

# SHINKANSEN IN JAPAN



Established in 1964, the Shinkansen, a network of high-speed railway lines in Japan, has expanded to link most of the cities on

the islands of Honshu and Kyushu. Carrying over ten billion passenger per year, it has transported more passengers than any other high-speed line in the world. Between Tokyo and Osaka, the two largest metropolises in Japan, up to thirteen trains per hour with sixteen cars each (1,323-seat capacity) run in each direction with a minimum headway of three minutes between trains. More importantly, the Shinkansen has a significant impact on Japan's economy. Switching from a conventional to a high-speed network has been estimated to save 400 million travel hours annually, which equals an economic influence of 500 billion yen per year. In terms of environmental benefits traveling by the Tokyo-Osaka Shinkansen line produces only around 16% of the carbon dioxide that a car would produce on an equivalent journey. This adds up to 15,000 tons of carbon dioxide each year which is no longer dispersed in to the atmosphere.



## metropolises n.

metro 指的是地铁，特别是巴黎的，但是 metropolises 就是首都或者特大城市的意思了。

## a minimum headway of three minutes

minimum headway的字面意思是车头之间最小的距离，那么后面跟上时间以后引申义就是两列车之间的最短间隔时间。

## conventional adj.

传统的，相当于traditional

## estimate v.

预估

## in terms of

相当于about

