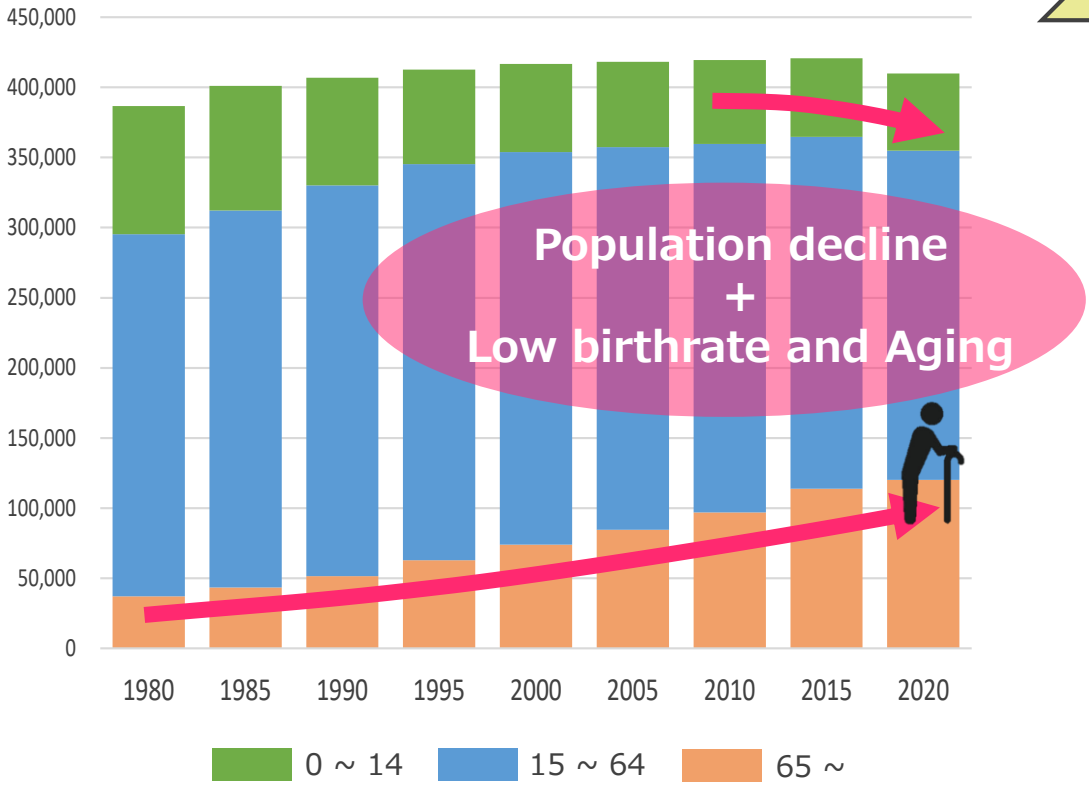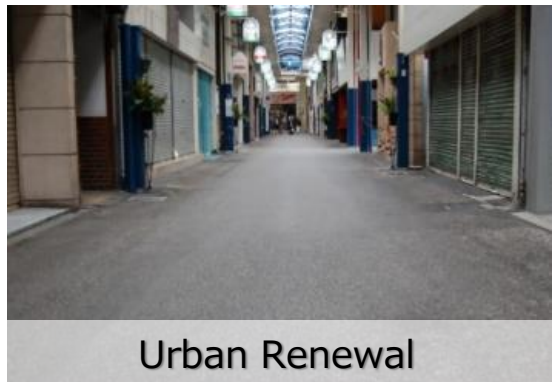# Challenges faced by the Regional central cities and Small and Medium-sized Cities

- The regional central cities (e.g., Takamatsu city) and other medium-sized cities have been facing population decline and urban sprawl at the same time.
- Under these circumstances, it is necessary to promote sustainable urban development, addressing issues such as climate change, disasters and aging urban infrastructure, while ensuring urban convenience.

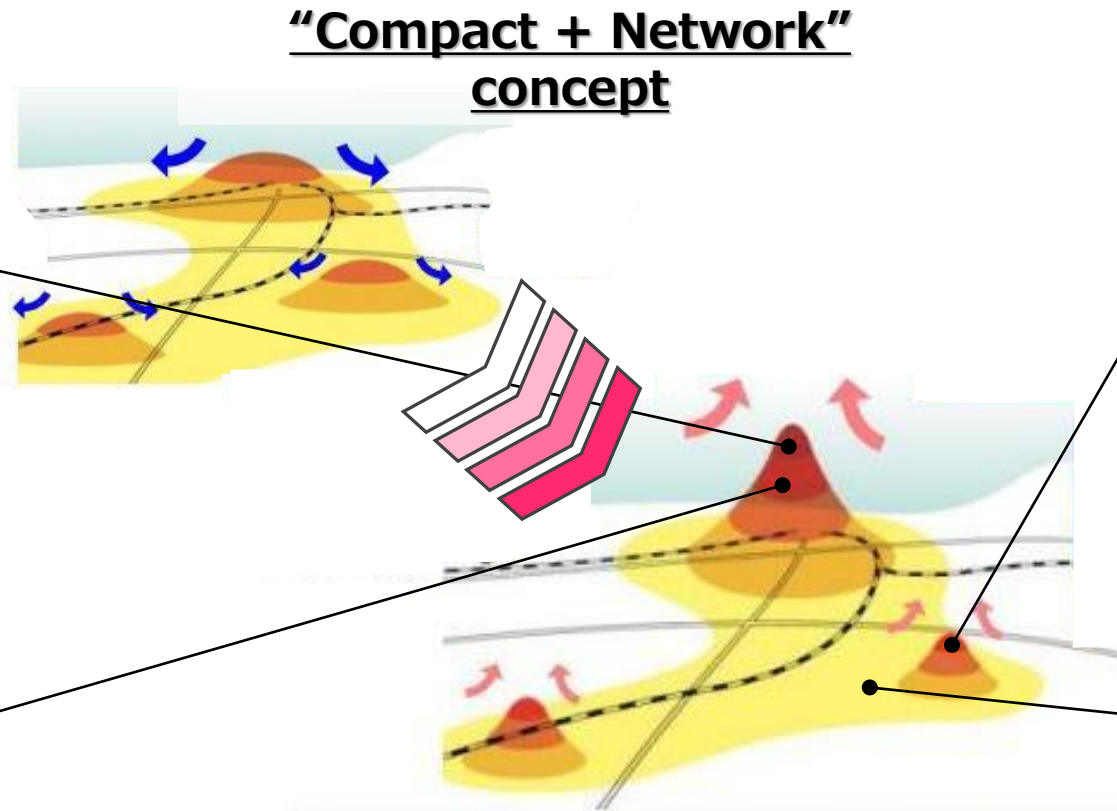## Population of Takamatsu City

Population decline
+
Low birthrate and Aging

Legend: 0 ~ 14 | 15 ~ 64 | 65 ~

Sustainable Cities and Communities

Maintain public transportation

Infrastructure Maintenance

Urban Renewal

Disaster Resilience

2

Sustainable urban development to cope with issues such as population decline. (Compact Plus Network)

- Sustainable urban development under population decline requires not only development control methods to curb urban sprawl, but also to maintain urban conveniences and attract people.
- At the same time, maintaining and building public transport networks is another pillar of maintaining the convenience of urban life and attracting people.

"Compact + Network" concept

Redevelopment of urban centers

Development of key public transportation systems

Sharing the value of urban space

Transportation tailored to residents' needs

Sustainable and attractive city

3

Toward Further Sustainability in Takamatsu City

- The use of digital technology is expected to contribute to promoting efficient and smooth urban transformation to realize the "Compact plus Network" concept.
- The aim is to improve urban convenience, create new industry, be environmentally friendly (Net-zero) society towards further sustainable city.

Compact + Network
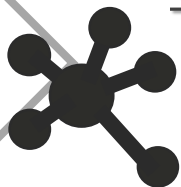
- ➤ Redesigning the public transportation network
- ➤ Development Control

Compact Plus Network ✕ Smart Cities

- ➤ Building a map infrastructure for infrastructure management
- ➤ 3D city model（PLATEAU）

Smart cities
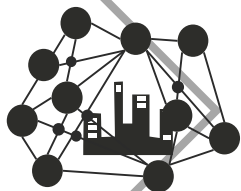
- ➤ Linking city data（City OS; FIWARE）
- ➤ Providing information on disaster prevention to citizens

making efficient + innovation

CO_2

Zero Carbon City Takamatsu

11 SUSTAINABLE CITIES AND COMMUNITIES

4

(Urban hub) Sunport Area
– Urban renewal through joint efforts by public-private and citizen initiatives –

- The Sunport area where the conference center is located used to be a port that served as the gateway to Kagawa and Shikoku island, connected to Honshu main island by railroad connecting ships. However, the role of the area has changed significantly since the opening of the Great Seto Bridge in 1988, and urban renewal has been taking place to meet new needs.
- The Sunport area as an urban hub will be developed together with the stakeholders involved in the area and grown together with the citizens.

2023－2025
Development concentrated in the Sunport area

Okayama · Takamatsu Port
Uno
Uko Route
Takamatsu

Sunport area
G 7 venue

University
Tokushima Bunri

Government
Prefectural Arena

Takamatsu Station Building 「TAKAMATSU ORNE」
Transportation business

Together with citizens and stakeholders

(Urban hub) Sunport Area
-Urban activities (Area Management) through joint efforts by public-private and citizen initiatives -

- Improve the attractiveness and value of areas through the skillful use of public and private spaces such as squares and parks in urban centers and community centers by citizens and stakeholders.

- Citizens and stakeholders with a variety of involvement in the place will participate, transcending distance and relationships as well as age and gender.

Takamatsu Music Blue Festival

Sunport Takamatsu Triathlon

Port Food Trucks

Release of young fish by children

Encourage further civic engagement through the use of digital

- ■ Participation in urban development has been based on discussions and activities in physical space. The use of digital technologies can lower the hurdles to participation in terms of time, distance and expertise.

- ■ With using Minecraft, gamification could be a platform for diverse participation that is different from the elaborate digital twin.

Real

Digital Twin/3D City Model

Minecraft

Good!

Citizen participation

× Digital = Diverse participation in urban activities

interest

Metaverse space that is easy to understand and interesting

Minecraft – Place and break blocks and represent your ideal Takamatsu city!! -

- By utilizing data from 3D city models, Takamatsu City has just been recreated on Minecraft! A design contest will be held for participants to freely express their vision of the future Takamatsu on Minecraft.
- Opportunities are provided for diverse citizens and organizations to participate in the realization of a sustainable city, leading to participation in real urban activities and attachment to and civic pride in the city.

A game where you place the blocks and go on an adventure

Number of monthly active users : More than 140 million

Used as teaching materials for programming classes, etc.

Takamatsu Minecraft Townscape Design Contest
（July to November 2023）

Ongoing public interest

Free your ideas!

Think of the city of the future on Minecraft!

Final judging and awards
Nov 25

Hmm..

workshop
Aug 5,20

Virtual photo session

Kick-off event
July 23

today