

TRANSPORT SITUATION IN TURKEY IN 2008

1. Traffic Trends

In terms of road transport

Having 90 % of passenger and freight traffic, road transport constitutes a great share concerning transportation modes in Turkey that for the forthcoming years, it is not expected to have a significant change in this ratio.

As of 2008, traffic volume of State Roads has not been completely evaluated yet but initial studies show that traffic volume is likely to increase approximately 2~3 percent. The rate of increase in 2008 is less than the rate of increase in 2007 due to global economic recession whose effects seem to be perceived as of 2009.

In terms of rail transport

Shares of transport modes in Turkey fluctuate in a narrow band therefore can be considered stable since 2004 because of the fact that the ongoing share increase in roads has stopped. This outcome particularly results from investments made in railways as well as the development of passengers' transport at airways. According to the existing figures, the share of railways in freight transportation is approximately 5%, while the share of railways in passenger transportation is 2% in Turkey. Moreover this figure is likely to change in favor of railways for the forthcoming years, especially in passenger transportation at first, due to high speed lines under construction between major metropolitan cities of Turkey.

Investments particularly made to railways have kept up with its speed for 6 years. Within this framework, the Transport Master Plan Strategy has been elaborated and it is considered that the railway portion of the freight and passenger transportation is going to be 15 % and 10 % respectively as of 2020.

In terms of air transport

A considerable progress has been experienced in the field aviation in the last 6-year-period that the average growth in the civil aviation sector in the recent years is recorded as 5 % in the world and 53.3 % in Turkey.

Number of aircrafts is recorded as 271 by the year 2008 and today Turkish civil aviation operators fly from 7 centres to 43 destinations in Turkey.

Number of domestic passengers carried increased from 8.7 million to 33.5 million and carried international passengers increased from 25 million to 40.8 million. Total passenger number which was 33.7 million in 2002 was reached to 74.3 million in 2008. Since 2002, development in domestic lines has been recorded as 300 %.

Development in the field of aviation is also experienced in air traffic field. When we look at air traffic in 2008, total traffic in domestic lines are recorded as 385.053, international lines as 356.127 and transit as 268.328 whereas total air traffic is recorded as 1.009.641. Development of air traffic in domestic lines is 143 % between 2002 and 2008.

Since 2002, increase in total cargoes carried by air has been recorded as 75 % and the total cargoes carried are 1.529.677 tones in 2008. Concerning the year in 2009, the passenger number is expected to increase to 75 million and air traffic to 1.150.000.

In terms of maritime transport

CARGO HANDLING FIGURES AT TURKISH PORTS (2007-2008)

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YEARS	LOADING					DISCHARGING					Transit	Grand Total
	Cabotage				Loading Total	Cabotage				Discharging Total		
		Turkish Flag	3 rd Foreign Flag	EXPORT TOTAL			Turkish Flag	3 rd Foreign Flag	IMPORT TOTAL			
2007	17.723.114	9.804.237	58.856.033	58.660.270	86.383.384	18.005.809	27.187.904	126.211.445	153.399.349	171.405.158	28.486.106	286.274.648
2008	18.922.398	10.654.742	62.590.230	73.244.972	92.167.370	20.134.058	21.136.641	139.397.079	151.533.720	171.667.778	50.744.950	314.580.098

2. Obstacles to the development of transport

In terms of road transport

- Inadequacy of permits: this issue can be deemed as quantitative restrictions while transporting goods to abroad. Shortage of bilateral, multilateral (ECMT Licenses), transit and 3rd country permits hinder the smooth flow of trade. Liberalization of quota is one of the solutions that ensure smooth flow of trade. Without any quantitative restrictions, then the trade as well as transport among states would be incrementally flourished.
- Difficulty in obtaining Professional Driver Visa: Numerous numbers of documents are required; there is a requirement for applicants to present an invitation letter; high application fees; having a limited duration of stay for all types of visas delivered to professional drivers; a long period of waiting in obtaining visa. Acceleration and simplification of getting professional driver visa process is of great importance in order to speed up border crossings. Turkey has already agreed with 4 countries to establish a system that ensure one-year multiple entry visas for professional drivers through Bilateral Agreements and protocols with these countries. Such process ought to be extended to regional level.
- High Passage Fees: Expensive charges for using transport infrastructure in the 3rd countries. Mutual abolition of Passage Fees will also help simplify the border crossing procedure, thus precipitating border passage. Vehicles of some certain countries are exempt from passage fees on the basis of reciprocity as debated during Joint Committee Meeting on Road Transport.
- Border crossing problems: Outdated technology used in customs transactions, different transit regimes of countries, complexity of customs legislation, long period of waiting, lack of coordination among customs authorities. Some modernization projects have been conducted in major border gates in Turkey (Turkey-Iran and Turkey-Syria). Such infrastructure modernization projects ease the flow of vehicles that were stuck in queue.
- Traffic Congestion: bottlenecks that exist on main traffic arteries cause time as well as monetary loss since the vehicle consumes extra fuel.

In terms of rail transport

General obstructive factors for the development of railway transportation on the existing lines are dominant single line operation, infrastructure capacity and performance insufficiency , tight curves, high gradients, lack of automatic signaling systems on major line sections and insufficient number of staff employed.

As for freight transportation, low operational speed, lack of sufficient traction power for long hauling, higher operational costs are leading factors of railways confining power to compete with other modes.

3. Best Practices in Transport and Infrastructure Regulation

In terms of road transport

- Development of Border Gate Infrastructure: To provide adequate infrastructure in order to remove the physical barrier at border crossing points, appropriate infrastructure should be available at the border points including offices for the inspection and control agents, laboratories, warehouses, road approaches to the border, border gates, vehicle parking areas, reliable electricity and power sources, reliable telecommunications services, scanners, etc. Such modernization projects at border gates can be realized through the Public-Private Partnership (PPP) financing package as is the case at some of the main border gates in Turkey such as Gürbulak (Turkish-Iranian Border), Habur (Turkish-Iraqi Border) and Cilvegözü (Turkish-Syria Border).
- "End-of-life vehicle" Economically and Technically: Turkish fleet operating in international transport consists of high Standard vehicles under Euro norms, however; the fleet in domestic transport market especially in freight transport does not conform to the same standards. As a solution to this fact, a Project has been developed and motor-vehicles whose model year is 1972 and older in both freight and passenger transport will be gradually withdrawn from the market within 2 years. (This implementation covers motor vehicles whose permissible maximum weight is more than 3.500 kg in freight transport and buses which have more than 16 sitting places including the driver.) Through this project, 60.000 vehicles-trucks and buses- are expected to be withdrawn from the domestic market.
- Vehicle Inspection: the tender for Vehicle Technical Inspection Stations has been finalized and an international tripartite consortium has been authorized to build and operate Vehicle Technical Inspection Stations and so to realize technical inspections and road worthiness tests, for 20 years. In this context, totally, 189 fixed and 78 mobile stations will be set up which are distributed according to vehicle number registered and geographical conditions of the provinces of Turkey. As of 2009, inspections are being carried out in line with the EU requirements.

Regulatory developments for Survey and Design Department of General Directorate of Highways (KGM) initiated in 1998 in cooperation with SWEROAD focusing on management for safe and sustainable roads. In 2004, KGM became an active member in Partners for Roads association of European Union. After this, the Department of Survey and Design started to monitor and deal with EU regulations especially in sustainable safe road design. In 2008 department of survey and design hosted EU experts from the Netherlands' Ministry of Transport, Public Works and Water Management. A workshop on technical design of roads in different aspects such as traffic safety, sustainability, efficiency and regulatory measures consolidated mutual collaboration and understanding of EU and Turkish practices.

Also, environmental dimensions of roads such as nature defragmentation, noise and environmental mitigation measures for roads are covered within the content of studies conducted with Partner for Roads Cooperation.

In terms of rail transport

Considering the importance of an efficient transport network, Turkish government has taken several measures and undertaken investments to modernize and rehabilitate the railway infrastructure. The investment amount allocated to railways was about 1.130 Million \$. The ratio of Investment amount of Turkish State Railways (TCDD) to GDP is about 1,5 ‰ in 2008.

Within the scope of Strategy for Transport Main Plan in parallel with National Development Plan, the government has a policy to establish a balance between transport modes by considering all modes as a part of combined transport and giving priority particularly to railway and maritime transports. Major priorities set forth in the Transport Main Plan Strategy of Turkey could be enumerated as establishing balance between transport modes, developing modes as complementary to each other, strengthening combined transport system in compliance with international legislations are.

The Passenger traffic to/from Europe is carried out via both Bulgaria and Greece. The scheduled passenger trains are: Bosphorus Train (Istanbul-Bucharest, daily) and Friendship Train (Istanbul-Thessaloniki, daily). There are also passenger trains to Iran, which are Trans-Asia Train, once a week between Istanbul and Tehran, and a weekly train between Van-Tabriz, and to Syria, which is Taurus Train once a week between Istanbul-Damascus. Moreover, there is a train between Iran and Syria through Turkey, as from Tehran via Van - Tatvan to Damascus once a week. The train operating Gaziantep-Baghdad-Gaziantep was canceled due to Iraq's situation.

"Produktverbund" a block train between Germany and Turkey has been operated on regular basis since 2004. The train follows Bulgaria-Romania-Hungary-Austria route between Köseköy (Turkey) and Cologne (Germany) and operates once a week. 5 journeys a week is planned for near future. "Istanbul-Almaty Block Container Train" runs once a week since 2002. The second stage for this train is to extend it from Hamburg to Lianyungang (China).

Block train operations has been operated national and international freight transportation simultaneously and within this context, the block freight trains between Turkey-Europe, Turkey-Middle East and Turkey-Central Asia have been running reciprocally. Furthermore, Ro-La transportation has been realized between Turkey-Austria since 2006 with the cooperation of private sector, after the agreements were approved among the countries on the route.

Combined transport operations are successfully done in Halkali, Haydarpaşa, Kosekoy, Ankara, Alsancak, Bogazkopru, Iskenderun, Mersin and Gaziantep (Baspinar), which have container depots. Implementation of future investments is planned as to merge such container terminals into new logistic villages. Logistic Villages are completed in Gelemen (Samsun) and Kaklık (Denizli) and under construction in Kosekoy (Izmit) and Hasanbey (Eskisehir). Construction of Logistic Villages in Gokkoy (Balikesir), Yenice (Mersin) and Bogazkopru (Kayseri) will start in 2009. Feasibility studies for establishment of logistic villages are completed for Palandoken (Erzurum), Usak, Halkali (Istanbul), Ispartakule (Istanbul) and Kavacik (Konya).

In addition to constructing high speed lines between major metropolitan cities, upgrading the existing lines by installing signaling systems and electrification systems, track doubling and also renewal of tracks, TCDD aims at increasing operational speed, comfort as well as line capacity of existing lines.

The ongoing Projects are as follows:

- Constructing 467 km - high speed line between Istanbul – Ankara
- Constructing 212 km – high speed line between Ankara – Konya
- Constructing 455 km – high speed line between Ankara – Sivas. Construction of Yerkoy – Sivas line section for Ankara-Sivas High Speed Line Project is under construction.
- Upgrading existing line between Boğazköprü-Yenice and Mersin – Toprakkale 429 km in length with signaling systems and track rehabilitations
- Marmaray Project connecting Europe and Asia via railway (13,6 km tube tunnel out of 76,7 km total)

The planned Projects are as follows:

- Upgrading existing lines of 2934 km in length by installing signaling systems to increase line capacity
- Upgrading existing lines of 2431 km in length by installing electrification systems
- Planning 105 km – high speed line between Bursa – Osmaneli, connecting Bursa to Ankara and Istanbul via rail lines
- Upgrading existing line between Irmak-Karabuk-Zonguldak 415 km in length with signaling and electrification systems along with track rehabilitations
- Procurement of 125.000 tones rail for track renewal works

The Final Drawings of Ankara – Izmir and Istanbul – Kapikule high speed train lines, which have 250 kph operational speed with signaling and electrification systems, have been completed, in order to improve the existing situation of the railway against the other modes of transport.

MARMARAY PROJECT

As it has been known, one of the most important problems of Istanbul Province is the difficulty of transportation resulting from the rapid and uncontrolled population growth and the traffic jams.

This Project is one of the major transportation infrastructure projects in the world at present. When introducing major infrastructure projects such as the Marmaray Project, it is important to realize that it will influence not only the daily traffic pattern of Istanbul, but it will also influence the development of the city and the region. It further provides an upgrading of the commuter rail system in Istanbul, connecting Halkalı on the European side with Gebze on the Asian side with an uninterrupted, modern, high capacity commuter rail system

The Effects of Marmaray Project on the Istanbul Transportation System

Train Services

The Project allows operation of intercontinental (domestic and international) passenger and freight train services during off-peak hours through tunnel.

Passenger Demand

The improvements proposed with the project increases the capacity of the line from present 10 – 12 thousand passengers per hour per direction to 75 thousand with two minute headway services at the peak period in the year 2015. Number of total daily passengers is expected to increase to approximately 1.5 million in 2015.

Feeder Services

Bus and minibus feeder services and park and ride facilities allowing more passengers to have greater accessibility to this convenient and fast rail transport service are also part of the project. And it is a safe and environmentally clean system.

Reduction in Accidents

The project application will provide the reduction in highway passenger (and vehicle) kilometers and increase in rail passenger kilometers. This diversion effect of the project from highway modes to rail systems is resulted with reduction in accidents and related costs. Reduction of accidents with damage creates saving from these possible damages, related work hours spent for repair and bureaucratic procedures such as insurance and accident reporting. Reduction of accidents with injury saves lost labor days because of incapacitates medical treatments and also reduces fatal accidents.

Travel Time Benefits

By the implementation of the project, there will be a reduction in average travel times and time saving. This time saving will get some economic values and will be used for the social and cultural activities. Travel time for the passengers using the Marmaray Project will be considerably decreased.

Employment

A considerable amount of staff and workers will be required to establish the Marmaray Project. This will increase employment in the area with a considerable amount. At peak, some 6.000 - 8.000 people will be directly employed in the construction activities, and up to the double amount may be employed indirectly via sub-contractors and suppliers.

Reduction in Fuel Consumption

Implementation of the project reduces usage of highway modes of both private transportation (cars) and rubber tired public transport modes (buses). Increase in the passenger demand and passenger kilometers on rail transit results with consumption of less fossil based imported fuel.

Reduction in Highway Maintenance and Repair

Reduction of trips and passenger kilometers on the highway system creates another item of savings, reduction of highway maintenance and operation costs.

Improvements in Air Quality

Reduced highway vehicle kilometers due to implementation of the project help to reduce transport related air pollution in the metropolitan area. It will also cause reduction in air-borne diseases. It has been estimated that the saving of release of green-house gases per year will be in the order of 6.400 tons.

Effect on Historic Environment and Structure

Historic Istanbul district, due to its cultural and historic values, has been included in the "World Cultural Inheritance Literature". So by the help of this project; motor vehicle entrance to the reserved sites will be limited and acid rain effect resulted from exhaust gases will be reduced.

Effects on Urban Land Use

The project will help to achieve improved utilization of Istanbul's insufficient transport infrastructure, reduce pressures for converting urban land to roads, junctions and car parks, support urban development along the objectives and strategies of land use and development master plan.

Tourism

The project will attract international professional interest, and therefore tourism and conference activities might be considerable increased to the benefit of Turkey.

HALKALI KAPIKULE RAILWAY PROJECT

Halkalı-Kapıkule Railway Line is expected to improve Asia-Europe connection in the forthcoming years. Bulgaria-İstanbul (Halkalı) Railway Line which is the first step of Asia-Europe Corridor will reach European standards. By constructing that project, the route which starts from Kapıkule in the west will reach to East direction above İstanbul-Sivas- Erzincan-Erzurum-Kars. By constructing Kars-Tiflis Railway Line, it will reach to Tiflis-Bakü and China. The new railway project has been designed according to high speed railway technology. It has been designed double-track, electrified as well as signalized. Present line is not coherent with the line which comes from Bulgaria.Kapıkule-Halkalı railway line provides the continuity of high speed train standards which comes from Bulgaria. The construction of this Project will start in 2009.

Benefits of the Project

- This project will contribute environment protection. Since railway transport system is the most friendly type of transport mode when compared with other type of modes.
- Freight transport (with railways) rate is expected to increase from 5% to 17%. This will reduce road density as well as the problems, namely accidents, air pollution etc. that will be experienced.
- This railway line will be constructed according to high speed railway technology that the commercial connections with Asia and also Europe will thus improve.
- Kapıkule-Halkalı railway line will contribute to the improvement of national railway transport in the long run.
- This high speed line will provide interoperability with Europe. In addition, despite of high speed and comfort of the new railway line, passenger transport rate on railways will increase.
- Turkish Transport System will be stronger with high speed railways. This Project will affect evolution of main railway corridor

Objectives of the Project

- Provide a long-term solution to the current urban transportation problems of Istanbul,
- Relieve existing operating problems on the mainline railway services,
- Provide direct connection of railway system between Asia and Europe,
- Increase capacity, reliability, accessibility, punctuality and safety on the rail services,
- Reduce railway length and travel time
- Reduce air pollution

E Road Sections that are in the 2008 Investment Program

E Road Number	Project Name	Standart	Km.	2008 Investment (1000 YTL.)	Foreign Credit (1000 YTL.)
E-70	East Black Sea Coastal Road	Dual carriageway	560,5	325129	373704
E-80	İstanbul Peripheral Roads maintenance and rehabilitation of bridges and viaducts	Motorway		13172	50928
	Kınalı-Edirne	Motorway	43,1	31000	
	Kınalı-Sakarya Motorway	Motorway	77,2	36010	
	Sakarya-Kazancı-Bolu-Ankara	Motorway	27,1	9290	33110
	Gümüşova-Gerede (Bolu Mountain Passage is included)	Dual carriageway	27,1		
	Gerede-Çerkeş-15. Region Border	Dual carriageway	75	5800	
	Zana Bridge-Erbaa	1A (*), Dual carriageway	60	14700	
	Erbaa-Reşadiye	1A, Dual carriageway	73	13700	
	Erzincan Peripheral Road	Dual carriageway	20	5899	
	(Erzincan-Pülümür)District-12. Region Border	1A 35 BY 15	50	6000	
	Aşkale-Erzurum	1A Dual carriageway	30 41	6500	
	Taşlıçay-Diyadin Junction	Dual carriageway	52	100	
	Ağrı-Taşlıçay	Dual carriageway	31	700	
	Diyadin Junction-Doğubeyazıt	1A Dual carriageway	25 25	5500	
	Erzurum-Pasinler-Horasan	Dual carriageway	80	7200	
	Ağrı-Eleşkirt	Dual carriageway	36	4500	

E Road Number	Project Name	Standart	Km.	2008 Investment (1000 YTL.)	Foreign Credit (1000 YTL.)
E-90	Çanakkale-Lapseki	Dual carriageway	30	1400	
	Lapseki-Biga Junction	Dual carriageway	61	1600	
	Bandırma-Karacabey Exit	Dual carriageway	11	650	
	Bursa-Karacabey	Dual carriageway	66	8750	
	Bursa-İnegöl-Bozüyük	Dual carriageway	100	9790	
	Sivrihisar-Eskişehir-Bozüyük	Dual carriageway	96	57347	
	Ankara-Polatlı	Dual carriageway	56	2702	
	Bala Junc.-Aksaray-Ereğli Junction	Dual carriageway	285	9400	
	Aksaray-Ulukışla-Pozantı	1A	142	100	
	Kemerhisar-Pozantı Motorway	Motorway	120,5	59345	331450
	Gaziantep-Şanlıurfa	Motorway	214,4	48084	199132
	Şanlıurfa-Viranşehir	Dual carriageway	91	13500	
	Viranşehir-Kızıltepe	Dual carriageway	72	9616	
	Kızıltepe-Nusaybin	Dual carriageway	56	12006	
	Nusaybin Junction-Oyalı Junction	Dual carriageway	45	10116	
	Oyalı Junction-Cizre	Dual carriageway	55	10872	
	Cizre-Silopi	Dual carriageway	32	9750	
E-84	Kınalı Junction-Tekirdağ	Dual carriageway	56	13000	
	Tekirdağ Peripheral Road	Dual carriageway	15	10800	
	Tekirdağ-Malkara	Dual carriageway	55	500	
	Malkara Junction-İpsala	Dual carriageway	46	500	
	İpsala-Border Gate	Dual carriageway	6	2	
E-87	Trakya Motorway-Kırklareli-Dereköy-Aziziye-Bulgaria Border	1A, Dual carriageway	63	15500	
	Çanakkale-Ezine-Ayvacık	1A, Dual carriageway	70	200	
	Havran-Edremit-Ayvacık	Dual carriageway	77	9000	
	Aliağa-Ayvalık-14. Region Border	Dual carriageway	132	3500	
	İzmir-Aydın	Motorway	177	27640	128110
	Aydın-Nazilli-Horsunlu	Dual carriageway	65	2500	
	Horsunlu-Denizli	Dual carriageway	64	15499	
	Denizli-Acıpayam-13. Region Border	1A, Dual carriageway	82	1750	

E Road Number	Project Name	Standart	Km.	2008 Investment (1000 YTL.)	Foreign Credit (1000 YTL.)
E-88	Ankara-Kırıkkale	Dual carriageway	78	49994	
	Kırıkkale City Passage	Dual carriageway	13	2	
	Kırıkkale-Delice Junction	Dual carriageway	35	863	4730
	Yerköy Junction-Yozgat-Sorgun	1A, Dual carriageway	61	3700	
	Sorgun-Akdağmadeni-Yıldızeli	1A, Dual carriageway	157	32500	
	Yıldızeli-Sivas-Zara,Sivas-Ulaş	1A, Dual carriageway	185	25500	
E-89	Ankara Exits	Dual carriageway	74	2498	
E-91	Antakya Peripheral Road	Dual carriageway	18	19951	
	Antakya-Yayladağı-Syria Border	1A, Dual carriageway	51	1700	
E-95	Samsun City Passage	Dual carriageway	12	15000	
	Samsun-Kavak	Dual carriageway	48	20000	
	Kavak-Merzifon	Dual carriageway	58	14966	83809
E-96	Bornova-Turgutlu-Salihli	Dual carriageway	73	20500	
	Kula-Salihli	Dual carriageway	44	3500	
	Uşak-Kula	Dual carriageway	60	23999	
	Uşak-Afyon	Dual carriageway	97	48000	
	Afyon City Passage	Dual carriageway	19	37000	
	Emirdağ Junction-Afyon	Dual carriageway	71	22000	
	Sivrihisar-Emirdağ Junction	Dual carriageway	49	1212	
E-97	Trabzon-Aşkale	1A, Dual carriageway	220	12000	
	Gümüşhane City Passage	1A	8	210	
E-98	Belen-Topboğazı	Dual carriageway	17	8050	
E-99	Erciş-Muradiye-Çaldıran (Erciş City Passage is included)	1A, Dual carriageway	72	2818	
	Ahlat-Adilcevaz	Dual carriageway	23	1800	
	(Tatvan-Bitlis) Junc.- Ahlat	1A, Dual carriageway	40	100	
	Tatvan Junction-Bitlis-9 th Region Border (Bitlis City Passage is included)	1A, Dual carriageway	66	40249	
	Silvan-Malabadi-Haydar Bridge-11. Region Border	1A, Dual carriageway	98	9367	
	Diyarbakır-Siverek-Şanlıurfa (Akziyaret Airport-Hilvan Junction is included)	Dual carriageway	187	24273	

E Road Number	Project Name	Standart	Km.	2008 Investment (1000 YTL.)	Foreign Credit (1000 YTL.)
E-691	Kars-Selim-Horasan	Dual carriageway	116	1700	
E-881	Gölcük City Passage	Dual carriageway	2	10	
	Gölcük-Altınova	Dual carriageway	28	4500	
	Yalova -Topçular -Altınova	Dual carriageway	23	20789	
	Bursa Peripheral Road	Motorway	82	19305	52170
	Bursa -Yalova	Dual carriageway	76	13997	
	Balıkesir-Susurluk-Karacabey	Dual carriageway	86	24997	
	Manisa-Akhisar-Balıkesir	Dual carriageway	89	20450	
	İzmir-Manisa	Dual carriageway	24	10999	
	İzmir-Urla-Çeşme Motorway	Motorway	109	11101	1839

(*) 1A: 12 meter platform width
platform width

(*) 2A: 10 meter