

Tokyo

2024



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Connecting You with Tomorrow

Deep Dive into Virtual Meiji Era Ginza

The second edition of the Hyper Edohaku virtual Tokyo app allows users to step back in time to the turn of the century, when Edo became Tokyo as we know it today.

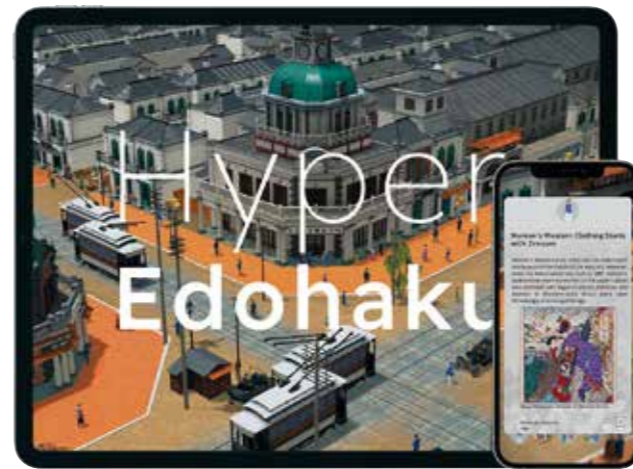
The Hyper Edohaku app is part of the TOKYO Smart Culture Project by the Tokyo Metropolitan Government and Metropolitan Foundation for History and Culture, whose purpose is to provide unlimited access to culture and the arts via technology. The Edo-Tokyo Museum released the Hyper Edohaku Edo Ryogoku Edition in 2022, giving users an entirely new way to interact with museum artifacts and explore Tokyo's heritage in a virtual setting. Covering the Edo period (1603–1868), that version of the app was set in the Ryogoku area, known for its sumo wrestler stables, and where the museum is located.

Curator of the Edo-Tokyo Museum, Kutsusawa Hiroyuki, says that the team chose the Meiji era (1868–1912) for its second version, released in 2023 because of the incredibly rapid social and technological changes that occurred during that time.

Marking the end of the Edo period, the Meiji era is considered the beginning of Japan's modern history, with Ginza especially at the forefront of Tokyo's swift modernization. This movement was thrust forward by a devastating fire that ravaged the area in 1872—a pivotal event included in the app. Following the disaster, the Meiji



Within the app, users can speak to people in the streets, interact with objects in the area, and become involved in events of the time. Photo: courtesy of Edo-Tokyo Museum



The English version of the Hyper Edohaku app opened up the virtual world of Tokyo to a global audience. Photo: courtesy of Edo-Tokyo Museum

government undertook the revitalization of the area by, for example, erecting brick buildings that could withstand fire. This action had a profound influence on Ginza's development, helping to create the unique, chic area loved by international visitors and residents alike.

From the Meiji Era to the Present

The app's center of action is the iconic Ginza 4-chome, considered by many to be the heart of modern-day Ginza.



From left, Akira in a suit and Haru in kimono. Photo: courtesy of Edo-Tokyo Museum

Kutsusawa says that one of the biggest challenges the team faced when developing this version was to faithfully re-create the Ginza of the Meiji era. Photos of Ginza from that time still exist, giving developers more references to work with than they had when creating the original Edo-period Ryogoku version.

One notable cultural development that the app captures, which Kutsusawa thinks users will find fascinating, is the rapid change in food culture. Several of the nation's culinary classics, such as Japanese-style curry, *anpan* (buns containing sweet red bean paste), and *ramune* (a carbonated soft drink), came into existence during the era.

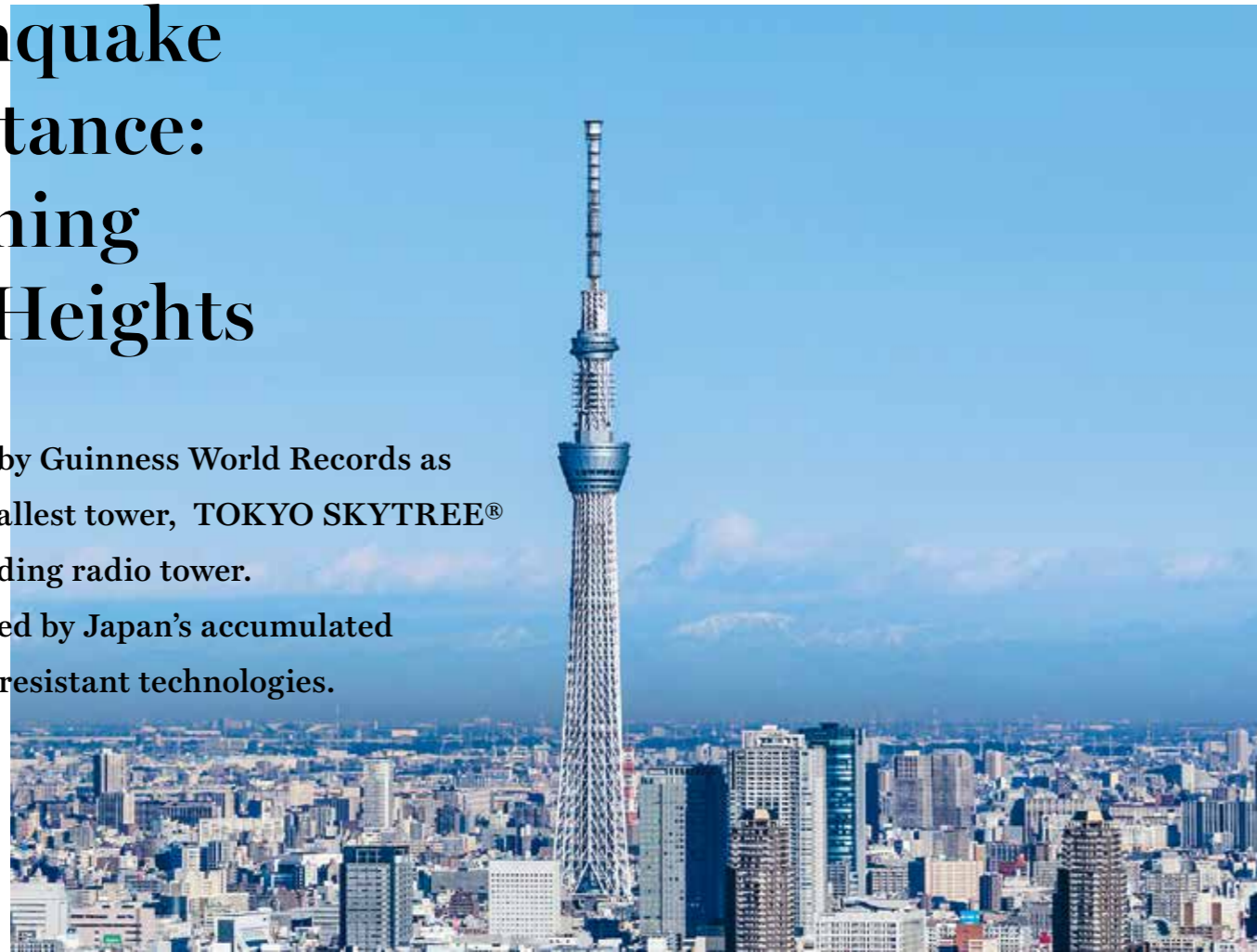
A New Chapter for Museum Curation

Perhaps the most notable feature of the app is its immersive approach to history education. The purpose of a museum is no longer to just display collections of artifacts in glass boxes or works of art on walls. Rather, museums are taking steps to allow and even encourage people to experience art and history more directly so that they can develop an understanding of what it was like to have lived during a certain time in history.

The Edo-Tokyo Museum has always striven to give its visitors a three-dimensional view of Tokyo's history, using scale models, dioramas, and even life-size replicas of real streets. And while other museums have created digital collections and online museum tours, the Edo-Tokyo Museum has taken a novel and entertaining approach to digitizing a collection, thereby bringing people into history itself. Tokyo has been at the forefront of this movement toward experiential and immersive museums in recent years.

Earthquake Resistance: Reaching New Heights

Recognized by Guinness World Records as the world's tallest tower, TOKYO SKYTREE® is a freestanding radio tower. It is supported by Japan's accumulated earthquake-resistant technologies.

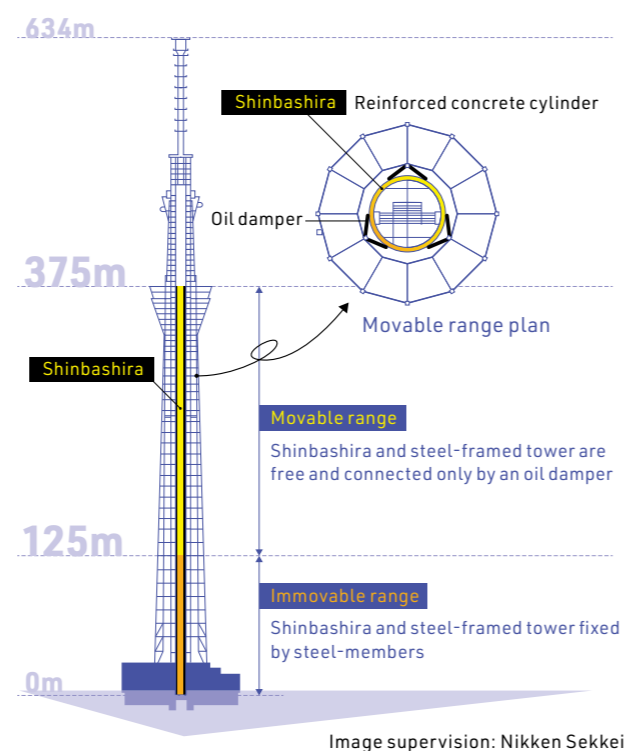


TOKYO SKYTREE has a height of 634 meters. Tembo Deck at 350 meters and Tembo Galleria at 450 meters offer a panoramic view of the city. Photo: courtesy of TOKYO SKYTREE

The year 2023 marks the 100th anniversary of the Great Kanto Earthquake of September 1, 1923. The earthquake struck right at the heart of the Tokyo metropolitan area, causing over 100,000 deaths and inflicting enormous damage to lifelines like the electricity and water supply as well as roadways.

After the earthquake, Japan was ahead of other countries in introducing seismic standards for buildings into its legislation, and the nation also saw significant progress in earthquake-resistant technologies. Indeed, the technologies developed through these efforts are what support Tokyo's high-rise buildings today.

As an integrated radio tower in the Tokyo metropolitan area, TOKYO SKYTREE was built in 2012 using the latest Japanese technologies. It ensures its ability to continue transmitting information to affected areas even in the event of a major disaster such as an earthquake.



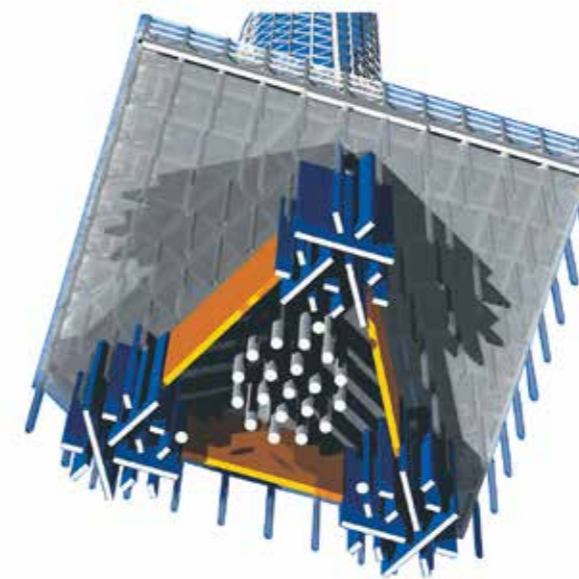
One element of the tower that plays a major role in its earthquake resistance is the reinforced concrete cylinder in its center, called the *shinbashira* (the Core Column). The *shinbashira*, which is eight meters in diameter and 375 meters tall, is fixed to the body of the tower with steel up to 125 meters above ground level. From that point up to the 375-meter point, the *shinbashira* is not fixed to the tower itself, but is connected by a cylinder with oil inside, called an oil damper. The oil damper acts as a cushion to prevent the core column from hitting the tower body when it shakes.

The steel frame of the tower's main body and *shinbashira* are designed to sway at different cycles during an earthquake, which damps the swaying of the tower overall, reducing it by up to 50 percent. It was the first time this sort of damping system had been implemented in the world, and the system was named "*Shinbashira-Seishin-Kikou* (the Core Column Vibration Control System)."

Swaying-Resistant Triangular Truss Structure

Unlike most towers overseas, which are made of concrete, the body of TOKYO SKYTREE comprises a steel frame. The reason for this is that concrete towers are heavy and can be subjected to a large amount of force during an earthquake, and the wind cannot blow through them.

The tower body has a truss structure consisting of steel pipe parts, vertically, diagonally, and horizontally, joined in a triangular shape. This structure is designed



Blue wall-like piles reach 50 meters underground beneath the three legs, and yellow wall-like piles reach 35 meters underground that connect the three points. Image: courtesy of Nikken Sekkei



The truss structure of TOKYO SKYTREE is made of steel components that are approximately twice the highest value, as strong as those used in standard steel frames.

through careful calculations so that it can supply with stand shaking of the tower caused by earthquakes and typhoons.

The underground component of the tower has also been designed with ingenuity. TOKYO SKYTREE is located on the banks of the Sumida River, where the surface layer is soft. So, wall piles with 50-meter depth, under the three legs that support the tower and reach to the rigid ground, are placed like petals to integrate with both the tower and the ground. As a result, the tower is able to withstand large shaking.

Playing an Important Role in Local Disaster Prevention

TOKYO SKYTREE also serves as a regional disaster prevention center. The two Sumida City cameras installed on the tower 260 meters above the ground offer a panoramic view of the entire city, with the footage accessible to city staff for monitoring. Within the tower, there is also a space for disaster preparedness activities and a disaster prevention stockpile, which together allow the tower to serve as a Sumida City crisis management hub. The 7,000 tons of water stored in the tower for heating and cooling purposes can be utilized in homes and for firefighting purposes in the event of a major disaster.

TOKYO SKYTREE is designed to offer security to tourists and local residents alike in the event of a disaster. As tourist attractions go, it is very safe and secure—all thanks to the advanced nature of Japan's earthquake resistance technologies.

Giving the Gift of Safety

The impact of growing up in a disaster area and witnessing the Great East Japan Earthquake led a young entrepreneur to start an innovative business.

After the 100th anniversary of the Great Kanto Earthquake, the Tokyo Metropolitan Government is engaged in various initiatives to strengthen the city's resilience against disasters. One such initiative, a business run by KOKUA, Inc., has garnered considerable attention in recent years.

Izumi Yusaku was born in Kobe City, Hyogo Prefecture in western Japan, and experienced the Great Hanshin-Awaji Earthquake when he was only two years old. He grew up hearing stories from his family about the earthquake and the ensuing disasters, and before he knew it, had developed an interest in disaster prevention. The real turning point, however, came with the Great East Japan Earthquake, which occurred in 2011—right before he entered university.

Izumi participated in search and rescue efforts throughout Japan during his time at university. He continued these volunteer efforts even after



Izumi Yusaku, CEO of KOKUA.



Upon entering university, he joined the International Volunteer University Student Association with about 3,000 student members. Photo: courtesy of Izumi Yusaku

graduating—for instance, participating in search and rescue for the 2018 Japan Floods. He established KOKUA with others of his generation who had experienced disasters, incorporating the business in 2020. “KOKUA” means “to cooperate” in the Hawaiian, and is an expression of Izumi's hope that individuals and companies will be able to work together to confront disasters, in ways that transcend their own interests.

LIFEGIFT for Your Loved Ones

KOKUA's flagship product is LIFEGIFT, Japan's very first disaster prevention-themed gift catalog. Its concept is, “The most important thing is your safety.” The catalog lists 16 disaster prevention items that are incredibly practical, yet are stylish enough to double as part of interior decorations.

“I think a lot of people see disaster prevention goods as an unnecessary cost until there is an actual disaster. We wanted people to feel that disaster prevention is relevant to their lives as well. So we came up with this gift that expresses the feeling of care for our loved ones in a very straightforward way.” This point of emphasis has resulted in the creation of a new business. LIFEGIFT is also just incredibly versatile—perfect for gifting at various celebratory events or as part of a corporate welfare program.

KOKUA is developing various products to help make disaster prevention feel more relevant to our individual lives. LIFEGIFT Food, for instance, is a catalog

that features stockpile foods like shelf-stable retort pouches and cans. They also offer a web service called pasobo that helps you discover the disaster prevention measures that are right for you.

Using Imagination, Being Prepared

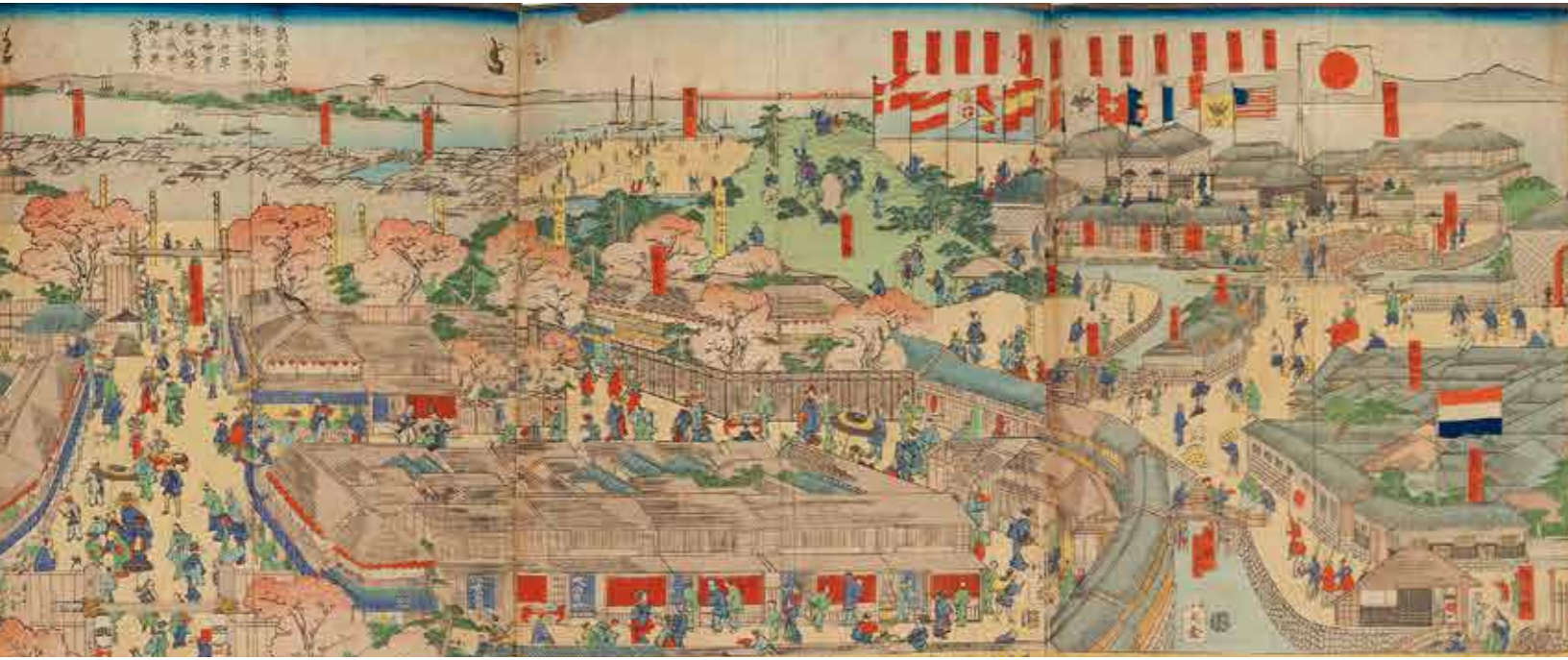
“Here in Japan, we've learned from the many disasters we've experienced, and used them to inform various initiatives. The system that Tokyo has in place for post-disaster recovery, for example, is one of the most comprehensive in the world. I think what's important for us as individuals to do is to use our imagination. Try imagining concretely,

when you're at home or out and about, what would really happen if you were to encounter a disaster in that moment. That will help you recognize what it is you need, and will help you take the best course of action if a disaster actually does occur.”

In this way, the public and private sectors are working together to establish disaster prevention measures in Tokyo. The important thing when it comes to protecting yourself and your loved ones, however, is to engage in your own research—each individual preparing for what may come.



The catalog, which itself feels stylish and high class, comes with cards introducing each of the disaster prevention items.



Nishiki-e (brocade picture) depicting the area around the settlement. *Tokyo Tsukiji Teppozu Kei* (Utawaga Kuniteru II; 1869) / Image: courtesy of Mizuno Printing Museum

Turning the Tide: Girls' Education in Tsukiji

The seeds of Tokyo's modern-day diversity were planted in the course of the Meiji era (1868–1912)—the period that saw Tokyo become Japan's capital. Here, we unravel some of that history.



Julia Carrothers established the Presbyterian Mission Female Seminary, the predecessor to Joshigakuin, the first girls' school in Japan. Photo: courtesy of Joshigakuin

Did you know that there was a settlement for foreign residents in the Tsukiji area after the Meiji Restoration (1868–1869), otherwise known as the dawn of modern Japanese civilization? The Tsukiji Foreign Settlement, as it was called, was in place from 1869 to 1899 and was home to churches built by foreign missionaries and numerous mission schools centered on female education.

However, the settlement was destroyed in the Great Kanto Earthquake of 1923, leaving almost no data, and its full extent remains a mystery. Mizuno Masao, chairman of the Tsukiji Foreign Settlement Historical Society, a non-profit organization that conducts research into the settlement, explained the history.

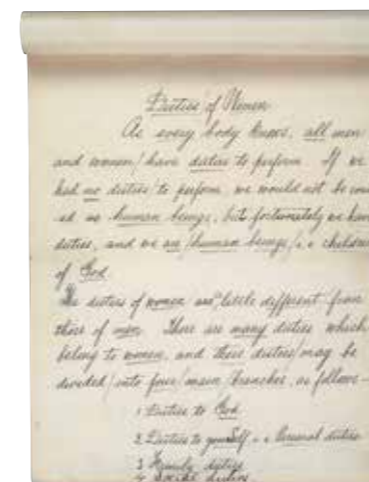
“Yokohama was actively engaged in business with foreign countries under the Japan-U.S. Treaty of Amity and Commerce of 1858. The settlement

was established because the Meiji government wished to promote the development of a town within Tokyo that would be open to the rest of the world as well,” said Mizuno. The first to set up in Tsukiji were the consulates and legations of nine countries, including Great Britain, the Netherlands, and the United States. In 1873, the *kosatsu* (public edict) prohibiting Christianity was abolished, and many missionaries began to arrive in Japan.

The Starting Point of Girls' Education in Japan

Mizuno continued, “The missionaries saw that female education in Japan was lagging behind that of other countries, and set up many schools for girls.” It started with an English tutoring school in Block 6, established by Julia and Christopher Carrothers, a married couple and pair of missionaries who had come to the settlement from San Francisco, in 1870. “At the time, Japanese people were eager to learn foreign languages. Schools were seen as places for boys, but one of the students at the school opened by the missionaries, although dressed in boys' clothing, wrote on the blackboard, ‘I'm a girl.’ This led Julia to decide to open a tutoring school for girls.” The school later became Joshigakuin, a girls' school, and still exists today.

In 1874, another female missionary, Kate Youngman, opened the Girls Boarding School (later Shinsakae Girls' School). This institution came to be known as one of the three “flowers of Tsukiji,” along with Kaigan Jogakko



“As everybody knows, all men and women have duties to perform. If we had no duties to perform, we would not be counted as human beings,” wrote Matsueda Suma.



St. Margaret's School, founded by Bishop Williams of the Episcopal Church in the United States of America in 1877. It was developed in the Tsukiji area from 1879, but was then moved to Sugunami City following the Great Kanto Earthquake of 1923. The chapel was built in 1932. Photo: courtesy of St. Margaret's School

(later Aoyama Gakuin) and St. Margaret's School. These schools aimed to cultivate free and independent women who did not fit the conventional model of “a good wife and wise mother,” and this spirit has been passed down to the present institutes. The neatly laid-out streets lined with magnificent brick churches and mission schools must have presented a progressive atmosphere, and one that was welcoming to girls and women wishing to break the mold.

The historical society has in its possession an essay written by a woman who graduated from St. Margaret's School when the settlement was still in place, which shows the high level of female education in those days. “Classes were held almost all in English, and students had to write all of their reports and papers in English as well. At the time, women generally only received four years of mandatory education, starting from when they were six years old, and ending while they were still in elementary school. So you can see how advanced the education was at these schools,” said Mizuno.

There are 13 schools that had premises in the Tsukiji Foreign Settlement that are still in existence today. The teachings of these missionaries, which were based around evangelism and involved various welfare projects—focusing on issues such as female education and relief for the poor—laid the foundation for women in Japan to be active and vibrant members of society.

World-Class Breakers Eye the Paris 2024 Olympic Games

Breakdancing has been announced as an official Olympic sport, to debut at the Paris 2024. Strong Japanese medal favorites are Ami and Shigekix.



Ami said that "There's no right or wrong. Just like Picasso and Van Gogh have different styles, I love that I can express my own style." Photo: Jason Halayko/Red Bull Content Pool

Street-born competitions skateboarding and BMX became official sports at the Olympic Games Tokyo 2020. Skateboarding in particular was a huge success, with Japanese athletes winning gold medals. This increased awareness of the sport, which is expected to see even more athletes taking part in the future. The Ariake Urban Sports Park is expected to be the symbolic place, continuing the legacy of the Tokyo 2020 Games. The next street-born competition attracting attention is breaking, which is an official sport at the Paris 2024 Olympic Games.

Breaking is a competition in which competitors face off one-on-one in an improvised dance battle displaying creativity and skills along with music played by a DJ. The winner is decided by a panel of judges. Two men and two women will be able to compete from each country at the Games. Japan is a powerhouse in the sport, having won gold medals for both men and women at the 2018 Summer



Ami and Shigekix, "We're rivals!"

Youth Olympics, as well as at many other international competitions. Among Japan's top medal hopefuls in the sport will be Nakarai Shigeyuki, known as "Shigekix," and Yuasa Ami, known simply as "Ami."

Leading to the Big Stage, Paris

Both described the "lack of restrictions on dance styles and ability to freely express themselves" as the main attractions of breaking, but they differed in what was most important to their style.

"For me, it comes down to one word, 'musicality,' which is about the expression of dance to music. It's about melding motion, polished like a sword, with music in a way that doesn't feel discordant. It makes me happy when I surprise the audience and make them wonder, 'How can you move like that to music!'" Shigekix said with a smile. Ami, on the other hand, asserted, "What I always try to do is to be 'beautiful and cool.' It doesn't matter how advanced a technique is—if it isn't perfect, I won't perform it. I have



Shigekix said, "Because it's an improvisational dance form, the ever-changing development of the battle from instant to instant really makes breaking fun." Photo: Little Shao/Red Bull Content Pool

to practice it until the movement becomes totally natural before I use it in a competition."

While both have strong feelings about breaking, they are clear-headed in looking ahead to the Paris 2024. Shigekix said coolly, "I don't set out to do a certain thing or to do something using cheap tricks. I just want to take on each battle heading into Paris and put some wins on the board." Meanwhile, Ami noted, "Rather than thinking too much about the future and feeling anxious, I like to just do my best to practice every day and focus on the battle in front of me. I think this is what leads to success with future steps."

Urban Sports Popular in Tokyo

Skateboarding, BMX, and breaking are known as "urban sports" that can easily be enjoyed by individuals because they do not require a large space. The popularity of urban sports is growing in Tokyo, especially among the younger generations, for the opportunity they present to compete on individual expression, not just ranking. There are plenty of breaking events taking place, including the world's premier one-on-one breaking battle, Red Bull BC One Japan tournament and Shibuya Street Dance Week, the largest street dance festival in Japan, which is supported by the Tokyo Metropolitan Government.

The popularity of breaking and other urban sports is sure to grow even more with the performances of Shigekix and Ami in Paris.



Developing Human Resources for “Zero Sports Fatalities”

A project to develop sports first responders in Tokyo was initiated during the Tokyo 2020 Games. Why are they vital for a safe sporting environment?

First responders refer to those who provide first aid in the event of a sudden illness or accident in the course of their duties, including members of the Self-Defense Forces, police officers, caregivers, station staff, and school staff. In particular, first responders who deal with sudden illness or injury during sports are called sports first responders (SFRs).

SFRs were among the volunteers who provided on-site support at the Olympic and Paralympic Games Tokyo 2020. As the number of doctors or nurses who were scheduled to be sent to the Tokyo 2020 Games was reduced due to the COVID-19 pandemic, the presence of SFRs, who stood by at each stadium and responded quickly in the event of injury or sudden illness, was increased. In 2022, an initiative to apply these achievements to future sporting events was undertaken as a joint project of the Tokyo Metropolitan Government, Kokushikan University, and Chuo University. The SFR development project aims to provide a safe and secure sporting environment with the goal of achieving zero sports fatalities.

Tanaka Hideharu, a professor at Kokushikan University’s Department of Sport and Medical Science in the Faculty

of Physical Education, says, “SFRs provide initial response and first aid in the event of injury or sudden illness before handing over to a physician, nurse, or emergency medical team. The response at this time greatly determines the life-saving rate, so they are indispensable in creating a safe and secure sporting environment.”

Learning through VR-Based Programs

Head and neck injuries, cardiac arrest, and heat stroke are three of the most urgent types of injuries and sudden illnesses on the sports field. Concussions and neck injuries are common in contact sports such as judo, wrestling, and rugby, as well as in gymnastics and diving. Cardiac arrest is more common in endurance sports such as marathons, and heat stroke is more common in sports played under the scorching sun such as soccer and can occur not only among athletes but also among spectators.

Sone Etsuko of Kokushikan University’s Research Institute of Disaster Management and Emergency Medical System, who was present at the Tokyo 2020 Games as an SFR for the canoeing and the rowing competitions says,



Photo: mitzy/Shutterstock

Workshops held in 2023 focused on practical exercises based on knowledge that had been gained previously through e-learning. In addition to cardiopulmonary resuscitation (CPR), the program included first aid for bleeds, sprains, fractures, and other traumatic injuries. “We created a VR presentation based on past case studies and incorporated it into the workshop in order to make it more practical, and the response was very positive,” says Sone.

Creating a Safer and More Secure Sports Environment

Kokushikan University intends to continue developing SFRs and increasing their presence in the field of sports. “If trainers, managers, physical education teachers, and others who work in sports are able to perform lifesaving and first aid activities, the environment surrounding sports will continue to improve. In the future, it will also be necessary to create horizontal connections among the various athletic

organizations,” says Tanaka. “If we can incorporate more practical programs into high school classes, I think the knowledge and skills possessed by SFRs will spread to the younger generation,” adds Sone.

This is just one of the initiatives aiming to enhance the value of sports in Tokyo, which is scheduled to host a number of international sporting events, including the Deaflympics in 2025.



Practical exercises in cardiopulmonary resuscitation being conducted at workshops held at Kokushikan University. Photo: courtesy of Kokushikan University

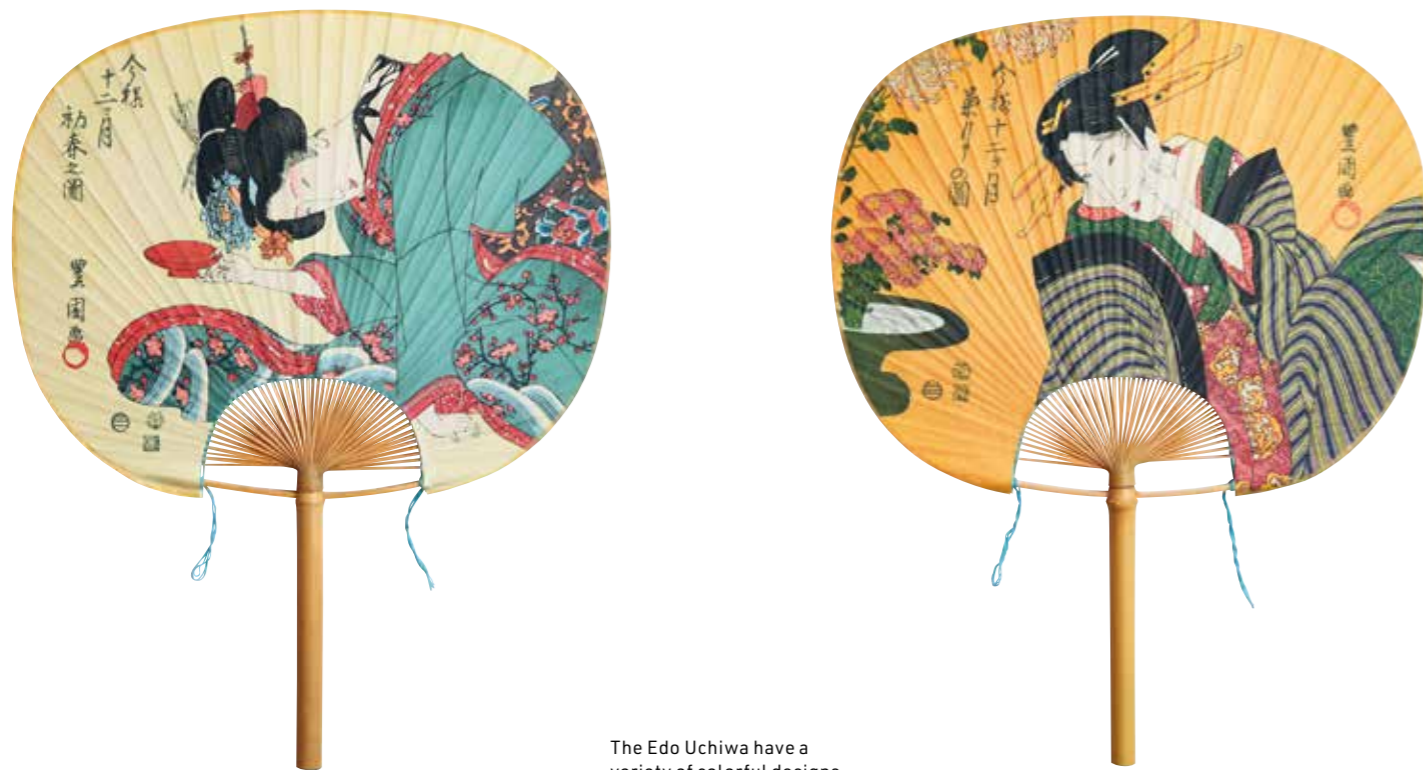
“I was in charge of providing first aid to athletes who suffered from heat stroke.” Expanding on this, Tanaka explains: “There are lives that can certainly be saved by the presence of SFRs on the sports field. We dealt with many of the athletes at the Tokyo 2020 Games, and in the case of heat stroke, had to cool them down immediately on site, while chest compressions and an AED were effective in the event of cardiac arrest.”

Top image: Students from Kokushikan University equipped with AEDs waiting along the roadside as SFRs at the Tokyo Marathon held in 2023. ©Tokyo Marathon Foundation



Edo Aesthetics as Conveyed by Edo Uchiwa

Ibasen's "Edo Uchiwa," patterned fans with popular *ukiyo-e* design from the Edo period, have attracted attention, not just as everyday items, but also as decorative art.



The Edo Uchiwa have a variety of colorful designs.

Even now, Tokyo is home to about 3,000 companies with artisans carrying on traditional crafts passed down from the Edo period. Through the Edo Tokyo Kirari Project, the Tokyo Metropolitan Government has offered support to traditional companies making efforts to combine their traditional ways with modern lifestyles. The concept? "Old meets new." Ibasen, a long-established manufacturer of *uchiwa* (traditional fans) and *sensu* (traditional folding fans), founded in 1590, was selected for the project in 2022 due to their use of digital technology to offer NFT *ukiyo-e* (Japanese woodblock prints) to an international audience. Their Edo Uchiwa are made using techniques passed down over 300 years, which has made them popular with tourists.

"It was in the mid-Edo period, around the 1700s, that our ancestors started making these fans," says Yoshida Nobuo, the 14th head of Ibasen. Upon Tokugawa Ieyasu's move to Edo, the first-generation head of Ibasen, Ibaya Kanzaemon, moved to Edo from Ibamura in the Enshu region (near the present-day west area of Shizuoka Prefecture, located roughly in the center of Japan), to serve as a contractor for Ieyasu. Following Ieyasu's establishment of the Edo shogunate in 1603, Kanzaemon started a shop selling materials for *washi* (traditional Japanese paper), eventually becoming an official merchant to the shogunate.

"After that, in the 1700s, they started using bamboo and washi to make uchiwa. These uchiwa later became known as the Edo Uchiwa," says Yoshida. A single bamboo



Uchiwa are made by hand, using traditional techniques and materials at Ibasen.

is split to shape both the frame and handle for the fan, which is one of the defining characteristics. "The fans aren't just for keeping cool—they are also used in cooking, for instance. As everyday tools, they have to be sold and produced in large quantities, which is why they are made from a single stem of bamboo, to lower costs."

In the late Edo period, advancements in woodblock printing technologies made the mass production of fan patterns possible, allowing fan makers to design uchiwa patterned with *ukiyo-e* portraits of popular kabuki actors, and more. Ibasen also began to incorporate paintings by famous *ukiyo-e* artists, and eventually came to serve the Edo shogunate in its capacity as both a fan merchant and *ukiyo-e* publisher.

Using Technology to Promote Ukiyo-e to International Audiences

As a publisher, Ibasen has put considerable effort into promoting Edo culture, even establishing a museum next to its store in Nihonbashi, Tokyo, in 2012. The museum displays their fans and the woodblocks used for printing, and more. In 2023, they also established the Metaverse Ukiyo-e Museum, through which they sell *ukiyo-e* that utilize NFT technologies in the metaverse.

"There are many people overseas who are interested in *ukiyo-e* and Edo culture. I believe that it is our role to protect the aesthetic and traditions of Edo, and convey it to future generations, so we want to incorporate digital technologies even more in the future."



Ibasen's traditional folding fans are also a popular choice of souvenir among foreign visitors.



Sustainable Urban Development through Beekeeping

The Ginza Mitsubachi (honey bees) Project promotes the rich natural environment of Tokyo through urban beekeeping, right from Ginza—one of the world’s leading shopping towns.

The practice of urban beekeeping—the keeping of bees on the roofs of buildings in urban areas—in addition to playing a role in the greening process, is said to help conserve and restore biodiversity, and even vitalize local areas.

The Ginza Mitsubachi Project (hereafter ginpachi), considered the pioneer of urban beekeeping in Japan, began in 2006 with the keeping of bees on the roof of the Pulp & Paper Building in the Ginza 3-chome area of Chuo City. People tend to think of beekeeping as something that is done in lush, mountainous areas. They may be surprised to learn that some urban areas are actually considered quite suitable for beekeeping, due to the large parks and roadside trees scattered about, and the relative lack of pesticides due to concerns about the environment.

Ginpachi is working to promote rooftop greening in order to expand the amount of nectar that is available to honey bees. Their bee gardens have begun popping up all around the city, atop commercial buildings and department stores, among other locations. This is due in part to the greening subsidy program offered by Chuo City, where Ginza is located, and the role that rooftop greening is

Top image: Honey bees gather nectar within a three-kilometer radius, visiting gardens like those of the Imperial Palace and Hibiya Park.

said to play in mitigating the so-called heat island effect. The expansion of greenery in the city has increased the number of insects in Ginza, which in turn has attracted swallows and other wild birds that prey on these insects. The regular seeding, planting, and harvesting events used to maintain this greenery have also presented new opportunities for community development, in a way that transcends occupation or generation.

A Town Tapped into the Cultural Zeitgeist

There are three ginpachi apiaries in Ginza and two in Marunouchi. Combined, they produced just over two tons of honey in 2022. The harvested honey is sold wholesale to department stores, restaurants, hotels, and bars in the area, where it is used to make desserts, cocktails, cosmetics, and more. These products, made with the rare commodity that is Ginza honey, are very popular gifts.



The bees forage from different flowers depending on the season, which results in changes in the color and flavor of the honey.

Indeed, the area’s restaurant industry was from the start very supportive of the project, and was eager to develop new products based on the idea of urban beekeeping—the consensus being that a Ginza honey would be fun and interesting.

“I think a lot of people were willing to work with us and found this project interesting because it started in Ginza, a town that’s set many trends and shaped cultural zeitgeist. I think that’s how we were able to grow the project as much as we have,” says ginpachi beekeeper Fukuhara Tamotsu.

Beekeeping from Tokyo to the World

Ginpachi’s efforts are not limited to rooftop greening. They have also been putting considerable effort into



Ginza, with its long-established department stores and luxury-brand flagship stores, is a popular shopping area frequented by tourists. Photo: iStock

regional vitalization and environmental education. Some examples of their efforts in environmental education include the hosting of visiting classes at elementary schools, and tours and lectures about their rooftop apiaries, which they use to promote learning about honey bee ecology and the urban environment.

Many international researchers have visited the site. This was especially true during the Rugby World Cup 2019 in Japan, with some of them combining site inspections with attending the games. “I think part of the reason why we’ve had so many visitors—from Japan but also overseas—is how easy it is to get to Ginza. Only in that area would you be able to tour an apiary, then turn around and go to some tourist attractions and enjoy some shopping,” says Fukuhara.

The project, which began in Ginza, has now expanded to over 100 sites in Japan, and is even being implemented abroad, in Seoul, Taipei, and elsewhere. This culminated in the establishment of the Mitsubachi Project Association in April 2023. Fukuhara says, “The goal of the project is to help realize a community-based, recycling-oriented society through the practice of urban beekeeping. We want to promote this project further, both within Japan and overseas, while also communicating that Tokyo as a city has begun to make these moves to better coexist with the natural environment.” The future developments of the project, which aims to connect people to people and people to cities, will be exciting indeed.



A Tale of Two Global Financial Cities

Early development of the Marunouchi business district was modeled on London.

Top image: The redbrick Mitsubishi Ichigokan, designed by a British architect, opened in Marunouchi in 1894. Photo: courtesy of Mitsubishi Estate

Two storied capitals of island nations perched on the edge of their continents, Tokyo and London are true global metropolises and financial centers. Both have long, rich histories but enjoy different roles in the global economy, and face differing challenges. Tokyo and the City of London are deepening their cooperation as they seek to adapt and flourish in the shifting landscapes of the increasingly interconnected economic and financial world.

The fate of the fishing port of Edo was transformed in 1590 when Tokugawa Ieyasu, the warlord who would finally unite Japan, chose to make it his residence. Establishing his shogunate in the town, the arrival of samurai lords and their entourages helped create one of the largest metropolises in the world with a population of approximately one million within a little over a century.

New Era, New Markets

When the samurai era came to an end in 1868—when Edo was renamed Tokyo (meaning eastern capital)—the

government began to pay a yearly stipend to former members of the warrior class. This was replaced shortly afterward by a one-off payment in the form of government bonds. Trading in these bonds was a driving force behind the opening of the Tokyo Stock Exchange (TSE) in Kabutocho in 1878, the birth of Japan's financial markets.

Directly to the west of Kabutocho, now the other side of Tokyo Station, lies the Marunouchi district, once home to Edo Castle and the surrounding mansions of daimyo lords. Marunouchi had become overgrown grasslands when the head of the Mitsubishi Company bought it at the government's request in 1890, but it was soon on its way to becoming a bustling business district.

The redbrick Mitsubishi Ichigokan, designed by British architect Josiah Conder, was the first Marunouchi office building when it opened in 1894. In line with Mitsubishi's mission to create a business district that rivaled London and New York, more redbrick buildings were built in the surrounding area. With around a dozen redbrick buildings lining one street by 1911, the district was



The Mitsubishi Ichigokan Museum, a reconstruction of the original Ichigokan, completed in 2010. Photo: iStock

dubbed “Iccho London,” a riff on the Japanese “cho,” meaning a block which measures approximately 100 meters, the length of the street.

London itself began as a Roman settlement nearly 2,000 years ago and the defensive walls built around it a couple of centuries later define the borders of the City of London, which remains a kind of city-within-a-city and a financial center. Three City of London institutions founded in the 17th century remain pillars of its financial prowess: Lloyd's of London insurance exchange, the Bank of England, and the London Stock Exchange.

By the 19th century, London had expanded far beyond the original City and with more than half of international trade using the British pound, become a global economic hub.

In the early 20th century, Marunouchi continued its rapid expansion with the opening of Tokyo Station, and the addition of American-style buildings led to the Gyoko-dori area. New office space drew more major companies into the district. Japan's breakneck rapid-growth era from the 1960s to the 1980s saw the district accounting for an ever-greater portion of its fast-rising GDP.

Working Side by Side for a Shared Future

Tokyo Metropolitan Government (TMG) and the City of London Corporation first announced a Memorandum of Understanding in 2017, setting in motion deeper cooperation between the two cities as TMG launched its Global Financial City: Tokyo Vision to bolster the competitiveness and attractiveness of the Japanese capital. Since then, the two metropolises have held a series of joint financial, fintech and green finance seminars as they seek to be at the forefront of the ongoing shifts in the global economy and markets.

Development in the two cities also continues apace. Mitsubishi Estate is reenergizing Marunouchi, along with the neighboring Otemachi and Yurakucho districts, creating open spaces and a more people-centered town with a vision looking another 100 years into the future. Meanwhile, the latest addition to the skyline of the Square Mile as the City of London is known, is the “8 Bishopgate” skyscraper, Mitsubishi Estate's largest overseas project, completed in June 2023.

In a rapidly changing world where fresh, and often unexpected, challenges emerge one after another, Tokyo and London are deepening their ties and working together to secure prosperity and quality of life for many more centuries to come.



Making Dining Out Fun for All

The concept of inclusive food was developed with the goal of creating a society in which everyone can come together to appreciate food.

More than one million people in Japan have dysphagia, a disorder that makes it difficult to chew and swallow food due to aging, neuromuscular diseases, or cerebral palsy, for example. People with dysphagia must have thickeners added to their meals or have their food blended together into a paste to make it easier to swallow and prevent asphyxiation.

In 2022, the Tokyo Metropolitan Government (TMG), Tokyo Medical and Dental University, and the University of Tokyo worked on the development of “inclusive food” so that children with dysphagia can enjoy the same meals as their families without extra processing. Tohara Haruka, professor of Dysphagia Rehabilitation at Tokyo Medical and Dental University, said the following regarding the reason for the focus on children.

“Until now, most nursing-care foods have targeted the elderly, but dysphagia affects other people as well. Recognizing that little focus has been given to the development of these foods for children with disabilities, we aimed to develop inclusive food that both children and their parents can enjoy together.”

Top image: Children with dysphagia and their families attended the Completion Ceremony of Inclusive Food event.

Enjoy the Choices of Meal Time

On February 25, 2023, children with dysphagia and their families participated in the Completion Ceremony of the Inclusive Food event held in Otemachi, Tokyo, where they had the chance to taste inclusive food. The menu featured a lunchbox for children called the Mogumogu Box and three types of sweets.

The soft *karaage* (fried chicken) was especially popular. This was made by blending deep-fried chicken in a blender to soften it, forming this mixture into the traditional shape of *karaage*, and then lightly deep frying the surface of each piece until slightly rigid yet edible texture. Some of the children who participated said this was the first time that they were able to eat meat in their life.

“It was important that we were able to hold a research presentation in the form of the Completion Ceremony of Inclusive Food, attract the attention of local governments and people in various industries, and foster momentum to continue the spread of inclusive food,” noted Tohara regarding the significance of the joint project between the TMG and the university.

Special Meal and Service Considerations

The number of restaurants in Tokyo that offer dysphagia-friendly food and services is gradually increasing. In June 2022, Soup Stock Tokyo, located in a commercial complex Lumine Tachikawa started dysphagia-friendly meal service. The menu is selected from the chain’s existing soups by inspecting the hardness of the ingredients. Soup Stock



In total, six dishes featured in the Mogumogu Box, including Japanese beef sirloin steak, soft fried chicken, and Neapolitan spaghetti.

Tokyo offers this service at its wheelchair accessible location, following training provided to staff.

If such a service is provided at a restaurant to which the parents of children with dysphagia usually go, these children will have more opportunities to eat out, which in turn will also lead to a better understanding of people with differing food needs.

Ogino Chikako of Soup Stock Tokyo’s Quality Control Group, which has been involved in the dysphagia-friendly meal service project since its inception, says, “Tokyo is a city of people with diverse needs and there is the energy and will to meet them, so I think it is meaningful to launch these new services from Tokyo.” Despite many issues such as restaurant space and staff training, “We’d like to increase the number of restaurants offering the dysphagia-friendly meal service,” she says.

Japan as a Pioneer for Other Aging Societies

“I haven’t heard much about people outside of Japan researching menu ideas for dysphagia and even attending events such as the Completion Ceremony of Inclusive Food,” says Tohara. “With the world’s most aging society, we in Japan are in the unique position of being able to develop and spread inclusive food because we have created a variety of nursing-care foods.” Inclusive food born and nurtured in Tokyo may help to build a more inclusive society in which everyone around the world can eat the same food and share the same joy.



Soup Stock Tokyo’s service at Lumine Tachikawa, there are spoons that are safe to chew and kitchen utensils to make food even smaller. Photo: courtesy of Soup Stock Tokyo

Creative Experiments in Urbanism

Civic Creative Base Tokyo [CCBT] was established in October 2022 as a hub where the public can explore their creative imaginations in society through art and digital technology.



"rode work ver. under city" (SIDE CORE, 2023), exhibited in an empty site next to the Meguro Observation Well. Photo: Tada (YUKAI)

The Tokyo Metropolitan Government and the Tokyo Metropolitan Foundation for History and Culture, which operate Civic Creative Base Tokyo [CCBT] (hereafter CCBT), have concluded a partnership agreement with Ars Electronica, a cultural institution in Linz, Austria, which has been working to connect art, technology, and society for about 40 years. Ogawa Hideaki, an internationally active member of Ars Electronica, was appointed the creative director of CCBT in April 2023.

Ogawa remarked, "CCBT is neither a museum nor a gallery. It is a hub for citizens and artists to gather, utilize art and technology, and conduct social experiments in Tokyo. It makes us redefine Tokyo and explore a multitude of 'futures,' using the city as a testing ground for these futures."



The project image of "IISE (Immersive Inclusive Sensory Environment)" by SnoezeLab., a 2023 Artist Fellow. The team includes people with disabilities and the parents of children with disabilities, and aims to develop an inclusive environment. Image: SnoezeLab.



AUGMENTED SITUATION D (March 2023), an urban XR exhibition by Asami Kazuhiko, God Scorpion, and YOSHIDAYAMAR, held in Shibuya. Photo: Tada (YUKAI)

Exploring Ways to Implement Advanced Technology through Art

Ogawa continues, "I believe that art has the power to raise questions and create dialogue with people and society. Rather than simply consuming technology that evolves every day, how do we give meaning to it through the power of art, and how do we install the resulting innovations within the society of Tokyo? CCBT is the platform that tackles such questions."

Programs Connecting Citizens, Artists, and Government

One of CCBT's core programs is the Art Incubation Program, in which five creators selected from the public each year become partners of CCBT in creative activities and openly share their processes with society through workshops and exhibitions.

In 2022, the project included an urban exhibition showcasing XR artworks in Shibuya, as well as Future Tokyo *Undokai* (Sports Day), in which people, from children to adults, collaborated to create a one-of-a-kind sports event.

In addition, under the theme of "underground space," skateboarders explored a giant underground regulating reservoir and other locations, exhibiting works that captured civil engineering and architecture from the street perspective. In 2023, 141 applications were received, and the five selected CCBT Artist Fellows have begun their respective activities.

"CCBT aims to create art not for the white cube (a contemporary art term for exhibition spaces in museums and galleries), but for the transformation of the city, to create art for society. Daring to incorporate art with a critical nature within the administrative system, we will work with citizens to develop strategies and policies to solve urban issues. Each project can be thought of as a major urban experiment involving society."

The many experiments that CCBT is engaged in will provide insights and opportunities for innovation that can be applied in other cities. Expectations are high for the role that CCBT will play in making Tokyo a global hub for digital creativity.



A visual imagining of the Tokyo Bay Area of the near future, where natural landscapes and innovative technology blend seamlessly. Image: courtesy of the Tokyo Metropolitan Government

Sustainable Future City Model

What is the major project that aims to overcome crises by rethinking society from an urban perspective and creating a sustainable city that looks 100 years into the future?

In the modern era, cities worldwide are facing a variety of challenges that cannot be overcome using traditional methods. Tokyo, too, is tackling global urban issues such as those related to the environment, disaster resilience, and finance by combining cutting-edge technology, digital expertise, and a fresh perspective gained from learning from the past. At the heart of this effort lies the concept of SusHi Tech Tokyo.

SusHi Tech Tokyo is derived from the concept of Sustainable High City Tech Tokyo that reinterprets the art of sushi, which has traditionally elevated seasonal ingredients into a cultural delicacy, through craftsmanship and skill. It encapsulates the desire to create “sustainable new value” through state-of-the-art technology and share it with the world, emanating from Tokyo.

One of the initiatives that embodies this aspiration is the Tokyo Bay eSG Project announced by the city in 2021. This project aims to build a sustainable city, even 50 or 100 years from now, by reevaluating the city’s structure and societal norms to overcome crises. The project encompasses about 1,000 hectares including the coastal subcenter and the central breakwater area in the south. With the convergence of facilities related to the Olympic and Paralympic Games Tokyo 2020 and a well-balanced mix of work, residence, education, and leisure functions, along with a world-class logistics terminal, this project enjoys an ideal location for execution.

Leveraging this environment, the goal is to achieve zero emissions through digital technology. Making use of the waterfront location facing the sea and canals, the project plans to develop parks and green spaces while meeting all energy demands by using renewable energy centered around hydrogen.

A Global Model City that Pioneers New Values

The “eSG” part of the project’s name not only encompasses the original concepts of ESG (environment, social, governance) but also refers to concepts like ecology and economy, as well as “epoch-making” endeavors. The image of the desired city is condensed within this name.

The first major target for realization is set for 2030. This includes the establishment of 5G communication infrastructure, unique power generation systems like those of wind and floating solar power specific to the Bay Area, the development of energy management systems, and the promotion of in-city transportation using ZEVs (zero-emission vehicles). The project will advance societal implementation of the latest technologies, involving startup companies dedicated to developing new technologies and progressing the project step by step.

The goal is to have the area become one where domestic and international startup companies congregate, focusing on the penetration of DX (Digital Transformation) and achieving carbon-free energy usage. It aims to be a

hub for various approaches stemming from green and sustainable initiatives, a place where innovative technologies are continually nurtured, and a model city for the world. The ideal scenario is to broadcast the project’s achievements globally, attracting further investments and contributing to the realization of “Global Financial City: Tokyo” that leads the world.

Of course, to be an attractive city for people, it is essential to pursue comfort and livability. Beyond creating parks and green spaces, the Bay Area is brimming with ideas for generating unique charm, like aiming for a “swimmable Tokyo Bay” achieved through green tech for water-quality improvement.



An image of the SusHi Tech Tokyo 2024 showcase program. Image: courtesy of the Tokyo Metropolitan Government

At the SusHi Tech Tokyo 2024 in April, there are programs such as Asia’s largest Global Startup Program, the City Leaders Program that brings leaders from five continents together, and the interactive Showcase Program that presents the future city as a festival, allowing visitors to experience Tokyo’s vision of the future city firsthand.

The vision of the city that humanity aspires to is being propelled from Tokyo to the world. At this historic turning point, there is great anticipation and hope for the future vision put forth by the Tokyo Metropolitan Government. A passionate initiative to “shape the future” with SusHi Tech is underway in the capital of Japan.

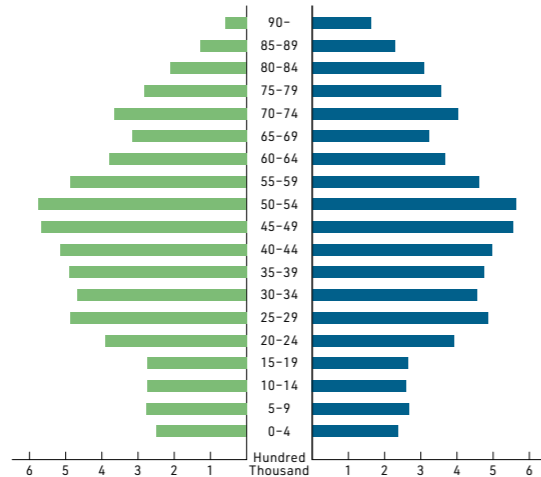
Tokyo Basics

POPULATION

Total Population of Tokyo (2023)

14,099,993

Population Age Structure by Gender (2023)



Men (2023)
6,915,965

Women (2023)
7,184,028

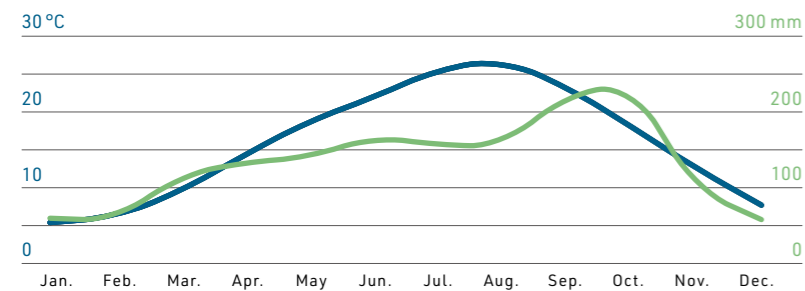
Average Life Expectancy (2020)
81.77

Average Life Expectancy (2020)
87.86

Foreign Residents (2023)
629,651

People Over 100 Years Old (2023)
7,057

AVERAGE MONTHLY TEMPERATURE AND RAINFALL



Source: Japan Meteorological Agency, 1991-2020 ● = Average temperature ● = Average rainfall

Average Annual Temperature

15.8 °C
(60.4 °F)



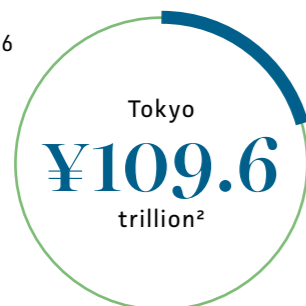
Average Annual Rainfall

1,598.2 mm



TOKYO'S GMP¹ (Nominal) as a Share of Japan's GDP (FY2020)

Japan ¥537.6 trillion



20.4% of Japan's GDP

1. GMP: Gross Metropolitan Product 2. US\$1.03 trillion
2020 annual average conversion rate ¥1 = US\$0.0094

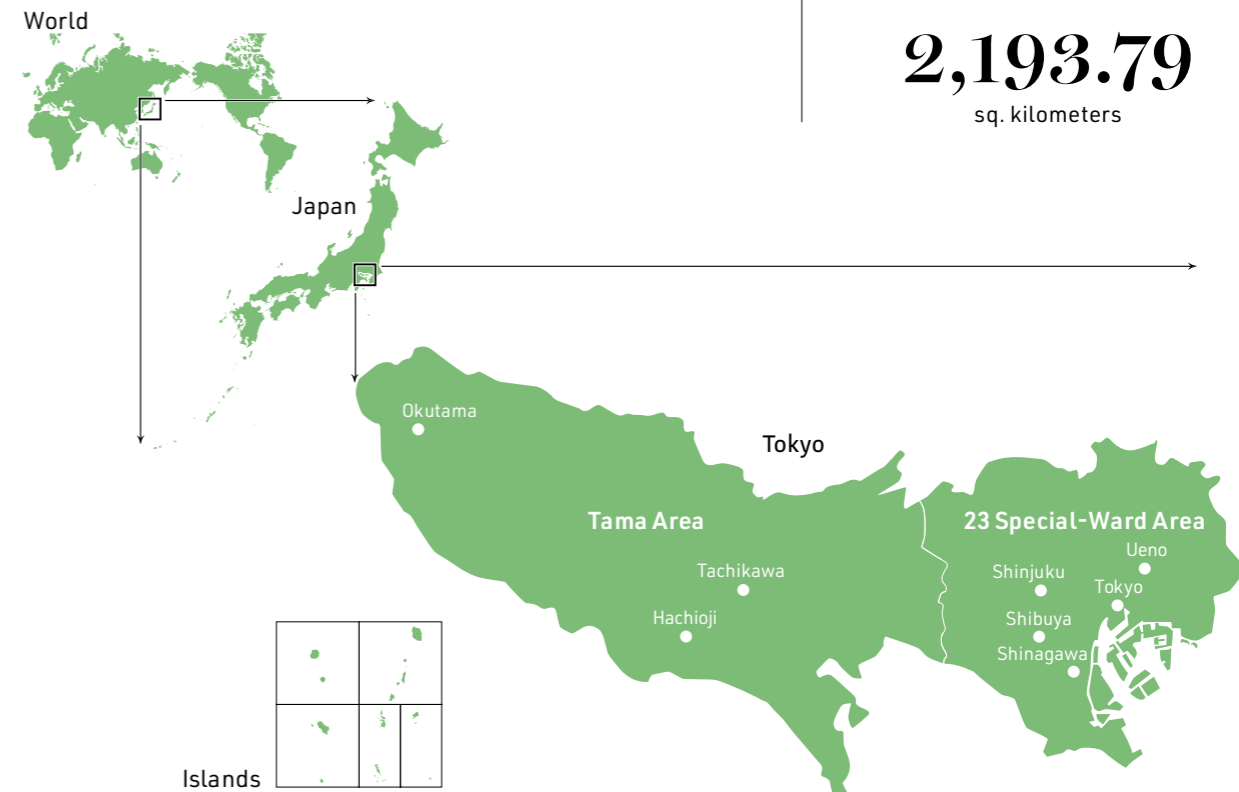
TOKYO'S BUDGET (Initial FY2023)

¥16,082 billion*



* US\$106 billion
¥1 = US\$0.0066 (Bloomberg, October 31, 2023)

LOCATION



AREA

2,193.79
sq. kilometers

SISTER AND FRIENDSHIP CITIES / STATES*

- ① New York (USA)
- ② Beijing (China)
- ③ Paris (France)
- ④ New South Wales* (Australia)
- ⑤ Seoul (South Korea)
- ⑥ Jakarta (Indonesia)
- ⑦ São Paulo* (Brazil)
- ⑧ Cairo (Egypt)
- ⑨ Moscow (Russia)
- ⑩ Berlin (Germany)
- ⑪ Rome (Italy)
- ⑫ London (UK)



SYMBOLS



The *somei yoshino* cherry tree was developed in the late Edo period to early Meiji era (late 1800s) by crossbreeding wild cherry trees. The light-pink blossoms in full bloom and falling petals scattering in the wind are a magnificent sight to behold.



Ginkgo biloba is a deciduous tree with distinctive fan-shaped leaves that change from light green to bright yellow in autumn. The ginkgo tree is commonly found along Tokyo's streets and avenues and is highly resistant to pollution and fire.



The *yurikamome* gull has a vermillion bill and legs. It comes south to Tokyo in late October every year and sojourns at the surrounding ports and rivers until the following April. A favorite theme of poets and painters, it is also called *miyakodori* (bird of the capital).



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