

The Bustling Activity Spreading Out from The Station

Reimagining Urban Vitality through Collaborative Design

Around the promenade area in Shunan City, many major facilities, including a zoo, are carefully located. However, the number of residents is decreasing, making it difficult to secure users of these facilities. This issue has extended to the maintenance and management of civil infrastructure, and many cities across the country facing similar problems. In response to this situation, Shunan City is carrying out pioneering activities for sustainable urban use, such as involving residents in cleaning activities of bridges (CATS-B). The promenade has attractive features such as animal-shaped objects that make pedestrians enjoyable and there is a plaza space in front of the station. On the other hand, there are factors that discourage pedestrian from hanging out. its landscape is monotonous with only trees, giving a rather dull impression. Additionally, the slope of the promenade can be physically demanding for pedestrians. To sustain and enhance such efforts, our design takes "affection" as its theme, aiming to create a mechanism that fosters a closer relationship between the city and its residents. By building on the positive aspects and tackling some issues, we aim to promote the revitalization of these activities and the dissemination of information, encouraging more people to engage with and walk through the city

What is CATS-B?

CATS-B is a volunteer-based organization based in Shunan City, composed of members from industry, government, academia, and the local community. Using bridges as its main field of activity, the group promotes awareness of the importance of civil infrastructure through enjoyable and engaging initiatives.

Issues Facing Shunan City

- Lack of activity around the station
- Steep slope of the promenade
- Declining birthrate and aging population

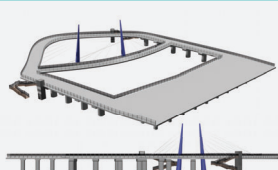


▲ Current Station Front Landscape



◀ Bench users within the station

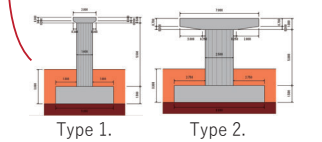
Pedestrian Deck Planning



The station plaza was divided into two levels to expand the outdoor space. This plaza not only provides a more comfortable setting for the daily market held in front of the station but also serves as a beloved symbol for citizens as the base for CATS-B activities. Furthermore, it acts as a bridge connecting the port and the city center more dynamically.

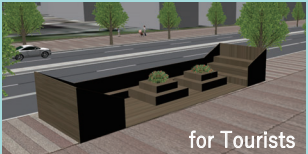
Pile Bearing Capacity Design

The strength of the pedestrian deck columns was calculated using software, and the required number and shape of columns were determined.

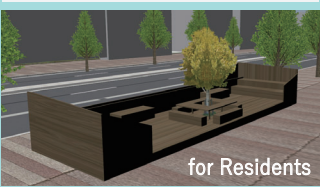


Promenade area planning

The design incorporates diverse features tailored to each area's unique user demographics. Several chairs and tables are provided, allowing people to sit comfortably and relax, enjoy personal time, or engage in activities suited to their specific purpose.



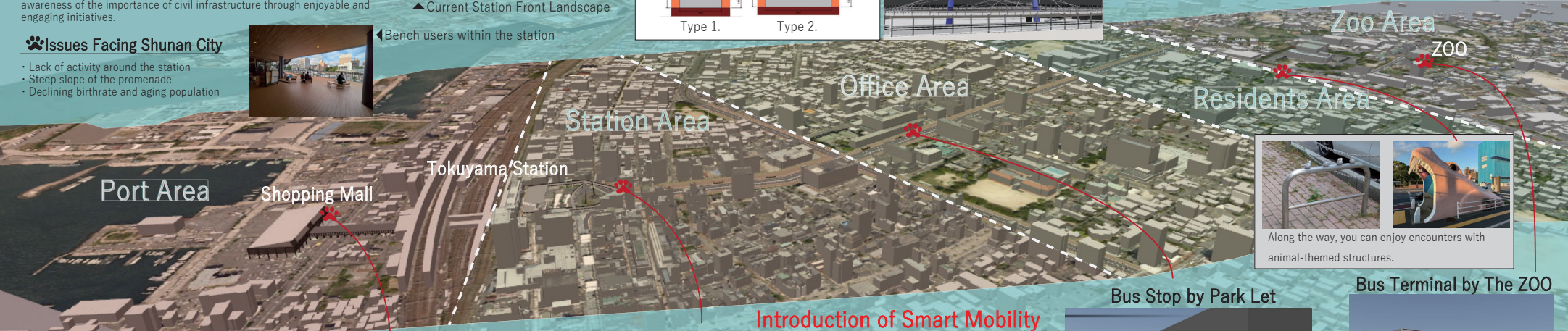
for Tourists



for Residents

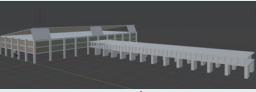


for Office workers

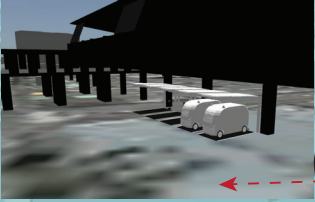


Tsunami Hazard Area

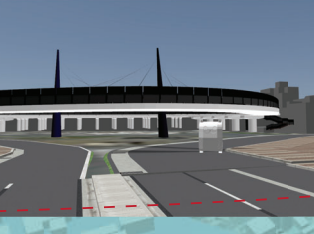
The tsunami inundation zone extends from the port to Tokuyama Station. Shopping malls will place critical facilities on the second floor or higher and install solar panels on rooftops to serve as temporary evacuation sites. Access to the city center remains easy during disasters via the connecting bridge to the station and the pedestrian deck at the east exit, enabling the supply of stored food.



Bus terminal by the Shopping mall



Bus Stop by Pedestrian Deck



Introduction of Smart Mobility

Road Replanning

Redesign roads and establish dedicated lanes to enable smart buses to operate safely. Furthermore, expand sidewalk widths and install parklets to create vibrant and relaxing spaces throughout the city.

Station area



Public office area and School area

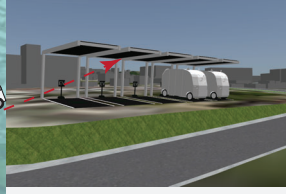


Bus Stop by Park Let

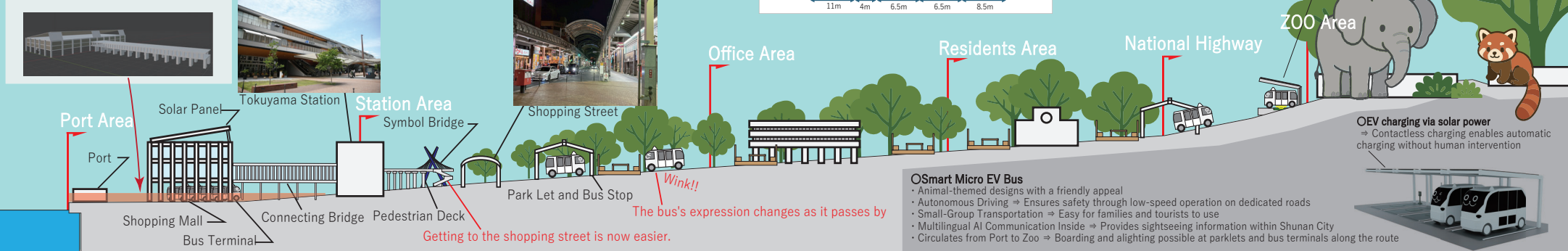


Each parklet has a bus stop, allowing buses to pass each other frequently. And you can wait for the bus at the parklet.

Bus Terminal by The ZOO



A spot where several buses can stop and charge. Contactless charging eliminates the need for manual labor.



Smart Micro EV Bus

- Animal-themed designs with a friendly appeal
- Autonomous Driving → Ensures safety through low-speed operation on dedicated roads
- Small-Group Transportation → Easy for families and tourists to use
- Multilingual AI Communication Inside → Provides sightseeing information within Shunan City
- Circulates from Port to Zoo → Boarding and alighting possible at parklets and bus terminals along the route

OEV charging via solar power
→ Contactless charging enables automatic charging without human intervention