

## Re: World's First Fuel Cell-Powered Train Locomotive Slated for 2008

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**From:** Scott A Crosby (*scrosby\_at\_cs.rice.edu*)

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On Thu, 19 Aug 2004 11:31:05 -0600, Hatunen <hatuunen@cox.net> writes:

> >And why would things be any different now with HSR, except that now  
> >the passenger rail network is in more disrepair, hundreds of miles of  
> >high speed track is needed, and airplanes are the entrenched  
> >technology? IE: Tell me why history wouldn't repeat itself exactly the  
> >same way this time.  
>  
> Going to Europe can be illuminating. High speed trains are effective  
> because they are used for medium distances where six hours is about  
> the longest trip that gives a train an attraction over air travel  
> (which is growing rapidly inside Europe since low-cost airlines have  
> been allowed).

In Europe, the countries are small. Germany is only 360k km<sup>2</sup>. France, 540k km<sup>2</sup>. With 200km/h trains virtually anyplace you might want to reach within the country is under 5 hours away. That isn't true about the US.

Europe also has a much higher population density. Germany and France combined have half of the population of the US, but only 8% of the land area, implying any nationwide HSR network is going to require several times the track milage --- and expense.

The distance between San Diego, CA and San Francisco, CA is 800km. Houston, TX to El Paso, TX is 1300km, and there's not much in between. How far apart is Nice, France and Brest, France? Or Kiel, Germany and the Austrian border? Europe and the US have very different population distributions, both at the large scale --- across the continent --- and at the small scale --- within a city.

> Another factor is that European governments consider trains and  
> local transit a social good and necessity and they are willing to  
> subsidize them heavily. One of the reasons for the decline of  
> rail in the 1950s (besides the interstate highways and toll roads  
> making driving attractive) was the rail service was provided by

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- > *private rail companies that had to make a profit; you can't make*
- > *a profit on passenger service and the rail companies found ways*
- > *to kill off passenger service.*

Wasn't passenger rail in the US a private and profitable and a desirable way to travel before it was outcompeted by airlines? Why would the outcome be any different today? With enough subsidies, you could bring back horse&buggy carriages for their lack of pollution and the valuable horse manure they'd leave on our streets.

Scott