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ESKISEHIR

REDUCING TRAFFIC AND DEVELOPING ALTERNATIVES IN A CONSTRICTED CITY CENTRE

Key words:

Transport-system integration; Non-motorised modes; Planning; Public-transport projects; City-centre regeneration

Eskisehir, the 12th-largest city in Turkey, located 230 km west of Ankara, is experiencing considerable industrial expansion. Rapid growth in vehicle numbers has exacerbated environmental and congestion problems. To mitigate these, the municipality has built two tramway lines. It has also redesigned its transport system to give pedestrians and cyclists more space.

Turkey	Eskisehir
Population: 72,752,000 inhab.	**Population:** 670,000 inhab.
Area: 783,562 sq. km	**Area**: 13,650 sq. km
Density: 92.8 inhab. / sq. km	**Density**: 49 inhab. / sq. km
Urbanisation rate: 69.60%	**Length of lines:** Tramway: 15 km (2004)
Annual rate of urban-population growth (2005-2010): 1.93%	
GDP / inhabitant: $10,094.1	
HDI: 0.699 / 1	
Car ownership: 95 vehicles per 1,000 inhab.	
Vehicles per km of road: 29	
Accident rate: 0.62 fatal accidents per 10,000 inhab.	

Sources: World Bank – UNDP – Erhan Enbatan – FEDRE

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Based on the presentation by **Erhan Enbatan** – general manager, ESTRAM (Marseille conference, 2010).

Eskisehir is a rare example in Turkey. To solve its traffic problems, the city chose not to develop road infrastructure but rather to adopt a sustainable-mobility policy by building two tramway lines and pedestrianising the city centre.

This Turkish city's mobility policy is based on three principles: diversifying the transport offering (bus, minibus, collective taxis, tramways, bicycles); reducing motorised traffic in the city centre by pedestrianising the streets; and improving public transport systems.

A TRAMWAY PROJECT AND THE IMPLEMENTATION OF AN INTEGRATED TRANSPORT SYSTEM

In July 2002, the city began constructing two tramway lines. These lines, totalling about 15 km in length, entered service in December 2004. The project, which was completed in two years, earned the city an award from the International Association of Public Transport (UITP) for its commitment to tramways.

Figure 1: Decongesting the city centre with a tramway.

Funding came from Swedish export credits and from loans from Scandinavian and European investment banks. The ESTRAM (Eskisehir Tramway) project involves deploying a mass transit mode connected to the city's three existing public transport modes.

ESTRAM is designed to carry up to 120,000 passengers a day.[1] The two lines, which share a section of city-centre track, link the city centre with the universities, railway station, hospitals, cultural and leisure districts and bus station. According to ESTRAM data, in seven years (2005-2011) ridership has grown by 19.2%.[2] On average, the tramway lines are used by 94,000 passengers daily. The city has developed an integrated transport system, based on the transport master plan that links the bus and minibus lines and the collective taxis with the ESTRAM framework. Investment in a ticketing system allowed fare integration across the various modes. Daily passenger numbers are 90,000 for buses, 60,000 for minibuses and 12,500 for minibus-taxis.

According to Erhan Enbatan, opening the tramway reduced city-centre traffic as well as the concentration of airborne toxic gases.
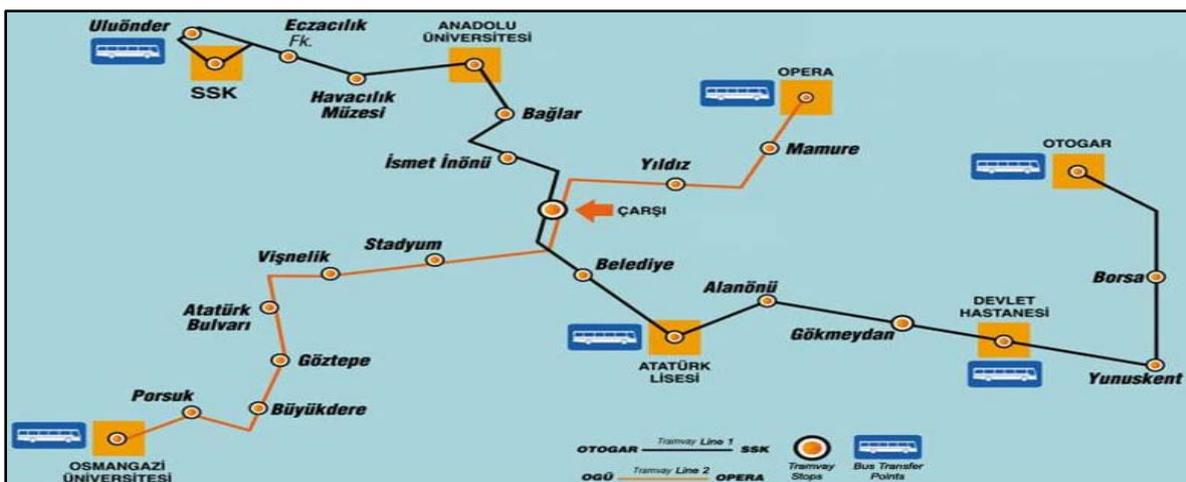

Figure 2: City of Eskisehir transport system.

[1] http://www.bombardier.com/
[2] http://www.estram.com.tr/eng/statistics.php

TRANSFORMING THE CITY: CITY-CENTRE PEDESTRIANISATION, AND THE WILL TO DEVELOP ECO-FRIENDLY MODES

While the tramway was being built, the city was reorganised. In the early 2000s, streets were pedestrianised and dedicated tramway routes were adopted in the city's transport plan. The main shopping thoroughfares were pedestrianised, and the embankments of the river Porsuk, which flows through the city centre, were transformed.

Eskisehir is one of only a few Turkish cities to have restricted road traffic in favour of pedestrian zones. Other cities' authorities think that restricting access may have a negative effect on local retail activity.

The city centre has become more attractive for tourists, shoppers, and students of the city's two universities. Several cafés and restaurants have opened. The pedestrianised streets soon turned into a leisure district that transformed the city centre's image. Indeed, the pedestrianisation of Eskisehir was cited as an example on ELTIS, the European Local Transport Information Service portal. Pedestrians and shopkeepers are satisfied with the results, and actually favour extending Eskisehir's pedestrian zone. The transport plan proposed to fully pedestrianise the city centre. In 2011, only part of the centre had been pedestrianised. Given the positive results of the initial phase, an extension of the pedestrian zone was planned.

The municipality, which wanted to develop eco-friendly modes, launched a self-service bike system. These bikes are located near the city centre and tramway and bus stops, in order to promote intermodality. When introduced, the system consisted of 288 bikes at 24 stations.

In July 2009, a river-shuttle system entered service. And in the summer months, horse-drawn carriages offer city-centre rides along specific routes.

CONCLUSION

The municipality has set itself the objective of creating a transport system that is fully integrated in the city. To do this, it plans to:

- Extend the tramway lines.
- Increase the share of public transport in the overall transport mix.
- Improve river-based transport.
- Upgrade roads, signage and traffic-light systems.[3]

The city has shown that a pedestrianisation plan can revive a city centre and have a positive influence on the local economy. In Turkey, the Eskisehir pedestrianisation project is seen as a definite success. It has been presented many times in transport policy speeches and meetings. Unfortunately, no other Turkish city has so far been brave enough to implement such a project.

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[3] http://www.eskisehir-bld.gov.tr