

# Form "Smart City Utsunomiya".



Project Area	Utsunomiya City, Tochigi Prefecture
Project Organization	U Smart Promotion Council

Urban issues and Goals.

Project area goals, features and issues. (Smart city image)

## I. Utsunomiya City Overview

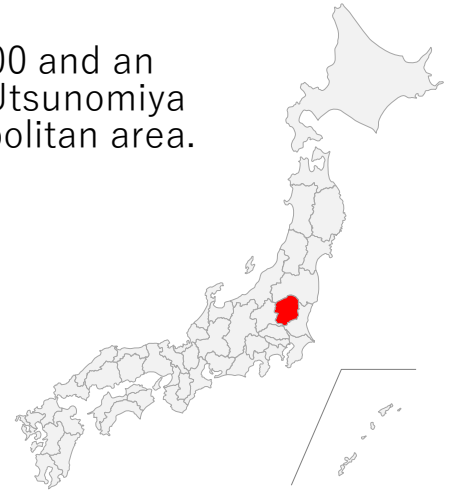
Utsunomiya City is located in the center of Tochigi Prefecture. It is a city with a population of about 517,000 and an area of 417 km<sup>2</sup>. Utsunomiya City arrives from Tokyo in about 50 minutes by using the Tohoku Shinkansen. Utsunomiya City will arrive in 1.5 to 2 hours from Tokyo by using the Tohoku Expressway. Easy access from the metropolitan area.

## II. Main issues to be addressed by cities and goals of smart city projects

- ① Eliminate traffic congestion and improve turnability in tourist areas (Otani area).
- ② Reduce travel time by public transportation and improved convenience by seamless transportation.
- ③ Formation of a lively central city area.
- ④ Realizing a low-carbon, disaster-resistant city
- ⑤ Strengthen support for watching over and raising children.
- ⑥ Promotion of purpose of life for the elderly

## III. The selling point of the project

Utsunomiya City is proceeding with the development of the LRT, which will be the first new track on all lines in Japan. It sees the greatest opportunity for this development to bring about major changes in the figure of city and the living behavior of the citizens. We are proceeding with efforts aimed at "Development of a comfortable mobile environment by introducing MaaS", "Creation of services such as collection and analysis of human flow data and information transmission for attracting customers", and "Realizing a clean and sustainable smart city by promoting the use of renewable energy". In addition, projects targeting new fields such as "Creation of a share community utilizing apps in the field of child-rearing" and "Holding online gymnastics classes in the welfare field" are underway from 2021 in order to solving issues in various fields using advanced technology.



The Shinkansen arrives from Tokyo in 50 minutes.

◇ It will challenge to solve problems in cities and townships by utilizing technology and data.

### □ MaaS project in tourist area (Otani area)

In order to aim for improve the traffic environment in the Otani area and introduce MaaS in tourist areas, we will improve turnability inside and outside the region by Various mobility operations such as green slow mobility in Otani area and develop a system that can seamlessly use various transportation services.

### □ A project to introduce a system for traffic operation and reservation in the area

It will develop an on-demand mobility service that uses reservation and vehicle allocation systems to improve convenience and operational efficiency for regional transportation users operated by local residents.

### □ A project to revitalize the city center and create a lively city

For citizens who want to visit events, sports games, exhibitions, etc., we encourage them to tour the city by providing value using a smartphone app.

### □ Energy management projects in disaster shelters, etc.

We are studying how energy should be supplied in the event of a disaster at multiple evacuation centers. It aims to be self-sustaining and decentralized with low carbon energy centered on renewable energy. In addition, we will develop a system that improves the accuracy of demand forecasting by utilizing AI in public facilities.

### □ Energy saving and labor cost reduction projects by "3D house model" and "agricultural house utilizing AI"

Reduce the amount of energy used in agricultural houses under extreme weather. In addition, by converting the situation and state in the agricultural house into 3D and visualizing the collected data using ICT and IoT, the environment will be managed appropriately to save energy and improve work efficiency.

### □ Energy network platform development project to expand renewable energy utilization area in the region

Develop a platform (energy network platform) that can utilize renewable energy power generation data and consumer data in the region. By more efficiently utilizing energy through optimal operation of the power grid and realizing self-sustaining decentralization in the event of a disaster, we will contribute to the creation of a low-carbon, disaster-resistant town.

### □ Project to promote mutual support for child-rearing generations using apps

It utilizes a smartphone app with functions that help each other smoothly, such as temporarily baby-sitting, picking up, reusing children's items, and sharing with others. Have a shared community that helps each other in class units such as nursery schools.

### □ Projects for "visualization of effects through data analysis" and "promotion of effective long-term care prevention by holding online gymnastics classes"

By utilizing various data, we will promote "visualization" of the effects of health promotion places such as long-term care prevention classes. In addition, an online gymnastics class will be held to increase the number of male participants, who have fewer participants than females.

### ■ Overview of all project (when smart city promotion plan draft)



# ◇ Implementing organization

# ◇ Project Timeline

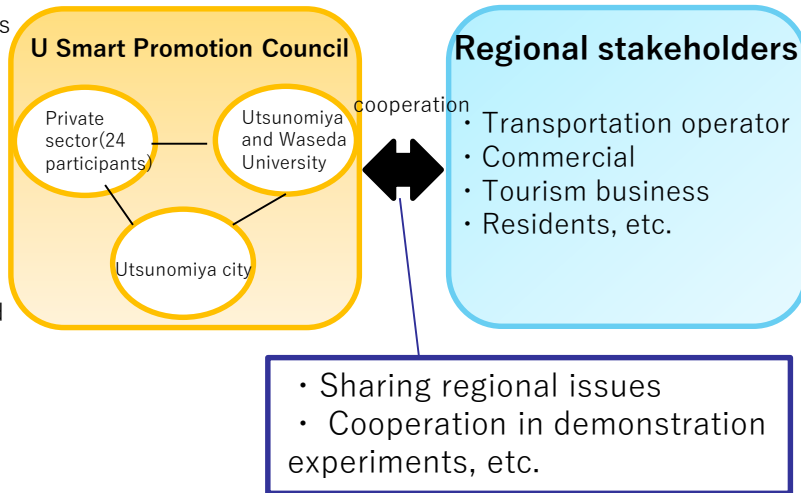
## ■ U Smart Promotion Council

- We will work together with the public and private sectors to solve social issues and create new businesses by utilizing ICT, which is an advanced technology. This council will be established because the purpose of realizing a smart city is to develop sustainably for the future.
- The council aims to share a common vision among the parties concerned and formulates and manages rules for each member to smoothly promote cooperation.

### ■ Main managed rules.

- Purpose
- Project content
- Execution plan formulation and progress management
- Survey, research, and demonstration experiments of advanced technology
- Project plan, budget, financial statements
- Eligibility to participate in the council
- I agree with the purpose of the activity. Take the initiative to promote activities.
- Placement and roles of officers
- Chairman: Overseeing the project
- Vice Chairman: Assisting the Chairman
- Establishment of general meeting and matters to be decided
- Formulation or change of promotion plan
- Planning or changing project plans and budgets
- Change of terms
- Confidentiality
- Handling of all information about activities or committee members obtained through the council (unauthorized disclosure, leakage prohibited)
- Intellectual property rights
- Clarification of attribution rights in writing

## ■ Operation system



2019

in preparation

Council established

- The council was established mainly by **eight organizations participating in the study group** with the city and Waseda University.
- It is a council in which a university professor plays **the role of an advisor** on the efforts and management of the council.

Plan (strategy) Review stage

Strengthening the council organization

- For the full-scale operation of the council, **16 organizations** were additionally selected by recruiting additional participants.

Plan Review

- **Formulation of smart city model promotion plan**

From 2020

Demonstration stage

Demonstration experiment project model

- **Embody the business model** considered through demonstration.

Share with citizens

- Share information and exchange opinions with residents' associations and shopping district associations.

City OS

- We will consider introducing an urban OS to enable data on efforts in each field to be linked.

Expand the department

- From 2021, **three groups will be additionally selected by publicly soliciting efforts such as child-rearing support, welfare, and education, which are fields familiar to citizens.**

Implementation stage

## ◇ Others (Awards, selection for smart city projects promoted by the government, etc.)

[Selection of model business]

2019: Selected as a leading model project for the "smart city model project" (Ministry of Land, Infrastructure, Transport and Tourism)

[SDGs Future City]

2019: Selected as "SDGs Future City" (Cabinet Office)