

## CONNECTED TRANSPORTATION: TECHNOLOGY MPROVING URBAN MOBILITY

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Traffic jams in big cities are one of the main causes of lost time and wasted fuel, aside from increasing air pollution and stress for drivers. The European Union estimates that 1% of GDP in Europe is lost in traffic jams. "City Life," a study of 13 global cities—conducted by ConsumerLab, the Ericsson division that studies user behavior—concluded that traffic is the main root of dissatisfaction among citizens living in large urban areas.

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In São Paulo, for example, people spend an average of two hours and forty minutes in traffic every day. The Getúlio Vargas Foundation estimates that in 2012, São Paulo inhabitants wasted about USD\$21 billion with unproductive time and fuel burned in traffic jams. In Mexico City, the annual loss is estimated in USD\$3 billion by the Mexican Institute for Competitiveness.

And the urban mobility problem is only going to get worse as cities continue to grow.

Approximately 7,500 new inhabitants join the population of the world's major cities every day. By 2050, an estimated 70% of the global population will be concentrated in major urban centers. In order to deal with such huge population movements, public transportation must be prioritized by applying information and communications technology (ICT).

In Brazil, the bus system in Curitiba is a good example of how technology can be an ally in urban mobility management. The city was the first in the world to connect public transportation to mobile broadband. The 2,500 buses circulating in the Paraná State capital are constantly monitored in terms of their speed and time at stations. Electronic panels are currently being deployed at bus stops, informing riders of the vehicle's expected arrival time. The data is also available to applications such as Moovit and Transit, via Google Maps, allowing citizens to see where their buses are located via smartphone.

In Paris, the local metropolitan train operator launched an app called Tranquilen, and has been encouraging train users to download it for free to their smartphones. Through its use, each rider voluntarily helps monitor passenger flow, allowing the application to obtain information on their location. The app gives the user information, such as how full the trains are at a certain time, and it is even possible to identify which train cars have more unoccupied seats than others. Users can plan the best time to leave work, avoiding the busiest hours.

In Santiago, Chile, the Undersecretary of Transport for the Government of Chile, the mobile operator Entel and Ericsson signed a collaboration agreement in September 2014 for the development of a Smart Cities tool to optimize public transport. The tool will collect the data generated by millions of Entel subscribers in order to analyze their movements using the bus and subway systems. The traffic flow of people will then be mapped in order to plan improvements in the public transportation system.

Using mobile technology in public transportation has proven to be a great ally in improving the quality of life for people in big cities. In light of this trend, in November 2013, Ericsson launched the Connected Transport Initiative, which is working to create safer, more efficient and comfortable transportation systems. The goal will be to determine how smart transportation systems can be deployed.



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