

# Exaggerating Effects on California Transportation

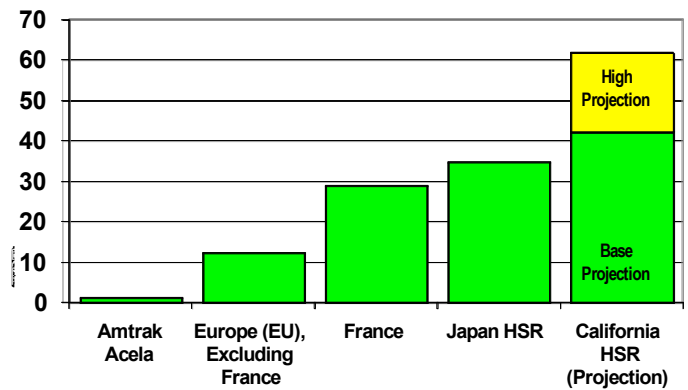
The high speed rail service proposed by the CHSRA will not have the effects on ridership that it claims.

The CHSRA has been increasing forecasted ridership over time and has issued a Base Projection of 65.5 million intercity riders and a High Projection of 96.5 million intercity riders for 2030. The CHSRA ridership projections are considerably higher than independent figures developed for comparable California systems in Federal Railroad Administration (FRA) and University of California Berkeley studies.

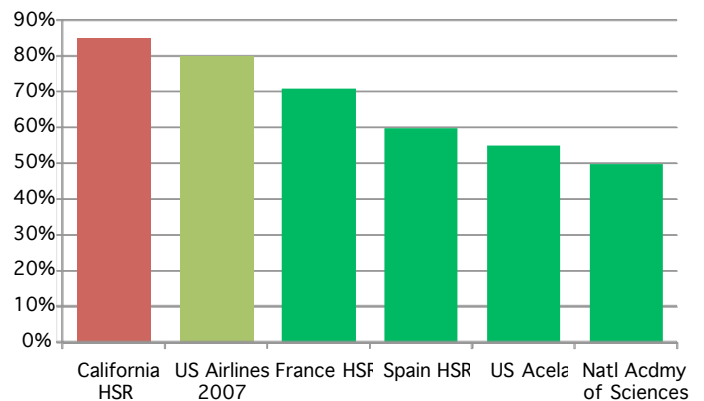
Using generous assumptions this Due Diligence Report projects a 2030 base of 23.4 million intercity riders, 64% below the CHSRA's base of 65.5 million intercity riders, and a 2030 high of 31.1 million intercity riders, nearly 60% below the CHSRA's high of 96.5 million. In short, the CHSRA's ridership projections are absurdly high.

The CHSRA projects ridership intensity (passenger-miles per route-mile) to be far above levels achieved on HSR systems in France, the balance of the European Union, and Japan (see Ridership Intensity figure). Each of these markets is considerably more favorable for HSR and it would thus be expected that California ridership intensity would be lower. Moreover, the CHSRA's projected load factor (share of seats filled on average) is far higher than what is found on HSR systems elsewhere around the world (see California HSR Load Factors figure).

Ridership Intensity Comparisons  
PASSENGER MILES PER ROUTE MILE



California HSR Load Factors in Context  
COMPARED TO AIRLINES AND OTHER HSR SYSTEMS



The CHSRA's ridership projections rely on extraordinarily low fares that are far below current levels on other HSR systems. For example, the projected San Francisco–Los Angeles unrestricted business class fare is proposed to be \$70 in 2030 (2006\$) while today's business class fares Tokyo–Osaka are \$135, Paris–Marseille \$140 and New York–Washington \$172. The CHSRA's artificially low fares—unlikely to be achieved—could be a substantial element in driving the absurdly high ridership projections.

Another factor driving overestimation of ridership is the CHSRA's assertions about the speed of the train. But the CHSRA will be unable to meet its speed and travel time objectives—based upon international HSR experience, realistic HSR speeds mean that a non-stop San Francisco–Los Angeles trip would take 3 hours and 41 minutes—59 minutes longer than the statutory requirement of 2 hours, 42 minutes.

The CHSRA's anticipated average speeds are not being achieved anywhere in the world, including on

the most advanced systems. CHSRA anticipates average speeds of 197 mph, while France's TGV-Est averages 174 mph, TGV Paris–Avignon averages 159 mph, Japan's bullet train averages 159 mph, and Taiwan's HSR averages 152 mph. Other HSR lines in the world average even slower speeds.

Given this reality, the limits of HSR technology, and the reality that at least 150 route miles would be in built-up areas where trains would be forced to slow down, this Due Diligence Report predicts California's HSR average speeds in urban segments will not exceed 90 mph much less reach 150 mph. The average speed outside urban areas is unlikely to surpass 170 mph.

As a result, HSR will be less attractive as an alternative to airline travel and is likely to attract fewer passengers than projected. It is also likely that HSR door-to-door travel times would be greater and there would be considerably less frequent non-stop service than air service.