



# CASE STUDY

## Controlling millions of vehicles Beijing, China's traffic policy package

### Key point

- **Beijing city government takes six steps to control private vehicle use and improve public transport.**

### There was a big problem...

Due to fast economic growth and the increasing number of residents, Beijing now suffers from massive traffic congestion. In 2009, the net increase of vehicles reached 515,000 in the city, close to the 580,000 total vehicle population in Hong Kong, China. The Beijing government estimated that the vehicle population exceeded 4.7 million in 2010, with an average daily gain of about 2,000 vehicles.<sup>1</sup>

### What was done?

In December 2010, the Beijing government instituted a combination of policy measures to control private vehicle use and improve public transport. This involved a six-step plan, with 28 specific measures aimed at controlling the motorized vehicles (in line with the national Twelfth Five-Year Plan). The city planned to use both regulatory and economic instruments to control the number of motorized vehicles and to reduce the traffic volume.

**Control of license plates:** Beijing introduced a quota system for license plates to regulate the increasing number of private cars. Under the quota system, only 240,000 license plates were issued through a lottery system in 2011, compared with 700,000 the previous year. The license plates will be issued only for permanent residents of Beijing.

**Odd-even license plate system:** Additionally, the Beijing government imposed an odd-even license plate system to reduce the number of the cars on the roads during special events and extreme weather conditions. The system allows cars to drive on alternate days, based on the license plate number. This measure is already in place a few other cities around the world, such as Bogota and Mexico City. However, the scheme is a temporary solution because it encourages owners to buy a second car.

**Traffic restriction for non-residents to Beijing for peak hours:** Cars registered outside of Beijing will not be allowed into the city during peak hours. Check points are set up to prevent motorists to enter the fifth ring road from 7 a.m. to 9 a.m. and from 5 p.m. to 8 p.m. This encourages people to commute by train or bus to the city.

**Control of the number of official vehicles:**<sup>2</sup> The Beijing municipal government launched a special campaign to restrict official motor vehicles, which covers various organizations, political advisory bodies, government-funded institutions among others. The growth in official vehicles is also one of the reasons for the traffic congestion – they contribute 15 per cent of the city's car ownership. Restrictions will be applied on the purchase and operation of official vehicles.

**Increasing parking fees:** Since 2002, the Beijing government gradually increased parking fees to discourage vehicle use. Parking fees in non-residential areas have increased to discourage driving to work. Based on the level of congestion, the non-residential areas have been divided into three zones. The parking fees were raised from 2 yuan to 10 yuan in April 2010; the fee is also as high as 15 yuan in the highly congested zones.<sup>3</sup>

<sup>1</sup> Chen Xing, "Beijing's Plan to Steer Clear of Traffic Jams", *China Daily*, December 14 2010. Available from [www.chinadaily.com.cn/china/2010-12/14/content\\_11696079.htm](http://www.chinadaily.com.cn/china/2010-12/14/content_11696079.htm) (accessed 26 February 2012).

<sup>2</sup> Guanqung Wang, "China Launches Special Campaign to Restrict Use of Official Vehicles", *Xinhua*, May 31 2011. Available from [www.gov.cn/english/2011-05/31/content\\_1874275.htm](http://www.gov.cn/english/2011-05/31/content_1874275.htm) (accessed 26 February 2012).

<sup>3</sup> Ye Xin, "Beijing's Car Owners Switch to Bikes as Parking Fees Rise", *People's Daily Online*, April 15, 2011. Available from <http://english.people.com.cn/90001/90776/90882/7351622.html> (accessed 26 February 2012).

## Preliminary results

The initial traffic-control measures have started to have an impact, reports the Beijing Municipal Commission of Transport:

- The average travel speed for motorized vehicles has increased to 28 km per hour during morning peak hours.<sup>4</sup>
- There was about a 4 per cent increase in public transport passengers (January–March 2011), compared with the same period of 2010 (January–March)<sup>5</sup>.
- The average daily rail passengers increased to 21 per cent (January–March 2011), compared with the same period of 2010 (January–March).<sup>6</sup>
- Daily parking fee of up to 60 yuan and an increase in gasoline prices led motorists to commute by bicycle to work.<sup>7</sup>

## Future plan

The Beijing government announced in September 2011 that it will impose congestion charges for specific zones to ease traffic.<sup>8</sup> The specific details are not yet released. Further to the measures already introduced, this is expected to limit private vehicle use and encourage the uptake of public transport.

<sup>4</sup> Jia Xu, "Beijing Traffic Congestion Eases", *China Daily*, April 18 2011. Available from [www.chinadaily.com.cn/2011-04/18/content\\_12345368.htm](http://www.chinadaily.com.cn/2011-04/18/content_12345368.htm) (accessed 26 February 2012).

<sup>5</sup> People's Daily Online, "Beijing's Congestion Control Measures Pay Off", April 18 2011. Available from <http://english.peopledaily.com.cn/90001/90776/90882/7351622.html> (accessed 26 February 2012).

<sup>6</sup> *ibid.*

<sup>7</sup> Ye Xin, "Beijing's Car Owners Switch to Bikes as Parking Fees Rise", *People's Daily Online*, April 15, 2011. Available from <http://english.people.com.cn/90001/90776/90882/7351622.html> (accessed 26 February 2012).

<sup>8</sup> Sabrina Mao, Terri Yue Jones and Ken Wills, "Now Beijing Plans Congestion Fee to Ease Traffic", *Reuters*, September 2 2011. Available from [www.reuters.com/article/2011/09/02/us-china-traffic-beijing-idUSTRE78119120110902](http://www.reuters.com/article/2011/09/02/us-china-traffic-beijing-idUSTRE78119120110902) (accessed 26 February 2012).