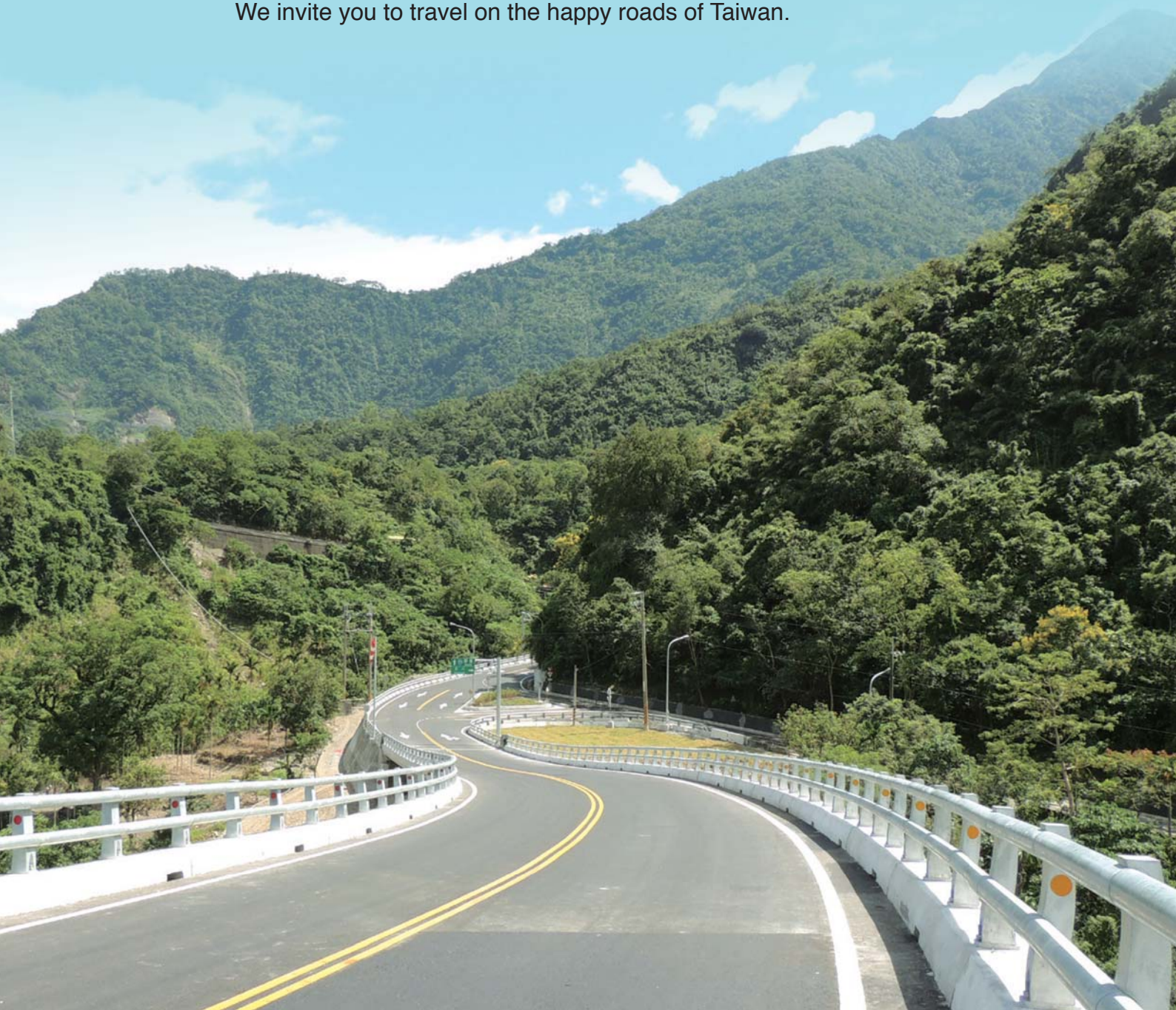
Directorate General of Highways, MOTC

2014 Annual Report

Highway People Who Make Others Happy

Reading the Pages of Happy Roads, Life, and Way of Thinking

It opens up a road that leads in all directions,
we realize the dream of coming home safely.
Sweat is the ink of hard work, which has been written faithfully for 60 years;
We read the essence of the 2014 Directorate General of Highways, MOTC,
stimulate the national networks, and have no regret protecting nature.
We connect today, and extend to the future;
We invite you to travel on the happy roads of Taiwan.



2014 Annual Report
for the Directorate General of Highways,
Ministry of Transportation and Communication

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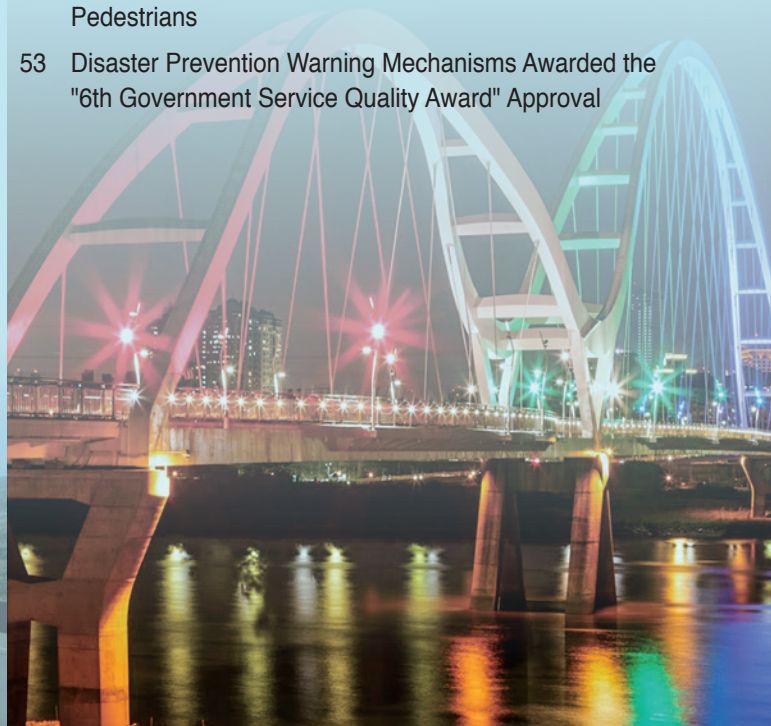


Sustainable Highways in Harmony with the Earth

On March 17th, 2014, we moved into a gold standard green architecture office building with solar and wind power, and became the leading government department in implementing sustainable development concepts. Over the last year, in this era of low carbon transportation, we have worked hard to innovate for a greener Taiwan, both in highway construction and highway monitorization. We hope that our efforts will put into practice the concept of "loving Taiwan, starts with the roads" to improve the transportation of this country, and make its people happy .

In 2014, we turned our vision of environmental protection into action, and it was a productive year. "The Region-Based Road System Construction (2009~2014) Project" , which created 190,000 square meters of road space from remote countryside, will promote the balanced development of the countryside, save traveling time, reduce air pollution, and was made using green materials in accordance with our commitment to sustainable methods. During the construction of the Beimen-Yujing Line, Provincial Highway 61 to National Highway No.1, Section E707, we used low noise and low vibration equipment to protect local fish farms, adjusted nighttime construction, controlled lighting angles, and conducted water and road cleaning work. In addition, in 2014, we officially launched "The Tamkang Bridge and Connecting Roads Construction Project". Because the route will pass through the habitat of an endangered species of oriole, environmental monitoring and ecological construction checking mechanisms were of the highest standard. The ongoing "Suhua Highway of Provincial Highway No.9 Mountainous Section Improvement Project" for example, was the first important road construction to have its carbon footprint verified by an independent organization. In addition, we also plan to promote the traffic dispatch measures during long holidays, and actively carry out the Highway Public Transport Enhancement Project to improve highway public transportation environments, and reduce private transportation use, working towards the goal of energy conservation and carbon reduction. We hope that under the leadership of the public sector, we will move closer to the values of respect for nature, and harmony between the humans and the earth that provides for us.

For the "Third-Generation Motor Vehicle and Driver Information System", Highway Motor Vehicle Services worked together with 37 motor vehicle offices and stations, arbitration centers

in 5 cities, and 510 inspection garages, as well as conducted 10 national online trials and field operation tests in 2014. We have successfully provided all kinds of motor vehicle services, and launched more complex ones in this digital age, all in the name of traffic safety. As for large vehicle, we expanded the disclosure of tour bus safety facility information, conducted regular re-training of large vehicle drivers, and conducted individual inspection for large vehicle, and in the meantime we also conducted road inspection work on accident prone locations. In addition, in order to deepen people's respect for traffic laws, we improved the driving schools project, conducted safety seminars for new drivers, and executed the "National Road Safety Improvement Plan." We hope through integration of diverse policies to improve traffic safety and reduce loss of life and property. As for the Kaohsiung Gas Explosion, we entered the disaster areas immediately, and through close co-operation with mobile motor vehicle services, were able to assist victims with motor vehicle services for damaged cars, displaying the Directorate General of Highways' determination to help others. Wherever there is need, we are there.

2014 was a year of "non-stop awards" for the Directorate General of Highways. For the "Early Warning and Disaster Prevention for Safer Road Users" Project, came first out of 56 government units in the 6th Annual Government Service Quality Award. In their speeding violations reduction plan, Chiayi Motor Vehicle Office used event data recording cards to calculate the driving trails of large vehicle on Alishan Highway. The plan won them 1st place in the 6th Innovative Road Safety Contribution Award. The Nantou Construction Branch won the Ministry of Labor's 2014 Promotion of Occupational Safety and Health, Public Construction and Staff Selection award for Provincial Highway 21, Beigang River Bridge Improvement Works. Kaohsiung City Motor Vehicle Office and Fengyuan Motor Vehicle Station jointly won the 12th Records Management Quality Awards, and finally the West Coast Expressway Central Region Engineering Office has won the highest honor of the 13th Public Construction Commission Golden Quality Award.

The awards mentioned above, along with other awards great and small, are the evidence of our sincere services, drive for innovation, and dedication to improvement.

We hope to share the awards won in this past year with all highway workers and road users who have the same vision of a better Taiwan. Thank you for working with us, and helping to write another chapter of using "roads" to love Taiwan.

Director General

Jaw, Shing-hau

Driving into the Future

From the treacherous mountains to blue coasts, and from the beautiful to the simple villages, roads are the veins of the land which connect the important arteries. The Directorate General of Highways is intent on its ultimate goal of creating safe, convenient, and economic transport networks. We tackle environmental issues on a par with international engineering standards, and use the newest highway facilities to satisfy people's traveling needs and desires now and in the future.

In our annual report we have collected examples of our award-winning performance through in-depth news coverage, on-site filming and detailed statistics. We hope that others can attest to our hard work, evidenced by the concrete results of all kinds of services like planning, new construction, road maintenance, disaster prevention, motor vehicle services, and administration. The applause and congratulations will become the inspiration to keep moving forward.

First, the chapter "Road of Revelation" includes the planning of the complete highway system network to improve quality of life; establishing the instant traffic update app for provincial highways so people can check the status of highways; the West Coast Expressway No. 61 Service Quality Upgrade Project, exhibiting the real utility of alternative roads; and the long holiday dispatch plan to alleviate traffic problems on holidays. In addition, the results of flatness tests on provincial highways have won us an opportunity for a thesis presentation at the 1st Annual Asian Regional Seminar conducted by the International Road Federation.

In the chapter "Road of Progress," we share our most recently planned works. For example, in 2014, we officially launched the Tamkang Bridge and Connecting Roads Construction Project, which will reshape the local transportation and landscape. We have also planned the improvement of mountainous section on Suhua Highway of Provincial Highway No.9, the widening project of the South Link Highway of Provincial Highway No.9, follow-up construction of the West Coast Expressway and the East-West Expressway. In addition, in order to improve labor safety supervision, we encouraged contractors to conduct top-down self-inspections, and conducted 16 seminars on autonomous management of labor safety.

The content of "Road to Safety" introduces our achievements in highway maintenance and disaster prevention. For example, the Disaster Prevention Emergency Improvement Plan has improved road safety on provincial highways and mountain regions, and the Typhoon Morakot renovation works. Other than conducting safety upgrades on the unstable regional shortcuts of Provincial Highway 20, Qinhe to Fuxing Sections, we also completed 12 steel bridges on Provincial Highway 21 to improve local transport and promote tourism. We have classified the

slopes on the mountain highways to ascertain the high risk road sections, and we pioneered the use of the "build first, demolish later" technique of bridge foundation replacement, so that Wanda Bridge on Provincial Highway 88 could continue to support traffic during construction. After construction of the new foundations, road users are much safer. Chiayi City Public Highway 1 New Construction-Chuiyang Bridge has been opened to traffic, which alleviated local traffic problems, promoted the balanced development of the east and west of the city, improved Roadside Disaster Prevention Warning Mechanisms, and set the record of 1,530 days of zero casualties in extreme climate. Due to these achievements, our pioneering and committed services won the 6th Government Service Quality Award.

The "Road to Action" chapter is the key point report for motor vehicle services. For example, the disclosure of tour bus safety facility information and regular re-training of large vehicle drivers give people safety assurances when they travel; cutting down the surplus number of old motorcycles lowers the burdens on people paying their fuel fees; promoting highway public transportation provides for the basic needs of traveling; our safety seminars for new drivers and motorcycle safe driving courses improve the riding skills and traffic safety concepts of motorcycle drivers; and our active participation in providing relief services to he Kaohsiung gas explosion disaster area helped to protect victim rights. We have also won the 12th Records Management Quality Awards from the National Archives Administration, and the Innovative Award for Management of Innovative Road Safety Contribution Award from the Ministry of Transportation and Communications. We look forward to sharing the honors with readers in this chapter.

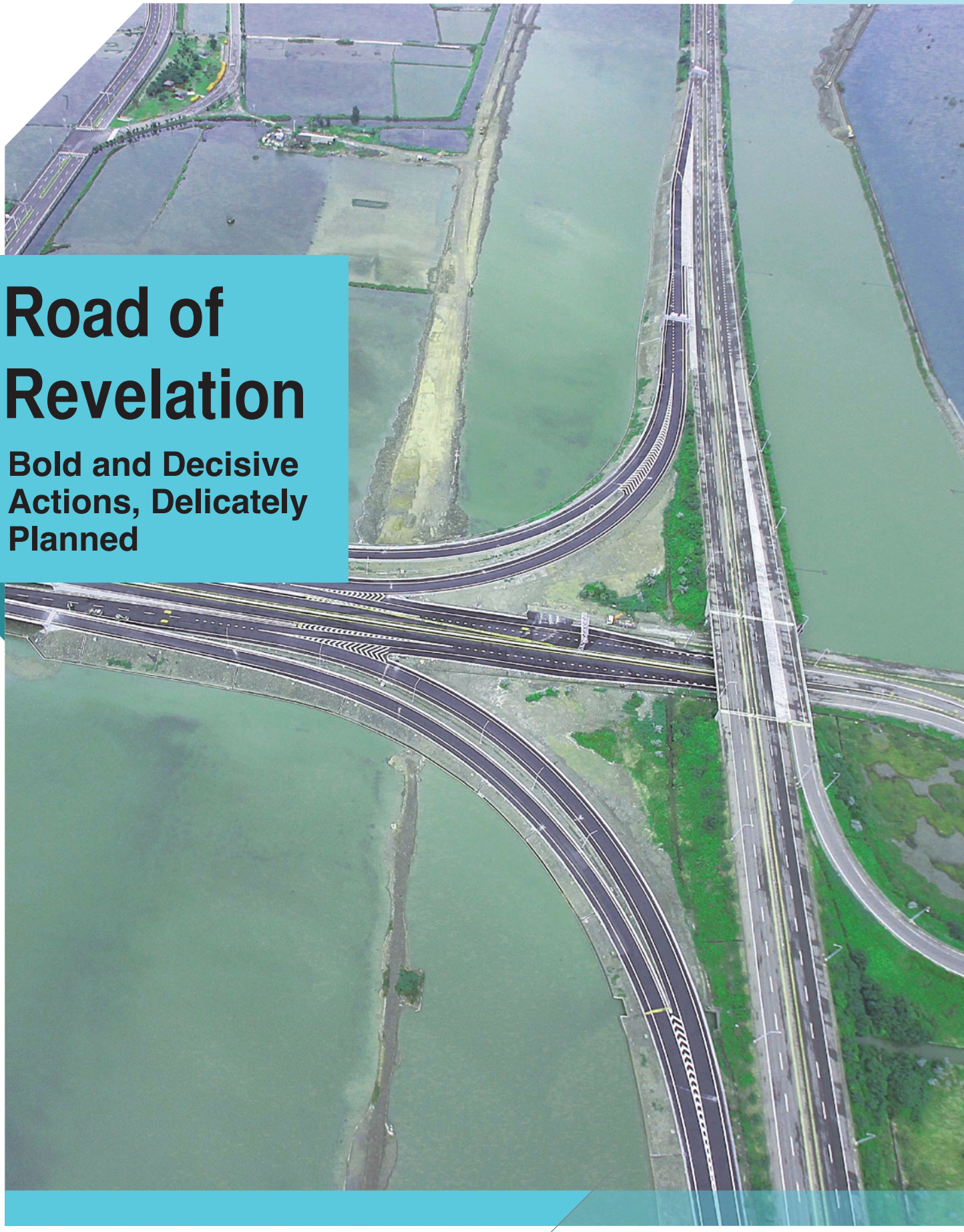
Detailed in the chapter "Road to the Heart", our gold standard green architectural office building has contributed to energy conservation and carbon reduction in the country; we made plans to loosen traffic regulations to reduce pressure on the public; we conducted car inspection garage seminars to assure the quality of inspection garages and improve the safety of the traveling public; we ran corporate integrity seminars to remind companies to adhere to ethics and regulations, we field tested the Third-Generation Motor Vehicle and Driver Information System to provide people with more convenience in this digital age; and with the newly established "thb-IDC" green energy information system, we have laid a great foundation for future information system services.

Finally, in the "Road to Success" chapter, we have exhibited the organizational structure of the Directorate General of Highways, administration performance, research and development, awards results, major events, budget implementation and encumbrance.

Highway people are the heart of our road network, and work for the benefit of Taiwan. We believe that this book will give readers a better understanding of our determination.

Road of Revelation

Bold and Decisive Actions, Delicately Planned



Road of Revelation

A Robust Highway System Improves Quality of Life

Sustainable development revitalizes Taiwan

The ultimate goals of traffic transportation policies include: improving quality of life, revitalizing industrial development, and preserving the natural environment. These are also the goals of the Region-Based Road System Construction.

Traffic construction is one of the basic foundations of the nation, and transportation is closely bound up with the daily lives of people. Highway transportation is the heart of Taiwan, and its quality influences the development of transportation in general.

If the Taiwan highway network were the cardiovascular system, then highways, expressways, and provincial highways would be the major arteries. They are responsible for the main transport of blood around the body. Country and township highways are like the veins, and are responsible of transporting nutrients to each cell. The Region-Based Road System Construction Project is like the nutrients, helping to maintain the health of these veins, so that life functions such as school commuting, medical support, disaster prevention and rescue, industrial transport and tourism travel all run smoothly. In recent years, the Region-Based Road System Construction Project integrates the concepts of energy conservation and carbon reduction, and encourages the use of green materials, working towards the goal of sustainability.

Perfecting construction-improving lives

In 1990, Taiwan Provincial Government came up with proposals for 18 Region-Based Road System Construction Projects as part of the "Taiwan Area Comprehensive Development Plan." Since 1995, we have included the project in the budget, gradually moving forward, and now after nearly 20 years, people can see the results of the project.

The recent 2009-2014 Highway System Plan was allocated nearly 26 billion of the budget by the central government. Thanks to the joint efforts of the MOTC, DGH, and local governments, we built 210km and 4.15 million square meters of road space, increasing the efficiency of transport, providing 20,000 jobs, and promoting balanced development in the countryside. It has provided remote areas with nearly 190,000 square meters of road space, giving local people more convenience and comfort.

Northern region:

- New Taipei City "Second Ganyuan Bridge New Construction" effectively alleviates the large car flows caused by the rapid development of Tucheng Dingpu Industrial Zone, Shulin, Shanjia, Ganyuan, and Taipei University Special District.

"New Construction of Ganyuan Second Bridge" in New Taipei City

- The New Taipei City Country Highway 102 (11K+540~12K+820) Expansion Works eliminates the dangers of the Ruifen, Jiufen Old Street to Jingguashi, and the Shuangxi region "two way crossing".It also improves the service qualities of Country Highway 102 and enhances the road scenery and the surrounding environment.
- The New Taipei City "Shulin Bridge Extension and New Da'an Road Construction" alleviates traffic jams from Shuilin Bridge to Fuzhou Bridge. This has upgraded the quality of traffic services. In the future, cars traveling from Zhongzheng Road to Huilong and Xinzhuang can use the bridge and directly cross to the Da'an Road intersection, thus reducing the waiting time. The traffic streams going straight and turning will be diverged.
- Taoyuan County "Tao35, Guanyin-Chenggong Road (Provincial Highway 15) going west bound to the expansion construction of Provincial Highway 61 (Zhongxiao Road) has increased the connecting transport options in Guanyin Industrial Zone, and effectively alleviates car flows during rush hour going in and out of the industrial zone. It is the main connecting road of Provincial Highway 61 and Guanyin city.
- Taoyuan County (Tao102 Road Expansion Construction) connects two important routes: Route 114 (Minzu Road) and Provincial Highway 66 Expressway (Guanyin-Daxi). It provides important connections for the nearby industrial zone and telecommunication research institute.
- HSR Hsinchu Station in Zhubei City and Zhuzong and Zhuzhong districts are now connected by the HSR Under Bridge Access Road Expansion and Hsinchu Science Park Construction (To Section 5 of the Highway). It enables transfers, increases the overall efficiency of transport, and reinforces the connections of HSR Hsinchu Station and all the highway and expressway systems.
- Hsinchu County Formosa Highway Jiadong Interchange Connecting the Hsinchu Country Collector Road Improvements: This project alleviates traffic congestion from Baoshan Township

"HSR under bridge access road extension to Hsinchu Science Park construction project" (To Gongdao 5th Road) in Hsinchu County

"National United University ground access road construction project"

"Route 131 43K+145~43K+600" (Including Chinhsiu Bridge) road and bridge expansion and improvement construction project

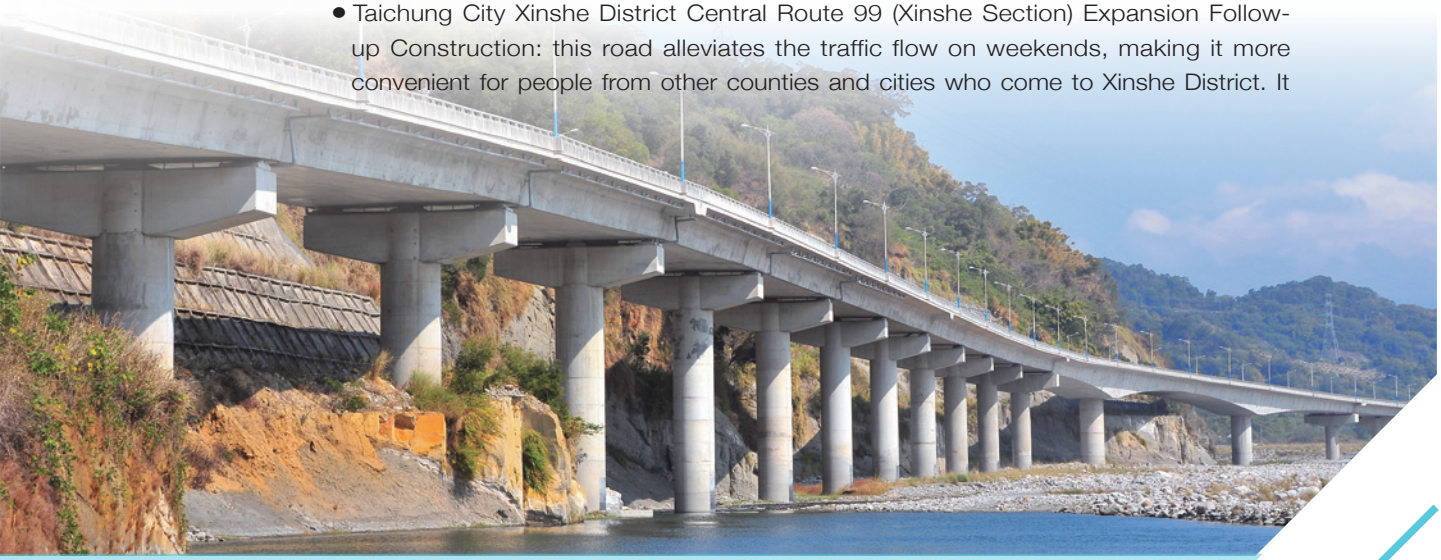
"Lugu Township, Route 55-1 4K+550~5K+960 road reroute construction" project in Nantou County

and Xiangshan District, reducing travel time, and provides sufficient and safe driving width for large vehicles.

- Miaoli County "The New Construction of Da'an River, Zhuolan to Sanyi Connecting Road": this road creates a transport network between Yuanli, Sanyi, and Zhuolan, relieves the congested road sections of traffic in the Miaonan region (southern Miaoli), and connects the mountain and sea areas of Miaoli. It replaces the original Miao52 zigzagged mountain roads. After it is opened to traffic, it will reduce travel time by over 30 minutes, which will be beneficial for the integration of Miaonan regional industry and tourism resources.
- Miaoli County, National United University Access Road Construction: this road connects the traffic of new and old campuses of the United University and Provincial Highway 13. It alleviates the traffic flow of Provincial Highway 13 and Provincial Highway 6 turning left and merging onto Provincial Highway 13. It integrates local tourism and recreational agriculture, and connects to the bicycle trail system of Miaoli City.

Central region:

- Taichung City Wufeng District, Liufeng Road (Central 110-1) Second Term Expansion (Asia University to Fuxin Road): This road section carries 20,000 students from Asia University, Guangfu Middle School, and Guangfu Elementary School every day. It is a major regional transport road, which upon completion effectively solved the problem of bottlenecks and increased the safety of travel.
- Taichung City Xinshe District Central Route 99 (Xinshe Section) Expansion Follow-up Construction: this road alleviates the traffic flow on weekends, making it more convenient for people from other counties and cities who come to Xinshe District. It



Daan River, "Zhuolan to Sanyi access road new construction project" in Miaoli County

also promotes local industrial development, and increases employment opportunities and land values.

- Changhua County Chang130 Expansion and Improvement: this road connects the 4th term Taichung Science Park and main road of Provincial Highway 19, going in and out of National Highway No.1 going northbound. Other than alleviating local traffic, it also raises the land value, creating a win-win situation.
- Changhua County Chang127 Expansion Improvement: This section connects County Highway 143 to the North, Zhutang region to the South, and connects Beidou Interchange to the East. It provides a convenient road to and from Central Science Park, Erlin Base to Pitou, Beidou, and Xizhou.
- Nantou County Route 31 (43K+145~43K+600) (Including Qingxiu Bridge) Road and Bridge Expansion Bridge Expansion and Improvement Construction: This section is the alternative route to Country Highway 151. Its function is to reduce the traffic burden of Route 151, guard against hazardous obstructions, and improve the connecting traffic of inland regions of Nantou: Lugu, Qingshui, and Xiufeng Districts.
- Nantou Country Lugu Township, Tou55-1 Route (4K+550~5K+960) Road Reroute: this newly constructed bridge can ensure that tourism transport and people's livelihoods are not obstructed by natural disaster. We created landmarks typical of the Shao Ban Tien Scenic Area to promote the development of the tourism industry.
- Yunlin County Yun156 Route (Beigang Township-Shuilin Township) Road Expansion: improves the traffic quality and safety in the Beigang and Shuilin areas. It is extremely beneficial to local agricultural sales and agricultural opportunities.
- Yunlin County "Yun198 Route Road Expansion Construction": improves the width and curves of the roads, increases the services going to Provincial Highway 3 and Country Road 149 A, and provides a safe and dependable road for the teachers and students of TransWorld University.

Southern region:

- Chiayi County Country Highway 159 Road Expansion (Xingang Township): rapidly connects with Chiayi Interchange, Chiayi 50m Expressway, and effectively saves travel time from Chiayi Interchange, National Highway No.1 to Chiayi City, Beigang, and Beigang, and increases the convenience of connecting traffic in that region.
- Chiayi County (Chia7 Expansion): Connects the lanes of Provincial Highway 17, Aogu Ramp, and Route 166 connects the Gangkou Temple, Dongshi Township, Aogu Farm, Taisugar Dongshi Farm, and coastline scenic areas, and promotes the industrial development of west coast tourism

"National Highway No. 8, Tainan Science Park access road extension to Provincial Highway No.1 construction project" in Tainan City

Country Highway Route 159 road expansion construction project (Hsingang County) in Chiayi County

"Pingtung Route 37 road expansion construction project" in Pingtung

in Dongshi Township. It can replace Route 166, and provide road users another options, so they can quickly travel to Dongshi Farm and coastline scenic areas.

- Tainan City National Highway No. 8 Tainan Science Park Access Road Expanding to Provincial Highway 1: forms the northern bypass road of the Tainan metropolitan area, and rapidly connects with Zhonghua North Road and the road beneath HSR viaducts. It creates a circular network in the Tainan metropolitan area, which is very helpful to the local traffic.
- Tainan City Houkuo Bypass Road New Construction: a connecting alternative route for Hsinying and HSR Chiayi Taibao Stations which alleviates the burden on Provincial Highway 1, and improves the tranquility of the Houkuo community so the residents can go in and out more conveniently.
- Tainan City Orchid Plantation Connecting Road: shares the busy traffic flows on Provincial Highway 1, and improves the traffic problems on County Highway 172 during the orchid exhibition, increasing people's access to agricultural tourism.
- Kaohsiung City (Kaoping99 (1K+388~3K+153) Road Expansion: main route from Kaohsiung City Meinong District to Pingtung County Ligang Township. It effectively diverges the car flows going to the Liugui region, and improves the overall traffic conditions of the Chiwei region.
- Kaohsiung City "Kao18 (0K+000~1K+380) road expansion construction: improves the northern traffic transportation of Kaohsiung Science Park and alleviates large car flows in the science park, making cargo transport more convenient, and lowering the cost of transport.
- Pingtung County (Route 187A Neipu to Longquan Expansion): effectively improves the traffic metropolitan plan of Neipu and Longquan, avoiding accidents caused by the narrow roads. In addition to the reservation of the green tunnels, scenic roads, and expansion planning, it brings more tourism value to Dongpian Village.
- Pingtung County Ping37 Road Expansion Construction: effectively improves the traffic problems of Ping37 Majia section toward Provincial Highway 24 and National Highway No.3. Aboriginal sceneries line the road, which will bring more tourism benefits for the local residents.

Eastern region and outlying islands:

- Yilan County Yi4 (Jiaoxi Township, Xingnong Road) Expansion: includes both original and expansion constructions and frees up the lanes of National Highway No.5 and Country

"Ji' an Township Zhongzhen Road (Hualien Route 29) Southern section road expansion construction project" in Hualien

"Penghu Route 21 (Dongwei-Wukan) road expansion construction project" in Penghu County

"Route 202 (7K+143~11K+273) (Huhsi-Longmen Section) road foundation expansion construction project" in Penghu County

Highway 191, improving both traffic and scenery. It also promotes regional development and makes the tourism and recreational areas of Jiaoxi Township more accessible.

- Yilan County "National Highway No.5 (Yilan Section) North-South Lane Expansion: will alleviate the longitudinal traffic on Provincial Highways 2 and 9, and Jiaoxi City, Luodong bypass, and Provincial Highway 7C connecting to the highway. It also diverges the traffic flows going in and out of the highway and regional traversing traffic. It joins different road systems, alleviates the burden on major city roads and lateral roads such as Provincial Highway 9, Provincial Highway 7, Provincial Highway 7C, Yi8, and Yi18. The Yilan A and B collector roads and Luodong collector road connecting the lateral traffic network increases the traveling speed of city road systems, and the complete lane system of Yilan National Highway No. 5 reinforces the connection and accessibility of regional roads and highways, and forms a complete regional network.
- Hualien County Highway 193 Road (Qixintan Beach) Access Overhead Bridge: after officially opening to traffic, it improved the bottlenecked sections of hairpins in the Qixintan community. Grade A large vehicles can get on Provincial Highway 9 going toward Xincheng Township, Minyou Street, enter the Qixintan Scenic Area, and go back on Provincial Highway 9 through Qixintan Bridge connecting to Huaxi Road, or going on Country Highway 193 to Hualien Brewery. New lanes were built either side of the bridge, which spread out traffic and allow residents to come and go more safely and conveniently.
- Hualien County, Ji'an Township, Zhongzheng Road (Hua29) Southern Section Expansion: this project removes a curve from the southern section of Zhongzheng Road, connecting it to Zhikaxuan Boulevard. It effectively solves the traffic flow problems of Zhikaxuan Park, and the congestion on Provincial Highways 9 and 11.
- Taitung County East46 Yan Wan Road Expansion: This section connects Provincial Highway 9 to Taitung Station, and Provincial Highway 11 B to the city. This will add convenience for agricultural transport, further promote nearby land appreciation, revitalize the economy, and promote the rapid development of industry.
- Taitung County East 58 Zhiben Hot Spring Bypass Access

"Country Highway Route 193 (Qixintan Scenic Area) ground access elevated bridge construction project" in Hualien County

Road: alleviates weekend traffic to the Zhiben Hot Spring, establishes connections to the scenic area around the hot spring, and increases the competitiveness of regional industry.

- Penghu County (Route 202 7K+143~11K+273) (Huhsi-Longman Section) RoadFoundation and Surface Expansion: connects important scenic sports with Huxi, Hudong, Nanliao, Beiliao, Guoyeh, and Longman Villages. We created the access roads for nearby Nanliao and Beiliao wind farms and Huhsi Abandoned Harbor Reuse, which has provided great benefits for local life and industrial development.
- Penghu County Peng21 (Dongwei-Wukang) Road Expansion: connects County Roads 202 and 204, providing a convenient route to the airport.

Go with the flow, and look toward the future

Looking back at the 40's and 50's, the most often seen transportation vehicles were bicycles and flatbed tricycles. Due to population growth and social development, people's transportation habits changed, and the Region-Based Road System Construction promotion has continued this trend of social transformation. Due to the effects of extreme climate, everyone should take energy conservation and environmental sustainability seriously. Low energy consumption materials and green energy use are the emerging trends for road construction both now and into the future, and the materials and methods used in the Region-Based Road System Construction are implemented in response to this trend.

With the financial difficulty of the government in previous years, every department had to work out how to create the greatest construction benefits using limited resources. The Executive Yuan enforced the Cross-regional Added Value Public Construction Financial Planning Project, which provided a direction: integration of surrounding cross-regional resources and diverse use of land in order to alleviate the financial pressure of the government, and allow construction to continue.

In the future construction of the Region-Based Road System, we will actively cooperate with the cross-regional platform of departments, and better distribute road construction resources. This will help us balance the disparity between cities and the countryside, cooperate with industrial policies, complete traffic networks, and put our best efforts into environmental sustainability to improve the quality of life for the Taiwanese people.

360 Perfection

With a perfect road system, all transportation services on that system benefit. Developed countries worldwide are actively pursuing low carbon transportation services, and Taiwan is of course following suit. Consequently, the Directorate General of Highways not only created the iBus system, but also paved the way for leading technologies by combining road networks, increasing the elimination of old vehicles, promoting low floor buses and integrating tickets. For example, public transportation side-road access, the Instant Traffic Update App for Provincial Highways, and integrated Taiwan Trip Buses provide 360 degrees of seamless public transportation service.

In addition, due to recent climate change and frequent disasters, the Directorate General of Highways established the "Highway Hazard Prevention Center" in 2011, as well as the Roadside Disaster Prevention Warning Mechanisms. We started with the concepts of bridge drainage and road risk management. Focusing on high risk road sections, we installed 24 hour monitoring, so that when disasters are about to happen, we can send out warnings and support to protect the safety of the public.

If a person's blood is not flowing smoothly, his body will have problems. Highways are connected with the development of cities and counties, and are like the veins of Taiwan, so if the transportation process is not smooth, it will affect people's lives. Therefore highways are the connectors of wonderful lives, and the maintenance work of these veins is vital!

Road of Revelation

Advanced Mobile Application Development Project

In recent years, following the gradual completion of highway networks and the slowdown of construction, the effectiveness and timing of highway management are very important. In order to provide road users with up-to-date highway information, the Directorate General of Highways established the Provincial Highway Real-time Traffic Information Network (http://168.thb.gov.tw/), and in February and March, 2013 we promoted the Android and iOS versions of the Provincial Highway Immediate Traffic Information App for smartphone users. Road users can use their smartphones to search for traffic information, and check the status of various DGH facilities. This includes CCTV, CMS, VD, and by integrating with Google Maps, it provides users with the immediate traffic and road conditions managed by the DGH. In addition, people can use the GPS functions on their smartphones to search for traffic information on nearby roads (CCTV, CMS), in order to receive the newest information on road condition and traffic congestion.

In order to provide road users with better digital services, the DGH released the upgraded edition of the app in January, 2014. In July, we also promoted the "App Push Technology Service" which added scenic routes, traffic control measures, hazard prevention information, road sections prohibited for large vehicles, traffic information, single-key dial, traffic safety zone, and push technology for important messages. We also completed the development of the app for iOS, Android, and Windows so that all smartphone users can access the system and adjust their route and schedule accordingly, making travel planning more efficient.

Users can choose different regions, scenic areas, easily congested roads, and

MOTC Press Conference

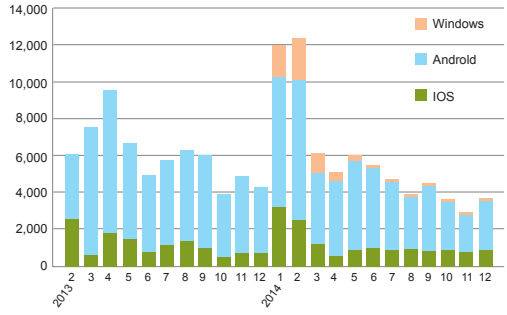
alternative routes to search for related facilities and road conditions, and through traffic control, hazard warnings, precautionary road closing, latest messages, and push technology for important messages, obtain important messages, so the trip planning can be more safe and efficient. In addition, we also added the traffic information section, and provided users with information on gas stations, parking lots, and convenience stores, bringing the app closer to the daily lives of users.

In order to promote this app, the DGH conducted press conferences at the MOTC on January 20th and August 12, 2014, as well as advertising the app in newspapers and media. It was published in Apple Daily App, the April 2014 Manual of Chinese Taipei Tunneling Association and the 2014 Annual Manual of the Value Management Institute of Taiwan. In the meantime, it has been recommended by "HamiPass" of Chunghwa Telecom. We also promoted this APP in the Government Pavilion at the 2014 Information Month Exhibition.

Since we promoted the newest version of this APP at the end of December 2014, 140,000 people have downloaded it. It was used 1.54 million times, and received a rating of 4.3 stars. During the Moon Festival in 2014, the APP was downloaded 2,016 times, and used 6,652 times. During Typhoon Fung-Wong, we used the app to send 16 important messages on provincial highways for the driving safety of users. In addition, during the DGH Government Pavilion exhibition in Information Month, from November 29th to December 7th, the app was downloaded 1,115 times and used 6,280 times. From December 31st 2014 to January 4th 2015, it was downloaded 2,628 times, and used 11,935 times. In the future, we will continue to promote real-time information services, in order to provide road users with more diverse and convenient services.

Brief introduction of the functions of the provincial highway instant traffic information APP

Media promotion poster



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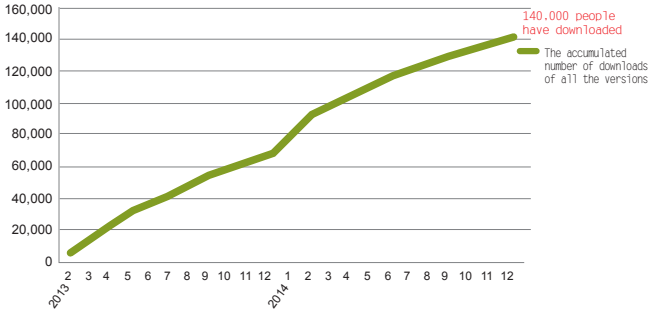


The accumulated number of downloads of all the versions

Road of Revelation

Upgrading Sign Quality on Provincial Highway 61 West Coast Expressway

West Coast Expressway is the key to solving traffic problems

Provincial Highway 61, National Highway No.1 and National Highway No.3 are the three major highways going north and south. The traffic flow on weekends is high, and whenever there is long weekends, such as: Chinese New Year's Day, Tomb-Sweeping Day, or Moon Festival, there is a large influx of cars as people travel or make their way home. When the demand for north and southbound long distance transport is increased, the fast and convenient National Highway No.1 and National Highway No.3 bear the load, however the large car surges often cause traffic jams on the National Highways. At the moment, Provincial Highway 61 West Coast Expressway is the first alternative route choice, sharing some of the traffic burdens of the highways. As this phenomenon has become more evident, we estimate that when the entire expressway is opened to traffic, surges will occur not only on weekends, but on weekdays as well. The Follow Up to the West Coast Expressway Construction Project was approved in 1991, and the entire planned route is 356.1km, 244.9km of which is currently open to traffic. When Provincial Highway 61 is entirely open to traffic, it will fulfill the function of an alternative route to the National Highways.

Improve content to get results

In order to improve the use and satisfaction rates of Provincial Highway 61, DGH has come up with the Provincial Highway 61 West Coast Expressway Service Quality Upgrade Project. It was divided into three parts: improvements to signs, markings and signals facilities, road smoothing and improvement of traffic control facilities. The budget totaled 992 million NT dollars, and stage by stage improvement is being conducted from 2014 to 2016.

Projects related to transportation improvement include: expansion and improvement of highway guiding signs, exit notice signs, interchange signs, directional signs, length adjustment of accelerating lane and decelerating lane, signal timing adjustment, guiding signs

South bound 91K+900: The sign of name of interchange+ sign of Expressway exit+ sign of directions of the names of places+ markers of directions of the names of places

Northbound 89K+520: Expressway exit distance sign

Left: Southbound 89K+210: Gas station and restroom guide signs
Central: Southbound 130K+600: Convenience store and restroom guide signs
Right: Southbound 93K+100: Main line exit markers and traffic poles

of gas stations, and convenience stores. There are 31 items in total, the budget was approximately 69 million, and it was completed on January 22nd, 2015. The major adjustments are as follows:

1. The signs and markings of intersection ramps were established like interchanges and named accordingly, in order to be recognized more easily.
2. Directional signs before exit ramps will display "the place name of the next exit" and "the place name of the next main city" in order to provide correct directional information.
3. Before exiting the intersection ramp, directional ground markings will improve route guidance.
4. Inspection and adjustment of slip-roads, markings, and traffic poles, in order to make routes run more smoothly and improve road safety.
5. As the timing of the signals were appropriately adjusted, it reduced waiting time of road users on the planned intersections, and increased the overall transit efficiency of the West Coast Expressway.
6. Increase the guiding signs of nearby gas stations and restroom facilities(including convenience stores with restroom inside) along Provincial Highway 61 to increase the satisfaction rate of drivers using Provincial Highway 61, West Coast Expressway, and their willingness to use the highway again.

Southbound 91K+200: Main line entrance markers and traffic poles

Road of Revelation

2014 Long Weekend Traffic Clearing Plan Calendar

In 2014, the DGH conducted traffic clearing for all the long weekends at over 40 popular scenic spots and festival events conducted by the local government. Clearing measures included shuttle bus services, to encourage people to take the buses more, drive less and reduce traffic jams.

2014 Traffic Clearing Achievements

In order to alleviate the car flows caused by popular scenic sites and people going home on the weekend, the DGH invited related units to come up with a traffic clearing plan, hoping to alleviate traffic conditions during events. The achievements are as follows:

1. Wuling Farm Cherry Blossom Festival (February 12th~February 24th, February 28th~March 1st): the Directorate General of Highways, Veterans Affairs Council, Executive Yuan, and Wuling Farm have agreed to cap the total daily capacity at 6,000 people per day and to provide a day trip cherry blossom tour bus, discounted prices for public transit, and traffic control measures on Provincial Highway 7 A. After the traffic clearing plan was implemented, more than 80% of the one day tour bus tickets were purchased, 63% of visitors took public transportation, and the travel time from Taipei to Wuling Farm was reduced to 4 hours. The plan has greatly improved the quality of travel, and was successful in promoting public transportation and tourism events.
2. The Alishan Cherry Blossom Festival (March 10th~April 10th): In 2014, we referred to past experience, and adjusted the partial control measures (For example the main traffic clearing date was changed to the weekends 3 weeks before the flower season, and the time of traffic control was changed to 11PM). In order to reduce the possibilities of complaints from store owners, we first worked with bus companies to open reservations for independent tourists, which effectively made them more willing to take public transportation, lowering the pressure on other vehicles. This measure reduced the traveling time on Alishan Highway to 2 hours, and no accidents occurred, helping to balance travel safety with quality flower viewing. On heavy traffic clearing days, the total number of people who entered the farm was 99,000 people, and the average number of flower viewing tourists each day was 16,000 people. 593 buses were dispatched, with an average of 86 runs daily (up and down the mountain), and 2,800 people were transported with good results.

Datong Township Office, Yilan County (Office of visitor cards for tour buses)

Wuling Farm Kuokuang Motor Transport Bus Waiting Area

3. Long weekend traffic-clearing (New Year, 228, Tomb Sweeping Festival, Dragon Boat Festival, Moon Festival, and National Day): The average speed limit on alternative routes to easily congested highway sections, other than Provincial Highway No.9 near Toucheng Interchange, was 40km per hour. The rest met the key performance indicators (KPI) set up by DGH. The average speed was over 50km per hour, and on expressways the speed could reach 70~80km per hour. On the easily congested road sections of the provincial highways, the actual driving speeds all met the KPI, with an average of 30km per hour. In addition, more bus runs were added during this time to increase transport capacity, so that vehicles could be dispatched as and when they were needed. In response to tourism in Yilan region, and the need for tourists to return home, we operated buses to Kuo Kuang, Capital, Kamalan, Metropolitan, and Taipei from Taipei-National Highway No.5-Yilan. We also added more bus runs to transport tourists, reducing the waiting time to under 15 minutes. In addition, DGH worked together with police units to conduct spot checks of large vehicles at National Highway service stations and scenic areas.

Traffic dispersal calendar

Facebook webpage

Advocacy and Promotion of the Traffic Clearing Calendar

The DGH website created the Traffic Clearing Calendar Zone, allowing people to search for the time, locations, maps, access roads, traffic clearing measures, and public transportation routes of large events, and providing links to all the official websites of the events (for detailed information, please visit http://public.thb.gov.tw/buscms/ets). In addition, in December, 2013, the DGH added a Facebook page for the Traffic Clearing Calendar as a discussion platform for public transportation users and road users to exchange and share on the internet, and added a link in the Traffic Evacuation Calendar Zone (Fan page: http://www.facebook.com/thbcalendar). In the future, the Traffic Clearing Calendar will continue to be updated, actively cooperating with sponsoring organizations to come up with comprehensive traffic clearing plans, and discuss the achievements of all the events.

We have established an SOP of "Preparation, Response, and Examination", which we will use to create a better quality tourism environment and provide people with more complete and convenient tourism and traffic services.

Left: Alishan Cherry Blossom Festival Bus
Right: The results of Alishan Cherry Blossom traffic dispersal measures were good

Road of Revelation

Invited to Present Thesis at the 1st IRF Asia Regional Congress & Exhibition

The International Road Federation (IRF) conducted the 1st Asia Regional Congress & Exhibition in Bali, Indonesia from November 17th-19th, 2014. DGH Director Jaw Shing-hau, Director of Material Testing Laboratory Hwang Sunn-jer, and Section Chief Chen Jyh-lin collected the International Roughness Index (IRI) of provincial highways over the years, and submitted the thesis, "The Improvement of Pavement and Its Future Prospects in Taiwan", which was accepted by the congress.We were invited to present the thesis, and discuss the IRI inspecting experience with international experts and scholars.

Constant Maintenance for Smooth Highways

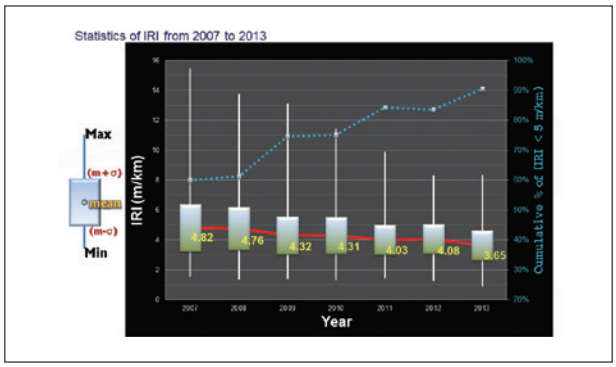
Director Hwang Sunn-jer and Engineer Chiu Jui-chang were assigned to take part the congress.Director Hwang represented the DGH to present the thesis on November 17th. This thesis covers the IRI statistical analyses of provincial highways from 2007. From the study of the thesis, the IRI of provincial highways maintained by the DGH was getting better year by year. The improvement of IRI from 2007 to 2013 was outstanding. The DGH implemented the result of IRI to the pavement management system. By using a Plan-Do-Check-Act (PDCA) cycle, we can assure the validity of the results and continuously improve the quality of pavement.

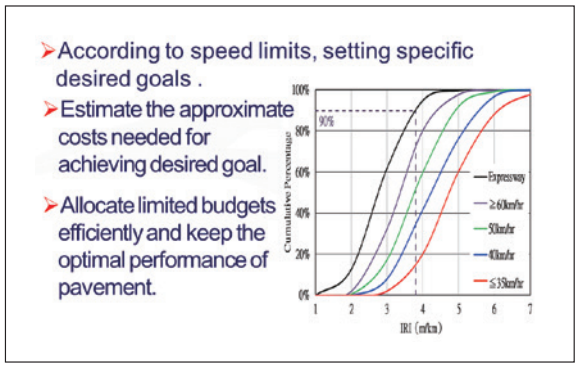
Maintenance Thresholds Determined by Speed Limit

The thesis of the DGH was unanimously approved by all the participants, and the innovative concept of evaluating IRI according to speed limit was something the participants had never heard about. Director Hwang further explained that since Taiwan is situated in the earthquake belt, together with typhoons and storms, highway hazards occur very often, and with limited budget we had to perform the most economic road maintenance work possible. Thus, through statistical analysis, we came up with the concept of using speed limits to establish the IRI thresholds for different types of roads (roads at lower speeds do not need to be as smooth). After each IRI testing cycle, we re-inspect the IRI results, and use this to revise the maintenance thresholds for the next year in order to continue to improve the quality of highways. In addition, the DGH can use this method to evaluate the required budget for maintenance, so it can be effectively used. Finally, we explained to the scholars and experts, that IRI is not the only indicator for road quality, and that this thesis only tested the results of IRI application.

Thesis presentation of "1st IRF Asia Regional Congress & Exhibition"

Photo taken with scholars





Statistical analysis charts of IRI

Automatic monitoring, thinking about the future

Through this conference, we gained a better understanding of automatic monitoring vehicle, not only for testing IRI values, but also laser scanning to check pavement conditions, analyze road service quality, and even calculate the coefficient of friction to evaluate the anti-skid properties of pavement surfaces. In order for the DGH to reduce skidding accidents involving two-wheeled vehicle, we are currently working to upgrade the anti-skid threshold values.Automatic monitoring technology and the application of anti-skid is something that is worth noting.

Emphasis on safety to improve happiness

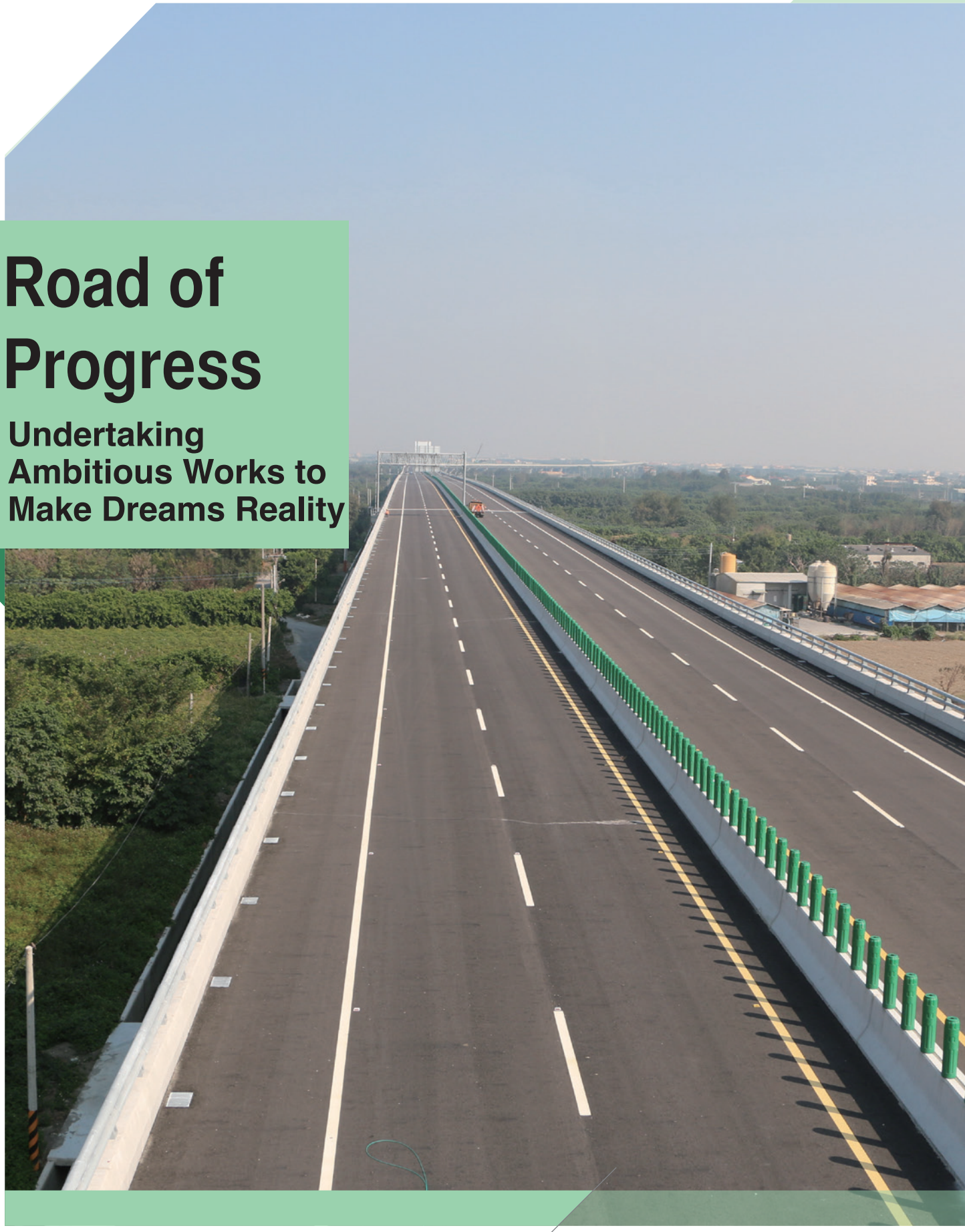
The International Road Federation worked together with highway experts and scholars worldwide, and conducted the 1st IRF Asia Regional Congress & Exhibition in 2014. The representatives presented their research regarding road constructions and different fields of expertise. It was an honor for the DGH to be able to present its thesis, and through this opportunity, it could improve Taiwan's image, giving the representatives a better understanding of the Taiwan Government's efforts in the field of highway construction. We can also observe and learn from the developments and research of other countries, so we can improve even more.

The motto of the IRF is "Better Roads. Better World." For this reason, the core theme of this congress was that how to use the newest construction techniques, the best managerial methods, and the most suitable pavement materials to reach the most important goal of road safety. Road safety is also the mission of the DGH. Based on the motto "Loving Taiwan, Starts with the Roads" the DGH continues to upgrade the quality of road services, creating a safe and comfortable environment for road users and making people happier by realizing our love and care for this land.

Multi-functional automatic inspection vehicle

Road of Progress

Undertaking Ambitious Works to Make Dreams Reality



Road of Progress

Promotion of the Follow Up to the West Coast Expressway Continuous Construction Project

The Follow Up to the West Coast Expressway Continuous Construction Project started in 2009, with a total of 24 contracts, including 8 sub-projects. By the end of 2014, we had completed 3 sub-projects and 11 contracts. From North to South, we have completed 1 interchange at Taoyuan Guanyin Industrial Zone, 3 multi-level crossings at Changhua Chang Bing Industrial Zone, Yun Yi Interchange to Hai Feng Bridge, and opened a further 25.84km of West Coast Expressway Provincial Highway 61 to traffic (Changhua Fuxing to Wangkung, Changhua Dacheng to Yunlin Taixi-Huzinei Interchanges). Taoyuan City Guanyin to Hsinchu County Fenggang Road has been divided into 4 contracts, 3 of which are currently under construction, while the other is in the design planning stage and set to be completed in 2019. Miaoli County Baishatun to Nan Tong Wan road section currently under construction is planned for completion in 2017, Taichung City Dajia Da'an Road section was divided into 2 contracts, and should be finished in the same year. Changhua County Wangkung to Dacheng Interchange road section was divided into 3 contracts: the 195K+995~199K+348 (WH50-2 tender) Wangkung to Yongxing should also be done in 2017, and the others are still in the planning stages, due to be completed in 2019. Tainan City Badongliao to Jiukuaicuo is divided into 3 contracts, all due to be completed in 2017. We are working hard on all of the road sections that are not currently open to traffic, and hope they can be completed soon. All of this construction work will connect the local areas of the West Coast, reduce the needed to travel to each region, and promote local economic development and tourism. It will also alleviate the heavy traffic flows on the National Highways, so people can have enjoy driving on more comfortable and safe roads.

In 2013, West Coast Expressway 190K+028~193K+270 (WH50 tender) Hanbao to Xinshen Section won the highest honor in Taiwanese construction: The Public Construction Commission Golden Quality Award. In 2014, it also won 1st Place in the Excellent Construction Category of the MOTC 2014 Golden Way Award. Our success in these awards is down to the hard work of our colleagues, rigorous quality checks on contractors, and the supervision of construction management offices and the DGH. We feel extremely honored.

West Coast Expressway 190K+028～193K+270 （WH50） tender of Hanbao to Hsinshen Section new construction Golden Way Award

Road of Progress

Beimen-Yujing, Provincial Highway 61 to National Highway No.1 Opening to Traffic

Provincial Highway 84 is the last link of the 12 east-west expressways, and the E707 contract was the third and last phase of construction for Provincial Highway 84. The contract included: the section to the west of Provincial Highway 61, West Coast Expressway, Beimen Interchange, the section to the east of National Highway No.1, and the Xiaying System Interchange, 13km in total. This construction was opened to traffic on September 27th 2014, and marks the end of construction for the 12 east-west expressways. The greatest benefit is the connection between the east of Tainan City, Yujing District and westernmost Beimen District. In addition, with the completion of the National Highway No.1 and National Highway No.3 highway network, it acts as a link between mountain and sea, joining the Siraya National Scenic Area with Southwest Coast National Scenic Area. It acts as an efficient transport route for local agricultural and aquatic products, and promotes tourism and local development.

Integrating local resources and working with the public

This project was divided into three tenders: the E707-1 and E707-2 tenders were contracted out to BES Engineering Corporation, and the E707-3 tender was contracted out to Pan Asia Corporation. Taiwan CECI Jianan Construction Management Office established the Beimen-Yujing Line Supervising Construction Management Office, which is responsible for construction supervision. The sponsor unit was Kao-Nan Region Construction Office for the East-West Expressway.

The E707 section of Provincial Highway 84, Beimen-Yujing Line of the East-West Expressway looks like an ordinary construction site, but it is the hope of young people from Xuejia, Madou, and Beimen. Not only is it connected with their lives, it also allows agricultural and aquatic products to be transported more rapidly across Taiwan. People can also visit this area through National Highways No.1 and No.3, furthering the general public's understanding of the traditional culture of northern coastal areas of Tainan.

Since the start of construction, the local people who worked in the fish farms, corn fields, and garlic fields as well as duck owners were all our working partners. The foundation laying and graded paving of construction paths were great challenges due to the delicate ecosystems of the fish farms. We were also afraid of disturbing the ducks, so the contractors used low noise and low vibration construction equipment. To avoid affecting the growth of milkfish, we leased adjacent fish farms without regard to cost, adjusted night time construction hours, and controlled

Completion of E707 tender

Several gather to cut the ribbon on the E707 tender opening to traffic ceremony

Satellite image of E707 tender

lighting angles. We were there not just for construction, but as representatives of our government, so we carried out water cleaning, road cleaning, emergency assistance, and participated in local religious festivals to earn the trust and support of local people. In order to ensure construction quality we followed the SOP carefully, from the concrete compound ratio and materials, disc bearings, prestressed beams, expansion joints, earthwork, level of gravel and AC inspection factories. We have always believed always believed in making our roads to the highest possible standard.

Thorough planning is a plus for administration

This construction team is focused on group strategic planning, effectively controlling the quality and progress of construction, and implementing construction safety supervision and environmental impact monitoring. At the same time, we actively try to be good neighbors, working to improve the public image of construction works, increase confidence in the government administration, and demonstrate the benefits other than the construction itself. We think that construction cannot be self-centered, and one of the most important goals was to allow other construction projects of DGH to benefit from the experience of this contract. The E707 contract's focus on construction quality and labor safety produced great results, and the E707-3 works won the 2011 Public Construction Golden Safety Award, 2012 the 12th Public Construction Commission Golden Quality Award, and 2014 Golden Way Award from the MOTC. The E707-1 works won the 2013 Golden Safety Award and 2014 the14th Public Construction Golden Quality Award. We have conducted many labor safety and health demonstrations, educational training to new DGH employees, and construction demonstration events on the E707 site. In order to pass on our valuable experience, we also conducted experience sharing workshops regarding the work that won golden safety and golden quality awards. We hope the good seeds sown by the E707 work can grow strong and blossom on all the construction projects of the DGH, and improve overall construction quality of Taiwan.

Construction status of E707 tender

Road of Progress

Implementing the Tamkang Bridge and Connecting Roads Construction Project

The Tamkang Bridge and connecting roads feasibility evaluation was approved by the Executive Yuan in April 2010, and on June 19th 2013 it passed the environmental impact and disparity analysis. After Executive Yuan approval on January 15th 2014, the project was officially launched, with construction due to finish in 2020. The budget was estimated to be TWD15.43 billion, including TWD1.33 billion for increasing the width of the main bridge.

Working flat out on every contract

This project was divided into three contracts. The first was the Taipei Port, Linggang Boulevard (Connecting Provincial Highway 61A), and as the land was already obtained, there was no need for urban renewal. On October 17th 2014, President Ma, Mayor Chu, and Director Yeh of the MOTC hosted the groundbreaking ceremony. Construction is expected to finish at the end of 2016. As for the second contract, the Bali and Tamsui access roads and ramps, the costs of design and geological inspection were negotiated at the end of 2014. It will be contracted out in late-2015, and completed by the end of 2018. The service range of the expressway will extend to the southern coast of the Tamsui River (Shihsanhang Museum).

For the third contract, the main bridge section, we wish to invite outstanding foreign and domestic design teams to bring the most creative and innovative engineering technology to the project. We will hold two domestic and three international (Hamburg, Germany, Tokyo, Japan, and San Francisco, USA) recruitment sessions before the end of January 2015. Based on the key requirements of scenic ecology, cultural reservation, underwater archaeology, and environmental sustainability, we will select the best bridge design in August 2015. The design and evaluation will be done in one year, after which the project will be contracted out with the aim of opening the bridge to traffic in 2020.

Environmental impact assessment, fulfilling our green promise

The planned route of Tamkang Bridge passes through the habitat of a first grade endangered species of oriole. As the ecological sensitivity of this area is high, in order to lower the possibility of

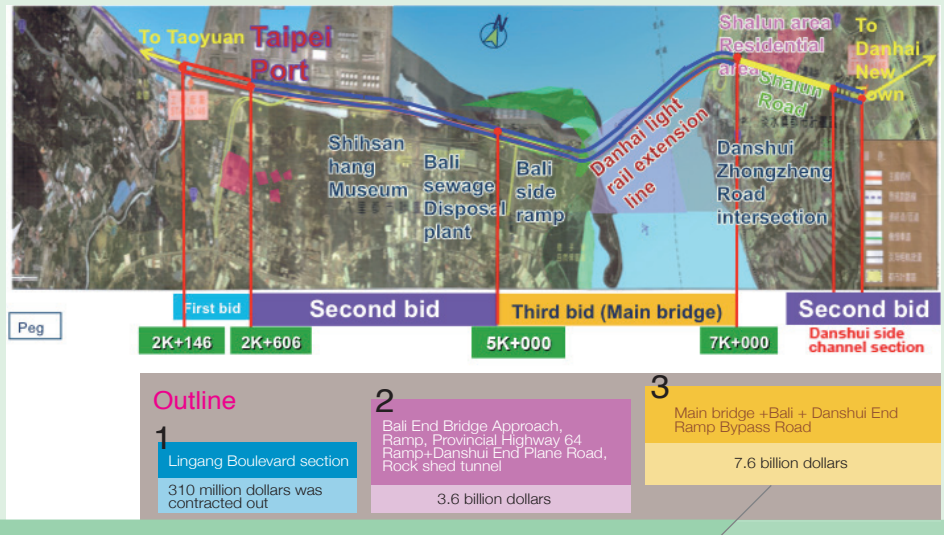


Diagram of Tamkang Bridge construction plan

Left: Groundbreaking
Center: Speech by the President
Right: Director of DGH Jaw Shing-hau came to the ceremony

impact we have completed a thorough environmental monitoring plan, and complied with environmental protection policies and ecological construction checking mechanisms. In order to ensure this project has the minimum impact, we set up the the Tamkang Bridge and Connecting Roads Environmental Protection Monitoring Team. We invited relevant agencies (including central competent authorities and the New Taipei City Government), experts, scholars, and civil groups of at least 17 people to form the team. We conducted a meeting on September 26th and December 24th 2014 in order to implement the concepts of citizen monitoring and citizen participation. The minutes of meetings were posted on the DGH website.

Diverse range of benefits expected

Tamkang Bridge is a major connection for Provincial Highways 2, 15, 61 (West Coast Expressway), and 64 (Bali-Xindian Expressway). Provincial Highway 64 will also connect to National Highway System. Upon completion, it will reduce the traveling distance between Tamsui and Bali for commuters and industry to approximately 15km and 25 minutes travel time. The completed North Coast Highway System will improve the traffic conditions of Danhai New Town and the Zhuwei and Guandu Bridge sections of Provincial Highway 2, reducing the traffic flow by 30%. It will also provide a convenient route for people in Tamsui on the north coast traveling to Taipei Port, Taoyuan Airport, and Taipei City.

Tamkang Bridge is situated on the river mouth of the Tamsui River, and connects the Danhai Light Rail Transit System and Bali Extension Line. The bridge will be designed with the view of the Tamsui sunset in mind, creating a new national transport link and landmark.

The Director of DGH took pictures with West Coast Expressway Northern Region Engineering Office colleagues

Blessing ceremony

Road of Progress

Sharing the Blessings of the Tunnel Stone Event

As dawn broke at 5am the air was filled with a penetrating coldness and eerie silence, and very few pedestrians on the street. Strange then, for the Suhua Highway Improvement Engineering Exhibition Hall to be surrounded by people at the same time, and when local residents noticed they started gossiping. They discovered that the Suhua Improvement Engineering Office was conducting a "tunnel stone event", in which they gave out fist-sized stones from the Suhua Tunnel Project. The event took place on Tuesday, Wednesday, and Thursday, for 3 straight weeks, and 50 stones were given out on the first day. The seemingly insignificant little stones were said to bring good luck and increase fertility, and appeared to bring hope for many people. On its first day (February 11th, 2014) the event attracted over 150 people. One person came from Tainan, and arrived at the exhibition hall at 5pm the day before, and another came from Hong Kong. The staff were surprised, saying "We often hear in the news that Taiwanese people do not want babies, but so many people came!" Because it was cold and raining, and we couldn't bear to send people away disappointed, we decided to give out all of the first week's 150 stones that day, and announced that we would give out the other 300 on February 18th. We predicted that some people would stand in line for the whole night, so for their safety, we arranged for staff to stay with them to keep order. Much to our surprise, some people wanted to stand in line at 5am on the 17th, so we politely asked them to leave, and they agreed. This turn of events once again demonstrated to us the awesome power of good luck stones!

The night shift staff stated that the people who stood in line overnight were orderly, laughing and talking about their experiences and future prospects. Many of them expressed their hopes to be blessed with children and grandchildren, bringing some warmth to the cold night. At 7am on the 18th, more than 300 people stood in line, and more were still coming. In order to avoid disappointing people, Deputy Director Lee Zhongren gave out 60 more stones donated by the staff of Guanyin Tunnel. They said it was worth it for to

The Digging of Guanyin Tunnel on Suhua Highway Alternative Route

make people happy and help the event to run smoothly. The ages of the people receiving the stones ranged from 3 to 80 years old. Many people came and received their stones personally, and many parents and grandparents collected stones for the next generation. The smiles on the faces of those people looking for good luck, and the faith they put in the stones, helped us to overcome the difficulties of the Suhua Highway Mountainous Section Improvement Project.

Sharing good luck and happiness with the people

How did the lucky stones of Guanyin Tunnel help with pregnancy? Some people said that the Guanyin Tunnel was blessed by the Gods! Some people wanted to use the tunnel stones to worship the Fertility Deity, passing round the incense burner in hope that it would give them strength. One man even had a container he obtained from a temple to store the tunnel stones. He treated the matter very seriously, saying "It is a gift given by the Gods. It is very holy." He hoped to use the spiritual power of the Guanyin stone to bring good luck (pregnancy). There was also a Frenchman who had come to Taiwan to start a family, showing that spirituality is not limited by distance. Are the tunnel stones effective? According to a person who received a tunnel stone last June, after his wife gave birth to a daughter they could not conceive for many years. After he got the tunnel stone his wife got pregnant, giving birth to a son on March 19th, and a celebratory rice cake was even brought to the Engineering Office. Perhaps the effectiveness of the good luck stones depend on the faith of the owner.

The event seemed to reflect the social effects of infertility. According to statistics from the Department of Health, infertile couples make up about 15% of the Taiwanese population, meaning for every seven couples there is one suffering from infertility. Difficulties in getting pregnant and the sadness of having no children have deeply affected the lives of many couples. Hearing about the magical powers of the tunnel stones brought hope to many people. They had faith that the stones would bring them luck, and giving out the tunnel stones allowed us to share in the happiness and good fortune to the people.

Left: Many people stood in lines overnight trying to get tunnel stones
Center: The tunnel stones are reputed to be magical
Right: Digging ceremony of Guanyin Tunnel on Suhua Highway Alternative Route

Road of Progress

Promoting the Follow Up to the South Link Highway of Provincial Highway No.9 Widening Project

The Follow Up to the South Link Highway of Provincial Highway No.9 Widening Project was divided into three sections: A, B and C. Sections A and B start northward of south Xianglan, along Provincial Highway 9 southbound to Daniao Rest Area. The route is 24.9km long, but after subtracting the already expanded section, the actual length of construction is 19.536km. The expansion method is the same as the rest of Provincial Highway 9, with the side facing the sea being expanded. Where the route goes through sloped sections, northbound and southbound traffic are on separate levels, both improving road safety and reducing excavation of the hillside. We will also adjust and improve some corner sections, which will improve traffic and flow driving speed, while also increasing the comfort of road users. Vice President Wu personally visited the construction site, inspected the conditions of the construction, and applauded the efforts of staff. This goal is to have this opened to traffic before the end of 2017.

Section A is currently at the stage of constructing foundation bases, well foundations, bridge pier studs, and supporting and advanced box beams. Section B is currently at the stage of constructing retaining walls, breast wall foundations, and wall bodies. It is currently under construction on a budget of approximately TWD5.4 billion.

Duoliang U2-2 (P6~P7) Box beam and steel reinforcing bar binding

Groundbreaking ceremony at Beikou

JinglunP9~P10 column top steel reinforcing bar binding and internal mold support installation

The starting point of Section C was Anshuo Village, Daren Township, Taitung County, and the end point was Caopu Village, Shizi Township, and Pingtung County. The original section of Provincial Highway 9 was very curvy, with rugged and broken terrain. In order to increase driving speed and driving comfort of road users we used the bridge curve cut-off method to construct the four lanes. Upon completion, the length of the route was reduced from 16km to 11km, the main tunnel section was 4.6km, and the bridge and bank section were 6km long.

The construction of Anshuo-Caopu section of the C1 bridge tender started on May 9th, 2014. This includes a bank section of about 1.6km, and bridge section of about 4.84km. The bridge construction methods include the concrete span-by-span method, supporting and advanced method, and cantilever method. Currently we are constructing all concrete piles casing, well foundations, and bridge pier studs. For the construction of the bank section we are cleaning, temporarily draining water, and retaining wall foundations.

Effective use of support slopes

The Anshuo-Caopu C2 tunnel work was divided into three parts: the northern entrance, southern entrance, and vertical well site. The blessing ceremony was conducted on March 19th at the vertical well site, and construction continued 24 hours a day. The groundbreaking ceremony of the northern entrance was conducted on June 3rd of the same year, and on the 28th, digging started on the southern entrance as

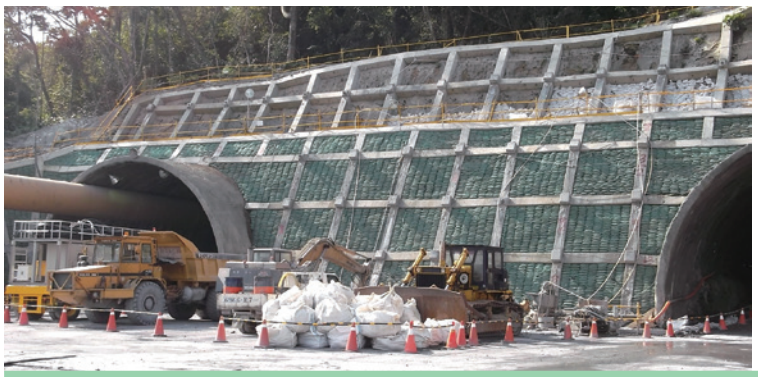
Left: Basic set of steel reinforcing bars
Center: Cleaning up and digging
Right: Duoliang U2 (P5~P7) supports the advance of the lead work vehicle

Pothole blessing ceremony

well. Of the total 9,220m of the upper sections of the north and southbound tunnels, 1,429.9m has been dug, 112m of vertical digging has been completed, and 33.4m of drainage has been dug.

During the typhoon season and northeastern windy season, the Nanxing Road Section of Dawu Township, Taitung County would be hit by waves, depleting the road foundations, stopping traffic and affecting the safety of road users. In order to solve this problem, we used the earth dug during the tunnel construction to build an artificial support slope. Not only will this ensure the safety of coastal sections, but also provides an efficient use for the earth extracted during construction. So far, we have completed the north detached breakwater and north pier.

Due to the rising awareness of domestic environmental protection, central and local environmental protection agencies will occasionally conduct inspections at the construction site. In 2014, we won first place in the Pingtung County environmental inspection, and first place in follow-up on-site environmental evaluation by the MOTC. This construction not only provided local employment opportunities, the local economy has also been greatly revitalized with the stationing of engineers, which has helped promote local prosperity. In the future, when construction is completed, it will reduce the disparity of eastern and western cities and counties, and improve the safety of the road network.



Beikou Grid slope protection seed nutriment soil sack placing

Effects of Northern detached breakwater and beach nourishment

Road of Progress

Conduct the First Grade Contractor and Labor Safety Autonomous Management and Oath Swearing Seminar

The DGH supervises all labor safety operations, including labor safety inspection of public works and construction offices. We regularly conduct labor safety educational training and construction site demonstrations, inviting labor safety scholars and experts to form a guidance team, and conduct labor safety inspection and consultancy. Advanced labor safety regulations require construction office briefs to include labor safety reports. Construction office managers at all levels should keep records and update information for the labor safety of all, and engineers' work reports should include complete records of daily labor safety inspection. We evaluated the second and third level labor safety management operations of DGH units, and upgraded to first class labor safety supervision and management of contractors. To this end, we conducted the first Supervision of Contractor Labor Safety Seminar, in order to implement a level three labor safety management system, and establish safety oriented labor culture in the DGH. Since March 5th 2014, the DGH has carried out Supervision of Contractor Labor Safety Seminars at all the construction offices. 16 sessions were conducted at 10 construction offices, 500 contractors participated, and 1,400 people were present.

Advocating ideas and strengthening inspections

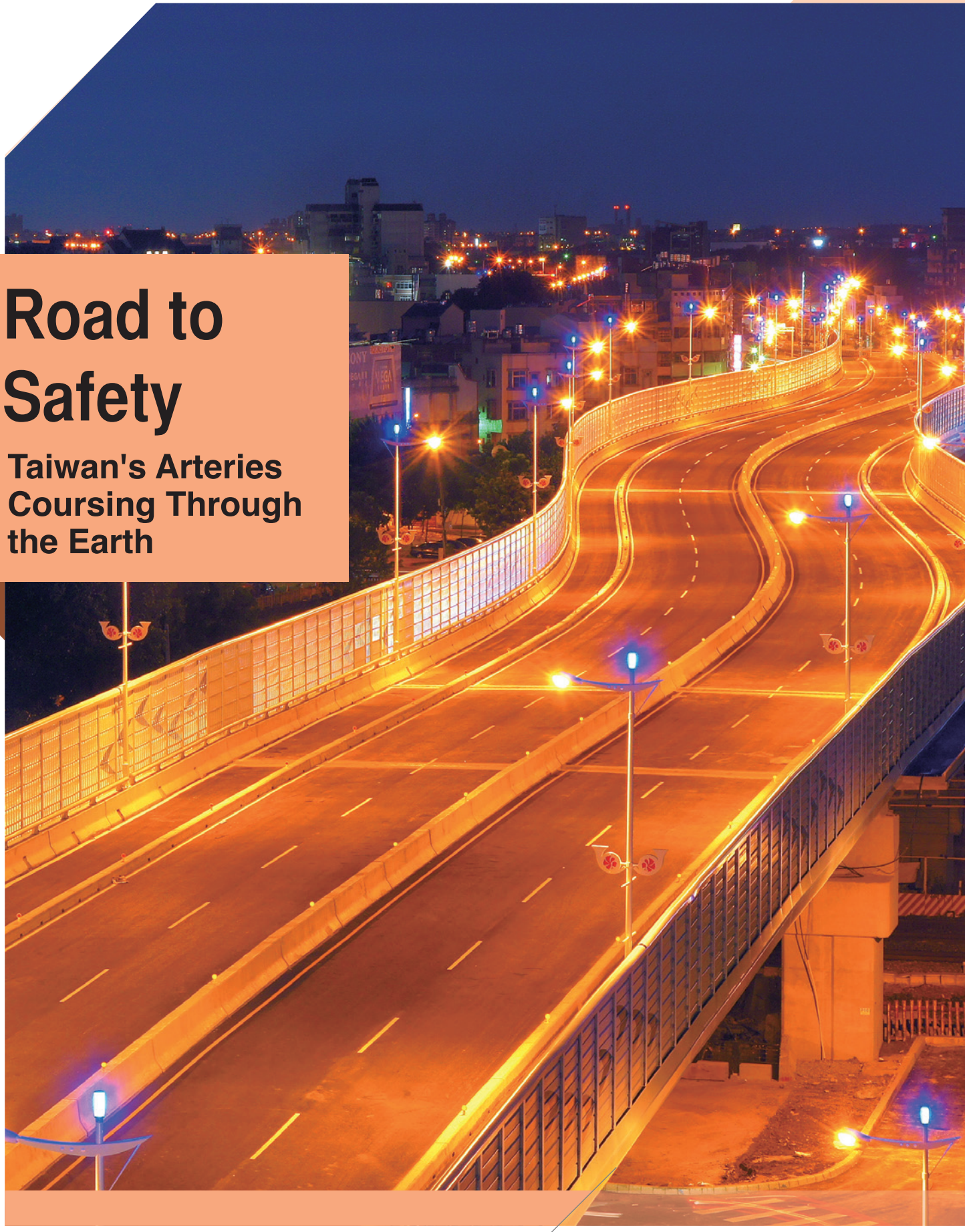
All the construction offices were hosted by Director and Deputy Director at the seminar. We gathered all the high level managers, and DGH arranged the schedules. In the meeting, the Construction and Design Division discussed the deficiencies in labor safety inspections and contractors' constructions to site information. We advocated the concepts of labor safety and offsetting risks to the contractors. Before construction, risk analyses should be conducted for all kinds of operations, relevant measures should be discussed, and inspections reinforced in order to reduce the risk of creating hazards. Other than contract-related documents, contractors must comply with all the labor safety regulations, including the implementation of autonomous health and safety management and checkups. They must also use the necessary health and safety facilities and safety protection measures to meet standards, provide a high quality safe working environment, and improve hazard recognizing abilities and health and safety practices. In addition, the Government Ethics Office spoke on "Autonomous Management of Contractor Labor Safety-Trust and Morals-New Concepts for Corporations", presenting the concepts of corporate trust exercises and promotion of sustainable development for corporations and society. Fighting corruption is the key, and honest national politics needs support and investment from all areas. We remind contractors and colleagues of the DGH during construction to follow the regulations and not to violate the law. In the seminar, the DGH, all the construction offices and contractors engaged in two-way communication regarding labor safety. The units that attended the meeting exchanged their perspectives, and finally upon completion of the seminar, all the contractors signed the Autonomous Management Declaration Document.

DGH has become the first domestic construction unit to declare first class autonomous management of contractors at all the construction offices. We changed the traditional supervision management method of top-down management from level 2 to level 3. We encouraged contractors to conduct bottom-up self-checks in order to improve the basic labor safety management mechanism. By using a level 3 labor safety management system, and conducting labor safety maintenance work, we hope to make the labor safety management mechanism even better. This will ensure the provision of good labor conditions and help to instill a culture of labor safety at the DGH, in order to complete all projects on schedule, to a high standard, and safely.

Level 1 labor safety autonomous management and oath-taking seminar

Road to Safety

Taiwan's Arteries Coursing Through the Earth



Road to Safety

Goal of the Disaster Prevention and Emergency Improvement Plan on Provincial Highways and in Mountainous Regions Reached

Maximizing the scope of disaster prevention

Due to the increasing dangers of typhoons and storms in recent years, repairs and renovations budgets have exceeded the quota of the highway maintenance plan, which has caused deficiency in the general highway maintenance budget and affected the safety of road users. In order to decrease emergency rescue work and overstretching of human and financial resources, this project has engaged in the emergency improvement of the slopes of provincial highways. We fully inspected and made improvements to sensitive areas that are prone to hazards, and established related warning facilities, shelters and broadcast of current road condition. Using the principle that "prevention is better than a cure," we have improved disaster prevention measures on mountainous parts of provincial highways. We have prepared before accidents could occur, and hope to reach the target of zero accidents and casualties.

Results of implementing the improvement plan

This plan was carried out in 2013 and 2014. The total budget for the two years was 2.3178 billion dollars, and the following was accomplished:

1. Established CCTV at 160 locations, increasing image surveillance points on highways. As well as providing images during hazards, they could also be used to provide traffic and road condition images for road users.
2. Installed changeable message signs (CMS) at 44 locations to send out road condition information. This allows road users to make decisions based on accurate information received ahead of time, as well as providing a useful tool for diversions.

Provincial Highway 18 70k+835~70k+915#2 rock shed

3. Conducted ground anchor testing and commissioned design of 124 projects. For sensitive areas that are prone to hazards, we conducted comprehensive inspection and improvement, improved slope safety and reduced the chances of disasters caused by weather conditions. At the end of 2014, we completed ground anchor testing and reinforcement, and continued the monitoring of 62 other locations.
4. Completed nine tunnels and one refuge platform to reduce casualties from disasters and provide a safe space for road users to wait for rescue.
5. Completed 67 slope renovation projects on provincial highways, upgrading road safety and reducing the risk of disasters.

Provincial Highway 62 7K+140~7K+760 dip slope reinforcement

Actual benefits that are evident

1. Level one monitored road sections have been reduced from 47 in 2012 to 31 in 2014.
2. Completed six tunnels in 2013 for Provincial Highway 18-Alishan Highway, reducing the chance of landslides by 30%.
3. Added CCTV at 160 locations and CMS at 44 locations, to ascertain current road conditions and relay information to road users.
4. Completed evaluation of hazardous road sections on Provincial Highway 9-Suhua Highway and Provincial Highway 8-Central Cross-Island Highway (Hualien Side) and implemented a hazard monitoring plan. We hope to reduce road closures by 50%.
5. Completed ground anchor testing and reinforcement work to maintain slope stability and improve the safety of road users.

Improving safety roads used for tourism, using Provincial Highway 18 as an example

In 2009, Typhoon Morakot hit Taiwan, which severely damaged Provincial Highway 18, and from 2009 to 2012 we completed main renovation of areas that were prone to landslides. To improve the hazard prevention capacity of Provincial Highway 18 34K~96K (Chuko-Alishan) we have completed tunnels on six sections of road prone to landslides, slope anchor reinforcement and slope protection works at three locations, as well as surveillance facilities at 55 locations.

Left: Provincial Highway 18 79K+955~80K+060#4 rock shed
Right: Provincial 18 71K+924~71K+984#3 rock shed

Road to Safety

Continued with the Completion of the Renovation Work after Typhoon Morakot

Post-Morakot renovations

Since August 30th, 2009, "Special post-Morakot regulations" were in place, and were extended to August 29th, 2014. Directorate General of Highways approved a TWD26.629 billion budget for the "Typhoon Morakot highway renovation plan". 943 tenders were conducted by the provincial and country highways. 942 tenders were conducted by the end of December, 2014. The completion rate was 99.9%.

Provincial Highway 20, Taoyuan District-Qinhe to Fuxing

Typhoon Morakot caused severe flooding in central and southern parts of Taiwan. Traffic was disrupted on many provincial highways in Kaohsiung, especially on Provincial Highway 20 Qinhe Fuxing, where the accretion of the Laonong riverbed was 30~40 meters. The bridge and tunnel suffered the worst damage, and were completely buried under the riverbed.

Historical record of hazards and renovations

In December, 2009, the Directorate General of Highways completed a temporary detour, repairing it as damage occurred. There were 1 billion cubic meters of collapsed earth at the branch of Laonong tributary. From 2009 to 2010, whenever there was rain, landslides would wash out the path. It was damaged and re-routed several times, and the traffic on Provincial Highway 20 was stopped for 134 days.

In order to improve hazard prevention, we have selected new routes, changed routes on some parts of the roads, heightened and reinforced road subgrades, and cut into the right side of the mountain walls to form a path. For the river crossing, concrete was originally used, but this was later changed to steel bridges. In May 2011, it was opened to traffic, but was exposed to more storms and typhoons later that year. Some subgrades of the roads were lost, and steel bridges were washed out, causing traffic interruption. This time, the period of interruption on Provincial Highway 20 was greatly reduced to 22 days.

Due to the storms in May and on June 10th 2013, and Typhoon Soulik on July 13th, the riverbed of the Laonong River rose by 20m. Many bridges were washed out and buried in Taoyuan

Provincial 17 Kaohsiung-Pingtung Shuanyuan Bridge (Reconstruction of Typhoon Morakot)

Provincial Highway 24 Pingtung Wutai Guchuan Bridge-Nighttime challenge (Reconstruction after Typhoon Morakot)

District. Putanpunas River also flooded and the path was washed out. Currently the riverbed path of the left bank of Laonong River could provide temporary access.

During Typhoon Morakot, a large amount of earth was washed downstream, and formed an alluvial fan deposit at the lower end of the Putanpunas River. 50 million cubic meters of landslide needed to be cleared. In addition, there was another 50 million cubic meters of landslides at the midstream and upstream. Due to the alluvial fan deposit, floods occurred easily. Large storms would force the Laonong River to change directions, thus flooding the paths, which was the main reason why the paths were often destroyed. According to the Jiaxian Construction Section, the path was destroyed 11 times during the flood period of 2014, and the renovation took 70 days, severely affecting traffic and people's lives.

Interim path improvements project

In order to ameliorate traffic interruptions on the section of Provincial Highway 20 from Qinhe to Fuxing, the Directorate General of Highways has drew up an interim path upgrade plan in 2014. The renovation work will continue to be contracted out, and should be completed before New Year of 2017.

While formulating the interim path upgrade project, we planned the following three road sections: the front and back road sections, from "Taoyuan Middle School to Yusui River" and "Zhuoshui platform to Fuxing village", were reinforced and heightened along the left bank path of the Laonong River. In the central "Yusui River to Shao Shan path" and "East Putanpunas River" sections, we mainly focused on building steel bridges. The interim renovation of the Qinhe to Fuxing section started in December, 2014, and has been divided into five contracts by the Directorate General of Highways. Along the Laonong River, we built interim roads and simple steel bridges in order to improve flood prevention. The total budget was 1 billion, and the area should be open to traffic before New Year of 2017. Interim roads could still be destroyed by flood, however the flood prevention measures have been increased from 150mm of the original paths to 800mm. After this road is completed, it will bring hopes of reopening the Southern Cross-Island Highway to traffic.

Left: Simulation diagram of mid-term temporary road upgrade
Right: Provincial Highway 20 Qinhe to Fuxing Road river temporary road situation diagram

Road to Safety

Reinforce Slope Classification Management

Mountain Highway Slope Management

Subjective conditions

Taiwan is situated between the Pacific Ocean and Eurasian plates. 70% of the island is composed of mountainous regions, and with the plates pressing against one another, earthquakes are quite frequent. The geology of mountain region is young, so topography and geological conditions are weak, broken, and complicated. With the increase of major storms in recent years, landsides are becoming more severe.

Objective conditions

The Taiwan highway network is spread across all the counties and townships of the island. It is the heart of the economic transport network, and the people's main mode of connecting with their families. Highways in mountainous regions are often accompanied by valleys and rivers, necessitating embedded roads and embankment slopes. This makes slope management an important part of highway maintenance work. The Directorate General of Highways is in charge of 5,000 km of provincial highways, 1,200 km of which are mountainous roads, meaning there are a large amount of slopes which can cause landslides due to erosion.

Professional details and implementation methods

Dealing with high-risk road sections thoroughly

Classification is conducted for slopes of mountainous highways by integrating the geological hazard chart and provincial highway route chart of the Ministry of Economic Affairs' Central Geological Survey. Field tests and slope signs were conducted for identification, and after confirmation, we proceeded to slope classification.

Information on slopes is saved in the Directorate General of Highways' database. Our goal is "regular inspection, problem discovery, and early improvement." After field testing the slopes, we entered the basic information for high risk slopes into the slope database based on the three major categories of historical hazard records, slope protection facilities, and slope instability. They are divided into four levels of management: A, B, C and D (Currently there are 1,300 locations, the classification method is shown in chart 1). The statistics of provincial highway slope classification up to January 9th, 2015 is shown in chart 2.

邊坡分級	2年內災害紀錄	5年內災害紀錄	護坡設施	邊坡不穩定徵兆
A	有	-	復(興)建中	明顯
B	有	-	無法設置	疑似
C	-	有	-	無
D	-	未有	-	無

A 2年內有災害紀錄，且尚未復建完成，或有明顯不穩定徵兆之邊坡

B 2年內有災害紀錄，且因地形地質因素無法設置護坡設施，或有潛在不穩定徵兆之邊坡

C 5年內有災害紀錄，後續無明顯不穩定徵兆之邊坡

D 5年內未有災害紀錄，且無明顯不穩定徵兆之邊坡

註：(1)災害紀錄來源為指「公路防災資訊系統(bobe168.tw)」及「公共設施災害復建經費申請補助明細表」內資料

(2)歷年災害紀錄除了Bobe系統資料認定外,可由工務段於巡查過程中若發現邊坡有顯著變化,可將邊坡等級提升

Chart 1: Slope classification

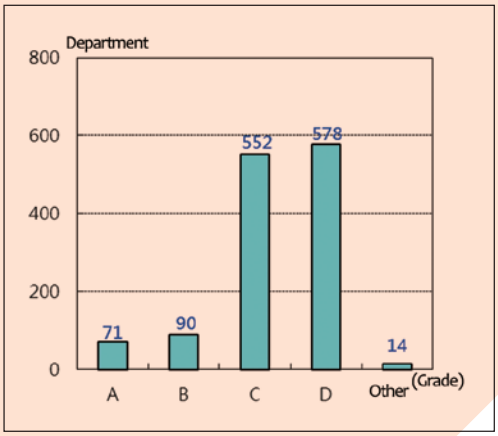


Chart 2: Provincial highway slope classification statistics

各情境之處置方式	A	B	C	D	大型地滑、順向坡
1.3小時累積雨量達120mm以上	1	1	1	1	1
2.前期(48小時)累積雨量達350mm以上	2	1	--	--	2
3.海上颱風警報解除後	1	1	1	1	1
4.震度6級以上區域	3	3	3	1	2
5.無預警大規模坍方搶通後	4	4	4	4	4
6.鄰河側上游發布土石流紅色警戒	1	1	1	1	1

處置1 2日內實施特別巡查

處置2 14日內完成特別檢測

處置3 (1)7日內完成特別檢測
(2)實施朝巡1週
(3)取得空中或衛星影像

處置4 (1)實施朝巡、暮巡1週
(2)取得空中或衛星影像

註：(1)情境5無預警大規模坍方：20,000M³以上者，執行處置4(1)及(2)
5,000~20,000M³者，執行處置4(1)
(2)無預警大規模坍方5,000M³以上者，原邊坡屬B,C,D及大型地滑、順向坡 分級者，情境1~6皆比照A級邊坡處置作為執行。

Chart 3: Maintenance management machine

各情境之處置方式	A	B	C	D	大型地滑、順向坡
1.3小時累積雨量達120mm以上	3	3	4	4	-
2.前期(48小時)累積雨量達350mm以上	1	1	2	2	2
3.海上颱風警報解除後	5	5	5	5	5
4.震度6級以上區域	6	6	6	6	6
5.無預警大規模坍方搶通後	7	7	7	7	7
6.鄰河側上游發布土石流紅色警戒	8	8	-	-	8

處置1 降低雨量門檻值

處置2 加強水情監控

處置3 實施巡查作業

處置4 揭露路段強降雨訊息

處置5 颱風警報期間，依「公路防災預警機制」辦理

處置6 依「交通部公路總局因應大規模震災標準作業程序」辦理

處置7 保全守視(必要時交通管制)

處置8 擬定加碼部署策略，按計畫執行

註：(1)情境2之大型地滑及順向坡邊坡之分屬A及B級邊坡者，處置修正為1。
(2)無預警大規模坍方20,000M³以上者，執行處置7。

Chart 4 Disaster response mechanism

Each level of slope classification contains maintenance management and hazard adaptability mechanisms based on different characteristics (For example see Figures 3 and 4). We have clearly stated the slope processing methods during typhoons and storms. Inspection work, maintenance posts and patrol systems will be implemented as a multi-level roadside disaster prevention warning mechanisms, and slope classifications adjusted based on regularly conducted inspections.

Real-time monitoring of rainfall trends

The "Automatic warning system for high risk road sections" (Chart 5) is used to replace manual monitoring. The system issues hourly rainfall charts from the Central Weather Bureau, and after filtering the road sections with heavy rainfall, compares their slope classification and historical hazard information.

Hazard prevention and warning systems will be fully automated. If road sections with heavy rainfall contain Level A or B slopes, the Directorate General of Highways uses the automatic system to send out messages to maintenance teams, allowing the appropriate examination of current conditions and follow-up evaluations.

Overestimate dangers and prepare for the worst

Through daily inspection mechanisms, we checked for signs of slope instability, and continued to draw up a plan for slope management or enactment of safety measures according to severity. The management strategy will be drawn up through ground anchor testing and slope monitoring. We will actively prevent hazards caused by sudden landslides, and execute field inspection, maintenance and management. We hope to reach the goal of gradually reducing the number of slopes on highways. For storms, earthquakes, and sudden landslides, we used slope classification to reinforce the management of high risk slopes, large landslides, and dip slopes, and stipulated maintenance and hazard management mechanisms under every circumstances. This ongoing inspection mechanism continues to make progress in the improvement of highway hazard prevention and warning. We hold to the principle that one should "overestimate dangers and prepare for the worst." The core thinking of roadside disaster prevention warning is to prepare for each typhoon as if it were the first typhoon and adapt as time progresses. We will report before, during, and after disasters, and complete all the adaptability activities. In the interest of improving road safety, we have combined this with an automatic warning system on high risk road sections, allowing road users go out happily and return home safely.

Chart 5 Automatic round the clock precaution system on high risk road section

Road to Safety

Completion of the Trial of "Happy Road Bicycle Travelling Plan."

Travelling by bicycle has become more and more popular, so the Directorate General of Highways wanted to enable cycling on the highways without any obstructions. Other than reinforcing the hardware, for example smooth roads and clear signs, we have provided more complete highway information on the internet, so people can grasp the latest road condition information before their bicycle trips. The section from Provincial Highway 8-Taroko to Provincial Highway 14-Wuling is a very popular cycling route, ascending from an altitude of 60m to 3,275m, passing through valleys and over mountains. During the weekdays, there are endless streams of cycle teams. Each year, in November, the Tourism Bureau and Ministry of Transportation and Communications cooperates with the Taiwan Cyclist Federation to conduct the events of "Taiwan Cycling Festival and Taiwan Kom Challenge", and we have attracted many well-known domestic and international cyclists to come. The seldom visited route from Tien Hsian gradually steepens, and there are natural mountain ridges. During the challenge, if cyclists suffer from stamina deficiency and lack of food supplies, they may have to turn back. If cyclists can obtain information on road conditions and slopes, they can prepare ahead of time and fulfill the dream of reaching the highest point of the "Wuling" Highway.

In order to assist people who want to fulfill their cycling ambitions, the Directorate General of Highways plans to create the "Happy road bicycle travelling" documentary. Starting from Provincial Highway 8-Taroko to Highway 14-Wuling, we integrated information on road conditions, altitude, average slopes, supply points, rest areas, and surrounding scenic spots. This information, as well as the locations of restaurants, food vendors, and public restrooms, is all available on the Directorate General of Highways global database. At the bottom of the slope chart, the mileage of each road section is labeled, and the average slope and distance are included so that cyclists can prepare accordingly. The most useful service is the event recordings, so road users can simulate the bicycle route at home, and be familiar with the whole route. In the documentary, we marked the highway mileage, scenic spots, and supply points. We also remind you the locations of narrow roads prone to falling rocks, and steep slopes that require good stamina.

The Happy road bicycle travelling plan provides scenic spot information along the highways for people to use in planning travel routes. In 2015, we plan to add "Provincial Highway 2-Fulong to Toucheng", "Provincial Highway 9-Xindian to Wulai", "Provincial Highway-Taitung to Chang Bing" "Provincial Highway 14-Puli to Wuling," and "Provincial Highway 18 - Alishan Highway" for people to plan their bicycle and mountain climbing routes.

DGH Cycling webpage

Successful challenge of road of happiness

Road to Safety

The Benefit of Provincial Highway 2-Jifu Highway Opening to Traffic

The Northeastern region of Taiwan has driven overall economic development; however, due to the decline of the mining industry, Pingxi has gradually declined despite the presence of mountains, forests, flowers, birds, mining, and railroads that promote local tourism industries. Due to travel inconvenience, young people had to leave their homes and work elsewhere. In order for the government to promote the development of Pingxi, Shuangxi, and Gongliao, they came up with the "Provincial Highway 2C Construction and Improvement Plan. " After many years of hard work in concert with the government policies of revitalizing the economy and promoting local industries, the budget for Provincial Highway 2 was obtained and it was opened to traffic at the end of 2014. The 29km long Provincial Highway 2, from Nuannuan District, Keelung City going east bound, through Pingxi District, Shuangxi City, and Gongliao Districts to New Taipei City, includes rugged mountain structures, including the 2,162 m long Giping Tunnel. Because the tunnel is an enclosed space, when accidents occurred the risk was high and rescue work was difficult. In order to improve the safety of driving through the tunnel, we installed cameras and an advanced traffic management system, which automatically monitors the car types, pedestrians, debris, smoke, fog, cars going the wrong way, and traffic jams, and immediately report to monitoring teams in order to reduce reaction time in the tunnel. In addition, in order to improve the safety of road users, from Nuannuan to Pingxi, big tractor trailers are prohibited.

Reducing journey time for more convenience

The completion of Provincial Highway 2 means that Nuannuan, Keelung, and Pingxi, Shuangxi, Gongliao and New Taipei City are much better connected. Before, going from Nuannuan to Shihfenliao on the Provincial Highway and County Road 106 took 50 minutes. Upon completion, it only takes 15 minutes through Giping Tunnel, a saving of 35 minutes. From Nuannuan to Fulong, the travel time was about 40 minutes, also greatly reduced. Residents of the mountain regions can now commute via Provincial Highway 2, travelling to the city and back for work and school, and the better travel provisions allow for quality medical care in the cities. Agricultural products in mountain regions can be sold elsewhere more rapidly, and the disparity between cities and counties will be lowered, as well as outward migration. After completion, Provincial Highway No.2 has become a traffic network hub with National Highway No.1 and 5 , Provincial No.62, and County Road 106 all serving to alleviate the traffic flow of Northeastern Coast and weekend traffic flow going back and forth between Taipei and Yilan.

Provincial Highway 2 was set up to be a scenic highway, and has created opportunities for relaxing mountain trips and coastal routes. Along the highway, people can breathe the phytoncides scents of Nuandong Valley and visit the world class geological potholes. Through Giping Tunnel is the home of Pingxi sky lanterns, where people can release sky lanterns filled with hopes and dreams, and go to Shifenliao to visit the 20m Shifenliao Waterfall, known as the "Niagara Falls of Taiwan." In Jingtong, people can experience local cultural creations, ride bicycles through the fields of Shuangxi and enjoy the floral sceneries along the way, as if they were situated in a colorful Chinese ink painting. Going over the ridge routes of Caoling Historic Trail, people can enjoy sea breezes and overlook the Pacific Ocean. Finally they can go to Gongliao to enjoy delicious seafood in Audi. During the summer time, people can go to Fulong Beach for the sand sculpture festival, or let their hair down and enjoy the rock and roll of Gongliao Music Festival.

Provincial Highway 2 C 7-9K

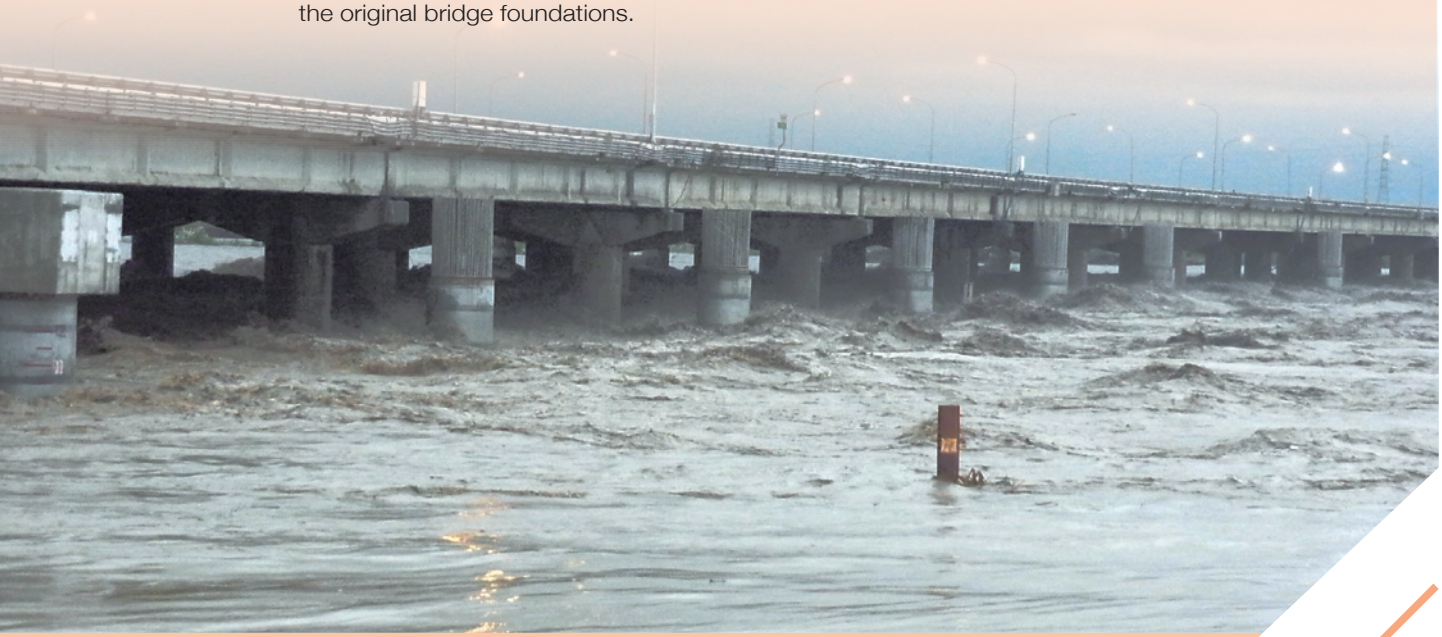
Provincial Highway 2 C Nuannuan route

The Construction Experience and Achievement of Provincial Highway 88-Wanda Bridge

Wanda Bridge is situated at the boundary of Kaohsiung City and Pingtung County. It is the section of Provincial Highway 88 and County Highway 188 crossing the Kaoping River. The bridge is 2.4km and is one of the main joining roads for traffic in Kaohsiung and Pingtung. On August 8th, 2009, Typhoon Morakot caused the 88 Flood. The deluge brought landslides, which caused the foundations of bridges to collapse, and leaving them exposed up to 3 meters after the disaster (as seen on P9-14). Due to the magnitude of flooding caused by this disaster, and the amount of driftwood, the impact to the bridge was larger than the capacity of the original design. Directorate General of Highways took the status and age of bridges and riverbed washing into consideration, and evaluated the need for reinforcement. For this, of Directorate General of Highways Third Maintenance Office invited experts and scholars to conduct meetings and discussions. The design was completed in July 2010, and in June 2011 the construction was contracted out. We adopted the first domestic use of the "construction then demolition" principle. We planned reinforcement by foundation underpinning, and the work was completed in March, 2014. This has reduced the possible hazards caused by bridge structures, and improved the safety of road users.

Top engineering specialists in the country

The foundation reinforcement of bridges was the first in the country. By using the "construction then demolition" principle we were able to maintain the original road surfaces and preserve the upper structures of the bridges, while lowering the foundation to meet flood prevention and earthquake endurance requirements and changing the structural system from single column bridge to multiple column bridge. We did not temporarily transfer the loading capacity of the bridges to temporary safety supporting structures during construction. Through the installation of independent cap beams, we constructed new foundations waited until they could hold the weight of upper structure, and then demolished the original bridge foundations.



Flood invasion during construction; the construction site was submerged under water

Officials came to supervise to encourage the construction team

Excellence in construction

The partial foundation of the construction is done under the original bridge. Due to the limited height of construction under the bridge, the work has to be lowered to the height suitable for construction. During flood season, the water level of the river is often close to the height of construction. During construction, when faced with floods caused by typhoons, the whole construction area was almost submerged 11 times. After the flood, cleaning the large amount of silt takes about one month. We continued to invest heavily in human and material resources for renovation work. During the crucial period of renovation, we extended working hours without regard to cost, worked overtime, rewarded employees, and gave out overtime bonuses. Finally, we did not disappoint, and fulfilled the mission assigned by the upper management.

On Provincial Highway 88, the average number of cars on the highway was 65,000 daily, a huge traffic flow. During construction, we still maintained the original bridge without the need for controlling the flow of cars. The road users were not affected by the bridge construction, and we assured the normal operation of nearby industries. By using these construction methods we saved road users from having to detour due to reconstruction of Kaoping Bridge on Provincial Highway 1 or Shuanyuan Bridge on Provincial Highway 17, saving time, fuel consumption and carbon emissions. We have estimated that the construction saved 9.3 billion dollars in manpower, 4.5 billion dollars in fuel consumption, and 70,000 tons of carbon emissions, the equivalent to chopping down 116,000 trees (Provided by Forestry Bureau. During the life cycle of each tree, it can absorb 600 kg of carbon emission.) This does not include nearby tourism and industries, which were saved a great deal of social cost.

Left: After the disaster, there was a large amount of aggredation so the cleaning up work took a lot of time
Center: The construction goal banner was hung in the construction site to encourage the construction workers
Right: Completion of bridge reinforcement

Road to Safety

Upgrading the 12 Steel Bridges on Provincial Highway 21, Namaxia District

The original Provincial Highway 21, Namaxia to Wulipu, was the only connecting road for Namaxia residents going in and out of Jiaxian District. After the 2009 Typhoon Morakot and 2012 flood on June 10th, the roads were completely destroyed. Transporting all the vital resources was not easy. The terrain of the damaged areas was steep, and the riverbed of Qishan River was unstable after the continuous disasters.

In order to quickly improve the traffic in Namaxia District after the Morakot Disaster, the Directorate General of Highways' 3rd District Maintenance Construction Department used simple steel bridges and pipe culvert paths for passing. Due to the high instability of the river course during the flood, there was still the possibility of the paths being broken, which could put the safety of the residents in jeopardy. In 2012, we requested the budget of 1 billion to build 12 new steel bridges.

Due to the urgency of the construction and the limited budget, the design principle was "broken bridges are hard to fix, landslides are easy." The construction was classified as a long term project by the pre-renovation planning team. We focused on the structure of the steel bridge crossing the river, with extended road sections (Approximately 50~100m) for protection. In order to upgrade the disaster prevention capacity of the 12 steel bridges. We assigned the height of the bridge bottom according to the 2011 flood recurrence period, to a water level and accretion of 1.5m. The foundation was consisted of deep 1.5m diameter double pipes every 48m of bridge span, with rock protection, and upstream piles to increase the strength of flood prevention for steel bridges and connecting roads.

Promoting tourism with featured images

In response to local consensus on promoting local culture and tourism and adding tribal images, the 12 steel bridges were painted the colors of spilling sand, peacock blue, poppy red, emerald green, dark gray, and lilly white. In response to the wishes of local residents, we added the warm color tones of local aboriginal tribes to the cold steel structures, increasing the cultural sense of belonging. The steel bridge over the Qishan River, Namaxia is a fortress among mountain ridges, and protects local residents.

Since the 88 Flood, the traffic of the original Provincial Highway 21 Namaxia to Wulipu has suffered due to damaged roads during flood season, severely affecting the livelihood and safety of residents. During construction, despite seven traffic interruptions from typhoons or storms, we still emphasized construction safety and quality as our ultimate goal of working overtime. Now the construction of 12 steel bridges has been completed and officially opened to traffic on May 31st, 2013. The road that used to Provincial Highway 21 has been changed to Provincial Highway 29. During the rainy season, there is no need for detours when going to Namaxia, which makes road users safer, and increases tourism in Namaxia District. Local residents do not have to worry about the roads being destroyed again.

No.1 Bridge

No.10 Bridge

Road to Safety

Chiayi City Public Highway 1 New Construction Project Opening to Traffic

Chiayi City Highway 1 New construction was under construction conducted by West Coast Expressway Southern Region Engineering Office for five years. At 10:00AM on September 13th, 2014, former mayor of Chiayi, Huang Ming Hui hosted the inaugural ceremony. The road was officially opened to traffic after the ribbon was cut by Minister Chang of the Control Yuan, Minister Chen of the Interior, Director Xiao of the Directorate General of Highways and representatives of the people.

Chiayi City Highway 1 New Construction was completed by the Directorate General of Highways' West Coast Southern Regional Construction Department upon the authorization of Chiayi City Government. The road connects Gaotie Boulevard (Gaotie Dadao) to Chuiyang Road, and cuts through the traffic veins of West and East Chiayi City. The construction was divided into two contracts. The first section was opened to traffic on January 1st, 2012, and the second section-the overhead bridge-was opened on September 13th, 2014

The bridge has become "a rainbow crossing the heart of Chiayi City", and was named "Chuiyang Bridge" by the Chiayi City Government. There are regular neon light shows at night on both sides of the bridge, making the Bridge of Light a new spotlight in the city. When it opened to traffic, it alleviated the traffic jam problems of Jiaxoing Bridge, Beigang Road, and Xinyeh underpass, promoting the balanced development of East and West Chiayi.

Zero labor accidents to achieve our safety goal

Chiayi City Highway 1 New Construction of overhead bridge. Along Chiayi City, the main drainage consists of central rows. The 5 units of the bridge's upper structure are divided into 4 sections. The steel box girder forms units 1 and 2, dual box and single box girders form unit 3, and unit 4 is the railway crossing bridge connecting to the single box girder of the 5th unit. The main structures of the bridges are situated over the central rows. Rainfall often interrupts the construction, and in recent years the amount of rainfall has exceeded the designed capacity of the central rows and cause flooding. West Coast Expressway Southern Region Engineering Office had to overcome

The newly completed Chiayi City Public Highway 1 at sunset

these difficult construction conditions. When there was storm alert reported by Central Weather Bureau, engineers and contractors would stay on the construction site for 24 hours, and alert the chief of the village and residents. As well as immediately activating emergency adaptability plan for hazard rescue, they were also there to reassure the residents.

Colorful lights make the Chiayi City Public Highway 1 very eye catching

In addition to the close pitched bridges, because the distance between bridge bottom and a high tension wire was only 30cm, we needed to wait for the Taiwan Railways Administration to power down, meaning we could only work from 1:30AM to 4:00AM every Tuesday and Friday. In order for the construction to run smoothly, West Coast Expressway Southern Region Engineering Office invited contractors to the construction site for field testing. We also invited TRA and Chiayi City Government to conduct disaster prevention drills. For working at night, West Coast Expressway Southern Region Engineering Office brought in extra staff to establish an emergency adaptability center. We hope to complete the hang beam work and follow-up matters under extremely limited time and space.

As for construction, it has been evaluated twice by MOTC and once by Chiayi City Government, and reached the goals: no occupational hazards during construction, zero labor accidents and on-schedule construction completion. The budget was estimated to be 1.62 billion by Chiayi City Government, and was finalized at 1.32 billion, saving 300 million of government money. In addition, the construction took place in the city, which meant environmental maintenance was especially important. West Coast Expressway Southern Region Engineering Office actively supervised the contractors and reinforced environmental protection measures. We have never been fined by environmental protection agencies, and have reached environmental protection goals.

During the construction period, Chiayi City Council and former mayor Huang came many times with high level officials to the construction site for inspections. He had good things to say regarding the construction quality of West Coast Expressway Southern Region Engineering Office, he also asked them to conduct a construction site demonstration. He demanded all the agencies and construction purchasing staff of the Chiayi City Government to come to the demonstration, as the construction purchasing exemplar for the city government. All this was down to former mayor Huang's faith in the Directorate General of Highways, and also demonstrates the hard working spirit of highway people.

The quality of Chiayi City Public Highway 1 was great. It was the exemplar of construction purchase

Road to Safety

The Production and Premiere of Indigenous Themed Micro-Movie

On December 7th 2014, Premier Mao of the Executive Yuan and former Director Yeh of MOTC inspected the Suhua Highway of Provincial Highway No.9 mountainous section improvement construction. Director Liao Wu Chang of Fourth Maintenance Office explained that due to the number of disaster repairs on the Suhua Highway, renovation work was extremely difficult and dangerous, and the eventual completion of the work depended on Hualien's aboriginal workers who risked their lives. Premiere Mao told the Directorate General of Highways to come up with a tribute project.

As director of Fourth Maintenance Office Liao Wu had to finish the project in an extremely short time, he formed two work teams. The teams regularly conducted meetings according to work plans, while at the same time continuing lateral communication and information exchange. The first meeting took place on January 24th 2014. By October, 9th 2014, 15 meetings had been conducted, and the project was completed on schedule.

During the process of publishing books and micro-movies, the Fourth Maintenance Office was responsible for selection. For the part of books and writings, we invited Professor Lee Ruizhong who has won many publishing awards. For the part of the micro-movies, we worked with Taiwan Panorama, multiple winner of the Golden Bell Award. Through the comprehensive collection of references and information obtained by interviews of local residents, we presented the hardworking aborigines who participated in the highway construction. Behind the construction history of Taiwan highways, there are numerous aboriginal engineers who helped us through thick and thin. The Directorate General of Highways published the book "Fly, Haipis, Fly: Stories of Taiwan's Highways" to let people know about those legendary aboriginal heroes who participated in highway construction.

A strong work ethic gets things done

"Fly, Haipis, Fly: Stories of Taiwan's Highways" is the name of the book. The haipis is the Himalayan Black Bulbul, a holy bird that brings fire and light. The book tells the stories of Taiwan aborigines participating in the highway construction, inspired by a beautiful legend of the Bunun Tribe. Aborigines' contribution to the highway construction was like the holy bird "haipis" in the Bunun legend, which brought light to the people.

During the book launch, many aboriginal employees of the Directorate General of Highways were also present. The station manager of Nao'ao Station, Liu Yuhsin of the Amis Tribe, was only 26. She was the only female and also the youngest station manager in Taiwan, and was responsible for the Nan'ao road section that

Bashan, Yihsian, and Yulao listened to the old people telling the road-building stories of aborigines

Blessing ceremony for Provincial Highway 24 Guchuan Bridge opening to traffic

Left: This book was written by historic trail expert Professor Lee Rui Zhong
Center: Bridge inspection work done by Gu Wanting
Right: Book launch of Fly, Haipis, Fly: Stories of Taiwan's Highways

has the most landslides in Taiwan. During Typhoon Saola, when the traffic of Suhua Highway was closed, she and her colleagues walked two days from Chongde to Heping. Her bravery and determination were astonishing. A 41 year old Assistant Engineer of the Tsou Tribe was stranded in her hometown of Alishan during Typhoon Morakot. After getting out, she left her three children behind, and rushed to work. Her spirit was admirable. 33 year old bridge inspector Gu Wanting of Taroko Tribe needed to inspect bridges after the typhoon. She told the media that she often cried in private, but after the tears dried, she continued to work, in order to give travelers and families a safe passage home.

This book included interviews with 18 people and 14 articles were collected. It included three articles on highway construction, six articles on road maintenance, and five articles on comprehensive matters. The yellowing old pictures in the book showed initial prospecting for the Northern Cross-Island Highway in August 1949, a Central Cross-Island Highway prospecting image from January 1955, and an account of driving rock-boring machines on the steep crags of the Mount Yu in the spring of 1986. The book included images of the difficult construction brought back by the six-axis helicopters, and accounts of a visitor to Taiwan, Mr. Foley, who was deeply fascinated by mythologies and legends. He met many different aboriginal tribes, and hiked along the Suhua, Southern Cross-Island, New Central Cross-Island, Central Cross-Island, Northern Cross-Island, and Northern Coast highways. On the steep rock slopes, he saw spider-men hanging on the wall and shooting out spider webs, and upon entering the tunnel, he explored the unknown darkness of the deep bore holes.

Highways honestly reflect the interior of a country. We can say that the construction of each important highway In Taiwan, from the initial prospecting to re-inspection to route survey and route-changing survey, the aborigines were there to help. Even during renovations and maintenance, you can see the presence of these partners. They are not afraid, and overcome difficulties to make the highways more steady and wide. Their effort is admirable.

Slope suspended mesh on Provincial Highway 7 A

Road to Safety

The Continuous Improvement of Disaster Prevention Warning Mechanisms and Record of Zero Injuries to Pedestrians

In 2014 the Directorate General of Highways continued developing its advanced disaster prevention warning mechanisms. The 34 locations on provincial highways that are prone to flooding are included in the extreme weather monitoring system QPESUMS. Together with levels 1 and 2,73 road sections and 22 bridges are monitored. After each storm caused by the typhoon, we revised the "early warning level," "warning level," and "action level" rainfall indicators.

Disaster prevention warning mechanisms and training were very effective

Hazard prevention drilling: total preparation

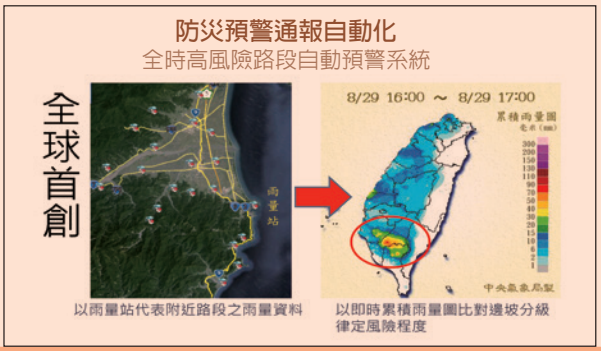
In 2014, 12 educational training classes on disaster prevention were conducted. 565 people participated in the training, 42 bridge and road closing drills and tunnel hazard adaptability drills were conducted, as well as 6 natural disaster command system enhancement drills. This year, the war game-like drills serve to familiarize all levels of the Directorate General of Highways leadership with all the decision-making tools available during natural disasters. In different scenarios, strategic decisions must be passed down the chain of command to fulfil the hazard adaptability actions of judgment, deployment, report, early warning and response. we hope that the regular drills can enhance adaptability and rescue capability.

Adaptability of command in extreme climates

In 2014, after suffering from three extreme weather events brought by the March 27 extremely heavy rain, Typhoon Matmo, and Typhoon Fung-Wong, the Directorate General of Highways monitored extreme weather for 860 hours. The highways were closed 84 times as precaution, and disasters occurred 53 times after closing the roads. Due to precautionary closures, no casualties were reported after 1,530 days of extreme climate as of December 31, 2014.

DPAWS-Disaster Prevention Auto-warning System protects all roads

The Directorate General of Highways designed and implemented the automatic caution system on high risk roads. By integrating the "Hourly Accumulated Precipitation Chart" produced by Central Weather Bureau and the slope information database, the system automatically reads the heavy rainfall spots to find high risk road sections. Finally, the system automatically sends text messages to activate each slope classification hazard prevention team. The uniqueness of this system is that the entire process of adjusting the hazard status of each rainfall station is automated, making sure every highway is protected at all times.



DPAWS Automatic around the clock precaution system on high risk road section

Provincial Highway 7 A Central-linked Highway Lishan Branch disaster prevention closure situation

Disaster Prevention Warning Mechanisms Awarded the "6th Annual Government Service Quality Award" Approval

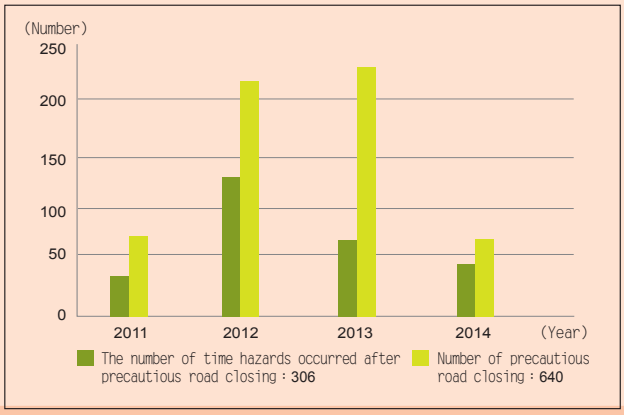
While the Directorate General of Highways' work has historically been motor insection services, bridge and road construction, due to the change in global climate in recent years, and the drastically increasing frequency of extreme climates, we are forced to face up to the challenges of mother nature; only with the humble attutide of "let nature go first. then pass" can safety be maintained.

For this reason we adhere to the principle of "Warning and disaster prevention for the safety of road users", by establishing and promoting disaster prevention warning mechanisms. Through disaster prevention advocacy, we were able to pass on the message: "know the disaster, avoid the disaster, be free from disaster" to the people. Under extreme weather conditions, we made careful decisions on bridge management, mountainous regional road risk management, and created a warning system. We also integrated the front line disaster prevention service agents, to teach people with the concept of "avoiding danger and being careful." Closing roads before the occurrence of hazards fulfils the goal of saving lives.

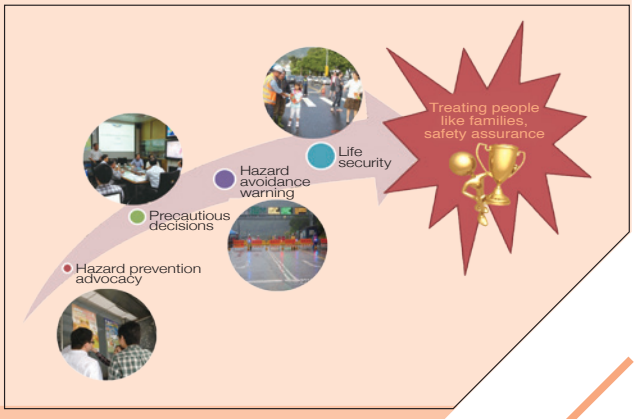
We treat the 30 million road users of Taiwan as customers. We provide the best safety services and have been promoting the roadside disaster prevention warning mechanisms for over three years. During this time, we have dealt with 54 typhoons and storms and 640 road closures, 306 of which resulted in accidents after the roads were closed. This has shown the value of precautious road closing. We monitor the roads 24 hours and provide people with the most dependable road use protection. As of 2014, we have set the record of zero casualties in 1,530 days in extreme climate.

The "Government Service Quality Award" has been awarded six times from 2008 to 2014. The awarded agencies include the household registration, land administration, tax, environmental protection, medicine, police, firefighters, and tourism departments. Our 2014 disaster prevention warning mechanisms was set up according to the principle "Warning and disaster prevention for the safety of road users", and we were nominated for the Government Service Quality Award. After the initial evaluation we received good reviews from judges in the industrial, government, and academic circles, and we have outperformed the other 56 government departments, earning the highest honor of government service quality. Other than the approval of excellence, we hope to become an example for people to learn from, making people safer by promoting the excellent roadside disaster prevention warning mechanisms to all city and county administrations and hazard prevention units.

DGH won the service quality award from Executive Yuan



Statistical chart of precautionary road closing from 2011~2014



Concept chart of the complete service of disaster prevention warning mechanisms

Road to Action

Collectively Working Towards Perfection

Road to Action

Expanding the Availability of Information on Tour Bus Safety Facilities

After the high number of tour bus accidents in recent years, there have been widespread doubts from all areas of society about the safety of tour buses traveling on mountain roads. As a result of tour bus companies working with the Ministry of Education and Tourism Bureau, there is now a vehicle age limit for tour buses rented for field trips and Chinese tourist groups, so people can find out about the quality of vehicle, but this has the adverse effect of lowering companies' use of high specification vehicle, and affects vehicle safety on mountain regional roads.

Improve the current safety management system for tour buses

In order to improve the current safety management system for tour buses, and encourage companies buying new vehicle to use those that have suitable facilities, the Directorate General of Highways investigated the specifications and equipment for vehicle being used and established a large vehicle information search platform. We hope to make related vehicle information available for public reference when choosing tour buses for traveling.

On September 2nd 2014 – tour bus information posted online

In order to provide all the vehicle functions and information for the tour buses for people to search, as well as the standard information provided by the tour company, like the vehicle identification number, brand, date of production, outstanding fines, engine displacement, overdue inspection, compulsory insurance, and violations. We also added vehicle specifications and functions, (including horsepower, torsion, vehicle length, vehicle width, total weight) and supplementary safety facilities. This includes the six supplementary safety facilities on tour buses: ABS, GPS, oil and liquid pressure decelerators, engine decelerators, exhaust brakes, and electromagnetic decelerators. The information was posted online on September 2nd 2014 for people to search. By disclosing tour bus information and providing recommendations and explanations, we hope to enable consumers to choose suitable tour bus services, and provide safer tourism environment.

Inspection of Provincial Highway 18

Road to Action

Expanding the Achievements of Highway Public Transport Enhancement Project

With the promotion of the Highway Public Transportation Enhancement Project (2013~2016) in 2013, we received great reception from company owners, citizens, and local government, so the Directorate General of Highways continued with the 2014 plan. We hope on the existing foundations, we can increase the competitiveness of public transportation and further the Ministry of Transportation and Communications' contributions towards energy conservation and carbon reduction.

The road to improvement does not end until perfection is reached

The 2014 results of the Highway Public Transport Enhancement Project (2013~2016) are as follows:

Service improvements in Hiway Public Transportation

Vehicle Improvement

In 2014, we have appraised and subsidized highway coaches and city buses, and eliminated 446 old buses. We first appraised the subsidization of outlying islands, remote and service routes in Central and Southern Taiwan, and upgraded the overall traveling and service quality environment.

The Improvement of Station Facilities

We assisted local governments to renovate and construct bus waiting facilities, set up concentrated bus stops, and extend the functions of status updates. In addition, we also planned and constructed bus stations, and provided more comfortable transfer and waiting spaces.

Making public transportation more attractive

What we are doing to increase consumers' willingness to use public transportation

By encouraging the use of non-contact electronic tickets and discounts for passengers taking public transportation, we hope to get people into the habit of using electronic tickets, and lower the cost.

Improvements to public transportation and tickets services

We assisted bus companies to establish integrated fare card readers, and integrate highway public transportation e-tickets from other cities, to facilitate people's use of integrated fare cards.

Provided a new form of transportation (Taichung City BRT)

Improved the transfer facilities of TRA Chiayi Station

Left: Service network made more complete (Nantou Bus Co. opens a new route Puli-Fazhi to serve people in the countryside)
Center: Complete basic civil transportation (Hsiuluan Village, Yufeng Village, Hsinchu County planning and subsidiary of public transportation service system)
Right: Caring for the physically and mentally disabled people (Buses on national highways have changed to large accessible vehicles

Providing for the basic needs of disadvantaged groups

According to the stipulation of Article 10 of Public Transportation Law, we provide subsidies for operational losses on service routes in remote and outlying islands in order to maintain basic service quality. In 2014, we further subsidized Jianshi Township, Hengshan Township, Daren Township, and the DRTS in remote areas of Kaohsiung city.

Excellent transportation services

Increase the supply of highway public transportation services

We created new routes, and increased the capacity of public transportation to satisfy the needs of a variety of groups. We also promoted the "bus first" concept to increase the popularity of public transportation.

Marketing highway public transportation

We conducted the overall marketing promotion plan, and assisted local governments to integrate public transportation. We also came up with marketing strategies, and helped with shuttle bus services for large events.

Consolidating policies – transformation and innovation

Summary: Inspection of the audited contents of the plan, and fulfilling the policy of developing public transportation on highways.

Consolidation: Provide for people's basic transportation needs without making it difficult for companies to operate.

In 2014, in order to maintain the existing routes, we continued to subsidize the bus companies of 14 counties and cities, including Keelung, and the losses of bus companies nationwide.

Transformation: Maintain the existing bus services, and improve expressway transportation.

In 2014, we assisted more local governments according to their individual needs. For example, the Kaohsiung City Government created the Harvard Express Tour Bus Route and the National Kaohsiung Normal University Yanchao- HSR Zuoying Station. Through National Highways, we improved connections from Kaohsiung County and Kaohsiung City. Nantou County Government cooperated with Nantou Bus to open the "Puli-Fazhi" route. In 2014, it officially hit the road, and became the No.1 city bus in Nantou.

Innovation: The value of innovation in public transportation is shown by demonstration.

In 2014, we worked with the bus companies of all National Highways to promote barrier-free bus services. The drivers had to complete relevant training on operating barrier-free facilities and professional service. Now, many schools, agencies, and groups with physical disabilities reserve these buses for trips and events, creating a safe and comfortable traveling environment for people with mental and physical disabilities.

Road to Action

Clearing Surplus Old Vehicles

Where before we collected two years of motorcycle fuel fees for vehicle registration recertification, we now collect one year of motorcycle fuel fee every year in July. Due to the large amount of fee collections for motorcycles, some non-existing motorcycles were still being processed. For this reason we needed to get rid of the surplus vehicles, and asked people to discard them in order to reduce discontent and complaints when they receive the notice for fee collection.

Old motorcycle disposal advertisement

People who fulfill the criteria for discarding their vehicles do not have to pay the motorcycle fuel fee

Article 30 of the Revised Regulations of Road and Traffic Safety states that "For vehicles over a certain age, highway agencies notify the owner to see if they want to scrap it and register the destruction with the agency." This is done for unused motorcycles over 10 years old with no traffic violations in the last 5 years, not covered under compulsory insurance, with no emission inspections from the Environmental Protection Administration and a vehicle registration over 5 years old. In August, 2013, we mailed out 2.2 million discard registration manuals, so the owners can discard their vehicles at the closest highway agency. They do not have to pay the five years of motorcycle fuel fee they owed.

Discarding old motorcycles, with good results

Regarding the discard registration for motorcycles over 10 years old, we have discarded 1.75 million motorcycles as of December 31, 2014.

Pingtung Motor Vehicle Station conducted matters regarding motorcycle disposal

Advocacy of unwanted motorcycle disposal

Improve Regular Re-Training for Professional Drivers of Large Vehicles

Due to the revision of Article 19 of Transportation Management Policies on October 1st, 2010, the "Regular Training of Professional Drivers of Large Vehicles," has conducted training courses since May 24th, 2010. By the end of 2014, 48,349 people were trained by Training Institute, Directorate General of Highways.

Simultaneous upgrade of training materials and facilities

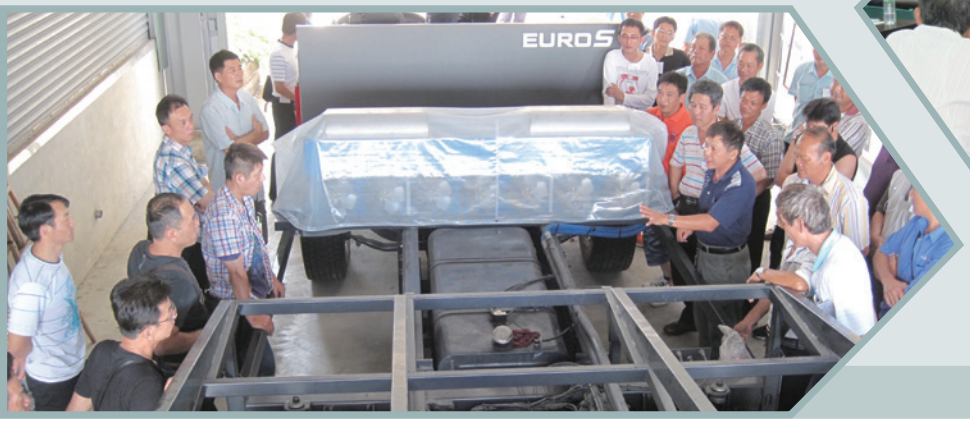
In order to improve training quality and increase course content, training materials are upgraded every three years. The last upgrade was on October 1st, 2013, and was used entirely for training courses. Training courses include "Newly revised traffic regulations", "Introduction to highway natural disaster emergency operations", "Preventing and dealing with disturbances", "Defensive driving and eco-driving" "Self-management of drivers" and "Self-inspection and emergency adaptability for large vehicle drivers (Including vehicle maintenance). There were seven items of learning, the training was six hours long. In response to the upgrade of education facilities, we purchased three Scania K400 buses, one for Training Institute, Directorate General of Highways, one for Central Region Training Center, Training Institute, Directorate General of Highways, and one for the Southern Region Training Center, Training Institute, Directorate General of Highways. We provided advanced vehicle instruction facilities, increased the technical knowledge of students, and improved the level of training.

Increase training courses for drivers

From May 24th, 2010 to September 30th, 2010 the Training Institute, Directorate General of Highways trained approximately 27,000 drivers. Once completed, training is valid for three years, so every three years there is a peak training period. In order to provide sufficient training capacity for drivers to participate, we increased training courses from April 22nd to September 30th, and trained about 18,780 people.

Continued improvement of training quality

In 2014, Chiayi Motor Vehicle Office authorized the Department of Marketing and Logistics Management, Ling Tung University to conduct the training for "The Satisfaction Survey Research Plan for Regular Training or Occupational Seminar for Professional Drivers of Large Vehicles". Analytical results and recommendations will be used as the basis for training course revisions and content upgrade, in order to develop drivers' abilities and raise the quality of traffic safety on the roads.



Left: Vehicle performance maintenance seminar situation
Right: Course teaching situation

Road to Action

Official Implementation of Safe Driving Course for New Motorcyclists

In order to raise awareness of new motorcyclists and improve motorcycle safety, from April 1st 2013, we started conducting experiments at seven Motor Vehicle Offices. On September 1st 2013, 18 motor vehicle joined the experiment, and on June 1st 2014, experiments were conducted at all the motor vehicle offices. We asked all motor vehicle offices to provide seminars according to Article 8, Item 1 of the Road and Traffic Safety Regulations.

Rates of traffic accidents and violations have decreased drastically

Since the first experiment, we have had excellent feedback from the public, with over 79% satisfaction. Of the 446,000 people who got their licenses between April 2013 and July 2014, 178,748 had participated in training, and 261,258 had not (Data provided by National Police Agency). After analysis, the accident rates for people who attended training were 23.67% lower than those who did not attend training. The traffic violation rates were also 12.41% lower.

Safety driver seminar for new driving license holders

Safety driver seminar for new driving license holders

On November 1st, 2014, full scale operation

As the results show, the Safe Driving Course for New Motorcyclists experiment has really proved the utility of driving safety training, and lowered traffic accident and violation rates. The satisfaction rate over 79% shows the high level of acceptance of course content, lecturers' methods, and classroom environment. In addition, all the motor vehicle offices of Directorate General of Highways have completed the preparation work for the seminars and since November 1st, 2014, all the motor vehicle offices have officially implemented the Safe Driving Course for New Motorcyclists.

Courses before driving will help develop good driving behavior

The statistics in November and December 2014 have shown that 62,345 people have participated in training, with the average satisfaction rate for participants at 82.7%, higher than the average of 80.8% from January to October. All units reported that there were complaints. For people new to motorcycle riding, the Safe Driving Course for New Motorcyclists has resulted in safer driving behavior.

Promoting Driving License Management for the Elderly

At the end of 2014, the senior citizen population aged over 65 reached 2,775,000, or 11.85% of the population. Taiwan has already become an aging society. According to domestic and international statistics, aging causes deterioration of physiological functions, reactions, and cognitive capacity. Even though there was no indication of higher accident rates, the death rate after accidents was significantly higher than those of young people. In recent years, there have been reports of elderly drivers involved in traffic accidents due to mechanical control abilities, judgement, and bad health conditions, which has attracted widespread attention.

Actively advocate traffic safety for the elderly

In order to maintain safety for elderly people and other road users, since 2013 the Directorate General of Highways motor vehicle offices have used all kinds of events to advocate traffic safety for the elderly, and encouraged them to renounce their licenses. At the end of 2014, we have conducted 921 elderly safety seminars, advised 93,804 people, and 9,154 people renounced their licenses.

Conducted public hearing and gathered the recommendations from all circles

In response to the license management of the elderly, the Ministry of Transportation and Communications authorized the Taiwanese Society of Psychiatry to conduct the "Cognitive checkup system authorization research project for elderly drivers." We have provided the checkup methods for elderly people over age 75 in Japan, and recommended this method domestically. We also invited the Directorate General of Highways to conduct public hearings on a licensing system for elderly drivers, and gathered opinions from members of the public. In December 2014, the Directorate General of Highways conducted four public hearings in Hualien, Kaohsiung, Taichung, and Taipei. In the hearings, we explained the current management system and possible future plans. The representatives raised their points of view, and there were different views from young groups and elderly people. Younger people thought it was necessary for management of elderly drivers, but it should be planned with care. The hearing was well-received, we fully voiced our opinions, and showed how strongly we feel on this issue. The public hearing gathered the opinions of people all over the country in order to provide references for public policies.

Elderly driver driving license management system hearing

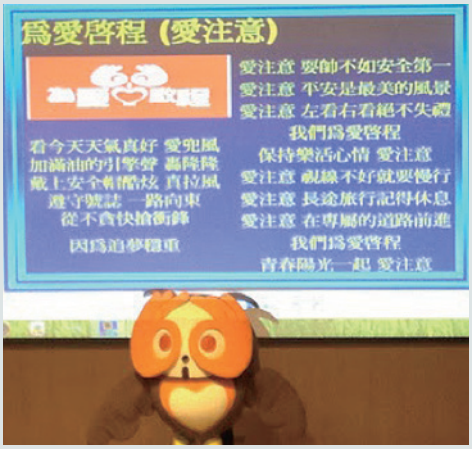
Elderly driver driving license management system hearing

Road to Action

Promotion of National Road Safety Improvements

Road safety, international attention

Traffic safety is not only a slogan, it is also an important policy topic for the safety of our citizens. According to World Health Organization statistics, every year traffic accidents take away the lives of nearly 1.3 million people. It is also the main cause of death for people aged 15~29. The United Nations statistics also show that traffic accidents not only cause sadness and pain for the families and friends of victims, but also greatly affect the economy. In many countries, the economic losses caused by road accidents have reached GDP1~3%. For this reason, the World Health Organization is actively working with countries all over the world to promote all kinds of road safety measures, and in the meantime come up with a ten-year road safety plan.



2014 we conducted the national road safety improvements seminar

Work together hand in hand, set out on a journey of love

Taiwan has always emphasized traffic safety work, and we have invested a great amount of manpower and material resources each year. In the interests of traffic safety, we have also responded to the suggestions of World Health Organization. The Ministry of Transportation and Communications has included traffic safety as an important policy topic, and on May 8th 2014, we conducted an oath taking rally to push for more meetings between departments, counties, and cities, combining the power of all county and city governments and public associations to include road safety in all facets of policies. We hope, through the integration of comprehensive policies, to fully exhibit the improvement and advocacy work for national road safety in all fields. For this, we used the motto "Set out on the Journey of Life," and promoted the "Reinforcing the Foundation of National Road Safety" project. We reminded people to "Care for loved ones, cherish family members, pay attention to safety, and set out on a journey of love" . By emotional appeals we also hope to receive active responses from civil groups and the public, and that the advocacy event will have a ripple-like effect, spreading its influence to all of society.

On May 8th, 2014, we conducted the oath taking rally

Kaohsiung City Motor Vehicle Office and Fengyuan Motor Vehicle Station have Won Records Management Quality Awards

In 2002, The National Archives Administration established the "Records Management Quality Awards" as the highest honor in archiving. Kaohsiung City Motor Vehicle Office and Fengyuan Motor Vehicle Station were invited to participate in the nomination of the 12th Records Management Quality Awards." We came out better than the 37 other nominated agencies, and won the honor of the Records Management Quality Awards.

Kaohsiung City Motor Vehicle Office created the first "Motor Vehicle History Museum"

We understand the importance of archives record keeping and heritage, so Kaohsiung City Motor Vehicle Office used the relics and archives collected by agencies to create the first "Motor Vehicle History Museum." Starting with the traditional ceramic craft "Ceramic motor vehicle history wall" made by at the entrance, "Archive application and multimedia tour" in the main hall, the "Motor vehicle history exhibition" on the second floor license test waiting area, and the "Historic relic exhibition", "Multimedia relic area" and "Cultural timeline hallway" on the fourth floor. We exhibited the historical features and motor vehicle of the harbor city of Kaohsiung, and used diverse methods to let people know more about motor vehicle and archives.

Our innovation and efforts in archive management have made our motor vehicle offices more than just offices. They are filled with history, culture and fun, a new age of educational service agency.

The staff of Fengyuan Motor Vehicle Station are not afraid of challenges

When you first hear "Records Management Quality Awards," you think it is a high standard, difficult and challenging award. Overtime work is a must to obtain this award. There were many rumors which made us doubt, "Can we really do this?" For those of us who first accepted the challenge, it seemed like an impossible task, but we kept working towards the gold medal award despite uncertainty.

There were doubts, confusion, and bottlenecks which challenged our limits, stamina, and determination. We appreciate all the partners who gave us support and encouragement during this time. The award is the start of making archiving even better. In the future, we will work hard to become the benchmark of archive management. The archive management of Fengyuan Motor Vehicle Station will continue to be the gold standard.

Left: The 12th Records Management Quality Awards record (Fengyuan Motor Vehicle Station)
Center: Ceramic motor vehicle story wall (Kaohsiung City Motor Vehicle Office)
Right: Archive application of multimedia tour area (Kaohsiung City Motor Vehicle Office)

Road to Action

Yunlin Motor Vehicle Station has Won the First Grade Innovation Award for Management from the Ministry of Transportation and Communications

The innovative Electronic Search System for Suspended Licenses research project uses reverse reasoning to try to understand what people want from quality government services, and what they really need. When analyzing and evaluating current services, we use ideas from storage management: stock purchase, shelving, storage, order picking, and shipment, and applied this to license suspension: re-listing, resuming driving, obtaining license, and license payment. By paring down the process, we improved the service procedures, and effectively solved the problems. We first focused on the needs of customers (people), and then resolved the long term problems of system users (colleagues).

Time-saving in license management

After the approval of the innovation project's findings, we immediately came up with the plan and conducted a meeting. First, we started using color-coding to manage suspended licenses, and fixed the lighting, environment, and long-standing ventilation problems of the office. Licenses and registration now use clear bags and external wrapping, so they can immediately see if the license is correct, and also reduce dirt contamination. In addition, the management system uses Access to establish a database and application development, and Visual Basic and webpage PHP to save and manage the database. We then integrated wireless transfer and a fixed positioning index system, so we can quickly label where the licenses are stored. According to statistical analysis, this innovative research project can reduce waiting time by 833 hours each year, and save 10,000 pieces of A4 paper (180kg).

The public's approval – a win-win situation

Innovation research is a new practice that the public and our colleagues. Not only does it increase the competitiveness of government agencies, it also refines innovative thinking and improves basic services. In summary, Yunlin Motor Vehicle Station encouraged colleagues to use innovation projects to develop relevant systems, and hope there will be simpler procedures, technological support, humane management and information, thus providing simpler operating procedures and quality service to the public.

Electronic management and search system for suspended license plates

We won the 2014 First Grade Innovation Award for Management from the Ministry of Transportation and Communications

Participation in the Care Services after the Kaohsiung Gas Explosion

At midnight, on July 31st, 2014, the petro-gas explosion in Kaohsiung caused severe injuries and property losses. Kaohsiung City Motor Vehicle Office was first on the scene to help the victims, and contacted Kaohsiung City Government. We worked with Kaohsiung City Government's Transportation Bureau, Environmental Protection Bureau, Revenue Service Office, District Offices, and Household Registration Offices to provide adequate care for members of the public.

Active local support

To provide adequate care to victims, Kaohsiung City Motor Vehicle Office offered all kinds of local care services.

Immediate Press Release

We immediately announced the "Kaohsiung gas emergency measures," to protect the rights of victims and give them peace of mind. Those who could not obtain certification documents could go to the warning areas announced by Kaohsiung City Government for approval at 26 villages.

Cross-department co-operation to immediately control disaster conditions

We worked with the Transportation Bureau to send messages and forms to Household Registration Offices, gathered the information of the 351 damaged and towed vehicles in the disaster area, and immediately entered these into the Motor Vehicle and Driver Information System for reference.

Providing counseling services

We visited Wu Chuang Elementary School and Ling Ya District Office, and provided victims with household and counseling services.

Increase the cooperation of mobile motor vehicle agencies

We worked with the Kaohsiung City Government's Transportation Bureau, Environmental Protection Bureau, Revenue Service Office and District Offices to provide "Cross-Department Motor Vehicle Services for the victims of the Kaohsiung gas explosion," helping the victims to deal with damaged cars, and providing general assistance.

The results of care services

This care plan conducted a total of 350 services: 10 re-issued licenses, 110 discarded licenses, 3 license cancellations, 3 suspended vehicles, and 138 regular vehicle inspections, as well as 86 fuel fee waivers.

Left, center: gas explosion care services
Right: The site of the Kaohsiung gas explosion

Road to Action

Promotion of Public Transportation in Remote Areas

From Typhoon Mindulle in 2004 to the 88 Flood in 2009, Provincial Highway 24, Wutai Guchuang Bridge (Formerly known as Ilah Bridge) and collector roads in Wutai Township, Pingtung County, have been damaged due to natural disasters. The hilly roads around the Tjarilik Village of Daren Township, Taitung County were damaged, meaning that buses could not enter the village, so the middle school students had to be driven by families or walk home for 1 hour and 3.5km to take the bus. TRA Yuli Station and Changgong, Taitung County (Changbing) had very few buses available. During holidays (New Year, Tomb Sweeping Festival, and Moon Festival), when people returned home at night, they had no buses to take. After Taitung University added Zhiben Campus, most students rode motorcycles between Taitung City and Zhiben Campus. Each year, there were many motorcycle accidents, and the commuting safety of residents and students has become a problem.

Public transportation needs immediate action

The route planning of public construction and highway buses is important to people's lives. The Directorate General of Highways third Maintenance Construction Office, has restored the connecting traffic of Wutai Township upon the completion of Guchuang Bridge, revitalizing local tourism. In addition, Kaohsiung City Motor Vehicle Offices has worked with Pingtung and Dingdong Buses to plan suitable highway bus routes, in order to satisfy the needs of residents and students and promote local traffic transportation development.

Wutai Township Scenic Route

From December 1st 2014, Pingtung Bus has restored the 8223 bus route "Pingtung City-Wutai Township route." Travelers can once again see the scenery of Wutai Mountain its surrounding valleys, and the beautiful cherry blossom. This will boost the tourism industry and economic growth of Wutai, and reunite people with long lost memories.

Shuttle services – students in remote areas are happy to learn

In order to relieve the difficulties of going to school for middle school students in remote areas, we worked with Dingdong Bus to open up special morning and evening routes to pick up and drop off students. The village chief of Tjarilik Village was there for the inaugural ceremony. He especially thanked

The Wutai Bus has been reactivated. Aunties eagerly took pictures

Wutai opening to traffic is wonderful

Left: The Tjarilik Love Bus of the Southernmost village in Taitung County
Right: Wutai people take the reactivated bus

motor vehicle units working with bus companies, as students can now walk five minutes to take the bus, allowing them to study more and help their families without worrying about getting to school.

Railway transfer – a convenient return home during holidays

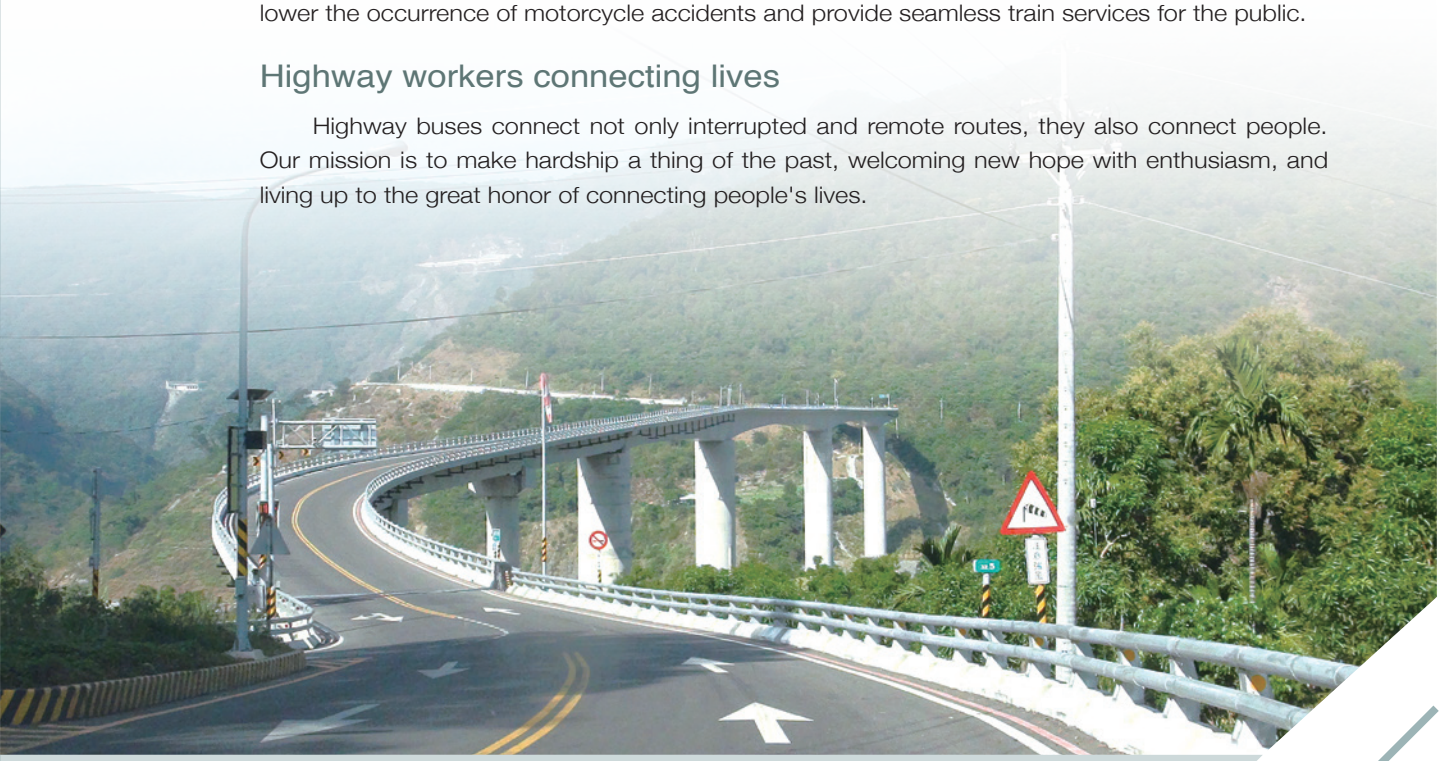
During the three major holidays (New Year, Tomb Sweeping Festival, and Moon Festival), at TRA Yuli Station and Taitung Coastline regions (Changgong and Changbing), the 8181 bus coordinated with the arrival time of the TRA going from Taipei to Yuli, and added midnight runs to provide for people coming from Changgong and Changbing.

Seamless service – connecting Zhiben Campus, Taitung University

The Dingdong Bus 8129 route was changed to circle inside Taitung University's Zhiben Campus, and then to Zhiben Train Station, in order to solve the commuting problems of students, lower the occurrence of motorcycle accidents and provide seamless train services for the public.

Highway workers connecting lives

Highway buses connect not only interrupted and remote routes, they also connect people. Our mission is to make hardship a thing of the past, welcoming new hope with enthusiasm, and living up to the great honor of connecting people's lives.



Rebuilt Guchuan Bridge

Road to Action

Execution Plan of Alishan Highway has Won the Innovative Road Safety Contribution Award

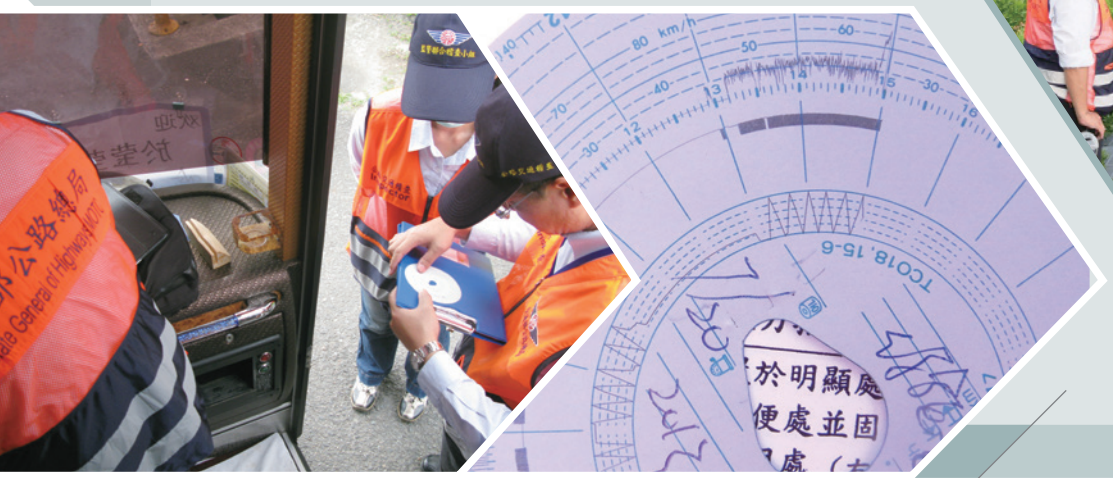
Alishan has become one of the most popular scenic spots in Taiwan, and is famous domestically and internationally. There are endless streams of tour buses every day, so when accidents occur, they cause severe passenger casualties. Despite the work of Chiayi Motor Vehicle Office to improve roadside inspections, accidents still occurred. From June 2012 to June 2013, there were 6 traffic accidents, which caused 2 deaths and 54 injuries, damaging the safety of road users and tarnishing the image of tourism in the area.

We created the first speeding ban using the event data recording card

The Alishan Highway is a sealed road going from Provincial Highway 18 24.9K (Chukou section) to 88.8K (Alishan National Scenic Area). With a total of 54km of continuous mountain roads, the whole route is dangerous, with no stopping points. Chiayi Motor Vehicle Office came up with the innovative method of using the driving logs of large tour buses' "event data recording card" as evidence for speeding violations from Provincial Highway 18 Alishan Highway 88.8 KM going downhill. Speeding cameras on a regular road only show speeding violation records at one location, meaning drivers are only prevented from speeding over a short distance. Chiayi Motor Vehicle Office used the event data recording card to stop drivers speeding over a long distance. We can monitor and inspect the driving conditions the whole time, and stop the drivers from thinking they can get away with it, ensuring that people obey the speed limit.

The results of implementation won the Innovative Road Safety Contribution Award from MOTC

Since July 1st 2013, police and safety inspection teams have used event data recording cards to see if tour buses on Alishan Highway have violated the speed limit, with excellent results. From November 15th 2013, all large vehicle are included, and a total of 153 routes and 3,215 buses have been inspected, 45 speed violations were found, and 23 EDR violations were found. This plan not only reduces the traffic accidents of tour bus, it has also received good words from the judges of the 6th Innovative Road Safety Contribution Award from MOTC, and they awarded us first place.



Left: Interception status
Center: Investigation of event date recorder driving tracks
Right: Inspection status

Activation of the Highway Bus Status Update System

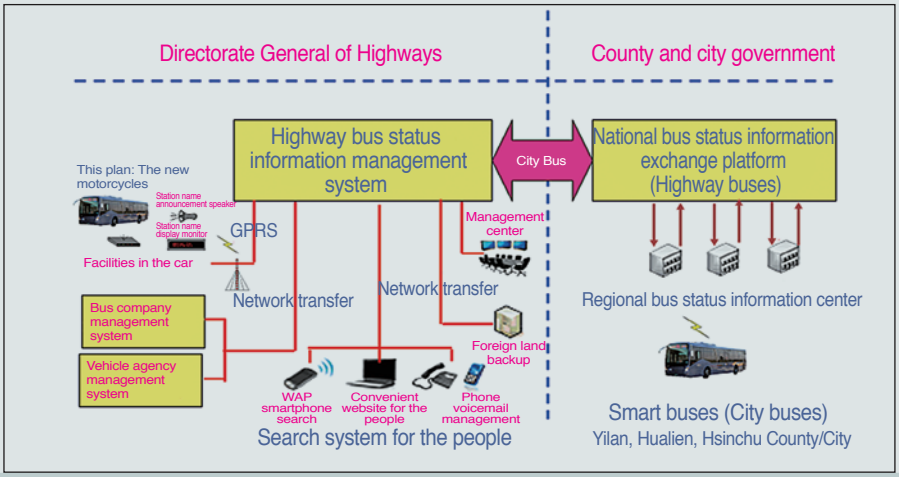
In recent years, due to the drastic changes to the overall domestic transportation environment and the running of highway buses, to promote the bus transportation industry we have assisted bus companies to manage their buses and provide people with necessary bus information. In 2009, the Directorate General of Highways promoted the plan of establishing a "highway buses status update system." After many years of hard work, it was officially launched on January 1st 2014, and has provided 510,000 people who take buses daily with accurate and valuable information.

Online satisfaction has met our standards

This system manages the status updates of 51 highway bus companies in Taiwan, 7798 highway bus routes, 70,000 bus stop locations, and 5,890 buses. Highway buses in Taiwan have officially entered the world of smart service, as the public can now use the internet, smartphones, and telephones to search for bus routes, bus stop locations, bus schedules, ticket prices, and arrival times of buses. Through the operational efficiency and service quality improvements, we have increased people's willingness to take buses. As of December 31st 2014, 3,070,000 people had used the internet to search our webpage, the smartphone app had over 280,000 downloads, and the satisfaction rate on Android and iOS systems was over 4 stars.

Diverse interfacing channels

This system currently serves 31 organizations (including county and city governments, agencies, schools and bus companies). Taipei City and New Taipei City have applied for service, providing related routes, status information, bus waiting booths, bus stops, and estimated arrival time, and the service application projects "Taiwan Tour Bus" and "Travel in Taiwan." In the future, the database of this system will provide free interfacing application services for civil groups and academic organizations to improve the accuracy of this system. For routes that have not met accuracy standards, the Directorate General of Highways will continue to conduct reviews and improvements.



Structure of "Highway Bus Status Update System"

Advertisement for the "Highway Bus Status Update System"

Smartphone APP of "Highway Bus Status Update System"

Road to Action

Conducted Camp Activities for Motorcycle Safety and Defensive Driving

In response to the higher rate of motorcycle accidents compared to the overall rate of vehicle accidents, the motorcycle licensing system now requires written tests to be completed for light motorcycle licenses, and written tests and basic skills road tests for regular and heavy motorcycles. But despite these measures, training courses mainly included content related to driving ethos and defensive driving concepts. Currently; there is no motorcycle training mechanism to improve the practical skills of drivers, and the safe driving abilities of people on difficult roads. New drivers can still have accidents due to inexperience and deficient skills. This plan used Shilin Motor Vehicle Station's vehicle testing course to establish a "motorcycle safety and defensive driving course." We have simulated all kinds of road conditions, so students can understand the concept of correct handling of motorcycles on special roads through practical experience. They can improve on bad driving behaviors and habits, in order to ensure their own safety and improve general traffic safety.

Associate Professor Wu made a speech during the seed instructor experience event

Students from Central Police University experienced the agile control course

Colleagues from Shilin Motor Vehicle Station showed guests from Central Police University the gravel road

Motorcycle safety and defensive driving course received good feedback

The course was visited by Korean Research Institute staff during construction. In August, 2014, Shilin Motor Vehicle Station invited all vehicle offices under the Directorate General of Highways, Training Institute, driving schools, scholars, experts, schools, civil agencies, and media. From September to December, 2014, 167 people have visited. We have received good feedback from all areas.

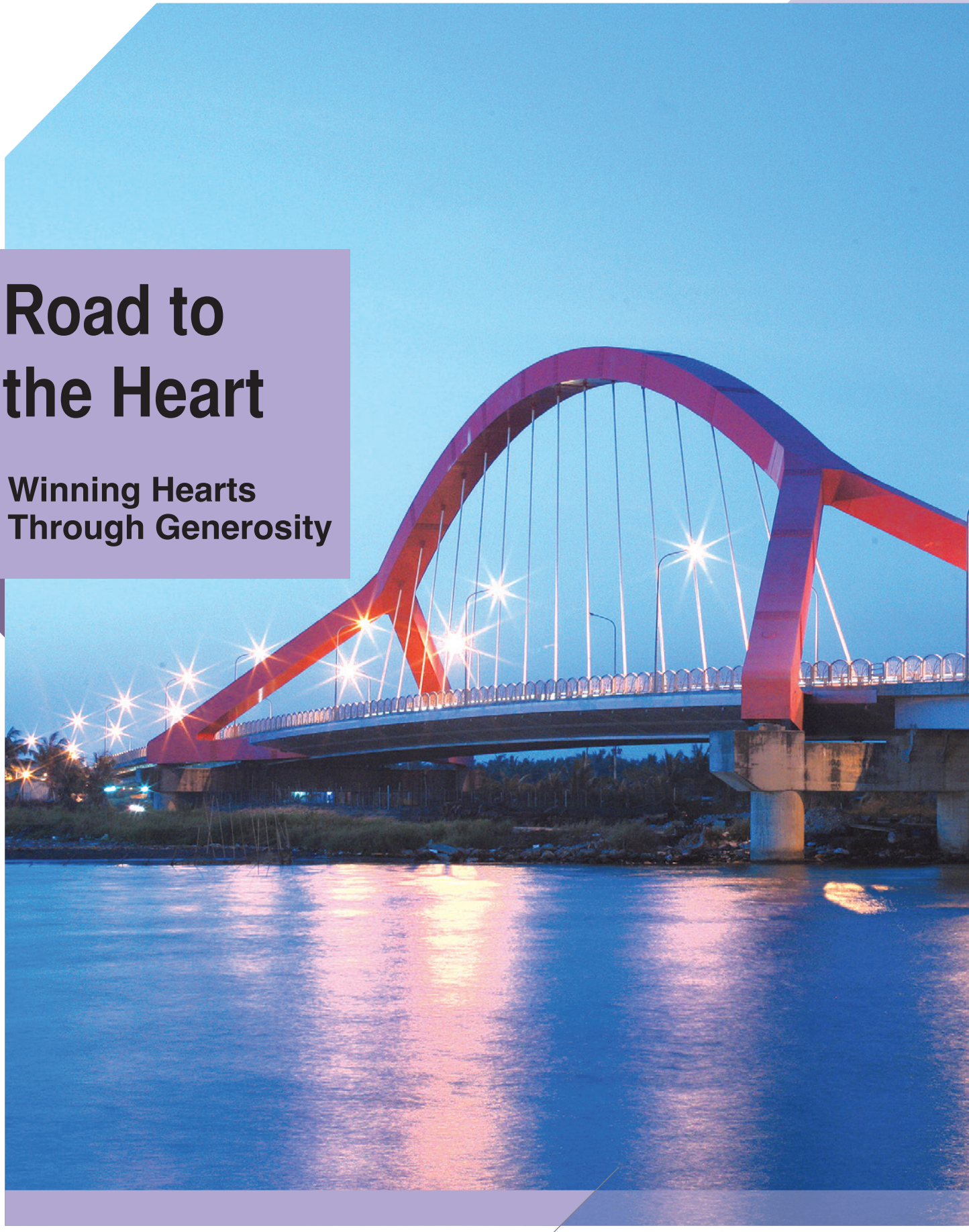
Improve riding skills, lower accident rates

In the future, we plan to open reservations to school groups, new motorcyclists, and individuals. We have taken the public's opinions on board and strive for improvement. We hope that through the professional training of our coaches, riders can not only learn mutual respect and courtesy for other road users, they can use their good riding skills to avoid accidents, and ensure the safety of their own lives and property. This course is the basis for traffic and motorcycle safety policies, and through decreasing motorcycle accidents, we hope to improve overall road safety.

Left: Colleagues from Shilin Motor Vehicle Station showed guest from Central Police University a wet and slippery road
Center: Teachers and students from Central Police University and staff and coaches from Shilin Motor Vehicle Station had a picture taken together
Right: Coaches explained the experience procedures to the students from Central Police University

Road to the Heart

Winning Hearts Through Generosity



Road to the Heart

The New DGH Building is Opened

To give staff a permanent and focused working space, the construction of the DGH office building was approved at the 55th meeting of the National Assets Management Committee. A budget of TWD1.2616 billion was approved by Executive Yuan, and the budget for renovation and relocation and the purchase of office furniture and facilities was 158.935 million. The construction work took three and a half years, finally reaching completion on March 17th, 2014, and was officially opened on May 2nd by former Director of MOTC, Yeh Kuanshi, and Deputy Director Wu Mengfen. The new office building consists of 12 floors and 2 underground floors, and has a green architecture design. The double layered outer wall increases the heat insulation of the property, and the outer wall is covered in three dimensional foliage, creating a city forest image.

Blessing ceremony of new building relocation

The Disaster Prevention Center facilities of the DGH were expanded so that all prevention information can be displayed and compared on 16 monitors, greatly enhancing the efficiency of the decision-making process. The new building has an information center that runs on green energy, with real-time access to all 125 national network points, 59 servers, and 16 websites (installing more). We have also established a private cloud platform that contains the virtual drives of the DGH and affiliated agencies, helping us to reach our energy conservation, carbon reduction, information backup, and maintenance management goals.

The planning, design, construction, and operation of the new building all fit in with the national drive for energy conservation and carbon reduction. The building was visited by former Premier Jian Yi Hua, Premier Mao, Director and Deputy Director of MOTC, members of the Control Yuan, Maritime and Port Bureau, TRA, and Chunghwa Post Co. Ltd, and our efforts in promoting green architecture were applauded by all who visited. The new building has become an example of new government constructions, and has written a new page in the history books for the DGH.

Left: Inaugural ceremony of the new building
Center: Former Premier Chiang of the Executive Yuan visited
Right: Deputy Premier Fan visited

Road to the Heart

Established Traffic Accident Investigation Committees in 8 Districts

As required by Article 67 of the revised Highway Law, the DGH planned ten auto Traffic Accident Investigation Committees in the eight former Taiwan Province districts: Taoyuan County, Hsinchu and Miaoli, Changhua County, Nantou County, Chiayi and Yunlin, Pingtung and Penghu, Keelung and Yilan, Hualien and Taitung; and the two counties of Kinmen and Lianjiang, for a total of 10 committees. In order to make sure the evaluations went smoothly, the DGH first used mission grouping to split the work into evaluation and consultation tasks. On November 12th 2013, the Executive Yuan, through official letter YSYZZ No. 1022261023, approved the "DGH Provisional Auto Accident Evaluation Regulations", "Auto Accident Evaluation Principles" and prepared a schedule. It came into effect on January 1st 2014, and was put on record for future reference by the Examination Yuan on April 22nd, 2014 through offical letter RKTZ 10300022131. So far we have established the auto Traffic Accident Investigation Committees in the eight aforementioned former Taiwan Province districts: Taoyuan County, Hsinchu and Miaoli, Changhua County, Nantou County, Chiayi and Yunlin, Pingtung and Penghu, Keelung and Yilan, Hualien and Taitung (abbreviated to evaluation committees below).

Kinmen and Lianjiang Counties did not fulfill the requirements for establishing evaluation committees, but after taking regional factors into consideration, the committees were still deemed necessary. Under the jurisdiction of Taipei City Motor Vehicle Office, we used the task grouping method to establish the evaluation committees in the two counties, and the DGH set up the "Kinmen and Lianjiang Counties Auto Accident Evaluation Committee Checkpoints." In the future, when motor vehicle offices have been established in all areas by the DGH and MOTC, the evaluation committees will be dissolved, and the motor vehicle offices will be responsible for unit dispatching. To carry out this work, the Executive Yuan approved the reassignment of 22 employees and 8 custodians to the evaluation committees, and one person to the DGH from Kinmen County Government.

Left: Traffic accident investigation meeting
Right: On site traffic accident investigation

Road to the Heart

Shared the 2014 Achievements of Relax of Regulations

In order for the DGH to provide a more caring service and enhance administrative efficiency, regulations were loosened 2014. Nine items were mentioned, as follows:

1. In March 2014, we revised the road inspection criteria to ensure the correct quotas were met.
2. In March 2014, we revised Article 15 of the Traffic Violations Standard Penalty, and increased the restrictions of Item 2, Article 36. We have extended the time before offenders must appear in court, allowing rental companies to conduct responsibility procedures, and making the process more convenient for people.
3. In April 2014, we have revised Items 8 and 9 of Article 4 of the Car and Transportation Industry Evaluation Regulations, to better serve the needs of transport companies, and provide guidance for transport companies that are expanding operations and upgrading service abilities.
4. In July 2014, in order to make the licensing system more convenient for students, we relaxed regulations for students who have lost their license registrations and those taking the driver's license tests.
5. In July 2014, we decided to relax Articles 15 and 16 of the Road Traffic Safety Regulations, meaning people won't have to carry their IDs.
6. In August 2014, we relaxed Article 21, Section 1, Paragraph 1, Item 3 of the Private Driving Instructors Regulations, reducing the minimum driving experience for new instructors from 3 years to 2 years.
7. In September 2014, we revised the Annual Evaluation of Car Inspection Garages at the DGH Motor Vehicle Offices. We have improved the annual inspection garage evaluation work.
8. On September 30th, we announced that under Article 23, Item 15 of the Traffic Safety Regulations, the side panels of small trucks can now be remodeled under the same registration, therefore legalizing mobile food-vending trucks.
9. We have relaxed the age restriction on the Motorcycle Safety Course to allow people under 18 years old to be accompanied by a close relative of over 20 years of age. We hope to contribute to traffic safety by educating the younger generation in correct road use.

Left: Discussing about relax of regulations
Right: Lecture and study of traffic safety for those people who are under 18

Road to the Heart

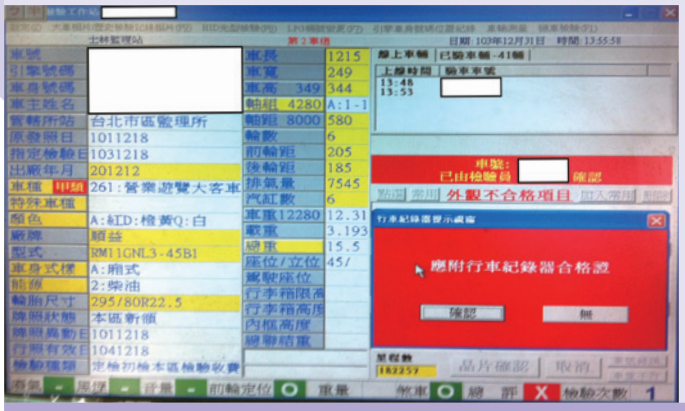
Large Vehicle Inspections and Special Case Evaluations in 2014

Vehicle inspections carried out by the DGH motor vehicle agencies are important to the safety of road users. For large vehicles, severe traffic accident rates and death rates are higher than those of small vehicles due to the different radius of the inner wheels, fishtailing, and blind spots. Due to insufficient staff at motor vehicle offices for vehicles inspection, we authorized private inspection garages to carry out the inspections. Civil inspection garages that are in compliance with current inspection regulations, are not only important to the credibility of motor vehicle agencies, but also affects the public's road safety. In order to assure the quality of inspections and the responsibilities of managing civil inspection garages, the DGH conducted the "Large Vehicles Inspection and Special Case Evaluation" in 2014. For safety purposes, DGH sent 16 people from the Government Ethics Office. In our evaluation of the vehicles management sections of all the motor vehicle offices, we found 10 violations, and in a random inspection of 22,233 vehicles, 399, or 1.795% of vehicles were found to be unsafe. We can see that some companies used illegal methods to raise inspection pass rates in order to attract customers.

Through this inspection, the DGH first discovered the deficiencies, immediately made improvements, and held an improvement review meeting afterwards. We have sent out notices regarding violations and follow-up processing, and the DGH has also been actively involved with law revision and establishing a complete inspection system. We emphasized precaution, guidance and regulation advocacy for companies. We hope to use multiple channels to stop corruption, helping companies to operate in compliance with the law, in order to establish a high quality inspection environment, and maintain a high degree of road safety.

On-board camera test pass certificate check

Image inspection work



Regular inspection screen

Field inspection work

Road to the Heart

Conduct Vehicle Inspection and Corporate Integrity Seminar

The DGH is in charge of all motor vehicle services, and manages 7.5 million cars. Due to limited manpower, in order to maintain convenient services, we authorize 523 inspection garages to conduct regular car inspections. Sometimes we receive reports of companies conducting illegal inspections, which severely affects public safety. In 2014, the DGH conducted special inspections for large vehicles, and discovered that some inspection garages did not conduct inspections according to regulations. In order to emphasize the importance of regulations and encourage corporate social responsibility, we conducted three Car Inspection Garage Corporate Integrity Seminars in northern, central, and southern Taiwan. Inspection garage owners personally came to the event, and we also invited Chief Inspector Chu Chao Liang of Taiwan High Court, Taichung Branch Court and Ministry of Justice, and the Anti-Corruption Agency to give speeches on "Corporate Integrity and Legal Knowledge" and "National Anti-Corruption Policy Explanation". The Motor Vehicle Department focused on the current policy of "Inspection Garage Management and Regulation Advocacy", and clearly reminded companies to comply with the regulations.

As the DGH is responsible for guidance, we meet with the Taiwan Automobile Inspection Association and regional groups to establish a social responsibility partnership. In the meeting, we conducted the Anti-Corruption Declaration Signing" ceremony, and read the "Anti-Corruption Regulations" to Car Inspection Garages, DGH and MOTC staff, the Director of the Taiwan Automobile Inspection Association and all of the regional group leaders. We also invited the Ministry of Justice, Anti-Corruption Agency, DGH and MOTC officers as witnesses. We hope through the collective signing, we can establish an excellent atmosphere corporate integrity. The three events went smoothly, and many company owners participated. We believe that this will make inspection garage owners more aware of the concepts of law compliance, corporate social responsibility, service quality, helping to fight corruption and maintain the efficiency of motor vehicle services.

Through the signing of "anti-corruption declaration," we have established a corporate integrity atmosphere

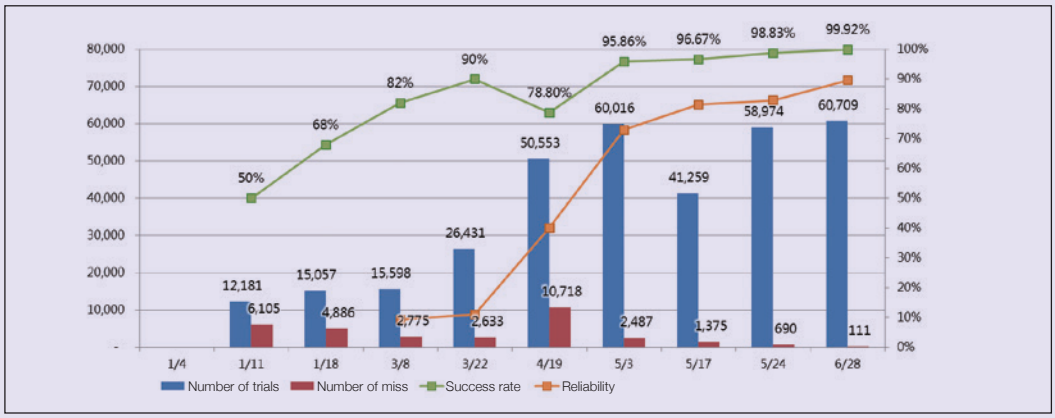
Road to the Heart

Reality Test of the Third-Generation Motor Vehicle and Driver Information System

The Third-Generation Motor Vehicle and Driver Information System was installed in September 2012. During installation we went through the basic installation of software, hardware and information security, the development of Application system, and various stages of the test. In 2014, we successively held 10 national drills for going live, and started the reality test on July 7th 2014.

National drills for going live

Due to the diversity and complexity of the Third-Generation Motor Vehicle and Driver Information System, we had to ensure that the installation team could adequately solve system problems and fulfill the requirements of all departments using the system. Since 2014, we have occasionally conducted complete system tests on Saturdays with 37 motor vehicle offices, 5 special municipalities traffic arbitration centers, and 510 vehicles inspection agents. A total of 10 drills were held, 18,738 people participated, and 340,778 cases were handled. The final success and efficiency rate reached over 99%. The confidence rate was over 90% as well. We have achieved the KPI of: 99% success rate, 90% efficiency rate, and 90% confidence rate.



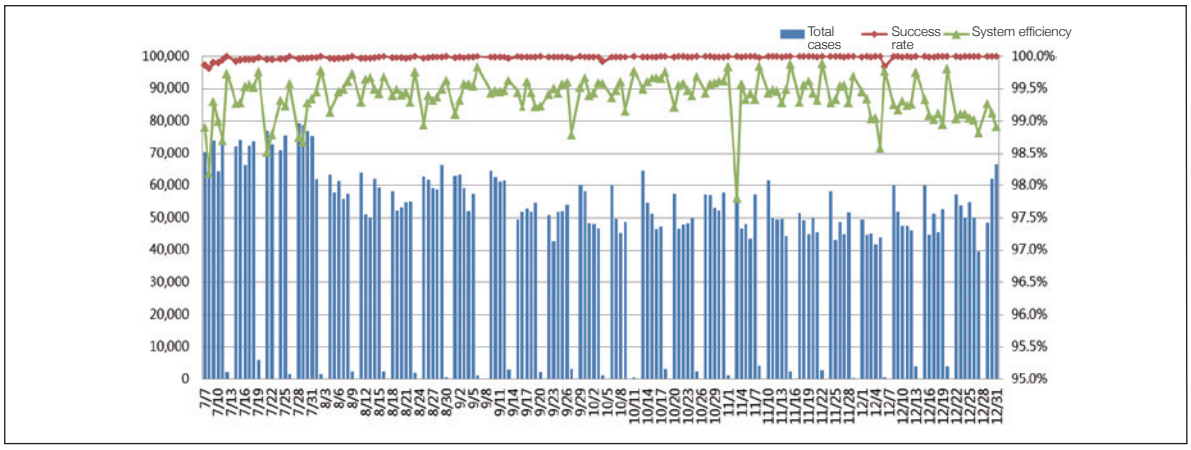
Run chart of 10 national drills for going live

Level 2 contingency operation of reality test – Former Director Yeh of MOTC visited the Command Center in Taipei Motor Vehicle Office

Start reality test

In response to the national drills for going live achieving its KPIs, the Third-Generation Motor Vehicle and Driver Information System officially entered the reality test stage on July 7th, 2014. It started providing people with all the motor vehicle services, and Second-Generation system is ready as a backup. The dual system assures that people will not be inconvenienced. We have also established the Third-Generation Motor Vehicle and Driver Information System chief command center, and have activated a 3 level contingency plan, in order to immediately grasp the operational status of the system.

1. Over the first two days of the reality test we conducted the level 1 contingency operation. We established the chief command center at the Third-Generation Motor Vehicle and Driver Information System Project Management Office, and established chief command center at all the motor vehicle offices. All the contingency staff worked around the clock during the operation, and we conducted reality test review videoconference in the morning, noon, and afternoon of every day.



Run chart of reality test

2. The level 2 contingency operation was carried out over the first 2 weeks of the reality test. The chief command center was moved to the DGH information office. Depending on the situation, we sometimes conducted reality test review videoconference with the command centers.
3. After the level 2 contingency operation ended, the level 3 contingency operation was conducted until the end of July. All the command centers moved to all the information offices of their respective motor vehicle offices. Due to the peak period of new license plate, vehicles fuel fee collections, and driver' s license tests, we increased monitoring of system efficiency and service window status to assure a high quality of service.
4. After the end of the level 3 contingency operation, we continued to conduct reality test. At the end of December 31st 2014, 37 motor vehicle offices and stations handled 7,121,839 cases, with an average success rate of 99.98%, reaching 100% on ten days of the trial. With the gradually improving stability of the Third-Generation Motor Vehicle and Driver Information System, deficiencies were eliminated, and we are hopeful that we can provide people with more convenient motor vehicle services in the future.

Left: The first day of the reality test – Window service situation (Taipei Motor Vehicle Office)
Right: Level 1 contingency operation of reality test – Chief command center (Project management office)

Road to the Heart

Establishment of the Thb-IDC Information Center

With recent advances in technology, the requirements for network and information systems has also increased. In 2011, in accordance with the centralized information policy of the National Development Council (Former Research, Development and Evaluation Commission), the DGH started establishing a basic network system, and in 2012 we centralized the system directory and mail services. In 2013, we established private cloud storage service, and in 2014, we took the opportunity to move to a new office building with more space, solving the electricity and air conditioning problems of the old computer rooms. We established a new information center (thb-IDC) in order to lay a steady foundation for the information system service, and respond to future increases in demand.

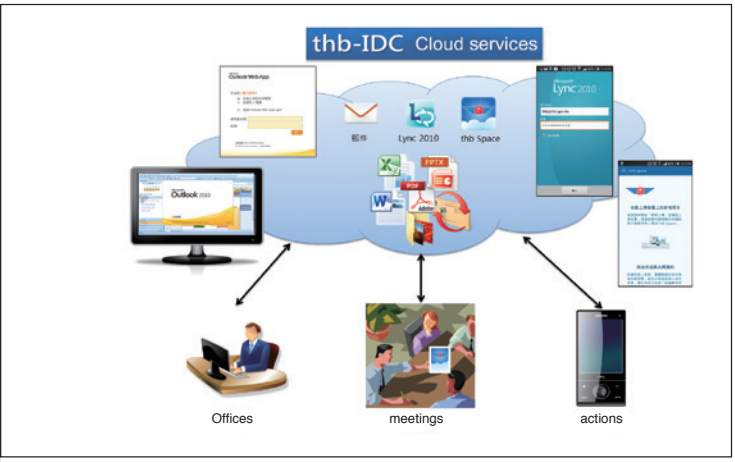
Establishment of thb-IDC green energy Information center

Alongside the construction project of the new office building, the DGH Information Room started planning in 2011, and using green architecture design concepts built an energy conserving information center with a power usage effectiveness (PUE) under 1.8. The facilities include computer cabinets, air conditioning, electricity, and uninterruptible power supply. We adopted a modular design to lower the maintenance cost and enable future expansion flexibility. As for fire safety, we use the environmentally sustainable gas (FM200) fire extinguishing system, and installed very early smoke detection apparatus in order to improve overall safety. The air conditioning uses InRow single split type cold-hot aisle. It can upgrade the refrigeration efficiency in order to achieve the goal of energy conservation. The interruptible power supply uses the 125 kilowatt backup system. It can maintain at least 30 minutes of operation. By supplementing the electric generating set of the building, it can assure stable electricity supply. Currently the overall PUE value is approximately 1.7 or lower.

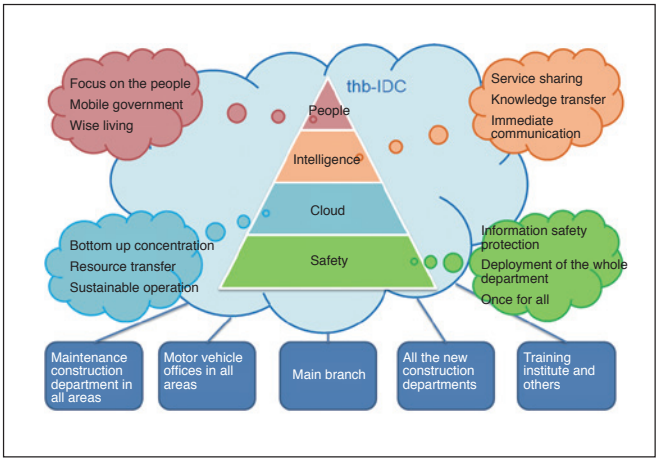
Information relocation, non-stop service

In order to help colleagues move to the new building smoothly, on March 17th, DGH information enlisted over 60 people (including contractors) to complete the installation of servers and office information facilities, removal, boxing, transport, unpacking, shelving, testing, and we were able to go online in just 48 hours. Over 20 trips, we relocated 294 servers and network facilities, 726 personal computers, and 78 printers. We planned the route, schedule, staff, and

We established a brand new thb-IDC information center



Cloud service diagram for thb-IDC



Information service pyramid of "People, Intelligence, Cloud, and Safety"

problem reporting procedures before relocation, and thanks to the support of the information team, we successfully completed the information relocation.

Premier Mao (He was Deputy Premier at the time) visited thb-IDC

Simultaneous service and monitoring

The Information Center monitoring room was equipped with 8 split screen wall displays, monitored by the DGH team, in order to manage the status of 145 information points, 60 servers and 27 website services, information center temperature, humidity, fire safety, electricity, and building access. We can also use the SafeTaiwan Platform to monitor the "mountains, waters, roads, bridges, people, and hazards" to assist the Highway Disaster Prevention Center.

Improving the information security of thb-IDC

In order to maintain information security, the thb-IDC must engage in data loss prevention (DLP), advanced persistent threat (APT) Prevention, and security operation center (SOC) services

Data loss prevention: detects whether the contents of E-mail, network, and FTP file transfer content contain personal data, establishes evaluated risk values based on set policies, and notifies the source user.

Advanced persistent threat: immediately analyzes whether there is a malicious software in the e-mail, and can regularly scan personal computers to see whether it is infected with spyware.

Security Operation Center: since January 1st, 2014, the DGH authorized Acer team (including Acer, Solution Founder, and Information Security Service Digital United) to conduct information security monitoring. During the daytime on weekdays, the staff of Solution Founder monitored maintenance operations, after work and weekends, Information Security Service Digital United conducted long distance monitoring. In the case of abnormal connections or attack behavior, whether internal or external, they are reported immediately. The maintenance operation team conducts follow-up inspection, examination, analysis, repair, and case closing, in order to maintain complete information security.

Smart, people-focused cloud services

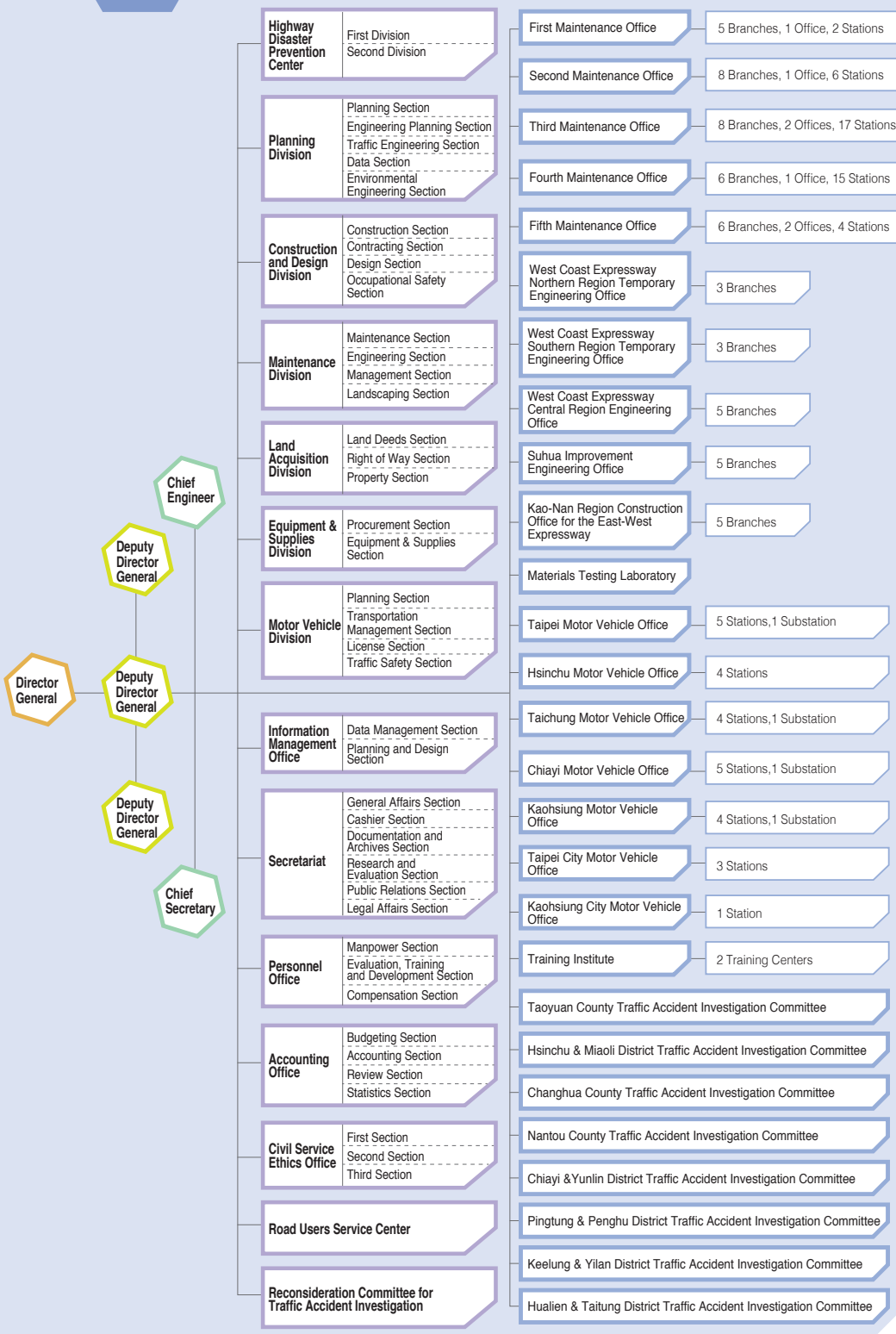
In a secure information environment, the information center provides all kinds of smart cloud services. Currently, we have completed a secure communication integration platform (Lync), mail sending services, and private cloud storage (thb-Space). In the future, we will continue to develop the Employee Information Portal, virtual desktops, and mobile offices. We hope to continue to provide the best services using the information service pyramid that focuses on "People, Intelligence, Cloud , and Security."

Road to Success

Shine Brightly and Embrace the Future

Road to Success

Organizational Structure



Administrative Performance

Project Name	Annual Budget (Thousands)	Timeframe (years)	Supervisory Level
Follow Up to the West Coast Expressway Continuous Construction Project	4,209,300	2009-2019	Excutive Yuan
East-West Expressway Construction Projects and Network Improvement Projects	1,517,478	2009-2016	Excutive Yuan
The Suhua Highway of Provincial Highway No.9 Mountainous Section Improvement Project	5,490,118	2010-2017	Excutive Yuan
Management of Tsengwen, Nanhwa and Wushantou Reservoirs to Stabilize Southern Water Supplies Project (DGH Portion)	50,000	2010-2015	Excutive Yuan
Provincial Highway 2C Construction and Improvement Project	324,633	2008-2015	Ministry
Region-Based Road System Construction Project (Highway System)	5,747,365	2009-2014	Ministry
Follow Up to the South Link Highway of Provincial Highway No.9 Widening Project	2,552,603	2011-2017	Ministry
Third-Generation Motor Vehicle and Driver Information System Establishment Projec	852,782	2012-2014	Ministry
Highway Public Transport Enhancement Project	3,699,626	2013-2016	Ministry
Provincial Highway Improvement Project	4,996,674	2013-2018	Ministry
Highway Maintenance Project	7,978,685	2014-2014	Autonomous Management

Research and Development

Research Items	Research Agencies	Research Personnel
Research on the Performance of Warm Mix Asphalt (WMA)	Materials Testing Laboratory	Hwang Sunn-jer, Lin Wen-chung, Chen Hsien-chou, Hon Min-jay, Lu Yi-ting
Study of Reclaimed Asphalt Pavement (RAP) as Aggregates for Road Subbase and Base	Materials Testing Laboratory	Hwang Sunn-jer, Lin Wen-chung, Chen Hsien-chou, Lu Yi-ting, Cheng Chun-sheng
A Study of Hot-mixed Asphalt Patch Slabs Applied on Pavement Maintenance	Materials Testing Laboratory	Hwang Sunn-jer, Chen Hsien-chou, Hong Ming-ze, Su Shin-yung, Lu Yi-ting
Research on Using Asphalt Brick for Pothole Patching	Third Maintenance Office	Yang Tsung-yueh, Chang Meng-kung, Huang Kai-hui, Chen Kung-te, Huang Chih-hui, Lin Jin-jhe
Research on Motorcycle Safety Planning and Defensive Driving Experience	Shilin Station ,Taipei City Motor Vehicle Office	Yeh Shi-kun, Wong Chi-jen, Chen Hui-qiong, Chen Yong-hunag, Pai Chia-hua
Automatic Questionnaire Analysis System	Sinying Station ,Chiayi Motor Vehicle Office	Ho Mei-jing, Hong Guang-chen ,Chuang Jing-hui, Yeh Guang-hui
Motorcycle Testing and Training Motor Vehicle Service on Campus	Yunlin Station ,Chiayi Motor Vehicle Office	Kao Fu-tsai, Wu Chi-zhe, Wu Meng-feng, Chu Zhen-chen, Chen Zi-jun, Huang Ya-lin
Development of Vehicle Inspection Information System	Kaohsiung City Motor Vehicle Office	Chen Tien-tze, Lee Zuo-hong, Chen Ming-chi, Yang Wen-ho
Push and Cloud Technology Applications	Kaohsiung City Motor Vehicle Office	Ho Ming-yong, Huang Long-shen, Yang Shu-hui, Lee Zhen-hao, Chu Li-jen, Deng Ya-fang

Awards Results

Serial No.	Evaluation(Verification) or Competition Name	Prize-winning Unit	Place
1	The 6th Government Service Quality Award from the Executive Yuan	Directorate General of Highways	Service Quality Award
2	2014 Golden Way Award from the Ministry of Transportation and Communications, Pedestrian Information (Provincial, country highways)	First Maintenance Office	First Place
3	Provincial Highway 31, from Provincial Highway 66 extending to Provincial Highway 1, initial evaluation for Golden Quality Award for first new construction contract (5K+100-6K+500)	First Maintenance Office	First Class
4	"Citizen Monitoring of Public Construction Implemention Project" 2013 Annual Evaluation received excellent grading Report No.10200001442	Yuanlin Branch, Second Maintenance Office	Excellent
5	In 2014, Ministry of Labor promoted the 2014 Promotion of Occupational Safety and Health, Public Construction and Staff Selection (Provincial Highway 21, Beigang River Bridge reconstruction)	Nantou Branch, Second Maintenance Office	Excellent
6	Conducted the 2013 annual transport personnel natural disaster rescue training	Third Maintenance Office	Excellent
7	The 12th Golden Wingspan Award	Third Maintenance Office	Excellent
8	The personnel selection for occupational health and safety and quality public construction (Provincial Highway 21 242K+530 Baolong Bridge reconstruction)	Third Maintenance Office	Honorable Mention
9	On July 16th, 2014, Ministry of Transportation and Communications evaluated the Region-Based Road System Construction Project	Fourth Maintenance Office	First Class
10	2014 Golden Way Award of Excellent Landscape from Ministry of Transportation and Communications	Lo Shao Branch, Fourth Maintenance Office	First Place
11	2014 Golden Way Award for Road Condition Maintenance from Ministry of Transportation and Communications (Provincial Highway and adopted County Highway) Construction Department	Fourth Maintenance Office	First Place
12	2014 Golden Way Award of Excellent Landscape first place for manager of the Construction Department of Ministry of Transportation and Communications	Fourth Maintenance Office	First Place
13	2014 Golden Way Award for Road Condition Maintenance from Ministry of Transportation and Communications (Provincial Highway and adopted Country Highway)	Lo Shao Branch, Fourth Maintenance Office	First Place
14	The 12th Golden Wingspan Award	Fifth Maintenance Office	First Grade Award
15	Provincial Highway 20 Ping Ho Bridge Reconstruction, Golden Safety Award	Fifth Maintenance Office	Honorable Mention
16	Management of Tsengwen, Nanhwa and Wushantou Reservoirs to Stabilize Southern Water Supplies Project (DGH Portion) (Overseen by the Executive Yuan)	Fifth Maintenance Office	First Class
17	The 12th Golden Wingspan Award	West Coast Expressway Northern Region Engineering Office	First Grade Award
18	Follow Up to the West Coast Expressway Continuous Construction Project (Overseen by the Executive Yuan)	West Coast Expressway Northern Region Engineering Office	First Class
19	East-West Expressway Construction Projects and Network Improvement Projects (Overseen by the Executive Yuan)	West Coast Expressway Northern Region Engineering Office	First Class

Serial No.	Evaluation(Verification) or Competition Name	Prize-winning Unit	Place
20	Follow Up to the West Coast Expressway Continuous Construction Project (Overseen by the Executive Yuan)	West Coast Expressway Central Region Engineering Office	First Class
21	East-West Expressway Construction Projects and Network Improvement Projects (Overseen by the Executive Yuan)	West Coast Expressway Central Region Engineering Office	First Class
22	The 13th Public Construction Commission Golden Quality Award	West Coast Expressway Central Region Engineering Office	Excellent
23	2014 Golden Way Award for Excellent Field Construction Evaluation from Ministry of Transportation and Communications	West Coast Expressway Central Region Engineering Office	First Place
24	Follow Up to the West Coast Expressway Continuous Construction Project (Overseen by the Executive Yuan)	West Coast Expressway Southern Region Engineering Office	First Class
25	East-West Expressway Construction Projects and Network Improvement Projects (Overseen by the Executive Yuan)	West Coast Expressway Southern Region Engineering Office	First Class
26	East-West Expressway Construction Projects and Network Improvement Projects (Overseen by the Executive Yuan)	Kao-Nan Region Construction Office for the East-West Expressway	First Class
27	2013 annual evaluation of motor vehicle agencies collecting vehicle fuel fees	Taipei Motor Vehicle Supervision Office	Excellent
28	Inspection of 2013 annual bonus given by the Executive Yuan (Highway and Motor Vehicle Services)	Taipei Motor Vehicle Supervision Office	First Place
29	Inspection of 2013 annual bonus given by the Executive Yuan (Dump Truck Safety Management)	Taipei Motor Vehicle Supervision Office	First Place
30	2013 annual evaluation of motor vehicle agencies collecting vehicle fuel fees	Hsinchu Motor Vehicle Office	Excellent
31	2013 "Trucking Survey", a trade vehicle quality check	Zhongli station,Hsinchu Motor Vehicle Office	First Place
32	2013 annual evaluation of motor vehicle agencies collecting vehicle fuel fees	Taichung Motor Vehicle Office	Excellent
33	2013 Service Quality Award from Ministry of Transportation and Communications	Fengyuan Station, Taichung Motor Vehicle Office	Service Quality Award
34	2013 annual evaluation of motor vehicle agencies collecting vehicle fuel fees	Chiayi Motor Vehicle Office	Excellent
35	Executive Yuan "Improvement Program for Traffic Order and Safety" 2013 annual inspection (Safety advocacy)	Chiayi Motor Vehicle Office	First Place
36	Executive Yuan "Improvement Program for Traffic Order and Safety" 2013 annual inspection (Safety advocacy) (2nd award)	Chiayi Motor Vehicle Office	First Place

Serial No.	Evaluation(Verification) or Competition Name	Prize-winning Unit	Place
37	The 6th Innovative Road Safety Contribution Award from MOTC-Highway motor vehicle group	Chiayi Motor Vehicle Office	First Place
38	The 12th Golden Wingspan Award	Kaohsiung Motor Vehicle Office	Excellent Achievement Award
39	2013 annual evaluation of vehicle fuel fees collected by motor vehicle agencies	Kaohsiung Motor Vehicle Office	Excellent
40	Conducted the 2013 annual traffic personnel preparation and natural disaster rescue drill	Kaohsiung Motor Vehicle Office	Excellent
41	2013 Executive Yuan "Improvement Program for Traffic Order and Safety" (Highway motor vehicle group)	Pingtung Station, Kaohsiung Motor Vehicle Office	First Place
42	The 12th Golden Wingspan Award	Kaohsiung Motor Vehicle Office	First Grade Award
43	2013 annual evaluation of motor vehicle agencies collecting vehicle fuel fees	Taipei City Motor Vehicle Office	Excellent
44	Executive Yuan "Improvement Program for Traffic Order and Safety" 2013 annual bonus inspection (Safety advocacy)	Taipei City Motor Vehicle Office	First Place
45	Executive Yuan "Improvement Program for Traffic Order and Safety" 2013 annual bonus inspection (Total group scores)	Taipei City Motor Vehicle Office	First Place
46	2013 Innovation Award for Management from the Ministry of Transportation and Communications	Kaohsiung City Motor Vehicle Office	First Grade Award
47	2013 annual evaluation of motor vehicle agencies collecting vehicle fuel fees	Kaohsiung City Motor Vehicle Office	Excellent Award

Major Events

1 January

1st	From this day, the depth of tread pattern of a tire is included as an item in regular vehicle inspection. In the interests of road safety, each vehicle is inspected to see the wear indicators are visible on the tire surface.
1st	"Provisional regulations for all vehicle accident evaluation committees from the Ministry of Transportation and Communications Directorate General of Highways" were announced from announcement JRZ 10250178481 from the Ministry of Transportation and Communications on December 30th, 2013, effective from January 1st, 2014. The Directorate General of Highways established 8 vehicle accident evaluation committees in Taoyuan County, Hsinchu, Miaoli, Nantou County, Changhua County, Chiayi, Yunlin, Pingtung, Penghu, Keelung, Yilan, Hualien, and Taitung.
1st	The "Budget Control System" of the Directorate General of Highways has been activated.
2nd	In order for the Executive Yuan's Consumer Protection Committee to assure the safety of public transportation during Chinese New Year, on January 2nd 2014, by working with the Directorate General of Highways, they conducted safety inspections of buses at Wu Tu Control Station, Taichung City Chaoma Bus Terminal, Sun Moon Lake, Pingtung County Pingtung-Eluanbi Highway, heavy traffic areas and scenic spots. A total of 120 buses were inspected, and 10 violations were reported.
2nd	All motor vehicle units under the Directorate General of Highways (Except Chiayi Motor Vehicle Office) started using our online attendance management system.
4th	Conducted the first online trial of "Third-Generation Motor Vehicle and Driver Information System".
6th	On Provincial Highway 21, from Namaxia District to Jiaxian District Riverbed Highway, the Directorate General of Highways built 12 steel bridges. The 12th bridge will be opened to traffic on January 6th, 2014.
7th	Conducted the design principles and bridge formation evaluation meeting for the "Provincial Highway 9 212k~214k Papaya River Bridge, 240k~243k Wanli River Bridge, and 246~247k Matai'an River Bridge reconstruction."
9th	Conducted the 2014 Chinese New Year Dispatch Project meeting, and completed the website Chinese New Year Dispatch Project. On January 21st 2014, we held a New Year press conference at Ministry of Transportation and Communications.
9th	The Directorate General of Highways, Veterans Affairs Council, Tourism Bureau, and Taichung City Government conducted the "2014 Wuling Farm Cherry Blossom Festival Traffic Dispatch Project Press Conference." We informed people regarding the schedule for the Cherry Blossom Festival in 2014 and related dispatch measures.
10th	Director Ma Wen-lin of the Ministry of Transportation and Communications Tourism Bureau was appointed as director of human resources at the Directorate General of Highways (Former director Wang Chi-ying has been promoted to director of the Ministry of Transportation and Communications Tourism Bureau). It was announced by Executive Yuan Directorate General of Personnel Administration in document ZCZ1020059817 on December 30th, 2013.
11th	Conducted the second online trial of the "Third-Generation Motor Vehicle and Driver Information System ", directed by Secretary Huang Yun-guei.
16th	Deputy director Lee Hui-hong was appointed director of the Directorate General of Highways Motor Vehicle Service. (Former director Wang Zhai-ju became the director of highway personnel training). It was announced by the Ministry of Transportation and Communications in document JR 10271014641 on January 3rd 2014.
16th	Director of the Directorate General of Highways Research and Evaluation Secretary Unit Wei Wu-shen was promoted to deputy director of Taipei City Motor Vehicle Office (Former deputy director Weng Shu-ho has retired), as announced by Ministry of Transportation and Communications in document JR 1027101464 on March 3rd 2014.
16th	Director Liu Ying-biao was appointed director of Chiayi Motor Vehicle Office (Former director Liu Yu-ling became the deputy director of highway personnel training), as announced by Ministry of Transportation and Communications in document JR 1027101464 on January 3rd 2014.

16th	Former director of Motor Vehicle Services Wang Zhai-ju has been appointed director of highway personnel training (Former director Liu Ying-biao became director of Chiayi Motor Vehicle Office), as announced by Ministry of Transportation in document JR 1027101464 on January 3rd 2014.
16th	Director of Chiayi Motor Vehicle Office Liu Yu-ling was appointed deputy director of highway personnel training as announced in document JR 1027101464. (Former deputy director Chen Hisn-bing has retired), as announced by Ministry of Transportation on January 3rd 2014.
18th	Conducted the third online trial of "Third-Generation Motor Vehicle and Driver Information System" ,led by Deputy Director Chen Mao-nan.
20th	The Instant Traffic Update App for provincial highways has been revised and put into use. It can now be used to check new scenic routes, prohibited roads for large vehicle, traffic control measures, hazard prevention information, live traffic information, and single key dial. In order to serve more road users, we developed a version for Windows Phone as well as the iOS and Android versions.
22nd	External SOC monitoring of the Directorate General of Highways' computer lab equipment maintenance commenced.
23rd	In order to implement the spirit of "trade contracts, people's votes, and collective achievements" the top 10 brilliant routes promotion was announced on January 23rd 2014, and remained active before the Chinese New Year.
24th	Conducted renovation of asphalt roads between Provincial Highway 26 88K+650~93K+522 and Provincial Highway 9 443K+884~464K+310, bank maintenance construction and safety inspection of hazards caused by Typhoon Tembin In August 2012 on Provincial Highway 9 408K+520~425K+069.
24th	Deputy director Hsu Ji-yuan of Third District Maintenance Construction Department was appointed deputy director of the planning department (former deputy director Lin Yi-hong has become Deputy director of highway personnel training). It was announced by the Directorate General of Highways on January 7th 2014.
24th	Deputy director of road maintenance department Ho Hong-wen was appointed deputy director of the Directorate General of Highways New Construction Department of (Former deputy director Lan Wei-gong has been promoted to director of the southern temporary construction department of West Coast Expressway). It was announced by the Directorate General of Highways in document RL1031000153A on January 7th, 2014.
24th	Deputy director of materials testing laboratory Lee Shun-chen was appointed director of Directorate General of Highways (Former deputy director Ho Hong Wen has become deputy director of the New Construction Department). It was announced by the Directorate General of Highways in document RL1031000153A on January 7th, 2014.
24th	Director of Road Maintenance Department Hsieh Zhe-hisung was appointed director of the Third District Maintenance Construction Department (Former Deputy Director Hsu Ji-yuan has been promoted to Deputy Director of the Directorate General of Highways Planning Department), as announced by the Ministry of Transportation and Communications in document JR10271014661.
24th	Deputy Director of Planning Department Lin Yi-hong was appointed director of the materials testing lab (Former deputy director Lee Shun-chen became deputy director of road maintenance department, Directorate General of Highways), as announced by the Ministry of Transportation and Communications in document JR1027101466 on January 3rd, 2014.
29th	In order to cooperate with the traffic dispatch on national highways during the Chinese New Year, we invited 11 television stations to help promote our national highway dispatch measures from January 29th to February 4th, 2014. To help traffic to flow smoothly and avoid traffic jams, we recommended people going to Taichung to take National Highway No.1, and people taking long trips north and south bound to take National Highway No. 3. People taking short trips were advised to take provincial and country highways, and those going north bound from Changhua to Hsinchu to take alternative routes (Provincial Highway No.76, 61, National Highways No.3, 1).
30th	There are a total of 12 steel bridge constructions from Provincial Highway 21, Namaxia to Wulipu River Bed Expressway. Due to our work with contractors, 8 of the bridges were opened to traffic on January 30th, 2014.

2 February

5th	The New Year dispatch has been completed. 151,000 buses moved 4 million people in total, and on National Highway No.5, 7,764 buses moved 127,000 people. The Directorate General of Highways worked together with police units to inspect large vehicle. A total of 1,243 large vehicles and 1,499 tour buses were inspected. No violations were found.
7th	Subgrade expansion work has started on Provincial Highway 9 235k+525~237k+490.
7th	The renovation work on Wannian Bridge on Provincial Highway 20 89k+050~89k+438 was completed. The bridge is now 123m long, the viaduct construction is 265m long and the effective width of subgrade is 9m. The bridge was opened to traffic at 15:00 PM this afternoon.
10th	Construction of the West Coast Expressway from Baishatun to Nantongwan has started.
12th	The Directorate General of Highways conducted the first bi-weekly meeting of "Third generation Information and SafeTaiwan platform", and officially named the platform "DriveTaiwan."
12th	From February 12th to 24th, the Wuling Farm Cherry Blossom Festival conducted dispatch measures such as total capacity control, road and traffic control, group reservations, and public shuttle. Wuling farm dispatch plan. Dispatch shuttles dispatched more than 85,000 people for 15 days. The average passenger capacity was 80%. It alleviated traffic jams on Provincial Highway 7 effectively.
12th	In order to encourage people to take public transportation to Wuling Farm from February 12th to 24th, we handed out little round stamps as souvenirs, which became a topic of discussion and helped popularized the use of public transportation.
13th	For the 2014 Lantern Festival in Nantou, the Directorate General of Highways used CMS on provincial highways to implement parking information and traffic control measures. We also helped with public transport transfers. The Directorate General of Highways, Second Construction Department and Taichung Motor Vehicle Office established the dispatch support teams, making a total of 8,239 buses available on 3 routes during the lantern festival, and 262,575 people benefited from their use.
20th	The Highway Personnel Training Agency conducted training on this year's motorcycle fuel fee payment reminders. In March we will start issuing the payment reminders, asking all motor vehicle offices to use available channels in environmental protection and civil affairs units to make the reminders more effective.
20th	Provincial highway 9 284k+221~285k+250 expansion construction has started.
20th	Contracted out the third follow-up improvement project at the southern end of the San Ming 284~285 section of Provincial Highway 9 – Huatung Highway. Construction started today, and should be finished by February 2015. In order to protect roadside trees, they were transplanted before construction.
27th	The new construction of the An Shu Tsao Pu C1 Bridge section of South-Link Highway of Provincial Highway No.9 (0K＋000～6K＋300) has been approved and contracted out.
27th	In response to the traffic flow on the Peace Memorial long weekend from February 27th to March 3rd 2014, the DGH carried out an evaluation of traffic clearing measures. (http://www.thb.gov.tw/)
28th	On February 28th 2014, Da Vinci Personal Data and High Tech Law Firm provided motor vehicle information and evaluation reports on the M2 and M3 highways to the DGH. After re-evaluation by the DGH it will become the basis for the National Freeway Bureau's the Third-Generation Motor Vehicle and Driver Information System and eTags.

3 March

3rd	Deputy Director of the Fourth District Maintenance Department Hsueh Zhan-tien was promoted to Director of the First District Maintenance Department (Former director Chuang Ming-song has retired), as announced by Ministry of Transportation and Communications in document JR1037100197 on February 25th, 2014.
3rd	Section Manager of the Fourth Maintenance Department Chen Ying-fu was promoted to Director (Former Deputy Director Hsueh Zhan-tien has been transferred), as announced by Ministry of Transportation and Communications in document JR10371001971 on February 25th, 2014.

8th	Conducted the first level 2 national online trial, Deputy Director Chen personally attended the command center, and Secretary Huang inspected Taipei City Motor Vehicle Office.
10th	In order to encourage people to take public transportation to Alishan Cherry Blossom Festival, we gave out little round stamps as creative souvenirs.
14th	In order to make the transfer of information services to the new building run more smoothly, more than 60 people from the information office as well as outside contractors were engaged in non-stop transfer work from March 14th to March 16th.
14th	Conducted the design principles evaluation meeting of "Provincial Highway 65 Tucheng Exchange (South Bound connecting Chen Lin Bridge) adding ramp construction, measurement, geological inspection and design work."
17th	From today, Directorate General of Highways headquarters is officially moved to No. 65 Dong Yuan St., Wanhua District, Taipei City. All employees moved to the new building and continue to provide services.
18th	We directed the motor vehicle offices and transportation bureaus of Taipei and Kaohsiung to engage in land and building rental contract signing. An evaluation was done and recommendations were provided as references for the contract signing of the motor vehicle offices from the two cities. The contract signing will be completed in April.
19th	The new construction of the An Shu Tsao Pu section of the South-Link Highway of Provincial Highway No. 9 engaged in groundbreaking and blessing ceremonies.
20th	Deputy Director Chen hosted the third consultation committee meeting on the outsourcing of the Third-Generation Motor Vehicle and Driver Information System (M3) project. Relevant committee members advised on key points to consider before going online, and asked all managers present to pass on the information to colleagues.
22th	Conducted the 2nd level 2 national online trial, with deputy director Chen personally attending the command center, while secretary Huang observed Hsinchu City Motor Vehicle Office.
23th	1,738 tourists arrived in Taiwan on an Italian cruise ship. Due to malfunctioning machinery, the tourists had to take planes to Xiamen. Taipei City Motor Vehicle Office rented 36 buses (49 trips) for the emergency transport of the tourists.
25th	The Directorate General of Highways' "roadside disaster prevention warning mechanisms" project was recommended by Ministry of Transportation and Communications for the "6th Government Service Quality Award." After initial evaluation by the Executive Yuan, it has been nominated for the "service and planning agencies" category.
26th	For the 2014 Alishan Cherry Blossom Festival (March 15th to 30th, 2014) transport plan, a total of 256 buses were made available (including overtime), moving 7,640 people. The traffic flow on Provincial Highway 18 was smooth.
27th	Conducted work safety evaluation on renovation work at Provincial Highway 9470K+500 for damage caused by Typhoon Kong-Rey on August 27th, 2013.
28th	Director of Ministry of Transportation and Communications Yeh Kuan-shi and legislators Chiang Chi Chen and Kong Wen Chi inspected the Central Cross-Island Highway from Guguan to Derji. If current control measures are maintained, the overall safety of the Central Cross-Island Highway will be improved.
31st	In response to the road and traffic fine regulations, the revised articles were implemented on March 31st 2014. We broadcast advocacy documentaries and advertisements on cycling regulations, which were aired on wired and wireless television stations nationwide and 11 broadcast television stations that were under contract with the Directorate General of Highways.
31st	In order to clear up vehicle registration information, we worked to increase the number of discarded motorcycles. The Directorate General of Highways worked with all the motor vehicle offices and stations, and with help from village chiefs on the weekend and at night, they visited residents to persuade them to discard worthless motorcycles. A total of 966 motorcycles were discarded in March, making the operation a success.

4 April

1st	On April 1st 2014, former Director Wu of Directorate General of Highways was promoted to the position of administrative deputy minister. His original position was filled by Deputy Director Jaw Shing-hau. It was announced by the Executive Yuan in document YSRZ10300276602 on March 27th, 2014.
1st	From April 1st to 30th, we conducted labor evaluation work on 11 new construction projects at Provincial Highway 2 1k+856~4K+280.

2nd	On April 2nd 2014, the evaluation meeting was held for bridge construction design principles and bridge formation of Tamkang Bridge and other 2k-3k collector road works.
4th~6th	During the Tomb Sweeping Day long weekend, large cemeteries, scenic spots, National Highways and alternative traffic routes are often jammed. This year, apart from the Yunchia Pagoda (Shuishang Township) and parts of Provincial Highways 26 and 1 at Shuidiliao road intersection, traffic was smooth. All the motor vehicle offices established regional instant communication groups, which monitored traffic dispatch in the field to make the dispatch work go smoothly.
4th~6th	A total of 17,542 buses were driven during the Tomb Sweeping Day, which was an increase of 12.67% compared to last year. The daily average of 249,000 passengers was an increase of 15% compared to last year.
4th~6th	Conducted the information transfer trial of the "Third-Generation Motor Vehicle and Driver Information System."
7th~15th	All motor vehicle offices conducted a parallel trial of the "Third-Generation Motor Vehicle and Driver Information System."
11th	Conducted the design principles and bridge formation evaluation meeting for Provincial Highway 66, Taoyuan Highway 102 to Country Highway 114 improvement works.
15th	A2-1's tender has been awarded the contract Provincial Highway 9 408K+140~409K+900 expansion and improvement works (formerly 421K+840~424K+160).
18th	Provincial Highway 20, Taoyuan District Bingtsai Bridge was completed on April 17th, 2013. It was opened to traffic today at noon.
19th	Conducted third level 2 national online trial of the "Third-Generation Motor Vehicle and Driver Information System." Deputy Director Chen personally attended the command center, while secretary Huang monitored Taipei Motor Vehicle Office.
23rd	Conducted the design principles and bridge formation meeting for the Provincial Highway 9 250k+760~268k+500 及274k+500~287k+000 expansion works.
23rd	Invited by National Science and Technology Center for Disaster Reduction to exhibit the "SafeTaiwan platform" at the "2014 CEOC Hazard Information Evaluation Seminar".
25th	On Provincial Highway 21 Namaxia to Wulipu, the 6th steel bridge was opened to traffic today at noon.
25th	Work has begun on the West Coast Expressway 195K-995~199K+780 (WH50-2 tender) Wangkung- Yonghsin section.
29th	Invited by the National Science and Technology Center for Disaster Reduction to exhibit the "SafeTaiwan Platform" at the "Disaster Warning Standards and Intelligent Disaster Prevention Applications Convention"
29th	The "Early Warning and Disaster Prevention for Safer Road Users" project was nominated by the Ministry of Transportation and Communications for Executive Yuan the 6th Government Service Quality Award after the paper evaluation. Field evaluation was completed today.
30th	The construction team of the Executive Yuan Public Construction Commission evaluated the Suhua Highway improvement works and construction of the Guanyin Tunnel.
30th	Senior engineer Chen Jun-yao of Directorate General of Highways was promoted to deputy director of the 4th maintenance construction department (Former deputy director Chien Chun-ming has retired." It was announced by the Ministry of Transportation and Communications.

5 May

2nd	The Ministry of the Interior's Construction and Planning Agency, the Ministry of Transportation and Communications, Institute of Transportation, and expert scholars inspected the "Executive Yuan "Improvement Program for Traffic Order and Safety" conducted by the Directorate General of Highways. In 2013, the DGH supervised highway motor vehicle services, road maintenance, traffic construction, and safety advocacy. The DGH took the project items assigned by Executive Yuan, and set to work improving national road safety, actively improving traffic management, and improving traffic safety.
2nd	The new Directorate General of Highways building was officially put into use by Director Yeh Kuanshi of Ministry of Transportation and Communications. He also introduced the overall software and hardware upgrade of the Disaster Prevention Center, which brought a more comprehensive disaster prevention service for people.

3rd	Conducted the 4th level 2 national online trial of Third-Generation Motor Vehicle and Driver Information System. Deputy director Chen personally attended the command center, while secretary Huang monitored Taichung City Motor Vehicle Office. This trial was completed without evaluating people's personal data. The work done by the M2 system in 6 hours and could be done by the M3 system in 3 hours.
8th	The Directorate General of Highways announced the road safety improvement project at EXPO Hall, and declared the overall marketing plans. Deputy Premier Mao of Executive Yuan, Director Yeh of Ministry of Transportation and Communications, Mayor Hao of Taipei City, and 1,200 central government, county and city representatives attended.
9th	A practical seminar on highway construction and carbon management systems was conducted at the Ministry of Transportation and Communications international meeting hall.
9th	Deputy Premier Mao of the Executive Yuan inspected the "Third-Generation Motor Vehicle and Driver Information System", and listened to briefings on the roadside disaster prevention warning mechanisms. He expressed his hope this system could be promoted by the central government and all the disaster prevention agencies.
13th	East-West Expressway, Guanyin-Daxi Line (Provincial Highway 66) and the follow-up works on Taoyuan Provincial Highway 102 were opened to traffic.
14th	Deputy chief Chu Kuohsian of the Executive Yuan Disaster Prevention Office and Deputy Director Wu Mengfen of the Ministry of Transportation and Communications ordered all departments to attend the hazard adaptability and introduction of SafeTaiwan Platform by Directorate General of Highways, and approved of the achievement of the roadside disaster prevention warning mechanisms.
17th	Conducted the 5th level 2 national online trial of the "3rd Generation Motor Vehicle Information System." Deputy Director Chen personally attended the command center. As part of this trial, 406 separate trials were conducted by the Taipei Motor Vehicle Office.
20th	The 12 steel bridges of Provincial Highway 21 Namaxia were opened to traffic.
20th	In order to promote highway disaster prevention, the Directorate General of Highways invited people from the industrial, political, and academic circles to attend the "2014 Highway Disaster Prevention Expert Seminar." We hope to make Taiwan safer by promoting this system to other preventive and road management departments.
27th	Premier Chiang Yi-hua of the Executive Yuan came for an inspection. He encouraged the Directorate General of Highways take the lead in promoting intelligent green architecture for the government, and to help to promote energy conservation, carbon reduction, reforestation, and environmental protection as social responsibilities for the next generation.
28th	Deputy Director Jaw Shing-hau has been promoted director of Directorate General of Highways, as announced by the Executive Yuan on May 23rd 2014. The inauguration was today.
30th	Conducted the 2014 Dragon Festival traffic dispatch plan. As well as providing transport at locations prone to congestion, we also asked local government to conduct dispatch measures at large dragon boat competitions to fulfill the transportation needs of people going back home.

6 June

1st	A driving safety seminar for drivers who had recently received their licences was conducted at 37 motor vehicle units nationwide.
2nd	The Dragon Boat Festival dispatch plan made 99,171 bus routes available from May 31st to June 2nd, and 2,028,236 people were transported.
3rd~4th	Deputy Director Wu of the Ministry of Transportation and Communications, the Director of the Directorate General of Highways and reporters visited the C2 tunnel groundbreaking ceremony for the Follow Up to the South Link Highway of Provincial Highway No.9 Widening Project, and traffic opening ceremony of Wutai Chuangu Bridge.
10th	The "SafeTaiwan Platform" won the Taiwan Geographic Information Society's 10th annual Golden Map Award for best system application. On June 26th, Section Chief Cheng Jiewen of the Directorate General of Highways gave out the award.
13th	The West Coast Expressway 190K+028-193K+270 (WH50 tender) Hanbao to Xinsheng won first place for the Ministry of Transportation and Communications' 2014 Golden Way Award for Excellent Construction. The East-West Expressway Beimen–Yujing E707-3 tender 8K+896-12K+950 Shuejia interchange to National Highway No. 1 works were awarded 4th place.

16th	We invited the Ministry of Economic Affairs, Environmental Protection Agency, 7 domestic bus companies and 5 manufacturing factories to a demonstration of electric buses. We engaged in discussion regarding the use and future development of electric buses.
17th	The Director of the Highway Engineering monthly magazine has resigned, and Deputy Director Xia has been promoted.
17th	New work on improving Renshui Tunnel of Suhua Highway (C2 tender) started.
18th	The book launch of "Happy Bus: Discover a Secret Place and Share Beautiful Time" was held on the 1st floor of the Directorate General of Highways.
23rd	The position of Deputy Director of the Directorate General of Highways has been filled by Secretary Huang Yun-kuei, as announced by Ministry of Transportation and Communications in document JR1037100702.
24th	The Directorate General of Highways was nominated for the 6th Government Service Quality Award for their "Early Warning and Disaster Prevention for Safer Road Users" system. After evaluations of 56 government units, we garnered the highest honor in service quality. On June 24th we were officially awarded, and Director Jaw Shing-hau represented Directorate General of Highways to receive the award.
26th	In May 2014 the payment reminder for motorcycle fuel fees was conducted. 960 million should have been paid. Up to June 26th, 2014, 430 million was paid, the rate was 44.79%.
27th	Senior engineer Lin Wen-hsiung of the 4th maintenance construction department of the Directorate General of Highways, Agent Chen Chien-yu of Taichung City Motor Vehicle Office, and Junior engineer of Highway Hazard Prevention Center Lee Jia-ji earned the 2014 Exemplary Government Officials Award from the Ministry of Transportation and Communications. At 14:00PM on June 20th (Friday), the award ceremony was held in the 5th floor hall.
29th	The construction of Provincial Highway 84 Beimen-Yujing Line E707-1 was completed.

7 July

1st	Provincial Highway 84 Beimen-Yujing Line E707-1 was completed. On July 28th, 2014, the first and second inspections were conducted.
1st	From today, entertainment display facilities are included in the items for vehicle inspection. Supplementary display facilities that are vital for the safety of driving are not included.
1st	The Information Security Management System (ISMS) was externally evaluated and certified.
2nd	Deputy Director of the Institute of Transportation Chen Mao-nan chaired the 46th project progress evaluation meeting and 12th online key point meeting of the "Third-Generation Motor Vehicle and Driver Information System." We have decided to field test the system on July 7th, 2014.
3rd	Deputy Huang Yun-guei chaired the "Tax Information Center Question Meeting." He stated the 3 principles of the Tax Information Center system and Directorate General of Highways M3 system: 1. the requirements of bilateral interfacing must not interfere with the requirements of M2, 2. the requirements of bilateral interfacing does not affect the system functions of M3, and information safety does not violate Personal Information Protection Act; 3. Bilateral interfacing is not within the required scope of M3 contract. Chunghwa Telecom should evaluate the cost and time of customized development, and then have the tax center take this into consideration.
7th~9th	Established a first class contingency plan for the "3rd Generation Motor Vehicle & Driver Information System." Deputy Director Chen Mao-nan of the Institute of Transportation and Deputy Director of Directorate General of Highways Huang Yun-guei took the lead at the chief command center. The deputy director was in charge of all the motor vehicle offices, and a webcam was used to record system operations.
10th	Attended the "meeting of cooperation with organizational restructure and establishment of Information system at the headquarters and affiliated agencies." Section Chief Cheng Jiewen of Directorate General of Highways shared his experience of integrating the information of combined level 4 agencies.
15th	Senior engineer Lee Zhongren was promoted to the position of Deputy Director of Suhua Improvement Construction Department of Directorate General of Highways (Former Deputy Director has been transferred to become the Director of Eastern Region Construction Department of Railroad Reconstruction Bureau), as announced in document JR1037100759.

16th	Attended the "educational training of GIS-T Transportation Network, Geological Information, and Storage System."
16th	Section chief of Road Maintenance Department Chen Jing-fa was promoted to deputy senior engineer of the Directorate General of Highways (Former deputy senior engineer Hsu Ah-ming has retired), as announced by the Ministry of Transportation and Communications in document JR1037100661.
16th	Fifth District Maintenance Works Director Tsai Zhong-chen has been promoted to the position of Section Chief of the Directorate General of Highways Road Maintenance Department, as announced by Ministry of Transportation and Communications in document JR1037100661 on June 17th, 2014.
16th	Deputy section chief Weng You-lai of Road Maintenance Department has been promoted to Director of the 5th District Maintenance Works Department, Directorate General of Highways, as announced by Ministry of Transportation and Communications in document JR1037100661 on June 17th, 2014.
18th	In cooperation with the Transport and Industrial Forum, the Directorate General of Highways conducted 2 land transport sessions. We invited tour bus companies, rental companies, and 3 major cargo companies to engage in discussion, and further understand the needs of these companies, and build good relationships with them.
18th	For the media project "Happy Road and Bicycle Journey" ,from Provincial Highway 8 Taroko to Provincial Highway 14 Wuling section, we integrated information for road conditions, altitude, average slope, supply stations, rest areas, and surrounding scenic spots onto our website for people to search.
21st~ 25th 28th~31	We established the Level 3 adaptability measures for the "Third-Generation Motor Vehicle and Driver Information System." The command center has been moved to the Information Offices of all the motor vehicle offices. In addition, in response to the peak time of new cars getting license plates, collection of car fuel fees, and driver's license tests, we especially improved the functions of the systems, and the number of people monitoring the service windows, to order assure the quality of motor vehicle services.
24th	Evaluation of the design principles and bridge formation of the new construction on the "West Coast Expressway 199K+780~209K+087 Yonghsin to Dachen."
24th	Attended the TGOS CLOUD promotion workshop educational training held by the Ministry of the Interior.
25th	Evaluation of the design principles and bridge formation of the "Kaohsiung Railway Workshop moving to Chaozhou- Provincial Highway 1 Overhead Bridge Construction."
30th	Deputy Director of Chiayi Motor Vehicle Office Lin Yi-shen has been promoted to Deputy Director of Hsinchu Motor Vehicle Office (Former Deputy Director Chang Yi-shun), as announced by the Ministry of Transportation and Communications in document JR1037100754 on July 9th, 2014.
30th	Special committee agent Lin Zhen-yong of Directorate General of Highways has been promoted to deputy director of Chiayi Motor Vehicle Office, as announced by the Ministry of Transportation and Communications in document JR1037100754 on July 9th, 2014.
30th	Deputy Director Lin Yin-dong of Hsinchu City Motor Vehicle Office was made Deputy Director of Taichung City Motor Vehicle Office, Directorate General of Highways (Former Deputy Director Wang Ming-de has been promoted to become special committee agent of Directorate General of Highways) as announced by the Ministry of Transportation and Communications in document JR1037100754 on July 9th, 2014.
30th	Motor Vehicle Department Section Chief Chiang Shu-ren of the Directorate General of Highways was promoted to the position of Deputy Director of Hsinchu Motor Vehicle Office, Directorate General of Highways as announced in document JR1037100754.

8 August

1st	Business Weekly interviewed us regarding "How to create a win-win situation for Shihsanhang Ruins and Tamkang Bridge."
1st	On August 6th, 2014, the Executive Yuan approved the national bicycle-friendly environment, overall road network planning, and the Ministry of Transportation and Communications' plan to establish a bicycle road network in document YTJ1030044806.
1st	Directorate General of Highways hosted the 68th anniversary event on the 2nd floor meeting hall. Events included Director's Cups badminton and ping pong competitions. (The competitions were held on June 28th and July 20th at Chunghwa Telecom's recreational center), sharing of business topics, status of social groups, and a total of 250 employees participated. Political Deputy Minister Chen Chien-yu of the Ministry of Transportation and Communications, and former Deputy Minister Chen Shi-yi personally instructed us.

1st	Section Chief of Traffic Safety Department Chiang Shu-ren was promoted to Deputy Director of Hsinchu Motor Vehicle Office (Former Deputy Director Lee Yin-dong has been promoted to become Deputy Director of Taichung Motor Vehicle Office) as announced by Ministry of Transportation and Communications in document JR1037100754 on July 9th, 2014.
5th	Attended the "Rainfall Experience Platform Seminar" conducted by the Taiwan Typhoon and Flood Research Institute.
6th	"CIO IT Manager Magazine" interviewed Section Chief Chen Sho-chiang of the Directorate General of Highways Information Office regarding the establishment of green energy information centers.
8th	The Directorate General of Highways was invited by the National Development Council to attend the 6th Government Service Quality Award seminar in Hualien. Deputy Secretary Yen of Highway Disaster Prevention Center reported on the roadside disaster prevention warning mechanisms, as well as good service experience.
11th	By holding the concept of pedestrian safety, for the hazard prevention construction on Provincial Highway 2 82k~83k, we first prevented the fallen rocks on the upper slopes, and then cleared the dangerous areas of fallen rocks. The construction was completed today.
11th	Approved by Ministry of Transportation and Communications to adjust the specifications and sizes of license plates of new large, medium, and small size motorcycles.
11th	Tamkang Bridge and connecting roads 2K+146~2K+606 new bridge construction has been awarded the contract.
11th	The "Third-Generation Motor Vehicle and Driver Information System" established outsourcing services and management team structure and member adjustment. It was signed and sent to the units responsible.
12th	Cooperated with the Directorate General of Highways to install the Provincial Highway Instant Traffic Update App, and added orientation and push technology functions. We held a press conference at Ministry of Transportation and Communications to explain, and encourage people to use instant traffic updates on the provincial highways.
13th	Senior engineer and Construction Section Chief of Directorate General of Highways Chu Chien Dong was promoted to deputy director of Materials Testing Lab (Former Deputy Director Lin Hong Yi has retired), as announced by the Ministry of Transportation and Communications in document JR1037100759.
22nd	Ministry of Transportation and Communications nominated the "East-West Expressway Beimen-Yujing Line E707-1, Beimen Interchange to South bound Country Highway 1" for the 14th Public Construction Commission Golden Quality Award.
27th	Invited to attend the "Government Information Outsourcing and Service Management CIO Leadership Camp" ,and briefly introduced the online use of the "Third-Generation Motor Vehicle and Driver Information System."
28th	Deputy Director of Planning Department Hsu Ji-yuan was appointed director of the road maintenance department of the Directorate General of Highways (Former deputy director Weng You-lai has been promoted to become director of fifth district maintenance construction department) as announced by Directorate General of Highways in document LRL1030040169 on August 13th.
28th	Section Chief of Department of Railways and Highways, Ministry of Transportation and Communications Wu Wen-yi was appointed deputy director of the Directorate General of Highways Planning Department (Former Deputy Director Hsu Ji-yuan has been promoted to be the Deputy Director of Road Maintenance Department), as announced by the Directorate General of Highways on August 13th.
28th	The Ministry of Transportation and Communications conducted the "2014 Serving the People Conference" at the Civil Aeronautics Administration. The Directorate General of Highways was invited to give briefings on the roadside disaster prevention warning mechanisms and good service practice, in order to improve the service quality of the Ministry of Transportation and Communications.
29th	From today until September 1st, at the 2014 Taichung International Tourism Festival, the Directorate General of Highways attended the exhibition to promote the Happy Bus events.
31st	"Interchanges were set up at the Intersections of Provincial Highways 78, 17, and 61" ,and opened to traffic.

9 September

1st	The Ministry of Transportation and Communications conducted the award ceremony of the 2014 Golden Way Awards. The Directorate General of Highways won many awards: the 4 construction sites at Lo Shao section won 1st place for both best landscape and road condition; the Fuxing section under construction won 1st place for pedestrian information; the Directorate General of Highways (West Coast Expressway Hanbao to Xinsheng construction) won 1st place for excellent construction. A total of 14 units won the awards.
2nd	Technician Lin Fu-shan of Department of Railways and Highways was appointed director of the Directorate General of Highways Motor Vehicle Department (Former Director Wang Zhai-ju has been promoted to be the director of highway personnel training), as announced by Ministry of Transportation and Communications.
2nd	The reconstruction has finished on Provincial Highway 20 Bai Yun Bridge, the new bridge is 45m long and has a net width of 11m in both directions. The new bridge will be opened to traffic at 16:00pm today.
2nd	In order to safeguard people renting tour buses, the Directorate General of Highways has announced the following supplementary safety facilities on the tour buses, including: ABS, decelerators, engine decelerators, exhaust brakes, electromagnetic decelerators, and online GPS for people to search.
4th	On September 4th, 2014, Senior Engineer Hsu Chen Zhan of the National Freeway Bureau led 30 employees to the Directorate General of Highways to attend seminars on disaster prevention warning mechanisms. They had briefings and were engaged in discussions, in order to further promote the Directorate General of Highways' roadside disaster prevention warning mechanisms.
6th~8th	During the Autumn Festival, other than the traffic jams on some parts of Provincial Highway 9 and nearby Toucheng Interchange, the traffic on other roads was smooth. 108,000 buses were run, and 2,520,000 people were transported. 8,315 buses were run on National Highway No. 5, and 183,000 people were transported.
10th	Conducted the "M3 Independent Verification and Confirmation Project", the first quarterly inspection of 2014.
11th	From 2011, Deputy Senior Engineer Chen of the Directorate General of Highways was secretary of the Highway Disaster Prevention Center, and he promoted the roadside disaster prevention warning mechanisms. He set the record of over 1,300 days of working under extreme weather with zero casualties, and won the 6th Government Service Quality Award with distinction. On July 28th 2014, the Directorate General of Highways awarded Chen with two merits, which will be reviewed today by the Ministry of Civil Service as stated in document LRK1031005397.
16th	The Chinese Society of Pavement Engineering has arranged for the Hunan Province Highway Society to visit the Directorate General of Highways to discuss general highway planning and exchange investment and construction knowledge.
17th	The Kaohsiung City Motor Vehicle Office, Directorate General of Highways and Fengyuan Station of Taichung City Motor Vehicle Office were awarded the 12th Records Management Quality Awards for file management at the National Library on September 17th, 2014.
27th	The inaugural ceremony of East-West Expressway Beimen-Yujing Line, Shuejia Interchange to Beimen Interchange.
30th	The Third District Maintenance Construction Department attended the Labor Department's 2014 Excellence In Disability Work prize-giving event. We won the 12th Golden Wingspan Award in Pingtung.

10 October

1st	Deputy Director Chen Wen-juei of Transportation Department, New Taipei City Government was appointed secretary of the Directorate General of Highways (Former Secretary Huang Yun-kuei was promoted to become Deputy Director) as announced by Ministry of Transportation and Communications in document JR1035010355.
6th	The Nantou Station Manager of Taichung City Motor Vehicle Office was appointed minister of Traffic Accident Investigation Committee of Nantou District (Former minister Chen Yong-chuan has been promoted to become the section chief of Driver's licenses section), as announced by Ministry of Transportation and Communications in document JR1037101188.
8th	Invited to attend the "Government Information Outsourcing Managerial Practice Seminar" hosted by National Information and Communications Initiative Committee. Chief Chen Sho-chiang made a speech regarding the online management of the 3rd Generation Motor Vehicle & Driver Information System (M3).

10th~ 12th	105,000 buses were run during the National Day long weekend, and 2,560,000 people were dispatched.
13th	The 2014 Ministry of Transportation and Communications Recruitment Booth (South Hall of the Kaohsiung Exhibition Center) exhibited the "Improvement works on Provincial Highway 66 crossing over Taoyuan Highway 81, 79, and Provincial Highway 31."
15th	Cooperated with Executive Yuan Information and Communication Security to conduct the 2014 information security evaluation of government agencies and institutes. A total of 19 officers were evaluated at the Directorate General of Highways. Director Xiao of Directorate General of Highways, Deputy Director Huang, Secretary Chen, and all the section officers participated.
16th~ 17th	The Executive Yuan's National Science and Technology Center for Disaster Reduction and Department of Homeland Security hosted the workshop on "key safety improvement facilities in Asia by APEC" .We observed the Highway Hazard Prevention Center's early warning mechanism.
17th	The groundbreaking ceremony of Tamkang Bridge.
21st	Information Center Chief Chen Li-jen of the Taiwan Railways Administration led her team to learn about SafeTaiwan and thb-IDC at the Directorate General of Highways.
23rd	Deputy Director Chang of the Department of Civil Service and 160 officers participated in the 2014 safety drill and demonstration conducted by Chiayi Motor Vehicle Office.
24th	Counselor Lee Tai-ming of the Ministry of Transportation and Communications and colleagues visited the Highway Hazard Prevention Center, and had good things to say regarding the establishment of the adaptability center and promotion of Directorate General of Highways roadside disaster prevention warning mechanisms.
28th	The Ministry of Transportation and Communications Recruitment Booth (North Hall, Taipei Garden Hotel), exhibited "Improvement works on Provincial Highway 66 crossing over Taoyuan Highway 81, 79, and Provincial Highway 31." , and the third new construction tender of Tamkang Bridge and Connecting Roads (Main bridge section).
29th	The pre-licensing safety seminar on November 1st for people getting their first motorcycle license was approved by the Ministry of Transportation and Communications.
30th	The Civil Service Office hosted the "2014 civil service manager seminar." Chief Chen Sho-chiang made a speech regarding installation of the Third-Generation Motor Vehicle and Driver Information System (M3), and discussed legal administration and information security management.

11 November

4th	Hsinchu Motor Vehicle Office participated in the selection of the Ministry of Transportation and Communications 6th Innovative Road Safety Contribution Award. We won first place in the Educational Advocacy Award, and second place in the Motor Vehicle Award.
4th	Attended the 2014 APEC Typhoon Symposium conducted by the Central Weather Bureau and Taiwan Typhoon and Flood Research Institute. Chief Chen Sho-chiang of the Directorate General of Highways Information Office was the speaker.
5th	Participated in the "Homeland Information System and Socioeconomic Database Promotion and Application Seminar" held by the Ministry of the Interior.
6th	"Online signing system of official documents" passed the "Official Documents and Archive Management Information System Inspection" conducted by the National Development Council's National Archives Administration.
7th	In remembrance of the late Mr. Chen Shi-hua, Administrative Deputy Minister Wu Chungmeng personally led colleagues from Third District Maintenance Construction Department and West Coast Expressway Southern Region Construction Department to the monument to pay homage.
11th	Participated in the "1st Annual Intelligent Space Technology Application Seminar" conducted by the Taiwan Geospatial Information Industry Consortium.
12th	Deputy Director of Information Security Huang Yun-guei participated in the second Information Security Meeting of 2014 at the Ministry of Transportation and Communications.
13th	The groundbreaking ceremony for the third working side of Guanyin Tunnel at Suhua Alternative Road.

13th	Tainan Motor Vehicle Office's was nominated for the Ministry of Transportation and Communications 2014 Service Quality Award for their self-service counters.
13th	Senior Engineer Lin Wen-hsiung of 4th district maintenance construction department was named exemplary government official of 2014 by the Executive Yuan. At 8:30AM, the award ceremony was held in the 1st floor hall.
18th	The Directorate General of Highways conducted the "Corporate Integrity Seminar and Project Promotion Event." Owners of 124 inspection garages in Northern Taiwan participated, and the "non-corruption declaration signing" ceremony was held, in order to reinforce principles of integrity among owners.
21st	Secretary Wang Chihsiung of the Soil and Water Conservation Bureau, Council of Agriculture, Nantou Branch, and his colleagues from Changhua, Yunlin, and Chiayi County governments visited the Directorate General of Highways. He engaged in discussion through the Roadside Disaster Prevention Warning Mechanisms briefings, and had good things to say regarding the achievements of the warning system.
25th	Deputy Chief Cheng of the Ministry of the Interior's National Land Surveying and Mapping Center and his colleagues visited Directorate General of Highways "Early Warning and Disaster Prevention for Safer Road Users". The Roadside Disaster Prevention Warning Mechanisms won the 6th Government Service Quality Award. He said there is a lot to be learned from the Directorate General of Highways.
27th	According to the 2014 satisfaction survey results for motor vehicle office services, 80.7% of people were satisfied, and an average grade of 83.1 was given.
28th	Conducted the "Annual Inspection of Control Yuan, Transportation and Purchasing Committee." Participants included members of Control Yuan, Minister, Deputy Minister, Director General, Counselor, and officers from all agencies.
29th	Conducted the "Directorate General of Highways Museum" exhibition during the 2014 Information Month. The exhibition date in Taipei was from November 29th to December 7th, 2014. The topics of exhibition were: the SafeTaiwan platform, bus status information system (iBus), and the instant traffic update system on provincial highways.

12 December

3rd	Deputy Director Liu Shi-ming of the Northeast and Yilan Coast National Scenic Area Administration and his colleagues visited the Directorate General of Highways. Throughout the briefings and information exchanges, he had good things to say regarding the achievements of roadside disaster prevention warning mechanisms.
4th	4 hearings on elderly drivers licensing management in Hualien (December 4th), Kaohsiung (December 10th), Taichung (December 19th), Taipei (December 26th). The purpose of the hearings was to hear what people had to say, and explain the future directions of the current management system.
5th	Attended a technical training session on the Land Integration Information Services sharing platform API and interfacing skills conducted by the Ministry of the Interior.
8th	The Ministry of Transportation and Communications conducted the "2014 traffic construction and environmental impact evaluation follow-up and field inspection." The Directorate General of Highways won 1st place for the Follow Up to the South Link Highway of Provincial Highway No.9 Widening Project (Anshuo-Tsaopu).
11th	Conducted the "2014 Highway Motor Vehicle Seminar." 3 speeches were given on the installation of the Third-Generation Motor Vehicle and Driver Information System (M3), the opportunities and risks of electronic services developments, and the application of large numbers and vehicle networks.
12th	Conducted the "Directorate General of Highways Museum" exhibition during the 2014 Information Month. The exhibition dates in Taichung were from December 12th to 17th. The topics of exhibition: the SafeTaiwan platform, Bus Status Information Management System (iBus), and instant traffic update system on provincial highways.
18th	A press conference was conducted regarding road traffic signs, network activity inspections and marketing plans. The signs and markers team was formed today.
18th	As Penghu did not have professional accident inspection services, and people had to take planes to Kaohsiung for traffic accident inspection, the Penghu Motor Vehicle Office set up long distance traffic accident inspection services, so people do not have to travel back and forth between Taiwan and Penghu. People had good things to say about this.

18th	Hsinchu Motor Vehicle Office won the 2014 "Ministry of Transportation and Communications Golden Service Award" (First line service agency). We also represented Ministry of Transportation and Communications at Executive Yuan the 7th Government Service Quality Award. We actively try to implement the service principle "Care about what people care about" in order to upgrade the service quality.
18th	Participated in technical training on "Homeland Information System and Socioeconomic Information system Web Service and Statistical Map API Services Interfacing."
19th	The first overseas investment meeting for the Tamkang Bridge was held in Hamburg, Germany.
22nd	Deputy Director Huang Yun-guei hosted the "2014 Evaluation Meeting of Information Security and Personal Data Protection and Management for Directorate General of Highways and affiliated agencies" event. All the information security officers participated and information managers and information security sales representatives also were present.
23rd	At 1:00PM today, Provincial Highway 2 was opened to traffic, the route goes from Nuannuan District, Keelung City, through Pingxi, Shuangxi to Gongliao, Fulong and New Taipei City. This has created a tour network of mountains and oceans in Northern Taiwan.
24th	Deputy Director Huang Yun-guei of the Directorate General of Highways and Chief Chen Sho-chiang of the Information Office participated in a meeting on the use of information technology to reinforce the policy implementation of the Ministry of Transportation and Communications.
25th	Conducted the "Directorate General of Highways Museum" exhibition during the 2014 Information Month. The exhibition date in Kaohsiung was from December 25th to 30th. The topics of exhibition: the SafeTaiwan platform, Bus Status Information Management System (iBus), and instant traffic update system on provincial highways.
26th	Chief Chu Kuo-hsian of the Executive Yuan Hazard Prevention Office personally came to instruct us. Senior Engineer Chen Jing-fa and his colleagues from the Hazard Prevention Center reported. Through briefings and discussions, he said that there is a lot to learn from the Directorate General of roadside disaster prevention warning mechanisms.
26th	Participated in the technical training "Reinforcement Plan of GIS-T traffic network, geological information, and storage systems" conducted by Ministry of Transportation and Communications.
30th	Conducted the Take the Bus to Wuling Farm press conference. On the website, the 2014 calendar of Wuling Farm Cherry Blossom Festival was updated.

Road to Success

Budget Implementation and Encumbrance

Budget Implementation

Annual revenues

2014 annual budget NT$7,784,139,000, actual receipts NT$9,172,035,000, accounts receivable NT$556,354,000 (7.15% of the annual budget). The total NT$9,728,389,000. The implementation rate was 124.98%.

Annual accounts receivable for the previous fiscal year NT$514,779,000, actual receipts NT$496,809,000. (96.51% of the accounts receivable). The remaining NT$17,970,000 will be implemented in the next fiscal year (3.49% of the annual budget).

Annual expenditures

2014 annual budget NT$45,649,483,000, actual expenditures NT$42,021,651,000, accounts payable NT$949,000 , NT$1,044,780,000 paid in treasury (2.29% of total budget), suspense payments NT$304,075,000, including the implementation rate of suspense payments at 95.01%.

Budget encumbrance for the previous fiscal year NT$4,153,902,000, actual expenditures NT$3,400,080,000, accounts payable were NT$0, written off tax NT$50,073,000 (1.21% of the encumbrance), suspense payments NT$327,977,000, including the implementation rate of suspense payments at 90.95%.

Special budget of reconstruction for post-typhoon Morakot disaster

2014 fiscal year 2013 Budget encumbrances were NT$1,734,314,000 (Implemented from 2009~2012) Actual expenditures (not including suspense payments) were NT$1,522,534,000, accounts payable were NT$0, and the amount due to treasury was NT$76,448,000 (4.41% of encumbrances), suspense payments were NT$0 , including the implementation rate of suspense payments at 92.20%.

Budget Encumbrance

Annual expenditures

2014 annual budget encumbrance application NT$2,583,051,000(5.66% of total budget).

Budget encumbrance application for the previous year NT$703,749,000 (16.94% of the encumbrance).

Special budget of reconstruction for post-typhoon Morakot disaster

2014 annual budget encumbrance application NT$135,333,000 (7.80% of the encumbrance).

The encumbrance application transfer to the 2015 fiscal year: NT$3,422,133,000 (6.64% of the budget and encumbrance).

2014 Annual Report of Directorate General of Highways, MOTC

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