# Part II

# **Trend in MLIT Policies**

# Chapter 1

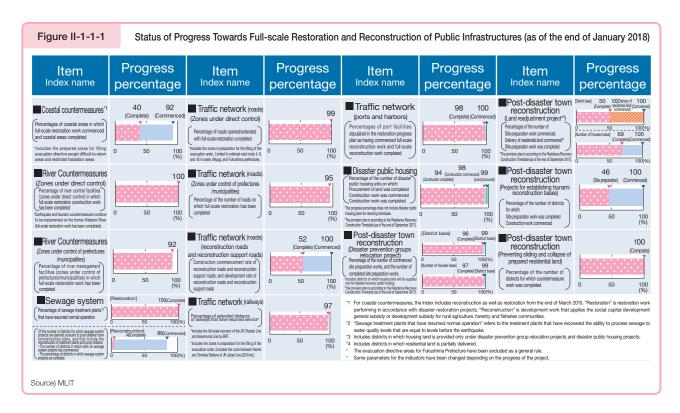
# **Initiatives towards Restoration and Reconstruction** from the Great East Japan Earthquake

# Section 1

#### Current Status and Measures Towards Restoration and Reconstruction

Accelerating restoration from the Great East Japan Earthquake is one of the top priorities of the MLIT. Although the number of refugees has decreased from the initial 470 thousand individuals at the time of the earthquake, around 71 thousand people<sup>Note 1</sup> currently lead lives in evacuation in approximately 1,044 municipalities<sup>Note 2</sup> throughout 47 prefectures. Although infrastructure-related recovery efforts, such as the completion of permanent housing, are progressing steadily, many people are still forced to lead a life of inconvenience, and it is necessary to support them to rebuild their lives and livelihoods as quickly as possible. MLIT will come together as a united body to be attentive to voices from disaster-affected areas through the Regional Development Bureau, the District Transport Bureau, the Japan Meteorological Agency, and the Japan Coast Guard, etc. in order to give people in disaster-affected areas a sense of having recovered by the completion of the recovery period in 2020.

Restoration and reconstruction of basic infrastructure such as ports and roads, and reconstruction of houses is progressing steadily and we will continue to ensure we promote these measures. Furthermore, in order to promote the return of residents and improve their quality of life, we will provide indirect support, such as by creating sustainable public transport networks. In order to restore livelihoods in disaster-affected areas, it is important to promote tourism, so we have been engaging in careful and detailed initiatives to encourage visitors to Tohoku according to the situation in each prefecture, such as initiatives to eradicate rumors. We are providing support as necessary to establish special reconstruction and revitalization zones, etc., for the recovery and reconstruction of Fukushima.



<sup>71,365</sup> people. As of March 15, 2018. Reconstruction Agency study. Note 1

As of March 15, 2018. Reconstruction Agency study. Note 2

### Section 2

# Steady Recovery and Reconstruction of Infrastructure and Transportation

#### (1) Outline

For the public infrastructure under the jurisdiction of the MLIT, we are steadily working toward transitioning to full-scale restoration and reconstruction based on the project plan and progress schedule. We will continue our endeavors now and in the future to achieve a full recovery of northeastern Japan as soon as possible, while staying mindful of requests from other disaster-stricken areas.

#### (2) Coastal Countermeasures

In terms of full-scale restoration and reconstruction work of coastal levees, etc., of the shores of the 677 districts where restoration and reconstruction work is to be done, construction has begun in 649 districts and had been completed in 320 districts as of the end of March 2018. Of these, the approximately 40 km of national construction area (including the section for which the national government will cover disaster recovery) had been completed along its entire length as of the end of March 2017.

In proceeding with construction, whenever possible we are incorporating structures where the effects of the levees will persistently demonstrate their capabilities, even when they are struck by tsunamis. In Iwanuma City and Yamamoto Town, Miyagi, we have established a model in which the coastal levees are integrated with green coastal levees comprised of coastal levees with vegetation planted throughout. We also actively use disaster waste for coastal levee material, while paying careful attention to the surrounding landscape and natural environment during reconstruction.

#### (3) River Countermeasures

Full-scale restoration work to secure pre-earthquake safety levels has been completed for the affected river management facilities in zones managed by the national government. Building on this, we are implementing the necessary earthquake and tsunami countermeasures, and aim to complete them by the end of FY2020. In addition, full-scale restoration work has been completed in approximately 90 percent of locations in zones under control of prefectures/municipalities.

#### (4) Sewage System

With regard to wastewater treatment plants, Minami-Gamo Wastewater Treatment Plant in Sendai, which was severely damaged, had been restored by the end of FY2015, and all 124 damaged plants have now been restored (excluding three plants within the Fukushima evacuation order area and two plants that have been abolished). In regards to the 962 km of sewer pipes affected by the disaster, 842 km was fully restored as of the end of March 2018. We will continue to work in accordance with the reconstruction plan and aim for the earliest possible restoration and reconstruction.

#### (5) Countermeasures against Sediment Disasters

We will push ahead with countermeasures against sediment disasters in Iwate, Miyagi and Fukushima Prefectures, where sediment disasters occurred at the time of the Great East Japan Earthquake.

#### (6) Roads

(1) In regard to expressways, the Joban Expressway, which was fully opened to traffic on March 1, 2015, is frequently used. The Joban Expressway also encourages companies to move in the area along this expressway in Hamadori, Fukushima, which generates employment in this area. Work on the conversion of parts of the Joban Expressway into a four-lane highway and the addition of lanes is expected to be completed within the Reconstruction and Revitalization Period. Additional interchanges, Okuma IC and Futaba IC, were newly planned to develop on June 12, 2015.(2) In regard to the national highways that are under direct control of MLIT, full-scale reconstructions were basically completed by the end of FY2012. Furthermore, the major disaster areas were reconstructed based on the restoration plan, including the bridges on national road route 45 and other structures. (3) In regard to the reconstruction of roads/support roads, to contribute to the post-disaster reconstruction of afflicted areas, the goal is to complete reconstruction as soon as possible by using the Project Promotion Process (PPP), which makes use of the private sector's technological skills. Projects were planned for a total of 550 km of roads and support roads, including the section opened after the Great East Japan Earthquake. Over

90% (503 km) of the roads have opened or have moved a step forward toward reopening. In FY2017, we opened a total of 29 km that was planned as a new project after the earthquake including the Sanriku Coastal Road (Yamada to Miyako-Minami).

#### (7) Railroads

Of the railways that were damaged by the Great East Japan Earthquake, the Sanriku Railway resumed full operations in April 2014, the Ishinomaki Line in March 2015, and the Senseki Line in May 2015. Regarding the Ofunato Line and the Kesennuma Line, the BRT<sup>Note</sup> has been operated as a temporary restoration measure to secure public transportation, and acceptance of full-scale restoration by BRT was agreed for the Ofunato Line in December 2015 and for Kesennuma Line in March 2016. As a result, the only railway lines with zones where service is still suspended are two of Japan Railways East Japan lines (Yamada Line and Joban Line).

As for the Yamada Line, JR East and relevant parties, including local government bodies, agreed to transfer the management of the line from JR East to Sanriku Railway in February 2015. Restoration work commenced in March 2015, and is proceeding with an eye to the scheduled reopening date of March 23, 2019.

In regards to the Joban Line, the policy to resume operations for the entire line in the future was decided in March 2015. In March 2016, the goal became to open the entire line by the end of FY2019. Of the sections that were not operating, the section between Haranomachi and Odaka stations reopened in July 2016, the section between Soma and Hamayoshida stations reopened in December 2016, the section between Odaka and Namie stations reopened in April 2017, and the section between Tomioka and Tatsuta stations reopened in October 2017. In addition, the goal is to open the remaining section between Namie and Tomioka Stations by the end of FY2019.

#### (8) Ports/Harbors

With regard to ports and harbors, the breakwaters at the ports of Soma and Kamaishi, and disaster restoration of major port facilities, was completed in FY2017. Port/harbor facilities that are foundational to the economic recovery, such as quay walls and breakwaters, have been repaired.

The Japan Coast Guard plans to complete the restoration of incomplete 5 (as of March 2018) of the 158 aids to navigation that were damaged by the Great East Japan Earthquake in concert with the restoration of ports and harbors and breakwaters.

Meanwhile, the sea area landfill sites of the Sendai Shiogama and Ishinomaki ports zone and the Ibaraki and Hitachi-Naka ports zone are undergoing maintenance in order to advance the disposal of disaster waste produced by the Great East Japan Earthquake. Landfill disposal has started in the Sendai Shiogama and Ishinomaki ports zone in February 2013 and in the Ibaraki and Hitachi-Naka ports zone in July 2012.

#### Section 3

#### Promoting Post-Disaster Town Reconstruction and Securing Stability of Residency

To give the disaster victims a prospect as to when they will be able to secure a residence, we are working on the promotion of post-disaster town reconstruction and securing the stability of residency, taking into account the "Residence Recovery Construction Timetable" that organizes the prospects for the provision of building lots for private residences and the completion of disaster public housing based on reports from local governments. As the reconstruction projects progress full-scale in the disaster affected areas, we need to compensate for the lack of personnel and know-how in the disaster affected municipalities to help the projects progress smoothly.

For these reasons, in addition to supporting the progress of projects by providing personnel support to disaster affected local governments, implementing procurement methods for relieving the burden of procurement operations in disaster affected local governments, and utilizing the Urban Renaissance Agency, we also disseminate information by providing technical support through notifications regarding procedures for the efficient execution of reconstruction projects and by posting the "Reconstructive City Development Index", an online website for compiling support initiatives.

**Note** Abbreviation for Bus Rapid Transit, meaning a bus transportation system that is faster and more punctual than regular route buses by operating trains on bus-only roads.

#### (1) Promoting Post-disaster Town Reconstruction

For post-disaster town reconstruction, various projects are being carried out, such as the Disaster Prevention Group Relocation Project, which helps people whose homes are in zones considered unsuitable for residence, and the Disaster Urban Area Land Recovery and Readjustment Project, which supports comprehensive town building by combining work on public facilities, such as building sites and roads, with site reconstruction work on tsunami disaster-affected urban areas, as well as the preparation of building sites for relocation to higher ground.

As of the end of March 2018, the Disaster Prevention Group Relocation Project had secured the consent of the Minister, which is a statutory procedure required for starting the project, for all 330 districts in which implementation of the project was planned under the Residence Recovery Construction Timetable; almost all districts have started site preparation work and 321 districts have completed such work. As for Disaster Urban Area Land Recovery and Readjustment Project, project approval was obtained and construction work started in all 50 districts under the Residence Recovery Construction Timetable, and 29 of those districts have completed site preparation work.

#### (2) Securing Stability of Residency

For victims who are able to build or obtain housing on their own, interest rates are lowered for disaster recovery housing loans provided by the Japan Housing Finance Agency. Disaster recovery housing loans are also provided to victims who only suffered damage to real estate. Pre-existing loans are given up to five-year extensions on payments and payment deadlines, and interest rates are lowered for such loans when the borrowers meet certain criteria.

Victims who face difficulties in building or obtaining housing on their own are being provided public housing (disaster public housing) by local governments. In addition to distributing grants to offset the cost of maintenance in these facilities and expenses resulting from lowering rent for victims, we are devising special arrangements concerning the requirements for occupant qualification and assignment of housing facilities.

Moreover, in response to the Fukushima No. 1 Nuclear Power Plant accident, we plan to secure stability of residency for refugees residing in evacuation order areas (evacuees or returnees) by providing them the same accommodations as disaster victims, such as moving into disaster public housing.

Prefecture	Procuring of land	Design started	Construction started	Construction completed	Overall plan
Iwate	5,700 houses	5,865 houses	5,577 houses	5,284 houses	5,865 houses
Prefecture	212 districts	215 districts	204 districts	186 districts	
Miyagi	15,823 houses	15,823 houses	15,675 houses	15,415 houses	15,823 houses
Prefecture	443 districts	443 districts	440 districts	433 districts	
Fukushima	8,040 houses	7,965 houses	7,797 houses	7,797 houses	8,066 houses <sup>(Note)</sup>
Prefecture	184 districts	183 districts	178 districts	178 districts	

- Regarding Fukushima's disaster public housing, the overall plan is not finalized for disaster public housing for returnees from evacuation due to the nuclear disaster Source) MLIT

### Section 4

## Securing Local Public Transportation and Promoting Tourism

#### (1) Securing Local Public Transportation

In regards to local public transportation, which suffered damage from the Great East Japan Earthquake, we are implementing exceptional measures, such as mitigating the auxiliary requirements for the Regional Public Transportation Securement, Sustentation, and Improvement Projects to support the securing and maintaining of local public transportation systems, such as buses, and to share taxis in disaster affected areas.

Specifically, these measures support the securing and maintaining of inter-regional mainline bus transportation networks, as well as community bus transportation for daily commutes between evacuation shelters, temporary housing, remaining settlements, and hospitals, shops, and public agencies.

#### (2)Reviving Tourism

According to the Overnight Travel Statistics Survey by the Japan Tourism Agency, the total number of guest nights of international visitors in 2017Note 1 was 275.9% of the level of 2010, which was before the earthquake, while the total number of guest nights of international visitors in the six prefectures of the Tohoku region Note 2 was 187.1% of pre-earthquake levels. Although this level exceeds the level prior to the earthquake, growth has been limited in comparison to the national level.

In response, following on from its efforts in 2016, the Japan Tourism Agency and the Japan National Tourist Organization (JNTO) conducted intensive promotion of the Tohoku Region, including showing footage that highlights the appeal of the Tohoku region on major international broadcasters, inviting media influencers and travel agents from each market to the region, conducting joint advertising campaigns, and encouraging online travel agents to send tourists to the region, as a global destination campaign, in collaboration with Tohoku Tourism Promotion Organization, local governments, and people in the tourism industry.

In addition, initiatives to attract tourists from overseas by capitalizing on the effects of the rapid increase in inbound tourism to Japan, in order to accelerate the recovery of disaster-affected regions through tourism, are supported by the Subsidy for Tohoku Tourism Revival established in FY2016. Initiatives include providing more fulfilling activities during tourists' stay (e.g. experiential programs conducted according to proposals made by the local communities), enhancing promotion, and creation of an environment suitable for receiving foreign travellers. In addition, to facilitate the earliest possible recovery of tourism in Fukushima Prefecture, we have supported tourism-related businesses that contributed to the efforts for disaster recovery and reputation damage control, such as domestic promotions implemented by the prefectural government, and a project to revive educational travel. Additionally, we have supported community efforts to create far-ranging sightseeing routes throughout Tohoku.

### Section 5

# **Ensuring the Smooth Execution of Reconstruction Projects**

The restoration/reconstruction projects for the disaster areas are moving forward steadily and the home rebuilding/town reconstruction is basically progressing according to the "Residence Recovery Construction Time Table".

MLIT has been taking necessary measures to assist the smooth execution of reconstruction projects by cooperating with the institutions concerned and related industries in "Restoration Acceleration Meetings" (held 8 times since March 2013) and the "Council to Secure Execution of Reconstruction Projects" (held 8 times since December 2011). In order to set predetermined prices that reflect current market prices, the unit price of design work for public works in the three affected prefectures has been raised six times since April 2013, and reconstruction production rates, which are based on construction works conducted, and the reconstruction coefficient were introduced. Also, the national and prefectural governments established public ready-mixed concrete plants.

Furthermore, the MLIT is also working on measures to ensure smooth execution of projects for public building construction, such as disaster public housing, schools, government offices, and hospitals. These measures include the reflection of current market prices and the actual status of construction sites at predetermined prices, such as by continuing the special measure on standard construction expenses for disaster public housing and promoting the use of the construction and repair cost estimation method developed by the MLIT for the reconstruction of public buildings, as well as by providing individual consultation with care at the public buildings construction inquiry desk.



Breakdown of Organizations using Consultation Service (April 2017 to March 2018) (nationwide)



Corporations 19%

National 46%

Government-designated City 5%

Prefectural 18%

Source) MLIT

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Content of Consultation	Total Number of Consultations (nationwide)	Total Number of Consultations (Tohoku jurisdiction)
Planning and budget measures	337	124
Order and implementation (design, quantity survey, bidding process and construction administration)	1,241	28
Conservation	491	60
Other	145	3
Total	2,214	215

Breakdown of Use of Consultation Service by Content (April 2017 to March 2018)

Inquiries on consultations should be directed to the public buildings construction inquiry desk on the MLIT website or to eizen@mlit.go.jp.

# Section 6 Reconstruction and Revitalization of Fukushima

After the Tokyo Electric Power Fukushima No. 1 Nuclear Power Plant accident, the number of people instructed to evacuate from the evacuation zones was approximately 24,000 individuals Note 1 (according to studies by the Cabinet Office), while the total number of refugees in Fukushima Prefecture, including self-imposed evacuees, climbed to approximately 50,000 individuals Note 2 (according to studies by Fukushima Prefecture). Evacuation directives have been lifted in most restricted residential zones and zones that are ready for the lifting of the directives. It is necessary to promote the creation of an environment conducive to return and further deepen strategies to support return and support for new lifestyles, as well as to expand initiatives aimed at rebuilding businesses, livelihoods and lives, and achieving self-sufficiency.

In areas where return has been deemed to be difficult, a system of plans has been established under the Revised Act on Special Measures for the Rebirth of Fukushima, which was promulgated and enacted in May 2017, to promote the rebuilding and recovery of Special Reconstruction and Revitalization Zones, with the aim of lifting evacuation orders and making resettlement possible within about five years. In September 2017, Futaba, Okuma, Namie, and Tomioka towns became subject to reconstruction plans for Special Reconstruction and Revitalization Zones, and work has commenced in some areas. It is necessary to promote the creation of an environment conducive for evacuees to return to their homes as soon as possible and further deepen strategies to support return and support for new lifestyles, as well as to expand initiatives aimed at rebuilding businesses, livelihoods and lives, and achieving self-sufficiency.

The MLIT strives to restore and reconstruct infrastructures in accordance with the Timetable, implement measures for the toll-free use of expressways for refugees, and overcome harmful rumors. In addition, within the framework of the amended Act on Special Measures for the Rebirth of Fukushima,, measures are taken so that we can carry out infrastructure improvement projects on behalf of municipalities and provide support for the establishment of new downtown areas in Special Reconstruction and Revitalization Zones, so that allowing people to live in them.

# Section 7 Building Tsunami-resistant Communities by Learning from the Great East Japan Earthquake

Based on the lessons learned from the Great East Japan Earthquake, in December 2011 the Law for Tsunami Disaster Prevention District Building was established and put into effect. This law is based on the thinking that even when a maximum level tsunami occurs, people's lives are the number one priority, and the promotes building districts that are well fortified against tsunami disasters with the concept of multiple defenses that combine structural and non-structural measures.

Note 1 As of April 1, 2017.

Note 2 As of February, 2018.

<sup>\*</sup> Private: Private orderers, design offices, construction business operators, etc.

The MLIT provided technical advice related to the enactment of the aforementioned law to support local governments in building communities resistant to tsunamis, published guidance documents regarding the settings for tsunami flood suppositions, and opened a consultation desk for inquiries related to tsunami flood suppositions. Also, in order to configure a maximum class tsunami fault model for the Sea of Japan where the accumulation of scientific knowledge is insufficient, the MLIT is providing technical support by publishing reports of the Study Commission of a Large Scale Earthquake in the Sea of Japan.

As of the end of March 2018, 34 prefectures had announced tsunami flood suppositions for maximum class tsunamis. Furthermore, tsunami disaster prone areas have been designated in nine prefectures, and of these, Izu City in Shizuoka Prefecture has been designated a special disaster prone area. Plans (promotion plans) have been created to generally promote the creation of tsunami disaster caution zones in 10 municipalities.

In the disaster affected areas, 24 districts are proceeding with recovery efforts using the Law concerning the Construction of Tsunami-resistant Communities, like making city planning decisions regarding the Tsunami-resistant Urban District Forming Facility by Building a Housing Complex (as of the end of March 2018).

Going forward, we must take into consideration the characteristics of the entire region and using the existing public facilities to combine 'structural' measures like sea embankments with 'non-structural' measures like evacuation drills to further proactively advance the construction of tsunami-resistant communities to protect the lives of citizens.