

FOREIGN EXCHANGE

Japan: Blurring the line between bullets and trains



HO / AFP/Getty Images

Japan wants its bullet trains to run at 310 miles per hour by 2025.

It's not enough that trains run on time in Japan -- they've got to break land records. In 2025, the country plans to be traveling by rail at 310 mph.

By John M. Glionna
March 24, 2009

Reporting from Nagoya, Japan -- This is a nation addicted to speed.

And to ride Japan's super Shinkansen, or bullet train, is to zip into the future at speeds reaching 186 miles per hour.

From Nagoya to Tokyo, the scenery whizzes past in a dizzying blur as the sleek engine with its bullet-like nose floats the cars along elevated tracks -- without the clickety-clack of the lumbering U.S. trains that make you feel as though you're chugging along like cattle to market.

These days, Californians dream of a future with high-speed elevated rails that



Japan blurs line between bullets, trains

By John M. Glionna

It's not enough that trains run on time in Japan -- they've got to break land records. In 2025, the country plans to be traveling by rail at 310 mph.

would link Southern California and Las Vegas in less than two hours, or L.A. and San Francisco in just over 2 1/2.

Japan, meanwhile, will soon have a class of train that could make the trips in less than half those times.

This is a nation where it's not nearly enough that the trains run on time -- they've got to break land records. And even that's not enough.

By 2025, a network of bullet trains connecting major cities is to feature magnetically levitated, or maglev, linear motor trains running at speeds of more than 310 mph.

Developed for use during the 1964 Tokyo Olympics, the Shinkansen trains were the brainchild of Hideo Shima, a government engineer who died a decade ago at the age of 96. Over the years, the trains have signaled Japanese prosperity, a gauge of just how far this technology-crazed culture has come and where it's headed.

Designed to traverse Japan's mountainous terrain, the trains use tunnels and viaducts to go through and over obstacles rather than around them. They travel on elevated tracks without road crossings and apart from conventional rail. An automated control system eliminates the need for signals.

Officials boast that on average the trains are less than half a minute late each year, which includes delays caused by earthquakes, typhoons and snow. During the line's 45-year history and transport of 7 billion passengers, there have been no deaths from derailment or collisions.

An E-5 series of train scheduled to take to the rails in 2011 promises speeds of nearly 200 mph, improved suspensions and a car-tilting system to make the ride more comfortable on curves. Power-reclining shell seats in first class will provide what engineers call a "peaceful and soothing time during your travels."

Amtrak, eat your heart out.

But Japan isn't stopping there. The trains planned for 2025 will reduce the travel time between Tokyo and Nagoya to 40 minutes from about 90 minutes. At that speed, commuters could go from L.A. to the Bay Area in just over an hour. Rail officials say as many as 200,000 passengers could use the line daily.



HO / AFP/Getty Images

Japan blurs line between bullets, trains

By John M. Glionna

It's not enough that trains run on time in Japan -- they've got to break land records. In 2025, the country plans to be traveling by rail at 310 mph.

Still, the Shinkansen isn't perfect.

The trains often cause a rail version of a sonic boom as they emerge from tunnels. That's because they enter so fast that they create a bubble of air pressure that is pushed along until they emerge.

The trains remain in stations for only two minutes -- not a moment more or less -- before easing out and quickly gaining speed. By the time they reach top velocity, the world has begun to change. There's no tooth-jarring shudder as when jets lumber down the runway. This ride is smooth. The turns are gentle, peaceful, even serene, though every once in a while a passenger is awakened by the boom of a train passing by or exiting a tunnel.

For the most part, you don't realize you're traveling faster than almost any other man-made land vehicle until you look out the window and see the scenery passing by so fuzzily that you think you've lost your glasses.

For most of the ride you settle into your seat, buy a beer or coffee from the passing snack cart and realize once again that you're not in America anymore.

###

Internet: <http://www.latimes.com/news/nationworld/world/la-fg-japan-bullettrain24-2009mar24,0,2177731.story>