The Year Following the 2011 Great East Japan Earthquake

Moving Forward As One - SENDAI -

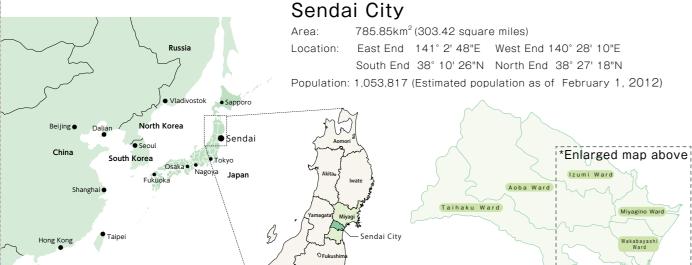


Sendai City/Coastal Area Map

[Areas Flooded by the Tsunami] Population: 22,021 Number of Households: 8,110 Area: 5,200ha(20 square miles)







Foreword

I offer my prayers to all of the individuals that perished in the Great East Japan Earthquake and hope they have found peace in the next life.

The principle duty of any municipality is to guarantee the safety and stability of their citizens. The disaster that occurred on March 11, 2011 grievously hindered our ability to carry out that duty.

This booklet, which includes pictures taken in the year following the disaster, was created to highlight Sendai City's response to the disaster. We seek to show how rescue efforts were enacted, how opportunities were provided for people to come together, and support was provided for our citizens.

Over the course of one year, Sendai was able to re-establish vital services such as gas and water to the citizens, secure housing for individuals who lost their homes in the disaster, devise special methods for the removal of debris, and implement changes in financial policies to support the local economy. However, our progress has not come easy and there have been difficulties along the way. I view our experience as a valuable resource that we want to openly share with others in hopes that they may learn from our recovery efforts.

I also would like to take this opportunity to offer my most heart-felt gratitude to everyone in Japan and also to those from around the world for their continuous out-pouring of support and encouragement.

There are several important factors in our recovery process. The unyielding will of the people, businesses rising to the challenge, support from all around the world, and the resulting bonds that were forged through collective hardship. If any single one of these pillars of support were to falter, the task ahead of us would seem insurmountable.

To guarantee success, our only available option is to focus on building a better future and to move forward as one.

Emiko Okuyama

Mayor City of Sendai

Part 1

Occurrence of the Great East Japan Earthquake and Resulting Damage

An unprecedentedly immense 9.0 magnitude earthquake, the largest ever recorded in history. A calamity which produced a tsunami that threatened to wash everything away.



A huge wave engulfs the coast of Fujita, Wakabayashi Ward and overwhelms houses.



Southwest aerial view over Arahama Elementary School.

Two helicopters from the Sendai City Fire Bureau continue to grapple with the situation.



Sendai Minato Gas Plant



A fire approaches a petrochemical complex





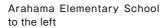
Minami-gamo Purification Center



March 11, 4:00 p.m.



and local residents wait for rescue on the rooftop of tsunami stricken Arahama Elementary School.







Heliport at Arahama Aircraft Division Station with the Pacific Ocean visible on the right



View from near Arahama, Wakabayashi Ward towards Yuriage, Natori City



A group of evacuees being guided by rescue personnel all hold on to the same rope while fleeing from Arahama Elementary School.



Near Nakano Elementary School





Arahama Elementary School Gymnasium



Vehicles carried by the force of the tsunami can be seen in a classroom on the first floor of Arahama Elementary School.



Sendai Tobu Toll Road and the surrounding area





A debris-covered residential area of Nakano, Miyagino Ward



Inland view from the coastal area of Arahama, Wakabayashi Ward. In the middle, slightly to the right is Arahama Elementary School. Most of the coastal pine trees were washed away by the tsunami (March 18, 2011).



The seaside Park Adventure Field in Ido, Wakabayashi Ward (March 18, 2011). Five individuals were rescued after evacuating to a lookout tower in the park.



The seaside Park Adventure Field before the disaster (May, 2004)



The eastern coastal area before the disaster (May, 2004)



Fujitsuka, Wakabayashi Ward. Teizanbori Canal can be seen stretching out to the right (March 18, 2011).



Sendai-Shiogama Port (March 18, 2011)



Scattered cargo containers (Sendai-Shiogama Port)



A vessel washed ashore (Sendai-Shiogama Port)



A bus terminal in front of the JR Sendai Station (March 11, 2011)



waited patiently for a free shuttle bus the earthquake bound for Dainohara (March 25, 2011).



At Izumi-chuo Subway Station, people Taihaku Ward Office immediately following



Evacuees attempt to charge cellular Evacuees seek shelter in the lobby of Evacuees sleeping near a counter in phones at Miyagino Ward Office (March 12, Miyagino Ward Office 2011)





Taihaku Ward Office (March 13, 2011)



First floor lobby of the Taihaku Ward Office



The stairs of a pedestrian bridge are all that remain after the bridge collapsed in Kasuminome, Tomizuka 3-chome, Wakabayashi Ward (March 13, 2011).



A building damaged by the earthquake



People wait in line at a supermarket due to entrance restrictions





Vehicles waiting to purchase gasoline caused traffic jams and blocked the passage of emergency and construction vehicles.

13



Kenmin no Mori Forest Park (Iwakiri, Miyagino Ward)



Damage to a residential area in Aoyama 2-chome, Taihaku Ward (March 26, 2011)



Damage to a hillside suburban residential area (Seikaen, Aoba Ward)

Damage in Sendai City

Outline of the Earthquake

2011 Tohoku Region Pacific Coast Earthquake

Name	2011 Tohoku Region Pacific Coast Earthquake
Date/Time	March 11, 2011 at 2:46 p.m.
Epicenter	Off the Sanriku Coast of Japan (38° 06.2' N, 142° 51.6' E)
Earthquake Depth	24km (14.9 miles)
Earthquake Size	Magnitude 9.0
Seismic Intensity in Sendai City	Intensity 6 upper: Miyagino Ward Intensity 6 lower: Aoba Ward, Wakabayashi Ward, Izumi Ward Intensity 5 upper: Taihaku Ward
Tsunami	March 11 at 2:49 p.m. Tsunami warning issued for the Pacific Coast of the Tohoku region March 12 at 8:20 p.m. Major tsunami warning downgraded to tsunami warning March 13 at 7:30 a.m. Tsunami warning downgraded to tsunami advisory March 13 at 5:58 p.m. Tsunami advisory cleared * Height of tsunami (Sendai-Shiogama Port): estimated 7.2m (23.6 feet)

(Source: Japan Meteorological Agency)

Largest Aftershock

Date/Time	April 7, 2011 at 11:32 p.m.		
Epicenter	Off the Pacific Coast of Miyagi Prefecture (38°12.2' N, 141°55.2' E)		
Earthquake Depth	66km (41 miles)		
Earthquake Size	Magnitude 7.2		
Seismic Intensity in Sendai City	Intensity 6 upper: Miyagino Ward Intensity 6 lower: Aoba Ward, Wakabayashi Ward Intensity 5 upper: Izumi Ward Intensity 5 lower: Taihaku Ward		
Tsunami	April 7 at 11:34 p.m. Tsunami warning issued for Miyagi Prefecture April 8 at 12:55 a.m. Tsunami warning cleared		
(Source: Japan Meteorological Agency			

Earthquake Damage

Casualties / Missing Persons Injuries (As of March 6, 201

Number of Casualties

(1) Confirmed casualties in Sendai City / 797 (448 males, 349 females)

(Including 91 non-residents and 2 unidentified bodies found in the city)

- (2) Residents of Sendai City / 872 (491 males, 381 females) (Including 168 residents confirmed deceased outside of the city)
- * Both numbers include 143 casualties identified as attributable to disaster-related causes, such as pneumonia due to the loss of utilities.
- * The numbers shown above were counted independently in Sendai City and may differ from those provided by police reports.
- * Among those who were confirmed deceased in the city, the following are locations where bodies were found (excluding those identified as attributable to disaster-related causes): Aoba Ward 1, Miyagino Ward 305, Wakabayashi Ward 338, Taihaku Ward 8, Izumi Ward 2 (Total 654)
- In accordance with guidelines put forth by the Miyagi Prefectural Government, the number of casualties does not include missing persons for whom death notifications have been submitted.

Number of Missing Persons

32 (17 males, 15 females)
(including 27 for whom death notifications have been submitted)

Number of injuries

Serious injuries: 275

(including 6 by aftershocks on April 7, 2011)

Minor injuries: 1,994

(including 65 people by aftershocks on April 7, 2 people on July 25, 1 person on July 31, and 1 person on August 19)

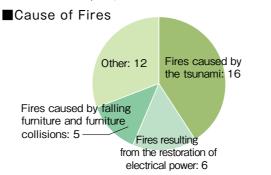


Fires

■Number of Fires

Aoba Ward	Miyagino Ward	Wakabayashi Ward	Taihaku Ward	Izumi Ward	Total
11 (1)	25 (2)	0	1	2	39 (3)

*Numbers in brackets represent fires that occurred as a result of the aftershock on April 7, 2011



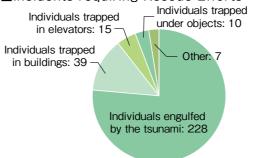
Firefighting Efforts

■Number of Firefighting Efforts by Type

Fires	Rescues	First aid	Gas leaks	Dangerous substance leaks	Natural disaster response
39 (3)	299 (17)	141 (33)	113 (52)	46 (22)	225 (47)

*Numbers in brackets represent fires that occurred as a result of the aftershock on or after April 7, 2011

■Incidents requiring Rescue Efforts



■Results of Rescue Efforts

Number of individuals rescued: 899 Number of individuals who received evacuation guidance: 3,931

Refuge Areas

■Evacuees

Number of evacuees (Max.): 105,947 (As of March 12, 2011 at 11:30 a.m.)

■Refuge Areas

Number of refuge areas (Max.): 288 (As of March 14, 2011 at 8:00 a.m.)

Date of closure: July 31, 2011

(Aoba Ward - June 25, Miyagino Ward - July 31, Wakabayashi Ward - July 24, Taihaku Ward - July 9,

Izumi Ward - July 17)



Gamo, Miyagino Ward (April 6, 2011)

Damage to Buildings (As of January 8, 2012)

■Number of Damaged Private Buildings

Ward Office	Breakdown by Degree of Damage				
General Branch Office	Complete	Severe	Half	Partial	
Aoba Ward	2,090	3,807	14,725	22,673	
Miyagi general branch office	414	159	1,905	5,672	
Subtotal (Aoba Ward + Miyagi General Branch Office)	2,504	3,966	16,630	28,345	
Miyagino Ward	9,375	4,724	12,620	23,855	
Wakabayashi Ward	7,195	7,478	14,576	13,595	
Taihaku Ward	4,385	5,241	14,569	20,840	
Akiu General Branch Office	1	2	71	296	
Subtotal (Taihaku Ward + Akiu General Branch Office)	4,386	5,243	14,640	21,136	
Izumi Ward	5,425	3,732	13,369	24,476	
Total	28,885	25,143	71,835	111,407	
Total Damage by Type (%)	12.2%	10.6%	30.3%	47.0%	

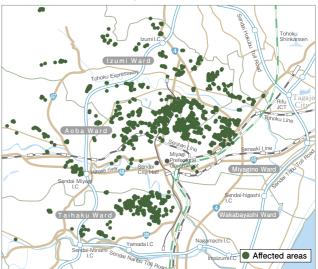
^{*} Percentages are rounded to the nearest tenth and will not add up to 100

Damage to Residential Areas (As of August 19, 2011)

■Number of Damaged Houses

Ward	Damaged houses	Breakdown of Damage to Structures			
		Ground only	Retaining wall only	Ground & Retaining wall	
Aoba Ward	1,290	530	306	454	
Taihaku Ward	1,365	934	99	332	
Miyagino Ward	484	219	95	170	
Izumi Ward	892	450	144	298	
Total	4,031	2,133	644	1,254	

■Location of Damaged Residential Areas



Part 2

Rescue and Recovery Efforts

Recovery efforts have been continuously ongoing since the disaster without faltering. People from all walks of life have been helping since the disaster. Some of these areas that people are helping with are as follows: search and rescue, identification of missing persons, and maintaining infrastructure. Continued citizen support has been instrumental in situations ranging from emergencies to follow up support after the disaster.



Helicopter rescue at the scene of a fire near Nakano Elementary School



Disaster rescue dog searching for missing persons.



Search and rescue efforts by the Sendai City Fire Bureau focusing on flooded agricultural land (March 20, 2011)



Search and rescue efforts in Arahama (April 9, 2011)

Rescue Efforts



Search and rescue efforts focusing on cars that were swept away by the tsunami (April 24, 2011)



Joint operation between DMAT (Disaster Medical Assistance Team) and the Sendai City Fire Bureau



Search and rescue efforts using aluminum boats (April 18, 2011)



Search and rescue efforts focusing on collapsed houses (April 16, 2011)



Nagamachi Elementary School being used as a refuge area (March 16, 2011).

Refuge Areas



Mayor listening to the concerns of evacuees at Shichigo Elementary School (March 23, 2011)



Information Desk for volunteers at Sendai City Gymnasium



Message boards at Nagamachi Elementary School (March 16, 2011)



Mayor providing encouragement to evacuees at Shichigo Elementary School (March 23, 2011)



Evacuees at a Children's Well-being Center



Evacuees waiting in line for water

Emperor Akihito and Empress Michiko visiting disaster-affected areas









Emperor Akihito and Empress Michiko made a number of visits to disaster affected areas in order to encourage disaster victims. On April 27, 2011, they visited Miyagi Prefecture, which was their first stop in the Tohoku region. Their Majesties were greeted by Mayor Okuyama at the Miyagino Gymnasium and then listened to an explanation of the current situation in devastated areas of Sendai. They then expressed their deep condolences and sympathies for the victims. The citizens in attendance were all evacuees whose houses had been swept away by the tsunami in the Nakano Elementary School district. The Emperor and Empress spoke face-to-face with the residents and provided much needed encouragement through the warm shaking of hands.

Refuge Areas

A maximum number of 288 refuge areas were in operation after the disaster with more than 100,000 evacuees. The number of evacuees and the need for refuge areas decreased as utilities recovered and temporary housing became available.

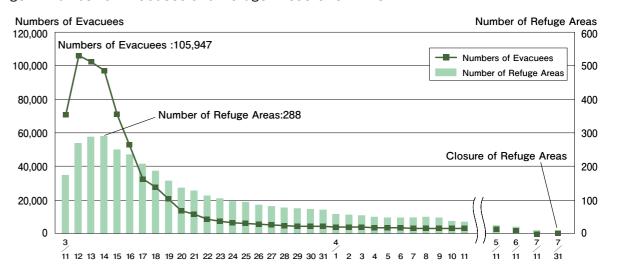
Number of Evacuees

Maximum Number of Evacuees: 105, 947 (March 12, 2011 at 11:30 a.m.)

Number of Refuge Areas

Maximum Number of Refuge Areas: 288 (March 14, 2011 at 8:00 a.m.)
Closure of Refuge Areas: July 31, 2011

■Change in Number of Evacuees and Refuge Areas Over Time



City Clean-up Efforts

Continued efforts for the recovery of utilities



Recovery work on damaged water pipes continued in heavy snow. Water supply was restored on March 29, 18 days after



The earthquake caused manholes to protrude from the ground.



The gas recovery team dispatched by the Japan Gas Association and city gas operators around Japan.



Construction work took place to replace damaged gas pipelines with quake-resistant polyethylene pipelines.



On March 12, 2011, Minami-gamo Purification Center dedicated all of their efforts to resume sewage treatment of their 716,000 customers. Workers can be seen removing debris from the water discharge gate (March 16, 2011).



Debris Collection Site (Ido, Wakabayashi Ward)

Disaster Waste Disposal

The earthquake and tsunami produced roughly 1,350,000 tons of waste which includes houses, vehicles that drifted into residential and farming areas, broken furniture, dishes, and household goods and appliances. The garbage collected was equivalent to the amount of garbage produced over a four year period by the entire city. Sendai City has made the processing and disposal of disaster waste its primary concern and has committed to completely removing all disaster waste within one year and to process it all within three years via cooperating with local industry groups.



Temporary incinerator (Arahama, Wakabayashi



Disaster waste was thoroughly separated into different categories at each Debris Collection Site.

■Disaster Waste Removal Teams

Local officials formed teams and launched full-scale efforts after taking into consideration desired removal times and purposes. These teams were formed and specialized in a certain type of waste

- Removal of debris to search for missing persons
- Removal of debris to clear public roads
- Removal of debris from housing areas
- Removal of debris from farming areas
- Removal of pieces of household furniture that were damaged due to the earthquake
- Separation, crushing, and incineration of debris at debris collection sites
- Removal of damaged vehicles
- Trimming and removal of dead and fallen trees - Collection of waterlogged furniture
- Demolition and removal of disaster-affected house
- Demolition and removal of brick walls





of damaged houses



The dismantling and demolishing Collection of waterlogged



Removal of damaged vehicles



Removal of tsunami debris

Support from Around the World

Sendai City received support from around the world and from several of our Sister Cities and Friendship Cities with Special Agreements which include: Riverside City, Rennes City, Minsk City, Acapulco City, Changchun City, Dallas City, Gwangju Metropolitan City, Tainan City and Oulu City.



People writing messages of support in Riverside (March 29, 2011)



Support activities in front of Rennes City Hall (March 19, 2011)



Minsk City accepted a delegation of disaster afflicted high school students (August 4, 2011).



Relief supplies from Changchun City (March 17, 2011)



Disaster victims support event in Dallas City (March 27, 2011)



A moment of silence conducted by

Acapulco citizens (March 12, 2011)

Relief supplies from Gwangju Metropolitan City (March 17, 2011)



Disaster victims support event in Tainan City (March 25, 2011)



Oulu University students hosted a charity event and donated all of the proceeds to aid in disaster recovery (October 20, 2011)

Riverside City (U.S.A.)

May 5: The Mayor of Riverside paid a courtesy visit to the Mayor of Sendai and brought donations and messages of support.

Rennes City (France)

March: A fundraising event for disaster victim support was held in Rennes.

July 22: Courtesy visit by the Deputy Mayor of Rennes to meet the Mayor of Sendai. January 2012: Received monetary donation.

Minsk City (Belarus)

August 1 - 10:Hosted a delegation of disaster afflicted high school students.

Acapulco City (Mexico)

March 12-13: The citizens and Mayor of Acapulco held a moment of silence and offered flowers in memory of the victims of the disaster.

Changchun City (China)

March 18: 10 tons of water offered as relief supplies.

April 18: Received monetary donation.

Dallas City (U.S.A.)

June, November: Received monetary donation (donated via a citizen group for disaster victims).

July 6: Received messages of support.

Gwangju Metropolitan City (Korea)

March 17-20: Received relief supplies in the form of water, cup noodles and other everyday essentials.

July 25: Courtesy visit made to the Mayor of Sendai.

November 1: Received monetary donation.

Tainan City (Taiwan)

April 22: Courtesy visit by the Mayor of Tainan to the Mayor of Sendai along with a monetary donation.

February 2012: Tainan hosted a group of disaster afflicted students.

Oulu City (Finland)

April 28: Received monetary donation.
October 20: Oulu University students hosted a charity event and donated all of the proceeds

to aid in disaster recovery.

October 27: The Deputy Mayor of Oulu paid a courtesy visit to the Mayor of Sendai.

Other Cities

Various countries, municipalities, and groups sent words of encouragement as well as monetary donations.

Support from all Over Japan

Sendai City received a large number of support messages from other people including children from all over the country.



Support messages from Hyogo Prefecture



Support messages were sent by citizens in Kobe City who experienced the Great Hanshin-Awaji Earthquake (March 26, 2011).



"Olympic Day Festa in Sendai," an event where Ai Fukuhara, a member of the Japanese National Table Tennis Team, and other national team players talked and played together with citizens in Sendai (October 10, 2011).



Shizuka Arakawa, the 2006 Olympic Figure Skating Champion, paid a visit to Kabanomachi Junior High School which was being used as a refuge area (April 6, 2011).



"Team Nippon (Japan)," along with Naoko Takahashi, the 2000 Olympic Marathon Champion, and other athletes offered their support.

Total monetary donations for disaster victims and recovery activities that Sendai City received:

For disaster victims: JPY 1,029,410,116 (as of March 9, 2012)

For disaster recovery activities: JPY 1,953,161,782 (as of March 12, 2012)

Remembrance and Pledge for the Future

A memorial service was held on July 11, 2011, four months after the disaster, in order to console the spirits of the deceased. The first remembrance ceremony took place on March 11, 2012, exactly one year after the disaster.

Great East Japan Earthquake Memorial Service in Sendai City (July 11, 2011)







Great East Japan Earthquake Remembrance Ceremony in Sendai City (March 11, 2012)

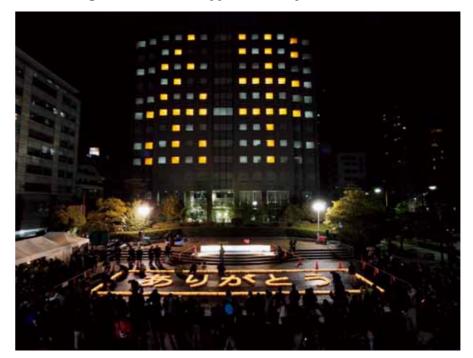






Gratitude for Support and Promise of Reconstruction

On March 11, 2012, an event was held in Sendai City in order to console the spirits of the deceased and to express Sendai City's gratitude for the support from Japan and around the world.







The Candle-Night Event hosted by the Sendai Junior Chamber Inc. featured the Japanese Symbol "Kizuna" 「絆」 created with lit up windows from a neighboring building and "Thank You" spelled out with candles.









Many events were held in downtown Sendai with the theme of consoling the spirits of the deceased and hope for the future. Lights were projected onto the ceiling of a local shopping arcade and live music performances were held in keeping with these themes.

Part 3

Pursuit of Reconstruction

One year since that day. The signs of life are gradually coming back to disaster afflicted areas. Individuals determined to overcome sadness and to improve their current situation bring about strong bonds that have been a boon to our forward progress. Movements from recovery to reconstruction are springing up in several different locations. We will show our new image to the rest of the world.



Aomori Nebuta Festival, Akita Kanto Festival, Morioka Sansa Odori Festival, Yamagata Hanagasa Festival, Fukushima Waraji Festival and Sendai Tanabata Festival were jointly held during the Tohoku Rokkonsai Festival which aimed to encourage everyone in the Tohoku region after the disaster.



A great number of visitors gathered at the Tohoku Rokkonsai Festival to see performances from the other six major festivals participating in the event.

Efforts to Bring Back Tourists and Visitors



Sendai Suzume Odori, a traditional dance in Sendai that was performed at the Tohoku Rokkonsai Festival to help lift everyone's spirits.



Fukushima Waraii Festiva



Morioka Sansa Odori Festival



The SENDAI Pageant of Starlight was close to being canceled as many of the light bulbs for the event had been swept away by the tsunami. However, thanks to the support from the entire country, the event was held as usual (December, 2011).



Kyoto Gion-Matsuri Festival joined the Sendai Tanabata Festival to support the recovery process.



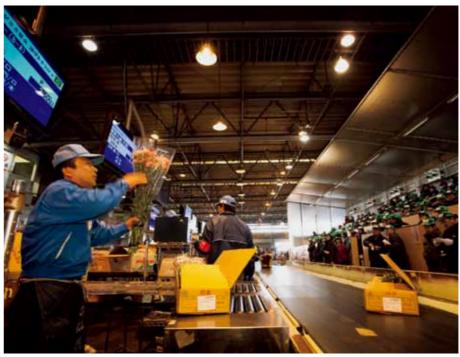
Sendai Tanabata Festival



More than two million visitors gathered during the three days of the Sendai Tanabata Festival (August, 2011).



The 21st Jozenji Streetjazz Festival boasted a total of 746 bands from all over Japan (September, 2011).



Although the amount of sales of fish products and agricultural goods from coastal areas dropped as much as 50% for several months, the annual sales volume has now recovered and the market is performing as well as in the past (Photo provided by Kazuhiko Suzuki).



held its first auction since the disaster (Photo provided by Sendai Suisan).



The meat market held its first auction of the year on January 5, 2012.



The Central Wholesale Market in Sendai worked through the hardships of the disaster and held a market festival in October to celebrate their 50th anniversary.

Commercial Distribution The Central Wholesale Market which is known as the "kitchen of Sendai," continued to provide food even after the disaster. Not only did they supply food within the market, they also delivered to ward offices, relief supply stations, Sendai City Hospital, and helped with soupruns provided by the Japan Self Defense Forces. Their strong determination to never stop supplying food supported the lives of citizens and helped lead to the recovery of Sendai.



On June 8, 2011, a containership left Sendai-Shiogama Port bound for North America for the first time since the disaster.



Professional Sports

Yurtec Stadium Sendai, the home of Vegalta Sendai, was restored promptly and the first home game of the season was held on April 29, 2011.

Vegalta Sendai, the Rakuten Eagles, and the Sendai 89ERS, which are the three major professional teams that represent Sendai, began support efforts immediately following the disaster. Support efforts included visiting refuge areas and volunteer work. Their dedication and spirit of perseverance seen by the citizens in the season following the disaster played an instrumental role in raising spirits in Sendai Citizen's and the people of the Tohoku region, and also brought domestic and international attention to disaster recovery efforts.

Although Vegalta Sendai devoted themselves to training and physical conditioning for their opening match, they were also extremely active in volunteer activities (Photo taken on March 30, 2011 at Wakabayashi Ward).



Many citizens were encouraged by the caliber of the athletes' performances and by their fundraising and volunteer efforts.



89ERS at the first home game of the season.

Hometov Summit h Children

The Hometov Summit: In elementary gathered to 80,000 schoin disaster n

Education

Even in the midst of this unprecedented disaster, students did a great job of categorizing and distributing donated goods at refuge areas and helped deliver water to elderly people's homes.

"We're willing to help Sendai" — Children's passion for their hometown has led to the "Hometown Reconstruction Project by School Children," which aims to revitalize Sendai.

Hometown Reconstruction Summit held by School Children

The Hometown Reconstruction Summit: In July, delegates from elementary and junior high schools gathered to discuss in what manner 80,000 school children could assist in disaster recovery.



Hand-in-Hand for Reconstruction (May 11, 2011)



Children picking up litter and cleaning up the community on their way to school



School children participated in a greeting campaign in collaboration with local citizens to strengthen efforts on the road to recovery.

Wish Upon a Star! The Combined Hope for Recovery of 80,000 Students

All elementary and junior high school students in Sendai made one folded crane totaling 80,000. Parents and teachers strung them together in order to make decorations for the Sendai Tanabata Festival.





Cover Photo: Temporary school facilities at Oritate Elementary School

Oritate Elementary School and its surrounding areas were severely damaged by the earthquake and subsequent landslides. This resulted in the school not being able to use their facilities for school activities. In the month following, the students of this school started their new semester in rented classrooms at the nearby Oritate Junior High School and in November, they moved to prefabricated facilities that were built for temporary use on the same property. (Photo: Oritate Elementary School in the front; Oritate Junior High School in the back)

Although confused by the changes in their educational environment, children in the devastated areas have adapted very well and are progressing without issue. The resilience of all of these children is a beacon of hope for us on our road to recovery.

The Year Following the 2011 Great East Japan Earthquake

Moving Forward As One - SENDAI -

Published on March 23, 2012 by the City of sendai Public Relations Section 3-7-1 Kokubuncho, Aoba-ku, 980-8671 Japan TEL +81-22-214-1150 Printed and edited by U-media Co., Ltd. 103 Tsuchitoi Wakabayashi-ku, 984-8545 Japan

Acknowledgements

We would like to thank the following volunteer translators from IBM Japan for their contribution to this booklet.

Harendra Bhandari, Kazumi Inagaki, Mayu Noguchi,

Tadayuki Yoshida, Takaaki Shiratori, Yasuko Matsumura,

Yumiko Ogawa.

This booklet is an abridged version of the Japanese edition.