



安全 · 效率 · 品質 · 綠色  
Safety ; Efficiency ; Quality ; Eco-Friendly

# 110 年報

## 交通部公路總局

Directorate General of Highways, MOTC  
Annual Report 2021



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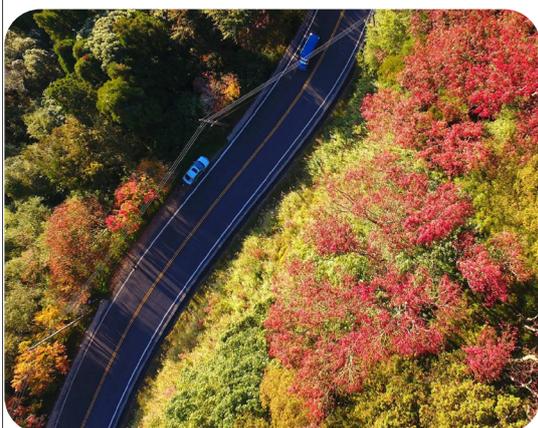
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# 局長的話 我們都是照亮「路」 的點點螢光

春夏之際，人們沿著大路小路深入秘境，只為一睹火金姑滿山遍野螢光點點的動人景象，以雙眼和相機留下這季節限定之美。但若向我們的同仁問起，他們會笑著說，有個地方不但一年四季螢光飛舞，甚至不需下車就能親近。這個聽起來如奇蹟般的體驗，就發生在用路人熟知的阿里山公路上。

## 找回大地春天

俗稱阿里山公路的台18線，是阿里山的大動脈，流動著活力與熱情，螢火蟲卻曾在這條路上幾乎失了蹤跡。公路不僅是車之路、人之路，也是生命之路，在同仁宣導禁用農藥和微棲地營造下，夏螢、冬螢再度點亮公路，並成為微電影《四季螢光》的主角，突破語言隔閡打動人心，於三大國際影展榮獲14座獎項。

這種道路與自然、生態和平共存的努力與堅持，早已銘刻在同仁們的規劃中，深受國內外肯定，110年以「山路共融，人旅合歡」為題的台14甲線24k~32k（鳶峰-水晶宮）路段，以及友善生態的台21線136k~142k（同富-塔塔加）路段屢獲景觀大獎，讓臺灣的路通向世界，與世界相連。

## 迎接夏季考驗

然而，自然帶來的不止美和驚喜，地震和颱風也為公路帶來考驗。台20線南橫公路94k明霸克露橋在110年8月7日盧碧颱風外圍環流所帶來的強降雨影響下，造成上游大規模土石崩塌，沖毀橋墩。搶修過程中時常因土石流襲擊而前功盡棄，同仁密集檢討後，改採順天應人策略，終於在8月25日以緊急涵管便道搶通，並持續加固短期鋼便橋，守護通行安全。

## Words from the Director-General

# We are the Sparkle that Lights up the “Road”

In spring and summer, people go deep into the secret realm along various roads and paths to appreciate the moving scene of the dots of light of fireflies all over the mountains. They enjoy the beauty of the season with their eyes and cameras, but our colleagues might laugh and tell them there is a place with fireflies all year round, and you can be among them without even getting out of the car. This miraculous experience takes place on Alishan Highway, which is familiar to all drivers.

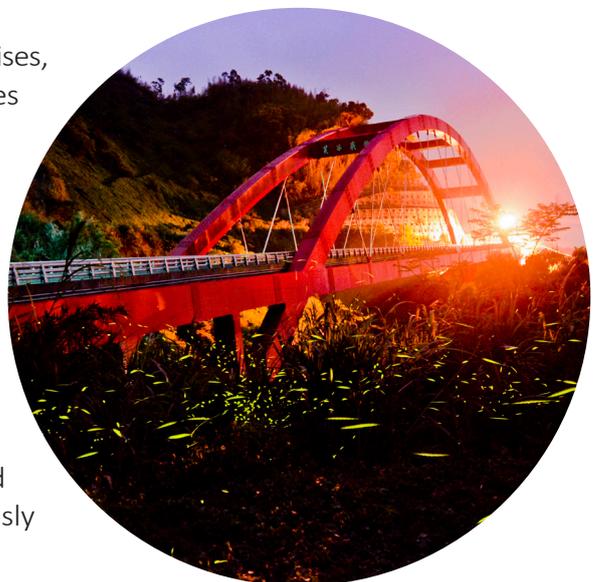
### Finding Spring of the Earth

Commonly known as the Alishan Highway, Taiwan Provincial Highway No.18 is the artery of Alishan filled with energy and passion. While fireflies were once almost extinct on this road, the road is now not only for cars and people but also for wildlife. With our colleagues persuading people to stop using pesticides and building micro-habitats, summer and winter fireflies lit up the road again. This story was featured in the microfilm All-Season Glow, which broke the language barrier to touch many people’s hearts. The film ended up winning 14 awards at three international film festivals.

The effort and persistence for roads in coexisting peacefully with nature and ecology have long been taken into consideration in our plans, winning recognition at home and abroad. In 2021, the section of 24k-32k of Provincial Highway No.14A (Yuanfeng-Shuijinggong) and the eco-friendly section of 136k-142k of Provincial Highway No.21 (Tongfu-Tataka) won numerous landscape awards, allowing Taiwan’s roads to lead to and connect with the world.

### Welcoming the Summer Challenge

However, nature brings not only beauty and surprises, but also earthquakes and typhoons that pose challenges to the roads. On August 7, 2021, the heavy rainfall brought by the peripheral circulation of Tropical Storm Lupit caused a large-scale landslide upstream of Mingba Kelu Bridge located at the 94k of the Provincial Highway No.20, destroying the bridge piers. All the efforts were often in vain during the emergency repair process due to landslides. After intensive review, the strategy of respecting nature was adopted. Eventually, the emergency culvert pipe builders’ road was cleared on August 25, and the temporary steel builders’ bridge was continuously strengthened to improve traffic safety.



不過，土石流不僅存在於現實世界，也出現在虛擬世界裡。隨著科技急速發展，大量資訊如滾滾洪流挑戰我們的服務與系統，為確保質與量能同步提升，宣示110年為我們的「數位轉型元年」，從智能客服、車輛動態資訊，到智慧化公路管理、災害應變，從十大面向拉動服務效能，也拉近我們與用路人間的連繫。

## 秋日歡喜收成

一方播種，另一方也有歡喜收成的時刻。隨著台61線西濱快速公路、台9線南迴公路與蘇花改陸續通車後，臺灣環島公路路網已趨於完整，為讓民眾更輕鬆、安全地抵達臺灣各個角落，我們將分年辦理台61線、東西向快速公路交控設備更新工程，並與中央氣象局合作強化公路天候事件預警，使應變速度和管理能力再升級。

而推出多年的監理服務APP也再次全新改版，打造個人化監理服務，從「我的監理管家」概念出發，整合個人車輛、駕照、汽燃費及違規等監理資訊，提供專屬駕照、車輛現況、定檢預約、繳費紀錄等申辦及查詢，並提供無障礙雙語服務，讓外國友人也能盡享貼心服務。

## 共渡疫情寒冬

110年臺灣再次遭受COVID-19疫情衝擊，全國於5月19日進入三級警戒，民眾減少通勤與觀光旅遊，為降低疫情對於公路客運、遊覽車業者及計程車駕駛人的營運衝擊，我們除給予營運費用、防疫物資、薪資等補貼外，也協調執行第7類北北基桃各類司機和外送員的疫苗接種作業，維持社會機能運作，相互扶持共度難關。

同樣暖心的，還有我們持續推廣的幸福巴士（含幸福小黃），至110年底已擴展至120處，路線數增加至321條，並再接再厲打造幸福巴士2.0，一步步實現偏鄉民眾「想去哪、就去哪」的夢想。

四季流轉、一年復始，我們各地同仁四季無休地在各自崗位上為路、為人、為車、為所有生命散發照亮未來的光，如同阿里山公路的四季螢光，齊心構成一幅屬於臺灣道路的動人風景。

局長

陳文端



However, landslides exist not only in the real world but also in the virtual world. With the rapid development of science and technology, excessive information continues to challenge our services and systems. To ensure improvement in both quality and quantity, we announced the year 2021 as the “Year One of digital transformation.” From smart customer service, dynamic vehicle information, and smart road management to disaster response, service efficiency has been elevated from ten aspects to further facilitate our connection with road users.

## Joyful Autumn Harvest

Once the seeds are sown, there will be moments of joyful harvest. With the opening of Provincial Highway No.61 West Coastal Expressway, Provincial Highway No.9 South Link and the Suhua Highway Improvement Project, Taiwan’s road network around the island has almost been completed. To make it easier and safer for the public to reach all corners of Taiwan, we continue to work on the renewal project of traffic control equipment for Provincial Highway No.61 and East-west Expressway Provincial Highway No.76 on a yearly basis. Moreover, we work closely with the Central Weather Bureau to strengthen the early warning of highway weather events to improve the response speed and management ability.

The Motor Vehicle Driver Information Service App has been upgraded regularly after its launch many years ago to offer personalized services. Based on the concept of a “personal motor vehicle driving information manager,” the app integrates information such as a personal vehicle, driver’s licenses, fuel costs, and violations to provide applications and inquiries regarding driver’s licenses, vehicle status, and scheduled inspection appointments and payment records. The app also provides bilingual services for users from abroad.

## Surviving the Epidemic Winter Together

The COVID-19 pandemic hit Taiwan again, and the level 3 epidemic alert was implemented on May 19. As a result, people commuted and traveled less. To reduce the impact on bus operators, tour bus operators, and taxi drivers, we provided subsidies for operating expenses and epidemic prevention materials and wages, on top of coordinating vaccine appointments for all drivers in Taipei, New Taipei, Keelung, and Taoyuan as well as delivery people who belonged in category 7. All these have helped society keep moving, and people helped each other overcome difficulties.

What was equally heart-warming was the Happiness Bus (including Happiness Taxi) that we continue to promote. As of the end of 2021, the program had been expanded to 120 locations with 321 routes. We have further launched Happiness Bus 2.0 to help people in remote and rural areas to realize their dreams of “going wherever they want to go.”

The seasons change, and another new year begins. Our colleagues all over Taiwan continue to work tirelessly to light up the future for all roads, people, cars, and all lives, just like the all-season glow on the Alishan Highway, forming a moving Taiwan road landscape.

Director-General

CHEN, WEN-JUEI





1

單元

規劃之路：  
轉型優先向永續

The Road to Planning: Prioritizing  
Sustainability for transformation

# 1

## 螢火蟲保育微電影四季螢光 國際影展獲獎

All-Season Glow, a Microfilm on Firefly Conservation  
Won awards at International Film Festivals



 台18線阿里山公路「芙谷莪橋」  
Caption: The Fugue Bridge on Provincial Highway No.18.

位於臺灣中部的省道台18線「阿里山公路」，不僅振興了大阿里山地區的經濟，大幅改善當地居民的生活，更讓阿里山晉升為國際級的旅遊勝地！位於破碎岩層上的阿里山公路，除了地震頻繁外，每年還要面對颱風、豪雨的侵襲…。

### 由傳統思維轉為尊重自然與環境共存

民國98年，阿里山公路發生了自開通以來最嚴重的災害「莫拉克風災」，風災造成沿線的公路柔腸寸斷，也讓本局思考如何與大自然生態環境和平共存，並決定以更謙卑的態度去面對，所以在復建工法的選擇上，捨棄了往常的混凝土擋土牆，而改採對環境較為友善的「型框植生工法」，並噴植草種及基材，讓種子成長茁壯，恢復邊坡綠意盎然的風貌！

一直以來，阿里山公路沿線都有棲息著螢火蟲，但民國96年時，整個大阿里山地區的螢火蟲數量正在快速的減少。在風災復建後，藉由一位經常往來的用路人告知，在本局所做的型框植生邊坡，發現大量的螢火蟲飛舞，

經過觀察後發現，原來型框中的草種及基材成為了蝸牛和蛞蝓的能夠生長環境，也就是螢火蟲幼蟲的食物，所以螢火蟲便在這邊建構牠們的家。

### 加強棲地營造範圍，紀錄復育成果

發現螢火蟲漸漸回歸後，本局便本著無痕景觀的原則，將路肩閒置的隙地空間，運用綠建材，穩固隙地邊坡，提供螢火蟲和蝸牛喜歡的空間，除了保水固土的功能外，更兼具生態保育的意涵。

由於復育的成效良好，公路總局更將其復建及復育過程拍攝成微電影短片，紀錄自然生態及物種保育的奮鬥歷程，並獲得美國最佳短片競賽（Best Short Competition）、全球電影競賽（The Accolade Global Film Competition）及休士頓影視展（WorldFest-Houston International Film Festival）共14項獎項。



「四季螢光」微電影封面  
All-Season Glow microfilm cover

Known as the Alishan Highway, Provincial Highway No.18 has revitalized the economy of the greater Alishan area and greatly improved the lives of local residents, and promoted Alishan as an international tourist destination. Located in the strata-breaking zone, Alishan Highway faces frequent earthquakes, as well as typhoons and torrential rain on a yearly basis.

### From traditional thinking, changing to respect for nature and co-existence with the environment

In 2009, Alishan Highway suffered from the most severe disaster since its opening, namely Typhoon Morakot. The typhoon broke the road in several places, making the DGH consider

how to coexist peacefully with the natural ecological environment. It was decided that a humbler attitude would be adopted. Therefore, the more eco-friendly “frame-structure vegetation” engineering method was selected instead of the usual concrete retaining walls when choosing the restoration construction method. Grass seeds and substrate were added to the frame so that plants could grow and restore greenery to the slope!

Fireflies have always existed along the Alishan Highway, but the number went down drastically in the Greater Alishan area in 2007. After recovering from the typhoon, a frequent road user informed us that many fireflies were found flying around the frame-structure vegetation we built. Some observations revealed that the seeds and substrate in the frame make a good environment for snails and slugs, which are food for firefly larvae. Therefore, fireflies built their homes here.

### Enhancing scope of habitat building, recording restoration results

Upon discovering that the fireflies gradually returned, the DGH took advantage of the idle open space along the shoulder of the road to stabilize the slope with green construction materials based on the principle of the seamless landscape. This provides a favorable environment for fireflies and snails, protects the earth and water source, and contributes to ecological conservation.

As the restoration project achieved great results, the DGH turned the reconstruction and restoration process into microfilm and won prizes at the Best Short Competition in the United States, The Accolade Global Film Competition, and the WorldFest-Houston International Film Festival.

# 省道高山公路 - 台 14 甲線、台 21 線 分別榮獲 110 年國內、外景觀大獎殊榮

Mountain Highways Including Provincial Highway No.14A and  
Provincial Highway No.21  
Won the 2021 Landscape Awards at Home and Abroad



台 14 甲線 -31k+500 水晶宮路段  
Shuijingong Section at 31k+500 of Provincial Highway No.14A

省道台14甲線穿越臺灣中央山脈脊梁，為南投進入花蓮的最佳路徑，沿路可達清境、合歡山之武嶺（海拔3,275公尺），這條路擁有珍貴的冰河地形遺蹟、全世界最南端的黑森林以及海拔分布最高的冷杉林，也孕育了黃鼠狼、雪山草蜥等臺灣特有種生物。而台21線新中橫公路位於南投縣水里至塔塔加，由於地勢高低差異大（海拔500至2,610公尺），生態資源豐富，獲選為臺灣最美十大景觀公路，是串聯日月潭及阿里山景點的高山公路，亦是登玉山必經之路，沿途可欣賞赤楊、檜木、櫻花等高山植物，並有機會與山羌、黃鼠狼、黃喉貂、長鬃山羊、帝雉、臺灣獼猴等動物相遇。

## 台 14 甲線 24k~32k（鳶峰-水晶宮）

公路總局第二區養護工程處埔里工務段

以「山路共融，人旅合歡」為題，於台14甲線24k~32k（鳶峰-水晶宮）路段，訂定五大策略—「設施輕化減量，實踐環境美學」、「隙地整合活化，體驗自然公路」、「制訂養護策略，環境永續經營」、「設施優化管理，落實人本交通」及「管理宣導齊行，提升遊憩品質」，達到「山、路、人」和諧共融的目標。

為通透台14甲線路段視野景觀，將護欄設施平順整齊，並拆除礙景設施、清理凌亂管線、活化隙地，站牌及解說牌結合文創，融入於自然環境內；同時跨域與相關專業單位合作，如：特生中心、梅峰農場及林務局等，進行景觀營造或生態友善措施經驗交流與協作，突破過去工程執行的框架，榮獲110年交通部金路獎優良景觀類第1名肯定。



 公車站牌減低彩度並結合文創  
Bus Stops Made Less Colorful with Cultural and Creative Elements

Provincial Highway No.14A cuts through the backbone of the Central Mountain Range and is the best way to enter Hualien from Nantou. You can reach Qingjing and Hehuan Mountain's Wuling (3,275 meters above sea level) along the way. The black forest at the southernmost tip of the world and the fir forest with the highest altitude also nurture Taiwan's endemic species, such as weasels and *Takydromus hsuehshanensis*. Provincial Highway No.21, known as the Central Cross-Island Highway, is located between Shuili and Tataka in Nantou County. The large altitude difference in terrain (500 to 2,610 meters above sea level) nurtures rich ecological resources. It was selected as one of Taiwan's top ten most beautiful scenic highways. It is the mountain highway that connects scenic spots between Sun Moon Lake and Alishan, as well as on the way to climbing Yushan. You can appreciate alpine plants such as the Formosan alder, cypress, and cherry blossoms along the way and have the opportunity to spot animals such as Reeves's muntjac, weasels yellow-throated martens, Taiwan serow, Mikado pheasants and Formosan rock macaques.

### 24k-32k of Provincial Highway No.14 (Yuanfeng-Shuijinggong)

Puli Maintenance Office Branch of the DGH's Second Maintenance Office formulated 5 strategies targeting the section of 24k-32k of Provincial Highway No.14A (Yuanfeng-Shuijinggong), followed the themes of "harmony between mountains and highways, perfect for people and trips," including "realizing environmental aesthetics with minimal facilities," "integrating and revitalizing the space to create a natural highway experience," "formulating maintenance strategies to achieve environmental sustainability," "optimizing facility management to realize human-oriented transportation," and "improving the quality of recreation by practicing management and awareness-raising" to achieve harmony among "mountains, roads, and people."

In order to broaden the view of Provincial Highway No.14A, the guardrails were made smooth and tidy, the view-obstructing facilities were removed, the messy pipelines were cleaned up, the open space was revitalized, and the bus stops and information signs were integrated into the environment with added cultural and creative elements. At the same time, the DGH worked with relevant professional units in different fields to exchange experience and collaborate on landscaping and eco-friendly measures, such as the Endemic



 台 21 線 -136k 同富路段  
136k Tongfu Section of Provincial Highway No.21

### 台21線 136k~142k (同富-塔塔加)

公路總局第二區養護工程處信義工務段以生態友善理念，採近自然工法辦理台21線136k~142k（同富-塔塔加）路段之道路養護，並以綠資材建構生態友善設施，運用竹圍籬、蛇籠、防落石網、乾砌塊石製作擋土牆及護岸，以確保生物棲地安全與降低路殺情況，野生動物能見度逐年上升。在草坪頭-塔塔加路段間於每日下午17:30至隔天上午07:00實施之道路夜間封閉管制，除能確保用路人安全外，也使山林恢復寧靜、植被日漸復甦、野生動物獲得生息。

台21線以「樸原森活新中橫公路」為主題，參加110年國際景觀建築師協會亞太區分會（簡稱IFLA-APR）舉辦之景觀大獎競賽，自397件優秀作品中脫穎而出，獲得自然保護類卓越獎殊榮。

高山公路因地理環境特殊，有著得天獨厚的自然景觀與生態環境，卻也因地質敏感而被視為易發生災難的山區道路，工程人員從大自然的考驗中學習面對衝擊、思考順應自然的復建工法，達到安全道路、生態友善、永續景觀的平衡，這樣的理念得到國內外獎項的肯定，亦期待國人同來鑑賞臺灣高山公路之美。



隙地改善採低維護且融入自然的設計手法

Low-maintenance design that becomes one of nature is adopted for open space improvement projects

Research Institute, the National Taiwan University Highland Experimental Farm, and the Forestry Bureau. The breakthrough from the framework of past project execution won first place in the 2021 MOTC Golden Way Award in the outstanding landscape category.

### 136k Tongfu Section of Provincial Highway No.21

Based on the concept of eco-friendliness, the Xinyi Maintenance Office Branch of the DGH's Second Maintenance Office adopted the natural construction method to engage in the road maintenance of the 136k-142k (Tongfu-Tataka) section of Provincial Highway No.21 as well as building eco-friendly facilities with green materials. Bamboo fences, gabions, rock-fall protection nets, and dry rubble were chosen to create retaining walls and bank protection to ensure the safety of natural habitats and reduce road kills, allowing more and more wild animals to be spotted year by year. The Chaopingtou-

Tataka section is closed from 17:30 to 07:00 the following day to ensure the safety of road users and restore tranquility to nature, allowing vegetation to recover and wildlife to bloom.

Provincial Highway No.21 participated in the IFLA Asia-Pac Landscape Architecture Awards 2021 (IFLA-APR) with the theme of "Plain-Native Forest-Lohas: New Central Cross-Island Highway." The project stood out from 397 outstanding works and won the Award of Excellence in Nature Conservation.

Due to the specific geographical conditions, alpine highways have a unique natural landscape and ecological environment, but they are also mountain roads prone to disasters due to the sensitive geology. The construction method achieves a balance between road safety, eco-friendliness, and a sustainable landscape. Domestic and foreign awards have affirmed this concept, and we look forward to inviting the public to appreciate the beauty of Taiwan's alpine highways.

# 淡江大橋連絡道路第 2 標通車 沿海而行生態永續

The Second Tender of the Connecting Road of the Danjiang Bridge Opens to traffic  
Ecological Sustainability along the Coast



淡水端車行箱涵  
Driving Box Culvert in Tamsui

## 淡江大橋八里端通車，完成階段任務

淡江大橋建設工程計分三標案辦理，第一標（臨港大道段）已於105年11月完工，第二標引橋段及淡水端車行箱涵，第三標為主橋段工程，第二標八里端主線於110年10月25日階段性通車，通車後可藉由主線與八里一交流道到達八里文化公園、新北市立十三行博物館等，除分散進入臺北港車流外並可帶動地區觀光產業發展，為淡江大橋計畫重要階段里程碑。

## 工程與環境並重，設置環境保護監督小組

本工程鄰近自然保留區及國家重要濕地，基於開發兼顧環境保育之理念，公路總局配合工程路線進行防風林補植、水下文化資產調查、陸上考古試掘及施工中監看等多項環境保護作業；亦邀請有關機關、專家學者及民間團

體組成環境保護監督小組，定期召開會議監督工程執行過程落實執行環境保護對策，討論議題包含環境品質、生態維護、交通運輸及文化資產等各項議題。

## 訂定停復工機制，落實生態保育對策

此外本工程訂定停、復工標準作業流程，針對黃鸝鳥繁殖季節每年4~6月於淡水端車型箱涵路段進行預警性停工，其餘鳥類、紅樹林、蟹類及彈塗魚等當地動植物經由監測作業觀察工程施工所造成衝擊影響，並訂定停工機制，工程施工至今，落實相關環境保護作業，皆未達停工標準。

未來淡江大橋主橋完工後，可使北部濱海公路系統更趨完善，促進商業發展及就業機會，淡水與八里引進車流將可直接銜接淡海新市鎮及北海岸，縮短淡水河兩岸旅次時間，對促進地區與北海岸遊憩帶發展有極大助益。



 淡江大橋聯絡道路第2標  
Second tender of Danjiang Bridge connecting road

### Opening the Bali end of the Danjiang Bridge completed the stage mission

The construction of the Danjiang Bridge was divided into three tenders, with the first one (Lingang Boulevard) being completed in November 2016. The second tender included the expressway and the driving box culvert in Tamsui, and the third tender was the main bridge construction. On October 25, 2021, the main route in Bali was opened to traffic, making it possible to reach Bali Cultural Park and Shihshang Cultural Park by the main route and Bali Interchange. Besides reducing traffic to the Port of Taipei, it will drive the development of the local tourism industry as an important milestone of the Danjiang Bridge project.

### Emphasizing engineering and environment, establishing the Environmental Protection Supervision Group

As the project is adjacent to nature reserves and important national wetlands, the DGH is engaged in multiple environmental protection projects such as replanting windbreak, underwater cultural asset investigation, land archaeological trial excavation, and construction monitoring to effectively take development and environmental conservation into consideration. Relevant agencies, experts, scholars, and non-governmental organizations have also been invited to form an environmental protection monitoring group and hold

regular meetings to supervise environmental protection countermeasures during project implementation. The topics discussed include environmental quality, ecological maintenance, transportation, and cultural assets.

### Drawing up a work halt and re-start mechanism to implement ecological protection policy

In addition, the project has established a standard operating procedure for stopping and resuming work. Early warning shutdowns are implemented on the box culvert section in Tamsui each April to June for the breeding season of Black-naped oriole. Other local animals and plants such as birds, mangroves, crabs, and mudskippers are monitored to determine the impact of the construction with a shutdown mechanism established. To date, all environmental protection measures have been implemented, and the project has not been halted.

After completing the main Danjiang Bridge, the northern coastal highway network will be close to perfect, bringing more commercial development and employment opportunities. The introduction of traffic flow from Tamsui and Bali will directly connect Danhai New Town and the north coast, shortening the travel time from both sides of the Tamsui River. This is of great help in promoting the development of the region and the North Coast Recreational Area.



 東方環頸與唐白鷺為淡江大橋生態停復工機制之觀測物種之一  
Kentish plover and Chinese egret are species monitored to decide when the construction of the Danjiang Bridge should stop and resume

# 110 年度道路補助型計畫推動情形

## Road Subsidy Projects in 2021



**生活圈計畫補助案 - 嘉義縣縣道 157 線 29k+800-30k+912 (蒜頭大橋) 拓寬改建工程：嘉義縣首座景觀斜張橋，為朴子市與六腳蒜頭地區間之重要聯絡道路**  
Region-Based Road System Construction Project- Chiayi County Highway 157 29k+800-30k+912 (Suantou Bridge) Widening and Reconstruction Project: The first landscape cable-stayed bridge in Chiayi County, an important connecting road between Puzi City and Liujiao Suantou area

### 強化區域路網斷鍊補缺，推動人本優質道路

公路系統基礎建設與促進社會經濟及區域均衡發展息息相關，亦為民眾日常生活通行基本需求。公路總局透過推動「生活圈道路交通系統建設計畫（公路系統）」及「前瞻基礎建設-提升道路品質計畫（公路系統）」等2項補助型計畫，希冀透過公路路網有效串聯與既有道路整體環境改善提升，以讓民眾能夠「行」的安全、順暢與便利。

### 補助項目多元化，道路建設更完善

本期「生活圈道路交通系統建設計畫（公路系統）8年（104~111）計畫」，中央編列經費439億元，除延續過往協助地方辦理

道路新闢拓寬事項，亦匡列資源協助偏鄉或急需改善之道路進行整建修復工作，消彌危險瓶頸路段，藉以協助地方建構完善路網、提升區域產業運輸效能，整體計畫截至110年已完成223項工程建設，道路新闢拓寬及改善里程數約264.4公里；另為推動公路系統路網完整性及長遠之規劃，使資源投入效益最大化，自108年起補助11個地方政府辦理整體路網評估，以達成路網完整串聯及斷鍊補缺為目標，做為未來道路建設之重要依據，110年底已進入期末規劃階段，預計至111年可完成相關評估作業。

另「前瞻基礎建設-提升道路品質計畫（公路系統）（106~114年）」編列中央經費約220億元，除協助地方政府辦理都市計畫區外之公路系統道路路面品質改善，亦將人本需求及友善環境等納入補助範疇，截至110年底已完成363項工程案件，累計完成路面約2,230公里、孔蓋下地約16,400個、人行道改善約14,700公尺。

### 永續發展，道路功能多元化

未來道路功能發展將更具多元化，除既有之交通功能外，同時強化偏遠地區聯外交通提振區域平衡、提升適應氣候變遷能力、人本友善設計及綠能應用、建立生態公路或景觀公路網絡及持續利用綠色材料達成永續發展及多元化等目標，公路總局後續將納入推動補助型計畫之思考面向，以期待給用路人一條安全順暢之優質道路。



**提升道路品質計畫補助旗艦型案件 - 臺南市白河區林初埤小南海周邊觀光路線道路品質提升計畫（南 89 線道路工程完工照片）**

Road Quality Improvement Project Subsidy Flagship Case- Road Quality Improvement Project for Sightseeing Routes around Xiaonanhai, Linchu Pi, Baihe District, Tainan City (Photo of the completed construction project on South Route 89)

## Strengthening the Broken Links in the Regional Road Network to Fill the Gaps and Promoting People-oriented High-quality Roads

The infrastructure construction of the highway system is closely related to promoting balanced development between the social, economic, and regional aspects and fulfilling the basic needs of everyday life. The DGH has two types of subsidy programs in place, including the “Region-Based Road System Construction Project (Highway System)” and “Forward-looking Infrastructure Construction - Road Quality Improvement Project (Highway System),” aiming to effectively connect the road network and improve the overall road conditions so that people can enjoy safe, smooth and convenient transportation.

## Complete Road Construction with a Variety of Subsidy Projects

For the “8-year Region-Based Road System Construction Project (Highway System, 2015-2022),” the central government has allocated NT\$43.9 billion. In addition to assisting local governments in widening new roads, resources are also listed for assisting roads in remote villages or in urgent need of improvement to be renovated and repaired to eliminate dangerous bottleneck road sections. This helps local governments build and improve road networks

and regional industrial transportation efficiency. As of 2021, the overall program has completed 223 construction projects, with 264.4 kilometers of roads being widened. In addition, in order to promote the integrity of the road network of the highway system and long-term planning as well as maximize the efficiency of resource investment, 11 local governments have been subsidized to conduct overall road network assessments since 2019 to achieve a complete road network connection. The goal is to fill in the broken links gaps and serve as an important basis for future road construction. As of the end of 2021, the program has entered the final planning stage. It is expected that the relevant assessment will be completed by 2022.

In addition, the central government has allocated approximately NT\$22 billion for the “Forward-looking Infrastructure Construction - Road Quality Improvement Project (Highway System, 2017-2025).” In addition to assisting local governments in improving the road surface quality of highway systems outside the urban planning areas, it also includes people-oriented needs and eco-friendliness in the subsidy. As of the end of 2021, 363 construction projects have been completed on a total of 2,230 kilometers of road surfaces, 16,400 underground pipe hole covers, and about 14,700 meters of the sidewalk.

## Sustainable Development and Diversification of Road Functions

The development of road functions will be more diversified in the future. In addition to the existing transportation functions, they will also achieve goals such as strengthening the connection between remote areas and external traffic to improve regional balance, improving the ability to adapt to climate change, human-oriented design and green energy applications, building ecological roads or landscape highway networks, as well as continuous use of green materials. To this end, the DGH will consider these goals for subsidy programs in the future, hoping to provide road users with safe and smooth, high-quality roads.

# 啟動公總數位轉型元年

## The First Year of DGH Digital Transformation



 黃運貴副局長率領同仁實地參訪臺灣微軟公司總部  
The DGH Deputy Director-General, Huang Yung-kuei led a delegation to visit the headquarters of Microsoft Taiwan

110年1月25日局務會議局長指示：為擘劃公路總局數位轉型方向、強化資訊安全管理與數位治理及增進同仁資訊安全意識，已由黃運貴副局長率領同仁實地參訪臺灣微軟公司總部，請資訊室落實參訪成果，訂定期限由各單位提出業務轉型規劃，共同努力落實公路總局數位轉型相關工作。爰規劃公路總局核心業務數位轉型方案並請各組室研提構想，是以啟動公路總局數位轉型元年。

### 營造共識

黃副局長109年12月18日、110年2月2日率隊參訪微軟，雙方於各領域人工智慧技術成果、資安治理及未來趨勢等相互交流。為凝聚變革共識、建立團隊願景，公路總局規劃說明會（4月12日）及共識營（7月30日）活動，分別邀請微軟團隊、人事行政總處蘇副

人事長蒞局分享成功案例，蘇俊榮副人事長並期勉公路總局從民眾需求出發，透過觀念改變、流程改變、業務改變，以逐步達成機關業務數位轉型工作。

### 推動數位轉型三階段

- 一、研提數位轉型構想書：由各組室研提3年一期之核心業務數位轉型構想書，公路總局邀請相關專家學者進行審查以完備所提構想。
- 二、提報執行計畫：各組室依核定之構想書研擬具體執行計畫。
- 三、追蹤執行進度：各組室依核定計畫落實執行，資訊室每半年追蹤執行進度。

### 110年推動成果

包括「工地勞安稽核作業」、「天然災害應變指揮官輔助系統」、「智慧化公路管理系統提升規劃」、「省道災害經費管理及工程執行資訊系統」、「智能客服賦能與電話客服系統轉型」、「車輛動態資訊系統服務轉型計畫」、「打造安全效率與向上集中的資訊服務架構」、「公路客運營運路線許可作業數位化升級計畫」、「智慧監理服務效能躍升計畫」及「車輛行車事故鑑定決策支援平臺」等10案，藉由本案之推動，公路總局將持續精進並提供切合民眾需求之服務，進而帶動政府服務效能全面躍升。



**核心業務數位轉型共識營邀請蘇俊榮副人事長蒞局專題演講**  
Deputy Minister, Su Chun-jung, of the Directorate-General of Personnel Administration invited to give a keynote speech at DGH at the Core Business Digital Transformation Consensus Camp

On January 25, 2021, the DGH’s Director-General announced during the internal affairs meeting: To plan the direction of the DGH’s digital transformation, strengthen information security management and digital governance and enhance the information security awareness of all employees, Deputy Director-General, Huang Yung-kuei, has led a delegation to visit the headquarters of Microsoft Taiwan, as well as asking the Information Management Office to implement the findings finding the visit. Deadlines were set for all divisions to submit business transformation plans to realize digital transformation. By planning the digital transformation for the core business, the DGH has invited all divisions to develop proposals and launch the first year of digital transformation.

### Building a Consensus

Deputy Director-General Huang Yung-kuei, led a delegation to visit Microsoft on December 18, 2020, and February 2, 2021. Both parties exchanged views on AI technology achievements in various fields, information security governance, and future trends. In order to build consensus on the reform and develop a team vision, the DGH hosted activities such as a briefing (April 12) and consensusbuilding session (July 30) activities, inviting the Microsoft team and Deputy Minister, Su Chun-jung, of the Directorate-General of Personnel Administration to share successful cases.

Deputy Minister, Su also encouraged the DGH to start from the public's needs and gradually achieve digital transformation through concepts, processes, and business changes.

### Stages of Digital Transformation

1. Submitting digital transformation proposals: Each division will formulate a three-year core business digital transformation proposal for the DGH to invite relevant experts and scholars to review and complete the ideas.
2. Submitting implementation plans: Each division will develop a specific implementation plan according to the approved proposals.
3. Tracking the implementation progress: each division will implement the plan according to the approved version, and the Information Management Office will track the progress every six months.

### Promotion results in 2021

A total of 10 projects have been approved, including “Worksite Labor Safety Audit Operations,” “Natural Disaster Response Commander Assistance System,” “Smart Highway Management System Improvement Planning,” “Provincial Highway Disaster Fund Management and Project Execution Information System,” “Smart Customer Service Empowerment and Telephone Customer Service System Transformation,” “Vehicle Dynamic Information System Service Transformation Plan,” “Building a Safe, Efficiency and Centralized Information Service Architecture,” “Digital Upgrade for Highway Bus Operation Route Permit Applications,” and “Smart Motor Vehicle Driver Information Service Efficiency Improvement Plan,” and “Vehicle accident identification decision support platform.” The DGH will continue to improve and provide services that meet the needs of the public, thereby driving the overall improvement of government service efficiency.





# 2

單元

## 新建之路： 效率第一創未來

The Road to New Constructions:  
Building a Future by Prioritizing

# 2

## 配合桃園國際機場第三航廈 及第三跑道建設計畫 辦理台 15 線及台 4 線改線工程

Provincial Highway No.15 and No.4 Re-routing in Line with Taoyuan International Airport Terminal 3 and Runway No.3



「台 15 線及台 4 線改線工程」路線示意圖  
Diagram of "Provincial Highway No.15 and No.4 Re-route Construction"

### 計畫緣由

為因應亞太地區航空客貨運成長之趨勢，並提升國家競爭力，行政院全力推動「桃園航空城」計畫，新建第三航廈、第三跑道及擴大自由貿易港區，以達目標年119年之客、貨運需求。

本計畫道路改線工程係為提供桃園國際機場興建第三跑道用地而辦理，亦是「桃園航空城」中第一棒的先期工程，未來本計畫道路完工通車改道後，舊路再交由桃園國際機場股份有限公司興建桃園國際機場第三跑道。

### 工程概要

本工程「新台4線」東起於三民路一段（台4線）及航翔路口，沿南崁溪左岸於國際路三段與「新台15線」改道段銜接，路線西轉行於竹圍國中南側南轉至圳頭路接回台15線，路線全長約7.39公里。計畫道路路寬為30公

尺，雙向佈設四車道及兩慢車道設置綠帶及草溝，並於計畫道路下方設置排水箱涵，配合綠帶設計提升透水、保水及滯洪能力；於人行道及自行車道下方設置共同管道，整合區域維生及機場周邊管線，並設置智能路燈及車輛偵測系統，由遠端中控中心進行監控，打造智慧公路成為智慧城市的骨幹。

### 計畫效益

桃園國際機場為臺灣之主要國門，伴隨未來「桃園航空城區段徵收工程」及「客貨運園區」開發，以及第三跑道的闢建完成，可預見未來將引進龐大的客貨運車流。而本計畫道路完工後，配合國道1號、國道2號、台61線及航空城北側高（快）速公路（國1甲），提供便捷的聯外交通運輸環境，可串聯台北港達到「海空聯運，雙港運籌」之區域運輸效能，使桃園國際機場成為「臺灣與世界連結的重要門戶」。

## Plan origin

The Executive Yuan has spared no effort in promoting the Taoyuan Aerotropolis Project to cope with the growth in air passenger and cargo in the Asia-Pacific region and enhancing national competitiveness. Terminal 3, Runway 3, and an enlarged free trade port have been included to meet the annual passenger and freight demand of the target year of 2030.

The re-routing work in this project is meant to provide land use for the Runway 3 of Taoyuan International Airport, and it is also the initial phase of Taoyuan Aerotropolis Project. Once the road re-routing has been completed and opened for public, the old road will be part of Runway 3 implemented by Taoyuan International Airport Corporation.

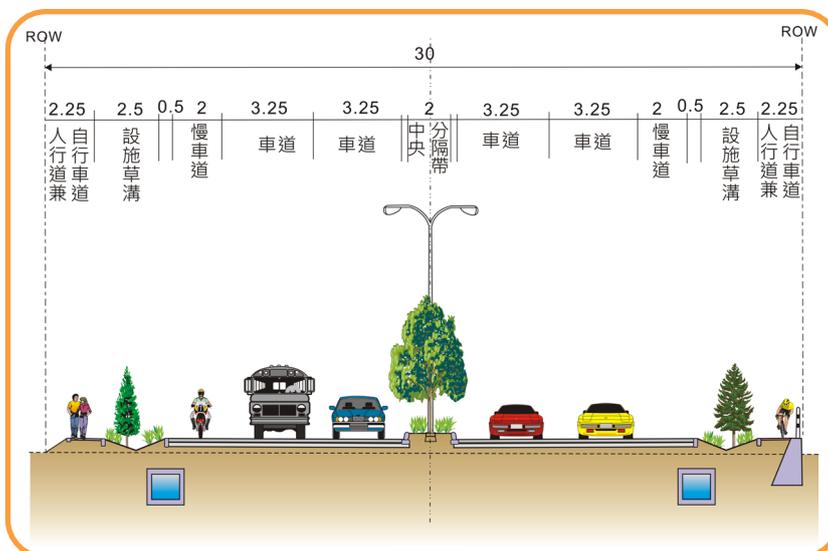
## Engineering overview

The “New Provincial Highway No.4” starts from the east Sanmin Road Section 1 (Provincial Highway No.4) and Hangxiang Road intersection, goes along the left bank of the Nankan River, at the intersection Guoji Road Section 3 connecting with the diversion section of “New Provincial Highway No.15” turning west in the south of Zhuwei High School, turning south to Zhentou Road and connecting to Provincial Highway No.15 again. The total length of the route is about 7.39 kilometers, with a planned width of 30 meters. There are

four lanes and two slow lanes with green belts and grass ditches in both directions. Drainage box culverts are installed under the road to improve water permeability, water retention, and flood retention capacity in conjunction with the green belt design. A common pipeline is set up under the sidewalk and bicycle lane to integrate the lifelines and pipelines around the airport. Moreover, smart streetlights and a vehicle detection system are also set up to be monitored by the remote central control center to create a smart highway and the backbone of the smart city.

## Plan benefits

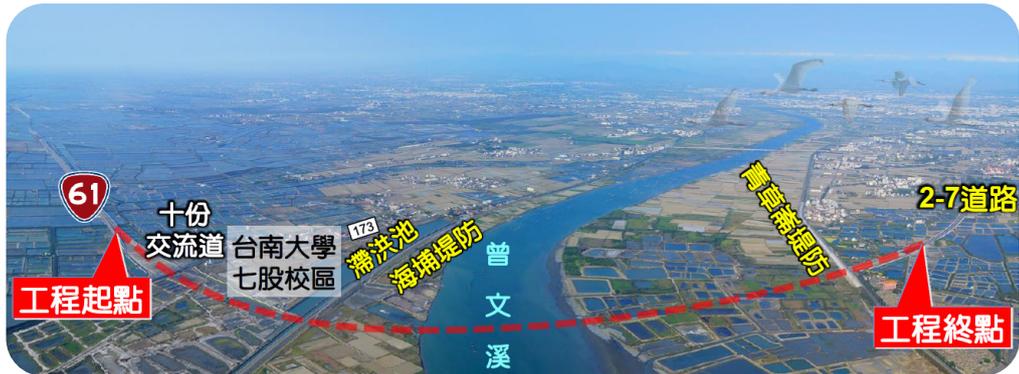
As the main gateway to Taiwan, Taoyuan International Airport is expected to generate a lot of passenger and cargo traffic with the future development of the “Taoyuan Aerotropolis zone expropriation” and the “Passenger and Cargo Park,” as well as the completion of Runway 3. Upon completion of this project, the road will provide convenient access to transportation together with National Freeway No.1, National Freeway No.2, Provincial Highway No. 61, and the highway/expressway on the north side of the Aerotropolis (National Freeway No. 1A). This network can connect with Taipei Port to achieve regional transportation efficiency by “combining marine traffic and aerial transportation and twin port logistics”, making Taoyuan International Airport an “important gateway that connects Taiwan with the world.”



標準斷面圖  
Standard profile section

# 西濱快速公路曾文溪段新建工程 旅者之道

New Construction for the Zengwun River Section of the West Coast  
Expressway The Travelers' Path



路線示意圖  
Route Map

## 計畫緣由

台61線西濱公路目前路線南邊止於臺南市的七股地區，隔著曾文溪與臺南市2-7號道路遙遙相望無法串聯。曾文溪橋完工後可與臺南都會區北外環道銜接，往東可銜接國道8號、國道1號、國道3號等高速公路，串起台61線與國道8號等交通動脈，構築大臺南地區「三橫三縱」高快速道路路網最後一塊拼圖，又能串連觀光休閒產業，促進區域均衡發展，成為人們往來的通行要道，以及生態、觀光、產業發展即刻飛翔的「旅者之道」。

## 設計概念

曾文溪橋跨越擁有豐富歷史及人文的曾文溪，橋址所在為眾多水鳥、候鳥過境的休息站，更是黑面琵鷺每年冬季必訪之地；兩岸從荷據明鄭時期的開拓，到現今科技園區入駐及臺南大學成立，跨越歷史軸線，獨特顯現其歷史變遷的時光之景。因此，曾文溪主橋設計成一線形流暢，低調與周圍環境融合之雙塔脊背

橋，塔柱以「黑面琵鷺」為設計意象，於曾文溪上輝映融入地方景觀；期許本道路最純粹、最簡單的融合環境之美，為每日的陸行遊客、每年的飛行訪客、時光飛逝的歷史過客，提供旅者們方便及舒適之視覺享受。

## 執行情形

本工程北側銜接已通車之「西濱快八棟寮至九塊厝段」，跨越北側海埔堤防及南側青草崙堤防，平面銜接臺南市2-7號道。路線長度約3.38公里，計畫經費為66.36億元，已於110年完成設計工作，刻正辦理工程發包中。



主橋段脊背橋日間模擬圖  
Daytime simulation of the main extradosed bridge



景觀意象圖  
Landscape imagery

## Plan origin

The current route of West Coast Expressway 61 ends in Qigu District in Tainan City, across from roads 2-7 with Zengwen River without being connected. After the completion of the Zengwen River Bridge, it can be connected to the North Outer Ring Road of the Tainan Metropolitan Area, National Highway No.8, No.1, No.3, and other expressways to the east, as well as other arterial roads such as Provincial Highway No.61 and National Highway No.8, to piece together the last piece of the puzzle of Tainan's "three horizontal and three vertical" highway network. Moreover, it connects the tourism and leisure industry to promote balanced regional development, becoming a thoroughfare for people and "travelers' path" for ecology, tourism, and industrial development.

## Design concept

The Zengwen River Bridge spans the Zengwen River, which is rich in history and culture. The bridge is located where many water and migratory birds take a rest while crossing the border. It is also where black-faced spoonbills visit every winter. From the time the banks were settled during the Dutch Occupation to where the science park and the National University of Tainan were built, they spanned history to present a unique view of time-based on historical evolution. Therefore, the main part of the Zengwen River Bridge is designed as an extradosed bridge with

double pylons with a streamlined shape and low-key integration with the surrounding environment. The pylons are designed based on the image of the "black-faced spoonbill," reflecting on the Zengwen River and integrating into the local landscape. It is hoped that this road can present the purest and simplest beauty that is part of the environment, providing a visual feast for the birds, passers-by in history, and travelers.

## Execution situation

The north side of the project is connected to the Badongliao to Jiukuaicuo section of the West Coast Expressway opened to traffic, crossing the Haipu embankment on the north side and the Qingchaolun embankment on the southside. It connects to roads 2-7 in Tainan City with a length of 3.38 kilometers and a budget of NT\$6.636 billion. The design was completed in 2021, and the project is in the process of being contracted.



主橋段背橋夕陽模擬圖  
Simulation of the main extradosed bridge at sunset

# 南方澳跨港大橋重建工程進度超前 力拼 3 年內完工通車

The Reconstruction of Nanfang'ao Bridge is ahead of Schedule  
Expected to be Open in Three Years



 預鑄U型梁吊裝  
Precast U-Beam Hoisting

## 計畫緣由

108年10月1日宜蘭縣蘇澳鎮境內「南方澳跨港大橋」無預警倒塌造成漁港航道受阻及傷亡事件，不僅影響當地交通及漁業發展，更重創當地經濟及觀光產業。

108年10月16日公路總局、航港局與港務公司完成代辦協議書簽訂，108年10月31日啟動重建工程規劃與設計，109年5月底完成設計作業、109年7月13日決標予新亞建設開發股份有限公司，並於109年7月16日開工。

## 工程概要

本工程位於宜蘭縣蘇澳鎮南方澳大橋原址辦理重建，工程總長796.53公尺，其中橋梁595公尺、引道201.53公尺，主橋段採三跨預力箱型梁橋，配合景觀藝術設施加寬並設置觀景平臺。目前主橋段之橋墩正施作到最後的柱頭節塊，兩側引道部分之主要結構亦已完成，進度穩定超前。

## 計畫效益

「南方澳跨港大橋重建工程」完工後，除可連結跨港橋西側碼頭區漁港觀光市集與東側豆腐岬風景區，亦可配合周邊道路形成環狀道路系統，未來將提升南方澳地區民眾之交通便利性、重振漁港往日風采、促進漁港活化、振興商圈並加速觀光發展，橋梁特殊鯖魚造型搭配夜間藝術光雕系統，更可成為南方澳地區指標性地標。

## 戮力完成

110年9月9日蔡英文總統偕同陳歐珀立委、王國材部長、公路總局許鈺漳局長及各級長官再度至工地視察工程進度及重建情形，並期許如期於111年9月18日完工。相信在公路總局及蘇花公路改善工程處工程團隊、港務公司及航港局努力下，與漁業署、宜蘭縣政府、漁會及地方民眾一同攜手合作，全力以赴，一定能克服困難，達成3年內如期如質完工通車之目標。

## Plan origin

On October 1, 2019, the collapse of the Nanfang'ao Bridge blocked the navigation channel and killed and wounded many. The incident interfered with the development of local transportation and fishing, and it also had a severe impact on the local economy and tourism industry.

On October 16, 2019, the DGH, Maritime & Port Bureau, and Taiwan International Ports Corporation signed the agency agreement. The reconstruction planning and design started on October 31, 2019. The design was completed at the end of May 2020, and NEW ASIA CONSTRUCTION & DEVELOPMENT CORP. was awarded the tender on July 13, 2020. The work started on July 16, 2020.

## Engineering overview

This project is located at the original site of Nanfang'ao Bridge, Suao Town, Yilan County. The total length of the project measures 796.53 meters, of which the bridge is 595 meters, and the approach road is 201.53 meters. The main bridge is a three-span box girder bridge, which widened with a viewing platform installed based on landscape art. At present, the last pier segments of the piers of the main bridge section are being constructed, and the main structures of the approach roads on both sides have also been completed with stable progress that is ahead of schedule.

## Plan benefits

After the completion of the “Nanfang'ao Bridge Reconstruction Project,” it can form a ring road system together with roads in the surrounding area in addition to connecting the fishing port tourism market in the wharf area on the west side and Tofu Cape Scenic Area on the east side. It will offer the local people convenient transportation, revive the old splendor of the fishing port, revitalize the fishing port, bring business to the business district, and speed up tourism development. The mackerel shape of the bridge paired with light sculptures at night will become a landmark in the area.

## Determined completion

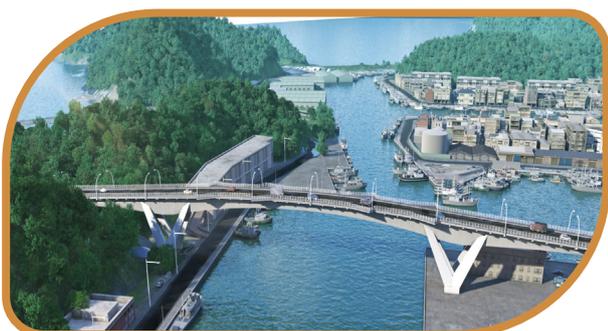
On September 9, 2021, President Tsai Ing-wen visited the site again to inspect the progress of reconstruction together with Legislator Chen Ou-po, Minister, Wang Kwo-tsai, Director-General of the DGH, Hsu Cheng-chang and other officials, expressing her wish that the project could be completed on time by September 18, 2022. It is believed that with the efforts of the engineering team of the DGH Suhua Improvement Engineering Office, Taiwan International Ports Corporation, and Maritime & Port Bureau, as well as the assistance from the Fisheries Agency, Yilan County Government, fishermen's association, and local residents, all difficulties can be overcome and the bridge will be open within 3 years as scheduled.



蔡英文總統工地視察工程進度及重建情形  
President Tsai Ing-wen inspected the progress of reconstruction



橋梁現場施工情形  
Daytime simulation of the main extra dosed bridge



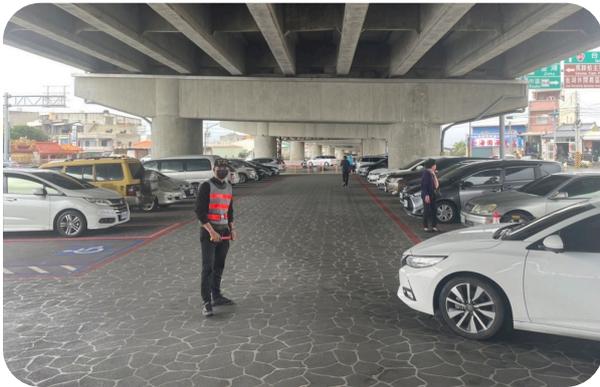
新橋完工日景模擬圖  
Daytime simulation of the completed new bridge



新橋完工夜景模擬圖  
Nighttime simulation of the completed new bridge

# 台61線口湖休息站 開創省道公路服務新里程碑

The Kouhu Rest Area on Provincial Highway No.61  
Creates a new Milestone in Services on Provincial Highways



**➤** 設置停車場以利用路人休憩、補給  
The parking lot makes it easy for passers-by to take a break and get supplies

台61線西濱快速公路縱貫臺灣西部沿海地區，是全臺最長的快速公路，全長約300多公里。其中，中南部路段大多是高架、封閉式道路，雖然提高了交通行旅效率，但用路人要解決餐飲補給等基本需求時相對不便。109年2月15日台61線中部路段全線通車，時任交通部林佳龍部長在「吹海風的路：台61線西部濱海快速公路」新書發表會中，指示公路總局打造成不同於高速公路服務區的台61線休息站，帶動地方創生。

## 完備法源依據

經盤點公路相關法規發現，缺乏省道休息站設置及管理相關法源依據，公路總局隨即啟動「公路附屬設施設置管理要點」修訂作業，透過不斷地研商與條文撰擬增修，交通部於109年12月8日修正發布該要點第2點、第3點及增訂第21點、第22點，自此省道休息站設置及管理法源完備，得以全面推



**➤** 假日小農市集販售雲林當地農特產  
Weekend Farmer's Market with Local Agricultural Products

動省道休息站建置工作。經公路總局評估交通量及用路人需求，決定先在雲林口湖以試辦方式設置休息站。並於台61線246k橋下規劃246幸福休息站之站體工程、周邊公路鋪面及附屬設施改善工程，並研採標租方式委託廠商經營。

## 首座省道休息站啟用

休息站相關工程於109年11月開工，並由全家便利超商公司得標獲得經營權，於今年春節前110年2月7日開始營運。除了設立便利商店24小時服務旅客及廁所提供使用外，假日還有舉辦農民市集展售口湖當地豐富的農漁產品，提供用路人餐飲補給等需求。台61線西濱快速公路因設置休息站而大幅提升服務品質，提升春節疏運期間用路人使用率，減輕國道1號及3號壅塞壓力，而農民市集展售口湖當地豐富的農漁產品，亦提升了地方產業能見度。



 台 61 線口湖休息站 110 年 2 月 7 日開幕儀式  
The opening ceremony of the Kouhu Rest Area on Provincial Highway No.61 on February 7, 2021

Provincial Highway No.61, known as the West Coast Expressway, runs through the western coastal areas of Taiwan. It is the longest expressway in Taiwan, with a total length of more than 300 kilometers. The central and southern sections are mostly elevated and closed roads. Although the design improves transportation efficiency, it is relatively tricky for passers-by to fulfill basic needs such as food and other supplies. On February 15, 2020, the central section of Provincial Highway No.61 was opened to traffic. The then MOTC Minister Lin Chia-lung instructed the DGH to create a service area different from the expressway service areas at the new book presentation for “Road in the Sea Breeze: Provincial Highway No.61 West Coastal Expressway” to facilitate regional revitalization.

### Complete legal basis

After reviewing relevant laws and regulations on highways, it was found that there was a lack of legal basis for the establishment and management of rest areas on provincial highways. The DGH immediately started revising the Guidelines for the Management of Highway Facilities. After a lot of discussion and revision, the MOTC revised clauses 2 and 3 and announced clauses 21 and 22 on December 8, 2020. Since then, the legal basis for establishing and managing provincial highway rest areas has been completed, and it has become possible to construct rest areas on provincial

highways. After evaluating the traffic volume and the needs of passers-by, the DGH decided to set up a rest area on a trial basis in Kouhu, Yunlin. The 246 Happiness Rest Area was also planned under the bridge at 246k of Provincial Highway No.61, including the surrounding road pavement and other facility improvement projects. It was decided to entrust the operations and management through tender and standard lease.

### The first provisional highway rest area opens

The construction of the rest area started in November 2020, with Family Mart winning the tender for the right to operate. The operation started on February 7, 2021, before the Lunar New Year. In addition to setting up a convenience store to serve passengers 24 hours a day and provide access to restrooms, there are also farmers’ markets over the weekend with abundant local agricultural and fishery products from Kouhu, providing food and beverage supplies for passers-by. The service quality of the highway was greatly improved due to the rest area, increasing the utilization rate of passers-by during the Lunar New Year, and relieving the congestion of National Highway No.1 and No.3. The local agriculture and fishery products from Kouhu featured by the farmers’ market also enhance the visibility of local industries.





3

單元

養護之路：  
紮穩馬步立百年

The Road to Maintenance: Building a  
Foundation to Last a Century

# 3

## 台 20 線南橫公路 94k 明霸克露橋 災損斷橋搶通歷程

The Emergency Repair of Mingba Kelu Bridge  
Located at 94k of Provincial Highway No.20



 主要通行便道修築  
Construction of Main Access Roads

### 公路環境歷程及受災搶修歷程

台20線南橫公路94k明霸克露橋屬高雄市桃源區，該橋位於荖濃溪、布唐布那斯溪及玉穗溪等三條溪流匯集處。110年8月7日盧碧颱風外圍環流所帶來之強降雨影響下，造成玉穗溪上游大規模土石崩塌，堆積河道引發土石流沖毀明霸克露橋A1橋臺及P1、P2橋墩。公路總局第三區養護工程處自8月7日起即積極搶修，歷經多次土石流襲擊終於在8月25日以緊急涵管便道搶通，並持續辦理短期鋼便橋加固，提升用路人通行安全。

### 應變處置

110年8月6日三工處經氣象情資研判盧碧颱風外圍環流雨量已達封閉行動值，即果斷採預警性封閉，於隔（7）日下午1點17分

明霸克露橋因大量玉穗溪土石爆發，造成A1橋臺至P2橋墩遭沖毀，所幸封閉得宜無人員傷亡。8月8日三工處立即於寶來監工站成立前進指揮所，以及邀集相關工程司及搶修廠商研商搶修策略，經8月9日至12日連日搶修，河床便道已完成約75%。

搶修期間，因玉穗溪發生多次土石流，8月13日鑒於11至12日連續兩天皆發生土石流，且當日預報當地約有80毫米的雨量，所以當現地出現下雨時即要求所有工作停止、立即撤退，所有人員機具及時撤離至安全區域。由於土石流至工區時間僅約2分鐘，所幸所有搶修人員、國軍、消防搜救人員，約有50人均因提早撤離而倖免於難。但此次災情也造成8月12日前完成之河床便道全數沖毀，搶修進度一切歸零。

## The Surroundings of the Highway and Emergency Repair

Located at 94k of the Provincial Highway No.20, Mingba Kelu Bridge belongs to the Taoyuan District, Kaohsiung City. It is where the Laonong River, Pu-Tun-Pu-Nas River, and Yusui River converge. On August 7, 2021, the heavy rainfall brought by the peripheral circulation of Tropical Storm Lupit caused a large-scale collapse upstream of the Yusui River, causing a landslide with the earth and rocks and destroying the A1 abutment and the P1 and P2 piers of the Mingba Kelu Bridge. On August 7, the DGH's Third District Maintenance Construction Office started emergency repairs. Eventually, the emergency culvert pipe builders' road was cleared on August 25, and the makeshift steel builders' bridge was continuously strengthened to improve traffic safety.

### Emergency Response

On August 6, 2021, the Third District Maintenance Construction Office concluded that the rainfall in the peripheral circulation of typhoon Lupit had reached the closure action value based on the meteorological information.

As a result, preventive closure was taken. At 13:17 the following day (7), the large-scale collapse of the Yusui River upstream caused a landslide with the earth and rocks and destroyed the A1 abutment and the P1 and P2 piers of the Mingba Kelu Bridge. Fortunately, nobody was hurt. On August 8, the Third District Maintenance Construction Office set up the forward command operations at Baolai Station, inviting engineering offices and companies to formulate strategies for emergency repairs. After continuous repairs from August 9 to 12, about 75% of the riverbed access road had been completed.

During the repairs, Yusui River had a few more landslides. On August 13, as landslides took place for two days, and the weather forecast predicted 80 mm of rainfall, all work was halted with people evacuated to move the people and machinery to a safe area as soon as it rained. It took only two minutes for the landslide to reach the construction site. It was fortunate that around 50 people were evacuated on time, including the repair staff, military, and firefighters. However, the disaster also wiped out the effort made for the riverbed access road before August 12, and the progress returned to zero.



 處長下令撤離  
The Director ordered the evacuation



主要通行便道淹沒  
The main access road flooded

搶修期間，面臨復興里、拉芙蘭里及梅山里等三里之民生需求及經濟作物運補問題，於8月20日緊急開放封閉已久之南橫公路天池至向陽路段供民眾臨時通行，因南橫公路部分封閉路段尚未復建完成，於開放期間採管制戒護通行以確保用路人安全。

因玉穗溪土石流向不定，造成便道搶修過程非常艱困，更時常因玉穗溪土石流襲擊而前功盡棄，進度歸零。在吸取數次失敗經驗，因應現地狀況，三工處團隊密集檢討，改採順天應人策略，於玉穗溪河口布設緊急避難平臺，供人員機具得以較短時間完成緊急避難，以設立第一線施工人員之安全防線。另務實修正便道路線，改沿局部削山墊高方式進行，避免土石流沖積扇漫延至便道，並擴挖疏通土石流路設置涵管，最終在團隊的努力下，於110年8月25日河床便道正式搶通開放通行。

## 跨域合作

搶修期間三工處連繫相關橫向單位及專家學者召開多次會議，研議搶修相關工法以及土石流災害之防護方案。另請氣象局針對明霸克露橋客製化設計QPE+，提供工程人員研判斷降雨與否氣象情資；及水土保持局臺南分局於玉穗溪上游設置雨量計監測降雨情資，以維施工人員安全。

## 後續作為

台20線南橫公路94k明霸克露橋為南橫必經之路，緊急搶修方式為鋪築涵管便道；短期方案為建置鋼便橋，增加通洪斷面、提升安全；因勤和至復興路段（93k-99k）為地質不穩定區域，中、長期方案將持續調查水文地質，俟穩定後規劃長期路廊，提供用路人一條長久安全的道路。

During the emergency repair, the long-closed Tianchi-Xiangyang Road section of Provincial Highway No.20 was urgently opened on August 20 for the public to satisfy the basic needs of the people in Fuxing Village, Lavulan Village, and Meishan Village, as well as transport cash crops. As the closed section had not yet been rebuilt, a controlled and guarded passage was adopted to ensure the safety of passers-by.

Due to the unpredictable direction of the Yusui River landslides, it wasn't easy to repair the access road. All previous efforts were often wiped out due to the landslide. After learning from several failures, the Third District Maintenance Construction Office did an intensive review to cope with the conditions and decided to respect nature. To this end, an emergency evacuation platform was set up at the mouth of Yusui River so that people and equipment could complete the emergency evacuation quickly, protecting the safety of construction workers. In addition, the route of the access road was revised to cut part of the mountain and raise the height to avoid the landslide from flooding the access road. Culvert was also installed to dredge the landslide. Finally, with the team's efforts, the river bed access road was officially completed on August 25, 2021, and opened for access.

## Cross-field Collaboration

During the emergency repair, the Third District Maintenance Construction Office held several meetings with relevant units, experts, and scholars to discuss landslide disasters construction methods and protection plans. In addition, the Central Weather Bureau was also asked to customize the QPE+ for Mingba Kelu Bridge, providing engineering personnel with meteorological information to determine whether it was going to rain. The Tainan Branch of the Soil and Water Conservation Bureau also installed rain gauges upstream of the Yusui River to monitor rainfall to protect the safety of construction workers.

## Follow-up Actions

Located at 94k of the Provincial Highway No.20, Mingba Kelu Bridge is the only way to Nanheng. The emergency repair laid a culvert and pipe access road, and the short-term plan is to build a steel access bridge to increase the flood section and improve safety. As the 93k-99k section (Cinho to Fuxing) is a geologically unstable area, the medium and long-term plan will include investigating hydrology and geology. After stabilization, a long-term corridor will be planned to provide a long-lasting and safety road for passers-by.



 主要通行便道修築  
Construction of main access roads

# 自行車多元路線建置及 環島路網優化

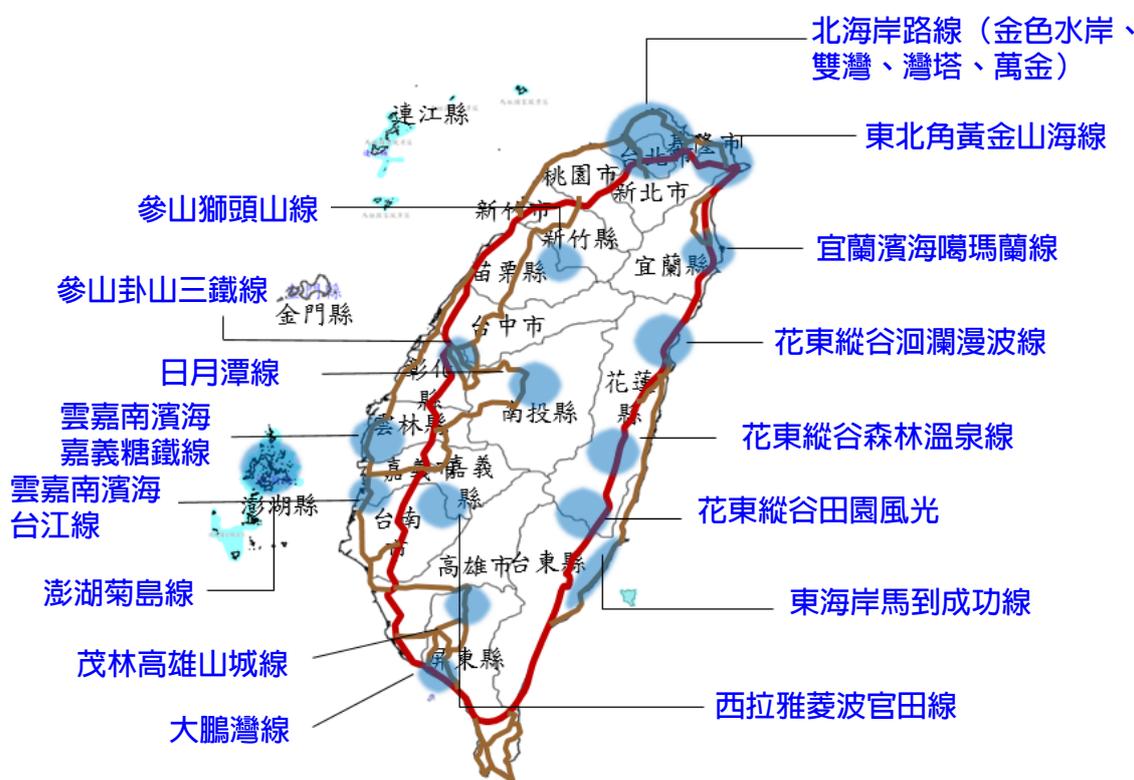
## Multiple Cycling Paths Built and the Optimization of Island-wide Network

### 響應2021「臺灣自行車旅遊年」， 推廣多元路線

近年來，在「東部自行車路網示範計畫」及「全國自行車友善環境路網整體規劃及交通部自行車路網建置計畫」推波助瀾下，自行車觀光旅遊活動已蔚為風潮，聯合國亦於107年正式制定每年6月3日為「World Bicycle Day」，我國108年6月2日於福隆遊客中心辦理「世界自行車日」宣示活動，是日除宣示臺灣加入「世界自行車日」響應活動外，並宣布將2021

年訂為「臺灣自行車旅遊年」。為響應前揭目標，「環島自行車道升級暨多元路線整合推動計畫」除持續優化已完成之環島自行車路線，並會同相關單位規劃16條多元之自行車旅遊路線，以吸引更多民眾前來使用。

經交通部運輸研究所、觀光局、臺灣鐵路管理局及公路總局共同努力，110年已完成全數16條多元路線導引標誌、補給站指標及導覽牌，路線及成果照片如下：





 雲嘉南濱海 - 嘉義糖鐵線增設慢車道  
Slow lane added to the Southwest Coast National Scenic Area-Chiayi Sugar Railway Line

### Multiple Routes Promoted to Welcome the “2021 Year of Cycling Tourism”

Cycling tourism has become a trend in recent years thanks to the “Eastern Bicycle Lane Network Demo Project” and the “Overall Planning for the National Bicycle-friendly Network and the MOTC Bicycle Lane Construction Project.” The United Nations has also designated June 3 as “World Bicycle Day” in 2018. On June 2, 2019, Taiwan pledged to celebrate World Bicycle Day at the Fulong Visitor Center on June 2, 2019. In addition to

announcing Taiwan's participation in World Bicycle Day, 2021 was announced as the “Year of Cycling Tourism.” To this end, the “Bicycle Lane Upgrade and Route Integration Project” continues to optimize the existing network, and plan 16 more routes for cycling tourism with other divisions to attract more users.

Through the joint efforts of the Institute of Transportation, Tourism Bureau, Taiwan Railways Administration, and the DGH, signs, supply station indicators, and guide signs have been completed for all 16 routes in 2021.



 北海岸路線自行車鋪面及欄杆改善  
North Coast Route bike pavement and railing improvement

## 「環島自行車道升級暨多元路線整合推動計畫」修正，串聯斷鏈路線

「環島自行車道升級暨多元路線整合推動計畫」原計畫期程為109~112年，因該計畫未編列地方政府補助經費，致涉地方政府路段較難推動，且部分具特色之地方政府、省道自行車道斷鏈點亦未納入該計畫執行，經運輸研究所盤點及歷次會議討論，於110年修正「環島

自行車道升級暨多元路線整合推動計畫」，從原核定16億元，再增加7億元辦理多元路線斷鏈之縫合，及新增省道自行車路線騎乘空間及設施優化改善，另增加5億元補助地方政府執行，調整後總經費為28億元，計畫延長至113年。多元路線斷鏈之縫合，及新增省道自行車路線騎乘空間及設施優化改善項目。



斷鏈路線示意圖  
Diagram of broken routes



 日月潭線水蛙頭平台整建  
The construction of the Shuiwatou Trail platform at Sun Moon Lake

### Revision of the “Bicycle Route Upgrade and Integration Project” to Connect the Gaps in routes

The original “Bicycle Route Upgrade and Integration Project” was planned for 2020-2023. As the project did not include local government subsidies, it was difficult for the local governments to work on road sections. As some places with unique characteristics are gaps that are not included in the plan by the local government and provincial bicycle lanes,

the project was revised in 2021 by the Institute of Transportation after taking inventory and meetings from the original approved budget of NT\$1.6 billion to additional NT\$700 million to fix the gaps, increase the cycling space and improve facilities for the provincial highway bicycle routes. Moreover, an additional NT\$500 million will be added to subsidize local governments for implementation. After adjustment, the total funding is NT\$2.8 billion, and the plan is extended to 2024.



 東北角黃金山海線增設標誌  
Signs added to the Golden Mountain and Sea Route at the Northeast Coast

# 110 年公路養護具體成果

## The Highway Maintenance Results in 2021

為使公路、橋梁、隧道及其附屬設施，能經常維持其原有良好行車及安全狀態，公路總局須不斷進行各種工程改善與維護補強作為。又因省道公路易受颱風豪雨侵襲，公路總局養護單位於災害時接獲通報均儘速予以搶修，以維護民眾用路權益。

### 導入科技輔助

公路總局已採用無人機於空中檢查公路橋梁、邊坡狀況，空拍資料可與汽車路巡資料互補，多方向瞭解公路何處須予以維護。至於民眾最關心的公路平整度，公路總局持續推動快速公路路面平整度提升，採IRI檢測，本年度改善後IRI已由109年的2.32降至2.23。（IRI的測定很複雜，可大致理解為每公里公路有幾公尺的垂直向高度變化，IRI愈低表示公路愈平整，且IRI降至3之後就很難再降低）

公路總局自106年9月開始補助各地方政府改善道路品質，截至110年底已補助452件工程案件，金額達177.3億元，目前已完工358件，路面改善數累計1,562公里、孔蓋下地7,355座、也增加37,980平方公尺綠化面積，成效顯著。

### 因應氣候變遷挑戰

近年因遭受極端氣候影響，公路災害發生機率及規模提高，為減少災害對社會的衝擊，公路總局針對災前應變整備加強盤點作為，針對路側排水設施、橫向排水系統、易遭浪襲路段、易淹水及泥流路段、搶修人力、機具、物料整備、勘災器材設備整備盤點，做好災害來襲的因應作為，110年度影響臺灣之颱風共計5個，災害事件均無人車傷亡，並災害路段均已完成搶修恢復通行，維護民眾用路權益。



台15線關渡橋耐震改善及維修補強工程於110年5月27日完工

The Guandu Bridge Seismic Improvement and Repair on Provincial Highway No.15 was completed on May 27, 2021

In order to keep highways, bridges, tunnels, and their ancillary facilities in their original state for driving safety, the DGH must continuously carry out various improvements and maintenance. In addition, as provincial highways are vulnerable to typhoons and torrential rains, the maintenance unit of DGH always conducts emergency repairs when a notification is received to give people access to the roads.

### Introducing technological aids

The DGH inspects the conditions of highways, bridges, and slopes with drones. The aerial photography data can be complementary to the road inspection data of automobiles to understand where the highway needs to be maintained from different perspectives. As for the road surface roughness that the public cares the most about, the DGH continues to work on this aspect with IRI testing. After this year, the IRI has dropped from 2.32 in 2020 to 2.23 (the measurement of IRI is very complicated. It can be roughly understood as the vertical height change of several meters per kilometer of road. The lower the IRI, the smoother the road, and it is difficult to reduce the IRI after it reaches 3).



台2線136k+800-137k+865金馬橋、竹安橋改建及路基拓寬工程於110年12月11日完工  
Jinma Bridge and Zhu'an Bridge reconstruction and subgrade extension at 136k+800-137k+865 of Provincial Highway No.2

Since September 2017, the DGH has subsidized local governments to improve road quality. As of the end of 2021, it has subsidized 452 engineering projects with an amount of NT\$17.73 billion. So far, 358 projects have been completed, with a total of 1,562 kilometers of road surface improvements and 7,355 underground manhole covers. Moreover, an additional 37,980 square meters green area has been added with remarkable results.

### Responding to the challenge of climate change

Due to the impact of extreme weather events, the occurrence and scale of highway disasters have increased in recent years. In order to reduce the impact of disasters on society, the DGH has strengthened its inventory of pre-disaster response preparations. Inventory targets drainage facilities, horizontal drainage systems, road sections subject to wave inundation, flooding and mud flow, emergency repair manpower, equipment, material preparation, and disaster survey equipment, inventory. A total of 5 typhoons affected Taiwan in 2021, causing no death or damage to vehicles. All road sections have been repaired and restored to traffic to give the public's access to roads.



台17線本淵橋改建工程於110年6月18日完工  
The Benyuan Bridge Reconstruction on Provincial Highway No.17 was completed on June 18, 2021. The widening project was completed on December 11, 2021

# 110年公路防災成果及展望

## Highway Disaster Prevention and Prospects in 2021



 應變中心開設  
Launch of the Response Center



 劇烈天候下防災零A1事件計數表  
Disaster Prevention Zero A1 Event Table under Extreme Weather

### 110年防災應變、演練成果

110年度歷經彩雲颱風、烟花颱風、0730西南氣流、盧碧颱風、0806水災、燦樹颱風、圓規颱風共7次劇烈天候事件，憑藉常時監控、演練整備、SOP檢討及擬訂，於災時發揮預判、部署、通告、預警、應變之節奏，成功守護用路人安全，劇烈天候下防災零A1事件計數表數字110年度累計至2248天。

**演練導入關鍵基礎設施演習之精神：**110年度共辦理兵棋推演5場、天然災害封橋/封路演練41場、隧道事故演練25場、地震演練40場；其中兵棋推演導入國家關鍵基礎設施演習之精神，讓演習與程序回歸正統，第一階段辦理核心功能業務風險評估，評估選定之維生基礎設施、辨識機關營運風險；第二階段以兵棋推演

方式辦理演習，以全災害角度（天然、人為、資安）下達情境，經過設計的程序，隨著假設事件的時序、不斷通報的訊息，採取真實行動方案的應對，緊急啟動應變小組，建立指揮體系，執行各項指揮應變作為，並納編縱橫向單位之人員及能量，依現行相關作業規定及程序進行演習，以驗證機關風險是否均能有效控制（降低災損、迅速復原）。

**資訊服務改版：**為強化提供各災防單位介接省道通阻資訊及因應資通訊安全管理，特辦理公路防救災資訊系統改版暨功能模組開發，藉由改版優化人機介面提升使用順暢度及防救災工作效率，迅速通報相關災情，俾供採取各種必要之應變措施，並提供穩定省道即時資訊予用路人。

## 2021 Disaster Prevention, Response and Drills

In 2021, Taiwan experienced 7 extreme weather events, including Typhoon Choi-wan, Typhoon In-fa, 0730 southwesterly flow, Typhoon Lupit, 0806 flood, Typhoon Chanthu, and Typhoon Kompasu. With constant monitoring, training, preparation, SOP review, and formulation, the DGH made predictions, deployment, notification, early warning, and response to successfully protect the safety of road users. The number of disaster prevention zero A1 events under extreme weather reached 2,248 days in 2021.

**Drills in line with infrastructure drills:** In 2021, a total of 5 simulation drills, 41 natural disaster bridge/road closure drills, 25 tunnel drills, and 40 earthquake drills were organized. The pattern of the national key infrastructure drills was introduced to standardize drills and procedures. In stage 1, the core function and business risk assessment was carried out by selecting life-sustaining infrastructure and identifying operational risks for the organization. Stage 2 was

organizing simulation drills to develop scenarios (natural, manmade, and information security) to adopt countermeasures based on the formulated procedures and the sequence of the assumed events and ongoing messages. The command system was established to carry out different commands and include the staff and capacity of relevant divisions. The drills are conducted in line with current guidelines and procedures to verify if the risks can be effectively controlled (damage reduction and rapid recovery).

**Updated Information Services:** In order to strengthen the provision of information on the access of provincial highways to various disaster prevention units and respond to the security management of information and communications, the highway disaster prevention and relief information system, as well as functional modules, was developed. The human-machine interface is optimized in the update to improve user-friendliness and efficiency. Disasters are deported as soon as possible for necessary contingency measures to be adopted, and provide stable provincial highway real-time information to road users.



110年度兵棋推演  
2021 Simulation Drills



資訊服務改版  
Updated Information Services

## 111年展望-軟體設備優化升級改版，提升防災應變戰力

**應變中心環控系統再升級：**公路總局應變中心軟硬體設備全年無休運轉，目標將視訊影音設備及會議室智慧自動控制功能整合，強化各項設備訊息傳遞之穩定性及系統自動控制之便利性，以期達到應變中心、疏運作業及視訊等多功能會議室之需求。

**公路防救災資訊系統（Bobe168.tw）再進化：**公路防救災資訊系統運行超過10年，有鑑於使用者需求漸趨多樣性，將提升硬體設備及軟體改版，以響應式網頁設計跨載具通用（手機/平板/電腦），功能操作化繁為簡，以利使用者輕鬆上手。

公路總局持續以「風險管理」及「科技運用」精進公路災害防救業務，將道路通阻與即時風險資訊傳遞予用路人，落實防災重於救災、離災優於防災的防災思維。



110年度兵棋推演  
2021 Simulation Drills



## 2021 Prospects - Software Optimization and Upgrade to Enhance Disaster Prevention and Response Capabilities

**The environmental control system of the response center is further upgraded:** The software and hardware DGH Response Center operate 24/7. The goal is to integrate the video and audio equipment and smart automatic control in the conference room to strengthen the stability of information transmission for various equipment and convenient automatic system control to meet the needs of multi-functional conference rooms such as emergency response centers, transportation, and video conference.

## Evolution of Highway Disaster Prevention and Relief Information System (Bobe168.tw):

The Highway Disaster Prevention and Relief Information System has been in operation for over a decade. In view of the increasingly diverse needs of users, the hardware equipment and software have been upgraded with a responsive web design to be used across different devices (mobile phone/tablet/computer). The functions have been simplified to be more user-friendly.

The DGH continues to improve road disaster prevention and rescue with “risk management” and “technology applications” to transmit road obstruction and real-time risk information to road users, realizing the logic of prevention is better than cure.





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臺東縣政府

要預約

公所

A group of people, including children and adults, are standing in a grassy field. They are holding large, white cutouts of smiley faces with orange and red accents. The background shows a hazy landscape with mountains and a building. The entire scene is overlaid with a semi-transparent pink filter. Large, white, curved abstract shapes are positioned on the left and bottom right of the page.

4

單元

運輸之路：  
一切如常享安心

The Road to Transportation: Business  
as Usual for Peace of Mind

## 4

幸福就是想去哪裡  
就能去哪裡

Happiness Is Being Able to Go Wherever You Want



美濃區幸福巴士通車典禮試乘  
Happiness Bus Trial Ride in Meinong District

## 改善偏鄉公共運輸推動情形

為了改善偏鄉地區交通問題並考量偏鄉地區公共運輸需求特性，公路總局持續推廣幸福巴士，截至110年底公路總局幸福巴士（含幸福小黃）已擴展至120處，路線數增加至321條，全國偏鄉公路公共運輸服務涵蓋率提升至89.78%。

另外也因應偏鄉環境特殊性，繼109年修法放寬偏鄉可由當地的社會團體或個人成立市區客運業服務外，110年再修訂放寬可客貨共載，開放客運班車可提供貨運服務，透過公私協力，導入更多元、彈性的模式來解決偏鄉交通的痛點，改善偏鄉民眾交通上的不便。

## 擴大推動幸福巴士2.0示範服務

繼屏東縣滿洲鄉幸福巴士2.0整合示範服務試辦後，110年再接再厲，於新北市雙溪區、桃園市復興區、花蓮縣富里鄉、臺東縣延平鄉等地區持續推動，包括建構媒合平臺、整合部會資源、導入在地服務、民間CSR資源投入等特色亮點；另外臺中市和平區也已完成相關規劃，並輔導個人取得市區客運業營業資格，即將於111年初上路營運。

偏鄉交通的改善是一項長期性且持續性的工作，未來我們將持續推動幸福巴士，讓幸福巴士可以深入服務到每個偏鄉角落，讓在地服務在地，實現幸福就是想去哪裡，就能去哪裡。



雙溪區幸福巴士通車典禮  
Happiness Bus launch ceremony in Shuangxi

### Improving public transport in remote areas promotion situation

In order to deal with the traffic problems while considering the characteristics of public transportation needs in rural areas, the DGH has continued to promote the Happiness Bus. As of the end of 2021, the Happiness Bus (including Happiness Taxi) has been extended to 120 locations with 321 routes, increasing the coverage of public transportation services for rural highways across the country to 89.78%.

The regulations were revised in 2020 to allow local organizations or individuals to operate City Bus Carrier in response to the specific environment of remote townships. In 2021, the regulations were further loosened to allow city buses to carry cargo. With the joint efforts of the public and private sectors, diversified and flexible models have been introduced to solve the pain points of transportation in remote rural areas and improve the inconvenience.

### Expansion of Happiness Bus 2.0 service

Following the pilot program of the integrated demo service of Happiness Bus 2.0 in Manzhou Township, Pingtung County, the program has been extended in 2021 in Shuangxi District of New Taipei City, Fuxing

District of Taoyuan City, Fuli Township of Hualien County, and Yanping Township of Taitung County, featuring highlights such as matchmaking platform, local services, and CSR resources. District of Taichung City has also completed relevant planning and assisted individuals in obtaining qualifications and will be put into operation in early 2022.

The improvement of transportation in remote townships is a long-term and continuous mission. In the future, we will continue to promote the Happiness Bus so that the program can serve every corner of the remote townships, serving the locals and realizing the vision that happiness is being able to go wherever you want to.



來義鄉幸福巴士剪綵祈福儀式  
Happiness Bus ribbon-cutting ceremony in Laiyi Township

# 汽車運輸業紓困補貼 伸出援手度過疫情衝擊

Bailout Subsidies for the Motor Transport Industry  
Reaching out a Helping Hand to Survive the Pandemic



客運場站執行防疫措施  
Epidemic prevention measures at passenger terminals



監理所同仁電話受理駕駛人紓困申請  
The Motor Vehicle Office answers phone calls about subsidies for drivers

## 落實防疫 安心乘車

新冠肺炎疫情自109年初起，公路總局隨即規劃多項防疫措施，並要求客運業者落實車輛及場站防疫措施、向乘客宣導搭乘客運時全程佩戴口罩；亦於連假期間前往客運轉運站查核業者執行防疫措施情形，以提供民眾安心乘車環境。

## 紓困補貼 伸出援手

110年5月中提升為三級警戒，民眾減少通勤與觀光旅遊，為降低疫情對於公路客運及遊覽車業者之營運衝擊，公路總局除持續給予國道客運機場路線營運費用補貼外，針對機場以外之公路客運路線及遊覽車業者，110年5月至7月依營運衰退幅度分級再給予營運費用補貼，另並提供防疫物資補貼，協助業者維持基本營運渡過疫情難關。

另為減輕遊覽車、計程車駕駛人及小客車租賃業代僱駕駛之經濟負擔，維持生計，亦廣續辦理駕駛人薪資補貼，109年申請過且110年符合資格的駕駛，直接撥款匯入帳戶，針對新加入市場的駕駛，提供線上申請管道，減少外出接觸染疫風險，讓駕駛人獲得最即時且實質的幫助。

另自110年6月4日起至6月30日補助汽車駕駛人訓練機構，給予受補貼機構員工薪資及營運成本補貼，以受僱員工數每人新臺幣4萬元給予一次性補助。110年5月11日起至6月30日補助地方政府辦理派遣載運無症狀之居家檢疫（隔離）或確定病例者之防疫專車部分車資，補助車資金額每車每日補助最高百分之五十，其中計程車及租賃小客車上限新臺幣1,750元、乙類大客車上限新臺幣3,500元、甲類大客車上限新臺幣5,000元，讓受影響發生營運困難產業事業能順利渡過疫情衝擊。

紓困措施 Relief measures	受益數 (人次 / 業者數) Number of beneficiaries ( persons/ operators )	補助金額 Amount of Subsidy
駕駛人薪資補貼 <b>Subsidy for driver salary</b>	220,459 人次 <b>220,459 persons</b>	43.9 億元 <b>NT\$4.39 billion</b>
公路客運營運費用補貼 <b>Subsidy for intercity bus carrier operation</b>	48 家客運業者 <b>48 operators</b>	4.22 億元 <b>NT\$422 million</b>
遊覽車客運業營運費用補貼 <b>Subsidy for tourist bus carrier operation</b>	807 家遊覽車業者 <b>807 operators</b>	3.15 億元 <b>NT\$315 million</b>

### Implementing epidemic prevention for worry free travel

At the beginning of the COVID-19 pandemic in 2020, the DGH immediately launched a number of epidemic prevention measures, including requiring passenger transport operators to implement epidemic prevention measures for vehicles and stations and educating passengers to keep their masks on. The DGH also inspected the implementation of the measures over long weekends to provide the public with safe transportation.

### Relief subsidy gives a hand

The alert level was raised to 3 in mid-May 2021, causing people to commute and travel less. To reduce the impact of the pandemic on intercity bus carrier and tourist bus carrier, the DGH not only continued to subsidize the operating expenses of the airport routes, but also provided subsidies for operating expenses according to the level of operational decline from May to July 2021. Moreover, subsidies were given for epidemic prevention materials to help operators maintain basic operations and survive the pandemic.

In addition, in order to reduce the financial burden of tourist bus drivers, taxi drivers, and hired drivers of car-rental carrier and maintain their livelihoods, the DGH also continued to offer subsidies for their salaries. Drivers whose application was approved in 2020 automatically received the subsidy in their bank account. Drivers who were new in the market could apply online to reduce the risk of catching the virus and get substantive help as soon as possible.

In addition, from June 4 to June 30, 2021, driver training institutions received subsidies for their employee salary and operating costs. Each employee was entitled to a one-time subsidy of NT\$40,000. From May 11 to June 30, 2021, local governments provided up to 50% of partial subsidies for epidemic prevention taxis that transported people under home quarantine/isolation with no symptoms or confirmed cases. Among them, the upper limit for taxis and rental cars was NT\$1,750, the upper limit for Class B buses was NT\$3,500, and the upper limit for Class A buses was NT\$5,000, to help businesses that were suffering from the impact of the pandemic to survive.

# 運輸從業人員優先施打疫苗 守護您我的健康

Transport Workers Prioritized for Vaccination to  
Safeguard Everyone's Health



 行政院蘇貞昌院長巡視運輸從業人員疫苗施打情形  
Premier, Su Tseng-chang, inspected the vaccination process of  
transport workers

## 提升運輸業從業人員執業安全

新型冠狀病毒來勢洶洶，110年5月19日全國進入三級警戒，本局依中央疫情指揮中心規劃執行第7類北北基桃計程車司機、外送員、國道客運司機、貨運司機接種作業，期及早達成較高的疫苗接種覆蓋率，維持社會機能正常運作。本局執行第7類人員疫苗施打造冊人數高達178,100人，為加速疫苗施打並節省駕駛人時間，均由各監理所（站）同仁

於施打日前2-3天主動以電話或簡訊通知施打時段及地點，倘駕駛人臨時無法於前往接種，則通知其他日期名單內駕駛人遞補。

## 公私協力、圓滿 完成任務

該次獲配疫苗數量原訂施打125,644人，執行期間僅30日，期間又因醫院抽取技術及依CDC規範將未使用部分疫苗繳

回，下修可施打數至123,883人，經通知所有造冊人員後，完成施打高達124,301人。對於本局獲配施苗能全數完成接種，除醫護人員全力投入外，監理機關總計動員1,532人次、執勤13,491.5小時來協助疫苗施打業亦功不可沒，同時交通部積極協助本局與疾管署之間的溝通，適時提供本局疫苗施打之相關支援作業，均是接種作業順利完成的關鍵，本次執行的任務對於維持正常交通運輸及貨暢其流助益甚大，值得所有同仁為自己努力的成果喝采。



交通部王國材部長巡視運輸從業人員疫苗施打情形

The MOTC Minister, Wang Kwo-tsai inspected the vaccination process of transport workers

### Increasing operating safety of transport workers

With the COVID-19 pandemic on the rise, the epidemic alert level was raised to 3 on May 19, 2021. Under the instructions of the CECC, the DGH organized the vaccination for Category 7 to achieve higher vaccine coverage with the hope of keeping society running. The category includes taxi drivers, delivery drivers, national highway bus drivers, and freight drivers in Taipei City, New Taipei City, Keelung City, and Taoyuan City. In order to speed up the process and save time, the staff of each motor vehicle office took the initiative to notify drivers by phone or text message 2-3 days before the appointment. If the driver could not show up, someone scheduled on another day would be notified to take the spot.

### Public-private cooperation for successful mission completion

The number of vaccines distributed this time was supposed to vaccinate 125,644 people within 30 days. However, due to the technique and some of the vaccines being returned as they had not been used in line with the CDC regulations, 123,883 people could be vaccinated. After notifying everybody on the list, a total of 124,401 were vaccinated. Besides the dedication of the medical staff, the DGH could only finish giving out all the vaccines as the motor vehicle's offices mobilized 1,532 people working for 13,491.5 hours to assist with the operation. The MOTC also actively assisted the DGH in communicating with the CDC to offer support, which was another key to the success. The mission was of great help in maintaining normal transportation and flow of goods, and everybody involved should give themselves a round of applause.

# 人本交通 智慧公路

## Human-oriented Smart Highway

### 以人為本 符合民意

公路總局為打造友善用路環境，借鏡其他國家相關交岔路口設計及人本交通理念之實踐，委託國立臺灣大學蒐集及分析相關文獻資料，針對我國省道公路交通特性提出「省道人本安全路口設計原則」。

公路總局並持續將「省道人本安全路口設計原則」應用於所轄省道公路相關改善，包含斜交路口改善、車道寬度調整、左轉專用道及左轉待轉空間配置、行人穿越道線退縮、增設行人庇護空間等相關設施，提供安全友善道路空間。110年配合交通部「加強並擴大檢討路口路型改善計畫」完成55處改善。



台14乙線中興新村圓環改善  
Improvement of the Zhongxing New Village Circle on Provincial Highway No.14B



台3線與省府路路口槽化改善  
Improvement of channelization at the intersection of Provincial Highway No.3 and Shengfu Road



 台 14 乙線路口槽化及增設左轉車道  
Channelization at the intersection of Provincial Highway No.14B with a left-turn lane

## Humans and Public Opinion-centered

To create a friendly environment for road users, the DGH borrowed ideas from similar fork intersection designs and human-oriented transportation concepts in other countries, as well as entrusted National Taiwan University to collect and analyze relevant literature and data to put forward the “Design Principles of Human-oriented Safe Intersections on Provincial Highways” according to the traffic model provincial highways in Taiwan.

The DGH continues to apply the “Design Principles of Human-oriented Safe Intersections on Provincial Highways” to improve provincial highways under its jurisdiction, including the improvement of diagonal intersections, lane width adjustment, left-turn lanes, left-turn waiting spaces, pedestrian crossing lanes, pedestrian shelter space and other related facilities to provide a safe and friendly environment. In 2021, 55 projects were completed according to the MOTC’s “Review for Strengthening and Expanding the Road Pattern Improvement Plan for Intersections.”

## Building a smart round island highway

With the opening of Provincial Highway No.61, No.9, and the Suhua Improvement, Taiwan’s round island highway network is closer to completion. In order to allow people to reach all corners of Taiwan more easily and

safely, the DGH has entrusted a consulting company to carry out the construction plan for the smart round island highway and implement the design of the overall traffic management and control strategy for the West Coast Expressway. It is expected to renew the traffic control project for Provincial Highway No.61 and No.66. The DGH has invited the Freeway Bureau and local governments to hold a regional meeting to jointly review the congested road sections within their jurisdiction and formulate a common incident response plan to improve traffic safety of Provincial Highway No.61 and No.66. In addition, in order to strengthen the early warning of highway weather events, the DGH cooperated with the Central Weather Bureau to build automatic weather stations along Provincial Highway No.61 to strengthen the collection of weather information. With information channels such as the CMS and the Happy Highway App, warnings on abnormal weather events such as rain, dense fog, and strong winds can be issued. Through the response strategy setting function in the event management module of the traffic control system, the DGH pre-sets the text and scope of the CMS message release so that when an abnormal weather event occurs, the Maintenance Offices of the DGH can send out the message and notification more quickly to strengthen the highway’s incident management capabilities.

## 建構環島智慧公路

隨著台61線西濱快速公路、台9線南迴公路與蘇花改陸續通車後，臺灣環島公路路網已趨於完整，為讓民眾能以更輕鬆、安全的方式，到達臺灣各個角落，公路總局於110年起委託顧問公司進行環島智慧公路之建置計畫，執行西部快速公路路網整體交通管理與控制策略之設計工作，預計分年辦理台61線、東西向快速公路交控設備更新工程。公路總局已邀集高速公路局及各地方政府召開區域協控會議共同檢討轄內易壅塞路段，訂定共通事件反應計畫，提升台61線及東西向快速公路之交通安全與行車順暢。另為強化公路天候事件預警，公路總局與中央氣象局合作，於台61線沿線建置自動氣象站以加強天候資訊蒐集，並結合道路上游資訊可變標誌（CMS）及幸福公路APP等訊息管道，發布雨勢、濃霧及強風等異常氣候事件路況警示資訊。本局期透過交控系统事件管理模組中反應策略設定功能，預先設定CMS訊息發布文字內容與範圍，使異常天候事件發生時，公路總局各養護工程處能更快速完成訊息發布及通報等作業，以強化台61線事件管理能力。

針對環島智慧公路沿線瓶頸路口部分，公路總局將逐年建置高解析度攝影機，結合5G高速傳輸與人工智慧辨識技術（AI）進行多元交通資訊蒐集（如轉向交通量等）與辦理相關延伸應用（如動態標誌等）。110年重要工作成果，說明如下：

- 一、西部快速公路路網計畫：110年投入經費1.31億元，將有效提升路網監控能力及安全。
  - （一）完成北部地區台61線與東西向台62、64、65、66、68線快速公路、南部地區台61線與東西向台78、82、84、86線快速公路之設計工作與更新工程發包。
  - （二）完成中央電腦擴充功能基本設計工作。

- （三）召開2次西部快速公路路網北部地區（基隆、新北、桃園、新竹）區域協控溝通平台會議，確認未來資料交換共通格式，並訂定台61線鳳鼻-香山路段、台62線大華交流道與國道1號、台64線中和交流道與國道3號及三重交流道與平面道路、台65線土城交流道與國道3號及泰山交流道與平面道路等6項區域協控交通管理策略。

- （四）完成彰化-臺南路段共9處自動氣象站（加裝濃霧偵測器）建置，並責成各區交控中心加強監控。

二、推動5G提升智慧交通服務效能與安全計畫：110年投入經費6,800萬元，共計完成63處智慧路口（段），將大幅提升瓶頸路口運作效率。

- （一）台61線新竹及竹南路段。
- （二）台9線蘇花改。
- （三）台1線水底寮及臺南路段。

透過前述計畫辦理線（西部快速公路路網）與點（5G計畫）的改善，期能有效提升環島智慧公路事件反應能力，並加強環島智慧公路內各道路間連結，提供民眾更安全、便捷的環島公路行。



台61線西濱快速公路自動氣象站示意圖（正面）  
Schematic diagram of the automatic weather station of Provincial Highway No.61 (front)



 台 61 線西濱快速公路自動氣象站示意圖（反面）  
Schematic diagram of the automatic weather station of Provincial Highway No.61 (back)

For the bottleneck junctions along the smart highway around the island, the DGH will install high-resolution cameras year by year to combine 5G high-speed transmission and artificial intelligence recognition technology (AI) to collect traffic information (such as turning traffic volume, etc.) and manage relevant applications (such as dynamic signs, etc.). Important achievements of 2021 are described as follows:

1. Provincial Highway No.61 Network Plan: NT\$131 million was invested in 2021 to effectively improve road network monitoring capabilities and safety.
  - (1) Completion of the design and renewal project contracting of Provincial Highway No.61 in the northern region and the east-west expressway of Provincial Highway No.62, 64, 65, 66, and 68, and the expressway of Provincial Highway No.61 and East-west Routes 78, 82, 84 and 86 in the southern region.
  - (2) Completed the basic design of the expansion function of the central computer.
  - (3) Held 2 regional coordination and control communication platform meetings in the northern region of the western expressway network

(Keelung, New Taipei, Taoyuan, Hsinchu) to confirm the common format for future data exchange, and set the Fengbi-Xiangshan section of Provincial Highway No.61, Dahua Interchange of Provincial Highway No.62 and National Highway No.1, Provincial Highway No.64 Zhonghe Interchange and National Highway No.3 and Sanchong Interchange and surface road, Provincial Highway No.65 Tucheng Interchange and National Highway No.3 and Taishan Interchange and the surface road to coordinate traffic management strategies.

- (4) Completed the construction of 9 automatic weather stations (with dense fog detectors) in the Changhua-Tainan road sections and instructed the traffic control centers in each district to strengthen monitoring.
2. Promoted 5G to improve the efficiency and safety of smart transportation services: NT\$68 million was invested in 2021 to complete a total of 63 smart intersections (sections), which will greatly improve the operational efficiency of bottleneck intersections.
    - (1) Hsinchu and Zhunan sections of Provincial Highway No.61.
    - (2) Suhua Improvement on Provincial Highway No.9.
    - (3) The Shuidi Liao and Tainan Road section on Provincial Highway No.1.

It is expected to effectively enhance the incident response capability of the smart round-island highway through the improvement of the aforementioned lines (Provincial Highway No.61 network) and points (5G project), as well as strengthening the connections between the roads in the smart highway around the island, providing people with a safer, and convenient road network around the island.

# 改善停車空間不足 促進公共運輸轉乘

Improve the Lack of Parking Spaces with Public Transport Transfer



高雄市鼓山區鼓山國小地下停車場成果照（110年2月2日完工）  
Photo of the underground parking lot of Gushan Elementary School in Gushan District, Kaohsiung City (completed on February 2, 2021)

## 納入亮點計畫，協助改善地區發展需求

行政院於106年2月18日聽取國家發展委員會報告「城鄉建設－地方前瞻基礎建設事宜」會議提示，請交通部研議提出公共運輸服務計畫，納入停車問題改善評估，若停車場管理具示範效果，可容許地方政府依其發展特色及需求提出專案亮點計畫納入，以協助地方政府改善地區發展需求；另於106年3月21日「研商城鄉建設－改善停車問題」會議結論，基於停車場建設為具自償性之公共建設，為擴大政府投資乘數效果，帶動民間投資量能，應鼓勵民間

投資參與，惟也不排除由地方政府自行興建。交通部依據行政院上述政策方向，提出「改善停車問題計畫」。

## 智慧化停車管理及綠能性別友善，提升停車服務品質

為了鼓勵及增加大眾運輸使用，透過創造較佳的停車轉乘設施，並搭配接駁運具與市中心連接，避免過多車輛進入市中心、人車商業密集區域造成交通壅塞，另由於許多遊憩據點並未設置大眾停車場或停車場地不足，以致沿路邊停車。交通部研訂「前瞻基礎建設－城鄉

## Incorporated into the Highlights Program to help improve regional development needs

On February 18, 2017, the Executive Yuan heard the National Development Council's report on "Urban and Rural Development-Local Forward-looking Infrastructure Issues" and requested the MOTC to discuss and propose a public transport service plan with parking problems included and evaluated. If the parking lot management is a good model, local governments can be allowed to put forward project highlights and plans based on their development characteristics and need to improve regional development needs. In addition, on March 21, 2017, based on the conclusion of the meeting on "Discussion on the Construction of Urban-Country Constructions- Parking Problem Improvement," the construction of parking lots is a self-paying public construction. In order to expand the synergy of government investment and drive private investment, the private sector should be encouraged to improve the lack of

parking space and promote the participation of public transport transfer investment. However, local governments should not be excluded from the construction. In accordance with the aforementioned policy direction of the Executive Yuan, the MOTC proposed the "Parking Improvement Plan."

## Smart parking management, green energy is gender-friendly to improve the quality of parking services

In order to encourage people to use public transportation, the plan is to create better park-and-ride facilities and offer shuttle vehicles that connect with the city center to avoid too many vehicles entering the city center and traffic jams caused by densely populated areas with people and vehicles. Many tourist areas have no or insufficient public parking, resulting in parking along the road. The MOTC has formulated the "Forward-looking Infrastructure Construction - Urban and Rural Development - Parking Problem Improvement Plan," intending to give prioritized subsidies to public transport stations



新北市金山區金山立體停車場成果照（110年8月30日完工）  
Photo of Jinshan vertical parking lot in Jinshan District, New Taipei City (completed on August 30, 2021)



 屏東縣屏菸文化基地立體停車場成果照（110年9月16日完工）  
Photo of the vertical parking lot of Pingtung 1936 Tobacco Culture Base (completed on September 16, 2021)

建設「改善停車問題計畫」，期藉由優先補助公共運輸場站停車轉乘、觀光遊憩旅次量大之地區等停車位不足，具示範效果之路外公共收費停車場，並透過智慧化停車管理服務、綠能及性別友善設計原則，提升停車場使用效益與服務品質，以改善停車空間不足問題，滿足停車轉乘及觀光等停車需求。

## 執行成果

奉行政院106年6月30日院臺交字第1060091615號函核定及109年9月7日院臺交字第1090029856號函同意修正，改善停車問題計畫期程由106年9月至113年12月，計畫經費200億元。

截至110年底，完成核定補助19縣市125座停車場，合計總工程經費為420.85億元，中央

補助197.9億元（預計可提供大型車66席、汽車34,838席及機車15,543席）；已完工停車場32處，可提供大型車52席、汽車8,475席及機車2,323席，改善各地交通及停車問題。補助情形如下：

- 一、整體規劃案件：核定20件合計1億3,520萬元（臺北市與新竹市已自行完成未申請）。
- 二、可行性評估案件：核定59件合計7,192.4萬元（基隆市1件、新竹市10件、桃園市4件、金門縣2件、宜蘭縣5件、澎湖縣2件、高雄市10件、屏東縣6件、臺南市7件、雲林縣3件、花蓮縣3件、臺東縣2件、嘉義市4件）。
- 三、工程案件：核定125件，中央補助經費合計為197.9億元。

for parking and transfer, areas with a large number of sightseeing and recreation tours, and other areas where there are insufficient parking spaces to demonstrate the effect of the roadside paid to park. Moreover, the benefits and service quality of the parking lot can be improved by smart parking management services, green energy, and gender-friendly design principles to improve the problem of insufficient parking space and meet the parking needs such as park-and-ride and sightseeing.

### Implementation Results

In line with approval letter No.1060091615 on June 30, 2017, and the amendment in the letter No.1090029856 on September 7, 2020, the plan to improve the parking problem is scheduled from September 2017 to December 2024, with a budget of NT\$20 billion.

As of the end of 2021, 125 parking lots in 19 counties and cities have been approved and subsidized, with a total project cost of NT\$42.085 billion and a central subsidy of NT\$19.79 billion (66 spaces for large vehicles,

34,838 spaces for cars and 15,543 spaces for motorcycles). A total of 32 parking lots have been completed to provide 52 spaces for large vehicles, 8,475 spaces for cars, and 2,323 spaces for motorcycles, improving traffic and parking problems in various places. The subsidy is as follows:

1. Overall cases in planning: 20 projects totaling NT\$135.2 million were approved (Taipei City and Hsinchu City have completed their projects with no application).
2. Feasibility assessment projects: 59 projects totaling NT\$71.924 million were approved (1 in Keelung City, 10 in Hsinchu City, 4 in Taoyuan City, 2 in Kinmen County, 5 in Yilan County, 2 in Penghu County, 10 in Kaohsiung City, 6 in Pingtung County, 7 in Tainan City, 3 in Yunlin County, 3 in Hualien County, 2 in Taitung County and 4 in Chiayi City).
3. Engineering projects: 125 projects were approved, with a total of NT\$19.79 billion subsidized by the central government.



 臺北市內湖106號公園地下停車場成果照 (110年11月15日完工)  
Photo of the underground parking lot in Neihu Park No.106, Taipei City (completed on November 15, 2021)

# 110 年車輛動態資訊成果及展望

## Achievements and Prospects of Dynamic Vehicle Information in 2021

公路總局車輛動態資訊系統納管國內4600餘輛公路客運車輛，以及1萬3,000餘輛遊覽車，運用車輛回傳GPS資訊進行大數據分析，強化營業大客車營運安全；配合政府資料開放之政策，車輛動態系統資訊提供交通部「公共運輸整合資訊流通服務平臺（PTX）」，擴大資料加值應用，創造便利民眾的數位乘車服務。

### 強化營業大客車營運安全

- 一、建置公路客運駕車時間事前、事中及事後管理機制：客運業者於發車前2日預排班表並上傳至動態系統進行檢核；發車前透過動態系統自動檢核駕駛員駕車時間、休息時數，即時發出告警；駕駛勤務執行完畢後運用駕車時間異常報表進行檢核，強化公路客運駕駛駕車時間管理。
- 二、65歲以上大客車駕駛管理：因應運汽車運輸業管理規則第19-7條開放延齡駕駛有條

件執行駕駛勤務，車輛動態資訊系統建置駕車時間、駕車時段及行駛路線等各項檢核項目，提升延齡駕駛之安全管理。

### 創造便利民眾的數位乘車服務

公路客運動態資訊系統（iBus）提供交通部PTX平臺開放資料：配合交通部「公共運輸整合資訊流通服務平臺（PTX）」推動公共運輸整合開放資料（Open Data）政策，提供靜態資料（路線編號、路線名稱、站牌、票價等）、動態資料（定點、定時、即時到站）、最新消息、營運通阻、站間旅行時間、站位名稱檢核、重繪路線線型、路線簡圖上傳，使公路客運之資訊發布、車輛到站時間及路線查詢應用更廣泛。交通部今年舉辦「運輸資料流通服務平臺TDX加盟協作單位績優評獎活動」，公路總局榮獲「公車組-特優」。



公路客運駕駛駕車時間事前、事中、事後三階段管理  
Three-stage management of driving time before, during, and after the event



交通部「運輸資料流通服務平臺 TDX 加盟協作單位績優評獎活動」榮獲「公車組 - 特優」  
The DGH won the Excellence-Bus Category in the MOTC's Transport Data eXchange (TDX) Collaborative Unit Performance Award."

The Dynamic Vehicle Information System of the DGH manages more than 4,600 highway passenger vehicles and more than 13,000 tourist vehicles. It takes advantage of GPS information returned by the vehicles to conduct big data analysis and strengthens the operation safety of commercial buses. The Dynamic Vehicle Information System provides the MOTC with the "Public Transport Data eXchange (PTX)," which expands the application of value-added data and creates digital ride services convenient for the public.

### Strengthening the safety of bus operations

Established a pre-, in-, and post-event management mechanism for the driving time of highway passenger transport: the passenger transport operator pre-arranges the schedule 2 days before the departure and uploads it to the dynamic system for verification. The system automatically verifies the driver's number of driving and rest hours and issues an alert. After completing the driving duty, the abnormal driving time report will be used for the inspection to strengthen the driving time management of highway passenger vehicle drivers.

Driving management for bus drivers over the age of 65: In accordance with Article 19-7 of the Regulations for the Administration of the Transportation Industry, drivers are allowed to perform driving duties conditionally after a certain age, provided that the driving time is logged in the Dynamic Vehicle Information System, driving periods and routes to enhance the safety management.

### Create user-friendly digital ride services

The Intercity Bus dynamic information system (iBus) provides open data on the MOTC's open PTX platform: An Open Data policy for integrated information on public transportation is promoted in line with the MOTC's PTX platform. It provides static data (route number, route name, stop sign, fare, etc.), dynamic information (fixed location, fixed time, real-time arrival), latest news, operational accessibility, travel time between stops, stop name check, redrawing the route line and uploading the route diagram so that the information release of highway passenger transportation, vehicle arrival time and route inquiry is more widely used. The MOTC held the "Transport Data eXchange (TDX) Collaborative Unit Performance Award," and the DGH won the Award of Excellence in the bus category.



獎牌照片  
Photo of the medal

# 110 年話務服務成果及展望

Call Center Achievements and Prospects for 2021



 話務中心24小時堅守崗位，服務不中斷  
The call center has provided uninterrupted services 24/7 as the “service center for road users.”

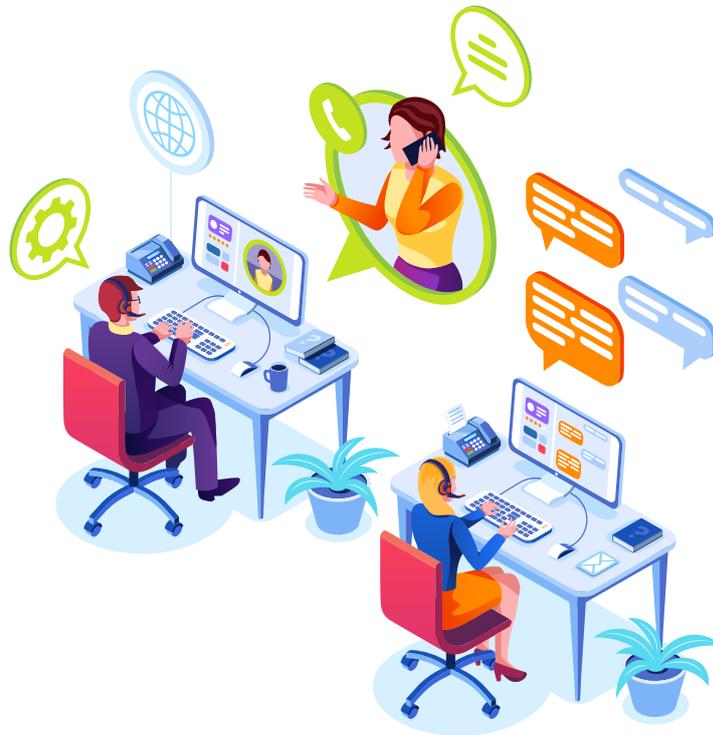
現在，做好「用路人服務中心」，未來，更做好「用數據服務中心」。

## 110年新冠肺炎（COVID-19）疫情拉開人與人的社交距離，話務中心成為抒發及安定的窗口

4月疫情持續升溫，職業駕駛人薪資補貼紓困方案規劃等措施尚未定案期間，每日超過千通進線詢問申請或撥款進度。同仁耐心回應1通又1通，來自全國各地焦急且苦於生計的電話，共同感受當時似乎看不到疫情降級的日子。

## 第一線承受民眾情緒，也克服家人擔心的雙重壓力

因應社區傳播有擴大趨勢，指揮中心提升雙北疫情警戒至第三級，中心即於5月18日啟動異地值機作業因應。面對每日大量進線之詢問、抱怨或情緒的對話，及同仁家人關心壓力，仍到班接起每一通真實且需要協助的電話。面對前所未有的話務挑戰，就靠團隊彼此互相支援打氣，確保服務不中斷。



In the future, it will become a “data service center.”

**The COVID-19 pandemic in 2021 widened the social distance between people, and the call center has become a way to have heart-to-heart conversations and provide stability.**

The pandemic continued to worsen in April. Before measures such as the salary subsidy relief plan for professional drivers were finalized, more than 1,000 calls were received every day to inquire about the progress of applications or grants. The employees patiently responded to all the calls from people who were anxious and struggling to make a living from all over the country, sharing the feeling that the pandemic would never come to an end.

**The front line workers bear the emotions of the people while having to overcome the pressure from their own families’ worrying**

The CECC raised the epidemic alert level to 3 as there were signs of community spread. On May 18, the center launched the work from home program. Facing the huge number of phone calls with inquiries, complaints, or high emotions and worries from their families,

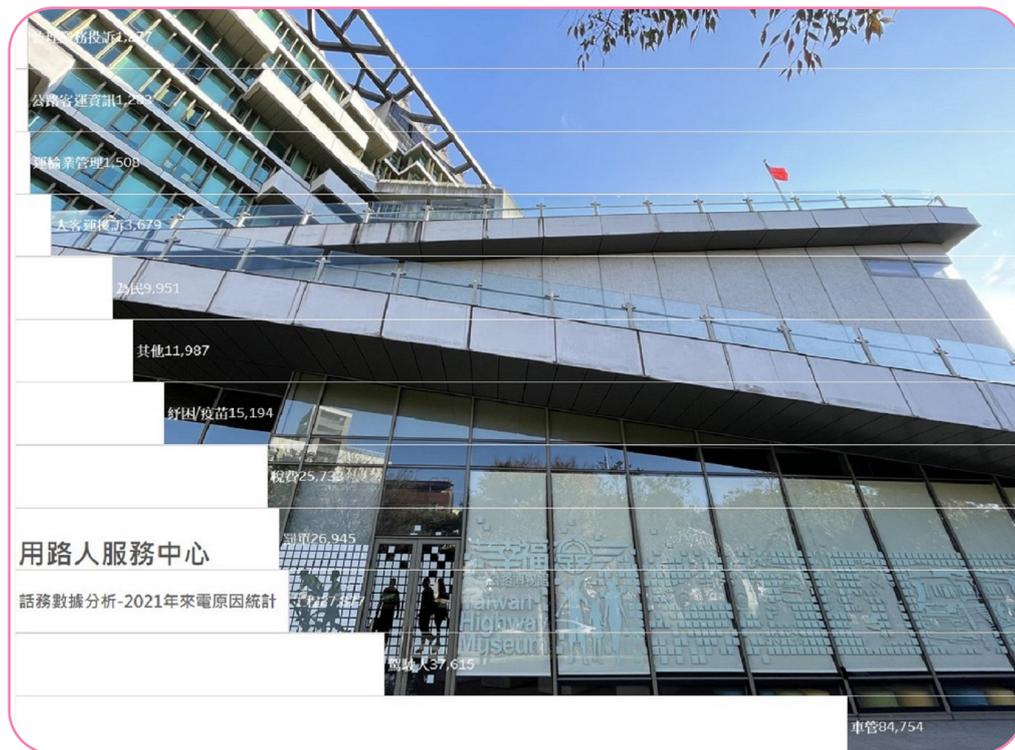
employees still picked up all phone calls to help those in need. Facing these unprecedented challenges, team members had to support and encourage each other to ensure uninterrupted services.

**The outbreak of the epidemic in Taiwan drastically increased the volume of calls, activated the reinforcement mechanism, and canceled days off**

The average daily number of calls was about 1,000 over the past few years. During the pandemic, the number reached historical highs of over 3,000 calls a day. In order to cope with three times the call volume, more than 20 backup staff were deployed quickly to increase the service capacity. This showed the need to speed up the “digital transformation.”

**The experience of the outbreak proves that digital transformation can happen quickly and far beyond our imagination.**

Deploying an architecture that coordinates and integrates organizations' data, information, and actions allows early identification of road users' potential problems and possible grievances. It also creates new service scale, scope, and learning values for the DGH.



➤ 用路人服務中心話務數據分析 -2021 年來電原因統計  
Data analysis of the road user service center-2021 call reason statistics

## 臺灣爆發疫情，更爆衝話量，啟動增援機制並取消休假

往年平均每日接聽量約為1千通，疫情發生期間，更有單日高達超過3千通歷年最高的接聽量。為因應超過以往3倍話務量，啟動備援人力超過20名人次，快速應變增加服務承載量，更看到加快「數位轉型」的需要。

## 爆發疫情的經驗證明，數位轉型可以快速發生，而且遠超乎我們想像

因為社交距離的規定，110年各公務及民間企業不得不採用視訊會議，甚至法院也快速調整採取遠距視訊方式進行訴訟等。未來，把可以數位化的流程予以數位化，是不可逆的趨勢。

## 數位服務及實體服務已被視為互補而非取代

部署一個能夠協調整合組織及用路人的數據、資訊與行動的架構。得以提早辨識出可能遭遇的問題及用路人可能的不平之鳴。也為公路總局創造服務規模、範疇及學習的新價值。

## 現在，做好「用路人服務中心」；未來，也做好「用數據服務中心」

疫情趨緩後，將內化疫情期間學到的經驗，繼續推動轉型—「以資料為中心，以分析為根據」的數位轉型：例如智能文字客服除文字應答功能外，導入線上作業，運用現代科技便利民眾立即傳達相關陳情或建議，並將相關訊息統計分析，回饋供公路總局各單位參考精進業務。此外未來也將評估QR Code 網路電話、即時視覺化管理及分析儀表板及AI 導入之可行性，期能以數據資訊及軼事雙向發掘問題，回饋監理、運輸及工程等權責單位，提供民眾及機關適切、適時、人性的服務，並降低異常風險。

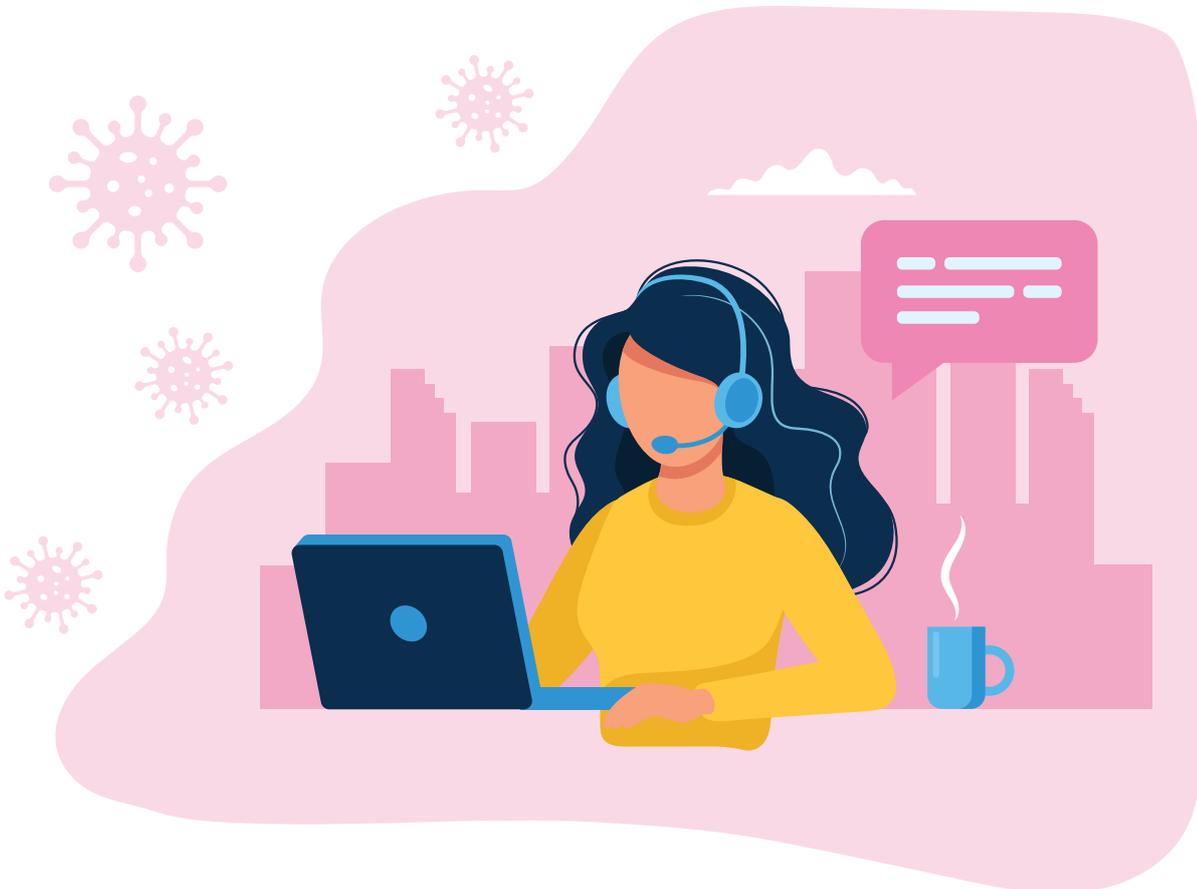
### Digital and physical services are seen as complementary rather than the former replacing the latter

Deploying an architecture that coordinates and integrates the data, information and actions of organizations and allows early identification of potential problems and possible grievances from road users. It also creates new values of service scale, scope and learning for the DGH.

### Now we can make a good “Road User Service Center.” In the future, we can make a good “Digital Service Center.”

After the pandemic eased, the transformation was facilitated based on the experience learned during the pandemic - “data-centric, analysis-based” digital transformation: For example, in addition

to the text response, smart text customer service has introduced online operations and applied modern technology to help the public immediately raise complaints or suggestions, as well as making statistical analysis of the relevant information and feeding it back for reference by all units of the DGH to improve their operations. In addition, the feasibility of the QR Code Internet phone, real-time visualization management, analysis dashboard, and AI introduction will be evaluated in the future. It is hoped that data, information, and anecdotes can be used to discover problems in both directions, give feedback to motor vehicles offices, transportation, engineering, and other dedicated units to provide appropriate, timely, and human-oriented services for the public and institutions, as well as reducing the risks of abnormalities.





數位行車 靜觀 靜聽

南投監理站 讚

慢

看

停

行

停

行

停

交通安全月  
路口慢看停

交通安全月  
路口慢看停  
行人停看聽

119年 交通安全月  
路口安全  
路口慢看停 行人停看聽  
交通部安委會 交通部公路總局 臺中區監理所南投監理站

路口慢看停 行人停看聽

監理所南投監理站

# 5

單元

## 監理之路： 指下操作行百里

The Road to Motor Vehicle Services:  
A Hundred Miles At Your Fingertips

## 5

## 監理服務 APP 換新裝 使用體驗全面升級

New Look for the Motor Vehicle Driver Information Service App  
Upgrading the Experience



 監理服務APP首頁  
Homepage of the Motor Vehicle Driver Information Service (MVDIS) APP

### 服務功能多元豐富，視覺分明智慧展現

隨著行動載具及無線網路快速普及，透過手機APP從事各項活動已成為現今基本生活模式。為讓民眾透過行動載具使用監理服務更友善方便，監理服務APP全新改版換新

裝，以民眾角度出發，優化使用體驗，讓操作介面更為直覺友善，並推出個人化監理服務，以貼近個人生活之服務功能，提供民眾更優質的使用體驗。

全新改版之監理服務APP結合大數據分析及監理實務，挑出民眾常用業務，除精進既有服務功能外，亦導入使用者介面（UI）及使用者經驗（UX）重新設計介面，並聚焦民眾痛點予以強化，以我的監理管家概念出發，整合個人車輛、駕照、汽燃費及違規等監理資訊，提供專屬個人資料、駕照及車輛現況、定檢預約、繳費紀錄、住居所變更等申辦及查詢，更將量身訂製18類監理訊息結合行動裝置行事曆達到專屬個人之監理行事曆，實現訊息主動提醒，且為方便民眾隨時掌握監理新知，更結合手機定位導入適地性訊息服務，提供使用者位置附近監理所站公告最新消息；此外，考量友善雙語環境，參考手機設定語系自動變更為英文版等功能，讓外國友人也能體驗友善、無障礙雙語服務。

### 持續精進便利智慧服務

全新改版監理服務APP比以前更為直覺及友善，功能更為多元及豐富，自7月16日上線以來累計下載數達57萬人，已成為民眾申辦監理業務及接收監理訊息的小幫手。未來亦持續精進並與時俱進推出創新服務，為民眾創造更多有溫度服務體驗，提供更全面及便利智慧化服務。

## Diverse service functions, visually clear smart display

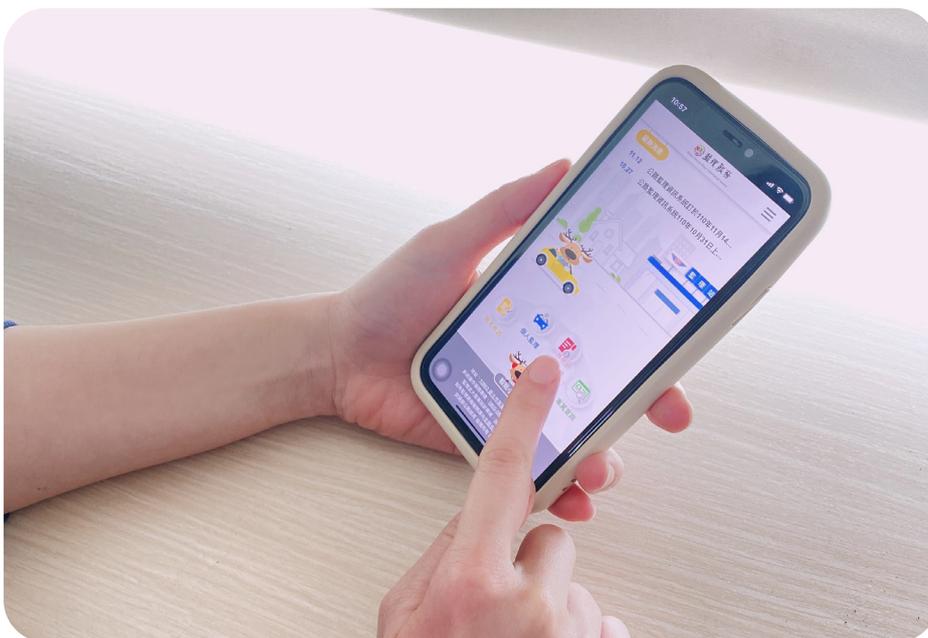
With the popularity of mobile devices and wireless networks, engaging in various activities through mobile apps has become the norm today. In order to make it more user-friendly to access motor vehicle services through mobile devices, the Motor Vehicle Driver Information Service (MVDIS) APP has been redesigned and upgraded to optimize user experience by making the interface more intuitive and friendly. Moreover, personalized motor vehicle services have been made available to suit different lifestyles, providing a better user experience in general.

The newly revised Motor Vehicle Driver Information Service (MVDIS) APP combines big data analysis and motor vehicle practices to select the most common requests. In addition to improving the existing service features, it also introduces the concepts of user interface (UI) and user experience (UX) to redesign the interface with the public in mind. The pain points have also been addressed to create the “my motor vehicles services manager” experience by integrating information such as personal vehicles, driver licenses, fuel costs, and violations to provide access to applications

and inquiries for exclusive personal information, the current status of the driver licenses and vehicle, regular inspection appointments, payment records, residence changes, etc. 18 types of inquiries for customized motor vehicles information are combined with the mobile device calendar to create a personal calendar that sends notifications. Mobile phone positioning has also been introduced to provide location-specific information so that people can stay updated with the latest information. In addition, a friendly bilingual environment has been created by referring to the device's language setting to provide an English version so that people from abroad can access the services with ease.

## Continuing to improve convenient smart service

The new Motor Vehicle Driver Information Service APP is more intuitive and friendly than ever before, with more features. Since its launch on July 16, it has been downloaded 570,000 times to offer the best help for applications and the best source of information. The app will continue to improve with innovative services to create a better experience for the public, as well as more comprehensive, convenient, and smart services.



 監理服務APP線上操作  
Online operations of the Motor Vehicle Driver Information Service App

# 廢車回收一站通 報廢止費真輕鬆

One-stop Service for Scrap Car Recycling  
Scrapping Cars Made Easy



廢車回收一站通記者發表會  
Press Conference of "One-stop Services for Scrapping Cars"

## 免臨櫃，廢車回收上網申辦一站就通

為便利民眾辦理車輛報廢、繳費及申請獎勵金等跨機關業務，公路總局參加環保署配合國發會智慧政府推動計畫，共同合作推動「廢車回收一站通」線上申辦服務措施，民眾透過網路系統即可辦理「車體回收」、「車籍報廢」、「繳納汽燃費」、「繳納牌照稅」及「獎勵金申請」等跨機關5大項目服務。

過去民眾辦理「車輛報廢登記」，需洽監理機關臨櫃辦理，同時繳清汽燃費、牌照稅、交通違規罰鍰等費用，並將車牌及行照繳回始可完成「車籍報廢」，「車體回收」部分則由民眾自行通知環保署轄管回收商進行回收，當「車籍報廢及車體回收」程序皆完備，始能完成「車輛報廢登記」，就民眾立場，礙於該項業務權責機關不同需至不同地點辦理，既費時又不便民；進而催生

「廢車回收一站通」線上系統，提供民眾或回收商線上申辦車籍報廢、車體回收、繳費（稅）及獎勵金申請等五合一服務系統，藉由該系統自動串接各部門業務流程，一次完成「車輛報廢登記」程序，民眾無需再奔波各公務機關。

## 民眾便利省時，機關效率提升

「廢車回收一站通」系統，於110年12月1日起展開為期1個月的系統試營運，並自111年1月1日正式上線；依以往廢車回收及車輛報廢統計數量，每年將可受惠人數約為100萬人；另申辦車籍報廢、繳納汽燃費及牌照稅程序，也可減少民眾往返監理機關及稅捐機關之路程及等待時間約節省1天的時間，獎勵金申請部分，民眾也可提早6天領到獎勵金等效益，大大提升各部門行政效率及民眾辦理車輛報廢便利性。



 一站式回收商收牌  
Sign for one-stop recycling services

## One-stop online application for scrap car recycling

In order to facilitate the process of scrapping cars, the DGH worked with the Environmental Protection Administration (EPA) to promote the “One-stop Services for Scrap Cars” online application measure in line with a smart government program launched by the National Development Council (NDC). The program allows people to access 5 services, including “car body recycling,” “vehicle registration scrapping,” “payment of fuel fees,” “payment of license tax,” and “reward application.”

People used to have to go to the motor vehicle services authorities to apply for “vehicle scrapping registration” in the past. They had to pay the fuel fee, license tax, traffic fines, and other fees and return the license plate and vehicle license to complete the “vehicle registration scrap.” For “vehicle body recycling,” people had to notify the recyclers under the jurisdiction of the EPA for recycling. The “vehicle scrap registration” is only done upon completing “vehicle registration scrap and car body recycling” procedures. People had to go to different locations to handle the process, which was time-consuming and inconvenient. Therefore, an online system of

“One-stop Service for Scrap Car Recycling” was created, providing people and the recyclers the possibility of applying for the scrapping of car registration, car body recycling, and online payment (tax) and reward application. The five-in-one service system is automatically connected with different divisions so that the procedure can be completed in one go with no need for people to visit various government agencies.

## Convenience and time-saving for the public, increased efficiency for agencies

The “One-stop Service for Scrap Car Recycling” system launched a one-month trial on December 1, 2021, and was officially launched on January 1, 2022. Judging by past statistics, around 1 million people can benefit from the system every year. In addition, the procedures for applying for the scrapping of vehicle registration, payment of fuel fees, and license tax can also reduce one day of time necessary for visiting and waiting at the supervisory authority and tax authority. In terms of reward applications, people can collect the money 6 days earlier, which greatly improves various departments' administrative efficiency and the convenience of handling vehicle scrapping.

# 產官學攜手合作 呼朋引伴來駕訓

Industry, Government, and Academia Work  
Together to Promote Driving Lessons



 實地術科教案教學  
Field technical lesson teaching

## 鼓勵駕訓，提升安全

為提升騎乘機車安全，公路總局配合交通部政策，自108年起開始推動機車駕訓補助，期間委託交通大學辦理研究分析駕訓之成效，研究成果顯示，經過機車駕訓者，可延長取得駕照後之未發生違規及肇事騎乘時間；亦可降低取得駕照後之違規風險32%、肇事風險20%，顯示機車駕訓確有成效。

110年度持續辦理機車駕訓補助計畫，補助金額每名新臺幣1,300元，名額共10,000名，期間自110年1月1日至11月30日止，只要符合報考駕照資格者皆可申請，今年度共計19,495人參加機車駕訓。

## 精進教學，提升量能

110年度除辦理師資培訓外，亦設計實地教學術科教案，模擬實地上路後之道路實境，要求全體駕訓班使用，融入現行之術科教學，增加學員安全駕駛之觀念及實際上路之技能，透過機車駕訓班接受扎實的交通安全知識及騎乘技巧教學，未來終生皆可受用。

另為增加駕訓量能，積極邀集地方政府、業者、公會共襄盛舉，共同挹注補助名額，110年度外單位共補助6,745名補助名額；亦積極輔導駕訓班成立，機車駕訓班家數自108年24家成長至110年共58家，有效增加駕訓之誘因及成效。

## Encouraging driver training, improve safety

In order to improve the safety of motorcycles, the DGH has followed the MOTC policy in subsidizing motorcycle training lessons since 2019. The National Chiao Tung University was entrusted to conduct research and analyze the effectiveness of driving training. Research shows that people who took lessons stay violation and incident-free for longer, as well as reducing the risk of violation by 32% and the risk of accidents by 20% after obtaining a driver licenses, demonstrating the effectiveness of training

The motorcycle training subsidy program continued in 2021. Running from January 1 to November 30, a total of 10,000 people received NT\$1,300 in subsidy. Those who are eligible to take the test have the right to apply. A total of 19,495 people participated in the training this year.

## Improve teaching, increase capability

In addition to providing instructor training, a teaching plan for field training and written tests were also developed in 2021. The test simulates real-life road conditions after on-site driving, which all trainees are required to use. Once introduced to the current field training, the teaching plan strengthened the concept of safe driving and actual driving skills. Once people have received solid traffic safety knowledge and driving skills training, they can benefit from life.

Local governments, industry players, and associations were invited to participate by increasing the number of people entitled to the subsidy to increase the training capacity. In 2021, external players subsidized a total of 6,745 people. The DGH also actively encouraged the establishment of more driving schools, with the number growing from 24 in 2019 to 58 in 2021, effectively increasing the incentive and performance of driving lessons.



 駕訓師資召訓  
Driving instructor training

# 輕鬆掌握危險物品車輛動態資訊 隨時把關道路行車安全

Keeping the Roads Safe by Tracking Vehicles  
Carrying Hazardous Goods



「危險物品車輛動態資訊管理平台」系統畫面

Screenshot of the "Management Platform for Dynamic Information of Vehicles Carrying Hazardous Goods"

## 建置危險物品車輛動態資訊管理平台

為有效掌握及共享載運各類危險物品車輛是否依規定申請運送許可、依規定時段、路線行駛及車輛檢驗狀態等資訊，以科學化管理方式強化高風險危險物品車輛行車安全，公路總局於108年規劃分階段建置「危險物品車輛動態資訊管理平台」，並於當年度6月30日完成初步建置，截至110年12月23日共納管車輛數6,158輛。

危險物品車輛動態資訊管理平台具備動態監控、統計報表、基本資料及系統管理等功能，並運用第3代公路監理資訊系統車籍及臨

時通行證等資訊建立預警機制，以利監理機關管理並提醒車輛駕駛人。

## 辦理裝置全球衛星定位設備補助計畫

110年4月辦理裝置全球衛星定位設備補助計畫，補助金額每車輛以新臺幣2,000元為限，截至11月30日止，只要近6個月內曾經申請取得載運危險物品臨時通行證者皆可申請，今年度共計約3,500輛車輛參與補助計畫。

未來，公路總局持續針對載運危險物品車輛鼓勵裝置全球衛星定位設備，持續精進系統功能，以利掌握車輛載運品項及行駛路線等資訊，隨時把關道路行車安全。

## Establishing the Management Platform for Dynamic Information of Vehicles Carrying Hazardous Goods

The DGH started building the "Management Platform for Dynamic Information of Vehicles Carrying Hazardous Goods" in phases since 2019 to effectively keep abreast of and share information such as whether vehicles carrying various types of hazardous goods have applied for transportation licenses in accordance with regulations, travel in accordance with prescribed periods, routes and vehicle inspection status, etc., as well as strengthening the driving safety of vehicles carrying hazardous goods with scientific management. The initial establishment was completed on June 30, 2019. As of December 23, 2021, a total of 6,158 vehicles are under management.

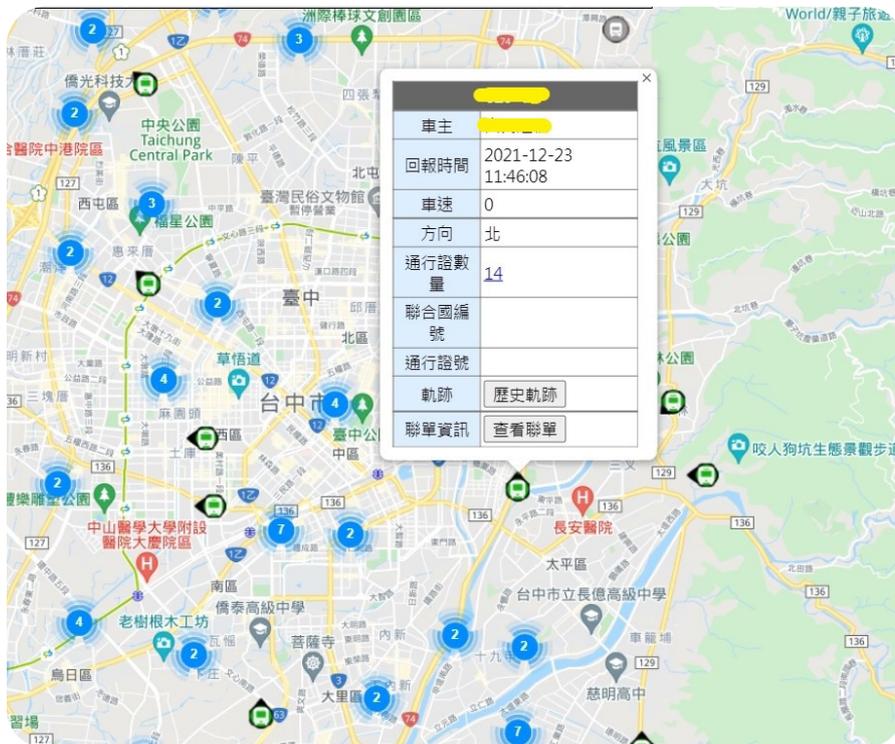
The "Management Platform for Dynamic Information of Vehicles Carrying Hazardous Goods" has features such as dynamic monitoring, statistical reports, basic data, and system management. It has also built an

early warning mechanism based on the third-generation highway motor vehicles information system and temporary permits in order to facilitate management and remind the drivers.

## Handling the GPS Equipment Installation Subsidy Program

In April 2021, the subsidy program for global satellite positioning equipment installation was implemented, limited to NT\$2,000 per vehicle. As of November 30, all vehicles that have applied for a temporary permit for carrying hazardous goods within the past 6 months were eligible. A total of 3,500 vehicles participated in the subsidy program this year.

In the future, the DGH will continue to encourage the installation of global satellite positioning equipment for vehicles carrying hazardous goods and improve system features to keep abreast of information such as items carried by the vehicles and driving routes and to ensure road safety.



車輛動態顯示畫面  
Dynamic vehicle display

# 資訊中心與公路監理資訊系統維運成果

## Operation and Maintenance Achievements of thb-IDC and “Motor Vehicle and Driver Information System”



 公路總局 thb-IDC 機房內部機櫃陳列  
Display of cabinets in the thb-IDC computer facilities of the DGH

公路總局資訊中心因網路設備老舊、所屬機關網路頻寬不足且資訊中心內網虛擬化平臺使用已逾7年，不足以因應所屬機關網路作業之需求與新資訊系統伺服器主機所需之處理效能，原廠亦不再提供平臺弱點修補服務，面對上述挑戰，資訊室辦理下列精進作為。

### 網路設備汰換升級

以單模光纖汰除總局大樓老舊多模光纖骨幹，將傳輸頻寬由1Gbps提升至10Gbps以上，再次換核心、邊際交換器，將內部交換頻寬由1Gbps升至200Gbps。

### 所屬機關網路頻寬提升

局本部及所屬一級機關等22個辦公處所之頻寬由20M提升到200M不等；所屬監理單位24個辦公處所頻寬由20M提升到100M不等；所屬工程單位51個辦公處所之頻寬由20M提升到35M不等。

### 虛擬化平臺改造

將傳統3層式架構汰換為超融合基礎架構，提升各系統主機運作效能及資料存取速度，並大幅降低資訊中心維護成本及電力消耗。

### 首次辦理M3兵棋推演

公路監理資訊系統（M3）自104年陸續導入資訊安全相關管理制度，迄今管理制度已趨成熟穩定。為落實管理制度，依據「110年度兵棋推演實施說明會議」之決議與資通安全管理法相關規定，資訊室於11月22日辦理兵棋推演，係首次參照公路總局工程機關作法辦理，在資安長黃運貴副局長及陳進發副總工程司指導下，順利完成演練。另於10月3日辦理M3營運持續演練，參演單位包括來來超商、六都交通裁決機關、警政署、北市刑大、環保署等10局外機關，與公路總局資訊室、監理組、7區監理所及公訓所等。

### 賡續汰換M3老舊設備

公路總局長期致力於M3功能維穩、提升效能及加強資安防護，惟其基礎軟硬體建置迄今已逾8年，面臨設備老舊、軟硬體原廠陸續宣告停止技術支援，資訊室於7月提報軟硬體版本升級修正計畫並獲國發會審議通過，刻正分年辦理汰換與升級工作，俾維持公路監理資訊系統之服務水準，持續推展各項公路監理應用服務。



 首次辦理M3兵棋推演  
The first M3 simulation drill held

With the phased-out network equipment, insufficient bandwidth, and the Virtual Machine (VM) platform of the intranet that had been working for over 7 years, the thb-IDC of the DGH has been facing the challenge of meeting the needs of networking and processing capacity of the computing resources for the next-generation information systems. Moreover, the original supplier stopped providing technology support services for platform vulnerabilities. To overcome these challenges, the Information Management Office engaged in the following improvement projects:

### Replacement and upgrade of network equipment

The old multi-mode fiber backbone of the DGH Building was replaced with single-mode fiber, increasing the transmission bandwidth from 1Gbps to more than 10Gbps. The core and edge switches were also replaced to increase the internal switching bandwidth from 1Gbps to 200Gbps.

### Increase in network bandwidth of affiliated institutions

The bandwidth of 22 offices, such as the headquarters and affiliated first-level agencies, increased from 20M to 200M. The bandwidth of 24 offices of the subordinate supervision units has been increased from 20M to 100M. The bandwidth of 51 offices of subordinate engineering units was improved from 20M to 35M, depending on the situation.

### Transformation of Virtual Machine (VM)

The traditional 3-tier architecture was replaced by Hyper Converge Infrastructure (HCI), which improves each system host's operating performance and data access speed and greatly reduces the maintenance cost and power consumption of thb-IDC.

### The first M3 simulation drill held

Since 2015, the Third-Generation Motor Vehicle and Driver Information System (M3) has successively introduced information security management systems. As of now, the management system has become mature and stable. In order to implement the management system, the Information Management Office conducted the situation drill on November 22 in accordance with the resolution of the "2021 Annual Simulation Drill Implementation Meeting." The drill was successfully completed under the guidance of Deputy Director-General, Huang Yung-kuei and Deputy Chief Engineer, Chen Chin-Fa. In addition, a sequel to the M3 operation drill was organized on October 3. The participants included 10 external units such as OK Mart, the traffic adjudication agency of the 6 main cities, the Police Administration, the Criminal Investigation Division, Taipei City Police Department, the EPA, as well as the Information Management Office, Motor Vehicles Division, 7 Motor Vehicles Offices and the Training Institute of the DGH. 5. Continuously replacement of the

### Continuously replacement of the outdated M3 equipment

The DGH has long been committed to maintaining the stability of M3 functions, improving performance, and strengthening information security protection. However, its basic software and hardware have existed for more than eight years. Therefore, they are old with no more technical support from the original suppliers. The Information Management Office submitted a proposal in July, which was approved by the NDC (National Development Council). Each year, the replacement and upgrade will be carried out to maintain the service level of the Motor Vehicle and Driver Information System and continue to promote relevant application services.





6

單元

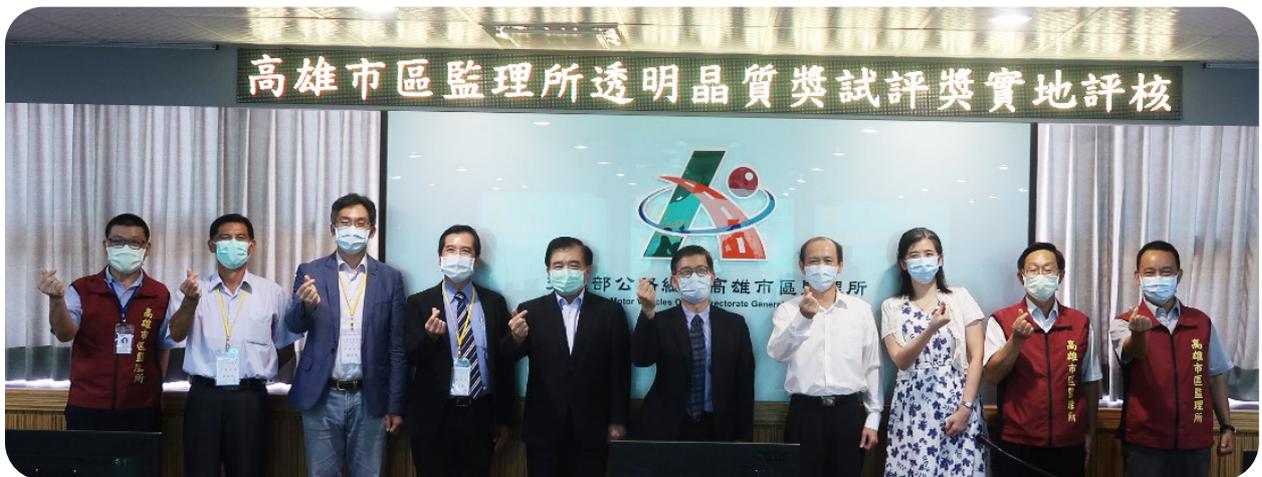
幸福之路：  
殷勤耕耘享成果

The Road to Happiness: Reaping the  
Results of Dedicated Efforts

# 6

## 廉能監理創新永續 榮獲 110 年透明晶質獎

Innovation, Sustainability and Integrity in Motor Vehicles Services  
Won the 2021 Transparency Award



評核委員至高雄市區監理所進行實地評核複審作業  
The assessment committee visits Kaohsiung City Motor Vehicles Office to conduct an on-site assessment and review

### e化透明降風險 監理創新有貢獻

高雄市區監理所官網全面公開與人民權益攸關施政措施及相關資訊，並成立檢驗疑義處理小組、代檢廠評鑑制度導入外部監督機制，以及電腦報考駕照、臨時通行證線上申辦等措施，有效減少代辦黃牛中介圖利之機會，並致力於運用科技翻轉服務模式，打造無人監理站、Line-智能客服監理小幫手、數位QR-code愛心服務鈴等多項創新設施。

### EIS系統再進化 預警成效有方法

該所規劃公路監理營運決策管理系統（EIS），改善先前運用公路監理系統貨運預警機制管理面向不足部分，重新制定「公司管理」、「車輛管理」、「駕駛人管理」等3層面計11項風險指標，藉由全面風險評估總項指標及個別面向單項指標等不同層面告警，找出

高風險業者，透過派員查核、責令限期改善、公路法裁罰、廢止汽車運輸業執照等手段督促改善，強化貨運業者源頭輔導與管理，守護用路人生命安全。

### 團隊合作齊努力 透明晶質獲佳績

自公路總局提報高雄市區監理所參加法務部廉政署110年「透明晶質獎」以來，陳崑山所長率領該所全員投入參獎事宜，公路總局政風室及交通部政風處亦全程參與，團隊合作協助審核、修改高市所參獎申請書，為第一階段初審做最佳準備；參獎過程中，透過標竿學習、專家指導，不斷演練策進，不僅充分發揮自身優勢，對弱點回應亦充分準備，圓滿完成實地評核複審作業，榮獲「特優」機關佳績，為交通部奪得首座透明晶質獎，監理行政透明成效，獲得外界肯定。



➤ 法務部蔡清祥部長親自頒發透明晶質獎予公路總局高雄市區監理所陳崑山所長  
Minister Tsai Ching-hsiang of the Ministry of Justice personally presented the Transparency Award to Director Kunshan Chen of the Kaohsiung City Motor Vehicles Office

## Electrification or transparency to lower the risks: contributing with innovation

The official website of Kaohsiung City Motor Vehicles Office makes all administrative measures and information related to the rights and interests of the people public, as well as setting up a team for addressing doubts, the evaluation system for inspection agencies with an external supervision mechanism, and measures such as online application for driver's license and temporary passes. This reduces the chance of an intermediary making a profit in the process and innovating service models with technology and creating a number of innovative facilities such as unmanned motor vehicle offices, Line-smart customer service assistants, and QR-code service bell.

## EIS system evolution for effective early warning

The office formulated a highway motor vehicles decision management system (EIS), improved the previous management deficiencies of the freight warning mechanism

of the highway motor vehicles system, and re-established 11 risk indicators on three levels, including "company management," "vehicle management" and "driver management." Comprehensive risk assessment, general indicators and individual indicators, and other different levels of warning are incorporated to identify high-risk businesses, and urge them to improve through means such as dispatching personnel for inspection, ordering improvement within a time limit, penalties based on the Highway Act, and revoking licenses to enhance the guidance and management at the source to protect the safety of road users.

## Teamwork and hard work won the Transparency Award

Since the DGH nominated the Kaohsiung City Motor Vehicles Office for the 2021 Transparency Award of the Agency Against Corruption, Ministry of Justice Director Kunshan Chen led all staff to participate in preparing for the award. The DGH Civil Service Ethics Department and the MOTC Civil Service Ethics Department were also involved in creating good teamwork that helped review and revise the application for the preliminary round. During the process and through benchmarking learning, expert guidance, and continuous practice and improvement, the Office gave full play to its own advantages and prepared to answer its weaknesses. The on-site assessment and review were successfully completed with the "Excellent" rating, winning the MOTC its first Transparency Award. The outside world officially recognized the effectiveness of administrative transparency.

# 傑出公務人員 榮耀與肯定

Honor and Recognition for Outstanding Civil Servants



蘇花公路改善工程處李宗仁處長接受蔡英文總統頒獎  
Director Zongren Li of Suhua Improvement Engineering Office accepts the award from President Tsai Ing-wen

## 蘇花公路改善工程處「幸福工程蘇花改，永續環境宜花東」榮獲110年公務人員傑出貢獻獎團體獎

由考試院舉辦的「公務人員傑出貢獻獎」被譽為公務人員最高殊榮，每年選拔優秀公務人員或團體，公路總局蘇花公路改善工程處「幸福工程蘇花改，永續環境宜花東」榮獲110年公務人員傑出貢獻獎團體獎。

「蘇花公路山區路段改善計畫」起於97年，101年始執行蘇澳東澳段、南澳至和平及和中至大清水路段之設計與施工，歷經8年工

期，完成了38.8公里的建設旅程，計8座隧道、13座橋梁及5.6公里的平面道路，109年1月開放全線通車。施工期間落實環評承諾減少碳排及環境污染。克服隧道抽坍湧水等困境完成全國第一個包含隧道、橋樑、道路、機電及交控標的碳盤查工程道路，經英國標準協會（BSI）認證，開創道路工程推動碳管理實務之先河。團隊設計結合地方人文景觀，以白米社區為發想，採米粒造型打造國內首座複合材料工法的白米造型脊背景觀橋，融合公路工程與技術、原民特色與景觀，結合在地人文景觀意象，兼具環境生態與人文之美。

## Suhua Improvement Engineering Office “Happy Suhua Improvement Project: Sustainable Environment in Hualien and Taitung” won the 2021 Civil Servant Outstanding Contribution Group Award

The “Civil Servant Outstanding Contribution Award,” given by the Examination Yuan, is known as the highest honor for civil servants. Outstanding civil servants or groups are selected each year. In 2021, the Suhua Improvement Engineering Office won the Civil Servant Outstanding Contribution Group Award for the “Happy Suhua Improvement Project: Sustainable Environment in Hualien and Taitung.”

The “Suhua Highway Mountain Section Improvement Project” started in 2008. In 2012, the design and construction of the Suao-Dongao section, Nan’ao-Heping, and Hezhong-Daqingshui sections were implemented. After 8 years, the construction of 38.8 kilometers was completed, including 8 tunnels, 13 bridges, and 5.6 kilometers of surface road

that was opened to traffic in January 2020. The EIA commitments were implemented during the construction period to reduce carbon emissions and environmental pollution. Overcoming difficulties such as tunnel collapse and water influx, the office had to fulfill Taiwan’s first carbon inventory project and reduce environmental protection. The problem with water influx in the tunnel was overcome to finish the first carbon inventoried road, including the tunnels, bridges, roads, electromechanical, and traffic control standards. This was certified by the British Standards Institution (BSI), creating a precedent for road engineering to promote carbon management practices. The team design combines the local human landscape with the Baimi Community with the idea to build the first extradosed landscape bridge with the shape of a grain of rice with the composite material construction method. It merges highway engineering and technology, aboriginal characteristics and view, local culture, and landscape to present the beauty of the environment and the local people.



 蘇花公路改善工程處團體獎成員於受獎當日在考試院合影  
Group photo of team members of the Suhua Improvement Engineering Office when they received the Team Award at the Examination Yuan

## 西部濱海公路北區臨時工程處詹益祥處長榮獲行政院110年模範公務人員

行政院為表揚所屬公務人員對國家社會之貢獻，以激勵士氣，提升行政效能，每年依規定就所屬人員中事蹟顯著，確具貢獻，足為公務人員楷模者，遴選為行政院模範公務人員。

詹處長於98至103年任職公路總局期間，完成100年版的臺灣地區公路整體規劃。105年調西濱北工處副處長，於106年至107年陸續完成東西向快速公路台66線高鐵橋下等三路口主線高架、台61線西濱快速道路大潭至永安路段主線高架及永安至新豐段主線高架通車。108年擔任公路總局工務組副組長督導蘇花公路山區路段、南迴公路後續及西濱快速公路後續等三個改善計畫，於108年底與109年初分別通車，將臺灣環島公路推向新進程。109年調西濱北工處擔任處長，繼續完成淡江大橋建設、台76線彰化路段台19以西新建工程，並推動臺灣造橋技術新境界的「南、北竿馬祖大橋」規

劃，表現優異足堪楷模，獲頒行政院及交通部110年模範公務人員。

## 第三區養護工程處吳昭煌處長辦理「0806水災台20線明霸克露橋災後便道搶修」工作，一次記二大功專案考績

吳處長於110年8月4日盧碧颱風發佈海上警報，指示該處及相關工務段於當日成立緊急應變小組，其中甲仙工務段轄管之台20線勤和復興中期道路，於8月6日晚間10時即封閉，該封閉路段內之明霸克露橋因無法抵抗大量土石流，於8月7日橋體沖斷，惟適時封路，未造成用路人傷亡。8月13日約下午2時，玉穗溪及荖濃溪河床面上，有搶修人員正施工，國軍及搜救人員進行搜尋失蹤人員，是時吳處長，發現天候不佳恐有土石流發生，於下午約2時30分果斷下令於河床作業之人員機具撤離，挽救現場約50人生命及機具，至8月25日恢復復興、拉芙蘭及梅山等3里里民對外通行，績效厥偉，獲交通部核定一次記二大功專案考績。



西部濱海公路北區臨時工程處詹益祥處長接受行政院蘇貞昌院長頒獎

Director of West Coast Expressway Northern Region Temporary Engineering Office, Chan Yi-hsiang, accepted the award from Premier, Su Tseng-chang

### Director of West Coast Expressway Northern Region Temporary Engineering Office, Chan Yi-hsiang, was awarded the 2021 Model Civil Servant by the Executive Yuan

In order to commend civil servants for their contributions to the country and society, encourage morale and improve administrative efficiency, the Executive Yuan selects the model civil servants for those with outstanding deeds and contributions every year in accordance with regulations.

During his tenure at the DGH from 2009 to 2014, Director Chan completed the 2001 version of the overall planning of highways in Taiwan. In 2016, he was transferred to the deputy director of the West Coast Expressway Northern Region Temporary Engineering Office. From 2007 to 2008, he successfully completed the mainline viaduct at the third intersection of the East-West Expressway, Provincial Highway No.66 high-speed railway bridge, Provincial Highway No.61, the mainline from Datan to Yon'an section, and the mainline of the Xinfeng section, which was opened to traffic. In 2019, he served as the deputy head of the Engineering Division of DGH and supervised three improvement plans for the mountainous section of the Suhua Highway, the follow-up of the Nanhui Highway, and the follow-up of the West Coast Expressway, which were opened to traffic at the end of 2019 and the beginning of 2020 respectively, bringing the island-wide highway project to the next level. In 2020, he was transferred to the West Coast Expressway Northern Region Temporary Engineering Office as the director, completed the construction of the Danjiang Bridge, the new construction of the Changhua Section of the Provincial Highway No.76 and Provincial Highway No.19, as well as promoting the planning of the "Nangan and Beigan Matsu Bridge," a new realm of bridge-building technology in Taiwan with excellent performance. He was awarded the 2021 model civil servant award, the Executive Yuan, and the MOTC.

### Director of the Third Maintenance Office, Wu Chao-huang, was in charge of the "Repair of the access road to Mingba Kelu Bridge after the August 6 flood" with two project merits recorded

Director Wu instructed the office and the engineering team to set up an emergency response team on August 4, 2021, when the sea warning was issued for Typhoon Lupit. Provincial Highway No.20 was closed at 22:00 on August 6. Mingba Kelu Bridge in this closed section was unable to resist the landslide, and it ended up breaking on August 7. However, the road was closed in time, with no casualties. At about 14:00 on August 13, emergency workers were working on the riverbeds of Yusui River and Laonong River. The army and search and rescue personnel were looking for the missing person. At that time, Director Wu found that the weather was bad and there might be landslides, so he ordered all personnel and equipment to be evacuated from the riverbed at 14:30, saving about 50 people and equipment. On August 25, the residents of Fuxing, Lavulanand Meishan were able to access the outside world. The MOTC acknowledged Wu's great achievements with two major project merits.



第三區養護工程處吳昭煌處長向行政院蘇貞昌院長簡報明霸克露橋段搶修進度  
Director, Wu Chao-huang, briefed Premier, Su Tseng-chang, on the emergency repair progress of the Mingba Kelu Bridge

# 深耕法規專業業務 精進鞭策法制教育

Working on Professional Regulatory Tasks  
Advancing Legal Education



 法制室於公路人員訓練所辦理國家賠償實務講習班  
The Legal Affairs Office held the State Compensation Practical Workshop at the Training Institute

## 創新辦理統計及解析彙編，作為因應對策之參據

為提升同仁有效處理國賠實務及加強重視國賠案件，法制室主動創新辦理「公路總局暨所屬機關105年至109年國賠案件發生類型統計分析彙編」，提供局內機關（單位）就常見類型研擬因應對策，以減少國賠案件之發生及件數；另法制室亦主動編撰「公共工程上相關請求權時效消滅之簡介-以『西濱南工程處西濱快速公路WH75-78標路段爐渣廢棄物處理案』為例」及研析監理運輸業務之重大案件法院判決見解，並掛置於網路專區，俾利協助各單位於業務上參考借鏡。

## 法規查核，更為卓越

法制室配合交通部辦理109年度的法規通報績效查核作業，奉交通部110年4月8日函復：「表現卓越」、「較往年之表現更為精

進，請依權責辦理相關人員敘獎事宜，以資鼓勵」。

## 策勵法律教育，不遺餘力

法制室110年度除例行開辦工程法律、公報與法制作業、國賠實務及行政救濟等5項講習班之外，首度辦理「法制人員研習班」，平均滿意度達92.7分。另為加強基層人員的基本法律概念，法制室指派專人至五工處、西濱南工處、臺北市所、臺北所、新竹所、嘉義所及高雄市所等機關授課，共計7場次，上述到訓同仁累計達613人次，著有實績。

## 提供法律諮詢，有效協助推動業務

法制室提供適法性之法律諮詢，於110年度提供諮詢共計達566件次、服務時間共計達16,092分鐘，未來法制室仍秉自我期許扮演「推進器」與「煞車器」之雙重角色，俾協助業務單位「依法行政」下推展業務及遂行各項任務。



**➔ 法制室指派專人至臺北所授課，提升基層人員法律基本知能**  
The Legal Affairs Office sent an instructor to teach at the Motor Vehicles Office to increase the basic legal to improve the basic legal knowledge of all employees

### Innovative management of statistics and analytical compilation as reference for countermeasures

In order to improve the employees' effective handling of state compensation cases and to pay more attention to such cases, the Legal Affairs Office took the initiative to organize the "Statistical Analysis and Compilation of State Compensation Cases Occurred at the DGH and Subsidiaries from 2016 to 2020," providing internal divisions (units) with countermeasures developed for common complaints to reduce the occurrence and number of state compensation cases. In addition, the Legal Affairs Office also took the initiative to compile "Introduction to the Elimination of Time Limits for Relevant Claims in Public Works-Based on the 'Slag Waste Disposal at the WH75-78 Section of the West Coast Expressway for the West Coast Expressway Southern Region Engineering Office' case and analyzed the opinions of the court in major cases of transportation supervision operations. The takeaway was posted in the dedicated section of the website to help all divisions to conduct their tasks accordingly.

### Better Regulatory Review

The Legal Affairs Office worked with MOTC to carry out the 2020 audit for regulatory review. The result was received in a letter dated on April 8, 2021, stating that the DGH had "worked hard to achieve great performance" and that the performance was "better than previous years. All those responsible should be awarded."

### Sparing no effort in encouraging legal education

In addition to five workshops on the legal concept of engineering, bulletin and legal operations, state compensation practice, and administrative relief, the first "Legal Affairs Personnel Workshop" was organized with a satisfaction score of 92.7 points. In addition, to strengthen the basic legal concepts of all personnel, the Legal Affairs Office sent personnel to give seven lectures at the Fifth Maintenance Office, the West Coast Expressway Engineering Office, the Taipei City Motor Vehicles Office, The Taipei Motor Vehicles Office, the Hsinchu Motor Vehicles Office, the Chiayi Motor Vehicles Office and the Kaohsiung City Motor Vehicles Office. The total number of participants reached 613, showing great achievements.

### Providing legal consultations to effectively assist with the daily operations

The Legal Affairs Office provides consultations on legal compliance. In 2021, it provided a total of 566 consultations, with a total service time of 16,092 minutes. In the future, the Legal Affairs Office will act as both the "propeller" and "brake" to help all units comply with the regulations while performing various tasks.

## 組織系統 Organizational Structure

➤ 總局內部單位計有6組、6室、4個任務編組單位。

17個所屬機關（構）：

- 5個養護工程處（所轄36個工務段及49個監工站）
- 3個新建工程處（所轄18個工務段）
- 7個監理所（所轄26個監理站、4個監理分站及7個鑑定會）
- 公路人員訓練所（2個訓練中心）
- 材料試驗所

➤ The internal units of the Directorate General of Highways include 6 divisions, 6 offices, and 4 temporary task force units.

17 subordinated units:

- 5 maintenance offices (36 branches and 49 stations)
- 3 engineering offices (18 branches)
- 7 motor vehicle offices (26 stations, 4 substations, and 7 investigation committees)
- Training Institute (2 institutes)
- Materials Testing Laboratory



## 施政計畫 Administrative Project

計畫名稱 Project name	年度預算 (千元) Annual budget (NTD 1,000)	計畫期程 (年) Timeframe (year)	列管級別 Supervisory Level
淡江大橋及其連絡道路建設計畫 Danjiang Bridge and Connecting Roads Construction Project	3,759,130	2014-2024	政院管制 Executive Yuan
生活圈道路交通系統建設計畫(公路系統) Region-Based Road System Construction Project (Highway System)	4,641,500	2015-2021	部會管制 Ministry
環島自行車道升級暨多元路線整合推動計畫 Bicycle Route Upgrade and Integration Project	478,430	2020-2024	部會管制 Ministry
提升道路品質建設計畫 Road Quality Improvement Construction Project	1,263,516	2017-2025	部會管制 Ministry
改善停車問題計畫 Parking Improvement Project	5,634,639	2017-2024	部會管制 Ministry
公路公共運輸服務升級計畫 Highway Public Transport Service Enhancement Project	4,264,738	2011-2024	部會管制 Ministry
科學城低碳智慧環境基礎建置—公共建設部分 Science City Low-carbon Intellectual Environment Foundation-Partial Plan for Constructing Infrastructure	346,304	2017-2022	部會管制 Ministry
西濱快速公路曾文溪橋段新建工程 New construction of the Zengwun River Bridge section of the West Coast Expressway	83,700	2011-2026	自行管制 Autonomous Management
台9線花東縱谷公路安全景觀大道計畫(臺東段) A Safe Landscape Boulevard on East Rift Valley Highway of Provincial Highway No.9 (Taitung Section)	239,563	2021-2027	自行管制 Autonomous Management

計畫名稱 Project name	年度預算 (千元) Annual budget (NTD 1,000)	計畫期程 (年) Timeframe (year)	列管級別 Supervisory Level
公共服務據點整備-公有危險建築補強重建(中央自辦)(公務)-交通部及所屬 Refurbishment of Public Service Facilities - Reinforcement and Reconstruction of Publicly-owned Dangerous Buildings (managed by the central government) (public affairs) - MOTC and its affiliated institutions	39,581	2021-2021	自行管制 Autonomous Management
台9線花東縱谷公路安全景觀大道計畫 A Safe Landscape Boulevard on East Rift Valley Highway of Provincial Highway No.9	1,281,190	2017-2024	自行管制 Autonomous Management
東西向快速公路台76線(原漢寶草屯線)台19線以西路段改線工程 East-West Expressway No.76 (former Hanbao-Caotun Expressway) Section on the West of Provincial Highway No.19 Construction Project	2,386,918	2018-2025	自行管制 Autonomous Management
省道改善計畫(108-113年) Highway Improvement Project (2019-2024)	6,700,000	2019-2024	自行管制 Autonomous Management
公路養護計畫 Highway Maintenance Project	8,285,629	2021-2021	自行管制 Autonomous Management
高雄市區監理所苓雅監理站遷建計畫 Linya Motor Vehicles Station, Kaohsiung City Motor Vehicles Office Relocation Project	190,070	2019-2023	自行管制 Autonomous Management
臺中區監理所臺中市監理站新建辦公大樓工程計畫 The New Office Building Construction Project for Taichung City Motor Vehicles Station, Taichung Motor Vehicles Office	102,763	2019-2023	自行管制 Autonomous Management
公路公共運輸多元推升計畫 Highway Public Transport Multiple Enhancement Project	343,089	2017-2021	自行管制 Autonomous Management

## 參賽成果 Competition Results

編號 Number	考評(核)或競賽名稱 Evaluation or the name of the Competition	得獎單位 Awarded Unit	成績 Result
1	交通部所屬各一級行政機關110年績效考評 The 2021 performance evaluation of the chief administration departments of the Ministry of Transportation and Communications	公路總局 Directorate General of Highways	第1名 First Place
2	109年度公路養護及管理績效考評(暨金路獎路況養護類) The 2020 Golden Way Award of Highway Maintenance and Management Result Evaluation - road maintenance category	第一區養護工程處 First Maintenance Office	第1名 First Place
3	110年交通部金路獎-路況養護類-工程處 The 2021 MOTC Golden Way Award - road maintenance category - Maintenance Office	第一區養護工程處 First Maintenance Office	優勝 Excellent
4	110年推動職業安全衛生優良工程金安獎選拔-第十五屆公共工程組-工程類 The 2020 Engineering Golden Safety Award for promoting safety and health - the 15 <sup>th</sup> public engineering category - engineering category	第一區養護工程處 First Maintenance Office	優等 Excellent
5	109年度「全民監督公共工程」執行績效考核 The 2020 Annual Performance Evaluation of the "Program for Supervision of Public Construction by All the People"	第二區養護工程處 Second Maintenance Office	優等 Excellent
6	110年交通部金路獎優良景觀類-工務段 The 2021 MOTC Golden Way Award - outstanding landscape category - Maintenance Office Branch	第二區養護工程處(埔里工務段) Second Maintenance Office (Puli Maintenance Office Branch)	第1名 First Place
7	110年交通部金路獎優良景觀類-工程處 The 2021 MOTC Golden Way Award - outstanding landscape category - Maintenance Office	第二區養護工程處 Second Maintenance Office	第1名 First Place
8	「2021 IFLA-APR LA Awards」(國際景觀建築師協會亞太區分會景觀大獎)-台21線樸原森活新中橫公路 The 2021 IFLA-APR LA Awards - Native / Forest / Lohas New Central Cross-Island Highway of Provincial Highway No.21	第二區養護工程處(信義工務段) Second Maintenance Office (Xinyi Maintenance Office Branch)	自然保護類卓越獎 Award of Excellence in Nature Conservation
9	「2020 IFLA-APR LA Awards」(國際景觀建築師協會亞太區分會景觀大獎)-雲川霧境返山路-十年來莫拉克颱風災害後的重建 The 2020 IFLA - APR LA Awards - the Misty Road Leading Back to the Mountain - Decade of Reconstruction After the Typhoon Morakot Disaster	第三區養護工程處(潮州工務段) Third Maintenance Office (Chaozhou Maintenance Office Branch)	自然災害與極端氣候類榮譽獎 The Honorable Mention of the natural disaster and extreme weather event category

編號 Number	考評（核）或競賽名稱 Evaluation or the name of the Competition	得獎單位 Awarded Unit	成績 Result
10	110年度交通部金路獎 - 用路人資訊類 - 工務段 The 2021 MOTC Golden Way Award - road users information category - Maintenance Office Branch	第三區養護工程處 (大武工務段) Third Maintenance Office (Dawu Maintenance Office Branch)	第1名 First Place
11	美國全球電影競賽（Accolade Global Film Competition）- 四季螢光-生態公路典範·台18線螢火蟲復育之路 Accolade Global Film Competition - All-Season Glow - model of eco-friendly highway - road to firefly conservation for Provincial Highway No.18	第五區養護工程處 Fifth Maintenance Office	公共服務類卓越獎、自然環境野生動物類卓越獎、音效剪輯混音類卓越獎、攝影錄像類卓越獎、紀錄短片類卓越獎、電影攝影類卓越獎、剪輯類卓越獎 Excellence in Public Service Program, Excellence in Natural Environment and Wildlife, Excellence in Sound Editing and Mixing, Excellence in Photography and Video, Excellence in Short Documentary, Excellence in Cinematography, Excellence in Editing
12	美國最佳短片競賽（Best Shorts Competition）-四季螢光-生態公路典範·台18線螢火蟲復育之路 Best Shorts Competition - All-Season Glow - model of eco-friendly highway - road to firefly conservation for Provincial Highway No.18	第五區養護工程處 Fifth Maintenance Office	自然野生動物環境類卓越獎、剪輯類卓越獎、觀眾影響力類卓越獎、紀錄短片類卓越獎、公共服務節目類卓越獎 Excellence in Natural Environment and Wildlife, Excellence in Editing, Excellence in Audience Impact, Excellence in Short Documentary, Excellence in Public Service Program

編號 Number	考評(核)或競賽名稱 Evaluation or the name of the Competition	得獎單位 Awarded Unit	成績 Result
13	休斯頓國際電影節(2021 54TH worldfest-houston international film festival)-四季螢光-生態公路典範·台18線螢火蟲復育之路 The 2021 54 <sup>th</sup> Worldfest-Houston International Film Festival - All-Season Glow - a Model of Eco-Friendly Highway - Road to Firefly Conservation for Provincial Highway No.18	第五區養護工程處 Fifth Maintenance Office	紀錄片類白金獎 Platinum Award in documentary
14	美國全球電影競賽(Accolade Global Film Competition)-「四季螢光」-阿里山公路螢火蟲復育之路 Accolade Global Film Competition - All-season Glow: Alishan Highway's Road to Firefly Conservation	第五區養護工程處 Fifth Maintenance Office	人道主義獎 Humanitarian Award
15	勞動部勞動力發展署109年第18屆進用身心障礙者工作績優機構金展獎 The 18 <sup>th</sup> (2020) Workforce Development Agency, Ministry of Labor, Golden Award for Divisions Hiring People with Physical/Psychological Disabilities	西濱北區工程處 West Coast Expressway Northern Region Temporary Engineering Office	優等 Excellent
16	「台9線南迴公路拓寬改善後續計畫-安朔草埔段」獲得亞澳道路工程協會第2屆「Mino最佳工程獎項-高容量道路類」 The 2 <sup>nd</sup> Road Engineering Association of Asia and Australasia, REAAA - (Mino Best Project-High Volume Road) Caopu Senyong Tunnel of the Provincial Highway No.9 improvement project	西濱南區工程處 West Coast Expressway Southern Region Temporary Engineering Office	第1名 First Place
17	交通部金路獎傑出工程類(台9線蘇花公路仁水隧道新建工程) The 2021 MOTC Golden Way Award - outstanding engineering category (New Construction of Renshui Tunnel, the Suhua Highway of Provincial Highway No.9)	蘇花公路改善工程處 Suhua Highway Improvement Engineering Office	第1名 First Place
18	「台9線蘇花公路山區路段改善計畫」榮獲109年度「全球道路成就獎」(Global Road Achievement Awards, GRAA) 工程設計類首獎 The Suhua Highway Mountain Section Improvement Project of Provincial Highway No.9 won the 2020 Global Road Achievement Awards, GRAA - First Prize for Engineering Design	蘇花公路改善工程處 Suhua Highway Improvement Engineering Office	第1名 First Place
19	109年度院頒「道路交通秩序與交通安全改進方案」年終視導-砂石車安全管理組 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - dump truck management	臺北區監理所 Taipei Motor Vehicles Office	第1名 First Place

編號 Number	考評（核）或競賽名稱 Evaluation or the name of the Competition	得獎單位 Awarded Unit	成績 Result
20	109年度院頒「道路交通秩序與交通安全改進方案」 年終視導 - 公路監理第2組 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - motor vehicle office team 2	新竹區監理所 Hsinchu Motor Vehicles Office	第1名 First Place
21	109年度院頒「道路交通秩序與交通安全改進方案」 年終視導 - 綜合管考第1組 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - control and evaluation team 1	新竹區監理所 Hsinchu Motor Vehicles Office	第1名 First Place
22	110年「第13屆道安創新貢獻獎」公路監理組 2021 the 13 <sup>th</sup> Road Safety Innovative Contribution Award-motor vehicle office team	新竹區監理所 Hsinchu Motor Vehicles Office	第1名 First Place
23	110年「第13屆道安創新貢獻獎」交通安全宣導組 2021 the 13 <sup>th</sup> Road Safety Innovative Contribution Award-traffic safety advocacy team	新竹區監理所 Hsinchu Motor Vehicles Office	第1名 First Place
24	109年交通部汽車貨運調查 The 2020 MOTC Annual Evaluation of Auto Cargo	新竹區監理所 Hsinchu Motor Vehicles Office	第1名 First Place
25	交通部「運輸資料流通服務平臺 TDX」加盟協作單 位績效評作業-公車票證組 The MOTC "Transport Data eXchange (TDX) Collaborative Unit Performance Award" Bus Ticket category	新竹區監理所 Hsinchu Motor Vehicles Office	特優 Superior
26	110年交通部服務獎（社會關懷服務類） The 2021 MOTC Services Award (Social Care and Services category)	臺中區監理所 Taichung Motor Vehicles Office	獲獎 Winning Award
27	109年度院頒「道路交通秩序與交通安全改進方案」 年終視導 - 公路監理第3組 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - motor vehicle office team 3	臺中區監理所 （南投監理站） Taichung Motor Vehicles Office (Nantou Motor Vehicles Station)	第1名 First Place
28	109年度院頒「道路交通秩序與交通安全改進方案」 年終視導 - 交通安全宣導第2組 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - traffic safety advocacy team 2	臺中區監理所 （彰化監理站） Taichung Motor Vehicles Office (Changhua Motor Vehicles Station)	第1名 First Place

編號 Number	考評（核）或競賽名稱 Evaluation or the name of the Competition	得獎單位 Awarded Unit	成績 Result
29	109年度院頒「道路交通秩序與交通安全改進方案」 年終視導 - 交通安全宣導第3組 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - traffic safety advocacy team 3	臺中區監理所 (南投監理站) Taichung Motor Vehicles Office (Nantou Motor Vehicles Station)	第1名 First Place
30	109年度院頒「道路交通秩序與交通安全改進方案」 年終視導 - 公路監理第1組 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - motor vehicle office team 1	臺北市區監理所 Taipei City Motor Vehicles Office	第1名 First Place
31	109年度院頒「道路交通秩序與交通安全改進方案」 年終視導 - 交通安全宣導第1組 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - traffic safety advocacy team 1	臺北市區監理所 Taipei City Motor Vehicles Office	第1名 First Place
32	109年度院頒「道路交通秩序與交通安全改進方案」 年終視導 - 砂石車安全管理 2020 Executive Yuan Annual Inspection "Improvement Program for Traffic Order and Safety" - dump truck management	臺北市區監理所 (基隆監理站) Taipei City Motor Vehicles Office (Keelung Motor Vehicles Station)	第1名 First Place
33	109年度第3屆行政院政府服務獎 The 3 <sup>rd</sup> Executive Yuan Government Service Award	高雄市區監理所 Kaohsiung City Motor Vehicles Office	獲獎 Winning Award

## 研究發展

## Research and Development

編號 Number	研究計畫名稱 Name of Research Development	研究單位 Research Unit
1	碎石級配料底層改良採用水泥處理之方法研究-採用德州規範 Item275 Research on the method of cement treatment for the improvement of the bottom layer of crushed stone materials - using the Texas Standard Item 275	材料試驗所 / 第一區養護工程處 Materials Testing Laboratory / First Maintenance Office
2	養護條件對水泥混凝土抗滲能力影響之研究 Study on the effect of curing conditions on the impermeability of cement concrete	材料試驗所 Materials Testing Laboratory
3	多孔隙瀝青混凝土（PAC）材料特性及力學成效之研究 Research on material properties and mechanical effects of porous asphalt concrete (PAC)	材料試驗所 Materials Testing Laboratory
4	機車新領牌照流程智慧化之研究-以板橋監理站為例 Research on the Smart New Scooter Registration - Example of Banqiao Motor Vehicles Office	臺北區監理所板橋監理站 Taipei Motor Vehicles Office (Banqiao Motor Vehicles Station)
5	推動車輛檢驗自助登檢櫃檯導入收費之研究 - 以板橋監理站為例 Research on Promoting the Introduction of Charges at Self-check-in Counters for Vehicle Inspection - Example of Banqiao Motor Vehicles Station	臺北區監理所板橋監理站 Taipei Motor Vehicles Office (Banqiao Motor Vehicles Station)
6	研究蘇花改車牌辨識系統對交通的影響 Research on the Influence of the License Plate Recognition System on Suhua Improvement Project's Traffic	臺北區監理所宜蘭監理站 Taipei Motor Vehicles Office (Yilan Motor Vehicles Station)
7	公路監理規費雲端數位傳繳核帳管理研究 Research on the Management of Highway Processing Fee Cloud Transmission Payment and Verification Account	臺中區監理所 Taichung Motor Vehicles Office
8	三層科技使用模式探討監理人員運用e-learning行為意圖之研究 Foreign driver's license and verification information query platform	嘉義區監理所臺南監理站 Chiayi Motor Vehicles Office (Tainan Motor Vehicles Station)
9	智慧科技機車路考場（辨識擺頭察看） Smart technology scooter road test field (identify, turn your head to check) Madou Motor Vehicles Office	嘉義區監理所麻豆監理站 Chiayi Motor Vehicles Office (Madou Motor Vehicles Station)
10	利用深度學習（deep learning）優化監理服務 - 以註銷號牌收繳為例 Optimizing motor vehicles services with deep learning - example of canceled license plates	高雄市區監理所 Kaohsiung City Motor Vehicles Office

## 1 Jan

配合交通部108年12月31日發布修正身心障礙者報考汽車及機車駕駛執照處理要點規定，自110年1月1日起放寬部分體格體能、活動能力符合標準之肢體障礙者，以原廠未改裝無段變速或三輪大型重型機車報考駕照，並配合修正評分表。

1/1

In line with MOTC's revision on the regulations of driver's license for persons with disabilities on December 31, 2019, some disabled persons whose physical fitness and ability meet the standards will be able to take the test with original vehicles or motorcycles on January 1, 2021, based on the revised score table.

公路總局舉辦公車先導行動支付記者會，交通部林佳龍部長於會中宣布客運路線行動支付PILOT RUN正式啟用。

1/5

The DGH held a press conference on the mobile payment of PILOT RUN made available on highway buses, announced by Minister, Lin Chia-lung.

公路總局辦理現場孔蓋啟閉新工法觀摩會議，由交通部林佳龍部長蒞臨指導。

1/11

The DGH organized the on-site opening and closing new construction method observation meeting, attended by the MOTC Minister, Lin Chia-lung.

蘇花改（南澳～和平、和中～大清水）於109年1月6日開放小型車及大客車通車後，並於整備完成後提送「台9線蘇花公路山區路段改善計畫開放大貨車通行評估報告書（南澳～和平、和中～大清水）」報交通部核定，於110年1月19日開放大貨車通行。

1/19

The Suhua Highway (Nan'ao-Heping, Hezhong-Daingshui) was launched to traffic on January 6, 2020, for small cars and buses, and submitted the "Provincial Highway No.9 Suhua Highway Mountain Section Improvement Plan to Open to Large Vehicles Assessment Report (Nan'ao-Heping, Hezhong-Daingshui)" after the completion to the MOTC for approval. The section was opened to large vehicles on January 19, 2021.

公路總局補助臺南市政府辦理前瞻基礎建設計畫-「沙崙綠能科學城聯外道路新闢工程」二標工程，1月25日舉行通車典禮。參加觀禮人員有交通部林佳龍部長、公路總局許鈺漳局長、臺南市黃偉哲市長及中央各部會機關首長、各級民意代表參加。

1/25

The DGH subsidized the Tainan City Government for the second bid of the forward-looking infrastructure project - "Shalun Green Energy Science City Outward Connecting Road Project." The opening ceremony was held on January 25 with attendees including the MOTC Minister Lin Chia-lung, the DGH Director-General, Hsu Cheng-chan, Mayor, Huang Wei-che, of Tainan City, heads of central ministries, and agencies and legislators.

公路總局規劃於110年春節連假起，於3日以上連續假期時段性開放大客車行駛蘇花改路肩，交通部陳彥伯政務次長特別至蘇花改路段檢視開放大客車行駛路肩的整備情形。

1/25

The DGH planned to open the road shoulder for buses on the Suhua Highway during holidays of more than 3 days, starting from the Spring Festival in 2021. MOTC Deputy Minister, Chen Yen-po, inspected the road shoulder of Suhua Highway in preparation.

行政院張景森政務委員視察淡江大橋工程及臺北港。

1/28

Minister of State, Chang Ching-sen, of the Executive Yuan inspected the Danjiang Bridge project and the Port of Taipei.

交通部陳彥伯政務次長視察公路總局台61線口湖休息站整備情形，該休息站訂於110年2月3日試營運並舉辦祈福儀式，2月7日舉行啟用典禮。

1/29

The MOTC Deputy Minister, Chen Yen-po, inspected the construction of the Kouhu Rest Area on Provincial Highway No.61, scheduled for trial operation and prayer ceremony on February 3, 2021, and launch ceremony on February 7.

公路總局補助苗栗縣政府「苗30線（聯大路）整體改善工程」，於1月30日上午舉行動土典禮，強化聯合大學機車通學（勤）師生的行車安全。

1/30

The DGH subsidized the Miaoli County Government's "Miaoli Line 30 (Lianda Road) Overall Improvement Project" with a groundbreaking ceremony on the morning of January 30 to enhance the driving safety of the faculty and students at the National United University.

修正大型車及聯結車駕駛人路考評分標準及成績紀錄表，業經交通部核定於110年2月1日實施。

2/1

The revised road test scoring standard and score record table for drivers of large vehicles and semi-trailer trucks have been approved by the MOTC and implemented on February 1, 2021.

公路總局規劃110年春節連假起，於3日以上連續假期時段性開放大客車行駛蘇花改路肩，交通部林佳龍部長於開放前至蘇花改（蘇澳-東澳）視察開放路段的整備情形。

2/1

The DGH planned to open the road shoulder for buses on the Suhua Highway during holidays of more than 3 days, starting from the Spring Festival in 2021. MOTC Minister Lin Chia-lung inspected the road shoulder of Suhua Highway (Su'ao- Dongao) in preparation.

交通部林佳龍部長參加「國道三號烏日交流道聯絡道延伸至芬園段新闢工程延伸段」通車典禮。

2/6

The MOTC Minister, Lin Chia-lung, attended the opening ceremony of the "Extended Section of the New Construction Project of the Extension of National Freeway 3 Wuri Interchange Connecting Road to Fenyuan Section."

公路首座省道休息站-台61線西濱快速公路口湖休息站，於110年2月7日正式啟用，交通部林佳龍部長親臨剪綵，期望能大幅提升西濱快速公路便利性。

2/7

The first provincial highway rest area, Kouhu Rest Area of the West Coast Expressway of Provincial Highway No.61, was officially opened on February 7, 2021. The MOTC Minister, Lin Chia-lung, came to cut the ribbon in person, hoping the rest area will greatly improve the convenience of the West Coast Expressway.

交通部林佳龍部長與總統府湯文萬國策顧問、行政院中部辦公室蔡培慧執行長、魚池鄉公所劉啟帆鄉長等視察日月潭中興停車場聯外道路工程辦理成果。

2/8

The MOTC Minister, Lin Chia-lung, National Policy Advisor Tang Wen-wan, of the Presidential Office, Tsai Pei-hui, Executive Director of the Central Office of the Executive Yuan, and Liu Qi-fan, Mayor of Yuchi Township Office, inspected the results of the Sun Moon Lake Zhongxing Parking Lot Connecting Road Project.

110年武陵農場櫻花季疏運於2月12日展開，並持續至3月1日，櫻花季疏運期間實施「場內總量管制、道路交通管制、團客預約入場、公共運輸接駁」等四大疏運措施。

2/12

The Wuling Farm Cherry Blossom Season started on February 12, 2021, continuing until March 1. 4 measures were taken during the period, including total volume control, road traffic control, group reservations, and public transport."

交通部林佳龍部長視察台7丁線14k+415新城橋改建工程通車情形。

2/17

The MOTC Minister, Lin Chia-lung, inspected the opening of the 14k+415 Xincheng Bridge Reconstruction Project on Provincial Highway No.7D.

交通部訂於110年2月18日假臺北諾富特華航桃園機場飯店舉辦「2021電動大客車發展成果與展望論壇」，聚集產官學研各界要角超過200人經驗分享、提出建言，促電動巴士產業鏈積極發展。

- 2/18 The MOTC held the "2021 Electric Bus Development Achievement and Prospect Forum" on February 18, 2021, at the Novotel Taipei China Airlines Taoyuan Airport Hotel. More than 200 people from the industry, government, academia, and research gathered to share their experiences, put forward suggestions, and promote the development of the electric bus industry chain.

監理服務網線上申辦「車牌報廢、繳銷」自110年2月19日起擴大實施，除原開放申辦之150C.C.以下機車外，增加151C.C.以上機車及自用小型車申辦，民眾於監理服務網申請後將號牌寄回監理單位即完成車牌報廢、繳銷。

- 2/19 On the Motor Vehicle Driver Information Service (MVDIS) website, the online application of "license plate scrapping and cancellation" was expanded on February 19, 2021. In addition to the original 150 c.c. scooters, the application of 151c.c. and above cars were added to the list. After applying online, people only have to send the license plate back to the Motor Vehicles Office to complete the scrapping and cancellation of the license plate.

交通部林佳龍部長視察淡江大橋主橋塔首支基樁施作。主橋塔基樁打設代表主橋塔永久結構邁入施工階段，為本工程施工之重要里程碑。

- 2/24 The MOTC Minister, Lin Chia-lung, inspected the construction of the first foundation pile of the Danjiang Bridge. The erection of the tower foundation piles of the main bridge represented that the permanent structure has entered the construction stage, an important milestone in the project.

交通部陳彥伯政務次長於3月1日（228連假收假日）前往公路總局第四區養護工成處南澳交控中心視察本次假期蘇花路廊疏運情形。

- 3/1 The Deputy Minister, Chen Yen-po, inspected the Nan'ao Traffic Control Center of the Fourth Maintenance Office to inspect the evacuation of the Suhua Highway Corridor during the 228-holiday on March 1, 2021.

交通部陳彥伯政務次長出席宜蘭縣政府辦理之「宜蘭縣羅東轉運站暨附屬設施及停車空間新建工程」開工動土典禮。

3/4

The Deputy Minister, Chen Yen-po, attended the groundbreaking ceremony for the "Yilan County Luodong Transfer Station, Ancillary Facilities and Parking Space New Construction Project" organized by the Yilan County Government.

交通部陳彥伯政務次長召開「228連假公路疏運情形檢討及清明節連假公路疏運規劃會議」，瞭解高速公路局及公路總局110年228連假疏運情形及清明節連續假期公路疏導規劃。

3/5

The Deputy Minister, Chen Yen-po, held the "228-holiday highway transportation review and Qingming Festival holiday highway transportation planning meeting" to look into the situation for 2021.

「淡江大橋及其連絡道路規劃第3次環境影響差異分析報告」（台61甲線增設南向匝道及土方數量變更）召開專案小組審查會延續會議。

3/10

The 3<sup>rd</sup> "Environmental Impact Difference Analysis Report of the Danjiang Bridge and Connecting Road Planning" (addition of southbound ramps and changes in the number of earthworks on Provincial Highway No.61A) held a follow-up review meeting of the task force.

110年阿里山花季時程自110年3月10日至4月10日（包含清明連續假期），花季期間於例假日及連續假期上午6-11時進行交通疏導措施，包含遊客總量管制、小型車管制時段轉乘措施、散客轉乘公共運輸上山、停車規劃及分散售票地點等。

3/10

The 2021 Alishan Flower Season was scheduled from March 10 to April 10, 2021 (including the Qingming holiday). During this period, traffic diversion measures were carried out from 06:00-11:00 on regular holidays and consecutive holidays, including control over the number of tourists, transfer measures for cars, individual passengers transfer to public transport, parking projects and multiple ticketing locations, etc.

公路總局辦理「中部地區友善道路改善計畫」109年度成果發表會，該計畫由公路總局與農委會特有生物研究保育中心合作。

3/26

The DGH held the 2020 annual results presentation meeting of the "Friendly Road Improvement Project in the Central Region," co-operated by the DGH and the Endemic Species Research Institute of the Council of Agriculture.

4  
Apr

4/1

交通部林佳龍部長於110年4月1日下午2時視察臺北轉運站，並檢視本局臺北市區監理所執行路檢聯稽作業。

The MOTC Minister, Lin Chia-lung, visited the Taipei Transfer Station at 14:00 on April 1, 2021, and inspected the road inspection and joint inspection work carried out by the Taipei City Motor Vehicles Office.

5  
May

5/3

自110年5月3日起，民眾持汽車駕照申請報考機車駕照，仍應考筆試，以維行車安全。

From May 3, 2021, people with driver's licenses are all required to take a written test for a scooter license to maintain safety.

5/22

交通部王國材部長視察市府轉運站「簡訊實聯制」導入狀況，確認相關大眾運輸均已導入實聯制。

The MOTC Minister, Wang Kwo-tsai, inspected the introduction of the "SMS contact-tracing system" at the Taipei City Hall Transfer Station to confirm that relevant measures have been put in place.

5/26

交通部陳彥伯政務次長視察板橋轉運站「簡訊實聯制」執行狀況，確認相關大眾運輸均已導入實聯制。

The Deputy Minister, Chen Yen-po, inspected the introduction of the "SMS contact-tracing system" at the Taipei City Hall Transfer Station to confirm that relevant measures have been put in place.

6  
Jun

6/12

交通部陳彥伯政務次長於110年6月12日上午9時前往臺北轉運站，視察端午連假中長途國道客運限載2成措施，及客運與轉運站業者防疫作為辦理情形。

The Deputy Minister, Chen Yen-po, went to the Taipei Transfer Station at 09:00 on June 12, 2020, to inspect the 20% restriction on passenger traffic on long-distance national highway buses during the Dragon Boat Festival holiday, as well as the epidemic prevention measures taken by the passenger and transfer station operators.

交通部王國材部長率陳彥伯政務次長、路政司陳文瑞司長及公路總局許鈺漳局長，至公路總局運管大樓視察疫苗施打外展點場地及動線規劃整備情形。

- 7/1 The MOTC Minister, Wang Kwo-tsai, Deputy Minister Chen Yen-po, Director-General of the Department of Railways and Highways, Chen Wen-ruey, and the DGH Director-General, Hsu Cheng-chang, visited the vaccination location and route planning outside the transportation management building of the DGH.

交通部王國材部長視察臺北市計程車建國休息站及臺北市濱江計程車服務站疫苗施打情形。交通部陳彥伯政務次長至大龍港駕訓班、濱江計程車休息站及建國計程車休息站視察疫苗施打情形。

- 7/2 The MOTC Minister, Wang Kwo-tsai, inspected the vaccination situation at the Jianguo Rest Area of the Taipei City Taxi and the Binjiang Taxi Service Station in Taipei City. The Deputy Minister, Chen Yen-po, went to Dalonggang Driving Training Institute, Binjiang Taxi Rest Area and Jianguo Taxi Rest Area, to inspect the situation of vaccine administration.

交通部王國材部長陪同行政院蘇貞昌院長、中央流行疫情指揮中心陳時中指揮官視察內湖高工疫苗施打情形。

- 7/6 The MOTC Minister, Wang Kwo-tsai, accompanied Premier, Su Tseng-chang, and Commander Chen Shih-chung, of the Central Epidemic Command Center to inspect the vaccination situation at Taipei Municipal Neihu Vocational High School.

交通部王國材部長視察臺北市計程車建國休息站疫苗施打情形。交通部陳彥伯政務次長至臺北市立聯合醫院中興院區視察公路客運施打疫苗情形。

- 7/9 The MOTC Minister, Wang Kwo-tsai, inspected the vaccination situation at the Jianguo Rest Area in Taipei City. The Deputy Minister, Chen Yen-po, went to the Taipei City Hospital Zhongxing Branch to inspect the situation of vaccine administration in highway passenger transport.

公路總局自7月16日起推出全新改版監理服務APP，除精進既有服務功能外，亦導入UI/UX重新設計介面等，讓使用體驗更升級。

- 7/16 The DGH upgraded the Motor Vehicle Driver Information Service (MVDIS) app on July 16 with improved existing features and introduced UI/UX to upgrade the user experience.

8  
Aug

交通部王國材部長前往淡江大橋工地視察淡江大橋進度及防颱整備事宜，要求施工團隊依據緊急應變計畫做好防颱應變。

7/22

The MOTC Minister, Wang Kwo-tsai, visited the construction site of the Danjiang Bridge to inspect the progress and the preparations for typhoon prevention and asked the construction team to follow the emergency response plan.

行政院蘇貞昌院長率交通部王國材部長、陳彥伯政務次長視察「台20線明霸克露橋便道搶修情形」，期勉團隊在確保安全下，儘速搶通便道，滿足用路人通行需求。

8/22

The Premier, Su Tseng-chang, the MOTC Minister, Wang Kwo-tsai, and Deputy Minister, Chen Yen-po, inspected the progress of the emergency repair of the access road of the Mingba Kelu Bridge on Provincial Highway No.20, encouraging the team to clear the access road as soon as possible while ensuring safety.

9  
Sep

交通部陳彥伯政務次長出席《牧路》新書發表會，與公路總局許鈺漳局長、天下雜誌吳迎春董事長及監理運輸領域的先進，共同見證臺灣監理運輸歷史與發展過程點滴。

9/1

The Deputy Minister, Chen Yen-po, attended the launch of the new book "Shepherd of the Road" with the DGH Director-General, Hsu Cheng-chang, and President, Wu Ying-chun, of the Commonwealth Magazine to witness the history and development of Taiwan's transportation.

交通部王國材部長與陳歐珀立法委員、宜蘭縣林姿妙縣長、交通部航政司何淑萍司長、公路總局林聰利副局長、航港局葉協隆局長、港務公司王錦榮副總經理等人，前往宜蘭蘇澳視察「南方澳跨港大橋重建工程」。

9/4

The MOTC Minister, Wang Kwo-tsai, Legislator, Chen Ou-po, Mayor, Lin Zi-miao, of Yilan County, Director, He Shu-ping, of the Department of Aviation Administration, Deputy Director, Lin Cong-li, of the DGH, Director Ye Xie-long, of the Maritime & Port Bureau, and the Deputy General Manager, Wang Jin-rong, of the Taiwan International Ports Corporation went to Yilan Su'ao to inspect the "Reconstruction of Nanfang'ao Bridge Project."

蔡英文總統南下挺進南橫災區最前線，由公路總局許鈺漳局長、高雄市陳其邁市長、邱議瑩立法委員、伍麗華立法委員、許智傑立法委員以及原民會主委夷將-拔路兒等人陪同前往台20線明霸克露橋便道視察，並慰勞搶災團隊的辛勞。

9/4

The President, Tsai Ing-wen, went to the disaster-struck Nanheng area, accompanied by the DGH Director-General, Hsu Cheng-chang, Kaohsiung Mayor, Chen Chi-mai, Legislator, Qiu Yi-ying, Legislator, Wu Li-hua, Legislator, Xu Zhi-jie, and Chairman of the Indigenous Peoples Association, Yi Jiang-ba-luer and others to inspect the progress of the Mingba Kelu Bridge Provincial Highway No.20 and congratulate the team for their hard work.

9  
Sep

9/9

蔡英文總統至南方澳視察「南方澳跨港大橋重建工程」，由交通部王國材部長、宜蘭縣林姿妙縣長、陳歐珀委員及公路總局許鈺漳局長等人陪同。

The President, Tsai Ing-wen, went to Nanfangao to inspect the "Nanfangao Bridge Reconstruction Project," accompanied by the MOTC Minister, Wang Kwo-tsai, Yilan County Mayor, Lin Zi-miao, Legislator, Chen Ou-po, and the DGH Director-General, Hsu Cheng-chang.

9/30

台9線蘇花改訂於110年9月30日12時起開始試辦大型重型機車通行作業，試辦期間計6個月，將於試辦結束後透過各種評估指標評估未來是否適宜繼續通行大型重型機車。

The Suhua Provincial Highway No.9 was scheduled to start the trial operation of heavy motorcycles at 12:00 on September 30, 2021. The trial would last for 6 months before evaluating whether it could be continued.

10  
Oct

10/6

公路總局於交通部舉辦汽車運輸業落實路口慢看停暫師大會，本次活動由王國材部長及公路總局許鈺漳局長見證，號召所有運輸業者及駕駛員共同響應。

The DGH held a pep rally for slowing down, looking, and stopping at the intersections for transport operators at the MOTC. The pep rally was witnessed by Minister, Wang Kwo-tsai, and the DGH Director-General, Hsu Cheng-chang, with all operators and drivers invited to join.

10/15

公路總局配合交通部110年10月為交通安全月，辦理民間標竿企業供應鏈運輸安全管理座談會，由交通部陳彥伯政務次長擔任座談會主持人邀請產官學界三方專家學者，共同分享供應鏈運輸發展經驗與未來展望。

The DGH held a symposium on supply chain transportation safety management of private benchmarking enterprises in line with the MOTC's Traffic Safety Month in October 2021. Deputy Minister, Chen Yen-po, served as the host of the symposium and invited experts and scholars from the industry, government, and academia to share supply chain transportation's experience and prospects.

10/18

行政院吳澤成政務委員在宜蘭縣林姿妙縣長、交通部公路總局許局長鈺漳、交通部航港局劉志鴻副局長及臺灣港務公司王錦榮副總經理等機關團體代表陪同下，至南方澳跨港大橋重建工程工地現場視察。

The Minister of State, Wu Tze-cheng, inspected the site of the Nanfangao Bridge Reconstruction Project accompanied by representatives of agencies and organizations, including Yilan County Mayor, Lin Zi-miao, the DGH Director-General, Hsu Cheng-chang, the Deputy Director Liu Zhi-hong, of the Maritime & Port Bureau, and Wang Jin-rong, the Deputy General Manager of the Taiwan International Ports Corporation.

淡江大橋及其連絡道路八里端主線通車，由行政院蘇貞昌院長、交通部王國材部長、公路總局許鈺漳局長、新北市侯友宜市長及中央與地方民代等共同參與。

10/25

The main line of the Danjiang Bridge and its connecting road to Bali was opened to traffic, with the attendance of Premier, Su Tseng-chang, MOTC Minister, Wang Kwo-tsai, the DGH Director-General, Hsu Cheng-chang, Mayor of New Taipei City, Hou You-Yi, and local representatives.

交通部陳彥伯政務次長視察「南方澳跨港大橋重建工程」，檢視督導實際施工面之執行情形，並關心工程與地方訴求。

10/27

The Deputy Minister, Chen Yen-po, inspected the "Nanfangao Bridge Reconstruction Project" and supervised the implementation of the actual construction aspect while looking into the needs of the project and locals.

公路總局蘇花公路改善工程處「幸福工程蘇花改，永續環境宜花東」榮獲銓敘部110年度公務人員傑出貢獻獎團體獎。

10/28

The Suhua Improvement Engineering Office's "Happy Suhua Improvement Project: Sustainable Environment in Hualien and Taitung" won the 2021 Civil Servant Outstanding Contribution Group Award.

「台29線雙連堀路段瀾富羅-板布努瀾橋」通車典禮，由公路總局許鈺漳局長主持，參加觀禮人員包含高雄市陳其邁市長、各方民意代表、那瑪夏區區長及民眾等。

10/29

The opening ceremony of the "Mifuluo-Panbu Nulan Bridge on Shuanglianbori Road Section of Provincial Highway No.29" was presided over by the DGH Director-General, Hsu Cheng-chang. The attendees included Kaohsiung City Mayor, Chen Chi-mai, representatives from various parties, the mayor of Namasha District, and local people.

公路總局榮獲交通部「109年度施工品質績效考核作業」工程專責機關第一名及「110年度公共工程金質獎初評」之優良工程獎，由交通部張垂龍技監親自至公路總局頒獎。

11/24

The DGH won first place in the "2020 Annual Construction Quality Performance Assessment Operation" project-special agency of the MOTC and the excellent project award in the "2020 Annual Public Works Gold Award."

公路總局發布「公路總局與民間機構團體合作辦理初考領機車駕駛執照安全講習作業要點」。

12/1

The DGH issued the "Key Points of the Safety Workshop for the DGH and Non-governmental Organizations to Cooperate with the Preliminary Examination for Obtaining a Scooter Driver's License."

公路總局延請專業團隊製作「中華民國駕駛人手冊」，已於110年12月1日局網上架完成。

12/1

The DGH invited a professional team to produce the "Driver's Manual for Drivers in Taiwan," which was uploaded on the website on December 1, 2021.

交通部陳彥伯政務次長出席「台64線銜接台61線南向匝道改善工程」開工祈福儀式，本工程預計113年完工通車。

12/7

The Deputy Minister, Chen Yen-po, attended the commencement ceremony of the "Southbound Ramp Improvement Project of Provincial Highway No.64 Connecting with Provincial Highway No.61". The project is expected to be completed and opened to traffic in 2024.

交通部陳彥伯政務次長視察淡江大橋第3標工地，並參加公路總局西濱北工程處第三工務段109年度公路新工工程及管理績效考評揭牌。

12/7

The Deputy Minister, Chen Yen-po, inspected the construction site of the third bid for the Danjiang Bridge and participated in the 2020 annual new highway construction and management performance evaluation and unveiling of the Third Maintenance Office of the West Coast North Engineering Department of the DGH.

公路總局辦理「台61線後龍觀海大橋及西湖溪橋改建工程」祈福儀式，由許鈺漳局長、苗栗縣徐耀昌縣長及各級民意代表等共同參與，本工程預計114年完工。

12/29

The DGH held a blessing ceremony for the "Reconstruction Project of Houlongguanhai Bridge and Xihuxi Bridge on Provincial Highway No.61," which was attended by the DGH Director-General, Hsu Cheng-chang, Miaoli County Major, Hsu Yao-chang, and representatives. The project is expected to be completed in 2025.

# 預算執行成果及展望 Budget Execution and Vision

## 一、公務預算 Official Budget

110年度歲入預算82億6,602萬餘元，執行96億8,015萬餘元，執行率117.11%，超收14億1,413萬餘元（圖1）；歲出預算378億2,782萬餘元，執行370億4,416萬餘元，執行率97.93%，撙節335萬餘元（圖2）。

In 2021, the annual revenue budget was over NT\$8.26 billion, with over NT\$9.68 billion implemented at the execution rate of 117.11%, and the over-collection was more than NT\$1.41 billion (Figure 1). The annual expenditures were more than NT\$37.83 billion, with NT\$37.04 billion implemented at the execution rate of 97.93%, saving more than NT\$3.35 million (Figure 2).

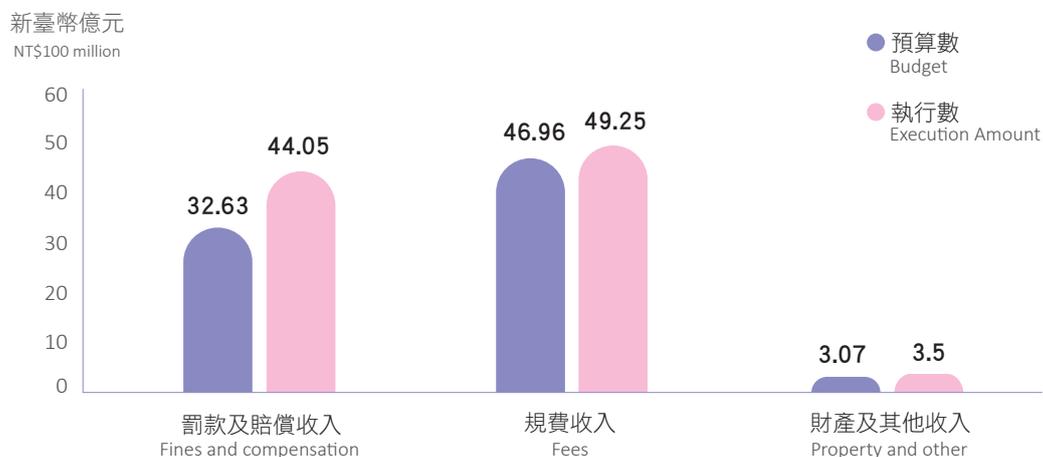


圖1 110年度公務預算歲入執行情形  
Figure 1 Execution of the 2021 Annual Official Budget Revenue

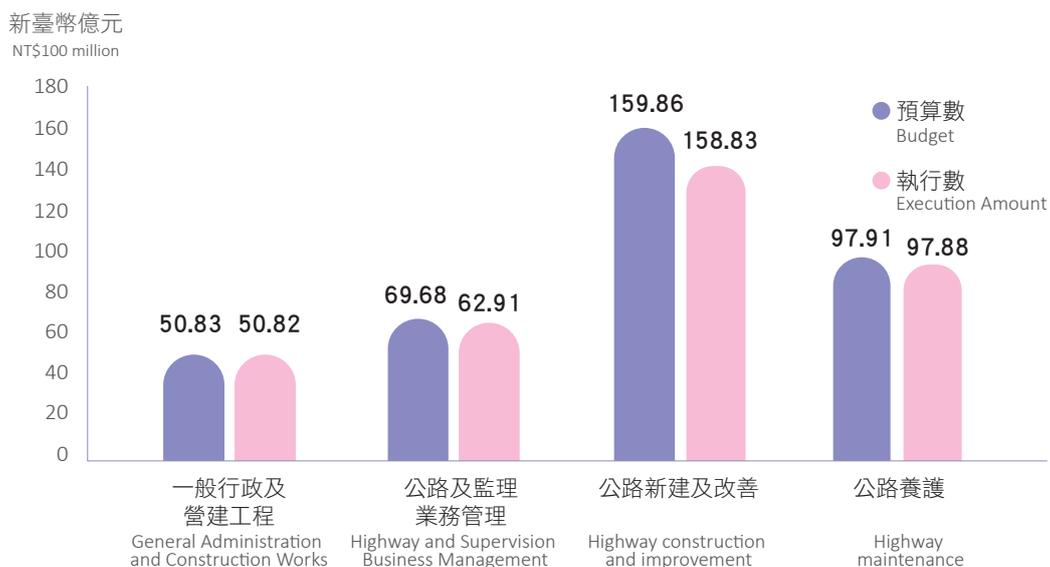


圖2 110年度公務預算歲出執行情形  
Figure 2 Execution of the 2021 Annual Official Budget Annual Expenditure

111年度歲入法定預算85億5,122萬元，較上年度增加2億8,519萬餘元（圖3）；歲出法定預算385億5,294萬餘元，較上年度增加21億7,712萬餘元（圖4），本局將依施政計畫與目標，逐步達成打造幸福公路及追求永續共榮的願景。

The annual revenue statutory budget for 2011 was over NT\$8.55 billion, an increase of more than NT\$285.19 million over the previous year (Figure 3). The annual statutory budget was over NT\$38.55 billion, an increase of more than NT\$2.17 billion over the previous year (Figure 4). The DGH will gradually achieve the vision of building a road to happiness and pursuing sustainable and common prosperity in accordance with the policy plan and goals.

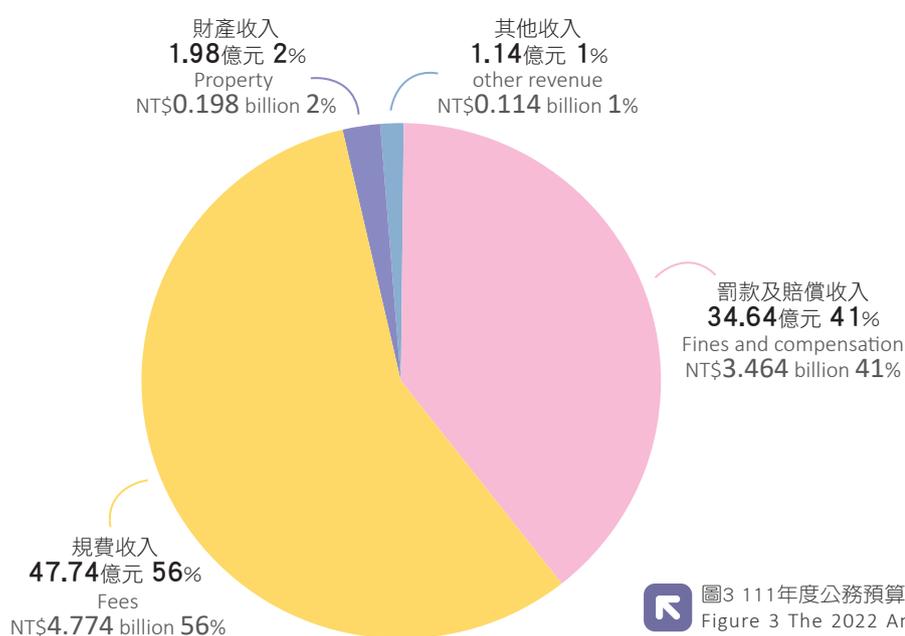


圖3 111年度公務預算歲入預算結構  
Figure 3 The 2022 Annual Official Budget Revenue Budget Structure

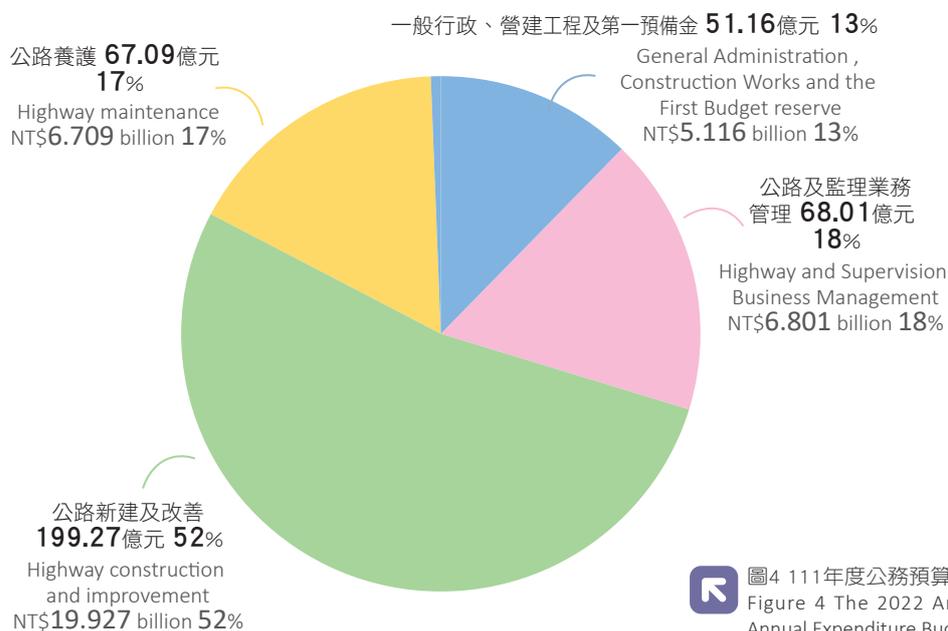


圖4 111年度公務預算歲出預算結構  
Figure 4 The 2022 Annual Official Budget Annual Expenditure Budget Structure

## 二、特別預算 Special Budget

### (一) 第三期前瞻基礎建設計畫 Third Phase of Forward-Looking Infrastructure Plan

110年度歲入執行5,317萬餘元（圖5）；歲出預算64億5,220萬元，執行63億7,718萬餘元，執行率98.84%，未執行數併入本期第二年度賡續辦理（圖6）。

In 2021, the annual revenue was more than NT\$53.17 million (Figure 5), the annual budget was NT\$6.45 billion, and more than NT\$6.37 billion was implemented at the implementation rate of 98.84% (Figure 6).

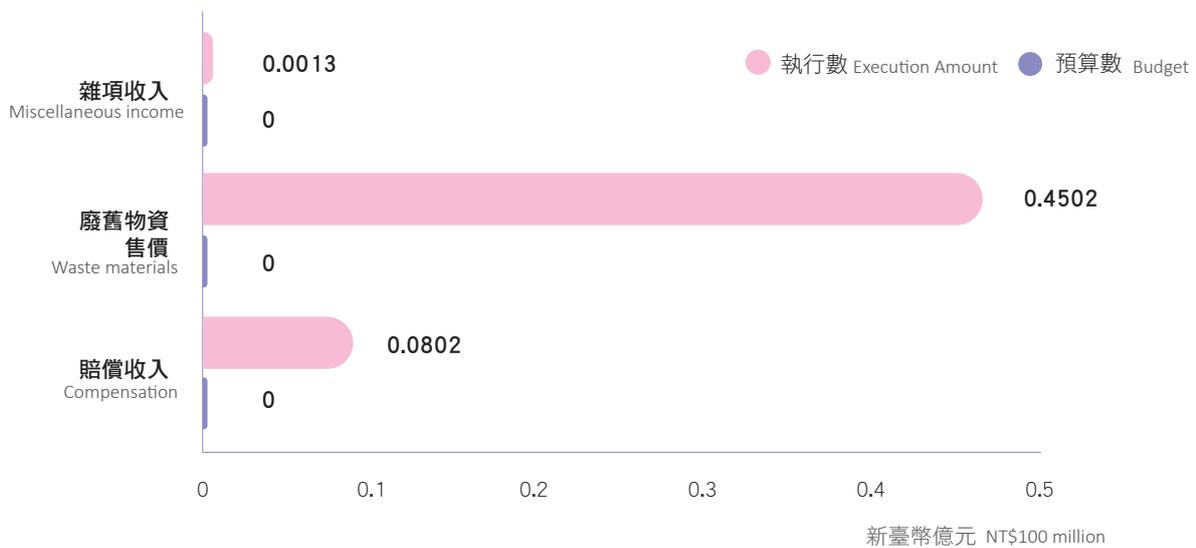


圖5 110年度前瞻三期歲入執行情形  
Figure 5 Execution of Annual Forward-looking Phase III Revenue in 2021

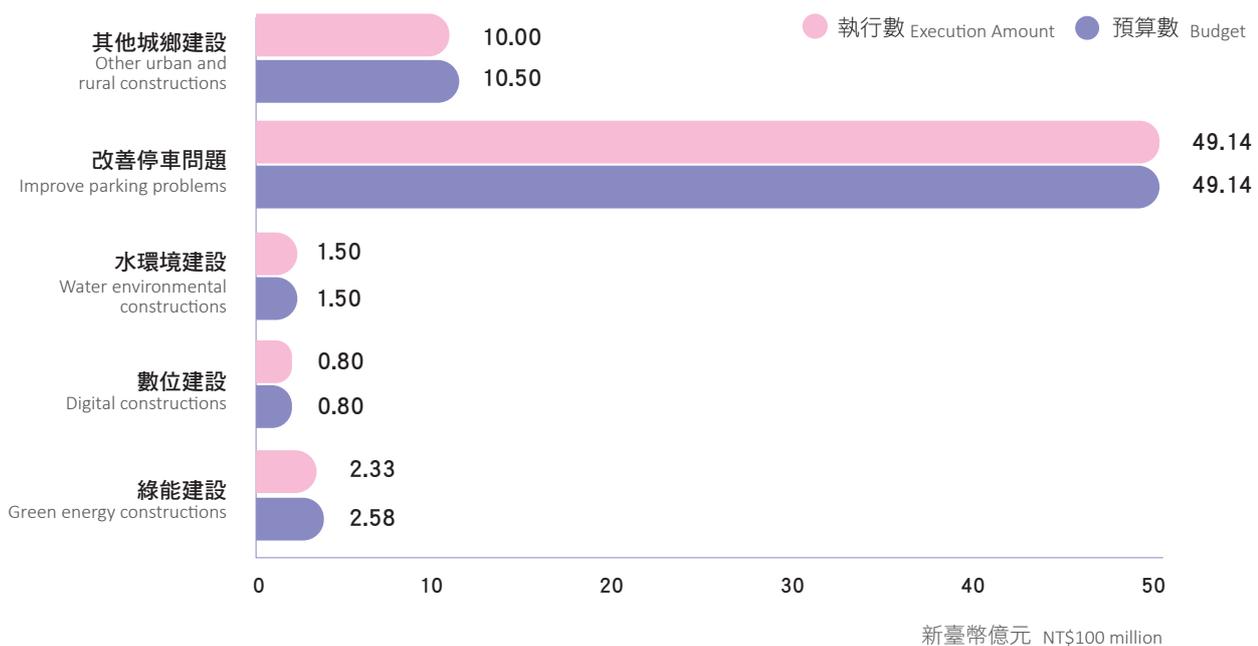


圖6 110年度前瞻三期歲出執行情形  
Figure 6 Execution of Annual Forward-looking phase III Expenditure in 2021

111年度歲出預算79億1,300萬元（圖7），本局將持續改善停車問題、提升道路品質、推動綠能產業等建設，達成加強地方整體發展及區域均衡，奠定公路未來發展基礎的願景。

The annual budget for 2022 is NT\$7.913 billion (Figure 7). The DGH will continue to improve parking problems, improve road quality, and promote the construction of green energy industries so as to achieve the vision of strengthening the overall local development and regional balance, and laying the foundation for the future development of highways.

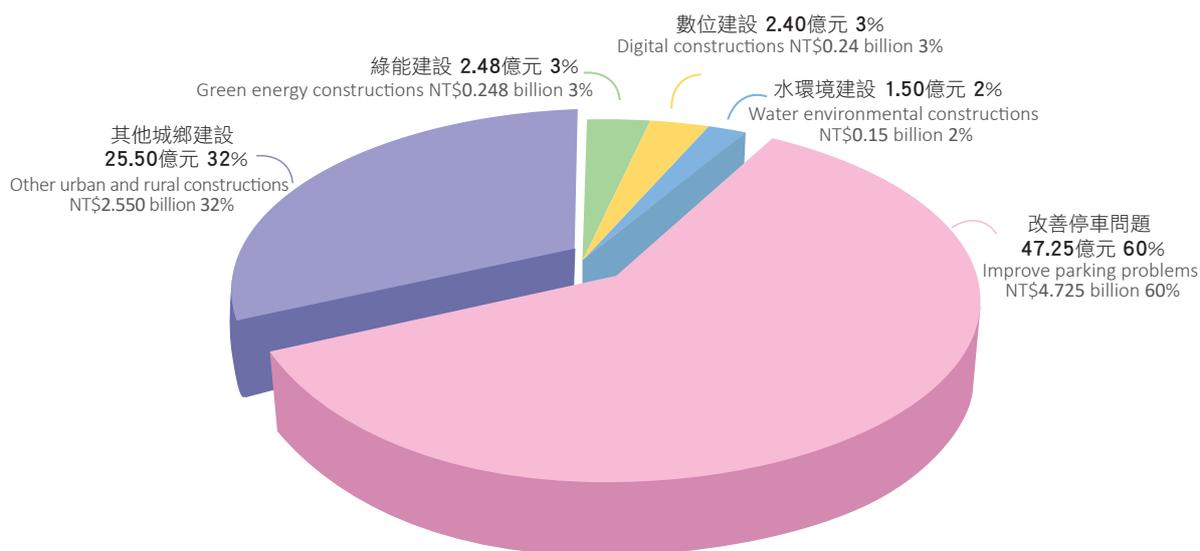


圖7 111年度前瞻三期歲出預算結構  
Figure 7 Budget structure of Annual Forward-looking phase III Expenditure in 2021



(二) 嚴重特殊傳染性肺炎防治及紓困振興 Prevention, Relief and Revitalization Measures for Severe Pneumonia with Novel Pathogens

110年度歲出預算45億3,333萬餘元，執行數44億5,541萬餘元，執行率98.28%（圖8）。

The annual expenditure budget in 2021 was more than NT\$4.53 billion, with an execution amount of more than NT\$4.45 billion at an execution rate of 98.28% (Figure 8).

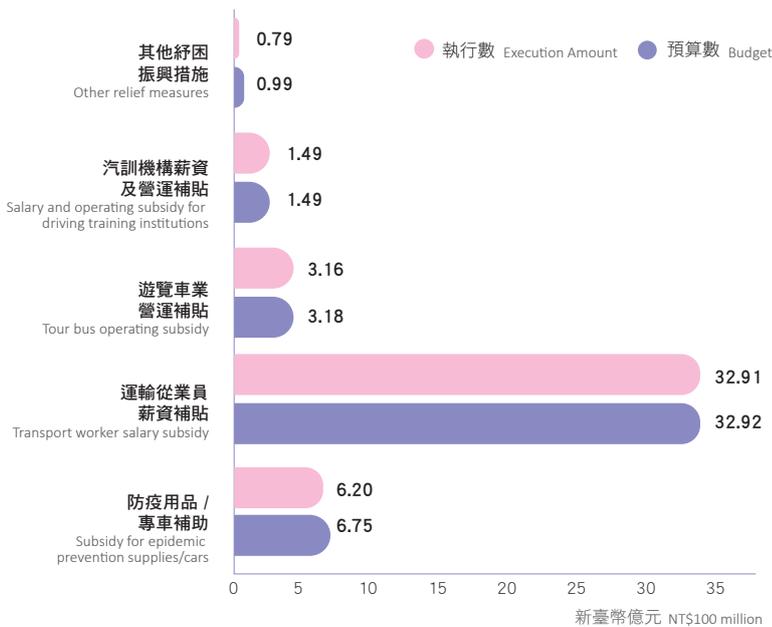


圖8 110年度肺炎防治及紓困歲出執行情形  
Figure 8 The implementation of annual expenditures for COVID-19 prevention and relief in 2021

111年度歲出預算12億9,502萬餘元（圖9），本局持續防治疫情，補助公路運輸業所需資源，並照顧公路運輸從業人員，追加薪資補貼，減緩疫情衝擊，共度難關。

The annual expenditure budget for 2022 is more than NT\$1,295.02 million (Figure 9). The DGH continued to prevent and control the epidemic, subsidized the resources required by the highway transportation industry, and took care of road transportation employees by increasing salary subsidies to mitigate the impact of the epidemic and tide over the difficulties together.

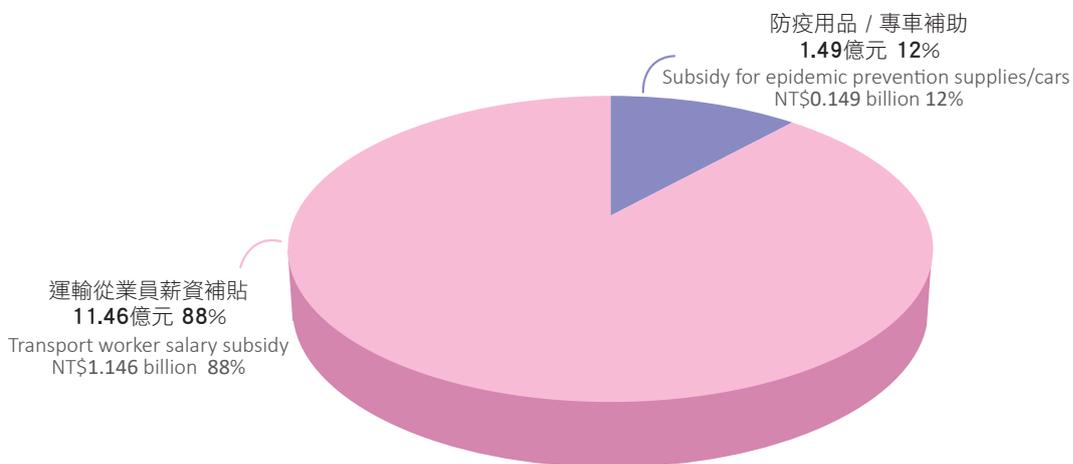


圖9 111年度肺炎防治及紓困歲出預算結構  
Figure 9 The Budget structure of annual expenditures for COVID-19 prevention and relief in 2022

# 交通部公路總局110年年報

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