

# **Part II**

## **Trend in MLIT Policies**

# Chapter 1

## Initiatives towards Restoration and Reconstruction from the Great Eastern Japan Earthquake

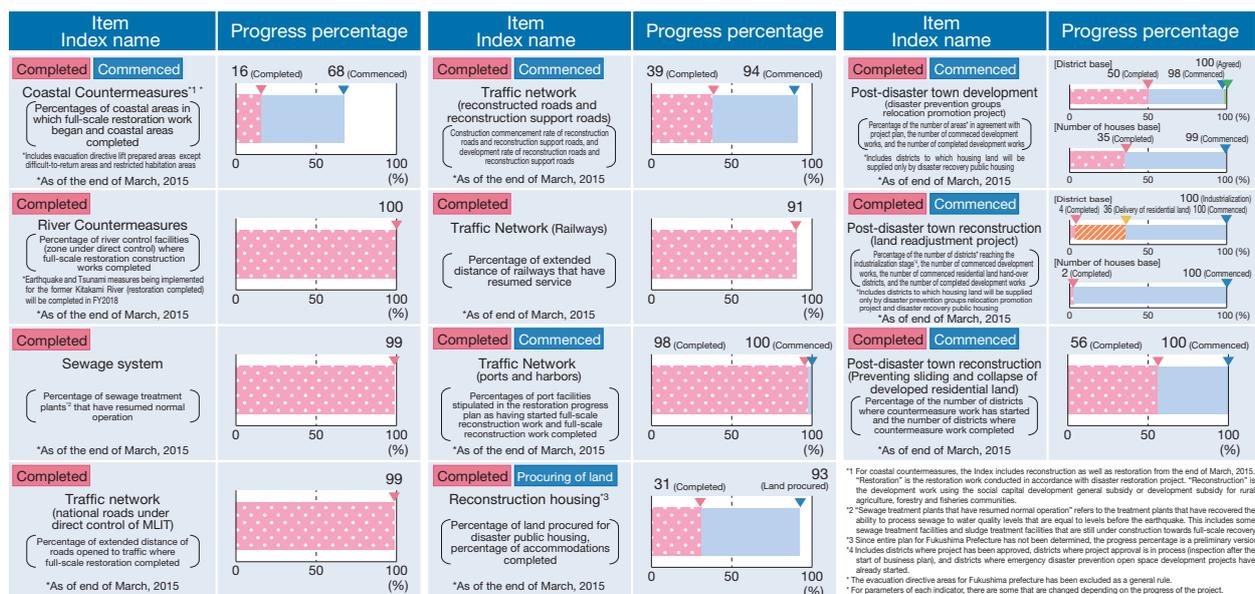
### Section 1 The Current Status and Measures towards Restoration and Reconstruction

Accelerating the restoration from the Great East Japan Earthquake is one of the top priority tasks the MLIT faces. Although the number of refugees has decreased from the initial 470 thousand individuals at the time of the earthquake, around 225 thousand people <sup>Note 1</sup> currently lead lives in evacuation in approximately 1,160 municipalities <sup>Note 2</sup> throughout 47 prefectures. The MLIT is working on further expediting the restoration and reconstruction processes, making an all-out effort so that people from the affected areas can actually feel the restoration.

Attentive to voices from areas affected by disaster, the MLIT will work as a united body to swiftly respond to on-site needs of the Regional Development Bureau, the District Transport Bureau, the Japan Meteorological Agency, and the Japan Coastguard. In order to achieve this goal, in January 2013, we split the parliamentary secretaries into groups of three, and assigned a prefecture to each group as an “Affected Area Assistance Team” within the MLIT to respond sensitively to requests from each area affected by disaster.

The emergency restorations of basic infrastructures such as roads and ports are mostly complete, and full-scale reconstruction work advances steadily as well. We will continue to faithfully execute the work according to the infrastructure progress schedule. Meanwhile, due to the necessity of expediting housing reconstruction and post-disaster town development, we will implement measures in the housing reconstruction and post-disaster town development process that will help accelerate progress. Specifically, we will overcome each of the impediments based on the current conditions of the disaster-affected municipalities, by things such as the front-loaded revision of the public works construction design labor unit price and strengthening of the delivery system by the installation of a public concrete plant in order to secure personnel/materials, accelerate site purchasing, and set appropriate prices. We will also work to secure local public transportation and promote tourism in the affected areas.

Figure II-1-1 Status of Progress Towards Full-scale Restoration and Reconstruction of Public Infrastructures



Source) MLIT

**Note 1** 225,177 people as of March 12, 2015 based on study by Reconstruction Agency.

**Note 2** As of March 12, 2015, based on study by Reconstruction Agency.

## Section 2 The Steady Recovery and Reconstruction of Infrastructures and Transportation

### (1) Outline

For the public infrastructures under the jurisdiction of the MLIT, we are steadily working towards transitioning from emergency restoration phase 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 the full recovery of north-eastern Japan as soon as possible, while staying mindful of requests from disaster stricken areas.

### (2) Coastal Countermeasures

In terms of the full-scale restoration and reconstruction of the coastal levees and so on, of the shores of the 677 districts where restoration and reconstruction is to be done, construction has begun in 459 districts and has been completed in 106 districts as of the end of March 2015. Of these, a section of about 34km has been finished out of the approximately 41km of the national construction area (including the section for which the national government will cover disaster recovery), with the completion of its entirety aimed to be around the end of March 2018. Also, reconstruction of the bay mouth breakwaters will be continued systematically so that there will be as little hindrance as possible to the city building and industry activity, and is targeted to be completed around the end of March 2019.

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, Miyagi, we have established a model where 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

For areas on the state-managed embankments that had been damaged by the disaster, full-scale recovery to secure a safety level equivalent to before the disaster has been completed. While coordinating with the restoration plans formulated by the municipalities, we will continue to gradually build the embankments up to the necessary height, and also work step by step on countermeasures for earthquake and liquefaction, as well as automatic and remote control operation of the floodgates.

### (4) Sewage System

Out of the 120 sewage treatment plants affected by the disaster (excluding the 9 plants within the evacuation order area in the Fukushima prefecture), 2 plants do not need to be in operation as there is no waste-water being generated, and for the 117 other plants—not including the Sendai Minami Gamo Purification Center where the damage was extensive—the recovery of normal processing levels were completed by the end of FY2012. Of the treatment plants located within Fukushima prefecture's "evacuation order cancellation ready area," 3 plants have already completed full-scale recovery. In regards to the 675km of sewer pipes affected by the disaster, 652km of it was fully recovered as of the end of FY2015. We will continue to work in accordance with the reconstruction plan, and aim for earliest possible restoration and reconstruction, combined with the incorporation of earthquake- and tsunami-resistant structures.

### (5) Countermeasures against Sediment-related Disasters

We are working on landslide countermeasures in water system areas like the Abukuma River, where there is a strong possibility that an intense seismic movement would cause unstable sediment to fluidize, which would lead to extensive damage to important transportation networks that are essential to the reconstruction work in the affected areas. Our goal is to complete these countermeasures by the end of FY2015.

### (6) Roads

(1) In regard to expressways, of which there were already sections in the caution zones before the Joban Expressway zone review, the section between Joban Tomioka IC and Hirono IC was reopened on February 22, 2014 and the section between Minami-Soma IC and Namie IC, which had been under construction at the time of the disaster, was opened on December 6, 2014. The remaining section between Namie IC and Joban IC was opened on March 1, 2015, approximately

two months ahead of schedule. With the completion of this last section, the Joban Expressway in its entirety was opened to traffic. (2) In regard to the national highways that are under direct control of MLIT, the full-scale reconstructions were basically completed by the end of 2012. 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, the work on the main structures, such as bridges, has begun in earnest. The work is simultaneously being completed on all areas, including zones that have been newly privatized, and through the application of the Project Promotion Process (PPP), we are able to make use of the private sector's technological skills. Furthermore, in April 2014, the prospect of the roads being opened to traffic was confirmed for the first time in regard to reconstruction roads and reconstruction support roads that were added to the project after the disaster. There are 5 sections of roads (42km) that are expected to be opened for use within 6 to 7 years after the project's commencement, which is an unusually quick time frame. This has been confirmed after the opening of approximately 60% of the total area, including sections that were already opened for use.

### (7) Railroads

Of the railways that were damaged in the Great East Japan Earthquake, reconstruction works started on the Sanriku Railway, by utilizing the new support system established using the FY2011 third supplementary budget, so that the railways of the South Riasu Line between Kamaishi and Yoshihama Stations and the North Riasu Line between Tanohata and Omoto Stations restarted operation on April 5 and 6, 2014, thereby the entire railways were restored. For the railway line between Tatsuta and Hirono Stations, taking into account the decision for the return date of the residents of Narahamachi, operation was resumed on June 1, 2014, and Ishinomaki Line for the stretch between Urashuku and Onagawa Stations resumed operation as of March 21, 2015, thereby the entire Ishinomaki line was fully restored. As a result, the only railway lines with zones where service is still suspended are five of Japan Railways East Japan lines (JR Yamada Line, Ofunato Line, Kesenuma Line, Senseki Line, Joban Line).

Senseki Line is expected to reopen for operation of the entire line on May 30, 2015, and reconstruction is moving forward on the Joban Line between Hamayoshida and Soma Stations with the goal of resuming operation in the spring of 2017. For the route between Haranomachi and Tatsuta Stations on the Joban Line, the decision was made on March 10 to "resume operation for the entire line in the future", and as specific steps to achieve this goal, the timing of resuming operation for each zone was indicated by targets such as "the route between Haranomachi and Odaka Stations would be opened by spring of 2016". For the route between Namie and Tomioka Stations which includes a problematic recovery zone, it has been determined that "operations will be resumed after completing the combined decontamination and restoration work as well as confirmation of the emergency safety measures for the users of this line."

As for the Yamada Line, JR East Japan and the local government bodies agreed to transfer the management of the line from JR East Japan to Sanriku Railway in February 2015 and restoration work started on March 7.

Meanwhile, the MLIT Tohoku Department of Transportation has been appointed the secretariat for the Ofunato Line and the Kesenuma Line at the reconstruction coordination meetings comprised of municipalities along the railway lines, JR East, and restoration offices of each railway line, in order to move forward ideas for integrating the restoration of the railway lines with the city development. Furthermore, in order to secure public transportation for the immediate future, the BRT <sup>Note</sup> is being operated as a temporary restoration measure from December 22, 2012 for Kesenuma Line and from March 2, 2013 for Ofunato Line.

### (8) Ports/Harbors

For the ports and harbors, the disaster restoration on the port/harbor facilities vital to industry and logistics was mostly completed in FY2014. The restoration of the baymouth breakwater will be continued according plan, while the port/harbor facilities that are foundational to the economic recovery, such as quay walls and breakwater, have been repaired.

Meanwhile, the sea area landfill sites of 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

**Note** Abbreviation for Bus Rapid Transit. Refers to a bus transportation system that is faster and more punctual than regular bus systems by using bus-only roads.

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 stability of residency, taking into account the “Residence Recovery Construction Time Table” which organizes prospects for the provision of building lots for private residences and the completion of disaster public housing based on reports from the 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 also by posting the “Reconstructive City Development INDEX,” an online website for compiling support initiatives.

### (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 the zones considered unsuitable for residence, and the “disaster urban area land recovery and readjustment project” which supports comprehensive town building by combining work on the public facilities such as building sites and roads with the site reconstruction work on tsunami disaster affected urban areas, as well as the preparation of building sites for relocation to higher grounds.

By the end of March 2015, the disaster prevention group relocation project had already secured the consent of the Minister—which is the legal procedure for undertaking projects—for projects such as the relocation of group to upland, and of all 331 districts scheduled to be relocated, construction works have already commenced on 326 districts based on the “Residence Recovery Construction Time Table.” For the land readjustment project, project approval has been received and construction has begun on the 50 districts based on the “Residence Recovery Construction Time Table.”

### (2) Securing Stability of Residency

For victims who are able to build or obtain housing by their own means, interest rates were lowered for disaster recovery housing loans provided by the Japan Housing Finance Agency. Disaster recovery housing loans were also provided to victims who only suffered damages to their real estate. Pre-existing loans were given up to 5 year extensions on payments and payment deadlines, as well as interest rates being lowered for loans amid payment.

Victims who face difficulties in building or obtaining housing by their own means 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 the stability of residency for the refugees residing in evacuation order areas (evacuees) by providing them the same accommodations as the disaster victims, such as moving into disaster public housing.

Figure II-1-3-1 Development Status of Disaster Public Housing (March 31, 2015)

Prefecture	Procuring of land	Construction commenced	Construction completed	Provision plan
Iwate prefecture	5,246 houses 160 districts	3,678 houses 100 districts	1,525 houses 54 districts	5,921 houses 12 municipalities
Miyagi prefecture	15,004 houses 350 districts	10,291 houses 223 districts	5,289 houses 132 districts	15,988 houses 21 municipalities
Fukushima prefecture <sup>(Note)</sup>	7,041 houses 127 districts	3,577 houses 84 districts	2,126 houses 48 districts	7,592 houses 21 municipalities

(Note) Fukushima Prefecture has a district where the construction plans for disaster public housing for earthquake/tsunami victims are not formulated. Also, the distribution plans for the disaster public housing for nuclear disaster evacuees have not been confirmed due to the fact that current plans may need to be reviewed based on the results from the residents' intention survey. Source) MLIT

## Section 4 Securing Local Public Transportation and Promoting Tourism

### (1) Securing Local Public Transportation

In regards to the local public transportation, which suffered damages from the Great East Japan Earthquake, we are taking exceptional measures such as mitigating the auxiliary requirements for the Regional Public Transportation Securement, Sustention and Improvement Projects to support the securing and maintaining of local public transportation systems such as buses and 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 newly built housing, hospitals, shops and public agencies. Furthermore, for bus transportation within the district, continued support is being offered by extending the support period for another 2 years to FY2015, making it possible to respond with careful consideration of the needs in the district, such as raising the aid provision limit according to the number of places with temporary housing.

### (2) Reviving Tourism

To recover the major drop in the number of foreign tourists coming to the Tohoku area after the earthquake, we are working on dispelling harmful rumors in major overseas markets and engaging in PR work regarding the recovering of tourism in this area.

To be more specific, we posted accurate information regarding things like radiation doses on the Japan Government Tourist Office website for the benefit of overseas consumers, and we invited members of foreign media to the Tohoku region and also implemented the transmission of information about Tohoku through SNS to promote the appeal of the Tohoku as a tourist destination. In addition, we invited overseas travel companies to the Tohoku region, and communicated tourism information about the Tohoku region by supporting the development of travel products and having an overseas travel exposition.

We are also implementing different initiatives to recover national tourism. For the Pacific Ocean coastal areas in particular, we have supported efforts taken by both people in departing and arriving areas by developing public relations for the recovery and dispelling of harmful rumor, preventing the memories of earthquake from being forgotten, promoting regional systems for the recovery of tourism, advancing the creation of travel products and recovery tours that are unique to the region. In addition, to facilitate the earliest possible recovery of tourism in Fukushima prefecture, we supported tourism-related businesses that contributed to the efforts for reputation damage control and disaster recovery. In addition, in order to contribute to increasing the satisfaction level of visitors and dispelling damaging rumours, a special exception has been made based on the Special Measures for Fukushima Restoration and Revitalization so that as of March 2012, Fukushima Prefecture is authorized to grant their own licensed guide qualifications. As of the end of March 2015, 85 people have been registered with this qualification.

According to the Overnight Travelers Statistical Survey by the Japan Tourism Agency, among the 6 Tohoku Prefectures <sup>Note 1</sup>, the total number of overnight guests was approximately 39 million people for FY2014 yearly rate <sup>Note 2</sup>, which is a 1.5%

**Note 1** The 6 prefectures in Tohoku region: Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima.

**Note 2** Provisional value

increase compared to 2010 before the earthquake. However, if we look at the total number of overnight guests that stayed at facilities that are mainly for tourists <sup>Note</sup>, the number has decreased by 19.0% compared to 2010, showing that the major scars left by the earthquake disaster is preventing the national economic boom from reaching these areas.

## 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”.

Although there have been some slumps and failures in bidding—mainly for construction projects with difficult conditions—by using ingenuity when re-commissioning, such as reviewing the planned price to reflect the actual condition of the market and commissioning on an appropriate scale, most projects have reached the point of getting a contract.

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 5 times since March 2013) and the “Council to Secure Execution of Reconstruction Projects” (held 8 times since December 2011). In these meetings, in order to set planned prices to reflect the current market price, the design work unit value for public works was pulled up to approximately 21% in April 2013, approximately 8% in February 2014, and approximately 6% in February 2015 for the three disaster-stricken prefectures. We also introduced the reconstruction coefficient related to the reconstruction productivity data based on the actual work conditions of the disaster affected areas and the indirect construction costs, and built public concrete plants financed by the country and/or prefecture.

Furthermore, as work on disaster public housing and the public building construction such as schools, governmental buildings and hospitals gets well underway with the progress in reconstruction, in order to reflect the current market price and the conditions of the construction sites in the planned price, the MLIT is moving forward with measures for smooth execution of reconstruction projects, such as raising the standard construction price of public disaster housing and promoting the use of the “cost management method”, as well as providing thorough responses to the individual consultations at the public construction consultation service.

### Column

#### Public Construction Inquiry Desk

The Government Buildings Department, Regional Development Bureau Maintenance Department and Maintenance Office of the Government Buildings Department has set up a consultation service to respond to a variety of opinions/questions related to government buildings maintenance, starting with measures for public construction bidding slumps/failure, building maintenance operations and various standards. As a part of the consultant function of the government maintenance administration, this service is providing various types of information making use of the know-how developed while maintaining governmental facilities.

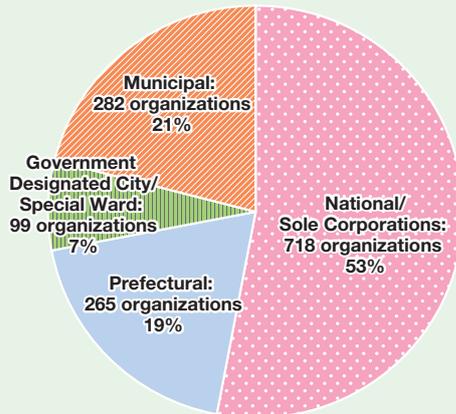
In FY2014, as a part of the smooth execution of construction measures and the measures to extend the life of infrastructures, we have proactively responded to questions such as how to set an appropriate planning price, quantity survey related queries, and conservation related consultations, along with other questions that have come in related to design, construction management and bid contract processes.

Over half of the consultations are from local governments, and concrete results are being achieved, such as hospitals, government building and schools that had been struggling with bidding slump/failure for construction projects being able to reach successful acceptance of bids.

Inquiries to the consultation service can be made by using information found in “Public Construction Consultation Service” listing on MLIT’s website to directly contact the various District Development Bureau’s Maintenance Office, or by emailing [eizen@mlit.go.jp](mailto:eizen@mlit.go.jp).

**Note** Facilities mainly for tourists refers to facilities that answered that over 50% of all their overnight guests stay there for tourism purposes.

Breakdown of Organizations using Consultation Service (April 2014 to March 2015)



Source) MLIT

Breakdown of Contents using Consultation Service (April 2014 to March 2015)

Content of Consultation	Total Number of Consultations
Quantity survey, design and bidding process	1,270
Conservation	491
Construction Supervision	201
Other	297
<b>Total</b>	<b>2,259</b>

Source) MLIT

## Section 6 Reconstruction, Revitalization and Etc. of Fukushima

After the occurrence of Tokyo Electric Power Fukushima No.1 Nuclear Reactor accident, the number of refugees from the evacuation zones was approximately 79,000 individuals <sup>Note 1</sup>, while the total number of refugees in the Fukushima prefecture including self-imposed evacuees climbed to approximately 120,000 individuals <sup>Note 2</sup> (according to studies by the Reconstruction Agency). Taking into account the fact that the evacuation order was lifted for Tamura City on April 1, 2014 and for a part of Kawauchi Village on October 1 of the same year, the government needs to expand and strengthen the measures for early return support and new life support so that infrastructure and daily life related service can be restored and the citizens and local governments can start taking steps towards establishing a new future. The MLIT strives to actualize the soonest possible return of those in evacuation through efforts such as reconstructing infrastructures, implementing measures for the toll-free use of expressways for refugees, and overcoming harmful rumors, in accordance with the “Early Return and Resettlement Plan,” established in March 2013, and the “Speeding Up of Recovering Fukushima from the Effects of the Nuclear Accident,” which was approved by the cabinet in December of the same year. In accordance with the “Evacuation Lifted Districts Reconstruction and Revitalization Plan” formulated based on the “Act on Special Measure for the Rebirth of Fukushima” amended in June, 2014, the MLIT will make full efforts to realize the early return of evacuees by taking such initiatives as restoration of infrastructures based on the time table, expressway toll-free setting for evacuees, and dispelling of harmful rumor.

## 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 number one priority”, and promotes building districts that are well-fortified against tsunami disasters with the concept of “multiple defenses” that combine structural and non-structural measures.

The MLIT is providing technical advice related to the enactment of the aforementioned law to support local governments in building communities resistant to tsunamis, and published guidance documents regarding the settings for tsunami flood measurement. We are also implementing establishment of consultation service for inquiries related to tsunami flood suppositions and exchanging opinions between municipalities. 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 held a “Study Commission of a Large Scale Earthquake in the Sea of Japan” and put together a report in September 2014.

**Note 1** As of January 13, 2015.

**Note 2** As of October 1, 2014.

Tsunami flood suppositions for maximum level tsunami occurrences have been published for 22 prefectures (as of the end of March 2015). Also, since March 2014, Tokushima Prefecture and Yamaguchi Prefecture (Seto Inland Sea Coast) have been designated as a Tsunami Disaster Caution Zone, and plans (promotion plan) are being made to comprehensively promote tsunami disaster prevention district building in the 4 cities of Yaizu City and Hamamatsu City of Shizuoka Prefecture, Kushimoto City of Wakayama Prefecture, and Miyazaki City of Miyazaki Prefecture.

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 2015).

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.