

Kōzōji smart city project

Project Area	Kasugai City, Aichi Prefecture
Project Organization	Kōzōji Smart City Promotion study Committee

Urban issues and Goals.

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

1 Features

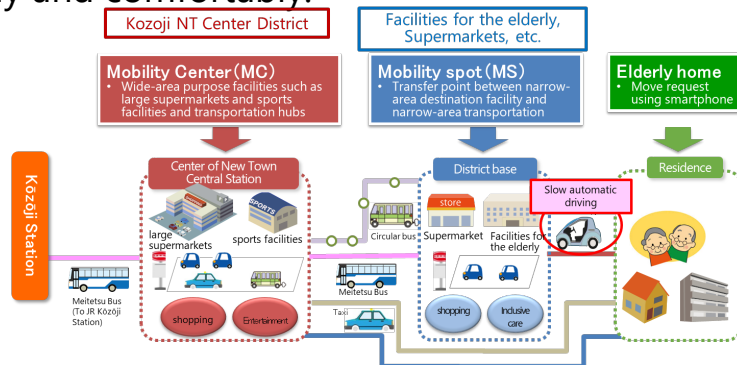
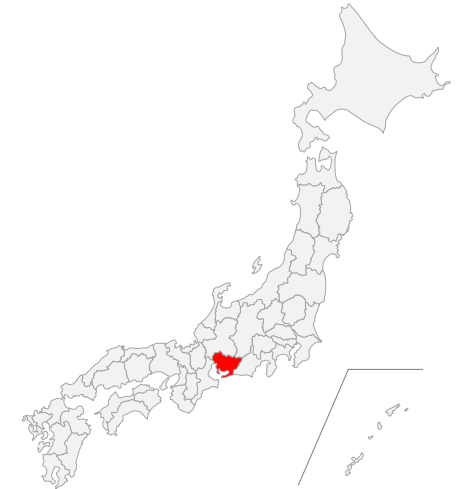
Kōzōji New Town, located in the eastern part of Kasugai City, is about 700ha (occupies about 8% of Kasugai City area). JR Kōzōji Station on the JR Chuo Main Line is the nearest station, and it is easily accessible by rapid train to JR Nagoya Station in about 26 minutes.

2 Issues

It has been more than 50 years since the start of residence, and there is a good living environment due to the enhancement of urban infrastructure such as roads and parks. However, the people who first settled in all become elderly and have various problems.

3 Goals

In order to solve these problems, we will utilize advanced technologies such as the introduction of autonomous driving technology, the development of high-precision 3D maps and dynamic maps, and the utilization of next-generation mobile communication "5G" and AI. As a result, we are aiming for a sustainable and comfortable city "Kōzōji Smart City" where all generations living in New Town can move safely, securely and comfortably.



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

◆ It will develop seven projects in a composite manner centered on mobility measures such as last mile autonomous driving and AI on-demand shared service.

□ Last mile automatic driving in a limited area (slow automatic driving)

- It moves within about 1km in diameter in the same town.
- It is a vehicle that can be used "at a short distance" instead of a bicycle.
- By combining automatic and manual operation, we will provide "door-to-door" service.
- The operation will be organized mainly by the local community and will be operated.



□ Advanced use of taxis (AI on-demand shared service)

- Even if a user other than yourself is not on board, the fare will be discounted by 50% by the "shared cooperation discount".
- Introduce a "pre-fixed fare system" that finalizes the usage fee before boarding.
- It will be customized accordingly to improve profitability and boarding ratio.
- It will collaborate with businesses (hospitals, commerce, etc.) within the planned site.



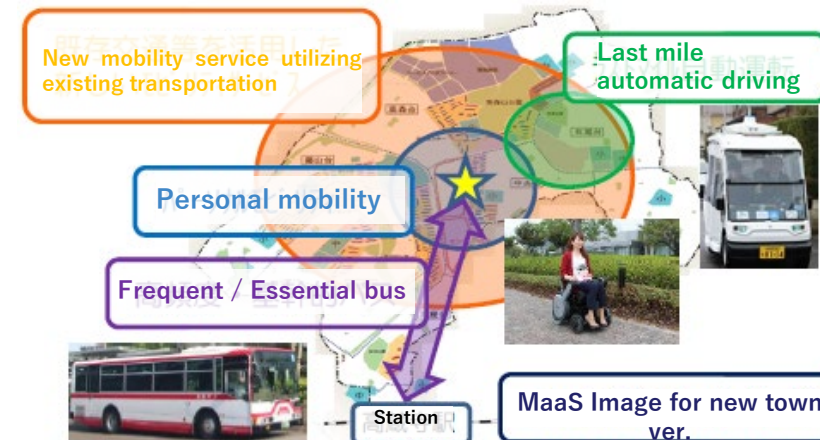
◆ Development of measures linked with administrative plans, etc.

□ Kōzōji New Town Redevelopment Plan (Primary revision in 2021)

- It is an administrative plan that summarizes the projects that should be tackled in New Town after March 2016.
- In addition to "Kōzōji Station area reconstruction" and "Reusing the old primary school facility as a multi-generational exchange base," it will be "development of a comfortable mobility network" and "securing of various means of transportation."

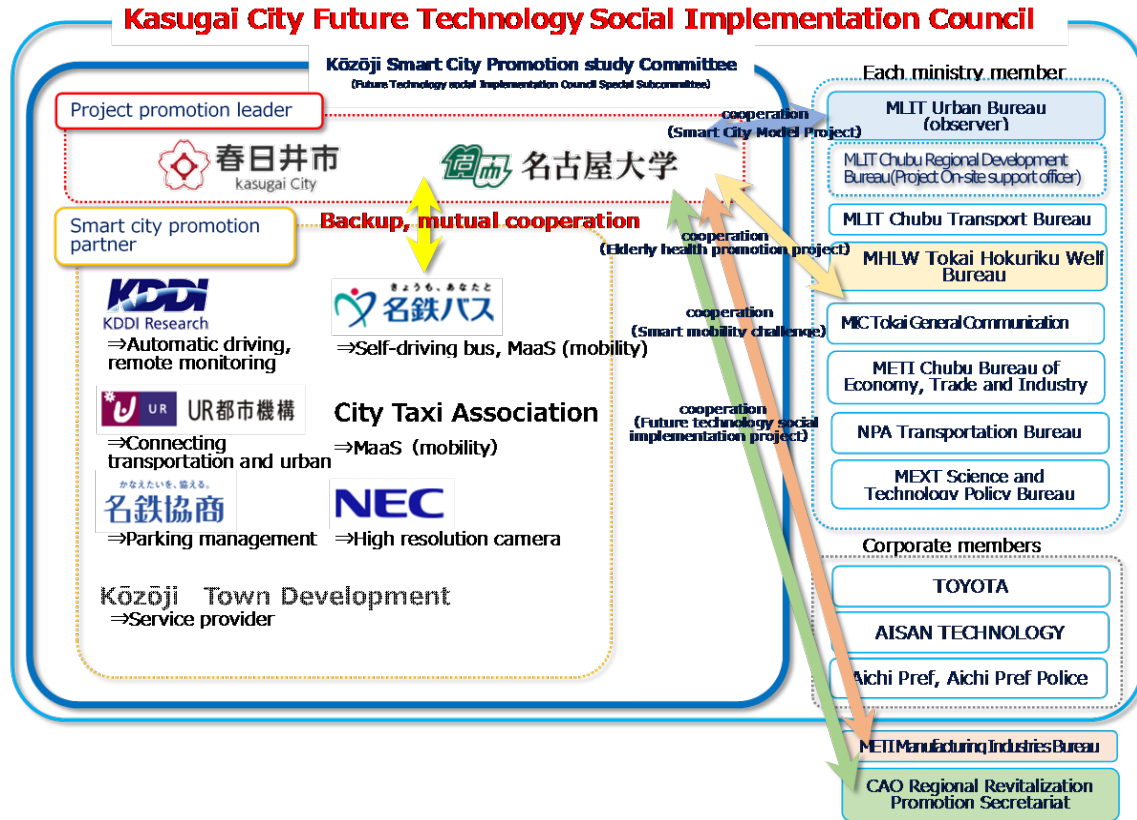
□ Kōzōji New Mobility Town Plan

- Find a way to best mix new mobility services with existing transportation systems (mobility blend).
- It aims to develop a MaaS that takes into consideration the characteristics of this new town.



◇ Implementing organization

Members: Kasugai City, Nagoya University, KDDI Research Institute, UR Urban Organization, Meitetsu Bus, City Taxi Association, Meitetsu Kyosho, NEC, Kōzōji Town Development.



◇ Project Timeline

□ Last mile automatic driving in a limited area (slow automatic driving)

- 2020: consider scheme, stakeholder coordination
- 2021: Established management organization and service scheme
- 2022: test operation start (automatic, manual), hardware maintenance such as power supply
- 2023: Organization management funds, vehicle maintenance costs, and other running costs
- 2024: service scheme confirmed (full-scale operation), horizontal deployment study

□ Advanced use of taxis (AI on-demand shared service)

- 2020: Start of collaboration with other businesses, study to secure business profitability
- 2021 Expansion of collaboration with other companies, implementation of long-term demonstration experiment, consideration of area expansion
- 2022: Start of test operation, promotion of business adjustment related to ensuring profitability, consideration of area expansion
- 2023: Reorganization of living with existing services (hospital shuttle cars, etc.)
- 2024 Service scheme established (full-scale operation)

Main implementation plans, etc.

	2020	2021	2022	2023	2024
▲ Last mile demonstration		→			
▲ Test operation (sustainable running scheme, hardware development, etc.)			→		
★ Full-scale operation				→	→
▲ AI on-demand shared service demonstration / test operation (verification of service feasibility, high added value, etc.)				→	
★ Full-scale operation					→
△ Examination of core traffic such as self-driving buses (information system cooperation, station development combined with station redevelopment)					→
▲ Test run					→
△ Considering cooperation with MaaS apps, dynamic maps, etc.					→
▲ Trial operation (PF construction, OPEN, cost verification)					→
★ Full-scale operation					→

Full-scale implementation of NT version MaaS

Results up to application

- Study on mobility blends such as automatic driving through joint research with Tokai National Higher Education Organization Nagoya University, promotion of mobility town concept project.
- Collaboration with various model project such as future technology regional implementation project, smart city, mobility challenge, project development.

(Reference) Local Revitalization Promotion Grant (Society5.0) Project Plan

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

【Selected Model Project】

Ministry of Land, Infrastructure, Transport and Tourism

- Smart city model business 2019,
- Japanese version of MaaS promotion and support business, 2020

Ministry of Economy, Trade and Industry

- Smart Mobility Challenge 2019, 2021

Cabinet Office

- Local revitalization promotion grant 2017-2019
- Local Revitalization Promotion Grant (Society5.0) 2020-2024
- Future technology social implementation business 2019-2023

Ministry of Health, Labour and Welfare

- Health promotion business for the elderly 2018, 2019