



# Seoul

## TRANSPORT VISION 2030

Seoul, South Korea

**S**eoul's bold new municipal vision seeks to shift the city's heavy dependence on private cars to a more sustainable, shared, human-oriented paradigm. **Dr Joonho Ko**, Director of the Megacity Research Centre at the Seoul Institute, explains.

### The Challenge

Over the past 40 years, Korea's dramatic economic development and rapid urbanisation have led to an explosion in private car ownership, affordable now even for the lower-income citizens. In the past four decades, the population of Seoul increased fourfold while the number of cars grew fiftyfold. More cars on the road have meant greater demand for infrastructure such as flyovers, widened roadways and car parks, while reducing space for other needs such as pedestrian spaces.

Previously, Seoul's transport policies were developed to cater primarily to the growing car population. Such car-oriented policies, however, were proven unsuccessful in supporting the ever-increasing demand for private transportation. Traffic congestion worsened, with average car speeds lower than 16 kilometres per hour in the central business district (CBD). In 2009, the social cost induced by traffic congestion in Seoul was estimated to be about US\$7 billion for the year.





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Despite having implemented various policy interventions, including bus system improvements and travel demand control measures, a significant 26% of trips in 2010 was still made by passenger cars. Such trips accounted for 56% of energy consumption in the transportation sector.

Under these circumstances, it was obvious that continued dependence on private cars was unsustainable for urban development and contributing to growing inefficiency in the transport system.

01 Congestion on a street in Seoul, 2007.

## The Solution

To address the city’s transport concerns, the Seoul Metropolitan Government (SMG) developed a long-term, strategic policy for transportation. The Seoul Transport Vision 2030, the outcome of this effort, was announced in May 2013.

### **Paradigm shift**

Incorporating perspectives from citizens and subject experts, the Vision set forth important paradigm shifts in Seoul’s transportation policies, some of which include:

- prioritising pedestrians over cars;
- emphasising equitable accessibility over mobility;
- changing of perspectives from “owning” to “sharing” of travel modes and public spaces;
- taking a “bottom-up” approach for decision-making processes instead of a “top-down” one;
- integrating transportation systems, instead of persisting with divided modalities;
- attempting “software” measures before constructing infrastructural “hardware”;
- considering not only efficiency, but also accounting for equity, sustainability and economic needs.

### PARADIGM SHIFTS IN THE SEOUL TRANSPORT VISION 2030

Present

Future

Car



Human

Mobility



Accessibility

Restricted mobility



Universal mobility

Owning



Sharing

Divided modality



Inter-modality

Top-down



Bottom-up

Hardware



Software

Efficiency only

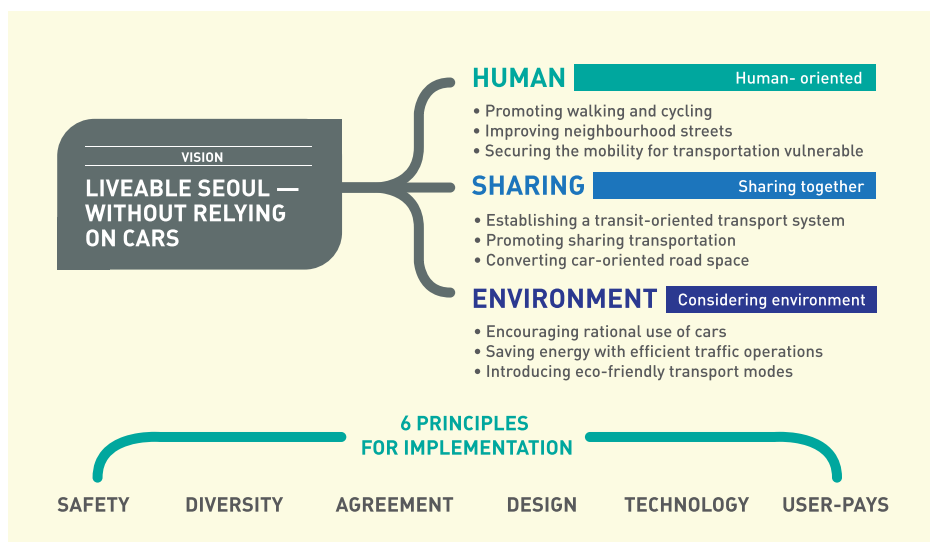


Equity + Sustainability + Economic

HUMAN

SHARING

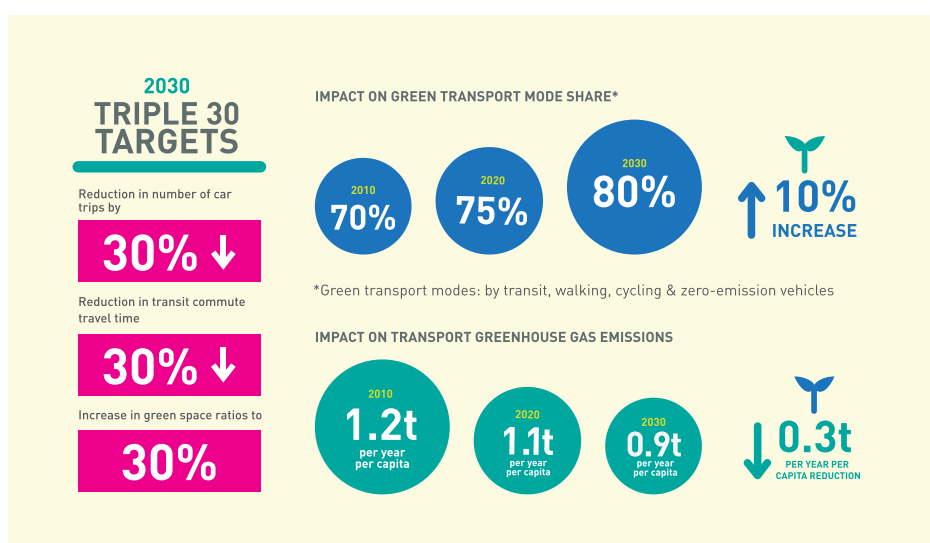
ENVIRONMENT



### Vision

To anchor its new Vision, SMG adopted the slogan “Liveable Seoul without relying on cars” as well as three key concepts: “Human-oriented transportation”, “Shared transportation” and “Environmentally friendly transportation”. SMG also set out an array of detailed transport objectives called the “2030 triple 30”: a 30% reduction in automobile use, a 30% reduction in public transit travel time, and an increase in the city’s green space ratio in the CBD from 10% to 30%.

If successful, Seoul could experience a 10% increase in green transport mode share from 70% to 80%, with a reduction in transportation CO<sub>2</sub> emissions from 1.2 tonnes to 0.9 tonnes a year per capita. SMG hopes to achieve this by 2030.







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## The Outcome

Seoul’s new transport vision – based on sharing, and taking on human and environmental priorities – is already being realised.

### *Road diet*

A transit mall – accessible only to buses, emergency vehicles and pedestrians – was established by SMG in January 2014. Built in the Sinchon area by reducing vehicle travel lanes from four to two, and widening the sidewalks, the street mall spans 550 metres. This design discourages cars and encourages public transport use. A survey conducted after six months showed a 34% reduction in traffic accidents, an 11% increase in bus users, and a 4.2% increase in sales for shops in the local area. In addition, the proportion of citizens satisfied with the transit mall rose from 12% to 70%.

- 01 The widened sidewalks at the transit mall provide more space for pedestrians, and can accommodate public events.
- 02 The transit mall in the Sinchon area.

***Removal of flyovers***

While flyovers help keep car traffic flowing, they can blight the urban landscape, obstruct pedestrian movement, and hinder the installation of median bus lanes. SMG has thus demolished some flyovers to promote urban vitality. A subsequent survey indicated that vehicular speeds have remained the same, while land values near the new intersections have risen after the flyovers were removed.

***Reducing demand for cars and delivering more environmentally friendly cars***

To further reduce the demand for cars, SMG launched a car-sharing program in 2013, which saw the deployment of more than 1,300 cars – approximately 300 of which are electric cars. Since September 2014, ten electric taxis have begun operating in the city, to evaluate the viability of electric cars as commercial vehicles over longer travel distances.





**Joonho Ko** is the director of Megacity Research Center (MRC) in the Seoul Institute, the think tank of Seoul Metropolitan Government, Korea. His area of expertise is in transportation studies, such as public transportation, green car deployment and congestion mitigation. He has also participated in various traffic and environmental impact assessments. He earned his PhD in transportation systems engineering from the Georgia Institute of Technology, USA.

- 01** An all-electric bus in the Namsam area. All city buses will be gradually replaced with environmentally-friendly buses by 2030.
- 02** The Cheonggyecheon Restoration Project is one of Seoul's most famous flyover-removal projects. Where concrete and a flyover once covered the Cheonggye river, public recreation space has been restored. The government intends to demolish more flyovers for better pedestrian accessibility, urban vitality and bus access.