The Taipei City Government continued to push ahead with various public infrastructure projects in year 2009. On the premise of quality upgrades, the Taipei City Government conducted improvement work on the city’s trunk roads and roadways connecting the neighboring counties and cities and built cyclist-friendly biking spaces; flood control and wastewater sewage reinforcements were implemented to protect citizens from the ravages of floods; streets and roadway greening projects were kicked off to enhance Taipei’s cityscape. A variety of themed floral expositions was organized to enrich the lives of Taipei citizens. Public utility construction works, including tap water and natural gas services were in full supply, while service quality was further reinforced. Effective land consolidation, planning and expropriation, plus effectual public housing occupancy encouraged constructive resource utilization, so as to fashion Taipei City into a safe, convenient, and resident-friendly metropolis.
Swarms of city inhabitants come and go in haste, day in and day out, becoming unconsciously lost in the mire of their own busyness and blindness, missing the bus they’re supposed to board, or neglecting an appointment. But if one cares to saunter leisurely down the sidewalks of Taipei City, he might find that the single-story houses in disarray have been demolished, that a lovely park has been built next to his home; or that the streets have become smoother and more spacious; the sidewalks shaded by the umbrage are pleasing to the eye; the nighttime streetlights are charmingly lit, and that a growing numbers of people is are attracted to the riverfront spaces in the city. The fullness of life is n’ot measured by the fat paycheck; rather, it can be found in the accessible public infrastructure, quality living environments and a robust welfare system. That the City of Taipei has been constantly reinventing herself is evident, constantly, as long as one takes the time to appreciate her transforming beauty.

**Part 1 Unobstructed, Comfort-Driven Transportation Constructions**

In response to demands arisen from urban planning perspectives, the Taipei City Government develops expressways, builds and renovates urban roadways and bridges, while effectively improving roadway service quality to mitigate heavy traffic in downtown areas.

**1. Convenient Roadways Development**

(1) **Expressway Systems**

The total length of Taipei City’s expressway system is measured at approximately 59.6 kilometers; the system consists primarily of East Ring Expressway, West Ring Expressway, East-West Expressway, North-South Expressway, and Xinyi Expressway. 43.3 kilometers of the construction have been completed.

(2) **Urban Roadways Construction**

Zhongshan Second Bridge was demolished in October 2007 to make room for reconstruction work on the distributor road on the north point of Xinsheng viaduct, connecting the original Zhongshan Second Bridge distributor road and Xinsheng viaduct. The viaduct was completed on October 10, 2009; its completion allows two-way traffic heading to Shilin from having to detour around the Yuanshan circle, and traveling directly to Zhongshan North Road and Tonghe Street. Meanwhile, motorcycle traffic is permitted on Zhongshan Bridge, to effectively mitigate heavy congestion in the Yuanshan area.

The reconstruction project begins in the north at the intersection of Zhongshan North Road and the south side of Tonghe Street, connecting Zhongshan New Bridge and Xinsheng viaduct, respectively, at 284 meters in total length (including 94 meters of the main steel bridge), and 16 meters in width. The construction started on June 1, 2008, and it is slated for completion in March 2010.

The City’s railway underground eastward extension construction to Nanggang is measured at 5.4 kilometers. The project began on November 1,1998, and it is slated for completion in August 2011. Upon completion, the project can remove the current obstruction blocking the northern and southern stretches of the railway to improve local traffic flow.

The construction of Shezhi Bridge started in 2008 with a view to building a more robust regional
roadway network. The project consists of two stages. Stage one begins in the east at the Chengde intersection, traveling along the Beitou 13th Turnpike and crossing the Keelung River to Shezhi Island’s Roadway 1-1, where it meets the Shezhi-end embankment; the section is measured at 1,260 meters with a width of 40 to 50 meters. A designated space for an advanced public transportation system has been reserved (at about 9 meters in width). Work has begun for Construction Bid No.1, on May 6, 2009; it is slated for completion in May 2012. Stage two starts with Westside Shezhi Island along Roadway 1-1, extending all the way to the intersection of Roadways 1-2 and 1-3; work for this particular stage will begin upon the approval of the Shezhi Island Development project.

Also, the Taipei City Government joined forces with the Taipei County Government on renovating Jingmei Bridge. The construction aimed at connecting Jingwen Street in Jingmei with Shunan Street in Xindian, employing a steel arch bridge design to cross Jingmei Bridge. The new structure is 93 meters in length and 15 meters in width. Construction began in January 2009, and will be completed in April 2010; it will effectively increase the breadth of the bridge, and make up for the lack of lanes and alleviate heavy traffic.

2. Roadway Quality Improvement

Taipei City’s total road area is measured at about 22 million square meters, with a total of 675 roadways. Crack fortification and fresh paving are scheduled for execution once in 6 years (2009 through 2014). From 2008 up to now, 1,311,491 square meters of road surface have been fortified and repaved; also, 4,981 manholes have been lowered to ensure that the city’s roadway surface is smoother, enabling pedestrians and drivers to travel safely and comfortably.

3. Smooth Pedestrian Surfaces

Taipei City’s sidewalks cover about 2.5 million square meters. On average, 50,000 square meters of sidewalk surfaces are renovated annually. By 2009, 1,999,266 square meters were revamped, covering 79.97% of the total sidewalk area in Taipei City. The rest of the sidewalk renovation project will be prioritized in accordance with the regional environment reform program – sidewalks surrounding government units and schools that are frequently used and extensively damage take precedence for repair.

4. Bridge Safety and Maintenance

There are currently 189 bridges, 34 river-crossing bridges, 31 vehicle flyovers, 90 pedestrian overpasses, 12 tunnels, 12 vehicle underpasses and 56 underground walkways, a total of 424 bridges in Taipei City.

(1) Xinsheng Viaduct Renovations

The southern tip of the project begins at the intersection of Jinshang South Road and Jinan Road,
running along Xinsheng North Road to Binjiang Street, crossing the Keelung River via Songjiang Bridge. The bridge is divided into the east- and west-collector/distributor road, at 3.91 kilometers in total length. The primary improvement projects consist of bridge shockproof reinforcements (including piers and the bridge’s foundation), expansion joints and railings renovations to revamp any existing structural damage and improve its structural shockproof capacity; sound barrier walls were added to decrease noise. Construction began on July 26, 2008, and the bridge was open to traffic on October 10, 2009.

(2) Bridge Inspection, Maintenance and Reinforcement

Inspections were conducted on a total of 223 bridges in 2009. Inspection work on earthquake structural components and river-crossing constructions during the flood control period were added. Follow-up exams and re-evaluations are conducted, especially for bridges that raised concerns upon visual assessment. Budgets will be earmarked for bridges needing maintenance and reinforcement should new inspection results deem them necessary to ensure transport security.

(3) Underground Walkways and Flyover Enhancement

Beautification constructions were completed on Wanda/Fumin, and NTNU/Hoping underground walkways; exits and entrances of the walkways were installed with an elaborately penetrative and low-oppression architectural design. Comprehensive enhancements were administered to repair leaks, lighting, pavement and handrail structures. Three other underground walkways around the National Taipei University of Technology, and five pedestrian flyovers on Xinhai Road underwent comprehensive repairs and beautification work.

(4) Tze-chiang Tunnel (eastside) Flood Control and Beautification

Tze-chiang Tunnel is a two-way tunnel, located on Beian Road in Dazhi in Shilin District, leading to Gugong Road, at 820 meters in total length (one-way). Construction projects undertaken were: wall surface renovation at the entrance, interior repairs and beautification. The project began on March 15, 2009; beautification work was completed on a single pathway on September 9, 2009.

5. Common Ducts Constructions

The construction of common ducts ensures a
decrease in road excavation, the maintenance of roadway quality, and diverse road and land applications. There is a network of nine common duct routes in Taipei City. To date, Route Civic Boulevard, Route New Community (Keelung River Bend straightened area), Route Zhoumei and the Nangang Economy and Trade Park common duct constructions have been completed and are in full operation. Common duct constructions slated for 2009 include: Route Dadu common duct, MRT Xinyi Line common duct, MRT Songshan Line common duct, and railway underground extension eastward to Nanggang common duct constructions. Common duct construction on the Fuguo Road extension line is in the designing stage.

Part 2 A Safe and Pleasant Waterfront

1. Flood Control and Drainage Constructions

(1) Establishing an Integrated Water Control Mechanism in Taipei City

The Taipei City Integrated Water Control Management Commission was inaugurated on January 1, 2006 with the objective of launching a new water management mechanism for “retaining upstream water resources, reducing midstream flood risks, and preventing downstream flooding,” with integrated support of the government and private sector to create a safe, cozy, pleasant and healthy eco-metropolis. Three conventions, two public awareness workshops and two preventive technology exhibitions were held in 2009 to map out six quantified, integrated flood control objectives, highlighting urban planning, mountain areas, rainwater drainage, river flood control systems, the setup of an early-warning mechanism and public awareness campaigns; the program also enhanced flood prevention program reinforcements and flood control construction to create a comprehensive and robust damage-control structure for promoting a full-scale flood control system.

(2) Flood Control Engineering in Northern Taiwan

In keeping with the principles of “Flood Control Engineering in Taipei” by the Ministry of Economic Affairs, Taipei City’s overall flood control program is characterized by embankment construction, and is complemented by river course renovation and river management. The city’s embankment construction in the planning stage is measured at 131,231 meters in total length. By the end of 2009, 109,141 meters of construction had been completed, with 22,090 meters awaiting flood control installation. Of that amount, approximately 1,500 meters of Zhoumei embankment along Keelung River await construction; the project will be administered in line with the “Beitou-Shilin Technology Park Development Project” for completion by the end of year 2015. Approximately 5,268 meters along Guandu embankment await enforcement, and the construction will be implemented along with the Central Government’s approval of the Shezi Island Development Project. Also, about 7,210 meters of embankment between Shuangxi’s Fuxing Bridge and Jiannan Bridge require flood control installations; the assignment has been listed as a mid-to long-term project. Budgets have been earmarked for protection installations from Wanshou Bridge to Wanfu Bridge along the Jingmei River, at 1,550 meters in length. Finally, about 6,562 meters of area from upriver Wanfu Bridge down to the provincial/municipal border await flood prevention construction. This particular stretch is blessed with a pleasant landscape; only a limited area suffers from insufficient outlet height. However the problem is of little consequence and bears no impact on flood control concerns.
(3) Rainwater Sewage Construction Work

The total length of the city’s rainwater sewage construction, including main and branch drainage lines, is 540 kilometers long. By year-end 2009, 521.778 kilometers had been completed; the completion rate was estimated at 96.63%. In the same year, “Lid Addition Construction Work on Interception Ditches (from the railway to the embankment section) at Sanzhangli” and “Open Drain Improvements on the North Side of Dadu Road” construction project were conducted to significantly ameliorate Taipei’s cityscape and improve its drainage.

In order to strengthen water-level monitoring stations at the rainwater sewage network, in 2009 Taipei City completed installation of 122 water level monitoring stations, two discharge gauge stations and four closed-circuit television stations for effective data monitoring and analysis.

(4) Pumping Stations Management and Installations

There are a total of 63 official pumping stations, 21 provisional pumping stations operating in Taipei City. A total of 384 sets of water pumps are installed around the city, with a total pumping capacity of 1,962 cubic meters per second. Also, to increase flood control and drainage capacity, as well as pumping capacity, construction (expansion) projects continued apace for Zhoumei, Zhoumei (1), Wenlin, Shezi and Changchun Pumping Stations in 2009. To intensify flood control and emergency response capabilities, the Hydraulic Engineering Office of the Public Works Department of Taipei City Government hosted flood control exercises on April 24, 2009, mobilizing 133 staff members and 28 mobile pumping stations to conduct simulated drills on the activation/shutoff of pumping stations and evacuation valves, and the operating of mobile pumping stations at Huanshan Pumping Station, the 16th evacuation valve at the Meiti Base, and Meiti Riverside Park. The drills served to enhance disaster relief and emergency repair capacities.

2. Reinvigorating Taipei’s Watershed Areas

(1) Wastewater Sewage Construction

Pipeline construction for wastewater sewage systems continued, completion ratios for sewage system’s primary main pipes, secondary main pipes, and the branch pipeline network were 100%, 97.71% and 98.98%, respectively. In 2009, a total of 656,628 households in Taipei City had wastewater sewage connections; the rate of door-plated household pipe connections reached 62.02%, registering 1.62% in growth.

Figure 1: Annual Growth Rate of Household Sewer Connections in Taipei City
rate over the figure of 60.4% in 2008. The rate of users’ pipe connections increased to 99.07% in 2009, for a significant 5.04% growth rate, up from 94.03% registered a year before. The city plans to increase the number of connected households to 30,000 homes annually. See Figure 1.

Government organizations, schools and the top-100 tap-water users in Taipei City receive priority pipe connection services. 64 units from among the City's top-100 tap-water users, 49 central government organizations (connections were completed for 21 agencies), 320 public and private schools (connections were completed for 216 schools), and 52 public markets (connections were completed for 36 units) received connection services. Services will continue for government agencies and MRT stations across the city.

(2) Wastewater Treatment Improvements

In 2009, wastewater treatment systems in Taipei City processed 1.28 million CMD (cubic meters daily) of sewage. Wastewater processing capacity is being continuously improved; plans are underway to increase treatment capacity to 2 million CMD. There are currently ten wastewater interception stations in Taipei City, intercepting more than 290,000 CMD of wastewater. Taipei County houses 16 stations, intercepting more than 440,000 CMD of wastewater. 26 stations are installed across the Danshui river system, intercepting over 730,000 CMD of water. These stations will be in a constant state of operation to improve water quality. Nine interception stations will be added by the end of 2010; two have been set up along the Danshui River’s mainstream, and seven others in Taipei County. By the end of the year, there will be a network of 35 stations across the Danshui watershed, and the total interception capacity of the dry weather flow interception system is expected to reach 2.11 million CMD.

(3) Increasing In-situ Processing Facilities

The Taipei City Government currently houses the Nanhu and Chengmei in-situ processing facilities containing gravel and one wetland area in Guandu Nature Park; their average BOD, SS and NH3-N removal rates have surpassed 80%. Five more such facilities and six artificial wetlands were added in Taipei County; presently there are 14 in-situ processing plants across the Danshui watershed. Two more processing facilities (Zhongxiao, Guiyang) containing gravel will be set up in Taipei City; four more such facilities and three more artificial wetlands will be installed in Taipei County by the end of 2010. By then, there will be a total of 23 in-situ processing facilities throughout the Danshui watershed, with processing capacity estimated at 360,000 CMD to effectively improve the water quality of the Danshui River.

(4) River Aeration Facilities

16 surface aeration facilities have been installed along the Keelung and Danshui rivers to expedite contaminant and pollutant dissolution, reduce odor, and increase the oxygen level in the rivers. Also, to ensure effective dredging of the rivers, cleaning and garbage removal projects were conducted across the city’s rivers and retaining embankments. 4,580.34 metric tons of waste drift were removed in 2009.

3. Creating More Waterfront Space

The pollution level of the Danshui River dropped from “severe” to “medial” in 2008. With water quality
significantly improved, 29 riverside parks dotted around the city’s rivers have attracted throngs of people to participate in camping, exercise and other leisure activities. The 2010 Taipei International Flora Exposition, celebrated as Taiwan’s debut in organizing an international extravaganza, will be held at Yuanshan Park, the Fine Arts Park, extending all the way to Xinsheng Park and Dajia Riverside Park in fanfare.

Taipei’s riverside bikeways are measured at 108 kilometers in total length. Working to maintain a variety of riverscapes and local features, six unique riverside bikeways are in the planning, so that citizens can enjoy biking while feasting on the pleasant riverside scenery.

Part 3 Vibrant Cityscapes and Flower Exhibitions

1. Adding new Parks and Green Areas

Presently in Taipei’s urban planning, a total of 1,019 lots of land (including riverside parks and 37 other sites) covering 1,962 hectares have been reserved for parks, greening areas, plazas, and children’s playgrounds. By year-end 2009, 814 parks (including some partially constructed 42 parks) and green areas have been developed, totaling 1,352 hectares. This equals 5.18 square meters of green area coverage per capita. Table 1 shows the green area coverage per capita from 2000 to 2009.

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<th>Year</th>
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<td>5.11</td>
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2. Park Construction (Expansions)

Some of the key new (expansion) park projects in 2009 include: key construction work conducted at Beitou Hot Spring Waterfront Park with a view to connecting the New Beitou MRT Station and the New Beitou Hot Spring Park entrance; new construction projects were undertaken at Qixing Park to extend the images and impressions of the Hot Spring Country, and to connect adjacent parks and green spaces; expansion construction at Nanggang No.58 Park served to create a pleasant community landscape and increase leisure spaces for residents in the area; new construction projects at Changshou Park improve the neighborhood, while infusing a new visual effect for the aging communities in Wanhua with vibrant colors. Finally, construction work at Tianshou No.1 green space and Wanhua Park 409 were completed to increase leisure areas for residents while beautifying the environment.

3. Road Greening and Beautification

(1) Greening Embellishments for Streets and Roadways

Roadway embellishments were conducted on key, designated areas, such as trunk roads in the cities, incoming and outgoing pathways connecting the neighboring cities and counties, traffic circles, traffic islands and green areas. Shrubs, colorful potted flowers, and bonsai plants were planted in these designated regions in geometric and ornate patterns in gradational layers, to create a variety of pleasing visual effects for the roadways. Environmentally friendly and attractive plant features, including potted plants, perennial plants, flowering shrubs, long-lasting herbaceous flowers and lawns have replaced flowering plants to cut costs.

Also, street trees have been planted along city sidewalks wider than 2.5 meters; special attention was paid to planting trees in empty tree holes and renewing tree species to enhance the effects of roadside greening. In 2009, the new plant additions (replacements) totaled 1,098 street trees, 165,262 shrubs, 11,008 square meters of lawns and 37,825 potted plants. By means of renovating the cityscape and beautifying streets with plants, the city hopes to incorporate the “Green Network” philosophy into Taipei’s future urban development.

(2) Cityscape Beautification

Greening efforts were undertaken to improve the appearance of substations and gas pressurization stations in parks and green areas and on traffic islands to enhance roadside landscape. These facilities include protruding fixtures that were eyesores to the overall cityscape. Appearance embellishments were conducted on these substations and gas pressurization stations, using the natural beauty of plants to improve the appearance of facilities.
Also, in coordination with the construction of
drainage facilities for household wastewater sewage,
the city made improvements to transform back
alleys into pleasant gardens. For gardens that meet
the criterion (they must be more than two meters
in length), back alley beautification projects will be
implemented as construction and repair are completed
for user pipe connections. 39 back alleys were given
a facelift in 2009; by now, improvement work has been
completed for 337 back alleys.

4. Flower Exhibitions

(1) Camellia Exposition

“The 2009 Taipei Camellia Exposition” was held for
ten days from February 6 to 15 at the Yangmingshan
Flower Experimentation Center, attracting
approximately 30,000 visitors. The exposition was
themed “a Love Affair in Flowered Paths,” featuring
camellias of the Valentine species. The fair was
complemented by musical events to create a romantic
feel.

(2) Yangmingshan Flower Festival

The “Yangmingshan Flower Festival” is one of the
most popular events among domestic and foreign tourists. The 2009 Festival was held from February 20
through March 22, and themed “Fall in Love with YangMing.” The critically-acclaimed festival drew 1.38
million tourists to travel up Yangming Mountain and view the breathtaking seas of dainty cherry blossoms
and azaleas.

(3) The Chrysanthemum Exposition at the Shilin Presidential Residence

“The 2009 Chrysanthemum Exposition” was organized from November 28 through December 20,
2009, and themed, “the Flora Exposition Imagerys – Blossoming Chrysanthemums,” drawing over
400,000 visitors. Among the displays was “Liu Ge” a Dali chrysanthemum species with 530 blossoms – which took 16 months to nurture and grow, was the show’s centerpiece.

(4) The Taipei Flower Exposition

“The 2010 Taipei Flower Exhibition” kicked off from December 19, 2009, through January 17, 2010, at the Daan Forest Park. It was themed “Flora Exposition Impressions – Dreams Take Off in 2010.” The venue was decked out with various patterns and themes to give visitors a preview of the 2010 International Taipei Flora Exposition. Community parks from Taipei City’s 12 administrative districts also participated in the decorative project, allowing visitors to experience the exuberant hustle and bustle of the event.

5. Streetlamp Construction and Maintenance

(1) Streetlamp Construction

As a vital part of municipal work, the city’s streetlamps can enhance citizens’ engagements in nighttime activities, beautify the cityscape, prettify street blocks, maintain traffic order, prevent crime and eliminate vulnerable public security weaknesses. In 2009, 2,900 new streetlamps were installed; for the past five years, the city’s streetlamp installation rate has grown steadily at 1.9% per year. By the end of 2009, Taipei City had a total of 145,508 streetlamps, and effectively maintained and managed a streetlamp replacement ratio of 0.163%.

(2) Nighttime Illumination Improvement for Bikeways along Riverside Parks

In considering leisure activity safety for city residents, the City Government set up projection lights atop upper platforms and embankments of riverside parks to enhance nighttime lighting for the parks’ activity areas. A total of 3,147 lights were installed in 28 riverside parks in 2009.

Part 4 Robust and Comprehensive Public Facilities

1. Water Supply Facilities

(1) Water Supply Facilities Improvements in Preparation for Draught

After weathering the drought crisis of 2002, the Taipei Water Department has thus mapped out and implemented projects to ensure thoughtful, long-standing water resource utilization and improvement. In 2009, the city implemented the “Water Supply Network Improvement and Management Project – Stage One” (2006 – 2012) to adopt four major directives: pipeline replacements, hydraulic gauge management, spontaneous leak inspections and efficient leak repair. These directives were implemented to ensure a robust water supply network. In 2009, 153.7 kilometers of pipeline replacements were completed, 5,661 inspections for leaks were conducted, and 92 sections of zoned metering were demarcated. The
construction efficiency surpassed the original goal by a significant margin.

The Taipei City Government also actively encouraged conserving water resources and improving the supply network. From 2003 to 2008, 871 kilometers of pipeline were replaced; the percentage of leaky pipes dropped from 28.44% in 2002 to 23.61% in 2008. Also, the average daily water allocation capacity decreased from 241 metric tons in 2002 down to 215 tons in 2009. The drop effectively slowed water level descent at the Feitsui Reservoir; water conserved through the implementation of such a measure is channeled to Taipei County’s Banqiao and Xindian areas for use.

(2) Strengthening Backup and Mobilization Systems to Prevent Water Shortage

Typhoons and storms often cause a rise in water turbidity, forcing existing water purification plants to lower their processing load, and in turn causing shortages in the water supply. In order to build a safe and reliant water supply system, the Taipei City Government introduced a backup and mobilization project for the water system at a cost of NT$21.8 billion, hoping thereby to run a city that never runs dry. The 2nd Untreated Water Transmission System Project became one of the core projects; it began on December 6, 2005, extended for about three kilometers in length. The Pre-stressed Concrete Cylinder Pipes (PCCP) lining tunnel is the country’s largest pipe jacking work for tunnel construction work. The pipeline is 4,000 millimeters in caliber.

Construction was wrapped up in August 2009, adding 2.7 million metric tons of untreated water supply capacity. The project can meet the water access demands of the Zhitan Water Purification Plant’s six facilities; the new structure can serve as a backup for the existing Zhitan First Untreated Water Transport Pipeline, supporting one another. The plants can also rotate for maintenance services to extend their long-term effectiveness and significantly enhance the safety in accessing untreated water of the Zhitan Water Purification Plant.

(3) Additional Cover and Solar Powered Photovoltaic Facility for the Gongguan Water Purification Plant

The Taipei Water Department is located on the premises of the Gongguan Water Purification Plant. Thanks to its open space and plentiful sunlight, a solar power plant was established there. The upper level of the plant is 13,000 square meters in total area, and is covered with a mobile GFRP cover to prevent algae growth in the tank. The cover can cut down on purification medication expenses, and ensure the safety of both the plant and residential drinking water. Also, nearly 1,200 solar panels with 258KWp of power generation capacity were installed atop the sedimentation tank cover and the rooftop.
of the Purification Plant’s management corridor. The panels cover an area of 2,500 square meters, and are expected to generate over 200,000 units of electricity for the Plant’s administration building and some of the energy consumption of the facility. The panels can reduce annual carbon dioxide emissions by 130 metric tons at a cost of NT$150 million. The panels went into service on October 15, 2009. These eco-friendly additions make Gongguan the nation’s first purification plant to combine water resource protection and energy conservation education functions.

2. Hot Spring Resource Management

(1) Hot Spring Resource Management Continues

In 2009, 30 hot spring monitoring wells were installed, while 12 new springheads were discovered. Cultural and landscape features were incorporated into these resources for installing hot spring facilities. These measures help in diversifying the utilization of hot spring resources.

(2) Hot Spring Acquisition Fees

The Hot Spring Management Fund and Designated Account have been set up. In 2009, NT$9,075,877 were collected for acquisition fees to subsidize five organizations: the Department of Health, Taipei City Government, Taipei Municipal Hushan Elementary School in Beitou, the Taipei City Hot Spring Development Association, the Shamaoshan Hot Spring Development Association of Taipei City, and the Yangmingshan Hot Spring Community Development Association in Beitou. The fees are used for promoting hot spring resource stewardship, research and development efforts.

(3) Hot Spring Resource Stewardship

In coordination with the Taipei Water Department’s public pipeline network deployment routes, geological landscape conservation engineering was launched for the Taipei City Huangxiling Hot
Springhead Area. Assistance was provided to local hot spring resource business owners to minimize private pipeline installations, and remove pipelines hampering hillside drainage, turning these haphazard pipeline networks into a landscaped pathway. Hillside drainage pipelines were installed, and riverside security was strengthened in hopes of transforming the Hot Springhead Area into a landscape conservation showcase area.

3. Natural Gas Utilities

The natural gas supply for Taipei City comes from four city gas corporations: the Great Taipei Gas Corporation supplies gas to: Zhongzheng, Daan, Xinyi, Songshan, Zhongshan, Wanhua and Datong administrative districts, and Shilin district. The Yang Ming Shan Gas Corporation provides gas to the Shilin (excluding the Mingsheng and Fuhua boroughs) and Beitou administrative districts. Shin Shin Natural Gas Co., Ltd. supplies gas to the Wenshan district; the Shin Hu Natural Gas Co., Ltd. supplies the Nangang and Neihu districts. In 2009, these four corporations supplied a total of 309,626,967 million cubic meters of gas to 626,392 households, accounting for 64.62% of the total households in the city’s supply area.

All the gas companies in the city took part in completing the installation of a central monitoring system, setting up 32 supply regions in the service area, deploying emergency containment and a pipeline network connection for better monitoring. Regular disaster-prevention drills are conducted to ensure the safety of the network of pipes. The gas companies also conduct regular pipeline inspections and replacements; in 2009, 8,051 kilometers of pipelines were inspected, and 62 kilometers of the pipes was replaced, at a replacement rate of 2.7%, to ensure gas supply and transport safety. Additionally, the companies provide free household gas pipeline facility security checks for city residents every other year. In total, 279,000 households were examined in 2009 to strengthen user safety education.

4. Taipower Electricity Supply and Gas Stations Safety Management

Taiwan Power Company houses three operating centers in Taipei City, servicing 968,739 households. The Taipei City Operating Center is in charge of Daan, Zhongzheng, Zhongshan, Wanhua, Xinyi, Songshan, and Datong administrative districts; the Taipei City Southern Region Operating Center is responsible for Wenshan District, while the Northern Region Operating Center oversees the Shilin, Beitou, Neihu and Nangan administrative districts.

In hopes of enhancing the management of the gas stations, periodic inspections are conducted on gas station safety management. 79 gas stations, five liquefied petroleum gas stations, and 42 self-use and petrol storage facilities were inspected in 2009. A majority of these stations successfully met safety standards; those which failed inspection were able to rectify their failings and make improvements within a short time.

5. Energy Conservation Promotion

The Taipei City Government targeted electricity users in the industrial and commercial communities of over 300kWp – as specified in power consumption contracts – to conduct energy control evaluations and
guidance, and to establish a reasonable energy consumption level and utility efficiency. During the 2009 summertime peak season, campaigns were conducted to encourage energy control and the reduction of carbon dioxide emissions; inspections were performed on room temperature settings and lighting facilities in business venues and offices. Storeowners who were able to deliver impressive energy conservation results were publicly commended. Makers and marketers of energy-sensitive products also took part in these energy stewardship campaigns to encourage the use of energy-saving merchandise, estimated to have saved 73 million units of electricity, equaling 676 kiloliters of gas, NT$700 million in costs, and 48,000 metric tons of carbon dioxide emissions; the amount of these emissions equals those generated from the construction of 128 Daan Forest Park.

Part 5 Residential Services for the People, Maximizing Property Value

1. Residential Service Platform Expanded

The Taipei City Government has halted the construction of public housing units; rather, it devotes its resources into reinventing residential services. These services include public housing leasing, modifying the organization style of public housing community management, working with the central government to process housing subsidies, plus promoting general designs and expanding the Residential Service Platform. These service items are aimed at providing Taipei residents with comprehensive residential placement assistance.

(1) Public House Leasing Continues

For public house leasing and contract extension, the Taipei City Government worked to complete tenant qualification reviews as public housing tenancy expires, and informed qualified tenants to finish notarization procedures for lease extension and signing. In 2009, a total of 1,404 units extended their contracts for leasing public housing units, including Zhongzheng (484 units), Qiyan (10 units), Yanping (37 units), Jungong (6 units), Maosan (8 units), Xining (431 units), Huaiheng (6 units), Longshan (2 units), Donghu C (44 units), Taiwan Fertilizer (15 units), Sisi East Village C (29 units), Dali Street (29 units), Yanshou P (86 units), Wanle (207 units), and Huachang (10 units). In regard to the sale of public housing commerce and other services and facilities, six units were sold, plus 71 leaseholds.
(2) Modification of Public Housing Community Management Organization

In 2009, 164 public housing communities which had set up building management systems (201 have been established as of now) in accordance with statutes governing the management of apartment housing. In 2009, 169 completed structural preparations and filed applications with the Building Administration Office. 132 received management maintenance funds for community public works.

(3) Establishing Transitional Housing Assistance and Promoting Renovations on Old and Decrepit Residences

The Taipei City Government set up a designated construction project and assigned 306 units of the Keelung River Phase 3 Public Housing in C and D districts, and 88 units of Yongping Public Housing to be transitional leaseholds. All of them have been leased to the owners of the Xiude Public Housing Community during renovation and reconstruction. While vacant, these houses will be leased to young families for short-term residence.

(4) Improving the Landscape of Public Housing Leaseholds

In 2009, building facade landscape beautification and environmental renovation construction projects were undertaken in Qiyan community. Benches were added so that the community’s overall setting blends in with the neighboring public space to enhance living quality. Similar projects were conducted for Xining High-Rise and Wanmei Community. By renovating the building facade of Xining High-Rise, the frontal view and nighttime lighting along Huanhe South and North Roads, and both sides of Zhongxiao West Road have been greatly improved. For Wanmei Community, plans are underway to renovate the existing structures, making them energy-saving and CO2-neutral.

(5) Comprehensive Housing Subsidy Assistance for台北市民

The Taipei City Government works with the Interior Ministry to address housing subsidy services. In 2009, service items announced include: rent subsidies (the highest subsidy is NT$ 3,600 dollars monthly per individual for up to one year), housing mortgage interest subsidies (as high as NT$2.2 million for up to 20 years) and housing renovation mortgage interest (as high as NT$800,000 dollars for up to 15 years). A total of 6,922 households in Taipei City were eligible for these services.

(6) Barrier-free Residential Spaces for “Aging in Place and Housing for All Ages”

The Taipei City Government adopted a "design-for-all" general design principle to unveil a series of specific inspection entries for issues surrounding universal designs in collective housing, and published a universal design guidebook for living space to promote general design ideas for housing repairs.

(7) Enhancing Information Transparency in the Housing Market

The Taipei City Government successfully expanded application services for the city’s housing service platform, including “residential space information inquiry systems” which integrated Taipei City’s municipal resources with

The 4th Universal Design Awards Ceremony.
the GIS and mobile device inquiry services to create a community exchange platform. The services were inaugurated in hopes of meeting the objective of “the right residents for the right housing.” During the 2009 Information Month, an Achievement Exhibition for the Taipei City Housing and Realty Information Systems and related workshops were held at the Taipei World Trade Center Exhibition Hall.

2. Enhancing Land/Property Utilization

(1) Expropriation and Appropriation of Land

In light of the dense urban population and the flourishing economy, land acquisition has become increasingly difficult as land value has been rising sharply. The Taipei City Government actively processes land acquisition deals needed for public infrastructure. In 2009, there were a total of 18 cases of private land expropriation, including 163 lots, and 511 households, the total area of which was 2.61 hectares with compensation totaling NT$1,107,697,853. The Taipei City Government also completed 51 cases of public land appropriation and 126 lots with an area of 16.95 hectares in hopes of accelerating the implementation of public infrastructure projects.

(2) Zone Expropriation

To expedite the completion of Taipei’s urban planning blueprint, the Taipei City Government undertook 14 areas of zone expropriation totaling 781.17 hectares by year-end 2009. The completion of this project supplied 215.52 hectares of land for construction, while 565.65 hectares were earmarked for public facilities such as roadways, parks, public schools and other public facilities.

The Taipei City Government is working on Zone Expropriation projects covering the new community in Qiyan, and the Beitou-Shilin Technology Park, the total size of which was 106.89 hectares. Upon completion, 52.09 hectares of land will be available for construction, and 54.8 hectares will be allotted for public facilities. The completion of the redevelopment promises to increase land use efficiency, multiply land appreciation value, improve cityscapes, and fortify the overall urban development.

(3) Urban Land Consolidation

The Taipei City Government has been promoting urban land consolidation for over 40 years. The land is earmarked for public facilities needed for urban construction; the project also bears witness to the development history of various major construction projects, such as Taipei 101, Nangang Economic and Trade Park, Taipei Neihu Technology Park, National Taiwan Science Education Center, Songshan Minsheng Community, Shilin Central Community, and Songshan Station. By year-end 2009, Taipei City had completed 994.87 hectares of property in its urban land consolidation project, constituting 42 blocks, and the total construction-ready area amounted to 602.38 hectares for building purposes. The city also
acquired another 392.49 hectares of property for roadways, parks, and public schools. Urban construction projects are a great conduit for participation of the private sector. In addition to the infusion of plentiful funding and input from the private sector, spontaneous public participation also encourages a collective consensus and builds regional identity. The Taipei City Government rewards landowners who initiate and organize their own unions for urban land consolidation efforts. Assistance has been provided to Yucheng in the Nangang District, the southeast side of Nangang No 1 Park, Huaisheng in Daan District, the 6-6 Residential Complex in Shilin District, Shitan Borough in Neihu District, and 12 residences in Beitou for land consolidation.

Conclusion

The Taipei City Government is determined to rise up to the challenges of and to seek innovative measures in promoting public works projects, the objective of which is to effectively enhance the quality of public works, and earnestly address issues that concern the public. Temporary inconveniences must be endured during the building stage, smoothing out roadways and removing traffic bottlenecks to improve traveling convenience. The promotion of effective flood control systems, wastewater sewage construction work, and the reinvigoration construction work for Taipei’s rivers to create waterfront space have won the public’s critical acclaim. Beautiful flower expositions have provided another attractive leisure activity for the public; robust utility facilities have endowed people’s lives with greater conveniences. Standing firm on its already substantial foundation, the Taipei City Government vows to continue to work hard to fashion a safe and cozy living environment for all.