to implement Level 4 autonomous buses in the "Smart Mobility Area."



To Travel Light



Hands-Free Ticketing Service

People with disabilities and those with children often face difficulties in tapping their IC cards when using public transport. **"Hands-Free Ticketing" will be implemented to enable seamless use of various transport services without the need to carry anything,** realizing a society in which the elderly, people with disabilities, and people raising children can move around comfortably and without inconvenience.



To Make Parent & Child Outings Easier



Child MaaS

Some people, such as those accompanied by small children, face difficulties with even the shortest journeys. **The introduction of low-speed automated mobility will facilitate multi-person transportation and provide a safe means for children to get around,** thereby enhancing residents' well-being and creating a thriving city center.



To Connect the City and Suburbs



AI On-Demand Share-Ride Taxi

People living in the suburbs have difficulty getting around without driving. To address this problem, efforts are underway to implement AI on-demand taxis to facilitate the mobility of people with mobility difficulties. Compared to rideshare services, where reservations have to be made at least one day in advance, **reservations can now be made anytime from a smartphone, and AI can help streamline operations.**



To Carry Heavy Objects



Human Following Robot



The elderly and people with disabilities face significant challenges in carrying around items for daily activities, such as shopping and taking out the garbage. **The use of easily-operated automated robots that can follow behind a person and assist in carrying items** will help them carry out these activities, leading to a society in which anyone can lead their lives without inconvenience.