

Utilization of Modern Cultural Properties



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Edited by

Tokyo National Research Institute for Cultural Properties
Center for Conservation Science, Restoration Techniques Section

Foreword

The Tokyo National Research Institute for Cultural Properties is presently involved in research of various tangible cultural properties including methods for their preservation and restoration. Particularly regarding fundamental studies with the aim of protection of diverse cultural heritage properties from Japan's Modernization period following the Meiji Restoration in 1868, a project titled "Research on Conservation and Restoration of Modern Cultural Properties" was established in 2001 when the institute became an independent administrative institution. Since then, an annual theme has been set and study meetings have been held, inviting guests from Japan and abroad, to share information so that further advancements in our studies could be made.

In the meantime, in 2006, so as to convey our strong focus on preservation and restoration of cultural properties from the Modern era, the name of the section in charge was changed from Restoration Techniques Section to Modern Cultural Heritage Section, and the organization has been reinforced.

Topics that have been dealt with pertaining to modern cultural properties are vessels, aircraft, large-scale structures, steel structures, and concrete structures. Additionally, we have focused on media for recording audio and video including records, film, and tape. Preservation issues that were focused on regarding works that employ such materials as oil paint, Western paper, or modern textiles have been published as a series of reports.

Although the basic principles regarding protection of Modern heritage as cultural properties have already been provided by Japan's Agency of Cultural Affairs in 1996 in a report titled "Preservation and Adaptive Use of Modern Cultural Heritage," twenty years have passed since its publication. Since then, preservation of cultural properties has come to include cases in which working properties need to be protected with their original functions intact or while requiring enhancement, rather than as mere monuments. They also may involve changes in use or planning for adaptive use. Today, various flexible measures need to be derived for each property according to their characteristics. Therefore in 2015, a study meeting with the theme of principles for preservation and restoration was held, to summarize

the outcome of the past projects, which was published as "Principles for Conservation and Restoration of Modern Cultural Properties." Nevertheless, it cannot be denied we are still only at the beginning of our studies on modern cultural properties.

With the aim of building on previous achievements in the Fourth Medium-Term Plan of the National Institutes for Cultural Heritage and promoting research more broadly and deeply, the Restoration Techniques Section, which was renamed from the "Modern Cultural Heritage Section" in 2021, has focused on buildings with comparatively advanced status such as Designated Cultural Properties and with a track record of conservation and repair, which we have summarized as follows: "Conservation and Restoration of Brick Masonry Structures," "Conservation and Restoration of Steel Structures," "Conservation and Restoration of Concrete Structures," and "Conservation and Restoration of Internal Features." Following on these achievements, during this fiscal year, we focus on the utilization of cultural properties, the main target of the Act on the Protection of Cultural Properties, which was amended in 2019. "Utilization" refers to various methods such as utilizing the functions of the cultural properties as they are, establishing an exhibition space that introduces history and culture while utilizing the building, or collaborating with the surrounding streets and communicating the characteristics of the town as a whole. Each of these forms of utilization involves making efforts to acquire visitors with their innovations, and we introduce these innovations here. Furthermore, the Restoration Techniques Section has compiled the results of field surveys as reference materials.

I would like to thank all of those who took part in this research and seminar and hope that full use of this report would be made in the actual practices of preservation and restoration of concrete structures.

Our institute intends to proceed with studies on theory and methods for protection of modern cultural properties through involvement in actual cases of restoration. We would like to ask you for your continued support and cooperation.

SAITO Takamasa
Director General
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Introduction

Introduction

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1. Background

With the start of the Fourth Medium-Term Plan (five-year period from FY2016 to FY2020) of the National Institutes for Cultural Heritage, the Modern Cultural Heritage Section has aimed at building on previous achievements and promoting research more broadly and deeply. To that end, we have focused on buildings with comparatively advanced status such as Designated Cultural Properties and with a track record of conservation and repair, which we have summarized as follows: “Conservation of Construction Techniques for Brick Buildings,” “Conservation of Construction Techniques for Iron Structures,” and “Conservation of Construction Techniques for Concrete Structures.” Furthermore, we focused on the interior decoration of buildings, where we conducted and summarized survey research on the preservation and restoration of floors, walls, ceilings, fittings, lighting fixtures, and other parts that usually play a supporting role in building repair but are the most noticeable parts for visitors.

In 2019, the Act on the Protection of Cultural Properties was amended, and the administration of cultural property protection was increasingly put into practice. Therefore, we decided to conduct survey research on how cultural property owners, managers, among others, were thinking about using modern cultural heritages and the cultural properties that are preserved nationwide, as well as their achievements on that front.

2. Current Status

The amended Act on the Protection of Cultural Properties has shifted gears toward utilization, but this does not necessarily mean that it can immediately be applied everywhere. We inferred that what was important was to first understand the extent to which the utilization of modern cultural heritages has

advanced and what their circumstances currently are. To that end, for the past two fiscal years, we have been conducting questionnaire surveys on utilization by modern cultural heritage owners and managers, and we have proceeded with this survey by understanding what types of actions are being taken, wherein the survey involved direct field interviews focused on cultural properties with characteristic responses being among the responses to the survey. Please refer to Chapter 4 for the results of the questionnaire survey, where they are summarized.

We observed that what people first thought when they hear the word “utilization” in this context was that it has been common until now for people to look at cultural properties themselves and experience the culture and technology of the time, and to generally utilize the cultural properties in a manner that does not go beyond this. However, owing to economic circumstances and other reasons, allocating a large budget to the preservation of cultural properties has not been possible; moreover, when considering that we are in an era where the cultural properties themselves must take measures to preserve themselves as much as possible based on entrance fees, and other factors, it has no longer become enough to just display these properties as before. Therefore, owners and managers are beginning to seek ways for increasing the number of visitors and understanding people through different methods and products. Here, we have asked all people involved in such activities to write articles, and we hope that they would be used as references. Furthermore, the Restoration Techniques Section has compiled the results of field surveys as reference materials.

3. Structure of this Book

In this book, Chapters 1–3 are articles about the

efforts taken by owners or managers. In Chapter 4, we present a summary of the results of the above-mentioned questionnaire survey. Furthermore, in Chapter 5, we publish a collection of case studies that summarize the contents of nationwide field surveys conducted by the Modern Cultural Heritage Section.

Chapter 1 provides a summary of the utilization of the National Treasure "West Cocoon Warehouse of Tomioka Silk Mill," whose conservation and repair work was completed in 2020, and the types of efforts that Mr. Okano Masae, who is an administrator in Tomioka City, are implementing on behalf of the City with regards to the preservation, restoration, and utilization of the Tomioka Silk Mill. The West Cocoon Warehouse of Tomioka Silk Mill has prioritized the current situation while being aware of use even during its repair work. A rarely seen house-in-house method was used, which leaves the building itself as untouched as possible and enabling the interior space to be viewed properly and used to hold events while being made earthquake-resistant, and a case study that would be very useful as a reference for utilization is introduced.

Chapter 2 introduces the efforts by Mr. Hagiwara Kiyoshi of Kiryu City where both the government and citizens are working together, such as by utilizing the many modern cultural heritages that remain in Kiryu City (e.g., Former Gunma Prefecture Sanitary Center) and Important Preservation Districts such as Honmachi 1- and 2-chome.

Chapter 3 introduces the efforts by Mr. Murakami Masayoshi of the NPO Aigi Tunnel Group Preservation and Restoration Committee with regards to the Aigi Tunnel Group of the Former Chuo Main Line, which straddles Kasugai City in Aichi Prefecture and Tajimi City in Gifu Prefecture, where they have gathered local volunteers to gradually improve it and increase the number of visitors since its discovery in 2006.

In Chapter 4, we introduce the results of the questionnaire conducted by the Modern Cultural Heritage Section in 2020. The results shows that the primary utilization method is just a simple display or a slightly more involved use of the space and that they have not been able to utilize them as expected. This may be in part due to the relatively short amount of time

since the amended Act on the Protection of Cultural Properties, and utilization of these properties in earnest is still in the works. However, the reality is also that utilization faces various constraints such as earthquake resistance and barrier-free installations and that this is difficult under current circumstances.

In Chapter 5, we provide a collection of case studies that summarize the results of the surveys conducted by the Modern Cultural Heritage Section. As mentioned above, we used the questionnaire results as a basis to conduct field surveys on cultural properties that were thought to be used in interesting ways. "Utilization" can be executed in various ways: innovations can be made to the building itself, functions that the building itself lacks can be complemented by annexes, areas with Important Preservation Districts in the same town can work together toward utilization, and facilities with completely different functions are built on adjacent land to promote utilization. We introduce such cases here.

We would like to express our gratitude to the parties involved, and we hope that this book will serve as a reference when thinking about the utilization of modern cultural heritages.

Chapter1

Tackle to maintain and inheritance on the Tomioka Silk Mill
-From the field of preservation and utilization-

Tackle to maintain and inheritance on the Tomioka Silk Mill -From the field of preservation and utilization-

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1. Introduction

In this article, we describe the efforts till date toward the preservation and utilization of the Tomioka Silk Mill as a cultural property and cultural heritage, the current circumstances of those efforts, and the issues regarding the maintenance and passing on of the property from the perspective of on-site staff. I will describe what I, as a staff member who has been involved in the preservation and utilization of the Tomioka Silk Mill for over 10 years, perceive are the issues toward preserving its value as a World Heritage Site and a national cultural property while actively utilizing it as a tourism resource for regional development.

The Tomioka Silk Mill is a full-fledged, large-scale mechanized silk mill established in 1872 in what is present-day Tomioka City, in the southwestern part of Gunma Prefecture. The Meiji government focused on raw silk, which was in high demand at the time as an export product, and in an effort to mass-produce high-quality raw silk, introduced advanced mechanized silk-reeling technology from the West and established the Mill as a model factory for nationwide dissemination.

Although the Mill's management underwent changes after its privatization in 1893, it continued to operate as a silk mill until 1987. During this time, the Mill made pioneering efforts in the technological innovation of reeling machines and cocoon dryers and led the technological innovation of the silk industry, which was a core industry in the country.

The Tomioka Silk Mill has maintained its condition ever since it stopped raw silk production in 1987, and it is one of Japan's representative Heritages of Industrial Modernization as a cultural heritage that speaks to the history and technological innovation that occurred from the beginning to end of Japan's modern silk industry.

Although Katakura Industries Co., Ltd., who was the last owner of the Mill, continued to manage and maintain the Mill even after the end of operations, in 2003, promotional activities for its inclusion on the UNESCO World Heritage List began; simultaneously, a survey was conducted of all buildings on the site with the objective of protecting it as a cultural property, and a report was created. Based on the survey results, in 2005, the entire site was designated as a National Historic Site, and in the following year, seven buildings, one unit, and one location were designated as an Important Cultural Property (the three buildings of the Silk Reeling Mill, East Cocoon Warehouse and West Cocoon Warehouse were designated as National Treasures in 2014). The maintenance and management, as well as preservation and utilization, of the site as a cultural property thus began in earnest. The Tomioka Silk Mill was transferred to Tomioka City and opened to the public from October 2005.

Enthusiastic promotional activities that involved the participation of both prefectural and municipal residents resulted in its inclusion in the World Heritage List, and in 2014, the Mill, along with three other constituent assets (Arafune Cold Storage (Shimonita Town), Takayama-sha Sericulture School (Fujioka City), and Tajima Yahei Sericulture Farm (Isesaki City)) became a World Heritage Site named "Tomioka Silk Mill and Related Sites." The exchange of technologies relating to raw silk production with foreign countries and the technological innovations that enabled the mass production of high-quality raw silk in the four constituent assets as a whole were assessed as contributing to the global spread of silk culture.

Regarding the progress of building preservation and maintenance, in 2020, the preservation and maintenance work of the National Treasure "West Cocoon

Warehouse” was completed, and the building was made open to the public, with enhanced exhibition contents that convey the history and value of the silk mill. The scope of utilization has also increased, such as with the installation of a multi-purpose hall that was based on the house-in-house method.

When the Mill became a World Heritage Site in FY2014, it had 1.33 million visitors a year in part owing to its topicality and high media exposure. However, over time, the Mill became less topical and the attention level decreased, resulting in a gradual decrease in the number of visitors. Furthermore, with the COVID-19 pandemic, the number decreased to around 170,000 visitors a year in FY2020. This number recovered to around 300,000 visitors in FY2022, with around 7.19 million visitors welcomed to the Mill since it was opened to the public in 2005.

2. Current conditions and system of preservation and utilization

The Tomioka Silk Mill has a site measuring approximately 55,000 m² in area. Within its premises, it includes seven timber-framed brick buildings from during its foundational period, as well as various buildings related to the silk reeling system and welfare of workers, which have been expanded and remodeled in line with changes in management and technological innovation during its 115-year period of operation (**Fig. 1**). These buildings can be subdivided into approximately 100 individual buildings, but many of them are wooden structures that have been added for various purposes since privatization, and many of them have deteriorated or been considerably damaged. All of these, including the National Treasures and Important Cultural Properties, are in urgent need of conservation and repair.

As of FY2022, the main buildings whose preservation, repair, and maintenance work has been completed are the National Treasure West Cocoon Warehouse and two company housing buildings (Historic Sites (Buildings)), and the Cocoon Drying Facility and Cocoon Handling Facility (Historic Site (Building)) that is currently undergoing preservation and maintenance work, is targeted for completion in FY2025. Therefore, it would not be an overstatement to say that the preservation and maintenance

project for the buildings in the Mill has just begun.

As mentioned above, Tomioka Silk Mill has been owned and managed by Tomioka City since 2005, and all operations related to the Mill, including daily maintenance, preservation and repair work, visitor reception, event implementation, media responses, acceptance of inspections, among others, are under the jurisdiction of the Tomioka Silk Mill Section, which is one of the sections of Tomioka City Hall. In addition to this, there is a department that conducts survey research, document storage, and educational dissemination work related to Tomioka Silk Mill.

The department overseeing tourism is involved in the utilization of Tomioka Silk Mill for tourism purposes, and the Cultural Properties Division oversees the excavation surveys and work related to changing the current conditions of the Mill.

Operations such as sales of visitor tickets, guides, supervision of visitors, group reservation reception, cleaning, and night security are outsourced.

The costs of these various projects and operations related to Tomioka Silk Mill are generally funded from visitor fee income. The labor costs of the staff were also covered by the visitor fee income until that income sharply decreased due to the COVID-19 pandemic. The government and Gunma Prefecture subsidize the costs related to the preservation and maintenance of Nationally Designated Important Cultural Properties (Buildings) and Historic Sites (Buildings), but the expenses on Tomioka City’s side must be covered by the city itself. The problems of how to cover the costs of maintaining and managing the Tomioka Silk Mill, preserving and repairing it, and continuing to open it to the public and utilize it are major issues associated with the site.

Currently, excluding the three days at the end of the year, the Mill is open to the public from 9:00 am to 5:00 pm every day. There is a fee for admission: the visitor fee is 1,000 yen for adults, 250 yen for high school and university students, and 150 yen for elementary and junior high school students. Most of the buildings can only be viewed from the outside, and currently, the interiors of only the three National Treasure buildings (Silk Reeling Mill, East Cocoon Warehouse, and West

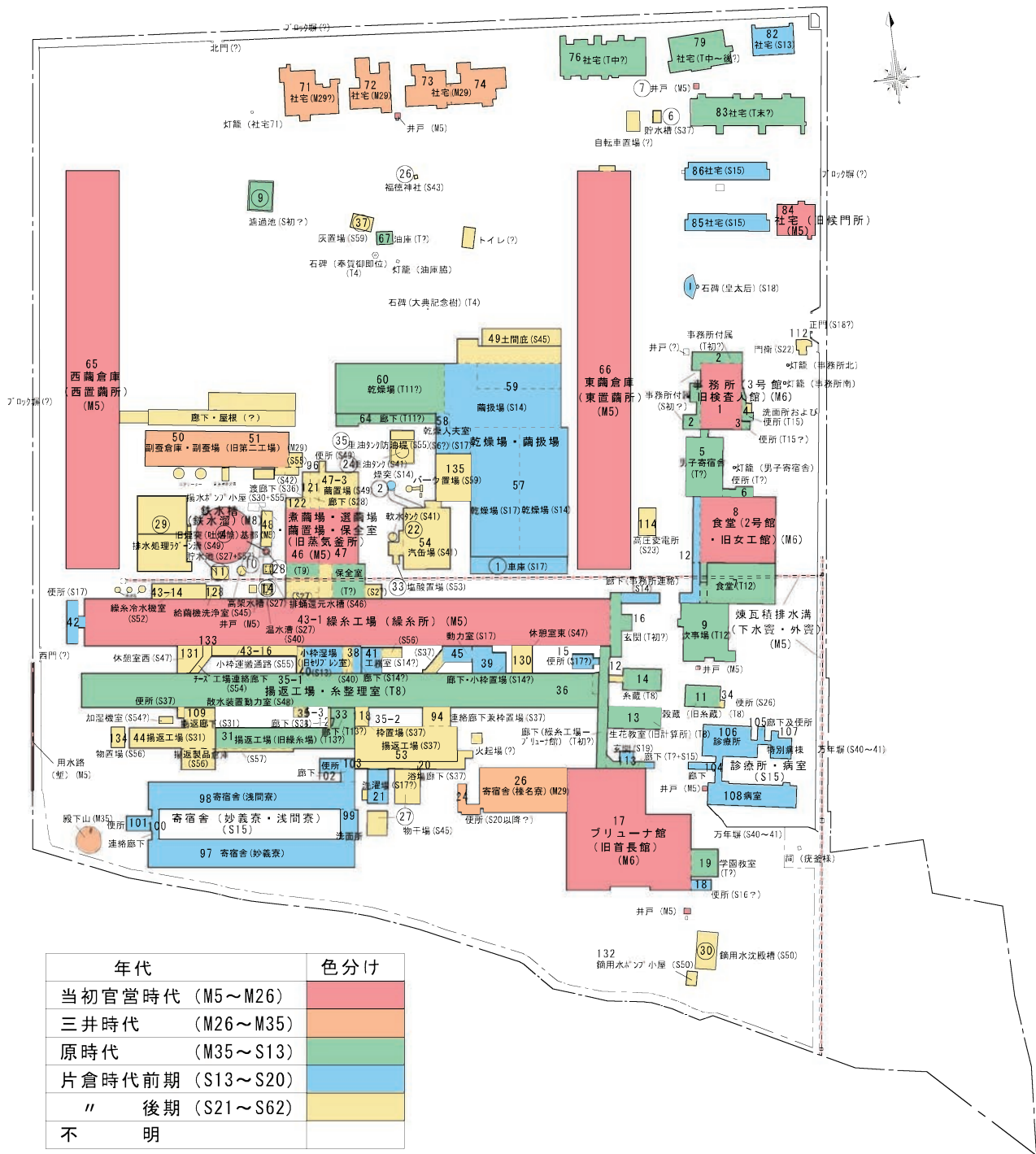


Figure 1 Site plan (reference : 史跡・重要文化財 (建造物) 旧富岡製糸場保存管理計画」P31 Figure 2-16)

Cocoon Warehouse) and one company housing building are open to the public. The East Cocoon Warehouse interior includes a panel display and video screening for guidance; the West Cocoon Warehouse interior displays historical materials, a 16-m graphical chronology display, and a cocoon storage space on the second floor; and the company housing interior has an exhibition that

conveys what life in the 1950s was like, a year-round exhibition of live silkworms, and an experience room for silk collection.

There have been many requests to open the closed buildings to the public, but the safety of the buildings cannot be ensured given their unrepaired and also deteriorated states, so there is no choice but to keep the

buildings closed. There are also many dangerous locations on the site, and the area where visitors can freely walk is limited to approximately half of the site so as to ensure the safety of the visitors (Fig. 2).

For the overall commentary guidance, visitors can participate in a scheduled guided tour by a paid commentator, or download an audio guide (free/multilingual) to their smartphone and listen to it freely while touring the site. To make the tour as enjoyable as possible, we have made efforts to involve voice actors who are active in anime or rokyoku performers to narrate the audio guides.

The basic policy for how the Tomioka Silk Mill is preserved and repaired, and how it is developed for utilization, is formulated in the “Historic Site and Important Cultural Property (Building) Former Tomioka Silk Mill Preservation and Management Plan” (formulated in 2008) and the “Historic Site and Important Cultural Property (Building) Former Tomioka Silk Mill Maintenance and Utilization Plan” (formulated in 2012). These plans were generally used as the basis for the basic policy for preservation and utilization, and progress was made after consulting the expert committee established by the city and after discussing with the Agency for Cultural Affairs. Discussions were also held with Gunma Prefecture, which was in charge of the comprehensive assessment of the four World Heritage constituent assets.

In this preservation and management plan, the preservation and management policy was set as the “preservation and management of the history and system accumulated by Tomioka Silk Mill,” and in response to this, the maintenance and utilization plan stipulated “maintenance that emphasizes the history and system accumulated by Tomioka Silk Mill.” This is the basic policy for the preservation and development of the Heritage of Industrial Modernization and Tomioka Silk Mill, and it indicates that there is value in the 115-year tran-

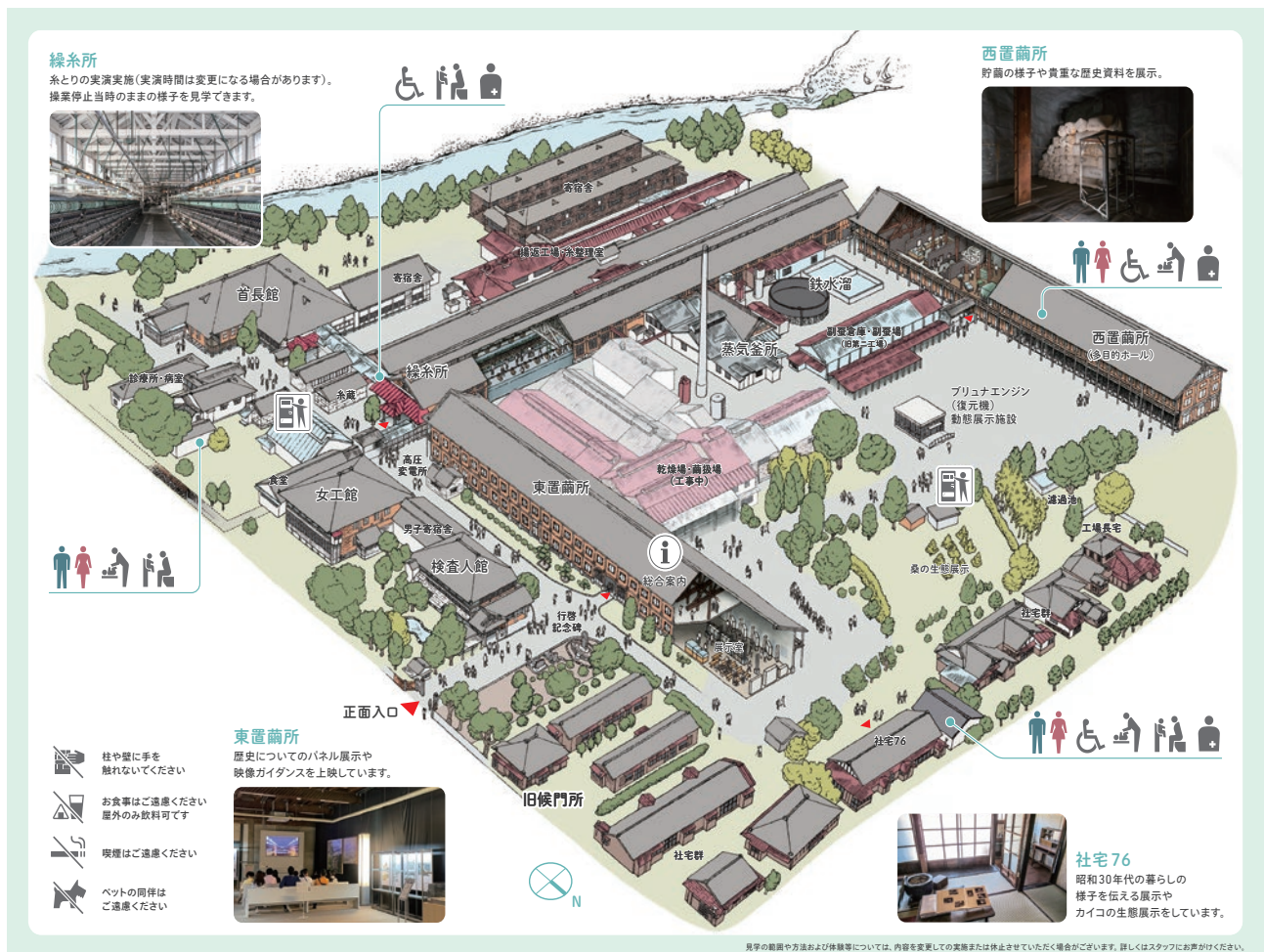


Figure 2 Guide map

sition up to the time of the stopping of operations and that preservation and utilization should be conducted as a factory system (production system).

Regarding the annual plan for the preservation and maintenance project, although a schedule of 30 years was set when the plan was formulated, the number of completed works has been small, as mentioned previously. There is also the problem of financial resources, and we plan to review these issues in the future.

3. National treasure “West Cocoon Warehouse” preservation and maintenance project

The West Cocoon Warehouse preservation and maintenance project is one of the achievements of the preservation and utilization efforts conducted thus far. The project was started in FY2014, and after six years of work, the project was completed in 2020 and opened to the public. The aim of the project was active utilization premised on the idea of not compromising the value of the National Treasure architecture, and structures such as a gallery (material exhibit room), foyer, and multi-purpose hall were installed as new functions on the first floor.

An overview and characteristics of this project are described below (please refer to “National Treasure West Cocoon Warehouse of Tomioka Silk Mill Preservation

and Repair Project Report” (2020) / Tomioka City for details). **(Photo 1)**

The West Cocoon Warehouse, located opposite the East Cocoon Warehouse across the courtyard, is a warehouse for storing cocoons, which are the raw material of raw silk, and was built to coincide with the opening of the Mill in 1872. It is a two-story building made of timber-framed bricks and a pantile roof, has a length of approximately 104 m, and stretches in the north-south direction, located on the west side of the site in a secluded location.

It is generally a cocoon warehouse, but unlike the East Cocoon Warehouse, the northern half of the first floor was a coal storage site when it was first opened, and after privatization, it was used as a workshop for sorting cocoons as well as where machines were lined up as a re-reeling area; it is a building whose functions have changed over time. Furthermore, there are several galvanized iron rooms on the second floor for storing cocoons that were called “Chokentaikan.” These conditions have already been lost in the East Cocoon Warehouse, so the aim in this maintenance project was to maintain the current conditions as much as possible so that visitors could experience the cocoon storage space during operation **(Photo 2)**.

This preservation and repair work was a partial re-



Photo 1 West Cocoon Warehouse, after repair / photo taken by : Sewaki Takeshi

pair, which involved re-roofing the entire roof, as well as the dismantling and repair of the floorboards on the first floor and the veranda on the second floor. The framework and brick walls generally were left the same.

The restoration year was set to 1974, which was when Tomioka Silk Mill was at its peak as a production facility and when raw silk production was at its highest during its 115-year period of operation. This made it possible to preserve as much of the traces of the Mill's operation as possible from the start of operations to the peak period. Moreover, the northeastern side of the first floor was completed by removing the new brick wall that was built around 1981 to improve the scenery and revealing the wooden glass doors that remained on the inside.

As mentioned earlier, the aim of the project was active utilization premised on the idea of preserving the value of the West Cocoon Warehouse as a cultural property, and not only preservation and repair but also seismic reinforcement and maintenance for utilization were simultaneously examined and implemented. One characteristic of this project was that many of the involved parties cooperated and collaborated in the examinations, design, and construction.

For the first floor, the steel frame for seismic reinforcement installed on the inside was used as a framework, and glass walls and ceilings were installed, a new floor was installed on top of the original floor, and a house-in-house method was used to set up rooms in the north and south sides for utilization. In doing so, the aim was for people to work in the house to utilize the

National Treasure architecture with as little damage to it as possible and to also segment the long space for ease of use, thereby establishing both preservation and active utilization. The above-mentioned gallery and multi-purpose hall were developed using this house-in-house method (**Photos 3 and 4**).

The multi-purpose hall is a glass hall within the World Heritage / National Treasure, and the aim is to actively promote its utilization as a truly unique venue. From FY2022, a usage fee was set up in the ordinance, and rentals of the space began to external parties were made available as an option. The start of utilization was in the midst of the COVID-19 pandemic, and there was still insufficient public awareness; to resolve this, in the future, we would like to collaborate with the tourism department to promote the dissemination of information and make the space one of the cornerstones of the utilization of the Mill.

Different reinforcement methods were used for the first and second floors, with the second floor rein-



Photo 2 West Cocoon Warehouse, second floor "Chokentaikan" as display / photo taken by : Sewaki Takeshi



Photo 3 West Cocoon Warehouse, first floor gallery photo taken by : Sewaki Takeshi



Photo 4 West Cocoon Warehouse, first floor multi-purpose hall photo taken by : Sewaki Takeshi

forced by installing braces made of stranded carbon fiber wires in the vertical and horizontal directions. In addition, aramid fibers were partially embedded in the joints of the brick walls to reinforce them.

The preservation, repair, and reinforcement work followed the basic principles of cultural heritage building preservation, where we preserved as much of the original structure as possible, minimized interventions during repairs, and used reversible methods. The first-floor house-in-house structure was built as a “temporary structure”; thus, removing it would return the building to almost its original state. To protect the underground site, the foundation of the reinforced steel frame was constructed by laying the foundation on the surface.

One of the characteristics of this preservation and repair work was the preservation of the plaster coating on the ceiling and inner walls of the first floor. The plaster coating was damaged in certain spots, and the plaster had already peeled off from the ceiling, revealing the wooden lath underneath. However, the ceiling was a valuable example of the status of construction of wood lamination and plaster coating in the early Meiji era, and the plaster wall also has traces of various forms of work during the 115-year period of operation, so the policy implemented involved complete preservation. The memos from the work left in various locations on the plaster walls, and the graffiti that appear to reveal the hearts and minds of the people who worked there are valuable documents that convey the history and value of the Tomioka Silk Mill as an industrial heritage that emphasizes the passing on of the memories of this labor (**Photos 5 and 6**).

Meanwhile, ensuring the safety of the users during active utilization is also important. The introduction of the house-in-house method allows the house to function as a shelter and protect the users inside the house even if the plaster on the plaster ceiling falls off due to a major earthquake. The plaster ceiling is covered with a double layer of netting in order to prevent it from falling off.

The house-in-house method adopted at the West Cocoon Warehouse is reversible, and additionally, transparent glass was used for the walls and ceiling of the house, with lighting used to make the original

walls and ceiling more prominent. However, there is the problem that the interior scenery has been considerably changed, and there may be some arguments for and against the introduction of this method. Nevertheless, we believe that we were able to present one development method regarding cultural heritage buildings, particularly old factory facilities, including large warehouses such as the West Cocoon Warehouse, to achieve both the preservation of its value and active utilization.

4. Issues

The current issues of concern for safely maintaining and passing on the Tomioka Silk Mill to future generations, and for establishing both preservation and active utilization, are described below. Here, I will mainly touch upon problems relating to financial resources and human resources, and interpretative problems due to the somewhat special type of cultural heritage that is the Heritage of Industrial Modernization.



Photo 5 West Cocoon Warehouse, first floor, wooden lath underneath of the ceiling, before preservation and repair work



Photo 6 West Cocoon Warehouse, second floor, graffiti on the plaster wall probably during government-operation period

<Financial resources>

As mentioned previously, the financial resources for the maintenance, management, preservation, and utilization of the Tomioka Silk Mill are generally based on the income from visitor fees, and the enterprise is also considerably assisted by donations.

The annual costs for the Tomioka Silk Mill varies depending on the content of the preservation and maintenance work for that year, but at present, when excluding personnel costs, it is assumed that we are able to manage one large-scale construction project if we have 450,000 visitors a year, and that we will have some leeway if there are 500,000 visitors a year.

However, even with this calculation, we are able to handle only one construction project, and conducting two or three projects in tandem is not possible. If such circumstances continue, then there is the risk that valuable historical buildings will be damaged or collapse due to deterioration over time or natural disasters, since seismic reinforcement and repair will not be implemented in time.

It was judged that the chimney, which is approximately 37 m high and which had prominent deterioration at the top, was in urgent need of work, so we solicited donations nationwide from 2021 for preservation and repair costs, and thankfully, we were able to achieve the target amount, and we immediately began surveys and examinations. We believe that we were able to cover the expenses of our city through contributions owing to the highly symbolic nature of the chimney, and the relatively low construction costs compared to that of large-scale construction like that for the West Cocoon Warehouse.

In addition to these difficult financial circumstances, the number of tourists in the region had decreased due to the COVID-19 pandemic, and in order to revitalize the region, there is a strong need for the Tomioka Silk Mill to make efforts toward increasing the ability to attract visitors to its site as one of the representative tourist destinations of the region.

From the perspective of attracting tourists, the tourism department of Tomioka City is also conducting utilization projects related to the Tomioka Silk Mill, and a recent trend has been the increasing number of

efforts toward working on national government-subsidized projects in cooperation with tourism departments. Recently, it seems that the national government has increased the number of subsidy projects that support tourism utilization. We would like to utilize these efforts and seek to improve the exhibition contents and create an experience menu that will lead to an increase in the number of visitors to our site.

<Human resources>

Currently, there are approximately 20 city officials who are involved in various tasks at the Tomioka Silk Mill site. Although several dedicated temporary staffs are available, regular employees are transferred once every three years, which results in the situation where people who have finally gotten used to the work of the Mill are then transferred, and their accumulated knowledge and experience cannot be used for the Mill. This is also one of the issues of being owned and managed by an organization like the city hall.

Above all, proper employees are needed for the roles of the architectural engineers who oversee the preservation and maintenance work. Tomioka Silk Mill has many buildings that are awaiting preservation and repair work; this requires multiple architectural engineers who can supervise the construction over a long period of time. This work requires cultural property-specific knowledge, so having a staff member accumulate experience in the field and stay permanently as an experienced member, rather than being transferred every two to three years is desirable. Furthermore, from the perspective of interpretation, there is always a need for curatorial staffs who are involved in maintenance and utilization projects.

When implementing preservation and maintenance projects, consultation with experts and the Agency for Cultural Affairs is essential, and implementation is difficult without at least a certain degree of specialized knowledge. For Tomioka Silk Mill, which is a World Heritage Site, Historic Site, National Treasure, and Important Cultural Property, preserving and utilizing the Mill without losing its value and securely maintaining it and passing it on to future generations requires the overseeing staff to have a wealth of knowledge and know-how

on the topic, and securing specialists is always an issue.

Today, I think that the aging of staff and involved parties associated with the Tomioka Silk Mill since before its registration as a World Heritage Site has gradually been progressing. The training of motivated young successors is also an issue.

<Interpretation as an industrial heritage>

Tomioka Silk Mill is a former factory, and it is a cultural heritage falling under the genre of an industrial heritage. Furthermore, its era division is in the modern era. It generally feels that accepting it as a cultural heritage or cultural property is difficult for people.

Furthermore, the value of Tomioka Silk Mill as an industrial heritage related to the technological innovations and production systems (factory systems) involved in raw silk production from the early Meiji period to the late Showa period, and these facts are generally not well-known.

Moreover, talking about the Mill's value as an industrial heritage requires a focus on labor, and it is important to convey how people worked and lived on the site, but visualizing in an effective manner how people worked in a factory whose machines have already stopped and where operations have ceased is difficult. Furthermore, the working environment and social background have changed greatly from the Meiji era to the Showa era.

What makes the interpretation of Tomioka Silk Mill even more difficult is people's impression of it. Generally, the impression that people have of the Tomioka Silk Mill is a woodblock print-like image of the Mill at its establishment in 1872, or the wood-framed brick building completed in 1872. As a result, many people seem to have the impression that the Tomioka Silk Mill is synonymous with the Meiji era, and there are many calls for the maintenance and interpretation of the Mill with the Meiji era in mind.

However, as mentioned earlier, the Tomioka Silk Mill is an industrial heritage and a silk mill that continued to operate for 115 years from 1872 to 1987, and it was its technological innovations during this time and the fact that its conditions when its operations ended were generally preserved that were highly regarded and that

led to its registration as a World Heritage Site. There is a need to accurately and appropriately convey these values while pursuing maintenance and interpretations that do not betray the expectations of its visitors, and this is being felt as a future issue for the site.

At the Cocoon Drying Facility, which is currently undergoing preservation and maintenance work, there are six two-story cocoon dryers that are preserved in the facility. We are hoping to devise exhibition contents that would easily convey to any visitor how these machines worked to dry the cocoons, and the types of flow lines that the laborers worked in during this time.

The interpretation for conveying the value of the Tomioka Silk Mill is based on the "Tomioka Silk Mill Interpretation Guidelines" (2020), which was formulated in consultation with an expert committee. The rental of the multi-purpose hall that was maintained in the West Cocoon Warehouse also required the user to understand this guideline and submit an implementation plan.

During formulation, we worked on the idea that the characteristics of the Tomioka Silk Mill be reflected in a manner suitable as a World Heritage Site, and that consistent and appropriate interpretation activities can be implemented even if the person in charge at the site changes. We used the "ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites" (2008) for identifying what is suitable as a World Heritage Site, and the contents were based on the utilization policy of the "Former Tomioka Silk Mill Maintenance and Utilization Plan" in order to reflect the characteristics of the Tomioka Silk Mill.

We also feel that broadening understanding of the English term "interpretation" is difficult as there is no appropriate Japanese translation for the term and because its transliteration is written in Japanese as *katakana*.

5. Conclusion

I discussed the current circumstances and issues regarding the preservation and utilization of the Tomioka Silk Mill from a field perspective. The maintenance, management and preservation of a large-scale World Heritage and cultural heritage site such as the Tomioka Silk Mill, and the appropriateness of generally covering

all costs related to public utilization with visitor fee income, as well as the system of ownership and operation by a local government with a population of less than 50,000 people to begin with, are points of discussion that can be tackled from various perspectives.

There have recently been many opportunities to promote maintenance for tourism utilization. As much as we would love to increase the number of tourists and increase visitor fee income, the major premise is to securely preserve the history and value of the Tomioka Silk Mill while maintaining it and passing it on to future generations, and we would like to actively promote its utilization as a tourist asset on top of these obligations.

In doing so, it is important to keep in mind that a cultural property, once the original is lost, cannot be restored, and even with software maintenance, once the wrong impression has been fixed, then it is difficult to undo. Hasty and easy developments should be avoided.

We believe that maintaining and passing on the Tomioka Silk Mill to future generations as a cultural property and cultural heritage for many years to come requires first having many people actually visiting Tomioka Silk Mill, experience its value, and to sympathize with the preservation of Tomioka Silk Mill through time and effort. I think that many of the visitors to the Tomioka Silk Mill stop by while on their way to other destinations. For such people to sympathize with our efforts, and for them to have felt that their visit was worth it and to have enjoyed their visit, we must provide a variety of interpretation menus and increase the avenues for developing interest, and to enable people to gain an interest in Tomioka Silk Mill from a variety of perspectives. I believe that this continuation is the first step towards preserving and passing down the Tomioka Silk Mill to future generations.

Chapter 2

Utilization of modernization heritage in Kiryu City

Utilization of modernization heritage in Kiryu City

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1. Introduction

Kiryu City is located at the eastern end of Gunma Prefecture, bordering Ashikaga City in Tochigi Prefecture. The city is surrounded by Mount Akagi in the north, the Ashio Mountains on the east, and Hachioji Hills on the west. It has an undulating topography due to the Watarase River and its tributaries flowing through the center of the city. In 2004, Niisato Village and Kurohone Village, both belonging to Seta District, merged and became a small city with a population of approximately 105,000 people.

The area has long been home to a thriving textile industry, particularly in the Edo period, when silk fabrics were produced, and various fabrics were produced in the modern era, with a focus on silk and artificial silk thread for both Japanese and Western clothing.

Historically, the individuality of present-day Kiryu City was formed after the early modern era. Though there were changes during the Edo period mainly in Kiryu Shinmachi (present-day Honcho, Kiryu City) such as switching between land under the Tokugawa shogunate and under its direct retainers, the city was not under direct rule of a feudal lord until the Meiji Restoration, and it has achieved its own unique development through self-governance by its residents. From the end of the Tokugawa shogunate to the modern era, the city experienced economic development based on quality improvement and increased production that accompanied textile technology innovations, and the city became known as one of the cities that supported the modernization of Japan. Given this richness, residents actively adopted new aspects in various fields such as in their daily life, culture, and industry, where they fostered a civic sense with an “enterprising spirit” that anticipated trends and eras. After World War II, large factories that

were converted to munitions factories disappeared, but production continued to increase mainly due to domestic demand, and by 1952, exports exceeded domestic demand both in terms of production value and volume. The textile industry is specialized for each production process, and various companies were established by individuals and groups for production processes such as twisting, dyeing, warping, and weaving, as well as the manufacturing and repairing of machines and associated parts, and processes for making designs such as patterns and crests into products. As many factories—new and old—co-existed, the industrial area expanded to the peripheries of the city limits, forming a town called “Shokuto.”

Even today, Kiryu City still has many Heritages of Modernization¹⁾ that are centered on the textile industry and are being utilized for various purposes.

Here, I provide a brief history and background of Kiryu City, which has preserved and utilized these Heritages of Modernization, as well as the associated changes in the residents, users, and administration²⁾ (**Fig. 1**).

2. Preservation and utilization of cultural properties and use of space (from Showa period to early Heisei period)

From the Showa period to the early Heisei period, the concept of the preservation and utilization of designated cultural properties was emerging and the spaces of vacant factories and offices were being used. At the time, some had understood the importance of buildings built after the Taisho period, but there was little recognition of their value as cultural properties, and it could be said that this was at the stage prior to the practice of conscious utilization. Modern factories and offices were being converted for use in practice, but most of these

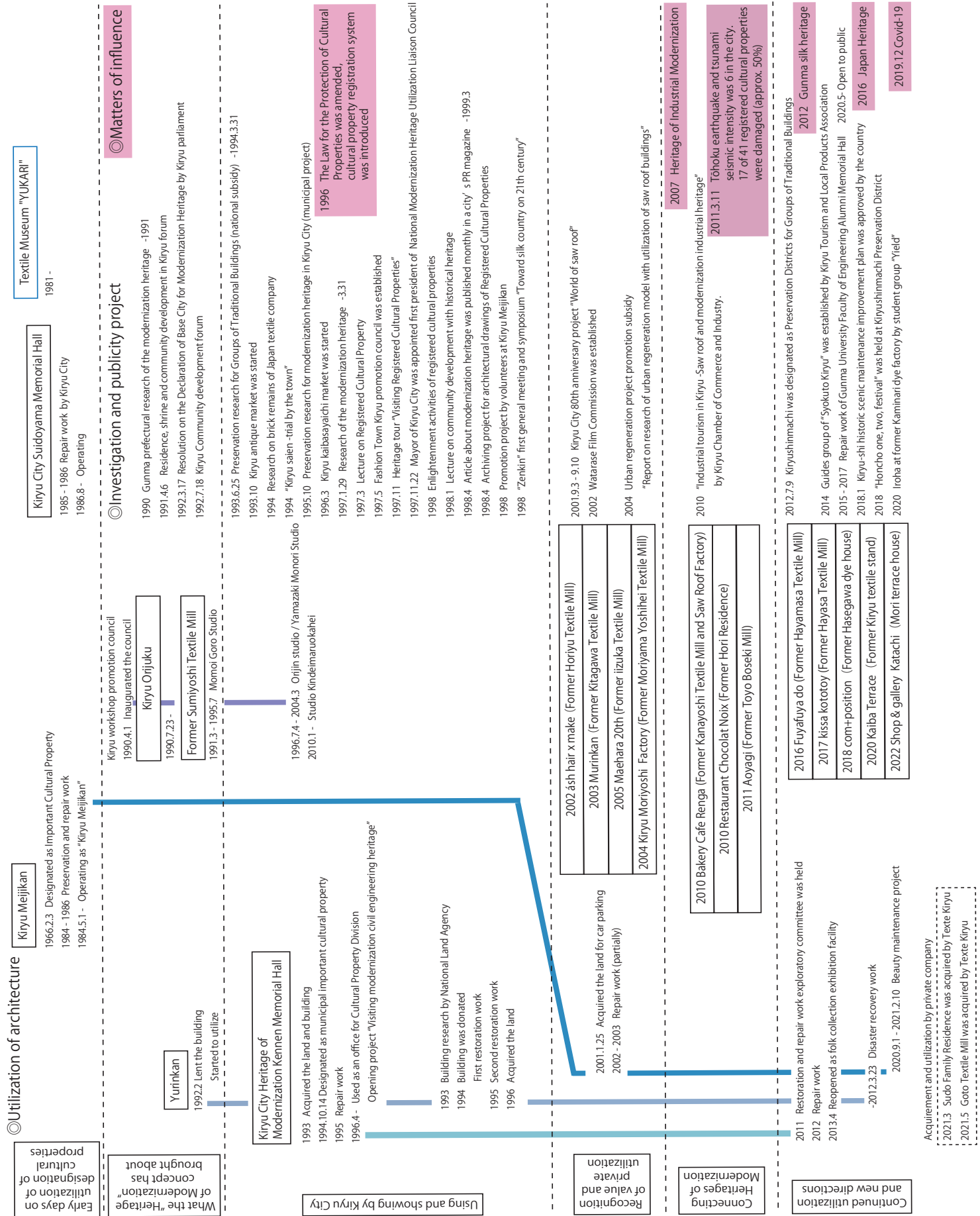


Figure 1 Utilization of modernization heritage in Kiryu City

cases involved using those unused spaces according to its purpose.

In this context, the Hataoto-Mura Kōsō (“‘Hataoto Village’ Concept”)³⁾ that was presented by Hisao Koike, who was the Chairman of the Kiryu Textile Cooperative Association, in 1977 was a pioneering concept that combined the rich nature of Kiryu City with the tradition of textiles and that was reminiscent of modern open-air museums and heritage tourism where “buildings and facilities in the city are utilized for industry, culture, and tourism.” Although this concept has not yet been achieved, it has influenced the direction of subsequent urban development.



Photo 1 Inside of Textile Museum "YUKARI" (Registered Cultural Property)

Subsequently, in 1981, the Textile Museum “Yukari” opened as the first example of purposeful and conscious utilization by the private sector. This was a textile company that had been in business since 1877, and it was a building built in the Showa period, where the interior of the factory whose operations had been discontinued was refurbished to exhibit machines and tools related to weaving, as well as set up to provide indigo dyeing workshops (**Photo 1**). As the name in Japanese “参考館”, Sankokan (Reference Museum), indicates, this is a method of utilization in which a museum is attached while manufacturing and selling in-house products. Every year, elementary school students in the city and surrounding areas visit the factory on a school-by-school basis; they learn about the history and culture of textiles and the atmosphere of the factory.

The designation system under the Act on the Protection of Cultural Properties indicates a new direction of simultaneous preservation and utilization while maintaining the philosophy of cultural property protection. In Kiryu City, the start of these efforts was with the Former Gunma Prefecture Sanitary Center (**Photo 2**). This was a pseudo-Western style building built in 1878 and designated as an Important Cultural Property in 1976 owing to its importance as an example of public architecture in rural areas. Preservation and repair work was



Photo 2 Kiryu Meijikan (Former Gunma Prefecture Sanitary Center, Important Cultural Property)



Photo 3 Shimada Dental Clinic (Shimada Shoten Former Stone Warehouse (Registered Cultural Property))

conducted over a two-year period from 1984, and pioneering attempts have been made to utilize the cultural property under the guidance of the Agency for Cultural Affairs. Operating under the name of Kiryu Meijikan from 1986, its building interior has been made open to the public, and its rooms can be leased free of charge for users to host special exhibitions and concerts, with a Tea Room that is directly managed by the city operating on the first floor. Though the products are not free, the utilization method of providing coffee and cake within an Important Cultural Property attracted considerable attention at the time.

Furthermore, in the same year, the Former Water Distribution Station Office (Registered Cultural Property), which was built by the Kiryu City Waterworks in 1932, was repaired and opened to the public as the Kiryu City Suidoyama Memorial Hall. It was preserved and utilized after its importance as the building when the water supply was first established was recognized.

Another aspect is its use not from the clear perspective of “preserving historical buildings” but rather as an asset (space). Examples include saw roof factories that have been used for other industries such as metal machinery and automobile maintenance, table tennis courts that use a wide space, and interiors that have been divided into residences and lodgings. Examples other than factories include the Kiryu City West Community Center (Registered Cultural Property) that has been used as a social education facility due to the relocation of the waterworks office, and the Shimada Shoten

Former Stone Warehouse (Registered Cultural Property), where a residential building was refurbished as a dental clinic in 1985 (Photo 3).

The Showa period could be regarded as an embryonic period for the secondary use (renovation) of designated cultural properties and modern buildings.

3. What the “Heritage of Modernization” concept has brought about (from 1990 to 1992)

A turning point in the conceptualization and activities regarding Heritages of Modernization in Kiryu City was the “Heritage of Modernization Comprehensive Survey” first conducted in Japan in Gunma and Akita Prefectures from FY1990 to FY1991.⁴⁾

It was the first time that the “Heritage of Modernization” concept was first presented, and we as the surveyors also struggled to get a grasp of the concept. In Kiryu City, the survey was conducted under the definition of “that in which Westernization could be seen in the modern era,” and of the 982 cases listed in Gunma Prefecture in the first survey, 97, or 10%, were in Kiryu City. As a result, people began to view structures such as the saw roof factories (textile mills)⁵⁾, Western-style buildings, and brick buildings with higher value as structures that expressed the modernization of Kiryu. In particular, saw roof factories were used as manufacturing factories in naval ports; however, in Kiryu City, most of them were used as either twisted yarn or textile mills, and they were built from the middle of the Meiji period to mid-1965.

There were many events during this period that triggered the utilization of Heritages of Modernization. In 1990, based on the desire of residents of Honcho 1- and 2-chome (present-day Important Preservation District) to “utilize the many storehouses that remain in the area in order to revitalize the community,” the “Storehouse Utilization Conference” was established from among government officials and local residents. This is an idea that links the utilization of historical buildings to urban development, and it led to the utilization of the Kiryu City Yūrinkan from the following year. Furthermore, in the same year, based on the concept of “High-tech and fashion city” in its Third Comprehensive Plan, Kiryu City organized the Kiryu City Workshop Promotion Council

through its Economy Department, and in the following year, it started a project where historical buildings could be rented out to individuals and groups as a workshop. The first version of this was called Kiryu Orijuku (“Textile School”), where researchers conducted a project in the residence, built in 1881, of the founder of the city’s first manufactured textile mill “Seiaisha” and his family, to widely disseminate the technology and history of textiles, which continued until 2018. The other case was the invitation of the contemporary sculptor Kakei Goro (deceased) to the reinforced concrete saw roof factory built in 1921 called the Former Sumiyoshi Textile Mill, and to use the building as his atelier (**Photo 4**). The saw roof factory is structured to have a lighting surface on the north side so that the colors of fabrics can be seen and stable indirect light can be received all day long, and its usefulness as a space for creating works, such as for an atelier, has come to be recognized once again.

In April 1991, in response to the results of the Heritage of Modernization Comprehensive Survey, the city board of education held the Forum for the Development of Folk Houses, Shrines, and Towns based on the recommendation of the Agency for Cultural Affairs, which provided an opportunity for citizens, governments, and experts to discuss the utilization of Heritages of Modernization and historical buildings.

Subsequently, on March 17, 1992, the Kiryu City Council unanimously adopted Japan’s first “Heritage of Modernization Core City Declaration.” This declaration of “We will re-assess Heritages of Modernization as cultural heritages and utilize it in urban development” has attracted attention as a pioneering example of how the “Heritage of Modernization” concept was quickly accepted by citizens, which in turn paved the way for utilization of these structures. In July of the same year, over 300 participants, including the Architecture and Other Structures Division of the Agency for Cultural Affairs, Gunma Prefecture Cultural Properties Division, and Kiryu city officials and citizens, hosted the Second Kiryu Forum for the Development of Towns ‘92, with Kiryu City Yūrinkan as the venue. The theme of the first subcommittee was “What are Heritages of Modernization?”. This served as the guideline for the utilization of Heritages of Modernization, and in the second subcom-



Photo 4 Saw roof factory (Former Kakei Goro's atelier)

mittee, “Urban Development and Heritages of Modernization in Kiryu,” the current status and historical value of the Honcho 1- and 2-chome districts in the city area were re-assessed, which led to their selection as Important Preservation Districts. The third subcommittee was on the theme of “How to utilize Heritages of Modernization,” which later led to the utilization of Yūrinkan. This was a turning point in the Heritages of Modernization of Kiryu City and the utilization of its historical assets.

What this period brought about was the consolidation of all activities with different purposes and implementation bodies until then into a single stream by presenting the concept of “Heritages of Modernization.” From 1990 to 1992, urban development in Kiryu City was implemented through the utilization of Heritages of Modernization.

4. Using and showing Heritages of Modernization (from 1993 to 1998)

From 1993 to 1998, Kiryu City utilized Heritages of Modernization to influence its later activities through the dissemination of information.

In March 1992, in response to the aforementioned “Storehouse Utilization Conference,” 11 storehouses that were owned by Yano Co., Ltd. and located in the city area were leased, and its utilization was started under the name of Kiryu City Yūrinkan (**Photo 5**). This was a group of buildings centering on the era when a brewery was operated at the present location of the Yano Honten, which was set up as a residence in the town of Kiryu by the Omi merchant Kyuzaemon Yano and

which started as general merchandise business, from the Meiji to Showa periods. In 1994, it became a Kiryu City-designated Important Cultural Property under the name “Yano Storehouse Group,” with the building being donated in the same year. From the following year, the building was repaired and maintained under the National Land Agency subsidized project “Regional Characterization Project,” and in 1996, the city centralized its management by purchasing the land. Utilization began in earnest with the “Yūrinkan and Kakei Goro’s Work” exhibition held in 1993 as a pre-construction publicity project, and the space has many users to this day as a multi-purpose facility. Its unique historical landscape in the city area and its 3,765 square meters of land have been used as an important place for citizens to disseminate art and culture as well as a base for urban development.

Another example implemented by the city is the utilization of the Former Kiryu Nenshi Limited Partnership Company Office Building, which was positioned by the Heritage of Modernization Comprehensive survey as one of the oldest Western-style buildings in Gunma Prefecture (**Photo 6**). The building was planned to be demolished, so discussions were held between the city and the owner, and in 1994, the land was exchanged for

equivalent land owned by Kiryu City, with the building preserved in the form of a donation; in the same year, it was designated as an Important Cultural Property of Kiryu City. Minor development work was conducted, and it began to be used as the Cultural Properties Division office under the name of the Kiryu City Heritage of Modernization Kennen Memorial Hall. The cultural property information center was located on the first floor, and buried cultural properties and folk cultural properties were arranged on the second floor. The building was used from 1996 to 2010, but the Great East Japan Earthquake on March 11, 2011 resulted in damage such as cracks on the external and interior walls, and the Cultural Properties Division moved to the main government building. At the time, plans were underway to refurbish this building into a historical museum as part of a project to commemorate the 90th anniversary of the Kiryu City system, so a building survey was conducted by Kiryu City, city board of education, Nagaoka Institute of Design, and the Gunma Prefecture Association of Architects, renovation work was conducted in FY2012, and the building has been used as a museum from the following year till the present day. It showed that buildings could be used differently depending on the circumstances such as location, characteristics, and



Photo 5 Yūrinkan (Yano Storehouse Group, Municipally Designated Important Cultural Property)



Photo 6 Kiryu City Heritage of Modernization Kennen Memorial Hall
(Former Kiryu Nenshi Limited Partnership Company Office Building, Municipally Designated Important Cultural Property)

scale of the building, such as the use as a cafe with Meijikan, multi-purpose facility with Yürinkan, and an office and information center with the Kennen Memorial Hall.

In the 10-year period from 1994, when information about Kiryu City began to be disseminated, such as the utilization of Yürinkan and atelier utilization by Goro Kakei, the works created from old buildings and natural scenery throughout the city, where the “Kiryu Reenactment” exhibition was held, which centered on students from the Tokyo University of the Arts and was held in saw roof factories and historical buildings as venues, discovered the charms of Kiryu City and showed the visiting citizens the potential of these old buildings.

In FY1996, a registered cultural property system was launched to complement the designated system. This system changes the stereotypes regarding the preservation of cultural properties and showed that conducting repairs for utilization while preserving the exterior (scenery) in consultation with local governments and the national government was possible. Kiryu City also had 132 buildings in 33 locations since the first registered building as a cultural property on December 26 of the same year to the present day, with residences, shops, offices, factories, and others contributing to the

historical landscape and becoming important elements of tourism.

5. Recognition of value and private utilization (from 1998 onwards)

After 1998, citizens widely recognized the value of Heritages of Modernization, and the main entities of utilization more broadly shifted from the city and some organizations to the private sector. At the center of such efforts was the utilization of saw roof factories, and when looking in chronological order, this began with “ash hair x make” (Registered Cultural Property) (**Photo 7**) in 2000; and then “Murinkan” (Former Kitagawa Textile Mill, Registered Cultural Property), in which a factory space was partitioned into a creator’s atelier; “Maehara 20th” (Registered Cultural Property), which was a private automobile museum; and “Restaurant Chocolat Noix” (Former Hori Residence, Registered Cultural Property), wherein a textile mill president’s office was converted into a French restaurant. Additionally, “Bakery Cafe Renga” (Former Kanayoshi Textile Mill and Saw Roof Factory, Registered Cultural Property), which is a bakery with a cafe that utilizes the only remaining brick saw roof factory in the city, has approximately

100,000 visitors per year (**Photo 8**). In 2009, “Joshu Confectionery Aoyagi Saw Roof Store,” which manufactures and sells confectionery, opened for business (**Photo 9**). This building was built in two phases, with the three buildings on the north side made of stone and the three buildings on the south side made of wood. The stone part is used as the store, and the wood part is used as a warehouse. In the Heisei period, the space was temporarily used as a gallery and movie theater by art students and citizen volunteers, and in 2007, large-scale cleaning was conducted by volunteers, indicating the long need for preservation and utilization of the building.

The Kiryu Textile Center Former Building (Registered Cultural Property), which was built by the Kiryu Textile Cooperative Association in 1934 and has been used as the Association office for each textile process, was opened to the public in 2001 under the name of Kiryu Textile Memorial Hall, including a shop. Kiryu City is well-known as a textile production area, but at the time, only a limited number of locations in the city existed where textile-related products could be purchased, and the utilization of the main building was welcomed by the citizens of the city.

Among the organizations that promote utilization, in 1997, the Kiryu Chamber of Commerce and Industry adopted the “Fashion Town Concept” and launched the Community Development Subcommittee. In the latter half of 1998, this subcommittee began to take on the activities of community development that utilized Heritages of Modernization, historical buildings, and landscapes, centering on the saw roof factory.

Furthermore, during this time, public awareness of Heritages of Modernization was being promoted to citizens through intangible projects. In 1998, the first general meeting of the National Liaison Council for Utilization of Heritages of Industrial Modernization was held at the Gunma University Engineering Alumni Memorial Hall (National Registered Tangible Cultural Property), chaired by the mayor of Kiryu City. This organization comprised the Agency for Cultural Affairs and local public entities, and it gathered information nationwide through exchanges with members and was simultaneously able to disseminate the efforts of Kiryu City to



Photo 7 ásh hair x make
(Former Horiyu Textile Mill, Registered Cultural Property)



Photo 8 Bakery Cafe Renga (Former Kanayoshi Textile Mill and Saw-Tooth Roof Factory, Registered Cultural Property)



Photo 9 Joshu Confectionery Aoyagi Saw Roof Store

the entire country. In addition, the organization created pamphlets, held lectures, trained volunteers for explaining cultural properties, published in public relations magazines, and held the city’s 90th anniversary commemorative project “The World of Saw Roofs,” leaving

an impression of Heritages of Modernization to the general public.

At this time, Kiryu City did not have a clear strategy based on the idea of “industrial tourism”⁶⁾ that was advocated in the Nagoya metropolitan area. However, in 1997, the Kiryu City Board of Education held a tour entitled “Cultural Property Tour: Visiting Registered Cultural Properties,” and from 2005, began the “Simultaneous Public Opening of Heritages of Modernization” as part of the National Liaison Council for Utilization of Heritages of Industrial Modernization. Making the saw roof factories and Western-style buildings that are being utilized available for touring gave opportunities for people inside and outside the city to use those structures and feel their charms, and even today, these activities have continued at an increased scale. In the private sector, in 2000, the Fashion Town Kiryu Promotion Council began to consciously implement the project of “connecting the scattered Heritages of Modernization with a single purpose and creating a lead,” which was pioneered by the “Kiryu Reenactment,” involving activities such as the creation and distribution of the “Wonderful Experience Kiryu Machinaka Map,” which lists the Heritages of Modernization. Thus, the importance of the city as a tourism resource has been recognized.

In 2002, the Watarase Film Commission, which was Japan’s first private organization, was established. The charm of Kiryu City, which this group promoted for attracting filming locations, is its rich nature and townscape, as well as its Heritages of Modernization, and since then, the city has been widely used as a location for filming movies and television.

Looking at the flow process so far, from 1993 to around 1998, the city and some organizations practiced the utilization of Heritages of Modernization and raised public awareness. This then shifted from 1998 onwards, private organizations and companies recognized the value and history of the buildings that are Heritages of Modernization, and they began to consciously use the scenery that they preferred. The commercial and hobby value of these buildings was also recognized, and it has come to be realistically utilized in the urban development of Kiryu.

6. Connecting Heritages of Modernization (from 2000 onward)

In Kiryu City, the Heritages of Modernization were consciously preserved and utilized, and new trends emerged when these activities spread to the private sector.

Based on the results of discussions at the Kiryu Forum for the Development of Towns ‘92 that was held in 1992, in the following year, in 1993, a national government subsidized project “Survey on Preservation Measures for Groups of Traditional Buildings” was implemented for Honcho 1- and 2-chome (former Kiryu Shinmachi 1- and 2-chome). As a result, it was assessed that the land allocation and site usage patterns of the early modern era remain in good condition, and the “Zaigomachi” (weaving town), where buildings from the end of the Edo period to the modern period line the streets, retained their historical scenic beauty. Residents also became aware of this, and an awareness of community development through Important Preservation Districts began to emerge.

From the same year, the Old Folk Items Antique Market was held on the first Saturday of every month in the precincts of Kiryu Tenmangu Shrine, which was the starting point for the development of Kiryu Shinmachi as a town, to promote community development by attracting visitors to the north side of the city area. In conjunction with this project, from 1996, the “Kaiba Sayaichi” (Shop Saya Market) was started by shops and companies in Honcho 1-chome with the clear purpose of preserving and utilizing the old townscape. This created a flow of people from Tenmangu Shrine to Honcho 1-chome, which later led to the opening of markets and collaborations with other shopping districts. This area is still bustling with many visitors on the first Saturday of the month. Afterwards, various projects, discussions, surveys, ordinance development, among others, were conducted by the city and local residents, and on July 9, 2012, the district and part of Tenjin Town were selected as the Kiryu City, Kiryu Shinmachi Important Preservation District (**Photo 10**). This district included the Gunma Prefecture-designated Important Cultural Property Tenmangu Shrine, two Municipally designated Important Cultural Properties such as the Yano Storehouse Group (Yūrinkan), and 25 Registered Cultural Properties such as the Former Kitagawa Textile Mill (Murinkan) in six lo-



Photo 10 Kiryu City, Kiryu Shinmachi Important Preservation District

cations; and once the district became a cultural property that constitutes the Important Preservation District, new value was added to its history and scenery.

Another trend is the creation of added value by the government. Under the Heritages of Industrial Modernization system established by the Ministry of Economy, Trade and Industry in 2007, the silk textile industry in Kiryu City and Ashikaga City was certified as one of 66 in the “Heritage of Industrial Modernization Group” nationwide. Of the textile-related heritage sites in Kiryu City, 11 are constituent elements, and a new value of “industrial heritage” was set. In 2012, the Gunma Silk Heritage certified by Gunma Prefecture was established, and Kiryu City has 18 of the 105 certified silk heritage sites in the prefecture. Since the Edo period, Gunma Prefecture has been thriving in sericulture, silk reeling, and textiles, and particularly since the beginning of the Meiji period, the area has had a history of rapid modernization, as represented by the Tomioka Silk Mill, and this was a system for registering buildings, places, festivals, among others, related to silk heritage with the aim of “connecting and networking the silk heritages that remain in the present day to utilize them for tourism and cultural projects.”

In 2015, the story, “Kakaa Denka - Silk Story of Gunma,” which comprises the constituent cultural properties of Kiryu City, Kanra Town, Nakanojo Town, and Katashina Village in Gunma Prefecture, was certified as a Japan Heritage under the Agency for Cultural Affairs. “Kakaa Denka” is a word that praises the women of Gunma for being hardworking and firm, and the expression “Uchi no Kakaa wa Tenka Ichi” (“My wife is the best in the world”). This is proof that women simultaneously played a central role in the sericulture and textile industries through their labor force, and supported households in Gunma Prefecture.

The purposes and methods of utilization of these certification systems, including the Important Preservation District system, differ depending on the government office or local government that has jurisdiction, but they have helped create assets that contribute to industry, tourism, and community development by finding common values and networking them.

7. Continued utilization and new directions (10-year period up to the present day)

From the end of the Showa period to the Heisei period, Kiryu City has been utilizing its Heritages of Modernization in various ways, but as it has become more common, new circumstances have arisen.

In the Important Preservation District, since its selection in 2012, citizens and people associated with Kiryu have noticed the charm of the district and have begun to utilize the buildings. People effectively utilized the atmospheres of buildings like Fuyafuya-dō, in which part of a former textile mill was converted into a bookstore, and Kototoi Kissa, in which a former textile mill office was converted into a coffee shop, without much remodeling of the buildings. Furthermore, an example of utilization following preservation and repair work that was conducted with national government subsidies from FY2013 is the com+position, in which two buildings (loom parts manufacturing factory and dyeing factory) were leased and utilized as a hat manufacturing factory and store (**Photo 11**). One of the reasons of the people involved in the project to move to the district was that it was an area where materials that are difficult to procure for making hats could be produced and procured, and this project has been an example of combining the local industry and historical landscape. The number of cases of utilization has been steadily increasing; another example includes the Kaiba Terrace, where several citizens leased the Former Kiryu Textile Trading Center built in 1882 and used it as a restaurant and miscellaneous goods store. Furthermore, the district itself, continuing from Kaiba Sayachi, has been the stage for activities. At HONCHO 1-2 FES, where many markets using the buildings and vacant lots mainly in the Important Preservation District will be exhibited from 2018, most of the people involved are in their 30s and 40s, and it can be seen that they are doing what they wish to do with free ideas. The local people are also warmly watching over these activities and are cooperative, and the potential for new urban development can be felt here.

When looking at the Heritages of Modernization, there are cases where facilities that have been continuously utilized have been modified to add or change the way they are used. Patisserie Uchiyama, which is a pastry

shop that used the saw roof factory in a manner that hides this distinct feature, was renewed in 2011 and sold as a cake shop with a saw roof, and in the following year, the product sales area on the first floor was expanded at the Kiryu Textile Memorial Hall, its design was renewed, and a textile museum was opened on its second floor (**Photo 12**). In 2020, Yield, which was founded by Gunma University students, renovated a dyeing factory and opened Iroha, which was a store that offered shaved ice, sweets, soups, among others, and in 2021, due to the strong desire of the tenant of the building, the Former Kanaya Residence (Registered Cultural Property), which was the main building connected to the previously mentioned saw roof factory Bakery Cafe Renga, was refurbished as a pottery gallery and cafe Jizaian. Furthermore, the JR Ryomo Line, Tobu Railway, Jomo Railway, and Watarase Keikoku Railway, which are railway companies that are present in the city, have begun introducing their own histories and their owned facilities (Heritages of



Photo 11 com+position (Former Hasegawa dye house)



Photo 12 Kiryu Textile Memorial Hall (Kiryu Textile Hall, Municipally Designated Important Cultural Property)

Modernization) on their websites and leaflets while utilizing events, and in recent years, the four companies have jointly held a stamp rally that includes the cultural properties in the surrounding area. Cross-sectional utilization is a persistent issue in Kiryu City, but in August 2022, with “History Rogaining in Kiryu” being held in city areas following a proposal by a student at Gunma Prefectural Women’s University, the value and charm of Heritages of Modernization were recognized once again, and these values and charms began to be actively utilized and its information disseminated.

The most notable is the activity of Texte Kiryu Co., Ltd., which is a community development company that was established as a joint venture by local entrepreneurs. In 2021, they began efforts to purchase and utilize two Registered Cultural Properties that were likely to be sold or destroyed. They conducted comprehensive surveys of buildings and textile production systems, such as the Sudō Residence (Photo 13), which is a Western-style building from the Taisho period, for use in readings and music events; and Gotō Orimono (Photo 14), which is the oldest working factory in Kiryu City and which opened in 1870, for clarifying its historical value. There was a new perspective where, though the company wanted to determine its utilization method in the future, since both buildings are historical buildings that represent Kiryu, private capital ventures would take the initiative in taking preservation measures, and if possible, examine the direction of utilization as a useful asset. This deserves special mention as a new private sector-led attempt that cannot be achieved by the government.

8. Activities and awareness of citizens as seen from Kiryu City Yūrinkan

Here, I would like to introduce the case of Kiryu City Yūrinkan, which is a representative example of the utilization of Heritages of Modernization and which best represents the way in which Kiryu citizens relate to each other and their civic sense. As previously mentioned, Kiryu City Yūrinkan was established in February 1992, when Kiryu City decided to lease 11 storehouses in the city area, where the old townscape remains. It is the Heritage of Modernization that has been the most utilized by citizens to date, and it is this case that gives one a

sense of what Kiryu is. In 1992, there were few examples nationwide of the utilization of historical buildings, so the Cultural Properties Division of the City Board of Education, which oversaw this project, decided on the concept as a “multi-purpose facility that provides a historical space,” organized the Yūrinkan Steering Committee comprising local residents as well as citizens involved in cultural activities and academic experts, and leased the building. The name of the facility is derived from Confucius’ story, “Yūrin” (“having virtue”), that is, “Virtue is never left to stand alone, and he who has it will always have neighbors.”

When Yūrinkan first opened, the Cultural Properties Division and the Yūrinkan Steering Committee conducted planning projects, and there were approximately 3,000 users per year, but over time, people began to understand the charm of the facility, and it has come to be used by a wide variety of people, ranging from amateurs and students to top-class artists, musicians, and comic



Photo 13 Sudō Residence (Registered Cultural Property)



Photo 14 Gotō Orimono (Registered Cultural Property)

storytellers. The facility was utilized in a variety of ways that made the most of the atmosphere of the building, such as fashion shows, flamenco performances, professional concerts, galleries, comic storytelling, and Kyogen (Photos 15 and 16). As a result, in 2010, the number of visitors increased to 83,956 people, with the number of users / organizations increasing to 130 (Fig. 2). This facility attempted the idea of “above all, use it, let it be used,” which is the basic method of utilizing Heritages of Modernization, and the result has given us the confidence in freeing the use of municipal buildings.

In terms of operations, Yürinkan has only one director and three female employees who are appointed during the fiscal year. There are projects several times a year that use all storehouses, and there are inevitably situations such as theater and concerts that cannot be handled due to the scale and need for specialized skills, but this is resolved by the existence of three “citizen volunteers,” which is said to be a characteristic of Yürinkan. The first is the above-mentioned Yürinkan Steering Committee, which is commissioned by the City Board of Education and is a completely volunteer-run committee that considers and implements the planning and operation of Yürinkan. The second is the NPO Yürinkan Tomo-no-Kai, which is not organized by the city, but rather by the people who are active behind the scenes of the Yürinkan project in the form of an NPO, where they implement projects such as the Yürinkan Festival. And then there are the nameless volunteers who do not form a group and unconditionally conduct volunteer activities just for Yürinkan. When an event that requires diverse usage methods occurs, for example like when needing to set up a stage, then with a single call, people with specialized knowledge and skills come and prepare things such as props and sound systems. A system for utilization has suddenly been completed thanks to the support of such people. It is a facility that embodies the activities where, “as a city continued to utilize the Heritages of Modernization, citizens began to take part as well.”

This is something that I had also participated in, but there are some interesting results in the “Survey on the Preservation and Utilization of Historical Cultural Resources and Community Revitalization by Utilizing Residents’ Volunteer Activities”⁷⁾. When nearly 150 resident

organizations in various fields in the city were surveyed and analyzed, it was observed that there were few examples of each organization conducting cooperative activities, and that all of these activities were on an individual level. This may be due to the fact that Kiryu City is a city with a concentration of small and medium-sized textile-related companies, and there is a civic sense that seeks originality in their activities, but the interview surveys indicated that the subjects did not understand the circumstances of other organizations, and that they had no collaboration or cooperation between them. However, as we proceeded with the survey, it was observed that, in practice, people used Yürinkan in some form as a place for information exchange and interaction, enabling the effective division of activities between organizations. Moreover, many subjects responded that they had no experience using cultural properties (historic buildings), and it was demonstrated that there was a poor understanding of the fact that Yürinkan is a cultural property.



Photo 15 Utilization of Yürinkan (brick warehouse)



Photo 16 Yürinkan Art Festival (soy sauce brewery)

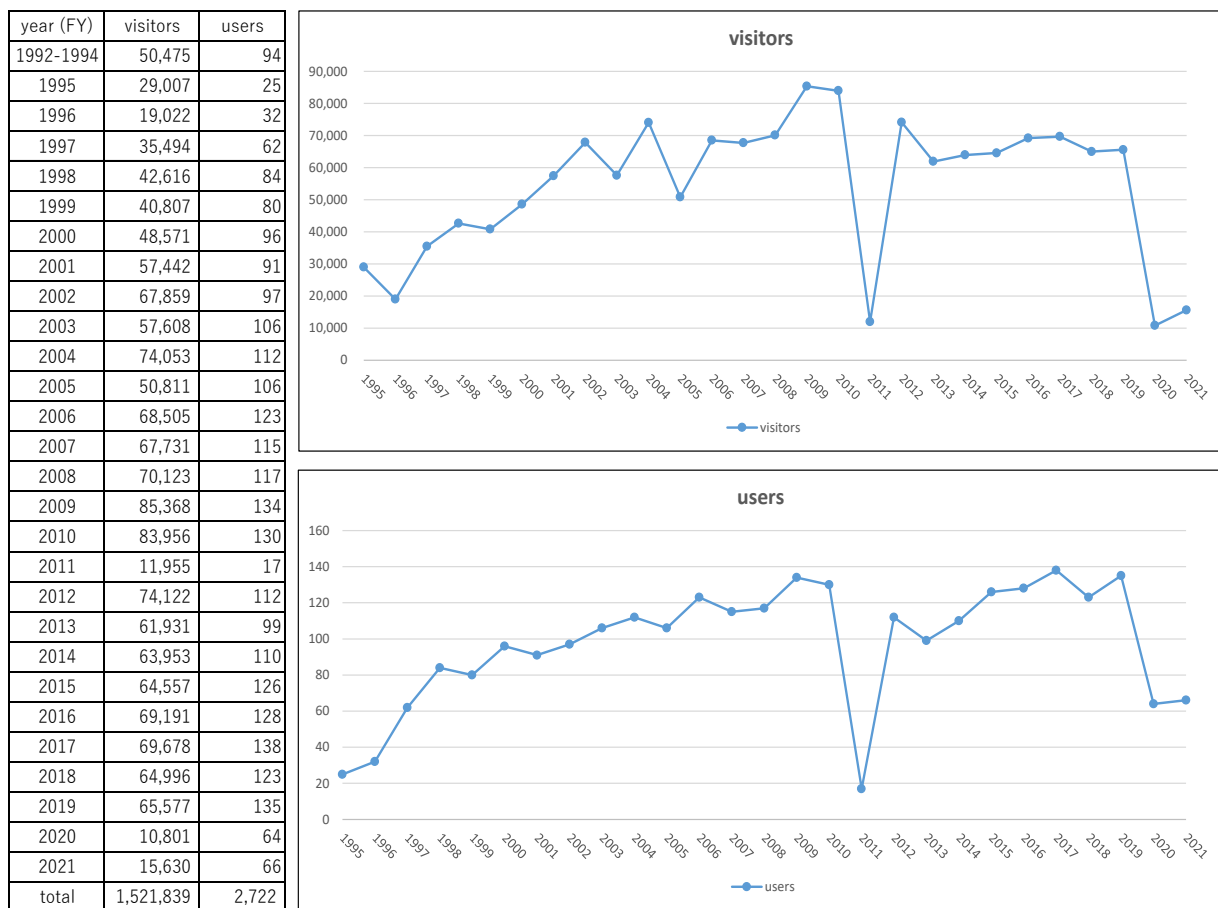


Figure 2 number of visitors and users of Yürinkan

These results show that Yürinkan was well known to citizens as a place for activities and information dissemination and that it is a cultural property widely used in an unconscious manner owing to its location and charming scenery.

The Yürinkan Arts Festival (started in 1996) and the Yürinkan Theater Festival (started in 1997), which have been held even now since the opening of Yürinkan, have had yearly fluctuations in visitors due to the alternate hosting of the two events, but its usage progressed smoothly. However, on March 11, 2011, Kiryu City was hit by an earthquake with a seismic intensity of >6. Owing to the Great East Japan Earthquake, the brick roof tiles of the north building of Yürinkan collapsed, cracks were observed in some members of all the storehouses, and the earthen storehouse on the south side became tilted. Yürinkan was closed on the same day to ensure the safety of users, with restoration and development work conducted from July 2011 to March 2012. During that time, the Yürinkan Steering Committee changed its

activity slogan from “Use and keep Yürinkan” to “Fix and use Yürinkan,” where they held events bearing the name of Yürinkan at other facilities and sought donations for repairs. Donations were also received from people who wished for the facility to re-open and who wished to restore historical buildings, and as a result, of the construction cost of approximately 34.8 million yen, 24.3 million yen came from donations, with the result embodying the literal spirit of “Yürin.” After it re-opened in April 2012, visitors and users gradually returned, but usage restrictions and closed periods were set since December 2019 to prevent the spread of COVID-19, and the number of visitors sharply fell once again.

Kiryu City Yürinkan is a facility that is managed by the city, but it is operated by citizens and users, and it has a history of those citizens and users building and growing morals themselves for the building and its activities. It is a miraculous Heritage of Modernization that has naturally achieved public-private collaboration in its operation.

9. Conclusion

The utilization of Heritages of Modernization was chronologically summarized in this paper. In Kiryu City, after 1998, the value of structures as cultural properties or Heritages of Modernization was revisited, and the awareness among owners and users who have previously been utilizing these structures changed accordingly. For example, the Kiryu Club, which is Gunma Prefecture's oldest incorporated association, established the Kiryu Club Hall (Municipally Designated Important Cultural Property) in 1919 as a base for cultural activities aimed at fostering mutual friendship among members and exploring the public interest, where it was long used according to its initial purpose (**Photo 17**). However, in recent years, systematic development work has been conducted by implementing plans and public projects for external use. One of the missions of the club was to increase the value of historical heritages and to pass it on to the next generation. With regards to administration, the Kiryu City Urban Master Plan formulated in 2009 included a description of the future city plan as the "formation of a unique and attractive townscape by examining the preservation of the forms of historical buildings around Yūrinkan and their utilization as Heritages of Modernization"; and the Kiryu City Tourism Basic Plan of 2010 recognized the "Heritages of modernization such as saw roofs as tangible and intangible cultural properties that were nurtured by the prosperity of the textile industry" as one of the charms of Kiryu City. By the time that the Kiryu City Historical Scenic Maintenance and Improvement Plan was formulated in 2018, the Heritage of Modernization had become universal and was one of the centers of historical scenic beauty.

Since the presentation of the Heritage of Modernization concept, its utilization entities have spread from government and limited companies or organizations to the general public, and as a result, it has been fed back to government policy. With the advent of the Reiwa era, there have been new developments such as the establishment of private companies with a strong sense of purpose for preservation and utilization.

Kiryu City has the same problems as other local cities, such as depopulation due to declining birth rates, aging populations, and industrial decline, and there are many



Photo 17 Kiryu Club Hall (Municipally Designated Important Cultural Property)

Heritages of Modernization themselves that are being demolished due to aging and an increase in vacant houses. However, looking at actual examples of saw roof factories, in the 10-year period from 1990, approximately 10 such buildings were demolished each year, but in the present day, this pace has been slowing down. With people reviewing the value of the buildings and the thoughts of the owners and users, the status of these structures as "those that should be kept" is becoming clearer, and there seems to be a sense of hope for their utilization for citizens.

Hani Goro, who was a historian born in Kiryu, described the "textile capital" Kiryu as a "free city"⁸⁾; and Sakaguchi Anjo, who was a writer who died in Kiryu, described it as a "personal city"⁹⁾. This town, which was once full of people based on the textile industry, is Japan's only "Heritage of Modernization Base City" that has free-spirited citizens that have not changed even today. The efforts of Kiryu City to preserve and utilize their Heritages of Modernization are always continuing in many different subjects and forms, and they are being utilized in urban development.

Footnotes

- 1) A Heritage of Modernization is defined by the Agency for Cultural Affairs as “all buildings related to industry, transportation, and civil engineering that were constructed between the end of the Edo period and World War II and that contributed to the modernization of Japan,” and for the purpose of the content here, the present text does not use modern cultural heritages in a broad sense.
- 2) This text is based on the following lecture record given by myself, with new findings and analysis added.
荻原清史「職都桐生の近代化遺産三十年」(地域ブックレット 群馬の歴史と文化遺産 vol7 『近代化遺産総合調査の30年』群馬県立女子大学群馬学センター 平成4(2022))
- 3) 『月刊上州路』あさを社 昭和52(1977)年12月号
- 4) 群馬県教育委員会『群馬県近代化遺産総合調査報告書』平成5(1993)年2月
- 5) The definition of a saw roof is as follows, according to Noguchi (1997): “A roof that looks like a saw tooth when viewed from the gable side, and received light from the vertical or slanted part of the short side of the tooth shape. It is used for factory architecture, and it is mostly used in textile mills and spinning factories. The ridges are continuous, but cases of singular ridges exist.” Moreover, the term “saw roof” is used in this text.
野口三郎「イギリスの工場建築について(その8ダービシャとヨークシャの場合)」日本建築学会関東支部研究報告書 平成9(1997)年3月
- 6) 須田 寛『産業観光』(株)交通新聞社 平成11(1999)年
- 7) 文化庁文化財部建造物課『住民のボランティア活動を活かした歴史的文化的資源の保存活用と地域活性化に関する調査 報告書』平成14(2002)年3月
- 8) 羽仁五郎『羽仁五郎—私の大学(人間の記録)』日本Figure書センター 平成13(2001)年
- 9) 坂口安吾「桐生通信」『坂口安吾全集14』筑摩書房 平成11(1999)年

Chapter 3

Meiji tunnels discovered by coincidentally
-Regeneration and a blueprint for the future created by citizen-

Meiji tunnels discovered by coincidentally -Regeneration and a blueprint for the future created by citizen-

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Chairman, Specified Nonprofit Corporation Aigi tunnel group preservation and revival committee

1. Introduction

In 2006, in Kasugai City, which is a city of 300,000 people adjacent to the northeast of Nagoya City, Aichi Prefecture, roughly in the center of the Japanese archipelago, abandoned railway lines and tunnels from a former Japanese National Railways (JNR) era, which had even been forgotten by its own citizens, were suddenly discovered. The discovery site was located in the middle of the mountainside in a deep V-shaped valley that borders Kasugai City and neighboring Tajimi City in Gifu Prefecture. Hidden by dense trees and bushes that grew after the discontinuation of the railway line, and blocked by the massif in the background and the Shonai River, which is a first-class river that flows beneath, it was an almost perfect place for stopping any human intrusion, as nobody could reach it. Therefore, for 40 years, it luckily (?) lay dormant without being seen by

people. In this report, I would like to introduce to everyone the preservation and utilization of the tunnels that were discovered by chance.

2. Aigi Tunnel

2-1. Overview

The Aigi Tunnel Group (**Fig. 1**), which straddles Kasugai City in Aichi Prefecture and Tajimi City in Gifu Prefecture, is a group of 13 abandoned tunnels (14 at the time of tunnel construction) located between Jokoji and Tajimi Stations on the Chuo Main Line, and it was used for over half a century since the opening of the section between Nagoya and Tajimi Stations on the JNR Chuo Line in 1900. After the Chuo Main Line was opened, timber such as Tono cypress, high-quality pottery clay, and pottery were transported to Nagoya via this railway line. Wood was exported to automobile

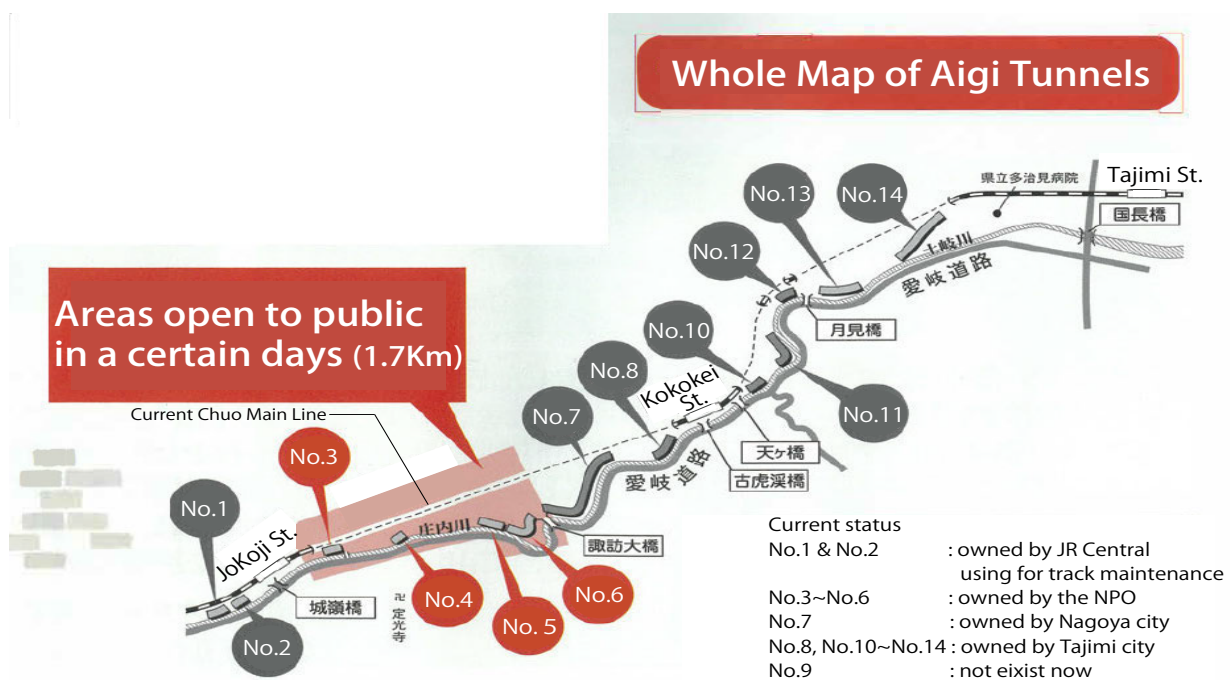


Figure 1 Whole map of Aigi tunnels (prefectural border is between No.6 and No7)

manufacturers (e.g., Nippon Sharyo) and automatic loops (e.g., Toyota Industries), and pottery clay was exported overseas as Japan china, the representative example of which was Noritake. Thus, this railway line is said to have played a major role as a material supply source for creating the prototype of “Monozukuri Chubu” (“manufacturing center”). Following electrification and double-line development in the post-war period, new routes were opened with a long tunnel, and the railway service ended in 1966, ending the role of the 8-km track bed and group of 13 tunnels between Jokoji Temple and Tajimi Stations. After the end of this service, the area was completely untouched by human hands, and until recently, it was buried in thick bushes. (Photo 1)

2-2. Historical background

When constructing the railway section between Nagoya and Tajimi Stations on the JNR Chuo Line, which includes the Aigi Tunnel Group, the Ministry of Railways chose a route to dig 13 tunnels along the Shonai River valley. In 1896, construction work on the tunnel began. The Annual Report of the Ministry of Communications stated that “the geology is extremely rigid, and

construction is easily progressing,” and completing all tunnels was estimated to take almost two years. However, in April 1897, heavy rain caused Tunnel No. 6 to collapse, followed by Tunnel No. 5 in November 1897, leading to a tragic accident where workers were buried alive. In response to such collapse accidents and fragile ground conditions, designs were changed multiple times. However, the construction of Tunnel No. 6 continued to be difficult, and in the same year, construction of the tunnel was conducted using a square winding structure, which was rare in Japan in order to prevent collapse, with a “structure where the earth and sand from the upper part of the mountain is cut off, an embankment is built at the lower part, and a square winding tunnel is built in the embankment.” Furthermore, in June 1899, cracks appeared in the tunnel due to the uneven pressure of the earth and sand caused by rainfall, so construction work involved making the ceiling and side walls of the tunnel even thicker and implementing an invert structure. Such difficult construction work was conducted for its completion, and as a result, Aigi Tunnel may be the only one of its kind where an invert structure is currently visible locally. (Fig. 2 and Photo 2)

As a result of the above, the construction work was

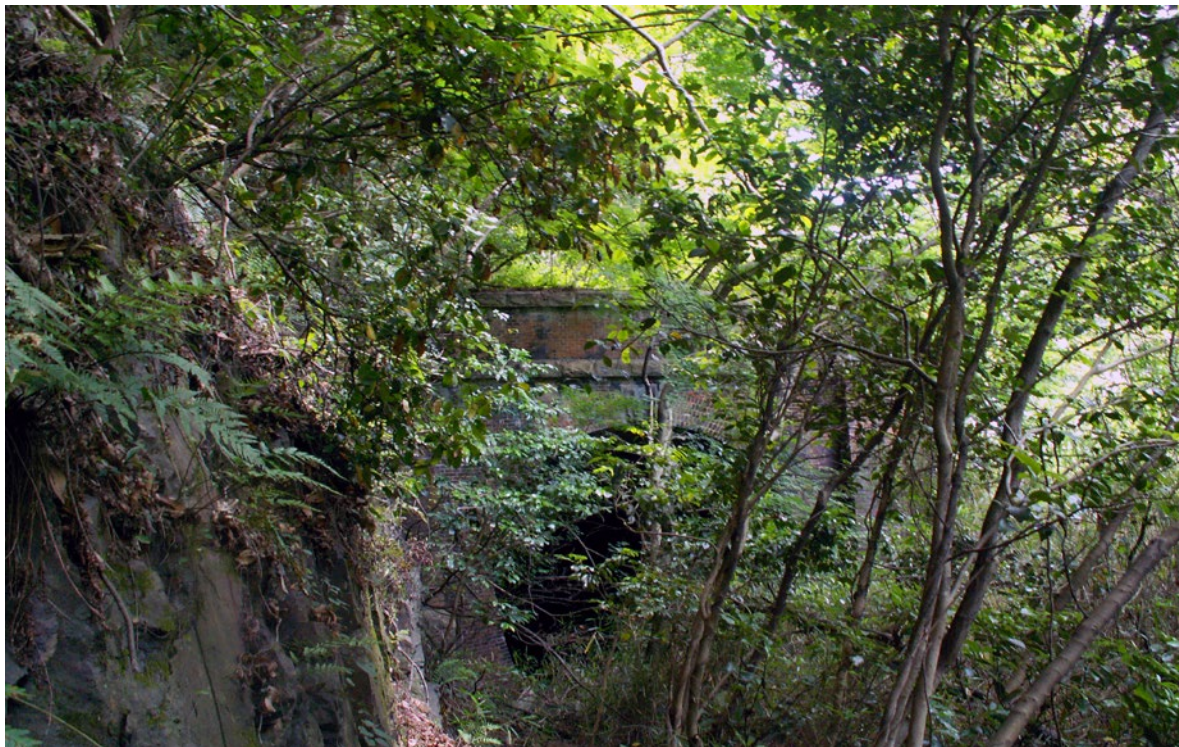


Photo 1 No.3 tunnel at the time of discovery

twice as difficult as planned, and its construction was completed on May 31, 1900, only two months before the scheduled opening of the Chuo Line on July 25, 1900.

As previously mentioned, after the end of the railway service and the discontinuation of the railway line in 1966, the existing 13 tunnels and the 8-km track bed that had been owned by JNR were privatized and transferred to the Japan National Railways Settlement Corporation (JNRSC). The railway tracks from Nos. 3–6 (approximately 13 ha) on the Aichi Prefecture side, excluding Nos. 1 and 2, were transferred to a medium-sized general contractor in Nagoya City via a major construction consultancy. Meanwhile, the track bed Nos. 7–14 on the Gifu Prefecture side were transferred to the local Tajimi City as is. Afterwards, in 1978, Nagoya City acquired Tunnel No. 7 and its surrounding land along with the construction of the final waste disposal site. Therefore, there was a mix of landowners of the abandoned approximately 8-km railway line such as JR Tokai, Aigi Tunnel Group Preservation and Restoration Committee, Nagoya City, and Tajimi City; and unified intentions for future utilization or re-use is likely to be an issue.



Figure 2 Many experts cooperated in the Invert investigation



Photo 2 Invert excavation scene

3. Efforts toward preservation

3-1. From the faint memories of elders

In 2006, when the JR Kachigawa Station building in Kasugai City was being renovated, removal of the Meiji-era disused brick platform was initiated, and citizens began efforts to preserve the brick platform (**Photo 3**). At that time, a local elder blurted out “Maybe the brick tunnel remains?”, and based on those words, a search for the tunnel was initiated, and half a year later, the remains of a tunnel that lay dormant in the mountains were discovered. In 2007, the Former JNR Tunnel Group Preservation and Restoration Committee was established by citizen volunteers. In 2009, they acquired legal status and re-organized as the NPO Aigi Tunnel Group Preservation and Restoration Committee (henceforth, “Committee”), where the citizens’ group has been responsible for preservation activities to the present day.

3-2. Debut to national district

In 2009, Tunnel Nos. 3–6 on the Aichi Prefecture side, along with nine railway-related heritages nationwide, such as the Former Ousakayama Tunnel in Otsu City, Shiga Prefecture, and the Usuitōge Tunnel Group in Annaka City, Gunma Prefecture, were certified as part of the “33 Heritages of Industrial Modernization (Continued)” as the “Group of Heritages of Industrial Modernization that tells the story of the tunnel construction that overcame mountains and straits and contributed to the formation of the national railway network.” In

2016, Tunnel Nos. 3 and 4 (Tamano Tunnel Nos. 3 and 4) and Kasaishi-hora Culvert were selected as National Registered Tangible Cultural Properties (Buildings) by the Agency for Cultural Affairs, with official registration in November of the same year.

The “railway tunnel” is a legacy of the technology of our predecessors who contributed to the industrial development of Japan through the formation of the national railway network, while also being a Heritage of Modernization that has little connection with the daily lives of citizens. Furthermore, in the case of the Aigi Tunnel Group, this had a historical background of being abandoned in the mountains for nearly half a century and forgotten by local residents until it was excavated by citizens, but its historical value was established following an assessment by the Japanese government.

3-3. Largest number of bricks used in Japan

Digressing a bit here, I would like to discuss the number of bricks used.

After four years of difficult construction work, all 14 tunnels of the Aigi Tunnel Group were completed in 1900. Table 3 shows the number of bricks in constructing the group of tunnels. Incidentally, as is well-known, when ranking the number of bricks used in buildings, the highest count is Tokyo Station, with approximately eight million bricks, followed by the Osaka City Central Public Hall with three million bricks, and the Hokkaido Government Office with 2.5 million bricks (excluding warehouses, among others). In that case, where is the



Photo 3 Newspaper article about brick removal

“most impressive” brick building in Japan? Something where, no matter how gorgeous the building is, the building has a presence that keeps everything else away, and whose status is solidly assured. My belief is that this title goes to the Hiroshima Peace Memorial, which bears the negative history of early-modern Japan, or rather, the world, and whose presence is deeply imprinted in our hearts.

Meanwhile, the structure with the largest number of bricks is Usuitōge Tunnel, which is the first railway tunnel in Japan to be nationally designated as a Important Cultural Property and is a representative of the railway world, with 15 million bricks; followed by the Lake Biwa Canal, which is a water supply facility that runs from Otsu City, Shiga Prefecture, to Nanzenji Temple in Kyoto, with 14.5 million bricks. These are the top-ranking structures that use the largest number of bricks in Japan. However, what about the recently discovered and utilized Aigi Tunnel Group? Results of research by the members showed that, according to the Meiji Chuo Line construction summary found in the National Diet Library, 18 million bricks were actually used. (Fig. 3) Unfortunately, this is a new facility where it has only been 16 years since its discovery, and although it has hardly any name recognition nationwide, “the numbers speak for themselves.” Over time, when this group of facilities becomes more well-known, I hope the day will come when this number, which is the highest in Japan, will shine.

Furthermore, numerous bricks are present around the group of tunnels that were no longer deemed necessary and dumped due to collapses during construction. The Committee collected them, and proceeded with surveys to identify the manufacturer by searching for the original address of the brick stamp. It became clear that a considerable number of bricks for construction were transported from the neighboring Tajimi area, as well as Nagoya, Mikawa, Yokkaichi, Ogaki, and even from the Osaka area (Fig. 3).

3-4. National trust

The Committee initially operated with permission from the general contractor to obtain entry permission for surveys, but as more surveys were conducted, the

Committee recognized that this was a valuable heritage of the region that should be kept, and learning from the citizen fundraising campaigns for nature conservation in the United Kingdom, in 2009, the Committee launched a “National Trust movement” with the aim of acquiring land for the first time in Aichi Prefecture. In the present day, the concept of crowdfunding has begun to be established, but at the time, the purchasing of land by citizens’ donations for the purpose of preserving civil engineering structures was reported as a rare and unique case in Japan by newspapers and on television.

Five years later, a total of 11,143 citizens raised approximately 15 million yen in funds, which led to the acquisition of the former JNR Chuo railway line, including four tunnels (Tunnel Nos. 3–6) on the Aichi Prefecture side in June 2014.

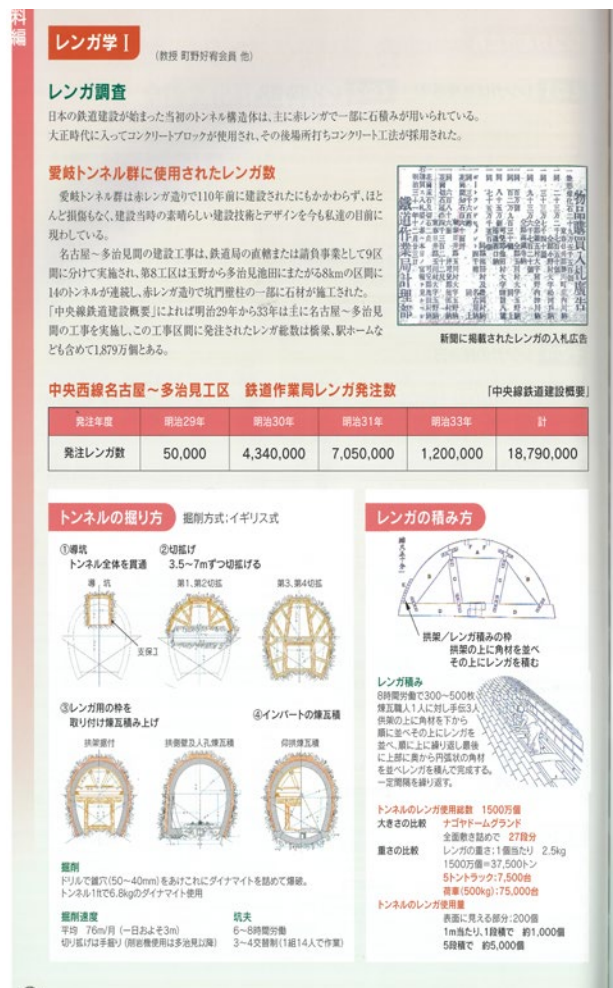


Figure 3 Number of bricks used in Aigi Tunnels

3-5. Start of preservation activities

The 1.7-km abandoned railway line between Tunnel Nos. 3–6 on the Aichi Prefecture side, which had become the Committee's private property in this way, is normally set as off-limits using steel gates. At the time of its discovery, the abandoned railway line between Tunnel Nos. 3–6 was open to the general public for one day under the name of a "Pioneering Site Tour," but owing to the massive influx of aspiring visitors, it has since been opened to the general public for a total of about two weeks each spring and fall as "Special Openings to the Public" (Photos 4 and 5).

The first turning point was encountered at the beginning of activities in 2006. Is it possible for citizens alone to protect such a large group of public facilities, especially one that is so widespread? When conducting surveys of the status of utilization of abandoned railway lines nationwide, most local governments were involved in some form of preservation. However, there were also scattered cases where "money would be given, as well as an opinion." In fact, when looking at other cases of conservation of abandoned railway lines, there were many cases where natural features on abandoned railway lines were completely cut down and covered with asphalt pavement in order not to incur a large amount of expenses for year-round maintenance and management of the abandoned railways, such as weeding. The above tendency was particularly strongly observed in cases where local governments managed and maintained the railway lines, and there were a considerable number of cases where the railway lines were transformed into simple forms for maintenance purposes. For example, a zelkova forest that had been revived on the site of a local abandoned railway line in a region of Nagano Prefecture was clear-cut in the name of regeneration, and the site reverted to an unremarkable linear abandoned railway track. Using such cases as lessons, the Committee chose to cut off contact with governments as much as possible from the outset of development. Preserving the tree flora that had revived on the discontinued railway line was given top priority, so the abandoned railway line, which was born with a winding figure that avoids the trees that grow on the abandoned track, was transformed into a nature trail rather than an

abandoned railway line, taking a route that prioritizes the citizens' perspectives, kindness, and attention to detail.

At the root of this effort was the realization from a member's comment that "a tree can be cut down at any time, but restoring a tree that has been cut down takes decades of time and effort." In the half century after the end of service, this abandoned railway line has witnessed the revival of many trees and flowers, with nearly 50-year old trees thriving on the track bed, and over 600 trees across 50 species growing on the entire abandoned line, and it has the appearance of a nature zone, with the discovery of endangered flowering plants listed on the Regional Red List. In particular, nearly 300 maple trees grow wild on and around the abandoned railway line, and during the spring and fall public openings, people have come to enjoy the spring maple and autumn foliage by strolling around the abandoned railway line. Despite the railway site, railway fans are not conspicuous, and most visitors are citizens who came to enjoy the nature, so this seems to be playing a very important role in the sense of connecting the historical heritage of the tunnel with ordinary citizens. (Photo 6)

Creating the rule of "not eradicating the natural fauna and flora that has been revived due to over 40 years of neglect," the Committee has made efforts to prioritize nature conservation.

The result is a notable phenomenon in which the 300 maple trees that grow wild on the abandoned railway line are becoming a famous spot for viewing the autumn foliage. Though in hindsight, these nature conservation efforts are also linked to the opinion of visitors who come seeking natural beauty.

4. Other aspects of preservation and utilization of Aigi Tunnel Group

4-1. Preservation and utilization efforts

As of 2022, the Committee, which is a civic organization, has approximately 70 active members. The average age is over 70 years, and with participating residents from nearby areas such as Kasugai City, Tajimi City, Komaki City, Seto City, and Nagoya City.

Preservation activities began with the excavation of overgrown bushes on the abandoned railway track,



Photo 4 100 carp dancing in the wind every year during the special public exhibition in spring



Photo5 The special public exhibition in autumn is becoming popular as a hidden spot for autumn leaves

and over a period of about one year, the Committee developed the 1.7-km abandoned railway track between Tunnel Nos. 3-6 on the Aichi Prefecture side such that people could walk through it. Many innovations were made to ensure that visitors can enjoy themselves on the promenade that was developed through the above

efforts. As mentioned above, while cutting and thinning the bushes on the surrounding mountain surface to protect the endangered flower species with the aim of creating a scenery where visitors could feel the surrounding nature and feel the seasons, the Committee members discovered a colony of maple trees on the ground



Photo 6 Autumn leaves on abandoned railroad tracks



Photo 7 Autumn leaves growing in clusters on the ground above tunnel no.6

surface of Tunnel No. 6. When developing a 300-m circuit around this colony of maple trees and naming it “Momijiyama” (“Maple Tree Mountain”), it was well received by many people, including photographers, due

to the denseness of the colony. (Photo 7) Moreover, we planted thoroughwort plants, which are a favorite food of the Chestnut Tiger Butterfly, which flies across long distances, and by doing so, visitors could now see these

butterflies fluttering wildly in the area. Furthermore, we prepared activities so that not only adults but families with children could enjoy, such as a massive swing measuring over 8 m called a Tarzan Swing that uses the surrounding trees (Photo 8), and preparing the thickets along the river as a thicket maze. Interestingly, we developed the area around a 30-m rocky outcrop found on the side of a mountain on the side of the abandoned railway line, and we placed shimenawa rope around it as the “God of the Mountain of the Tongari-Iwa,” striving to make the most of what is locally available.

Furthermore, in parallel with such field work, we actively conducted public awareness activities for raising awareness, such as setting up panel exhibitions and lectures mainly in Kasugai City and Tajimi City (Photos 9 and 10), and we have also strived to accumulate know-how and knowledge regarding preservation and utilization, such as visiting facilities that utilized abandoned railway lines in various places, such as the Usuitōge Tunnel Group in Gunma Prefecture and the abandoned railway track of the former Fukuchiyama Line in Hyogo Prefecture. (Photo 11)

4-2. Utilization examples

In 2009, the driving wheel of a C57 steam locomotive was presented as a monument by the local Lions Club, and it was installed near the Tajimi side entrance of Tunnel No. 5. Based on the opinion of the members that simple static preservation was not interesting, we built a mechanism that allowed the driving wheels to be turned manually. The wheels of the C57 locomotive rotate slowly when visitors pedal a bicycle installed next to the driving wheel, and we have a hard time managing the children who line up when the park is opened to the public. The Committee announced that it was the first human-powered dynamic preservation of driving wheels in Japan. (Photo 12)

Events that were held using the characteristics of the tunnels are as follows:

In 2009, we held a Solar Eclipse Observation Party (Photo 13), where visitors can enjoy a solar eclipse by projecting the sun’s light onto a screen in the tunnel; in 2013, we held a contemporary art exhibition entitled Aigi Tunnel Group Art Project 2013: Light of the Wil-



Photo 8 Tarzan Swing is popular with children



Photo 9 Exhibiting at railway fairs



Photo 10 Exhibited at Tajimi Pottery Festival



Photo 11 Abandoned Railway Tunnel Summit



Photo 12 Driving C57 driving wheels



Photo 13 Viewing the annular solar eclipse from inside the tunnel

derness, where we used sound and light performances in the darkness of the tunnels and abandoned railway lines (**Photo 14**); and in 2019, we held a Explosive Classical Concert, presided by Reiko Yuyama, which toured four tunnels and played classical music of different genres, with the S seats (7,500 yen) immediately selling out (**Photo 15**).

We also promoted the utilization of the “characteristics” of the tunnel in addition to the charm of natural beauty, such as opening beer halls from the summer of 2018 by utilizing the temperature difference between that in the tunnel, which is about 10 ° lower than the ground below (**Photo 16**).



Photo 14 Art event flyer “Hikari in the wilderness”



Photo 15 Explosive classical concert



Photo 16 Forest beer hall

4-3. Many obstacles along the way

Though the Committee is proposing utilization through such revitalization, they have simultaneously announced a permanent revitalization vision for the original abandoned railway line. This is the “footpath concept” that uses the abandoned railway track of the former Chuo Line, which exists along the current JR Chuo Main Line between Jokoji Station and Kokokei Station (Fig. 4).

The plan is to form a course of approximately 3.5 km in total length that includes not only Tunnel Nos. 3–6, which are owned by the Committee and are specially open to the public, but also Tunnel Nos. 7 and 8, and enable people to walk through the abandoned nature trail without having to take the train from Jokoji Station to the next Kokokei Station. However, many issues need to be resolved, such as coordinating with the local governments that own Tunnel Nos. 7 and 8, and protecting the bats living in Tunnel No. 7.

Meanwhile, there are many more problems behind these preservation activities. For example, multiple temporary toilets were installed in the premises of the group of tunnels owned by the Committee in preparation for the large number of visitors and for use during events. These are simple mobile toilets that are used during civil engineering work, but these are in an environment that are far removed from human settlements, where there are no lifelines for electricity and water, and is inaccessible for heavy machinery, so vacuuming up the human waste in the tanks or arranging sewage treatment equipment is not possible. Therefore, we are forced to use a soil infiltration (dripping) method, where the waste is treated on site. We are researching all types of options such as a biological type and a simple water-washing type, but under the current circumstances of short-term intensive visits of approximately two weeks in a year, we unfortunately are forced to use dripping style toilets, which is a disappointing develop-

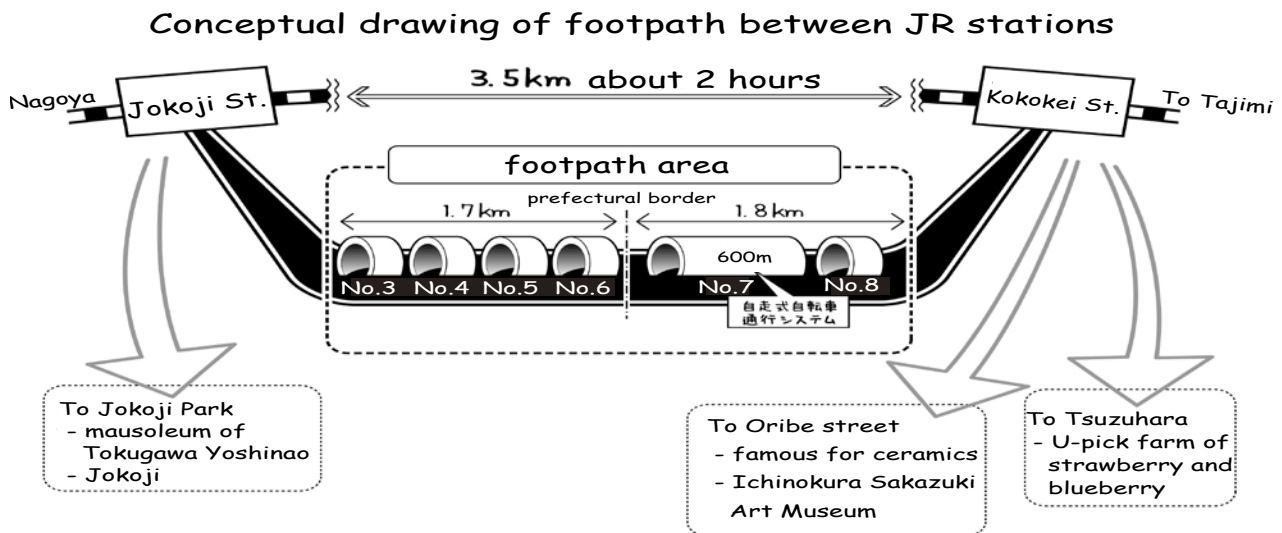


Figure 4 Footpass concept diagram

ment for us as we strive to make the site a tourist destination.

4-4. "Value" movement

Since its special opening to the public from 2008, the Aigi Tunnel Group has attracted people from all over the country. It subsequently was "valued by the national government" in the form of designation by the Ministry of Economy, Trade and Industry and the Agency for Cultural Affairs led to a re-assessment by the citizens of Kasugai City and others of the site as a phenomenon of re-importing from external parties and even from the national government. While the valuing of these tunnels themselves continues, visitors to the tunnels are also valuing the rich flora and fauna and scenic valley views that have been revived on the discontinued railway line. (Fig. 5) The Tamano area of Kasugai City, where the Aigi Tunnel Group is located, has always been popular as a health resort where visitors can enjoy cherry blossoms and autumn foliage along with the valley scenery, and in the pre-war period, was an area that was bustling with tourists, mainly Nagoya citizens, as "Nagoya's inner parlor." In the Questionnaire Survey for Tourism Resources conducted by the Chubu University Research Institute for Industry and Economics in 2011, 71% of respondents highly rated the fact that "the old tunnels exist together," followed by 60% of respondents highly

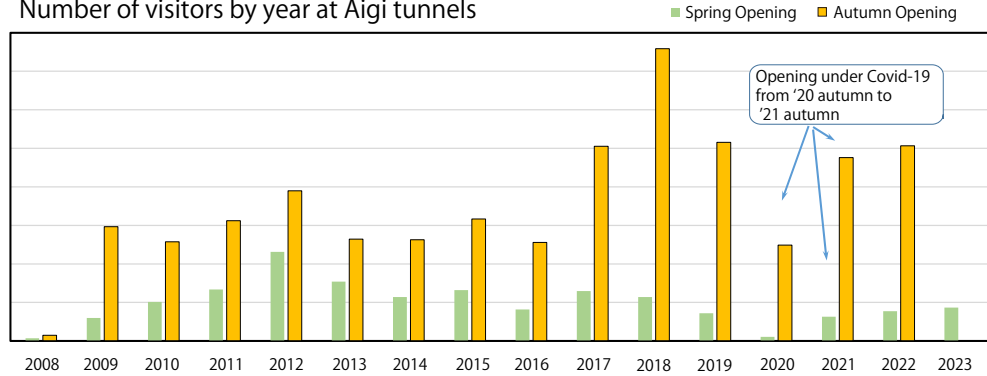
rating the "scenery of the flowers and trees around the promenade." As natural beauty has been added to the railway site in this manner, the perspectives of the fans have considerably expanded, and I think that we have succeeded in attracting a wide range of visitors who are not just limited to railway and abandoned railway line enthusiasts. (Fig. 6)

Meanwhile, though "cultural valuation" has been promoted, there has been hardly any activity regarding "economic valuation." The Aigi Tunnel Group was originally discovered with the intent of utilizing it as a resource for urban development, but the reluctance of Kasugai City to implement tourism measures became a major obstacle, and creating an initiative that would lead to the revitalization of the entire city was not possible.

However, following its transfer to the Kasugai City Chamber of Commerce and Industry in 2014, the tourist association began to collaborate with the Committee, and finally, with the theme of "aiming for the industrialization of tourism, and how to connect tunnel visitors to the economic effect of the city," the two organizations began to make efforts to connect their activities to economic valuation, such as mobilizing related organizations during the public period to locally sell food and drinking water.

With these efforts, the Aigi Tunnel Group is seeing

Number of visitors by year at Aigi tunnels



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Number of visitors in spring opening	350	2,993	5,059	6,683	11,559	7,703	5,718	6,596	4,101	6,467	5,701	3,596	526	3,154	3,868	4,337
Number of visitors in autumn opening	730	14,838	12,873	15,591	19,483	13,221	13,135	15,830	12,794	25,263	37,931	25,776	12,440	23,795	25,332	
Total number of visitors	1,080	17,831	17,932	22,274	31,042	20,924	18,853	22,426	16,895	31,730	43,632	29,372	12,966	26,949	29,200	4,337
Cumulative number of visitors	1,080	18,911	36,843	59,117	90,159	111,083	129,936	152,362	169,257	200,987	244,619	273,991	286,957	313,906	343,106	347,443

Figure 5 Number of visitors (cumulative total of over 340,000people)

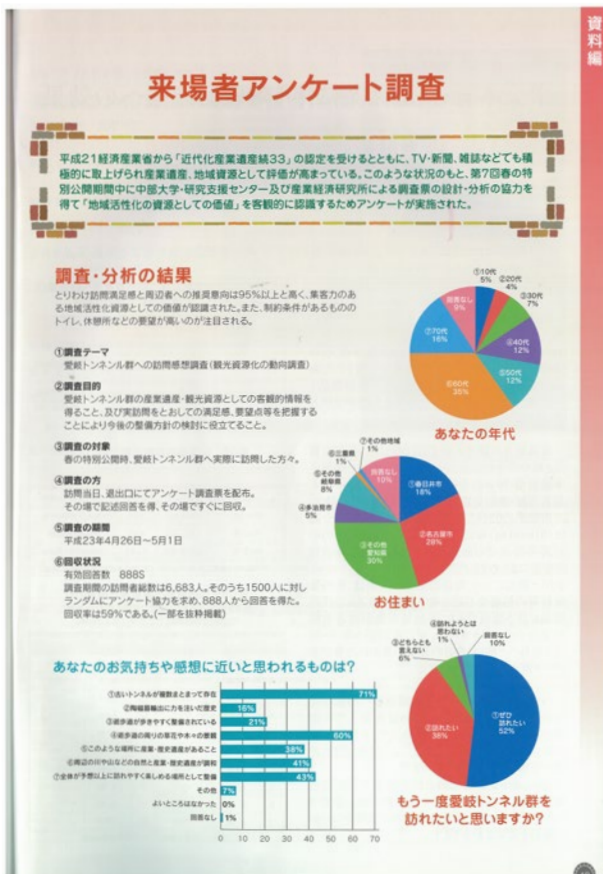


Figure 6 Survey results

an increased number of visitors each year, and its name recognition is steadily increasing, but when reflecting on the current situation where special exhibitions and various events are held on a dozen or so days a year, it is precisely this “limitation” that enables it to attract a certain number of visitors. Therefore, if the footpath concept is completed in the future, and the promenade that runs through the tunnels is made open to the public at all times, it is doubtful whether it will become a base for tourism in neighboring areas such as Kasugai City and Tajimi City. Therefore, a future task is not only for the private sector but also the government and academia to devise methods for developing a major base for regional tourism and making it even more attractive for visitors.

5. Conclusion

In addition to the nature of the “tunnel” itself, which has little direct relation with the activities of citizens, and the historical background of its existence being forgotten by local residents for a long period of time, government reluctance to utilize the site was a major obstacle to external expansion. However, a proponent of the Aigi Tunnel Group was elected in the local mayoral election last spring. Nurturing the Aigi Tunnel Group as a resource for city revitalization in the future will likely

require using this as an opportunity to fully explain the significance of preservation and utilization of this site to the government and local residents, and to pass it down to future generations with a better understanding of its utilization. In the future, if we can obtain the understanding and cooperation of administrative authorities, then we would like to propose the implementation of “field lectures” to elementary and junior high schools in the city. We aim to establish an emerging identity by nurturing and maturing a sense of pride in the area where the students live by sharing a recognition of value among children who will be responsible for its future.

If we could continue these field lectures for 10 years, then the Aigi Tunnel Group will live on as a form of “civic pride” in the hearts of all young people in a city of 300,000 people.

What an exhilarating prospect!

Chapter 4

Utilization of modern cultural properties
Results of a questionnaire survey

Utilization of modern cultural properties

Results of a questionnaire survey

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1. Introduction

The Restoration Techniques Section, Center for Conservation Science, Tokyo National Research Institute for Cultural Properties has been conducting survey research on the utilization of cultural properties, specifically targeting modern cultural heritages, since FY2020. The purpose of this survey is to understand how cultural property owners and managers are currently using cultural properties and what types of utilization that they are planning in the future, in response to the promotion of the “utilization of cultural properties” in the amended Act on the Protection of Cultural Properties, which came into force in April 2019.

In FY2020, a questionnaire survey was conducted from August to October 2020 for surveying how owners and managers of cultural properties (modern cultural heritages) are implementing and examining utilization in practice. This report presents the aggregated results.

2. Survey method

Fig. 1 shows the questionnaire for this questionnaire survey. The survey items were whether the site was open to the public and how it is open (paid vs. free),

normal utilization status such as the implementation of events, whether repairs and refurbishment are conducted for the purpose of utilization, whether there was a review of utilization methods following the enforcement of the amended Act on the Protection of Cultural Properties in 2019, trends in the number of visitors (entries), and measures for increasing the number of visitors (entries) and their implementation frequency.

The survey targets were 390 cultural properties (as of June 1, 2020) that were designated as Nationally Important Cultural Properties and classified mainly into the period after the Meiji period. Survey forms were mailed to the owners or facility managers of the cultural properties, and requests were made to provide a reply by mail, fax, e-mail, or online. The implementation period was set from August 24, 2020, to October 16, 2020.

In this survey, we obtained responses for the 230 cultural properties shown in **Table 1** (recovery rate of 59%). Since we received responses even after the implementation period, responses received up to December 1 were included in this report.

Table 1 Responses

Types 1	Types 2	Responses
Structure	Educational facility	27
	Public facility	15
	Industrial facility, transportation, engineering work	49
	religious facility	6
	Residence	66
	Cultural facility	28
	Commercial and business facility	17
	Other	2
Fine art and craft	Historical materials	20
Total		230

3. Survey results

3-1. Public opening of cultural properties

Fig. 2 shows the results regarding public opening. Regarding whether cultural properties were open to the public, including during limited periods such as for special exhibitions, 219 cases (95%) were open to the public, and 11 cases (5%) were closed to the public. The breakdown of cultural properties responding as not open to the public was as follows: two educational facilities, two industrial / transportation / civil engineering, four residential, one commercial / business,

one cultural facility, and one historical document. Reasons given for not being open to the public, whose responses were set as free-description, included the facility still being in active service, and safety reasons such as insufficient earthquake resistance.

Of the properties that were open to the public, 119 (54%) were open to the public free of charge, and 100 (46%) were open to the public for a fee. In addition, we included the "paid" category that responses as below;

- Admission fees apply to public facilities including target cultural property

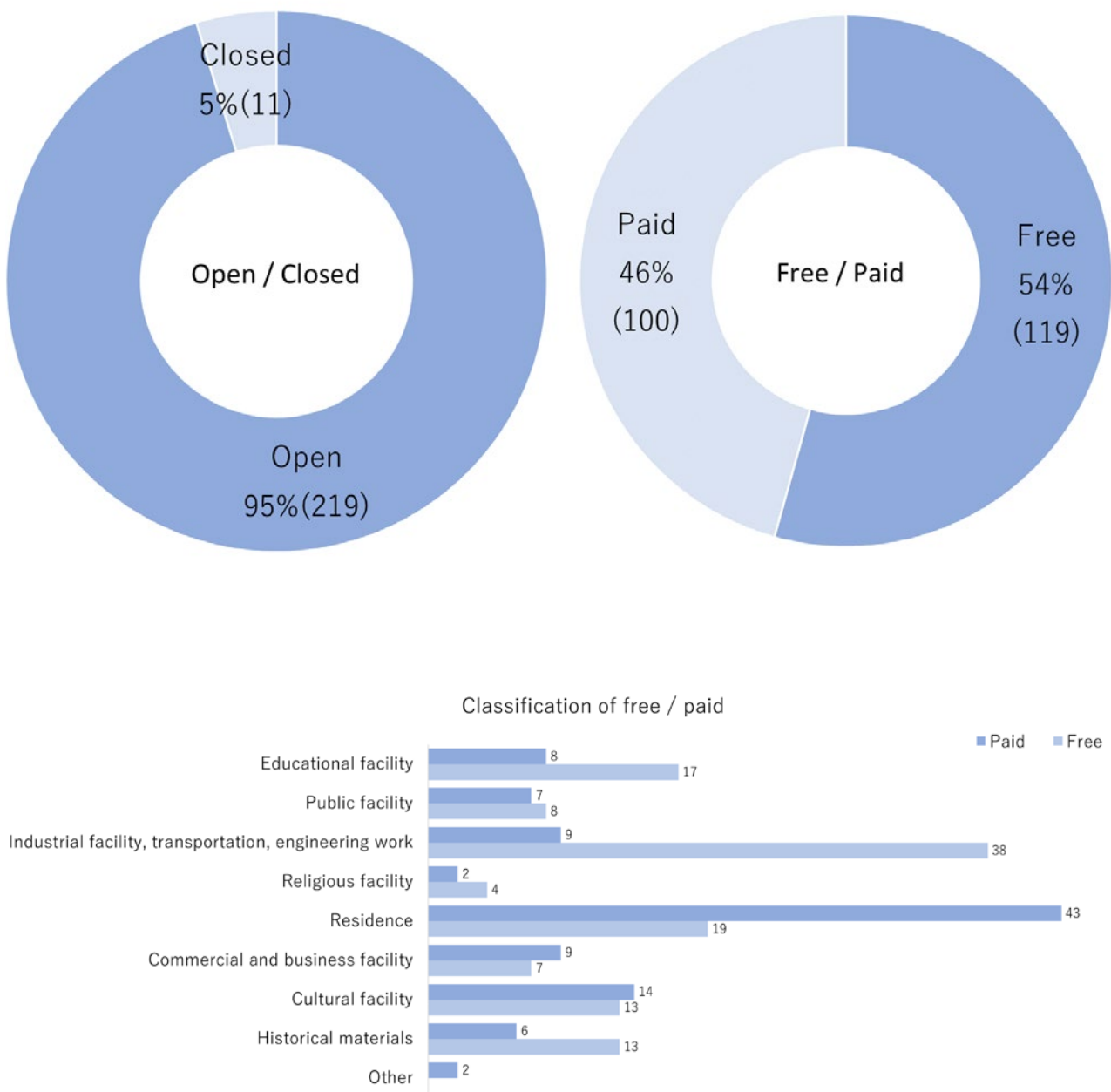


Figure 2 Results regarding public opening

- Admission fees are charged alongwith other facilities
- There are paid part and free part existed in the facilities

Open to public without charge	
Educational facility	17
Public facility	8
Industrial facility, transportation, engineering work	38
Religiousfacility	4
Residence	19
Commercial and business facility	7
Cultural facility	13
Historical materials	13

Open to public with charge	
Educational facility	8
Public facility	7
Industrial facility, transportation, engineering work	9
Religiousfacility	2
Residence	43
Commercial and business facility	9
Cultural facility	14
Historical materials	6
Other	2

Regarding historical materials, many respondents said that the facilities that owned and managed the materials themselves either required a fee or were free for entry, and that no special fees were charged for the property surveyed.

Based on these results, the properties that were open to the public were almost identical when requiring a fee or were free, but there was a difference between the two depending on the type. When looking at the type of cultural property, residences had more cases where it was open to the public for a fee. This was thought to be due to the fact that there are many residences that are not currently in use as such but were being utilized by converting them into archives or museums. Meanwhile, industrial / transportation / civil engineering properties had many responses where it was open to the public for free. This is thought to be due to the fact that, unlike other building-type cultural properties, many industrial / transportation / civil engineering properties are

difficult to convert into archives or museums and can be toured from both inside and outside the premises. These differences by type are thought to be due to differences in the current use of the properties and the differences in the possible utilization methods depending on the type.

3-2. Cultural property utilization methods

Fig. 3 shows the results regarding utilization methods. Of the 219 cultural properties that were open to the public, 153 (approximately 70%) responded that they held events as an example of utilization. The results when classifying and tabulating the free-description content of the events implemented are as follows.

Concert and performance	50
Echibition	35
Tour	19
Lecture	18
Lesson	14
Festival	13
Tea ceremony	10
Rental	9
Illumination	6

Some of these responses included those stating that the event such as a concert, observation tour, or festival was held as part of local events. This indicated that utilization involved collaboration with not only the cultural property but also the surrounding area.

Regarding whether repairs / refurbishments were made with utilization in mind, 88 cases (44%) did so (including those currently in progress, 82 cases (41%) did not, 23 cases (11%) were planning to do so, and 9 cases (4%) were considering doing so. The results when classifying and tabulating the free-description content of the repairs / refurbishments are as follows.

Repairs	32
Seismic retrofit	32
Installed / updated air conditioners	14
Increased accessibility	12
Restorations	9

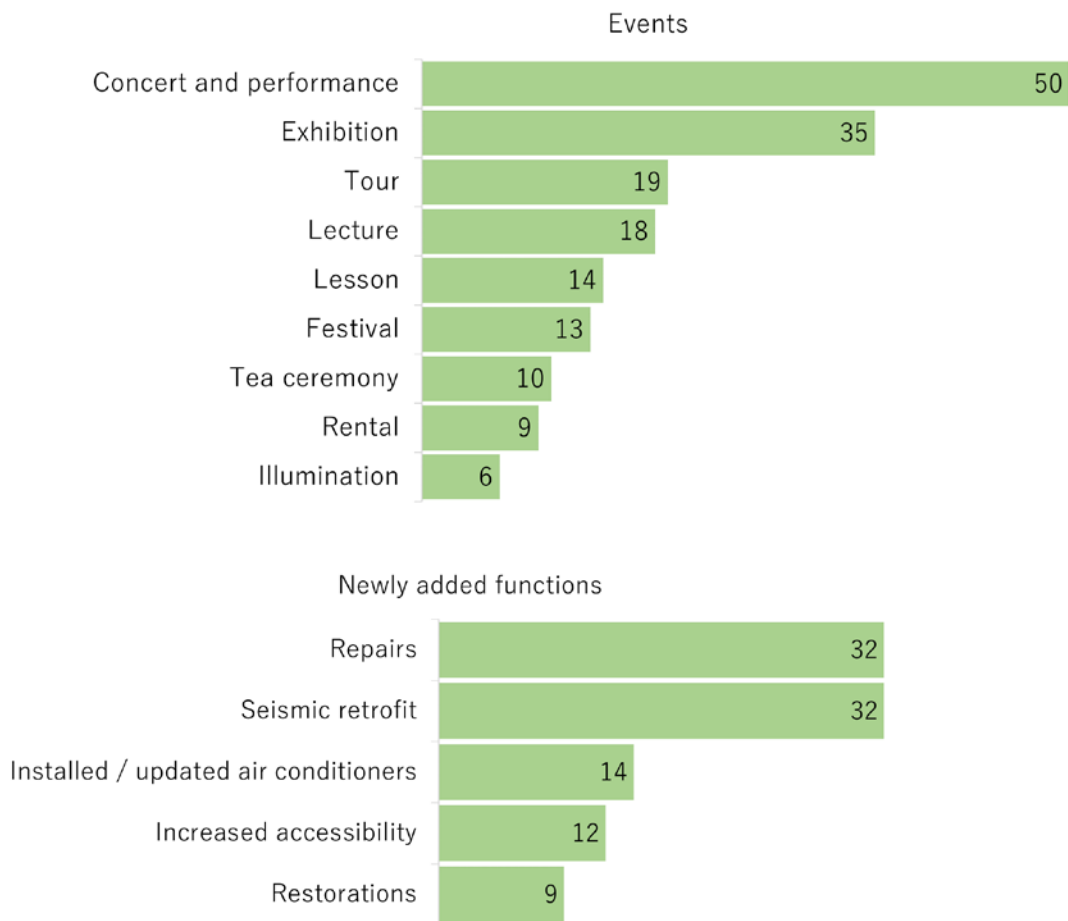
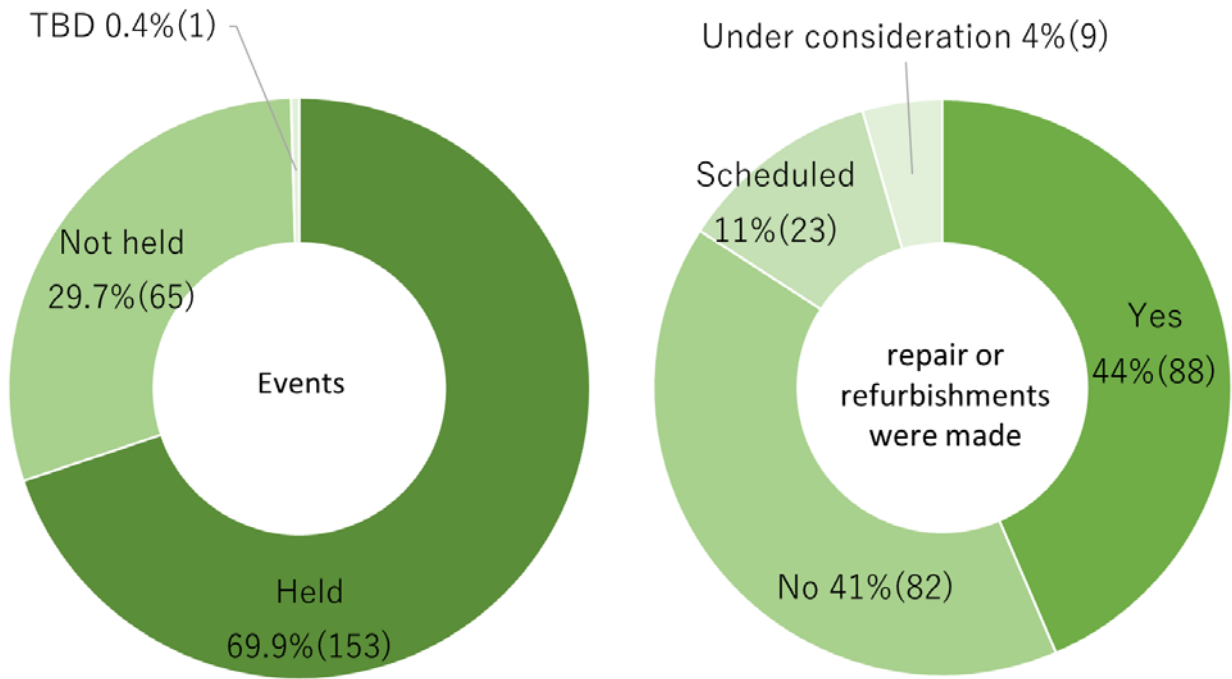


Figure 3 Results regarding utilization methods

Furthermore, for newly added functions among the responses, in addition to previously mentioned “installation of toilets, slopes, and elevators” (13, 6, and 5 cases, respectively) mainly for barrier-free purposes, as well as that of “air conditioning equipment,” there was the “installation of additional kitchen equipment” for use as a cafe / restaurant (7 cases). Other cases included “partial renovation as a seminar room,” “updating of electrical wiring (e.g., addition of outlets),” and “improvement of Wi-Fi.”

Over half of the respondents stated that they have implemented or will implement repairs and refurbishments that are conscious of utilization, including plans and considerations, with the main contents being repairs that aimed to maintain the cultural properties themselves and plans that were conscious of visitor safety. Regarding the addition of functions as well, the most common response was the installation of convenience facilities with the aim or improving convenience for visitors. These show that repairs and refurbishments were at the stage of improving visitor safety and convenience. Meanwhile, there were responses stating that kitchen equipment was added for the purpose of conversion of use, and there have been reviews of utilization methods by changing the use of the cultural properties.

3-3. Amended Act on the Protection of Cultural Properties

Fig. 4 shows the results of the amended Act on the Protection of Cultural Properties in 2019. In terms of whether the utilization method of cultural properties was reviewed following the enforcement of the amended act, 207 (93%) did not do so and 16 (7%) did. Classifying and aggregating the free-description content of those who did review utilization methods, five “created and reviewed cultural property preservation and utilization plans” and three “actively provided rentals to external parties (e.g., use as meeting room, photography).”

3-4. Number of visitors

Fig. 5 shows the results regarding the number of visitors. Of the 219 cultural properties open to the

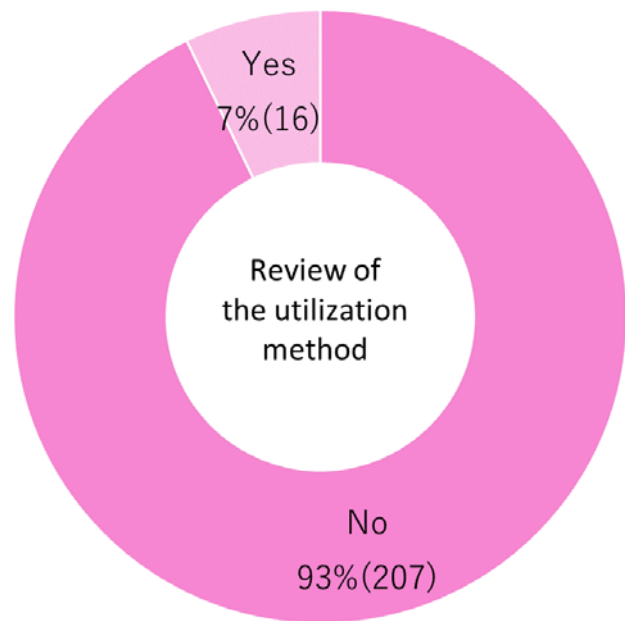


Figure 4 Results of the amended Act on the Protection of Cultural Properties in 2019

public, 167 (76%) responded that they knew the number of visitors (entries) to the cultural properties, and 52 (24%) did not. A breakdown of the type of cultural property that responded that they did not know was as follows.

Educational facility	5
Public facility	2
Industrial facility, transportation, engineering work	23
Residence	5
Commercial and business facility	1
Cultural facility	7
Historical materials	3

Here, two public office buildings responded that they did not know because they had temporarily stopped being open to the public.

Regarding trends in the number of visitors, of the 166 responses stating that they knew the trends, 41 (25%) stated that the numbers were increasing every year, 44 (26%) stated that the numbers were decreasing every year, 79 (47%) stated that the numbers hardly changed, and 1 (1%) each stated that the number was different every fiscal year and stated no response. The results when classifying and tabulating the free-description content of the reason for the fluctuation are as follows.

Reasons of increase of visitors	
Implementing events	11
Reported in media	6
Designated to Important Cultural Property / World Heritage	5
Increased recognition	4

Reasons of decline of visitors	
Reducing effects of designation / open to public	9
Decline of tour group visitors	7
Influence of natural disaster	6
Lack of events and publicity	5

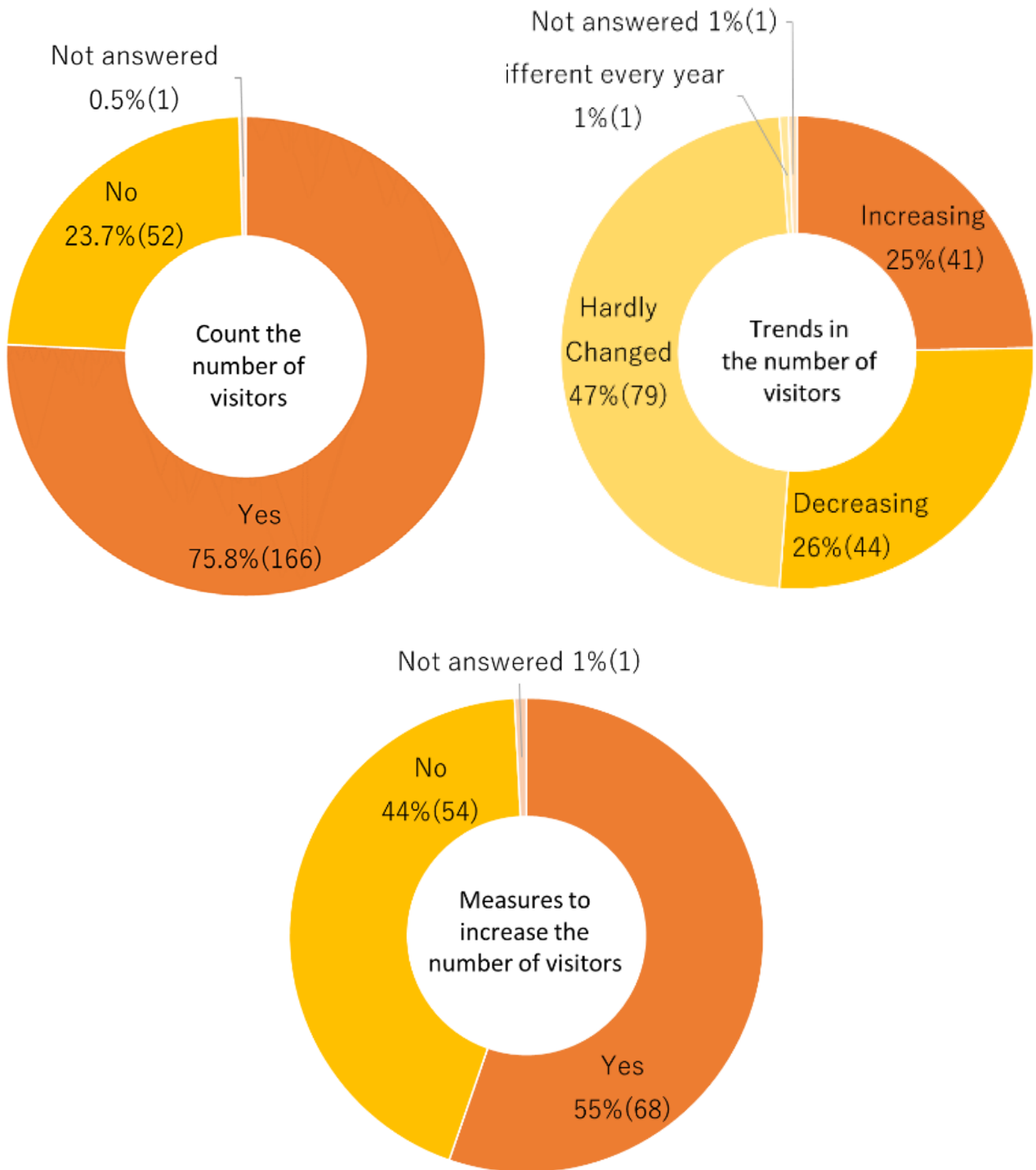


Figure 5-1 Results regarding the number of visitors

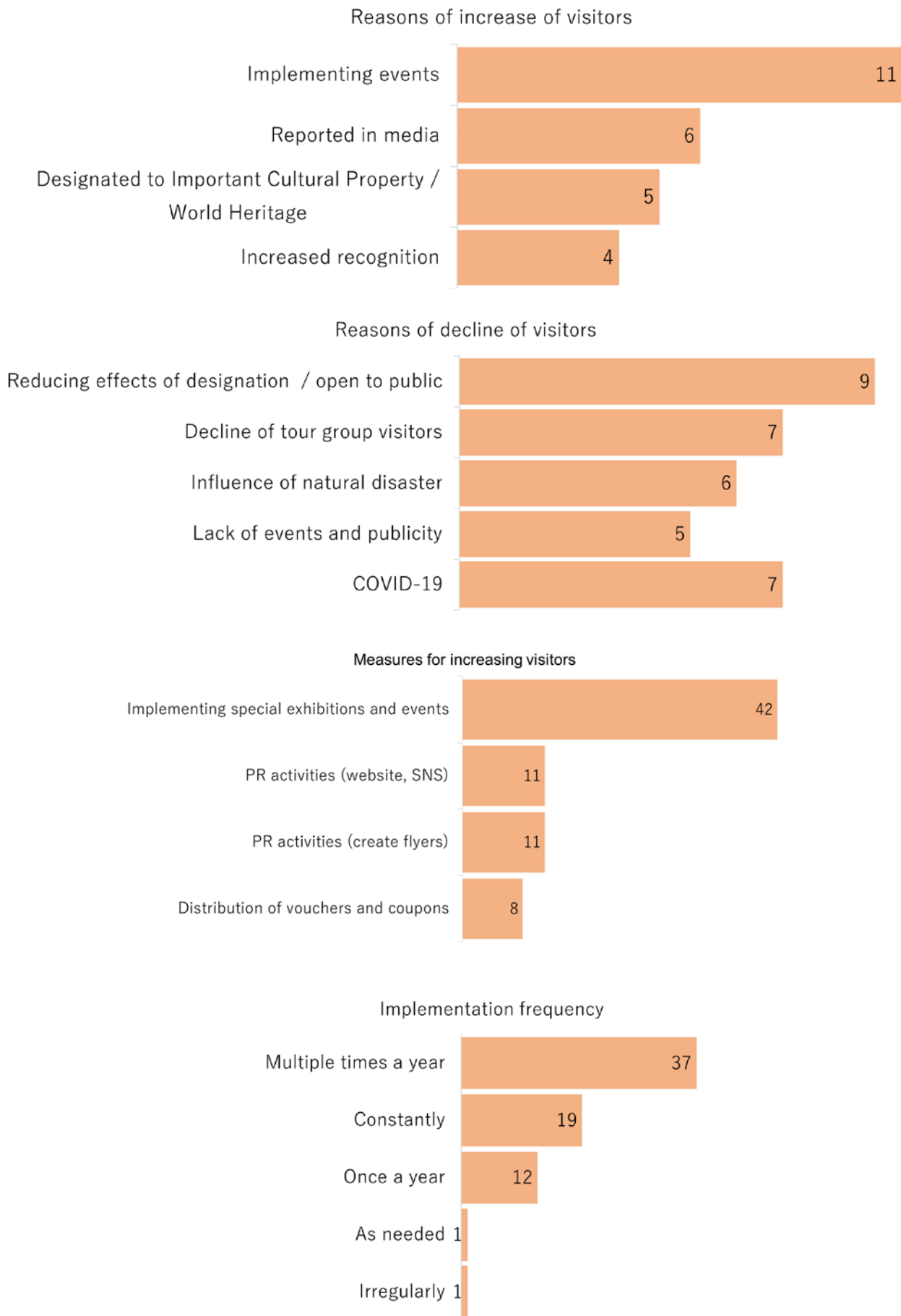


Figure 5-2 Results regarding the number of visitors

There were also 7 responses stating the “impact of COVID-19” as a reason.

Of the 123 cultural properties that responded that the number of visitors has decreased or hardly changed every year, 68 (53%), or approximately half, have taken measures to increase the number of visitors. The results when classifying and tabulating the free-description content of the content of measures are as follows.

Implementing special exhibitions and events	42
PR activities (website, SNS)	11
PR activities (create flyers)	11
Destributuion of vouchers and coupons	8

When asking respondents to assess the implementation frequency of the measures as “constantly,” “multiple times a year,” or “once a year,” the following results were obtained.

Multiple times a year	37
Constantly	19
Once a year	12

There were also responses of “irregularly” and “as needed.” In terms of the trends for implementation frequency by category, the implementation of special exhibitions and events were often held “multiple times a year.” and distribution of discount tickets and coupons as well as public awareness activities via their website and social media were often done “constantly.”

Both internal factors, such as expanding events, and external factors, such as media reactions, and the designation and certification as Important Cultural Properties and World Heritage Sites, ranked high. Regarding events, which are an internal factor, the reason for why the number of visitors was decreasing was due to the “lack of events and publicity,” and as can be seen with the main measure for increasing the number of visitors being “implementing special exhibitions and events,” implementing events had an impact on fluctuations in the number of visitors and should be implemented. Meanwhile, regarding public awareness activities, the reason for why the number of visitors was increasing was due to the “increased

recognition,” and the reason for why the number of visitors was decreasing was owing to the “lack of events and publicity.” However, the measures for increasing the number of visitors by “using the internet such as their website or social media” and “creation of flyers and sales activities,” even when combined, was only approximately half that for event implementation. The external factors of designation and certification as an Important Cultural Property and World Heritage Site, opening of the Shinkansen to the surrounding area, and increased topicality due to the opening of properties to the public were the main reasons for the increase in the number of visitors. However, as can be seen by the fact that the top-ranking reason for the decrease in the number of visitors was “diminishing effect due to a long period of elapsed time since designation / certification or opening to the public,” this effect seems to be temporary.

4. Conclusion

Here, we conducted a questionnaire survey on 390 cultural properties designated as Nationally Important Cultural Properties and were mainly classified as after the Meiji period, with the survey items regarding utilization as follows: whether the site was open to the public and how it is open (paid vs. free), normal utilization status such as the implementation of events, whether repairs and refurbishment are conducted for the purpose of utilization, whether there was a review of utilization methods following the enforcement of the amended Act on the Protection of Cultural Properties in 2019, trends in the number of visitors (entries), and measures for increasing the number of visitors (entries) and their implementation frequency. As a result, we obtained 230 responses, and for the properties that were open to the public, we were able to determine the implementation of repairs and refurbishments that were conscious of event implementation or utilization, as well as the trends and content of the reason for the fluctuations in the number of visitors and measures for increasing this number. However, there were also differences in the type of property such as buildings and historical materials; as well as differences by type of building such as educational facilities, public facilities,

and industrial facility, transportation, engineering work properties. There were also differences in the responses depending on the purpose of use, such as whether the facility was currently in use or whether it has been converted into an archive or museum.

Acknowledgement

The author is grateful to the participants who took part in the questionnaire survey.

Chapter5

Case study on utilization of modern cultural properties

Case study on utilization of modern cultural properties

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1. Introduction

For this survey, we selected structures to undergo on-site studies based on the results of the questionnaire conducted in 2020 on utilize of important cultural properties. In the selection of structures, we first picked those for which affirmative replies were received to the question of whether or not repairs had been or were going to be made with use in mind in this questionnaire. Those structures which made a significant impression in the many on-site studies of structures implemented so far were also selected as subjects for this survey.

Although the matter also depends on what people picture when they hear the word “utilize,” which is the focus of this survey, we have the impression that many of the structures are taking the conventional approach as regards being open to the public. Among the many structures in this category, numerous ones were conducting backyard tours and the like for limited numbers of people. Some cases were the subject of extensive activities to draw visitors etc. One example is the area centered around Korakukan and facilities of the former Kosaka Railway in Kosaka Town, Akita Prefecture. The authorities relocated the Kosaka mine office and former Seien Maria-en Nursery School to this area, and built a huge parking lot and the Kosaka Rail Park around it (using the track and facilities of the former Kosaka Railway, the park provides experience of the Kosaka Railway train and even has lodging facilities). Similarly, Uchikoza Theater, Important Cultural Property in Ehime Prefecture, presents a case of inducing a customer-attracting effect by bringing out appeal on the district level, through collaboration with an important preservation district for groups of historical buildings in the vicinity.

This report introduces cases thought to present particularly distinctive approaches to use of important cultural properties remaining in various parts of Japan.

2. Utilization of cultural properties

There are all sorts of examples of use of cultural properties as noted above.

- Opening to the public as an archive, museum, or tourism information center while drawing on the functions of the original building that is the cultural property
- Opening to the public for use as a local meeting place etc., with the addition of facilities of convenience for users to the original functions
- Attraction of visitors using an appealing townscape through linkage with peripheral districts while maintaining the original functions
- Attraction of visitors by constructing facilities that draw visitors with different functions close to the structure that is the cultural property

In this report, we shall describe several such cases.

Discussion on utilization of cultural properties is liable to focus on ways of attracting more visitors. To be sure, when cultural properties such as the Tomioka Silk Mill and Iwami Ginzan Silver Mine were first inscribed on the World Heritage register, many people went to see them. With the subsequent passage of time, however, the number of visitors has undergone a commensurate decrease. The phase of visitations in massive numbers does not last very long. In this situation, the owners and managers must think about how to maintain the number of visitors. Additional questions are how to have many people not only view cultural properties but also make use of them with an appreciation of their value, and to foster an understanding of what it means to bequeath cultural properties to future generations. Efforts on these agenda are needed at present.

This report describes mainly cases that are considered distinctive in the context of the overall survey. We

hope that these cases will serve as a reference in future efforts to promote the utilization of cultural properties.

table List of Properties visited for Research

Date	Name of the properties 【current name】	Designation
2021.04.26 2021.08.05	The International Library of Children's Literature, National Diet Library	Historical building selected by Tokyo Metropolitan Government
2021.10.28	Former British Consulate of Nagasaki	Nationally Designated Important Cultural Property
2021.10.29	Former Nippon Life Insurance Building 【Fukuoka City Red Brick Culture Center】	Nationally Designated Important Cultural Property
2021.11.10	Gunma Prefecture Sanitary Center 【Kiryu Meijikan】 Yano Storehouse Group (Yurinkan) Kiryushinmachi, Kiryu City, Gunma Prefecture	Nationally Designated Important Cultural Property City Designated Important Cultural Property (Kiryu City) Nationally Designated Preservation Districts for Groups of Traditional Buildings
2021.11.19	Former Yamagata Prefectural Office and Assembly Building 【Bunshokan】	Nationally Designated Important Cultural Property
2021.12.01	Former Zentsuji Kaikosha	Nationally Designated Important Cultural Property
2021.12.03	Uchiko-za Kamihaga Residence 【Japan Wax Museum Kamihaga Residence】 Yokaichi-gokoku, Uchiko Town, Ehime Prefecture	Nationally Designated Important Cultural Property Nationally Designated Important Cultural Property Nationally Designated Preservation Districts for Groups of Traditional Buildings
2021.12.13	Tomioka Silk Mill	Nationally Designated Important Cultural Property
2021.12.21	Former Yamaguchi Prefectural Office and Assembly Building 【Yamaguchi Prefectural Government Museum】	Nationally Designated Important Cultural Property
2021.12.22	Former British Consulate of Shimonoseki	Nationally Designated Important Cultural Property
2022.01.20	Aigi Tunnels	Registered Tangible Cultural Property
2022.01.21	Toyota Commemorative Museum of Industry and Technology	
2022.05.10	Former Kanazawa Military Armoury Warehouse 【Ishikawa Prefectural Museum】 Ishikawa Prefectural Museum of Art Hirosaka Annex (The headquarters of 9th Division, Imperial Japanese Army)	Nationally Designated Important Cultural Property Registered Tangible Cultural Property
2022.05.27	Former Owada Bank Main Store Main Building 【Tsuruga Municipal Museum】 Former Owada Bank Main Office Building 【Minato Tsuruga Float Museum Annex】	Nationally Designated Important Cultural Property Registered Tangible Cultural Property
2022.06.01	Nikko Tamozawa Imperial Villa Furukawa-bashi Bridge Former Ashio Copper Mine Office Archive Furukawa Kakemizu Club	Nationally Designated Important Cultural Property Nationally Designated Important Cultural Property Registered Tangible Cultural Property Registered Tangible Cultural Property

table List of Properties visited for Research

Date	Name of the properties 【current name】	Designation
2022.06.08	Former Fishery House of Hanada Family	Nationally Designated Important Cultural Property
2022.06.09	Former Honma House	Nationally Designated Important Cultural Property
2022.06.13	Old Public Hall of Hakodate Ward	Nationally Designated Important Cultural Property
	Former Soma House	Nationally Designated Important Cultural Property
	Hakodate Orthodox Church	Nationally Designated Important Cultural Property
	Iai Gakuin (Former Iai Girls School)	Nationally Designated Important Cultural Property
2022.06.22	Former main branch of the 59th National Bank 【Aomori Bank Memorial Hall】	Nationally Designated Important Cultural Property
2022.06.23	Former Hirosaki Kaikosha	Nationally Designated Important Cultural Property
2022.06.24	Kosaka Mine Office	Nationally Designated Important Cultural Property
	Korakukan	Nationally Designated Important Cultural Property
	Tenshikan (Former Misono Mother Mary Kindergarten)	Registered Tangible Cultural Property
	Kosaka Railroad Rail Park	
2022.10.11	Former Nippon Yusen Otaru Branch	Nationally Designated Important Cultural Property
	Hoheikan	Nationally Designated Important Cultural Property

1. The former Hanada Family Fisherman's Lodge (Hokkaido)

Name of building : Former Hanada Family Fisherman's Lodge

Location : Obira Town, Hokkaido

Owner / Administrator : Obira Town/Obira nishin banya user association

Date of Designation: : 18 December 1971

Designated Category : Important Cultural Property

Era of Construction : Meiji

Case study on Utilization

① State of preservation

The Lodge building per se was designated as an important cultural property in 1971, and was opened to the general public in 1976, after a project of dismantling and repair that ran from 1973 to 1975. After subsequently undergoing required maintenance and repair, it underwent repair work including thatch of the roof beginning in 2003 and restoration work after incurring damage in the 2004 Rumoi-Nanbu Earthquake. Preparations have been made for tours of the Lodge interior with easy-to-understand information on how fishermen and their bosses lived in those times.

As part of a district improvement project in the area, a facility providing food (restaurant and store) was opened next to the Lodge and registered as a roadside station (a government-designated rest area found along roads and highways in Japan) in 1996. A tourism exchange center was opened next to it in 2015. This center contains an exchange gallery, space for selling specialty products, and hall for historical and cultural displays.

② Approaches to utilize

After the building was opened to the general public in 1976 following its dismantling and repair, the number of visitors peaked at more than 66,000 in 1996. Subsequently, however, it continued to decline, and has basically hovered around 10,000 since 2014.

In formulating a plan for preservation and utilization of important cultural properties in January 2021, Obira Town posted the items noted below as subjects for study in related measures. It is surveying approaches to utilize of such properties in other municipalities (cities, towns,

and villages), and is examining original approaches of its own.

- Utilize of charts showing the layout of Hanada Family fishing ground facilities and buildings
- Linkage with school education and social education
- Partnership with countryside stay programs etc.
- Approaches providing experience of the history of herring fishing and the prosperity it brought
- Preparation of information-dissemination tools
- Preparation and sale of goods related to the former Hanada Family Fisherman's Lodge
- Linkage with peripheral facilities
- Linkage with facilities related to herring fishing
- Approaches for coping with closure during winter

The former Hanada Family Fisherman's Lodge has special siting conditions, in that it is next to a roadside station. The methodology for its utilization making the most of this location was a subject of considerable interest. Although the number of visitors after the dismantling and repair work swiftly topped 60,000, it is now trending on the level of about 10,000. As noted above, a roadside station was built next to the Lodge, and the addition of facilities for the benefit of visitors (such as restaurants and restrooms) was anticipated to enhance convenience and promote sales of goods. As such, the case attracted attention as a rarity even viewed in the nationwide context. However, it would be hard to say whether these effects have actually been induced, to judge from the on-site situation. While some are of the opinion that the setup has had the effect of halting the gradual decline in the number of visitors, it could also be said that it has not been effective for increasing the number as much as had been expected. Fuller improvements in the "soft" aspect as well as in the "hard" aspect could be anticipated to promote further use.

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Photo Former Hanada Family Fisherman's Lodge, distant view

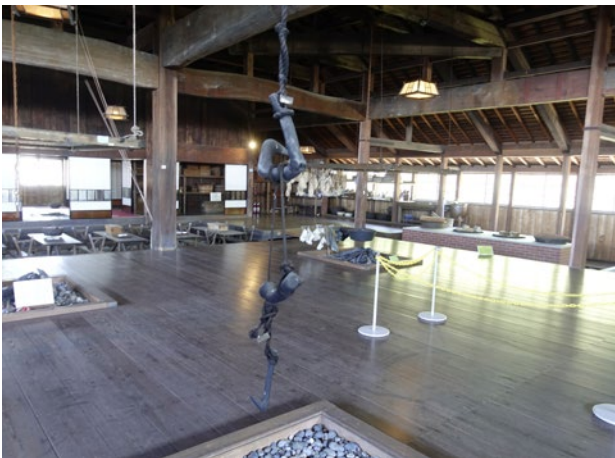


Photo Inside the lodge, fisherman's living room



Photo Inside the lodge, Nakanoma (family's living room)



Photo Inside the lodge, fisherman's bed room



Photo Inside the lodge, Butsuma (Buddha room)



Photo Roadside station and the lodge

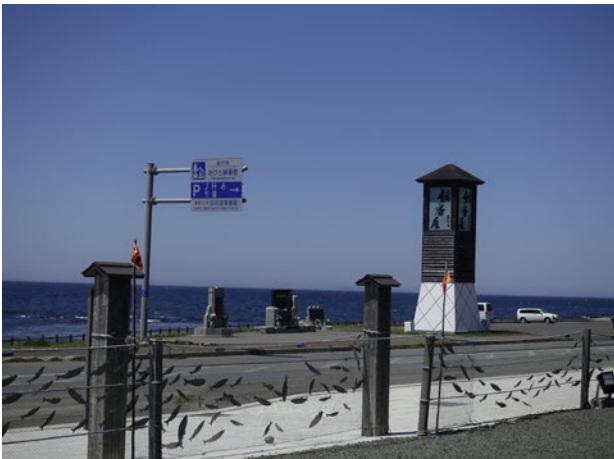


Photo Sign of roadside station



Photo shop which sells local products in the station

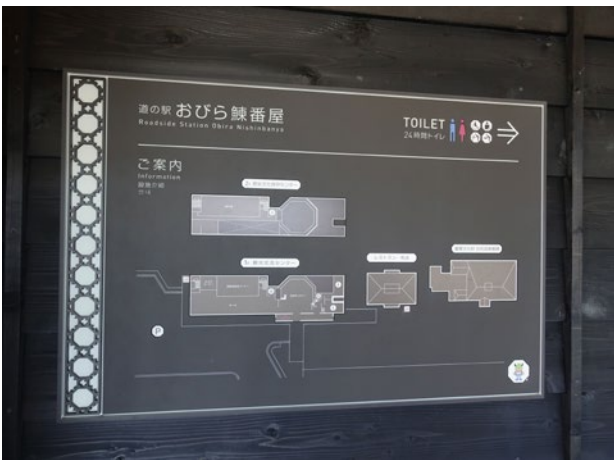


Photo Guide map of the roadside station



Photo shop which sells local products in the station



Photo Gallery in the station



Photo Exhibition booth on the second floor in the station

2. Former Zentsuji Kaikosya (Kagawa)

Name of building : Former Zentsuji Kaikosha

Location : Zentsuji City, Kagawa

Owner / Administrator : Zentsuji City

Date of Designation: : 15 June 2001

Designated Category : Important Cultural Property

Era of Construction : Meiji

Case study on Utilization

① Preparations for utilization (toward the formulation of a plan for preservation and utilization)

In advance of the preservation and repair project beginning in 2004, the Zentsuji city authorities conducted a questionnaire regarding use of the building with its users and other local residents. The findings of this questionnaire provided the basis for their formulation of a plan for preparation and utilization.

② Facilities considered necessary based on the questionnaire findings

The following types of facilities were considered necessary in light of the findings of the aforementioned questionnaire.

- 1) Spots for drinking tea and relaxing while viewing the important cultural property
- 2) Air conditioning (heating and cooling equipment)
- 3) Audio & lighting equipment
- 4) Equipment that can be used for cooking for banquets
- 5) Restrooms, storage space, etc.
- 6) Barrier-free arrangements

In the repair work begun in 2004 based on the questionnaire findings, decisions were made to incorporate these items as solutions. More specifically, facilities and equipment for the benefit of users such as restrooms and cooking facilities were concentrated in an annex constructed next to Kaikosha. An air-conditioning system was installed under the floor in the hall. In addition, lighting fixtures and fire-prevention equipment were concentrated in a baton that was newly attached to the ceiling of the hall. (For details, please see the section titled "Preservation and repair of interior furnishings.")

③ Utilization plans and record

The city of Zentsuji formulated the plan outlined below for utilization of Kaikosha. (The following is an excerpt from the plan for preservation and utilization.)

- 1) Plan for opening the structure to the public
 - 1)-1 Appreciation of the former Zentsuji Kaikosha as a historical structure
 - 1)-2 Conditioning as a venue for hands-on learning and lifelong learning
 - 1)-3 Archive-type function
 - 1)-4 Local salon

In accordance with the aforementioned plan, the structure is still being used by the local residents. The record of use since fiscal 2007, when the repair work was completed, also shows use by an extremely large number of residents.

A look at the use record indicates that the main type of public use is for conferences. In the category of general use, the main types are concerts, seminars, local meetings, and pre-wedding photography. In addition, as indicated by the table, the number of people using the structure is higher than that of those simply touring it. This suggests that advance activities regarding use that involved residents have been effective. It can be seen that the purposes of facility use have basically been in line with the utilization plan.

The former Zentsuji Kaikosha is located on the same lot as Zentsuji City Hall, and has good geographical conditions including the ability to share parking space. This is another factor enhancing convenience for users.

Bibliography

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- 2 重要文化財 旧善通寺偕行社 保存活用計画 2007年2月 善通寺市教育委員会



Photo Zentsuji Kaikosya



Photo Annex building



Photo Air conditioner duct under the main hall



Photo The main hall



Photo Lighting equipments and sound system in the main hall



Photo Air conditioner vent



Photo Walkway between Kaikosya and the annex



Photo Restaurant in the annex



Photo View from the restaurant

Table Number of uses

Year (FY)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Public Use	22	39	32	20	19	21	10	8	14	6	7	16	2
Private use	63	178	132	118	124	161	147	148	139	159	159	170	115

Table Number of attendances

Year (FY)	2017	2018	2019	2020
Attendance to visit	6,212	5,588	4,958	2,844
Attendance to use	9,694	10,555	12,638	4,617

3. Uchiko-za Theater (Ehime)

Name of building : Uchiko-za Theater

Location : Uchiko Town, Ehime

Owner / Administrator : Uchiko Town

Date of Designation: : 8 July 2015

Designated Category : Important Cultural Property

Era of Construction : Taisho

Case study on Utilization

① Outline of the building

Uchiko Town prospered throughout the Meiji era as a center of production of wax and paper. Uchiko-za Theater was built in 1916 to commemorate the accession of Emperor Taisho and serve as an entertainment venue for the citizens. It is made of wood and has two stories in part. It has a half-hipped (gambrel) roof with a cusped, eaved gable on the front. A drum tower sits on the main ridge, and gabled roofs jut forth on both sides. The theater has a truss structure, and the interior is built in the manner of a traditional Japanese-style playhouse. The installation of frontal box-seat partitions in the balcony on the second floor is a modern addition. Although some elements are missing, Uchiko-za well retains the major ones, and has precious value as a Taisho-era cultural facility that still survives in an industrial town in Shikoku. It also has a high historical value as a playhouse built in a phase of modernistic transition marked by the beginnings of adaptation to modern performing arts. This is exemplified by features such as the appearance emphasizing frontality, the truss frame, extensive use of glass windows to let sunlight in, and the arrangement of audience seating with a view to appreciation of the performance from the front.

② Preservation of the building

After its completion in 1916, Uchiko-za was used as a provincial theater for a wide range of events, including performances of Kabuki and Bunraku theater, movies, and political speeches. Subsequent to a change of ownership and some alteration of the modes of use, it was donated to the town of Uchiko in 1982, when it was also designated by the town as a tangible cultural property. In 1983, the area centered on the historic section of Uchiko district became a “wax and white-

wall townscape” under the program of bunka-no-sato (“cultural community”) districts designated by Ehime Prefectural Government. This was followed by the start of work on repair and restoration of Uchiko-za as part of the project for improvement of wax and white-wall townscapes. As a matter of fact, studies had been made of a proposal to raze the theater and replace it with parking lots and other facilities for the convenience of tourists. In 1982, however, Uchiko’s Yokaichi-Gokoku district, which is located a few hundred meters from Uchiko-za, was selected to be an important preservation district for groups of historic buildings (hereinafter referred to as “preservation district”). Partly because of this development, the authorities decided to pursue collaboration between Uchiko-za and the preservation district, and to repair and restore the theater in order to attract tourists. This project was completed in 1985. A second-phase project for further improvement of the theater was finished in 1995. Besides the updating of lighting and audio equipment, this second-phase project included improvement of facilities required for large-scale shows.

③ Approaches to utilization

This section views the connection between Uchiko-za and the preservation district around it.

People visiting the theater see a map with tourism information on Uchiko town as soon as they go out the door. By walking down the store-lined Moto-machi street while referring to this map, they will come upon the visitor center on the left, only about 200 meters away.

If they walk farther, they will see the Akinai-to-Kurashi Museum (Museum of the Work and Life of Merchants) on the right side. Another 200 meters down on the left is the Uchiko branch of the Iyo Bank. If visitors turn left at this branch, they will enter the Yokaichi-Gokoku preservation district after passing through Saka-cho. The traditional townscape stretches for a length of about 650 meters in this district. Among the buildings in it, three have been designated as important cultural properties: Omura Family Residence, Hon Haga Family Residence, and Kami Haga Family Residence. (Unfortunately, the interiors of the Omura Family Residence and Hon Haga Family Residence are not open to the public.) The Kami Haga

Family Residence is open to the public as a Japanese wax museum. The Kami Haga were a merchant family that prospered from the Edo period to the Taisho era thanks to their production of Japanese wax. A total of 10 buildings, consisting of both residential facilities and wax production facilities, have been designated as important cultural properties. The premises also contain a hall that displays the process of wax production in those days. Visitors can therefore learn about the lives of wealthy merchants and the wax industry.

As visitors proceed down Yokaichi-dori, they come upon more houses with distinctive architecture in the preservation district. Near the end of the district is the Yokaichi-Gokoku Townscape Preservation Center. Inside this center is an exhibit on the history of townscape preservation, which has continued since 1965. This exhibit features a description of the characteristics of the preservation district and history of the repair work to date while indicating the amounts of subsidies received. As such, it constitutes a rare case even as viewed in the nationwide context. It provides an easy-to-understand explanation of the significance of residence in the preservation district and things that must be bequeathed to future generations.

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Photo Guide map around Uchiko Town



Photo Uchiko-za theater



Photo visitor center (former Uchiko police station)



Photo Kami Haga Family Residence (Japanese wax museum)



Photo Yokaichi Gokoku Preservation District



Photo Kami Haga Family Residence, view from courtyard



Photo Exhibits in the YOKAICHI • GOKOKU Townscape Preservation Center



Photo Exhibits in the YOKAICHI • GOKOKU Townscape Preservation Center

4 町並み保存地区の特性

町並み保存地区の特性を語る際には、単に町家の形状や建築年代のみでは説明ができません。ここでは、町の姿、伝統的な建築物群、個々の町家の特徴に分けて説明します。

(1) 町の姿

〈I 内子の町〉

内子の町は、松山の南西約32km、大洲、宇和島に向かう南予地方への玄関口に当たり、小田川に沿った山間の盆地にあります。現在の内子町は、1955年（昭和30年）の旧5ヶ町村合併と2005年（平成17年）の3町合併によってつくられました。

〈II 町並み保存地区〉

町並み保存地区は合併前の旧内子町にあり、小田川、中山川、麓川に沿う上流山間地域との、経済、文化の交流の中で成長する一方、ここで集荷される物産は京阪神に運ばれるとともに、都市の文化を還流させました。物流の要衝の地にあった八日市・護国の町並みは、なだらかな山裾に発達した江戸時代の旧街道で、傾斜地の山側（西）を削り、谷側（東）を盛り土して敷地が造られ、南北約600メートルにわたって両側に町家が建ち並んでいます。江戸時代後期にできあがった町とはいえ、明治、大正時代に必要に応じて町が拡張され、また建物が改造され、200年以上に及ぶ時の流れをそれぞれの建物に刻み込んだ町です。

〈III 町並みが残された理由〉

町並みが残された理由は、1762年（宝暦12年）以降、町を焼き尽くすような大火がなかったこと、江戸時代の後期に和紙と木蠟によって得られた富により、質の良い建築物が建てられたことです。この時代に建てられた住宅の内部の構成は、1955年頃までは部分的改修への要求を除き生活に対応できるものであり、建物の外側を土壁で塗り籠めることで火災に対する効果が大きかったようです。一方で、町割りが山裾の傾斜地であったことが、戦後の都市改修の中で不利な条件として働き、幸いにして残されることにつながりました。

（町並調査報告書から）



八日市・護国の町並み俯瞰（平成6年5月17日撮影）

7 内子町における助成措置とその財源のしくみ

(1) 町並み保存事業における補助対象部分

部 所		補 助 の 対 象 と な る 材 質
屋根		本瓦・葺瓦葺・和形スレート・檜
庇		屋根に同じ
外壁	軒下	狐型に大壁塗・タルキ型・桁型塗出・平板大壁塗込 } 白または黄 大壁漆喰・大壁吹付タイル・真壁 なまこ壁・たて板壁
	上部	
腰		
開口部	出入口	はね上戸・格子(木製)引違い
	1階	格子・格子戸・ガラス戸
	2階	塗格子+土戸・塗格子・格子・格子戸
内部		屋根下地・構造部分・土台・土間
石垣・側溝		材料等一式
土塀・塀		材料等一式・焼板及び瓦

(2) 内子町における補助金交付の限度額一覧

区分	対象	内 容	補 助 限 度 額	補助対象事業費	補 助 率	備 考
修 理 事 業	伝 統 的 建 造 物 類	主屋	上限なし	上限なし	80%	補助金の額及び率は、町並み保存のための対策事業費について適用する。
		石垣・側溝	300万円	375万円	〃	
		塀及び門	400万円	500万円	〃	
		付属建物他	上限なし	上限なし	〃	
		防虫・殺虫	60万円	90万円	2/3	
修 景 事 業	伝 統 的 建 造 物 以 外	主屋	500万円	750万円	2/3	補助金の額及び率は、町並み保存のための対策事業費について適用する。 新築またはこれに類する建物等を対象にする。
		石垣・側溝	200万円	300万円	〃	
		塀及び門	300万円	450万円	〃	
		付属建物他	400万円	600万円	〃	
		防虫・殺虫	40万円	80万円	1/2	

- ① 主屋及び付属建物については、外観保存のための屋根、壁、建具、土台ほか構造部所の修理、修景に要する経費を補助する。
- ② その他構築物については、現状の維持、復元に要する経費を補助する。
- ③ シロアリ対策など防虫、殺虫処理に要する経費を補助する。
- ④ これらの設計、施工監理に要する経費を補助する。

(3) 税の優遇措置

	伝 統 的 建 造 物 類	伝 統 的 建 造 物 以 外
固定資産税	非課税 (風俗営業又は風俗関連営業の用に供しているものを除く)	町道に直接面しているものについては50%減額 それ以外のものは20%減額
相続税 (贈与税)	家屋及び構築物並びにその敷地について 財産評価額の30/100を控除	優遇措置なし

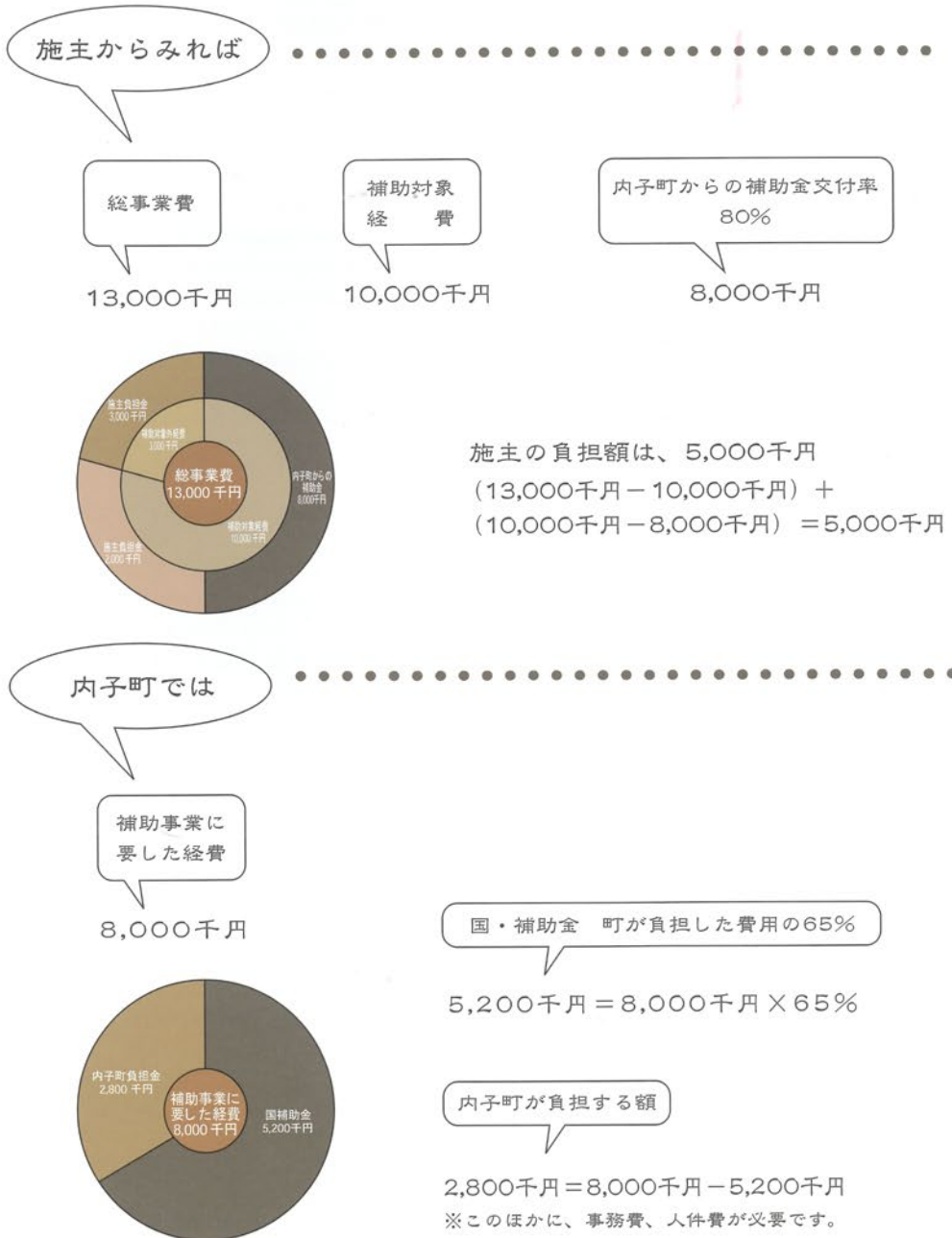
Figure Grant for townscape preservation at Uchiko Town (excerpt from 「内子町の町並保存」)

7 内子町における助成措置とその財源のしくみ

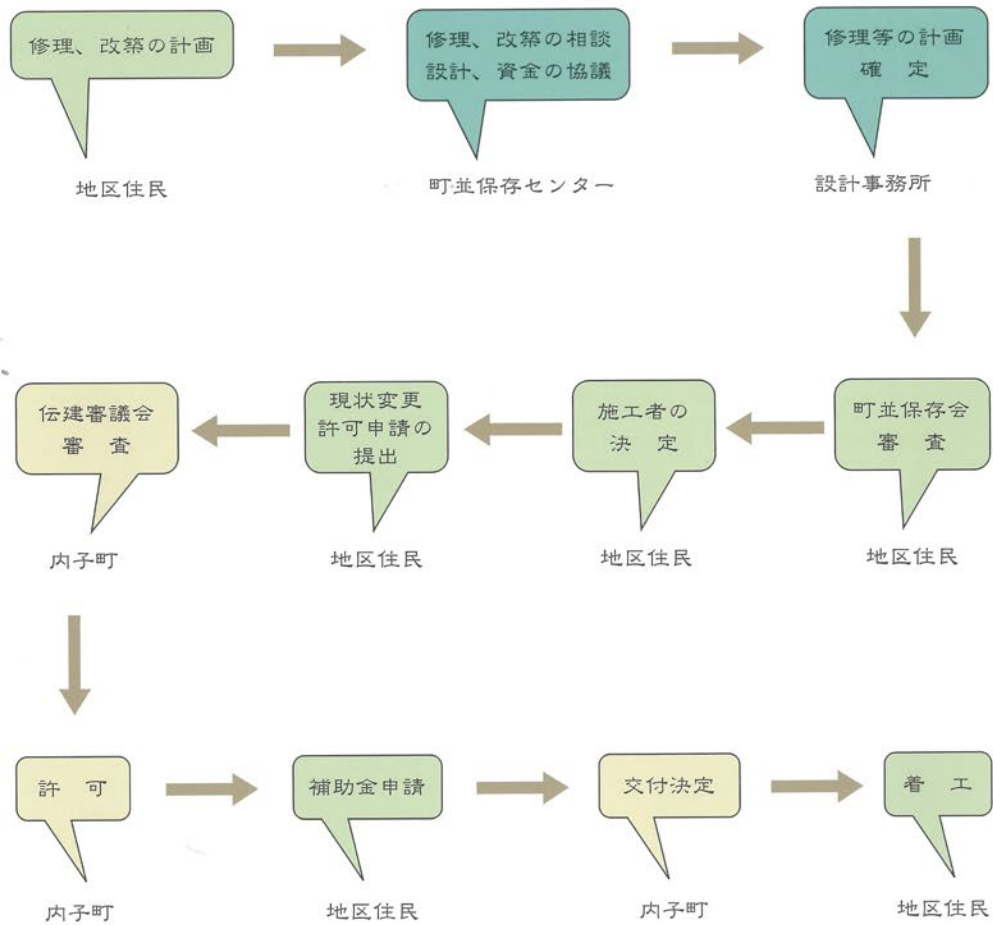
(3) 保存事業に要する財源負担の流れ

※ これは、修理事業を想定したもので、金額等は仮定の数値です。

また、年度途中で修理、増改築等が生じた場合は、町の単独事業で対応します。



8 保存対策事業の流れ



※ 台風災害や緊急な修理事業等については、臨機に対応します。

4. The former Nippon Life Insurance Kyushu Branch (Fukuoka)

Name of building : Former Nippon Life Insurance Kyushu Branch

Location : Fukuoka City, Fukuoka

Owner / Administrator : Fukuoka City

Date of Designation: : 12 March 1969

Designated Category : Important Cultural Property

Era of Construction : Meiji

Case study on Utilization

① Profile and current status of the building

The building was constructed in 1909 to house the Kyushu branch of Nippon Life Insurance Company, and was also used as one of the company's offices after the war. In 1969, it was designated by the Japanese government as an important cultural property and transferred to Fukuoka City, which used it for a municipal historical archive until 1990. Upon restoration of its interior to the state when it was originally constructed, it was reopened to the public as the Fukuoka City Red Brick Culture Center in 1994. Since then, it has served as a cultural facility where people can enjoy the atmosphere of the Meiji era.

In August 2019, the first floor and lower level were remodeled into the Engineer Cafe, a venue for interchange among engineers who handle leading-edge technology.

② Approaches to utilization

The Fukuoka City Red Brick Culture Center is taking approaches to utilization in ways that do not negate the results of the 1994 restoration of appearance in the Meiji era. The second floor has meeting rooms, both large and small, that are used for meetings by citizens and city authorities. These rooms are retrofitted with air conditioning units, and the lighting fixtures are mainly restorations, with the addition of some floor lamps. Users can therefore feel the Meiji atmosphere as they hold meetings.

The authorities also added a counter that extends from the first floor entrance to the cafe space in the rear on the right, but the space is used as a cafe while retaining the Meiji ambiance.

The Engineer Cafe main hall to the left of the first floor entrance recently underwent improvement that appears to have made it more convenient to use. Ordinarily, it is open to the public as a co-working space, but can also be used by the engineer community for study and events. The equipment required for such activities is installed (retrofitted) in a manner that avoids detracting from the interior preserving the original atmosphere, as far as possible.

Even on the occasion of the restoration in 1994, the maker (work) space on the lower level did not have its interior restored; it was instead decided to have it used as a work space while monitoring the subsequent progress of use plans.

Although small, the building retains the atmosphere of the Meiji era to a high degree, and its users can feel this ambiance while making use of it. The facilities retrofitted to enhance the convenience of users were skillfully added without detracting from the building itself. While meeting present-day needs, the work also enabled users to enjoy the building as an important cultural property.

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Photo The former Nippon Life Insurance Kyushu Branch (Fukuoka Prefecture)

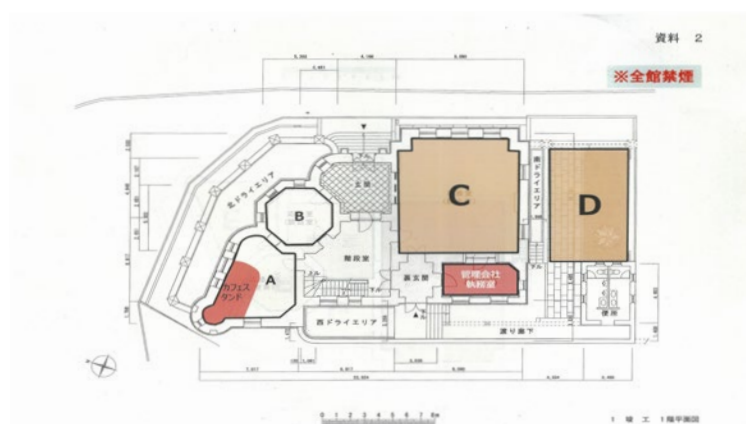


Figure First floor

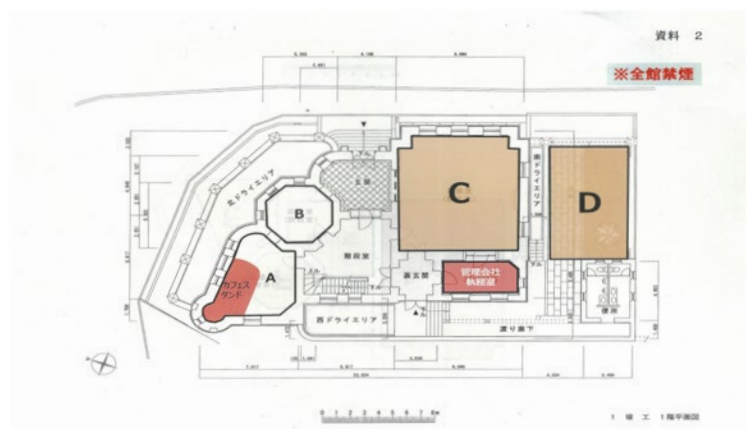


Figure Second floor



Photo Meeting room 1 at the second floor



Photo Retrofit counter at the cafe



Photo Meeting room 3 at the second floor

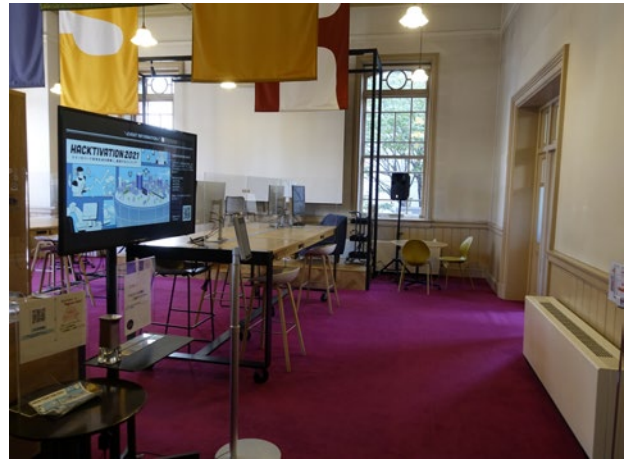


Photo Engineer cafe main hall at first floor



Photo Stair room and atrium at the second floor



Photo Desks at engineer cafe main hall



Photo Podium at the engineer cafe



Photo Under space at the basement floor



Photo Maker space at the basement floor



Photo Maker space at the basement floor

5. International Library of Children's Literature, National Diet Library (Tokyo)

Name of building : International Library of Children's Literature, National Diet Library
Location : Taito Ward, Tokyo
Owner / Administrator : National Diet Library
Date of Designation: : 1999
Designated Category : Historical building selected by Tokyo Metropolitan Government
Era of Construction : Meiji/Showa/Heisei

Case study on Utilization

① Profile of the building

The Imperial Library plan formulated in 1899 articulated the grand vision of a library holding up to 1.2 million books, with 730 seats and an extended floor area of about 20,000 square meters. Based on this plan, the construction was divided into three phases. The first phase began in 1900 and ended in March 1906. Partly because the initial budget was pared, the library opened with a size that was somewhat smaller than in the original plan. At the time of its opening, it was nevertheless extolled as the biggest library in the Orient, with an extended floor area of 3,959 square meters, a collection of some 240,000 books, 250 ordinary reading seats, and 85 special reading seats. Construction to enlarge the library began in June 1928, 22 years after the opening, and was completed in August 1929. This Showa-era extension executed as the second phase built a section that had not been constructed in the Meiji-era first phase due to the reduced budget. While there were still wishes to realize the initial plan in its entirety, various circumstances prevented this from happening, although the stack room was enlarged after the war, in 1953.

The building constructed in the Meiji era has a red brick structure reinforced with a steel frame. It was supported by the walls made by laying red brick with cement mortar, and by the beams and pillars of the steel frame supporting the floors. This red brick structure does not appear on the exterior. The walls of the room interiors are plastered, and the exterior surfaces consist of two types of brick (beige bricks with a black sesame-like speckled pattern and bricks with white glazing) plus

Shirochoba-ishi (andesite), which are laid in a manner that integrates them with the structure. The red bricks were produced in Japan, and the steel beams (I-beams) were manufactured by the U.S. company Carnegie. The floors have a fire-preventing structure with the steel I beams, and the foundation is made of unreinforced concrete. There are three types of flooring with mutually different finishes: stone, linoleum, and wood. The selection of which to use depended on the purpose of the room. A queen's truss using Douglas fir timber imported from the United States was adopted for the frame in the Meiji-era building. In contrast, the extension added in the Showa era has frames whose pillars and beams are made of steel-reinforced concrete. The outer walls of the extension use cladding that imitates the facing of the Meiji era, and consists of brick-like tiles and artificial stones made of pulverized Shirochoba-ishi (andesite). The roof has a steel-frame truss.

② Building preservation and renewal

The building even withstood the Great Kanto Earthquake of 1923. Along with the enactment of the National Diet Library Act after the war in 1947, it was put to use as the Ueno Branch Library of the National Diet Library, with a collection centered around doctoral dissertations. With the construction of the Kansai Branch of the National Diet Library, however, it ended this role and was reborn as the International Children's Library. The following items came under study upon submission of a proposal by the Ministry of Construction (the current Ministry of Land, Infrastructure, Transport and Tourism) premised on preservation and reuse.

The items examined for preservation and reuse were as follows.

- Assurance of structural safety
- Installation of information, air-conditioning, and disaster-prevention equipment not in the original building, and assurance of flow lines for stairs, elevators, etc.
- Preservation of the outer appearance and Meiji-era interior

The study found that both the Meiji- and Showa-era buildings had an insufficient structural strength

as viewed from the standpoint of current standards, and required major reinforcement. It also revealed the need for large-scale improvement owing to many infringements of laws and regulations in the areas of disaster and fire prevention. It was nevertheless decided to adopt retrofitting by seismic isolation for the approach to structural reinforcement, because reinforcement and improvement by other means would have done great damage to the interior and exterior of the building. (For details on the various following types of work implemented, see reference materials 1 and 2.)

For the agenda in the disaster prevention plan, the authorities made assurance of safety the top priority. They newly established fire limits (compartments) and installed a smoke-eliminating system. They also confirmed evacuation safety through simulation, and received certification under the former Article 38 of the Building Standards Act. These efforts made it possible to preserve the major interior space such as stairwells and reading rooms.

For preservation of the exterior, crews repaired only parts with performance problems and took care to retain the look dating from the Meiji era as far as possible.

For the interior, they preserved the Meiji-era walls and ceilings. The basic approach for parts that could be used in the current condition was to strip away paint that had been applied later and then applying a thin layer of protective cement paste all over the original surface. Plastered (stuccoed) parts with missing elements were restored by taking molds from existing ones.

For interior furnishings, the basic approach for woodwork was to repair and reattach existing parts and members such as fitting frames, frieze boards, and parquetry. New additions were confined to the missing pieces of ornamentation and fire doors required for disaster prevention.

③ Approaches to utilization

The International Children's Library was repaired to function as both an information-disseminating e-library that collects and makes available children's books from inside and outside Japan, and a center of research on children's books. The layout in the initial plan positioned the administrative & management division and reading

rooms that could also be used by children on the first floor, a reading room for researchers and research & seminar rooms on the second floor, and an exhibition room and hall on the third floor. The aim was to provide a pleasant and safe environment for the children and researchers using the facility while making the most of the structure and space of the existing building, and to provide the latest IT functions.

This report presents a detailed account of Meet the World on the first floor, the No. 2 Archive Room (the current Gallery of Children's Literature) on the second floor, and the Book Museum on the third floor. These facilities were repaired in order to attain the aforementioned objective while preserving the interior as it was at the time of construction.

1) First floor, Meet the World (the former VIP Room)

This room was formerly the VIP Room, and its ceiling has plastered decoration. In the repair work, the ceiling decoration restored using the conventional plastering method. Walls were temporarily removed for restoration. The parquetry on the floor was also restored. There were plans to restore the ceiling chandelier, which was missing, based on photos taken in the Meiji era. Subsequently, however, one of the original type was found, so the chandelier were restored same as original one.

The newly installed bookshelves are not merely shelves; their tops are equipped with air-conditioning outlet vents and lighting fixtures that supplement illumination of the room.

2) Second floor, No. 2 Archive Room (the current Gallery of Children's Literature) (the former Special Reading Room)

In this room, the ceiling and the tops and bottoms of the pillars have plastered decoration. Part of the ceiling and the pillars were restored after removal and fireproofing.

Because the plaster on the walls exhibited some puffing, it was removed and restored.

A raised floor was adopted to serve as an air-conditioning path. Glass was put into the baseboard to afford a view of the original floor.

Because some of the lighting fixtures on the ceiling

were from the Showa era, these were repaired and reinstalled. For missing ones, new light fixtures were made based on the existing ones.

The newly installed bookshelves and reading desks were positioned together in the middle of the room, away from the walls. In addition, the shelves were equipped with lighting fixtures to supplement the room illumination.

3) Third floor, Museum (the former Reading Room)

The missing portions of the plastered decoration on the ceiling of this room were restored. The plastered decoration on the walls and pillars, which had exhibited some puffing, were also restored. In addition, Some of the pillars were removed and restored to build air-conditioning ducts into them.

The floor was raised to house air-conditioning ducts and electrical equipment. Glass panels were put into the baseboard to show the original floor, same as on the second floor.

The lighting fixtures on the ceiling were restored on the basis of photos from the Meiji era.

The newly installed facilities for exhibition of books were all positioned in two places in the middle of the room to avoid any influence on the plastered ornamentation on the aedicule and walls. Air-conditioning machinery was built into the exhibition-use facilities, whose tops were equipped with lighting fixtures pointed upward to supplement the room illumination. In order to protect books, the equipment used to exhibit them utilizes optical fiber that does not emit ultraviolet rays or heat rays.

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Photo International Library of Children's Literature, National Diet Library



Photo Inside "Meet the World" (the former VIP Room)



Photo Bookstack at "Meet the World" (the former VIP Room), lighting and AC vent are installed



Photo Parquet floor at "Meet the World" (the former VIP Room)



Photo No. 2 Archive Room (the current Gallery of Children's Literature), pillar and AC vent



Photo No. 2 Archive Room (the current Gallery of Children's Literature)

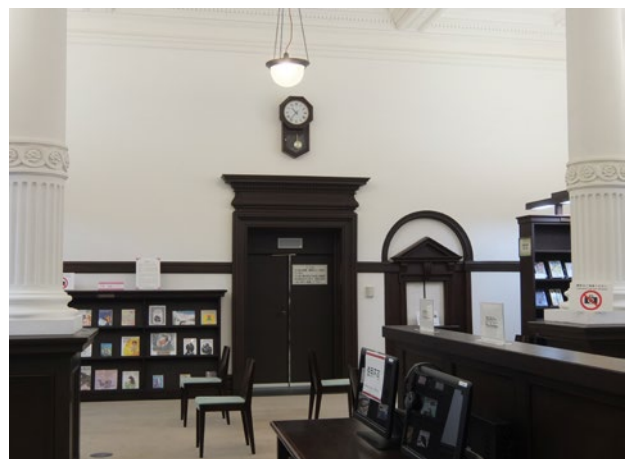


Photo No. 2 Archive Room (the current Gallery of Children's Literature), doorway to stacks



Photo No. 2 Archive Room (the current Gallery of Children's Literature), newly installed stacks



Photo No. 2 Archive Room (the current Gallery of Children's Literature), raised floor



Photo Museum (the former Reading Room), newly installed exhibiton stand

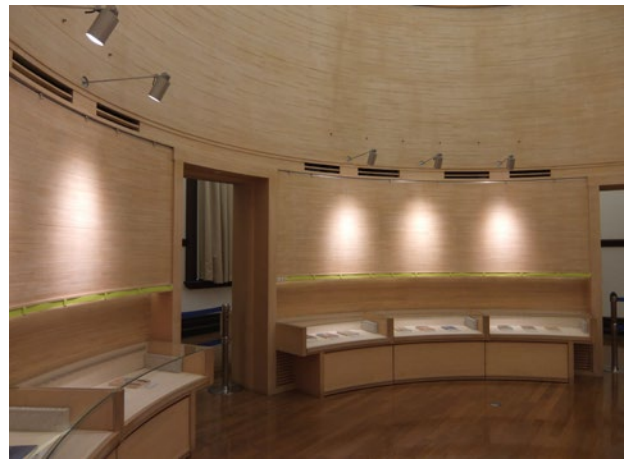


Photo Museum (the former Reading Room), inside the exhibition stand



Photo Museum (the former Reading Room), exhibits

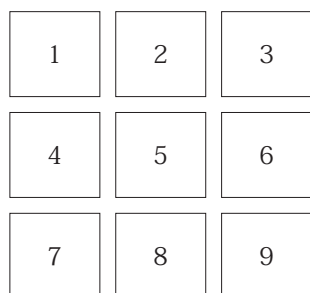


Photo Museum (the former Reading Room), "aedicule "

Editor's postscript

We are deeply grateful to all the people who provided support to the investigation and research activities of the Restoration Techniques Section of the Center for Conservation Science at the Tokyo National Research Institute for Cultural Properties. We plan to continue publishing this series of reports focused on conservation of industrial heritage properties into the coming years. Your continued support will be highly appreciated.

Photographs of the cover



1. Cafe & Pub, Former British Consulate of Shimonoseki
2. Main dining hall, Old Public Hall of Hakodate Ward
3. Engineer cafe main hall, Former Nippon Life Insurance Kyushu Branch
4. Hall, Former Hirosaki Kaikosha
5. Multi-purpose hall, West Cocoon Warehouse,
Former Tomioka Silk Mill (photo taken by : Sewaki Takeshi)
6. Brick warehouse, Yurinkan
7. Forest beer hall, Aigi tunnel
8. Annex building, Zentsuji Kaikosya
9. Annex building, Hoheikan

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