

# 2012年 民航经济运行状态

## 一、运输航空

2012年，在世界经济不景气的情况下，中国民航主要运输指标保持平稳增长。

**运输总周转量** 全行业完成运输总周转量610.32亿吨公里，比上年增长32.88亿吨公里，增长5.7%，其中旅客周转量446.43亿吨公里，比上年增长42.90亿吨公里，增长10.6%；货邮周转量163.89亿吨公里，比上年减少10.02亿吨公里，减少5.8%。

国内航线完成运输周转量415.83亿吨公里，比上年增长35.22亿吨公里，增长9.3%，其中港澳台航线完成13.66亿吨公里，比上年增长1.02亿吨公里，增长8.1%；国际航线完成运输周转量194.49亿吨公里，比上年减少2.35亿吨公里，减少1.2%。

**旅客运输量** 全行业完成旅客运输量31 936万人次，比上年增长2 619万人次，增长8.9%。国内航线完成旅客运输量29 600万人次，比上年增长2 401万

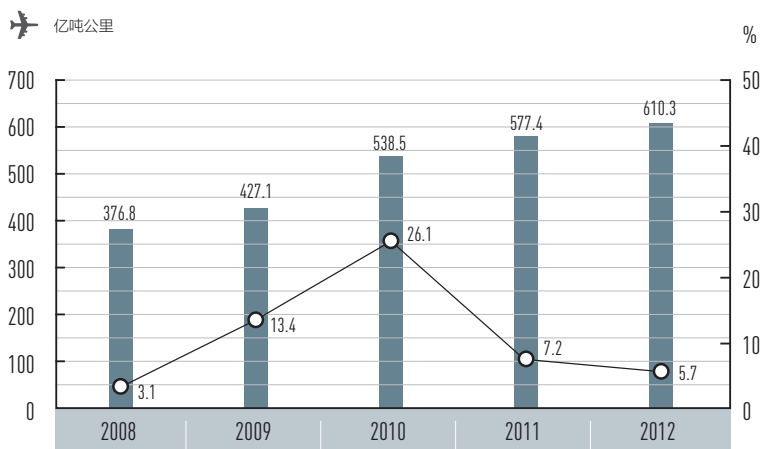


图1 2008—2012年民航运输总周转量

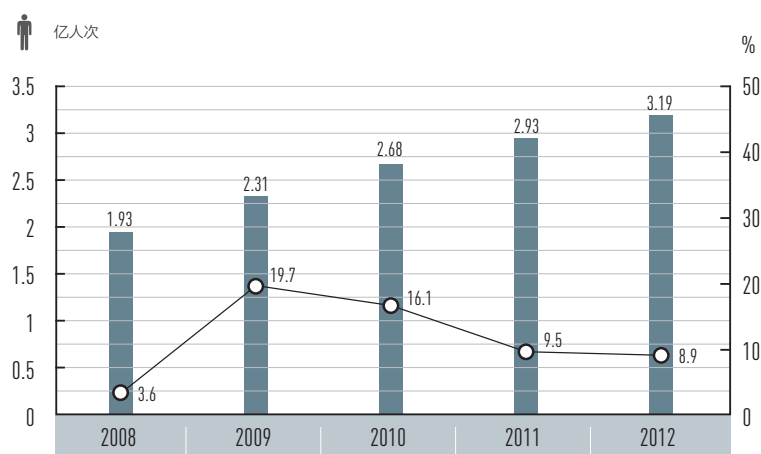


图2 2008—2012年旅客运输量

人次，增长8.8%，其中港澳台航线完成834万人次，比上年增加74万人次，增长9.7%；国际航线完成旅客运输量2 336万人次，比上年增加218万人次，增长10.3%。

**货邮运输量** 全行业完成货邮运输量545万吨，比上年降低2.2%。国内航线完成货邮运输量388.5万吨，比上年增长2.4%，其中港澳台航线完成20.8万吨，比上年降低1.1%；国际航线完成货邮运输量156.5万吨，比上年降低12.1%。

**机场业务量** 全国民航运输机场完成旅客吞吐量6.8亿人次，比上年增长9.5%。

全国运输机场完成货邮吞吐量1 199.4万吨，比上年增长3.6%。

全国运输机场完成起降架次660.32万架次，比上年增长10.4%。

2012年，年旅客吞吐量100万人次以上的运输机场57个，其中北京、上海和广州三个城市机场旅客吞吐量占全部机场旅客吞吐量的30.7%。

2012年，年货邮吞吐量1万吨以上

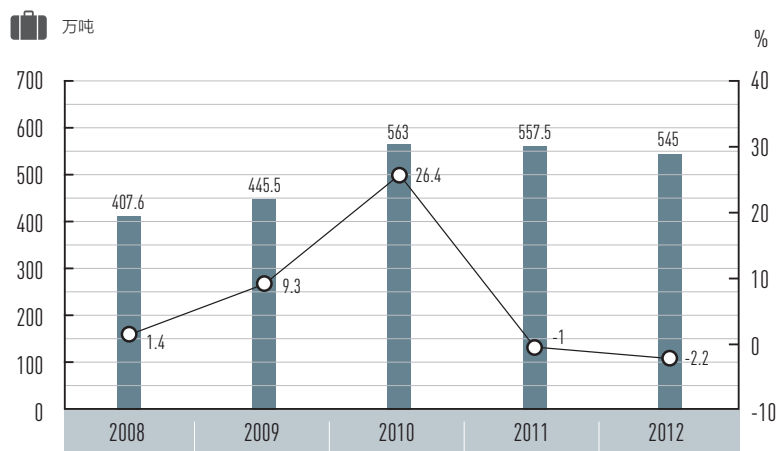


图3 2008—2012年民航货邮运输量

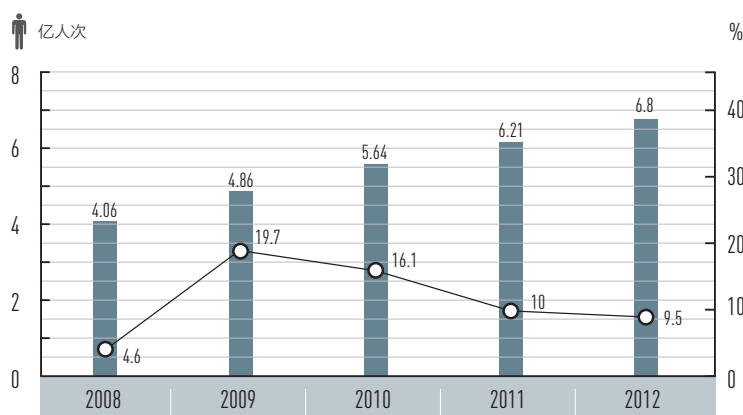


图4 2008—2012年民航运输机场旅客吞吐量

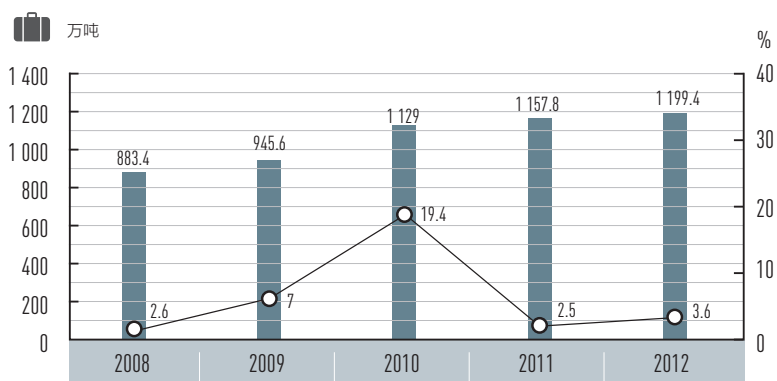
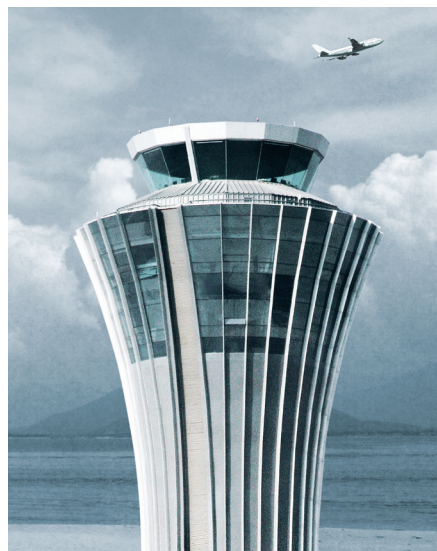


图5 2008—2012年民航运输机场货邮吞吐量

的运输机场49个，其中北京、上海和广州三个城市机场货邮吞吐量占全部机场货邮吞吐量的53.5%。

2012年，北京首都机场完成旅客吞吐量0.82亿人次，位列亚洲第一；上海浦东机场完成货邮吞吐量293.8万吨。

**运输机队** 截至2012年底，民航全行业运输飞机期末生产在册架数1 941架，比上年增加177架。

**机场服务能力** 截至2012年底，我国共有颁证运输机场183个，比上年增加3个。2012年新增机场分别为黑龙江加格达奇机场、江苏扬州泰州机场和贵州遵义机场。另外，完成了昆明长水机场迁建。四川攀枝花机场、新疆且末机场停航。

**航线网络** 截至2012年底，我国共有定期航班航线2 457条，按重复距离计算的航线里程为494.88万公里，按不重复距离计算的航线里程为328.01万公里。截至2012年底，定期航班国内通航城市178个（不含香港、澳门、台湾台北、台中及高雄等）。我国航空公司国际定期航班通航52个国家的121个城市，定期航班通航香港的内地城市40个，通航澳门的内地城市7个，通航台湾地区的大陆城市38个。

**对外关系** 截至2012年底，我国与其他国家或地区签订双边航空运输协定114个，与2011年底持平。其中，亚洲44个国家，非洲23个国家，欧洲35个国家，美洲8个国家，大洋洲4个国家。

**运输航空（集团）公司生产** 截至2012年底，我国共有运输航空公司46家，按不同类别划分：国有控股公司36家，民营和民营控股公司10家；全货运航空公司10家；中外合资航空公司14家；

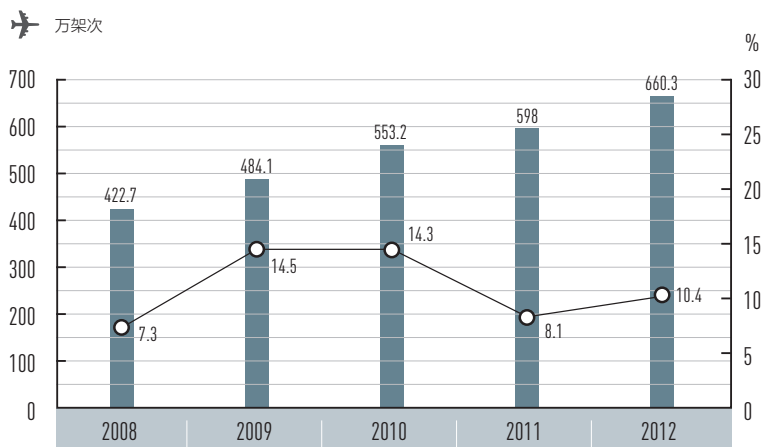


图6 2008—2012年民航运输机场起降架次

表1 2012年旅客吞吐量100万人次以上的机场数量 单位：个

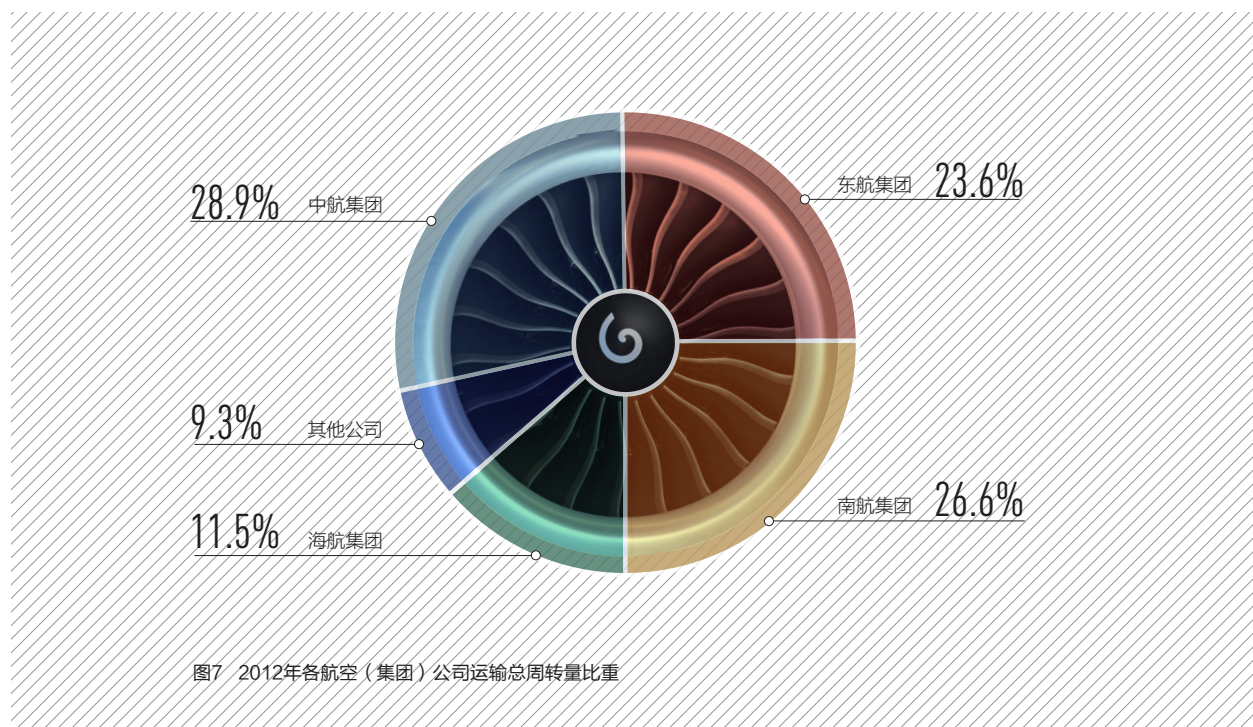
年旅客吞吐量	机场数量	比上年增长	吞吐量占全国比例 (%)
1 000万人次以上	21	0	74.0
100-1 000万人次	36	4	21.3

表2 2012年货邮吞吐量万吨以上的机场数量 单位：个

年货邮吞吐量	机场数量	比上年增长	吞吐量占全国比例 (%)
10 000 吨以上	49	2	98.5

表3 2012年我国定期航班航线条数及里程

指标	数量
航线条数 (条)	2 457
国内航线	2 076
其中：港澳台航线	99
国际航线	381
按重复距离计算的航线里程 (万公里)	494.88
国内航线	339.04
其中：港澳台航线	13.85
国际航线	155.84
按不重复距离计算的航线里程 (万公里)	328.01
国内航线	199.54
其中：港澳台航线	13.33
国际航线	128.47



上市公司5家。

中航集团完成飞行小时162.4万小时，完成运输总周转量176.7亿吨公里，比上年降低2.8%，完成旅客运输量0.82亿人次，比上年增加4.9%，完成货邮运输量155.6万吨，比上年降低10.9%。

东航集团完成飞行小时141.7万小时，完成运输总周转量144.1亿吨公里，比上年降低4.6%，完成旅客运输量0.73亿人次，比上年增加6.5%，完成货邮运输量141.7万吨，比上年降低5.3%。

南航集团完成飞行小时168.1万小时，完成运输总周转量162.1亿吨公里，比上年增加12.0%，完成旅客运输量0.86亿人次，比上年增加7.2%，完成货邮运输量123.0万吨，比上年增加8.4%。

海航集团完成飞行小时79.2万小时，完成运输总周转量70.5亿吨公里，比上年增加10.6%，完成旅客运输量0.42亿人次，比上年增加17.4%，完成货邮运输量58.0万吨，比上年增加4.9%。

其他航空公司共完成飞行小时67.5万小时，完成运输总周转量57.0亿吨公里，比上年增加15.0%，完成旅

客运输量0.36亿人次，比上年增加19.8%，完成货邮运输量66.8万吨，比上年增加3.7%。

## 二、通用航空

**飞行时间** 2012年，全行业完成通用航空飞行51.7万小时，比上年增长2.8%。其中工业航空作业完成7.71万小时，比上年增长36%；农林业航空作业完成3.19万小时，比上年降低3.9%；其他通用航空项目完成40.81万小时，比上年降低1.2%。

**通用航空企业** 截至2012年底，获得通用航空经营许可证的企业146家，新增27家，注销4家。其中，华北地区41家，中南地区27家，华东地区29家，东北地区16家，西南地区16家，西北地区11家，新疆地区6家。

**机队规模** 2012年底，通用航空企业生产在册航空器总数达到1 320架，其中教学训练用飞机328架。

## 三、运输效率、经济效益与运输收入水平

**运输效率** 2012年，全行业在册运输飞机平均日利



用率为9.15小时，比上年降低0.11小时。其中，大中型飞机平均日利用率为9.58小时，比上年降低0.13小时，小型飞机平均日利用率为4.91小时，比上年提高0.16小时。

2012年，正班客座率平均为79.6%，比上年降低2.2个百分点。

2012年，正班载运率平均为70.6%，比上年降低1.4个百分点。

表4 2012年正班客座率和正班载运率

指标	指标值(%)	比上年增长(百分点)
正班客座率	79.6	-2.2
国内航线	80.3	-2.9
其中：港澳台航线	75.4	-1.3
国际航线	77.1	0.8
正班载运率	70.6	-1.4
国内航线	72.2	-1.8
其中：港澳台航线	64.1	0.6
国际航线	67.3	-1.2

**经济效益** 2012年，全行业累计实现营业收入5561.4亿元，比上年增长10.5%，利润总额295.9亿元，比上年减少76.5亿元。其中，航空公司实现营业收入3889.8亿元，比上年增长9.1%，利润总额211亿元，比上年减少62.1亿元；机场实现营业收入550.2亿元，比上年增长10.9%，利润总额45.4亿元，比上年减少14.1亿元；保障企业实现营业收入1121.4亿元，比上年增长15.7%，利润总额39.6亿元，比上年减少0.3亿元。

**运输收入水平** 2012年，全行业运输收入水平为5.99元/吨公里，比上年增加0.15元/吨公里。其中国内航线（不含港澳台航线）7.05元/吨公里，比上年增加0.08元/吨公里；港澳台航线7.48元/吨公里，比上年减少0.09元/吨公里；国际航线3.72元/吨公里，比上年增加0.11元/吨公里。

国内航线（不含港澳台航线）客运收入水平为7.83元/吨公里，比上年提高0.04元/吨公里；港澳台航线客运收入水平为8.27元/吨公里，比上年减少0.10元/吨公里；国际航线客运收入水平为6.25元/吨公里，比上年减少0.20元/吨公里。

国内航线（不含港澳台航线）货邮运价为2.02元/吨公里，比上年增加0.06元/吨公里；港澳台航线货邮运价为4.42元/吨公里，比上年减少0.16元/吨公里；国际航线货邮运价为1.69元/吨公里，比上年减少0.06元/吨公里。

全行业客公里收入水平0.68元/客公里，与上年基本持平。其中，国内航线（不含港澳台航线）收入水平0.70元/客公里，与上年基本持平；港澳台航线收入水平0.74元/客公里，比上年减少0.01元/客公里；国际航线收入水平0.56元/客公里，比上年减少0.02元/客公里。

## 四、航空安全与服务质量

**航空安全** 民航安全形势平稳。全行业未发生运输航空事故、空防安全事故、重大航空地面事故和特大航空器维修事故。

2012年，全年共发生通用航空一般飞行事故1起。全年发生事故征候295起，其中人为原因严重事故征候5起，同比下降44.4%，通用航空事故征候12起，同比增加1起。东航、厦航、山航、春秋航等35家运输航空公司未发生人为责任事故征候。

截至2012年12月31日，运输航空连续安全飞行1355万小时。

**航班正常率** 2012年，航空公司计划航班250.2万班次，其中正常航班187.2万班次，不正常航班63.0万班次，平均航班正常率为74.83%。

2012年，主要航空公司共执行航班208.7万班次，其中正常航班158.0万班次，不正常航班50.6万班次，平均航班正常率为75.69%。

**旅客投诉情况** 民航局、各地区管理局、民航局消费者事务中心和中国航空运输协会全年共受理航空消费者投诉1801件。全年受理投诉总量较2011年减少217件。

## 五、固定资产投资

2012年，民航固定资产投资总额1464.6亿元，其中：民航基本建设和技术改造投资712.2亿元，比上年增长3.6%。

基本建设和技术改造投资按系统划分如下。

**机场建设** 机场系统完成固定资产投资总额498.7亿元，比上年增长0.7%。重点建设项目12个，其中：杭州萧山机场扩建工程、成都双流机场扩建工程、拉萨贡嘎机场扩建工程、西安咸阳机场扩建工程等竣工；深圳宝安机场扩建工程、西宁曹家堡机场扩建工程、沈阳桃仙机场扩建工程、南京禄口机场扩建工程、贵阳龙洞堡机场扩建工程等续建项目进展顺利；天津滨海机场扩建工程、广州白云机场扩建工程等开工建设。

**空管建设** 空管系统完成固定资产投资26.7亿元，比上年增长48.3%。重点建设项目4个，其中：成都区域管制中心、西安区域管制中心等项目进展顺利；沈阳区域管制中心以及乌鲁木齐区域管制中心等项目开工建设。

**其他方面** 2012年，民航其他系统完成固定资产投资总额186.8亿元，比上年增长7.2%。其中：民航信息系统建设投资5.4亿元，民航科研、教育系统投资21.2亿元，民航安全保卫系统投资2.8亿元，民航油料系统投资2.9亿元，民航机务维修系统投资4.8亿元，运输服务系统投资54.7亿元，公共设施系统投资21.9亿元，其他系统投资73.1亿元。

表5 2012年航班不正常原因分类统计

指标	占全部比例 (%)	比上年增长 (百分点)
全部航空公司航班不正常原因	100.0	
航空公司原因	38.5	—
流量原因	25.0	—
天气原因	21.6	—
其他	14.9	—
主要航空公司航班不正常原因	100.0	
航空公司原因	37.5	0.4
流量原因	25.0	-2.5
天气原因	21.9	1.9
其他	15.6	0.2

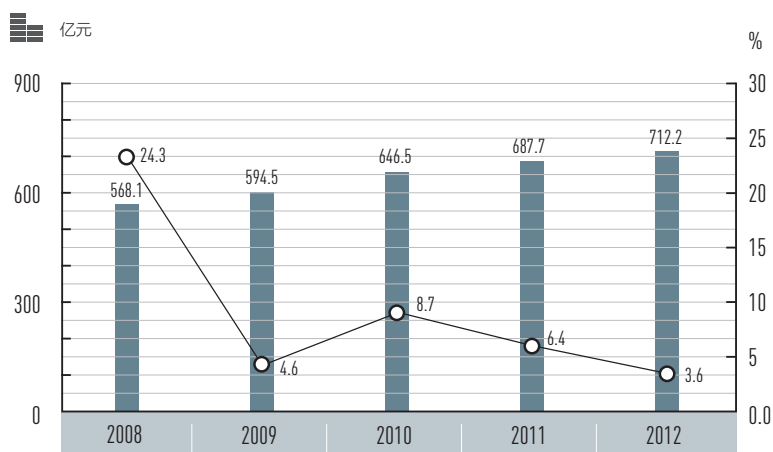


图8 2008—2012年民航基本建设和技术改造投资额 — 固定资产投资额 — 比上年增长

## 六、社会责任

**重大运输任务** 完成党的十八大航空运输保障任务。中国共产党第十八次全国代表大会于2012年11月在北京召开，民航系统圆满完成了25个省、自治区、直辖市代表乘坐民航航班的航空运输保障任务，共保障代表团集中乘坐的航班48班（其中专门包机33班）、部分代表分散乘坐的航班278班，共运送代表及工作人员4529人次。

完成“两会”航空运输保障任务。民航圆满完成十一届全国人大五次会议和全国政协十一届五次会议16个省、自治区、直辖市人大代表团和全国政协驻17个省、自治区、直辖市政协委员航空运输保障任务，共保障专

门航班66班（其中包机18班）、部分代表、委员分散乘坐的航班624班，共运送代表、委员及工作人员6 539人次。

民航还圆满完成了中央经济工作会议航空运输保障任务；省部级领导干部专题研讨班航空运输保障任务；学习贯彻党的十八大精神中央宣讲团航空运输保障任务；公安部赴老挝押解犯罪嫌疑人回国紧急包机任务；公安部赴马来西亚、泰国押解犯罪嫌疑人，共3架次139人紧急包机任务等。民航协调、布置伦敦奥运会中国代表团返京、第十四届残奥会中国体育代表团返京、莫斯科大学生研修代表团、日本灾区高中生来华修养团航班等保障工作。

**上缴税金** 2012年，民航全行业应缴税金217.9亿元，比上年下降0.3%。

**节能减排** 2012年，航空公司使用临时航线约有41.3万架次，缩短飞行距离超过1 400万公里，节约航油消耗7.6万吨，减少二氧化碳排放约24万吨。完成西安、重庆、长沙、南京、武汉等17个年旅客吞吐量超过500万人次以上机场桥载设备安装立项报告评估和批复工作。“桥载设备替代飞机APU”全国推广专项工作顺

利推进，年节能量和减排量将随着机场相关设备的逐步安装使用不断扩大。

## 七、飞行员数量

截至2012年底，全行业取得驾驶执照飞行员31 381人，较上年年底增加3 574人。

## 八、教育

2012年，民航直属院校共招收学生18 006人，其中：研究生676人，普通本专科生14 125人，成人招生2 698人，中专生507人。飞行、机务、空管三个民航特有专业计划招生7 161人，占总招生计划的50.4%。

2012年，民航直属院校在校生数达到55 101人，其中：研究生1 759人，普通本专科生45 270人，成人招生6 250人，中专生1 822人。

2012年，民航直属院校共毕业学生13 634人，其中：研究生493人，普通本专科11 109人，中专学生617人，成人学生1 415人。■





# The Economic and Operational Situations of China Civil Aviation in 2012

## I. Transport Aviation

In 2012, in spite of the world economic recession, China civil aviation remained steady growth in major transport indicators.

**Total Transport Turnover.** The whole industry completed a total transport turnover of 61.032 billion ton-km, an increase of 3.288 billion ton-km or 5.7% over that of the previous year, of which 44.643 billion ton-km were for passengers, an increase of 4.290 billion ton-km or 10.6% over that of the previous year, and 16.389 billion ton-km for cargo and mail, a decrease of 1.002 billion ton-km or 5.8% against that of the previous year.

Domestic air routes witnessed a transport turnover of 41.583 billion ton-km, an increase of 3.522 billion ton-km or 9.3% over that of the previous year, of which 1.366 billion ton-km were for Hong Kong, Macao and Taiwan air routes, increasing by 102 million ton-km or 8.1% over that of the previous year, and 19.449 billion ton-km for international air routes, decreasing by 235 million ton-km or 1.2% against that of the previous year.





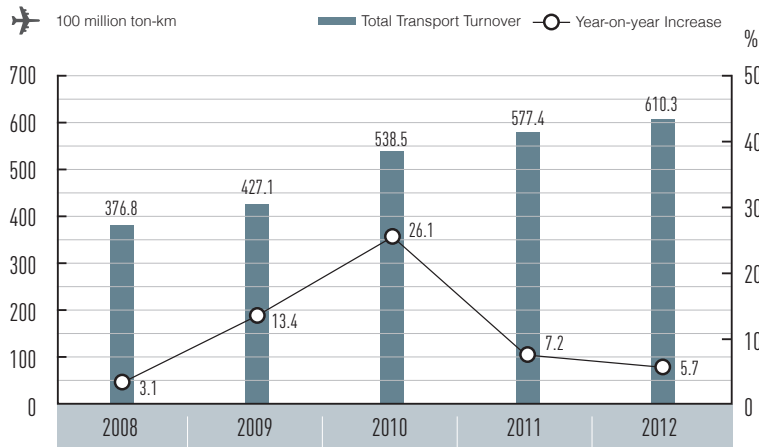


Figure 1 Total Transport Turnover of Civil Aviation 2008–2012

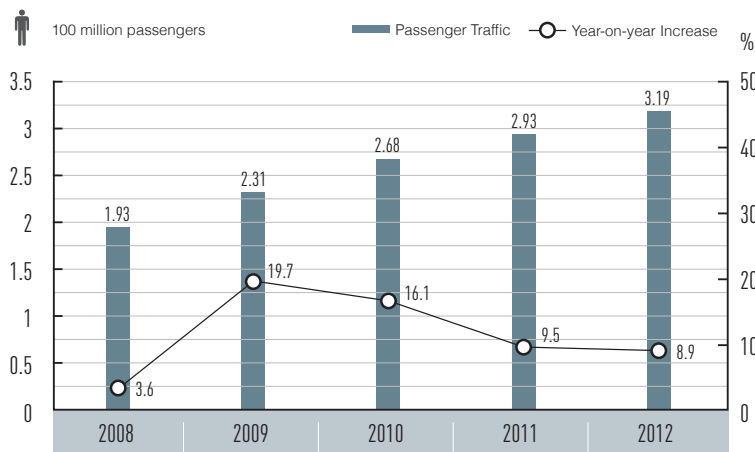


Figure 2 Passenger Traffic 2008–2012

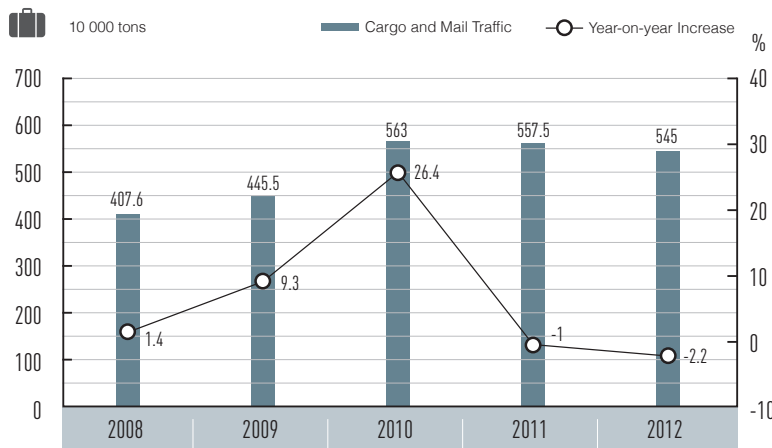


Figure 3 Cargo and Mail Traffic 2008–2012

**Passenger Traffic.** The whole industry carried 319.36 million passengers, an increase of 26.19 million or 8.9% over that of the previous year, of which 296 million were for domestic air routes, 8.34 million hereof were for Hong Kong, Macao and Taiwan air routes, and 23.36 million for international air routes, increasing by 24.01 million or 8.8%, 0.74 million or 9.7% and 2.18 million or 10.3% respectively over those of the previous year.

**Cargo and Mail Traffic.** The whole industry carried 5.45 million tons of cargo and mail, decreasing by 2.2% against that of the previous year. 3.885 million tons were carried by domestic air routes, an increase of 2.4% over that of the previous year, of which 0.208 million tons were for Hong Kong, Macao and Taiwan air routes, decreasing by 1.1% against that of the previous year. 1.565 million tons were carried by international air routes, decreasing by 12.1% against that of the previous year.

**Airport Turnover.** The civil aviation airports nationwide handled 680 million passengers in total, an increase of 9.5% over that of the previous year.

The civil aviation airports nationwide handled 11.994 million tons of cargo and mail in total, an increase of 3.6% over that of the previous year.

The civil aviation airports nationwide supported 6.603 2 million aircraft movements in total, an increase of 10.4% over that of the previous year.

In 2012, there were 57 airports



Figure 4 Passengers Handled at Civil Aviation Airports 2008–2012

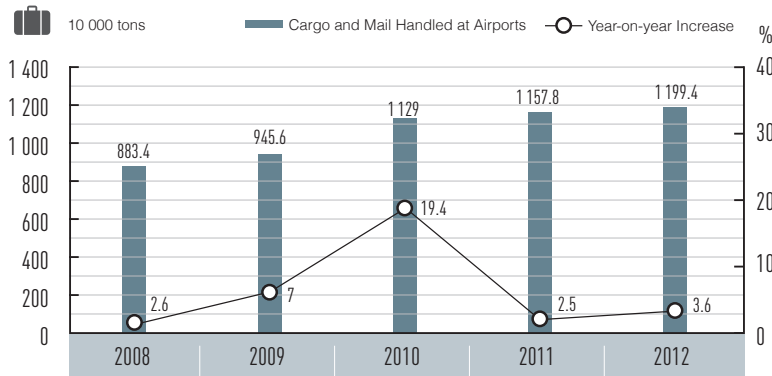


Figure 5 Cargo and Mail Handled at Civil Aviation Airports 2008–2012

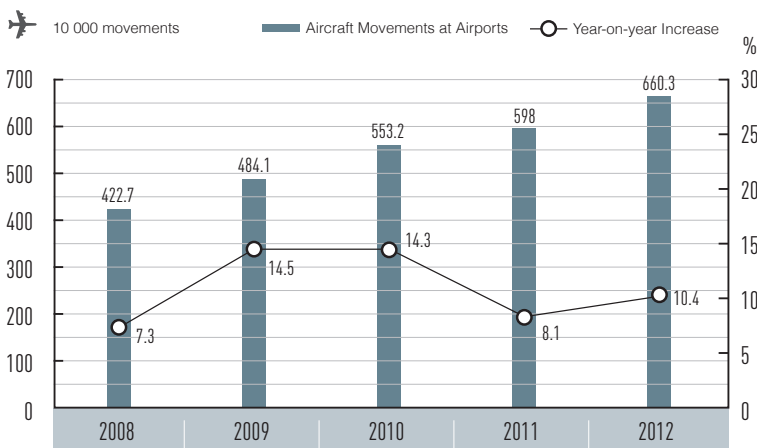


Figure 6 Aircraft Movements Supported at Civil Aviation Airports 2008–2012

that handled more than 1 million passengers, and the passengers handled at the three airports of Beijing, Shanghai and Guangzhou accounted for 30.7% of the total.

In 2012, there were 49 airports that handled more than 10 000 tons of cargo and mail, and the cargo and mail handled at the three airports of Beijing, Shanghai and Guangzhou made up 53.5% of the total.

In 2012, Beijing Capital International Airport handled 82 million passengers, ranking the 1st in Asia, and Shanghai Pudong Airport handled 2.938 million tons of cargo and mail.

**Transport Aircraft Fleet.** By the end of 2012, the whole civil aviation industry had 1 941 registered transport aircraft, adding 177 to those of the previous year.

**Airport Service Capability.** By the end of 2012, China had a total of 183 certified airports, adding 3 to those of the previous year. Airports newly added in 2012 were Heilongjiang Jiagedaqi Airport, Jiangsu Yangzhou Taizhou Airport and Guizhou Zunyi Airport. Besides, Kunming Changshui Airport was relocated, and Sichuan Panzhihua Airport and Xinjiang Qiemo Airport were closed.

**Air Route Network.** By the end of 2012, China had 2 457 air routes for scheduled flights. The route mileage amounted to 4.948 8 million km including overlapped distance, and 3.280 1 million km excluding overlapped distance. By the end of 2012, there were 178 cities

Table 1 Number of Airports Handling More Than 1 Million Passengers in 2012

Passengers Handled	Number of Airports	Year-on-year Increase	% of the Total
10 million or above	21	0	74.0
1-10 million	36	4	21.3

Table 2 Number of Airports Handling More Than 10 000 tons of Cargo and Mail in 2012

Cargo and Mail Handled	Number of Airports	Year-on-year Increase	% of the Total
10 000 tons or above	49	2	98.5

Table 3 Number of Air Routes and Mileage for Scheduled Flights in 2012

Item	Number
<b>Number of Air Routes</b>	2 457
Domestic Air Routes	2 076
Including: Hong Kong, Macao and Taiwan Air Routes	99
International Air Routes	381
<b>Air Route Mileage Including Overlapped Distance (10 000 km)</b>	494.88
Domestic Air Routes	339.04
Including: Hong Kong, Macao and Taiwan Air Routes	13.85
International Air Routes	155.84
<b>Air Route Mileage Excluding Overlapped Distance (10 000 km)</b>	328.01
Domestic Air Routes	199.54
Including: Hong Kong, Macao and Taiwan Air Routes	13.33
International Air Routes	128.47

that provided domestic scheduled flights (not including Hong Kong Macao Taiwan Taipei Taichung and Gaoxiong) and the international scheduled flights provided by China's airlines reached 121 cities in 52 countries. There were 40 mainland cities providing scheduled flights to Hong Kong 7 to Macao and 38 to Taiwan.

**Foreign Relations.** By the end of 2012 China signed bilateral air service agreements with 114 countries or regions the same as that at the end of 2011. Among them, 44 countries were in Asia, 23 in Africa, 35 in Europe, 8 in Americas and 4 in Oceania.

### Transport Airlines (Groups) Performance.

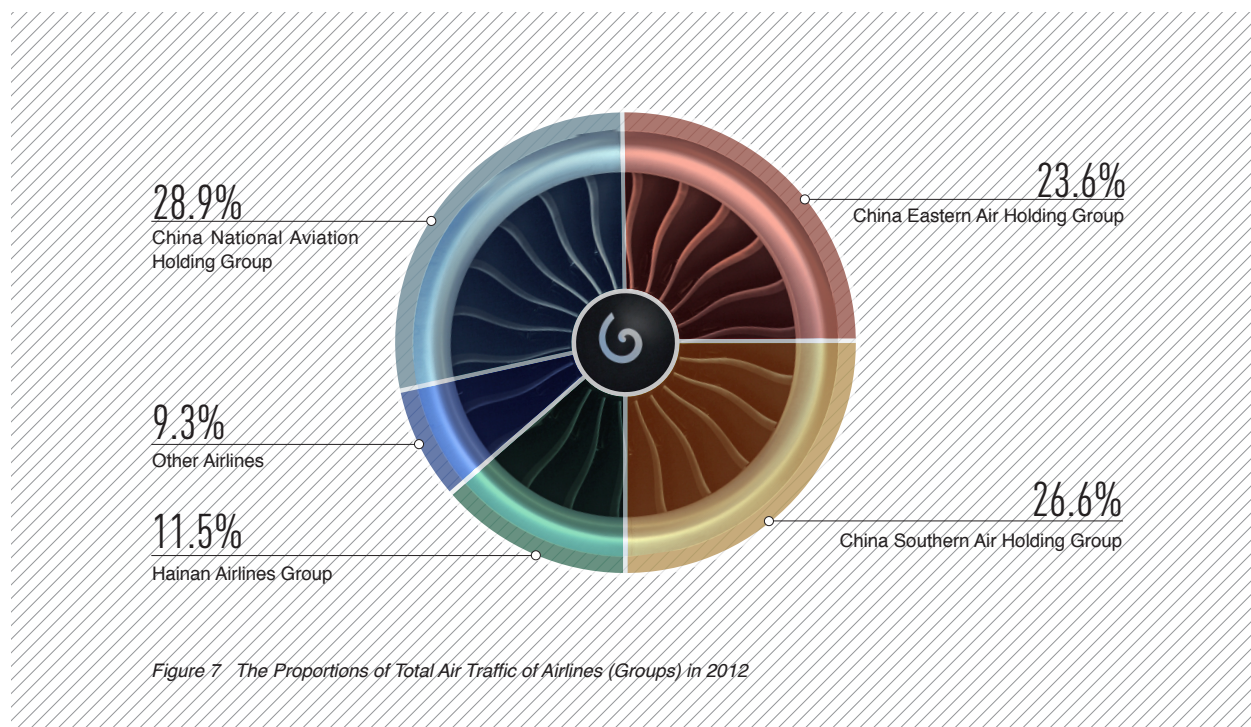
By the end of 2012, China had 46 transport airlines, of which 36 were State-owned, 10 were private or privately held, 10 were all-cargo carriers, 14 were joint-ventures and 5 were publicly listed.

China National Aviation Holding Group completed 1.624 million flight hours, and a total air traffic of 17.67 billion ton-km, a decrease of 2.8% against that of the previous year. 82 million passengers were carried, an increase of 4.9% over that of the previous year, and 1.556 million tons of cargo and mail were handled, a decrease of 10.9% against that of the previous year.

China Eastern Air Holding Group completed 1.417 million flight hours, and a total air traffic of 14.41 billion ton-km, a decrease of 4.6% against that of the previous year. 73 million passengers were carried, an increase of 6.5% over that of the previous year, and 1.417 million tons of cargo and mail were handled, a decrease of 5.3% against that of the previous year.

China Southern Air Holding Group completed 1.681 million flight hours, and a total air traffic of 16.21 billion ton-km, an increase of 12.0% over that of the previous year. 86 million passengers and 1.23 million tons of cargo and mail were carried, an increase of 7.2% and 8.4% respectively over those of the previous year.

Hainan Airlines Group completed 792 000 flight hours, and a total air traffic of 7.05 billion ton-km, an increase of 10.6% over



that of the previous year. 42 million passengers and 0.58 million tons of cargo and mail were carried, an increase of 17.4% and 4.9% respectively over those of the previous year.

All the other airlines completed 675 000 flight hours, and a total air traffic of 5.70 billion ton-km, an increase of 15.0% over that of the previous year. 36 million passengers and 0.668 million tons of cargo and mail were carried, an increase of 19.8% and 3.7% respectively over those of the previous year.

## II. General Aviation

**Flight Hours.** In 2012, the whole industry completed 517 000 flight hours for general aviation operations, an increase of 2.8% over that of the previous year, among which, 77 100 hours were for industry operations, an increase of 36% over that of the previous year, 31 900 hours for agriculture and forestry, and 408 100 hours for other purposes, a decrease of 3.9% and 1.2% respectively against those of the previous year.

**General Aviation Enterprises.** By the end of 2012, there were 146 general aviation enterprises with operation licenses, 27 of which were newly added. The licenses of 4 enterprises were revoked. Of the 146 enterprises, 41 were in north China region, 27 in central and southern region, 29 in east China region, 16 in northeast region, 16 in southwest region, 11 in northwest region and 6 in Xinjiang region.

**Aircraft Fleet Size.** By the end of 2012, general aviation enterprises had a total of 1 320 registered aircraft, of which 328 were used for teaching and training.

## III. Transport Efficiency Financial Performance and Transport Revenue

**Transport Efficiency.** In 2012, the average daily utilization rate for all registered transport aircraft was 9.15 hours, 0.11 hours lower than that of the previous year. The average daily utilization rate for large and medium sized aircraft was 9.58 hours, and for small



aircraft was 4.91 hours, 0.13 hours lower and 0.16 hours higher respectively than those of the previous year.

In 2012, the average passenger load factor of scheduled flights was 79.6%, 2.2 percentage points lower than that of the previous year.

In 2012, the average load factor of scheduled flights was 70.6%, 1.4 percentage points lower than that of the previous year.

Table 4 Passenger Load Factor and Load Factor of Scheduled Flights in 2012

Item	Value (%)	Increase over the Previous year (ppt)
Passenger Load Factor of Scheduled flights	79.6	-2.2
Domestic Air Routes	80.3	-2.9
Including: Hong Kong, Macao and Taiwan Air Routes	75.4	-1.3
International Air Routes	77.1	0.8
Load Factor of Scheduled Flights	70.6	-1.4
Domestic Air Routes	72.2	-1.8
Including: Hong Kong, Macao and Taiwan Air Routes	64.1	0.6
International Air Routes	67.3	-1.2

**Financial Performance.** In 2012, the whole industry garnered a revenue of 556.14 billion yuan, an increase of 10.5% over that of the previous year, and realized a total profit of 29.59 billion yuan, a decrease of 7.65 billion yuan against that of the previous year. Of the revenue, airlines recorded a revenue of 388.98 billion yuan, an increase of 9.1% over that of the previous year, and made a total profit of 21.1 billion yuan, a decrease of 6.21 billion yuan against that of the previous year; airports yielded a revenue of 55.02 billion yuan, an increase of 10.9% over that of the previous year, and earned a total profit of 4.54 billion yuan, a decrease of 1.41 billion yuan against that of the previous year; support enterprises generated a revenue of 112.14 billion yuan, an increase of 15.7% over that of the previous year, with a total profit of 3.96 billion yuan, a decrease of 30 million yuan against that of the previous year.

**Transport Revenue.** In 2012, the transport revenue of the whole industry was 5.99 yuan/ton-km, an increase of 0.15 yuan/ton-km over

that of the previous year. The revenue on domestic air routes (not including Hong Kong, Macao and Taiwan air routes) was 7.05 yuan/ton-km, an increase of 0.08 yuan/ton-km; the revenue on Hong Kong, Macao and Taiwan air routes was 7.48 yuan/ton-km, a decrease of 0.09 yuan/ton-km; and the revenue on international air routes was 3.72 yuan/ton-km, an increase of 0.11 yuan /ton-km.

The passenger transport revenue on domestic air routes (not including Hong Kong, Macao and Taiwan air routes) was 7.83 yuan/ton-km, an increase of 0.04 yuan/ton-km over that of the previous year; that on Hong Kong, Macao and Taiwan air routes was 8.27 yuan/ton-km, a decrease of 0.10 yuan/ton-km against that of the previous year; and that on international air routes was 6.25 yuan/ton-km, a decrease of 0.20 yuan/ton-km against that of the previous year.

The freight of cargo and mail on domestic air routes (not including Hong Kong, Macao and Taiwan air routes) was 2.02 yuan/ton-km, an increase of 0.06 yuan/ton-km over that of the previous year; that on Hong Kong, Macao and





Taiwan air routes was 4.42 yuan/ton-km, a decrease of 0.16 yuan against that of the previous year; and that on international air routes was 1.69 yuan/ton-km, a decrease of 0.06 yuan/ton-km against that of the previous year.

The revenue passenger-km of the whole industry was 0.68 yuan/passenger-km, the same as that of the previous year. The revenue passenger-km on domestic air routes (not including Hong Kong, Macao and Taiwan air routes) was 0.70 yuan/passenger-km, the same as that of the previous year; that on Hong Kong, Macao and Taiwan air routes was 0.74 yuan/passenger-km, a decrease of 0.01 yuan against that of the previous year; and that on international air routes was 0.56 yuan/passenger-km, a decrease of 0.02 yuan against that of the previous year.

#### IV. Aviation Safety and Service Quality

**Aviation Safety.** Civil aviation safety remained stable. There was no air transport accident or aviation security

accident or major ground accident or serious aircraft maintenance accident.

For the whole year, there was one common flight accident in general aviation, and 295 incidents, 5 of which were serious incidents caused by human factors, a year-on-year decrease of 44.4%. General aviation had 12 incidents, a year-on-year increase of one. 35 transport airlines including China Eastern Airlines, Xiamen Airlines, Shandong Airlines, Spring Airlines, etc. had no human factor related incidents.

As of 31 December 2012, the air transport industry completed 13.55 million hours of safe flight in a row.

**Flight Regularity Rate.** In 2012, airlines planned a total of 2.502 million flights, of which 1.872 million were regular flights and 630 000 were irregular flights, with an average flight regularity rate of 74.83%.

In 2012, the major airlines operated 2.087 million flights, of which 1.580 million were regular flights and 506 000 were irregular flights, with an average flight regularity rate of 75.69%.

**Passenger Complaints.** CAAC, Regional Administrations, CAAC Consumer Affairs Center and China Air Transport Association accepted a total of 1 801 aviation consumer complaints for the whole year, a decrease of 217 complaints against that of 2011.

Table 5 Flight Irregularity Causes in 2012

Item	% of the Total	Increase over the Previous Year (ppt)
<b>Causes for Flight Irregularity (All Airlines)</b>	<b>100.0</b>	
Airlines	38.5	–
Flow	25.0	–
Weather	21.6	–
Other Causes	14.9	–
<b>Causes for Flight Irregularity (Major Airlines)</b>	<b>100.0</b>	
Airlines	37.5	0.4
Flow	25.0	-2.5
Weather	21.9	1.9
Other Causes	15.6	0.2

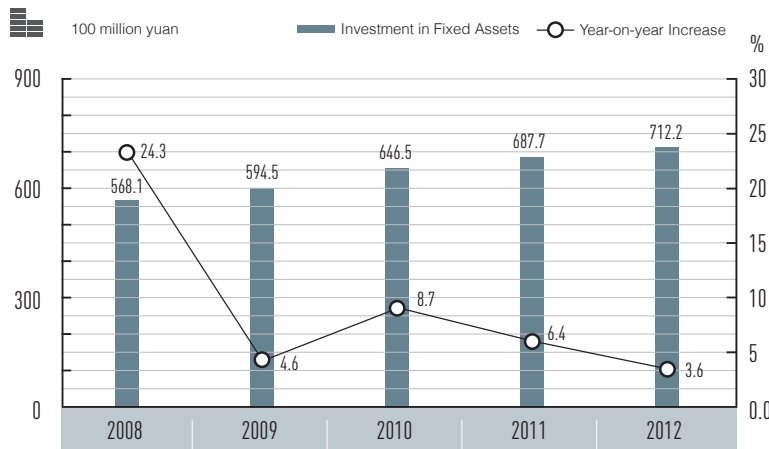


Figure 8 Investment in Civil Aviation Infrastructure and Technical Upgrading 2008–2012

## V. Investment in Fixed Assets

In 2012, the civil aviation industry had a total of 146.46 billion yuan of investment in fixed assets, 71.22 billion yuan of which was for civil aviation infrastructure and technical upgrading, an increase of 3.6% over that of the previous year.

The investment in infrastructure and technical upgrading were classified by system as follows.

**Airport Construction.** The airport system made a total investment of 49.87 billion yuan in fixed assets, an increase of 0.7% over that of the previous year. There were 12 key construction projects: the expansion of Hangzhou Xiaoshan Airport, the expansion of Chengdu Shuangliu Airport, the expansion of Lhasa Gonggar Airport, and the expansion of Xi'an Xiangyang Airport were completed; the expansion of Shenzhen Bao'an Airport, the expansion of Xining Caojiabao Airport, the expansion of Shenyang Taoxian Airport, the expansion of Nanjing Lukou Airport, and the expansion of Guiyang Longdongbao Airport were in smooth progress; the expansion of Tianjin Binhai Airport and the expansion of Guangzhou Baiyun Airport were newly started.

**ATM Construction.** The ATM system made an investment of 2.67 billion yuan in fixed assets, an increase of 48.3% over that of the previous year. There were 4 key projects: Chengdu Area Control Center and Xi'an Area Control Center were in smooth progress, and Shenyang Area Control Center and Urumqi Area Control Center were newly started.

**Investment in Other Areas.** In 2012, other systems in the civil aviation industry made a total investment of 18.68 billion yuan in fixed assets, an increase of 7.2% over that of the previous year. Of the total, 540 million yuan was invested in the building of information system, 2.12 billion yuan in scientific research and education system, 280 million yuan in aviation security system, 290 million yuan in aviation fuel system, 480 million yuan in aircraft maintenance system, 5.47 billion yuan in transport service system, 2.19 billion yuan in public facilities system and 7.31 billion yuan in other systems.

## VI. Social Responsibilities

**Major Transport Tasks.** Air transport support task for the 18th National Congress of CPC was fulfilled. The 18th National Congress of CPC was held in Beijing in November 2012, and the civil aviation industry successfully fulfilled the flight support tasks for the air transport of delegates from 25 provinces, autonomous regions and municipalities directly under the Central Government. 48 flights (33 of which were special or charter flights) were supported for group delegates and 278 flights for individual delegates, totally transporting 4 529 delegates and staff.

Air transport support tasks for NPC and CPPCC were fulfilled. The civil aviation industry successfully fulfilled the flight support tasks for the air transport of delegations of the 5th Session of the 11th NPC and members of the 5th Session of the 11th CPPCC from 16 provinces, autonomous regions and municipalities directly under the Central Government. 66 special flights (18 of which were charter

flights) and 624 flights for some individual delegates and members were supported, transporting 6 539 delegates, members and staff in total.

Besides, the civil aviation industry successfully fulfilled air transport support tasks for the Central Economic Working Conference, the Seminar of Province and Ministry Leaders, and the Central Explaining Group for the Study and Implementation of the guiding principles of the 18th National Conference of CPC, and urgent charter flight tasks for the Ministry of Public Security going to Laos, Malaysia and Thailand to fetch under escort criminal suspects, with three flights provided and 139 persons carried totally., The civil aviation industry coordinated and arranged flight support for the coming back to Beijing of China delegations of London Olympic Games and the Chinese sports delegation of the 14th Paralympic Games, the Moscow student delegation for training mission, and Japan disaster district high school student delegation visiting China for recuperation.

**Taxes.** In 2012, the whole civil aviation industry turned over 21.79 billion yuan for taxes, a decrease of 0.3% against that of the previous year.

**Energy Conservation and Emission Reduction.** In 2012, airlines operated about 413 000 flights on temporary air routes, cutting flight distance by over 14 million km, saving 76 000 tons of aviation fuel and reducing 240 000 tons of carbon dioxide. The project report was assessed and approved for the installation of bridge-borne equipment at the 17 airports handling more than 5 million

passengers per year such as Xi'an, Chongqing, Changsha, Nanjing, and Wuhan. The "replacement of APU with bridge-borne equipment" was promoted smoothly, and the yearly energy saved and emission reduced would continuously increase with the gradual installation and use of relevant equipment at airports.,

## VII. Number of Pilots

By the end of 2012, the whole industry had 31 381 licensed pilots, an increase of 3 574 compared with the number at the end of the previous year.

## VIII. Education

In 2012, the universities and colleges directly under CAAC enrolled 18 006 students in total, of which 676 were graduates, 14 125 were undergraduates, 2 698 were adult students, and 507 were technical secondary school students. The three civil aviation featured majors of flight, maintenance and ATC were planned to enroll 7 161 students, 50.4% of the total enrollment plan.

In 2012, the universities and colleges directly under CAAC had 55 101 enrolled students, of which 1 759 were graduates, 45 270 were undergraduates, 6 250 were adult students, and 1 822 were technical secondary school students.

In 2012, universities and colleges directly under CAAC had 13 634 students graduated, of which 493 were graduates, 11 109 were undergraduates, 617 were technical secondary school students and 1 415 were adult students. ■

