

臺灣

99年鐵路年鑑
2010 Taiwan Railways
ANNUAL REPORT



RAILWAYS



以客為尊 幸福久久

*Customer Focus and
Happiness forever*

迎接建國百年的喜悅與光輝

臺灣鐵路管理局以創新服務為成長動能

秉持環島路網及車站區位的優勢

積極落實政府推動臺鐵捷運化政策

強化西部走廊中短程交通便民行旅

並加強臺灣東部及跨線運輸效能

開拓觀光旅次及多角化附屬事業經營

以期在多元化運具競爭的局勢中脫穎而出

世世代代滿載鐵道的幸福傳奇

Greeting the happiness and glory of the centenary of the ROC, the TRA's growth has been driven by service innovation. Using the advantages of its round-island track network and station location, the TRA has actively implemented the government's rapid transit systematization policy, strengthened medium and short distance transport services in the western corridor to facilitate traveling and increased eastern Taiwan and cross-line transport effectiveness. The TRA has also actively sought to attract more tourist passengers and develop diversified subsidiary business, with the aim of achieving success in the face of competition from other modes of transport and ensure that the TRA legend lives on well into the future.

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優質運輸， 蛻進迎向榮光新紀元

Quality transportation:
changing qualitatively and striding
towards a glorious new era

局長序言 Preface

「永續99 滿意100」是企業經營最理想的境界，向著標竿勇往前進，更是最可貴的精神所在。回首99年，在全體同仁的通力合作，以及交通部的政策指導下，我們不但從雪隧與高鐵通車的衝擊中，重新恢復了營運成長的動能，也正加緊腳步地積極改善與提升臺灣鐵路在各方面的軟硬體建設及服務，為迎向建國100年及未來邁入「年年蛻進」的發展新紀元，做好一切的努力與準備。

在99年期間，客運業務以持續推動捷運化，強化花東旅客疏運及落實無縫運輸為政策，擴大辦理電子票證乘車服務，並首創多卡通整合平台達到快速通關目標，及掌握通勤與中、短途市場，加強與高鐵之轉乘接駁，又推出觀光化創新服務，發展多元乘車旅遊方式等措施，使得99年客運營收及運量與去(98)年比較都呈現成長的趨勢，平均日運量約52萬人次，成長5.79%，日收入約4,171萬元，成長8.67%；另貨運業務也因景氣回溫，貨商需求旺盛，平均日運量約2.85萬噸，與去(98)年相較成長8.86%，日收入約273萬元，成長12.52%，以上實績正說明了臺灣鐵路雖面對多元運具的競爭，但藉由善用內在的優勢與利基，在區隔市場後奮力圖強，仍可創下近年來新高的優良紀錄。

在經營績效方面，落實績效責任制，並勵行開源節流政策，積極推動增裕收入及降低成本的各個計畫或措施，99年執行成果與去(98)年相較，總計減虧12.72億元，較原訂減虧目標5億元超出2.54倍，這是全體員工共體時艱戮力配合的成果；雖然99年仍較法定預算虧損增虧3.42億元，但在不影響行車安全與維護前提下，臺灣鐵路的經營狀況已朝向每年遞減虧損的良性趨勢發展。



"Sustainable Operation and Customer Satisfaction" is the ideal of business management for the enterprises, and the spirit striving to reach the goal is even more the most valuable. Looking back on 2010, with the combined efforts of all our colleagues and the guiding policies of the Ministry of Transportation and Communications, we not only have recovered the momentum of operational growth from the impact of the opening of Xueshan Tunnel and Taiwan High Speed Rail, but are also increasing the pace of improvements and upgrades to the facilities and services of Taiwan railways, making all efforts and preparations to welcome the centennial of the R.O.C. and to enter a new era of changing qualitatively and constantly.

During 2010, Passenger Transportation Business saw continuing rapid transit systematize policy, strengthened dispersal of transporting passengers in eastern Taiwan and implementation of seamless transportation, expansion of e-tickets services and for the first time, the integration of various smart card platforms to achieve the objective of allowing passengers to quickly enter and exit stations. Commuters and short-medium distance journey markets were also targeted, strengthening high-speed railway transfer services; innovative service for tourists was also introduced, offering diverse methods of travelling by train. The result was that passenger volume grew on 2009, with an average of carrying number 520,000 a day, showing 5.79% growth and average daily revenue of NT\$41.171 million, up by 8.67%.

In addition, in terms of Freight Transportation Business, due to the recovering economy and strong demand from freight customers, the average daily freight carried was 28,500 tons, representing relative growth of 8.86% from 2009, with daily revenue of approximately NT \$2.73 million, an increase of 12.52%. These results demonstrate that although Taiwan railways face competition from an array of modes of transport, by making good use of intrinsic advantages and its niche and focusing intensely on specific market segments, the TRA has been possible to reach records high in recent years.

With regard to performance, a performance responsibility system was implemented, and various programs or measures to raise income and lower costs were actively promoted under the "increasing revenue and reducing expenditures" policy. As a result of their implementation, and thanks to the combined efforts of all colleagues to get through difficult times, relative to the previous year (2009), total losses were reduced to NT \$1.272 billion, exceeding the original loss reduction target of NT \$500 million by 254%; although losses increased by NT\$342 million compared to legal budget losses in 2010, TRA's operations are now developing towards a positive trend of progressive reduction of losses each year under premise of not affecting train operating safety and maintenance.



在業務暨管理表現方面，因積極推動資產活化，並參加財政部「強化國有財產管理及運用效益方案」活化運用組評比，榮獲了全國第1名的優良佳績。又推動勞工安全認證機制，臺北機務段已通過OHSAS-18001職業安全衛生評估系列標準(國際級)及TOSHMS臺灣職業安全衛生管理系統之授證。另「沙鹿站跨站式站房新建工程土建部分」又獲選99年「推動勞工安全衛生優良公共工程」工程類獎，這些榮譽除了歸功於業管同仁的辛勤與努力外，也期許以對外參與競賽方式，激勵臺灣鐵路在各方面的進步與員工素質的提升。

至於在行車準點與安全方面，99年客運列車的準點率及每百萬動力車公里的事故件數，都未能達到預定目標，除必須深切檢討分析外，應澈底落實風險管理機制，並廣續全力加強改善，俾使臺灣鐵路成為可靠度高的運輸系統，但99年為「零重大職災事故」年，期勉全體同仁務須時時提高警覺防範，繼續保持得來不易的成果，以策勵來茲。

展望未來，臺灣鐵路仍將以確保行車準點與安全，作為服務大眾的優先準則，並「與時俱進」、「通時達變」地推動「感動服務」、「創意行銷」與「安全認證」，以提升服務品質與顧客滿意度，運用「資產活化」與「償債計畫」，以改善財務結構；相信在關鍵的未來3年內，隨著新購傾斜式電聯車136輛及通勤電聯車296輛陸續交車加入營運後，再配合多項軟硬體設施及設備的整合與改善，臺灣鐵路必將邁入另一個嶄新的里程碑，朝向「服務優質化」、「營運效率化」、「設施科技化」、「財務健全化」的永續經營，再次跨前一大步。

局長

范植谷

謹識



In terms of business and management performance, due to the active promotion of assets revitalization, and participation in the Ministry of Finance's Enhancement of Management and Efficiency in the Use of State-Owned Property Program, in the Active Utilization category, the TRA was honored with the top rating nationwide. In addition, it also moved forward with the work safety certification mechanism, with the Taipei Rolling Stock Branch passing the international OHSAS-18001 (Occupational Health and Safety Assessment System) standards and receiving certification under the Taiwan Occupational Safety and Health Management System (TOSHMS). In addition, the Shalu Overpass Station Construction Project - Civil Engineering Portion was also selected to receive an award in the Engineering category as a 2010 "Outstanding Public Work Promoting Work Safety and Health." These honors reflect the hard work of the TRA's relevant colleagues in charge and it is hoped that involvement with external organizations and participation in competitions will encourage both general improvements in the TRA and the improvement of staff quality.

Regarding the safety and punctuality of trains, the projected targets for both on-time performance for passenger trains and number of accidents per million power car kilometers were unable to be met in 2010. In addition to carrying out a profound review and analysis of the problem, the TRA should also thoroughly implement risk management mechanisms, as well as continue to make every effort to improve in order to make Taiwan's railways a highly reliable transportation system. However, 2010 was a year with zero major occupational accidents; all colleagues should be encouraged to remain vigilant and alert to maintain this difficult achievement.

Looking to the future, the TRA will continue to take train punctuality and safety as its highest priorities in serving the public, as well as promote "Touch-your-heart service", "creative marketing" and "Safety Certification" that are in step with the times and flexible in order to improve the quality of service and the level of customer satisfaction, and use "asset revitalization" and "repayment plans" to improve company's financial structure. We believe that in the crucial period of the next three years, with the new purchase of 136 tilting EMUs and 296 commuter EMUs being incrementally delivered and put into service, in tandem with the integration and improvement of a number of different facilities and equipment items, Taiwan railways would mark another important milestone on the road towards sustainable operation of "quality of service", "efficiency of operations", "use of technology in facilities" and "soundness of finances".

Director General

Fan. Chih-ku



業精於勤，

焠鍊成專業菁英團隊

Mastery through diligence:
forging an elite professional team



臺鐵的願景與組織架構

TRA's Vision and
Organizational Structure



臺鐵願景、營運目標與營運策略

(一) 願景

以顧客滿意為導向之優質大眾運輸系統，經營運輸本業及相關附業之雙核心事業。

(二) 營運目標

1. 列車運轉安全化。
2. 營運設備通用化。
3. 強化中短程旅客服務，並兼具都會區間捷運系統功能。
4. 車輛汰舊換新，提升運輸競爭力。
5. 開拓附屬業務。

TRA's Vision, Operating Objectives and Strategies

1. Vision

To carry out the core activities of the transportation business and related subsidiary businesses with a top quality mass transit system oriented towards customer satisfaction.

2. Operating Objectives

- (1) Increased safety of train transportation.
- (2) Interchangeability of operational equipment.
- (3) Improvement of service to medium and short distance passengers, combined with rapid transit functions between metropolitan areas and regions.
- (4) Replacement of old rolling stock with new stock to increase the competitiveness of train transportation.
- (5) Develop subsidiary businesses.





（三）營運策略

■ 經營管理方面：

- （1）積極推動票價合理化方案，西部幹線實施區段票價，簡化購票程序，並配合票證整合政策，便利轉乘。
- （2）改善花東及東西部跨線城際運輸；強化西部幹線區域性與都會通勤（捷運化）及中長程城際運輸。
- （3）推動無縫運輸，與捷運、客運及公車進行電子票證整合，與高鐵及捷運進行場站班次及資訊整合。
- （4）加強行銷策略，推動旅客會員制度；強化鐵路觀光旅遊，進行異業結盟，創造客製化的觀光客群，增加營收。
- （5）有效利用既有資產發展行旅生活服務事業，擴大附屬事業商機，以改善財務狀況，減少營運虧損。
- （6）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。
- （7）加強員工風險管理及危機處理等在職教育、督導與考核，以維護行車及旅客安全。

■ 供需配合方面：

- （1）廣續辦理環島鐵路整體系統安全提升計畫，確保運輸安全。
- （2）加速購置及汰換營運車輛，提升服務品質。
- （3）廣續辦理臺北機廠及高雄機廠遷建計畫，解決高鐵過軌問題及配合高雄市區鐵路地下化工程，確保行車安全。
- （4）廣續辦理臺鐵都會區捷運化後續建設計畫，以擴大臺鐵通勤服務範圍，並加強中程運輸，縮短旅行時間及列車班距。



3. Operating Strategies

■ Operations Management:

- (1) Actively work to promote a plan for more logical ticket prices, implement sectional ticket pricing for the Western Main Line, simplify the ticket buying process, and conform with the ticket consolidation policy to improve the convenience of transfers between lines.
- (2) Improve Hualien-Taitung and east-west inter-line transportation between cities; strengthen west coast main line regional and urban commuting services (rapid transmit systematize) and medium and long-distance inter-city transportation.
- (3) Promote seamless transportation, carrying out electronic ticket integration with the MRT and public buses, and timetable and information integration with High Speed Rail and MRT stations.
- (4) Improve marketing strategy, and promote a traveler membership system; improve tourist rail travel, working in concert with other industries to create customized tourist groups to add to revenue.
- (5) Effectively use existing assets to develop travel services business, expanding subsidiary business opportunities to improve the company's financial standing and reduce operating losses.
- (6) Improve internal communication and coordination, improve the function of labor-management meetings, and establish harmonious relations between labor and management.
- (7) Improve employees' on the job training in risk management, crisis response and other areas in order to protect the safety of trains and travelers.

■ Coordination of supply and demand:

- (1) Continue to implement the Round-Island Railway System Safety Upgrading Plan to ensure the safety of transportation.
- (2) Increase the pace at which operational rolling stock are purchased and replaced, improving the quality of service.
- (3) Continue to implement the TRA Taipei and Kaohsiung Railway Workshop Relocation plans, resolve the High Speed Rail rail-crossing problem, and coordinate with the Kaohsiung Railway Underground Project to ensure train safety.
- (4) Continue to implement the TRA Rapid Transit Systematization in Metropolitan Area Follow-Up Construction Plan in order to increase the range of TRA commuter services, as well as improve medium distance transportation and decrease travel time and the interval between trains.



鐵路營運設施概況 Overview of Operational Facilities

營業里程 Operating Distance

營業里程合計 Operating Distance	1085.3
雙線電氣化 Double Track Electrified	645.5
單線電氣化 Single Track Electrified	40.5
雙線非電氣化 Double Track Non-Electrified	23.5
單線非電氣化 Single Track Non-Electrified	375.8

單位：公里 Unit: km
民國99年底 End of 2010





營業里程：1085.3 公里

|||||| 雙線：669.0公里

|||||| 單線：416.3公里

電化區間：686.0公里

非電化區間：399.3公里

車站：217站

特等站3站，一等站27站，二等以下187站。

平交道：554處

第一種10處、第二種2處、第三種472處、

半封閉32處、手動控制25處、專用13處。

Operating Distance 1085.3 km

|||||| Double track: 669.0 kilometers

|||||| Single track: 416.3 km kilometers

Electric track: 686.0 kilometers

Non-electric track: 399.3 kilometers

Stations: 217

(3 special grade stations, 27 grade one stations and 187 grade two and below)

Level Crossings: 554

(10 type one crossings, 2 type two crossings, 472 type three crossings, 32 semi-closed crossings, 25 manually-controlled crossings and 13 special-use crossings)

(一) 營業里程

■ 營業里程：1085.3 公里

- (1) 雙線：669.0公里
- (2) 單線：416.3公里
- (3) 電化區間：686.0公里
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(二) 車輛數與運用效率

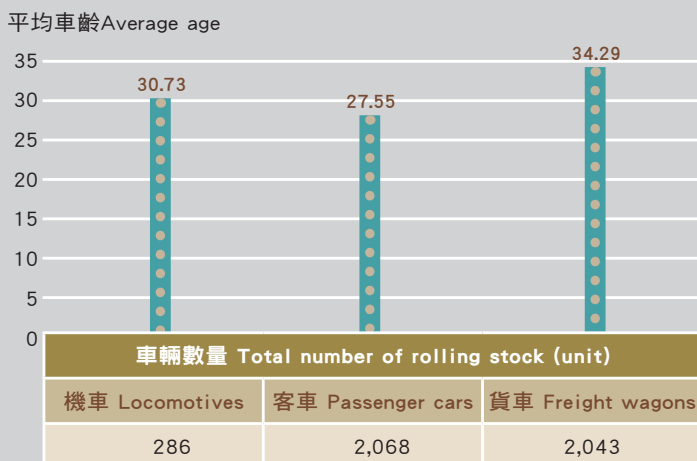
■ 現有車輛數

99年底現有鐵路車輛4,405輛，較98年底減少100輛(-2.32%)，其中電力機車、推拉式電力機車、柴液機車、傾斜式電聯車及推拉式客車維持不變外，柴電機車報廢2輛、電聯車報廢17輛、柴油客車報廢1輛、客車報廢29輛、貨車則報廢51輛。上述報廢原因皆為以新車替代運能，並減少因車輛老舊帶來之故障事故。

■ 車輛運用效率

99年動力車之可用率達到80.98%，較98年80.19%，增加0.79百分點。其中可供使用的電力機車達到全部該型車輛之81.36%，推拉式電力機車85.18%，柴電機車80.13%，柴液機車80.24%，電聯車80.40%，傾斜式電聯車（太魯閣號）97.1%，柴油客車80.24%。

臺鐵機車車輛數量及平均車齡
Average Age of TRA'S Rolling Stocks



1. Operating Distance

■ Operating Distance 1085.3 km

- (1) Double track 669.0 kilometers
- (2) Single track: 416.3 km kilometers
- (3) Electric track: 686.0 kilometers
- (4) Non-electric track: 399.3 kilometers

■ Stations :217

3 special grade stations, 27 grade one stations and 187 grade two and below

■ Level Crossings: 554

10 type one crossings, 2 type two crossings, 472 type three crossings, 32 semi-closed crossings, 25 manually-controlled crossings and 13 special-use crossings

2. Total number of rolling stock and its operating efficiency

■ Total Number

At the end of 2010, the TRA's rolling stock numbered 4,405 units, a reduction of 100 units (-2.32%) from the end of 2009. Of these, the number of electric locomotives, electric push-pull locomotives, diesel-hydraulic locomotives, tilting EMUs, and push-pull passenger cars remained the same, while two diesel-electric locomotives, 17 EMUs, one diesel passenger car, 29 passenger cars, and 51 freight wagons were scrapped. They were all scrapped because their functions were replaced by new cars, and to reduce malfunctions and accidents due to aged cars.

■ Operating Efficiency of Rolling Stock

The usability rate of power cars reached 80.98% in 2010, an increase of 0.79% from 2009. Of this, 81.36% of electric locomotives, 85.18% of push-pull electric locomotives, 80.13% of diesel-electric locomotives, 80.24% of diesel-hydraulic locomotives, 80.40% of EMUs, 97.1% of tilting EMUs (the "Taroko"), and 80.24% of diesel passenger cars were usable.

組織分工及人力資源 Organizational Structure and Personnel

(一) 臺灣鐵路管理局編制 TRA Organizational Structure

局長下置副局長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、勞安室、會計室、員工訓練中心等13個編制單位；法規小組、防護團、行保會、專案工程處等4個任務編組單位與貨運服務總所、餐旅服務總所2個直屬機構及43個分支機構。

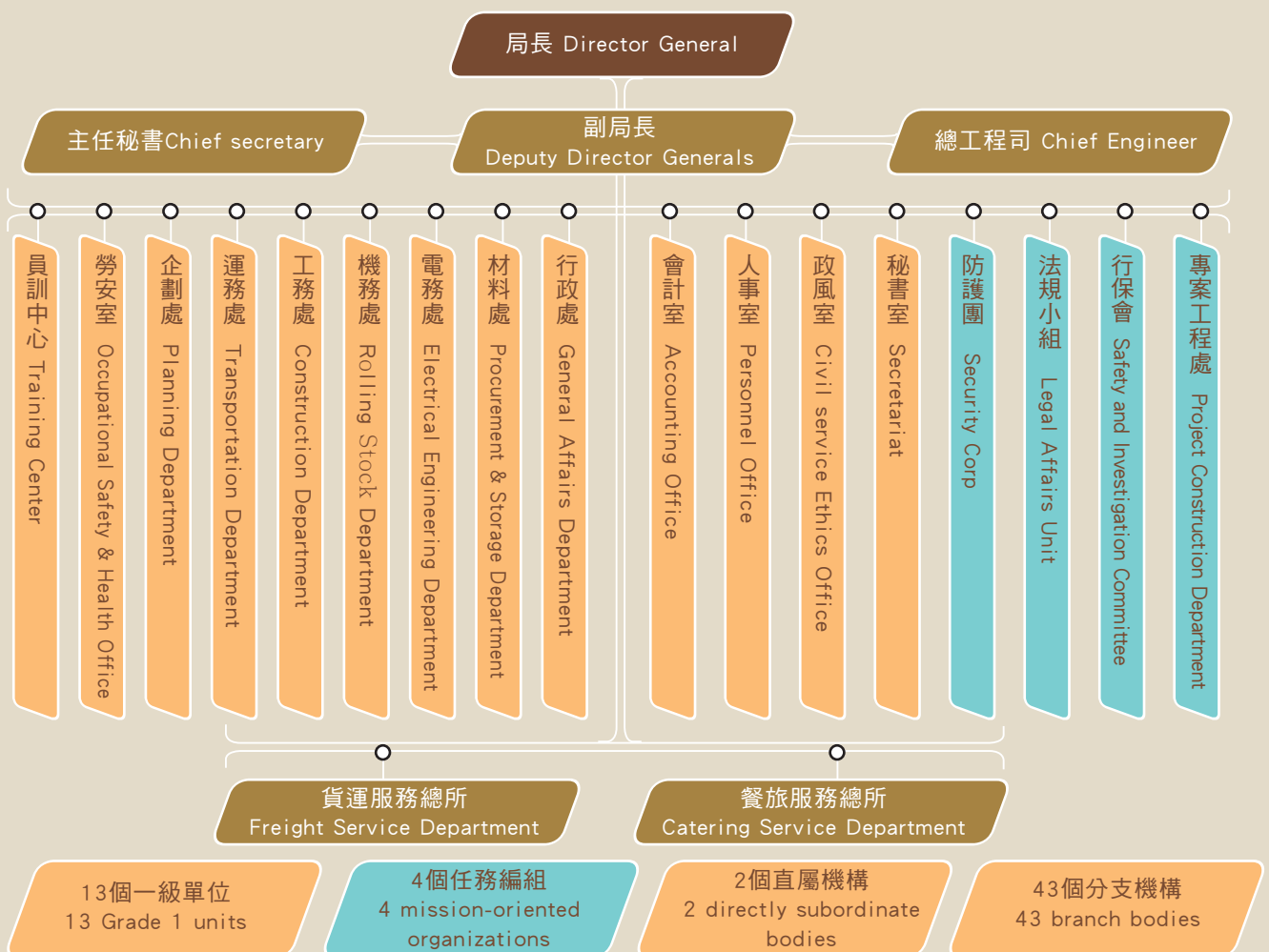
Below the Director General are three Deputy Directors General, a Chief Secretary, and a Chief Engineer to assist the Director General in handling the affairs of the TRA. In addition, there are thirteen organizational units - the Transportation Department, Construction Department, Rolling Stock Department, Electrical Engineering Department, Planning Department, Procurement & Storage Department, General Affairs Department, Secretariat, Personnel Office, Civil Service Ethics Office, Occupational Safety & Health Office, Accounting Office, and Staff Training Center- as well as four mission-oriented entities- the Legal Affairs Unit, Security Corp, Safety and Investigation Committee, and Project Construction Department, two direct subsidiaries- the Freight Service Head Office and Catering Service Head Office- and 43 branch organizations.

(二) 現有人員數 Current Employee Number

臺鐵局99年預算員額為14,170人、99年12月底現有員額為13,603人。

The TRA's 2010 budget allowed for 14,170 employees, while the number of current employees at the end of December 2010 was 13,603.

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





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Innovation with vision:
a strong operating record



99年業務經營績效

2010 Operating Report



營運損益分析 Profit and Loss Analysis

99年與98年損益比較表 Table comparing profits and losses in 2009 and 2010

單位：萬元
Unit: NT\$10,000

項目 Item	99年 2010	98年 2009	比較 Comparison
客運收入 Passenger revenue	1,462,618	1,345,868	8.7%
貨運收入 Freight revenue	99,733	88,633	12.5%
其他營業收入 Other operating revenue	388,924	522,269	-25.5%
營業外收入 Non-operating revenue	184,862	176,641	4.7%
總收入 Total revenue	2,136,137	2,133,411	0.1%
營業成本 Operating costs	2,531,238	2,567,894	-1.4%
營業費用 Operating expense	89,774	91,134	-1.5%
營業外費用 Non-operating expense	539,059	625,459	-13.8%
總支出 Total expenditure	3,160,071	3,284,487	-3.8%
損益 Profits and Losses	-1,023,934	-1,151,076	減虧11.0%

*本表98年為審定決算數，99年為初編決算數。

Remarks: 2009 is approved final accounts, while 2010 is preliminary final accounts.





客貨運業務 Passenger and Freight Transport

99 年與 98 年客貨運營收比較表 Table comparing passenger and freight revenue in 2009 and 2010

單位：萬

Unit: NT\$10,000

項目 Item		99年 2010	98年 2009	比較 Comparison
客運 Passenger	人數 Number	18,976	17,937	5.79%
	延人公里 Passenger/km	899,841	838,686	7.29%
	收入 Revenue	1,462,618	1,345,868	8.67%
貨運 Freight	噸數 Tonnage	1,043	958	8.86%
	延噸公里 Ton/km	86,630	76,987	12.53%
	收入 Revenue	99,733	88,633	12.52%
客貨運收入合計 Total passenger and freight revenue		1,562,351	1,434,501	8.91%

(一) 客運業務

1. 99年受全球經濟景氣復甦影響，國內、外出遊旅客意願大增，全面帶動交通運輸業中、長程旅次之增加。
2. 99年暑假7、8月旅遊旺季期間，因無任何風災影響，加上大陸地區及其它地區來台觀光旅客倍增，亦使收入呈成長趨勢。
3. 北部地區電子票證使用大幅成長，及新增捷運化車站發揮功能，短程通勤旅次穩定成長。
4. 持續加強與高鐵轉乘接駁，有效提升整體軌道運輸系統服務品質，吸引各種旅次需求之旅客搭乘。
5. 綜合上述因素，99年客運人數、延人公里及客運收入，較上年度分別增加5.79%、7.29%及8.67%。

(二) 貨運業務

1. 99年受全球經濟景氣復甦影響，貨商需求旺盛，使貨運業務量較去年度大幅成長。
2. 98年度因林口發電廠歲修，加上水泥、石灰石等大宗貨物之廠方因風災、機械故障及庫滿（市場蕭條），致貨物列車停駛，今年貨運呈成長趨勢。
3. 煤斗車加入砂石運送，貨櫃化運送砂石及貨商自備貨車，大幅提升貨運運能。
4. 綜合上述因素，99年貨運噸數、延噸公里及貨運收入，較98年度分別增加8.86%、12.53%及12.52%。



1. Passenger Transport

- (1) In 2010, with the global economy recovering, there was greater willingness to travel both domestically and abroad, which led the number of medium and long distance trips taken to increase greatly throughout the transport industry.
- (2) Also contributing to the trend of growth during 2010's peak travel season were the lack of impact from storm damage and the great increase of tourists from the mainland and other regions.
- (3) The use of e-tickets increased substantially in northern regions, and with newly added rapid transit stations going into use, short-distance commuter travels saw steady growth.
- (4) Continual improvement of transfers to high speed rail effectively improved the service quality throughout the rail transport system, attracting various types of transfer passengers.
- (5) Given the factors above, the number of passengers, passenger kilometer, and passenger transport revenue grew from the previous year by 5.79%, 7.29%, and 8.67% respectively.

2. Freight Transport

- (1) In 2010, due to the improvement of the global economy, there was strong demand for goods transportation resulting in a substantial increase in freight transport business compared with the previous year.
- (2) In 2009, due to annual maintenance of the Linkou Power Plant and the fact that cement and lime and other bulk goods plants suffered typhoon damage, mechanical failures and full warehousing (market depression), some freight trains operation suspensions of; while this year 2010 freight transport has experienced a trend of growth.
- (3) Coal hopper cars taking part in the transport of gravel, containerized transport of gravel and self-provision of freight cars by customers, greatly increased freight transportation capacity.
- (4) Given the above factors, in 2010 freight tonnage, ton kilometers, and freight transport revenue grew from the previous year by 8.86%, 12.53%, and 12.52% respectively.

(三) 運輸效率評估 Transport Efficiency Assessment

受列車數量減少影響，99年度列車相關統計呈微幅下降，但由於景氣回溫及積極推動各項行銷服務，促使客運及貨運成績均較98年為優，整體運輸表現亮眼；另在行車事故方面，雖然責任事故與傷亡人數低於98年，但如何提升營運設施效能並減少事故發生，仍為未來持續改善的重點。

Due to the effects of the reduction in the number of trains, train-statistics fell slightly in 2010; however, the improving economy and the active promotion and marketing of various services led to better results in both passenger and freight transportation than in 2009, with a shining overall performance. In addition, although both the number of accidents due to negligence and the number of accidents injuries and fatalities decreased, improving the efficacy of operational facilities and reducing the incidence of accidents will remain the focus of continual performance in the future.

■ 客貨列車統計 Comparison of passenger and freight train statistics for 2009 and 2010

項目 Item		99年 2010	98年 2009	比較 Comparison
列車 Trains	列車次數 Train Number	391,332	398,657	-1.84%
	列車公里 Train/km	44,201,104	44,364,320	-0.37%
	客車準點率 On-time performance of passenger trains	92.81%	95.31%	-2.50%
	貨車準點率 On-time performance of freight trains	100%	100%	-
客車 Passenger carriage	每日客車公里 Daily train/km of passenger trains	839,848	845,094	-0.62%
	每日客座公里 Daily seat/km of passenger trains	41,278,765	41,370,315	-0.22%
	客座利用率 Seat occupancy rate	59.72%	55.54%	4.18%
貨車 Freight wagon	每日貨車公里 Daily train/km of freight trains	185,071	167,332	10.60%
	每車平均週轉日數 Average turnaround days per train	1.58	1.80	-12.56%
	每車平均停站時間 Average station stop time at stations	9.14時	9.91時	-7.77%
	每列車平均載重噸數 Average tonnage carried per train	231	201	14.93%



■ 行車事故

- (1) 事故總件數：99年為853件，較98年800件，增加53件，增加率為6.63%；其中責任事故為37件，較98年減少6件，減少率為13.95%。
- (2) 事故類別：以號誌故障156件最多，占18.29%；其次為電車故障142件，占16.65%；再次為電力機車故障133件（占15.59%），其它75件（占8.79%），其餘各類件數所占則均在7%以下。各類事件中，機車故障（含電力機車及電車機車）占三成，足見行車事故的發生主要以動力車故障居多。
- (3) 傷亡人數：99年行車事故死傷人數114人，較98年減少5人。就肇事原因分析，以行走路線死傷42人最多，占36.84%；其次依序為強越平交道死傷33人（占28.95%），列車未停跳車15人（占13.16%），跨越路線12人（占10.53%），其餘各類均在5%以下。
- (4) 每百萬動力車公里平均事故：99年每百萬動力車行駛公里平均事故件數為10.34件，較98年9.89件，增加0.45件，增加率為4.50%。

■ Train Accidents

- (1) Total number of incidents: 853 incidents occurred in 2010, in comparison with 800 in 2009, an increase of 53 or 6.63%; among these there were 37 accidents due to negligence, a reduction of 6 incidents or 13.95% from 2009.
- (2) Accident types: Signal malfunctions were the most numerous type of incident, with 156 cases accounting for 18.29% of the total; second most frequent were breakdown of electric cars, 142 of which accounted for 16.65% of incidents; next were electric locomotive breakdown at 133 incidents (15.59%); in addition, 75 miscellaneous incidents accounted for 8.79%, while the remaining incident types accounted for less than 7% each. Among all types of incidents, locomotive malfunctions (including both electric locomotives and EMUs) accounted for 30%, from which it can be seen that power car breakdown still account for a large portion of train operation accidents.
- (3) Number of injured and dead: In 2010, train operation accidents resulted in 114 cases of injury or death, five less than in 2009. The most common cause was people walking on the tracks, which resulted in 42 casualties, 36.84% of the total; the other causes were, in descending order, forcibly going through a level crossing, resulting in 33 cases of injury or death (28.95%), 15 cases of passengers jumping from trains before they came to a stop (13.16%), and 12 cases of people injured or killed while crossing railroad tracks (10.53%), with casualties in other types of incidents accounting for less than 5% of the total each.
- (4) Average number of accidents per million power car kilometers: An average of 10.34 accidents occurred per million kilometers travelled by power cars in 2010, an increase of 0.45 incidents or 4.50% compared to 9.89 in 2009.

附屬事業經營

(一) 資產開發利用

■ 促參建設

- (1) 臺北車站大樓G+2、G+1、U-1層促進民間參與整建營運案，已於95年12月簽約，現已正常營運中，每年經營（定額）權利金收入5,200萬餘元，營運（抽成）權利金738萬餘元。
- (2) 板橋車站大樓U-1員工餐廳、G+2、G+24及G+25層商場民間參與整建營運案（於98年4月1日完成投資契約簽訂，特許權利金2,500萬元），經營權（定額）利金收入3,252萬餘元，營運（抽成）權利金956萬餘元。

■ 地權業務

- (1) 臺鐵目前經管之土地資產約計40,582筆，面積共約5,161公頃，財產價值總計約4,242億元。
- (2) 臺鐵局98年度辦理活化經營公用財產收益達22億4,516萬元，績效良好，獲交通部推薦參加財政部99年9月28日召開全國「國有公用不動產活化運用績效評選會」，經評定為全國活化運用組第1名。

(二) 餐旅服務事業

臺鐵99年度餐旅服務事業總收入為17億6,100萬餘元，總支出為14億1,993萬餘元，盈餘為3億4,107萬餘元，較98年度盈餘3億1,652萬餘元，盈餘增加2,455萬餘元。

■ 積極拓展鐵路便當績效卓著

- 99年度臺鐵便當銷售數量共計496萬5,304個，每日平均銷售量約1萬3,000餘個，較98年度372萬6,391個，增加約123萬餘個，成長率約33.25%。
- 99年總營收合計3億2,801餘萬元，較98年度2億4,537萬餘元，增加約8,263萬餘元，增加比率約33.67%。

■ 配合節慶推出多款紀念便當盒組

- 配合99年春節活動，臺鐵推出「2010（庚寅）年」（平溪天燈款）不銹鋼紀念便當空盒及提袋各1萬份。
- 另配合99年鐵路節慶祝活動，特別規劃推出「臺灣鐵路123週年紀念不銹鋼便當盒及提袋各1萬5,000份（含後續擴充5,000份）及配合舊山線復駛，推出「2010舊山線鐵道文化祭紀念提袋」500份，以增裕營收。



Subsidiary Businesses

1. Property development and utilization

■ Private Participation in Public Construction

- (1) Private Participation in the renovation project of Taipei Station Building G+2, G+1, U-1 levels was signed in December of 2006 and is currently operating normally, bringing in fixed operating royalties of over NT \$52 million annually and over NT\$7.38 million in profit operating royalties.
- (2) Private participation in the renovation and operation project of Banqiao Station Building U-1 employee restaurant, G+2, G+24 and G+25 levels saw an investment contract signed on April 1, 2009, bringing in NT\$25 million in licensing royalties, over NT\$32,520 million in fixed operating royalties and NT\$9.56 million in profit operating royalties.

■ Land Rights business

- (1) The TRA currently manages approximately 40,582 parcels of land totaling 5,161 hectares in area, with a total property value of approximately NT \$424.2 billion.
- (2) In 2009, TRA revenue from active utilization of public property reached NT\$ 2.245 billion, a good performance, and was rated as the top organization in the active utilization category nationwide on September 28 in the Ministry of Finance's "Evaluation meeting for active utilization performance of state-owned immovable property" after being recommended by the MOTC.

2. Catering Service Business

The gross revenue for the TRA's catering service business was over NT\$ 1.76 billion, with expenditures totaling some NT\$ 1.419 billion, netting profits of NT\$ 341.07 million, an increase of \$24.55 million over 2009's profits of \$316.52 million.

■ Strong performance in expansion of boxed lunches

Sales of TRA boxed lunches totaled 4,965,304 sets, with average daily sales of some 13,000. This marked an increase of approximately 1.23 million from the 3,726,391 sold in 2009, an increase of 33.25%.

Gross revenue in 2010 totaled over NT\$ 328 million, an increase of \$82.63 million or 33.67% over the approximately \$245.37 million earned in 2009.

■ Introduction of commemorative boxed lunch sets in conjunction with festivals

Coordinated with 2010's Spring Festival events, TRA produced ten thousand units each of stainless steel commemorative lunch boxes and bags (Pingxi sky lantern pattern).

In addition, in order to increase revenue, the TRA specially produced "123rd Anniversary of Taiwan Railways" commemorative stainless steel lunch boxes and bags in quantities of fifteen thousand each (including the additional second run of five thousand) for the celebration of Railway Day in 2010, and quantities of five hundred of "2010 Old Mountain Line Railway Culture Festival commemorative bags" for the reopening of the Old Mountain Line.





（三）場站房地出租運用

■ 停車場業務

為改善車站周邊交通秩序暨服務商旅，臺鐵規劃於車站區域土地設置停車場。

截至99年底，全線共有101處停車場，累計停車場租金收入為2億1,830萬元，比較98年同期收入2億2,342萬元，減少512萬元。

■ 房地業務

臺鐵利用鐵路沿線閒置空地、站房、房舍等，在不妨礙原有使用目的原則下規劃辦理出租。

99年度營收4億73萬元，較98年度同期3億4,363萬元，增加5,710萬元。

（四）貨運服務

■ 承攬運送業務

（1）99年度鐵路承攬運送量為394萬公噸，比較98年度555萬公噸，減少161萬公噸，成長率為-29%。

99年度承攬運量大幅減少係因煤炭、水泥、砂石及加工品等大宗貨物減少所致，運輸收入5,722萬餘元，比較98年度4,979萬餘元，增加743萬元。

（2）99年度快遞收入1,045萬餘元，比較98年度869萬餘元，增加176萬元。

■ 倉儲業務

臺鐵局倉儲業務已由倉儲保管業務轉型為倉庫出租業務，截至99年底，可供出租倉庫計有179間，其中已出租倉庫158間，出租率91%，尚餘21間待出租。

99年度倉儲業務累計營收7,348萬餘元，比較98年同期7,583萬餘元，減少235萬元。

（五）其他車站商務

■ 廣告業務

在不妨礙站車秩序與行車安全及破壞建物結構範圍內，臺鐵妥善利用空間規劃燈箱、多媒體及海報等廣告標的出租。

99年度廣告租金累計收入為5,561萬元，比較98年同期5,448萬元，增加113萬元。

3. Leasing and usage of station real estate

■ Car park business

In order to improve the orderliness of traffic around stations and serve business travelers, TRA has planned and placed car parks on land in station areas.

As of the end of 2010, there were 101 car parks along all rail lines, with cumulative rental income from car parks of NT\$ 218.3 million, a decrease of \$5.12 million from the \$223.42 million earned during the same period in 2009.

■ Real estate business

The TRA leases idle properties along the railway lines so long as doing so does not interfere with their intended use. The leased real estate space includes station buildings, housing, and other buildings.

Revenue from this source totaled NT\$ 400.73 million in 2010, an increase of \$57.1 million over 2009's earnings of \$343.63 million.

4. Freight services

■ Freight forwarding business

(1) In 2010, 5.71 million tons of freight were transported by rail, an increase of 160 thousand tons or 2.88% over the 5.55 million tons transported in 2009.

Revenue of NT\$ 57.22 million was earned through the transportation of coal, cement, gravel, and other bulk freight, an increase of \$7.43 million from the approximately \$49.79 million earned in 2009.

(2) Revenue earned for express shipping in 2010 totaled over NT \$10.45 million, an increase of \$1.76 million over the \$8.69 million earned in 2009.

■ Storage business

The TRA's storage business has been transformed into warehouse leasing business. At the end of 2010, there were 179 warehouses for lease, among which 158 had already been leased while the remaining 21 were still available, a leasing rate of 91%.

In 2010, storage business earned a cumulative NT\$ 73.48 million, a reduction of \$2.35 million from the \$75.83 million earned in 2009.

5. Other train station business

■ Advertising business

Within limits necessary to ensure that station order and train running safety are not affected or structures damaged, the TRA makes appropriate use of space to rent for light box, multimedia, poster, and other forms of advertising.

In 2010, leasing of advertising space brought cumulative revenue of NT\$ 55.61 million, an increase of \$1.13 million from the \$54.48 million earned in 2009.



■ 拍攝場地出租業務

為應外界需要及有效利用場地、設備（施），提供業者申請租用進行拍攝，並協助及規範拍攝行為，以維護臺鐵局業務正常運作暨旅客權益，訂定臺鐵局「拍攝場地設備出租作業要點」，並自99年2月3日起經營拍攝場地出租業務。99年度拍攝場地出租之租金收入約143.5萬元。

■ 積極開發鐵路商品商標授權業務

為開發具臺鐵品牌價值之鐵路商品，並拓展外部銷售通路，臺鐵局積極開發鐵路商品商標授權業務，除收取權利金外，對維護臺鐵形象（商譽）、提升商品多樣化與附加價值及保存鐵路文化亦有助益，目前已獲經濟部智慧財產局核准註冊商標共計81件。

99年度授權廠商之產品共計165項，授權金收入計172萬餘元。

■ 推展文創產業並開發具品牌價值之鐵路商品

99年度為慶祝鐵路123週年紀念活動，推出客製化鑰匙圈（1款）、鐵道奇兵、迷你懷舊造型吊飾系列（共4款）、太魯閣號紀念印鑑、新竹車站太魯閣列車紀念幣—虎年、動力之環、舊票袋、臺鐵123週年紀念icash套卡、愛情文鎖、臺鐵123週年CK124紀念便當盒、復刻版紀念茶杯、TR鐵道一族12代同堂系列公仔、R100火車公仔存錢筒、鐵道服務員大公仔、車庫收藏盒、象棋和跳棋遊戲便當模型盒、鐵虎仔系列—招財福袋、開運書籤、平安御守、迴力車組—12入等30餘種商品，鐵路商品銷售（含車勤部及各餐廳）總額全年共計1,943萬餘元。

另為配合辦理「建國100年火車環島接力，百年車站巡禮」活動，以商標授權方式由廠商開發「CK124黃金鑿鍊商品」。此外，為推廣搭乘火車拜訪車站之旅遊樂趣，自99年12月7日起以商標授權方式發行「鐵道旅行、幸福100」筆記書，並刻製100個車站風景戳印，讓民眾記錄自己的幸福鐵道旅行樂趣，至99年12月31日止共發行15,000本。

■ 招商經營各站賣店以提升車站形象

臺鐵委託統一超商、萊爾富、麥當勞等專業廠商經營全國各車站販賣部，99年度純收益計2億3,935萬餘元。

■ 充分開發各車站商業空間以增裕營收

臺鐵辦理各車站候車室部分場地標租民間業者經營各類商店業務，99年度租金收入共計5,563萬餘元。

■ 廣設無人商店以方便旅客

規劃車站可用空間（包括月台）招商設置自動櫃員機、飲料機、飲用水機、資訊查詢機、快照機及報紙機等各類機台，99年度租金收入共計1,182萬餘元。

■ 設置旅遊服務櫃檯以提供多樣化旅遊服務

為發展旅遊觀光業務，規劃開發鐵路觀光旅遊行程，臺鐵與旅遊業者合作於各車站設置旅遊服務櫃檯，提供旅客多樣化旅遊服務，租借臺北、板橋、臺中、嘉義、高雄、花蓮等6站7個場所予易遊網旅行社及雄獅旅行社設置「旅遊服務櫃檯」，總租金收入計749萬餘元。

■ 結合地方政府擴大車站服務面向

配合行政院「觀光客倍增計畫」，臺鐵99年度辦理全國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）、公用資訊站及就業服務台等，年租金收入計67萬餘元。

■ 開辦地接業務委外以推動鐵道旅遊

為配合運務處開行之2天1夜（或以上）郵輪式列車當日迄站下車後至次日起站上車前之旅遊行程安排，臺鐵規劃辦理地接業務，提供旅客多元化之旅遊服務。

■ Filming location rental business

In order to meet external needs and make effective use of space, equipment, and facilities, allow applications to be made to rent space for filming, and both assist with and regulate filming in order to maintain normal operations and the interests of travelers, the TRA formulated "Guidelines for the Rental of Locations and Equipment and Filming," and began engaging in the business of filming location rental beginning February 3, 2010. Revenue from the rental of filming locations was approximately NT \$1.43 million in 2010.

■ Active development of railway product trademark licensing business

In order to develop railway merchandise with TRA brand value, as well as expand channels for outside sales, the TRA actively worked to develop railway product trademark licensing business. In addition to receiving royalties, this will be beneficial to protecting the TRA's image and reputation, increasing product diversity and added value, and preserving railway culture. There are now totally 82 TRA product trademark registered under Intellectual Property Office, Ministry of Economic Affairs.

In 2010, there were a total of 165 products licensed, with revenue from royalties totaling NT \$1.72 million.

■ Promotion of cultural and creative industries and development of railway merchandise with brand value

To commemorate the 123rd anniversary of Taiwan's railways in 2010, the TRA released over 30 souvenir items, including key rings(one version), "Railway Trooper" toys, mini-pendants with series of nostalgic charm (four versions), Taroko commemorative chops, the Hsinchu Station and Taroko Train commemorative coins Year of the Tiger, Ring of Power, old ticket bags, a series of 123rd anniversary commemorative icash cards, love paperweight, 123rd anniversary Steam Locomotive CK124 commemorative lunch boxes, reissued commemorative teacups, TR Railroad Family 12 Generation Set figures, R100 train piggy bank, large train attendant figurine, train car collection case, Chinese checkers and chess game board lunchboxes, Lucky Tiger pouch, bookmark, and amulet, a set of pull-back cars, and more. Revenue from sales of railway merchandise totaled NT\$ 19.43 million for the year.

To coincide with the R.O.C. Centennial Round-Island Train Relay, a company was also licensed to develop gold necklaces using the image of locomotive CK124.

In addition, in order to encourage more people to ride trains and visit train stations, the "Discover Taiwan by Railway" scrapbook was released through a licensing agreement, letting the public document their enjoyment of rail travel. 15,000 had been distributed as of December 31, 2010.

■ Solicitation of businesses to operate shops in stations in order to boost stations' image

The TRA has commissioned the President Chain Store Corporation, Hi-Life, McDonald's and other companies to operate stores at stations throughout the island, yielding net profits of some NT \$239.35 million in 2010

■ Fully developing commercial space in stations to increase revenue

The TRA leases parts of the space in station waiting areas to the highest bidding private businesses to operate various commercial shops. Rental income from this source totaled some NT\$ 55.63 million in 2010.

■ Widespread installation of vending machines and automated services for the convenience of travelers

Usable open space inside stations (including platforms) is planned for business to install ATMs, drink vending machines, water coolers, information terminals, photo booths, newspaper vending machines, and other machines. Rental revenue from this source totaled some NT\$ 11.82 million in 2010.

■ Establishment of travel service counters to provide diversified travel services

In order to develop the travel and tourism industry, and plan and develop railway sightseeing routes, the TRA cooperates with travel agents to set up service counters at stations to provide diversified services to travelers. Seven locations have been leased to the ezTravel and Lion Travel agencies to establish Travel Service Counters at six stations (Taipei, Banqiao, Taichung, Chiayi, Kaohsiung, and Hualien), providing rental income of some NT \$7.49 million in 2010.

■ Integrating local governments to broaden station service orientation

In line with the Executive Yuan's Doubling Tourist Arrivals Plan, the TRA worked in 2010 to lease space in train stations to county and municipal governments to establish travel service centers, travel information service stations (or service counters), public information stations, employment service counters and other facilities, providing rental income of NT \$670,000 for the year.

■ Outsourcing of local hosting services to promote train travel

In order to coordinate with the Transportation Department's launch of two day, one night (or more) train cruises with travel itineraries planned for the period between disembarking at the destination the first day and boarding the next day, the TRA plans to provide travelers with a variety of travel services at their destinations.



齊頭並進，

永續運輸本業與附業

Working together for sustainability
in transportation and subsidiary businesses



各事業體運作狀況

Operations of the various
business divisions



客運業務

(一) 積極推動客運業務

1. 提升整體運輸效能，除積極辦理車輛採購，並定期檢討現有列車運輸系統，建置平、假日差異化之班表，靈活加開列車及調整座位分配，強化中程運輸之市場競爭力。
2. 持續加強與高鐵轉乘接駁功能，有效提升整體軌道運輸系統服務品質，進而吸引各種旅次需求之旅客搭乘。
3. 提升售票服務效能，持續推動票證整合，增加局外代售據點，及結合運具建置旅客會員制度，全面提升服務品質。
4. 強化鐵路觀光旅遊，積極發展鐵道文化及推動懷舊之旅，提供旅客多樣化旅遊服務，帶領民眾體驗鐵道文化之美。

(二) 配合運輸需要，調整列車班次時刻

1. 99年7月14日起，配合南科站啟用，調整南部區間通勤列車計76列次，以改善臺南科學園區周遭通勤需求。

Passenger Transportation Business

1. Active promotion of passenger transportation business

- (1) Raise overall transportation capacity by, in addition to active procurement of rolling stock, also regularly reviewing the existing train transportation system, setting schedules that differentiate between regular and non-working days, and flexibly adding trains and adjusting the distribution of seats, enhancing competitiveness in the market for medium-distance transportation.
- (2) Continuously improve the ability to transfer to high speed rail lines, effectively improving the service quality of the entire rail transport system and attracting all types of travelers to take the train.
- (3) Improve the effectiveness of ticketing services, continuing to promote ticket consolidation, making train tickets available in more non-TRA locations, and establishing a frequent traveler membership system integrating other forms of transportation, comprehensively raising the quality of service.
- (4) Improve the train sightseeing experience, actively developing railway culture and promoting nostalgic travel, providing travelers with diversified travel services, and introducing the public to the charms of rail travel.

2. Train timetable adjusted to meet transportation needs

- (1) Beginning July 14, 2010, in tandem with the opening of Nanke Station, adjustments were made to the schedules of 76 commuter trains in southern Taiwan in order to better meet commuter demand for the area around the Tainan Scientific Industrial Park.



2. 99年8月18日起，配合新左營調車場的啟用，調整南迴線、屏枋線等各級列車至新左營站起、迄，以提升旅運服務品質，並建構無縫運輸環境；其中新左營往屏東列車原76列次提升為108列次、新左營往臺東列車原15列次提升為22列次，均大幅提升旅運品質。
3. 99年12月22日時刻調整案：
 - (1) 配合「基隆市都市更新暨車站改建」工程施行，調整北部區域通勤列車計130列次；其施工期間，基隆對外運輸服務水準（運能）於尖峰時段維持不變，另離峰時段則配合工程做微幅調整。
 - (2) 配合新左營轉運需求，強化南半環線輸運並促進花東觀光與發展，增加花蓮=臺東=高雄間跨區運輸旅次（原8列次提升為14列次），致整體南迴線運能增加11.05%，大幅改善東南部觀光、旅運需求。
 - (3) 配合車種簡化政策，簡化復興號折疊門車型，調整西幹線（101、112、115、116）、南迴線（175、176、177、178、179）等復興號列次，改以莒光號或自強號車廂行駛，防止墜車以提升行車安全。

貨運業務

（一）提升貨車營運效能

1. 改造閒置貨車，藉以提高運能。
2. 鼓勵貨主自備貨車，藉以節省購車成本，並確實掌握大宗貨源。
3. 配合大宗貨物產銷計畫需求，開行專列貨車，以提升運輸效能。
4. 減少停開貨物列車，以避免現有貨源流失。

（二）增加貨運運輸業務

1. 積極拓展東部砂石運輸業務以確保營收。
2. 增闢公共貨場，容納更多貨物吞吐量。
3. 利用率低之50F平車加裝貨櫃固定裝置，載運傾卸式貨櫃。
4. 鼓勵回程重車裝載，並改善貨場週轉效率、路線及站場（北埔—花蓮港間）。





- (2) Beginning August 18, 2010, in tandem with the opening of the Xin Zuoying Marshalling Yard, all grades of trains on the South-Link Line and Pingtung-Fangliao Line were adjusted to start and finish their runs at Xin Zuoying Station to improve the quality of travel service and establish a seamless transportation environment; trains from Xin Zuoying Station to Pingtung increased from 76 to 108, while trains to Taitung increased from 15 to 22, both of which greatly improved transportation quality.
- (3) Adjustment of train timetable on December 22, 2010:
- To coordinate with the implementation of the Keelung Urban Renewal and Train Station Renovation project, adjustments were made to running frequency of 130 commuter trains in northern Taiwan; during the construction period, the level of transportation service (transportation capacity) to and from Keelung during rush hour was maintained, while minor adjustments were made to facilitate the project during off-peak hours.
 - To meet demand for line transfers at Xin Zuoying, improve transportation on the southern half of the rail circuit and stimulate tourism and development in Hualtung, the number of Hualien-Pingtung-Kaohsiung interregional transportation running frequency was increased from 8 to 14, increasing transportation capacity for the entire South-Link Line by 11.05%, substantially improving demand for tourism and travel in the southeast.
 - In line with the policy of simplifying train car types, Fuxing Express folding-door car models were simplified, adjusting Fuxing Express trains on the Western Main Line (101, 112, 115, 116) and the South-Link Line (175, 176, 177, 178, 179) being adjusted to operating Juguang or Zijiang Express cars, improving train operating safety by decreasing risk of derailment.

Freight Transportation Business

1. Increasing operational effectiveness of freight cars

- (1) Refit idle freight trains to improve transportation capacity.
- (2) Encourage freight shippers to use their own freight cars, thereby saving on car procurement costs and helping to maintain sources of bulk freight.
- (3) Respond to the production and sales demands of bulk freight goods by operating dedicated freight trains to improve transport efficiency.
- (4) Reducing the number of cancelled freight trains to avoid losing existing sources of freight.

2. Increasing freight transportation business

- (1) Actively expand gravel transport business in east Taiwan to ensure revenue.
- (2) Open more public freight yards to accommodate more freight throughput.
- (3) Refit low-usage 50f flatcars with fixed containers and dump cars.
- (4) Encourage the reloading of trains for return trips, and improve the efficiency of turnover at freight yards, rail routes, and stations (between Beipu and Hualien Harbor).



貨運服務與出租業務

(一) 承攬大宗貨運

99年度承攬煤炭、水泥、砂石及加工品等大宗貨物運輸。

(二) 轉型倉庫出租

倉儲業務已由倉儲保管業務轉型為倉庫出租業務。

(三) 設置停車場

為改善車站周邊交通秩序暨服務商旅，規劃車站區域土地設置停車場。

(四) 辦理房地出租

利用鐵路沿線閒置空地、站房、房舍及車站大樓商場ROT等，在不妨礙原有使用目的原則下規劃辦理出租。

(五) 拓展廣告業務

在不妨礙站車秩序與行車安全及破壞建物結構範圍內，妥善利用空間規劃燈箱、多媒體及海報等廣告標的出租。

(六) 經營拍攝場地出租

為應外界需要及有效利用場地、設備（施），開辦拍攝場地出租業務，提供業者申請租用進行拍攝，並協助及規範拍攝行為，以維護臺鐵局業務正常運作暨旅客權益。

餐旅服務

(一) 推出懷舊便當盒組

配合特殊節日，設計不同圖樣之紀念便當空盒及提袋。

(二) 創新便當菜色

研發創新便當菜色，並開發具地方特色之專屬便當。

Freight Transport Services and Leasing Business

1. Bulk freight transportation

Coal, cement, gravel, and other bulk freight were transported in 2010.

2. Transformation to warehouse leasing

The TRA's storage business has been transformed into warehouse leasing business..

3. Establishment of car parks

In order to improve the orderliness of traffic around stations and serve business travelers, TRA has planned and placed car parks on land in station areas.

4. Leasing of real estate

Lease idle properties along railway lines so long as doing so does not interfere with their intended use. The leased real estate space includes station buildings, housing, and station shopping center ROT.

5. Expanding advertising business

Within limits necessary to ensure that station order and train running safety are not affected or structures damaged, make appropriate use of space to rent for light box, multimedia, poster, and other forms of advertising.

6. Renting out of space for filming

In order to meet external needs and make effective use of space, equipment, and facilities, allow applications to be made to rent space for filming, and both assist with and regulate filming in order to maintain normal operations and the interests of travelers.

Catering Services

1. Release of nostalgic lunch boxes

Lunch boxes and bags with different designs have been brought out coordinated with different festivals.

2. Creating new boxed meals

New boxed meals are being created, and exclusive lunchboxes with local character being developed.



（三）拓展便當外送服務

訂定便當外送條件，委託快遞公司外送便當服務，以便利旅客訂購便當之需求。

（四）拓展客製化便當業務

設計不銹鋼餐盒組，以客製化服務滿足消費者需要，並提升紀念價值。

（五）拓展多樣化商品銷售

配合特殊節日或活動，推出客製化或具創意之紀念性商品。

（六）鐵路商標授權，活化鐵路資產

運用臺鐵商標，授權予廠商製作、販售或使用於相關商品，以收取授權金，並保存及發展鐵道文化。

（七）多樣化旅遊服務

與旅遊業者合作，於各車站設置旅遊服務櫃檯，提供旅客多樣化旅遊服務。

（八）發展旅遊觀光業務

配合兩天一夜郵輪式列車開行，與旅行社合作辦理行程規劃等相關事宜，以提供更多元化旅遊服務。

資產管理及活化業務方面

（一）促參業務

1. 臺北車站特定專用區交九用地開發經營案。
2. 南港車站大樓興建營運案。
3. 松山車站綜合大樓暨立體停車場大樓民間參與興建營運案。
4. 萬華（東、西）車站大樓民間參與興建營運案。
5. 板橋車站大樓商業樓層民間參與整建營運案。
6. 臺北車站2樓商場營運案。
7. 板橋車站特定區（特專二）國際觀光旅館興建營運案。
8. 新左營車站旅運服務空間民間參與整建營運案。
9. 三支線民間參與整建營運案。
10. 舊山線鐵道復駛及民間參與整建營運案。
11. 花蓮市六期重劃旅館區興建營運案。
12. 民間參與彰化車站扇形車庫古蹟保存區及周邊地區興建營運案。
13. 苗栗鐵道文物展示館促參建設營運案





3. Expanding boxed meal delivery service

Set conditions for outside delivery of lunchboxes, and contract with delivery companies to deliver boxed meals for the convenience of travelers.

4. Expanding custom-made meal boxes

Designing stainless steel meal boxes meets consumer demand for customized service, as well as adding to their value as souvenirs.

5. Expanding sales of diverse merchandise

Put out customized or creative souvenir merchandise in conjunction with festivals and special events.

6. License railway trademarks to make active use of assets

Use the TRA trademark, licensing companies to manufacture, sale, or use related merchandise, receiving royalties and preserving and developing railroad culture.

7. Diversified travel services

Cooperate with travel agents to set up travel service counters at various stations, providing a variety of travel services.

8. Developing tourism business

In coordination with the launch of two days, one night train cruises, cooperate with travel agencies in itinerary planning and other matters to provide travelers with a variety of travel services.

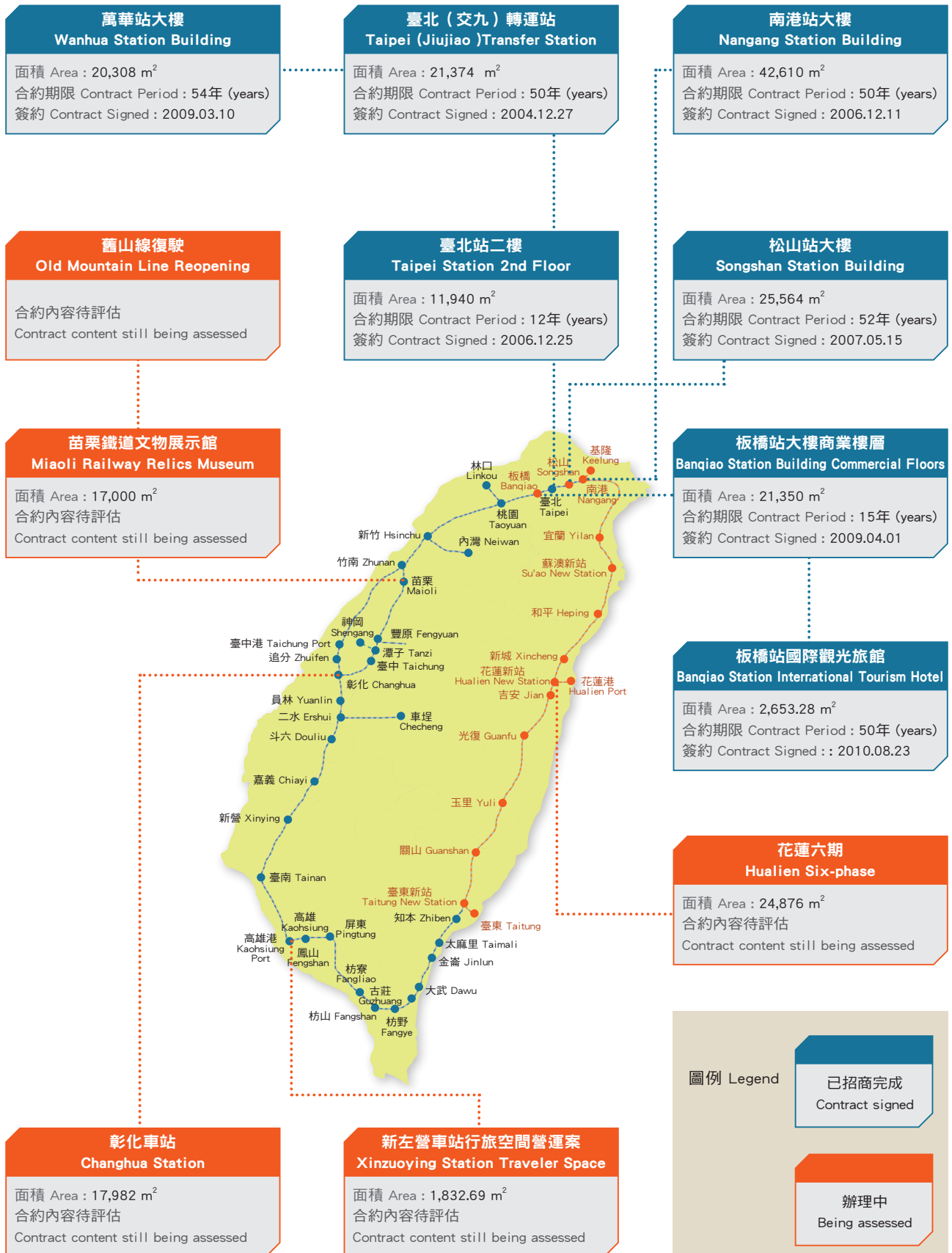
Property Management and Active Utilization

1. Construction through Public-Private Partnerships

- (1) Land Develop-Operate project for Taipei Station specially designated area Jiujiiao.
- (2) BOT project for Nangang Station Building.
- (3) BOT project for Songshan Station Building and parking tower.
- (4) BOT project for Wanhua (east and west) Station Building.
- (5) BOT project for Banqiao Station Building commercial floors.
- (6) Operation project for Taipei Station 2nd floor shopping center.
- (7) BOT project for Banqiao Station designated area (area 2) international tourism hotel.
- (8) BOT project for Xinzuoing Station travel service space.
- (9) BOT project for three branch lines
- (10) ROT project for the restoration of service to the Old Mountain Line
- (11) BOT project for the Hualien sixth rezoned hotel district.
- (12) BOT project for the Changhua Station Fan-Shaped Train Depot Protected Historic Area and periphery area.
- (13) BOT project for the Miaoli Railway Relics Museum.

推動促進民間參與公共建設案

Promoting Private Participation in Public Construction Projects



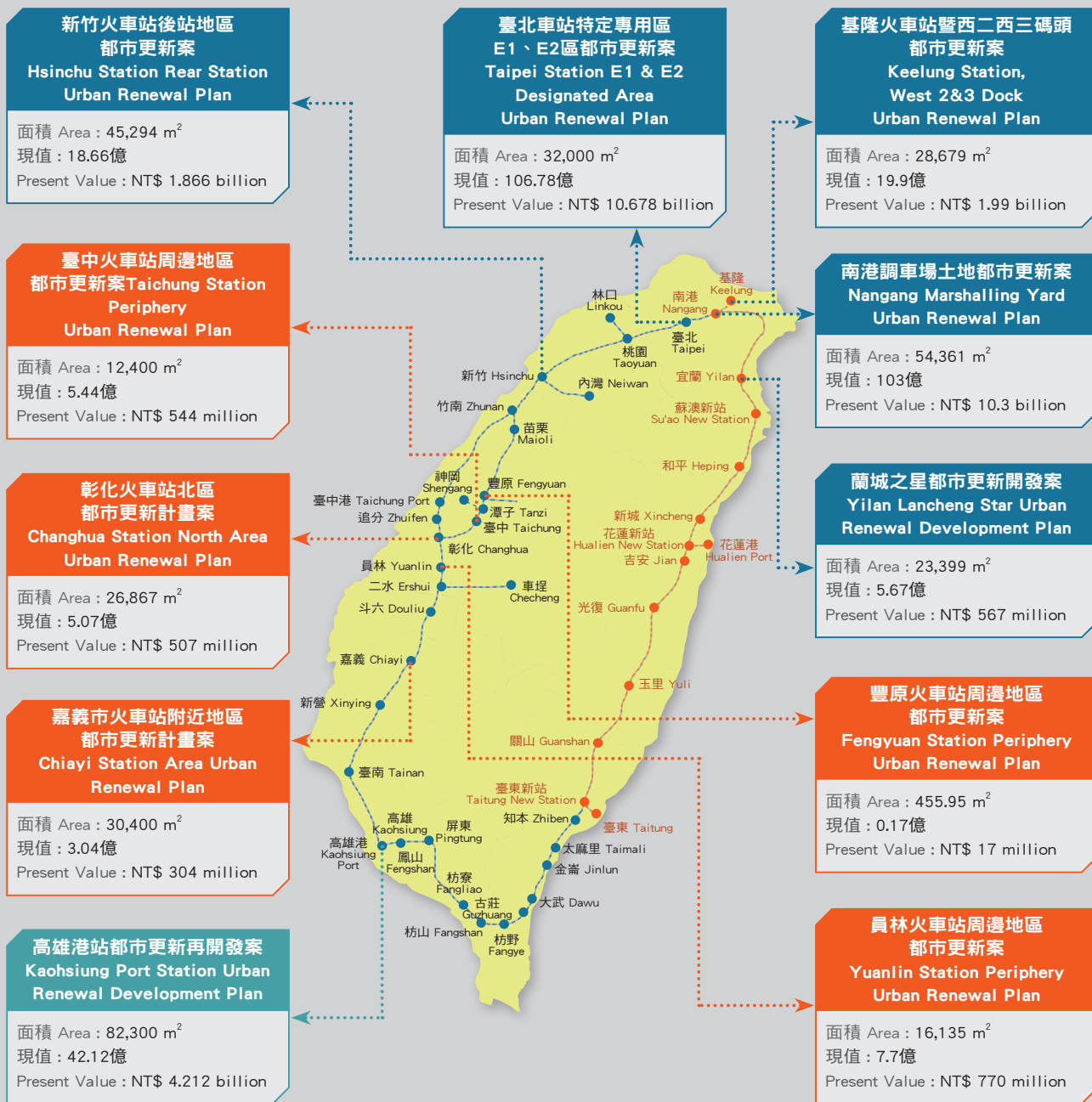
圖例 Legend

已招商完成
Contract signed

辦理中
Being assessed

推動都市更新案

Urban Renewal Projects Underway



區位 Region	件數 Number	面積 (m ²) Area	公告現值 (億) Assessed Present Value (NT\$ hundred million)
北部 North	5	183,733	254.01
中部 Central	4	55,857.95	18.38
南部 South	2	112,700	45.16
合計 Total	11	352,290.95	317.53



(二) 都市更新建設

1. 蘭城之星都市更新開發案。
2. 基隆火車站暨西二西三碼頭都市更新案。
3. 臺北車站特定專用區E1、E2區都市更新案。
4. 南港調車場土地都市更新案。
5. 新竹火車站後站地區都市更新案。
6. 臺中火車站周邊地區都市更新案。
7. 豐原火車站周邊地區都市更新案。
8. 彰化火車站北區都市更新計畫案。
9. 員林火車站周邊地區都市更新案。
10. 嘉義火車站附近地區都市更新案。
11. 高雄港站都市更新再開發案。

(三) 場站多目標使用

1. 鶯歌站、羅東站、高雄臨時站、汐止站及「臺中車站站區」等已辦理出租經營。
2. 已改建完工啟用之後龍站、斗六站及施工或規劃中的楊梅站、竹南站、苗栗站、新烏日站、湖口站、北湖口站、新豐站及楊梅站等，均依場站多目標使用原則辦理。

(四) 不動產開發前置規劃作業

為利土地資產活化及管理之先期規劃與效益評估，截至99年底，臺鐵已陸續完成「資產總體利用及管理目標、策略報告」、「具開發效益資產活化、開發、營運研析規劃」、「資產管理及應用資訊擴充建置建議方案」、「高雄機廠資產開發評估報告」、「臺南車站資產開發評估報告」、「北投員訓中心資產開發評估報告」、「花蓮市六期重劃區資產開發評估報告」等。

另為辦理都市計畫變更、都市更新權利變換及招商作業，臺鐵99年陸續辦理「臺北機廠遷建後土地開發策略規劃暨都市計畫變更案」、「新竹火車站後站地區都市更新事業、權利變換計畫及招商作業」、「南港調車場土地都市更新開發暨招商規劃」、及「民間參與臺鐵臺中車站鐵道文化園區建設營運案可行性評估及先期規劃暨招商作業」等委託技術服務案。

(五) 加強資產合理經營管理

為促進鐵路立體化建設土地清理活化，臺鐵研擬完成「交通部臺灣鐵路管理局鐵路立體化計畫都市土地運用規劃」，經行政院國有土地活化督導小組第4次會議結論認定「本案提報資料呈現鐵路立體化之全貌及臺灣鐵路管理於管理土地之核心價值及具體貢獻」。

為瞭解鐵路資產之活化利用常遭遇困難與權益受損，臺鐵完成「鐵路站區資產活化與都市計畫之課題分析」，就目前新左營、新烏日、屏東站、舊高雄港站、彰化站、員林站、高雄車站及高雄機廠舊地開發等車站土地建設遭遇問題提出具體建議，以創造鐵路資產最佳使用效益。

為利資產增值（如TOD規劃、都市計畫變更、容積調配與移轉、都市更新等）與資產保值（如降低回饋比例、鐵道文化資產最適保存、公共設施提供與維護、促參建設等），臺鐵刻正研析整體資產活化執行策略，以改善財務狀況及挹注營收，並達到永續經營為目標。

2. Urban renewal and construction

- (1) Lancheng Star Urban Renewal Development Project
- (2) Keelung Train Station and West 2&3 Dock Urban Renewal Project
- (3) Taipei Station E1 & E2 Designated Area Urban Renewal Project
- (4) Nangang Marshalling Yard Urban Renewal Project
- (5) Hsinchu Station Rear Station Urban Renewal Project
- (6) Taichung Station Periphery Area Urban Renewal Project
- (7) Fengyuan Station Periphery Area Urban Renewal Project
- (8) Changhua Station North Area Urban Renewal Design Project
- (9) Yuanlin Station Periphery Area Urban Renewal Project
- (10) Chiayi Station Area Urban Renewal Project
- (11) Kaohsiung Port Station Urban Renewal and Development Project

3. Multi-purpose usage of stations

- (1) Leasing of operations has been completed at Yingge Station, Luodong Station, Kaohsiung Temporary Station, Xizhi Station and the Taichung Station Area.
- (2) The refurbished and operational Houlong and Douliu stations and Yangmei, Zhunan, Miaoli, Xinwuri, Hukou, North Hukou, Xinfeng and Yangmei stations, all in the construction or planning phases, will all be used for multiple purposes.

4. Real estate development planning and preparation

In the interest of preliminary planning and benefit assessment of property usage and management, by the end of 2010, the TRA had in succession completed the "Report on the Purpose and Strategy of Overall Property Usage and Management", "Analysis and planning for the Active utilization, Development and operation of assets with development potential", "Suggestions on the expansion of asset management and application information", "Evaluation Report for the development of Kaohsiung Railway Workshop", "Evaluation Report for the development of Tainan Railway Station Assets", "Evaluation Report for the development of Beitou TRA Employee Training Center" and "Evaluation Report for the development of the Phase 6 Rezoned area of Hualien City" and so on.

In addition, it conducted work involving modifications to city planning and exchange of property rights and solicitation of investment for urban renewal, and in 2010 "Taipei Railway Workshop Post-Relocation Land Development Strategy Planning and Urban Planning Modification Proposal", "Hsinchu Train Station Rear Station Area Urban Renewal Activity, Property Rights Exchange Plan and Investment Promotion", "Nangang Marshalling Yard Land Urban Renewal and Development and Investment Promotion Planning", and "BOT Project of the TRA Taichung Station Railroad Culture Park, Feasibility Study, Preliminary Plan and Investment Promotion," and other contracted technical services projects.

5. Enhance the efficiency of property operation and management

To advance the clearance and utilization of land for the construction of elevated and underground railways, the TRA formulated the Urban Land Usage Planning for the Three-Dimensional Railway Conversion Plan of the Taiwan Railway Administration, Ministry of Transportation and Communications; after the 4th meeting of the Executive Yuan's State Land Usage Supervision Subcommittee, it was concluded that "the data presented for this project presents a full view of the move to underground and elevated railways and the Taiwan Railway Administration's core values and concrete contributions to the management of land."

To find out about the difficulties and infringements of rights and interests that frequently occur in the active utilization of railway property, the TRA completed "Problem Analysis of Active Land Use and Urban Planning for Railway Station Areas," making specific recommendations regarding problems currently encountered in construction on land by the Xinzuoying, Xinwuri, Pingtung, Changhua, Yuanlin, and Kaohsiung stations, the old Kaohsiung Harbor Station, and Kaohsiung Railway Workshop old land development, so that the greatest benefit may be yielded from the utilization of railway property.

In the interest of adding value to property (such as transit-oriented development planning, urban planning amendments, capacity adjustment, deployment and transfer as well as urban renewal) and maintaining the value of property (such as by decreasing the rate of feedback, best preservation of railroad cultural assets, provision and maintenance of public facilities, and private participation in public construction), the TRA made a detailed analysis of the strategy for implementing full property utilization, in order to improve its financial standing and put resources into operations, as well as to achieve the goal of sustainable operation.

（六）鐵路法部分條文修正

為因應環境變遷及市場需求，及強化資產活化之執行彈性及擴大資產利用之開發效益，以建構資產保值、增值及長期運用收益之機制，爭取土地開發及附屬事業經營之自主機制，以期充分利用土地及通路資源，營造便捷完備之行旅服務環境，並藉以強化有關培養或繁榮鐵路之附屬事業範疇，臺鐵已擬定修訂草案及相關執行法令等配合作業，報請交通部協助推動「鐵路法部分條文修正草案」。

（七）眷舍處理業務

1. 截至99年12月底經管宿舍總戶數3,326戶，已收回計2,225戶，未收回1,101戶（使用中830戶、非法占用271戶），為利資產活化，對於已收回之宿舍，因目前臺北市區停止標售，以參與都市更新為主，在都市更新辦理前，則以短期出租或暫時作出租停車場使用。
2. 未收回宿舍中非法占用戶計271戶，較98年12月底減少被占用195戶，建物面積減少1.3169萬平方公尺，至99年6月份起全部循訴訟程序收回。

（八）土地資產管理

1. 配合政府政策，積極辦理都市更新作業，以增加收益。
2. 開發知名連鎖公司於臺鐵路車站設賣店據點。
3. 配合土地占用處理、宿舍處理及閒置資產清查等作業，加強檢討辦理土地出租事宜以增裕營收。
4. 積極開拓附屬事業，求新求變，把握商機創造利潤以提升經營效能及營收。

工務工程

為強化臺灣地區軌道運輸系統功能，提高全國民眾對大眾運輸工具之使用率，經建會於98年審議通過「環島鐵路整體系統安全提升計畫」，自98年至101年，分4年辦理「車站整體更新工程」、「橋梁更新工程」、「隧道檢測及更新工程」、「潛在高风险脆弱路段強化工程」、「軌道結構強化」、「危險路段安全圍籬設施工程」、「通訊及號誌系統可靠度提升」、「電力系統更新」、「車輛動力機電系統更新」等9個分項計畫，總經費為149.49億元。

99年度主要辦理內容包括：車站建築及服務設施更新、橋隧基礎結構物改良、站場及路線可靠度提升及機電設施可靠度提升。

機務工程

（一）車輛增購

1. 傾斜式電聯車184輛：第一階段48輛案已於96年交清，97年2月1日投入營運；第二階段136輛案，業於99年12月30日決標，由日本住友商事株式會社得標，預定101年開始分批交車，103年底前交畢。
2. 通勤電聯車428輛：160輛案已於96年交清，97年4月18日投入營運；待辦268輛，99年度併其他營運計畫共計採購296輛案，可自101年開始分批交車，104年年中前交畢。



6. Amendments to the Railway Act

To respond to changes in the business environment and the demands of the market, enhance flexibility in the execution of active property utilization, and broaden the developmental benefits of property utilization, constructing independent mechanisms for maintaining and increase the value of property and making long-term use of earnings, achieve independent mechanisms to develop land and channel resources, in order to build a more convenient and complete transportation service environment and thus nurture subsidiary industries. The TRA has formulated drafts of the revisions to the act and related administrative regulations, and requested that the Ministry of Transportation and Communications assist in pushing forward the Draft Amendment of Clauses of the Railway Act.

7. Handling of staff dormitories

- (1) As of the end of December 2010, there were a total of 3,326 TRA-managed dormitories, 2,225 of which had been recovered, while 1,101 had not yet been recovered (830 in use, 271 illegally occupied). In the interest of active utilization of property, as recovered dormitories are no longer being sold at auction, mainly because they will be part of urban renewal, they will be rented out for short periods or the space temporarily rented out as parking areas until urban renewal plans are carried out.
- (2) Among the unrecovered housing were 271 illegally occupied properties, a reduction of 195 from the end of December 2009, with the building area reduced by 13,169 square meters; legal proceedings to recover all properties began in June 2010.

8. Management of land assets

- (1) Working in coordination with government policy, actively conduct urban renewal to increase revenue.
- (2) Develop presence of well-known chain stores in TRA stations
- (3) In coordination with the handling of land occupation, dormitories, inspection of idle properties and other matters, strengthen the review and handling of land leasing arrangements in order to increase revenue.
- (4) Actively expand subsidiary businesses, looking for new and innovative areas to enter, seizing on business opportunities to generate profits, increasing operational capacity and revenue.

Construction Engineering

In order to enhance the capabilities of the rail transportation system in the Taiwan region and increase the public's usage of mass transit nationwide, the Council for Economic Planning and Development deliberated and passed the Round-Island Railway System Safety Upgrading Plan in 2009. Under this plan, with a total budget of NT\$14.94 billion, nine projects were to be completed from 2009 to 2012: Complete Station Renovation Engineering Project, Bridge Renovation Project, Tunnel Inspection and Renovation Project, Potential High-Risk Weak Track Section Reinforcement Project, Track Structure Strengthening Project, Dangerous Track Section Safety Fencing Installation Project, Upgrading of Reliability of Communications and Signaling Systems, and Car Power Unit Electric System Upgrading.

Major work carried out in 2010 included renovation of station buildings and service facilities, improvements to the foundation structure of bridges and tunnels, increasing the reliability of depots and tracks, and increasing the reliability of mechanical and electrical facilities.

Rolling Stock Engineering

1. Rolling stock procurement

- (1) 184 tilting Electrical Multiple Unit (EMU) cars: Delivery of the 48 cars purchased in the first phase was completed in 2007, and the cars went into operation on February 1, 2008; tendering for the phase two purchase of 136 cars was completed on December 30, 2010, with the contract awarded to the Sumimoto Corporation of Japan. Cars are scheduled to begin being delivered incrementally in 2012, with all cars delivered before the end of 2014.
- (2) 428 commuter EMU cars: Delivery of the 160 cars purchased in the first case was completed in 2007, with the cars going into operation on April 18, 2008; the purchase of the remaining 268 cars was combined with other operating plans for a total purchase of 296 cars, to begin incremental delivery in 2012 and be delivered in full by mid-2015.

(二) 車輛改善

在機車、車輛改善方面，包含購置EMU500型用頂置型空調機、柴聯車組動力系統更新及安裝工程案、篷斗車改造案、文化資產修復案等，均已發包施工或完工。

電務工程

(一) 號誌

1. 在交通流量較高的鐵路平交道，建置平交道障礙物自動偵測系統共52處，當前方有障礙物時可傳送訊息予司機員示警，以利司機員立即減速，有效降低發生事故機率，並提高用路人安全。
2. 為降低號誌障礙影響行車，有效提升號誌可靠度，自94年起建置計軸器與既有軌道電路串聯用於列車偵測，並於99年全線建置軌道 / 計軸並聯電路，以達偵測列車位置雙重化功能，使其互為備援，藉以提高旅客服務品質。

(二) 電力

1. 臺鐵局變電站自電化新建至今已逾30餘年，現配合臺鐵都會區捷運化，造成負載容量增加，致使舊有容量不足，恐造成過載跳脫而影響列車運行，故針對善化及岡山等2處變電站辦理擴建容量工程，以提升變壓器供電容量（增加66%，容量由30MVA擴增為50MVA）。
2. 配合鐵嘉線69kV輸電線路改為地下化工程，嘉義變電站增設「計器變比器（MOF）」工程，並一併汰換舊有GCB斷路器與機械式電驛，以提升用電可靠度。

(三) 電訊

1. 臺鐵局已於96年全面啟用自動列車防護系統（ATP），為防止司機員將ATP關機造成行車事故，於99年完成利用既設行車調度無線電車上設備連接ATP系統，偵測ATP隔離開關狀態，傳送至行控中心所屬調度臺進行遠端監視，以增進行車安全及提升服務品質。
2. 為改善支線彎道路線視線不良情形，於平溪線十分站至大華站間彎道山區路線，建置列車接近告警設備（閃光警示燈），用以警示於鐵路旁行走之遊客及平交道通行車輛，提升該路段行車安全。
3. 為改善支線彎道區段無線電話通話品質，完成平溪支線行車調度無線電話系統新設工程，澈底改善車站、列車司機員及旅客嚮導間相互之通訊，增進更安全的鐵路運輸及服務品質。



2. Rolling stock improvement project

In terms of improving locomotives and rolling stock, the purchase of roof-mounted air conditioning units for use by EMU500 cars, the DMU mechanical system updating and installation engineering project, grain hopper car refitting project, and cultural asset restoration project have all been contracted or completed

Electrical Engineering

1. Signals

- (1) Automatic crossing obstruction detection systems have been installed at 52 high-traffic level railroad crossings. When there is an obstruction in front of a sensor, a signal is sent to warn locomotive engineers so that they may immediately decrease engine speed, effectively lowering the probability of accidents and improving safety for those on the road.
- (2) To decrease the impact of signal malfunctions on moving trains and effectively improve the reliability of signals, starting in 2005, axle counters were linked to existing track circuits for train detection, and, in 2010, circuits of track/axle counters were fully installed and linked in parallel across the whole line network, achieving a dual train position detection function, each method serving to back up the other in order to improve the quality of service to travelers.

2. Power

- (1) TRA electrical substations were built over 30 years ago with the electrification of the railways; now, in conjunction with the TRA's conversion to a rapid transit type system in metropolitan areas, their load capacity has been increased, resulting in the former capacity being insufficient, possibly resulting in overloads that will impact the operation of trains. Projects to expand capacity were therefore undertaken at substations in Shanhua and Gangshan, increasing their capacity to supply power (an increase of 66%, with capacity expanded from 30 MVA to 50 MVA).
- (2) In conjunction with the project to convert Chiayi Line's 69kV power transmission lines to an underground line, a project was undertaken to add a metering out fit (MOF) transformer to the Chiayi transformer substation, and replace the old generator circuit breaker (GCB) and mechanical relays to increase the reliability of the supply of electricity.

3. Communications

- (1) The TRA began using Automatic Train Protection (ATP) systems in 2007; In 2010, to prevent accidents from occurring due to engineers turning the systems off, it linked ATP to existing onboard train dispatch radio equipment to monitor the status of the ATP disconnect switch and relay the information to the dispatch station at the Operation Control Center for remote monitoring, enhancing the safety of train operation and improving service quality.
- (2) To make improvements to the problem of poor sightlines at curves in branch lines, equipment to warn of approaching trains (flashing warning lights) were installed along the curving track in hills between Shifen and Dahua stations on the Pingxi Line, used to warn travelers walking along the side of the railway and vehicles at level crossing, improving the safety of train operations along this stretch.
- (3) In order to improve the quality of radio reception on winding sections of branch lines, a project to install new train dispatch radio systems on the Pingxi Branch Line, greatly improving communications between stations, engineers, and platform guides, promoting safer rail transportation and quality service.

行政管理及人員訓練 Administrative Management and Personnel Training

(一) 推動經營績效責任制 Promotion of a performance responsibility system

1. 年度虧損區分為營運虧損與非營運虧損

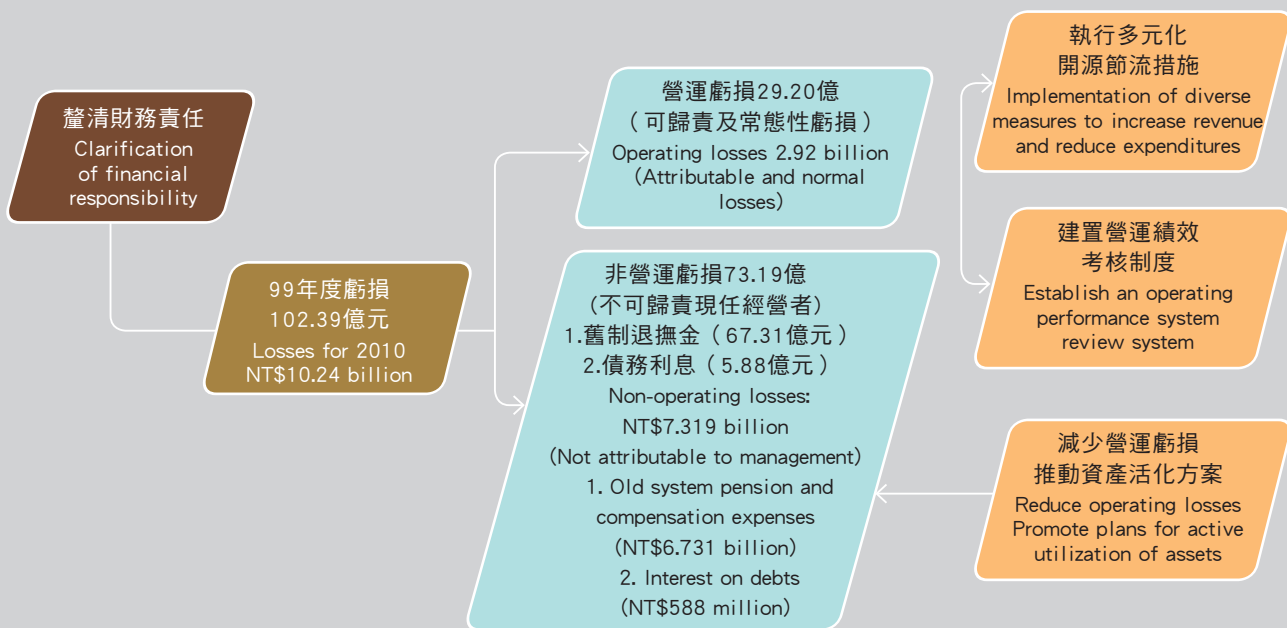
Division of annual losses into operating losses and non-operating losses

(1) 為合理考評經營者年度經營責任，依交通部指示，將年度虧損區分為營運虧損與非營運虧損，營運虧損含可歸責及常態性虧損（例如老人及身心障礙半價優待、服務性路線與小站虧損等）；非營運虧損則包括「舊制退撫金」、「債務利息」等不可歸責現任經營者。

In order to reasonably evaluate management's annual operating responsibilities, annual losses have been, as directed by the Ministry of Transportation and Communications, divided into operating losses and non-operating losses. Operating losses include both losses attributable to management and normal losses (such as losses from half-price tickets for seniors and the physically or mentally disadvantaged, service lines, and small stations); non-operating losses include pension and compensation expenses under the old system, interest on debts, and other losses that cannot be attributed to management.

(2) 99年度「年度虧損」責任歸屬，如圖所示：

The attribution of responsibility for annual losses in 2010 is as shown in the figure below:



2. 力行開源節流措施 Strong promotion of measures to increase revenue and reduce expenditures

(1) 開源：99年度目標值201.5億元，實收210.86億元，增加9.36億元，已達年度目標；另較98年度增加12.36億元。

Increasing revenue: The target value for 2010 was NT\$20.15 billion, while real income was \$21.086 billion, an increase of \$1.236 billion over 2009, exceeding the target by \$936 million.

(2) 節流：99年度目標值228.51億元，實支240.06億元，超支11.55億元，未達年度目標，另較98年度增加9.55億元。

Reducing expenditures: The target value for 2010 was NT\$22.851 billion, while real expenditures were \$24.006 billion. Expenditures increased by \$955 million, exceeding the spending target by \$1.155 billion.

(3) 99年度開源節流實際成效，如表所示：

The results of increasing revenue and decreasing expenditures plan are displayed in the table below:

99 年度收支目標與實績比較表

Comparison of income and spending targets and actual performance in 2010

單位：億元 Unit: NT\$ 100 million

項 目 Item	99年度目標值 Target value 2010		99年度實際執行數 Actual performing amount 2010			
	98年度決算 2009 Final account (A)	目標值 Target value (B)	99年度 累計執行數 Cumulative income for 2010 (C)	與目標比較 Comparison with target (D)=(C)-(B)	與去年比較增減 Increase or decrease from previous year (E)=(C)-(A)	
營運虧損 Operating losses	可歸責之總收入 (A) Gross attributable income	198.50	201.50	210.86	9.36	12.36
	客運收入 Passenger income	134.59	135.64	146.26	10.62	11.67
	貨運收入 Freight income	8.86	9.01	9.97	0.96	1.11
	餐旅服務收入 Catering service income	14.80	15.25	16.62	1.37	1.82
	貨運服務收入 Freight service income	0.59	0.67	0.68	0.02	0.09
	營業資產資金收入 Business asset funds income	22.51	22.64	17.74	-4.90	-4.77
	財產交易利益 Profits from property transactions	12.50	13.65	14.14	0.49	1.64
	其他 Others	4.65	4.65	5.45	0.80	0.80
	可歸責之總支出 (B) Gross attributable expenditures	230.51	228.51	240.06	11.55	9.55
	可歸責之年度盈(虧) (B1) = (A) - (B) Attributable annual profits or losses	-32.01	-27.01	-29.20	-2.19	2.81
	其他支出 (C) 【註1】 Other expenditures [1]	9.00	-	-	-	-
	可歸責項目之排除 (D) 【註2】 Elimination of attributable items [2]	14.26	-	12.84	-	-
	非營運虧損 Non- operating losses	不可歸責項目(退撫金+利息) (E) Non-attributable items (Pensions and compensation + interests)	74.84	-	73.19	-3.99
總收入 Gross income (F) = (A) + (D)	212.76	-	223.70	9.36	12.36	
總支出 (G) = (B) + (C) + (D) + (E) Gross expenditures	328.61	-	326.09	1.80	13.46	
年度盈(虧) (H) = (F) - (G) Annual profits or losses	-115.85	-	-102.39	7.56	-1.10	

註：1. 98年度其他支出係轉列松山專案與高鐵共構段租金呆帳損失。

2. 可歸責收支項目，排除財會第29號公報相關之折舊費用(報廢損失)以及政府補(捐)助收入。

3. 本表98年度為初編決算數。

Notes: 1. The "other expenditures" listed for 2009 are losses from unpaid rent on the section of the Songshan Project jointly built with Taiwan High Speed Rail.

2. Items of attributable income and expenditure deduct depreciation costs related to Accounting No. 29 Declaration (write-off losses) and government subsidies and contributions.

3. Income figures for 2009 are from preliminary final account.



（二）服務推動項目及改善措施

1. 以各車站及24小時客服中心為重點，持續推行電話禮貌改善運動，建立臺鐵良好的服務形象。
2. 持續要求各段加強督導轄屬車站落實執行各項業務，提升站車人員服務品質，並加強考核。
3. 運務處、彰化站獲99年度「交通部服務品質獎」，並獲提報參評行政院「政府服務品質獎」。
4. 視個別場站狀況，製作各站「身心障礙旅客乘車服務標準作業程序」，以提升身心障礙旅客乘車服務品質。
5. 旅客服務諮詢系統執行優良：
 - （1）中文網頁年度點閱率：16,827,684人次。
 - （2）兒童網頁年度點閱率：114,411人次。
 - （3）局長信箱旅客諮詢案件共回復12,446件。
 - （4）遺失物協尋資訊服務共15,360件。
6. 99年度為因應7月14日南科站啟用、12月22日沙崙支線通車時刻微調，分別印製「冊本式、摺頁式時刻表」各250,000、500,000份，置於各車站供旅客免費索取。

（三）採購業務與材料管理

■ 採購業務

1. 工程、勞務採購統計：

99年度辦理環島鐵路整體系統安全提升計畫、臺北機廠遷建建設計畫、桃園段高架化建設計畫及臺鐵捷運化後續計畫等計劃型資本支出及本局非計劃型資本支出等工程、勞務採購案件計689件（工程類433件、勞務類256件），合計金額為新台幣200億4,653萬元。
2. 財物採購統計：

99年度辦理財物採購決標（國內及國外）案計321件，預算總金額新台幣169億9,417萬元，決標總金額新台幣149億6,271萬元。

■ 提升材料管理改善作業，加強員工專業知識訓練

1. 積極落實「材料請購責任制實施要點」：經查1至3年未使用材料已由96年之2億6,500萬元，逐年下降至99年之6,600萬元。
2. 執行「材料管理改善計畫」：截至99年12月機務材料庫存共下降5億8,417萬元，已達5年（至101年12月止）計劃目標5億1,779萬元之112%。
3. 推行材料e化管理作業子系統：99年度已完成於PA系統內另建置財產/材料在途查詢子系統，可供線上即時查詢材料請購、招標及契約資訊。
4. 加強呆廢料標售處理：99年度廢料標售金額計2億5,637萬餘元，達年度執行目標2億2,400萬元之114%。
5. 辦理員工在職訓練：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；另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。

2. Promoting Services and Improvement Measures

- (1) Train stations and 24-hour customer service centers were the focus of the ongoing campaign to promote improved telephone etiquette, intended to build a good service image for the TRA.
- (2) The TRA continued to require that supervision of stations by each section be improved, improving the quality of service provided by station and train staff, and enhancing service assessments.
- (3) The Transportation Department and Changhua Station were awarded the 2010 Ministry of Transportation and Communications Service Quality Award, and were nominated for the Executive Yuan Government Service Quality Award.
- (4) "Standard Operating Procedures for Providing Boarding Service to Physically and Mentally Disadvantaged Travelers" were produced according to the circumstances of each station in order to raise the quality of boarding services provided to passengers.
- (5) Strong performance of website Passenger Inquiry Systems:
 - There were 16,827,684 visits to the Chinese language website during the year.
 - There were 114,411 visits to the children's website during the year.
 - There were 12,446 replies to traveler inquiries directed to the Director General's mailbox.
 - The lost and found service recovered 15,360 items.
- (6) In 2010, to respond to the opening of Nanke Station on July 14 and the December 22 adjustments to the schedule of the opening of the Shalun Line, 250,000 booklet and 500,000 folding timetables for travelers are printed to take from stations at no charge.

3. Procurement and Materials Management

■ Procurement

- (1) Engineering and labor procurement statistics:

In 2010, the TRA carried out the Round-Island Railway System Safety Upgrading Plan, Taipei Railway Workshop Relocation Project, Taoyuan Section Elevation Construction Project, the TRA Rapid Transit Systemization Follow up Project, and other planned capital expenditure projects, as well as unplanned capital expenditures and other engineering and labor procurement cases, 689 in all (433 of which were engineering, 256 labor), totaling NT\$20,046,530,000.

- (2) Property procurement statistics:

In 2010, a total of 321 property procurement contracts were awarded to domestic and foreign bidders, with a total budget of NT\$16,994,170,000, and contracts awarded totaling NT\$14,962,710.

■ Improvement of materials management work and enhancing employees' professional training

- (1) Active implementation of the Instructions for Implementing the Materials Requisition Responsibility System: Surveys found that the value of materials not used for one to three years gradually decreased each year from NT\$200,650,000 to NT\$66 million in 2010.
- (2) Implementation of the Materials Management Improvement Plan: As of December 2010, the total value of inventory of rolling stock materials had dropped by NT\$584,170,000, already reaching 112% of the NT\$517,790,000 target of the five-year plan ending in December 2012.
- (3) Implementation of electronic materials management subsystem: In 2010, the TRA completed the additional installation to the PA system of a subsystem for checking the status of property/materials in transit, allowing for immediate online search for information on requisitions, invitations to tender, and contracts.
- (4) Improved handling of auction sales of scrap materials: In 2010, the auction of scrap materials netted a total of NT\$256,370,000, reaching 114% of the year's performance target of \$224,000,000.
- (5) On-the-job training of employees: Seminars on procurement work were held in the northern, central, southern, and eastern regions of Taiwan, providing guidance laws and regulations regarding procurement work; in addition, management personnel training and foundational procurement training courses were held at the Staff Training Center to enhance colleagues' professional knowledge.



(四) 會計與統計業務

1. 積極開源並力行節流措施：

(1) 開源：強化捷運化運輸效率及服務品質；創新商業模式，提升客製化專列及包車服務；強化資產出租經營、鐵路商品多元化等收益。

(2) 節流：節約水電、燃料、維修用料等及檢討作業流程與人員配置。

2. 建置「營運績效帳」及「整合性策略成本管理資訊系統」，以深化整體營運管理與決策品質，改善財務績效。

3. 辦理各項民意調查，以供檢討各項業務缺失、擬訂因應改善對策，落實「以客為尊」之服務理念。



(五) 人事業務

1. 99年10月6日，臺鐵局與交通部及臺灣鐵路工會舉行「鐵路業務發展座談會」，討論鐵路法修正案、維護臺鐵局土地權益、交通及建設部（臺鐵定位）、政策配合高鐵對臺鐵衝擊影響、臺北機廠搬遷富岡基地案、人力不足預算控管案及公保年金案等。

2. 99年9月28至30日，臺鐵局與臺灣鐵路工會合辦「99年勞資關係研討會」，研討勞動法令、勞資關係及其他政策宣導等事項，

3. 99年6月9日，臺灣鐵路123週年暨99年鐵路節慶祝大會活動中，臺鐵局安排「韻律舞班」及「排舞班」社團成員演出，展現臺鐵青春與活力，博得滿堂彩。

4. 臺鐵局哺集乳室經陸續改善多項軟硬體設施，於99年9月成功獲得臺北市優良哺集乳室認證。

5. 99年9月，臺鐵局洽中華捐血中心運動協會協辦，分別於臺北、板橋、基隆、高雄及屏東各車站置放捐血車，在每年血荒高峰的寒暑假響應捐血公益，臺鐵局范局長並獲臺北捐血心致贈感謝狀。

6. 99年5月17日，臺鐵局於局務會報中表揚99年創新獎獲獎提案同仁，而99年度交通部創新獎，臺鐵局亦為交通部所有部屬機關中入圍複審件數最高者，表現可圈可點。

7. 交通部99年第2次創新提案制度創新獎，臺鐵局宜蘭工務段副工程司王振豐榮獲工程類甲等獎，由交通部毛部長親自頒獎表揚。

8. 99年12月8日，臺鐵局舉辦新進人員座談會，除增進彼此互動交流機會及凝聚向心力，將臺鐵局營造一個學習型的組織，並加強宣導臺鐵局使命、願景、價值及策略目標等經營理念、當前重點工作、守法守紀的觀念等，以培養員工團隊精神。



(六) 資訊作業

1. 建置會員制系統，強化顧客關係之管理。

2. 設立考試職缺填報及人員分發系統，提升99年鐵路特考考試分發作業速度。

3. 建構臺鐵客服系統，提供Q&A等系統，俾增進客服人員服務品質。

4. 完成線上測驗系統，特別就行車運轉進行運轉規章測試，厚實運轉人員之素養。

5. 建立鐵路文化資產管理數位典藏，將臺鐵文化資產以數位形式永久保存。

4. Accounting and Statistics Work

- (1) Active efforts to increase revenue and reduce expenditures:
 - Increasing revenue: Improved efficiency and service quality of rapid transit travel; formulated innovative business models, improving special customized and charter train service; improved earnings from the leasing of property operations, diversification of railway merchandise, and other sources.
 - Reducing expenditures: Conserved water, electricity, fuel, maintenance materials, and other items, and reviewed workflow and staff allocation.
- (2) Established the Operating Performance Balance Sheet and the Integrated Strategic Cost Management Information System, improving financial performance.
- (3) Carried out various public opinion polls in order to examine business losses and formulate appropriate measures for improvement and put the "customer first" service philosophy into practice.

5. Personnel management

- (1) On October 6, 2010, the TRA, MOTC, and Taiwan Railway Labor Union (TRLU) held a Railway Business Development Conference, discussing the amendment to the Railway Act, protecting the TRA's land rights, the TRA's position in the future Ministry of Transportation and Infrastructure, policies to respond to the impact of high-speed rail on the TRA, the Taipei Railway Workshop Fugang Base Relocation Project, insufficient manpower budget control, and the Public Employee Insurance Annuity.
- (2) From September 28-30, 2010, the TRA and TRLU held the 2010 Labor-Management Relations Forum, discussing labor laws, labor-management relations, and other policy promotion matters.
- (3) On June 9, 2010, for the events at the 123rd Anniversary of Taiwan Railways and 2010 Railway Day Celebration Assembly, the TRA arranged performances by dance groups that brought out the youthful energy of the TRA, earning standing ovations.
- (4) After continued improvement of hard and soft facilities at TRA's Nursing Rooms, they successfully obtained Quality Nursing Room certification from Taipei City in September of 2010.
- (5) In September 2010, agreed to cooperate with the TRA Chinese Blood Donation Association to set up bloodmobiles at Taipei, Banqiao, Keelung, Kaohsiung, and Pingtung stations for blood drives during yearly summer blood supply shortages, for which TRA Director General Fan received an official certificate of appreciation from the Taipei Blood Center.
- (6) On May 17, 2010, in an internal meeting, the TRA honored colleagues responsible for putting forward proposal awarded the 2010 Innovation Award; TRA also had the most projects make the short list for consideration for the MOTC's 2010 Innovation Award than any other body under the ministry.
- (7) In the 2nd innovation proposal awards, deputy engineer Wang Chen-feng of TRA's Yilan Construction Branch won a Grade A award in the engineering category, and received his award from Minister of Transportation and Communications Mao Chi-kuo.
- (8) A seminar was held for new TRA employees on December 8, 2010 to provide an opportunity for exchange to increase cohesion, help make the TRA a learning organization; during the seminar the TRA's mission vision, values and strategic objectives, main current work focal points, the importance of respect for the law and discipline were also explained to participants.

6. Information work

- (1) Established a member management system, improving the management of customer relations.
- (2) Created an Opening Test Filing and Personnel Distribution System, speeding the distribution of the 2010 Railway Exam.
- (3) Set up a TRA customer service system, providing Q&A and other systems to advance customer service quality.
- (4) Completed online testing system to test knowledge of train operating regulations, reinforcing operators' knowledge.
- (5) Established a railway cultural asset management digital archive, permanently preserving the cultural assets of Taiwan's railways in digital form.

6. 99年度官網與旅客服務諮詢整合執行優良：
- (1) 中文網頁年度點閱率：16,827,684人次
 - (2) 英文網頁年度點閱率：32,342人次
 - (3) 兒童網頁年度點閱率：114,411人次
 - (4) 局長信箱旅客諮詢案件共回復12,446件。
7. 提供遺失物協尋資訊服務共15,410件。



(七) 建置行車保安資訊系統

1. 建置臺鐵行車保安資訊系統，蒐集自81年起行車事故資料庫，分門別類，統計與分析，供各級主管據以擬定事故防範對策。
2. 為維護行車安全，積極建立風險管理、平交道資料庫等子系統，供各相關單位擬定降低風險及防範平交道事故對策之參考。

(八) 專業人力培訓

1. 臺鐵為推動顧客滿意經營理念，提供社會大眾安全、準確、創新之運輸服務及多角化經營，必須積極培育鐵路專業技術及經營管理人才，使臺鐵永續經營發展，因此，除由員工訓練中心專責辦理在職員工之鐵路專業、風險管理與工作知能教育訓練，新進人員之職前教育訓練，及適時配合各業務單位設備更新、業務改善、制度改革等，在工作現場實施教育訓練外，並遴選具有發展潛力之員工，參加學術機構或公、民營訓練機構之進修、研討或訓練。
2. 臺鐵員工訓練中心99年訓練實績共計開辦129班次（儲備人員專業訓練11班、知能補充訓練112班、職前訓練6班），訓練5,734人次，41,762人日。
3. 為提升工程品質管理效能，臺鐵員工訓練中心於98年經行政院公共工程委員會核准為「公共工程品質管理訓練班」代訓機構，截至99年底訓練合格人數141人，合格率94%。本訓練班已顯現訓練成效，交通部每年查核臺鐵100萬元以上工程案件評鑑成績列為甲等者，占總查核件數之比例，於95年至98年，每年約在59%-73%，而99年評鑑為甲等者高達95%。



(九) 提升勞工安全與衛生

1. 臺中工務段主辦之沙鹿站跨站式站房新建工程榮獲勞委會辦理之公共工程金安獎，於99年12月15日舉行頒獎典禮，范局長親自授獎，並代表授獎單位致詞。
2. 99年4月16日頒布「交通部臺灣鐵路管理局勞安業務稽核獎懲及績效競賽規章」，並即日實施，健全臺鐵局勞工安全衛生制度。

該規章計有5項要點：

- (1) 交通部臺灣鐵路管理局勞安查核調查小組工作要點
 - (2) 交通部臺灣鐵路管理局各級主管及人員安全衛生分層負責實施要點
 - (3) 交通部臺灣鐵路管理局勞安業務交叉查核實施要點
 - (4) 交通部臺灣鐵路管理局職業災害防範獎懲要點
 - (5) 交通部臺灣鐵路管理局勞安業務團體績效競賽要點
3. 花蓮工務段於99年6月通過臺灣職業安全衛生管理系統驗證，同時取得OHSAS18001及TOSHMS驗證證書。

- (6) Strong performance of official website and passenger inquiry system.
 - There were 16,827,684 visits to the Chinese language website during the year.
 - There were 32,342 visits to the English language website during the year.
 - There were 114,411 visits to the children's website during the year.
 - There were 12,446 replies to traveler inquiries directed to the Director General's mailbox.
- (7) The lost and found service recovered 15,410 items.

7. Creation of Train Safety Information System

- (1) The TRA Train Safety Information System was set up, compiling a database of information on train accidents since 1992 with classifications, statistics, and analysis for the reference of all levels of management in formulating accident prevention measures.
- (2) In order to maintain train safety, the TRA actively worked to establish risk management and risk management databases and other subsystems for the reference of relevant units in formulating measures to reduce risks and protect against accidents at level crossings.

8. Specialized Personnel Training

- (1) In order to promote an operating philosophy of customer satisfaction, provide the public with safe, punctual, and innovative transportation services, and diversify business operations, the TRA must actively work to train employees in specialized technical fields and operations management to sustain the railway's development. Therefore, in addition to the Staff Training Center's in-service training and education in specialized railway skills and knowledge and risk management and preparatory training for new employees, as well as the on-the-job training carried out in conjunction with upgrades to equipment, improvements to service, or systematic reforms, the TRA also selects high-potential employees to take part in advanced studies, seminars, or training at academic institutions and government or private training organizations.
- (2) The TRA Staff Training Center held a total of 129 courses in 2010 (11 specialized training courses for reserve personnel, 112 additional knowledge and skills courses, and 6 preparatory training courses), training 5,734 people for 41,762 person days.
- (3) In order to enhance the efficacy of construction quality management, the TRA Staff Training Center was authorized by the Public Construction Commission, Executive Yuan to hold Public Construction Quality Management Training courses. By the end of 2010, 141 people had passed such training, a passing rate of 94%. These training courses have already shown results. From 2006 to 2009, approximately 59-73% of TRA construction projects budgeted at NT\$1 million or more received "A" grades in annual MOTC inspections, while the percentage receiving "A" grades in 2010 reached 95%.

9. Improving Labor Health and Safety

- (1) The Taichung Construction Branch received the Public Construction Gold Safety Award from the Council of Labor Affairs for the Shalu Overpass Station Construction Project. Director-General Dr. Fan personally accepted the award in a ceremony held on December 15, 2010, and spoke on behalf of the unit receiving the honor.
- (2) On April 16, 2010, the TRA promulgated the TRA, MOTC Regulations for Work Safety Audit Rewards and Reprimands and Performance Competitions, implementing them the same day, firming up the TRA's work health and safety system.

The regulations contain five sets of instructions:

 - TRA, MOTC Working Instructions for Work Safety Audit and Investigation Task Forces
 - TRA, MOTC Instructions for Implementation of Levels of Responsibility of Management and Staff for Health and Safety
 - TRA, MOTC Instructions for Implementation of Work Safety Cross-Checks
 - TRA, MOTC Instructions on Sanctions for Occupational Hazard Prevention
 - TRA, MOTC Instructions for Work Safety Group Performance Competitions
- (3) The Hualien Construction Branch passed certification by the Taiwan Occupational Safety and Health Management System (TOSHMS) in June 2010, obtaining both OHSAS18001 and TOSHMS accreditation certificates.



客製服務，

著眼於大眾運輸需求

Customized services:
focus on demand for mass transit



創新業務與經營效能

Innovative Business and
Operation Efficiency



持續推動票證自動化

臺鐵持續推動辦理自動售票機背磁化、對號列車自動售票機、電腦售票終端機（TPT）背磁案及自動驗票（驗票閘門）系統更新案，截至99年底，共計有自動售票機99站439台可發售背磁車票，西部幹線18個大站及東部花蓮站設置62台對號列車自動售票機，另156站完成電腦售票終端機（TPT）背磁案，55站設置288道自動驗票閘門，30站174道自動驗票閘門具備IC票證查驗功能，將可加速旅客進出站速度，並充分發揮自動閘門功效。

建構電子票證多卡通

為提升旅客便利乘車之服務，臺鐵自97年7月起推動以電子票證取代紙票，除符合國際潮流趨勢與節能減碳環保概念，並節省購票及進、出站時間。99年3月26日北部區段26站（瑞芳－基隆－新竹）增加臺灣通卡營運，總計截至99年底，悠遊卡每日約有12萬人次、臺灣通卡約1萬人次使用。

此外，臺鐵將自100年1月1日起建構電子票證多卡使用平台，結合現有票證系統設備，引進多家票卡共同服務，率先業界進入多卡通時代，以便利旅客乘車，達成多卡通電子票證整合使用之目標。

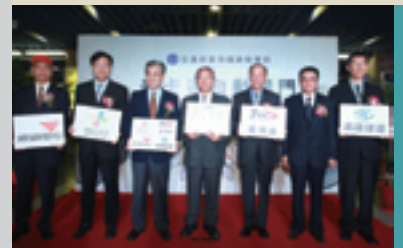
Continuing Promotion of Automated Ticketing

The TRA continued to move forward with automatic ticketing machine magnetization, express train ticket vending machine, and computerized ticket purchase terminal (TPT) magnetization projects, as well as the automatic ticket inspection (turnstile) system upgrade project. By the end of 2010, there were 439 automated ticket machines at 99 stations that could produce train tickets with magnetic strips, and 62 express train ticket vending machines at 18 major stations on the Western Main Line and Hualien Station in the east; in addition, 156 stations had completed TPT magnetization projects, while 288 automatic turnstiles had been installed at 55 stations, with 174 turnstiles at 30 stations having IC ticket verification functionality. These will increase the speed at which travelers enter and exit stations, making full use of the advantages of automated turnstiles.

Establishing E-Tickets for Multipass

In order to provide travelers with more convenient boarding service, the TRA has advanced the replacement of paper tickets with e-tickets, keeping in step with international trends and carbon reduction efforts, as well as reducing the time needed to purchase tickets and enter and exit stations. On March 26, 2010, 26 stations on the northern section of the railway (Rueifang-Keelung-Hsinchu) began accepting Taiwan SmartCards. By the end of 2010, EasyCards had been used approximately 120,000 times, while Taiwan SmartCards had been used approximately 10,000 times.

In addition, the beginning January 1, 2011, the TRA began setting up an e-ticket multipass platform, integrating existing ticket verification system equipment and introducing compatibility with a number of different payment cards. It is the first in the industry to enter the era of multipass functionality, and achieved the goal of providing added customer convenience through e-ticket integration.





增加兩鐵（臺鐵＋鐵馬）環保列車

為響應政府推動「節能減碳」政策，並因應各地方政府及民間團體之需，臺鐵自97年3月起開辦「兩鐵（臺鐵＋鐵馬）環保專車」業務，現已開放各站折疊式腳踏車免費人車同行，並可乘坐除臺鐵特定列車外的所有車種。

目前正進行人、車同行車廂改造案，未來新購電聯車及城際列車投入營運後，將可增加兩鐵車次，並逐步增加辦理人車同行業務之車站，總計99年全年約吸引46,000人次搭乘臺鐵專車，至各地進行無碳、零污染之自行車騎乘活動。

擴大郵輪式列車經營模式

97年8月在交通部指導之下，臺鐵突破以往列車到站即開之模式，選定數個可以停留賞景之車站辦理鐵道之旅，開辦各類主題式郵輪列車之新興旅遊方式。經過2年多來的積極經營，郵輪式列車已頗受旅客的支持及肯定，而旅客在景點車站周邊之消費，亦有助於活絡地方觀光產業。

為回饋各界支持並提供更完整之旅遊資訊，自98年11月10日起發行臺鐵郵輪專刊，並製作郵輪式列車專屬票套，99年3月份起更開辦2天1夜之多元化行程，與地方觀光產業協會進行策略聯盟。

臺鐵為慶祝建國百年，特以CK124、光華號、英國貴婦、太魯閣號等12代特色車輛環島開行，並結合新竹、臺中、臺南及高雄等歷史悠久的百年車站，自99年10月10日起至100年10月止，規劃一整年的郵輪式列車行程，帶領民眾體驗鐵道文化之美。

此外，鑒於98年12月31日開辦之「迎曙光 追幸福」主題郵輪式列車深受民眾肯定，故臺鐵於99年12月31日配合東北角風景區管理處（福隆）、東部海岸風景區管理處（三仙台）及臺東縣政府（太麻里）等擴大辦理迎曙光郵輪式列車。總計99年共計開行235列次，約吸引58,046人搭乘，開行之主題如下：

- ◎北迴三十鐵道文化知性之旅。
- ◎鐵路節特輯－福隆「沙」很大及林美步道健康行。
- ◎二天一夜－宜蘭國際童玩&農庄知性樂活遊。
- ◎舊山線～好久不見。
- ◎臺中、嘉義站間開行CK124「珍愛寶島～迎慶豐年」。
- ◎嘉義、屏東站間開行R20「嘉南體驗～屏現契機」。
- ◎屏東、臺東站間開行DR2700「事事如意～光華東逸」。
- ◎繽紛聖誕花東花海行。
- ◎百年迎曦～跨日幸福遊。

Increasing the number of eco-friendly trains(TRA train + bicycles)

In response to the government's promotion of energy conservation and carbon reduction policies, as well as the needs of various local governments and civic organizations, the TRA began providing "eco-friendly train" service, allowing bicycles on board certain trains. The service has now been opened up to allow folding bicycles from all stations at no additional cost, on any type of train other than those specified by the TRA.

A car project to renovate cars to allow passengers to board with conventional bicycles is currently underway, and after newly-purchased EMUs and inter-city cars go into operation, two additional bike-friendly trains per day can be added, and number of stations at which passengers may board with bicycles will increase incrementally. Approximately 46,000 journeys were taken on the special trains in 2010, with passengers transported all over Taiwan to take part in zero-carbon, zero-pollution biking events.

Expanding cruise train business model

In August 2008, under the guidance of the MOTC, the TRA made a break from the traditional model of trains departing shortly after arriving at stations, selecting several train stations where people could stop to enjoy the scenery to conduct railway journeys, creating different themed cruise train itineraries, a new way to travel. After two years of operation, cruise trains had already received significant support and approval from travelers, and their spending in the areas around the stations at scenic sites also helped to stimulate local tourism industries.

In response to the widespread support for the program and to provide more complete travel information, beginning November 10, 2009, the TRA began producing the publication "TRA Cruise Trains," and made special ticket covers. Beginning in March 2010, it began operating a variety of two-day, one night itineraries, and formed strategic alliances with local tourism associations.

To celebrate the centennial of the R.O.C., the TRA arranged for a year-long round-island relay from October 10, 2010 to October 2011 by 12 generations of distinctive locomotives, including the CK124 steam engine, the Guanghua, the EMU100 locomotive nicknamed the "English Lady," the Taroko, and more. The trains will travel between stations with long histories such as the Hsinchu, Taichung, Tainan, and Kaohsiung stations, introducing passengers to the charms of railroad culture.

In addition, due to the popularity of the Sunrise themed train cruise that began operating on December 31, 2009, the TRA coordinated with the Northeast Coast Scenic Area Administration (Fulong), the East Coast National Scenic Area Administration (Sansiantai), and the Taitung County Government (Taimali) to expand the operation of the Sunrise cruise train. In 2010, 235 cruise trains ran, attracting 58,046 passengers. The trip themes were:

- 30 Years of the North-Link Line: A Journey of Railroad Culture.
- Railroad Day Special- Fulong Sand Sculpture Festival and Linmei Trail Health Walk
- Two-Days, One-Night- Yilan International Children's Folklore & Folk game Festival and Farm Discovery Tour.
- Old Mountain Line: Long Time No See.
- Steam Locomotive CK124 Taichung-Chiayi Station: Cherished Island- Harvest Festival.
- Locomotive R20 ran from Chiayi to Pingtung station for "Experience Jianan, Discover Pingtung."
- Guanghua train DR2700 ran from Pingtung to Taitung stations for "It's All Good- Magnificent Eastern Escape."
- Huadong Flower Corridor Christmas Tour.
- Dawning of the Centennial- Overnight Celebration.



與旅行業者合作辦理觀光列車營運

配合國家促進觀光旅遊政策，臺鐵推動每日行駛雙向（順行、逆行）環島觀光列車，自99年4月10日起至102年4月9日止，與旅行業者合作提供「套裝旅遊行程」多樣性之服務，總計99年12月31日止，共服務25萬4,000旅遊人次。

另為提供機關團體及公司行號旅遊之服務，96年2月起開辦「商務車廂」專車案，至99年12月31日止，共計受理444團次，服務6萬9,083旅遊人次，除提升國、內外遊客舒適、便利之旅，並擴展延伸遊憩動線及層面，推動鐵道旅遊新發展。



發行新版TR-PASS券

為提倡國人鐵道旅遊風氣及提供青少年正當休閒活動，臺鐵於98學年度暑假期間開始，除全年度對外籍學生發售5日、7日及10日票種外，每年寒、暑假期間並開放國內學生購買5日及7日票種使用，有效期間內得不限次數、區間搭乘莒光號以下車種。

自99年7月12日起，臺鐵更參酌日、韓鐵路PASS概念，發行新版TR-PASS，取代原發售之環島週遊票及公教環島週遊票，可不限次數、區間、方向及車種使用，期以千元環島方式吸引旅客搭乘，總計99年7月12日起至99年12月31日止，共計吸引1萬8,000人次購買。



持續推動寒暑期青年自助旅遊專案

臺鐵與中華民國國際青年之家協會再度攜手合作，於99年寒假期間（1月1日至4月11日）共同舉辦「搭臺鐵、住YH、環島臺灣、勇闖世界趣」，及暑假期間（7月1日至9月30日）舉辦「搭臺鐵、住YH、兩腳Tour全臺灣」，提供3種套裝行程供國內外青年學子選擇。

參加者可依自身旅遊計畫選擇連續3天、5天、7天環島自遊行專案活動，於期間內不限次數、不限里程數搭乘無劃座之莒光號（含）以下車種，並入住平價又易結交國內外朋友的YH國際青年旅舍，完成環島壯舉，深度探索臺灣魅力，總計99年寒、暑假期間，即吸引了約2,000人次參加。

推出會員服務系統

為提升旅客服務品質，臺鐵規劃「會員制系統」以招募會員，提供旅客委託候補訂位之功能，及會員消費累計積點兌換免費車票之優惠，進而吸引旅客加入臺鐵會員，提升旅客忠誠度，增裕營收。

全案已於99年12月15日驗收合格，現階段正進行系統壓力測試、細部檢視各相關票務系統連結及訂定會員服務辦法，預估100年3月底上線。

Cooperating with travel agencies to operate tourist train

In line with the national tourism promotion policy, the TRA arranged for twice-daily two-direction (clockwise and counterclockwise on the map) round-island sightseeing trains, and from April 10th, 2010 through April 9th, 2013 will cooperate with travel agencies to offer "Travel Packages" with a variety of services. As of December 31, 2010, 254,000 travelers had been served under the scheme.

In addition, to provide travel services to institutions, organizations, and companies, from February 2007 the TRA began running reserved "Business Cars," and as of December 31, 2010, 444 groups had been handled, serving 69,083 passengers. In addition to providing foreign and domestic travelers with a comfortable and convenient journey, it both expanded and deepened leisure travel flow lines, promoting new developments in railway travel.

Issuing new versions of TR-PASS

To promote interest in railway travel and provide young people with a healthy recreational activity, beginning in the summer of 2009, the TRA not only began selling five, seven, and ten day rail passes to foreign students all year, but also offering five and seven day tickets to students around the country during each year's winter and summer vacation, allowing travel without limitation on number of trips or frequency on trains of the Chukuang class or below.

On July 12, 2010, drawing from Japanese and Korean rail pass concepts, the TRA began issuing new versions of the TR-PASS, replacing the originals with round-island tickets and round-island tickets for public employees and teachers, with no limitation on the number of trips, frequency, direction, or type of train taken, attracting travelers with round-island travel for the price of NT\$1,000. Between July 12 and December 31, 2010, 18,000 passes were sold.

Continuing Promotion of Summer/Winter Vacation Youth Independent Travel Packages

The TRA and Taiwan Youth Hostel Association continued their cooperation, jointly organizing the "Ride TR, Stay at the YH, Travel Taiwan, See the World" promotion from January 1 through April 11, 2010, and the "Ride TR, Stay at YH, Tour Taiwan" event during summer vacation, from July 1st through September 30th, providing three types of trip packages for local and visiting students to choose from.

Participants could choose three, five, or seven day round-island travel packages depending on their own plans, during which they could ride in unassigned seats on trains of the Chukuang class or below, with no restrictions on the number or length of journeys, as well as stay in inexpensive and friendly International Youth Hostels, making it easy to explore all the charms Taiwan has to offer. 2,000 people took part in the promotion during winter and summer vacation 2010.

Launching Traveler Membership Service System

In order to improve the quality of traveler services, the TRA planned a membership system and recruited members, which would allow them to register for the standby list for sold-out trains and receive related notifications online, as well as exchange accumulated travel points for free tickets to further attract travelers to join, increasing traveler loyalty and boosting revenue. The complete plan was approved on

The system is inspected and accepted on December 15, 2010; is currently undergoing stress-testing and detailed checks of relevant ticketing system links, and member service methods are being established. The system is expected to go online by the end of March 2011.



蓄勢待發，

再披鐵道馳騁的光環

Gathering momentum to
make another glory of railway



重大工程及投資建設

**Major Engineering Projects
and Investments**



臺鐵都會區捷運化桃園段高架化建設計畫

(一) 計畫內容

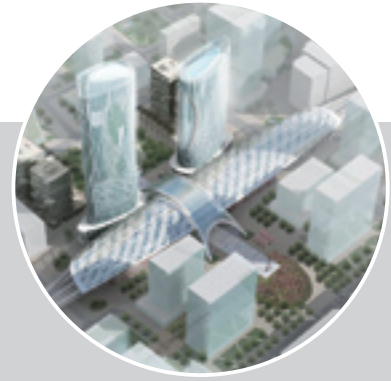
本計畫奉行政院98年2月27日院臺交字第0980000793號函核定辦理，總經費308.45億元，計畫期程自98年1月1日至106年12月31日止。主要內容包含：

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、中壢站改建為綜合大樓。
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。

(二) 執行成果

99年度為計畫第二年，仍以辦理各項前置作業為主：

1. 完成全線臨時軌定線測量工程20km。
2. 完成工程專案管理、環境監測委託技術服務發包並執行中。



TRA Rapid Transit Systematization in Metropolitan Area, Taoyuan Section Elevated Track Project

1. Content of plan

This plan is carried out pursuant to its ratification in Executive Yuan official document No. YZJZ0980000793. With a budget totaling NT\$30.845 billion, the plan is to be carried out between January 1, 2009 and December 31, 2007. Its major components include:

- (1) A total of 15.95 kilometers of excavated and elevated railways sections, including expansion to a three-track main line north of Taoyuan Station, with a two-track mainline to the south of the station.
- (2) The remodeling of Taoyuan, Neili, and Zhongli stations as mixed-use complexes.
- (3) The addition of four commuter stations: Wuri Station, Guoji Road Station, Yongfeng Road Station, and Chung Yuan Christian University Station.
- (4) Improvements to other facilities and infrastructure carried out in conjunction with the above. 17 level crossings can be eliminated when the project is completed.

2. Project achievements

During 2010, the second year of the plan, mainly preparatory work was carried out:

- (1) Completed surveying work for the location of the entire temporary track, 20 kilometers.
- (2) Completed the contracting of technical service providers for project management and environmental monitoring, now underway.



3. 完成DL01標鳳鳴降挖段（含鳳鳴、桃園臨時站與臨時軌部分）委託工程設計暨監造案決標。
4. 完成DL02桃園段（含桃園車站、國際路站、永豐路站）委託工程設計暨監造案決標。
5. 完成DL03中壢段（含桃園車站、國際路站、永豐路站）委託工程設計暨監造案招標。
6. 辦理臨時軌用地租用事宜。
7. 永久軌用地徵收作業由桃園縣政府辦理都市計畫變更中。

臺北機廠遷建設計畫

（一）計畫內容

計畫期程由94年6月1日至104年12月31日，總經費為170.14億元（第一次修正計畫行政院99年3月1日院臺交字第0990093143號函原則同意）。

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：七堵檢車段搬遷後，原騰空土地辦理七堵站場線形改善；基隆站改建後基隆機務分駐所移轉業務。
3. 富岡基地：規劃於桃園縣楊梅市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，並鋪設北湖口進廠線及新設北湖口站。
4. 潮州基地：推拉式客車維修廠併入高雄機廠遷建計畫辦理，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。

（二）執行成果

1. 七堵基地

- （1）七堵站場增設P21、P22股周邊工程完工。
- （2）七堵基地增設E11、E12、E13股道工程及電車線工程完工。

2. 富岡基地

- （1）整地及配合工程（CL111）完成A2、A3、A4等工區整地。
- （2）主體工程（CL221及CL221-1）於99年8月9日開工，完成A3，A4-1，A2-1基礎、地梁等工項施作。
- （3）臺北機廠檢修設備工程（CL431）於99年3月8日開工，已研討通過檢修設備47項。
- （4）北湖口進廠線及車站工程（CL651及CL651-1）於99年7月12日開工，目前完成六股溪橋台，A1及A2預鑄梁，吊裝前置作業。
- （5）北區供應廠及機廠辦公大樓工程（CL221-2）於99年10月4日決標。

3. 潮州基地：PP客車轉移高雄機廠維修改善工程與設備採購於99年3月25日完成。

4. 蘇新基地：蘇新基地擇定蘇澳新站東北側為預定地，於辦理地質鑽探時，發現選定之場址位於蘇澳新城石板棺遺址部分區域內，致影響綜合規劃報告作業期程，經99年11月10日開會研討，目前蘇澳地區尚無法尋得適當之用地，正擬替代方案。



- (3) Completed the awarding of contracts for design and construction supervision for Contract DL01, the Wuri excavated section (including Wuri and Taoyuan temporary stations and temporary track section).
- (4) Completed the awarding of contracts for design and construction supervision for DL02, Taoyuan section (including Taoyuan Train Station, Guoji Street Station, and Yongfeng Road Station).
- (5) Completed invitations to tender for project design and supervised construction projects for DL03, Zhongli section (including Taoyuan Train Station, Guaji Road Station, and Yongfeng Road Station)
- (6) Made arrangements for leasing of land for temporary track.
- (7) The Taoyuan County Government is making modifications to urban planning to expropriate land for the permanent act.

Taipei Railway Workshop Relocation Project

1. Content of plan

The plan is to be carried out from June 1, 2005 to December 31, 2015, with a total budget of NT\$ 17.014 billion. (First revision approved in principle by the Executive Yuan on March 1 2010 in official document No. YTJZ0990093143).

- (1) Suxin Base: The Qidu Maintenance Branch will be combined with the Yilan Rolling Stock Branch and relocated to the Suxin Base.
- (2) Qidu Base: After the relocation of the Qidu Maintenance Branch, the empty will be used to carry out track alignment improvements for Qidu Station; after the renovation of Keelung Station, Keelung Depot Branch will be transferred.
- (3) Fugang Base: It is planned to build an EMU maintenance depot, rolling stock branch, northern area supply depot, and diesel locomotive and electric locomotive maintenance depot at Fugang, Yangmei, Taoyuan County and lay a North Hukou depot access track and establish a North Hukou Station.
- (4) Chaozhou Base: The push-pull passenger car maintenance depot is to be combined with the Kaohsiung Railway Workshop Relocation Project. Prior to the completion of relocation to the new Kaohsiung Railway Workshop, push-pull passenger cars will be transferred to the original workshop for maintenance.

2. Project achievements

The plan is to be carried out from June 1, 2005 to December 31, 2015, with a total budget of NT\$ 17.014 billion.

- (1) Qidu Base:
 - Completed Qidu Station Yard additions P21 and P22 peripheral projects.
 - Completed Qidu Station Yard additional track sections E11, E12, and E13 project and electric car wiring project.
- (2) Fugang Base
 - Land preparation for areas A2, A3, and A4 completed as part of land preparation and coordination project (CL111).
 - Work began on the primary projects (CL221 and CL221-1) on August 9, 2010, with work completed on foundations A3, A4-1, and A2-1, ground beams, and other construction.
 - Work began on the Taipei Railway Workshop maintenance equipment project (CL431), with 47 maintenance equipment items having been examined and passed.
 - Work began on the North Hukou depot entrance track and station projects (CL651 and CL651-1) on July 12, 2010, with the Liugu River bridge abutments, precast beams A1 and A2, and installation preparations completed.
 - The contract for the Northern Region Supply Depot and Railway Workshop Office Building project (CL221-2) was awarded on October 4, 2010.
- (3) Chaozhou Base: The PP passenger car transfer and Kaohsiung Railway Workshop maintenance improvement project and equipment procurement were completed on March 25, 2010.
- (4) Suxin Base: The northeast side of the new Suao Station has been chosen as the location of the Suxin Base, but during geological drilling, it was found that the selected site was located on part of the Sincheng slate coffin ancient site, affecting the work schedule of the general planning report. Subsequent to a meeting was held to discuss the issue on November 10, 2010, the TRA is still unable to find suitable land in the Suao area, and a substitute proposal is currently being formulated.



臺鐵都會區捷運化暨區域鐵路後續建設計畫（基隆－苗栗段）

（一）計畫內容

計畫期程由94年1月1日至102年12月31日，總經費為84.84億元（第一次修正計畫行政院99年12月23日院臺交字第0990072342號函原則同意）。

1. 增設樟樹灣、浮洲、樹調、南新竹及豐富新等5座捷運化通勤車站。
2. 改善香山、談文及苗栗等3座既有場站。
3. 汐止－南港間擴建為三軌正線。
4. 改善基隆至苗栗間約140公里鐵路沿線景觀及安全。
5. 新建電聯車維修基地1座。

（二）執行成果

1. 增設捷運化通勤車站工程：
 - （1）樟樹灣站完成期末設計。
 - （2）浮洲站完成車站主體外牆及月台長度170公尺。
 - （3）樹調站完成都市計畫變更及路基改善工程。
 - （4）南新竹站完成規劃及基本設計。
 - （5）豐富新站完成委託規劃設計案決標並提送期初報告。
2. 既有場站改善工程：
 - （1）香山站原站房古蹟維修完成委託規劃設計案決標及月台、雨棚、軌道改建工程。
 - （2）苗栗站完成前期工程及提送主體工程細部設計書圖。
3. 瓶頸路段改善工程：
 - （1）汐止至樟樹灣擴建三軌工程完成南興路以北道路工程。
 - （2）樟樹灣至南港擴建三軌工程完成專案管理暨統包案決標，並核定第一階段設計圖說。
4. 系統機電設施改善工程：
 - （1）香山站電訊、號誌、電車線設備及列車自動防護系統改善工程完工。
 - （2）124K+700~126K+640間電訊改善工程完工。
5. 擴充機檢段設施改善工程：新竹機務段土建及檢修設備工程完成期末報告提送。

莫拉克災後重建工程

98年8月8日莫拉克颱風造成臺灣鐵路數十年來最嚴重的災情，南部路段多處受損，並有多處鐵路橋梁及路基損壞。

臺鐵局因應莫拉克災害搶救，投入總經費約5,507億元，計分成2階段辦理，第一部分救災階段，由於具時效性及急迫性，已於98年12月30日完成通車，恢復環島鐵路全線運輸；第二部分重建階段，則以復舊方式辦理，計畫接續或同步完成加固工程，主要辦理相關結構與設施之加固與復建，以增進行車安全，已如期於99年12月底前完成所有復建工程。

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

1. Content of plan

The plan is to be carried out from June 1, 2005 to December 31, 2013, with a total budget of NT\$8.484 billion (First revision approved in principle by the Executive Yuan on December 23, 2010 in official document No. Y TJZ0990072342).

- (1) Addition of five commuter train stations integrated with the rapid transit system- Zhanshuwan, Fuzhou, Shudiao, and South Hsinchu stations, and the new Fengfu Station.
- (2) Improvement the existing Xiangshan, Tanwen, and Miaoli stations.
- (3) Expansion to a three-track main line between Xizhi and Nangang.
- (4) Improvement of landscape and safety along approximately 140 kilometers of railway between Keelung and Miaoli.
- (5) Construction of a new EMU maintenance base.

2. Project achievements

- (1) Project to add commuter stations integrated with the rapid transit system:
 - Completed late stage planning of Zhangshuwan Station.
 - Completed outer station wall and 170 meters of platform at Fuzhou Station.
 - Completed urban planning revisions and sub grade improvement project at Shudiao Station.
 - Completed planning and basic design for South Hsinchu Station.
 - The contract was awarded for the outsourced planning and design of Fengfu New Station, an initial reported being delivered.
- (2) Projects to improve existing stations:
 - Completed the awarding of contract for the Contracted Planning and Design Project and the platform, rain canopy, and track rebuilding project for historical site preservation of the original Xiangshan Station.
 - Completed preliminary engineering for Miaoli Station and submitted detailed design drawings for major engineering.
- (3) Projects to improve bottleneck areas:
 - Completed road construction north of Nanxing Road for the project to expand the railway to three tracks between Xizhi and Zhangshuwan.
 - Completed awarding of contract for project management and package contract for the project to expand the railway to three tracks from Zhangshuwang to Nangang, and reviewed and approved design diagrams for the first phase.
- (4) System electrical and mechanical facility improvement engineering
 - Work was completed on projects to improve the communications, signals, electric car wiring, and automatic train protection systems at Xiangshan Station.
 - 124K+700~126K+640 communications improvement engineering work completed.
- (5) Maintenance branch expansion and improvement projects: Work completed and final report submitted for the Hsinchu Rolling Stock Branch civil engineering and maintenance equipment project.

Typhoon Morakot Recovery Engineering

On August 8, 2009, Typhoon Morakot did more damage to Taiwan's railways than any storm in decades, damaging tracks in many parts of southern Taiwan, as well as railroad bridges and subgrade.

The TRA made expenditures of totaling approximately NT\$550.7 billion in response to Typhoon Morakot, divided into two phases. Due to the timeliness and urgency with which the initial disaster relief phase was carried out, all trains were running again by December 30, 2009, restoring round-island transportation throughout the line. The second phase, reconstruction, focused on restoring existing facilities; the reinforcement and rebuilding of structures and facilities was carried out, in order to increase the safety of train operations. All rebuilding projects were completed as scheduled by the end of December 2010.



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年度大事紀要

Major Events of the Year



一月 JANUARY

- 6日 臺鐵局范植谷局長與英國在臺代表共同主持臺北機務段OHSAS-18001職業安全衛生評估系列標準（國際級）& TOSHMS臺灣職業安全衛生管理系統（臺灣版）授證典禮。
- 6 TRA Director-General Frank Fan and the Taiwan representative of the British Standards Institution (BSI) jointly hosted a ceremony for Occupational Health and Safety Assessment System (OHSAS-18001) (International grade) and Taiwan Occupational Safety and Health Management System (TOSHMS) certification of the Taipei Rolling Stock Branch.
- 12日 臺鐵局范植谷局長主持民雄站新站跨站式站房啟用典禮，交通部張邱春常務次長、嘉義縣張花冠縣長等貴賓共同剪綵，現場並發售紀念月台票。
- 12 TRA Director-General Frank Fan hosted the opening ceremony of the overpass station building at Minxiong Station, with MOTC Administrative Deputy Minister Chang, Chiu-chun, Chiayi County Commissioner Helen Chang and other guests in attendance to perform the ribbon-cutting duties, with commemorative platform tickets sold at the ceremony.

二月 FEBRUARY

- 1日 花蓮站擴大舉辦「北迴鐵路通車30週年」慶祝活動，由臺鐵局范植谷局長主持，交通部毛治國部長、花蓮縣傅崐萁縣長、立法委員林正二及前花蓮縣縣長王慶豐等貴賓共同歡慶，現場並發售各式紀念車票，及免費招待花蓮地區弱勢團體搭乘藍色塗裝的R101型圓夢列車。
蒸汽機車CT273號附掛煤水車租借臺灣民俗村，租期屆滿不再續約，經公路啟運回成功車站辦理復修作業。
- 1 Hualien Station held events celebrating the 30th anniversary of the North-Link Line, with TRA Director-General Frank Fan, MOTC Minister Mao Chi-Kuo, Hualien County Commissioner Fu Kun-Chi, Legislative Yuan Member Lin Cheng-Er, former Hualien County Commissioner Wang Ching-Feng and other special guests attending the festivities. Commemorative train tickets were sold at the site, and disadvantaged groups from the Hualien area rode free on the blue-painted model R101 "Train of Dreams."
Steam locomotive CT273 with coal water tender was rented to Taiwan Folk Village, and after the rental period ended, it was transported back to Chengong Station via highway for restoration work.
- 2日 彰化機務段辦理迎接原租借彰化臺灣民俗村之蒸汽機車CT273號自成功站無火迴送至彰化站回娘家活動及記者會，獲各界熱烈迴響。
- 2 The Changhua Rolling Stock Branch held an enthusiastic "welcome home" event and press conference for the fireless steam-powered return from Chengong Station of the steam locomotive CT273, previously leased to Taiwan Folk Village.



- 10日 本日起取消計次式磁卡定期票，試辦發售「磁卡式通用定期票」，為期3個月再行檢討。
- 10 Beginning on this date, the use of journey-limited periodic magnetic tickets was cancelled, with trial sales of "general-use magnetic periodic tickets" to take place for three months, after which time a review would be conducted.
- 12日 行政院吳敦義院長由交通部毛治國部長等長官陪同，至臺北站視察臺鐵及高鐵春節疏運狀況。
- 12 Accompanied by MOTC Minister Mao Chi-Kuo and other senior officials, Premier Minister Wu Tun-Yi inspected the state of railway and high speed rail passenger dispersal efforts for the Spring Festival peak travel period at Taipei Station.
- 11-22日 99年春節疏運期間，全線加開565列次，加掛1,071輛次。每日平均上車人數50萬7,768人、收入5,496萬6,482元、延人公里3,166萬4,577人公里，較98年上車人數減少1.68%，收入增加3.5%，延人公里增加3%。
- 11-22 During the 2010 Spring Festival peak travel period, 565 additional trains were operated throughout the railway, and an additional 1,071 cars added. Passenger boardings averaged 507,768 per day, and revenues NT\$54,966,482 per day, with passenger kilometers averaging 31,664,577 km per day. Compared with 2009, the number of passengers decreased 1.68%, revenue increased 3.5%, and passenger kilometers increase 3%.
- 13日 推出2010（庚寅）年春節紀念不銹鋼便當盒，以臺北縣縣定古蹟「菁桐車站」為背景，並搭配「天燈」升起圖案，自本日起開始販售。
- 13 2010 Spring Festival commemorative stainless steel lunchboxes depicting the floating lanterns against the background of Jingtong Station (a Taipei County Historical Site) went on sale from this date.

三月 MARCH

- 12日 為響應政府節能減碳政策，臺鐵局范植谷局長於富岡基地主持「百站萬樹」植樹典禮活動。
- 12 In response to the government's energy conservation and carbon reduction policy, TRA Director-General Frank Fan hosted the "One Hundred Stations, Ten Thousand Trees" tree-planting ceremony at the Fugang Base.
- 26日 臺鐵局辦理電子票證擴大乘車區間案，98年底由臺灣智慧卡公司得標，已完成系統設備建置及測試，本日起持有臺灣通卡民眾可在瑞芳－基隆－新竹間刷卡搭乘火車。
- 26 The Taiwan Smart Card Corporation won the bid of TRA E-tickets travel interval expansion in late 2009, and the installation and testing of system equipment being completed. Beginning on this day, holders of "Taiwan Easy Go" cards could use their cards to board between Ruifang-Keelung and Keelung-Hsinchu.





四月 APRIL

- 1日 99年鐵路特考訂於6月26日至28日舉辦，業於3月23日至4月1日受理報名完竣，報名人數經考選部初步統計：高員級3,379人、員級6,109人、佐級59,994人，總計69,482人，初步預估錄取率為1.25%。
- 1 Applications to take the 2010 special civil service examinations for railway personnel scheduled for June 26-28 were received and processed between March 23 and April 1. Preliminary statistics from the Ministry Examination indicate that 3,379 people took exams for senior officer positions, 6,109 for officer positions, and 59,994 for junior officer positions, a total of 69,482 people with a projected acceptance rate of 1.25%.
- 8日 臺鐵局范植谷局長與臺灣智慧卡股份有限公司吳運豐董事長共同主持瑞芳－新竹間「臺灣通」電子票證啟用典禮。
- 8 TRA Director-General Frank Fan and Taiwan SmartCard Corporation Chairman Wu Yun-feng jointly hosted a ceremony to inaugurate the usage of "Taiwan Easy Go" e-tickets between Ruifang and Hsinchu.
- 10日 為推動國內精緻觀光旅遊，經公開招標與「易遊網旅行社股份有限公司」合作，提供精緻彩繪車身、頭等艙舒適座位及車上精緻餐飲等細膩服務之「環島之星觀光列車」，並於「花蓮～臺東」、「臺東～高雄」、「高雄～臺北」等區間附掛3節莒光號自由行車廂。
- 10 To promote high-class domestic travel, ezTravel Co. Ltd. was contracted through public bidding to cooperate to reintroduce the "Formosa Express" luxury tour train, with brightly painted train cars, comfortable first-class seats, fine onboard dining, and attentive service. Three Juguang class passenger cars would also be added for independent travel between Hualien and Taitung, Taitung and Kaohsiung, Kaohsiung and Taipei, and other areas.
- 12日 板橋車站商場促參案環球購物中心開幕，由臺鐵局范植谷局長與冠德建設公司馬玉山董事長及臺北縣周錫璋縣長共同主持。
- 12 The Banqiao Station Shopping Center PPIP Global Mall was unveiled in a ceremony jointly hosted by TRA Director-General Frank Fan, Kingdom Construction Corporation Chairman Ma Yu-Shan, and Taipei County Commissioner Chou Hsi-Wei.
- 22日 臺鐵局提供板橋車站地下1樓空間，由臺北縣立圖書館籌設北縣第1座運用RFID技術自動借還書的智慧型圖書館，於本日啟用。
- 22 A self-service library using RFID technology, funded and organized by the Taipei County Library, was opened in space provided by the TRA in the first sublevel of Banqiao Station.

五月 MAY

- 7-9日 99年母親節疏運期間，臺鐵計加開145列次、加掛66輛次，每日平均旅客62萬4千人次，每日平均收入5,959萬元。
- 7-9 During the 2010 Mothers' Day peak travel period, the TRA added an additional 145 train trips and 66 cars. Travelers took an average of 624,000 journeys per day, and daily revenues averaged NT\$59.59 million.
- 17日 為服務高鐵旅客，臺中及高雄鐵路餐廳於本日分別與台灣高鐵公司簽約，於高鐵臺中站及左營站設置「臺鐵便當」銷售據點，臺中站於99年5月23日開幕，左營站另於5月26日開幕。
- 17 To serve high-speed rail travelers, the Taichung and Kaohsiung Railway Restaurants signed contracts with the Taiwan High Speed Rail Corporation to set up "HSR Lunchbox" concession stands at Taichung and Zuoying stations, respectively. The Taichung Station location began operating on May 23, 2010, while the Zuoying Station location opened on May 26.
- 26日 JR西日本新幹線科技股份有限公司社長森下逸夫率員來訪，與臺鐵局范植谷局長、黃民仁副局長及機務處同仁，針對車輛維修體系交流意見。
- 26 The TRA was visited by a delegation led by Itsuo Morishita, President of the JR West Japan Railway Technos Corp., who exchanged views on rolling stock maintenance systems with TRA Director-General Frank Fan, Deputy Director-General Huang Ming-ren, and colleagues from the Rolling Stock Department.

六月 JUNE

- 2日 臺鐵局「臺北機廠遷建後土地開發策略規劃暨都市計畫變更委託技術服務案」與策威開發管理顧問股份有限公司正式簽約，辦理規劃開發臺北機廠。
- 2 The TRA signed a formal contract for the Taipei Railway Workshop Post-Relocation Land Development Strategy Planning and Urban Planning Modification Project with Cewei Development Management Consulting Co. Ltd, commissioning the company to carry out the planning for the development of the Taipei Railway Workshop.
- 3-9日 臺鐵局於3日召開舊山線復駛記者會，交通部毛治國部長、臺鐵局范植谷局長、苗栗縣劉政鴻縣長及立法委員徐耀昌等貴賓蒞臨；另於5日與9日123週年鐵路節當日，先就三義站至舊泰安站間13.6公里路段進行復駛，開行「CK124舊山線風情半日遊」懷舊郵輪式列車，作為舊山線復駛營運ROT計畫公告招商前暖身活動。
- 3-9 On June 3, the TRA held a press conference announcing the reopening of the Old Mountain Line, attended by MOTC Minister Mao Chi-kuo, TRA Director-General Frank Fan, Miaoli County Commissioner Liu Cheng-hung, and Legislative Yuan member Hsu Yao-chang; also on the 5th and 9th, the Taiwan Railway Day, the 123rd anniversary of Taiwan's railways, operations resumed on a 13.6 km stretch of line between Sanyi and the old Taian station, operating the "CK124 old mountain line charm half-day journey" nostalgic cruise train as a warm-up before requesting bids for the re-opening of the old mountain line on an ROT basis.
- 9日 臺灣鐵路123週年暨鐵路節慶祝大會，由臺鐵局范植谷局長主持，行政院吳敦義院長及交通部毛治國部長蒞臨致詞，並頒發臺鐵之友、優良志工及40年、50年資深員工及各項績優人員獎，另首度邀請印度—臺北協會於臺北站辦理印度高山鐵路展及印度舞蹈表演等活動。
- 9 TRA Director-General Frank Fan hosted the TRA's 123rd Anniversary of Taiwan Railways and 2010 Railway Day Celebration Assembly, where Premier Minister Wu Tun-Yi and MOTC Minister Mao Chi-kuo also spoke. Awards were issued to "Friends of Taiwan Railways," outstanding volunteers, 40 and 50-year senior employees, and high-achieving employees; in addition, for the first time the India-Taipei Association was invited to put on an exhibit about the Mountain Railways of India at Taipei Station, Indian dance performances, and other events.
- 26-28日 99年鐵路特考於26日至28日舉辦考試，本次特考報名人數為69,637人，到考率約為65%。
- 26-28 The 2010 special civil service exam for railway employees was held from June 26 to 28. 69,637 people signed up for the examination, with 65% appearing to sit the exam.



七月 JULY

- 1日 五堵貨場D1股道及B區公共貨場啟用。
1 The D1 section of track and Area B Public Freight Yard went into operation at the Wudu Freight Yard.
- 14日 臺鐵局范植谷局長與臺南縣蘇煥智縣長共同主持「南科太陽能車站首航暨啟用典禮」，現場開行EMU700型上、下行首航專列各1班次，並發售限量名片式紀念車票、月台票。
南科站（簡易站，設於善化站、新市站間）自本日起營運，並指定善化站為管理站。
14 TRA Director-General Frank Fan and Tainan County Commissioner Su Huan-chih jointly hosted a ceremony inaugurating the opening and maiden voyage from the solar-powered Nanke Station. Two EMU700 trains set out southwards and northwards respectively the maiden voyages from the station, with limited edition commemorative train and platform tickets sold. Nanke Station (classified as a Simple Station, built between Shanhua and Xinshi stations) began operating on this date, with Shanhua station designated the managing station.
- 19-25日 臺鐵局黃民仁副局長率同仁赴日本拜會JR北海道日本總公司、JR西日本總公司、JR九州日本總公司，並參訪札幌、京都、姬路、岡山、博多、新宮中央、鹿兒島、大阪等火車站大樓開發。
19-25 TRA Deputy Director-General Huang Ming-ren headed a delegation visiting the Japan Railways Group's JR Hokkaido, JR West, and JR Kyushu companies, and inspected the development of the Sapporo, Kyoto, Himeji, Okayama, Hakata, Shingu-Chuo, Kagoshima, and Osaka station buildings.

九月 SEPTEMBER

- 7日 99年金路獎頒獎典禮，由臺鐵局范植谷局長主持，交通部毛治國部長蒞臨指導，臺鐵局共計16個單位於路況養護類、設備維護類、站場環境維護類及特殊貢獻類中獲獎。
7 At the 2010 Golden Way Awards ceremony, hosted by TRA Director-General Frank Fan and with a speech by MOTC Minister Mao Chi-kuo, 16 units within the TRA were presented with Special Contribution Awards in categories such as track maintenance, equipment maintenance, and station environment maintenance.
- 28日 臺鐵捷運化工程－楊梅跨站式車站啟用典禮，由臺鐵局范植谷局長主持，交通部張次長邱春蒞臨指導。
28 The Yangmei Overpass Station of the TRA Rapid Transit Systematization Project opening ceremony was hosted by TRA Director-General Frank Fan, with a speech by MOTC Deputy Minister Chang Chiu-chun.
- 29日 凡那比颱風災害－南太麻里溪橋提前搶修完成，恢復通車。
29 Typhoon Fanapi damage- Repairs to the Taimali River Bridge on the South-Link Line were completed early, with train operations resuming.

十月 OCTOBER

- 10日 為慶祝建國百年，臺鐵局以CK124、光華號等12代特色列車環島開行，並結合新竹、臺中、臺南及高雄等歷史悠久的車站，自99年10月10日起至100年10月底止，規劃一整年「12代機車環島接力，百年車站巡禮」之郵輪式列車行程，深獲社會各界好評。
- 10 To celebrate the centennial of the R.O.C., the TRA planned a year-long "Round-Island Relay of 12 Generations of Locomotives, Tour of a Century of Railway Station" event, with 12 generations of locomotives such as the CK124 and the Guanghai taking cruise-style trips between stations of historical interest, such as Hsinchu, Taichung, Tainan, and Kaohsiung stations. Set to run from October 10, 2010 to the end of October 2011, the event has been widely praised.
- 25日 以退休火車站站長為主角，展開火車環島之旅的迷你電視劇「記得我們愛過」，拍攝場景為平溪線沿途景色，劇中女演員林美照並獲得金鐘獎最佳女主角獎項。
- 25 The Taiwan Public Television Service launched "Remember We Have Loved," a mini-series with a retired station master as the protagonist. Shot on location at scenic sites along the Pingxi Line, the series netted a Best Actress award for Lin Mei-Zhao at the 45th Golden Bell Awards.

十一月 NOVEMBER

- 1日 臺鐵局與馬偕紀念醫院合作引進營養諮詢師制度，以產學合作研究委託案方式建置合作計畫，並於本日完成簽約程序，由該院淡水院區營養課輔導臺鐵局各餐務單位，研發推出「臺鐵健康養生餐盒」。
- 1 The TRA worked with Mackay Memorial Hospital to introduce a health consultant system, establishing a cooperation plan under the Industry-Academy Cooperative Research Project model and completing the contract signing procedures on this date. Under the plan, the Nutrition Section of the Danshui branch of the hospital developed "TRA Healthy Lunchboxes."
- 10日 99年鐵路特考正額錄取人員於本日報到，高員級36人、員級63人、佐級695人，合計報到794人（應報到883人，未報到89人），報到率89.92%。
- 10 New employees hired based on the 2010 special civil service exam for railway employees were to report for duty. 36 senior officers, 63 officers, and 695 junior officers reported for duty, a total of 794 reporting, 89.2% those who were to report.
- 19日 臺鐵局范植谷局長陪同交通部毛治國部長，視察臺中鐵路高架化計畫及沙崙計畫。
- 19 TRA Director-General Frank Fan and Railway Reconstruction Bureau Director-General Hsu Chun-yi accompanied MOTC minister Mao Chi-kuo to inspect progress on the Taichung Railway Elevation Plan and Shalun Plan.





- 23日 臺鐵局首創多卡通自動驗票閘門啟用記者會，由范植谷局長主持，交通部毛治國部長及多位貴賓蒞臨指導；新式自動閘門具備容納多家（4家）電子票證驗票機制，並可同時判讀臺鐵各類車票，且旅客出入的速度可以高達每分鐘60人次，達到一卡通用多功能快速通關之目標。
- 23 TRA Director-General Frank Fan hosted a press conference for the opening of TRA's first multiscard scanner turnstiles, where MOTC Minister Mao Chi-kuo and a number of special guests also spoke; the new type of automated turnstiles have scanning mechanisms that can accept cards from a number of vendors (currently four), while also reading various TRA ticket types. The speed of passenger entries and exits could be raised to up to 60 per minute, achieving the goal of allowing travelers to rapidly pass through gates with a single card.
- 23-24日 財團法人中華顧問工程司辦理「2010國際軌道工程論壇」，邀臺鐵局范植谷局長擔任專題主持人，並由電務處黃運傑處長主講「臺鐵號誌維修管理資訊系統」，和與會人員作雙向交流，以提升該系統未來建置功能。
- 23-24 CECI Engineering Consultants, Inc. held the 2010 International Forum on Railway Engineering, inviting TRA Director-General Frank Fan to serve as host for a special subject forum, with Electrical Engineering Department Director Huang Yun-chieh speaking on "the TRA Signal Maintenance Management Information System," and engaging in dialogue with participants to improve the function of the system in the future.

十二月 DECEMBER

- 10日 臺鐵局與出版社共同策劃發行「鐵道旅行 幸福100」筆記書，是第一本由臺鐵局商標授權、極具蒐藏價值及個人專屬性的鐵道旅行筆記書，為提高紀念性，並舉辦百站集章送贈品活動，期能掀起鐵路旅遊熱潮。
- 6th The TRA worked with a publisher to release the "Discover Taiwan by Railway" scrapbook, the first collectible, personalized railroad travel scrapbook to license the TRA trademark. To fill the scrapbook with even more memories, the TRA will also award a prize to travelers who collect stamps from 100 stations in order to boost the popularity of rail travel.
- 15日 臺鐵局「環島鐵路整體系統安全提升計畫－沙鹿站跨站式站房新建工程土建部分」，經勞委會委員評審獲選「99年推動勞工安全衛生優良公共工程」工程類獎，由勞委會王如玄主任委員親自頒獎。
- 15 The Civil Engineering Portion of the Shalun Overpass Station Rebuilding Project, part of the Round-Island Railway System Safety Upgrading Plan, was selected by the Council of Labor Affairs to receive an award in the Engineering category as a 2010 Outstanding Public Works Project Promoting Work Safety and Health, with Minister Wang Ju-hsuan give the award personally.
- 16日 基隆－中壢間各站「多卡通自動驗票閘門」正式啟用。
- 16 Multiscard automated turnstiles officially went into operation at stations between Keelung and Zhongli.
- 29日 埔心－新竹間各站「多卡通自動驗票閘門」正式啟用。
- 29 Multiscard automated turnstiles officially went into operation at stations between Puxin and Hsinchu.



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