Chapter 5 Reconstruction of Homes and Cities

Section 2 Housing

1. Emergency Temporary Housing

(1) Legal Framework for Emergency Temporary Housing

1) Overview of the system

Emergency temporary housing is one of the most important aspects of the disaster relief framework because it provides temporary housing stability until permanent housing is secured for disaster victims whose homes have been damaged.

Under the Disaster Relief Act (Act No. 118 of 1947), relief is provided primarily in kind (such as housing units in the case of emergency temporary housing), with cash assistance reserved only for truly exceptional cases, adhering to the principle of in-kind support[1]. Additionally, the entity responsible for providing relief is, in principle, designated as the prefectural governor.

Specific standards regarding the extent, method, and duration of the provision of emergency temporary housing are stipulated as follows in "Extent, Method, and Duration of Relief Under the Disaster Relief Act and Standards for Compensation for Actual Expenses" (Public Notice No. 144 of the Ministry of Health and Welfare, 2000)[2] as general standards for relief. However, as an exception, in cases where it is difficult to appropriately provide relief under these standards, additional standards for extraordinary circumstances are stipulated by prefectural governors after consulting with and obtaining the approval of the Prime Minister (or Minister of Health, Labour and Welfare in times of disaster) (Article 3, Paragraph 2 of the Order for Enforcement of the Disaster Relief Act (Cabinet Order No. 225 of 1947)). As for the cost of rescue, the proportion covered by the national treasury differs depending on the amount of the costs and other factors. In the case of the Great East Japan Earthquake, relief expenses were covered in whole by the national treasury (through disaster relief expense subsidies, etc.) due to the substantial cost.

Figure 5-2-1 General Standards for Emergency Temporary Housing at the Time of the Disaster

項目	主な基準
対象者	住家が全壊、全焼又は流失し、居住する住家がない者であって、自らの資力では住家を得ることができないものを収容するものであること。
規模[3]及び費用の限度額	1戸当たりの規模は、29.7m^{2}を標準とし、その設置のため支出できる費用は、2,387,000円以内[4]とすること。
集会等に利用できる施設	応急仮設住宅を同一敷地内又は近接する地域内におおむね50戸以上設置した場合は、居住者の集会等に利用するための施設を設置できることとし、一施設当たりの規模及びその設置のために支出できる費用は、上記にかかわらず、別に定めるところによること。
福祉仮設住宅	老人居宅介護等事業等を利用しやすい構造及び設備を有し、高齢者等であって日常の生活上特別な配慮を要する複数のものを収容する施設（福祉仮設住宅）を応急仮設住宅として設置できること。
着工日	災害発生の日から20日以内に着工し、速やかに設置しなければならないこと。

[1] Article 4, Paragraph 3 of the Disaster Relief Act stipulates that if a prefectural governor deems it necessary, a person in need of relief can be provided relief in the form of cash assistance. In practice, however, in-kind provision has been the established principle in accordance with "Regarding the Implementation of the Disaster Relief Act" (Notice No. 135 issued by the Social Affairs Bureau of the Ministry of Health and Welfare, 1947; a directive jointly issued by the Chief Cabinet Secretary and Vice-Minister of Health and Welfare).

[2] The ministries and agencies with jurisdiction over the Disaster Relief Act were transferred to the Cabinet Office (in charge of disaster prevention), and the current name of the notice is "Extent, Method and Period of Relief Under the Disaster Relief Act and Standards for Compensation for Actual Expenses" (Public Notice No. 228 of the Cabinet Office, 2013).

[3] The notice was revised in 2017 to stipulate that the scale per household shall be determined by the implementing entity based on the purpose of emergency relief and in accordance with such factors as the actual conditions of the region and household composition, and a specific area was no longer defined.

[4] Board of Audit, "Status of Provision of Emergency Temporary Housing as Relief for Victims of the Great East Japan Earthquake" (October 2012). Since then, the limit per household has been gradually raised to 6,285,000 yen as of March 31, 2022 (Public Notice No. 228 of the Cabinet Office, "Extent, Method and Period of Relief Under the Disaster Relief Act and Standards for Compensation for Actual Expenses," revised on March 31, 2022).

供与期間	応急仮設住宅を供与できる期間は、完成の日から建築基準法（昭和 25 年法律第 201 号）第 85 条第 3 項に規定する期限までとすること。
態様	応急仮設住宅の設置（建設仮設住宅）に代えて、民間賃貸住宅等の居室の借上げを実施し、これらに被災者を収容することができること。

Source: "Extent, Method and Period of Relief Under the Disaster Relief Act and Standards for Compensation for Actual Expenses," as of the time of revision on March 31, 2010 (Public Notice No. 144 of the Minister of Health, Labour and Welfare, 2000)

2) Eligible recipients (criteria for housing provision)

With regard to eligible recipients (criteria for housing provision), emergency temporary housing is provided to disaster victims whose homes have been completely destroyed or washed away in municipalities covered by the Disaster Relief Act, and who have no homes to live in. However, in the aftermath of the Great East Japan Earthquake, cases where people were unable to live in their homes for extended periods—due to evacuation orders issued by the mayor, for example—were treated as equivalent to losing one's home entirely, even if there was no direct damage to the residence[5].

On the topic of financial eligibility requirement for housing provision, housing is generally provided to those who are unable to secure housing with their own financial resources. In practice, however, assessing the extent of the damage caused by the Great East Japan Earthquake was a challenge, and taking into account damage to assets and changes in income following the disaster, it was difficult to justify a uniform income limit based on a fixed amount. Therefore, financial eligibility criteria were applied in line with the system's purpose of providing necessary emergency relief, and taking into account the supply of emergency temporary housing, such as leased private rentals and public housing, consideration was given to providing this housing to as many eligible applicants as possible6. In addition, evacuees who would ordinarily not be permitted to relocate but had temporarily moved into emergency temporary housing in distant areas, such as outside the prefecture, due to the extensive damage caused by this disaster, were allowed to move into local emergency housing if the prefecture deemed it unavoidable based on specific circumstances.

3) Provision period

According to the general standards, construction of construction-type emergency housing must be started within 20 days from the day of the disaster and completed promptly. In principle, this type of housing can be provided for up to two years. Furthermore, the period of use of emergency temporary housing is generally limited to a maximum of 2 years and 3 months under Article 85, Paragraph 3 of the Building Standards Act. However, the "Ordinance to Partially Amend the Ordinance on the Designation of Specified Disasters and Measures to be Applied for the Disaster Caused by The 2011 off the Pacific coast of Tohoku Earthquake" (Ordinance No. 19 of 2011) came into effect on June 1, 2011, and as a result, the "Special Provisions for the Period of Use of Emergency Temporary Housing Under the Building Standards Act," which is based on the Act on Special Measures Concerning Preservation of Rights and Interests of Victims of Specified Disasters (Act No. 85 of 1996), was applied to the Great East Japan Earthquake. This made it possible for the period of use of emergency temporary housing to be further extended by up to one year at a time, provided the designated administrative authority certifies that there are no safety, fire, or sanitation concerns[7].

[5] April 4, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Flexible Application of the Disaster Relief Act for the Great East Japan Earthquake (No. 5)"

[6] Same as above.

[7] With regard to non-residential emergency temporary buildings, the Act on Special Zones for Reconstruction in Response to the Great East Japan Earthquake came into effect on December 26, 2011. Based on this act, the location, use, and period of use of emergency temporary buildings such as stores, factories, social welfare facilities, and school buildings are specified in the reconstruction promotion plan prepared by specified local authorities. With the approval of the Prime Minister, the period of use of emergency temporary buildings under the Building Standards Act can be further extended for periods not exceeding one year within the period specified in the plan, provided the designated administrative authority certifies that there are no safety, fire, or sanitation concerns.

In addition to these special provisions of the Building Standards Act, prefectural governors and other such parties could consult with the national government to have the period of use of emergency temporary housing extended beyond the standard relief period. Upon approval, extensions were permitted to the extent necessary for a period of one year at a time. Evacuations and reconstruction projects continued for extended periods following the Great East Japan Earthquake. During this period, these provisions enabled extensions of emergency temporary housing periods to be carried out in one-year increments for over 10 years (see (5) for the history of extensions).

The aforementioned special provision system for the period of use under the Building Standards Act was standardized in the 12th Consolidative Act on Decentralization (Act on the Revision, etc. of Related Acts to Promote Reform for Increasing Independence and Autonomy of Local Communities (Act No. 44 of 2022)) which came into effect on May 31, 2022.

(2) Overview of the Supply of Emergency Temporary Housing

1) Number of units supplied

The Great East Japan Earthquake and subsequent tsunami caused extensive housing damage, and many victims were forced to live difficult lives in evacuation shelters for extended periods of time. In order to close the evacuation shelters as soon as possible, large numbers of emergency temporary housing units needed to be provided quickly. As a result, 53,194 units were constructed (construction-type emergency housing), and vacant rooms in existing private rental housing (rental-type emergency housing) were utilized.

The number of emergency temporary housing units peaked on March 30, 2012, with a total of 123,723 housing units, including 48,913 construction-type units, 68,616 privately leased rental-type units, and 6,194 public housing rental-type units, which housed up to approximately 316,000 people. As a result, evacuation shelters were closed in Iwate Prefecture in October, in Miyagi Prefecture in December, and in Fukushima Prefecture in February[8]. Disaster victims proceeded to rebuild their livelihoods in the years that followed, and as of January 1, 2022, the figure has decreased to a total of 663 units (housing approximately 1,200 people), of which three are construction-type units and 660 are rental-type units.

There were notable points of contrast compared to the Great Hanshin-Awaji Earthquake. More than half of the emergency temporary housing was provided in the form of rental-type units, and the provision period was very long (compared to five years for the Great Hanshin-Awaji Earthquake) due to disaster victims who were waiting for their homes to be rebuilt in large-scale reconstruction projects, as well as evacuees from the nuclear power plant area.

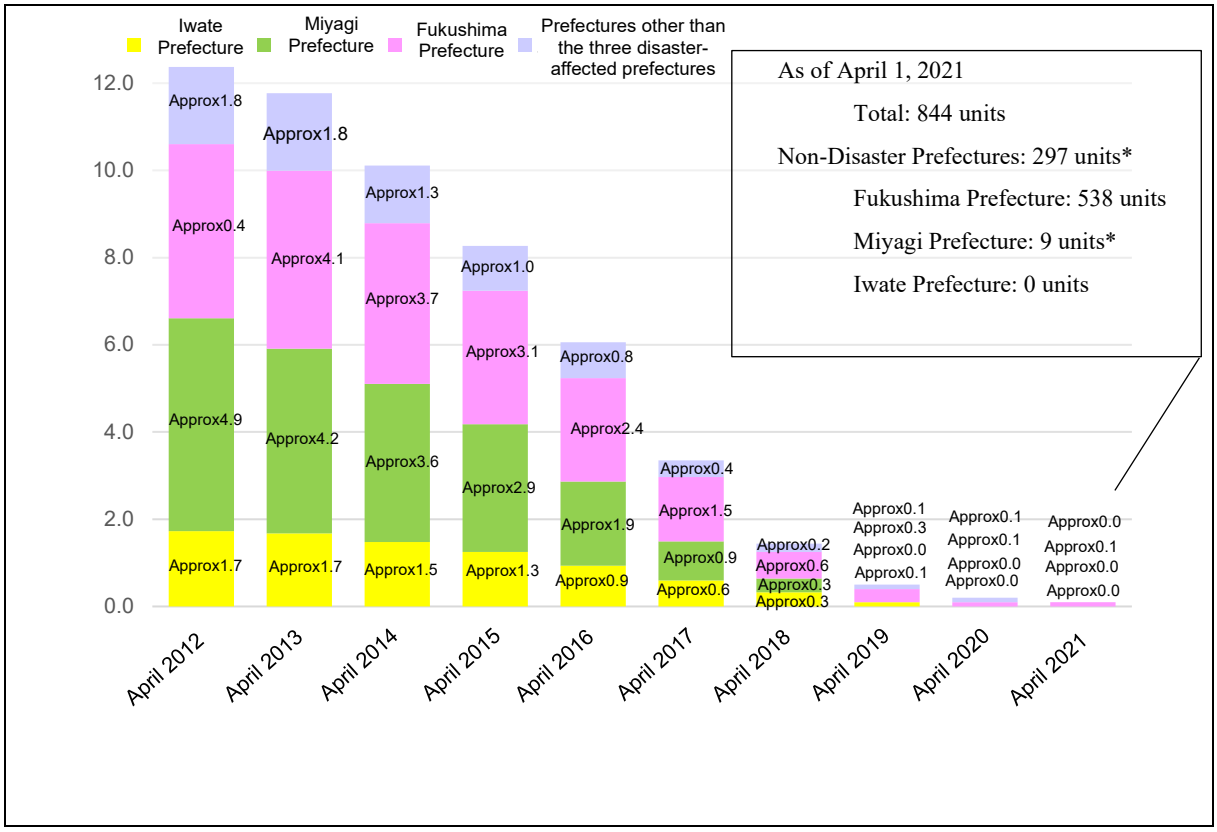
Figure 5-2-2 Number of Units Provided in Comparison with the Great Hanshin-Awaji Earthquake

	建設型	賃貸型	合計
阪神・淡路大震災	48,300 戸	139 戸	48,439 戸
東日本大震災	53,194 戸	68,616 戸	121,810 戸

Source: Cabinet Office (Disaster Management) Website, Review Meeting on National Support for Disaster Victims (August 2014), "Interim Report (Reference)" p. 7, etc.
https://www.bousai.go.jp/kaigirep/kentokai/hisaishashien2/chuukan/pdf/sankou01.pdf (browsed July 31, 2023)
* The rental-type units above do not include public housing.

[8] The evacuation shelter in Kazo City, Saitama Prefecture, where evacuees from Futaba Town, Fukushima had relocated along with the town's municipal office functions, was finally closed in December 2013.

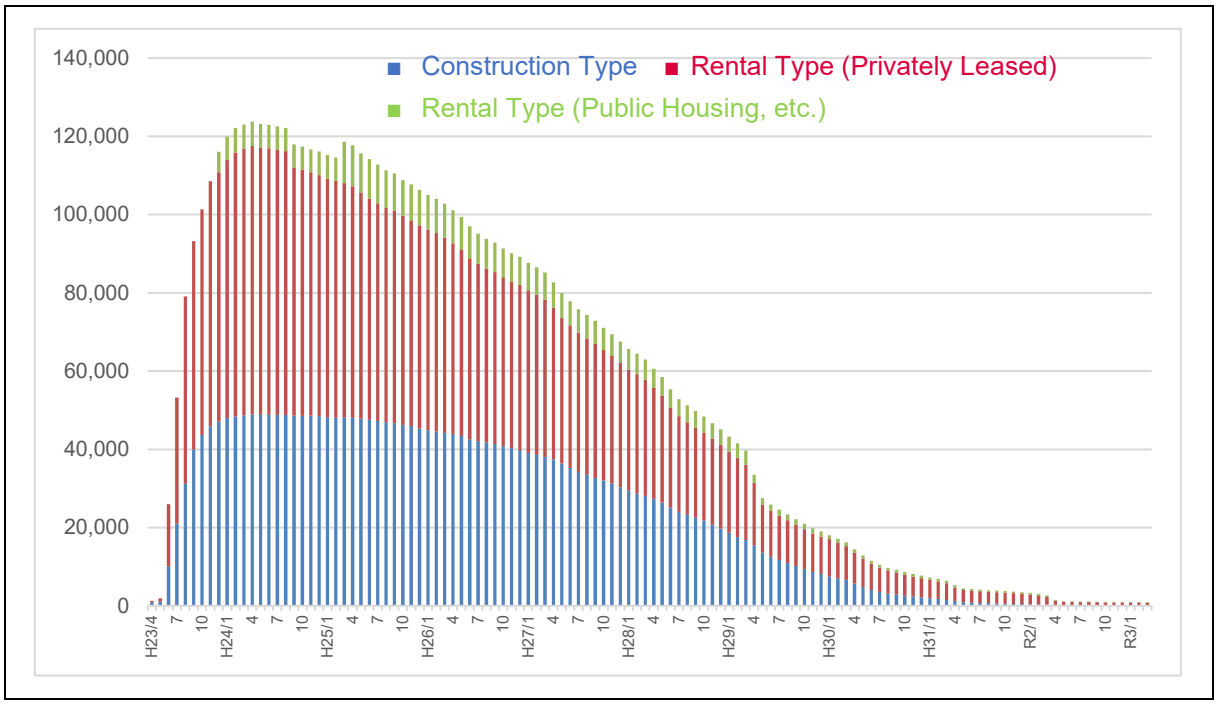
Figure 5-2-3 Trends in the Number of Occupied Emergency Temporary Housing Units by Prefecture



Source: Compiled by the Reconstruction Agency based on data from the Cabinet Office (Disaster Management)

* As of April 1, 2021, the emergency temporary housing units in the non-disaster prefectures and Miyagi Prefecture are used to house evacuees from Fukushima Prefecture.

Figure 5-2-4 Trends in the Number of Occupied Units According to Type (Construction, Rental, etc.)

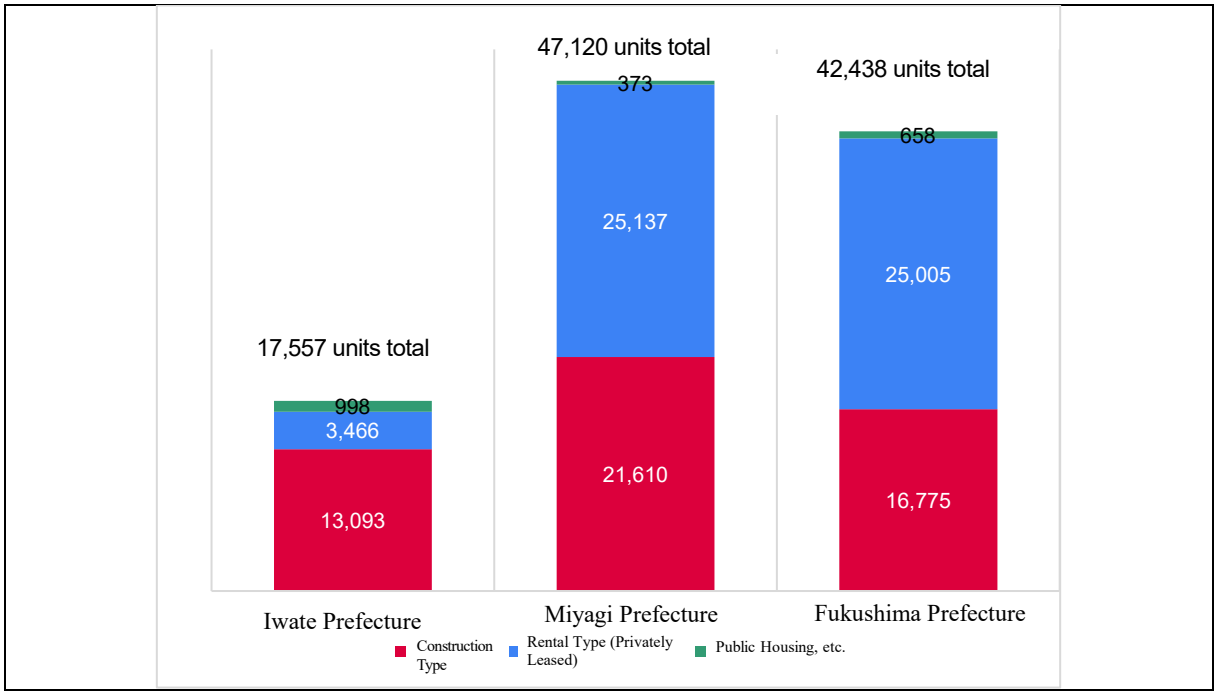


Source: Compiled by the Reconstruction Agency based on data from the Cabinet Office (Disaster Management)

* For rental-type units, the data for August to September 2012 and November 2012 to January 2013 are not continuous due to differing methods of data collection.
The number of units increased with the addition of public housing and similar accommodations to the data starting in November 2011, and employment promotion housing starting in March 2013.

The breakdown of the supply of emergency temporary housing (construction and rental types) in the three prefectures is as follows.

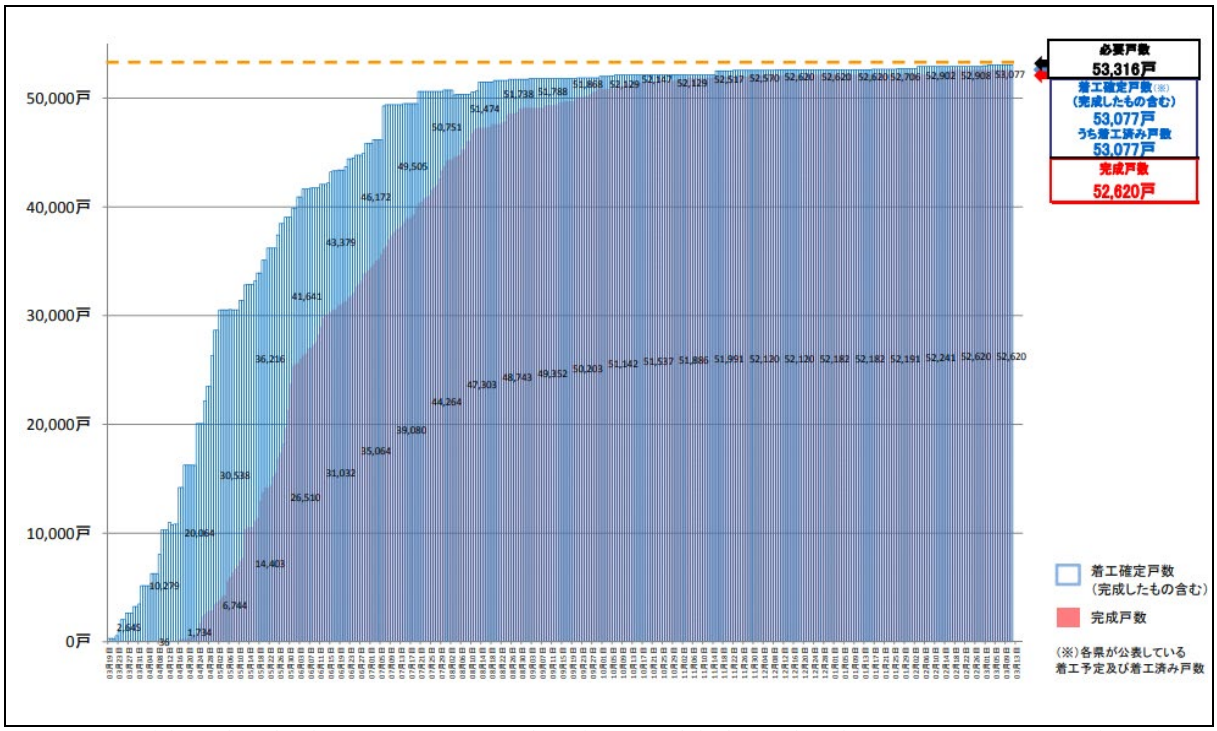
Figure 5-2-5 Trends in the Number of Occupied Units According to Type (Construction, Rental, etc.)



Source: Compiled by the Reconstruction Agency based on "Record of Activities in Response to the Great East Japan Earthquake and Tsunami: Five Months of Efforts to Secure Housing for Disaster Victims in Iwate Prefecture" (November 2011, Iwate Prefecture), "The Great East Japan Earthquake: A Record and Review of Disaster Response in Miyagi Prefecture During the First Year After the Disaster," (March 2015, Miyagi Prefecture) and "Fukushima Prefecture Emergency Temporary Housing Records: Emergency Housing Relief for the Great East Japan Earthquake" (March 2020, Fukushima Prefecture)

The numbers of construction-type emergency housing units for which construction had started are shown below, along with the numbers of units completed.

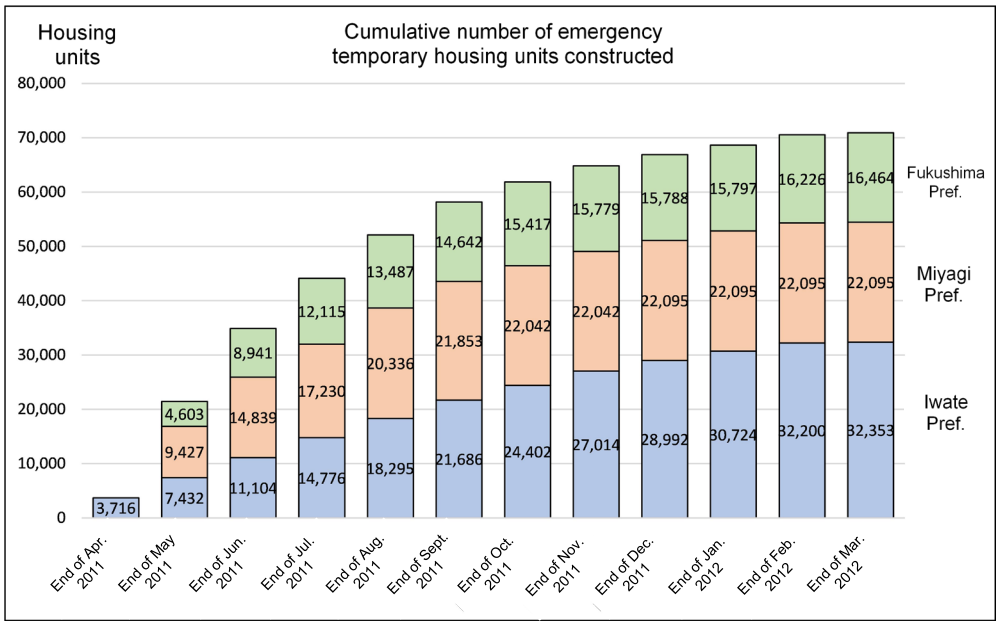
Figure 5-2-6 Trends in the Numbers of Construction-Type Emergency Housing Units Under Construction and Those Completed (as of March 11, 2012)



Source: Ministry of Land, Infrastructure, Transport and Tourism, "Trends in the Number of Emergency Temporary Housing Units Under Construction and Those Completed" (March 11, 2012)
https://www.mlit.go.jp/report/daisinsai_kasetu.html (browsed July 31, 2023)

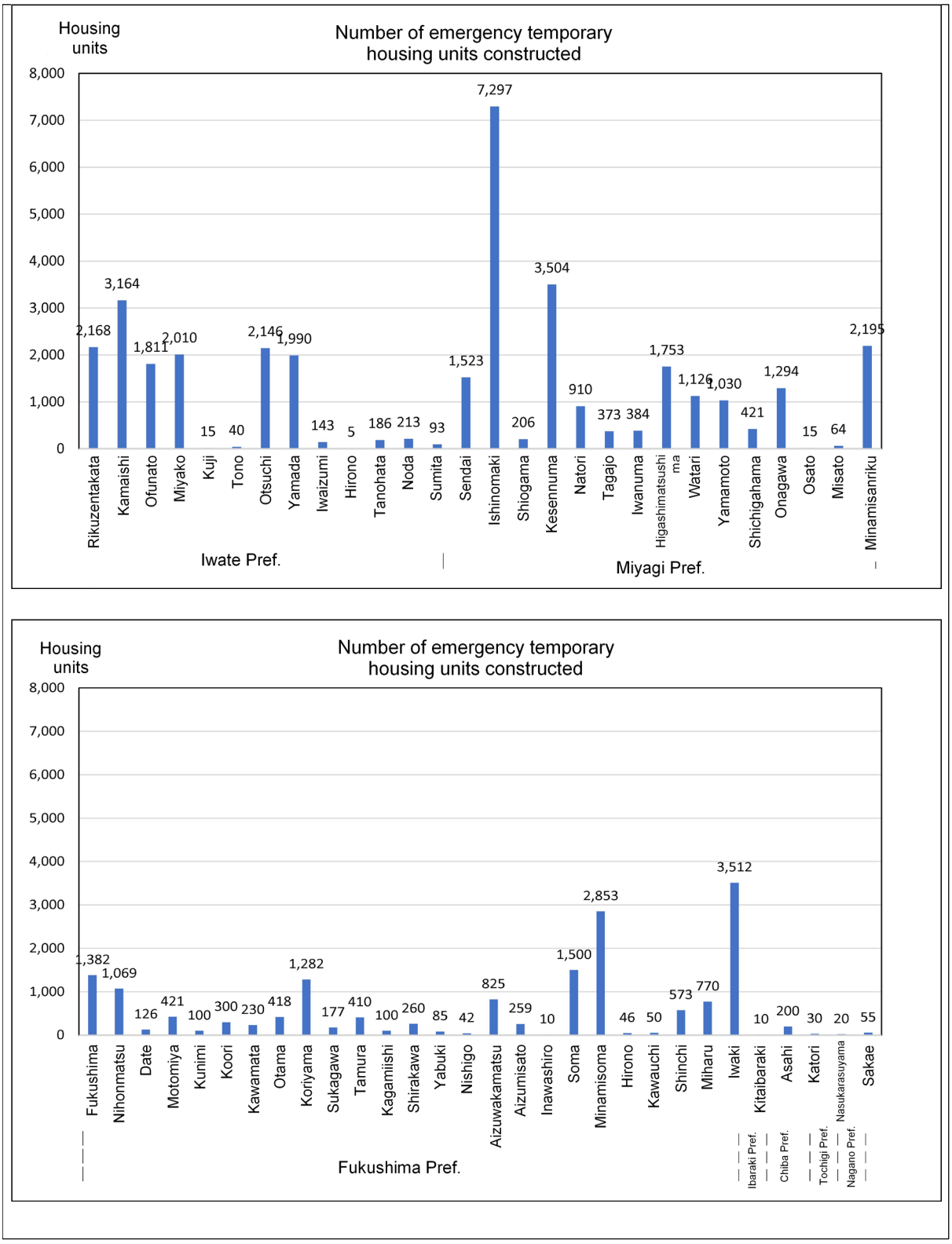
The breakdown by prefecture and municipality is as follows.

Figure 5-2-7 Cumulative Number of Construction-Type Emergency Housing Units Constructed by Prefecture



Source: Compiled by the Reconstruction Agency based on data from the following websites.
Iwate Prefecture Website https://www.pref.iwate.jp/shinsaifukkou/saiken/sumai/1002513.html (browsed July 31, 2023)
Miyagi Prefecture Website https://www.pref.miyagi.jp/documents/889/204097_2.pdf (browsed July 31, 2023)
Fukushima Prefecture Website https://www.pref.fukushima.lg.jp/uploaded/life/699613_1976788_misc.pdf (browsed July 31, 2023)

Figure 5-2-8 Construction-Type Emergency Housing Units Constructed by Municipality



Source: Compiled by the Reconstruction Agency based on data from the Ministry of Land, Infrastructure, Transport and Tourism, "Status of Emergency Temporary Housing Construction and Completion (by Municipality)" (April 1, 2013)
https://www.mlit.go.jp/report/daisinsai_kasetu.html (browsed July 31, 2023)

* Duplicate units related to relocations in Fukushima Prefecture have been excluded.

2) Project costs

a. Total cost

According to a report by the Board of Audit (October 2012), the national government provided disaster relief expenses totaling more than 2,050,900,000 yen for projects in FY2010 and more than 426,201,300,000 yen (figures are estimates) for projects in FY2011 to cover the cost of building emergency temporary housing in the seven disaster-affected prefectures[9].

In addition, the costs required for the seven disaster-affected prefectures and the municipalities within their jurisdictions to prepare construction-type emergency housing exceeded 286,762,170,000 yen in total.

b. Cost per housing unit

As described in (1), according to the general standards at that time, the maximum amount for construction-type emergency housing was set at an average of 2,387,000 yen per housing unit. However, according to the report by the Board of Audit (October 2012), the actual cost required for the seven disaster-affected prefectures and the municipalities within their jurisdictions to prepare construction-type emergency housing was more than 5.42 million yen per unit. Afterward, expenses for additional work became necessary to meet cold climate standards, add accessibility features, and install facilities like meeting spaces in housing complexes with larger numbers of units. By the end of March 2012, the per-unit installation cost had risen to over 6.28 million yen[10].

Broken down by prefecture, the average installation cost was 6.17 million yen in Iwate, 7.3 million ten in Miyagi, and 6.89 million yen in Fukushima (as of January 2013, according to research by the Ministry of Health, Labour and Welfare; see Figure 5-2-9). The final construction cost per unit is expected to increase further, as costs for restoring construction sites to their original condition have since been incurred.

On the other hand, for rental-type emergency housing, based on the number of units provided as of the end of March 2012, the rent for that month, the initial contract payments such as deposits, key money, and brokerage fees, as well as interior costs like air conditioners and curtains, the Board of Audit calculated the cost of providing these units for two years to be over 1.83 million yen per unit[11]. However, as will be described later, additional costs are expected to be incurred due to the prolonged period of provision as reconstruction continues. It should be noted that the total cost of rental-type emergency housing increases as the period of provision becomes longer. The three disaster-affected prefectures estimate that if the standard rent for rental-type emergency housing is around 60,000 yen, the construction type is more expensive if the period of provision is less than 10 years, but the rental type becomes more expensive if provided for longer than 10 years.

[9] Board of Audit, “Status of Provision of Emergency Temporary Housing as Relief for Victims of the Great East Japan Earthquake” (October 2012)
[10] Same as above.
[11] Same as above.

Figure 5-2-9 Cost of Emergency Temporary Housing

■近年の災害における応急仮設住宅建設に係る戸当たり単価

発災日	災害名	災害救助法に基づく一般基準（円）	実際の単価（特別基準（円））
2004 年 10 月 23 日	新潟県中越地震	2,433,000	4,725,864
2007 年 3 月 25 日	能登半島地震	2,342,000	5,027,948
2007 年 7 月 16 日	新潟県中越沖地震	2,326,000	4,977,998
2008 年 6 月 14 日	宮城・岩手内陸地震（岩手県）	2,366,000	5,418,549
	宮城・岩手内陸地震（宮城県）		4,510,000
2011 年 3 月 11 日	東日本大震災（岩手県）	2,387,000	約 617 万円 ※
	東日本大震災（宮城県）		約 730 万円 ※
	東日本大震災（福島県）		約 689 万円 ※

※ 談話室・集会所の建設費、造成費、追加工事費を含む建設コストの戸当たりの平均コスト（平成 25 年 1 月時点 厚生労働省調べ）。

Source: Cabinet Office (Disaster Management), "Working Group on Measures to Secure Housing for Disaster Victims (First Meeting), Reference 4: Overview of Emergency Temporary Housing" (December 16, 2013)
https://www.bousai.go.jp/kaigirep/kentokai/hisaishashien2/wg/pdf/dai1kai/siryo4.pdf (browsed July 31, 2023)

(3) Construction-Type Emergency Housing

1) Assessing the required number of units

In order to determine the number of construction-type emergency housing units that need to be built following the disaster, each municipality carried out surveys, such as questionnaires on housing preferences, among disaster victims in evacuation shelters and other places.

Immediately after the earthquake, on March 14, 2011, the Minister of Land, Infrastructure, Transport and Tourism requested the Japan Federation of Housing Organizations (formerly an "incorporated association," currently a "general incorporated association") to supply at least 30,000 units in approximately 2 months. On March 19, eight days after the earthquake, the first construction project started in Rikuzentakata City (36 units were completed on April 1)[12]. On April 5, the Provisional Policies on Measures Concerning the Supply of Emergency Temporary Housing (Draft) (discussed at the 2nd Meeting of the Task Force for Promoting Housing Supply for Disaster Victims; further details below) were compiled. The decision was made to supply at least 30,000 units within approximately two months and to prepare to supply an additional 30,000 units over the following three months in response to requests from the affected prefectures, and a renewed request was made accordingly. At the budget committee meeting of the House of Councillors held on April 18, Minister Ohata of the Land, Infrastructure, Transport and Tourism stated that if the land is secured by the end of April, 30,000 units will be completed and handed over to municipalities by the end of May. At the budget committee meeting of the House of Representatives held on April 26, Prime Minister Naoto Kan stated that all residents would be able to move in by the period of the Obon festival[13]. In addition, the Immediate Action Policy for Restoring Normalcy in the Lives of Disaster Victims in Areas Affected by the Great East Japan Earthquake was compiled by the Extreme Disaster Management Headquarters on May 20, with the aim of closing evacuation shelters by mid-August, while keeping some open for those still waiting for temporary housing. This plan involved accelerating the construction of temporary housing and promoting secondary evacuation to public housing or leased private housing, with the goal of providing housing for all who desired it.

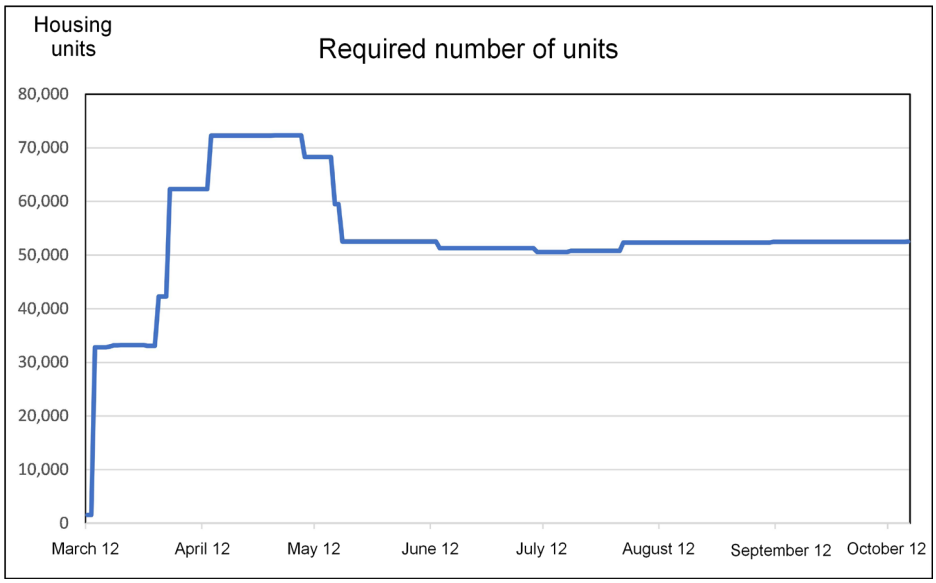
On the other hand, it was difficult to determine the number of units needed due to the shortage of personnel in municipalities and evacuations from areas affected by the nuclear accident, as well as the provision of rental-type emergency housing, which will be covered later. As a result, the affected prefectures were forced to repeatedly revise their estimates of the required number of housing units. The total number of emergency temporary housing units requested by municipalities in the affected prefectures was approximately 53,204 (13,984 units in Iwate Prefecture, 22,095 units in Miyagi Prefecture, 16,800 units in Fukushima Prefecture, 10 units in Ibaraki Prefecture, 20 units in Tochigi Prefecture, 230 units in Chiba Prefecture, and 55 units in Nagano Prefecture, as of February 6, 2012). This was expected to exceed the number of units constructed in the Great Hanshin-Awaji Earthquake (approximately 48,300 units were supplied in 7 months)[14].

[12] In the aftermath of the Great Hanshin-Awaji Earthquake, construction began three days after the disaster (January 20, 1995) and the first project was completed 14 days later (January 31). All units were completed seven months later, on August 10. (Ministry of Land, Infrastructure, Transport and Tourism Website, "Debriefing on the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake" (October 18, 2011) Reference 2: https://www.mlit.go.jp/report/press/house04_hh_000294.html (browsed July 31, 2023))

[13] During a budget committee meeting of the House of Representatives on April 26, 2011, Prime Minister Naoto Kan stated, "As the figure here shows, we must frankly acknowledge that, regrettably, the number of temporary housing units built has yet to reach a thousand. (...) We will make every possible effort to ensure that all applicants can move in at the earliest possible stage, aiming for full occupancy by the Obon holiday at the latest. We are determined to put forth all of our effort to move forward as quickly as possible." Furthermore, in a House of Councillors on May 1, he stated, "My Cabinet will take full responsibility to see that all those who wish to enter temporary housing can do so by Obon. If there are any remaining undecided matters, we will accelerate the process to resolve them."

[14] Ministry of Land, Infrastructure, Transport and Tourism, "Records of the Great East Japan Earthquake: the Ministry of Land, Infrastructure, Transport and Tourism's Disaster Response," p. 63 (March 11, 2012) https://www.mlit.go.jp/common/000208803.pdf (browsed July 31, 2023)

Figure 5-2-10 Trends in the Required Number of Emergency Temporary Housing Units



Source: Compiled by the Reconstruction Agency based on "Reference Material: Progress of Emergency Temporary Housing Measures for the Great East Japan Earthquake" from the Debriefing on the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake (October 18, 2011) on the Ministry of Land, Infrastructure, Transport and Tourism Website https://www.mlit.go.jp/report/press/house04_hh_000294.html (browsed July 31, 2023)

2) Efforts to quickly provide large quantities of housing units

As described above, the Great East Japan Earthquake and subsequent tsunami caused extensive housing damage, which made it necessary to quickly provide emergency temporary housing on a mass scale. Ultimately, not all residents were able to move in by Obon, but as a result of the following various efforts to accelerate construction, more than 25,000 units were completed by the end of May, and most of the construction-type emergency housing (around 50,000 units) were completed in the six months leading up to August. By August 2012, more than 53,000 units were completed. The last emergency temporary housing units were completed in March 2013, resulting in a total of 53,194 construction-type emergency housing units. In the three prefectures affected by the disaster, a total of 13,984 units were completed by August 11, 2011 in Iwate Prefecture, 22,095 units by December 26 in Miyagi Prefecture, and 16,800 units by March 6, 2013 in Fukushima Prefecture[15].

a. Task Force for Promoting Housing Supply for Disaster Victims

To address and examine various issues related to the prompt supply of emergency temporary housing as immediate housing for the disaster victims who lost their homes due to the Great East Japan Earthquake, as well as the supply of housing over the medium to long term, the Task Force for Promoting Housing Supply for Disaster Victims was established, chaired by the State Minister of Land, Infrastructure, Transport and Tourism and composed of director-general level members from relevant ministries and agencies. From March 28, 2011 to May 18, members of the task force convened to evaluate measures to quickly secure emergency temporary housing and other immediate housing for the disaster victims in large numbers, as well as measures to supply housing over the medium to long term.

On April 5, 2011, the Provisional Policies on Measures Concerning the Supply of Emergency Temporary Housing (last revised on June 20) was compiled, outlining basic concepts such as supply targets, cooperation with related organizations, securing of land, effective use of vacant rooms in private rental housing and public housing, consideration for existing communities, and flexible treatment of evacuees from areas affected by the nuclear disaster and wide-area evacuees. In accordance with these policies, the relevant ministries and agencies worked to promote the supply of temporary housing.

[15] Data obtained from the emergency temporary housing websites for each prefecture.

Committee members

Chair: State Minister Ikeguchi of the Ministry of Land, Infrastructure, Transport and Tourism
Councillor of the Nuclear Sufferers Life Support Team
Deputy Director-General of the Consumer Affairs Agency
Director-General for Regional Revitalization, Minister's Secretariat, the Ministry of Internal Affairs and Communications
Director-General of the Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare
Director-General, Rural Development Bureau, the Ministry of Agriculture, Forestry and Fisheries
Director-General of the Forestry Agency
Director-General of the Manufacturing Industries Bureau, the Ministry of Economy, Trade and Industry
Director-General of the Waste Management and Recycling Department, Ministry of the Environment
Director-General of the Bureau of Operational Policy, the Ministry of Defense
Director-General of the Housing Bureau, the Ministry of Land, Infrastructure, Transport and Tourism

Meeting proceedings

Meeting number	Date and time	Agenda
1st meeting	March 28, 2011	(1) Establishment of the Task Force for Promoting Housing Supply for Disaster Victims (2) Measures to promptly secure large quantities of emergency temporary housing and other immediate housing units for disaster victims
2nd meeting	April 5	(1) Establishing the next targets for emergency temporary housing; future measures (2) Report on the results of the emergency examination of materials; future measures (3) Other (regarding daily amenities established alongside emergency temporary housing)
3rd meeting	April 20	(1) Progress of construction of emergency temporary housing (2) Utilization of local contractors in each prefecture (3) Handling of imported housing (4) Policy in response to the review of nuclear evacuation zone (5) Future measures on the emergency examination of materials (6) Other
4th meeting	May 18	(1) Prospects for completion of emergency temporary housing (2) Handling of emergency temporary housing in emergency evacuation preparation zones (3) Facilitating the move-in process (4) Overview of the results of the 2nd emergency investigation of the supply and demand for housing construction materials (5) Other

Source: Ministry of Land, Infrastructure, Transport and Tourism Website, "On the Task Force for Promoting Housing Supply for Disaster Victims"
https://www.mlit.go.jp/jutakukentiku/house/jutakukentiku_house_fr4_000010.html (browsed July 31, 2023)

b. Securing land

Prior to the Great East Japan Earthquake, some areas already had limited flat land suitable for construction. Additionally, many pre-selected sites for building construction-type emergency housing were inundated by the tsunami or were unusable due to the risk of secondary disasters, disrupted transportation, and other factors. This made it difficult to secure land to build construction-type emergency housing, prompting coordinated efforts between prefectural and municipal governments immediately after the disaster. Inland municipalities were actually thought to have more available land, and many neighboring municipalities actually offered to provide land. However, in coastal municipalities where the damage was concentrated, there was difficulty in gaining an understanding of the general policy to avoid construction in tsunami-inundated areas. Many municipalities, concerned about population outflows, requested the construction of emergency temporary housing within their own boundaries. As such, coordination at the prefectural level was essential for construction in inland municipalities[16].

[16] "Immediate Challenges in Providing Emergency Temporary Housing" from the 1st Meeting of the Task Force for Promoting Housing Supply for Disaster Victims (March 28, 2011); "Handout from Miyagi Prefecture: Report on the Construction of Emergency Temporary Housing in Miyagi Prefecture" from the Debriefing on the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake (October 18, 2011) on the Ministry of Land, Infrastructure, Transport and Tourism Website

When selecting sites, information on state-owned land, farmland, and private land was collected, and each site was surveyed by technical staff specialized in the fields of architecture (general structures, etc.), civil engineering (exterior structures, etc.), facilities (plumbing, etc.), and electricity (electrical facilities, etc.). On top of that, difficult coordinated efforts were required to address the priority of SDF garrisons, rubble dumps, and disaster public housing sites. In addition, in order to address the shortage of administrative staff in local municipalities, technical staff were dispatched from a total of 27 administrative agencies and the Urban Renaissance Agency (UR) to evaluate construction sites, as described in a later section. However, the construction process was delayed because of the need to address cracks in the land and damages following aftershocks, as well as the need for site preparation, securing access routes, and establishing essential utilities.

Since the housing was previously planned to be constructed on public land, the land rent incurred for the establishment of emergency temporary housing was not covered by the Disaster Relief Act. However, since the Great East Japan Earthquake necessitated the utilization of private land, authorities were notified[17] that the land rent would be covered by the Disaster Relief Act as well (as currently specified in the relief standards).

c. Securing construction contractors, etc.

The building of construction-type emergency housing was led by the Standardized Architecture Committee of the Japan Prefabricated Construction Suppliers and Manufacturers Association (formerly an "incorporated association," currently a "general incorporated association"), which had concluded a disaster agreement with the prefectures in advance, as it had done in the past. As a large number of construction projects were expected, the Ministry of Land, Infrastructure, Transport and Tourism made a request to the Japan Federation of Housing Organizations (an incorporated association), an umbrella organization of the aforementioned association. As a result, the housing manufacturers from the Housing Committee of the Japan Prefabricated Construction Suppliers and Manufacturers Association were also entrusted with construction work.

In addition, the utilization of local builders was promoted in order to create jobs in disaster-affected areas.

As of October 2011, 43,206 units had been built by the Japan Prefabricated Construction Suppliers and Manufacturers Association (28,660 units by the Standardized Architecture Committee and 14,546 units by the Housing Committee), and 9,307 units were constructed by local contractors. Local contractors built many wooden construction-type emergency housing units using local lumber. However, there were a number of issues, such as differences in construction speed, costs, and livability depending on the provider of the construction-type emergency housing.

Figure 5-2-11 Examples of Prefabricated and Wooden Structures

プレハブ協会（規格建築部会）の例

地元業者を活用した木造住宅の例

Source: Ministry of Land, Infrastructure, Transport and Tourism Website, Debriefing on the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake (October 18, 2011)
"Reference 3: Examples of the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake"
https://www.mlit.go.jp/common/000170074.pdf (browsed July 31, 2023)

d. Addressing material shortages, etc.

In the immediate aftermath of the Great East Japan Earthquake, there were concerns about a shortage in the supply of housing-related materials due to damage to production bases for such materials, disruptions in logistics, and the effects of rolling blackouts. In response, measures were taken to prevent problems in securing necessary materials. For example, a request (March 18) was issued to the Japan Federation of Housing Organizations for their

[17] April 15, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Emergency Temporary Housing for the Great East Japan Earthquake"

cooperation in placing suitable orders based on actual demand and curbing excessive inventory holdings in addition to promoting the construction of emergency temporary housing. In addition, emergency investigations were conducted on the supply and demand of housing-related materials in cooperation with relevant ministries and agencies[18]. As a result, factors such as the increased use of privately leased housing led to the accumulation of a surplus. The specific measures taken are as follows[19].

- ○ Addressing temporary demand
  - Investigating the state of supply and demand and providing information on the results: The state of supply and demand was verified based on results from questionnaires regarding 16 types of building materials selected based on interviews, and follow-ups were conducted.
  - Establishing an interagency coordination system
- ○ Utilization of imported building materials
  - Centralizing the point of contact for overseas housing companies: The Federation of Housing & Community Centers consolidated information on materials and construction companies from overseas and provided information to each prefecture.
  - Acceleration of projects approved by the Minister: The approval and certification system for imported insulation materials was improved.
- ○ Addressing factories and businesses affected by the disaster
  - Damage to housing component factories and local construction companies affected by the tsunami was addressed.

e. Dispatch of national and local officials and UR for support

On March 12, 2011, immediately after the disaster, the Ministry of Land, Infrastructure, Transport and Tourism began dispatching staff to the Tohoku Regional Development Bureau and the three disaster-affected prefectures to support the development of construction-type emergency housing. One person was dispatched to each organization, mainly from the planning specialist to the assistant director level, to support the establishment of construction and housing departments in the disaster-affected prefectures, as well as to collect information and communicate with the head office as local contacts until July of the same year.

In addition, technical staff were dispatched from a total of 27 administrative agencies and the Urban Renaissance Agency (UR) to evaluate construction sites. By the end of August, approximately 7,000 people had been sent to the three disaster-affected prefectures.

f. Other

In each disaster-affected area in Iwate, Miyagi, and Fukushima Prefectures, more than 2,000 unit houses, which ensure a certain level of livability in a short construction period, were provided as construction-type emergency housing units.

Imported housing was utilized in the aftermath of the Great Hanshin-Awaji Earthquake, and following the Great East Japan Earthquake, many proposals for housing units from overseas were received by the national and prefectural governments. This caused confusion, prompting efforts to centralize the point of contact with the Federation of Housing & Community Centers. However, certain issues arose, such as the need to ensure not only the installation of the units but also the provision of comprehensive services, such as utility work for water, drainage, and electricity by local construction companies. Additionally, requests for additional construction needed to be managed, and complaints needed to be addressed. As a result, the number of temporary housing units constructed using complete housing materials imported from abroad, rather than partial building materials, totaled only 550 units. These included 150 units built with materials from Thailand and 400 units built with materials from China, which were ordered from Iwate and Fukushima Prefectures, with construction carried out by local businesses. Apart from these 550 units, temporary housing units were generally constructed using domestic materials, except in cases where some imported materials were used for insulation and other purposes[20].

[18] "Records of the Great East Japan Earthquake: the Ministry of Land, Infrastructure, Transport and Tourism's Disaster Response," p. 63 https://www.mlit.go.jp/common/000208803.pdf (browsed July 31, 2023)

[19] Ministry of Land, Infrastructure, Transport and Tourism Website, "Reference 2: Measures Related to the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake" from the Debriefing on the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake (October 18, 2011)

[20] Ministry of Land, Infrastructure, Transport and Tourism Website, "Temporary Housing Imported from Abroad" https://www.mlit.go.jp/report/press/house04_hh_000258.html (browsed July 31, 2023); and Ministry of Land, Infrastructure, Transport and Tourism, " Emergency Temporary Housing Construction Handbook: Interim Summary" (May 2012) https://www.mlit.go.jp/common/000211741.pdf (browsed July 31, 2023)

3) Considerations for the aging of the population and convenience of living at the supply stage

The specifications of construction-type emergency housing needed to be designed with consideration for an aging population. Facilities designed to accommodate multiple elderly individuals or others requiring special considerations in daily life (welfare temporary housing) were permitted to be established as emergency temporary housing under the Disaster Relief Act. Buildings were made accessible (barrier-free) through the elimination of physical hindrances to movement such as by installing handrails in bathrooms, and the structures and facilities were designed to be suitable for users of in-home nursing care for the elderly and other such services by installing ramps to eliminate steps and providing rooms for caregivers[21].

In addition, since the beginning of the disaster, it has been pointed out that consideration should be given to maintaining the existing community as much as possible in accordance with the actual conditions of the area so that the disaster victims, especially the elderly, can live in the area with peace of mind[22]. Regarding the selection of occupants, authorities were instructed to avoid a simple lottery system and instead consider methods tailored to local circumstances, as long as fairness among disaster victims seeking emergency temporary housing is maintained, to ensure an environment where they can live comfortably and with peace of mind[23]. Certain physical elements were designed in consideration of community needs. For example, entrances were made to face each other, and open verandas, outdoor tables, and benches were installed. At construction-type emergency housing complexes where residents have begun to move in, the opinions of residents were taken into account, and efforts were made to, for example, build new spaces for community exchange ("Home for All").

On the other hand, the prefectures had some difficulties in dealing with these various specifications, since the application of the Disaster Relief Act was expanded intermittently via notifications and other means. In particular, the first housing units had livability issues, and as such, a variety of additional work was required after construction due to problems with the living environment. These issues will be described in a later section.

4) Prompt housing and support for moving in

Tenant recruitment was carried out by municipalities in parallel with the construction of emergency temporary housing by the prefecture, but in some cases, there were delays between the time construction was completed and the time residents were able to move in[24]. For this reason, it was strongly requested that the construction schedule be shared and coordinated between the prefectural and municipal officials. Furthermore, it was requested that residents be selected before completion, and that the recruitment information be made known to evacuees who were housed in places other than prefectural evacuation shelters[25].

In addition, because it was difficult for the government to quickly provide home appliances necessary for daily life, the Japanese Red Cross Society worked with home appliance manufacturers to donate to the disaster victims sets of six items deemed to be the minimum necessities. The items were a refrigerator, a washing machine, a television, a rice cooker, a microwave oven, and an electric kettle. In order to house disaster victims as quickly as possible, the Japanese Red Cross Society was required to be informed of the destination and the number of sets needed two weeks before the scheduled completion. Of the ten prefectures covered by the Disaster Relief Act, eight prefectures initially wished to accept donations for 70,000 units of emergency temporary housing to be constructed. However, in consideration of the circumstances of those evacuated from Fukushima Prefecture due to the nuclear power station accident, the scope of the donation was expanded from the eight prefectures to include rental-type emergency housing and public housing outside of these Prefectures, and eventually, 133,000 sets were donated, approximately double the original plan (applications ended in December 2012)[26].

[21] April 15, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Emergency Temporary Housing for the Great East Japan Earthquake"

[22] Preventing isolation among seniors and single individuals while considering the needs of the local community and providing meeting spaces was already referenced in a March 12, 2011 notice issued by the director of the General Affairs Division of the Social Welfare and War Victims' Relief Bureau of the Ministry of Health, Labour and Welfare, which was titled "Improving Living Conditions in Evacuation Shelters and Accelerating Their Closure by Providing Emergency Temporary Housing (Points of Attention)."

[23] Ministry of Land, Infrastructure, Transport and Tourism Website, "Reference Material: Notification on the Construction of Emergency Temporary Housing (Related to the Ministry of Land, Infrastructure, Transport and Tourism)" from the Debriefing on the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake (October 18, 2011)

[24] May 24, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Emergency Temporary Housing for the Great East Japan Earthquake (No. 2)"

[25] May 6, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Flexible Application of the Disaster Relief Act for the Great East Japan Earthquake (No. 7)"

[26] Japanese Red Cross Society, "Efforts by the Japanese Red Cross Society to Provide Support for Life After the Great East Japan Earthquake" https://www.isad.or.jp/pdf/information_provision/information_provision/h25/higashinihon25_4-5-2c.pdf (browsed July 31, 2023)

5) Maintenance and improvement of living environments after moving in

Originally intended to serve as temporary homes for two years or less, construction-type emergency housing units were initially not consistently designed to be comfortable to live in, nor were they sufficiently adapted to cold regions. As such, there were calls to improve the living environment of these housing units. In addition, issues such as the utilization of vacant housing units and community building needed to be addressed.

a. Project Team on the Housing Environment in Emergency Temporary Housing, etc.

In the Basic Guidelines for Reconstruction in Response to the Great East Japan Earthquake (finalized by the Reconstruction Headquarters on July 29, 2011), it is advised that issues be identified based on the circumstances of residents, with a focus on the living environment of temporary housing, and considering appropriate responses as needed. It is also advised that municipal initiatives be supported to promote social inclusion through community support mechanisms, such as by understanding residents' needs, including living environments in temporary housing, introducing personal support-based assistance as necessary, and establishing safeguarding and support systems. Furthermore, Minister of State for Reconstruction Hirano stated that "due to the recent disaster, there is a possibility that those affected may have to live in temporary housing for an extended period depending on the circumstances. It is therefore necessary to identify issues related to the living environment and urgently consider a government response."

In light of these circumstances, in order to address the housing of the victims of the Great East Japan Earthquake, the Project Team on the Housing Environment in Emergency Temporary Housing, etc.[27] (hereinafter referred to as "PT") convened from August 4, 2011 to December 13, with relevant ministries and agencies as members. The aim was to identify issues based on the circumstances of the residents, particularly the living environments of the newly constructed emergency temporary housing units, and to prepare measures that should be taken as necessary, all while communicating and coordinating among the relevant ministries and agencies.

Committee members

Chair: State minister Otsuka of the Ministry of Health, Labour and Welfare (State minister Maki of the Ministry of Health, Labour and Welfare in the 2nd meeting and beyond)
Parliamentary vice-minister Akutsu of the Cabinet Office (Parliamentary state minister Goto of the Cabinet Office in the 2nd meeting and beyond)
Deputy Secretary-General of the Great East Japan Earthquake Reconstruction Headquarters
Director-General of the Cabinet Office (Disaster Management)
Director-General of the Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare
Director-General of the Housing Bureau, the Ministry of Land, Infrastructure, Transport and Tourism
Director of Iwate Prefecture Tokyo Office
Director of Miyagi Prefecture Tokyo Office
Director of Fukushima Prefecture Tokyo Office

Meeting proceedings

Meeting number	Date and time	Agenda	Decisions, etc.
1	2011 August 4	Questionnaire on the living environment of emergency temporary housing, etc.	Leave questionnaire items to the State minister of Health, Labour and Welfare
2	September 30	Results of questionnaire on the living environment of emergency temporary housing, etc.	- Start deliberating concrete measures in the next meeting - Promote the creation of a resident database
3	October 21	Response based on the results of a questionnaire survey on the housing environment in emergency temporary housing (interim report) (draft), etc.	A system is needed in which issues are summarized on a daily basis in each housing complex and linked to countermeasures.
4	December 13	• Progress of measures to improve the living environment (tangible aspects) in emergency temporary housing • Progress of efforts to resolve issues related to the living environment	The progress of each countermeasure in each prefecture will be followed up after the dissolution of this project team. Concrete updates on each housing complex will be posted on the website of the Ministry of Health, Labour and

[27] Ministry of Health, Labour and Welfare Website https://www.mhlw.go.jp/stf/shingi/other-syakai_141319.html (browsed July 31, 2023)

		(intangible aspects) in emergency temporary housing • Establishment of residents' associations	Welfare.
* Following this meeting, seven periodic reports were published between December 2011 and March 2012.			

The PT first conducted a questionnaire on the living environment of emergency temporary housing, targeting 50 municipalities in the three disaster-affected prefectures where such housing was established, as well as residents from 3,231 households across 616 complexes (1,108 households in Iwate Prefecture, 1,373 in Miyagi Prefecture, and 750 in Fukushima Prefecture). Municipalities were asked about measures for buildings and facilities, as well as access to schools, hospitals, and shopping facilities from each housing complex, and related measures. Residents (2,013 valid responses) were asked about areas requiring improvement in buildings and facilities, convenience (access) of activities like shopping and commuting, and current problems and concerns. Based on these responses, the PT decided to take the following actions.

b. Improving living environments in buildings and facilities

Before the PT convened, in addition to equipping air conditioners as a heat countermeasure, requests from disaster-affected areas led to the inclusion of further heat measures, such as growing plants like bitter gourd along exterior walls to create so-called "green curtains," as eligible for government subsidies[28].

In light of the results of the questionnaire conducted by the PT, various notices[29] were issued, indicating that the following were included in the scope of additional construction to be covered by the Disaster Relief Act: ① measures for cold weather (adding insulation, installing tatami mats in living rooms, installing additional air conditioners, etc.), ② accessibility measures (paving over gravel paths, etc.), ③ fire prevention and crime prevention measures (installing outside lights, providing fire extinguishers, etc.), ④ measures for rain and wind (providing windbreak rooms at entrances, providing gutters in corridors, etc.), and ⑤ measures for other problems (providing additional meeting spaces and common rooms, installing screen doors in living rooms and entrances, etc.).

In addition, as the housing was provided for longer than anticipated, the issue of repairs arose. Buildings deteriorated due to wind and rain, requiring reinforcement and other such measures. For residential buildings in Iwate Prefecture that were expected to be used for a long time, the foundations (wooden piles) were repaired in a planned manner before problems occurred (four to five years after the disaster).

As these efforts continued, living environments improved, but construction costs soared. Based on the lessons learned from this experience, measures against heat and cold and barrier-free measures are now expected to be covered by the Disaster Relief Act from the beginning.

c. Responding to issues related to location

According to the municipal responses to the PT questionnaire, there were no "stores (or shopping arcades) for daily shopping," "elementary or junior high schools," or "hospitals or clinics" within a 15-minute walk from around 40 to 50% of the housing complexes. When expanding the range to areas served by public transportation such as buses, the municipalities responded that such facilities were accessible from around 80% of the housing complexes. Meanwhile, around 40% of residents responded that they found it inconvenient to go on daily shopping trips and visits to hospitals or clinics from their housing site.

In order to address these issues related to location and access, the existing initiatives of various ministries and agencies, and the initiatives in the third supplementary budget of FY 2011 were compiled. These included: ① securing transportation for residents (securing and maintaining transportation necessary for daily life, subsidizing school bus operation, etc.), ② securing means to deliver services and products needed by residents (subsidizing

[28] July 14, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Measures Against Heat in Constructed Emergency Temporary Housing"

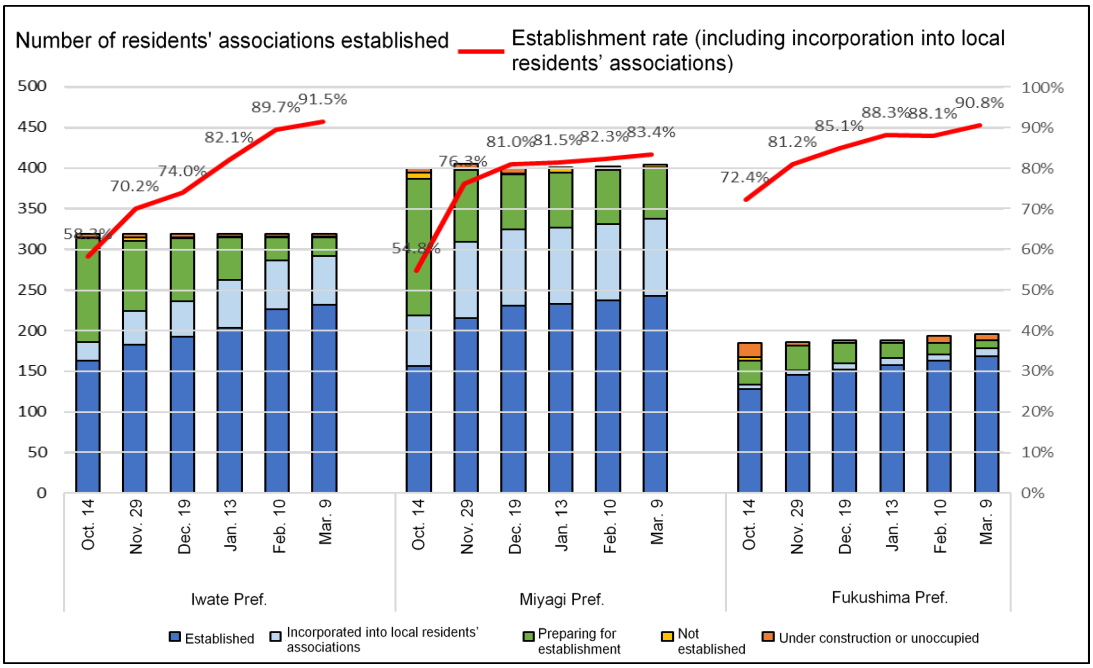
[29] September 28, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Measures Against Cold in Emergency Temporary Housing Constructed Following the Great East Japan Earthquake"; October 7, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Installation of Heating Equipment in Emergency Temporary Housing Constructed Following the Great East Japan Earthquake," etc. (PT)

shopping services by NPOs, etc.), and ③ securing places to provide services and products needed by residents (subsidizing the establishment of temporary clinics, etc.).

d. Community building and the establishment of residents' associations

From the results of the PT questionnaire, it became clear that each construction-type emergency housing complex differed significantly in terms of location, structural facilities, and the circumstances of residents. As the duration of occupancy extended, it was anticipated that the challenges faced by residents would also vary greatly between complexes. While trying to eliminate such disparity among housing complexes, it became crucial to take individual measures to solve the problems of each housing complex. For example, as the duration of occupancy grew longer, it became necessary to create forums for discussion among residents to decide on rules regarding daily life, such as how to use meeting spaces and how to take out garbage, and to create mechanisms for exchange between residents. To address these issues, residents' associations generally needed to be organized for each housing complex. These organizations needed to collect information on the problems faced by the residents of emergency temporary housing and solve these problems independently. In addition, in order to carry out community building to prevent residents from becoming isolated in emergency temporary housing, municipalities were urged to expedite the establishment of residents' associations through outreach efforts. The PT periodically assessed the progress of formation of residents' associations, which is outlined as follows.

Figure 5-2-12 Establishment of Residents' Associations in Construction-Type Emergency Housing Complexes



Source: Compiled by the Reconstruction Agency based on "Project Team on the Housing Environment in Emergency Temporary Housing, etc." (materials from each meeting) from the Ministry of Health, Labour and Welfare website

In the PT questionnaire, residents also responded about concerns that they currently faced. The most common answer was "finances" at about 50%, followed by "health" and "work (employment)" at about 20%. Progress was made in the establishment of residents' associations and other community-building efforts, but this did not eliminate the need for administrative support systems for disaster victims led by the municipalities. There was a continued need to provide support for activities such as gathering and maintaining databases of information on emergency temporary housing residents, establishing and operating support hubs, and fostering interaction and mutual safeguarding among residents. (See Chapter 4, Section 1 for more information on the support provided.)

e. Utilization of vacant housing units

After construction-type emergency housing complexes were built, further measures were needed to address the issue of vacant units, which arose as a result of fluctuations in the required number of units due to personnel shortages and the delayed full-scale provision of rental-type emergency housing, the construction of complexes on inconvenient sites due to a lack of available land, and discrepancies in the needs of disaster victims. In addition, the number of vacant housing units increased as more disaster victims moved into permanent housing to rebuild their livelihoods.

To make use of vacant housing units, the Ministry of Health, Labour and Welfare permitted the use of multiple units as meeting spaces and common rooms, as well as for housing in cases where larger households were confined in small spaces[30]. Furthermore, in January 2012, the Ministry approved, exclusively for this disaster, the temporary use of vacant units in construction-type emergency housing as accommodation for support personnel from other local governments or volunteers working at the request or under the commission of local governments, until new residents expressed interest in moving in[31]. As a result, the vacant units in construction-type emergency housing were used efficiently in various ways under this special exception, which was approved only for the Great East Japan Disaster. They served as lodgings for support personnel from other local governments, meeting spaces, and housing for individuals who were not victims of the disaster but had returned to their hometowns, as well as newly employed workers engaged in reconstruction projects in the affected areas.

[30] August 12, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Emergency Temporary Housing for the Great East Japan Earthquake (No. 5)"

[31] January 23, 2012 Notice from the Director of the General Affairs Division, Social Welfare and War Victims' Relief Bureau, the Ministry of Health, Labour and Welfare, "Use of Vacant Units in Constructed Emergency Temporary Housing" https://www.mhlw.go.jp/stf/houdou/2r98520000020xfe-att/2r98520000020xh2.pdf (browsed August 17, 2023)

(4) Rental-Type Emergency Housing

1) Utilization of rental-type emergency housing

In the wake of the Great East Japan Earthquake, there was a need to quickly secure a large number of emergency temporary housing units in response to the massive housing damage caused by the earthquake and tsunami and the number of evacuees from the nuclear power plant area. To address this need, an approach in which local governments leased existing private rental housing and supplied it as emergency temporary housing (rental-type emergency housing) was widely employed in addition to traditional methods such as constructing prefabricated homes and other emergency housing units (construction-type emergency housing) and providing vacant public housing. As this was the first time that private rental housing was utilized on such a scale, there were various sources of confusion at the outset. Ultimately, however, out of a total of 123,723 units, more than half (68,616 units) were provided in the form of rental-type emergency housing (privately leased) as of the peak of emergency temporary housing occupancy (March 30, 2012).

2) Utilization of vacant units of public housing, government employee housing, and UR housing

a. Usage status

To secure immediate housing for the disaster victims, the Ministry of Land, Infrastructure, Transport and Tourism requested local governments to repurpose vacant public housing and similar facilities. At the same time, local governments and the Urban Renaissance Agency (UR) were instructed to report on the availability of vacant public housing nationwide, and information on these vacancies was provided in order for disaster victims to use the units. On March 12, 2011, the day after the disaster occurred, the Ministry of Land, Infrastructure, Transport and Tourism made it known to the public that temporary occupancy by disaster victims is to be permitted in accordance with the provisions on permission for repurposing under Article 238-4, Paragraph 7 of the Local Autonomy Act. The Ministry of Health, Labour and Welfare issued a notice on March 25, 2011, stating that when prefectures outside disaster-affected areas provide support under the Disaster Relief Act, national funding would cover the provision of public housing or similar facilities as evacuation shelters or emergency temporary housing designated by the Act for evacuees from municipalities where the Act applies, and that proactive acceptance of disaster victims was encouraged.[32] (The cost of accepting disaster victims from other municipalities (e.g., repair costs for housing prior to moving in) was covered by national funding. However, the costs incurred by disaster-affected municipalities to house their own residents in their publicly owned housing were not eligible for national funding.) In this way, though initially provided as evacuation shelters for temporary use, public housing and other facilities began to function as emergency temporary housing as the evacuation period grew longer.

Figure 5-2-13 Number of Public Housing Units Used

	提供可能戸数	入居決定戸数 （平成 24 年 2 月 6 日時点）
公営住宅	約 25,000 戸	約 8,400 戸
ＵＲ賃貸住宅	約 5,100 戸	970 戸

* The term “public housing” includes housing for national government employees and employment promotion housing. As UR rental housing was mainly located in the Tokyo metropolitan area, the number of units used was relatively low.

Source: Research by the Ministry of Land, Infrastructure, Transport and Tourism

[32] March 25, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims’ Relief Bureau, the Ministry of Health, Labour and Welfare, “Flexible Application of the Disaster Relief Act in Relation to the 2011 Tohoku Earthquake (No. 3)”

Figure 5-2-14 Temporary Use of Public Housing (as of October 17, 2011)

○ 公営住宅の一時利用状況について（平成23年10月17日時点）

都道府県名	延べ提供可能戸数	入居決定戸数	都道府県名	延べ提供可能戸数	入居決定戸数
北海道	2,190	351	滋賀県	109	41
青森県	300	169	京都府	328	169
岩手県	385	152	大阪府	2,873	314
宮城県	495	373	兵庫県	2,187	266
秋田県	101	80	奈良県	164	37
山形県	141	62	和歌山県	276	21
福島県	613	383	鳥取県	147	25
茨城県	788	465	島根県	299	47
栃木県	383	183	岡山県	325	86
群馬県	498	297	広島県	616	93
埼玉県	555	254	山口県	461	28
千葉県	119	94	徳島県	265	23
東京都	1,150	908	香川県	186	23
神奈川県	721	580	愛媛県	147	33
新潟県	372	210	高知県	439	27
富山県	307	102	福岡県	816	128
石川県	346	116	佐賀県	101	16
福井県	150	53	長崎県	340	30
山梨県	337	98	熊本県	321	26
長野県	435	138	大分県	273	45
岐阜県	615	80	宮崎県	157	31
静岡県	404	172	鹿児島県	399	30
愛知県	815	391	沖縄県	166	49
三重県	230	65	合計	23,845	7,364

Source: Ministry of Land, Infrastructure, Transport and Tourism Website, Debriefing on the Construction of Emergency Temporary Housing Following the Great East Japan Earthquake (October 18, 2011)
"Handout from the Ministry of Land, Infrastructure, Transport and Tourism (Housing Development Division, Housing Bureau): Temporary Residence of Disaster Victims in Public Housing (p. 1)"

b. Information provision and consultation systems for disaster victims

On March 22, 2011, the Ministry of Land, Infrastructure, Transport and Tourism established the Information Center on Public Housing for Disaster Victims within the Federation of Housing & Community Centers in order to provide information on public housing available to disaster victims and guide them to the point of contact to apply for housing. The center dealt with information on public housing managed by local municipalities and UR rental housing. Additionally, from the 28th of the same month, it began dealing with private rental housing, housing for national government employees, and employment promotion housing, and continued its telephone guidance service until March 2012.

In Iwate Prefecture, the Housing Hotline (providing telephone consultations on five toll-free lines) was established in April 2011. The hotline provided consultation services regarding support programs for moving into emergency temporary housing or prefectural housing and rebuilding private homes. These services continued until August of the same year, when a clear outlook for closing evacuation shelters was established.

3) Utilization of private rental housing

a. Large-scale utilization of private rental housing

The use of rental-type emergency housing had been envisaged since immediately after the earthquake. On March 13, 2011, the Ministry of Land, Infrastructure, Transport and Tourism requested the cooperation of organizations with ties to the rental housing and real estate industries for housing support. On March 19 of the same year, the Ministry of Health, Labour and Welfare issued a notice stating that it was acceptable to provide housing by leasing private rental houses or vacant houses depending on the local situation. Initially, based on the principle of in-kind provision, it was assumed that prefectures would lease private rental housing in bulk and sublease it to disaster victims, and local governments proceeded with matching available properties with prospective tenants. However, the scale of the damage exceeded expectations, leading to challenges such as delays in compiling vacancy information. As of the end of April 2011, progress was limited, with only 745 units (14 in Iwate Prefecture, 4 in Miyagi Prefecture, and 727 in Fukushima Prefecture) having been utilized.

Meanwhile, in the immediate aftermath of the earthquake, there were many cases in which disaster victims

concluded lease contracts and moved into private rental housing by themselves. In response, the Ministry of Health, Labour and Welfare issued a notice on April 30, 2011 stating that even if a property had been leased in the name of a disaster victim after the earthquake, if the contract is replaced with a lease in the name of the prefecture (or municipality delegated by the prefecture) after it is concluded, the property would be recognized as emergency temporary housing funded by the national government (see below). This approach had many advantages. Disaster victims were able to move into temporary housing more quickly and select properties on their own, taking into account convenience in terms of commuting to work or school. As a result, most rental-type emergency housing units were provided through this approach in which the disaster victims searched for properties themselves, rather than through the matching system. In Iwaki City, Fukushima Prefecture, 695 units were supplied through the matching system, due in part to the painstaking efforts of administrative staff.

Taking into account the actual conditions during the Great East Japan Earthquake and subsequent disasters, the Basic Disaster Management Plan (Central Disaster Prevention Council) currently states that emergency housing should be provided under a basic policy of prioritizing the use of existing housing stock. Emergency housing should be secured for disaster victims by establishing consultation systems, promoting emergency repairs by providing support for information sharing about repair contractors, temporarily providing public housing and other existing stock, and offering rental-type emergency housing. In addition, the plans state that if there is no sufficient existing housing stock in the region, construction-type emergency housing should be built promptly to ensure emergency housing for disaster victims at an early stage. At the same time, a national guide has been prepared, in which the basic policy is for disaster victims to search for properties on their own. Hyogo Prefecture's preparation manual for a Nankai Trough earthquake serves as an example in which the number of units needed is estimated based on the number of units supplied in Miyagi Prefecture, under the assumption that private leasing will be prioritized[33].

Figure 5-2-15"Regarding the Leasing of Private Rental Housing as Emergency Temporary Housing for the Great East Japan Earthquake"
April 30, 2011 Notice from the Director-General of the Social Welfare and War Victims' Relief Bureau, Ministry of Health, Labour and Welfare (Extract)

応急仮設住宅の供与に当たって民間賃貸住宅の借上げによることも差し支えない旨、累次にわたり周知してきたところであります。

被災三県においては、現に救助を要する被災者が自ら民間賃貸住宅に入居している事例も少なくなく、また、応急仮設住宅の用地確保等の課題があって避難所生活が長期化しているところであります。この状況下、民間賃貸住宅借上げの活用が求められており、今般、民間賃貸住宅の取扱について下記のとおりといたします。

（略）

(1) 災害救助法による応急救助は、県が、現に救助を要する被災者に対して行うものである。この考え方に沿って、現に救助を要する被災者に、県が民間賃貸住宅を借り上げて提供した場合に、災害救助法の適用となって同法の国庫負担が行われる。

(2) 県の委任を受けた市町村が借り上げて提供した場合も、県借上げの場合と同様とする。

(3) 発災以降に被災者名義で契約したものであっても、その契約時以降、県(その委任を受けた市町村)名義の契約に置き換えた場合、(1)と同様とする。

(注)契約置換えに当たっては、敷金、礼金、仲介手数料等の入居費用の二重払いや被災者の負担が生じぬよう、留意されたい。

（以下略）

b. Specific procedures for lease contract management

Rental-type emergency housing was generally provided under a three-party contract between the landlord (the lender), the prefecture (the renter), and the disaster victims (the tenants). In the early stages in particular, the labor force was vastly insufficient for the amount of work that needed to be carried out in each prefecture. Before the outsourcing system was established, complaints were received daily due to delays in processing and payment. According to interviews with prefectural government officials conducted by researchers, there was an ongoing reluctance among personnel to be assigned to the relevant departments within the government office of Miyagi

[33] "Hyogo Prefecture Emergency Temporary Housing Provision Manual" (Comprehensive Coordination/Rental-Type Emergency Housing Edition) revised March 2021

Prefecture, which provided up to about 26,000 units, the largest number of units in the disaster-affected areas[34]. The prefecture proceeded to outsource relevant tasks. For example, payment operations were outsourced to banks that served as the designated financial institutions of the prefecture. Extending the provision period each year required the administrative work of renewing a large number of contracts.

In the notice issued by the Ministry of Health, Labour and Welfare on April 30, 2011[35], the following were stipulated as expenses covered by the national treasury when leasing private rental housing: expenses for moving in, such as security deposits, key money, and brokerage fees, as well as monthly rent, common area servicing fees, and administrative fees. Monthly rent was expected to differ based on factors like local conditions (actual market rates) and the family composition of disaster victims. Nevertheless, taking into account the publicly funded nature of disaster relief, the standard for the Iwate-Miyagi Nairiku Earthquake was set at 60,000 yen per unit per month. It was decided that in principle, disaster victims would not be required to pay rent while they are living in houses designated as rental-type emergency housing.

In addition, when a disaster victim moves out of a unit designated as rental-type emergency housing, in principle, the new residence will no longer be recognized as emergency temporary housing, and they will be required to pay rent. However, for households who were affected by the disaster and have evacuated to distant locations such as other prefectures, special provisions were enabled for a change of residence in order to facilitate their return to their home prefecture.

c. Provision of housing outside of disaster-affected areas

In cases where few properties were available in the area or properties could not be secured near the affected residential areas due to delays in finding properties, it was necessary to secure properties in urban areas where more units were available. Therefore, many rental-type emergency housing units were provided in areas other than the municipalities and prefectures where residents lived at the time of the disaster. In such cases, measures to lease private rental housing to residents who had evacuated to other prefectures were implemented extensively by the prefectures concerned (the prefectures accepting residents). In addition to public housing, rental-type emergency housing was provided in 46 prefectures. Yamagata Prefecture housed a particularly large number of disaster victims, with 3,877 people living in rental-type emergency housing units at the peak of occupancy.

In particular, the no-entry zones, planned evacuation zones, and emergency evacuation preparation zones in Fukushima Prefecture, which were established following the accident at the nuclear power plant, were generally designated to be outside the scope of coverage[36] for emergency temporary housing and emergency repairs. As such, many evacuees moved into rental-type emergency housing in municipalities and prefectures other than those where they originally lived.

For the use of private rental housing and public housing supplied nationwide as emergency temporary housing, costs such as rent, security deposits, and key money, as well as installation costs for fixtures of the minimum necessary specifications (air conditioners, gas stoves, lighting fixtures, water heaters, and curtains) were incurred by the prefectures that accepted the residents. These prefectures paid the costs and sought reimbursement from the disaster-affected prefectures, and the national government provided national subsidies to the disaster-affected prefectures. With regard to matters related to the Great East Japan Earthquake, it was decided that the application forms and related documents that each prefecture was required to send to the three disaster-affected prefectures would be compiled by the Ministry of Health, Labour and Welfare and sent to the three disaster-affected prefectures. Subsequently, the partial amendment of the Disaster Relief Act in 2013 stipulated that in the event of a highly unusual and extremely severe disaster, prefectures that have received reimbursement claims may request the national government to make payments on their behalf to the prefectures that have requested reimbursement.

d. Specific issues related to residents of rental-type emergency housing

It has been pointed out that residents of rental-type emergency housing enjoyed higher livability than residents of construction-type emergency housing units, which were temporary structures, and that disaster victims living in rental-type emergency housing benefited from being able to choose the room plan and location themselves

[34] Kishie Shigekawa, Satoshi Tanaka, Hiroko Koumoto, and Shousuke Satoh, "Housing reconstruction of disaster victims in the designated temporary housing system," *Journal of the Housing Research Foundation "Jusoken"*, Vol. 41, pp. 145–156 (2015)

[35] April 30, 2011 Notice from the Director-General of the Social Welfare and War Victims' Relief Bureau, Ministry of Health, Labour and Welfare, "Regarding the Leasing of Private Rental Housing as Emergency Temporary Housing for the Great East Japan Earthquake"

[36] "Handling of emergency temporary housing in emergency evacuation preparation zones," (Nuclear Emergency Response Headquarters, May 16, 2011), etc.

according to their needs[37]. It has also been noted[38] that it was easier for them to accelerate the process of rebuilding their lives, as they were able to carry out "normal" lives among residents who were not affected by the disaster in areas that had not suffered damage.

On the other hand, the following have been identified as issues unique to disaster victims living in rental-type emergency housing. ① As disaster victims were dispersed over a wide area, municipalities struggled to track their living conditions and contact information, making it hard to provide information and support (as support from organizations such as NPOs tended to be focused on construction-type emergency housing). There were cases in which the whereabouts of disaster victims could not be identified, making follow-up difficult. ② Some disaster victims moved to urban areas such as Sendai City, where many private rental housing units are located, and proceeded to secure permanent housing in the area to rebuild their lives, which led to the outflow of residents from the coastal municipalities from which they evacuated. ③ Properties became scarce in areas where demand was high, and rents soared, causing difficulties in the lives of residents who were not affected by the disaster. ④ Moving out of rental housing marked the end of eligibility for relief, and in principle, changes to the property for personal reasons were not permitted to be made, even if the property initially rented under unavoidable circumstances after the disaster did not meet the household's needs, or if the household size changed later. ⑤ There were complaints, particularly from disaster victims who felt it was unfair that those who had been living in rental housing before the earthquake could live rent-free in rental-type emergency housing, even though they had not experienced damage to a property asset like a home[39].

(5) Consolidation and removal of emergency temporary housing

1) Background on the reduction of the number of units and deadline extensions

In the aftermath of the Great East Japan Earthquake, residents lived in emergency temporary housing for longer periods than in past disasters. However, as disaster victims rebuilt their lives and the transition was made to disaster public housing, the number of occupied emergency temporary housing units and the number of individuals living in them steadily decreased, dropping to about half in five years and to approximately 1,200 people in 10 years. These trends are illustrated in detail in (2) 1) Figure 5-2-3.

Emergency temporary housing is a system in which housing is provided under public funding for a duration of two years in principle, serving as a disaster relief measure that provides temporary stability to the living situations of disaster victims. Therefore, in the reconstruction process, it is naturally desirable for disaster victims to be moved to permanent housing as soon as possible in order to stabilize their lives. Furthermore, with regard to temporary housing complexes built on school grounds or private land, there were cases where it was necessary to make the land available early for students or landowners.

However, in the aftermath of the Great East Japan Earthquake, the provision period was longer than in the past due to the fact that there were a certain number of disaster victims who struggled to rebuild their lives, as well as disaster victims who had to wait for the completion of disaster public housing projects or large-scale reconstruction projects such as land readjustment, and evacuees from the nuclear power plant disaster zone. The period of establishment was originally two years (two years from completion for construction-type units, and two years from the date of signing of the three-party contract with the prefecture for rental-type units), but the period was extended every year as a result of discussions between the prefecture and the national government in accordance with the system described in (1) 3). Following the completion of reconstructive urban development projects, the provision of emergency temporary housing to disaster victims from Iwate and Miyagi Prefectures was terminated at the end of FY 2020. For areas under evacuation orders in Fukushima Prefecture, the provision of emergency temporary housing was terminated by each municipality in light of the progress in the development of living environments, including residential, commercial, and educational facilities. From FY 2021 onward, the provision of emergency

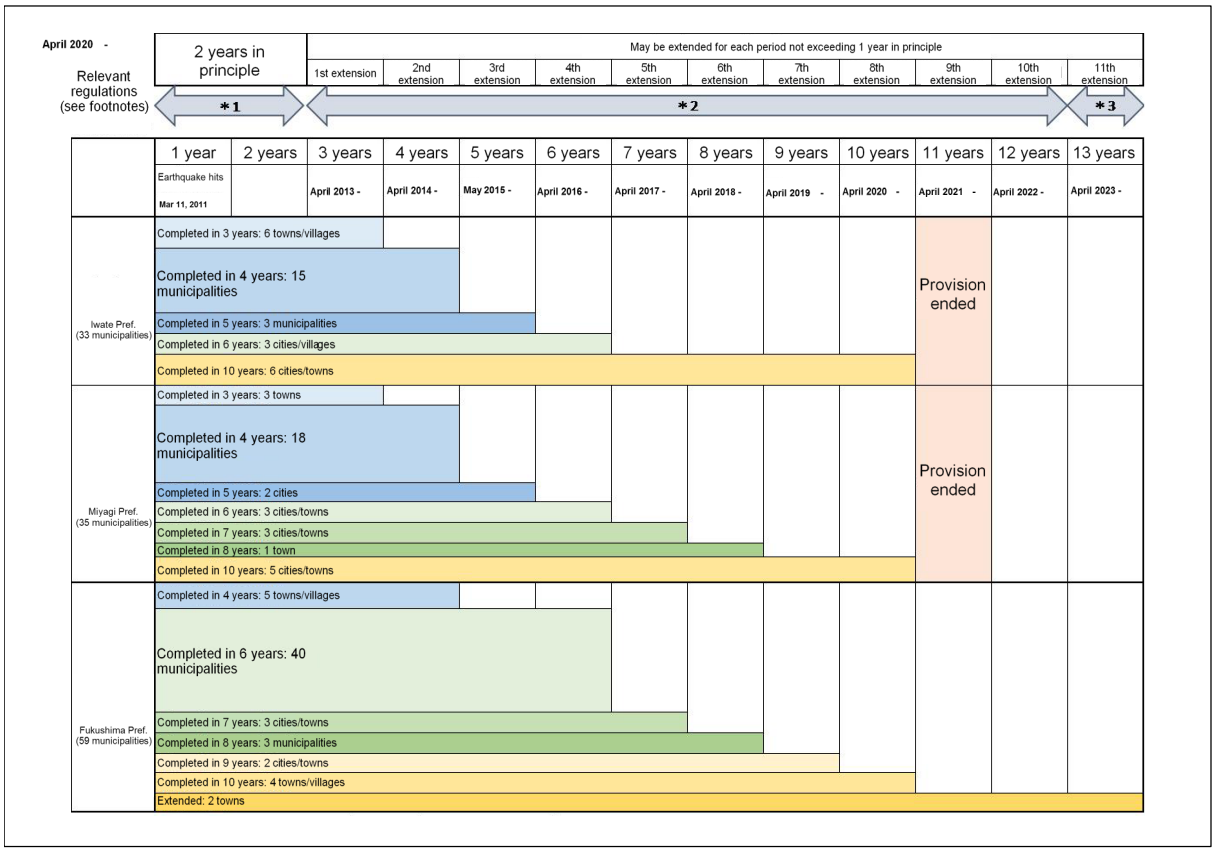
[37] Ministry of Land, Infrastructure, Transport and Tourism Website, "Utilization of Private Rental Housing Following Disasters (Handbook)," etc.

[38] Kishie Shigekawa, Satoshi Tanaka, Hiroko Koumoto, and Shousuke Satoh, "Housing reconstruction of disaster victims in the designated temporary housing system," *Journal of the Housing Research Foundation "Jusoken"*, Vol. 41, pp. 145–156 (2015)
https://www.jstage.jst.go.jp/article/jusokenronbun/41/0/41_1313/_article/-char/ja (browsed July 31, 2023)

[39] Footnotes 30 and 31 and the following documents, as well as hearings with officials from the three disaster-affected prefectures.
Research and Legislative Reference Bureau, National Diet Library, "Current Situation and Problems of Temporary Emergency Housing System," *Issue Brief* No. 966 (June 8, 2017)
https://dl.ndl.go.jp/view/download/digidepo_10358943_po_0966.pdf?contentNo=1&alternativeNo= (browsed July 31, 2023)
Fumitake Meno, "Actual Situation of Lease Termination and Residential Movement by Households Under the Housing Lease Program for Disaster Victims in Iwate Prefecture," *Journal of Architecture and Planning (Transactions of AIJ),* Vol. 83, Issue 746, pp. 717–723 (April 2018)
https://www.jstage.jst.go.jp/article/aija/83/746/83_717/_pdf/-char/ja (browsed July 31, 2023)

temporary housing has been limited to evacuees from Okuma and Futaba Towns in Fukushima Prefecture.

Figure 5-2-16 Extensions of the Provision Period of Emergency Temporary Housing



Source: Compiled by the Reconstruction Agency based on materials from the Cabinet Office (Disaster Management)

*1: Article 3, Paragraph 1 of the Order for Enforcement of the Disaster Relief Act (general standard); "Extent, Method and Period of Relief Under the Disaster Relief Act and Standards for Compensation for Actual Expenses" (Public Notice No. 228 of the Cabinet Office, 2013); Article 85, Paragraphs 3 and 4 of the Building Standards Act

*2: Article 8 of the Act on Special Measures Concerning Preservation of Rights and Interests of Victims of Specified Disaster; Article 3, Paragraph 2 of the Order for Enforcement of the Disaster Relief Act (Special standard: consultation with prefectural governors and approval of the Prime Minister)

*3: Due to a legal amendment, the provision was moved to Article 85, Paragraph 5 of the Building Standards Act.

With the aim of removing emergency temporary housing as soon as possible, local governments of areas affected by the disaster provided multifaceted support in cooperation with social welfare councils and NPOs, as well as experts such as lawyers and judicial scriveners. Support was provided in the form of surveys on the housing reconstruction plans of residents, assistance for residents moving into disaster public housing and private housing, and assistance for the funding and labor necessary for housing reconstruction. In addition, experts advised local government officials providing such assistance in order to improve the quality of support.

In Iwate and Miyagi prefectures, these assistance efforts were implemented proactively in order to remove temporary housing complexes built on school grounds in particular.

2) Consolidation and removal of construction-type emergency housing

As more residents left construction-type emergency housing complexes and vacancies grew, challenges arose in ensuring remaining residents do not become isolated, preventing crime, and maintaining community vitality. In light of these circumstances, there were calls for the consolidation of temporary housing complexes, as well as the dismantling and removal of temporary housing complexes that were no longer necessary after occupants had left. In addition, the number of construction-type emergency housing units required in the aftermath of the Great East Japan Earthquake was vast, and leasing from Japan Prefabricated Construction Suppliers and Manufacturers Association alone was insufficient. Of the roughly 50,000 constructed units, around 40,000 units were purchased and came under the ownership of individual prefectures. These purchased units needed to be reused in order to

minimize waste after the units had fulfilled their functions.

In addition, it was requested that temporary housing that was inevitably constructed on school grounds (school ground temporary housing) be removed as soon as possible in order to resume the original functions of the school facilities, such as holding classes. In FY 2011, there were 35 such schools in seven cities, towns, and villages in Iwate Prefecture, and 32 such schools in seven cities and towns in Miyagi Prefecture. (No school ground temporary housing was built in Fukushima Prefecture.) However, progress was subsequently made in the removal of these housing units, and as of the end of August 2018, this figure had decreased to 11 schools in four cities and towns in Iwate Prefecture, and three schools in two cities and towns in Miyagi Prefecture, enabling over 5,500 elementary, junior high, and high school students to use the school grounds. By September 2019, all temporary housing on school grounds had been removed.

a. Consolidation efforts and challenges

Individual municipalities formulated emergency temporary housing consolidation plans that clearly indicated the order of priority of the land for the removal and consolidation of emergency temporary housing complexes and the timing thereof, and the construction-type emergency housing units were consolidated accordingly. As part of this process, foundation reinforcement work, replacement of decaying floorboards, replacement of defective equipment, and other such tasks were carried out for construction-type emergency housing at the temporary housing complexes where the units would be consolidated, and measures were taken so that the housing could continue to be used. However, asking residents to relocate from housing complexes where they have lived for a certain period of time proved difficult, and in some cases, consolidation did not proceed as expected despite the fact that plans were formulated. Removal was carried out by housing complex rather than individual units, making it difficult to begin removal while households were still residing.

b. Reuse of materials

Materials were sometimes reused in cases where construction-type emergency housing units that were no longer in use were purchased by the prefectural governments after residents had left. The three disaster-affected prefectures provided materials free of charge to local governments and companies that requested them. Notably, in Fukushima Prefecture and elsewhere, materials were repurposed for disaster public housing and to promote settlement by developing facilities that allowed urban residents to experience relocation. In the aftermath of the July 2018 torrential rains that struck western Japan, Soja City in Okayama Prefecture, which was affected by the disaster, made a request to Fukushima Prefecture to provide used materials from wooden construction-type emergency housing structures. The materials were used to build 48 housing units and meeting spaces, a decision that was well-received by residents. However, it has been noted that even if materials can be reused, there will be no cost savings due to the need for transportation and establishment of essential utilities. In some cases, reuse was considered but ultimately rejected.

After demolition and removal, construction sites need to be restored to their original state, a task that is covered by the Disaster Relief Act. However, in some cases, soil improvement and afforestation were required for farmland and forest land, which proved to be time-consuming and expensive, and coordinating with landowners was a challenge.

Taking these lessons into account, in subsequent disasters, prefectures opted for lease agreements that covered demolition and restoration instead of purchasing the housing, thereby reducing the administrative workload.

3) Moving out of rental-type emergency housing

In Miyagi Prefecture, two-year leases were signed and renewed every year when the provision period was extended. However, since the lenders of rental-type emergency housing were generally private companies or individuals, the intentions of the lenders and the tenants needed to be verified when renewing the contract, and if both parties agreed, the contract would be concluded. To address cases in which the lender objects, a system was established to allow the tenant to move into another private rental unit, assuming no prefabricated construction-type emergency housing or public housing units are available.

In addition, the fact that tenants of rental-type emergency housing did not pay their own rent caused a diminished sense of involvement. This led to various problems that are unthinkable under normal circumstances, such as tenants moving out without notice and failing to return their keys [40]. In Fukushima Prefecture, evacuees from places outside the areas under evacuation orders (so-called voluntary evacuees) were also eligible to move into emergency

[40] Fukushima Prefecture, “Fukushima Prefecture Emergency Temporary Housing Records: Emergency Housing Relief for the Great East Japan Earthquake” (March 2020)

temporary housing (including rental-type emergency housing) under the Disaster Relief Act, the provision period for which ended at the end of FY 2016 (as announced in June 2015). However, as a measure to mitigate drastic changes in rent expenses after the end of provision of temporary housing, the prefecture maintained its own support program (rent subsidies for private rental housing and loans for use of national government employee housing as a safety net) until the end of FY 2018.

After this program ended, the prefectural government sometimes took legal action when residents did not move out despite providing various kinds of support for moving. For example, with regard to the residents of national government employee housing units in Shinonome, Koto Ward, Tokyo, efforts were made to learn about individual issues pertaining to living, housing, and health through door-to-door visits and on-site consultation meetings, and attempts were made to resolve these issue through discussions. A civil mediation was initiated to urge households that had neither signed a lease agreement nor paid any rent to enter into a contract. However, the mediation failed, and a lawsuit was filed, demanding that the tenants leave and make payments.

(6) Emergency repair system

1) Overview of the system

The emergency repair system is one of the disaster relief programs defined in Article 4, Item (vi) of the Disaster Relief Act as the "emergency repair of affected houses." This system covers the cost of repairs for households whose houses were partially destroyed or partially burned down due to a disaster, and for whom emergency repair is not possible with their own financial resources. It also covers cases in which households that are deemed to have suffered significant partial destruction*. Provided that they are able to continue living in their home as long as the minimum necessary emergency repairs are carried out on essential fixtures, such as roofs, kitchens, and toilets, these were covered by public funding. In accordance with the principle of payment in kind under the Disaster Relief Act, the municipalities request repair work from contractors, to whom the municipalities directly pay repair costs.

In addition, the system is not permitted to be used concurrently with the emergency temporary housing system, which similarly aims to provide emergency housing.

Concrete standards such as the extent, method, and period of emergency repairs are defined as follows in the general standards stipulated in "Extent, Method and Period of Relief Under the Disaster Relief Act and Standards for Compensation for Actual Expenses" (Public Notice No. 144 of the Ministry of Health and Welfare, 2000)*.

Figure 5-2-17 General standards for emergency repairs (at the time of the Great East Japan Earthquake)

対象者	住宅が半壊若しくは半焼し、自らの資力では応急修理をすることができない世帯	大規模半壊の被害認定を受けた世帯
工事対象箇所	被災した住宅の屋根や台所・トイレなど日常生活に必要不可欠な最小限度の部分の応急的な修理	
上限金額	52 万円	
期間	災害発生から 1 か月以内	

* In October 2013, the ministries and agencies with jurisdiction over the Disaster Relief Act were transferred to the Cabinet Office (Disaster Management), and the current name of the notice is "Extent, Method and Period of Relief Under the Disaster Relief Act and Standards for Compensation for Actual Expenses" (Public Notice No. 228 of the Cabinet Office, 2013). The system has then been amended. In October 2019, the scope of the system was expanded to include homes that have suffered "minor partial destruction," and in June 2021, the repair period was extended to a maximum of three months (maximum of six months in the case of a disaster for which a national disaster response headquarters has been established).

2) Results from the Great East Japan Earthquake

Figure 5-2-18 Application Results (as of December 19, 2018)

岩手県	宮城県	福島県	合計
2,742 戸	60,648 戸	26,135 戸	89,525 戸

Source: Cabinet Office

According to the general standards, emergency repair work should in principle be completed within one month from the occurrence of the disaster. However, in the aftermath of the Great East Japan Earthquake, repairs could not be completed by this deadline due to the large number of houses affected by the disaster and the shortage of contractors, and therefore, the period was extended to a maximum of 48 months[41].

[41] One expert (Masao Tsunoda, "Roles and problems of the Miyagi Prefectural government regarding the emergency temporary housing in the Great East Japan Earthquake," *Urban Housing Sciences,* Issue 98, 2017) believes that the slow progress was due to a shortage of workers, which may have been caused by a lack of awareness of the system and a reluctance to take on small-scale, labor-intensive repair work. Furthermore, a report from the time (Jiji.com, "(Diagrams/Society) Emergency Repairs of Homes Damaged by the Great East Japan Earthquake," September 8, 2011) indicates that there was a shortage of carpenters and other repair workers, and that by the time six months had passed, only 51% of the repairs were completed in Iwate Prefecture, 34% in Miyagi Prefecture, and 14% in Fukushima Prefecture, among households that had used the emergency repair system. According to the report, approximately 30,000 homes were either still under repair or waiting for repair work to begin.

Figure 5-2-19 Examples of the Extension of the Relief Period Under the Emergency Repair System (Research by the Ministry of Internal Affairs and Communications)

図表 5-④ 応急修理制度の救助期間（完了期限）の延長状況の例

災害名	発生時期（災害救助法適用時点）	一般基準による完了期限	市町村名	特別基準による延長状況	
				完了期限	救助期間
東日本大震災	平成23年3月11日	23年4月10日	大船渡市	24年3月	約12か月
			釜石市	25年3月	約24か月
			名取市	24年9月	約18か月
			多賀城市	25年5月	約26か月
平成27年9月関東・東北豪雨	27年9月9日	27年10月8日	常総市	28年3月	約7か月
熊本地震	28年4月14日	28年5月13日	熊本市	31年3月	約35か月
			益城町	令和元年9月	約41か月
平成28年台風第10号	28年8月30日	28年9月29日	岩泉町	29年5月	約8か月
平成29年7月九州北部豪雨	29年7月5日	29年8月4日	朝倉市	30年3月	約8か月
平成30年7月豪雨	30年7月5日	30年8月4日	岡山市	継続中（令和元年6月受付終了）	

（注）当省の調査結果による。

Source: Ministry of Internal Affairs and Communications, “Administrative Evaluation and Monitoring Related to Securing Housing in Times of Disaster: Supporting Disaster Victims in Rebuilding Their Lives—Results Report,” (March 31, 2020)[42]

According to the responses from the municipalities in the aforementioned survey by the Ministry of Internal Affairs and Communications, the reasons why the implementation of emergency repairs took such a long time were as follows: i) the damage was so severe that it took time to carry out damage assessment surveys to issue disaster victim certificates; ii) in the event of a large-scale disaster, it is physically difficult to carry out repairs in a short period of time due to the shortage of repair contractors; iii) in the case of condominiums, it takes time to build a consensus among residents; and iv) in the event of flooding, it takes time to remove soil and sand and to dry the residence. (However, it should be noted that the responses on which these reasons were based include those related to disasters other than the Great East Japan Earthquake.)

The same survey also found that at the time, the disaster-affected municipalities were required to deal with a vast number of emergency repair cases with a limited number of personnel. The process included responding to inquiries from victims about the use of the emergency repair system, accepting applications, reviewing estimates prepared by repair contractors, and concluding contracts with the contractors for the repair of the houses in question in accordance with the principle of in-kind provision. After the repair was completed, a completion inspection needed to be conducted based on the completion report submitted by the repair contractor, and finally, the repair fees needed to be paid to the contractor.

In addition, it was clarified through notices that, in certain cases, shared areas of condominium buildings with sectional ownership would also be eligible for national government funding of up to 520,000 yen per household[43]. It was also notified that the scope of emergency repairs for housing includes essential components necessary for daily life, such as basic parts like roofs, entryways like doors, piping and wiring for water and sewage systems, and sanitary facilities like toilets, where immediate emergency repairs are appropriate[44].

[42] June 30, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims’ Relief Bureau, the Ministry of Health, Labour and Welfare, “Emergency Repairs of Housing Under the Disaster Relief Act”

[43] July 4, 2011 Notice from the Director of the General Affairs Division, Social Welfare and War Victims’ Relief Bureau, the Ministry of Health, Labour and Welfare, “Emergency Repairs of Housing Under the Disaster Relief Act”

[44] Ministry of Health, Labour and Welfare, “Status of Damage and Responses to the Great East Japan Earthquake of 2011 (Report No. 116) (as of 14:00 on February 24, 2012)” https://www.mhlw.go.jp/jishin/joukyoutaiou.html (browsed July 31, 2023)

2. Disaster public housing

(1) Overview

According to Article 1 of the Act on Public Housing (hereinafter referred to as "the Act" in this paragraph), the purpose of the public housing system is to develop housing that is sufficient for a healthy and fulfilling life through coordination with the national and local governments, and to lease or sublease this housing at low rents to low-income individuals who are in need of housing, thereby contributing to stability in the lives of people and the promotion of social welfare. Furthermore, according to Article 2, item (ii) of the Act, public housing refers to housing and associated facilities constructed, purchased, or leased by local governments for the purpose of leasing or subleasing to low-income individuals, with national government subsidies provided under the provisions of the Act.

Disaster public housing refers to public housing urgently developed and supplied by local governments in the event of a disaster of a certain scale, and is intended to be leased to disaster victims who have lost their homes.

Various subsidies and requirements were eased for disaster public housing in the aftermath of the Great East Japan Earthquake.

The government subsidy is normally set at half of the cost of construction for public housing (Article 7 of the Act), but for the construction of public housing rented to low-income individuals who lived in homes that were destroyed by a disaster that meets certain criteria (referred to as disaster public housing), the subsidy rate is raised to two-thirds of the cost (Article 8 of the Act).

The term "destroyed" here refers to homes that have been completely destroyed, completely swept away by water, or completely burned down. It is specifically defined as cases in which the floor area of the parts of the housing unit that were damaged, burned, or washed away constitutes 70% or more of the total floor area of the housing unit, as well as cases in which the damage to major components of the housing unit accounts for 50% or more of the total value of the house (Clause 3, Item 18 of the Subsidy Guidelines for Public Housing Development Projects). For the Great East Japan Earthquake, cases in which "significant partial destruction/partial destruction 1" resulted in inevitable demolition due to being uninhabitable through ordinary repairs. Furthermore, under the Act on Special Financial Support to Deal with the Designated Disaster of Extreme Severity, when public housing is constructed in light of a disaster designated as extremely severe, the subsidy rate is set at 75% pursuant to the Act.

In addition, for disaster public housing for the Great East Japan Earthquake, the government's share of expenses was raised to 87.5% through additional government subsidies provided by the Great East Japan Earthquake Reconstruction Grant. Land acquisition and development costs, which are not normally subsidized, were also deemed eligible for subsidies. However, as disaster public housing generates rental income, no special local allocation tax is granted to cover local government expenses.

In addition, for general public housing, tenants are in principle required to satisfy ① the income criteria, and ② the housing need criteria. However, for the period required for construction of disaster public housing (up to 10 years) specified in the Reconstruction Promotion Plan, which is based on the Act on Special Zones for Reconstruction in Response to the Great East Japan Earthquake, tenants can move into public housing if they satisfy ② the housing need criteria (Article 19 of the Act on Special Zones for Reconstruction in Response to the Great East Japan Earthquake).[45]

[45] National Institute for Land and Infrastructure Management, "Study on Plan for Facilitating Provision of Publicly-Operated Housing after the Great East Japan Earthquake: Cases Examples of Basic Plan for Publicly-Operated Housing" (April 2015)
https://www.kenken.go.jp/japanese/contents/publications/data/165/10.pdf (browsed July 31, 2023)

Figure 5-2-20 Overview of the Disaster Public Housing System and Budget Measures

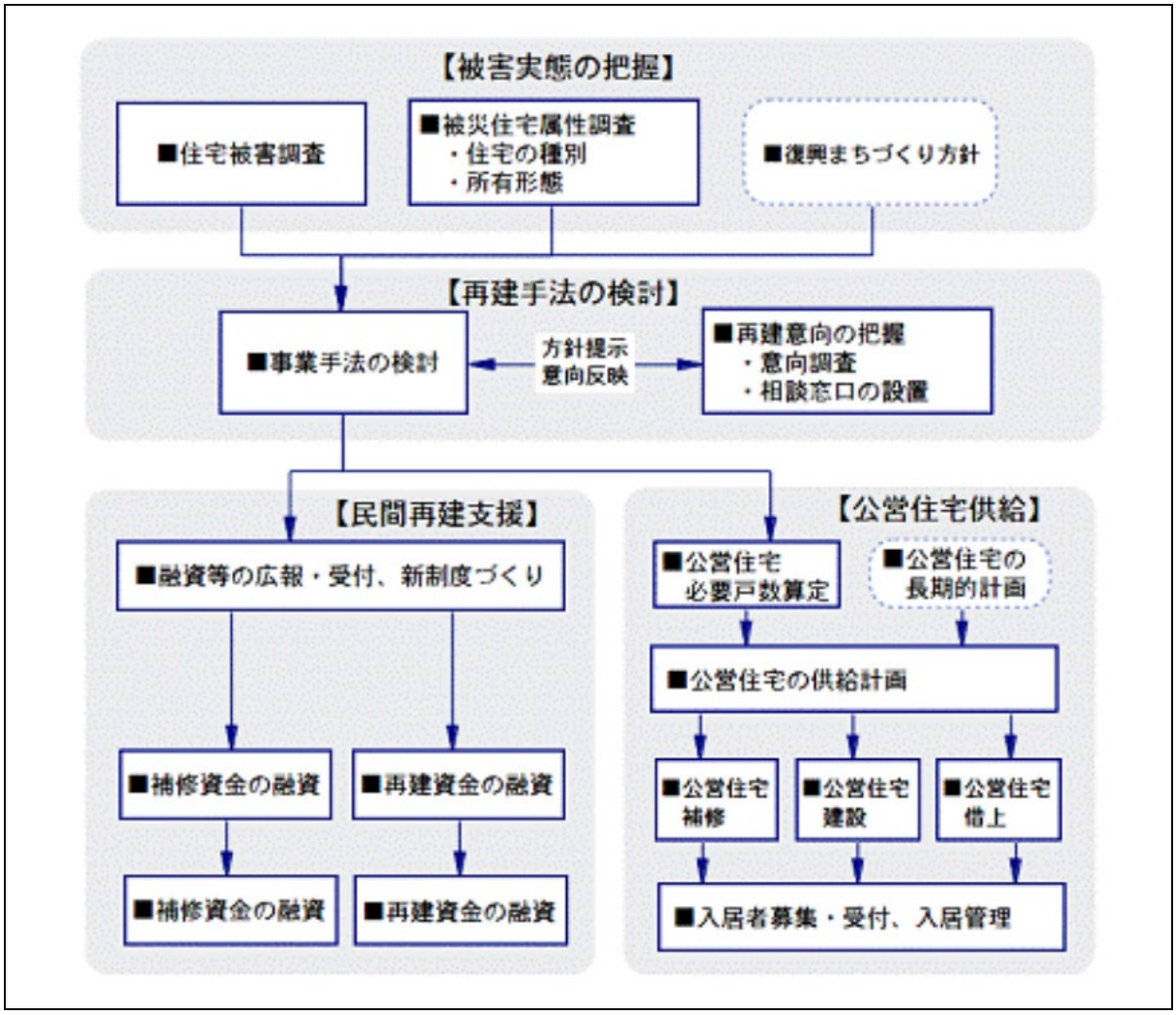
			一般の公営住宅	災害公営住宅（※法律により「災害公営住宅」の名称が規定されているわけではないことに注意）			
				一般災害	激甚災害	阪神・淡路大震災	東日本大震災、福島特措法
根拠となる法律			公営住宅法	公営住宅法	激甚災害に対処するための特別の財政援助等に関する法律（激甚法）		東日本大震災復興特別区域法 福島復興再生特別措置法
予算措置			社会資本整備総合交付金等				東日本大震災復興交付金等 ※ 福島再生加速化交付金 （帰還・移住等環境整備） （長期避難者生活拠点形成）
補助率	整備	建設・買取	国 ：原則50% 地方：原則50%	国 ：2/3 地方：1/3	国 ：3/4 地方：1/4	国 ：3/4 地方：1/4	国 ：7/8 地方：1/8
		借上 （共同施設整備費のみ対象）	国 ：2/3×1/2 地方：2/3×1/2 民間：1/3	国 ：2/5 地方：2/5 民間：1/5	国 ：2/5 地方：2/5 民間：1/5	国 ：2/5 地方：2/5 民間：1/5	国 ：7/10 地方：1/10 民間：1/5
		用地取得造成					国 ：7/8 地方：1/8
	家賃低廉化	用地取得ありの場合	20年間 原則50%	20年間 2/3	当初5年間 3/4 6～20年目 2/3	当初5年間 3/4 6～20年目 2/3	当初5年間 7/8 6～10年目 5/6 11～20年目 2/3 等
		用地取得なしの場合	10年間 原則50%	10年間 2/3	当初5年間 3/4 6～10年目 2/3	当初5年間 3/4 6～10年目 2/3	当初5年間 7/8 6～10年目 5/6
	特別家賃低減					1/2	3/4
地方財政措置（建設・買取）			地方債 （充当率100%）	地方債 （充当率100%）	地方債 （充当率100%）	地方債 （充当率100%）	地方債 （充当率100%）

※ 令和3年度以降は、災害公営住宅家賃低廉化事業・東日本大震災特別家賃低減事業（いずれも復興特会計上）

Source: Ministry of Land, Infrastructure, Transport and Tourism, “Overview of the Disaster Public Housing System and Budget Measures”

The basic procedure for supplying disaster public housing is as follows.

Figure 5-2-21 Basic Procedure for Supplying Disaster Public Housing



Source: National Institute for Land and Infrastructure Management, Ministry of Land, Infrastructure, Transport and Tourism, "Study on Plan for Facilitating Provision of Publicly-Operated Housing after the Great East Japan Earthquake: Cases Examples of Basic Plan for Publicly-Operated Housing" (April 2015)
https://www.kenken.go.jp/japanese/contents/publications/data/165/10.pdf (browsed July 31, 2023)

When developing disaster public housing, the necessary number of units is first calculated. The number of disaster public housing units to be constructed is set at 50% of the number of units destroyed in the case of a disaster of extreme severity (30% in the case of general disasters). As such, it is necessary to calculate the number of units destroyed.

However, despite the relaxation of housing eligibility requirements for victims of the Great East Japan Earthquake, not all those whose homes were destroyed would move into disaster public housing. Therefore, in order to provide a sufficient number of disaster public housing units, it became crucial to conduct surveys on the intentions of disaster victims regarding housing. After the total number of units to be supplied is roughly determined, a supply plan (development plan) is established for each municipality. Taking into account the household conditions and intentions of prospective tenants, the supply plan generally indicates the number of units to be supplied by region and type, the timing of supply (construction and occupancy), and the suppliers. In cases involving construction, the process subsequently moved through individual stages of basic planning, basic design, detailed design, and construction, which were carried out for the specific site.

Figure 5-2-22 Plan Formulation Process, Key Considerations at Each Stage, and Required Information

	概要	主な検討事項	必要な情報・条件
①基本計画	事業・施策の方向性や敷地に関する条件を整理しながら、基本方針（考え方）や配置計画等を策定	○地域特性の整理 ○周辺条件等の整理 ○土地条件の把握 ○基本方針の検討 ○配置計画の検討 ○住棟・住戸の標準プランの検討 ○施設・サービス導入の考え方の整理 ○概算事業費の把握	・建物形式 ・住宅規模別供給量の目安 ・概ねの敷地境界 ・都市計画関連情報 ・開発等に関する基準 ・建築基準関連法令 ・条例等
②基本設計	基本計画でまとめた方針等を基に、実施設計を行うための基本的な条件を定めるための設計	○住宅供給計画 ○配置設計の検討 ○供給処理計画、基盤整備計画 ○建築・構造・設備の基本設計 ○住戸の詳細設計の検討 ○施設の詳細計画の検討 ○概算事業費の算定 ○関連部局との協議	・供給計画等（型別供給の確定に必要な情報） ・測量データ ・敷地に関する詳細情報（地質、埋設管の状況等） ・事業予算の目安等
③実施	見積を作成し、工事の実施に必要な詳細事項を定めるための設計	○建築、構造、設備（電気・給排水）屋外土木・造園等の実施設計図書の作成 ○仕様書の作成 ○工事費の積算	・事業予算等
④設計		○事業の申請図書の作成	

Source: Fukushima Prefecture, “System and Technical Manual for the Provision of Post-Disaster Public Housing After the Great East Japan Earthquake” (August 2012)

Ultimately, around 30,000 disaster public housing units were constructed for disaster victims. With the exception of housing units under adjustment for evacuees from the nuclear power plant and housing units for returnees, construction was completed by the end of 2020.

Figure 5-2-23 Progress in the Development of Disaster Public Housing

(Completion dates and cumulative totals) (Unit: Housing units)

		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	(Under coordination)	Planned
Iwate Pref. (rate of progress)		5, 284 (91%)	5, 672 (97%)	5, 734 (98%)	5, 833 (100%)	Construction in Iwate Pref. completed by the end of FY 2020			—	5, 833
Miyagi Pref. (rate of progress)		15, 415 (97%)	15, 823 (100%)	Construction in Miyagi Pref. completed by the end of FY 2018					—	15, 823
Fukushima Pref.	Tsunami and earthquake (rate of progress)	2, 807 (100%)	Construction for tsunami and earthquake victims in Fukushima Pref. completed by the end of FY 2017						—	2, 807
	Nuclear evacuees (rate of progress)	4, 707 (99%)	4, 767 (100%)	Construction for nuclear evacuees in Fukushima Pref. completed by the end of FY 2018 except those under coordination					(123)	4, 890 〈4, 767〉
	Returnees	283	293	397	423	423	431	453	—	453
Totals of the 3 prefectures		28, 496 [28, 213 (97%)]	29, 362 [29, 069 (99. 4%)]	29, 528 [29, 131 (99. 7%)]	29, 653 [29, 230 (100%)]	29, 653 [29, 230 (100%)]	29, 661 [29, 230 (100%)]	29, 683 [29, 230 (100%)]	(123)	29, 806 [29, 230]

Note:
- Figures for each year are fiscal year-end figures.
- In Fukushima Prefecture, “tsunami and earthquake” refers to disaster public housing for tsunami and earthquake victims, “nuclear evacuees” refers to disaster public housing for nuclear evacuees, and “returnees” refers to disaster public housing for returnees from nuclear evacuation.
- “Under coordination” refers to the planned number of units for which the resident intentions are currently being verified. The rate of progress at the end of each fiscal year excludes units that are “under coordination.”
- The rate of progress for disaster public housing for returnees in Fukushima Prefecture is not shown because the planned number of units has not been determined.
- The figure in angle brackets in the “planned” column indicates the total number of units excluding those under coordination. The figures in square brackets for the totals of the three prefectures indicate the total number of units excluding those under coordination and those for returnees, as well as the total progress rate.

Source: Reconstruction Agency, “Residential Reconstruction Roadmap (as of March 31, 2021)” (published June 22, 2021)

(2) Challenges and Initiatives in the Early Stages of Reconstruction

Even in the latter half of 2011, about half a year after the earthquake, many victims were forced to live as evacuees. In order to rebuild their livelihoods, there was an urgent need for a smooth transition from temporary shelters such as emergency temporary housing to permanent housing. What distinguished the reconstruction process following the Great East Japan Earthquake was the large number of reconstruction plans that involved relocation to higher ground as a measure against the risk of tsunami damage. In the early stages of reconstruction, the national and local governments implemented a wide range of measures, including various system revisions, expansions of budgetary measures, and personnel support.

Of the efforts made in the early stages of reconstruction, the following were particularly important[46].

- Repeated and thorough surveys on housing intentions
  - Since the intentions of disaster victims change as time passes, the number of units required and their specifications must be determined appropriately through repeated and thorough surveys of the intentions of residents before constructing disaster public housing.
- Coordination between various organizations and division of responsibilities in development
  - In cases requiring large-scale development, various needs are met by allocating roles among municipalities, prefectures, the national government, UR, major companies, and local private businesses. In this process, development methods are studied based on the characteristics of the location, including consolidated projects in urban areas and individual, smaller-scale projects in regional communities.

In implementing these efforts, many disaster-affected municipalities faced challenges such as creating new urban development plans and securing land (a process requiring a certain amount of time for residential land development), as well as a lack of technical staff, or in some cases, a lack of experience in developing public housing. In light of these issues, the national government (the Housing Bureau of the Ministry of Land, Infrastructure, Transport, and Tourism) directly conducted surveys and evaluated basic concepts and standard designs for housing development, as well as examining approaches to disaster public housing construction through public-private partnership.

a. Examining the formulation of basic concepts and standard designs for housing development

In the formulation process, the national government conducted studies on promoting the supply of disaster public housing in FY 2011 with the aim of ensuring that the basic concepts and standard designs for housing development provide widespread benefits for local governments in disaster-affected areas. Furthermore, from FY 2012 to FY 2014, many disaster victims continued to be forced to live in inconvenient temporary shelters in emergency temporary housing complexes and other such arrangements. As such, there was a need to quickly supply large numbers of disaster public housing units in the affected areas. In light of this, the government continued to conduct research to facilitate the provision of disaster public housing.

With regard to the provision of disaster public housing, which is essential for the reconstruction of the homes and livelihoods of the victims of large-scale disasters, it is thought that housing experts responsible for planning prevention, recovery, and reconstruction efforts for future large-scale disasters will find it useful to refer to documentation of the timing and details of the surveys carried out directly by the national government following the unprecedentedly large-scale Great East Japan Earthquake. In these materials, examples of the basic plans prepared by numerous municipalities under various circumstances in the relatively early stages after the earthquake (2011 to 2013) are documented in a prescribed format, and the stages and circumstances under which the plans were studied are summarized. In addition, the materials summarized the points that were clarified during the process of documenting the plan overviews and development histories, as well as conditions, challenges, and points of consideration for early planning and supply.

Because of the unprecedented large-scale tsunami damage caused by the Great East Japan Earthquake, many municipalities needed time to decide on policies for urban development, including those related to the development of public transportation infrastructure such as seawalls, railways, and roads, as well as policies on site reconstruction and relocation to higher ground. In some cases, the surveys conducted directly by the national government examined basic plans on hypothetical plots of land (including sites for which landowner consent had not been obtained) to present residents with a vision for housing reconstruction.

[46] Reconstruction Agency, “Great East Japan Earthquake: Lessons Learned & Know-How Gained” (March 2021) https://www.reconstruction.go.jp/311kyoukun/index.html#gsc.tab=0 (browsed July 31, 2023)

Figure 5-2-24 shows the content of the surveys conducted directly by the national government from FY 2011 to FY 2023 by municipality and year.

In addition to topics such as supply plans covered in the table, studies were carried out regarding the elderly and community formation, as well as topics requested by individual municipalities. However, this table is a compilation of data on the three areas essential for the provision of disaster public housing (supply plans, intention surveys, and basic plans). Public housing refers to housing and associated facilities constructed, purchased, or leased by local governments for the purpose of leasing or subleasing to low-income individuals. The supply plans, intention surveys, and basic plans necessary for construction and other purposes are generally carried out by the local governments themselves, and in some cases, the municipalities carry out these efforts themselves without receiving support from surveys directly conducted by the national government. The surveys directly conducted by the national government in FY 2011 were divided into regional studies (Iwate, Miyagi, and Fukushima, each subdivided into southern/northern parts) and studies by theme (disaster prevention, the environment, and the elderly). The regional studies were conducted in 32 municipalities.

In FY 2011, there were a large number of basic planning projects prioritized under the implementation policy for surveys conducted directly by the national government. However, given the uncertainty around securing specific sites in the immediate aftermath of the earthquake, some municipalities carried out these efforts in the form of case studies like those described above (examining plans based on hypothetical sites and building conditions) and volume studies (with the primary goal of estimating the number of housing units). Furthermore, supply plans are a prerequisite for the basic plans, but municipalities in Iwate Prefecture had implemented these in parallel with the basic plans. In FY 2012, emphasis was placed on formulating supply plans for entire municipalities and basic plans for individual districts, as well as on solving issues that caused bottlenecks in the supply process.

In FY 2013, the formulation of supply plans and basic plans continued, and in addition, emphasis was placed on support for the elderly and community building, as well as studies on accelerating the supply schedule for integrated area development districts.

In response to requests from municipalities, advice was provided regarding the preparation of basic plans for more than 150 districts (with some districts being counted more than once due to studies spanning multiple fiscal years). This indicates that the number of new public housing construction projects had been decreasing, and that support from experts with the know-how to construct public housing was sought in municipalities that did not always have sufficient knowledge and experience in the supply and management of public housing[47].

[47] National Institute for Land and Infrastructure Management, Ministry of Land, Infrastructure, Transport and Tourism, "Study on Plan for Facilitating Provision of Publicly-Operated Housing after the Great East Japan Earthquake: Cases Examples of Basic Plan for Publicly-Operated Housing" (April 2015) https://www.kenken.go.jp/japanese/contents/publications/data/165/10.pdf (browsed July 31, 2023)

Figure 5-2-24 Overview of Municipalities and Content of Direct Surveys by the National Government (Excluding Surveys for Evacuees from the Nuclear Power Plant Area)

県	市町村	市町村概要							H23年度			H24年度			H25年度		
		人口（人）※1	世帯数（世帯）※1	高齢化率（%）※2	H22年度普通会計決算（百万円）	公営住宅管理戸数（戸）※3	死者・行方不明者※4	全壊・半壊住家数（棟）※5	供給計画	意向調査	基本計画	供給計画	意向調査	基本計画	供給計画	意向調査	基本計画
岩手県	宮古市	59,229	24,332	31.1	29,513	1,025	514	4,098	○		3			1			
	大船渡市	40,579	14,729	23.6	18,127	460	419	3,937	○	○	0			5			3
	一関市	118,115	42,262	29.9	60,437	1,173	0	794					○			○	1
	陸前高田市	23,221	8,196	27.6	11,639	329	1,763	4,041	○		1			1		○	
	釜石市	39,399	17,561	34.8	16,978	332	1,040	3,655	○		3		○				1
	大槌町	15,222	6,348	32.5	5,792	257	1,232	3,717	○		4			6			6
	山田町	18,506	7,182	31.7	7,118	244	752	3,167	○		5（ケーススタディ）			5		○	4
	岩泉町	10,708	4,710	38.2	10,134	142	7	200	○		2			0			
	田野畑村	3,838	1,452	33.7	4,047	20	29	270	○		2（ケーススタディ）			0			
	野田村	4,606	1,647	30.2	3,548	35	38	479	○		1（ケーススタディ）			0			1
	計								9	1	21	0	2	18	0	3	16
宮城県	仙台市	1,046,737	455,958	18.6	399,388	9,158	685	139,643			1						
	石巻市	160,394	60,928	27.3	66,667	1,333	3,707	33,081			2（ケーススタディ）						
	塩釜市	56,221	22,165	27.5	21,592	535	25	3,950			4			2			
	気仙沼市	73,154	26,601	30.8	28,089	462	685	11,054	○	○	1（ケーススタディ）						4（買取型）、木造戸建て標準仕様改善
	名取市	73,603	26,433	19.1	23,329	477	950	3,930			2			1			8
	多賀城市	62,990	24,733	18.4	19,428	317	188	5,476			1（ケーススタディ）			1			
	岩沼市	44,160	16,003	19.8	15,114	354	181	2,342	○		1	○					
	登米市	83,691	26,438	28.3	42,235	866	4	2,002			2（ケーススタディ）						
	東松島市	42,840	15,080	23.2	15,329	557	1,087	11,074			2			2			
	大崎市	134,950	47,379	24.4	55,113	1,710	2	3,030			1（ケーススタディ）						
	亘理町	34,795	11,442	23.4	9,843	225	270	3,539			2（1はホリュームスタディ）	○		3			
	山元町	16,608	5,561	31.6	5,486	199	698	3,302	○		3	○		1			
	松島町	15,014	5,492	30.9	5,660	157	2	2,006			1（ケーススタディ）			3			
	七ヶ浜町	20,353	6,568	21.6	5,468	20	77	1,323			5	○					
	女川町	9,932	3,852	33.5	5,873	239	851	3,273			2						
	南三陸町	17,378	5,362	30.1	8,177	400	816	3,321	○		3（ケーススタディ）			3			
	計								4	1	33	4	0	16	0	0	12
福島県	福島市	291,992	113,111	23.8	100,854	3,746	6	4,184			2（ケーススタディ）						
	郡山市	338,882	132,118	20.3	105,583	3,883	7	24,164			2						
	いわき市	341,463	128,960	25.1	122,327	6,848	330	40,454			3			4			
	白河市	64,602	22,738	22.7	27,179	1,135	12	2,058						1			
	須賀川市	79,109	25,824	21.8	28,885	879	10	4,752				○	○	5（ホリュームスタディ）			
	相馬市	37,721	13,251	25.4	14,921	585	458	1,837			2						
	南相馬市	70,752	23,650	26.5	27,744	1,130	636	8,994			4			2			
	桑折町	12,784	4,067	30.5	4,618	109	0	242						1			
	川俣町	15,505	5,189	31.6	7,138	184	0	58						1			1
	鏡石町	12,811	4,082	21.2	4,579	79	0	940				○	○	3（ホリュームスタディ）			
	矢吹町	18,365	5,948	24.1	7,081	297	0	1,881				○	○		○	○	4
	広野町	5,386	1,806	24.0	3,531	125	3	753			2						
	楢葉町	7,676	2,564	26.1	5,257	245	13	1,082									4
	新地町	8,178	2,461	27.0	4,471	157	110	577			1						
	飯舘村	6,132	1,716	29.9	4,719	115	1	577						1（福島市）			
	計								0	0	16	3	3	18	1	1	9
合計									13	2	70	7	5	52	1	4	37

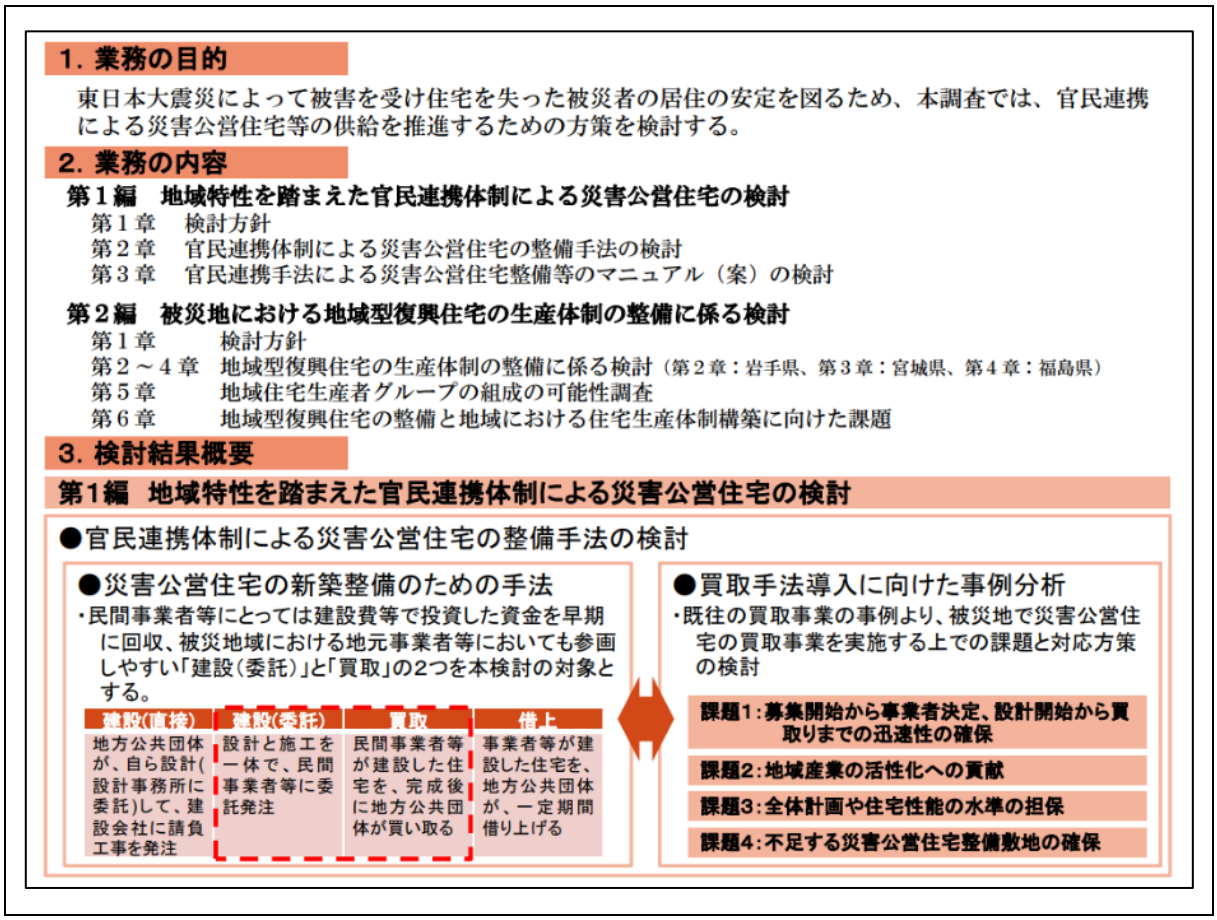
※1 県の推計人口（H23.3.1現在）
※2 岩手県、宮城県：H22年国勢調査（H22.10.1現在）、福島県：県の推計人口（H23.3.1現在）
※3 平成21年度末現在の管理戸数
※4 死者は直接死のみ、行方不明者には死亡届が出されている者を含む。岩手県：H26.9.30現在、宮城県：H26.8.31現在、福島県：H26.10.9現在。
※5 総務省消防庁資料（H27.3.1現在）

Source: National Institute for Land and Infrastructure Management, Ministry of Land, Infrastructure, Transport and Tourism, "Study on Plan for Facilitating Provision of Publicly-Operated Housing after the Great East Japan Earthquake: Cases Examples of Basic Plan for Publicly-Operated Housing" (April 2015)
https://www.kenken.go.jp/japanese/contents/publications/data/165/10.pdf (browsed July 31, 2023)

b. Studying the development of disaster public housing through public-private partnerships with consideration for regional characteristics

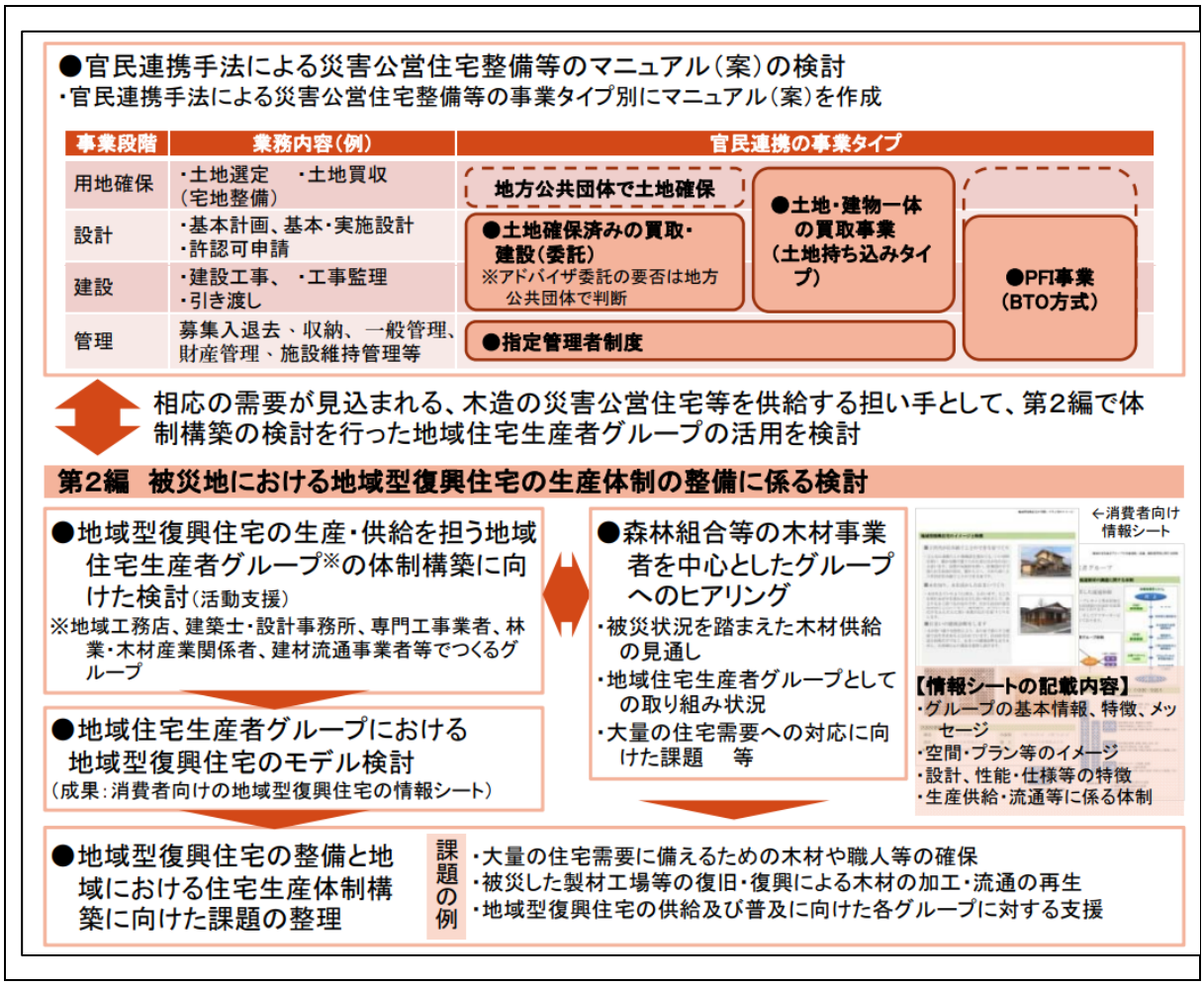
In FY 2011, the national government explored models for disaster public housing with features tailored to the regional climate and designs that complement the landscape, aiming to create homes that inspire a sense of attachment and pride in residents. In addition, models were developed based on project schemes that incorporated the use of local materials and partnerships with local industries, aiming to spread such approaches to other disaster-affected areas.

Figure 5-2-25 Activities to Study the Development of Disaster Public Housing Through Public-Private Partnerships with Consideration for Regional Characteristics (Overview)



Source: Ministry of Land, Infrastructure, Transport and Tourism, "Activities to Study the Development of Disaster Public Housing Through Public-Private Partnerships with Consideration for Regional Characteristics (Overview)" (March 2012) https://www.mlit.go.jp/common/000208897.pdf (browsed July 31, 2023)

Figure 5-2-25 Activities to Study the Development of Disaster Public Housing Through Public-Private Partnerships with Consideration for Regional Characteristics (Continued)



Source: Ministry of Land, Infrastructure, Transport and Tourism, "Activities to Study the Development of Disaster Public Housing Through Public-Private Partnerships with Consideration for Regional Characteristics (Overview)" (March 2012) https://www.mlit.go.jp/common/000208897.pdf (browsed July 31, 2023)

c. Studying Development Methods for Community-Oriented Disaster Public Housing Through Public-Private Partnerships

Based on specific examples, systems and methods were studied for private businesses and local governments to collaborate in developing disaster public housing and providing livelihood support services that contribute to the formation of strong local communities in disaster-affected areas. In addition, models were developed based on project schemes that were easy for local governments to adopt, aiming to spread such approaches to other disaster-affected areas.

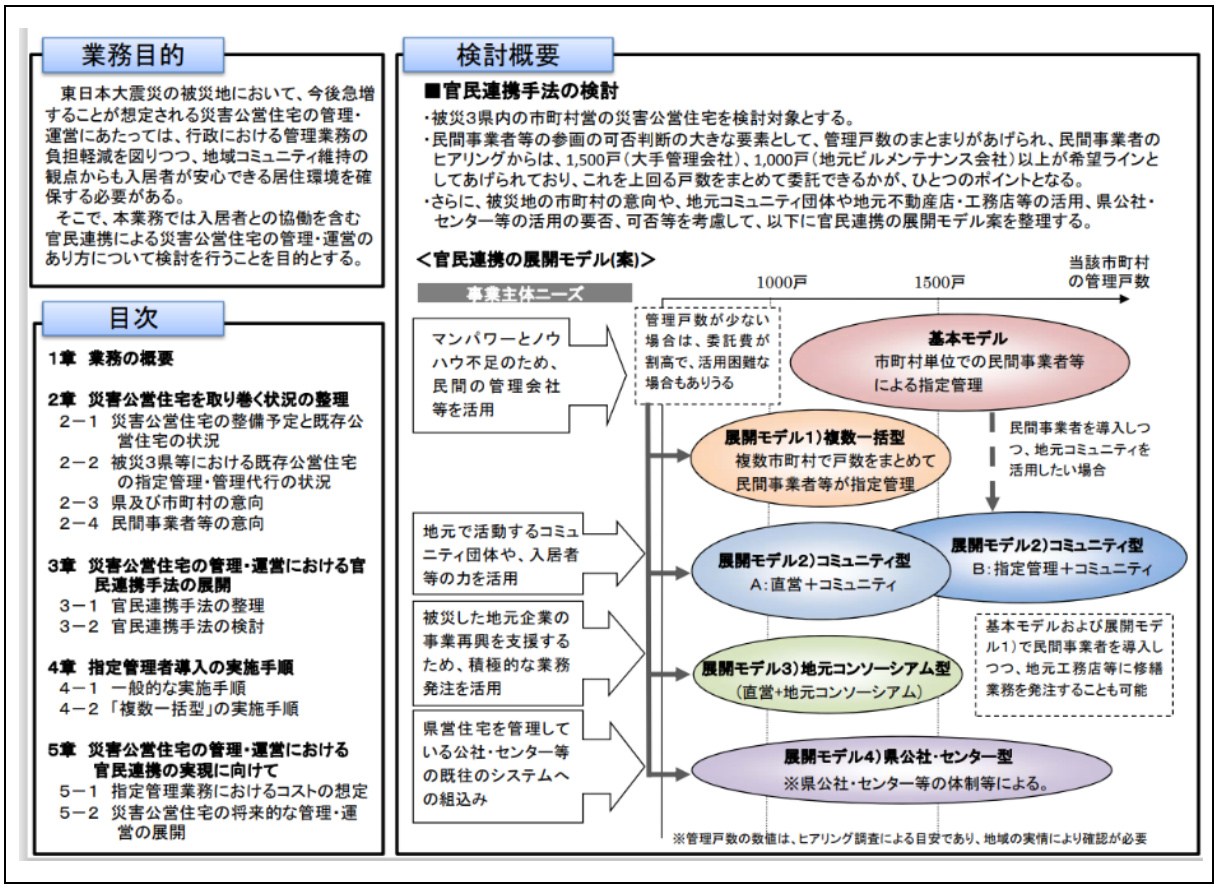
Figure 5-2-26 Activities to Study Development Methods for Community-Oriented Disaster Public Housing Through Public-Private Partnerships (Overview)

Source: Ministry of Land, Infrastructure, Transport and Tourism, "Activities to Study Development Methods for Community-Oriented Disaster Public Housing Through Public-Private Partnerships (Overview)" (March 2012)
https://www.mlit.go.jp/common/000208898.pdf (browsed July 31, 2023)

d. Exploring the Ideal Public-Private Partnership Approach for the Management and Operation of Disaster Public Housing in Earthquake Reconstruction

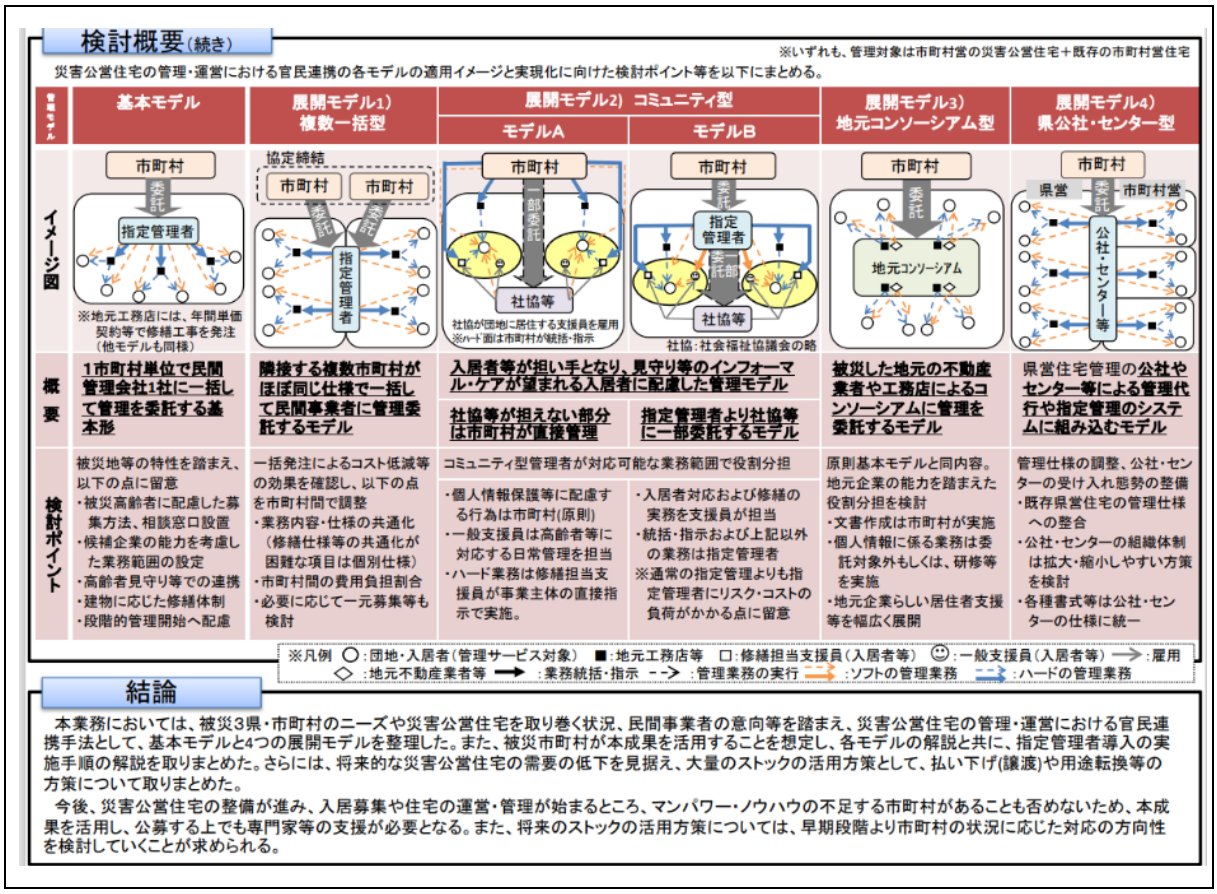
In the management and operation of disaster public housing in areas affected by the Great East Japan Earthquake, where a sharp increase in such housing was anticipated, it was essential to reduce the administrative burden of management tasks while also ensuring a living environment that allows residents to live with peace of mind in order to maintain the local community. As such, studies were conducted to explore the ideal approach to managing and operating disaster public housing through public-private partnerships, including collaboration with residents.

Figure 5-2-27 Activities to Explore the Ideal Public-Private Partnership Approach for the Management and Operation of Disaster Public Housing in Earthquake Reconstruction



Source: Ministry of Land, Infrastructure, Transport and Tourism, "Activities to Explore the Ideal Public-Private Partnership Approach for the Management and Operation of Disaster Public Housing in Earthquake Reconstruction"
https://www.mlit.go.jp/common/000995601.pdf (browsed July 31, 2023)

Figure 5-2-27 Activities to Explore the Ideal Public-Private Partnership Approach for the Management and Operation of Disaster Public Housing in Earthquake Reconstruction (Continued)



Source: Ministry of Land, Infrastructure, Transport and Tourism, "Activities to Explore the Ideal Public-Private Partnership Approach for the Management and Operation of Disaster Public Housing in Earthquake Reconstruction"
https://www.mlit.go.jp/common/000995601.pdf (browsed July 31, 2023)

(3) Entities responsible for the development of disaster public housing

Municipalities played a major role in the development of disaster public housing in cooperation with prefectural governments, and many were required to develop large numbers (hundreds to thousands) of units as quickly as possible.

Much of the land that was suitable for construction was unusable due to the tsunami damage, necessitating coordination with sites for construction-type emergency housing. In addition, local governments that had little experience in maintaining public housing were affected by the disaster, and there was an overwhelming shortage of technical personnel such as construction workers and civil engineers, as well as personnel capable of dealing with land acquisition. Because of this, the labor shortage continued even after support personnel were dispatched from other local governments. For this reason, it was necessary to secure sites as soon as possible and adopt methods other than direct construction by municipalities. As such, the municipalities proceeded to cooperate with the national and prefectural governments, the Urban Renaissance Agency (UR), and private businesses[48].

The following methods were used by municipalities affected by the Great East Japan Earthquake to develop disaster public housing: ① direct construction by disaster-affected municipalities, ② construction undertaken by the prefectures, ③ acquisition or leasing from private businesses, and ④ construction requests made to the Urban Renaissance Agency (UR).

The method chosen varied by municipality, but for coastal municipalities, Method ① was often not viable due to the labor shortage immediately after the disaster. In most cases, relatively large-scale housing complexes were developed using Methods ② or ④, and small housing units such as detached houses were developed using Method ③.

Under Method ④, UR received requests from the disaster-affected municipalities to construct disaster public housing. UR handled the process from design to building completion, after which the completed housing units were transferred to the municipalities. The first transfer of disaster public housing was carried out in August 2013, and a total of 5,932 disaster public housing units (in 86 districts in 17 municipalities) were maintained in the three disaster-affected prefectures until January 2021. UR built approximately 20% of the total number of units in Iwate Prefecture, and 25% of the total number of units in Miyagi Prefecture[49].

In the three prefectures (Iwate, Miyagi, and Fukushima) affected by the Great East Japan Earthquake, the entities responsible for the supply of disaster public housing were as follows.

- Iwate Prefecture: The municipalities and the prefecture. (Roles were divided between the municipalities and the prefecture in developing the necessary number of units.)
- Miyagi Prefecture: The municipalities. (The prefecture did not carry out development but did carry out construction on behalf of municipalities upon request.)
- Fukushima Prefecture: Municipalities for tsunami and earthquake victims, prefectures for evacuees from the nuclear power plant area

In the division of responsibilities between Iwate Prefecture and its municipalities, the prefecture focused on promptly constructing disaster public housing in sufficient numbers to meet the needs of disaster-affected area, as it was necessary to accommodate disaster victims across a wide region. Meanwhile, municipalities needed to construct disaster public housing for disaster victims within the municipality or within limited areas. Therefore, they emphasized the individual needs of each region, such as by building small-scale housing complexes suited to fishing villages and similar communities.

Miyagi Prefecture had originally planned to also develop disaster public housing to be managed by the prefecture. However, in light of the results of the intention surveys of each municipality and the progress of development efforts, it was determined that even in municipalities that were severely affected by the disaster, issues could be managed using methods like public purchases, a committee-based purchase method, or delegation to the prefecture, and after discussions with the relevant municipalities, it was decided that development managed by the prefecture was no longer required.

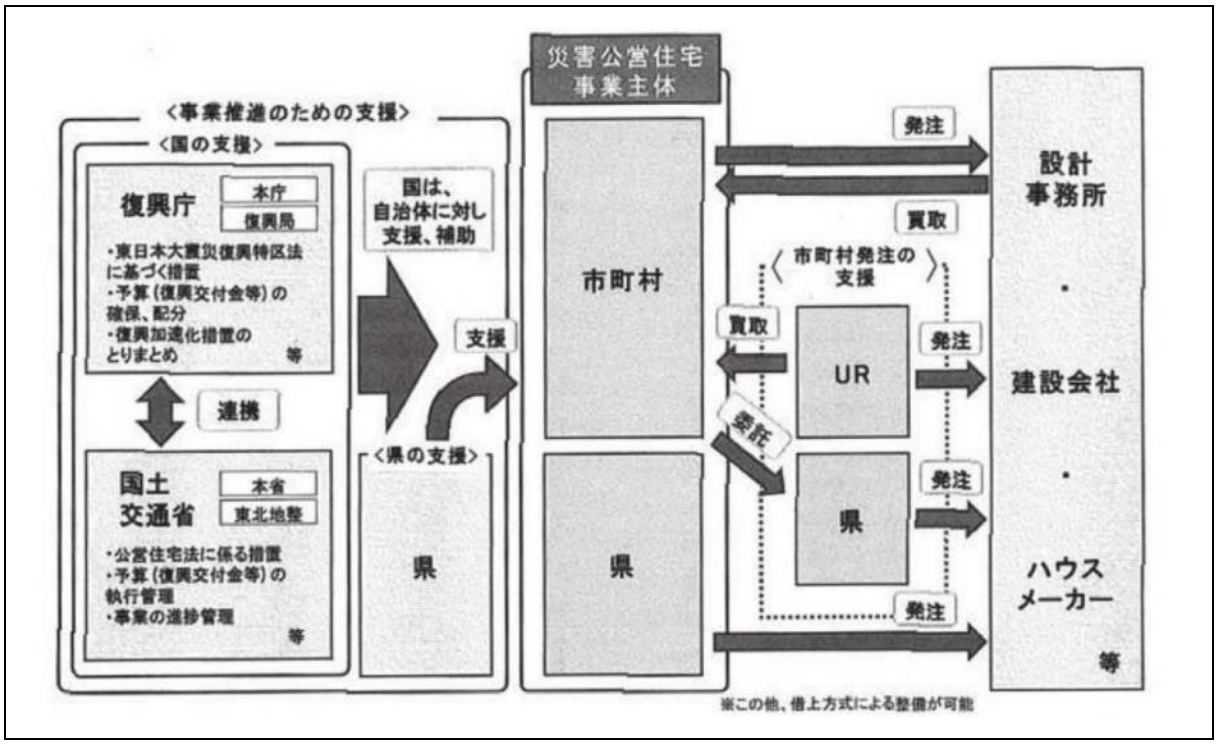
In Fukushima Prefecture, the initial policy was to develop housing to serve as disaster public housing managed by the municipality to which the disaster victims were evacuated, but in response to requests from the municipalities from which the disaster victims evacuated, the prefecture assumed responsibility for the projects[50].

[48] Reconstruction Agency, "Great East Japan Earthquake: Lessons Learned & Know-How Gained" (March 2021) https://www.reconstruction.go.jp/311kyoukun/index.html#gsc.tab=0 (browsed July 31, 2023)

[49] Urban Renaissance Agency, "History of Reconstruction Urban Development Projects for the Great East Japan Earthquake" (August 2021)

[50] National Institute for Land and Infrastructure Management, Ministry of Land, Infrastructure, Transport and Tourism, "Study on Plan for Facilitating Provision of Disaster Public Housing after the Great East Japan Earthquake: Study on Measures to Grasp Wishes for Disaster Public Housing" (December 2016) http://www.nilim.go.jp/lab/bcg/siryou/tnn/tnn0946pdf/ks0946.pdf (browsed July 31, 2023)
Urban Renaissance Agency, "History of Disaster Public Housing Development Projects for the Great East Japan

Figure 5-2-28 Disaster Public Housing Development Support Scheme



Source: Urban Renaissance Agency, “History of Disaster Public Housing Development Projects for the Great East Japan Earthquake” (March 2018)

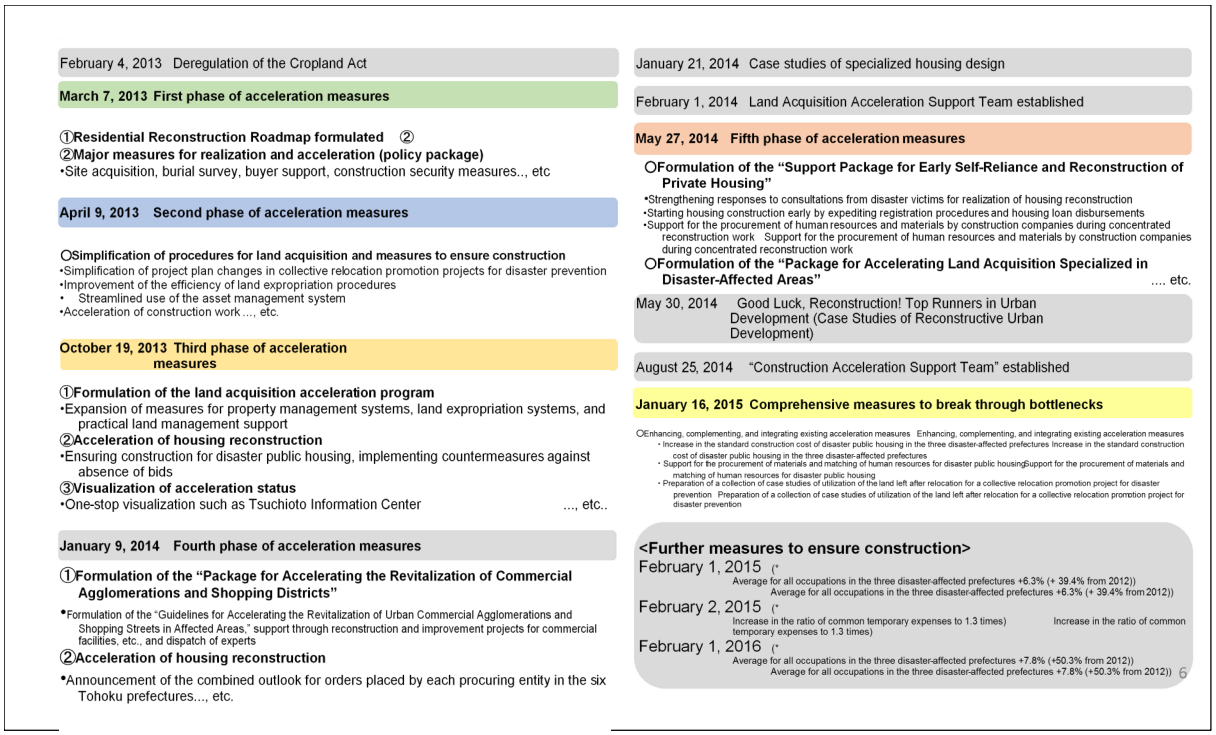
Earthquake” Public Works Department, Housing Division, Miyagi Prefecture, “Reconstruction Following the Great East (August 2021)
Japan Earthquake: Disaster Public Housing Development Records” (June 2020)

(4) Challenges and initiatives in accelerating reconstruction

As full-scale construction of disaster public housing began, various acceleration measures were taken under the leadership of the Minister for Reconstruction, as described in Chapter 3, Section 2. This included the implementation of five rounds of acceleration measures tailored to the stages of reconstruction, based on proposals from relevant ministries and agencies within the task force and discussions among stakeholders.

First, from the end of December 2012 to the end of March 2021, with the cooperation of relevant organizations, the Reconstruction Agency prepared and regularly published Residential Reconstruction Roadmaps to provide disaster victims with an outlook on rebuilding their own lives.

Figure 5-2-29 History of Acceleration Measures



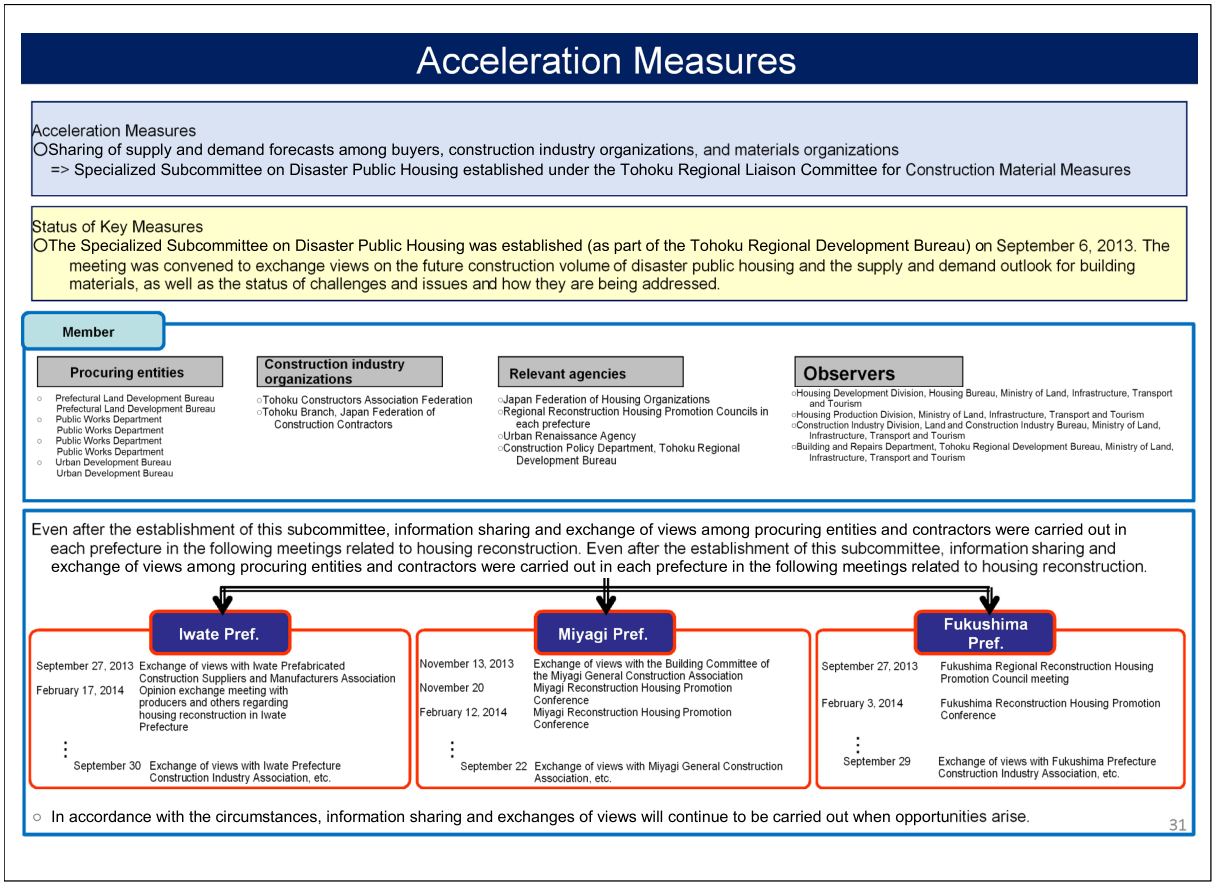
Source: Reconstruction Agency, "Compilation of Policies to Accelerate Housing Reconstruction and Reconstructive Urban Development" (July 2016)
https://www.reconstruction.go.jp/topics/main-cat1/sub-cat1-15/20160708_sesakusyu.pdf (browsed July 31, 2023)

Furthermore, by the middle of FY 2013, new issues arose, including shortages of construction materials and labor, as well as increases in unit costs for materials and labor. For this reason, efforts were made to ensure the implementation of projects such as disaster public housing development with the aim of promptly rebuilding housing in disaster-affected areas. Additionally, as a means for procuring entities, construction industry organizations, and other such groups to share information related to supply-demand forecasts for construction materials, the Specialized Subcommittee on Disaster Public Housing was established on September 6, 2013, under the Tohoku Regional Liaison Committee for Construction Material Measures, which was formed by the Tohoku Regional Development Bureau.

The Specialized Subcommittee on Disaster Public Housing exchanged views on the amount of disaster public housing to be constructed going forward, supply and demand forecasts for building materials, and the status of challenges and problems, as well as the responses thereto. Subsequently, efforts were made to raise standard construction expenses and establish price estimates that reflect market rates. In addition, meetings related to housing reconstruction were held in each prefecture, and thorough information sharing and exchange of opinions were carried out between procuring entities and vendors[51].

[51] Tohoku Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism, "Tohoku Regional Development Bureau Press Release" (September 3, 2013)
http://www.thr.mlit.go.jp/bumon/kisya/kisyah/images/48181_1.pdf (browsed July 31, 2023)

Figure 5-2-30 Addressing material shortages



Source: Reconstruction Agency, "Follow-up for and Validation of Effects of Measures to Accelerate Housing Reconstruction and Reconstructive Urban Development" (July 2016)
https://www.reconstruction.go.jp/topics/main-cat1/sub-cat1-15/20160708_followup.pdf (browsed July 31, 2023)

In accordance with the provisions of the Act on Public Housing, financial support for the development of disaster public housing is provided for a portion of the expenses normally required for the construction of public housing, up to the amount specified by the Minister of Land, Infrastructure, Transport and Tourism (standard construction expenses, etc.). In the disaster-affected areas, the unit costs of construction materials and labor were raised in the middle of the fiscal year because of the marked and continuous increase[52].

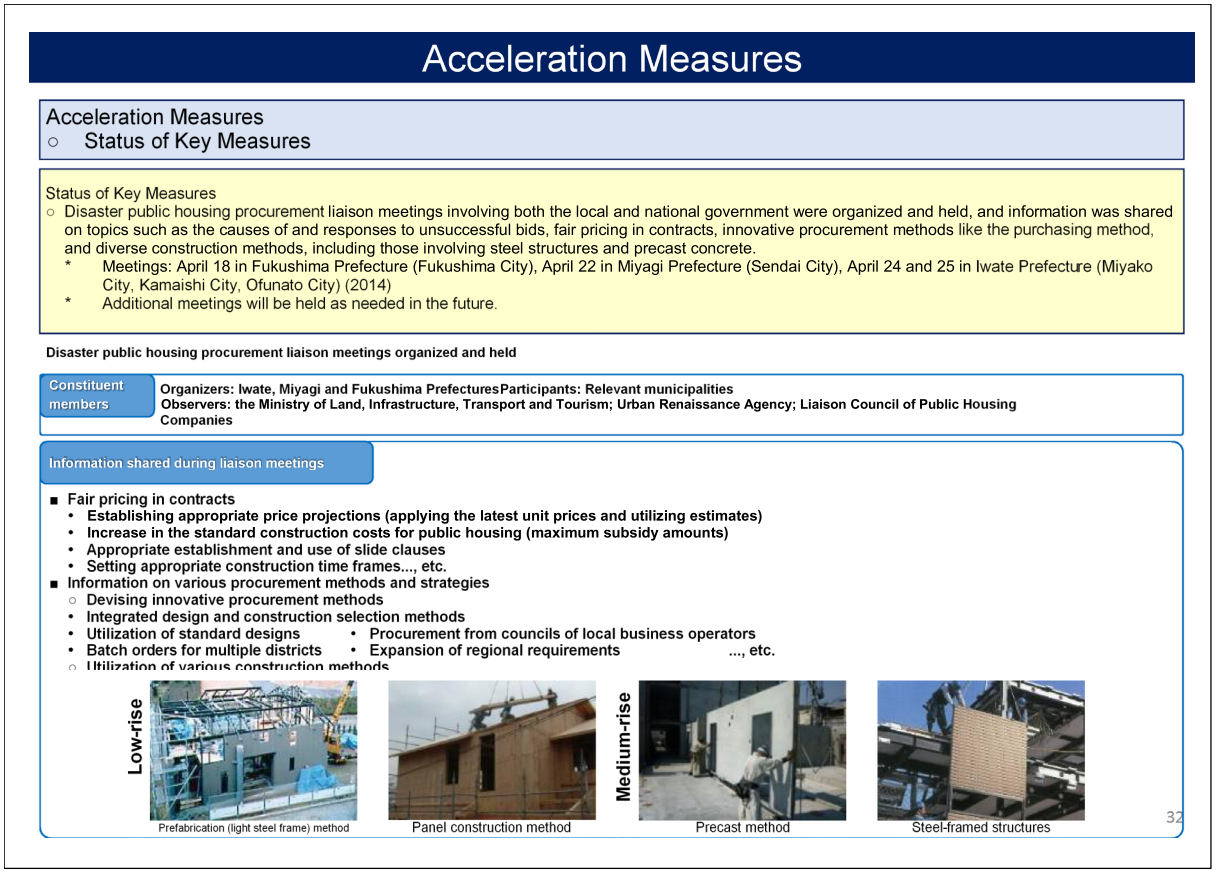
In FY 2013, the standard construction expenses for projects under the jurisdiction of the Housing Bureau in the three disaster-affected prefectures were adjusted, allowing for up to a 15% increase in the cap for construction costs related to the main structure and associated works, as necessary. Furthermore, in FY 2014, the standard construction expenses for projects under the jurisdiction of the Housing Bureau in the three disaster-affected prefectures were adjusted, allowing for up to a 22% increase in the cap for construction costs related to the main structure and associated works, as necessary[53][54].

In addition, starting in FY 2014, disaster public housing procurement liaison meetings involving both local governments and the national government were organized and held.[55] At these meetings, information was shared

[52] Joint Editorial Committee for the Report on the Great East Japan Earthquake Disaster, "Report on the Great East Japan Earthquake Disaster: Civil Engineering Part 8. Reconstruction Overview," p. 65
[53] Ministry of Land, Infrastructure, Transport and Tourism, "Standard Construction Expenses, etc. for Projects Under the Jurisdiction of the Housing Bureau in FY 2013 (Amended for Three Prefectures Affected by the Great East Japan Earthquake)"
https://www.mlit.go.jp/common/001009441.pdf (browsed July 31, 2023)
[54] Ministry of Land, Infrastructure, Transport and Tourism, "Standard Construction Expenses, etc. for Projects Under the Jurisdiction of the Housing Bureau in FY 2014 (Amended for Three Prefectures Affected by the Great East Japan Earthquake)"
https://www.mlit.go.jp/common/001064574.pdf (browsed July 31, 2023)
[55] Meetings: April 18 in Fukushima Prefecture (Fukushima City), April 22 in Miyagi Prefecture (Sendai City), April 24 and 25 in Iwate Prefecture (Miyako City, Kamaishi City, Ofunato City) (2014)

on topics such as the causes of and responses to unsuccessful bids, fair pricing in contracts, innovative procurement methods like the purchasing method, and diverse construction methods, including those involving steel structures and precast concrete. This initiative aimed to streamline the process of supplying disaster public housing by facilitating the procurement process for construction projects through the sharing of information on a variety of procurement methods and construction techniques for disaster public housing.

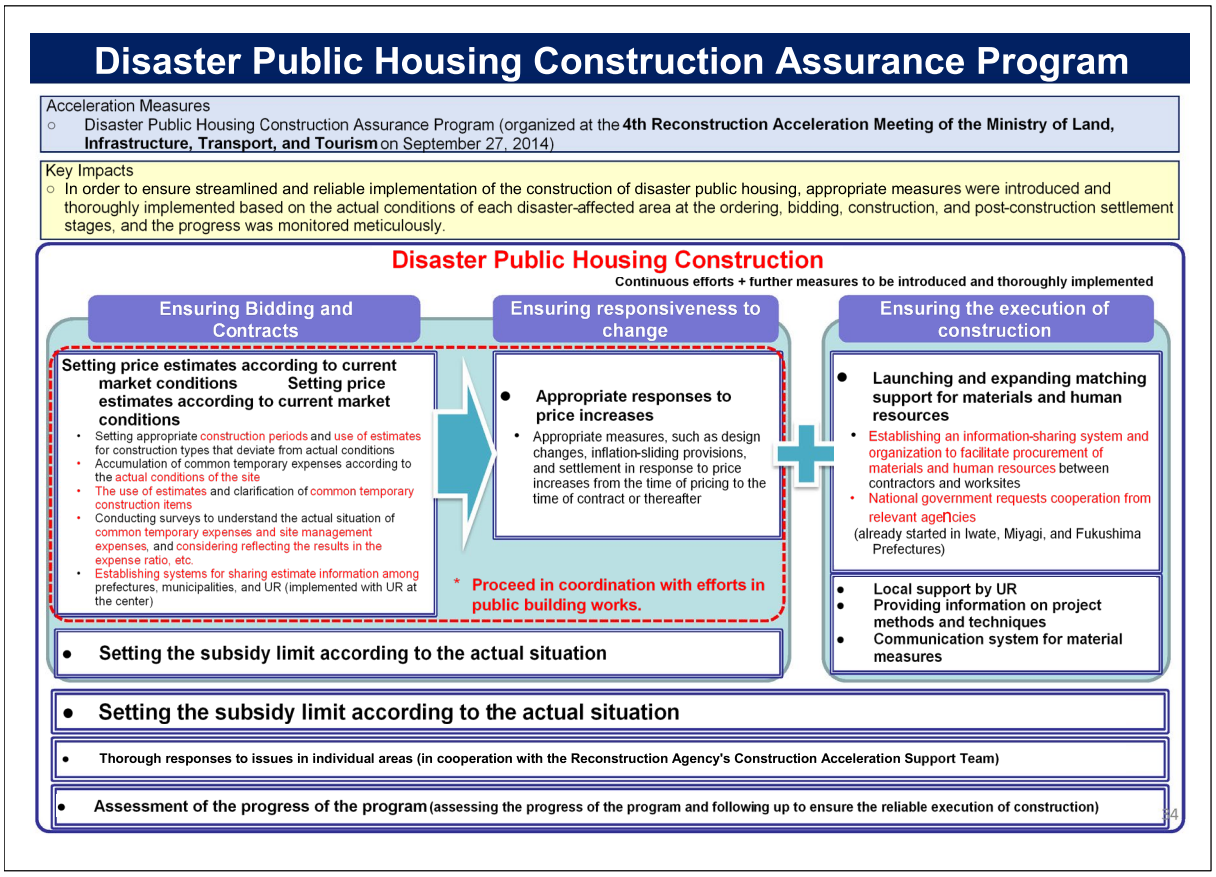
Figure 5-2-31 Streamlining Construction



Source: Reconstruction Agency, "Follow-up for and Validation of Effects of Measures to Accelerate Housing Reconstruction and Reconstructive Urban Development" (July 2016)
https://www.reconstruction.go.jp/topics/main-cat1/sub-cat1-15/20160708_followup.pdf (browsed July 31, 2023)

Furthermore, to ensure and facilitate the implementation of disaster public housing construction projects, the Disaster Public Housing Construction Assurance Program was organized at the 4th Reconstruction Acceleration Meeting of the Ministry of Land, Infrastructure, Transport, and Tourism on September 27, 2014. Taking into account the individual circumstances of the disaster-affected areas, precise response measures were introduced and thoroughly implemented at stages such as procurement and bidding, construction execution, and post-construction settlement, all while thoroughly monitoring the progress of implementation. These measures were carried out by ensuring reliable bidding and contracting by setting estimated prices in line with market rates, reliably addressing changes such as by responding precisely to price increases, and ensuring the smooth execution of construction by initiating and expanding support for matching materials and personnel.

Figure 5-2-32 Disaster Public Housing Construction Assurance Program



Source: Reconstruction Agency, "Follow-up for and Validation of Effects of Measures to Accelerate Housing Reconstruction and Reconstructive Urban Development" (July 2016)
https://www.reconstruction.go.jp/topics/main-cat1/sub-cat1-15/20160708_followup.pdf (browsed July 31, 2023)

(5) Development of distinctive disaster public housing

The damage caused by the tsunami that accompanied the Great East Japan Earthquake was widespread and severe, and in some areas, the layout of towns underwent drastic changes due to reconstruction. In response, the siting and facility arrangements were devised to address certain needs that were also sought for disaster public housing since the planning stages, including consideration for the elderly and the local community, sustainable urban development that integrates residences with various functions, revitalization of town centers to blend in with the urban landscape, and ensured convenience of living.

- Integrated development with the prepared land from area development projects
  In areas such as ria coastal regions, housing land for the project on promoting group relocation for disaster prevention was often planned to be integrated with relatively small-scale disaster public housing. Wooden detached houses and *nagaya* style houses were primarily adopted, as they would blend in with houses rebuilt by individuals on their own under the project on promoting group relocation for disaster prevention. In this way, integrating disaster public housing into prepared sites from area development projects, rather than building standalone structures, was effective from the standpoint of securing land.
- Ensuring convenience of living by forming compact cities
  Seizing reconstruction as an opportunity to develop compact towns, some municipalities planned to concentrate disaster public housing projects in certain key areas. In some cases, when disaster public housing was relocated and built in newly developed urban areas, public facilities and public transportation were developed in accordance with the scale of the disaster public housing, and commercial facilities were also drawn to the area[56].

In addition, in light of the fact that new houses and communities would take on a different form compared to the past, efforts were made to develop housing with the following design features.

- Consideration for community building (e.g., establishing spaces that foster daily interaction among residents, including the elderly)
- Consideration for child-rearing and safeguarding (e.g., establishing spaces where children can play safely)
- Utilization of natural renewable energy (e.g., measures to reduce environmental impact through the use of solar power)
- Consideration for disaster prevention, security, and safety (e.g., installing evacuation decks on rooftops to serve as disaster management bases in times of disaster)
- Utilization of local appeal (e.g., observing long-established traditional lifestyles and making use of locally produced materials)

In January 2014, the Reconstruction Agency published a collection titled “New Tohoku: Examples of Innovative Housing Design,” which introduces examples of housing with carefully designed features (innovations) as part of efforts to reconstruct homes. These special designs highlight the appeal of each region and town and address regional issues with an eye to the future.

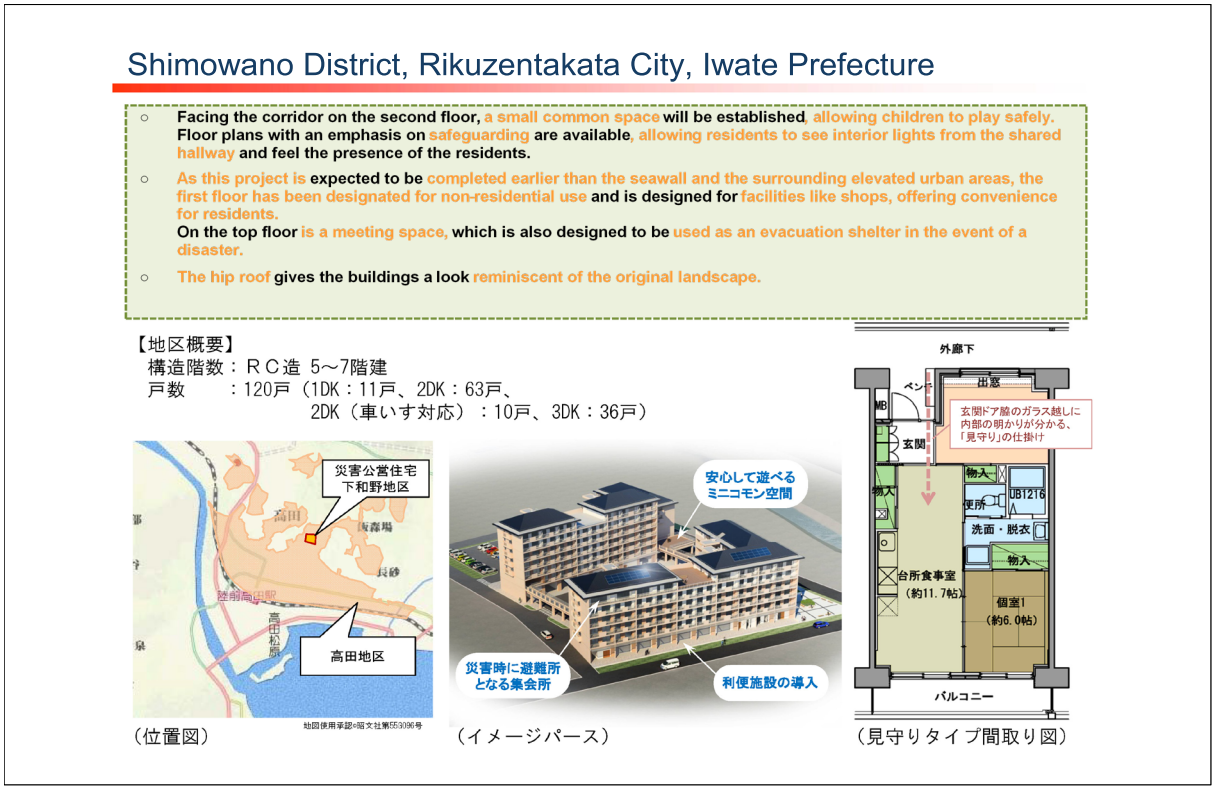
In addition, steps were taken to innovate processes, including organizing workshops with resident participation and adopting structural designs that reduce construction times. In addition, UR and others acted as coordinators to provide support for building new communities.

[56] Reconstruction Agency, “Great East Japan Earthquake: Lessons Learned & Know-How Gained” (March 2021) https://www.reconstruction.go.jp/311kyoukun/index.html#gsc.tab=0 (browsed July 31, 2023)

Figure 5-2-33 Disaster Public Housing Development in Ogakuchi District, Otsuchi Town, Iwate Prefecture

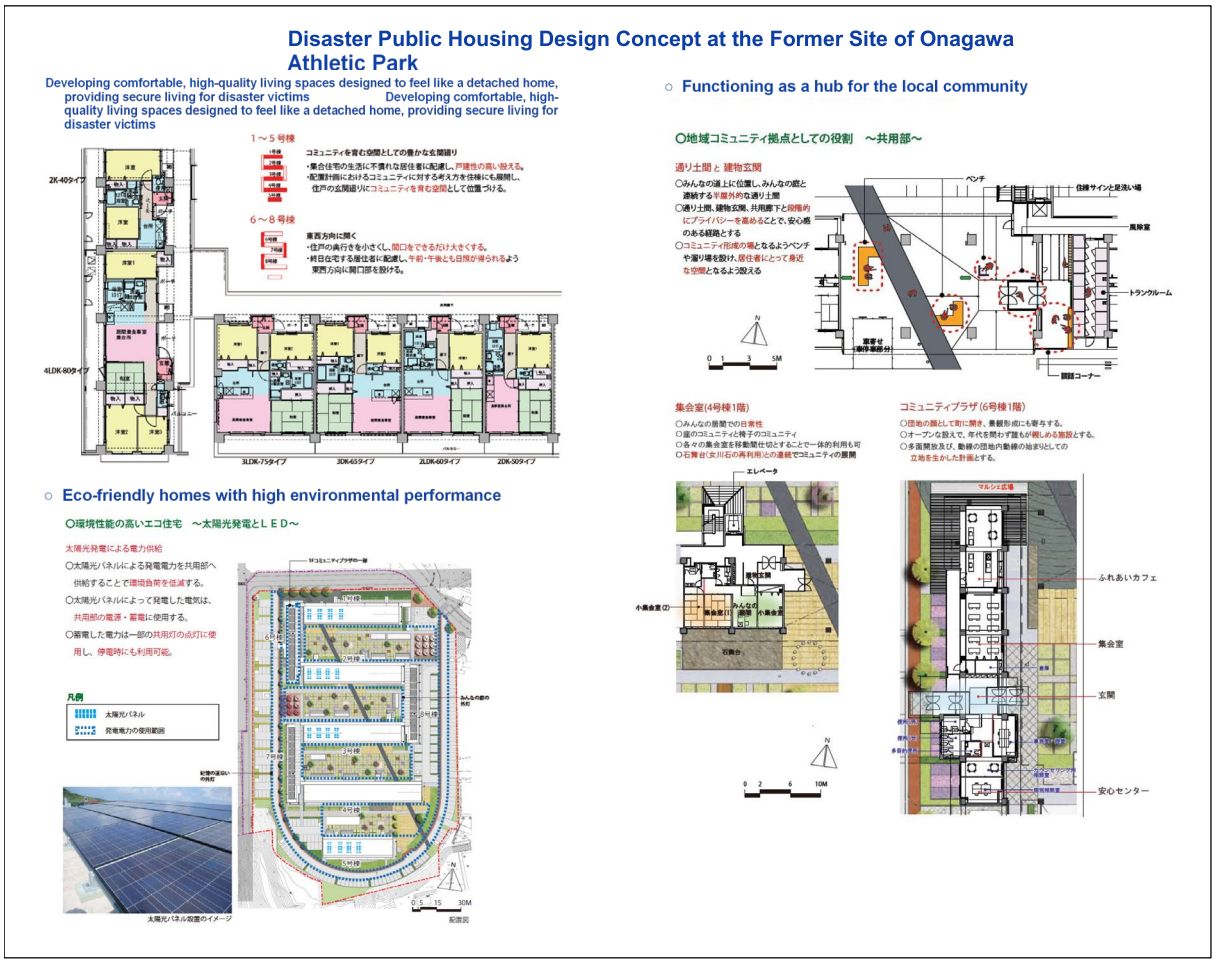
Source: Reconstruction Agency, "Ogakuchi District, Otsuchi Town, Iwate Prefecture (Ogakuchi 1-Chome Municipal Housing)" https://www.reconstruction.go.jp/portal/juutaku_koukyou/sub-cat1-1/sub-cat1-1-1/i001_kodawari_2.pdf (browsed July 31, 2023)

Figure 5-2-34 Disaster Public Housing Development in Shimowano District, Rikuzentakata City, Iwate Prefecture



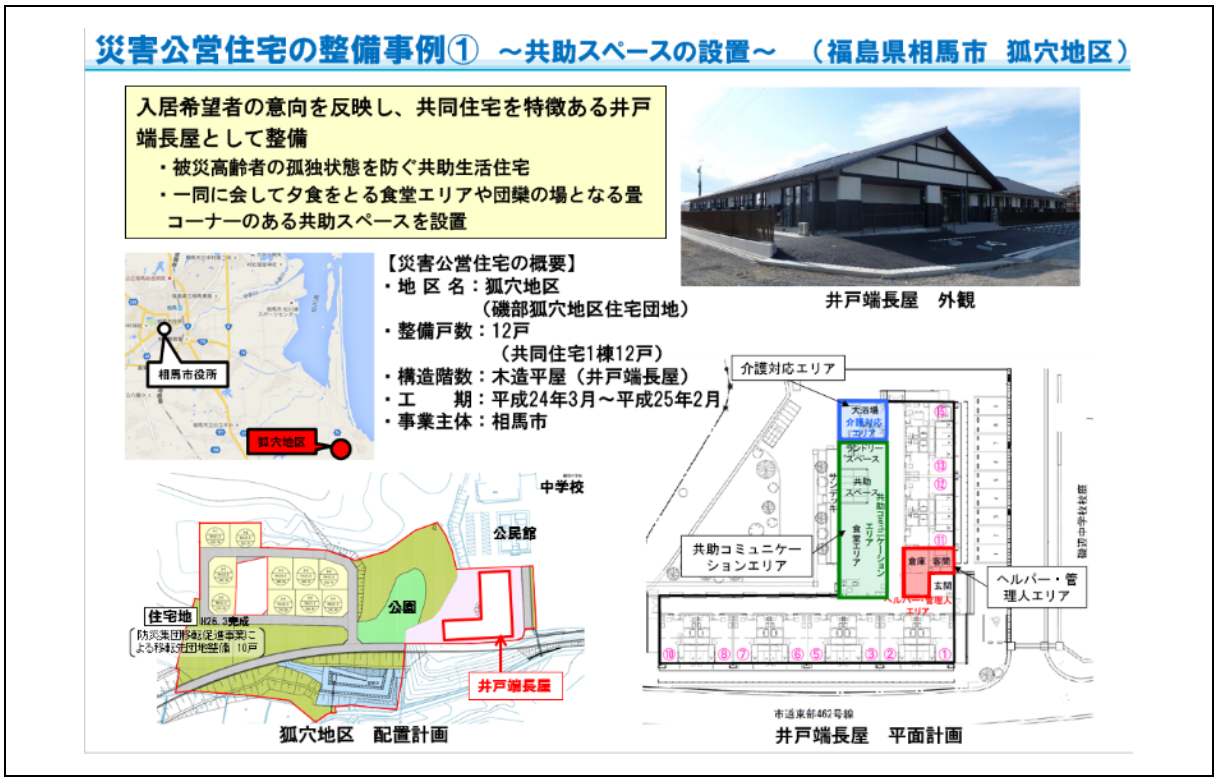
Source: Reconstruction Agency, "Shimowano District, Rikuzentakata City, Iwate Prefecture" https://www.reconstruction.go.jp/portal/juutaku_koukyou/sub-cat1-1/sub-cat1-1-1/i038_kodawari_3.pdf (browsed July 31, 2023)

Figure 5-2-35 Disaster Public Housing Development at the Former Site of Onagawa Athletic Park in Miyagi Prefecture



Source: Reconstruction Agency, “Disaster Public Housing Design Concept at the Former Site of Onagawa Athletic Park” https://www.reconstruction.go.jp/portal/juutaku_koukyou/sub-cat1-1/sub-cat1-1-1/m054_kodawari.pdf (browsed July 31, 2023)

Figure 5-2-36 Disaster Public Housing Development in Kitsuneana District, Soma City, Fukushima Prefecture

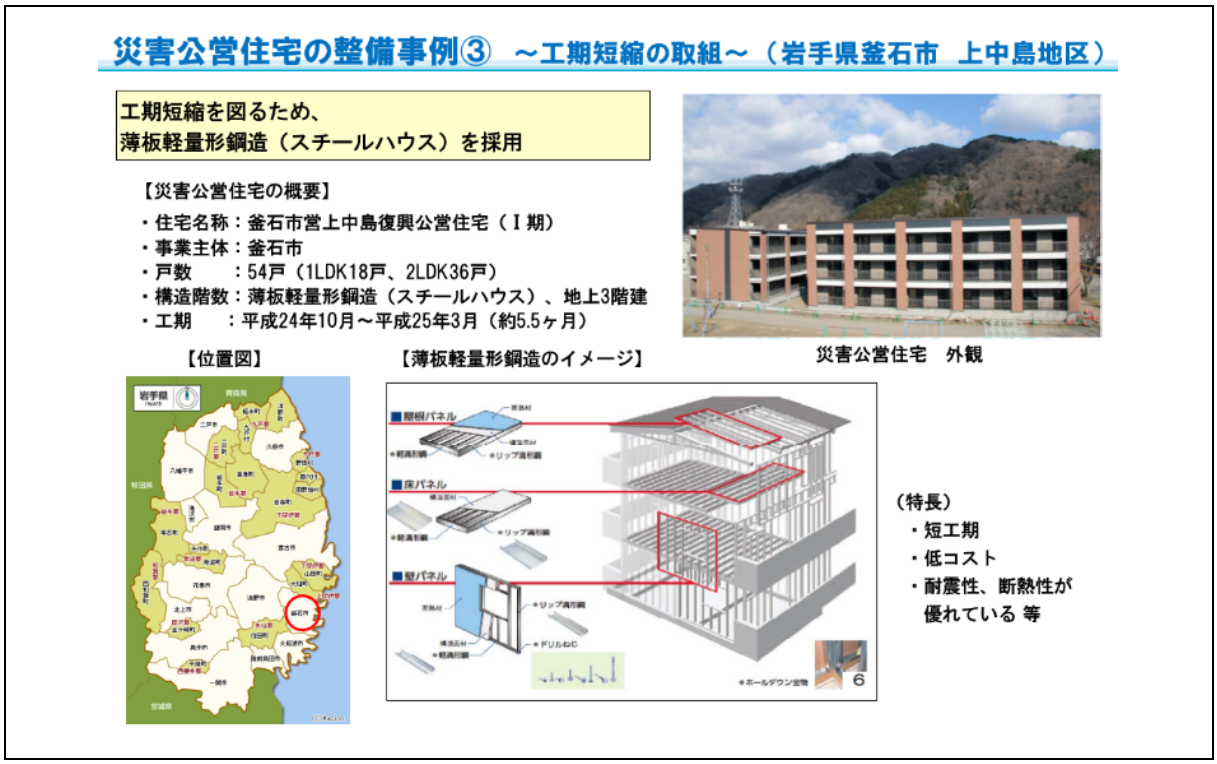


Source: Ministry of Land, Infrastructure, Transport and Tourism “Disaster Public Housing Development Case Study”

Figure 5-2-37 Disaster Public Housing Development in Tamauranishi District, Iwanuma City, Miyagi Prefecture

Source: Ministry of Land, Infrastructure, Transport and Tourism “Disaster Public Housing Development Case Study”

Figure 5-2-38 Disaster Public Housing Development in Kaminakashima District, Kamaishi City, Iwate Prefecture



Source: Ministry of Land, Infrastructure, Transport and Tourism "Disaster Public Housing Development Case Study"

Figure 5-2-39 Efforts by UR to Support Community Building

Source: Urban Renaissance Agency, “History of Disaster Public Housing Development Projects for the Great East Japan Earthquake” (March 2018)

(6) Maintenance and management of disaster public housing

Approximately 30,000 disaster public housing units were constructed in the aftermath of the Great East Japan Earthquake. The number of public housing units managed as a whole by some local authorities increased several-fold from before the earthquake, leaving affected municipalities and prefectures in the position of figuring out how to efficiently maintain and manage these units.

The following measures were taken to address these challenges.

1) Outsourcing and optimization of management operations

In cases where disaster-affected cities and towns in Miyagi Prefecture were not able to manage the housing directly, they entrusted the management work to the Miyagi Housing Supply Public Corporation, which was involved in the management of prefectural housing. In Fukushima Prefecture, tenants reported various issues such as construction defects and requested repairs or improvements. To address this, a notice was issued in 2016, which clarified the division of responsibilities and administrative procedures required of the many parties involved in dealing with such problems, including the designated managers of disaster public housing and contractors. In addition, receipts and report forms for repairs were standardized in order to allow relevant organizations to respond quickly when information is received from tenants about malfunctions and other problems. A collection of case studies containing summaries on problems was prepared each quarter for distribution to construction offices and designated managers involved in the management of public disaster housing units.

2) Utilization of vacant housing units

Municipalities in Miyagi Prefecture affected by the disaster relaxed requirements for the number of residents in order to recruit additional applications from prospective tenants when vacant units became available and to address mismatching in terms of room type. When no prospective tenants were found even after inviting additional applications and relaxing requirements, the housing units were made available as ordinary public housing to people who had not been affected by the disaster after recruitment and other activities were carried out for disaster victims throughout the prefecture for a certain period of time.

In addition, public housing may be used for purposes other than its original intent, provided it does not hinder the occupancy of the intended tenants or interfere with proper and reasonable management. This is permitted under the Act on Public Housing and the Act on Securement of Stable Supply of Elderly Persons' Housing, as well as with ministerial approval under Article 22 of the Act on Regulation of Execution of Budget Pertaining to Subsidies, etc. and the implementing entity's approval based on Article 238-4, Paragraph 7 of the Local Autonomy Act (permission for the use of public property for administrative purposes). For example, public housing can be used as housing to promote migration and settlement, group homes, and remote work facilities.

In addition, the Reconstruction Agency compiled and published "Promoting the Utilization of Disaster Public Housing Stock for Regional Development and Support for Living: Guidebook for Utilization of Disaster Public Housing Stock" in December 2020 with the aim of utilizing vacant housing units in disaster public housing. This guidebook is intended for those in local government involved in comprehensive planning, the formulation of reconstruction and community development plans, and public housing management. Taking into account the appeal of local regions, districts, and communities, the guidebook explains methods for effectively utilizing disaster public housing stock as a tool for addressing challenges, or as a platform for development, while introducing relevant case studies[57].

3) Formulating overall plans to extend service life, including for existing public housing

Municipalities affected by the disaster in Miyagi Prefecture revised (or newly formulated) plans to extend the service life of disaster public housing, in order to reduce overall maintenance and updating costs, including for existing public housing using benefit promotion projects for reconstruction grants.

[57] Ministry of Land, Infrastructure, Transport and Tourism, "Repurposing Public Housing"
Reconstruction Agency, "Promoting the Utilization of Disaster Public Housing Stock for Regional Development and Support for Living: Guidebook for Utilization of Disaster Public Housing Stock"
https://www.reconstruction.go.jp/topics/main-cat1/sub-cat1-15/material/20201228_saigaikouei_guidebook.pdf (browsed July 31, 2023)

4) Sale of disaster public housing

In order to ease the burden of managing disaster public housing in the future, the Act on Special Zones for Reconstruction in Response to the Great East Japan Earthquake enables the sale of disaster public housing earlier than usual. For general public housing, the condition is that one-fourth of the service life must have elapsed. However, for disaster public housing for the Great East Japan Earthquake, the requirement is one-sixth of the service life. In response to this, Soma City, Fukushima Prefecture first sold wooden, detached disaster public housing in 2018, and by the end of March 2022, ownership of 120 houses in the three disaster-affected prefectures had been transferred.

5) Exploring the possibility of accelerating the timeline for demolition

Some local authorities performed their own estimates on future income and expenditures based on population forecasts by the National Institute of Population and Social Security Research in order to avoid falling into the red due to population decline. These estimates indicated the possibility of starting the demolition of disaster public housing made with reinforced concrete after 40 years, with the timing moved up from the initially assumed 70 years after the start of management.

6) Continued support from the national government in relation to lowering rent and special rent reduction projects

The national government has provided support to stabilize housing conditions in disaster public housing for residents affected by the Great East Japan Earthquake through projects designed to lower rent and those for special rent reductions. However, some argued that the generous rent subsidies for disaster public housing were leading to municipal budget surpluses. In the 8th Proposal for Accelerating Reconstruction Following the Great East Japan Earthquake, the Liberal Democratic Party and the Komeito also indicated a need to "continue providing support while making necessary adjustments, considering future fiscal management of disaster public housing, differences in project progress due to unavoidable circumstances, other cases of large-scale disaster, and the appropriate division of responsibilities between the national and local governments." In view of these opinions and to ensure fairness among local governments of disaster-affected areas that started managing this housing at different times, the decision was made to continue the subsidy rate increase for rent reduction projects during the first 10 years of management, as well as the special rent reduction projects in FY 2021 and beyond, following the first reconstruction/revitalization period[58].

[58] Reconstruction Agency, "Great East Japan Earthquake: Lessons Learned & Know-How Gained" (March 2021) https://www.reconstruction.go.jp/311kyoukun/index.html#gsc.tab=0 (browsed July 31, 2023)

3. Housing loans for disaster recovery

The housing loan for disaster recovery system was implemented by the Japan Housing Finance Agency with the aim of providing low-interest loans to aid in the restoration of houses destroyed or damaged by disasters, thereby promoting the swift reconstruction of homes affected by the disaster.

For the Great East Japan Earthquake, the system was enhanced as follows: ① loan interest rates were lowered, ② deferral periods for principal payments and repayment terms were extended, and ③ loan application periods were extended. For ①, the interest rate on loans was reduced to 0% for the first 5 years and reduced by about 0.5% from the normal rate for years 6 to 10. For ②, the maximum deferral period for principal payments and maximum repayment term were extended from three to five years. For ③, the application period was extended from less than two years from the date of the disaster to less than 15 years (allowing applications to be made by the end of FY 2025), taking into account the status of area development projects in the disaster-affected areas.

After receiving a request from Sendai City at the end of March 2011, immediately after the earthquake, the Japan Housing Finance Agency began offering loan-related consultation services, which were provided by employees of the agency at housing consultation desks established by local governments. Consultations were also held at the request of the Administrative Evaluation Bureau, the Finance Bureau, and industry associations. In addition, requests were made to financial institutions to accept loan applications at the service counters of each financial institution, rather than the conventional method of sending applications by mail to the main office of the agency. This was achieved through measures such as providing training for financial institution staff and dispatching personnel from the agency. By offering low-interest loans efficiently and quickly, the Japan Housing Finance Agency helped disaster victims rebuild their homes and other properties on their own. By the end of FY 2021, 17,951 loans had been disbursed.

4. Issues that arose in project implementation and responses

(1) Emergency Temporary Housing

1) Construction-type and rental-type emergency housing

- In past large-scale disasters, construction-type emergency temporary housing was the dominant form of housing provision. Consequently, the full-scale utilization of rental-type emergency housing was delayed, resulting in operational confusion on the ground, repeated revisions to the number of required units, and vacancies in construction-type emergency housing units. From the perspectives of efficient budget execution, resource conservation, and land acquisition, it is preferable to actively utilize rental-type emergency housing, such as public housing or privately leased housing, or to secure housing through emergency repairs when feasible. However, in cases where the supply of privately leased housing is limited or where primary industry workers and others need to secure housing near the disaster-affected areas, the prompt supply of construction-type emergency housing is essential. This fundamental approach is clearly outlined in the latest Basic Disaster Management Plan. In the aftermath of the Kumamoto Earthquake of April 2016, approximately 4,000 units of construction-type emergency housing were supplied, compared to around 17,000 units[59] of rental-type emergency housing, accounting for approximately 80%.
- Rental-type emergency housing offers several advantages over construction-type emergency housing, including the ability to provide housing more quickly and at a lower cost. Additionally, it offers better livability compared to construction-type emergency housing units, which are designed to be temporary shelters. However, rental-type emergency housing has its unique challenges, such as the difficulty for local governments to monitor and understand the conditions of disaster victims, who are often dispersed over a wide area, making it harder to deliver information and support effectively. It can also contribute to population outflows from disaster-affected areas to larger urban centers.
- On the other hand, construction-type emergency housing provides benefits such as proximity to the disaster-affected areas and the ability to secure a concentrated number of units in one location, which makes it relatively easy to maintain existing communities. This approach facilitates more efficient delivery of living support and information to residents. However, it accompanies challenges in terms of supply speed, construction costs, living conditions, and subsequent removal and waste management[60]. Additionally, in cases where construction-type emergency housing is built in neighboring municipalities due to land availability constraints, population outflows can still occur as disaster victims rebuild their lives in those areas[61].

2) Supply and maintenance of construction-type emergency housing

- Immediately following the disaster, a prompt and large-scale supply of housing was required, with challenges arising in determining the necessary number of units, securing land, and acquiring sufficient labor power. It is essential to establish measures for securing land based on the anticipated number of required units, taking into account disaster damage estimates and past disaster records (such as listing potential sites, considering debris storage areas, and other factors).
- Regarding housing specifications that consider the living environment, convenience, and community needs, adjustments were made incrementally to meet on-site demands to the extent permitted by the Disaster Relief Act. This approach caused confusion at the sites. Additionally, many of the housing initially supplied failed to meet adequate livability standards, leading to cost increases from subsequent additional construction work. Currently, standard measures include improved cold-weather accommodations for construction-type emergency housing (e.g., air conditioners, fan heaters, double-pane windows, and heated toilet seats), an over twofold increase in permissible expenditure per unit under the general standards for relief, and provisions to allow even small-scale housing complexes to have a standard meeting space.

[59] "Damage situation related to the 2016 earthquake centered in the Kumamoto region of Kumamoto Prefecture" (as of 18:00 on April 13, 2017, Extraordinary Disaster Management Headquarters) 15,306 private rental units, and 1,836 of the 11,888 public housing units secured were filled by tenants.
[60] Ministry of Land, Infrastructure, Transport and Tourism, "Utilization of Private Rental Housing Following Disasters (Handbook)," etc.
[61] Mayor of Minamisanriku at the Third Meeting of the Expert Committee (February 27, 2023), etc.

- Based on these various lessons learned from the construction-type emergency housing developed in response to the Great East Japan Earthquake, the Ministry of Land, Infrastructure, Transport and Tourism formed a working group with prefectural construction and housing departments (with the Ministry of Health, Labour and Welfare participating as an observer) to compile the "Emergency Temporary Housing Construction Handbook: Interim Summary" (May 2012, Housing Production Division, Housing Bureau, Ministry of Land, Infrastructure, Transport and Tourism)[62].

3) Supply of rental-type emergency housing

- The Great East Japan Earthquake was the first time that rental-type emergency housing had been fully utilized on such a large scale. As a result, the matching system that was originally envisaged did not function effectively, leading to confusion later, when from the end of April, disaster victims were allowed to search for housing on their own. Moreover, rules and methods related to rental contracts had not been established, nor were efficient ways to handle the overwhelming volume of administrative tasks, resulting in delays in identifying available housing and processing administrative work.
- In light of such issues encountered during the Great East Japan Earthquake, a study group was established with the participation of the Ministry of Land, Infrastructure, Transport, and Tourism, the Ministry of Health, Labour and Welfare, the prefectures, and related organizations. On April 27, 2012, interim guidelines were compiled and issued, including reference examples of agreements that would be desirable for prefectures and related organizations to establish. Additionally, on December 4, 2012, a resource titled "Utilization of Private Rental Housing Following Disasters (Handbook)" was compiled and distributed[63].
- The current predominant approach is for disaster victims to look for housing on their own. Based on this premise, documents like the "Guidelines on Preparation and Training for the Supply of Rental-Type Emergency Housing" (May 2020, Director General, Cabinet Office (Disaster Prevention))[64] have been prepared, outlining preparations to make in times of non-emergency and efficient methods of administration. When housing is privately leased in this manner, disaster victims are often limited in their housing choices due to rent caps, and the prefectures, who are the contracting parties, face administrative burdens such as managing contracts and resolving disputes between landlords and tenants. Consequently, some have argued for a review of the principle[65] of in-kind support[66].

4) Extension of provision and removal of emergency temporary housing

- Emergency temporary housing is by definition provided on a temporary basis only. However, there were households that needed to wait for the completion of reconstruction urban development projects, as well as households that were unable to move out of emergency temporary housing for prolonged periods because they could not make a decision on rebuilding their home due to old age or other factors. Consultation desks were established, detailed surveys were conducted on individual households, and multi-faceted support was provided in cooperation with social welfare councils, NPOs, and experts. This included providing assistance for moving into disaster public housing or private housing, support for securing the funds and employment necessary for rebuilding homes, and other measures to promote self-reliance.

As described above, the emergency temporary housing system has been frequently revised in light of the responses to recent disasters, including the Great East Japan Earthquake. For example, the Task Force for Measures to Secure Housing for Disaster Victims in the Event of a Large-Scale Disaster (formed in November 2016 by the Cabinet Office for Disaster Management) studied potential large-scale disasters such as an earthquake that strikes the Tokyo metropolitan area or a Nankai megathrust earthquake. As a result, they compiled the "Key Points for

[62] https://www.mlit.go.jp/report/press/house04_hh_000369.html (browsed July 31, 2023)
[63] Ministry of Land, Infrastructure, Transport and Tourism Website, "Study of the Utilization of Private Rental Housing in the Event of a Disaster" https://www.mlit.go.jp/jutakukentiku/house/jutakukentiku_house_tk3_000013.html (browsed July 31, 2023)
[64] https://www.bousai.go.jp/taisaku/pdf/sumai_zenpen.pdf (browsed July 31, 2023)
[65] Even with the approach in which disaster victims find their own housing, the name of the contracting party must be changed to that of the local government in order for the unit to be recognized as emergency temporary housing. (Emergency temporary housing requires a three-party lease contract between the disaster victim, the prefecture, and the landlord, or a two-party lease contract between the prefecture and the landlord and a two-party usage contract between the prefecture and the disaster victim.)
[66] Board of Audit Report (October 2012); "Opinions of Committee Members on Measures to Secure Housing for Disaster Victims" (August 2014, Working Group on Measures to Secure Housing for Disaster Victims); 2nd Meeting of the Expert Committee (December 5, 2022) Material 2 (Miyagi Prefecture); etc.

Securing Housing for Disaster Victims in the Event of a Large-Scale Disaster" (jointly published by the Cabinet Office and the Ministry of Land, Infrastructure, Transport and Tourism on March 30, 2018). Efforts have been made to clarify the relief standards and the procedures for handling relief operations, as well as to enhance guidelines regarding preparations before disasters, response methods after disasters, and the scope of coverage of government subsidies permitted under the Disaster Relief Act. In recent years, new forms of emergency temporary housing such as movable homes in size of a shipping container and trailer houses have been used as construction-type emergency housing, and adjustments are being made as needed in response to social demand.

(2) Disaster public housing

To address the issue of financial and administrative burdens on the local governments of disaster-affected areas, the subsidy rate for the development of disaster public housing was raised. Other measures included support by prefectures and the Urban Renaissance Agency (UR) to carry out procurement procedures on behalf of the local governments of disaster-affected areas.

In addition, in light of the fact that new houses and communities would take on a different form compared to the past, housing was built with carefully designed features (innovations) that highlight the appeal of each region and town and address regional issues with an eye to the future. This was done by developing public housing that addressed various needs, including community building, support for childcare and safeguarding, the use of renewable energy, disaster prevention, ensuring safety and security, and upholding the appeal of the local area.

In addition, around 30,000 disaster public housing units for disaster victims were constructed, and the challenge of maintaining and managing them efficiently became an issue. As such, efforts were made to outsource and streamline management operations and to utilize vacant housing units.