

## Do You Need To Build New Tracks For Ohio To Operate Passenger Rail Service At 110-MPH?

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There has been a lot mentioned in the media recently about the speed of Ohio's passenger rail service. Most recently, there has been some confusion over whether Ohio would need to build new tracks to achieve service at 110-MPH. The current plan is to roll-out passenger rail service along the Cincinnati-Dayton-Columbus-Cleveland at speeds of 79-MPH. **The simple answer to the question about whether new tracks would be necessary for achieving speeds of 110-MPH is "no".**

Too much emphasis has been placed on maximum speeds. Experience with other new start passenger rail services show that improved reliability, frequent service, convenience and service amenities are also important factors in attracting riders.<sup>1</sup>

The 3C "Quick Start" Project has consistently been communicated as a first step to bringing high-speed passenger rail to our state. In order to quickly offer this travel option to 6.8-million Ohioans living along the 3C corridor, **Ohio can implement speeds at 79-MPH by making some initial upgrades to the existing tracks now being used solely for freight transportation.**

The 3C "Quick Start" Project calls for upgrades to freight bottleneck areas, rail signaling and improvements in safety at grade crossings. By making these upgrades, as well as preparing the corridor for the typical passenger rail amenities (i.e. stations, parking, last-mile transportation options, etc.), Ohio can start offering passenger rail service as early as 2012.

*The 3C "Quick Start" Project calls for upgrades to freight bottlenecks, rail signaling, and safety improvements in an effort to prepare for initial and higher speeds.*

Once the initial service is up and running at 79-MPH, the state will begin implementing additional corridor upgrades to achieve 110-MPH using the existing track infrastructure. However, **there are steps and negotiations with freight railroads that will need to be navigated in order to increase speeds.**

Freight railroads routinely allow passenger trains to operate at speeds up to 90-MPH on their existing tracks with some negotiations needed.<sup>2</sup> However, some freight railroads (particularly NS and CSXT which own the majority of Ohio's freight system) require that passenger rail service that operates at speeds greater than 90-MPH within their corridor be operated on separate, dedicated tracks. This is why freight railroads have cited this point in the MOU's submitted as part of their support of the Ohio passenger rail application submitted to the Federal Railroad Administration (FRA) by ODOT/ORDC. **However, to lift this freight railroad policy statement out of context as a blanket prohibition against allowing 110 mph speeds on their tracks is inappropriate, belies experiences in other states, ignores the negotiations that are part of Phase 2 planning, and federal law.**

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<sup>1</sup> Key US examples are the increase in service frequency and reliability seen on the *Capitol Corridor* between Sacramento and San Jose, as well as the *Keystone* service between Philadelphia and Harrisburg, and the *Pacific Surfliner* between San Luis Obispo and San Diego. Each route has seen a combination of frequency increases, travel time reductions, reliability improvement and targeted increase in top speed.

<sup>2</sup> Burlington Northern Santa Fe allows 90mph speeds over portions of its track in Kansas and Colorado (operated over by the *Southwest Chief*), as do the owners of the San Diego-Los Angeles corridor operated over by Metrolink and the *Pacific Surfliner* service. Freight railroads operate on the same Northeast Corridor tracks where Amtrak operates 150 mph (Same track). NS operates on Amtrak owned tracks in Michigan where the passenger trains operate at 95 mph today and will increase to 110 mph later this year. (Same track) BNSF owns the tracks that the Amtrak Southwest Chief operates on at 90 mph. Same tracks on NEC, Michigan and New York where Amtrak owns the track.

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**Section 24308 of Title 49 of the United States Code** provides that if a rail carrier refuses to allow accelerated speeds on their tracks by trains operated by or for Amtrak, Amtrak may apply to the U.S. Surface Transportation Board for an order requiring the carrier to allow the accelerated speeds.<sup>3</sup> The

Surface Transportation Board is charged with determining whether the accelerated speeds are safe or unsafe and which improvements would be required to make accelerated speeds safe and practicable.

After an opportunity for a hearing on the matter, the Surface Transportation Board (STB) may establish the maximum allowable speeds of Amtrak trains on terms the STB decides are reasonable.

To allow for either outcome – whether or not the freight railroads and STB agree to allow Ohio to operate 110 mph passenger service on existing freight railroads – **ODOT/ORDC needs to plan for the inevitability of having dedicated tracks at 110-MPH. To pre-judge the outcome of freight negotiations or a decision by the STB is premature and such questions will not be visited or even raised until Phase 2 negotiations are completed for 3C.**

*Ohio's approach is prudent and fiscally conservative, and follows the best practices of rail systems throughout the U.S. and the world.*

It is possible that the 3C rail route could eventually use a combination of existing, upgraded freight tracks and new track dedicated to passenger rail service based only on the outcome of these negotiations and hearings.

A scenario where new tracks would be required is when Ohio makes the decision to implement speeds up to 125-MPH. The current state-of-the-art rail technology would permit diesel trains to operate up to 125-MPH, but would require separate tracks and sealed corridors. To go beyond 125-MPH, service would have to electrify and might as well be built on a separate railroad. **Speeds of 250 mph make more sense for origins and destinations separated by at least 200 miles to allow for maximum operation of the train.**<sup>4</sup> Because of the short travel distances between Ohio's major population centers, trains would not have enough time or distance to reach full travel speed before they would have to slow down again.

Ohio's rail corridors are consistent with the goals outline for Regional High Speed Rail in the US Department of Transportation's "Vision for High-Speed Rail in America," which focuses service on population centers 100-500 miles apart, with speeds in the 110-150 mph range.

With additional upgrades to improve signalization and grade-crossing protections, and with deliberate negotiations with the freight lines and the STB, Ohio may be able to use existing tracks for speeds up to 110 mph. **Ohio's 3C "Quick Start" approach is prudent and fiscally conservative, and is encouraged by the FRA and Congress, following best practices of rail systems throughout the U.S. and the world.**<sup>5</sup> Starting a passenger rail line at 79-MPH and taking an incremental approach to higher speeds is a typical strategy in high-speed rail development.

<sup>3</sup> <http://uscode.house.gov/search/criteria.shtml>. See Title 49 Section 24308, and reference subsection (d) on Accelerated Transportation. Also, see CSXT and NS comments on the Richland/Hampton Roads Draft Environmental Impact Statement, Winter, 2010.

<sup>4</sup> Japan's "bullet trains," operating at speeds up to 186-mph, generally reserve their highest speeds for trains operating at least 200 miles between station stops (such as suburban Tokyo and Nagoya). China, which recently introduced 217mph service between Wuhan and Guangzhou operates most service nearly 600 miles without stopping. Western Europe, Korea, and Taiwan all have services operating at speeds of at least 186-mph combined with "local" trains that operate at lower, conventional speeds.

<sup>5</sup> See the commercial feasibility study published by the US DOT in September 1997: "High-Speed Ground Transportation for America".