

## Spanish High Speed Trains Stephen B Maurer

In early October, my wife and I visited Spain, where we took 3 round trips on the Spanish AVE trains recently highlighted in the *Inquirer* article about high speed trains around the world. This report complements the information you may have read there.

We took trips Madrid-Toledo, Madrid-Segovia (both 30 minutes, about 50 miles), and Madrid-Cordoba (1hr 45 min, 250 miles).

The AVE trains are priced *cheaper* than the old slower main-line trains. They consist of fixed consists with electric engines at both ends, typically 4, 6 or 8 cars, and run frequently (as opposed to fewer, longer trains). The result: every train was completely booked, or nearly so. (You must reserve a seat.) In particular, for the Madrid-Toledo run, which has both commuters and tourists all year, book online well in advance. For the Segovia run, we were able to buy tickets from a ticket agent the afternoon before, but by 9:30am when the train pulled out, it was full too. Moral: offer fast frequent service at an improved price, and people will use it. (Note: Spain has also invested in an extensive new superhighway system and lots of domestic flights, so it wasn't that there was no alternative to trains. Since the AVE service Madrid-Barcelona was started in 2008 (2 ½ hrs), it has taken over half the business away from the airlines.)

The trains didn't *seem* that much faster than Acela, but since they go 180 mph in the open, I guess they were. It was just that smooth a ride. Looking out the window wasn't a blur but rather great fun; the ride, especially to Cordoba, is quite scenic. And you get your money back if the train is even 5 minutes late. But don't count your chickens. In general the trains are early, 2-5 minutes.

Sometimes you can get seats very cheaply, if you book online shortly after a given day's trains goes on sale. On the other hand, the RENFE (Spanish railroad) website has problems. Almost every page is available in English, but American credit card payments often hang and sometimes the schedules are out of date, as we learned when that ticket agent looked at our printout for Segovia runs and said the train we wanted had not run in a year. I wonder what would have happened had we bought tickets online for that phantom train. Anyway, at one time it seems that the online security protocols of RENFE and American credit cards were incompatible, but now the problem simply seems to be insufficient server capacity. Keep trying and eventually your purchase will work. For very detailed information about buying RENFE tickets online, see <http://www.tripadvisor.com/Travel-g187514-c80518/Madrid:Spain:Buying.Renfe.Tickets.Online.html>

By the way, RENFE merely runs the trains; The stations have ADIF signs, for the company that builds and maintains the stations and tracks. Whether this division into two state-owned companies is wise I have no idea.

Train comfort: The seats are good, but don't recline, and don't always line up well with the windows or face forward, things you can't always tell from the seat selection diagrams on the website. There are TVs overhead, which show movies on longer trips. Unlike airlines, RENFE gives out headsets for free. The overhead luggage rack is fairly narrow, but there is some room at the end of the car for larger luggage. There are vending machines if not cafe cars, but no water fountains.

How do they achieve such high speeds? They built completely new lines, often quite distant from the old lines. None of this old hewing to the lay of the land. The simply tunneled through mountains (including an 17mi tunnel just before Segovia) and viaducted over valleys. Also, for old hill fortress cities like Segovia, they simply built new stations far from the city (7km) in the middle of nothing. But don't worry, there is frequent and reasonably priced city bus service from the station to the city; Spanish cities have lots of busses, including minibuses that can go up and down the old narrow streets. Also lots of taxis. Madrid has excellent subways.

In building new lines, Spain has an advantage we don't: contrary to our image of Europe, most of Spain is basically unpopulated. Most of the terrain is dry plains crisscrossed by mountain ridges with scenic outcrops. That's why all the spaghetti westerns were filmed in Spain. I was reminded of west Texas and northern Mexico, only slightly less arid. The point: land acquisition was probably not expensive or legally difficult, as it would be in the Northeast Corridor.

Madrid is the hub for all current AVE trains. Trains for the south and east leave from the main downtown station, Atocha, a beautiful old shed where the shed has been converted to shops and restaurants and a new functional station has been built on its south side. Trains for the north and northwest (like Segovia) leave from Charmartin, several miles north. They are building a tunnel so that all AVE trains can connect at Atocha. Actually, there is already a tunnel (it goes right under the Prado) but apparently it is only for commuter trains (cercanías).

Security. Bag screening is no doubt coming to US railroads. They already have it in Spain, but only on high speed trains (even though it was Spanish commuter trains that got blown up in 2004). I hope, when it does come, that Amtrak does a better job. First, RENFE only checks bags, not coats, shoes, etc. Second, I never could find a poster or a website that said what they were looking for. Not apparently bottles of liquid, since I forgot to take one out of my rucksack and nothing happened. In fact, once I forgot to take my rucksack off my back and no one noticed. At least the bag screening is quick. Still, you must appear 5 minutes before the train leaves, and better make it 10 in case the bag check line is long. As with all European trains, the intermediate stops of AVE trains are very short, so wait where your coach is going to stop and hop right on.

All told, it was a delight to ride these trains. I hope and pray we get true high speed service in my lifetime in the US.