

雙軸 Dual-Track Transformation 轉型

【智慧景區 價值升級】 Smart Scenic Sites, Value Enhancement

以「永續韌性 × 數位創新」為核心，觀光署推動產業與風景區的雙軸轉型，透過 2025 觀光產業數位博覽會，展示 AI 無人服務、機器人應用、即時翻譯與數位孿生等新興技術，為中小業者減輕人力壓力，同時提升服務品質與旅遊體驗；並以觀光盃 Open Data 黑客松匯聚創意能量，鼓勵運用開放資料發展生成式 AI 導覽與無障礙旅遊等應用方案，結合數據治理深化旅運洞察，在科技與旅遊交織之間，持續拓展臺灣觀光的國際視野與未來想像。

Centered on "Sustainable Resilience & Digital Innovation," the Tourism Administration advanced the dual-track transformation of the tourism industry and scenic areas. Through the 2025 Digital Transformation Expo for the Tourism Industry, it showcased emerging technologies including AI-powered automated services, robotics applications, real-time translation, and digital twins, helping small and medium-sized operators (SMEs) ease labor shortages while improving service quality and the visitor experience. Additionally, The Tourism Cup Open Data Hackathon also brought together creative energy, encouraging the use of open data to develop applications such as generative AI tour guides and accessible travel solutions. By integrating data governance to deepen insights into travel patterns, Taiwan continued to expand the international perspective and future possibilities of its tourism sector at the intersection of technology and travel.



觀光產業數位轉型 Digital Transformation of the Tourism Industry

面對全球 AI 浪潮與疫後旅遊趨勢，交通部觀光署以「永續韌性 × 數位創新」為核心，全面推動觀光產業與國家風景區之雙軸轉型。在產業端，透過辦理「觀光產業數位博覽會」及「觀光盃黑客松」，引導中小型業者導入 AI 翻譯、自動化服務及永續管理工具，解決人力成本痛點並強化數據加值應用。另同步推動數據治理，導入電信信令監測人流、建置 PWA 行動旅服、AI 多語導覽及數位孿生技術，優化遊客沉浸式體驗與管理效能。藉由科技賦能與虛實整合，具體提升我國觀光服務品質與國際競爭力。

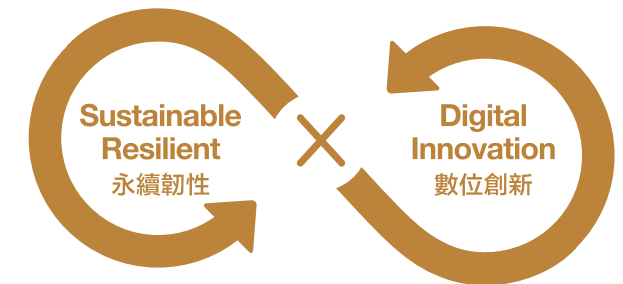
In response to the global AI wave and post-pandemic travel trends, the Taiwan Tourism Administration comprehensively promoted the dual-track transformation of the tourism industry and national scenic areas, with "Sustainable Resilience & Digital Innovation" at its core. On the industry side, the administration organized the Digital Transformation Expo for the Tourism Industry and the Tourism Cup Open Data Hackathon to guide small and medium-sized operators (SMEs) in adopting AI translation, automated services, and sustainable management tools, addressing labor cost challenges while strengthening value-added data applications. Concurrently, it advanced data governance by introducing telecommunications signaling for visitor flow monitoring, building Progressive Web App (PWA) mobile travel services, and adopting AI multilingual guide systems and digital twin technology, thereby enhancing immersive visitor experiences and management efficiency. Through technology empowerment and the online-to-offline (O2O) integration, Taiwan has tangibly improved the quality and international competitiveness of its tourism services.

「2025 觀光產業數位博覽會」

2025 Digital Transformation Expo for the Tourism Industry

為協助中小型觀光業者了解並導入創新數位工具，本署於 114 年擴大辦理南、北兩場「2025 觀光產業數位博覽會」。其中，南部場於 6 月 27 日至 29 日首度結合台灣仲夏節活動於高雄駁二蓬萊 B4 倉庫辦理，特別規劃「旅行探索站」、「觀光遊樂站」、「智慧景區」與「旅宿服務站」四大主題區域，以沉浸式情境展示 AI 無人拉麵機、智慧調酒機、AI 虛擬人導覽、AI 即時雙向翻譯機及 360 環景電子安全圍籬等近 20 種科技產品，推動南部地區觀光產業數位轉型意識；北部場則於 12 月 2 日至 3 日於台北松菸舉辦。「主題論壇」邀集產、官、學界共同探討觀光產業數位化之政策推動，強化觀光發展共識；「智慧科技體驗展區」匯集超過 40 家科技業者，展示包括智能珍珠奶茶機與小籠包機、智慧主廚機器人手臂、跨樓層服務機器人及 AI 智慧多語導覽系統等科技應用；另透過「媒合沙龍」依據觀光產業的多元需求，提供業者探訪觀光科技產品、轉型諮詢及了解前瞻趨勢。協助業者降低人力成本並提升服務品質，持續擴大展會品牌影響力並深化產學交流，參與人數更擴大高達 10,161 人次。

To help small and medium-sized tourism operators understand and adopt innovative digital tools, the Tourism Administration expanded the 2025 Digital Transformation Expo for the Tourism Industry in 2025, holding events in both southern and northern Taiwan. The southern event was held from June 27 to 29 at Pier-2 Art Center's Penglai B4 Warehouse in Kaohsiung, in its first-ever integration with the Solar Festival in Taiwan. It featured four specially designed themed zones: "Travel Exploration Station," "Tourist Amusement Station," "Smart Scenic Areas," and "Lodging Service Station." Through immersive scenario-based displays, the event presented nearly 20 technology products, including AI-powered ramen machines, smart cocktail machines, AI virtual human guides, AI real-time two-way translators, and 360-degree panoramic electronic safety fencing, driving digital transformation awareness across southern Taiwan's tourism sector. The northern event was held from December 2 to 3 at Taipei Songshan Cultural and Creative Park. The "Thematic Forum" convened representatives from industry, government, and academia to discuss policy promotion for the digitalization of the tourism industry and strengthen consensus on tourism development. The "Smart Technology Experience Zone" brought together more than 40 technology companies, showcasing innovations such as intelligent bubble tea and xiaolongbao machines, smart chef robotic arms, inter-floor service robots, and AI-powered smart multilingual guide systems. In addition, through the "Matchmaking Salon," operators were able to explore tourism technology products, receive transformation counseling, and learn about forward-looking trends based on the diverse needs of the tourism industry. These initiatives assisted operators in reducing labor costs and improving service quality, while continuing to expand the exhibition's brand influence and deepening industry-academia exchange. The event attracted 10,161 visitors.



2025 觀光產業數位博覽會
2025 Digital Transformation Expo for the Tourism Industry



114 年觀光盃 Open Data 黑客松
2025 Tourism Open Data Hackathon



「觀光盃 OpenData 黑客松」 Tourism Cup Open Data Hackathon

114 年擴大徵件範圍舉辦黑客松競賽，強化觀光開放資料（Open Data）之加值運用，首度鼓勵企業與新創團隊參與，共吸引 109 隊報名，最終遴選出企業公開組 13 組及大專院校組 11 組獲獎團隊。獲獎作品緊扣產業痛點，廣泛結合 AI、大數據與視覺辨識等技術，提出多元且具落地潛力的創新解方，如運用生成式 AI 打造「虛擬導遊與個人化行程助手」、結合 ESG 概念推出「碳足跡追蹤與綠色住宿推薦」引導環保旅程；或針對景區管理與平權，開發「AI 人流交通系統」解決擁擠難題，並設計「無障礙旅遊 APP」，提供智慧與永續旅遊體驗，為產業注入創新動能。

In 2025, the scope of submissions for the hackathon competition was expanded to strengthen the value-added use of tourism open data. For the first time, enterprises and start-up teams were encouraged to participate. A total of 109 teams registered, and 13 winning teams in the Enterprise Open Category and 11 winning teams in the College and University Category were ultimately selected. The winning entries closely addressed industry pain points and widely integrated technologies such as AI, big data, and computer vision to propose viable, and market-ready solutions. These included the use of generative AI to create "virtual tour guides and personalized itinerary assistants," the integration of ESG concepts to launch "carbon footprint tracking and green lodging recommendations" for environmentally friendly travel, the development of an "AI visitor flow and traffic system" to address crowding issues in scenic area management, and the design of an "accessible travel app" to promote travel equity. Together, these smart and sustainable solutions inject fresh momentum for innovation across the tourism sector.

智慧景區數位轉型 Digital Transformation of Smart Scenic Areas

智慧景區轉型：打造觀光數據治理服務新模式 Transforming Smart Scenic Areas : A New Model for Tourism Data Governance and Service

因應全球觀光發展趨勢與國內產業升級需求，觀光署積極推動「智慧景區轉型」策略，以實現《Taiwan Tourism 2030 臺灣觀光政策白皮書》所倡議的永續、創新與智慧治理目標。本署以「數據整合、技術導入、服務創新」為主軸，聚焦「智慧管理」、「智慧服務」、「智慧行銷」三大構面，帶動全臺風景區數據治理與服務進化。

In response to global tourism development trends and domestic industry upgrading needs, the Tourism Administration actively promoted its "Smart Scenic Area Transformation" strategy to realize the goals of sustainability, innovation, and smart governance advocated in the Taiwan Tourism 2030 White Paper. Built on the core pillars of "data integration, technology adoption, and service innovation", the Tourism Administration focused on three dimensions—"smart management," "smart services," and "smart marketing"—to drive the evolution of data governance and services across scenic areas in Taiwan.



智慧管理 Smart Management

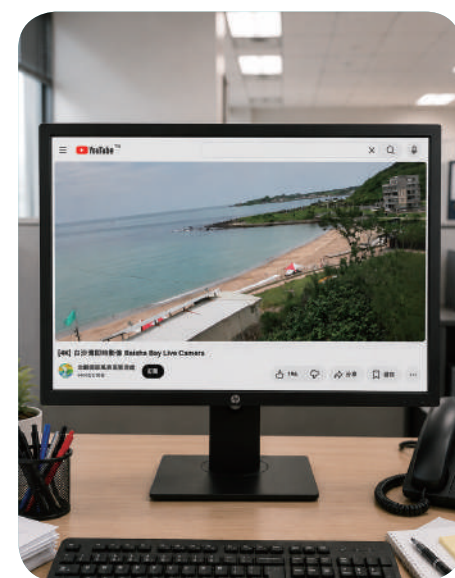
強化數據整合與預警系統，提升治理效能。除於熱門據點導入人車流 AI 辨識及具備異味、備品偵測之智慧公廁外，更依各管理處需求導入創新應用，如日月潭腳踏車道以 AI 影像辨識技術建構數位圍籬，防範機車違規闖入；北觀處強化水域安全監視，大幅減少人力巡檢成本並增強安全保障。

智慧服務 Smart Services

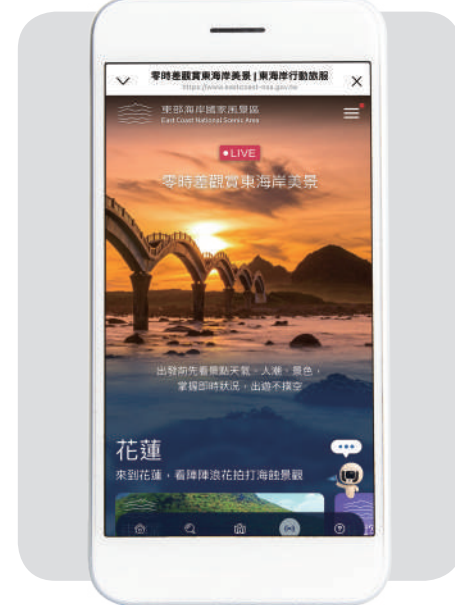
提供遊客無縫接軌的數位體驗。優先完成北區、東區及金門觀光圈之「PWA 行動旅服」系統建置，結合適地性服務（LBS）主動推播即時交通與旅遊情報；同時透過數位孿生與 AR/VR 技術，建置如參山處虛擬微型主題館、東北角 3D 旅遊地圖等沉浸式體驗，提升整體旅遊便利性與趣味性。

智慧行銷 Smart Marketing

採取虛實整合策略擴大行銷綜效。線上透過「數位孿生」技術將國家風景區（如野柳女王頭）進行高精度 3D 建模與遊戲化應用，創造線上線下串聯之創新體驗；同時於各重點景區廣設 4K 高畫質即時影像（鏡頭君）供民眾線上觀賞以創造話題。線下則於遊客中心導入 VR/AR 等沉浸式互動科技，並結合互動自拍與電子商務平臺（如阿里山 easy go 整合逾 10 個國內外通路），將數位感動有效轉化為實體觀光產值。



北海岸白沙灣高解析度即時影像
High-resolution live image of Baishawan
on the North Coast



東海岸 PWA 行動旅服
East Coast PWA Mobile Travel Service



阿里山 easy go 電子商務平臺
Alishan Easy Go E-Commerce Platform

PWA 行動旅服與喔熊 AI 小幫手

PWA Mobile Travel Service and OhBear AI Assistant

落實「行動優先」理念，建置免下載 APP 即可使用之「PWA 行動旅服」，依北、中、南、東及離島等 7 大觀光區模組化開發（已完成北區、東區及金門），利用 LBS 技術整合周邊食宿遊購行與交通站點資訊。同時，升級「喔熊 AI 小幫手」，支援中、英、日等多國語言的自然對話以打破語言隔閡，透過「引導式問答」了解旅客需求，量身打造圖文並茂的專屬行程，系統並串接全臺 13 個國家風景區的官方資料庫，避免一般 AI「幻覺」問題，確保旅客掌握最正確、最即時的官方節慶與食宿情報。

To implement a "mobile-first" approach, the administration built a "PWA Mobile Travel Service" that can be used without downloading an app. The system was developed modularly for seven major tourism regions, including northern, central, southern, eastern, and offshore island areas, with the Northern Region, Eastern Region, and Kinmen modules already completed. Leveraging Location-Based Services LBS, it integrates nearby information on dining, lodging, attractions, shopping, transportation, and transport hubs. At the same time, the "OhBear AI Assistant" was upgraded to support natural conversations in multiple languages (including Chinese, English, and Japanese) helping overcome language barriers. Through "guided Q&A," it identifies travelers' needs and creates customized itineraries with both images and text. The system is also connected to the official databases of Taiwan's 13 national scenic areas, mitigating "hallucination" risks typical of general AI, and ensuring that travelers have access to the most accurate and up-to-date official information on local festivals, dining, and lodging.



喔熊 AI 小幫手 OhBear AI Assistant

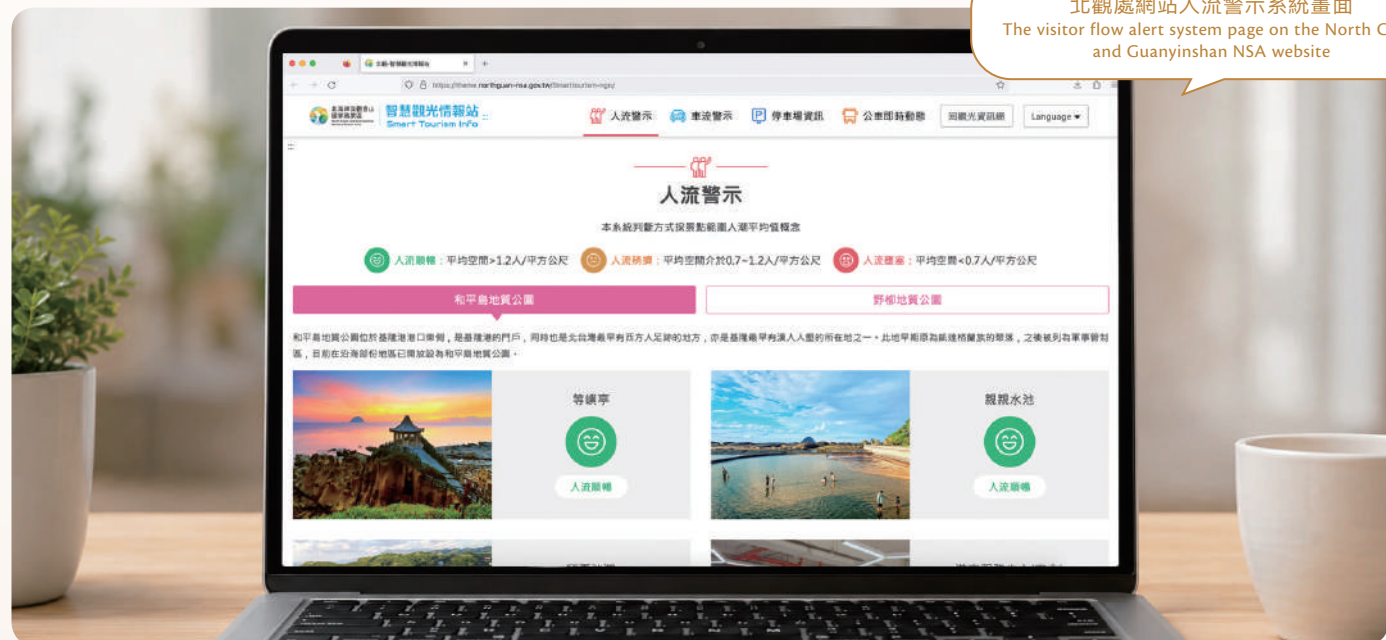


串接大數據平台，建置即時人流警示儀表板

Connecting to Big Data Platforms and Building a Real-Time Visitor Flow Warning Dashboard

觀光署採用電信大數據進行客流分析，透過同步串接大數據平臺，開發即時人流智慧警示儀表板（綠、黃、紅燈），提供國家風景區管理處進行熱點分流與連續假期疏運決策。

The Tourism Administration leveraged telecommunications big data for visitor flow analysis. By synchronously connecting to big data platforms, it developed a real-time smart visitor flow warning utilizing color-coded indicators (green, yellow, and red). This tool provides National Scenic Area Administrations with real-time decision-making support for hotspot dispersal and traffic management during consecutive holidays.



北觀處網站人流警示系統畫面
The visitor flow alert system page on the North Coast and Guanyinshan NSA website

開發 AI 多語導覽系統

Developing an AI Multilingual Guide System

針對外語導遊人力不足之痛點，開發以「手機為載具、免安裝」之即時翻譯導覽系統。中文解說員只需開啟系統語音解說，遊客掃描 QR Code 進入聊天室後，系統將自動偵測遊客手機語系，透過 AI 即時語音翻譯為使用者母語，目前已支援歐美、東南亞、東亞等 26 種語系，並於各國家風景區實地推廣運用。

推動野柳女王頭數位孿生

Promoting a Digital Twin of the Queen's Head at Yehliu

與數位發展部合作推動「城鄉建模與數位雙生計畫」，以北觀處野柳地質公園為示範點，對「女王頭」及「俏皮公主」進行高精度 3D 數位建模。未來亦可結合「夜訪女王」活動，導入雙生創作徵件、光雕展演、遊戲解謎與 3D 列印個人化紀念品，創造線上線下串聯之創新觀光體驗。



東部海岸全天 AI 旅遊智慧客服 - 鏡頭君
East Coast 24-Hour AI Smart Travel
Customer Service — Camera Man

AI 智慧翻譯櫃台

AI Smart Translation Counter

為營造友善國際旅遊環境，本署自 112 年起陸續於松山、桃園、高雄國際機場設置 AI 智慧翻譯櫃台。114 年更進一步於臺中國際機場導入升級版，採透明螢幕設計，具備自動判讀並切換高達 20 國以上語言之即時雙向翻譯功能，無須手動設定即可打破語言隔閡，提升第一線旅客服務中心之接待量能。

To create a more welcoming environment for international visitors, the administration has since 2023 successively installed AI Smart Translation Counters at Taipei Songshan, Taiwan Taoyuan, and Kaohsiung international airports. In 2025, an upgraded version was further introduced at Taichung International Airport. Featuring a transparent dual-screen display, the counter provides real-time two-way translation that can automatically detect and switch among more than 20 languages. Operating without the need for manual configuration, it breaks down language barriers and strengthens the capacity of frontline visitor service centers.

To address the shortage of foreign-language tour guides, the Tourism Administration developed an installation-free, web-based real-time translation guide system for mobile devices. Chinese-speaking guides simply activate the system's voice narration. After visitors scan a QR Code to enter the chatroom, the system automatically detects the language settings on their phones and uses AI to translate the narration in real time into the users' native languages. Currently supporting 26 languages across the Americas, Europe, Southeast Asia, and East Asia, the system has been deployed for on-site operations across National Scenic Areas.

In collaboration with the Ministry of Digital Affairs, the Tourism Administration promoted the "Urban and Rural Modeling and Digital Twin Project," using Yehliu Geopark under the North Coast and Guanyinshan National Scenic Area Administration (NSA) as a demonstration site to create high-precision 3D digital models of the "Queen's Head" and "Cute Princess." In the future, these models may also be integrated with the "Yehliu Night Tours: See the Queen's Head Illuminated at Night" event through digital twin creative submissions, light projection performances, puzzle-solving games, and personalized 3D-printed souvenirs, creating innovative tourism experiences that seamlessly link online and offline engagement.



2025 野柳石光夜訪女王藝術光影饗宴
2025 Yehliu Night Tours: Queen's Head
Art and Light Show



AI 智慧多語翻譯面板
AI Smart Multilingual Translation Panel

永續主題旅遊推廣 Promoting Sustainable Tourism

- 114 年 6 月 3 日辦理「2025 世界自行車日全台灣響應活動」，推廣自行車旅遊；「臺灣騎跡－全國自行車單一總入口網」提供全臺自行車活動資訊、補給站、周邊景點、旅宿、餐飲、台灣好行及氣象資訊，以一站式方式方便民眾規劃自行車遊程。並輔導近 5,000 家旅宿業業者加入「自行車友善旅宿」強化自行車旅遊配套服務。
- 114 年 11 月 23 日於「日月潭 Come!BikeDay 自行車嘉年華」舉辦一日限定市集，展示「自行車友善旅宿」專區，現場呈現自行車友善旅宿限定提供多項便利服務，包括可提供車友的單車停放、簡易維修工具、清洗設備區域，以及周邊補給資訊等貼心服務，並規劃抽獎活動吸引不少民眾響應。
- 114 年度辦理 4 場次永續旅遊教育訓練暨企業參訪活動，計 77 家次旅行業者參加；並輔導 3 家旅行業者申請 GTS 綠色旅行標章、2 家旅行業者申請 Travelife 認證，鼓勵更多旅行業者響應永續觀光趨勢，並導入永續認證系統。
- 研擬「旅行業遊程碳足跡計算指引」，並完成 10 條鳳金遊程碳足跡盤查，協助業者認識碳足跡概念與計算在遊程上的實務運用方式，掌握不同遊程排放結構，鼓勵自主揭露，在碳管理、綠色採購與永續服務等面向持續優化。



自行車友善旅宿輔導座談會
Bicycle-Friendly Lodging
Guidance Symposium



旅行業碳足跡計算指引研商會議
Consultation Meeting on Carbon Footprint
Calculation Guidelines for the Travel Industry

旅行業永續旅遊研習暨參訪
Sustainable Tourism Workshop
and Visit for the Travel Industry



- On June 3, 2025, the "2025 World Bicycle Day Response Event" was held to promote bicycle tourism. The "Taiwan Bike" web portal provides information on bicycle events across Taiwan, supply stations, nearby attractions, lodging, dining, Taiwan Tourist Shuttle routes, and weather, offering a one-stop platform that makes it easier for the public to plan cycling itineraries. Additionally, nearly 5,000 lodging operators were also assisted in joining the "Bicycle-Friendly Accommodation" network, strengthening supporting services for bicycle tourism.
- On November 23, 2025, a one-day pop-up market was held during the Sun Moon Lake Come!BikeDay Cycling Festival, featuring a dedicated "Bicycle-Friendly Accommodation" zone. The on-site display presented a range of convenient services offered exclusively by bicycle-friendly accommodations, including bicycle parking for cyclists, basic repair tools, washing equipment areas, nearby supply information, and other thoughtful services. A lucky draw was also organized, attracting strong public participation.
- In 2025, four sustainable tourism education and training sessions, combined with corporate visits, were held, drawing a total of 77 travel agency attendances. Assistance was also provided to three travel agencies applying for the Green Travel Seal (GTS) and two travel agencies applying for Travelife certification, encouraging more travel agencies to embrace sustainable tourism and introduce sustainability certification systems.
- The "Guidelines for Calculating the Carbon Footprint of Travel Industry Itineraries" were drafted, and carbon footprint inventories were completed for 10 Golden Age Tours. These initiatives assisted operators understand the concept of carbon footprints and the practical application of carbon footprint calculation to itineraries, gain insight into the emission structures of different itineraries, and encourage voluntary disclosure, while driving continuous optimization in carbon management, green procurement, and sustainable services.

I-center 創新服務推廣 Promoting Innovative i-Center Services

- 輔導地方政府、觀光署所屬國家風景區管理處於全國各地主要交通場站及國家風景區內重要遊憩據點建置「i」標誌之 i-center 旅遊服務體系，協助國內外旅客能便捷取得各類觀光旅遊資訊。
- 依區位特性及服務性質，各提供不同服務，第 1 層級為設置於桃園、高雄、松山國際機場等 3 處旅客服務中心；第 2 層級為輔導地方政府設置於國內重要交通節點，如火車站、高鐵站、航空站、捷運車站等 58 處旅遊服務中心；第 3 層級為地方政府及觀光署所屬管理處設置於風景區內重要遊憩據點等，共計 88 處遊客中心。
- 為營造優質友善旅遊環境並發揚「相借問」的臺式熱情，以產業跨域合作機制，擇優輔導民間產業及公私立單位設置「借問站」服務，提供當地旅遊資訊及諮詢服務，截至 114 年全臺完成 665 處借問站建置。



旅客服務中心設置多語翻譯面板
Multilingual translation panel
at a visitor service center

大稻埕晉發商號加入臺北市借問站行列
Jinfa Store in Dadaocheng joins Taipei City's
information station network

