

A TALE OF TWO COUNTRIES

If Mexico and China are any indication of pollution, this may be the worst of times



Passengers crowd into micros to travel through Mexico City.



Bikes usually outnumber cars on China's city streets.

Two journalists report on how a visitor could expect to get around in two countries: China and Mexico. In China, bicycles are the transportation method of choice for nearby destinations; trains are the choice of many to travel to far-away cities. Thanks to former Chairman Mao Zedong, China enjoys an intricately extensive rail network, which China plans to expand in the upcoming years.

Mexico City has accepted so many automobiles as transportation — and almost completely suspended the use of its trolley system — that the subway system only serves 15 percent of the city's population. Most people ride in micros, similar to vans, or drive personal cars. By 2010, the city expects to have more than six million vehicles travelling its streets; officials are unsure how they are going to fit, given the city's current network of roads and highways.

A comparison of the two shows a global increase in automobile usage, thus an increase in emissions. Could the Kyoto Treaty be tumbling toward imminent failure?



CHINA: From bicycle to rail, a country in transition

BY JIM DETJEN

Like a river flowing through Tianjin, China, thousands of bicyclists pedal slowly along its wide thoroughfares. Riding along the streets are executives in business suits, workers hauling jugs of water, and elderly men pulling cages of chickens and goats.

Unlike the United States, bicycles in China are a critical part of this country's transportation system. More than 550 million bikes travel along China's roads each day, carrying workers to jobs, students to schools and cargo to stores and factories.

In many cities, bike lanes are wider than streets used by motor vehicles; bicyclists pedal a dozen abreast. They pull cartloads of coal, mounds of Chinese vegetables and stacks of televisions and furniture.

By comparison, passenger cars are still a luxury in China. With a population of 1.3 billion people, only seven million cars and trucks are on China's roads. Many of these are trucks or taxis. Few citizens have the income to buy a private car. Roughly one out of 100 Chinese people owns an automobile compared with one in two in the United States.

But China is a country in transition. With the world's most rapidly growing economy, cars are being built at record rates. General Motors and Volkswagen have built enormous assembly plants and by 2010, 5 million vehicles are expected to be manufactured and sold each year.

More and more Chinese are reaching the income threshold at which private-vehicle ownership becomes a possibility — about the equivalent of \$4,000 a year. Most of these people live along the bustling east coast cities, such as Shanghai or Guangzhou.

Spurred on by advertising, many Chinese citizens yearn to own cars and are embracing a car culture. The Chinese government is building roads at a furious pace and the nation's road network has increased six-fold during the past six years.

The Chinese are also rapidly building a modern rail network. In the 1950s Chinese communist leadership fell in love with trains and the late Chairman Mao Zedong built rail lines between most major cities. It is possible, for example, to board a train late in the afternoon in Beijing or Tianjin, sleep in a comfortable passenger compartment and travel through the night to Shanghai or Qingdao. After a 15- or 18-hour train ride you arrive at your destination in time for breakfast and the start of a new day.

Today, China is the world's most prolific rail builder, laying tracks at rates surpassing the United States during America's 19th century rail boom. In January 2003, China inaugurated the world's first commercial maglev system in Shanghai. These trains ride almost friction free, floating on a cushion of air through the power of magnetic levitation.

Chinese officials are planning a \$24 billion high-speed rail link between Beijing and southern Guangzhou, which will cut travel time between these two cities from 23 hours to about 10. On the drawing board is a 50-year plan to crisscross China, a nation roughly the size of the United States, with an advanced network of high-speed rail lines.

While air travel is also growing in China, it is its rail networks and roadways which are expected to be the primary carrier of its citizens and cargo in the 21st century. 🌐

MEXICO: As 'micros' grow, a subway system loses favor

BY SUSANA GUZMAN

The subway of Mexico City is no longer the daily public transportation of choice for the majority of the population. The transport that is now mobilizing double the number of persons than the Metro (what Mexico City calls its subway) is known as the "micro" and gives service to eight million customers that travel every day around the 107 routes. This number represents 85 percent of the people using public transportation, leaving 15 percent remaining to ride the subway.

On the sidewalks, a customer wishing to ride a micro raises his/her right hand. The micro van is fast and stops at any place, at any time when people want to get in or get out. It might be comfortable, but it is also risky and the traffic is dense. There are 28,000 micro vans, most of them are 10 years old, releasing heavy polluting emissions into the air. With a capacity of about 20 people, the vehicles are always full to overflowing. Inside them, people stand, trying to keep balance while holding to the seat tubes.

The micro vans are the result of the major population growth during the 1970s — a rate of 5.5 percent — along with a transportation policy that benefited the automotive industry and the construction of wide avenues called *eyes viales*, explained Jorge Legorreta, a historian and former Mexico City council member.

Meanwhile, in the late 1970s the promotion of the new automotive transport was promoted, a common electric transport — the trolley — started to disappear. "The last trolley ran through Taxquena to Xochimilco in 1985. After the earthquake of 1985 the service was indefinitely suspended. It was substituted by a light trolley in 1986," he said. The shorter route was insufficient to the demand.

Roads were planned for the use of cars instead of public and massive transports — increasing the pollution. "The micro is one of the main causes of air pollution in Mexico City because authorities preferred the automobile over electric transport. ... The big struggle is back again to modify the private and automotive transport that heavily affects the environment."

Daily, more than four million private cars travel throughout the city. In 1996 Legorreta wrote: "The annual growth rate for vehicles is 5.9 percent, three times more than the rate for population growth. Thus, it is calculated that by the year 2010, 6 million vehicles will be circulating. These 6,200 miles of thoroughfare are insufficient when facing such an explosive growth of the number of vehicles."

According to a study released in 2000 from the Secretary of the Environment, Natural Resources and Fishery, Semarnap (now Semarnat), the transportation sector, accounts for 85 percent of air pollution.

For Legorreta, the governmental efforts to encourage collective rather than individual transportation has been insufficient, such as the Metro network that has grown continually over the past 15 years at a rate of 3.7 miles per year.

There is another trend, Legorreta points out, which is trying to diminish public transport toward private transport. Traditionally, public transportation has been controlled by the Mexican authorities. "The new buses that are circulating on the roads of Mexico City are (privately owned)." 🌐