Characteristics and Processes of Reconstruction Policy in Kamaishi City, Iwate Prefecture

Hideki Yoshino (Iwate Prefectural University)

1. Reconstruction Policy in Kamaishi City

One feature of Kamaishi City's reconstruction policy is that it promoted the aggregation of the primary facilities responsible for urban functions in the existing city center. Kamaishi City made use of the tsunami reconstruction base improvement projects established after the Great East Japan Earthquake. This improvement project developed the public land in the city center, or eastern district of the city, beginning shortly after the earthquake disaster, and it involved constructing of disaster public housing, a citizen hall, a citizen information exchange center, and so on. At the same time, Aeon Town Kamaishi, which is a large-scale private facility, typically visited by many customers, was attracted to the city, and the reconstruction of the city proceeded by linking these projects together.

Plans call for the new city hall to be constructed in the neighborhood of the present city hall in the central urban district. So far, few other municipalities have attempted to revive a damaged city center. Even in Kamaishi City, the relocation of urban functions to the area in front of Kamaishi Station (Suzuko-cho), where the damage caused by the disaster was light, appears to have been discussed. However, based on the opinions of the citizenry, the government promoted a policy of concentrating major facilities in the central urban area. This policy has been promoted as a Front project for the reconstruction of Kamaishi City. Thus, this paper first outlines the present state of the reconstruction of Kamaishi City. It then describes the process and context for the accumulation of urban functions in the existing city center, a characteristic feature of Kamaishi City's reconstruction policy.

2. The Status of Reconstruction in Kamaishi City¹⁾

2-1. The population and demographics of Kamaishi City

The population of Kamaishi City was 40,370 as of April 2010 (based on the Basic Resident Register) before the Great East Japan Earthquake; 35,594 in April 2016, the 5th year after the earthquake; 32,986 in December 2019, the 9th year after the earthquake; and 32,821 in February 2020. If we set the population in April 2010 at 100, it dropped to 88.2 in April 2016, 81.7 in April 2019, and 81.3 in February 2020, declining to nearly 80% of preearthquake levels over the last 10 years.

Regarding changes in the population of Kamaishi City, although some people have come to the city, since the earthquake, 1,200–1,400 people have left each year, resulting in a continuous decline in the population. The drop was as low as 74 in 2014 when it was small, and as high as 383 in 2017 when it was large. The size of the decrease has also been increasing in recent years, with a decrease of 356 in 2018.

According to the national census, 26.4% of the population of Kamaishi City was elderly in 2000, 31.2% in 2005, 34.8% in 2010, and 35.6% in 2015. The increase from 2005 to 2010 was 3.6 points, and the increase from 2010 to 2015 was 0.8 points. The nationwide trend is 17.4% in 2000, 20.2% in 2005, 23.0% in 2010, and 26.6% in 2015. The increase from 2005 to 2010 was 2.8 points, and the increase from 2010 to 2015 was 3.6 points. These findings

suggest that the pace of the population aging after the earthquake in Kamaishi City has been constrained to a certain extent.

2-2. Housing reconstruction

In the disaster-stricken municipalities, a large amount of emergency temporary housing (hereinafter referred to as temporary housing) was constructed under Article 4 of the Disaster Relief Act (Act No. 118 of 1947).²⁾ The main builder was the prefecture itself, and there were many prefabricated houses. As of November 2011, at the peak, 66 housing sites and 3,164 temporary housing units were built in Kamaishi City. The number of households affected by the disaster who moved into this housing was 2,845 at the peak, with an occupancy rate 89.9%. Since then, the construction of permanent housing has progressed, and many disaster victims have moved to housing reconstructed on their own or to disaster public housing.

The number of housing units rebuilt by the disaster victims of Kamaishi City is 1,726, of which 1,333 (77.2%) were built in the city, and 393 (22.7%) were constructed outside the city or outside the prefecture. In comparison, 48 sites for disaster public housing (both prefectural and municipal) were built in Kamaishi City, accounting for 1,316 units, the largest number of any municipality in Iwate Prefecture. A high percentage of these are managed by the city. The city manages 42 sites and 1,005 units, and Iwate Prefecture manages 6 sites and 311 units. As such, more than 2,600 housing units were constructed in Kamaishi City alone after the disaster. As of the end of February 2020, there were 16,257 households in Kamaishi City, and one of every six households lived in a dwelling unit that was newly constructed after the earthquake.

On the other hand, there have been cases in which people are confined to temporary housing due to various circumstances. Iwate Prefecture has extended the terms of temporary housing, which was initially 2 years, with the consent of the government obtained many times, taking into account the conditions of the disaster-stricken areas and the victims of the disaster.³⁾ According to a survey conducted by Kamaishi City, as of August 2019, there were 87 households residing in temporary housing (prefabricated housing) and 38 households residing in housing considered to be temporary housing, for a total of 125 households. As of the end of March 2020, however, the number of households residing in temporary housing decreased to 31, and the number of households residing in housing considered to be temporary housing decreased to 19, for a total of 50 households.⁴⁾

2-3. Industry

The fishing industry has not entirely recovered in Kamaishi City following the earthquake. The catch landed was 2.75888 billion JPY in 2010 before the earthquake, which was nearly halved to 1.48776 billion JPY in 2011 after the earthquake. Thereafter, it recovered to 1.6822 billion JPY in 2014, but was still only 1.76878 billion JPY in 2018, and it has never reached the pre-earthquake levels seen in 2010. A fish market has been completed as a reconstruction project, but the size of the catch has not recovered due to a lack of salmon fishing and a decrease in fishery workers.

Movements toward a recovery in manufacturing can be seen as well. The value of shipments of manufactured goods fell from 110.63101 billion JPY in 2010, before the earthquake, to 93.2377 billion JPY in 2011 after the earthquake. Subsequently, industry as a whole has maintained a trend of recovery, reaching 124.6489 billion JPY in 2017 and exceeding the numbers from before the earthquake.

The tourism sector remains unrecovered. Looking at the number of tourists arriving (per calendar year), this number was 1,034,690 in 2010, the year before the disaster, which dropped dramatically to 262,741 in 2011 after the disaster. It then recovered to over half a million persons and reached 516,119 in 2018. However, the number has still not reached 0.6 million, remaining almost half of what it was before the earthquake. The JR and Sanriku Railways have conducted various ad campaigns and invitational initiatives, and a number of hotels have been built in the city since the earthquake, but the number of tourists had not been restored to the level before the earthquake.

3. The Concentration of Urban Functions in the City Center

3-1. Three Front Project (flagship projects)

Kamaishi City set to work on restoration projects immediately after the earthquake, formulating a "Vision for Community Development" to allow citizens, businesses, various resident groups, and the administration to work with a common purpose toward the early recovery of the areas affected by the earthquake and new urban development. The "Basic Plan for Community Reconstruction in Kamaishi City—Scrum Kamaishi Reconstruction Plan" was also set into action in December 2011 as a policy to help materialize this vision. In the "Basic Plan for Community Reconstruction," a vision of Kamaishi City's future as "Kamaishi, a shining city of hope and smiling faces in Sanriku" is described. In the East Kamaishi district, which is the city center, Kamaishi aims to rebuild safe and attractive urban areas that can support urban functions for many years into the future. Specifically, the plan calls for the "creation of a new commercial space to include Nakabanko." This plan has been realized in the form of three Front projects.

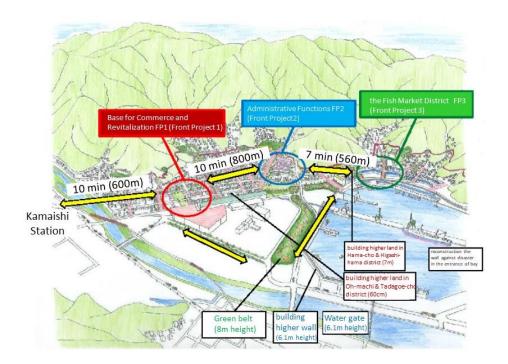


Fig. 1 Orientation of developments in the eastern district (Front Projects) *Source*: Kamaishi City homepage: "Front Projects"

"Front Projects," which Kamaishi City posted on its website on June 11, 2015, introduces three projects for the reconstruction of the Eastern District, a central urban district, as shown in Fig. 1. Front Project 1: "Building a Base for Commerce and Revitalization" is a project to create the face of a new urban district that will serve as a hub for exchange and commerce and to induce investment in the vicinity. It will accomplish this goal through the effective allocation of both public and commercial facilities. Front Project 2: "Restructuring of Administrative Functions" is a project centered around the construction of the town hall based on the experience of the earthquake and aimed at improving accessibility and convenience by providing urban functions. Front Project 3: "Revitalizing the Fish Market District" is centered around building a fish market and aggregating seafood processing facilities behind the market areas, and it also includes developing open spaces and areas for other water-based recreation. The project is described as forming a link between Front Projects 1 and 2.

As of March 2020, Front Projects 1 and 3 were almost completed, and Front Project 2, which is the construction of a new government building in the city hall, is in progress. These are all projects aimed at reconstructing the city center and are the cornerstones of the reconstruction plan formulated in the year of the disaster. Therefore, it can be seen that, from an early stage, the city hall of Kamaishi City was planning to rebuild at the current location rather than relocate.

3-2. Front Project 1

In March 2014, Kamaishi City formulated the "Front Project 1: Basic Plan for the Development of a Base for Tsunami Reconstruction in East Kamaishi." The plan describes the purpose and background of its formulation. This is followed by development policy, the basic plan itself, project methods, and the schedule. The development policy organizes the relationships between high-level city plans related to community redevelopment and states that it will make use of the Project for the Development of a Base for Tsunami Reconstruction in East Kamaishi. In the basic plan, the layout plan of the facilities and the functions and contents of each facility are described. The project methods and schedule describe the entities and area management organizations that will be involved in the operation of the facility and in introducing area management, after which the project methods for each facility are described.

According to "About Front Project 1," ⁶⁾ which Kamaishi City announced on its website on March 9, 2017, the facilities constituting Front Project 1 consist of public squares, a citizen hall, an information exchange center, reconstruction public housing, public parking lots, cooperative stores, and private sector revitalization introduction zones. The arrangement of each facility is shown in Fig. 3.

Public squares are described as "symbols of the regeneration of central urban areas and relaxing places for visitors that can be used for various events connected to culture and commerce." The South Square was opened to public use in July 2015 and the North Square in December 2017. The Kamaishi Citizens' Hall (TETTO) is described as fulfilling the basic concept of a place "loved by citizens, warming to the hearts of the citizenry, and serving as a comprehensive support base for citizen culture." It was developed as a replacement for the former Kamaishi Citizens' Cultural Hall, which was damaged by the disaster. It consists of a large hall, small hall, gallery, practice rooms, Japanese-style rooms, and so on, and it opened to the public in December 2017.

The Kamaishi Information Exchange Center is "a facility where citizens and visitors can visit casually, that serves as a base for gathering and disseminating information about Kamaishi, supports the development of civic culture, and contributes to a lively civic life together with the citizens' hall." It consists of lounges, conference rooms,

workspaces, citizen studios, and multi-purpose meeting rooms (the Kamaishi PIT, which is operated by Team Smile and accommodates approximately 150 people). The Kamaishi Information Exchange Center opened on December 23, 2015 (the Kamaishi PIT followed on January 9, 2016). Miffy Cafe Kamaishi, which is located on the 1st floor, was opened with the cooperation of the embassy of the Kingdom of the Netherlands and Dick Bruna Japan Co., Ltd. In Japan, pop-up miffy cafes have existed for limited periods of time, but the only permanent and official one is Miffy Cafe Kamaishi.

As reconstruction public housing, two disaster public housing buildings were built in the area of Front Project 1: Omachi Fukko 4 (an eight-story, 41-unit building) and Omachi Fukko 5 (a six-story, 24-unit building). These opened as residences in 2016.

As public parking lots, the Kamashi-Omachi parking lot was established and opened to public use in March 2014. This parking lot is a five-story steel-framed structure (five stories, six layers). The building area is 2,503.27 square meters (including all parking lots, slopes, and elevators), and the total floor area is 12,065.21 square meters (including all parking lots, slopes, and elevators). The parking lot can accommodate 475 cars and is open 24 hours a day.

Townport Omachi was developed as a cooperative store, and it opened in December 2014. The facility consists of nine tenants (five stores on the 1st floor and four stores on the 2nd floor), as well as water fountains, toilets, and communication decks, and it is directly connected to Aeon Mall Kamaishi. Present stores include a florist, cosmetic shop, eateries, a fashion goods store, a beautician, and so on.

The Kamariba Bar and Restaurant Hub opened in January 2017 in a corner of the private sector activity zone. The Kamariba Bar and Restaurant Hub is a city-owned land utilization project aimed at rebuilding the restaurant district as part of Front Project 1. The Iwate Branch of Daiwa Lease Co., Ltd., and Kamaishi City have worked together in a public-private partnership to advance the project, which includes 13 operating restaurants.

3-3. Outline of Large-Scale Commercial Facilities

In addition to the above facilities, a large commercial facility is depicted in Figure 2. This large-scale facility, which attracts many customers, is Aeon Town Kamaishi, mentioned above. It was constructed on land owned by the Nippon Steel Corporation (commonly called Nakabanko, which formerly served as a site for storing fuel waste) using the special reconstruction zone system. In October 2011, Kamaishi City approached Aeon about opening a store as part of the reconstruction after the earthquake, and in February 2012, Aeon decided to open Aeon Town Kamaishi as part of the reconstruction project. In March 2013, Aeon Town signed the "Agreement Concerning the Location of Large-Scale Commercial Facilities and Community Contributions" with Kamaishi City, and the groundbreaking ceremony was held in June of the same year. Some of the stores opened on March 12, 2014, nearly 3 years after the earthquake, and the grand opening took place on March 14, 2014. The location of the store is 1-1, Minato-machi 2-chome, Kamaishi City. The structure is a steel building that rises three-stories above ground. It has a lot area of 36,600 square meters, a total floor area of 51,700 square meters, 19,234 square meters in store area, 1,240 parking spaces, and 500 spaces for parking bicycles. It includes 57 stores (including ATMs) with 56,065 square meters of retail space. The 1st floor of the building is a parking lot raised on piloti, with an area covering 9,300 square meters. The roof includes space (a 3,200 square meter area, 22 meters above sea level) to accommodate temporary evacuees, and on the 3rd floor, there is a disaster preparedness warehouse.

The store is the third largest in comparison to other Aeon stores in Iwate Prefecture, coming after the Maegata store in Morioka City, which has a site area of about 97,000 square meters, a total floor area of about 99,000 square meters, a commercial facility area of 39,800 square meters, and 136 stores (including the Aeon Morioka store itself) and the Motomiya store, also in Morioka City, which covers an area of 74,684 square meters, with a commercial facility area of 57,220 square meters and 142 stores (including the Aeon Morioka Minami store).

4. Development of Front Project 1

4-1. Establishment of the "Basic Plan for Urban Redevelopment"

In December 2011, Kamaishi City formulated the "Basic Plan for Community Reconstruction in Kamaishi City—Scrum Kamaishi Reconstruction Plan." Basic Goal 3 of this plan is to "build communities that ensure the safety of residents" and to "work to build communities that are protected from tsunamis and that allow people to live with peace of mind in order to rebuild and stabilize the livelihoods of disaster victims at an early date." In addition, Basic Goal 4 aims to revive central urban areas and promote interactions between people and things to "create a base for the exchange and interaction of people, things, and information."

Thus, from the beginning, the city has planned urban redevelopment with the restoration of central urban districts in mind. As such, Kamaishi City announced in March 2012 that it would start discussions on the location of large-scale commercial facilities, and in May, of the same year it established the Kamaishi City Center and East District Commerce Promotion Council. In July of the same year, the East Kamaishi District Revitalization Center Improvement Project (survey project) was adopted by the Ministry of Land, Infrastructure, Transport, and Tourism as part of the "2012 Public-Private Earthquake Reconstruction Partnership Project." The Kamaishi City Center and East District Commerce Promotion Council held its first conference on May 8 of the same year and held further seven conferences before February 13, 2015.

From the meeting minutes, it can be seen that the term "Front Project" is used as early as the first meeting. A "Workshop on East District Front Project 1" was also held three times on July 24, August 27, and October 7, 2012. Following these discussions, the Kamaishi Community Development Co., Ltd. was established in November 2013, and the "Basic Plan for the East Kamaishi District Front Project" was formulated in March 2014.

The measures taken to realize this plan were the introduction of the Tsunami Reconstruction Base Improvement Project, the formulation of two "Reconstruction Promotion Plans" and of one "Reconstruction and Improvement Plan."

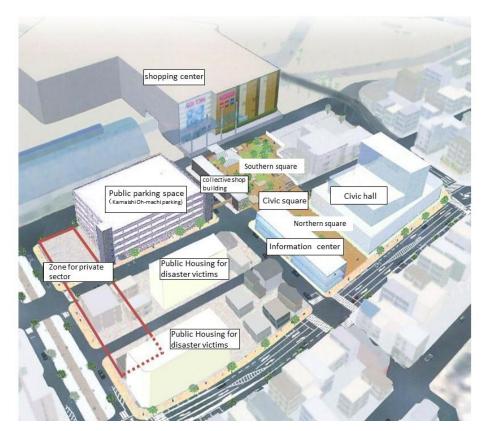


Fig. 2 Diagram of the layout of facilities in Front Project 1 *Source:* Front Project 1 on the Kamaishi City website

4-2. The Introduction of the Tsunami Reconstruction Base Improvement Projects

The "Operation of Urban Development Projects in the Areas Affected by the Great East Japan Earthquake (Guidance)" announced by the Ministry of Land, Infrastructure, Transport, and Tourism in January 2012 says the following regarding tsunami reconstruction base improvement projects.

First, tsunami reconstruction base improvement projects are defined as

"projects to develop urban facilities planned as 'single sites composed of facilities that form an urban area that serves as a tsunami disaster prevention base' as stipulated in Article 17 of the Act on Regional Development for Tsunami Disaster Prevention. They aim to urgently develop tsunami-safe urban areas in which the functions of housing, public utilities, business facilities, and so on are consolidated in order to serve as forward bases for the reconstruction of areas damaged by the tsunami following the Great East Japan Earthquake."

Subsequently, the districts in which this project can be implemented are "districts that should lead the way in development in the reconstruction plan." Furthermore, it states that these sites should be "granted the right of expropriation through implementation as city planning projects, making it possible to acquire land through the use of special exemptions from taxation on capital gains and so on (such as special income tax exemptions of 50 million JPY and other similar measures)." As such, it indicates large tax incentives to the sellers (landowners) and the expropriation of private land by local governments.

Also, "single sites composed of facilities that form an urban area that serves as a tsunami disaster prevention base" are defined as "a single site of residential facilities, specified business facilities or public interest facilities, and public facilities that form an urban area that serves as a base for maintaining, even in the event of tsunami, urban functions in areas where there is a significant risk of disasters due to tsunamis and where there is a high need to prevent or mitigate such disasters, as provided for in Article 2, Paragraph 15 of the Act on Regional Development for Tsunami Disaster Prevention." It is also stipulated that "these may be defined in city plans as urban facilities, as prescribed in Article 11 of the City Planning Act." In light of this, as it is assumed that tsunamis will occur in the future and will cause damages, the aim is to form an urban area so that urban functions can be maintained even after such tsunamis occur. The term "specified business facilities" here refers to "all offices, business establishments, and other business facilities that contribute to the promotion of core industries, the creation of employment opportunities, and the formation of favorable districts in the tsunami-affected areas and that do not qualify as public welfare facilities." The term "public welfare facilities" refers to "educational facilities, medical facilities, public offices, cooperative stores, and other facilities necessary for the common welfare or convenience of residents," and the term "public facilities" refers to "facilities that are used for public purposes such as roads, parks, and so on." This project is therefore applicable to the construction of any of these facilities within the area in question.

According to the Kamaishi City website, the tsunami reconstruction base improvement projects are projects to provide support for the swift development of "urban areas to serve as reconstruction hubs" that were determined to be "single sites composed of facilities that form an urban area that serves as a tsunami disaster prevention base" in areas affected by the tsunami caused by the Great East Japan Earthquake under the Act on Regional Development for Tsunami Disaster Prevention. According to the description of these projects, "by raising residential land to a level that does not flood even when a tsunami of the same scale as the recent tsunami occurs and by using the existing road network, the development of facilities such as government buildings, cultural exchange centers, public parking lots, and multipurpose squares will create urban areas with disaster prevention and urban functions that will serve as hubs for maintaining urban functions even in the event of a future disaster."

In other words, tsunami reconstruction base development projects "provide support for the urgent development of urban districts that will become bases for reconstruction in areas affected by the tsunami of the Great East Japan Earthquake" and are limited to those that have been designated as "single sites composed of facilities and forming an urban area that serves as a tsunami disaster prevention base" in the Act on Regional Development for Tsunami Disaster Prevention. These projects are limited to municipalities that satisfy the adoption requirements, determined by the degree of damage caused by the tsunami disaster, and are "basically limited to projects implemented as subsidized reconstruction projects within the area of the subsidized reconstruction project plan stipulated in Article 77 of the Act on Special Zones for Reconstruction in Response to the Great East Japan Earthquake (the 'Special Reconstruction Zone Law')."

Requirements for adoption are municipalities that either have "an area affected by flooding that is approximately 20ha or more, as well as a number of flooding-affected buildings of approximately 1,000 or more" or are "those that the Minister of Land, Infrastructure and Transport recognizes to be of the same size as the above-mentioned requirements." In addition, the number of single sites composed of facilities that form an urban area serving as a tsunami disaster prevention base that are to be supported by a tsunami reconstruction base improvement project is "in principle up to two districts per municipality with an upper limit of area for national budget support of up to

20ha per district." Since the tsunami reconstruction base improvement projects are essentially implemented as subsidized reconstruction projects, the basic portion of the expenses provided by the nation is one-half. However, one-half of the local burden is additionally subsidized by the national treasury, and the remaining one-half is provided as a Special Earthquake Tax Subsidy for Reconstruction in the third supplementary budget for fiscal 2011. As such, "basically no burden is borne by local governments." This project is allowed to cover the costs associated with the acquisition and development of land for tsunami reconstruction bases, including land costs (acquisition costs of land necessary for the development of tsunami reconstruction bases); compensation costs (costs associated with the acquisition of land necessary for the development of tsunami reconstruction bases); and development costs (costs necessary for the development of tsunami reconstruction bases).

In addition, where the expropriation of land and similar measures have been conducted pursuant to the provisions of the City Planning Act, "special tax exemptions for the acquisition of substitute assets due to expropriation and similar measures," "special tax exemptions for the acquisition of assets as a result of land exchanges and similar measures," and "special deductions for capital gains (a 50 million JPY deduction) in the case of exchanges for expropriation and other similar measures" exist. Where land or other similar assets have been expropriated for compensation by a project, or where land or similar assets located in the area of a single site composed of facilities that form an urban area that serves as a tsunami disaster prevention base is purchased pursuant to the provisions of the Act for the Promotion of the Expansion of Public Land, "special deductions for capital gains on the transfer of land and similar assets for a specified residential land development project (15 million JPY deduction)" and "special tax exemptions for taxation on long-term capital gains on the transfer of land and similar assets for the development of a high-quality residential project" (lower tax rates of 14% for amounts equal to or less than 20 million JPY and 20% for amounts over 20 million JPY) exist.

Kamaishi City clearly stated in the city's community reconstruction plan that it would introduce a tsunami reconstruction base improvement project, choosing to proceed with such a project in the East Kamaishi district. After the city plan was decided in November 2012, Kamaishi City changed the city plan to expand this area in August 2013, such that the single site composed of facilities that form an urban area that serves as a tsunami disaster prevention base was set to occupy 26.8ha of the city center. Additionally, as this project is an effort to prevent chaotic development that would hinder reconstruction and to develop urban areas that were strongly affected by the disaster and aims to develop a base that will lead to the reconstruction of areas affected by tsunami, its scope is limited to projects beginning during or prior to the year 2015.

4-3. Formulation of the "Reconstruction Promotion Plan"

The Act on Special Zones for Reconstruction in Response to the Great East Japan Earthquake (the Special Reconstruction Zone Law) was enacted on December 26, 2011, with the aim of facilitating and promptly promoting Japan's resurgence from the Great East Japan Earthquake and contributing to the regeneration of a vigorous Japan. Prefectures and municipalities that suffered a certain degree of damage from the Great East Japan Earthquake could prepare a "Reconstruction Promotion Plan" based on the basic policy formulated by the government, apply to the prime minister, and if approved, receive special exceptions for the relaxation of land use regulations (special exceptions from the Building Standards Act), special exceptions related to taxes on industrial clusters (national and local taxes), and special financial exceptions (subsidies for the payment of interest). In other words, being

recognized as a special reconstruction zone allowed an area to enjoy certain deregulation measures.⁷⁾

Kamaishi City was the first in the prefecture to formulate such a plan when it formulated the "Kamaishi City Reconstruction Promotion Plan" on July 19, 2012, as a "Reconstruction Promotion Plan" under special measures of the Building Standards Act (measures for the relaxation land use restrictions). This plan was accredited by the government on August 3 of the following month (Iwate No. 3). This plan stipulates that "with the development of commercial facilities in reconstructed industrial clusters, the establishment of industry will be aimed at in the future. However, with the aim of contributing to the effective utilization of land in the city center, use restrictions will be relaxed to promote the development of commercial facilities to achieve synergies with the commercial areas in the vicinity, including in industrial zones." Specifically, to "develop large-scale commercial facilities in industrial areas in East Kamaishi district (2-chome, Minato-machi, Kamaishi City)," the establishment of special zones to relax usage restrictions was requested. Here, the term "large-scale commercial facility" refers to Aeon Town Kamaishi.

As a "Reconstruction Promotion Plan" related to tax incentives, Iwate Prefecture applied for approval of the "Iwate Prefecture Industrial Reconstruction Promotion Plan" on February 6, 2012, and received approval on March 30, 2012. This plan stipulates special repayment schedules or tax exemptions for the acquisition of machinery and other capital costs on prefectural taxes (business taxes—individual and corporate—real estate acquisition taxes, and fixed asset taxes) for businesses in the medical chemical, information services, lumber, energy with a reduced environmental impact, tourism, food, fisheries, agriculture, and other related industries in reconstructed industrial clusters. The tax exemption period is 5 years from the project year, which includes the date of acquisition of the exempt facilities or equipment. Thirty-three municipalities in the prefecture are targeted. However, as shown in Table 1, the specific target areas are reconstruction industrial clusters stipulated in the reconstruction promotion plans formulated by Kamaishi City, Ofunato City, Yamada Town, Rikuzentakata City, and Otsuchi Town.

Kamaishi City submitted the "Kamaishi City Reconstruction Promotion Plan" (Special Industrial Revitalization Zones) related to special tax measures to the national government in March 2013 based on the "Iwate Prefecture Industrial Reconstruction Promotion Plan" and was accredited as Iwate No. 6 on March 26, 2013. Subsequently, change approvals (for Iwate No. 6) were received on March 29, 2016, and May 25, 2018. The "Kamaishi City Reconstruction Promotion Plan" is based on the Act on Special Zones for Reconstruction in Response to the Great East Japan Earthquake (the Special Reconstruction Zones Act) and is intended to provide for the reception of special tax measures, such as preferential treatment with respect to national and local taxes, for businesses undertaking projects that contribute to reconstruction in designated areas such as the East Kamaishi district. Approximately 300 business establishments in the East Kamaishi district were included in the plan.

Table 1 Industrial Revitalization and Reconstruction Promotion Plans in Iwate Prefecture

Special Zone Name	Date of Approval	Entity
		Formulating Plan
Iwate Prefecture Industrial Rebuilding and	March 30, 2012	Iwate Prefecture
Reconstruction Promotion Plan (Special Industrial		
Revitalization Zones)		
Kamaishi City Reconstruction Promotion Plan	March 26, 2013	Kamaishi City
(Special Commercial Zones)		

Ofunato City Reconstruction Promotion Plan	March 29, 2016	Ofunato City
(Special Commercial Zones)		
Yamada Town Reconstruction Promotion Plan	June 2, 2016	Yamada Town
(Special Commercial Zones)		
Rikuzentakata City Reconstruction Promotion Plan	December 20, 2016	Rikuzentakata
(Special Commercial Zones)		City
Otsuchi Town Reconstruction Promotion Plan	December 20, 2016	Otsuchi Town
(Special Commercial Zones)		

The industries covered by the Iwate Prefecture Industrial Rebuilding and Reconstruction Promotion Plan are wide-ranging, including manufacturing, medical chemicals, information services, timber, energy with reduced environmental impacts, tourism, food, fisheries, agriculture, and related industries. However, as the types of industries covered by the municipal plans are limited to industries related to commerce, the zones created by these plans are designated as special commercial zones.

Source: Compiled from the Iwate Prefecture website

https://www.pref.iwate.jp/shinsaifukkou/nariwai/saiseitokku/index.html

4-4. Formulation of Reconstruction and Improvement Plans

In a reconstruction and development plan, the disaster-stricken municipalities describe their primary reconstruction and development projects (various projects such as urban development and improvement of agricultural production infrastructure). Various special measures (unification of procedures, relaxation of licensing standards, establishment and expansion of project systems, etc.) may then be applied to the projects described. Therefore, when it is necessary to receive such special measures, a reconstruction and improvement plan that contains the required information must be produced. Kamaishi City formulated the initial Reconstruction and Development Plan jointly with Iwate Prefecture on July 31, 2012, and announced it on August 2 (after which 11 changes were made prior to a second announcement on March 31, 2016).

The original plan stipulates that the land use policy for the city center is "to perform development so as to defend urban areas by means of wave protection facilities in response to an L1 tsunami and to create a city that can tolerate a certain level of flooding due to an L2 tsunami. This will primarily make use of residential and commercial areas." An overview of the land use in the East Kamaishi district is as follows: "This site is leading the reconstruction of Kamaishi City and is primarily used as commercial, business, and residential land."

Table 2 Chronology of the Reconstruction of the Kamaishi City Center

Year	Month	Major Items
2011	11	Dialogue between Kamaishi City and commercial stakeholders
	12	The Basic Plan for Community Redevelopment clearly states the goals of
		"promoting the functional development of commercial and exchange spaces"
		and "creating a new commercial base to include Nakabanko."
2012	1	The Chamber of Commerce and Industry asks the city to promote the
		establishment of a large-scale shopping center.
	3	Announcement of the start of discussions regarding the location of large-
		scale commercial facilities

	5	Establishment of the Eastern District Commerce Promotion Council and
		commencement of discussion regarding the development of a new
		commercial hub in the city center (East District)
	5	Briefing sessions held for land right holders
	7	East Kamaishi District Rebuilding Project adopted by the Ministry of Land,
		Infrastructure, Transport, and Tourism as a "Public-Private Earthquake
		Reconstruction Partnership"
	7	Kamaishi City Reconstruction and Improvement Plan formulated and land
		use policies for the Eastern Kamaishi District established
	7	"Kamaishi City Reconstruction Promotion Plan (Special Commercial
		Zones)" related to the relaxation of use restrictions submitted to the national
		government
	8	The government certifies the "Kamaishi City Reconstruction Promotion
		Plan" related to the relaxation of use restrictions (Iwate No. 3).
2013	3	Agreement concluded Aeon Town Co., Ltd. regarding the location of a large-
		scale commercial facility and its contributions to the local community.
	3	"Kamaishi City Reconstruction Promotion Plan" concerning special tax
		measures submitted to the national government.
	3	National government approves the "Kamaishi City Reconstruction
		Promotion Plan" related to special tax measures (Iwate No. 6) on March 29,
		2016, and approves changes on May 25, 2018.
	5	Formulation of the basic concept for the development of new commercial
		bases in East Kamaishi
	7~	Workshop on Front Project 1 in East Kamaishi (3 times in total)
	8	
	10	Formulation of the "Basic Concept and Basic Plan for the Kamaishi Citizen
		Hall (tentative name) and Kamaishi Information Exchange Center (tentative
		Hall (tentative name) and Kamaishi Information Exchange Center (tentative name)"
	11	
	11	name)"
		name)" Kamaishi Community Development Co., Ltd. established
2014		name)" Kamaishi Community Development Co., Ltd. established Kamaishi City and the Dutch Embassy announce the opening of the Kamaishi
2014	11	name)" Kamaishi Community Development Co., Ltd. established Kamaishi City and the Dutch Embassy announce the opening of the Kamaishi Smart Miffy Café.
2014	11	name)" Kamaishi Community Development Co., Ltd. established Kamaishi City and the Dutch Embassy announce the opening of the Kamaishi Smart Miffy Café. Aeon Town Co., Ltd.; Aeon Super Center Co., Ltd.; and Kamaishi City
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2014	2	name)" Kamaishi Community Development Co., Ltd. established Kamaishi City and the Dutch Embassy announce the opening of the Kamaishi Smart Miffy Café. Aeon Town Co., Ltd.; Aeon Super Center Co., Ltd.; and Kamaishi City conclude the "Agreement on Assistance in the Event of a Large-scale Disaster."
2014	2	name)" Kamaishi Community Development Co., Ltd. established Kamaishi City and the Dutch Embassy announce the opening of the Kamaishi Smart Miffy Café. Aeon Town Co., Ltd.; Aeon Super Center Co., Ltd.; and Kamaishi City conclude the "Agreement on Assistance in the Event of a Large-scale Disaster." Omachi Square Cooperative Store (tentative name) is selected as an "SME

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3	Aeon Town Kamaishi opens.
3	Front Project 1 Basic Plan is formulated.

Source: Front Project 1 Basic Plan p2., et al..

Areas with large inundation depths are used as commercial facility areas, such as fishery processing areas, as areas for industrial use, or as parks. Urban districts will be developed by consolidating public and public welfare facilities and tsunami disaster prevention base facilities. In addition, in East Kamaishi district, the Ureishi-Matsubara districts, and Hirata district, "even in areas where L2 tsunami flooding occurs, land use, including residential land, will be pursued in areas where the estimated inundation depth is below two meters. Guidance will be provided regarding non-residential land use restrictions on housing construction introduced in areas where the assumed inundation depth exceeds two meters."

Specific reconstruction and development projects include the implementation of "East District 1," or the Eastern District Disaster Reconstruction Project Area (project leader: Kamaishi City), as an urban development project from 2012 to 2018 (scheduled) and the implementation of "East District 2," or the East Kamaishi Tsunami Reconstruction Base Improvement Project (project leader: Kamaishi City), from 2012 to 2016 (scheduled) as a project related to the development of urban facilities.

This clearly states that development (development in areas with assumed inundation depths of less than 2 meters) that permits a certain level of inundation due to an L2 tsunami shall be conducted in the city center, which is used for residential and commercial areas. It also aligns with a form of urban development conducted such that public facilities, facilities for public use, and tsunami disaster prevention facilities are concentrated in relatively safe areas. Thus, in July 2012, the reconstruction of inundated central areas was included in the reconstruction and improvement plan, and it was decided to proceed with the project while also attempting to receive various exceptions. Furthermore, the expected method to accomplish the project was a framework of public-private partnerships.

4-5. Promoting Public-Private Partnerships

Following the adoption of the "Public-Private Partnership Support Project" by the Ministry of Land, Infrastructure, Transport, and Tourism in 2012, Kamaishi City conducted the "East Kamaishi District Revitalization Base Improvement Project Survey." The survey was carried out to (1) examine improvement plans for facilities, including public facilities; (2) examine commercialization techniques and business entities. As a result of the investigation, it was proposed that a facility improvement plan be produced based on the concepts of "creating a nexus for the city" and "lightening the burden for future generations." Creating a nexus for the city proposes the creation of a facility distribution plan that takes into account the connections between large parking lots and the city, the connection between large commercial facilities and the area concerned, and so on. Lightening the burden for future generations proposes the formulation of a "public policy that takes into account the degree of resident use and the life cycle costs of the facilities, as well as the active adoption of public-private partnerships and the joint construction of public and private facilities to achieve more efficient facility management and facility utilization."

In response to this proposal, studies were made to form new commercial centers, such as the relocation of public and public welfare facilities and ensuring the accessibility of these centers so as to create prosperity. Kamaishi City compiled the "Basic Concept for the Development of a New Commercial Center in East Kamaishi" in March 2013.

Accordingly, the Basic Plan for Community Reconstruction in Kamaishi City, which was formulated on December 22, 2011, states that a new commercial hub space will be developed as a core for the functional development of commerce and exchange spaces. Specifically, the plan considers relocating public facilities in the city center, East Kamaishi, where large-scale commercial facilities were scheduled to be located, as well as constructing public housing for reconstruction, and developing a new commercial center through the aggregation of damaged stores. In the city, this was named "Front Project 1," and it was examined as a leading project.

5. Reconstruction Aimed at the Concentration of Urban Functions and the Reconstruction of the City Center

5-1. The Re-concentration of Urban Functions into the City Center, including Residential Area

As a background to the formulation of Front Project 1, the Kamaishi City website states that

in East Kamaishi, which was the birthplace of the city and the location where urban functions have historically been concentrated, many public and public welfare facilities were severely damaged by the tsunami caused by the Great East Japan Earthquake, including municipal government buildings, fire department buildings, civic culture halls, and municipal parking lots. Seawalls 6.1 meters above sea level and bay entrance breakwaters cannot prevent the inundation of this area by tsunamis as high as they have been in the past. As such, to maintain safe and secure activity in this area, which serves as the center of urban functions, in the future, along with the construction of seawalls and the creation of embankments, it is necessary to improve the functions of the disaster-prevention base by, for example, developing new base facilities to serve as evacuation buildings in the event of a disaster. To rebuild East Kamaishi as a central city area where the safety of residents is ensured, and to effectively and promptly develop public and public welfare facilities that will serve as the core of reconstruction, the creation of prosperous conditions and the introduction by the Tsunami Reconstruction Base Improvement Project of a single site composed of facilities that form an urban area that serves as a tsunami disaster prevention base development have been examined.

As we have seen, Front Project 1 is intended to realize the reconstruction of the city center and is built around two concepts: urban planning and public-private collaborations. Summarized in light of what is written in the basic plan report produces the following. As for city planning (surface development), the "Basic Plan for Community Reconstruction in Kamaishi City—Scrum Kamaishi Reconstruction Plan" (formulated in December 2011) first promoted the reconstruction of the city center and subsequently clearly positioned it within the "Reconstruction and Development Plan" (July 2012) and the "Kamaishi City Master Plan" (formulated in March 2014). These processes clarified the zoning of the city center as the area of project application of the special reconstruction zone, focused the project on this area, and secured high priority for these efforts in the reconstruction project.

As public-private partnerships, in terms of introducing private-sector vitality (Aeon Town Kamaishi), in July 2012, the national government approved the "Kamaishi City Reconstruction Promotion Plan" related to the relaxation of usage restrictions. At the same time, the "East Kamaishi District Revitalization Center Improvement Project" (adopted by the Ministry of Land, Infrastructure, Transport, and Tourism as part of the Public-Private

Earthquake Reconstruction Partnership Project) was introduced, and the "Reconstruction Promotion Plan" for special tax measures in the special commercial zone of East Kamaishi district was subsequently approved in March 2013.

Based on these, the "Basic Concept for the Development of a New Commercial Center in East Kamaishi" was formulated on March 2013. Hence, the Basic Concept for the Development of a New Commercial center was compiled 2 years after the disaster and the formulation of a master plan for urban planning was completed 3 years later. Aeon Town Kamaishi opened almost simultaneously. Thus, efforts are being made to rebuild the city center at a speed not seen in other municipalities.

Two disaster public housing buildings, Omachi Fukko 4 (eight stories and 41 units) and Omachi Fukko 5 (six stories and 24 units) were developed in the Front Project 1 area and opened to residents in 2016. In addition, the construction of disaster public housing has been intensively promoted in nearby areas. The number of disaster public housing projects (total of prefectural and municipal housing) constructed in Kamaishi City is 48 sites with 1,316 units, which is the largest number among local governments in Iwate Prefecture. Of these, the city manages 42 sites and 1,005 units, and Iwate prefecture manages six sites and 311 units. The city is therefore managing a large percentage of this housing and has taken the initiative to promote the construction of these units. As a result, 15 sites and 430 units were constructed in East Kamaishi, which is the city center. This is 42.8% of the number (1,005 units) of municipal disaster public housing units constructed in the city and 32.7% of the total number (1,316 units) of municipal and prefectural housing units. As such, the construction of public housing has also been focused in the city center and has aided in the return of the population to the city center and its recovery.

As noted above, Kamaishi City's reconstruction policy is characterized by the formulation of the "Kamaishi City Reconstruction and Improvement Plan" and the "Front Project 1 Basic Plan," which aim to revitalize urban functions by inviting large-scale commercial facilities to the area while building large-scale community facilities in the city center. An additional characteristic of this policy is that the formulation of these plans was remarkably rapid.

5-2. Future Challenges

In Kamaishi City, a tsunami reconstruction base improvement project was similarly introduced in the Unosumai area, and large-scale public facilities (Kamaishi City Unosumai Reconstruction Stadium, elementary and middle schools, Unosumai Tomos, etc.) were constructed to advance reconstruction efforts through urban infrastructure development. These constructions were made not only based on the desires of the city, but also pushed forward by a combination of various factors, not all of which have been proceeding as initially planned. What is clear is that the advance of Aeon Town into Kamaishi marked the start of these reconstruction efforts. However, public records do not provide detailed information on the history of business expansion or how consensus-building takes place, making the examination of these areas necessary.

Furthermore, the strengthening of the relationship between residents of the several disaster public housing sites (reconstructed public housing) constructed in the city center and the redeveloped urban areas is also an issue for future consideration. Many people living in disaster public housing are elderly people, and the proportion of single-person households is high. It is necessary to further verify whether they are able to shop in the community with peace of mind, use the urban facilities, and communicate with local residents in various ways. While there are various initiatives for tourists and visitors from outside the city, there is little connection between the disaster victims

and the new large-scale stores or large-scale public facilities. In addition, it is difficult to say that interactions between existing organizations of local residents and business organizations and the residents of disaster public housing are actively taking place. From the perspective of residents who moved into temporary housing after the earthquake, it may be their first experience living in eight-story concrete housing or their first experience living in downtown areas. These residents must acclimate to living in central urban areas, but careful support from the city government, residents, and other support groups is necessary in the future as well. Support activities for disaster victims may be needed in collaboration with the implementation of welfare policies, as well. There is a concern that the number of customers using commercial facilities and restaurants will decline as the demand created by reconstruction subsides and the number of workers engaged in reconstruction falls. The sustainability of the city of Kamaishi must continue to be closely monitored.

Notes

- 1) Unless otherwise noted, the figures in this section are based on the "Kamaishi Reconstruction Report," Vol. 53 (January 1, 2020).
- 2) According to the "Outline of Emergency Temporary Housing," produced by the Cabinet Office, in the "S tandards for the Extent, Method, and Period as well as the Reimbursement of Actual Costs for Relief Under the Disaster Relief Act" (Notification No. 228 of the Cabinet Office in 2013), residents of temporary housin g are described as those who had their own housing completely destroyed or washed away and who were u nable to obtain housing with their own resources. The standard size per dwelling is 29.7 square meters, and the amount that can be spent to build or obtain temporary housing is 2.401 million JPY or less. However, th e construction costs of temporary housing constructed after the Great East Japan Earthquake greatly exceede d the 2.387 million JPY stipulated at the time of the earthquake, reaching 6.170 million JPY in Iwate Prefec ture, approximately 7.3 million JPY in Miyagi Prefecture, and approximately 6.890 million JPY in Fukushim a Prefecture (as of January, 2013, according to a survey by Ministry of Health, Labor, and Welfare of the a verage cost per unit, including construction costs, development costs, as well as the additional construction c osts of discussion rooms and conference centers). In addition, instead of installing temporary emergency hou sing, rental housing can be obtained and disaster victims housed in them. Such housing is referred to as hou sing considered as temporary housing. The period of provision of temporary housing is less than 2 years, w hich is the period stipulated in Article 85, Paragraph 3 or Paragraph 4 of the Building Standards Act (Law No. 201 of 1950). (Source: Cabinet Office, "Review Group on State Support for Disaster Victims" Working Group on Measures to Secure Residence for Disaster Victims (First Meeting) Held on December 16, 2013; Document 4: Outline of Emergency Temporary Housing): (See, http://www.bousai.go.jp/kaigirep/kentokai/hisa ishashien2/wg/pdf/dai1kai/siryo4.pdf.)
- 3) According to the "Extension of the Term of Provision of Temporary Housing" published on Iwate Prefecture's website, "Those who have specific circumstances" are described as "those who are moving into disaster public housing or into other housing currently being reconstructed by public works dedicated to disaster prevention group relocation and land readjustment projects and who cannot leave temporary housing within the 9-year period due to the continuing construction period or other similar reasons" or "those who are reconstructing housing through methods other than public works and, although they have a fixed reconstruction period, cannot leave temporary

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housing within the 9-year period due to the continuing construction period or other similar reasons."

- 4) As of the end of December 2019, 265 temporary housing buildings and 1,522 units had been dismantled in Kamaishi City. As temporary housing numbers stood at 66 sites and 3,164 units as of the peak period of November 2011, the current ratio of dismantled housing is 48.1%. Since the extension measures will continue until March 31, 2021, it is expected that all households will be removed from the temporary housing by the end of 2020 and that all temporary housing will be dismantled afterwards.
- 5) Kamaishi City website "Front Projects": https://www.city.kamaishi.iwate.jp/docs/2015061100031/6) "Front Project 1" on the Kamaishi City website: https://www.city.kamaishi.iwate.jp/docs/2017030900031/
- 7) As of March 24, 2020, the Reconstruction Agency announced 33 instances of special reconstruction zon es in Iwate Prefecture, 83 instances in Miyagi Prefecture, and 126 instances in Fukushima Prefecture, a signi ficant difference by prefecture. By type, the number of cases of the deregulation of land use (exceptions to t he Building Standards Act) was two in Iwate Prefecture, including Kamaishi City (approved on August 3, 2 012) and Rikuzentakata City (approved on March 27, 2018), four in Miyagi Prefecture, and zero in Fukushi ma Prefecture. The number of special tax exemptions related to industrial clusters (national taxes and local t axes) was three in Iwate Prefecture, including Iwate Prefecture itself (March 30, 2012), Kamaishi City (March 26, 2013), and Yamada Town (approved on June 2, 2016), 16 in Miyagi Prefecture, and four in Fukushi ma Prefecture. The largest number in each prefecture was the number of financial exceptions granted, with 2 0 cases in Iwate Prefecture, 51 cases in Miyagi Prefecture, and 114 cases in Fukushima Prefecture. (See, htt ps://www.reconstruction.go.jp/topics/000500.html)