North American High Speed Rail

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High speed electric rail is the best mode to achieve intercity high speed ground transportation. Maglev can be used for downtown to airport trips. Other modes such as high speed diesel rail and battery powered rail simply can't perform the task.

High speed electric rail consists of trains that use steel wheel — on steel track and 25000 volt AC catenary. High speed trains can run on existing track into existing downtown train stations. In addition, electric trains get cab power from the catenary, whereas maglev gets cab power from non-contact magnets. Unlike diesel, high speed electric trains can achieve speeds of up to 200 mph (of course, speeds that high require dedicated trackage). Also, electric locomotives are more efficient than diesel in that they can pull three times as much weight. Battery powered rail is total rubbish since the train might as well get power from overhead catenary.

As of 2023, the only high speed intercity railroad in America is the Acela Express from Boston to Washington. That route is 450 miles long, and runs off electric catenary. The rest of Amtrak is mostly low to medium speed diesel. This situation is appalling for an industrialized nation. America, the world's premier superpower, is lagging behind other countries such as China, France, Japan, and Germany, when it comes to advanced rail technology. For example, China has almost 26000 miles of high speed electric rail, and they are building more. Why doesn't America have such a vast, high speed rail system? Excuses, such as "It costs too much", or "The geographic distribution of America doesn't allow for this" are both false.

The first excuse is nonsense because America has a higher GDP than China, and yet China can afford to build such a vast system. The second excuse is totally absurd because rail has always served every region of the country, especially in the early 20th century. Furthermore, America has an inexhaustible power source (nuclear fusion) that can be used to run electric trains.

In conclusion, with the proper funding and commitment, American high speed rail can have a bright future, and can cover most regions of the country within the next few decades.