



102^{new} 里程
2013 Taiwan Railways Annual Report
臺灣鐵路年鑑

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護您的遊憩品質及安全
，請依據工作人員指示
引導上車。

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砂箱

102^{new} 里程

2013 Taiwan Railways Annual Report

臺灣鐵路年鑑

TRA

Better life for you

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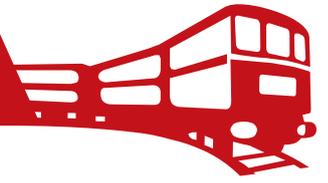
前言

「薪火廣傳」、「丕基永固」，是民國102年1月10日，本局臺北機廠遷建至富岡車輛基地第一階段啟用典禮時，由馬英九總統及交通部毛治國部長所贈之碑文，意義深遠。鐵路維修技術的傳承與精進，將是臺鐵未來最關鍵與最亟需的努力方向，賜予八字座右銘，期勉全體員工持續努力，日新月異，並奠定事業永續基石。

回顧民國102年，在營運服務方面，新購自強「普悠瑪號」於2月春節起陸續加入臺北～花蓮間營運，其精緻與優質化設施，係目前最快速與最友善（配備基本點字說明及4人桌型座）的乘車環境；在提升運能與品質上，打造觀光餐車2輛、擴展多卡通電子票證服務範圍至中南部通勤區間，全線提供便捷化服務已達102站，持續落實無縫運輸。另本年度營運績效，客運量與營收雙雙再創高鐵通車以來新高，客運人數每日平均62萬人次，客運收入每日平均4,624萬元。

配合政府政策，本局自102年5月1日起，正式協助行政院農委會林務局營運阿里山森林鐵路，以鐵路專業協助該國寶級文化資產，得以順利復駛營運，以符各界期望。北部地區八堵至南港間三軌化最後一哩路「樟樹灣-南港間擴建三軌工程」於10月20日舉行通車典禮，提升基隆～臺北間運能及服務品質。另外，一向有待改善的臺北車站東、西區地下停車場管理，以OT方式委外經營管理，於12月17日正式啟用，除了結合人文藝術、科技服務、節能減碳之外，並引進最先進的管理系統與設施，創造有別以往的優質亮麗場地，大幅提升服務品質，倍受好評。

接軌國際，開展視野，創造新局，是企業競爭力的關鍵，自推動國際交流以來，迭有進展與成果。102年4月23日平溪線與日本江之電鐵締結聯合行銷協議，以無償兌換雙方一日券方式，吸引觀光客互相參訪，共創臺、日兩地觀光收益與地方經濟發展。8月16日新竹站與美國紐約中央車站締結姊妹車站，10月13日松山站與日本JR四國鐵道株式會社松山站締結友好關係協議，寫下同名車站國際交流新頁，期未來在雙方良好情誼的基礎上，廣續推動交流，並深化雙方人員、經營與技術等各方面之經驗分享，藉以提升競爭力。



Intro

"Torch Passing Inheritance" and "Everlasting Foundation" are the profound inscriptions bestowed by President Ma Ying-jeou and Minister Mao Chi-Kuo from the Ministry of Transportation and Communication on January 10, 2013, at the opening ceremony for the phase I of the Taipei Railway workshop relocation to the Fugan workshop. The heritage and advancement of railroad maintenance techniques are and always will be the key orientation for the Taiwan Railways Administration to strive for. The inscriptions serve as the inspirational encouragement for being continuously hardworking, innovative and creative and the establishment of an everlasting foundation.

Looking back to year 2013, we enhanced our services by procuring the Puyuma Express trains for the Tze-Chiang Express series, and started the new operations during the Chinese New Year in February, offering transport between Taipei and Hualien. The Puyuma Express equipped with braille characters 4-person seat and table sets are recognized to be the fastest and most friendly train-riding environment. In order to increase the transport capacity and quality, 2 tourist dining cars are created and the multi-card e-ticketing service has been expanded to cover commuters' traveling intervals in the central and southern areas with a total of 102 stations, thereby fulfilling the seamless transportation. This year's operational performance has shown a record high of both passenger volumes and revenues since the running of the Taiwan High Speed Rail. The average number of passengers transport is posted 620,000 daily and the daily revenue is approximately NT\$46.24 million.

In compliance with the government policies, starting from May 1, 2013, the Taiwan Railways Administration officially undertook the task of assisting the Forestry Bureau, Council of Agriculture, the Executive Yuan to operate the Alishan Forest Railroad, in an effort to preserve the national treasures and cultural assets. Our railway professionalism has successfully helped resume the operations of the forest railroads, and met all sectors' expectations. The "Three-track expansion project between Zhangshuwan and Nangang" the last mile of the three-track between Badu and Nangang in the northern area had its grand opening ceremony on the 20th of October, and has since lifted the capacity and quality of transportation between Keelung and Taipei. Also, the underground east and west parking lots of the Taipei Railway Station have been in need of improvement for a while. The parking lots have been contracted to the private sector for operation with an Operation-Transfer (OT) mode and officially re-opened on the 17th of December. The new facilities combined literary arts, technical services, and energy efficiency, introducing a cutting-edge management system, and created a quality and brilliant venue that is distinguished from what it was before. This novelty greatly raises the service quality and receives large praised as well.

International connection, global vision and creative innovation are keys to corporate competitiveness. Since the onset of international exchanges, the Administration has been making fruitful accomplishments from time to time. On April 23, 2013, the Pingxi line signed an agreement with the Japanese Enoshima Electric Railway for joint marketing. The free exchange of one-day tickets from both sides mutually attracts more tourists, creating a win-win situation for the Taiwan and Japan tourism, and stimulates the growth of local economies. On August 16, the Hsinchu station and the U.S. New York Grand Central Station formed sister station relationship. On October 13, the Songshan station made an agreement on friendly relations with JR Matsuyama Station. These friendship agreements will create more and deeper exchanges for experience sharing on operations and techniques. Stronger competitiveness will be built.

2

願景 組織與營運概況

Vision,
Organization, and Operational Overview





電4.8
車輛
停車

汐科
Xike
6

大同路一段
新台五路

5

4

基隆 17:01 板橋 準時
基隆 17:20 板橋 準時

出口

一、願景、營運目標與營運策略

(一) 願景

以顧客滿意為導向之優質公共運輸系統，經營運輸本業及關聯事業之雙核心事業。

(二) 營運目標

建構安全、準確、服務、創新與綠能的運輸環境。

(三) 營運策略

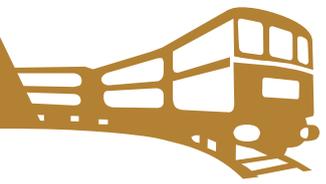
1.關於經營管理者

- (1) 落實通用設計，逐步改善月臺高度與車廂齊平及車站無障礙空間，建構現代化友善運輸環境。
- (2) 推動無縫運輸，強化與高鐵、捷運、客運、及公車轉乘接駁，並進行電子票證、場站班次及資訊整合，建構優質運輸服務。
- (3) 增加運能，強化東部幹線中長程及跨線運輸；西部幹線區域及通勤運輸。
- (4) 加強行銷策略，持續推動旅客會員制度；結合鐵道文化，進行異業結盟，提供客製化服務，開創新客群。
- (5) 有效利用既有資產發展行旅生活服務事業，擴大關聯事業商機。
- (6) 推動資產活化利用，藉由都市更新、設定地上權等多元開發方式，提高經濟及財務收益。
- (7) 加強企業內部溝通協調、強化勞資會議功能、建立和諧勞資關係。
- (8) 加強員工風險管理及危機處理等在職訓練、督導與考核，強化防災防恐機制，提升緊急應變能力，以維護行車及旅客安全。

2.關於供需配合者

- (1) 賡續辦理臺鐵都會區捷運化後續設計計畫，增設車站及增開區間列車，以擴大臺鐵通勤服務範圍，縮短旅行時間及列車班距。
- (2) 加速購置及汰換營運車輛，簡化車種，提升服務品質。
- (3) 賡續辦理臺北機廠遷建計畫、高雄機廠遷建潮州及原有廠址開發計畫，並規劃推動全線號誌系統升級，以解決高鐵過軌問題及配合高雄市區鐵路地下化工程，提升車輛維修技術與品質，確保行車安全。
- (4) 逐步推動自動化電腦排點作業系統，提升排班及調度功能，以促使運能之供給規劃可密切配合旅客之運輸需求。





I. Vision, The Goal, and The Strategies

A. Vision

Build a superior and customer-satisfaction-oriented public transportation system and manage a dual-core business covering transportation and affiliated business.

B. Goal

Establish a safe, accurate, service-oriented, innovative, and green transportation environment.

C. Operation Strategies

1. About Management

- (1) Implement standardized designs to gradually improve the platform height to match car entrance and create the barrier-free environment in the stations, aiming to build modern and friendly transportation surrounding.
- (2) Promote seamless transportation, by reinforcing transit connections with high speed rail, MRT, and intercity and city buses and integrate the e-ticketing system with the train scheduling information to provide superior transportation service.
- (3) Increase transport capacity by enhancing medium-and-long distance routes for the Eastern Line and cross-lines transit and strengthen the West Line's regional and commute transportation.
- (4) Enhance marketing strategies by continuously promoting passenger membership system and apply the railroad cultures to cooperate with different sectors to form strategic alliances offering customized services and explore new customer groups.
- (5) Effectively utilize existing assets to develop railroad tourism and expand business opportunities for the affiliated business.
- (6) Revitalize the existing assets through multiple approaches such as urban renovation renewal projects and establishment of superfacies to increase the economic and financial benefits.
- (7) Strengthen corporate internal communications and the function of the labor-and-capital conference functionality to establish a harmonious relationship between labor and capital.
- (8) Enhance on-the-job training, supervision, and auditing on employee risk and crisis management to build a disaster-prevention and counter-terrorism mechanism so as to raise emergency response capability and assure the safety of train operation and passengers.

2. About Supply and Demand

- (1) Continue implementing the TRA Rapid Transit Systematized in Metropolitan Area and Regional Railway Follow-up Construction Project by adding train stations and local train operations to expand the range of commuter service and shorten travel time and train intervals.
- (2) Procure new cars to replace the old ones and simplify car types so as to raise the service quality.
- (3) Continue implementing the Taipei Railway Workshop Relocation Project and the Project of Kaohsiung Depot Relocation to Chaozhou and Development of the Original Depot Sites, upgrading the signal systems for all lines, solving track crossing issue with high speed rail, and collaborating with the Kaohsiung Metropolitan Area Underground Railway Project to enhance maintenance technique and quality and assure safety of train operation.
- (4) Gradually promote the automatic computerized scheduling system to increase the function of train scheduling and dispatching capability to increase transport capacity in compliance with passenger demand.

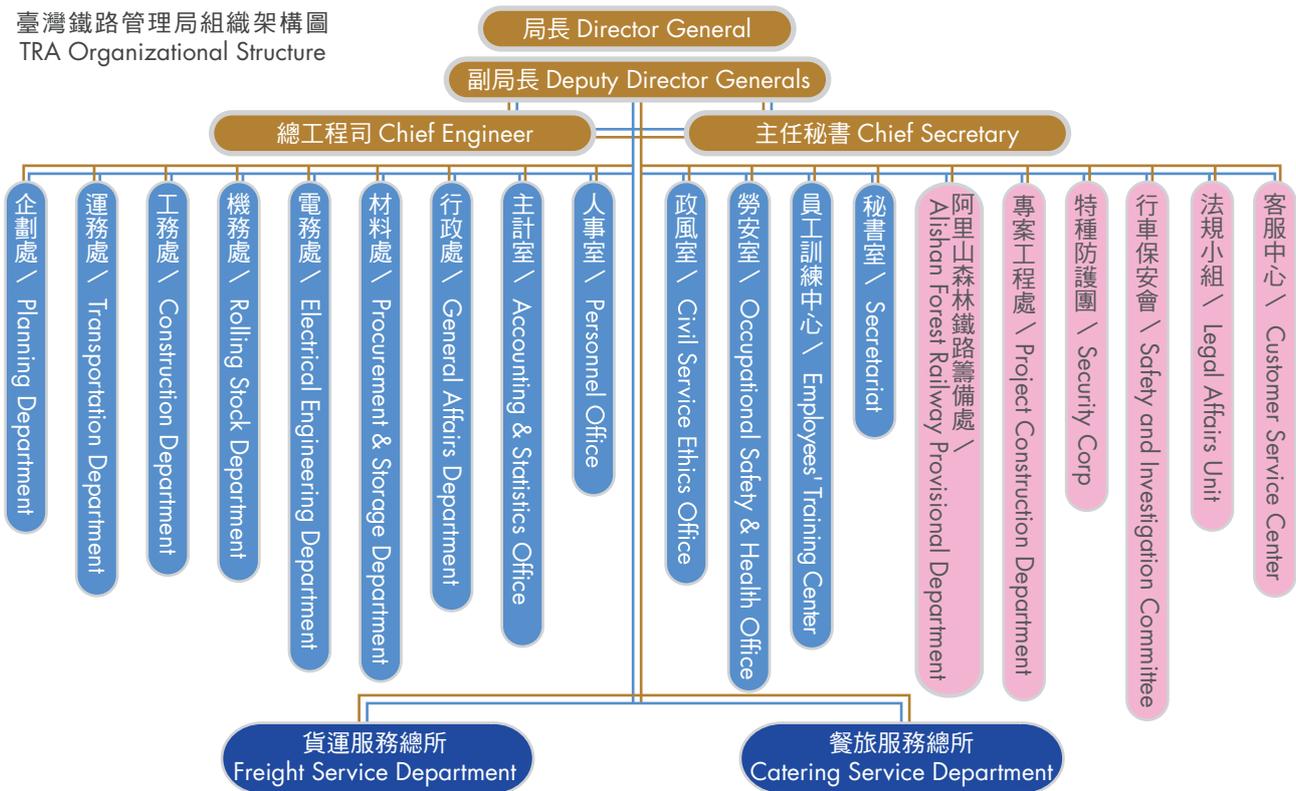
二、組織與人力

依據「交通部臺灣鐵路管理局組織條例」(93年6月9日修正公布)規定,於局長之下置副局長3人,主任秘書及總工程司各1人,襄助局長處理局務,並設有運務處、工務處、機務處、電務處、企劃處、材料處、行政處、秘書室、人事室、政風室、勞工安全衛生室、主計室、員工訓練中心等13個一級單位;貨運服務總所與餐旅服務總所等2個直屬機構;法規小組、特種防護團、行車保安會、客服中心、專案工程處及阿里山森林鐵路籌備處等6個任務編組。

另為辦理鐵路工程、客貨運輸、車輛調度及機客貨車與路線電氣設備之養護、材料之儲運管制、票務印製、局內外無線電聯絡、較遠地區營收款項收付等事項,依前揭組織條例第15條規定,分設所、段、站、廠、隊、中心、中心等43個分支機構。

本局102年預算員額為14,385人,102年12月底現有員額為13,916人。

臺灣鐵路管理局組織架構圖
TRA Organizational Structure

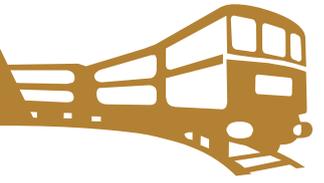


II. Organization and Human Resource

According to amendment of "Organizational Regulation of Taiwan Railways Administration, Ministry of Transportation and Communication" announced on June 9, 2004, the organization sits 1 Director General, along with 3 Deputy Directors, 1 Chief Secretary and 1 Chief Engineer assisting the Director General to administer the organization. In addition, there are 13 grade-1 units consisting of the Transportation Department, Construction Department, Rolling Stock Department, Electrical Engineering Department, Planning and Research Department, Procurement and Storage Department, General Affairs Department, Secretariat, Personnel Office, Civil Service Ethics Office, Occupational Safety and Health Office, Accounting Office, and Staff Training Center. 2 direct subsidiaries consisting of Freight Service Department and Catering Service Department, and 6 task groups consisting of the Legal Affairs Unit, Security Corp, Safety and Investigation Committee, Customer Service Center, Project Construction Department, and Alishan Forest Railway Preparatory Department.

Based on the No. 15 provision of the aforementioned regulations, for engagement in railroad construction, passenger and cargo transport, train dispatching, maintenance of locomotive/car and electrification, material storage and management, ticket printing, internal/external radio communications, and remote areas revenue collections and expenses payments, the organization establishes 43 branch units consisting of offices, sub-branches, stations, workshops, corps and centers.

TRA's budget for the year of 2013 could support 14,385 persons. As of the end of December 2013, the headcount was 13,916 persons.



三、鐵路設施營運概況

III. Overview of Operational Facilities

(一) 營業里程

A. Operating - Mileage



單位 Unit : 公里 km
民國 102 年底 End of 2013

營業里程合計 Operating Distance	1061.3
雙線電氣化 Double Track Electrified	660.4
單線電氣化 Single Track Electrified	47.9
雙線非電氣化 Double Track Non-Electrified	23.5
單線非電氣化 Single Track Non-Electrified	329.5

2 願景、組織與營運概況

Vision, Organization, and Operational Overview



營業里程：1061.3公里

— 雙線：683.9 公里

— 單線：377.4 公里

電化區間：708.3 公里

非電化區間：353.0 公里

車站：223 站

特等站 3 站，一等站 27 站，二等以下 193 站。

平交道：466 處

第一種 9 處、第二種 2 處、第三種 405 處、半封閉

28 處、手動控制 14 處、專用 8 處

Operating Distance 1061.3 Km

— Double track : 683.9 kilometers

— Single track : 377.4 kilometers

Electric track : 708.3 kilometers

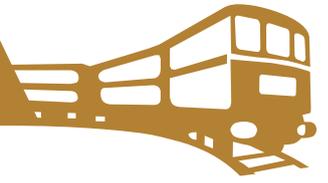
Non - electric track: 353.0 kilometers

Stations: 223

3 special grade stations, 27 grade one stations and 193 grade two and below stations

Level Crossings: 466

9 type one crossings, 2 type two crossings, 405 type three crossings, 28 semi-closed crossings, 14 manually-controlled crossings and 8 special-use crossings



(二) 車輛數與運用效率

1. 截至102年止計有車輛數：

機車290輛，分別為：

- (1) 電力機車91輛
- (2) 推拉式電力機車64輛
- (3) 柴電機車119輛
- (4) 柴液機車16輛

另有電聯車747輛，傾斜式電聯車152輛，柴油客車221輛，客車1,065輛，貨車1,837輛。

2. 運用效率：

本年動力車之可用率達到89.77%。其中可供使用的電力機車達到全部該型車輛之83.42%，推拉式電力機車89.29%，柴電機車89.07%，柴液機車88.58%，電聯車93.02%，傾斜式電聯車99.00%，柴油客車89.37%。

B.Number of Rolling Stock and Utilization Efficiency

1. As of the end of year 2013, a total of 290 locomotives were posted:

- (1) Electric locomotives: 91
- (2) Push-pull electric locomotives: 64
- (3) Diesel-electric locomotives: 119
- (4) Diesel-hydraulic locomotives:16; EMUs (Electric Multiple Units):747; tilting EMUs:152; diesel passenger cars:221, passenger cars:1,065;and freight cars: 1,837.

2. Utilization efficiency:

The utilization rate of the traction unit is as high as 89.77% for this year. Of these, the electric locomotives available for use reaches 83.42% , the push-pull electric locomotive is 89.29%, diesel-electric locomotive is 89.07%, diesel-hydraulic locomotive is 88.58%, EMU is 93.02%, tilt EMU is 99.00%, and diesel passenger car is 89.37%.



3

創新業務與成果

Innovations Business and
Achievements





一、拓展電子票證使用區間

本局於100年元月起全國首推全臺多卡通電子票證乘車服務，嗣後陸續建置多卡通電子票證驗票設備，目前多卡通電子票證服務範圍含北部區段（福隆-基隆-苗栗間，含平溪、內灣、六家支線間等62站）、南部區段（林內-屏東間等40站），共102站。每日平均使用人數由啟用初期13萬7,000人次成長至102年24萬人次，成長約75%。

I. Expand the E-tickets to Cover More Train Commute Intervals.

Since January 2011, the TRA pioneered in launching the multi-card e-ticketing service and installing verification facilities to provide the service range of the Northern Taiwan (Fulong-Keelung-Miaoli section, including Pingxi, Neiwan, and Lieujia branch lines with a total of 62 stations) and the Southern Taiwan (Linnei-Pingtung section with a total of 40 stations). The average number for daily passenger usage increases to 240,000 in 2013 from 137,000 at the initial stage with the growth rate of 75% to support 102 stations.

二、提供便民之訂購票服務

(一) 超商取票、訂票

本局為提供民眾更便利的訂購票服務，持續開辦統一、全家、萊爾富及 OK便利超商取票及訂票服務，擴大取票通路，節省旅客購票時間與成本，提升本局服務水準，以符合社會E化的潮流與趨勢。102年，利用超商訂票服務之民眾每日約1萬7,731人次。

(二) 開辦24小時網路及語音訂票服務

101年開放當日訂（取）票服務，旅客可於乘車當日預訂開車前 1小時以上之班次車票，最遲於開車前半小時完成付款取票，同年12月4日零時起開放網路及電話語音24小時訂票服務，全天不打烊，提供更便利之訂購票服務，訂票後取票筆數統計至102年約計 1,182萬筆，較去年950萬筆成長24.43%。

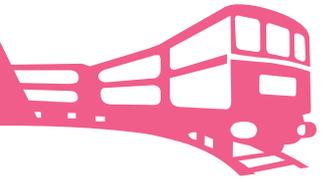
II. Provide convenient ticketing services

A. Tickets ordering and fetching at convenient stores

To facilitate tickets ordering and fetching, the TRA continuously works with convenient stores, such as Seven-Eleven, Family Mart, Hi-Life, and OK, to provide ticketing services in order to reduce ticket pick-up time and cost and meanwhile raised the TRA's service quality in such a way the TRA is striving for accommodating the modern trend of e-commerce. In 2013, there was a post of 17,731 customers visiting the convenient stores for ticketing services.

B. The 24/7 Internet and voice-booking services

The same-day ticket ordering and fetching services commenced in 2012, allowing travelers to order the tickets for the same-day trains departing at least an hour later and pick up the tickets 30 minutes prior to the train departure. Since December 4, 2012, the Internet and telephone voice ticketing is opened for 24 hours a day, making the service more convenient. The ticket ordering and fetching reached 11.82 million transactions in 2013 with a growth rate of 24.43%, compared to the last year's record of 9.5 million.



三、加強與國際鐵道公司合作交流及旅客互惠措施

(一)CK124與日本JR北海道C11型締結姊妹車

為慶祝本局CK124蒸汽機車與日本JR北海道釧路支社之C11型蒸汽機車「SL冬季濕原號」，締結姊妹車1週年，特於今（102）年3月9、10日兩天懸掛紀念車頭銘板，行駛舊山線郵輪式列車與JR北海道「SL冬季濕原號」同時開行「締結姊妹列車1週年紀念專列」；另於8月23日更首度結合阿里山森鐵列車開行「雙鐵（臺鐵+森鐵）之旅」行程，為臺鐵郵輪式列車首度結合阿里山森鐵觀光旅遊之創舉。

III. Strengthen cooperation with international railways to benefit mutual travelers

A. TRA CK124 and JR Hokkaido C11 Formed Sister Train Relationship

In order to celebrate the first anniversary for the establishment of sister train relationship between TRA CK124 steam locomotive and JR Hokkaido Kushiro branch C11 steam locomotive "SL Fuyu-no-Shitsugen" memorial nameplates were hung on the locomotives of TRA cruise train running old mountain line and JR Hokkaido "SL Fuyu-no-Shitsugen" on March 9 and 10, 2013. Also, special trains were run in memory of one-year anniversary. On August 23, the Alishan Forest Train had its debut journey for the "Dual Railways (TRA and Forest Railways)", marking the first tourism innovation that combines the TRA's cruise with the Alishan Forest Railway.

本局CK124蒸汽機車與日本JR北海道釧路支社之C11型蒸汽機車「SL冬季濕原號」締結姊妹車1週年慶祝活動。

Celebration for the first anniversary for the establishment of sister train relationship between TRA's CK124 steam locomotive and JR Hokkaido C11 steam locomotive "SL Fuyu-no-Shitsugen."



(二)平溪線與江之島電鐵進行聯合行銷合作協議

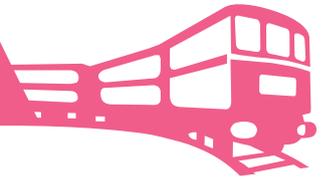
本局平溪線與日本江之島電鐵株式會社（簡稱江之電）於102年5月1日起至103年3月31日止進行聯合觀光行銷活動，結合彼此山線與海線觀光鐵道特色，以無償兌換雙方一日週遊券方式吸引兩地旅客互訪沿線景點，並於瑞芳站內及臺北站1樓大廳西側通道設立「臺鐵平溪線與日本江之電聯合觀光行銷」展示專區，擴大宣傳行銷。自今年5月份開辦截至12月底止，已有2,928名旅客至臺、日兩地兌換雙方一日券，進行鐵道旅遊。

B. TRA Pingxi Line signed a joint marketing agreement with Japanese Enoshima Electric Railway.

TRA Pingxi Line collaborated with the Japanese Enoshima Electric Railway for a to jointly launch marketing activity from May 1, 2013 to March 31, 2014, in order to mutually promote tourism by emphasizing, each other's mountain and coastal railway features. Also, free mutual exchange of one-day passes was introduced to solicit tourists from both sides. To magnify the effectiveness of this partnership, exhibition centers for the "Joint Tourism Marketing of TRA Pingxi Line and Japanese Enoshima Electric Railway" were set up at the Ruifang Station and on the 1st floor lobby of the Taipei Station. From the outset in May till the end of December, we have solicited 2,928 tourists to Taiwan and Japan for the railway tour with this exchanged one-day ticket on both sides.

1. 102年4月23日本局平溪線與日本江之島電鐵株式會社簽訂合作協議。
 2. 本局平溪線與日本江之電鐵針對雙方合作之宣傳海報，以無償兌換雙方一日週遊券方式，增進彼此觀光資訊交流、擴大對國內外旅客行銷兩地觀光。
1. On April 23, 2013, TRA Pingxi Line signed a joint marketing agreement with Japanese Enoshima Electric Railway.
 2. Propaganda posters for the joint marketing between TRA Pingxi Line and Japanese Enoshima Electric Railway were printed. Free exchange of one-day unlimited train tickets on both sides not only facilitates the exchange of tourism information and but also attract more travelers from both domestic and international.





(三)與國外鐵路締結姊妹站

1. 松山站與日本松山駅締結姊妹站：

臺鐵松山站與JR四國旅客鐵道株式會社「松山駅」，以同名車站於102年10月13日舉行締結姊妹站結盟儀式，並規劃推動雙方旅客交流及互惠行銷。雙方票證無償兌換，由本局印製名片式車票（松山至板橋自強號車票，售價新臺幣31元）共500張作為兌換紀念；配合姊妹站締結活動，本局松山站於活動當日在站內販售紀念套票，每套售價新臺幣98元。

另國人赴日持本局松山起站背磁式車票，可於JR四國松山駅兌換特製月臺票1張（日幣160円，價值約新臺幣48元），作為促進臺日旅客互惠交流與雙方締結姊妹車站之紀念。

C. Conclusion of Sister Stations with International railways

1. The Songshan Station concluded as a sister station with Japanese Matsuyama Station:

TRA Songshan Station formed sister station relationship with Japanese Matsuyama Station of the JR Shikoku Railway Company since both sides share the same name of Chinese character "Songshan". The signing ceremony was organized on October 13, 2013, followed by the promotion on passenger interaction and mutual marketing. To carry out mutual free exchange of tickets, the TRA printed 500 business-card like tickets (the Songshan-Banqiao Tze-Chiang Express ticket for NT\$31). Also, in line with this ceremony, a memorial ticket package was launched to be sold at the Songshan Station.

In addition, Taiwanese on a trip to Japan with a magnetic ticket showing the departure from the Songshan Station can exchange it for a platform ticket (equivalent to 160 yen, about NT\$48) at the JR Shikoku Matsuyama Station, so that the traveling passengers can keep the tickets for memory and the mutual exchange of travelers can also bring about benefits on both sides.

1

松山站與日本松山駅結盟締結姊妹站：

松山站簡信立站長與日本JR四國松山站窪仁志站長共同簽署姊妹站儀式。

The Songshan Station concluded as a sister station with Japanese Matsuyama Station:

The master of Songshan Station, Jian Xingli, and the master of Japanese JR Shikoku Matsuyama Station, Hitoshi, jointly signed a sister station agreement in the ceremony.



2. 新竹站與紐約中央車站結盟締結姊妹站

本局新竹火車站與同為西元1913年建成之美國紐約中央車站，於今西元2013年皆屆滿100年，8月16日在美國紐約由美國中央車站站長及本局新竹站站長共同署締結姊妹站之簽約儀式，並邀請美方大都會運輸署總裁及我方新竹市長擔任見證人。

2. The Hsinchu Station and New York Grand Central Terminal concluded as sister stations

The Hsinchu Station and the U.S. New York Grand Central Terminal both were established in 1913 and celebrated the centennial anniversary in 2013. The master of Hsinchu Station and the master of New York Grand Central Terminal jointly signed a sister station agreement on August 16. The CEO of the U.S. Metropolitan Transportation Authority and the Mayor of the Hsinchu City were invited to witness in the signing ceremony.



■ 新竹站與紐約中央車站結盟締結姊妹站：
本局新竹站黃榮華站長與美國紐約中央車站Steve Cupelli站長共同簽署姊妹站儀式。

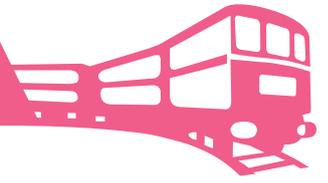
The Hsinchu Station and New York Grand Central Terminal concluded as sister stations:
The master of Hsinchu Station, Huang Ronghua, and the master of New York Grand Central Terminal, Steve Cupelli, jointly signed a sister station agreement in the ceremony.

四、辦理服務品質認證

臺北、花蓮、臺東站自102年12月起持續辦理「QUALICERT國際服務品質認證」，預計明(103)年5月30日辦理完成並取得驗證。

IV. Apply for Service Quality Certification

Since December 2013, the Taipei, Hualien and Taitung stations began filing the application for the international service quality certification "QUALICERT", and the procedure and certification obtainment are expected to be completed on May 30, 2014.



五、推動書香氣息車站

本局除於板橋站設置國內公共運輸場所首座「低碳圖書館」外，並陸續於臺中、臺北、松山三站設有微型圖書館，又配合新北市政府及臺灣漂書協會所辦之『漂書活動』，自102年10月11日起於雙溪、瑞芳、五堵、汐科、浮洲、山佳、汐止、板橋、樹林、鶯歌等10個車站設置漂書點，提供二手書籍供旅客閱讀。

V. Establish Scholarly Atmosphere in Stations

The Banqiao Station is the first public transportation venue founding "low carbon library," followed by the establishment of micro-libraries in the Taichung, Taipei and Songshan stations. Also, since October 11, 2013, in cooperation with the "BookCrossing" activite organized by the New Taipei City Government and the Taiwan FunReading Association, the TRA set up bookcrossing spots in 10 stations: Shuangxi, Ruifang, Wudu, Shike, Fuzhou, Shanjia, Xizhi, Banqiao, Shulin, and Yingge, where second-hand books are provided for travelers to read.



- | | |
|---|---|
| 1 | 2 |
|---|---|
- 1.位於板橋站的漂書點，提供二手書籍供旅客閱讀。
 - 2.松山站「Fastbook自動借還書服務站」，民眾可利用悠遊卡操作借、還書系統，亦可甲地借書，乙地還書（臺北市立圖書館轄區），非常便利。
- 1.The bookcrossing spot at the Banqiao Station offers second-hand books for travelers to read.
2.The "Fastbook Auto Library Service" at the Songshan Station allows the public to conveniently borrow and return books with an Easy Card, and borrow from location A and return at location B (under the administrative territory of the Taipei City Library).

六、臺鐵夢工場啟動全方位服務

- (一)臺鐵夢工場旗艦店（臺北站）自101年5月25日正式開幕後，102年6月11日再成立高雄店，為南部注入臺鐵的文創實力。
- (二)為提升旅客的購物服務及推廣臺鐵夢工場品牌，自102年6月11日起於太魯閣號及普悠瑪號列車上，免費發放「商品快訊（DM）」，提供旅客閱覽選購。

VI. Taiwan Railways Shops Launches Full Scale Service

- A.The flagship store of the Taiwan Railway Shop had its grand opening at the Taipei Station on May 25, 2012. And again, the Kaohsiung store was opened on June 11, 2013, to inject literary innovation of the TRA's energy to the south.
- B.To improve shopping service for travelers and promote the branding of the Taiwan Railway Shop, the product brochures were placed on the Taroko and Puyuma trains since June 11, 2013 to stimulate travelers' shopping interests.

七、配合在地食材開發4款特色風味便當

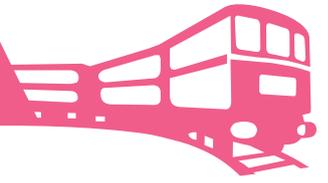
102年3月9日臺北餐廳與北海道「釧路館」運用兩地食材共同推出「臺鐵・北海道特色便當」；為慶祝本局協助阿里山森林鐵路營運，於102年5月1日由高雄餐廳及臺北餐廳共同推出「阿里山特色便當」；102年10月7日車勤服務部推出「宜蘭風味便當」；102年12月5日車勤服務部花蓮分部推出「花東特『蔬』便當」，提供旅客多樣化餐飲選擇。

VII. Set Out 4 Flavors of Relish Boxed Meal with Local Ingredients

On March 9, 2013, TRA' Taipei Kitchen jointly worked with Hokkaido's "Kushiro" to introduce the "Taiwan Railways · Hokkaido Specialty" boxed meal with local ingredients from both side. To celebrate the TRA's engagement in the Alishan Forest Railway operations, on May 1, 2013, the Kaohsiung Kitchen and Taipei Kitchen jointly introduced the "Alishan Specialty" boxed meal. On October 7, 2013, the On-Train Services Department presented the "Yilan Specialty" boxed meal, and again on December 5, 2013, the department's Hualien branch brought in the "Hualien-Taitung Vegetable Specialty" boxed meal. Travelers are offered a variety of choices for their meals.

- | | | |
|---|------------|--|
| 1 | 1. 花東特蔬便當 | 1. Hualien-Taitung Vegetable Specialty boxed meals |
| 2 | 2. 宜蘭風味便當 | 2. Yilan Specialty boxed meals |
| 3 | 3. 阿里山特色便當 | 3. Alishan Specialty boxed meals |
| 4 | 4. 北海道特色便當 | 4. Hokkaido Specialty boxed meals |





八、異業結盟、創新行銷

為慶祝126週年鐵路節，102年5月13日與老夫子哈傳媒公司合作，藉知名漫畫人物-老夫子風趣形象推廣臺鐵便當，並推出5款具鐵路意象之老夫子漫畫封面包裝鐵路便當，提升臺鐵便當知名度與形象。

VIII. Cross-Industry Alliance, Innovative Marketing

To celebrate the 126th anniversary, the TRA-worked with the OMQ ZMedia on May 13, 2013 to use the humorous and funny image of comic character, Old Master Q, to promote TRA' boxed meals, which came with 5 styles of the Old Master Q character standing for Taiwan's railways image printed on the outer package of meal boxes for a better recognition and impression.

老夫子便當封面 Meal boxes with the Old Master Q's images on the package cover.

臺鐵便當

老夫子瘋臺鐵 暢遊全臺灣



九、廉政便當與相聲

- (一) 126週年鐵路節推出「廉政便當」，邀請漫畫人物老夫子擔任代言人，並與大番薯并肩穿上臺鐵列車長制服，在臺北車站及青天白日為背景的陪襯下，老夫子與大番薯連袂宣導本局反貪倡廉之決心。本次推出的廉政便當包括5道菜色，其中銀芽三絲取諧音三思而行，青菜指定綠花椰，象徵清廉家園，一塊燻魚則取東漢懸魚太守模範公僕的形象，香Q滷蛋則代表依法行政不容但書，而主菜排骨就是一鼓作氣、拒絕貪腐之意。
- (二) 以新進列車「普悠瑪」及「太魯閣」為主題，在126週年鐵路節慶祝大會上表演「瑪太春秋」相聲短劇，藉由輕鬆詼諧的方式，宣導公務員廉政倫理規範，深化公務員應廉潔自持的觀念。

IX. Anti-Corruption Boxed Meal and Crosstalk (Xiangsheng)

- A. The anti-corruption boxed meals were introduced to celebrate the 126th anniversary. The TRA invited the comic character, Old Master Q, to endorse and stand side-by-side with the other comic character, Big Potato, in train master uniforms at the Taipei Station to manifest TRA's determination to fight against corruption. This anti-corruption boxed meals comes with 5 ingredients: the shredded bean sprout is homophonic to "think twice" in Mandarin; the broccoli-indicates honest and non-corruption homeland; the smoked fish fillet captures the image of an ethic official in the Eastern Han Dynasty; the marinated egg stands for strict compliance with regulations without compromises; and then the main course of spareribs signifies the strike on corruption in all-out shot.
- B. With the theme of the new Puyuma and Taroko trains, the "MaTa Era" crosstalk skit was performed for the 126th anniversary celebration in an easy and humorous way to publicize the ethic norms of public servants so that the ethic codes can be deeply rooted in the hearts of government officials.

十、交通部102年創新提案制度—「鐵客網戰」榮獲創意獎管理類甲等獎

本局臺北運務段站務佐理林明寬提案「鐵客網戰」，構思以線上遊戲方式傳遞鐵路資訊，將鐵路與虛擬網路世界結合，企圖開發本局新市場之創意，在交通部嚴格的審查當中脫穎而出，榮獲交通部102年創新提案制度創意獎管理類甲等獎。

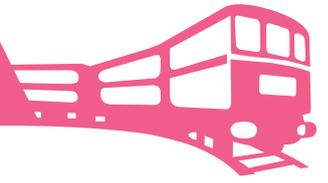
X. 2013 innovative Proposition System of the Ministry of Transportation and Communication "Railway Internet Battle" Won the Class A Medal of the Innovative Management Award.

Mr. Lin Mingkuan, transportation clerk of the Taipei-Transportation Section, proposed the "Railway Internet Battle" with a conception of using online gaming to propagate the railway information and combining railways with the Internet virtual world, in an effort to develop TRA's new markets. Through rigorous reviews by the Ministry of Transportation and Communication, Lin's proposal stood out and won the Class A Medal of the Innovative Management Award under the 2013 Innovative Proposition System.

臺北運務段站務佐理林明寬與葉部長合影
(左起為葉部長匡時、林明寬)。

Mr. Lin Mingkuan, transportation clerk of the Taipei Transportation Section posed for a photo with Minister Yeh Kuang-Shih from Ministry of Transportation and Communication (on the left)





十一、路線養護創新與成果

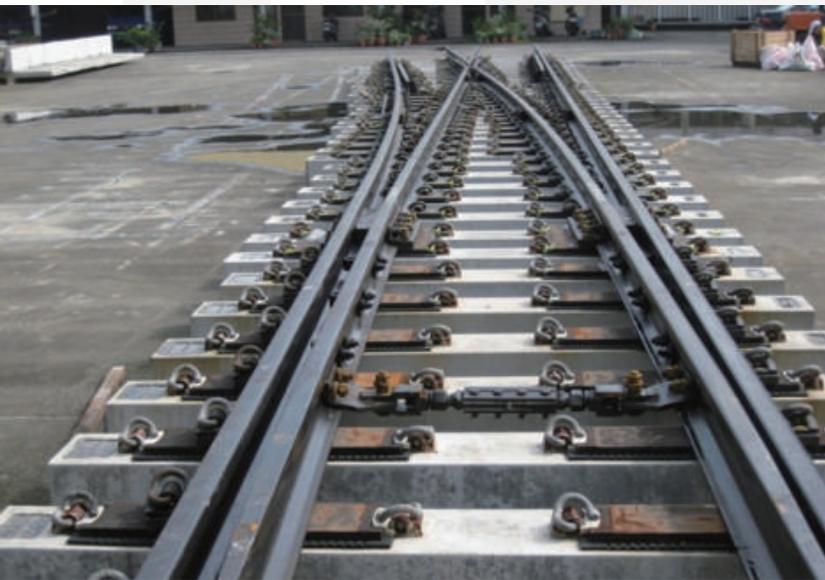
(一) 50N #10關節式PC枕道岔研發試鋪

自90年起推行軌道PC枕化，於96年研製佔總數83%之#8關節式PC枕道岔已量產，101年再研製佔總數9.3%之#10關節式PC枕道岔，並於102年在北迴線和仁站及平溪支線十分站完成試鋪，期達成全面性道岔PC枕化之目標，本研究案對軌道材料標準化有重大貢獻。

XI. Innovation and Achievement of Railroad Maintenance

A. The 50N#10 articulated PC (pre-stressed concrete) Track Sleeper Turnout - R&D and trial deployment

Since the onset of railway sleepers made of PC material was launched in 2001, the #8 articulated PC sleeper turnout accounting for 83% of the total had been put to mass production in 2007, and again in 2012 the #10 articulated PC sleeper turnout accounting for 9.3% of the total had been developed. The trial deployment had subsequently been completed at the North-link Line's Heren Station and the Pingxi Line's Shifeng Station in 2013. The goal is to reach a full-scale deployment of the PC sleeper turnouts. This research has made a significant contribution to the standardization of track materials.



1

1. #10關節式道岔關節的構造(廠內預組裝)

2

3

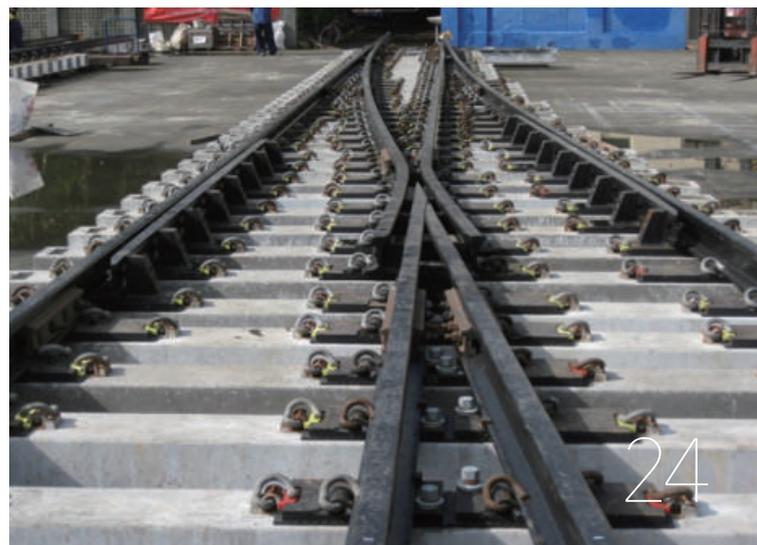
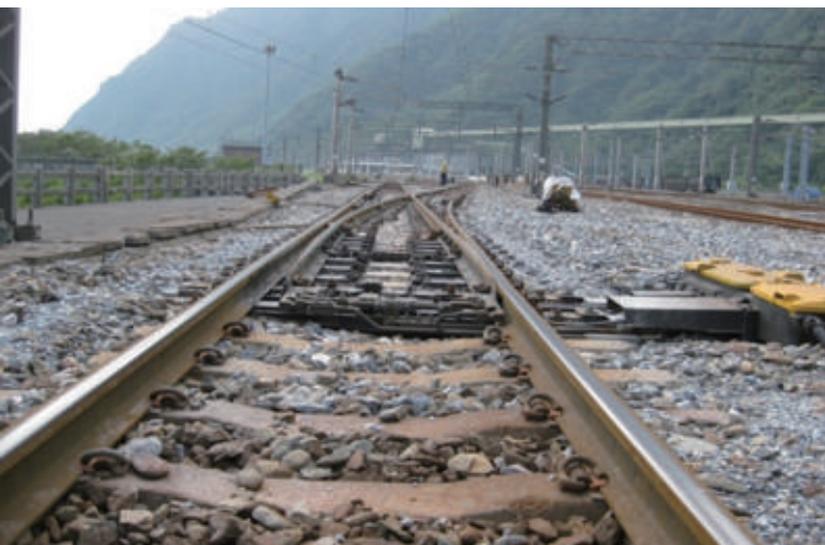
2. 102年7月23日試鋪於北迴線和仁站111號道岔

3. 國內自行生產製作#10拼裝式岔心

1. The joint construct of the #10 articulated track turnout (pre-assembled in factory)

2. On July 23, 2013, a trial deployment of the PC sleepers was given on the No. 111 turnout of the North-link Line's Heren Station.

3. The homemade #10 turnout crossings

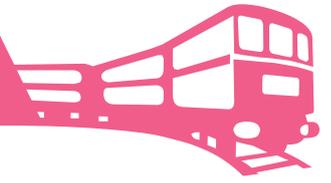


執行成果

- 1.將木枕改為PC枕，可強化及穩固軌道結構，增進行車安全，提高車速及旅客乘車舒適度。
- 2.節省道班養護道岔之時間及人力。（木枕因天候、日晒雨淋容易變形腐壞，肇致扣件鬆動，故須時時注意檢查及養護，造成人力資源浪費，改善後可降低成本。）
- 3.解決木枕料源缺乏及落實環保政策。（減少砍伐樹木，維護綠化資源，減緩溫室效應等。）
- 4.自研成功可國產量化，除節省成本外，亦可配合供料之時效期程以降低待料風險，減少道岔外購需求，每套比外購節省50萬元，總數量184套，潛在節省購料成本9,200萬元。
- 5.木枕壽年約為 8 年、PC枕壽年約為50年，所以一套PC枕約可抵用6套木枕，又一套PC枕可節省5套木枕費用，約68萬元。未來該型道岔全面PC化後，以現有鐵路行車路線使用#10道岔184套，可節省購木枕費用計1億2,500 萬元。

The Improved performance

- 1.Replacing wooden sleepers with PC sleepers can strengthen and stabilize the track structure, thus enhance the rail and train safety, and increase the train speed and passengers' comfort as well.
- 2.Saving railroad maintenance teams time and manpower to get the job done. (Wooden sleepers get deformed and rotten easily under rain and sun, thus making the fastening bolts become loosened. This would require maintenance and repair constantly, and surely cause tremendous waste of human resources. Therefore, PC sleepers help reduce the maintenance cost.)
- 3.It not only solves the problems of depleted resources of wooden sleepers, but also gets environmental protection policies implemented. (Reducing logging, protecting green resources, and alleviating greenhouse effect.)
- 4.The self-developed PC sleepers allow mass production to be implemented domestically to not only save costs but also reduce the risk in material inventory, thereby reducing the need in overseas procurement. Each local made track turnout can save as much as NT\$500,000, and the total of 184 sets can be produced, the potential procurement costs can be saved as much as NT\$92 million.
- 5.A wooden sleeper can be used up to 8 years, while a PC sleeper is durable for 50 years. As a result, one set of PC sleeper is equivalent to 6 sets of wooden sleeper; in other words, one set of PC sleeper saves 5 sets of wooden sleepers, which is calculated to about NT\$680,000. In the future when turnouts of the wooden type are all replaced with PC sleepers. Given the current 184 sets of #10 turnout in service, the total saving from not using wooden sleepers can reach NT\$125 million.



(二) 轉轍馬達枕PC枕化研發試鋪

鑑於木枕材料取得不易與壽年短的問題，必須發展出材料取得容易、使用壽年長、可克服用地限制、抽換容易及可相容多種馬達的轉轍馬達枕。本案將傳統木枕改為PC枕，並考慮用地限制，使之適用電務單位將馬達左置或右置之需求，並具備可減少抽換次數、降低現場施工困難度、縮短抽換時間、建立材料標準化等功能。

B. The PC-type Switch Motor Sleeper - R&D and Trial Deployment

In view that wood for sleepers are hard to acquire and shorter in service life, it is necessary to find an alternative material that is easier to procure, longer in service life, capable of overcoming terrains, easy for replacement, and compatible with various types of derailer motors. This project replaces traditional wooden sleepers with PC ones and, in consideration of the terrains, make them fitted to electrical engineers' requirement of left or right placement of the motors. In addition, the PC sleepers reduce the frequency of replacement, lower the difficulty of onsite construction, shorten the replacement time, and ultimately get a material standard established.

1 | 2

- 1.轉轍馬達枕PC枕
- 2.102年7月4日鋪設於彰化站131A道岔
- 1.PC-type switch motor sleepers
- 2.Deployment on the 131A turnout of the Changhua Station on July 4, 2013.



執行成果

- 1.穩定度高：與木枕比較，PC道岔枕更能提供均勻且穩定之勁度，使列車通過道岔時能更平穩，提高電動轉轍器之尖軌靠密度及輔助拉桿穩定度。
- 2.耐久性及成本低：木枕壽年約為8年、PC枕壽年約為50年，每套約可節省新臺幣14萬元。
- 3.減少維護費及降低庫存量：減少抽換施工時間、減少抽換週期、減少施工人員，除正常道岔維護外不需其他維修。嗣後再將轉轍馬達PC枕統一型式、規格，即可減少PC枕材料種類，降低維修用料屯備數量，加上材料均為國產，無外洋料交期冗長之限制。

The Improved performance

1. **High stability:** compared with wooden sleepers, the PC turnout sleepers provide better stability with higher stiffness that is evenly distributed, so that trains passing through the turnouts can be more stable in running, thus increasing the rail-by-rail density at the electric switch tips and creating a better stability on the track trolley.
2. **Durability and low cost:** The wooden sleepers can be used up to 8 years, while PC sleepers are durable for about 50 years, meaning each set of the PC sleeper can save as much as NT\$140,000.
3. **Reduced maintenance cost and lower inventory:** The PC sleepers require less replacement time, allow longer replacement cycle, and need less labor work, in that except for normal turnout maintenance, no other maintenance is needed. When the models and specifications of the switch motor PC sleepers are unified, the variety of PC sleeper materials can be reduced to lower the inventory cost. Plus, the materials are all homemade, thus free of the constraints from long overseas delivery schedules.

(三) 站內IRJ締結及纜線防護解決方案研製

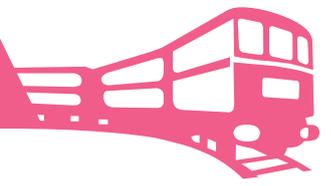
目前正線及站內側線接頭處尚使用木枕，由於墊板型式與締結空間不足，造成扣夾安裝困難或容易脫落問題(如照片1、照片2)，對鋼軌波狀運動上浮時無拘束力，造成夾膠絕緣接頭使用壽年縮短，常需更換。且夾膠絕緣接頭處電纜線一般均有4條以上(如照片3、照片4)，如因配線位置不良，砸道時易造成誤砸、致電纜線斷損，造成軌道電路異常情形。

C.The In-Station IRJ Coupling and Cable Protection - Research and Solution

So far, wooden sleepers are used for the connection points of the main lines and in-station side lines. Subject to the type of pad sheet and insufficient coupling space, the rail clips are difficult to install and easy to become loose and fall off (see picture 1 & 2). The consequence is lack of binding force on the upward floating caused by the rail rippling movement, thus shortening the service life of the plastic clip's insulated joint. Usually, there are at least 4 cables at the plastic clip's insulated joint (see picture 3 & 4), and improper cable wiring can easily get tamping mistakenly conducted, thus breaking the cables and causing abnormalities on the track electric circuits.

1	2	1.絕緣接頭處	1.Insulated joint
		2.無絕緣接頭處	2.Non-insulated joint
		3.懸接接頭處	3.Suspension joint
3	4	4.托接接頭處	4.Supported joint





研製易於締結站內IRJ之PC枕與纜線防護PC枕，除可降低枕木抽換頻率，改善無締結情形外，並可解決養路機械無法進行養護的缺點，及強化接頭處之結構。為解決絕緣接頭處締結不易及集中整理電纜線的問題，站內IRJ締結及纜線防護由原先無扣壓力的枕木與墊板，提昇為扣壓力達700kg以上的PC枕，解決夾膠絕緣接頭處締結不易的問題。

且以PC枕替換木枕，可增加枕木壽年、解決抽換困難問題，亦可減少路線上養護作業工作。採用3式5型PC枕、電纜防護枕，其體積及重量與路線上50kgN(2m)PC枕相當，可保持軌框結構一致性，方便現場抽換作業。另電纜線收攏於凹槽內，養路機械可進行軌道養護，並設計於凹槽處覆蓋黃色防護鋼板，便於施工作業時提醒操作手注意周遭電纜線，避免損壞軌道電路的號誌纜線，以解決站內夾膠絕緣接頭締結、纜線防護及木枕腐蝕抽換問題。

The PC sleepers that make in-station IRJ coupling easy and protect the cables can reduce the frequency of sleeper replacement, improve coupling and, at the same time, solve the problem of maintenance spots not accessible by maintenance equipment. Also, they reinforce the joint structure. To solve the problems of difficult coupling at the insulated joint and to concentrate the cable wiring, the in-station IRJ coupling and cable protection were restructured by replacing the non clipping pressure wooden sleepers and pad sheets with PC sleepers that have 700kg plus clipping pressure.

Also, with the PC sleepers that have longer service life than the wooden ones, the future replacement can be much easier and railroad maintenance can be significantly reduced as well. Using the 3-type model 5 PC sleepers and cable protection sleepers whose size and weight are the same as the 50kgN(2m) PC sleepers for the railroad allows a consistent rail frame structure, thus facilitating onsite replacement work. In addition, having cables concentrated in the groove makes it easier to use machinery for the railroad maintenance. The groove is covered with a yellow steel protection plate to remind workers that there are cables around so as to prevent inadvertent damage of the signal cables. This solves the problem of coupling of in-station plastic clip insulated joint, the problem of cable protection, and the problem of replacing rotten wooden sleepers, all in one shot.

Better life for you

1

2

- 1. 站內IRJ締結(採用3式5型PC枕)
- 2. 廠內電纜防護枕預組裝

- 1. In-station IRJ coupling (with 3-type model 5 PC sleepers)
- 2. In-house cable protection sleepers preassembly



執行成果

- 1.解決絕緣接頭處鋼軌與PC枕締結不易，強化接頭處之結構及集中整理電纜線的問題，減少軌道電路包含有電車線、號誌、電訊及機電（照明）等4大類設備非佔用性故障。
- 2.PC枕替換木枕，可增加枕木壽年、減少抽換週期，亦可減少路線上養護作業工作，減少施工人員，節省枕木暨養護費用。

The Improved performance

1. Solve the problem of difficult coupling of steel rail and PC sleepers at the insulated joint, and reduce non-occupied failure out of the major 4 equipment categories: tram lines, signals, communication, and electric mechanics (lighting).
2. The PC sleepers used to replace wooden ones offer a longer service life, thus reduce replacement frequency and lower railroad maintenance and, as a result, the workforce, use of sleepers and total maintenance costs are also reduced.

（四）自動軌道感應器PC枕設計及研製

為增加枕木壽年，減少抽換次數，減輕養護、施工工作量及改善部分路線無法機械砸道問題。目前線上大部分枕木均已PC枕化，只剩側線及部份路線尚使用木枕，為了達成全線PC化目標，研製將自動軌道感應器安裝木枕更換為PC枕。

D. PC Sleepers for Auto Track Sensors - Design and Development

The purpose is to increase the sleeper service life, reduce replacement frequency, alleviate maintenance workload, and solve the tamping problems on some railroad spots that prevent machinery operations. So far, most of the wooden sleepers have been replaced with the PC sleepers, except for the side lines and some parts of the railroad. To reach the goal of a full-scale deployment of PC sleepers, the wooden sleepers used for the auto track sensors have also been replaced with PC sleepers.



- 1.目前自動軌道感應器使用現況
- 2.廠內預組裝
- 3.感應器PC枕

- 1.The current status of auto track sensors in use
- 2.In-house preassembly
- 3.PC sleepers for sensors





自動軌道感應器木枕PC化後，可延長使用壽年50年，可大幅降低抽換率，且由於木枕使用爪螺栓帶帽型式安裝，更換前需由道班同仁挖除枕木下40cm的石碴，經改良完成後，電力同仁可獨力作業。又原枕木中心距離為630mm，經修正為20mm，養路作業前僅需拆除3個螺栓，即可進行砸道，解決浮枕問題。

The PC sleepers for auto track sensors allow a service life of 50 years, greatly reducing the replacement frequency. Wooden sleepers with claws-locking-bolts capping installation require digging out the gravel 40cm down for replacement, while the improved PC sleepers make the job so much easier that the work can be done by individual workers. Also, wooden sleepers have a central gap of 630mm, while PC sleepers shorten the gap to 20mm, so that only 3 bolts need to be dismantled prior to maintenance. The improvement allows tamping at any time, and solves the floating sleeper issues.

執行成果

1. 養路作業前僅需拆除3個新製雙頭鎖螺栓，暫時移除感應器，且拆裝不需工務段人員配合，電力同仁可獨力作業，減少施工維護人員。
2. 改善無法機械砸道及浮枕問題，PC枕更能提供均勻且穩定之勁度，使列車通過時能更平穩，提高旅客乘車舒適度。
3. 木枕PC化可延長使用壽年達50年，降低枕木抽換率，減輕養護作業，節省枕木暨養護費用。

The Improved Performance

1. To maintain a railroad, all needed is to dismantle 3 new developed dual-head bolts and temporarily remove the sensors, without the need of civil engineers' intervention. It allows an electric worker to get the job done with individual workforce, thus reducing manpower required.
2. It also facilitates the mechanic tamping and solves the floating sleeper issues. PC sleepers provide stable stiffness that is evenly distributed, making train running more stable and comfortable for passengers.
3. PC sleepers have a service life of 50 years, that greatly reduces replacement frequency, alleviates maintenance workload and saves on total maintenance costs.

4

102年度經營績效

2013 Operating Report





一、營運暨損益分析

I. Operations and Revenue Analyses

102年與101年損益比較表 Comparison of 2013 Income Statement vs. 2012

單位：千元

In Thousands NT

項目 Items	102年 2013	101年 2012	比較 Comparison
總收入 Total Revenues	24,001,466	22,969,569	4.49%
客運收入 Revenues on Passengers	16,875,785	16,118,743	4.70%
貨運收入 Revenues on Freight	854,719	969,320	-11.82%
其他營業收入 Other Operating Revenues	5,009,055	4,513,937	10.97%
營業外收入 Non-Operating	1,261,908	1,367,569	-7.73%
總支出 Total Expenses	28,181,233	28,145,311	0.13%
營業成本 Operating Costs	23,863,409	23,779,682	0.35%
營業費用 Operating Expenses	1,040,790	996,640	4.43%
營業外費用 Non-Operating Expenses	3,277,034	3,368,989	-2.73%
損益 Net Income	-4,179,767	-5,175,742	減虧 minus loss 19.24%

註：1.101年按國內財務會計準則公報及其解釋基礎編製之審定決算數，並配合國際財務報導準則及科目調節後之數。

2.102年起實施國際財務報導準則；102年為審定決算數。

Remarks:

1.The 2012 financial statements were based on the final auditing account in accordance with domestic Statement of Financial Accounting Standards (SFAS) and its explanation basis.

2.Starting from 2013, financial statements are based on International SFAS; the 2013 financial statements are based on the auditing final account.

原因分析

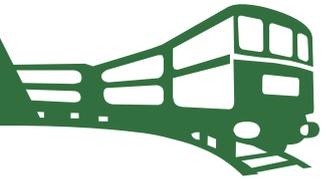
- 102年客運收入168億7,578萬元，較上年增加4.70%，創高鐵通車以來新高，主要是因來臺觀光客增加、擴大電子票證使用範圍、加強與高鐵之轉乘接駁、強化花東運輸、推動觀光客製化創新服務、普悠瑪列車加入營運、各地舉辦之活動吸引民眾前往及捷運化發揮成效所致。
- 102年貨運收入8億5,472萬元，較上年減少11.82%，主要是因運程較長之煤炭停運，運程較短之水泥及砂石運量增加，相抵後所致。

Analysis

- The 2013 income from passengers is NT\$16.87578 billion, a 4.70% growth from last year and a record high since the onset of high speed rail. The main reasons behind this are more tourists from abroad, expanding e-ticketing usage, enhancing services of transit to high speed rail, strengthening eastern Hualien transportation, offering creative services customized for tourists, Puyuma trains joining in the rank, local festivities to attract tourists, and connectivity with urban metro systems.
- The 2013 income from freight is NT\$800.5472 million, an 11.82% drop from last year. The main reason behind this is the trade-off of suspended longer distance coal freight, increasing shorter distance cement and sand freight.

98年-102年客貨運資料 Data of 2009~2013 passenger and freight transport

年 別 Year	客運人數(千人次) Number of Passengers (in thousand persons)	客運收入(千元) Income from Passengers (in thousand NT)	貨運噸數(千噸) Freight Weight (in tons)	貨運收入(千元) Freight Income (in thousand NT)
民國 98年/2009	179,369	13,458,678	9,578	886,327
民國 99年/2010	189,763	14,626,184	10,426	997,333
民國100年/2011	205,829	15,576,842	10,661	985,050
民國101年/2012	220,297	16,118,743	10,873	969,320
民國102年/2013	227,287	16,875,785	10,659	854,719



臺灣地區各運具客運量 Taiwan Passenger Volumes by Transport Vehicles

年 別 Year	總 計 Total	臺灣鐵路管理局 Taiwan Railways Administration	高速鐵路 High-Speed Rail	捷 運 Mass Rapid Transit	市區汽車客運 Highway Bus	公路汽車客運 Inland Bus	島內航空 Highway Airway
客運人數(千人次) Number of Passengers (in thousands)							
民國 98年/2009	1,756,862	179,369	32,349	505,811	800,975	237,805	553
結構比Structural Ratio(%)	100.00	10.21	1.84	28.79	45.59	13.54	0.03
民國 99年/2010	1,888,585	189,763	36,940	551,477	877,067	232,762	576
結構比Structural Ratio(%)	100.00	10.05	1.96	29.20	46.44	12.32	0.03
民國100年/2011	2,028,383	205,829	41,629	616,041	943,694	220,603	587
結構比Structural Ratio(%)	100.00	10.15	2.05	30.37	46.52	10.88	0.03
民國101年/2012	2,115,835	220,297	44,526	658,680	994,709	197,051	572
結構比Structural Ratio(%)	100.00	10.41	2.10	31.13	47.01	9.31	0.03
民國102年/2013	2,190,121	227,287	47,487	695,667	1,045,332	173,818	530
結構比Structural Ratio(%)	100.00	10.38	2.17	31.76	47.73	7.94	0.02

102年臺灣地區各運具客運總量達21.9億人次，其中本局客運人數為2.3億人次，占總量10.4%，近幾年本局占幅均達一成，且運量約為高鐵5倍。

The 2013 Taiwan passenger volumes by transport providers reached a total of 2.19 billion persons, among which the Administration accounted for 230 million persons, 10.4% of the total, and in recent years the Administration has accounted for at least 10% of the total passenger volumes per year, which are 5 times the volumes of high speed rail transportation.

二、關聯事業效益

II. Revenues from Associated Undertakings

(一) 土地開發經營事業

為提升經營績效，本局近年來陸續以促進民間參與公共建設、都市更新及設定地上權等方式，積極推動土地開發以拓展關聯事業經營績效，期能增裕營收、改善財務狀況，以達鐵路事業永續經營之目標。

本局自推動資產活化以來，截至目前為止，採促進民間參與公共建設及設定地上權開發方式辦理之土地開發著有績效，自93年12月完成臺北車站特定專用區交九用地開發案簽約起，至102年11月成功標售臺北市松山區寶清段土地止，土地開發總效益達32億元。102年相關土地開發經營績效約18億6,400萬餘元，收益明細如下表：

A. Land Development Business

To raise the performance as a whole, the Administration in recent years has been promoting civil participation in the public works, urban renovation, and superficies establishment, to actively engage in land development so as to expand the business performance of associated undertakings, in an effort to enrich revenues and improve financial positions, so that the railway business can be well sustained for good.

Since the onset of assets activation, the progress on civil participation in public works and establishment of superficies has been fruitful. From the December 2004 signing of a contract to develop the designated Area 9 land of the Taipei Station, up to the successful November 2013 sale of the land of Baochin section in the Songshan District of Taipei City, the total revenues from the land development have reached NT\$ 3.2 billion. The year 2013 land development revenues are about NT\$1.864 billion. The incomes are detailed as follows:

單位：千元
In Thousands NT

土地開發方式 Land Development Approaches	案名 Project Name	102年度收益/2013 Yearly Revenues	
		地租/Rent	權利金/Royalties
促進民間參與 公共建設 Promotion of civil participation in public works	臺北車站特定專用區交九BOT案 BOT project of developing Taipei Station's Area 9 land	48,552	-
	南港車站大樓BOT案 BOT project of Nangang Station Building	7,991	25,000
	松山車站綜合大樓暨立體停車場大樓BOT案 BOT project of Songshan Station's building complex and parking lot building	11,917	17,298
	萬華(東、西)車站大樓BOT案 BOT project of Wanhua Station Building (East, West)	8,067	-
設定地上權 Superficies Establishment	板橋車站特定區(特專二)國際觀光旅館興建營運案 Construction and operation of an international tourist hotel at Banqiao Station's designated area (Area B)	11,738	-
	彰化縣員林鎮靜修路設定地上權 Superficies setup on the Jingxiu Rd., Yuanlin Township, Changhua County	207	35,728
	臺北市松山區寶清段設定地上權 Superficies establishment on the Baochin section of the Songshan District, Taipei City	4,200	1,694,000
合計/Total			1,864,698

(二) 資產活化

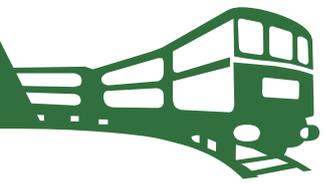
為活化本局資產並有效增裕營收，102年辦理本局PP自強號快遞、車站商場促參案及停車場、房屋、土地、倉庫、廣告空間、拍攝場地、基地臺空間出租等資產活化業務，共計增裕營收約10億4,950萬元。

B. Assets Activation

To activate the Administration's assets for better revenues, in 2013, the Administration raised civil participation in the PP Tze-Chiang express deliveries and station malls as well as rental of parking lots, buildings, lands, warehouses, advertisement spaces, film shooting venues, and mobile phone base stations. The total revenues reached NT\$ 1.495 billion.

資產活化業務內容與收益(民國102年) The Contents of Assets Activation and Revenues (2013)

項目 Items	業務內容 Business contents	收益(千元/年) Revenues (in thousand NT/year)
貨運服務 Freight Services	水泥、石灰石、砂石、PP自強號快遞 Cement, limestone, sand and gravel, PP Tze-Chiang express deliveries.	44,035
出租業務 Rental Business	停車場、房屋、土地、倉庫、廣告空間、拍攝場地、基地臺空間 Parking lots, building spaces, lands, warehouses, advertising spaces, film shooting venues, and mobile phone base station	808,538
車站商場 Station Shopping Malls	臺北車站大樓(G+2、G+1、U-1)、板橋車站大樓(U-1、G+1、G+2、G+24、G+25)、新左營站商場、臺北車站東/西區地下停車場 Station Building (G+2、G+1、U-1), Banqiao Station Building (U-1、G+1、G+2、G+24、G+25), New Zuoying Station Shopping Mall, Taipei Station East/West underground parking lots.	191,049
其他 Others	利息、什項收入 Interest and miscellaneous incomes.	5,874
合計 Total		1,049,496



資產活化業務民國98年至102年營業收支統計

Statistics of revenues and expenses from the 2009-2013 assets activation

單位：千元
In Thousands NT

年度 Year	民國98年 2009	民國99年 2010	民國100年 2011	民國101年 2012	民國102年 2013
營收 Revenues	985,449.56	1,093,066.91	1,093,328.86	1,175,303.95	1,049,495.85
支出 Expenses	627,476.25	662,548.74	646,658.43	623,089.77	365,901.84
盈餘 Profits	357,973.31	430,518.17	446,670.43	552,214.18	683,594.01

(三) 餐旅服務

餐旅服務業務主要為拓展臺鐵便當銷售、開發鐵路商品及商標授權、推動郵輪式列車、設置旅遊櫃台、招商經營各站商店及設置自動存物箱等各項服務旅客項目，102年總收入為9億2,391萬元，總支出為5億1,499萬元，盈餘為4億892萬元，較上年度盈餘3億5,241萬元，增加5,651萬元。

C. Catering Services

The catering service cover railway boxed meals, railway souvenirs and trademark right authorization, cruise-style trains, tourist information desks, station shopping malls, and auto station lockers. The 2013 total revenue is NT\$ 923.91 million, and total expense NT\$ 514.99 million, thus a profit of NT\$ 489.2 million, that is NT\$ 56.51 million more than last year's NT\$ 352.41 million.

餐旅服務總所98年至102年營業收支統計

Statistics of the revenues and expenses of 2009-2013 Catering Services

單位：千元
In Thousands NT

年度 Year	民國98年 2009	民國99年 2010	民國100年 2011	民國101年 2012	民國102年 2013
營收 Revenues	1,577,720	1,760,573	787,617	856,735	923,909
支出 Expenses	1,261,204	1,413,497	456,204	504,318	514,990
盈餘 Profits	316,516	347,076	331,413	352,417	408,919

1. 積極拓展鐵路便當績效卓著：

102年臺鐵便當銷售數量計有851萬個（每日平均銷售量約2萬3千個），較101年增加約102萬個，成長率13.62%；收入合計約5億8千萬元，較101年增加5,648萬餘元，增加比率約10.77%。

1. Excellent Performance of Railway Boxed meals Promotion:

In 2013, there were 8.51 million railway boxed meals sold (daily average of 23,000), which spells a 1.02 million more than 2012, a 13.62% growth; the total revenue is NT\$ 580 million, that is NT\$ 56.48 million more than 2012, a 10.77% growth.

2. 配合節慶推出紀念便當盒組：

102年配合本局及節慶活動，推出「臺鐵薪火相傳、12代同堂系列」第5代E200型及第6代EMU100型電力機車紀念不銹鋼便當盒及提袋，共計銷售24,600個，營收492萬餘元。

2. Special meal box combinations on festivities:

In 2013, the meal box specialty "Taiwan Railway torch passing inheritance, 12-generation together" was offered. The boxes were made of stainless steel shaped as EMU models of the 5th generation E200 and 6th generation MU100, along with a memorial handbag. There were 24,600 meal boxes sold for a total revenue of NT\$ 4.92 million.



1 2

1.E200紀念便當盒與便當提袋
2.EMU100紀念便當與便當提袋

1.E200 memorial meal boxes and accompanying handbags
2.EMU100 memorial meal boxes and accompanying handbags

3. 積極開發鐵路商品商標授權業務：

目前已獲經濟部智慧財產局核准註冊商標共計98件。102年經授權之鐵路商品共計290項，授權金收入共計556萬餘元。

3. Engagement in the railway product patent authorization business

So far, the Administration has been granted 98 patents by the Intellectual Property Office, Ministry of Economic Affairs. In 2013, there were 290 patent right authorizations on railway products, for a total revenues of NT \$5.56 million.

4. 推動鐵道旅遊辦理郵輪式列車地接業務：

辦理郵輪式列車2天1夜（或以上）地接業務，公開招標由旅行社參與推動鐵路旅遊行程。102年開行16列次，平均客座利用率約為85.54%，增加營收約420萬餘元（含車票、便當、權利金及車銷商品），行程整體滿意度92.84%。

4. Promote the shuttle services for cruise-style train tourism:

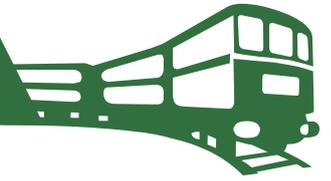
An open bidding for the two days (or more than two days) shuttle services of cruise- train was given, and selected tourist agents were granted participation in the services and railway tourism. In 2013, the cruise train was operated 16 times, with an averaged 85.54% of passenger seats utilized, for a total revenue of NT\$ 4.2 million (including tickets, meal boxes, royalties, and product sold on the train). The overall satisfaction reached 92.84%.

5. 設置旅遊服務櫃檯提供多樣化旅遊服務：

為發展旅遊觀光業務，與旅遊業者合作於臺北、板橋、嘉義、高雄、花蓮等5站6個場所設置「旅遊服務櫃檯」，提供旅客多樣化旅遊服務，102年租金收入共計760萬餘元。

5. Setup of Information Desks for A Variety of Tourist Services:

To develop railway tourism, the Administration worked with tourist agents by setting up "tourist service desk" at 6 locations at the 5 stations in Taipei, Banqiao, Jiayi, Kaohsiung, and Hualien. The variety of tourist services made a rental revenue of NT\$ 7.6 million in 2013.



6. 結合地方政府設置各種資訊服務台以增加車站服務面：

配合行政院觀光客倍增計畫，102年辦理全省各車站出租予各縣市政府設置旅遊服務中心、旅遊資訊服務站（或服務台）、公共資訊站及就業服務台等，全年租金收入共計89萬餘元。

6. Working with Local Authorities to Set Up Various Information Desks to Add More Station Services:

To go with Executive Yuan's doubling tourists project set out in 2013, the Administration has been renting train station spaces to local authorities for them to set up tourist service centers, tourist information desks, public information desks, and employment desks. The total rental revenue was NT\$ 890,000 in 2013.

7. 招商(專業廠商)經營各站商店以提升車站形象：

委託統一超商（於臺北等28站36台）、萊爾富（於竹南站）、麥當勞（於高雄站）、台灣鐵道故事館（於新烏日站）等專業廠商，以合作經營方式服務來往旅客，102年經營使用費收入共計1億7千萬餘元。

7. Promoting The Train Station Image by Soliciting Professional Business Operators to Run Station Shopping Malls:

Recruiting the convenient stores of Seven Eleven (36 locations at 28 stations), Hi-Life (at Chunan Station), McDonald (at Kaohsiung Station), Taiwan Railway Storyland (at Xinwurih Station), which worked with the Administration in joint venture to service travelers. The 2013 rental revenues totaled NT\$ 170 million plus.



- 1
- 2

- 1.新烏日站合作經營商店 1.Xinwurih Station shopping mall joint venture
- 2.竹北站商場招租商店 2.Zhubei Station shopping mall joint venture

8. 充分開發各車站商業空間以增裕營收：

利用各車站場地（包含月台），辦理招商標租商店、自動販賣機、自動櫃員機等業務，為旅客提供旅行所需服務，102年租金收入共計1億2千萬餘元。

8. Fully Developing and Utilizing Station Spaces So As to Enrich Revenues:

The venues at the stations (including platforms) are utilized through recruitment of business operators as well as setup of vending machines and ATM machines, to provide convenient services to travelers. The 2013 rental revenues totaled NT\$ 120 million plus.

9. 利用車站可用空間辦理短期出租：

提供予機關、學校或工商團體舉辦商品短期展售活動，102年計有801檔次短租進駐臺北、臺中、高雄、花蓮及宜蘭沿線各大車站，全年租金收入共計2,033萬餘元。

9. Utilizing Station Spaces through Short-Term Rental:

Available spaces are rented to institutions, schools and business groups for them to organize short-term exhibitions. In 2013, there were a total of 801 short-term exhibitions held at the major stations of Taipei, Taichung, Kaohsiung, Hualien and Yilan, for total rental revenue of NT\$ 20.33 million.

10. 設置車站自動存物箱業務：

為服務旅客及增裕營收，辦理設置自動存物箱業務計有基隆、臺北等27站，102年租金收入共計721萬餘元。

10. Setup of Auto Lockers at The Stations:

To better service travelers and enrich revenues, the Administration has set up the auto lockers business at 27 train stations including Keelung and Taipei, and the 2013 rental revenues totaled NT\$ 7.21 million.

11. 辦理車站月台飯盒叫賣業務：

為服務旅客及增裕營收，於福隆、鳳林、池上、關山等4站辦理月台飯盒叫賣業務，102年租金收入共計353萬餘元。

11. The Station Catering Business:

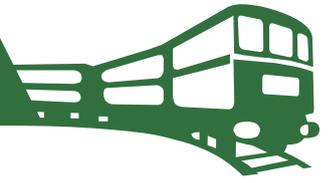
To service travelers and enrich revenues, boxed meal catering services are given at the 4 stations of Fulong, Fonglin, Chishang, and Guanshan, and the 2013 rental revenues totaled NT\$ 3.53 million.

12. 開發文化創意產業及具本局品牌價值之鐵路商品：

自行研發或委託專業廠商設計開發鐵路商品，由臺鐵夢工場、車勤部(含列車上)及各餐廳設置之販賣部自行販售，102年營業額共計3,613萬餘元。

12. Developing Cultural Innovation Business and Marketing the Administration's Branded Railway Products.

The railway products, self-developed or outsource-developed, are sold directly through dedicated counters set up by Taiwan Railways Shops, Car Duty Department (including on-train sale), and the Administration owned restaurants, and 2013 revenues totaled NT\$ 36,13 million.



三、節能減碳建設

III. Energy Efficiency and Carbon Reduction

(一) 臺鐵都會區捷運化暨區域鐵路後續建設計畫（基隆-苗栗段）

A. *Taiwan Railways' Integration with Urban MRT Systems and Regional Railway Follow-Up Projects (Keelung-Miaoli Section)*

1. 樟樹灣-南港間擴建三軌工程於102年10月20日通車啟用，並邀請總統至現場舉行啟用典禮，該路段路線容量已由332列次/日增為381列次/日，可增加約15%班次，每日可增加運能約47,000人次，每年可減少7,035公噸碳排放相當於18座大安公園碳減量效益。

1. The opening ceremony for the tri-railways at Zhangshuwan-Nangang section was given on October 20, 2013, and President was invited to hold the ceremony. The traffic capacity has since increased from 332 trips up to 381 trips per day, a 15% increase, equivalent to 47,000 more passengers transported, which spells a reduction of 7,035 metric tons of carbon emission, about the carbon reduction effect implemented with 18 Da'an Forest Parks.

2. 苗栗跨站式站房新建工程於102年8月30日竣工，並於102年10月25日正式啟用，響應綠色節能措施，並提供地方居民舒適、健康及環保乘車旅客的環境，建築主體以開放透空式設計，採輕量化搭配生態、能源的應用，以及自然的通風採光，塑造永續意向。

2. The Miaoli elevated station was completed construction on August 30, 2013, and officially opened on October 25, 2013. This building responds to green architecture, and provides local residents a comfortable, healthy and eco-friendly traveling environment. The main structure is an open-space design, transparent in light touch, coupled with ecologic and energy implementation, so that the natural sunlight comes in to shape up the perception of sustainability.

(二) 臺北機廠遷建設計畫

B. *Taipei Depot Relocation Project*

1. 富岡車輛基地第1階段（A2-1車體工場、A3電聯車整備試驗及油漆工場、A4-1柴電及電力機車工場、D3變電站、D4-1廢料堆置場、D4-3資源回收場、D5污水處理場、進場線及自然生態景觀區）於102年1月10日啟用，並邀請總統參加及揭牌儀式，將以現代化的修車設備與合理化維修流程，帶領臺鐵邁入新紀元。

1. The phase I opening of Fugon vehicle base (A2-1 car body workshop, A3 EMU overall test and painting workshop, A4-1 diesel and electric locomotive workshop, D3 converter station, D4-1 waste field, D4-3 recycle field, D5 sewage process plant, inbound lines, and natural landscape area) were open on January 10, 2013, and the President was invited to hold the ceremony. This grand opening will lead Taiwan Railways Administration to a new era, dominated by modern maintenance equipment and rationalized process.

2. 富岡車輛基地第2階段於102年10月25日完成第二階段啟用履勘作業，並奉交通部102年12月5日交路字第1020040428號函核定准予啟用。

2. Phase II of the Fugon vehicle base was completed and open for test run on October 25, 2013, and was officially started operations in accordance with the ordinance letter from MOTC, coded Giaolu zhi No. 1020040428, dated December 5, 2013.

5

事業運作狀況

State of Business Operation





一、客運及貨運業務

I. Passenger and Freight Businesses

102年運輸業務，客運方面在普悠瑪號陸續投入營運後，花東整體運能明顯提升，且為提升服務品質，除持續增設電梯設備提升無障礙設施外，亦加強提供轉乘資訊，並辦理「禮讓弱勢、先下後上、共維乘車秩序」活動，提供旅客優質的行旅環境；在貨運方面，除擴充五堵貨場裝卸能量，亦辦理貨車改造，加開大宗貨物單元列車，以促進貨運業務成長。

In 2013, the Puyuma Express joined the passenger transport business to significantly promote overall transportation capacity for the Hua-Tung Line. To further raise the service quality, elevators are built to provide barrier-free environment, along with enhanced transit information and "disabled passengers first, alighting first, orderly train riding" activities, in the hope of providing a quality travel environment. On the freight operations, the Wudu freight yard was expanded to add more loading/ unloading capacity, and freight cars were renovated, along with added bulk freight cars, to accommodate more freight capacity.

(一) 客運業務

1. 提升運能

(1) 配合新自強號（普悠瑪）陸續交車投入營運，提升花東地區運能：

新自強號（普悠瑪）於102年2月（春節）起加入臺北=花蓮間營運，102年春節期間共增開56列次，9月25日（局部改點）起每週增開至108列次，臺北=花蓮間自強號運能較改點前平日增加19%，假日增加21%。

(2) 強化暑假期間花東地區運能：

為達成旅客平安返鄉、出遊之疏運服務，並配合花東地區暑期所辦多項活動，自102年6月1日起至9月1日止，臺北=花蓮傾斜式列車增加6列次、假日增加8列次，另部分自強號、莒光號及復興號班次亦加掛車廂，臺北=花蓮間較非暑假期間平日增加座位數3,848位、假日增加5,812位；臺北=臺東增加1,021位；高雄=臺東間增加958位。

(3) 整體運能提升：

在新車陸續投入營運後，102年每日平均開行1,193列次，較去年1,189次，增加0.37%，整體運能有所提升。

A. Passenger Business

1. Promote transport capacity

(1) The newly added Tze-Chiang Limited Express, Puyuma, to increase the Hua-Tung Line's passenger capacity:

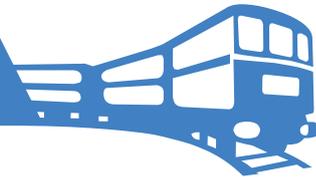
The Puyuma Express joined forces with the Taipei-Hualien transport beginning in February 2013, the Spring Festival, with 56 trips initially. And starting from September 25, the train stops were partially modified to add weekly transport up to 108 trips, increasing 19% of the transport capacity on weekdays and 21% on weekends of the Taipei-Hualien Tze-Chiang Limited Express.

(2) Enhance the summer vacation transport capacity of the Hua-Tung Line:

To help travelers with safe homecoming and easy travel, and to go with summer activities organized in the Hua-Tung areas, from June 1 to September 1 of 2013, the Taipei-Hualien tilt trains added 6 more trips on weekdays and 8 more on weekends. In addition, the Tze-Chiang Limited Express, Chu-Kuang Express, and Fu-Hsing Semi Express added more cars so that in a non-summer vacation period, the Taipei-Hualien transport is added with 3,848 more seats on weekdays and 5,812 more on weekends; the Taipei-Taitung transport is added with 1,021 more seats; and the Kaohsiung-Taitung transport is added with 958 more seats.

(3) Increase of overall transport capacity:

: After new trains joined forces with the passenger business, the 2013 average daily transport reached 1,193 trips, and compared with previous year's 1,189 trips, it's a 0.37% growth of transport capacity as a whole.



2.提升準點率

- (1) 102年旅客列車準點率為94.01%，較101年（94.80%）略為降低0.79%，將持續於「行車安全」前提下，以「旅客優先」為首要考量，力求列車準點行駛，提升運輸服務品質。
- (2) 詳細檢視列車準點情形，以「重點區域」五都(北、中、南)通勤服務區間以及「重點時段」早、晚旅客疏運尖峰(7至9時及17至19時)為運輸服務主軸，加強列車準點控管，提升服務效能。

2. Promote punctuality rate

- (1) The 2013 passenger trains' punctuality rate was 94.01%, and compared with the 94.80% rate of 2012, it is 0.79% slightly lower. The Administration will continue to uphold the principle of "traffic safety" and treat the "travelers first" as the top consideration, to assure high punctuality rate and transport quality.
- (2) Scrutinize the train punctuality rate, and take the "key locations" of the major five cities (north, midst, and south) commute regions and "key timeframes" of morning and evening rush hours (7:00-9:00 and 17:00-19:00) as the principal axis of transport services, to reinforce the train punctuality control for a better service quality.

3.發展國際觀光業務

- (1) 近年臺灣與日本往來觀光客人數屢創新高，觀光發展與日俱增，臺日鐵道正式交流為101年臺鐵局CK124蒸汽火車與日本JR北海道之「C11 171冬季濕原號」締結為姊妹列車，102年開行CK124仲夏寶島號專列3列次，計吸引近1,700人次搭乘，實際增加近100萬之收益。
- (2) 本局平溪線與日本江之電於102年4月23日簽訂合作協議，以無償兌換一日券方式，吸引兩地遊客互訪，創造出臺日兩地鐵道未來更大合作空間，經統計截至12月底止已有2,928名旅客至臺、日兩地兌換雙方一日券進行鐵道旅遊，另本案平溪線一日券於5月份開始實施後至12月底止，售出張數較去年同期增加10,621張(成長3.60%)，實質收益更達1,539萬元較去年1,477萬元成長4.20%，顯見本案已創造臺日兩地更大觀光收益及促進地域經濟發展。

3. Develop international tourist business

- (1) Recent years have been repeated record high volumes of tourists back and forth between Taiwan and Japan, a sign of booming tourism. Taiwan and Japan railways officially started business partnership in 2012, when the Taiwan Railways CK124 steam trains concluded a sister train agreement with Japanese JR Hokkaido C11 171 Fuyuno Shitsugen. In 2013, there were 3 trips of the CK124 Summer Baodao trains, attracting as many as 1,700 passengers, for an extra revenue of nearly NT\$ 1 million.
- (2) TRA Pingxi Line and Japanese Enoden signed a partnership agreement on April 23, 2013, for free exchange of one-day tickets to attract tourist from both sides, and this partnership has created bigger opportunity for future cooperation between Taiwan and Japanese railways. The statistics show that by the end of December, there already were 2,928 tourists visiting Taiwan and Japan with the free exchange of tickets for railway traveling. Also, under the same project, the Pingxi Line's one-day unlimited tickets started to sell in May, and by the end of December, there were 10,621 more tickets sold than previous year, a 3.60% growth, with a revenue of NT\$ 15.39 million, a 4.20% growth compared with previous year's NT\$ 14.77 million. Obviously, this project has created much bigger tourist revenues and promoted local economies for both Taiwan and Japan.

4.提升服務品質

- (1) 於本局外文網頁增加區域路線圖示：
為提供外籍人士或未知車站相對地理位置旅客之查詢，於102年3月8日起增加各支線轉乘圖示資訊，另於10月7日起增加臺鐵各區域各路線之圖形化功能。

4.Promote service quality

- (1) *The Administration's foreign language webpage adds a map with regional routes:*
To facilitate travelers from home and abroad to check a station's relative geographic location, starting from March 8, 2013, a map is added to show transit routes of all the railway branches. And again on October 7, the graphic functions are added to the map to show all the regional routes of Taiwan Railways.

(2) 增加臺鐵、高鐵車站間公路客運轉乘資訊：

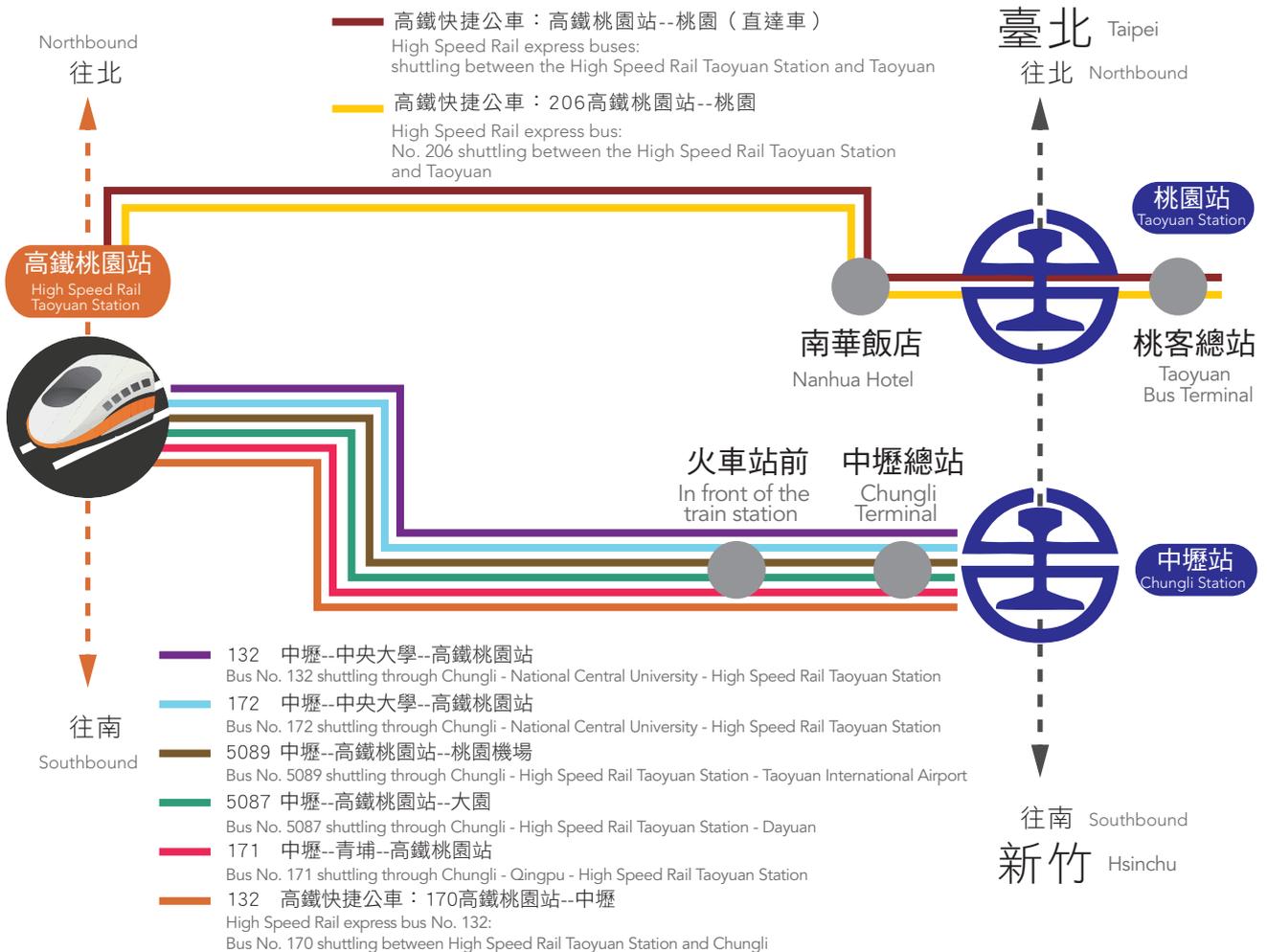
為妥善揭露兩鐵（臺鐵、高鐵）間非共構站（桃園、嘉義）公路轉乘資訊，已於102月9日25日提供公路轉乘圖示資訊。

(2) Add information of transit between Taiwan Railways and High Speed Rail:

To disclose the information of transit buses shuttling between non co-constructed Station Taiwan Railways and High Speed Rail stations (Taoyuan and Jiayi), the transit shuttle bus information has been provided since September 25, 2013.

桃園地區臺鐵、高鐵接駁公車圖

Map of bus routes shuttling between Taiwan Railways and High Speed Rail stations in the Taoyuan area.



(3) 提升車站無障礙設施功能：

逐站增設電梯設備，截至102年底已完成設置102站。

(3) Enhance the station barrier-free facilities:

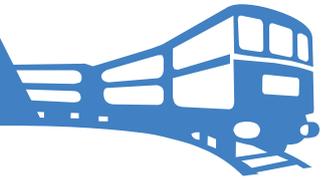
Up to 2013, there were as many as 102 stations added with elevators.

(4) 辦理禮貌乘車運動：

以「禮讓弱勢、先下後上、共維乘車秩序」為主軸，於斗六、嘉義、新營、臺南、岡山、新左營、高雄及屏東等8站及各支線試辦月臺上排隊線，透過人員引導、播音、海報及LED宣導，據以提供旅客優質的旅行環境，提升整體形象。

(4) The train riding courtesy movement:

Themed with the "disabled first, alighting first, orderly training riding", waiting lines are set up on the platforms of stations Douliou, Jiayi, Shinyin, Tainan, Gonsan, Xinzuoing, Kaohsiung, and Pingdong as well as their branch lines. The courtesy movement is conducted by staff and propagated through broadcast, posters and LED banners, in the hope of providing a quality travel environment and raising the overall railway image.



(5) 旅客整體服務諮詢系統102年執行現況如下：

- (A) 中文網頁年度點閱率：2,728萬9,805人次，開站至今共累計1億7,157萬3,553人次。
- (B) 兒童網頁年度點閱率：14萬3,261人次，開站至今共累計81萬5,708人次。
- (C) 局長信箱旅客諮詢案件計回復1萬4,830件。
- (D) 遺失物協尋資訊服務計2萬6,343件。

(5) *The 2013 implementation of the overall passenger service advisory system:*

- (A) Chinese webpage click through rate (CTR): there were 27,289,805 persons clicking through the webpage, and since its inception, the website has had a total of 171,573,553 visitors.
- (B) Children webpage CTR: there were 143,261 persons clicking through the webpage, and since its inception, the website has had a total of 815,708 visitors.
- (C) There were 14,830 replies to traveler opinions received from the Director General's mailbox.
- (D) There were 26,343 lost-and-found cases handled.

(6) 免費提供時刻表：

102年為因應9月25日列車時刻調整，分別印製冊本式及摺頁式時刻表各40萬、20萬份，分置於各車站供旅客免費索取。

(6) *Free train schedules offered:*

To deal with the overhauled train schedules starting from September 25, there were 400,000 copies of brochures and 200,000 copies of folding flyers concerning the new schedules printed and offered at various locations that travelers could fetch for free.

(二) 貨運業務

1. 擴充貨場裝卸能量：

102年4月完成五堵BA1區公共貨場約600坪，預估每日砂石卸貨量可增加3,000噸。

2. 改造貨車增加運能：

102年完成篷斗車改造石斗車200輛、平車100輛。每日平均增加礦砂石運能3,000噸、黏土600噸，合計3,600噸。

3. 北迴線瓶頸路段改善：

北迴線完成景美站增設2股待避線，增加新城-北埔間路線容量約15%，花蓮港線增設號誌站1處及花蓮港-北埔間電氣化可增加路線容量50%。

4. 加開大宗貨物單元列車：

配合東澳隧道開挖土方輸運，自102年9月6日起加開新馬-東澳、新馬-永樂單元列車輸送，每日平均增加運量2,700噸。

B. Freight Services

1. *Expand freight yard's loading/unloading capacity:*

The 600-ping public freight yard at the Wudu BA1 area was completed in April 2013, which is expected to increase 3,000 tons of sand and gravel unloading capacity daily.

2. *Remodel freight cars for larger freight capacity:*

In 2013, canopy cars were renovated and transformed to 200 bunker cars and 100 flat cars. The daily added freight capacity includes 3,000 more tons of sand and gravel and 600 more tons of clay, totaled 3,600 tons.

3. *Improve North-Link Line's bottleneck:*

Adding 2 refuge tracks at the Jingmei Station to increase 15% of freight capacity of the Shinchen-Beipu section; adding 1 signal station at the Hualien Port Line; also, the railway electrification at Hualien Port-Beipu section can increase 50% of the freight capacity.

4. *Add bulk cargo train schedules:*

To go with the Dong'ao tunnel project for earthwork transportation, starting from September 6, 2013, extra freight trains was running for the Shinma-Dong'al and Shinma-Yunle sections to increase 2,700 tons of freight capacity daily.

二、資產活化業務

II. Assets Activation

(一)車站商場OT/ROT：

依據「促進民間參與公共建設法」相關規定活化資產，規劃引進民間充沛資金及創意，使車站成為地區商業重心，提供完整行旅服務，成為匯集人文與凝聚商機之絕佳地點，配合大環境改變及法規之妥適修訂，並調整營運策略，多元開發擴大市場，以期附業收益逐年提高。截至102年底共完成臺北車站大樓(G+2、G+1、U-1)、板橋車站大樓(U-1、G+1、G+2、G+24、G+25)、新左營站商場、臺北車站東/西區地下停車場等4案，權利金總數為19,105萬元。

A. OT/ROT Train station shopping malls OT/ROT:

Based on the "Act for Promotion of Private Participation in Infrastructure Projects", the Administration owned assets were activated to attract abundant funds and creative innovation from private sectors, so as to make train stations regional commercial centers that provide comprehensive tourist services and become excellent venues for cultural and commercial gatherings. Furthermore, to go with changes of the bigger environment, acts were amended and operational strategies reoriented to diversify market development in the hope for better revenues year by year. Up to the end of 2013, there were four major projects completed: Taipei Station Building (G+2、G+1、U-1), Banqiao Station Building (U-1、G+1、G+2、G+24、G+25), Xinzuoing Station Shopping Mall, and Taipei Station East/West Underground Parking Lots. The total royalties reached NT\$191.05 million.

(二)提供青創、文創房地租賃創新方案：

為配合政府發展「青年返鄉築夢創業」暨「臺灣文化創意產業」，鼓勵青年返鄉築夢創業及優秀人才投入臺灣文創產業，進而形塑在地產業特色，臺鐵局提供經管公用不動產123戶由青年創業或文創產業創業者直接承租，以促進就業，繁榮地方經濟並提升我國文創產業質能，截至102年底共受理21件，5件已完成簽約公證。

B. Space rental for youngster and cultural entrepreneurship:

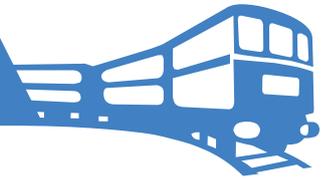
To go with the government policies of developing "Youngster homecoming entrepreneurship" and "Taiwan cultural creativity industry", that encourage youngsters to come home to start their own businesses, attract talents to engage in Taiwan cultural creativity industry, and further shape up industries with local signatures, TRA has provided 123 real estate locations for young entrepreneurs and cultural talents to directly rent, so as to simulate employment, prosper local economies, and promote the quality of our cultural creativity industry. Up to the end of 2013, there were 21 applications, 5 of which had already been signed and notarized.

(三)倉庫及文化資產轉型文創觀光據點：

為有效維管及利用本局經管文化資產(古蹟、歷史建築及老舊房舍)，與地方政府合作經營，整建為藝術創作的展示場所及藝文新地標，提供民眾休憩的好去處，102年度可供出租計有185間倉庫，其中已出租倉庫163間，出租率90.6%，租金收入共計7,057萬餘元。

C. Turning warehouses and cultural assets into tourist attractions:

To make effective maintenance, management and utilization of the Administration's cultural assets (historical sites and buildings, and old dormitories), the Administration has worked with local governments to renovate these architectures and turn them into exhibition venues and cultural landmarks, as leisure venues for the public. In 2013, there were 185 warehouses available for rent, and 163 of which had been rented, i.e. a 90.6% rent rate, for a total rental revenue of NT\$70.57 million.



(四)房地出租：

全面普查沿線各車站周邊可供出租之房地，朝整體規劃考量，在不妨礙原有使用目的原則下，以多元化經營開發利用鐵路沿線閒置空地、站房、房舍、辦公室、土地、停車場、倉庫等，截至102年底共出租房屋287件、辦公室63件、土地305件，租金收入共計3億8,101萬元。

D. Real estate rental:

A comprehensive survey of available estates in the peripheral areas around train stations was given for an integrated planning of land utilization. Without prejudice to the original purposes, the idled empty spaces, station buildings, dormitories, office spaces, lands, parking lots, and warehouses along the railways were utilized with diverse business operations. By the end of 2013, there were 287 rented houses, 63 rented offices, and 305 rented lands, for a total of NT\$ 381.01 million in revenue.

(五)站車廣告空間出租

在不妨礙站車秩序與行車安全及破壞建物結構範圍內，妥善利用空間規劃廣告標的出租，車廂方面有平面海報及車體彩繪，車站內外有平面、燈箱、櫥窗及多媒體廣告等，102年度租金收入共計5,422萬元。

E. Train station advertising space for rent:

Without prejudice to the normal operations and traffic safety and without damaging architectural structures, station spaces are well utilized through rental for advertisement. The cars join the rank with interior posters and car body color paintings. In the station are advertisements by posters, lamp boxes, showcases, and multimedia. The 2013 total rental revenues reached NT\$ 54.22 million.

(六)拍攝場地設備出租

配合政策推展文化產業，提升本局形象，同時為活化本局相關資產之運用，出租本局場地及設備，作為戲劇、電影、紀錄片、廣告等拍攝用途，102年共計辦理59件，租金收入約334萬元。

F. Film shooting venues and railway vintage objects for rent:

To go with the promotion of cultural industries and the Administration's image, as well as activate the Administration's assets, the railway venues and vintage objects are rented for shooting operas, movies, documentaries, and advertisements. In 2013, there were 59 such rentals and the total revenue reached NT\$ 3.34 million.

(七)基地臺空間出租

為方便行旅、改善通信品質並配合政府電信自由化政策，在不影響行車安全及行車通訊品質原則下，積極辦理鐵路沿線基地臺增設，開放本局車站、房地、土地供電信業者架設行動電話基地臺，102年租金收入約1,205萬元。

G. Spaces rented for telecommunication base stations:

To facilitate traveling, improve telecommunication quality and go with the government's telecommunication liberalization policies, without compromising the railway traffic safety and telecommunication quality, the Administration has been actively opening train stations, estates and lands to telecommunication operators to set up their mobile phone base stations. The 2013 rental revenues reached about NT\$ 12.05 million.

三、餐旅業務

III. Catering Business

餐旅服務業務主要為拓展臺鐵便當銷售、開發鐵路商品及商標授權、推動郵輪式列車、設置旅遊櫃台、招商經營各站商店及設置自動存物箱等各項服務旅客項目。

The catering business is mainly to develop the railway boxed meal, railway souvenirs and trademark authorizations, cruise trains, travelers' information desks, as well as recruit business operators to run the station shops and set up auto lockers at train stations.

(一) 拓展便當市場佔有率：

於車站增設便當販賣點，同時兼具便當轉運站功能，102年共增設臺北站四號店、基隆及苗栗車站3個車站販賣台，以服務更多旅客。

A. Expand the market share of boxed meals:

Adding boxed meal sales locations at the stations, which also provide boxed meal transferring functions. Added in 2013 were the No. 4 store in Taipei Station as well as 3 vending desks in the Keelung and Miaoli stations, bringing more convenient food services to travelers.

(二) 推動餐務室衛生認證制度：

各製供單位持續改善餐務硬體設施（如油炸機），並推動衛生自主管理認證，五個製供單位已有四個單位（台北·高雄·七堵·花蓮）通過相關認證，臺中餐廳預計將於103年底前完成認證事宜。

B. Set forth hygiene certification for the railway kitchens:

The food supplying units continue to improve hardware facilities, such as frying machines, and handle their own hygiene certification. 4 Out of the 5 kitchens (Taipei, Kaohsiung, Qidu, Hualien) have passed the certification, and the Taichung kitchen is expected to finish the certification by the end of 2014.

(三) 建置「臺鐵夢工場」實體店面：

臺鐵夢工場102年營業額約2,006萬餘元，佔各通路總營業額55.72%，可見臺鐵夢工場實體店面具經濟效益，並預計於103年規劃完成臺鐵夢工場松山店之建置，以滿足各地愛好鐵路商品者之需求。

C. Build physical stores of the "Taiwan Railways Shops":

The 2013 revenue of "Taiwan Railways Shops" was about NT\$ 20.06 million, a 55.72 % share of the total railway sales channels. These numbers have proved that the physical stores of "Taiwan Railways Shops" bring in substantial economic benefits. The Songshang store is expected to finish establishment by the end of 2014, and will then be ready to service consumers fond of railways products.

(四) 鐵路商品創新開發及強化品牌形象：

1. 持續開發鐵路商品，朝向「異業結盟」及「海外合作」模式，開拓不同領域的鐵路商品；配合本局活動並結合當地資源推出特色商品。
2. 推廣「臺鐵夢工場」品牌，透過文宣及包裝，加入品牌標誌及QR code，強化民眾對臺鐵夢工場的品牌印象，進而建立忠誠度。

D. Innovate railway products and enhance brand images:

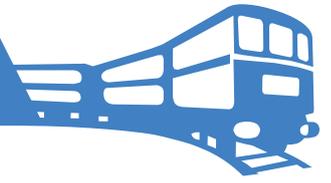
1. Continue to develop railway souvenirs with the business patterns of "cross-industry alliance" and "over seas cooperation", so that railway products can be developed in various fields. Also, to match up with the Administration's activities and integrate with local resources, product specialties are introduced to the market.
2. Promote the brand of "Taiwan Railways Shops" through publicity and packaging infused with branding logos and QR codes so as to strengthen public impression on the Taiwan Railways Shops brand, and establish customer loyalty.

(五) 積極開發鐵路商品商標授權，創造鐵路附加價值：

為維護本局形象（商譽）、提升商品多樣化與附加價值，並保存鐵路文化，持續開發商標授權業務。

E. Actively develop railway trademark authorization to create railway added values:

To maintain the Administration's image (reputation), enhance product versatility and added values, and preserve the railway cultures, the Administration continues to develop the trademark authorization business.



(六)發展旅遊觀光業務：

為拓展旅遊觀光產業，規劃2日以上之鐵路旅遊業務，行程安排停靠各站文創及觀光景點，藉由多樣化行程，提升鐵路旅遊之廣度，以不同角度體驗臺灣在地特色之美。

F. Develop tourism business:

To develop the railway tourism, at least two-day tourist schedule is organized, with itinerary including train stops at cultural and tourist attractions, among other rich activities, so that the railway tourism can stretch wider and deeper in tourist experience that leads to various perspectives for enjoyment of local beauty and characteristics.

(七)活化資產並提升利用績效：

1. 配合本局各新建、改建車站工程，積極爭取設置商業空間辦理招商，並針對新建、改建車站全面盤點，設置合適的商店，以活化並有效利用各車站之商業空間。
2. 充分利用各站閒置或畸零空間以擴充經營面積，提供短期出租並提高車站場地使用率。

G. Activate assets for better utilization and performance:

1. To go with the Administration's new construction projects and station renovations, available spaces are surveyed and developed into business spaces for shops and commercial operations, so that the station spaces can be effectively utilized.
2. Fully utilize idled and deformed spaces so as to expand the total commercial area, which are used for short-term rental to raise the utilization of the station spaces.

(八)持續提升車勤服務特色及品質：

1. 外聘服務認證講師，以講授或實作服務及禮儀方式，加強稽核及落實平時考核，以保證訓練效果，提升服務品質。
2. 新車新服務，善用普悠瑪列車上自動販賣機，銷售各類飲料、提供臺鐵夢工場商品型錄、增加車銷商品的多樣化。

H. Continue to improve the in-car service characteristics and quality:

1. External certified lectures are invited to provide service training and practices including service methods and manners. Also, routine audit and evaluation on the services are reinforced to assure the training results and improve service quality.
2. To add new services to new trains, vending machines are offered on the Puyuma Express for sales of various drinks, and the brochures of "Taiwan Railways Shops" products are also provided to display the versatile on-train products for easy shopping.

四、行政管理及人員訓練

IV. Administration and Personnel Training

(一)持續推動經營績效責任制

1. 建置營運績效帳，以評核財務改善成果：

為合理考評經營者經營責任，依交通部指示，將虧損屬性區分為可歸責與不可歸責，可歸責虧損含常態性虧損（例如老人及身心障礙半價優待、服務性路線與小站虧損等）；不可歸責虧損包括「舊制退撫金」、「債務利息」等不可歸責現任經營者，以考核經營者年度經營責任，並責成本局執行多元化開源節流措施，建置營運績效帳，以評核財務改善成果。

A. Continue running the performance evaluation system

1. Establish operational performance accounting to evaluate financial improvement results:

To reasonably evaluate operational performance, based on the instructions from the MOTC, operational losses are categorized into attributable and non-attributable ones, where the former includes normal losses (e.g. ticket discount for the elderly and disabled, and losses from service-oriented routes and small stations) and the latter include "old-system pensions" and "interests on debts". The MOTC also requires the Administration develop diversified revenue resources and cut expenditures, along with establishment of the operational performance accounts to evaluate improvement on financial status.

2. 努力成果：

102年客運量與營收雙雙再創高鐵通車以來新高，客運收入168億7,578萬元，每日平均4,624萬元，較上年度成長4.98%；客運人數2億2,729萬人次，每日平均62萬人次，較上年度成長3.46%。

2. Results

The 2013 passenger volumes and revenues were both record high since the running of High Speed Rail. The passenger revenues totaled NT\$ 16,875,780,000, which translates to a daily average of NT\$ 46,240,000, and a 4.98% growth from the previous year; the number of passengers carried is 227,290,000 persons, which spells a daily average of 620,000 persons, and a 3.46% growth from the previous year.

(二)會計與統計業務

1. 導入國際財務報導準則及國際會計準則：

- (1) 本局配合行政院主計總處自102年起依IFRSs基礎產製財務報表。
- (2) 本局102年虧損41.80億元，較預算數63.73億元減虧21.93億元，主要係於轉換日一次認列全部退休金精算損益與過渡性負債，每年退休金費用大幅減少，另適用IFRSs後維修資本化，減少維修費用所致。

B. Accounting and statistics operation

Introduce international standards of accounting statements and practices:

- (1) Comply with the IFRSs based financial statements regulations adopted by Directorate-General of Budget, Accounting and Statistics, Executive Yuan.
- (2) The Administration had a net loss of NT\$4.18 billion in 2013, mainly attributable to the one-time recognition of actuarial pension balances and transient liabilities on the conversion day. However, this implementation has substantially reduced future pension expenses; also, the practices of IFRSs allow maintenance to be capitalized, thus reducing future maintenance expenses on the account.

2. 配合最新市場情勢，辦理民意調查，落實「以客為尊」之經營理念：

辦理102年「臺鐵旅客意向調查」，瞭解旅客對本局各項服務措施之看法、滿意程度及應改進事項、提供旅運服務安全感受及探詢不安全原因，以及整體滿意度評分等，俾供檢視服務成效、研擬策略、新車採購及風險管理參酌，有效提升整體服務品質，增強市場競爭力。

To attach to the latest market trend, opinion polls are given to fulfill the business principle of "customers come first":

The 2013 "Taiwan Railways Passengers Survey" was given to explore passengers' views and satisfaction on the services as well as things to be improved. The purpose was to raise customers' satisfaction about railway transport safety, find out factors that could have caused insecure feelings, and the overall satisfaction. Results from the survey were used to examine our service performance, and subsequently set up strategies, procure new trains, and take risk management, so as to effectively promote the overall service quality and strengthen

(三)採購業務

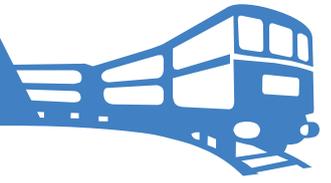
1. 工程採購統計：

102年辦理預算逾公告金額十分之一以上工程採購案件計358件，決標件數計315件，決標案件合計預算金額為新臺幣29億1,678萬元，決標金額計新臺幣21億8,090萬元，為預算金額之74.77%，結餘新臺幣7億3,588萬元，決標率87.99%。

C. Procurement operations

1. Engineering Procurement Statistics:

In 2013, there were 358 engineering procurement projects with budgets over 10% of promulgated amounts, and 315 biddings out of which were concluded; the total concluded budget was NT\$ 2,916,780,000, and the concluded biddings reached NT\$ 2,180,900,000 which was 74.77% of the total concluded budgets, with a remaining budget of NT\$ 735,880,000, making a 87.99% conclusion rate.



2. 勞務採購統計：

102年辦理預算逾公告金額十分之一以上勞務採購案件計245件，決標件數計222件，決標案件合計預算金額為新臺幣12億5,105萬元，決標金額計新臺幣10億1,148萬元，為預算金額之80.85%，結餘新臺幣2億3,957萬元，決標率90.61%。

2. *Service procurement statistic:*

In 2013, there were 245 service procurement projects with budgets over 10% of the promulgated amounts, and 222 biddings out of which were concluded; the total concluded budget was NT\$1,251,050,000, and the concluded biddings reached NT\$ 1,011,480,000 which was 80.85% of the total concluded budgets, with a remaining budget of NT\$ 239,570,000, making a 90.61% conclusion rate.

3. 財物採購統計：

102年辦理財物採購案件共計286件，決標件數計234件，決標案件合計預算金額新臺幣43億1,277萬元，決標金額計新臺幣37億3,704萬元，為預算金額之86.65%，結餘金額新臺幣5億7,573萬元，決標率為81.82%。

3. *Tangible Asset procurement statistics:*

In 2013, there were 286 assets procurement projects, and 234 biddings out of which were concluded; the total concluded budget was NT\$ 4,312,770,000, and the concluded biddings reached NT\$ 3,737,040,000 which was 86.65% of the total concluded budgets, with a remaining budget of NT\$ 575,730,000, making a 81.82% conclusion rate.



(四)材料管理業務

1. 完成修訂本局「材料管理須知」：

本局材料管理須知自95年第4次修正公布實施至今已滿7年，為因應政府法令修改、國際會計準則(IFRS)導入、後勤支援管理系統(MMIS)建置及本局組織名稱變更等諸多異動，並配合現行作業方式，邀集各相關單位完成本局材料管理須知第5次修訂工作。

D. Material management

1. Complete the amendment of "Materials Management Guidelines":

It had been 7 years since the 2006 implementation of the 4th amendment of the Administration's materials management guidelines, until the occurrences of many changes including government regulations amendment, introduction of the international accounting standards IFRS, establishment of logistics management system MMIS, and the change of the Administrations' official name. In response to these changes, the Administration organized a conference meeting with all relevant units to complete the 5th amendment of the Administration's materials management guidelines.

2. 修訂材料管理聯合稽核計畫：

為落實庫存材料、維修及工程拆收材料、報廢財產之管理，避免弊端發生，完成102年第1-2季中區及北區共20個存料單位之材料管理聯合稽核作業。另為強化分層管理理念，由主管處加強督導稽核功能，將原「本局材料管理聯合稽核計畫」修訂為「本局材料管理稽核作業要點」，由各主管處持續辦理材料三段式滾動稽核管理並納入局查核小組，以不定期不預警方式進行駐點式深入查核，藉以提升查核效能。

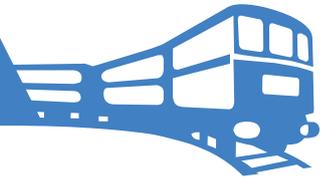
2. Amend the materials management joint auditing plan:

To implement the management of inventory materials, maintenance materials, materials from demolition, and abandoned properties, and to prevent any disputes, the 2013 Q1-Q2 joint auditing on materials management at 20 warehousing units of the central and northern areas was successfully conducted. To enhance hierarchical management, subordinate units are authorized to reinforce their own auditing practices, and accordingly the " TRA Materials Management Joint Auditing Plan" was amended as " TRA Materials Management Auditing Operation Directions ", which permissively requires individual authorities process a 3-stage rolling-style auditing management, and their performances are evaluated by a top level auditing team, which conducts random auditing without warning by stationing at the inspected units, so as to boost the auditing effectiveness.

■ 下圖為材料管理聯合稽核-聘請外部專家學者指導（彰化機務段）

The picture below shows a materials management joint auditing - external experts are hired to guide the auditing (Changhua Depot)





3. 加強呆廢料標售處理：

102年本局廢料標售收入金額計1億3,250萬元。

3. *Enhance disposal of unused and scrapped materials through sales by tender:*

The 2013 revenues from sales of scrapped materials totaled NT\$ 132,500,000.

4. 辦理員工在職訓練：

於員訓中心辦理管料人員材料管理訓練及採購基礎專業訓練課程，以強化同仁專業知識；另於北、中、南、東四區辦理採購作業研討會，宣導採購法令及作業規定，以增進經辦採購同仁對政府採購法及相關規定之認知。

4. *On-job training:*

Material management training and basic procurement training were given at the personnel training center, to reinforce staff's professional knowledge. In addition, procurement seminars were also given in the North, Midst, South and East regions to promulgate the procurement laws and regulations, so that the procurement staff can have better understanding of the Government Procurement Law and its relevant regulations.

5. 辦理北區供應廠遷廠作業：

配合臺北機廠搬遷富岡基地，於102年10月份辦理北區供應廠遷廠作業，新廠區分為C1棟(自動化倉儲設備及傳統儲位)、C2棟(待驗庫)及C3棟(油品庫)；其中自動化倉儲設備有3台高架吊車，每台吊車2個料架，每個料架15層，每層29個料位，共計有2,610個儲位，荷物規格(1100W*1100L*1144Hmm*1040kg/板)、運行速度可達60~300M/Min、升降30~80M/Min、存取15~40M/Min。結合高度自動化輸送、儲存及資訊管理，以期達到省時、省力、省空間、高利用率的倉儲目標。

5. *Relocate the northern supply factory:*

For the relocation of Taipei Depot to Fugon base, in October 2013, the northern supply factory was relocated, and the new factory has C1 building (automatic warehousing and traditional storage), C2 building (warehouse for goods to be inspected) and C3 building (fuel items); the automatic warehousing has 3 cantilevers, each of which has 2 material shelves, and each of the shelves has 15 layers, and each of the layer has 29 material holders, totaled 2,610 material storages. The payload specification is 1100W*1100L*1144Hmm*1040kg/pallet, operation speed up to 60~300M/Min, up/down speed at 30~80M/Min, and access speed at 15~40M/Min. The high-speed automatic transmission, storage and information management are expected to provide warehousing that saves time, labor and space, with high utilization rate.

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1.2北區供應廠自動化倉儲設備 The northern supply factor's automatic warehousing



(五)人事業務

1. 員工在職訓練：

- (1) 102年6月18日及20日局本部員工在職訓練，由局長范植谷專題演講，講授「本局營運工作重點及未來展望」。
- (2) 102年6月18日及20日局本部員工在職訓練，邀請臺北大學公共行政暨政策系助理教授詹靜芬專題演講，講授「行政中立與公務倫理」。
- (3) 102年6月19日及21日局本部員工在職訓練，邀請東華大學副教授徐揮彥專題演講，講授「認識二項國際人權公約」。

E. Personnel Operation

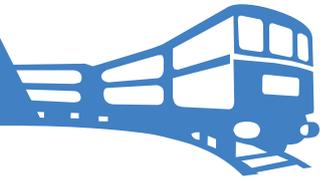
1. On-job training:

- (1) For the staff on-job training held on June 18 and 20 of 2013, the Director General, Mr. Fan Zhigu was invited to give speeches on the topic of "The TRA 's Operation Points and Future Perspectives".
- (2) For the staff on-job training held on June 18 and 20 of 2013, the assistant professor, Zhanjing Fen, of the Department of Public Administration and Policy, National Taipei University, was invited to give speeches on "Administrative neutrality and Public Servant Ethics".
- (3) For the staff on-job training held on June 19 and 20 of 2013, the associate professor, Shiu Huiyan, of National Dong Hwa University, was invited to give speeches on "Get to Know Two International Human Rights Conventions".

- | | | |
|---|---|---------------------|
| 1 | 2 | 1.局長專題演講 |
| | 3 | 2.行政中立與公務倫理專題演講上課情形 |
| | | 3.認識二項國際人權公約上課情形 |

- 1.The Director General's speech
- 2.The speech of "Administrative neutrality and Public Servant Ethics"
- 3.The speech of "Get to Know Two International Human Rights Conventions"





2. 法治教育

- (1) 102年3月21日局本部邀請勞工委員會專門委員黃荷婷專題演講，講授「個人資料保護法應注意事項」。
- (2) 102年12月17日局本部邀請福建高等法院金門分院檢察署檢察長邢泰釗專題演講，講授「公務員防身術－圖利罪解析」。

2. Legal education

- (1) On March 21, 2013, Labor Commission's senior executive office, Huang Heting, was invited to give a speech on "Matters of Personal Data Protection Law".
- (2) On December, 2013, the Attorney General of the Prosecutor's Office of Fujian High Court Kimen Branch, Xing Tai-chiu, was invited to give a speech on "Public Servant Self Defense - Crime of Profiteering Explained".

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1.個人資料保護法應注意事項上課情形

1. The speech on "Personal Information Protection Act "

2.公務員防身術－圖利罪解析上課情形

2. The speech on "Public Servant Self Defense - Crime of Profiteering Explained"



3. 未婚聯誼活動：

為配合政府鼓勵婚育政策，擴大辦理未婚聯誼活動，活動主題為「臺灣心，鐵路情，相伴終身行」，102年6月22日於福隆地區舉行，參加人員有交通部、中華郵政股份有限公司、臺灣電力股份有限公司、臺灣自來水公司、新竹市政府、臺北市政府、新北市地方法院檢察署、國防部軍備局、經濟部標準檢驗局、行政院原子能委員會、財政部臺北國稅局、財政部賦稅署、桃園地方法院、臺大醫院、國史館、花蓮縣政府、桃園國際機場公司、臺北榮民總醫院及本局各單位，計有男性28人、女性25人，合計53人參加，其中4組配對成功，績效良好。在救國團專業團康老師活潑帶領下，透過場地安排及團康活動，拉近彼此距離，並在愛情便利貼活動後，圓滿畫下完美句點。

3. Singles matchmaking activity:

To go with the government policies of encouraging marriage and having babies, an extended singles matchmaking activity themed with "Taiwan's Hearts, Railway's Affairs, Life Time Companions" was held on June 22, 2013 in the Fulong area. There were 28 males and 25 females, totaled 53 participants from the Ministry of Transportation and Telecommunications, Chunghwa Post Company, Taiwan Power Company, Taiwan Water Cooperation, Hsinchu City Government, Taipei City Government, New Taipei City District Prosecutor's Office, Ministry of National Defense Armaments Bureau, Ministry of Economic Affairs Bureau of Standards, Metrology and Inspection, Executive Yuan Atomic Energy Council, Ministry of Finance National Taxation Bureau of Taipei, Ministry of Finance Taxation Administration, Taoyuan District Court, National Taiwan University Hospital, Academia Historica, Hualien County Government, Taoyuan International Airport Corporation, Taipei Veterans General Hospital, and Taiwan Railways Administration. Four pairs were matched up, a quite good result. Led by the vivid cheerleaders from China Youth Corps, the activities were bustling in a well arranged venue, and the participants were brought closer together. The entire program came to a perfect close in the game of lovers sticky notes.



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1. 未婚聯誼活動愛情便利貼遊戲。
2. 參加未婚聯誼活動人員合影留念。

1. Singles matchmaking activities and the game of lovers sticky notes.
2. Photos of the participants in the singles matchmaking activities

4. 體康活動

(1) 局長盃桌球錦標賽

102年8月13、14日於宜蘭縣體育場，舉辦102年局長盃桌球錦標賽，參與人員計246人，共分男子團體組14組及女子團體組11組，經由一系列競爭激烈之比賽，男子團體組冠軍為高雄機廠文康小組，女子團體組冠軍為局本部文康小組。

4. Exercises and recreational activities

(1) An Director General's cup of table tennis championship was held

August 13 and 14 of 2013 at the Yilan Stadium. There were a total of 246 players in 14 male groups and 11 female groups. After a series of strong competitions, the champion of male groups was the Kaohsiung Depot recreational team and the female group champion was the HQ's recreational team.

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1. 兼代局長與謝理事長開球
2. 局內同仁合影

1. The acting director general and chairman Hsieh jointly held the kick-off ceremony.
2. A Photo of the HQ colleagues



(2) 地區文康活動

為促進同仁健康交誼，激勵工作士氣，維護員工身心健康，各地區文康小組舉辦多元化休閒活動。

(2) Regional cultural and recreational activities

For better physical and mental health of the staff, and getting them together to inspire the morale, a variety of recreational activities are given by regional recreational teams.

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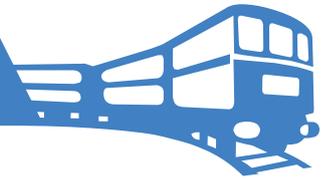
1.&2. 102年5月8日彰化地區文康小組— [合歡山東峰]健行

1. & 2. The May 8, 2013 activity organized by the Changhua recreational team - Heshuan Mountain East Peak Trail Hiking.

3. 102年10月18日高雄機廠文康小組— [拔河比賽]

3. The October 18, 2013 activity organized by the Kaohsiung recreational team - Tug of War Game





(六)專業人力培訓

1. 員工訓練中心102年共計開辦94班次，訓練4,554人次，47,629.5人日，茲詳細分述如次：

(1) 在職員工核心技術訓練

共計開辦25班，訓練950人次，28,321人日。班別如次：

運輸班、司機員班、運轉班、車輛檢查班、工程維修車司機及指揮員班、路線實務班、土木建築實務班、花東線鐵路電氣化幹部班、號誌技術基礎班、號誌風險管理班、電訊技術基礎班等。

(2) 管理知識訓練

共計開辦61班，訓練2,946人次，11,697.5人日。班別如次：

第一線服務人員講習班、站車英語會話種子師資班、採購專業人員基礎及進階訓練班、材料管理班、公共工程品質管理班、風險管理班、急救人員安全衛生教育訓練班、勞工安全衛生在職教育訓練、基層員工級升員級薪點訓練班、國有財產管理及活化利用研習班、出租及促參案件履約管理班、站車日語會話班、中高階主管法令與實務專班、高階主管共識營、簡報製作與表達訓練班、性別主流化研習班、廉政品管圈訓練班、品管圈活動基礎訓練班、品管圈活動評審人員班、政風人員學習成長共識營等。

(3) 職前訓練

101年鐵路特考新進人員（高員級、員級、佐級）專業研習班、102年鐵路特考新進人員（高員級、佐級）專業研習班，共計開辦8班，訓練658人次，7,611人日。

F. Professional Manpower Training

1. In 2013, the Employees' Training Center had 94 training classes, with each class having an average of 4,554 trainees, and each day having a total of 47,629.5 trainees in average, detailed as follows:

(1) There were 25 classes for core technique training, with each class having an average of 950 trainees, and each day having a total of 28,321 trainees in average.

The classes were:

Transport class, driver class, operation class, vehicle inspection class, maintenance car driver and conductor class, railway route class, civil engineering class, Hua-Tung Line railway electrification class, basic signal technique class, signal risk management class, and basic telecommunication class.

(2) Management knowledge training

There were 61 classes, with each class having an average of 2,946 trainees, and each day having a total of 11,697.5 trainees in average.

The classes were:

Frontline service staff seminar, train station English conversation seeded teacher training class, basic and advanced procurement personnel training class, material management class, public works quality control class, risk management class, emergency personnel safety and hygiene training class, labor safety and hygiene on-job training class, employee promotion and compensation training class, public property management and activation training seminar, property rental and private participation management class, train station Japanese conversation class, middle-senior executives legal affairs with practices class, senior executive consensus workshop, presentation preparation and self expression training class, gender mainstreaming seminar, anti-corruption quality control training class, basic quality control activity training class, quality control activity reviewers training class, ethics audit personnel learning and growth workshop.

(3) Pre-employment training

For the 2012 and 2013 railway qualification examination newly recruited personnel (senior level, middle level and preliminary level) professional seminars, there were 8 classes, each of which had an averaged 658 trainees, with each day having a total of 7,611 trainees in average.

2. 建立制度化管理、加強勞安教育，提升工安文化，以確保員工工作安全

- (1) 落實管理制度執行，持續推動臺灣職業安全衛生管理系統（CNS15506）運作，督促各單位力行自主管理。102年臺北工務段、臺中工務段、嘉義工務段、高雄工務段、宜蘭工務段、花蓮工務段、臺東工務段以及工務養護總隊等單位業先後通過台灣職業安全衛生管理系統（CNS15506）追蹤檢查驗證，有效落實自主管理作業。
- (2) 辦理教育訓練，提升員工安全意識，確保工作安全
 - A.延聘學者專家分區辦理安全文化與身心健康宣導講座，計3場次180人員參訓。
 - B.辦理風險管理、作業主管、新進人員及急救人員等教育訓練，共計20班1,084人參訓。
- (3) 完成修訂本局各項採購交付承攬安全衛生管理要點及安全衛生工作守則，先後於102年8月8日及10月21日公布實施，明確規範承攬商及員工應遵守事項，以提升作業安全。

2. Establish systematic management, reinforce labor safety education, and promote labor safety culture, to assure personnel's work safety.

- (1)Execute management systems, continue to promote the Taiwan Occupational Safety and Health Management System (CNS15506), and supervise all units on self-management. In 2013, the units engaged in the program included Taipei Construction Branch, Taichung Construction Branch, Jiayi Construction Branch, Kaohsiung Construction Branch, Yilan Construction Branch, Hualien Construction Branch, Taitung Construction Branch, and Construction Maintenance Corps. These units passed the tests of Taiwan Occupational Safety and Health Management System and were certified, therefore will be able to effectively implement their self-management.
- (2)Provide training to enhance staff's safety awareness and assure work safety.
 - a. Experts were invited to lecture on safety culture and physical/mental health concepts, in 3 sessions with a total of 180 participants.
 - b. Provide training on risk management for operational supervisors, newly recruited personnel and emergency personnel, in 20 classes with a total of 1,084 participants.
- (3)For procurement deliveries by contractors, the Administration's safety and health guidelines and code of practice were amended and enacted on August 8 and October 21 of 2013, respectively, to stipulate the codes to be complied with by contractors and employees, so as to promote operational safety.

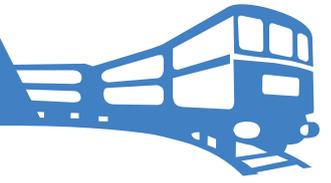
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1&2.急救人員訓練（員訓中心）

1&2.Emergency personnel training (Staff Training Center)





五、資產管理與開發

為因應環境變遷，積極運用交通建設與資產開發結合之利基，以發揮最大公共建設效益，本局透過資產開發及關聯事業經營等機制，依循促參法、都市更新條例及都市計畫公共設施用地多目標使用辦法等法令，配合政府鐵路建設計畫、行政院加速推動都市更新方案及地方政府都市發展計畫，辦理各項開發案。

除已簽約之案件外，102年持續推動案件尚有促進民間參與公共建設案3件、政府規劃都市更新案11件、配合民間自提都市更新案13件及設定地上權案6件；且為利土地資產活化及管理，針對相關資產進行開發前置作業規劃及評估者有12件。主要推動案件如下圖所示：

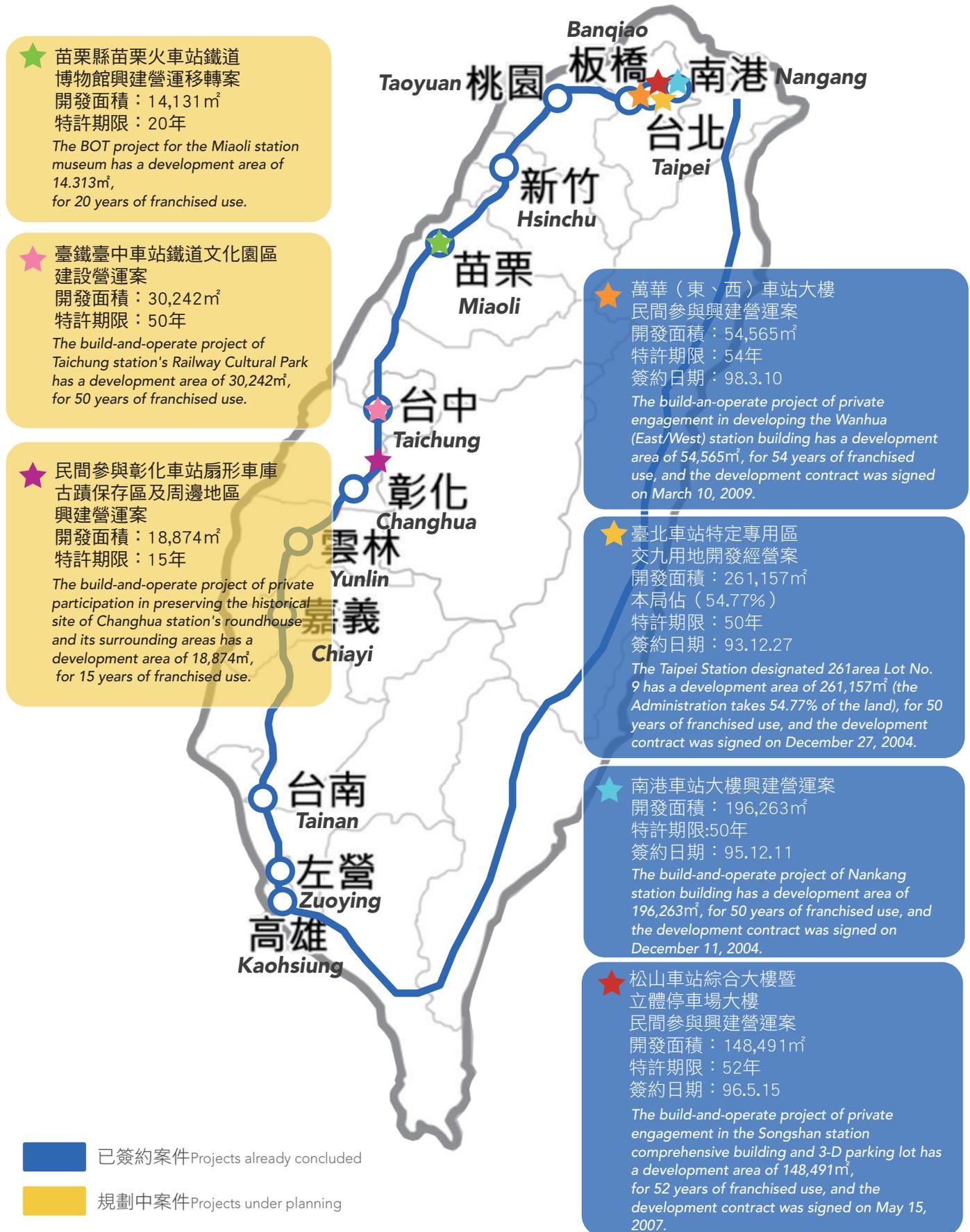
V. Assets management and development

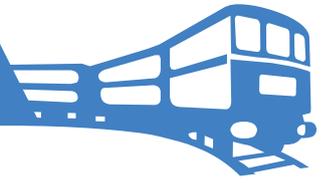
To cope with environmental changes, the niche of combined transportation projects and property development is built to exert maximum benefits from public works. Through the mechanism of property development and operations of associate undertakings, the Administration has executed various development projects in compliance with the regulations of private sector engagement, urban renovation, and multiple land uses in urban planning with public works. All the implementation goes with the central government's railway development projects, Executive Yuan's expedition programs for urban renovation, and local government's urban development projects. In addition to the already contracted projects, the ongoing ones in 2013 included 3 private participation in infrastructure projects, 11 government-led projects for urban renovations, 13 private sector-initiated projects for urban renovations, and 6 superficies establishment cases; also, to activate and manage land properties, there were 12 projects for preliminary planning and evaluation on the development. Main projects are shown in the diagram below:



(一) 推動促進民間參與公共建設

A. Promote Private Participation in Infrastructure Projects





(二) 都市更新建設(政府規劃)

B. Urban Renovations (planning by local governments)

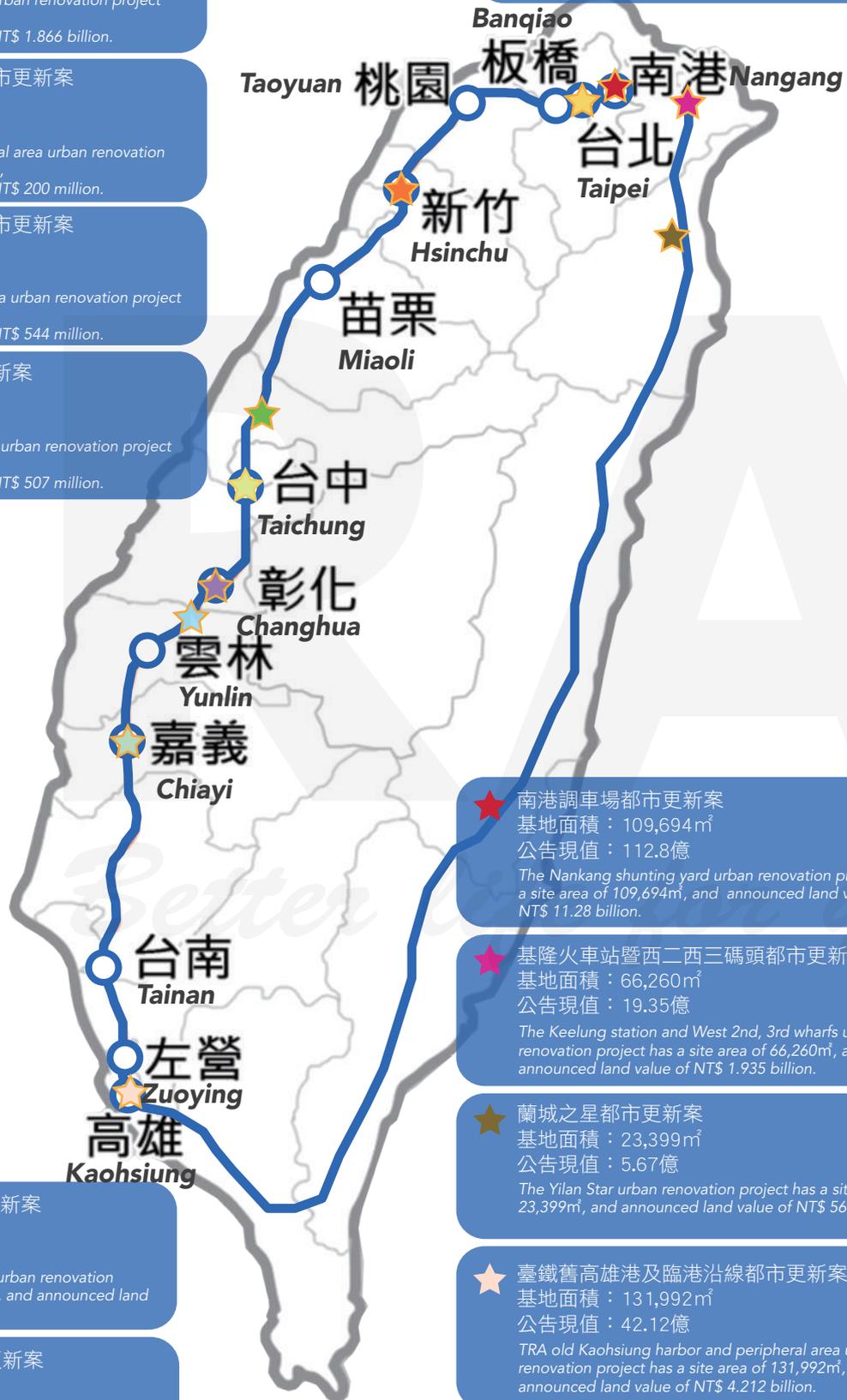
★ 新竹火車站後站地區都市更新案
 基地面積：45,101m²
 公告現值：18.66億
 The Hsinchu station rear area urban renovation project has a site area of 45,101m², and announced land value of NT\$ 1.866 billion.

★ 豐原火車站周邊地區都市更新案
 基地面積：827m²
 公告現值：0.2億
 The Fengyuan station peripheral area urban renovation project has a site area of 827m², and announced land value of NT\$ 200 million.

★ 臺中火車站周邊地區都市更新案
 基地面積：10,200m²
 公告現值：5.44億
 Taichung station peripheral area urban renovation project has a site area of 10,200m², and announced land value of NT\$ 544 million.

★ 彰化火車站北區都市更新案
 基地面積：26,687m²
 公告現值：5.07億
 Changhua station north region urban renovation project has a site area of 26,687m², and announced land value of NT\$ 507 million.

★ 臺北車站特定專用區E1、E2區都市更新案
 基地面積：37,924m²
 公告現值：106.78億
 The Taipei station designated area Lot E1, E2 urban renovation project has a site area of 37,924 m², and announced land value of NT\$ 10.678 billion.



★ 南港調車場都市更新案
 基地面積：109,694m²
 公告現值：112.8億
 The Nankang shunting yard urban renovation project has a site area of 109,694m², and announced land value of NT\$ 11.28 billion.

★ 基隆火車站暨西二西三碼頭都市更新案
 基地面積：66,260m²
 公告現值：19.35億
 The Keelung station and West 2nd, 3rd wharfs urban renovation project has a site area of 66,260m², and announced land value of NT\$ 1.935 billion.

★ 蘭城之星都市更新案
 基地面積：23,399m²
 公告現值：5.67億
 The Yilan Star urban renovation project has a site area of 23,399m², and announced land value of NT\$ 567 million.

★ 臺鐵舊高雄港及臨港沿線都市更新案
 基地面積：131,992m²
 公告現值：42.12億
 TRA old Kaohsiung harbor and peripheral area urban renovation project has a site area of 131,992m², and announced land value of NT\$ 4.212 billion.

★ 員林火車站周邊地區都市更新案
 基地面積：121,397m²
 公告現值：18.26億
 The Yuanlin station peripheral area urban renovation project has a site area of 121,397m², and announced land value of NT\$ 1.826 billion.

★ 嘉義火車站附近地區都市更新案
 基地面積：34,900m²
 公告現值：3.7億
 The Jiayi station nearby area urban renovation project has a site area of 34,900m², and announced land value of NT\$ 370 million.

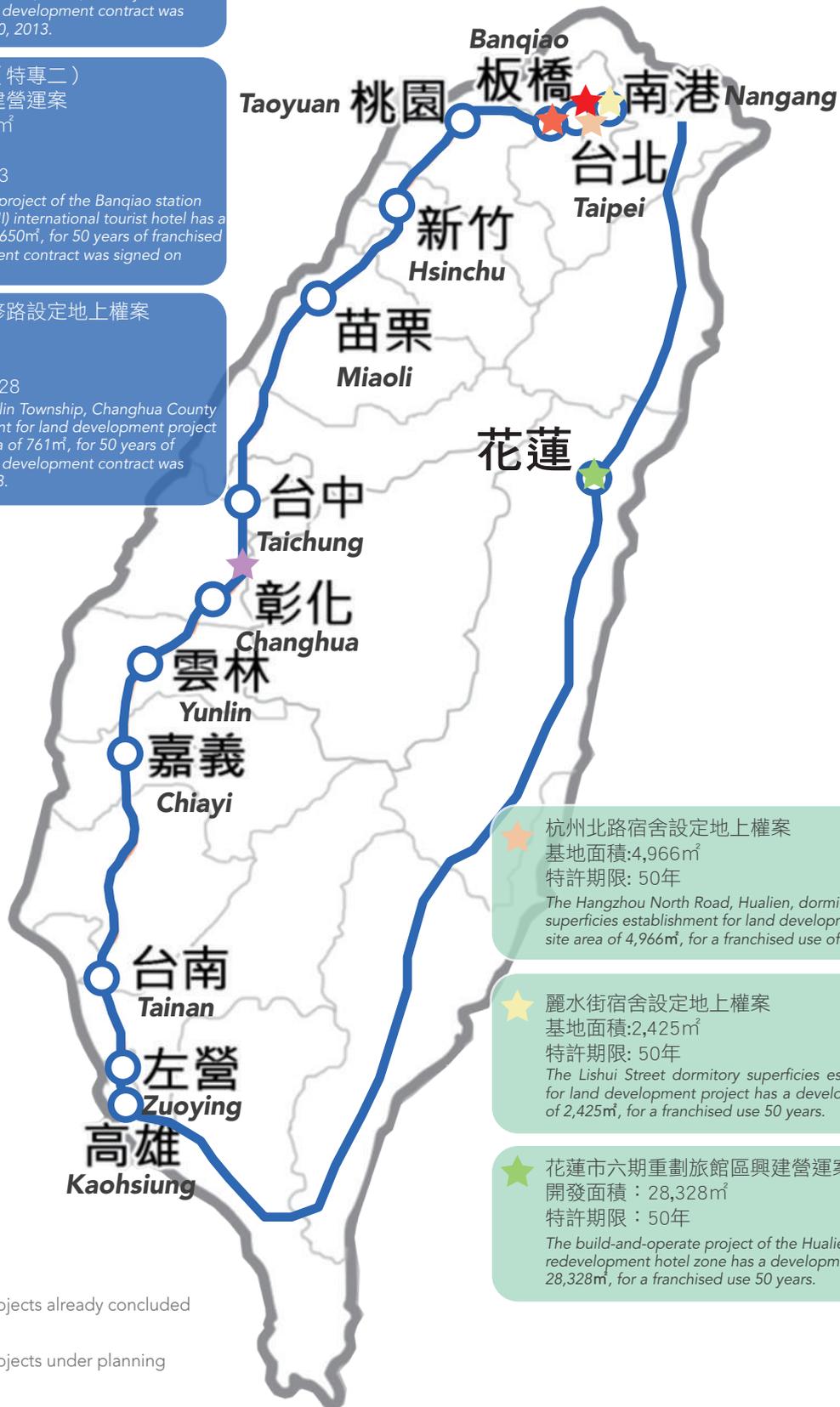
(三) 設定地上權

C. Superficies Establishment

★ 臺北市松山區寶清段設定地上權案
 開發面積：1,601m²
 特許期限：70年
 簽約日期：102.11.20
 The Taipei City Songshan District Bochin Section superficies establishment for land development project has a development area of 1,601m², for 70 years of franchised use, and the development contract was signed on November 20, 2013.

★ 板橋車站特定區（特專二）國際觀光旅館興建營運案
 開發面積：2,650m²
 特許期限：50年
 簽約日期：99.8.23
 The build-and-operate project of the Banqiao station designated area (Zone II) international tourist hotel has a development area of 2,650m², for 50 years of franchised use, and the development contract was signed on August 23, 2000.

★ 彰化縣員林鎮靜修路設定地上權案
 開發面積：761m²
 特許期限：50年
 簽約日期：102.5.28
 The Jingxiu Road, Yuanlin Township, Changhua County superficies establishment for land development project has a development area of 761m², for 50 years of franchised use, and the development contract was signed on May 28, 2013.

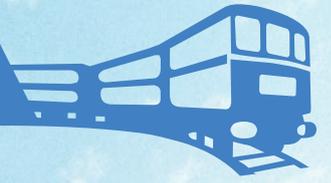


★ 杭州北路宿舍設定地上權案
 基地面積:4,966m²
 特許期限: 50年
 The Hangzhou North Road, Hualien, dormitory superficies establishment for land development has a site area of 4,966m², for a franchised use of 50 years.

★ 麗水街宿舍設定地上權案
 基地面積:2,425m²
 特許期限: 50年
 The Lishui Street dormitory superficies establishment for land development project has a development area of 2,425m², for a franchised use 50 years.

★ 花蓮市六期重劃旅館區興建營運案
 開發面積：28,328m²
 特許期限：50年
 The build-and-operate project of the Hualien City 6th redevelopment hotel zone has a development area of 28,328m², for a franchised use 50 years.

■ 已簽約案件 Projects already concluded
 ■ 規劃中案件 Projects under planning





重大工程及投資建設

Major Engineering Projects and
Investments





一、環島鐵路整體系統安全提昇計畫

(一)計畫內容

本計畫奉行政院98年2月27日院臺交字第0980008163號函核定辦理，總經費149.49億元，計畫期程自98年1月1日至101年12月31日止。主要內容包含：

1. 車站建築及服務設施更新：
山佳站、湖口站、竹北站及沙鹿站等4站跨站式車站改建；增設北新竹及仁德通勤車站及五堵至汐止間三軌高架化路線容量擴充。
2. 橋隧基礎結構物改良：
高風險脆弱路段強化、全線橋樑總檢查及耐震補強延壽規劃、大甲溪橋橋基更新、曾文溪橋改建、鹽水溪橋改建、二層行溪橋改建、集集線全線老舊隧道加固及北迴線隧道更新。
3. 站場及路線可靠度提昇：
辦理50kg/m長軌化121.2公里及抽換UIC-60KG鋼軌11.1公里。
4. 機電設施可靠度提昇：
建置421處平交道遠端錄影監控系統、基隆至竹南間電車線主吊線由49.5mm²更換為95mm²、車輛機電系統更新、變電站變壓器容量擴充及開關設備更新。

I. Round-the-Island Railway System Safety Upgrade Project

A. Project contents

The project is implemented in accordance with the approval letter coded yuan tai jiao zi No. 0980008163 issued on February 27, 2009 by the Executive Yuan. The construction, with a total budget of NT\$ 14.949 billion, was commenced on January 1, 2009 and finished on December 31, 2012. Main contents:

1. *Renovation of train station architectures and service facilities:*
Renovated were the 4 elevated station stations: Shanjia, Hukou, Zhubei and Shalu, adding commute stops at the North Hsinchu and Rende stations and expanding the transportation capacity for the elevated tri-rail routes between Wudu and Xizhi.
2. *Improvement of bridge and tunnel infrastructure:*
Enhancement of high-risk, fragile railway sections; overhaul of bridges of all routes with seismic reinforcement to extend their service lives, including renovations of the Dajia River Bridge abutment, Tsengwen River Bridge, Yanshuei River bridge, Fresh Water Bridge; reinforcement of the old tunnels of the entire Jiji line and renovation of the North-link line tunnels.
3. *Depot and route reliability upgrade:*
Laying down 121.2 kilometers of 50kg/m long tracks and replacing 11.1 kilometers of UIC-60KG steel rails.
4. *E/M facilities reliability upgrade:*
Setting up a remote recording & monitoring system for 421 level crossings; replacing the Keelung-Zhunan EMU main hanging wire 49.5mm² with 95mm² wires; upgrade of locomotive electrical systems; expanding capacity of substation transformers and replacing their switching devices with new ones

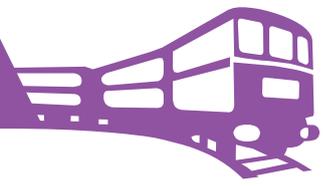
(二)執行成果

102年主要辦理內容包括：

車站建築及服務設施更新、橋隧基礎結構物改良及機電設施可靠度提昇。

B. Implementation results

The 2013 implementations include the renovation of train station architectures and service facilities, improvement of bridge and tunnel infrastructures, and reliability upgrade of E/M facilities.



1. 完成竹北站跨站式站房新建工程

竹北車站跨站式站房於102年7月17日啟用，建築設計納入太陽能光電、綠化植栽隔熱，以增加都市綠化意象，新站房百分之九十以上的建築材料可回收再利用，並使用眾多回收資源作為室內裝置藝術品。另採用自然通風設計理念，引導空氣對流，並結合屋頂牆面隔熱、遮陽處理、採光照明及雨水回收等設計手法，達成建築節能目標，獲得綠建築最高等級評定為鑽石級。

2. 完成沙鹿站跨站式站房新建工程

沙鹿站跨站式站房於102年12月20日啟用，站內提供多用途空間，配合需求內容做彈性使用，結合多種商業活動，賦予站區觀光商業契機，活絡整體車站機能。

1. Zhubei elevated station cross-site station house new construction completed

Completion of the Zhubei elevated station opened on July 17, 2013; the elevated station architecture accommodates solar photovoltaics and green plantation for heat insulation as well as urban green imagery. More than 90% of the architecture was built with recycled materials, which were also used for interior decoration as an installation art. Also featured is the design conception of natural ventilation that conducts the air convection, combined with the roof wall insulation to shield from the sun as well as natural lighting and rainwater recycling, all of which have fulfilled the architectural objective of energy conservation and been appraised as the highest diamond level of the green architecture award.

2. Shalu elevated station cross-site station house new construction completed

Completion of the Shalu elevated station opened on December 20, 2013, the architecture provides multi purpose spaces that allow flexible uses to accommodate various commercial activities and business opportunities particularly in tourism, so that the overall station mechanism can be uplifted.

竹北站跨站式站房外觀 Exterior of the Zhubei Station elevated house.



3. 完成曾文溪橋改建工程

曾文溪橋位於鐵路縱貫線K336+438新營～善化間，該橋於民國42年改建，橋齡已達核定壽年，為符合經濟部水利署治理計畫100年洪水水位高度及堤頂高度需求，爰辦理曾文溪橋改建工程，工程起點自K335+150起至K339+700止，全長4.55公里。於98年7月28日開工，歷時4年，於102年6月28日全線切換通車，共計消除東勢寮北平交道、東勢寮平交道及土虱窟平交道等3處，除節省平交道設備維修費用，減少事故維護、肇事賠償及鐵路車輛延滯時間成本外，亦提升行車安全暨維護列車正常營運。

3. Completion of the Tsengwen River Bridge Reconstruction

The Tsengwen River Bridge is situated on the West Coast line between Xinying and Shanhua. The bridge was already renovated in 1953, and had reached its limit of service life at the time of the rebuild. To meet the hundred-year plan for the flood level height and dike height proposed by the Water Resources Agency, Ministry of Economic Affairs the reconstruction project of the Tsengwen River bridge was thus initiated. The construction started at the point of K335+150 and ended at K339+700, with a total length of 4.55 km. The construction was commenced on July 28, 2009, and took 4 years to complete. Switch to the new route officially begun on June 28, 2013. This project has eliminated 3 level crossings - Dongshi Liaobei, Dongshi Liaoping, and Tushicu, and therefore saved the level crossing maintenance costs as well as reduced accident maintenance, accompanied compensation and time cost from train schedule holdup, in addition to a safer transportation and a more accurate train schedule.

1

1. 曾文溪橋無道碴路床

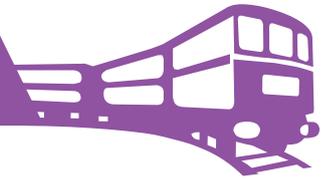
1. Tsengwen River bridge non-ballast roadbed.

2

2. 曾文溪橋拱橋造型

2. Tsengwen River bridge arc design.





4. 完成鹽水溪橋改建工程

鹽水溪橋位於鐵路縱貫線K349+678，該橋於民國57年改建，橋齡已達核定壽年，其橋梁結構已不符鐵路橋梁耐震設計規範，另依經濟部水利署治理計畫洪水與河寬，亦需修改線形，提高梁底高程，爰辦理鹽水溪橋改建工程，工程起點自K347+400起至K350+320止，全長2.92公里。於98年9月1日開工，102年6月6日全線切換通車，計消除車行平交道1處，除節省平交道設備維修費用，減少事故維護、肇事賠償及鐵路車輛延滯時間成本外，因改善線形，可提高行車效率增進行車安全暨維護列車正常營運。

4. Completion of the Yanshuei River Bridge Reconstruction

Situation at K349+678 of the West Coast line, the bridge was already renovated in 1968, and had reached its limit of service life at the time of the reconstruction. Its structure was uncomformable to the seismic specifications; also, the flood level and river width specified in the treatment plan issued by the Water Resources Agency, Ministry of Economic Affairs required the bridge a complete overhaul. The constructions started at the point of K347+400 and ended at K350+320, with a total length of 2.92 km. The construction was commenced on September 1, 2009, and switching to the new route officially begun on June 6, 2013. This project has eliminated 1 level crossing, and therefore saved the level crossing maintenance costs as well as reduced accident maintenance, accompanied compensation and time cost from train schedule holdup, in addition to a safer transportation and a more accurate train schedule.

1

2

1. 消除車行平交道

1. An eliminated level crossing

2. 鹽水溪橋無道碴路床

2. Yanshuei River bridge non-ballast roadbed



二、臺鐵都會區捷運化桃園段高架化建設計畫

II. TRA Rapid Transit Systematization in Metropolitan Area on the Taoyuan Section of Elevated Track Project

(一) 計畫內容

本計畫奉行政院98年2月27日院臺交字第0980000793號函核定辦理，總經費308.45億元，計畫工期自98年1月1日至106年12月31日止。主要內容包含：

A. Project contents

The project has been implemented in accordance with the approval letter coded yuan tai jiao zi No. 0980000793 issued on February 27, 2009 by the Executive Yuan. The construction, with a total budget of NT\$ 30.845 billion, was commenced on January 1, 2009 and will be finished on December 31, 2017.

Main contents:

1.鐵路降挖段及高架段合計15.95公里，其中桃園站以北擴建為三軌正線，桃園站以南為二軌正線。

2.桃園站、內壢站、中壢站改建為高架車站。

3.增設鳳鳴站、國際路站、永豐路站、中原大學站等4座通勤車站。

4.其他設施同時配合辦理改善，工程完工後可消除17處平交道。

1.The excavated and elevated sections total 15.95 km, among which the north of Taoyuan Station are expanded as a tri-rail main line and the south of the station expanded as a dual-rail main line.

2.The stations of Taoyuan, Neili and Zhongli are rebuilt as elevated stations.

3.Adding 4 commute stops: Fongming, Gouji Road, Yunfeng Road, and Chung Yuan Christian University.

4.Other facilities are accordingly renovated and improved, and there will 17 level crossings eliminated when the project is completed.

1

2

1.鐵路臨時鋼橋工程
2.桃園臨時站月台工程

1.Construction of a temporary steel bridge for the railway
2.Construction of a temporary platform for Taoyuan Station



(二)執行成果

102年度主要配合地方政府都市計畫變更作業辦理各項前置作業：

1. 工程專案管理持續辦理設計、招標及決標之諮詢及審查。
2. DL01標鳳鳴降挖段（含鳳鳴、桃園臨時站與臨時軌部分）：
 - (1).CL121/122標臨時軌道路基工程101年1月2日開工。
 - (2).CL141/142/143標臨時軌道號誌工程102年11月28日開工。
3. DL02桃園段（含桃園車站、國際路站、永豐路站）：

完成期中設計成果，配合都市計畫變更作業辦理期末設計作業。
4. DL03中壢段（含內壢車站、中原大學站、中壢車站）：

完成期中設計成果，配合都市計畫變更作業辦理期末設計作業。
5. 辦理臨時軌用地租用事宜。
6. 永久軌用地徵收作業由桃園縣及新北市政府辦理都市計畫變更中。

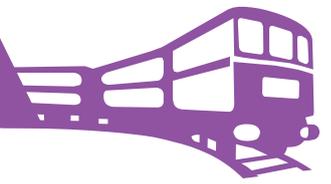
B.Implementation results

Preliminary works collocated with the 2013 local governments urban renovation projects:

- 1.Counseling and review of project engineering in design, bidding and bid awarding.
- 2.Excavated construction of the Project DL01, excavated section (including the temporary Fongming and Taoyuan stations, and temporary railroad tracks):
 - (1) Project CL121/122, temporary track foundation commenced on January 2, 2012.
 - (2) Project CL141/142/143, the signal engineering of temporary tracks commenced on November 28, 2013
- 3.DL02 Taoyuan section (including the stations of Taoyuan, Guoji Road, Yunfeng Road):

The mid-term design has been completed, and the final design to match up with the rezoning of urban planning goes on.
4. DL03 Zhongli section (including stations of Neili, Chung Yuan Christian University and Zhongli):

The mid-term design has been completed, and the final design to match up with the rezoning of urban planning goes on.
- 5.Lease of the land for temporary railway tracks.
- 6.Land expropriation for permanent railway tracks is been processed with rezoning of urban planning implemented by the Taoyuan County Government and New Taipei City Government.



三、臺鐵高雄－屏東潮州捷運化計畫

本計畫配合高雄市區鐵路地下化之前需將「屏東潮州車輛基地」完工，以取代高雄車站、機檢段成為西幹線始發站及南部最大駐車基地；潮州基地完成後，潮州站將為西幹線始發站，加上雙軌電化由屏東站延伸至潮州站，並將全線段採高架，減少平交道，確保行車安全，達到安全、舒適、快捷之便捷通勤系統，促進地方發展。本計畫於行政院於92年12月15日核定，工程內容包括潮州車輛基地及屏東潮州雙軌電化，總經費87億餘元，並納入「新十大建設」之「臺鐵捷運化」項下辦理。

III. TRA Rapid Transit Systematization Project (Kaohsiung-Pingtung Chaozhou Section)

Complete the "Pingtung Chaozhou depot" prior to the commencement of Kaohsiung urban railway underground project, and the establishment will replace the Kaohsiung station and maintenance branch to become the setout station of the West line and the largest depot in the south. When the Chaozhou depot is completed, the Chaozhou Station will be the setout station for the West line; also, the dual-track railway electrification will stretch from Pingtung Station to Chaozhou Station on elevated railroad to reduce level crossings and assure transportation safety. The ultimate goal is to build a safe, comfortable and fast commute transport system that will boost local economic development. This project was approved on December 15, 2003 by the Executive Yuan.

This project includes the buildup of the Chaozhou depot and Pingtung Chaozhou dual-track electrification, with a total budget of NT\$ 8.7 billion, and is listed as the "TRA Rapid Transit Systematization project, one of the new 10 major construction projects.

(一)本計畫內容如下

1. 屏東市區段（屏東站北--屏東市廣東南路）高架化長度約為3.4公里，消除臺鐵於屏東市區與公路系統9處橫交（包含4處平交道）。
2. 歸來--潮州段（廣東南路至潮州基地）自廣東南路高架橋南引道起規劃高架橋，經隘寮溪接回原路堤段，於南二高及省道88線採橋下穿過，20處平交道均以鐵路高架橋消除。
3. 屏東、歸來、麟洛、西勢、竹田、潮州6個車站改建為高架車站，其中屏東站及潮州站提升為頭等站，餘為捷運化車站。
4. 潮州車輛基地：約34.67公頃，位在潮州車站以南1.9公里處臺糖農場，為臺鐵南部駐車基地。

A. The project contents

1. Pingtung city section (between the north of Pingtung Station and south of Guangdong South Road of Pingtung City), an elevated railway with a length of 3.4 km, that eliminates 9 TRA intersections in the City of Pingtung and with highway systems (including 4 level crossings).
2. The Guilai-Chaozhou section (from Guangdong South Road to Chaozhou depot) starts from the south ramp on an elevated bridge at Guangdong South Road, passing through the Ai-Liao River, and connects back to the original Luty section, and then goes through the South Highway No. 2 and the Color bridge on the Provincial Road No. 88. This route eliminates 20 level crossings with elevated railroads.
3. The 6 stations - Pingtung, Guilai, Linluo, Xishi, Zhutian, and Chaozhou - are rebuilt as elevated stations, among which the Pingtung and Chaozhou stations are promoted as the first-class stations and the rest are rapid transit systematization stations.
4. Chaozhou depot: with an area of 34.67 hectares, the Taiwan Sugar Corporation Farm, 1.9 km south of the Chaozhou station, is TRA's southern depot.

(二)執行情形

1. 本計畫於96年12月18日動工，歸來-潮州段（16公里）西正線已於102年6月25日單軌高架通車營運（同時啟用歸來、麟洛、西勢、竹田及潮州等5座新高架車站）。
2. 廣續施作東正線工程、屏東市區鐵路高架化工程及潮州車輛基地，並以104年6月屏東-潮州（19.37公里）全線雙軌高架通車（含潮州車輛基地啟用）為目標。
(工程主辦單位為交通部鐵路改建工程局)

B. Executions

1. This project was started on December 18, 2007, and the elevated single-track railroad of the west main line of the Guilai-Chaozhou section (16 km) started official operations on June 25, 2013; in the meantime, the 5 new raised stations - Guilai, Linluo, Xishi, Zhutian, and Chaozhou were also up and running).
2. Continue construction of the east main line, elevated railroad in the Pingtung City, and Chaozhou depot; the goal is to build an elevated dual-track transportation of the Pingtung-Chaozhou section (19.37 km), and start operations by June 2015, that will include opening of the Chaozhou depot.
(Construction Organized by Railway Reconstruction Bureau, MOTC)

四、工務維護工程

(一)路線養護

辦理102年全線軌道路線改善，累計抽出枕木58,931根，換入枕木7,022根；抽出鋼軌62,157.7公尺，換入鋼軌24,050.1公尺；補充道碴使用12,110立方公尺（計61公里）；抽換道岔27套。

VI. Construction Maintenance

A. Route maintenance

The 2013 overall railway route improvement project had 58,931 sleepers pulled out and 7,022 replaced; steel tracks of 62,157.7 meters were pulled out and 24,050.1 meters replaced; replenishment of ballast of 12,110 cubic meters in 61 km; and replacement of 27 turnout sets.

(二)橋隧路基改善

委託專業技術服務機構進行沿線712座重要橋梁檢測及耐震、耐沖刷評估，預計103年10月底前提送計畫予交通部爭取經費。未來將依檢測結果，評估需求輕重緩急，辦理改建或補強，俾提高橋梁結構安全。

進行環島鐵路整體系統安全提昇計畫，高雄工務段轄內南迴線中央隧道辦理加固工程，於102年11月10日完工，及枋山一號等8座隧道持續辦理加固工程施工作業。

B. Bridge and tunnel roadbed improvement

Commissioning institutional experts to inspect 712 major bridges and evaluate their resistance to seismic hits and water erosion. Proposal of the project will be submitted in late October 2014 to the Ministry of Transportation and Communications (MOTC) for budget. Based on the inspection results, priority will be set up for renovation or reinforcement of the bridges, so that the safety of the bridge structures can be assured. To implement the Round-the-island Railway System Safety Upgrade Project, reinforcement of the central tunnel of South-link line under the Kaohsiung construction section was completed on November 10, 2013. In addition, the 8 tunnels of Fangshan No. 1 are also under construction for reinforcement.

(三)推動臺鐵通用設計化，打造無障礙交通環境

增設車站無障礙電梯，提供高齡者、行動不便者，以及攜帶重物之旅客搭乘，推動更加完善且優質之鐵路運輸服務；截至102年累計完成102站，另26站已納入各項鐵路改善計畫辦理中，預計103年起陸續完成。第2階段辦理30站將納入「鐵路行車安全6年改善計畫」廣續辦理。改善月台與車廂齊平，配合列車進出台階，提高車站月台高度，第一階段提高至92~96公分。縮短旅客上下車時間，減少列車停靠站時間，提高列車準點，構建現代化友善運輸環境。102年完成30站，月台提高共完成183站。

C. Setting forward TRA universal design to build a barrier-free transportation environment

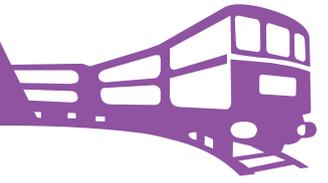
Add barrier-free elevators at train stations to facilitate the elderly and handicapped as well as passengers carrying heavy objects, making a sound and quality railway transportation and service environment. Up to 2013, there have been 102 stations finished with the universal design, along with other 26 stations on the waiting list, whose renovation jobs are expected to start in 2014, and will be completed progressively. In the second phase, there will be 30 stations included in the "Six-Year Railway Traffic Safety Improvement Project" and get improved progressively. Leveling the platform height with the train car's by lifting the platform height up to 92~96 cm in the first phase. Shortening the time of passengers' on and off the train and the train stops as well as increasing the train schedule accuracy, to build a modern, friendly transportation environment. There were 30 stations finishing the improvement, and 183 stations with their platforms lifted.

1 2 3

- 1.大橋站無障礙電梯
- 2.九曲堂站無障礙電梯
- 3.宜蘭站無障礙電梯

1. DaChiao station barrier-free elevators
2. Jiuqutang station barrier-free elevators
3. Yilan station barrier-free elevators





五、電務維護工程

(一)電力設施：

為提昇臺鐵電力系統之安全及可靠度，針對老舊電車線逐年安排更新，並提昇負載較重之變電站供電容量以滿足電力列車之用電需求，另為提昇電車線維修保養及事故時的搶修效率，購置新電車線工作車，於今年完成以下重要成果：

V. Electrical Maintenance Engineering

A. Electrical power facilities:

To enhance safety and reliability of TRA's electrical power systems, the old EMU cables are being replaced gradually, and the power supply capacity of substations with heavier loads is increased to meet the need of electrical power by EMUs. Also, to improve the efficiency of EMU cable maintenance and emergency repair, new EMU cable car have been procured. Here are the jobs done this year:



上圖為電車線主吊線(左為95mm² ,右為49.5mm²)
The picture above shows the main EMU hanging cables (the 95 mm² cables on the left, and the 49.5 mm² cables on the right.)



上圖為容量擴增為50MVA變電站
The picture above shows the substation with power capacity increased to 50MVA.



上圖為新購電車線工作車
The picture above shows the newly procured EMU maintenance car.

1. 將新營～林鳳營間49.5mm² 主吊線更新為95mm²，增加載流能力及抗拉能力。

1. Replacing the 49.5 mm² main hanging cables between Xinyin and Linfengying with 95 mm² ones, to increase the current carrying capacity and anti-pulling strength.

2. 南港變電站由室外改為室內及變壓器供電容量由30MVA擴增為50MVA，增加66%，以提昇供電系統穩定度。

2. The outdoor Nangang substation was renovated into an indoor facility, and its transformer's power capacity was increased from 30MVA to 50MVA, a 66% increase, to uplift the stability of power supply

3. 完成購置電車線工作車（附可升降小工作平台）1臺，提昇電車線維修效率及縮短故障搶修時間。

Procurement of one EMU maintenance car (equipped with a small elevating work platform), to improve the EMU maintenance efficiency and shorten the repair time.

(二)電訊設施：

配合「環島鐵路整體系統安全提昇計畫」，完成全線217個車站錄影監控設備裝設，透過遠端監看，各級車站管理，即時掌握旅客動態，提昇民眾遺失物協尋效率；維護車站旅客安全，強化打擊犯罪效能。

B. Telecommunication facility:

To go with the "Round-the-Island Railway System Safety Upgrade Project", video recording and monitoring equipment on 217 stations of the entire routes have been installed, which allow remote monitoring of train stations, grasp of real-time information of passenger dynamics, increase of the lost-and-found rates, assurance of passenger safety, and enhancement of the anti-crime effectiveness.



上圖為本局災害應變中心調閱宜蘭站月台監視器畫面。
TRA Disaster Prevention Center's review of the video recording from the monitoring equipment of Yilan station.

(三)號誌設施：

C. Signal installations:

1. 竹北站號誌設備改善電子聯鎖工程

(1)緣起：

竹北站號誌聯鎖系統於民國67年基隆～竹南間雙軌工程時所建置，使用已逾35年，為配合臺鐵環島安全提昇計畫，將竹北站站房改建為跨站式站房，並重新配置站場軌道及相關運轉所需之號誌設施。由於該站號誌系統已老舊，無法修改擴充達成工程目標，並為整體效能及安全提昇需要，將竹北站號誌系統更新為現代化電子聯鎖系統。

1. The Zhubei station signal equipment improvement with electronic interlocking

(1) Origin of project:

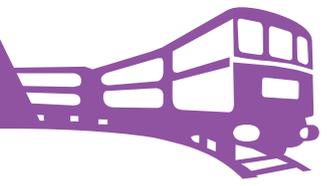
The Zhubei station's signal interlocking system was installed with the construction of the Keelung~Zhunan dual-track establishment in 1978, and it had been used for 35 years ever since. To go with the "Round-the-Island Railway System Safety Upgrade Project", the Zhubei station house was rebuilt into the elevated station style, and its station tracks and operational signals were reconfigured accordingly. Since the signal system was too old to renovate and expand for engineering objectives, and in consideration of increasing the overall performance and uplifting safety, the Zhubei station signal system was therefore replaced with a modern electronic interlocking system.

(2) 摘要：

- A.竹北站號誌設備改善電子聯鎖工程，於101年8月開工，102年10月切換啟用。
- B.電子聯鎖系統提供2主正線5股道，共34進路之主要號誌安全聯鎖，並提供4區調車及16套轉轍器就地扳轉控制聯鎖。
- C.電子聯鎖採用雙重查核及雙重熱備援(2+2, 4cpu)故障趨安全(fail-safe)硬體及軟體設計，並廢除早期CTC實體介面改採安全電子介面，軌道區間佔用檢出系統採用安全性達SIL-4之雙計軸備援。

(2) Abstract:

- a.The signal equipment improvement with electronic interlocking installation at Zhubei station was started in August of 2012, and switching to the new establishment was executed in October of 2013.
- b.The electronic interlocking system provides 2 main circuits and 5 station circuits, with a total of 34 incoming signal safety interlocking, and also provide a 4-area train shunting and 16 sets of switch of in situ interlocking control.
- c.The electronic interlocking adopts a double-check and double hot swap (2+2, 4 CPUs) backup of fail-safe hardware and software designs, and replaces the early CTC physical interface with the secured electronic interface; also, the track interval occupancy detection system adopts the dual axle counter redundancy with SIL-4 security level.



(3) 效益：

- A.達成竹北站改建後整體運轉效能及安全防護提昇，有效改善旅運安全與品質。
- B.汰換老舊系統，有效提昇號誌設備可靠度並減輕老舊設施維運負擔。
- C.竹北站號誌設備改善電子聯鎖工程，榮獲102年公共工程委員會「金質獎」評鑑。

(3)Efficiency:

- a.Increases the overall operational performance and security protection of the Zhubei station after the rebuild, and effectively improves the transportation safety and quality.
- b.Phases out the old systems to effectively uplift the reliability of signal equipment, and alleviates operational load of the old equipment.
- c.The signal equipment improvement with electronic interlocking installation at Zhubei station was awarded the Public Construction Commission's "Gold Medal" in 2013.



- | | |
|---|---|
| 1 | 2 |
| 3 | 4 |

- 1.舊竹北站房
- 2.新竹北站跨站式站房
- 3.竹北站新電子聯鎖設備
- 4.竹北站雙計軸器設備

- 1. Old Zhubei station house
- 2. The elevated station of Hsinchu north station
- 3.New electronic interlocking equipment at Zhubei station
- 4. Dual meter shaft equipment at Zhubei station

2. 北迴線景美無人號誌站電子聯鎖工程

(1)緣起：

配合交通部蘇花公路改善計畫貨物運能轉移鐵路運輸政策，改善北迴線瓶頸路段運能，配合於新城至北埔間增設景美無人號誌站。

2. The North-link line Jingmei unmanned signal station electronic interlocking installation

(1) Origin of project:

To go with the Suhua Highway Improvement Project, a policy to transfer freight capacity to railway transportation, initiated by MOTC, TRA has improved the freight capacity of the bottlenecked section of North-link line by adding the Jingmei unmanned signal station located between Xincheng and Beipu.

(2)摘要：

- A. 景美站電子聯鎖號誌增設工程，於101年7月開工，102年10月完成切換。
- B. 採用現代電子聯鎖系統，提供2主正線4股道共16進路之主要號誌安全聯鎖，由臺北行控中心或新城站透過光纖網路辦理遠端搖控。
- C. 電子聯鎖採用雙重查核及雙重熱備援(2+2, 4cpu)故障趨安全(fail-safe)硬體及軟體設計，並廢除早期CTC實體介面改採安全電子介面。同時建置相關ATP列車防護設備、軌道電路與計軸器並聯熱備援及完整號誌聯鎖狀態遠端監控系統。

(2)Abstract:

- a. Construction of electronic interlocking signal facility at Jingmei station was started in July 2012, and switching to this new installation was completed in October 2013.
- b. The modern electronic interlocking system provides 2 main circuits and 4 station circuits, with a total of 16 incoming signal safety interlocking, which are remote-controlled by the Taipei Traffic Control Center or Xincheng station through the fiber-optical network.
- c. The electronic interlocking adopts a double-check and double hot swap (2+2, 4 CPUs) backup of fail-safe hardware and software designs, and replaces the early CTC physical interface with a secured electronic interface. Also established relevant ATP train protection equipment, hot swap backup of track circuit in parallel with the axle counter, and complete signal interlocking status remote monitoring system.

(3)效益：

- A. 達成交通部蘇花公路改善計畫貨物運能轉移鐵路運輸政策，改善北迴線瓶頸路段運能。
- B. 提供安全可靠之交會待避路線相關安全防護，並藉搖控號誌系統減少本局運轉所需之人力配置。
- C. 採用號誌聯鎖狀態遠端監控系統，減少設備維運人力並提升系統可靠度。

(3)Efficiency:

- a. It fulfills the policy of transferring freight capacity to railway transportation initiated by MOTC with the Suhua Highway Improvement Project, and improves freight capacity of the bottlenecked section of the North-link line.
- b. It provides security protection with reliable intersection retreat routes, and alleviates manpower deployment by remote signal control.
- c. The signal interlocking status remote monitoring system reduces maintenance labor and promotes the system reliability.

1

2

1. 景美站新電子聯鎖設備
2. 景美無人號誌站

1. The new electronic interlocking equipment at Jingmei station
2. The Jingmei unmanned signal station





六、車輛新購及更新改造工程

VI. Train Car Procurement and Remodeling

(一) 傾斜式電聯車136輛，於99年12月30日決標，由日本車輛公司設計、承造中，首批16輛業於101年10月25日交車，102年12月底全數交車完成。

A. A bidding for 136 tilt EMUs was given and concluded on December 30, 2010, awarded to a Japanese train car manufacturer. The first 16 cars were delivered on October 25, 2012, and all the rest were also delivered at the end of December, 2013.

■ 傾斜式新自強號行駛北迴線 The new tilt Tze-Chiang Express (TEMU) running on the North-link line

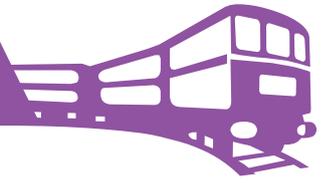


(二) 空調通勤電聯車296輛(EMU800型)，於100年1月12日決標，由台灣車輛公司設計、承造中，16輛原型車於102年8月27日運抵基隆港，預定103年春節前投入營運。

B. A bidding for 296 units of EMU800 air-conditioned commute cars was concluded on January 12, 2011, and awarded to a Taiwan train car manufacturer. The first 16 cars arrived at the Keelung Harbor on August 27, 2013, and are expected to join the operations by the Spring Festival of 2014.

EMU800型試運轉 Test run of EMU800





(三) 本局代辦蘇花公路改善計畫（篷斗車改石斗車200輛工程案）101年6月26日決標，由中鋼機械公司承造，102年12月完工。

C.A bidding for the Shuhua Highway Improvement Project executed by TRA (a project to replace 200 canopy trolleys with quarry ones) was concluded on June 26, 2012, and awarded to China Steel Machinery Company.

(四) 本局代辦阿里山森林鐵路車輛更新改善工程案，於102年8月15日決標，由秦陽機械公司更新改造中，預定103年6月30日完工。

D.A bidding for the Alishan Forest Railway Train Remodeling Project executed by TRA was concluded on August 15, 2013, and awarded to Qin Yang Machinery Company. The job is expected to get done by June 30, 2014.



1 2 1.DL49號柴油機車試運轉樟竹崎站 1. The DL49 diesel locomotive test run at Zhangzhuci station
2.DL49號柴油機車試運轉樟腦寮站 2. The DL49 diesel locomotive test run at Zhangnaoliao station

(五) 35FPK10500型莒光號客車2輛改造為餐車工程，100年11月9日決標，由景鴻企業公司承造，於101年12月完工，於102年8月正式營運。

E.A bidding for remodeling 2 cars of the model 35FPK10500 Chu-Kuang Express was concluded on November 9, 2011, and awarded to Jing Hung Corporation. The project was delivered in December 2012, and the two remodeled cars were put to operations in August 2013.

1 2 1.餐車外觀 1. Exterior of the dining car
2.餐車內裝 2. Interior of the dining car



七、專案工程

VII. Project Engineering

(一) 臺鐵都會區捷運化暨區域鐵路後續建設計畫（基隆－苗栗段）

計畫內容為有效利用既有運輸資源，強化臺鐵都會區通勤運輸及接駁功能，以臺鐵西部幹線基隆至苗栗為範圍，藉由增設捷運化通勤車站，擴充軌道設備，增加路線容量強化都會區通勤運輸功能。原計畫奉行政院94年1月27日院臺交字第0940002035號函核定實施；第1次修正計畫奉行政院99年12月23日院臺交字第0990072342號函同意；第2次修正計畫案業奉行政院102年11月25日院臺交字第1020071264號函核定，計畫總經費修正為84.12億元，並展延總計畫期程至105年底。

主要內容包含：

1. 於基隆至苗栗間增設4座捷運化通勤車站。
2. 改善基隆至苗栗間3座既有場站。
3. 改善基隆至苗栗間約140公里鐵路沿線景觀及安全。
4. 增建電聯車維修基地1座。

A. TRA Rapid Transit Systematize in Metropolitan Area and Regional Railway Follow-up Construction Project (Keelung-Miaoli section)

For effective use of existing transportation resources to enhance TRA urban commute transport and shuttle capacity in a range between Keelung and Miaoli of the West line, TRA has added rapid transit systematizing commute stops and additional track facilities to expand the route capacity and enhance the urban commute transport functionality. The project was implemented in compliance with the approval letter coded yuan tai jiao zi No. 0940002035 issued on January 27, 2005 by Executive Yuan; the first amendment was implemented in compliance with the approval letter coded yuan tai jiao zi No. 0990072342 issued on December 23, 2010 by Executive Yuan; and the second amendment was implemented in compliance with the approval letter coded yuan tai jiao zi No. 1020071264 issued on November 25, 2013 issued by Executive Yuan, which updated the total budget to NT\$ 8.412 billion and extended the project schedule to the end of 2016.

Main contents:

1. The 4 rapid transit systematizing commute stops added between Keelung and Miaoli
2. The 3 improved stations between Keelung and Miaoli
3. The improved landscape and safety along the 140 km railway between Keelung and Miaoli
4. The added EMU depot

(二) 臺北機廠遷建建設計畫

因應高速鐵路通車需要，本局需將臺北一松山間南隧道撥交高速鐵路使用，影響本局機車、車輛進出臺北機廠之維修作業，將因高鐵路線阻隔致有過軌問題，而產生相互干擾及營運限制，案經交通部邀集相關單位協商，研以將臺北機廠遷廠以解決過軌問題，奉行政院99年3月1日院臺交字第0990093143號同意辦理，總經費170.14億元，計畫期程自94年6月1日至104年12月31日。主要內容包含：

B. Taipei depot relocation project

In response to the High Speed Rail operations, TRA is required to allocate the south tunnel of the Taipei-Songshan section for the use by the High Speed Rail. This implementation will affect TRA locomotive and train cars traffic in and out of the Taipei depot, due to the track overlapping by the High Speed Rail route which will cause mutual interference and operational constraints. In view of this, MOTC has invited relevant parties to discuss the issue and decided to relocate the Taipei depot in order to solve the track overlapping problem. The relocation project is therefore implemented in accordance with the approval letter coded yuna tai jiao zi No. 0990093143 issued on March 1, 2010 by Executive Yuan, with a total budget of NT\$ 17.014 billion and a project schedule starting from June 1, 2005 through December 31, 2015.

Main contents:



- 1.蘇新基地：七堵檢車段併宜蘭機務分段遷至蘇新基地。
- 2.七堵基地：七堵檢車段遷至蘇新基地，原騰空之用地辦理線形改善工程。
- 3.富岡基地：於桃園縣楊梅鎮富岡里新建電聯車維修廠、機務段、北區供應廠、柴電機車及電力機車維修廠、北湖口進廠線及車站。
 - (1) 富岡車輛基地主體廠房（CL221&CL221-1）：102年6月30日完完整體廠房及周邊配合工程。
 - (2) 機廠辦公大樓及北區供應廠工程（CL221-2標）：102年5月31日完工。
 - (3) 號誌系統工程（CL771-1標）：102年4月30日完工。
 - (4) 機廠設備安裝（CL431標）：A1-1、A1-2、A1-3廠區檢修設備於102年6月30日完成安裝。
- 4.潮州基地：併臺鐵高雄機廠遷建計畫設置推拉式客車維修廠。為配合「高雄都會區鐵路地下化計畫」，遂將推拉式客車維修廠併入「高雄機廠遷建潮州及原有廠址開發計畫」辦理，該計畫於102年8月13日奉行政院院臺交字第1020048414號函原則同意綜合規劃報告及102年10月3日院臺交字第1020060201號函同意財務計畫，新高雄機廠未完成遷建前，推拉式客車移轉原高雄機廠維修。

1. The Sushin depot: the Qidu maintenance branch is merged with the Yilan rolling stock branch and relocated to the Sushin base.
2. Qidu depot: the Qidu maintenance branch is relocated to the Sushin Base, and the emptied land is used for linear improvement works.
- 3 Fugang depot: new EMU maintenance depot, rolling stock branch north supply factory, diesel locomotive and EMU locomotive maintenance depots, North Hukou inbound line and station are built at Fugang Village, Yangmei Township, Taoyuan County.
 - (1) The Fugang depot main factory (bidding CL221&CL221-1): the entire architecture and peripheral construction were completed on June 30, 2013.
 - (2) The Depot office building and north supply factory (bidding CL221-2): completed on May 31, 2013.
 - (3) Signal system (bidding: CL771-1): completed on April 30, 2013.
 - (4) Depot equipment installation (bidding: CL431): maintenance equipment of the A1-1、A1-2、A1-3 factories were finished installation on June 30, 2013.
4. Chaozhou depot: merged to the TRA Kaohsiung depot relocation project and a push-pull car maintenance workshop were built. To go with the "Kaohsiung Urban Underground Railway Project", the push-pull passenger car maintenance workshop was merged to the "Kaohsiung depot relocation to Chaozhou and Development of The Original Site Project". This project's overall plan was approved by the letter coded yuan tai jiao zi 1020048414 issued on August 13, 2013 by Executive Yuan, and the project's financial plan was approved by the letter coded yuan tai jiao zi No. 1020060201 issued on October 3, 2013 by Executive Yuan. Until the completion of relocation to the new Kaohsiung depot, maintenance of the push-pull cars will be transferred to the original Kaohsiung depot.



計畫名稱：臺鐵都會區捷運化暨區域鐵路後續建設計畫（基隆-苗栗段）
 工程名稱：樟樹灣-誠正國中擴建三軌工程
 說明：樟樹灣至南港間擴建三軌工程通車典禮

Project name:

TRA Rapid Transit Systematization in Metropolitan Area and Regional Railway Follow-up Construction Project (Keelung-Miaoli section);

Construction title:

Zhangsuwan-Chengzheng Middle School Tri-Track Expansion;

Description:

The opening ceremony of the Zhangsuwan-Chengzhen Middle School tri-track between Zhangsuwan and Nangang.

計畫名稱：臺鐵都會區捷運化暨區域鐵路後續建設計畫（基隆-苗栗段）
 工程名稱：樟樹灣-誠正國中擴建三軌工程
 說明：南港至汐止引道段

Project name:

TRA Rapid Transit Systematization in Metropolitan Area and Regional Railway Follow-up Construction Project (Keelung-Miaoli section);

Construction title:

Zhangsuwan-Chengzheng Middle School Tri-Track Expansion;

Description:

the Nangang-Xizhi ramp



計畫名稱：臺鐵都會區捷運化暨區域鐵路後續建設計畫（基隆-苗栗段）
 工程名稱：苗栗跨站式站房
 說明：苗栗車站前站(夜景)

Project name:

TRA Rapid Transit Systematization in Metropolitan Area and Regional Railway Follow-up Construction Project (Keelung-Miaoli section);

Construction title:

Miaoli elevated station;

Description:

the front Miaoli station (night view)



計畫名稱：臺鐵都會區捷運化暨區域鐵路後續建設計畫（基隆-苗栗段）
 工程名稱：苗栗跨站式站房
 說明：苗栗車站(室內)

Project name:

TRA Rapid Transit Systematize in Metropolitan Area and Regional Railway Follow-up Construction Project (Keelung-Miaoli section);

Construction title:

Miaoli elevated station

Description:

Miaoli station (interior)





計畫名稱：臺北機廠遷建設計畫
 工程名稱：主體工程(CL221&CL221-1)
 說明：B1基地維護管理中心

Project name:
 Taipei Depot Relocation Project;
Construction title:
 Main Structure Engineering (CL221&CL221-1);
Description:
 B1 depot maintenance center



計畫名稱：臺北機廠遷建設計畫
 工程名稱：主體工程(CL221&CL221-1)A1-1車體工場
 說明：蒸汽機車維修

Project name:
 Taipei Depot Relocation Project;
Construction title:
 Main Structure Engineering (CL221&CL221-1) A1-1 Car Body Workshop;
Description: steam locomotive maintenance

計畫名稱：臺北機廠遷建設計畫
 工程名稱：主體工程(CL221&CL221-1)A2-1車體工場(二)
 說明：富岡車輛基地邀請總統及部長蒞臨啟用典禮。

Project name:
 Taipei Depot Relocation Project;
Construction title:
 Main Structure Engineering (CL221&CL221-1) A2-1 Car Body Workshop II;
Description:
 The President and Minister are invited to the opening ceremony of the Fugang depot.



計畫名稱：臺北機廠遷建設計畫
 工程名稱：主體工程(CL221&CL221-1)A1-2轉向架工場
 說明：鋼輪維修

Project name:
 Taipei Depot Relocation Project;
Construction title:
 Main Structure Engineering (CL221&CL221-1) A1-2 Steering Bracket Workshop;
Description:
 Steel wheel maintenance.



計畫名稱：臺北機廠遷建設計畫
工程名稱：主體工程(CL221&CL221-1)A2-1車體工場
說明：電聯車維修

Project name:
Taipei Depot Relocation Project;
Construction title:
Main Structure Engineering (CL221&CL221-1) A2-1 Car Body Workshop;
Description:
EMU maintenance.

計畫名稱：臺北機廠遷建設計畫
工程名稱：主體工程(CL221&CL221-1) A4-1柴電及電力機車廠區
說明：柴電及電力機車維修

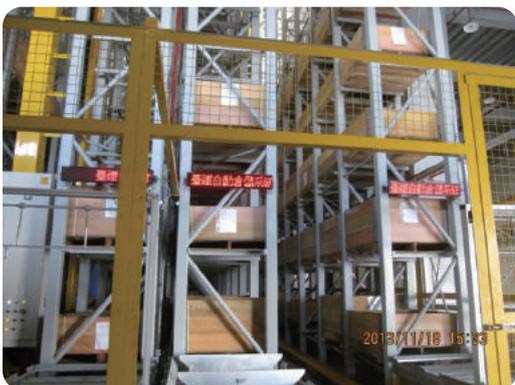
Project name:
Taipei Depot Relocation Project;
Construction title:
Main Structure Engineering (CL221&CL221-1) A4-1 Diesel and EMU Locomotive Workshop;
Description:
Diesel and EMU locomotive maintenance.



計畫名稱：臺北機廠遷建設計畫
工程名稱：主體工程(CL221&CL221-1) A4-1柴電及電力機車廠區
說明：柴電機車維修

Project name:
Taipei Depot Relocation Project;
Construction title:
Main Structure Engineering (CL221&CL221-1) A4-1 Diesel and EMU Locomotive Workshop;
Description:
Diesel and EMU locomotive maintenance

計畫名稱：臺北機廠遷建設計畫
工程名稱：主體工程(CL221&CL221-1)
說明：C1自動倉儲庫
Project name:
Taipei Depot Relocation Project;
Construction title:
Main Structure Engineering (CL221&CL221-1);
Description:
C1 automatic warehousing.



計畫名稱：臺北機廠遷建設計畫
工程名稱：主體工程(CL221&CL221-1)
說明：C1自動倉儲庫設備
Project name:
Taipei Depot Relocation Project;
Construction title:
Main Structure Engineering (CL221&CL221-1);
Description:
C1 automatic warehousing.



7

年度大事紀要

Major Events of the Year



鳳山 鳳山
5 5
Fengshan Fengshan



一月 January

1
/01

102年元旦連續假期疏運期間（101年12月28日至102年1月2日止計6天），全線加開266列次，其中東部幹線加開120列次，西部幹線加開128列次，南迴線加開18列次，運能提供較平日增加12.8%，每日平均運量高達72.8萬人次，較去年同期67萬人次增加9%，每日平均客運收入6,850萬元，較去年同期5,375萬元增加約8%，創歷年來連續假期疏運新高。

During the 2013 New Year Festival (December 28, 2012 thru January 2, 2013), TRA provided additional 266 train trips, among which the East Line had 120 extra trips, West Line 128 extra trips, and South-Link Line 18 extra trips, offering 12.8% more transportation volume than usual, with a daily average of 72.8 ten thousand passengers transported, which was a 9% increase compared with previous year's 67 ten thousand passengers; meanwhile the daily passenger revenue reached NT\$ 68.5 million which was a 8% increase compared with previous year's revenue of NT\$ 53.75 million, making a record high of holiday transportation.

一月 January

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/07

新營站及善化站無障礙電梯新建工程完工。

Completion of new construction of the barrier-free elevators of Xinying and Shanhua stations

一月 January

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/10

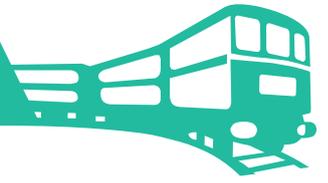
臺北車站B1-月台層電扶梯更新工程完工。

Completion of renovation of the Taipei station escalators

富岡車輛基地第一階段廠房正式啟用，由范局長植谷主持，並邀請馬總統英九、交通部毛部長治國、桃園縣吳縣長志揚、新竹縣邱縣長鏡淳及地方人士等貴賓共同參與啟用典禮。現場並由馬總統與貴賓為親提墨寶「薪火廣傳」揭碑，暨毛部長與貴賓在親提墨寶『丕基永固』石碑前合影，共同見證臺鐵邁向新紀元里程碑。

The opening ceremony of Fugang depot phase I workshop is hosted by Dr. Fang, TRA's Director General, and President Ma Ying-jeou, MOTC Minister Mao Zhiguo, Taoyuan Country Magistrate Wu Zhiyang, Hsinchu County Magistrate Chiu Ching-chun, and local celebrities were invited to join the ceremony. At the ceremony, President Ma together with the guests unveiled the monument carved with the motto "Passing the Torch" he wrote with a writing brush, and Minister Mao had photographs taken with the guests in front of the monument carved with the motto "Everlasting Foundation" he wrote, to jointly witness TRA's new milestone.





一月 January



新自強號(普悠瑪)於三義~后里間試車，於基隆起168Km~169+900Km間車速達150Km/hr，為本局車速開創新紀錄。

Test run of the new Tze-Chiang Limited Express (Puyuma) between the Sanyi and Houli regions. The new express can reach a speed up to 150km/hr in between the 168km in Keelung and the 169km+900km section, a record speed TRA ever had.

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/18

一月 January



為慶祝新自強號(普悠瑪)首航與太魯閣號引進6週年紀念，本局餐旅服務總所特與馬祖酒廠合作，推出首次以「普悠瑪」、「太魯閣」兩款列車模型設計之馬祖陳年高粱紀念酒。

To celebrate the maiden voyage of the new Tze-Chiang Limited Express (Puyuma) and the 6th anniversary of the Taroko Express, TRA's Catering Service Department collaborates with the Matsu Distillery to set forth the Aged Matsu Memorial Kaoliang contained in bottles of the "Puyuma" and "Taroko" shapes.

1
/30

二月 February

「代辦鐵工局內灣線(新竹-竹中)、六家線及沙崙線路線養護圖資及GIS建置」完工。

Completion of the "Railway Reconstruction Bureau's project of route maintenance geographic information and GIS establishment for the Neiwan line (Hsinchu- Zhuzhong), Liujiia line, and Shalun line.

春節疏運期間自2月7日起至2月18日(初九)止計12天，共加開658班次及加掛1,577輛次，共計疏運807萬6,693人次，平均每日疏運67.3萬人次，較去年同期60.8萬人次，增加10.7%，全線營收共計7億6749萬8717元，平均單日營收達6395萬8226元，較去年同期5842萬364元增加9.48%。單日尖峰出現在2月14日(初五)高達84.1萬人次，再度刷新101年創下之74.6萬人歷史高點。

During the Spring Festival from February 7 to 18, a total of 12 days, TRA provided 658 extra train trips, along with 1,577 extra cars, to transport 8,076,693 passengers, a daily average of 673,000 passengers transported, which is a 10.7% increase compared with previous year's 608,000 passengers, and the total revenue was NT\$ 767,498,717, averaged NT\$ 63,958,226 per day, which is a 9.48% increase compared with previous year's daily average of NT\$ 58,420,364. The single-day transportation peak, 841,000 passengers transported, appeared on February 14, breaking the 2012 record of 746,000 passengers.

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/07

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7 年度大事紀要

二月February

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/24

為加強疏運2013年台灣燈會活動期間(自2月24日至3月10日)人潮，本局除加開區間車外，並提供對號列車(除太魯閣號、團體列車、觀光列車外)增停竹北站。每日南下對號列車自12時起，北上對號列車自18時起均增停竹北站，以方便民眾轉乘。期間南下至竹北站、北上至新竹站旅客總運量約101萬人次。

To uplift the transportation capacity for the 2013 Taiwan Lantern Festival (from February 24 thru March 10), TRA provided extra interval trips and additional Zhubei stop for express trains (except for Taroko trains, group trains and tourist trains). During the period, the daily southbound express trains starting from 12:00 and northbound express trains starting from 18:00 stop at the Zhubei station for transfer passengers. During this period, the southbound passengers to Zhubei station and northbound passengers to Hsinchu station totaled 1,010,000 persons.

二月February

2
/28

配合2013年3月14日(諧音：一生一世)白色情人節，推出彩色版愛情文鎮，並於愛情文鎮上提供客製化刻字服務，每組售價1,899元，於2月28日至3月3日在臺北車站臺鐵夢工場、臺中鐵路餐廳及高雄鐵路餐廳開始預購。

To go with the White Valentine on March 14, 2013 (homophonous to "Love for A Lifetime"), TRA set out the color lovers paperweight, with customer-requested words carved on it. It was sold for NT\$ 1,899 per pair at the Taiwan Railways Shops at Taipei Station, T, from February 28 thru March 3.



三月March

3
/08

岡山車站月台提高暨身障電梯新建工程完工。

Completion of the uplift of the Gangshan station platform and new construction of elevators for the handicapped.

三月March

3
/09

臺北鐵路餐廳與北海道知名驛弁「釧祥館」共同推出「臺鐵・北海道特色便當」，每日限量100份。以臺灣、北海道常用食材入菜，讓消費者一次就能體驗日本與臺灣鐵路便當2種不同的風味。

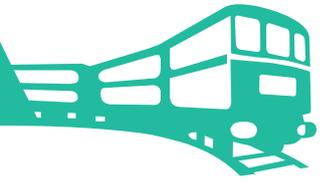
Taipei Railway Restaurant worked with the famous Hokkaido Yi Bian "Kushiro Hall" to jointly set out the "TRA・Hokkaido Meal Box Specialty", with limited daily offer of 100 sets. This cuisine takes ingredients commonly seen both in Taiwan and Hokkaido, so that consumers can taste both the Japan and Taiwan railway meal boxes at once.

三月March

3
/13

阿里山森林鐵路交接籌備處新任處長張錦松履新，由本局范局長植谷親臨主持佈達典禮，並邀請林務局嘉義林管處廖處長一光等參與，共襄盛舉。

The Director of Alishan Forest Railway Handover Preparatory Office, Mr. Zhang Jinsong, reported for duty. TRA's Director General, Dr. Fan Chih-Ku, personally hosted the ceremony, and the director of the Chiayi Forest District Office, Forestry Bureau, Mr. Liao Yiguang, was invited to attend the ceremony.



三月March

慶祝西洋情人節，於3月14日推出以臺鐵局汰換37Kg/m舊鋼設計製成之「第四代愛情文鎮（一生一世）」禮盒，限量750組。

To celebrate the Valentine's Day, the gift pack of "Fourth Generation Lovers Paperweight (Love for A Lifetime)" made of 37kg/m old steels phased out by TRA was set out on March 14th, with a limited offer of 750 sets.

3
/14

三月March

環島鐵路整體系統安全提昇計畫（臺鐵特甲級線軌道平整重建工程）完工驗收，共計787,084m（砸道、整碴及穩定車聯合作業）。

Completion and verification of the Round-the-Island Railway System Safety Upgrade Project (leveling and renovation of tracks of TRA premium class A routes), with a total of 787,084 m in length (joint operations of ballast pavement, tamping, and track stabilizer).

3
/27

三月March



慶祝新竹站建站100週年活動，在新竹站辦理CK124蒸汽機車靜態展示，並發售「臺鐵新竹站建站100週年精裝本紀念月台套票」等紀念活動。

To celebrate the 100th anniversary of the Hsinchu station, static display of the CK124 steam locomotive was given inside the station, along with sale of the "TRA Hsinchu station 100 anniversary hardcover platform memorial ticket set".

3
/31

四月April

配合清明節疏運，自4月3日起至4月8日止計6天，共加開264班次及加掛746輛次，合計疏運423萬5,885人次，平均每日疏運70萬5,981人次；全線營收共計3億2,354萬434元，平均單日營收達6,590萬9,874元。由於今（102）年清明為4天連續假期，與去（101）年假日僅1天之假期型態不同，營收及人數較去年同期分別成長22.23%及8.98%，亦顯示假期天數不一，收入相較於人數成長為高。

To go with the Qingming Festival transportation need, from April 3 through 8, a total of 6 days, TRA provided extra 264 trips along with 746 extra cars to transport 4,235,885 passengers, making a daily average of 705,981 passengers transported; the total revenue reached NT\$ 323,540,434, which was translated to a daily averaged revenue of NT\$ 65,909,874. The Qingming Festival of this year (2013) had 4 consecutive days off, different from last year with only 1 day off and, as a result, the revenue and passengers volumes grew 22.23% and 8.98%, respectively, compared with last year's. These figures also reveal that the number of days off affect revenue growth more than passenger growth.

4
/03

四月April



新左營站旅運服務空間促參案(ROT)正式開幕營運，與臺北站、板橋站商場並立，預估3站每年為本局帶來近2億元的資產活化營收。未來也將持續規劃更多車站複製本案成功模式，俾利各車站逐步發展成為集運輸、美食及購物之地區行旅生活中心。

4 / 09

The Xinzuoing station travel and transport service space ROT (reconstruction, operation, transfer) mall is officially opened for business, and stands side-by-side with the Taipei station and Banqiao station malls. The 3 station malls are expected to bring in total annual revenues of NT\$ 200 million from active utilization of the TRA assets. In the future, more stations will copy the ROT business model, so that all the stations will ultimately become the centers for transportation, dining and shopping.

四月April

本局阿里山森林鐵路籌備處設置要點奉行政院102年4月12日院授人組字第1020028344號函核定，並依本局同年月17日鐵人一字第1020012077號函發布生效。

4 / 17

The Guidelines for Alishan Forest Railway Preparatory Office Setup is approved by the document coded yuan tsou ren zu zi No. 1020028344 issued on April 12, 2013 by Executive Yuan, and promulgated to take effect in accordance with the document coded tie ren yi zi No. 1020012077 issued on the 17th of the same month by TRA.

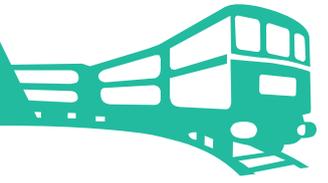
四月April

本局平溪線與日本江之島電株式會社(簡稱江之電)上午10時由本局鹿副局長潔身與江之電深谷研二社長共同簽署合作協議，並邀請交通部觀光局國際組鄭科長憶萍及新北市觀光旅遊局陳局長國君等貴賓參與共襄盛舉，協議內容以無償兌換雙方一日券方式，吸引觀光客互相參訪，共同創造臺、日兩地觀光收益與地方經濟發展。

4 / 23

TRA's Deputy Director, Mr. Lu Jiashen, and president of the Japan Enoshima Electric Railway, Mr. Kenji Fukaya, jointly signed an agreement for cooperative operations of the TRA Pingxi line with Enoshima Electric Railway (abbreviated as Enosima). The chief of MOTC Tourism Bureau International Section, Ms. Zheng Yiping and chief of the New Taipei City Tourism Bureau, Mr. Chen Guojun, were invited to the signing ceremony. According to the agreement, both parties offer free exchange of one-day unlimited tickets to attract tourists from both sides, so as to create new opportunities for tourist revenues and develop local economies.





四月April



「行政院農業委員會林務局委請臺鐵局協助營運阿里山森林鐵路行政契約」下午15:00由本局范局長植谷與農委會林務局李局長桃生假林務局嘉義林管處嘉義車庫舉行簽約儀式，並邀請內政部警政署鐵路警察局陳主任秘書哲深、嘉義市李副市長錫金及臺鐵工會謝理事長勝明等貴賓參與，共襄盛舉。本局自102年5月1日啟動阿里山森林鐵路協助營運事宜。

The "Administrative Contract of Forest Bureau, Council of Agriculture, Executive Yuan, Commissioning TRA to Assist Operations of Alishan Forest Railway" was concluded at 15:00 by TRA Director General, Dr. Fan Chih-Ku, and Director of Forest Bureau, Council of Agriculture, Mr. Li Taosheng in the signing ceremony held at the Jiayi Garage of Jiayi Forest Administration, Forest Bureau. Among the guests were Mr. Chen Zheshen, Chief Secretary of Railway Police, National Police Agency, Ministry of the Interior, Mr. Li Xijin, Deputy Mayor of Jiayi City, and Mr. Xie Shengming, Chairman of TRA Union,. TRA started operations of the Alishan Forest Railway on May 1, 2013.

4
/26



新自強號第2批(16輛)運抵基隆港，隨後即牽引至七堵機務段進行整備及運轉測試，預估暑假期間可投入營運。

The 16 cars of New Tze-Chiang Limited Express in 2nd delivery arrived at the Keelung Harbor, and were immediately hauled to the Qidu Rolling Stock Section for arrangement and test run. It is estimated that the new train will be put to operations for the summer vacation.

五月May

慶祝阿里山森林鐵路營運，高雄鐵路餐廳推出「阿里山特色便當」，每日限量100份，並於本局各餐廳門市、臺鐵夢工場商店舉辦「阿里山森林鐵路新紀元－紀念商品大集合」活動。

To celebrate the operations of Alishan Forest Railway, the Kaohsiung Railway Restaurant set out the "Alishan Boxed Meal Specialty", with limited offer of 100 sets; also, the "Alishan Forest Railway New Era - Grand Souvenirs Gathering" activities were given at TRA restaurants and Taiwan Railways Shops.

5
/01

五月May



在本局員工訓練中心辦理為期兩天之高階主管共識營，由范局長植谷率領一級單位主管參加，除邀請業界資深專業人士蒞臨授課外，並邀請交通部葉部長匡時蒞臨致詞勉勵激勵同仁士氣、凝聚臺鐵向心力。

A two-day senior officers training was given at the TRA training center, and among the attendees were TRA Director General Dr. Fan Chih-Ku as well as top management team leaders. In addition to the senior professional lecturers, MOTC Minister Mr. Ye Kuangshi was invited to give a speech to uplift the colleagues' morale and put all of us closer together.

5
/03

7 年度大事紀要

五月May

5
/10

因應102年母親節疏運旅客，自5月10日至13日合計4天，共加開126班次及加掛車廂239輛，合計疏運272萬823人次，平均每日疏運68萬206人次；全線營收共計2億3,881萬8,770元，平均單日營收5,970萬4,693元，與去（101）年母親節假期比較，人數與收入均略為減少，分別減少4.10%及2.64%。

To deal with transportation for the 2013 Mother's Day, from May 10 thru 13, a total of 4 days, TRA provided 126 extra train trips along with 239 extra cars, to transport a total of 2,720,823 passengers, with a daily average of 680,206 passengers; the total revenue from all routes reached NT\$ 238,818,770, with a daily average of NT\$ 59,704,693. Compared with the Mother's Day of previous year (2012), the passenger and revenue volumes are 4.10% and 2.64% slightly lower.

五月May

5
/13

慶祝126週年鐵路節，與老夫子哈傳媒公司合作，推出5款具鐵路意象之老夫子風趣漫畫，作為臺鐵便當封面，授權至102年12月31日止。

To celebrate the 126th anniversary of Railway Festival, TRA worked with OMQ ZMedia to set out 5 styles of comics with Old Master Q relish as the cover images on the TRA railway meal boxes, till December 31, 2013 when the patent authorization ended.



五月May

5
/16

上午11時日本愛媛縣松山市產業經濟部企劃官佐伯俊一先生等一行人蒞臨本局拜會范局長植谷，商議今年10月間該市松山車站與本局松山車站締結為同名姊妹車站事宜。

At 11:00, Mr. Saeki Shunichi et at., the planning officers of Industry & Economy Department, Matsuyama City, Ehime Prefecture, came to visit TRA Director General Dr. Fan Chih-Ku and discuss the sister station agreement concluded in mid-October this year for the same-name Songshan Train Stations of both sides.

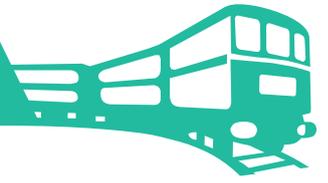
五月May

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/17

本日起開放提供「電話預訂素食便當」服務，訂購時間為每日上午9時至下午5時，旅客可於乘車前一日向各鐵路餐廳電話預訂並確認取餐方式，即可享用美味的素食便當。

Starting from today, the service of "Phone call reservation of vegetarian meal boxes" is available, and orders are taken from 9:00 am to 5:00 pm, during which passengers may order from all TRA restaurants one day in advance, so that the delicious meals can be served on the train ride.





五月 May

多卡通電子票證搭火車，自本日起由現行福隆—新竹站延伸至苗栗站及南部由現行南科—中洲站延伸至後壁站，共增13站。目前電子票證搭乘區域由原本51站擴增為64站，預計9月底前開放至103座車站可使用電子票證搭車，提高旅客使用便捷度。

Starting from today, for the multi-card e-ticketing train ride, the northern Fulong-Hsinchu route is extended to Miaoli and the southern Nanke-Zhongzhou route is extended to Houbi, with a total of 13 extra stops. The multi-card e-ticketing train stops are extended from the current 51 stops to 64 stops, and it is expected that by the end of September, there will be a total of 103 stations available for the e-ticking service. By then, travelers will enjoy more great convenient services.

5
/30

五月 May

136輛傾斜式電聯車購案第5編組8輛運抵基隆港。

For the procurement of 136 tilt EMUs, 8 units of the 5th group arrived at the Keelung Harbor.

5
/31

六月 June

自本日起停止發售月台票，除中壢、臺中、嘉義、臺南、高雄、宜蘭、花蓮等7個站，維持現行月台票及換證併行制外，其它車站民眾出入月台，均以換證方式辦理（但電子票證同站進出依使用規定仍維持收費）。

The stand-alone platform tickets are no longer available, starting from today, except for the 7 stations: Zhongli, Taichung, Jiayi, Tainan, Kaohsiung, Yilan and Hualien, which preserve the current dual systems of stand-alone platform tickets and certificate exchange; any other station will require passengers in and out of the platform to do the exchange of ticket certificate (but passengers in and out of the same platform with e-tickets will still be charged as regulated).

6
/01

六月 June

配合鐵工局花東鐵路電氣化工程施工，自本日起至12月30日止，列車微幅調整，606次莒光號逢週一至週四（國定假日及特定日期除外）停駛，改開行610次行駛樹林→花蓮間，花蓮→臺東間改以公路客運接駁旅客。全程車票（含公路客運行駛區間）仍由本局各售票通路統一發售。

To go with Railway Construction Bureau's Huatung Railway Electrification Project, starting from today thru December 30, TRA train schedule will be slightly adjusted: The No. 606 Chu-Kuang Express will not run on Monday-Thursday (except for national holidays and festivals), and for the replacement, No. 610 train will run from Shulin to Hualien, while the route from Hualien to Taitung will be replaced with highway bus shuttles. The full-range tickets (including highway bus shuttles) are still sold through TRA's ticket channels.

6
/03

六月 June

臺北車站指、標示系統設施等工程完工。

Completion of Taipei Station indicators system and facilities.

6
/04

7 年度大事紀要

六月 June

6
/06

鹽水溪橋切換使用。
Railway route switching to Yanshuei River Bridge

六月 June

6
/07

126週年鐵路節慶祝大會於5樓演藝廳舉行；由范局長植谷主持，邀請交通部葉部長匡時、英國鐵路工業協會理事長Mr.Jeremy Candfield、日本北海道旅客鐵道株式會社課長三木、釧路臨港鐵道支會常任委員峰雪剛及由利高原鐵道株式會社社長代表伊藤一己等貴賓參加，並請交通部葉部長匡時頒發服務40年績優資深員工、由本局范局長植谷頒發臺鐵之友及優良志工人員等獎項。

Celebration for the 126th anniversary of Railway Festival was held at the Performance Hall on the 5th floor, hosted by TRA Director General Dr. Fan Chih-Ku. Among the VIP guests were MOTC Minister Mr. Ye Kuangshi, Chairman of British Railway Industry Association Mr. Jeremy Candfield, Japan Hokkaido Railway Company Section Chief Mr. Mikiji, Port of Kushiro Railway Branch Permanent Member Mr. Feng Xuegang, and Representative of the President of Yuri Kogen Railway Corporation Mr. Ito Kazumi. In the ceremony, the MOTC Minister Mr. Ye Kuangshi bestowed service medals to employees with 40 years seniority, and TRA Director General Dr. Fan Chih-Ku bestowed Friend-of-TRA and Excellent Volunteer medals.



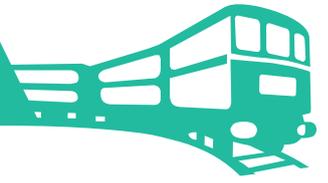
六月 June

6
/08



慶祝126週年鐵路節，特請知名漫畫人物「老夫子」代言「老夫子瘋臺鐵，暢遊全台灣」、「老夫子瘋臺灣臺鐵便當」等活動，並推出新商品：包括融合老夫子設計元素的「廉政便當」及聯名商品（著色本、明信片、資料夾等），並有老夫子與大番薯兩尊大型公仔於臺鐵夢工場（臺北站）前展示，以吸引華人世界老夫子迷購買。

To celebrate the 126th anniversary of Railway Festival, the comic figure "Old Master Q" was invited to endorse the activities of "Old Master Q Crazy for TRA Trips Around Taiwan" and "Old Master Q Crazy for TRA Boxed Meals", along with setout of new product, including "Anti-corruption meal box" featured with the Old Master Q design elements and co-branded merchandise (color painting books, postcards, folders). Also, there were two large models of Old Master Q and Big Potato displayed in front of the Taiwan Railways Shops at Taipei station to attract the fans of Old Master Q from Chinese communities all over the world.



六月 June

本局協助阿里山森林鐵路營運，奉行政院102年6月10日院授人組字第10200361362號函同意，核增預算員額正式職員9名及臨時職員148名。

To assist with the operations of Alishan Forest Railway, TRA, with the approval document coded yuan tsou ren zu zi No. 10200361362 issued on June 10, 2013 by Executive Yuan, acquired extra budget for additional 9 official employees and 148 temp workers for the operations.

6
/10

六月 June

配合端午節疏運，自6月11日起至6月13日止計3天，共加開14班次及加掛127輛次，合計疏運175萬799人次，平均每日疏運58萬3,600人次；全線營收共計1億2,722萬9,518元，平均單日營收4,240萬9,839元。去年（101）端午節假期適逢週六，疏運期間計有4天，與今年假期型態不同，故今年旅次量較少，平均每日營收及人次均較去年減少22.07%及6.37%。

To go with the Dragon Boat Festival transportation from June 11 thru 13, a total of 3 days, TRA provided extra 14 train trips along with 127 extra cars to transport a total of 1,750,799 passengers, with a daily average of 583,600 passengers transported; the totaled revenues from all routes reached NT\$ 1,27,229,518, with a daily average of NT\$ 42,409,839. The Dragon Boat Festival of the previous year (2012) was on a Saturday, so the holiday transportation continued for 4 days, making transportation busier. As a result, this year's averaged daily transportation and revenue volumes were 22.07% and 6.37% less than last year's.

6
/11



本局服務再精進－板橋站及臺北車班組通過第三方公證單位驗證，取得 ISO9001:2008品質管理系統驗證證書，並於本日上午10時完成授證儀式，對客運服務品質的提升，具有指標性的意義。

To further advance TRA services, the train squads of Banqiao and Taipei stations passed the ISO9001:2008 QA certification and the award ceremony was held to bestow the certificates at 10:00 this morning. To the service quality of passenger transportation business, this indicative awarding means a lot.

Better life for you

六月 June

102年鐵路特考於6月15日至17日舉行，共計39,068人報名，預計錄取620人。高員三級51人、員級103人、佐級466人。

The 2013 Railway Employment Qualification Exam was given from June 15 through 17. There were 39,068 people taking the exam, and about 620 of them will be qualified for TRA employment, distributed as 51 people for level-3 senior staff, 103 people for mid-level staff, and 466 people for preliminary staff.

6
/15

六月 June

響應政府政策，本局配合交通部辦理所屬機關(構)第5梯次未婚聯誼活動，假福隆地區舉行活動儀式，實際參加人數53人（男性28名、女性25名），透過活動安排，共計4對男女配對成功，績效良好。

In response to the government policy of encouraging marriage, TRA worked with MOTC to host the 5th matchmaking activity for the unmarried from all the MOTC related sub-institutions. Given in the Fulong area, the event attracted 53 people to attend (28 males and 25 females) and, through the recreational matchmaking activities, there were 4 couples matched up, which was quite a good result.

6
/22

7 年度大事紀要

六月 June



6 / 25

臺鐵屏東=潮州捷運化計畫「歸來=潮州間西正線高架路段」完工正式通車，由交通部葉部長匡時主持，全線5個高架化車站(歸來、麟洛、西勢、竹田、潮州)第1期工程亦完工同步啟用。為慶祝高架鐵路通車暨新站啟用，潮州站特發售紀念套票3000套，每套內含西勢站及潮州站上、下午月臺票各一張，名片式車票二張(歸來-麟洛、麟洛-竹田)、PP自強號列車票卡一張，每套售價120元，每人每次限購5套，現場另備有紀念戳章。

The "West Line Guilai-Chaozhou elevated Railway" under the Pingtung-Chaozhou rapid transit systematization project was completed and the opening ceremony was hosted by MOTC Minister Mr. Ye Kuangshi. The 5 elevated stations (Guilai, Linluo, Xishi, Zhutian, Chaozhou) along the route were also completed in the phase I construction and put to operations. To celebrate the operations of the raised railways and new stations, the Chaozhou station set out 3000 sets of memorial tickets, with each containing 1 morning and 1 afternoon platform tickets for the Xishi and Chaozhou stations, respectively, as well as 2 business card-type tickets (Guilai-Linluo and Linluo-Zhutian) and 1 PP Tze-Chiang Express ticket. Each set was sold for NT\$120, and each person was limited to buy no more than 5 sets. Memorial stamps were available at the purchase site.

六月 June

6 / 27

6月26日(跨27日)配合月美站(招呼站)路線高架化「花東線鐵路瓶頸路段雙軌化暨全線電氣化工程-CL312標月美段截彎取直土建工程」，辦理軌道切換工程，自本日起裁撤月美站並停辦客運營運服務。
On the 26th of June (crossing over to 27th), railway route switching was operated in compliance with the Yuiemei station (flag stop) raised railway construction under the "Huatung Line Railway Bottlenecked Section Dual Track and Full Electrification Project - CL312 bid for civil engineering on the Yuiemei section route straightening", and starting from the same, the Yuiemei station was no longer available for services.

六月 June

6 / 28

曾文溪橋切換使用。
Switching to the Tsengwen River bridge

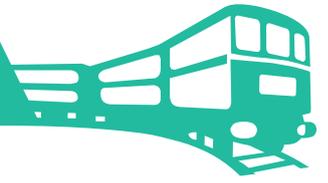
七月 July

7 / 10



臺北車站公益(再進化)廁所辦理啟用典禮，由本局范局長植谷主持，並邀請交通部陳常務次長純敬、仁愛國中林校長美娟等貴賓共同剪綵，本廁所係全國首座互動式「零接觸」、「環保」公廁，且獲臺北市政府環保局特優級廁所殊榮。

The opening ceremony of the Taipei Station public interest (re-evolved) toilets was hosted by TRA Director General Dr. Fan Chih-Ku, and MOTC Administrative Deputy Minister Mr. Chen Chunjing and Principal of Ren Ai Junior High School Ms. Lin Meijuan were invited to jointly cut the ribbon at the ceremony. This was the first interactive "zero contact", "eco-friendly" public toilet ever seen in the entire country, and was awarded as a superior toilet by the Environmental Protection Bureau, Taipei City Government.



基隆站至汐科站沿線各車站旅運服務設施更新工程完工。

Renovation of the transportation service facilities of the stations along the Keelung-Xike route was completed.

7 / 16

七月 July



具有「國家鑽石級綠建築」之稱的竹北站，舉辦跨站式站房啟用典禮，由本局范局長植谷主持，並邀請交通部葉部長匡時、林政務委員政則、新竹縣邱縣長鏡淳等貴賓共同參與，現場除由社區團體表演活動外，並免費提供新站房啟用紀念卡，同時限量發售紀念月台票供民眾收藏。

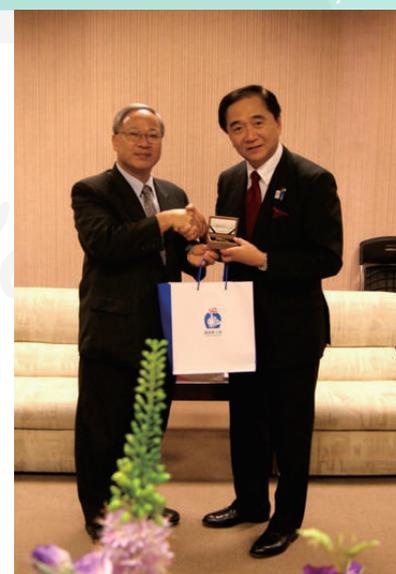
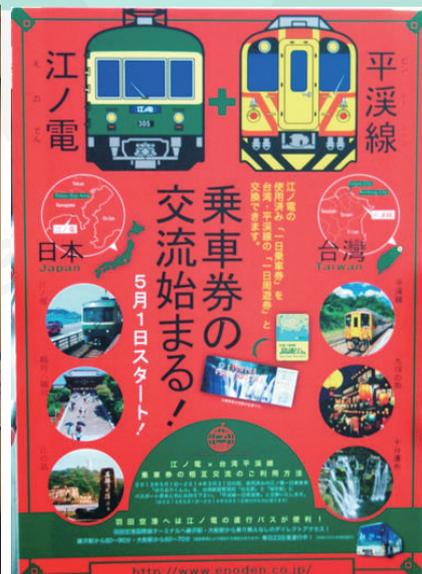
The opening ceremony of Zhubei station, known as a "national diamond level green architecture", was hosted by TRA Director General Dr. Fan Chih-Ku. Among the VIP guests were MOTC Minister Mr. Ye Kuangshi, Minister without Portfolio Mr. Lin Zhengze, and Hsinchu County Magistrate Mr. Qiu Jingchun. In addition to the shows performed by community groups and free commemorative souvenirs given away for free at the site, limited memorial platform tickets were sold for collections.

「臺鐵北迴線蘇新-花蓮間瓶頸路段改善可行性研究」開工。

Commencement of the " Feasibility Study on TRA North-link Line Su'aoxin-Hualien Bottlenecked Section Improvement"

7 / 17

七月 July



日本神奈川縣知事黑岩祐治先生為促進台、日觀光交流，下午蒞臨本局拜會范局長植谷，感謝臺鐵與日本江之電聯合行銷方案。日本江之電並於7月20日在臺北站與本局共同推廣平溪線與江之電一日券兌換觀光活動，同時赴平溪線共同推銷平溪地區與日本神奈川縣之旅遊觀光景點。

To promote the exchange of tourism between Taiwan and Japan, the Governor of Kanagawa Prefecture, Japan, Mr. Kuroiwa Yuji came to visit TRA this afternoon and meet Director General Dr. Fan Chih-Ku to pay tribute to the cooperation of joint marketing by TRA and Japan Enoshima Electric Railway. A joint promotional activity for free exchange of one-day tourist tickets for the TRA Pingxi Line and Enoshima Electric Railway was given at the Taipei Station on July 20. And on the same day, both parties at the Pingxi Line jointly promoted the tourist attractions of the Pingxi area and Kanagawa Prefecture of Japan.

7 / 19

八月 August

136輛傾斜式電聯車購案第8、9編組(共16輛)運抵基隆港。

The 16 EMU units of the 8th and 9th batches under the procurement of 136 tilt EMUs were delivered to the Keelung Harbor

8
/07



八月 August

8
/14

本局於8月13-14日兩天假宜蘭縣立體育場舉行「局長盃」桌球錦標賽，共有14個地區文康小組25隊參賽，參加選手共計195人，並於本日圓滿閉幕。比賽成績分別為：

男子組冠軍-高雄機場地區文康小組，女子組冠軍-局本部地區文康小組

A "Director Cup" table tennis championship was given on August 13 and 14 at the Yilan County Stadium. There were 25 teams from 14 recreational groups of different areas, totaled 195 players, taking part in the game. The game was successfully completed today. The men's champion was the recreational group from the Kaohsiung Airport area, and women's champion was the recreational group from the TRA HQ.

八月 August

8
/16

本局新竹站站長黃榮華與「美國紐約中央車站」(Grand Central Terminal隸屬美國紐約大都會運輸系統北方鐵路段)站長Steve Cupelli，於美國紐約州紐約市共同簽署「姐妹站聯合聲明」(Sister Station Agreement)，藉由合作與互敬，增進雙方交流與促進友好關係；並由新竹市市長許明財與美國紐約大都會運輸系統北方鐵路段(MTA Metro-North Railroad)總裁Howard Permut共同擔任見證人。

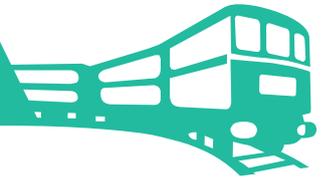
TRA Hsinchu station master Mr. Huang Ronghua and the master of the New York Grand Central Terminal, an affiliate of the New York Metropolitan Transportation Authority (MTA Metro) - North Railroad, Mr. Steve Cupelli, jointly signed a Sister Station Agreement in New York City to promote mutual cooperation and friendship. The Hsinchu City Mayor Xu Mingcai and the president of MTA Metro - North Railroad, Mr. Howard Permut, jointly witnessed the signing ceremony.

八月 August

8
/23

102年鐵路特考錄取人員榜示，計正額錄取296名，增額錄取104名，共錄取400名；另佐級車輛調度、機械工程、機檢工程、養路工程類科第1試共計錄取470名得參加第2試體能測驗。

The 2013 Railway Employment Qualification Exam was released. There were 296 people qualified, plus additional places for another 104 people, making a total of 400 people qualified of the exam. Also, the phase I written test for junior positions on vehicle scheduling, mechanical engineering, mechanical inspection engineering, and road maintenance engineering qualified 470 people, who had to enter the phase II physical test.



八月August

296輛通勤(800型)電聯車第1、2編組(原型車)共16輛運抵基隆港。

The 16 commute EMUs (prototype) of 1st and 2nd batch under the procurement of 296 commute EMUs (model 800) arrived at the Keelung Harbor.



8
/27

八月August

本日7時33分臺東開往新左營302次自強號列車，行經枋野至加祿間枋山二號隧道口，因豪雨土石流衝擊，肇致出軌意外事故，旅客17人輕重傷。經國軍官兵及臺鐵同仁全力徹夜搶修，於9月2日上午10時30分完成搶通，又豪雨造成西部幹線多處積水，衍生部分區段各級列車停駛，全線列車共影響240列次、延誤550分、旅客約45,000人。

Today at 7:33, the Tze-Chiang Express train No. 302 running the Taitung-to-Xinzuoying route had an accident, due to a mudslide, at the entrance of the Fangshan II tunnel between Fangye and Jialu, and the train was derailed, causing 17 passengers suffered from minor and severe injuries. With the help of the military and TRA's overnight emergency repair, the line was back to operations at 10:30 on September 2. The heavy rain has also caused floods in many places on the West Coast Line, stalling train operations in various sections. As a result, there are 240 train trips affected, with a total delay of 550 minutes, and about 45,000 passengers are affected.

8
/31

九月September

臺南站月台提高暨身障電梯新建工程完工。

Uplifting the platform and construction of handicapped elevators of the Tainan station are completed.

本日起在各車站及列車上推行「禮貌乘車運動」，以「禮讓弱勢、先下後上、共維乘車秩序」為主軸，透過各種宣導方式，籲請旅客配合與支持，共同營造便捷、友善的優質乘車環境，及提升全民乘車禮貌運動。並於本月起在斗六、嘉義、新營、臺南、岡山、新左營、高雄及屏東等8站，以「區間車」停靠月台位置「畫設排隊線」試辦，並持續推廣至平溪、內灣及集集等3條支線。

Starting from today, the movement themed with "courtesy riding" and "priority seats, alighting first, riding orders" is set out through publicities, urging passengers to cooperate and support the movement, to create a convenient, friendly train riding environment and uplift the public awareness of riding courtesy.

Starting from this month, at the stations of Douliu, Jiayi, Xinying, Tainan, Gangshan, Xinzuoying, Kaohsiung, and Pingtung, waiting lines are drawn at the shuttle train platforms for test run of the riding courtesy movement, which will be extended to Pingxi, Neiwan and Jiji branch lines.

9
/11

九月September

為配合9月25日全線列車時刻局部調整，分別印製冊本式時刻表40萬本、摺頁式時刻表20萬張，上午8時起置於各車站供旅客索取。

To go with the September 25 all-route rescheduling, 400,000 copies of new schedule brochures and 200,000 copies of folded leaflets are printed, and offered at all the stations for free, starting from 8:00 in the morning.

9
/17

7 年度大事紀要

九月September

9
/23

為配合中秋節疏運，自9月18日起至9月23日止計6天，共加開298班次及加掛634輛次，合計疏運380萬2,993人次，平均每日疏運63萬3,832人次；全線營收共計3億4,971萬7,630元，平均單日營收5,828萬6,272元。由於今年中秋節連續假期適逢天兔颱風來襲，故今年旅次量較少，平均每日營收及人次均較去年減少1.76%及6.39%。

For the Moon Festival transportation from September 18 thru 23, a total of 6 days, TRA provided 298 extra train trips along with 634 extra cars, to transport 3,802,993 passengers, with a daily average of 633,832 passengers transported; the total revenue from all the routes reached NT\$ 349,717,630, with a daily average of NT\$ 58,286,272. Due to the Typhoon Usagi hitting the long Moon Festival holiday, this year's daily average of passengers and revenues are 1.76% and 6.39% less than last year's.

九月September

9
/25

136輛傾斜式電聯車購案第10、11編組（共16輛）運抵基隆港。

The 16 EMUs of the 10th and 11th batch under the procurement of 136 tilt EMUs arrived at the Keelung Harbor.



因應「新購傾斜式自強號列車陸續加入營運」暨「各項鐵路工程陸續啟用」，自本日起部分班次進行局部調整。總計自強號整體運能臺北=花蓮間增加24.7%、臺北=臺東間增加11.7%、高雄=臺東間增加10.5%、臺北=高雄間(山線)增加4.9%、臺北=高雄間(海線)增加28.8%。

To deal with the "newly procured tilt Tze-Chiang Express trains joining operations" and "various constructed railway facilities up and running for operations", starting from today, the train schedules are partially adjusted. The overall transportation capacity of Tze-Chiang Express has a 24.7% increase in the Taipei-Hualien section, 11.7% increase in the Taipei-Taitung section, 10.5% increase in the Kaohsiung-Taitung section, 4.9% increase in the Taipei-Kaohsiung mountain line, and 28.8% increase in the Taipei-Kaohsiung coast line.

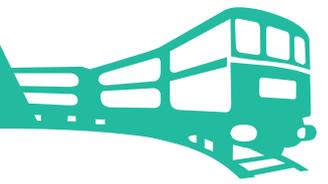
九月September

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/26

本局自民國75年後就停用觀光餐車，為了讓旅客再度體驗火車上用餐的樂趣，特別打造觀光餐車2輛，以附掛在郵輪式列車的形式，重現觀光餐車。

TRA has stopped using tourist diners since 1986. To let passengers experience the fun again of dining on the trains, TRA has 2 dining cars built and attached to the cruise-style trains, to revitalize the tourist dining relish.





九月September

102年鐵路特考正額錄取人員第1次分發(免體能測驗)計242人報到。

The first batch of job dispatch for people passing the 2013 Railway Employment Qualification Exam (without physical test) had 242 people reporting for duty.

9
/27

九月September

102年本局多卡通電子票證設備建置完工，自本日起南、北區段共增加38個車站提供電子票證搭車服務試辦營運，並修改部分乘車規定。北部區段含福隆、基隆、苗栗(含平溪線及內灣線、六家線)南部區段含林內、台南、屏東間及(沙崙線)等站。

The TRA multi-card e-ticketing system is completed in 2013. Starting from today, there are 38 stations in the south and north sections offering e-ticketing services for test run, and some of the train riding regulations are amended accordingly. The northern section covers the stations of Fulong, Keelung, Miaoli (including Pingxi Line, Neiwan Line, and Liujia Line), while the southern section covers the stations of Linnei, Tainan, Pingtung, and Shalun Line.

9
/30

十月October

雙溪站及福隆站無障礙昇降設備新建工程完工。

The construction of barrier-free elevators of the Shuangxi and Fulong stations are completed.

10
/02

十月October

車勤服務部推出「臺鐵宜蘭風味便當」嚴選蘭陽平原盛產之農、漁特產，提供愛好臺鐵便當的民眾味覺與視覺之新鮮感。

The On-Train Passengers Service Section set out the "TRA Yilan Relish Boxed Meal " featured with selected agricultural and fish products from Lanyang Plain, to feast passengers fond of railway boxed meals on the freshness of visual and flavor touch.

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/07

十月October

為配合雙十節國慶疏運，自10月9日至11日止計3天，共加開37班次，合計疏運208萬6,248人次，平均每日疏運69萬5,416人次；全線營收共計1億6,087萬8,115元，平均單日營收5,362萬6,038元。由於今年10月11日適逢週五，故今年旅次量較多，平均每日營收及人次均較去年增加32.56%及14.28%。

For the transportation on the Double Tenth National Day, starting from October 9 thru 11, a total of 3 days, TRA provided 37 extra train trips to transport a total of 2,086,248 passengers, with a daily average of 695,416 passengers transported; the total revenue from all routes reached NT\$ 160,878,115, with a daily average of NT\$ 53,626,038. Since this year's National Day fell on a Friday, the transportation was busier, with averaged daily volumes and revenues increased 32.56% and 14.28%, respectively, compared with last year's.

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Better life for you

7 年度大事紀要

十月October



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本局松山站與日本JR四國鐵道株式會社松山站，於上午11時在本局松山站舉行締結姊妹車站(日方稱友好交流)儀式，由本局松山站簡信立站長與日本JR四國鐵道株式會社半井專務、票務取役鐵道事業本部長半井真司、松山市長也志克仁及松山站濱仁志站長等共同舉行簽署儀式，並邀請臺北市陳副市長文雄及日本愛媛縣松山市野治克仁市長擔任雙方見證人，共同見證歷史性的一刻，寫下本局「首度」與外國鐵道單位以「同名車站」進行國際交流歷史的新頁，且成功將我方車站行銷到國際。現場並發行紀念套票共2,500套。

TRA's Songshan Station and Japan JR Shikoku Railway Company's Songshan Station were concluded as sister stations (known as friendly exchange in Japanese term) at 11:00 in the morning. The signing ceremony held at TRA's Songshan Station was co-hosted by the TRA Songshan Station Master Mr. Jan Xinli, JR Shikoku Railway Company's Executive Director Mr. Nakarai, Railway Ticketing Service Section Chief Mr. Shinji Nakarai Songshan (Matsuyama) City Mayor Mr. Katsuhito Noshi, and Japan Songshan Station Master Mr. Hitoshi Kubo. Also, Taipei City Deputy Mayor Mr. Chen Wenxiong and the Mayor of Japan Ehime Prefecture Matsuyama City, Mr. Katsuhito Noshi, co-witnessed the historical moment, a brand new page of TRA signing a friendship agreement with a foreign railway institution for the stations with the same names. This event has successfully publicized our train station to the international market. There were 2,500 sets of memorial tickets sold at the ceremony site.

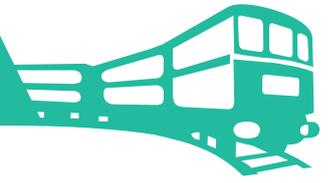
十月October

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/15

上午10時30分在新左營站大廳舉辦「臺鐵服務再擴充、便利乘車多卡通」多卡通電子票證啟用記者會，將服務範圍擴展至中南部通勤區間之林內一屏東站共40站，合計全線計102站。民眾可持高雄捷運一卡通、悠遊卡、遠通ETC卡及台灣通卡等電子票證於服務範圍內搭乘臺鐵、高鐵、捷運、地方客運及公車，達成票證無縫運輸。

The press conference titled "TRA Service Re-Expansion, Convenient Train Riding Multi-Card" for the new opening of multi-card e-ticketing business was held at 10:30 in the morning in the hall of Xinzuoyn Station, to mark the commencement of the extended service stretching to the central and southern commute areas that cover 40 stations in the range of Linnei-Pingtung section, making a total of 102 stations of all routes covered by the e-ticketing services. Passengers may use the e-ticketing certificates of Kaohsiung MRT iPass, Taipei EasyCard, Far East ETC card and Taiwan Easy Go Card to take TRA trains, High Speed Rail, MRT, highway buses and local buses within the service range, making a seamless transportation environment.





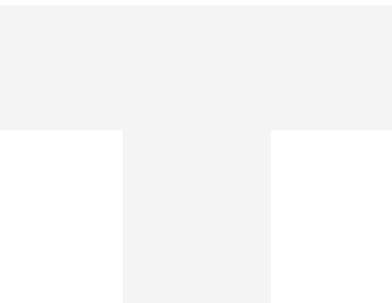
十月October



八堵至南港間三軌化最後一哩路『樟樹灣-南港間擴建三軌工程』，在南港車站舉行通車典禮。由交通部次長范兼代局長植谷親自主持，邀請馬總統英九、交通部葉部長匡時、立法委員蔡正元、臺北市張副市長金鶯、新北市李副市長四川等貴賓一同參與啟動儀式。又為配合七堵－南港間三軌化工程啟用暨提升基隆－臺北間運能，將部分班次增停樹林、南港及瑞芳等車站，以提供優質的運輸服務。

The opening ceremony for the last mile of the tri-track route from Badu to Nangang under the "Zhang Shu Wan-Nangang Section Tri-Track Project" was held at the Nangang Station. The ceremony was presided by MOTC Deputy Minister/TRA Director General Dr. Fan Chih-Ku, and President Ma Ying-jeou, MOTC Minister Mr. Ye Kuangshi, Legislator Cai Zhengyuan, Taipei City Deputy Mayor Mr. Zhang Jine, and Taipei City Deputy Mayor Mr. Li Sichuan were invited to the ceremony. To go with the Qidu-Nangang tri-track operations and uplift the transportation capacity of the Keelung-Taipei section, some train trips have extra stops at the stations of Shulin, Nankang, and Ruifang, for a better transportation service.

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/20



十月October



苗栗站榮獲「綠建築鑽石級殊榮」，上午10時舉辦跨站式站房啟用典禮，由交通部次長范兼代局長植谷主持，並邀請苗栗縣劉縣長政鴻、徐立委耀昌、陳立委超明、苗栗市邱市長炳坤及地方民意代表等一同剪綵啟用。現場除由舞獅團表演祥獅獻瑞、地方社團表演活動外，並免費提供新站房啟用紀念卡，同時限量發售紀念月台票供民眾收藏。

Miaoli Station was awarded the "Green Architecture Diamond Class Special Honor". The opening ceremony for the elevated station held at 10:00 in the morning was hosted by MOTC Minister/TRA Director General Dr. Fan Chih-Ku, and Miaoli County Magistrate Mr. Liu Zhenghong, Legislator Mr. Xu Yaochang, Legislator Mr. Chen Chaoming, Miaoli City Mayor Mr. Qiu Bingkun as well as local councilors were invited to jointly cut the ribbon. In addition to the lion dance and other local community performances, memorial cards for the new station house were given away for free at the ceremony site; also available for sale were the limited edition of memorial platform tickets.

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/25

you

7 年度大事紀要

十月October



本局與臺北市政府（文化局）合作辦理「102年臺北鐵道文化節」，由文化局劉局長維公、本局臺北機廠賴廠長興隆共同主持，邀請臺北市郝市長龍斌、交通部陳次長純敬、本局何副局長獻霖、臺北市張議員茂楠等貴賓共襄盛舉。本次「北廠48-臺北鐵道文化嘉年華」活動，帶領民眾認識、了解臺北昔日鐵道沿線的重要工業遺產及城市發展脈絡。

10
/26

The "2013 Taipei Railway Cultural Festival" organized by TRA and Taipei City Government Department of Cultural Affairs were co-hosted by the Director of Department Cultural Affairs Mr. Liu Weigong and Director of TRA Taipei Depot Mr. Lai Xinglong. Among the guests were Taipei City Mayor Mr. Hao Longbin, MOTC Deputy Minister Mr. Chen Chunjing, TRA Deputy Director Mr. He Xianlin, and Taipei City Councilor Mr. Zhang Maonan. The purpose of this "North Depot 48 - Taipei Railway Cultural Carnival" activity is to lead the public to get to know and understand the important industrial legacy and urban development context along the old railways.

十月October

10
/28

頭城、礁溪及南澳站無障礙昇降設備新建工程完工。

Completion of the barrier-free elevators of the Toucheng, Jiaoxi and Nan'ao stations.

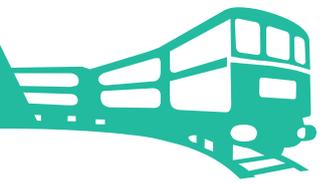
十一月November



推動「書香臺鐵、人文車站」方案，以「車站不只是車站」的概念，松山站與臺北市立圖書館合作建置「Fastbook全自動借還書站」正式啟用；旅客或民眾可透過甲地借書乙地還書之方式，充分利用交通路網車站連結功能，達到「行」與「育」日常生活的連結效益。

11
/01

The "Scholarly TRA, Literary Station" program was set out with the conception of "station is not just a station". With the theme, the Songshan Station and Taipei City Library collaborated to establish the "Fastbook-Automatic Book Stop" which has now been up and running. Travelers or general public may borrow books from point A and return at point B, so that the transportation network can be fully utilized to fulfill the benefits from linking "transport" and "education" together.



十一月November

配合國家推行無障礙運輸環境交通政策需求，提昇全國無障礙交通運輸環境，本局依序辦理車站無障礙電梯新設工程。雙溪站、福隆站、二水站無障礙電梯新設工程正式啟用。

transportation environment, TRA has been building barrier-free elevators at train stations. The barrier-free elevators of the Shuangxi, Fulong, and Ershui stations have been completed and put to operations.

11
/04

十一月November

三義站無障礙電梯新設工程正式啟用。

The barrier-free elevators of the Sanyi station have been completed and put to operations.

11
/05

十一月November

隆田站、瑞芳站無障礙電梯新設工程正式啟用。

The barrier-free elevators of the Longtian and Ruifang stations have been completed and put to operations.

11
/06

十一月November

102年鐵路特考正額錄取第2次(實施體能測驗)分配實務訓練計323人報到。

The second batch of job dispatch (with physical test) for people passing the 2013 Railway Employment Qualification Exam had 323 people reporting for duty.

11
/08

路竹站無障礙電梯新設工程正式啟用。

The barrier-free elevators of the Luzhu station has been completed and put to operations.

十一月November

配合「花東線鐵路瓶頸路段雙軌化暨全線電氣化工程」路線變更需要，溪口站裁撤。

To go with the "Huatung Line Railway Bottlenecked Section Dual Track and Electrification Project", the Xikou station was eliminated for route adjustment.

11
/14

十一月November

為期一年的「臺灣鐵道舊站戳章之旅」集章活動，將於今年12月31日結束。特舉辦鐵道旅行講座，邀請臺灣鐵道小旅行的作者與民眾分享交流。並另提供4款隱藏版戳章蓋印及商品優惠活動。

The one-year activity of "Taiwan Railway Old Station Stamps Tour" will come to an end on December 31 this year. Workshops with topics on the railway tours were given, and railway traveling authors were invited to share their experiences with the public. There were 4 types of hidden stampings and other souvenirs for sale with special discount.

11
/16

十一月November

通霄站、苑裡站無障礙電梯新設工程正式啟用。

The barrier-free elevators of the Tongxiao and Yuanli have been completed and put to operations.

11
/28

7 年度大事紀要

十一月November

11
/30

本局職工福利會在臺北車站展演廳舉辦「102年集團結婚典禮」，共27對佳偶參加，其中6對新人雙方皆為臺鐵員工。由交通部次長范兼代局長植谷擔任證婚人，並贈送「愛情文鎮」禮盒，象徵「鐵不出軌」，祝福新人締結良緣，開啟人生新里程。

The "2013 Group Wedding Ceremony", organized by TRA Workers Welfare Association, held at the Taipei Station Performance Hall, had 27 couples get married, and 6 couples had husband and wife both being TRA employees. MOTC Deputy Minister/TRA Director General Dr. Fan Chih-Ku witnessed the wedding and bestowed "Lovers Paperweight" gift packs to the new wedded to symbolize "Derail-Free Love", and wished them a happy new journey of life.



十二月December

12
/02

為增進本局人員對於採購流程的認知，提升採購效率，函頒新修訂「本局採購標準作業程序」。

To enhance TRA staff's knowledge of the procurement process and uplift the efficiency, the amendment of "TRA Procurement Standard of Operations" was promulgated.

十二月December

12
/05

花東特『蔬』便當，以原住民風味鹹豬肉及鬼頭刀魚排為主菜，搭配花東特產蔬菜及食材，讓民眾用味覺體驗花東好風情。

The Huatung boxed meal special featured with aboriginal-style bacon and Dolphin fish fillet as entree, coupled with Huatung vegetable and ingredients, is an exceptional treat that allows the public to use their taste buds to experience the Huatung relish.

十二月December

12
/13

臺北電務段辦理環島鐵路整體系統安全提升計畫(竹北站號誌設備改善電子連鎖工程)，榮獲行政院公共工程委員會主辦之第13屆公共工程金質獎(設施類)佳作獎。

The Round-the-Island Railway System Safety Upgrade Project handled by the Taipei Electric Section was award the Excellent Work Award of the 13th Public Construction Golden Medal (category of facility) hosted by Executive Yuan Public Construction Commission.

十二月December

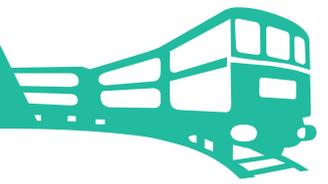
12
/16

本局訂票網頁除原有之中文「繁體版」及「英文版」外，增加中文「簡體版」及「日文版」訂票網頁，以方便國際觀光客訂票及付款，並提升服務品質及國際形象。

In addition to the traditional Chinese and English versions of the TRA ticketing website, the newly added simplified Chinese and Japanese versions have greatly facilitated international tourists to order tickets and make payments, and have promoted the service quality and international image.

樹調站捷運化通勤車站新建工程開工。

Commencement of the construction for the Sudiao rapid transit systematization commute station.



十二月December

12
/17



臺北車站東、西區地下停車場，以OT方式委託民間公司營運管理正式啟用。停車場除以人文藝術、科技服務、節能減碳進行改造外，並引進「車位導引LED系統」搭配「車位在席系統」及「智慧尋車系統」等先進設施，方便民眾迅速找尋車位及取車，有助於提升整體服務品質及形象。

The Taipei station east and west underground parking lots were up and running through outsourced operations with an OT model. Remodeled around the themes of literary arts, technological services, and energy conservation & carbon reduction, the parking lots have introduced the cutting-edge facilities of "parking guidance LED system" coupled with "car in-parking system" and "intelligent car searching system", to help people to quickly identify a parking spot or quickly locate and fetch their cars, thus the overall service quality and image are promoted.

十二月December

12
/18

136輛傾斜式電聯車購案第14、15編組（共16輛）運抵基隆港。

The 16 EMUs of the 14th and 15th batch under the procurement of 136 tilt EMUs arrived at the Keelung Harbor.

十二月December

12
/20

沙鹿站改建跨站式站房正式啟用。提供多用途空間，結合各種商業活動，賦予站區觀光商業契機，活絡車站整體機能。

The remodeled elevated station at Shalu Station was put to operations. The new establishment provides multi-purpose spaces that allow combination of various commercial activities and bring in business opportunity of tourism to revitalize the entire station mechanism.

102年特種考試交通事業鐵路人員考試第1次增額錄取報到73人。

The 1st additional admission quota for the 2013 Railway Employment Qualification Exam had 73 people reporting for duty.

十二月December

12
/27

296輛EMU800通勤電聯車購案第10編組（共8輛）交車。

The 8 EMUs of the 10th batch under the procurement of 296 models 800 EMUs were delivered.

三姓橋捷運化通勤車站新建工程開工。

Commencement of the construction for the Shanshin Bridge rapid transit systematization commute station.

十二月December

12
/30



新採購EMU800通勤電聯車微笑號周邊商品發表記者會，推出「鐵定保佑吉祥御守」、「迴力(列)車」、「T恤」、「筆袋」、「迴力車筆」、「紙膠帶」、「造型磁鐵」及「精密金屬模型」等22項鐵路商品，並辦理滿800送EMU800型迴力車優惠活動。

Set out 22 railway products including the "Railway Assured Lucky Guardian", "Pull Back (Express) Train", "T-shirts", "Pen Bag", "Pull Back Train Pen", "Paper Tape", "Stylish Magnet", and "Exquisite Metal Model" in the press conference for the EMU800 Smile Express. There was a special offer with NT\$ 800 of purchase for a free EMU800 Pull Back Train.

136輛傾斜式電聯車購案最後兩編組（第16、17編組，共16輛）運抵基隆港。
The 16 EMUs of the last two (16th & 17th) batches under the procurement of 136 tilt EMUs arrived at the Keelung Harbor.



於本局演藝廳舉辦品管圈全局發表會，由交通部次長范兼代局長植谷主持；期藉由員工自主之PDCAB循環改善活動，提升工作效率、鼓勵業務創新及達成各項任務目標，優勝團隊為：

殊榮獎：太馬圈－花蓮機務段。

The convention for TRA quality control circle (QCC) publication held in the Performance Hall was hosted by MOTC Deputy Minister/TRA Director General Mr. Fang Zhigu. The purpose of the activity was to encourage employees to do spontaneous PDCAB circular improvement, to make better efficiency, and to inspire business innovation to fulfill missions. The winning team bestowed a special honor award was the Taima circle from the Hualien Rolling Stock branch.

高雄工務段轄內南迴線中央隧道加固工程完工。

The reinforcement project of the South-link Line central tunnel under the duty range of Kaohsiung Construction Section was completed.





劉文光/

44年元旦台鐵花蓮管理處 花蓮車班全體合照

民國44年元旦於花蓮舊站拍攝全體車班同仁合照留念,右上角同仁,因當時正在行車出勤,故於後補上之。



邱茹岑/車上服務

照片主角劉鈴美小姐，19歲即在臺鐵任職當時人人稱羨的「飛快車小姐」，照片為民國63年於莒光號列車販售零食，由日籍觀光客拍攝後贈送留念。



劉文光/

1973.8.27 東線鐵路富源站33次開車

照片中開車站長劉慶榮為當時少數自日據時期即擔任列車長的臺籍站長，當年開車需由站長舉手為號誌，而非現在使用綠燈為號誌。

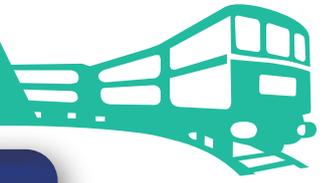


劉文光/懷舊·花蓮北濱海岸

照片為日據時代由花蓮舊站海邊往花蓮港方向拍攝,收藏距今約70年以上歷史。

懷舊憶往

記憶總是慢慢的淡去
餘下的，只有那泛黃照片訴說著
那曾經走過遺留下的故事痕跡



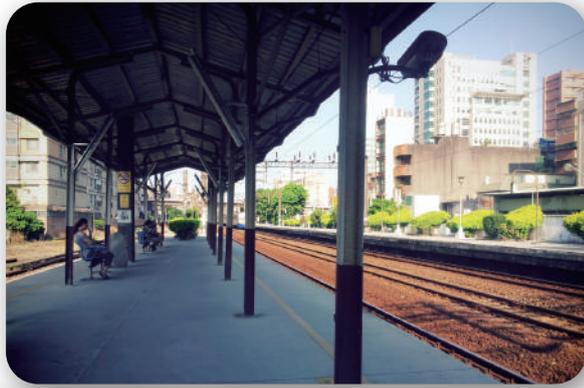
經典時刻



1	2
3	4
5	6
7	投稿人 / 作品名稱
8	說明

- 賴姿穎 / 6點56分
融合日式建築風格與幾米畫作的宜蘭車站，在晨曦中染了滿簾的綠意。
- 邱鈺芬 / 光華號
- 朱森榮 / 火車來了
不論田間花海或山林鐵道，等待只為了捕捉美麗的瞬間，凝住美好的回憶。
- 王彥翔 / 新舊傳承
冒著冉冉白煙的蒸氣火車旁停著新穎的電聯車，為橫跨百年歷史的新竹站留下世代傳承的最佳見證。
- 張建志 / 幸福的光線
乘著森林小火車上山觀賞阿里山日出，當天際由黑夜轉為白晝的瞬間，內心滿溢幸福的滋味。
- 卓聖男 / 圍繞
一圈一圈的圓彷彿舞動著的緞帶，為車站增添一股生命的律動。
- 徐簡麟 / 汐科車站之美
S型彎道加上鋼骨建築呈現出汐科站融合現代與工藝之美感。
- 王儷諭 / 向陽
在侯硐這座安靜的山城，有一列載滿旅客的列車奔向朝陽，正如夢想列車奔向未來，令人充滿希望和快樂。

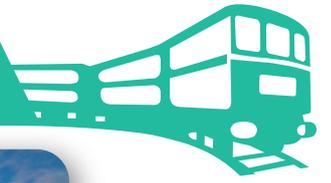
經典時刻



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|---|---|
| 1 | 2 |
| 3 | 4 |
| 7 | 6 |
| 3 | 3 |
| | 8 |

投稿人 / 作品名稱
說明

- 1 王詩婷 / 等待
在清晨的晴空下等待著列車進站，期待嶄新的一天就此展開。
- 2 徐簡麟 / 仲夏寶島號英姿
新竹站建站百年紀念-仲夏寶島號CK124蒸氣列車內灣之旅。
- 3 李淑華 / 山佳火車站
晴空、木棉、長者，映襯著擁有百年歷史的山佳火車站。
- 4 蕭力璋 / 最終 還是有交點
菁桐山線鐵道，從平行走向交會留下無限遐想的意境。
- 5 徐簡麟 / 仲夏寶島號英姿
仲夏寶島號CK124蒸氣列車內灣之旅。
- 6 卓聖男 / 就感心的小紙條
揪感心的服務為旅途留下美好的記憶。
- 7 朱森榮 / 冬山火車站
冬山火車站貌似瓜棚的前衛外型堪稱最漂亮的火車站。
- 8 朱森榮 / 穿越
看著火車奔馳在原野、穿越隧道與鐵橋所帶來的快樂與悸動，隨著「火車快飛」的旋律深深烙印在心中。
- 9 何祐杰 / 黃金普悠瑪
午後的花蓮站，月台邊靜候著的普悠瑪號，在煦煦陽光照射下呈現了高貴耀眼的金黃。



經典時刻



1	2
3	4 5
6	7
8	投稿人 / 作品名稱
9	說明

- 陳美雲 / 彩繪火車桐花季**
平溪是五月雪桐花季的美麗故鄉，身卓繽紛外衣的彩繪火車和雪桐花交織出春的經典。
- 楊柏彰 / 油菜花奔馳**
列車行經黃澄澄盛開的油菜花田，留下讓人讚嘆與驚喜的身影。
- 吳恩璋 / 映。紅影**
收割後的稻田，給了山、給了雲，也給了疾馳而過的普悠瑪一面鏡子，映出屬於後山的風采。
- 吳恩璋 / 孩時。趣**
等待著捕捉列車進站的剎那永恆，童真的孩子卻在此刻舉起了手，大大地給了迎面而來的老火車一個讚。
- 吳國禎 / 火車遊客庄**
白煙伴隨著CK124蒸汽火車賣力衝刺，抵達舊山線鐵路的最高點-勝興車站！
- 王添進 / 觀光彩繪列車**
觀光彩繪列車與溪流原野相映，讓人不禁憶起兒時搭火車時的回憶。
- 卓聖男 / 傳遞一輩子的情緣**
車票收藏回憶，也傳遞情感，簡單的互動中蘊藏著暖暖的情意。
- 楊柏彰 / 鳳凰火車**
盛開的鳳凰花與火車交織出美麗如畫般的景色。
- 李欣容 / 鐵道風光**
旅途中與區區車擦身而過，透過鏡頭看見台灣之美，也記錄下難得的鐵道風光。

交通部臺灣鐵路管理局年鑑編輯委員會名冊

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