

## **Solutionary Rail**, a people-powered campaign to electrify America's railroads and open corridors to a clean energy future

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Welcome to "Railbite" #3 from Solutionary Rail Electrify America's railroads ~ Open up the rail corridors for green-energy transmission!

## Rail Electrification Options: Why Solutionary Rail recommends starting with "Higher" Speed Rail

Currently, the buzzword for rail travel is "High Speed Rail." The term is being used broadly, but what does it mean? Brightline in Florida is being called "high speed," even though it travels at just 79 mph. So what is High Speed Rail and what are our best options? What about freight transportation – should the bulk of freight continue to be carried by trucks?

Drilling down a little, there's a difference between *ultra-high* speed bullet train rail, *high* speed rail, and what **Solutionary Rail advocates**, "*higher* speed rail":

- Higher Speed rail (HrSR) meaning moderately faster than current rail -- refers to maximum speeds of **80 mph for freight and 125 mph for passengers.**
- High Speed rail (HSR) even faster -- refers to mostly passenger trains traveling typically 150 mph and up to 200 mph.
- Ultra High Speed rail (uHSR) very fast "bullet trains" refers to **passenger trains** traveling over 200 mph.

Why does Solutionary Rail recommend starting with Higher Speed Rail (HrSR) rather than with faster high-speed trains? It's not an either/or choice, but consider this:

- Solutionary Rail's plan for freight and Passenger trains traveling at higher speeds (HrSR) of 80-125 mph require simply upgrading the tracks we have now, on the corridors we have now, and electrifying the system with high-voltage overhead power lines sooner and for much less money than building a network of faster high speed passenger trains.
- Solutionary Rail's plan includes a return of more high-value freight to the railroad and therefore a reduction in the number of trucks on the highway, relieving congestion and reducing wear and tear on our roads in addition to providing a viable alternative to air travel for passengers.
- Solutionary Rail's plan for an upgraded, electrified rail system does not rule out faster, high-speed and ultra high speed passenger rail where these makes sense. Solutionary Rail's "higher speed" option could lay the groundwork for faster HSR by laying HSR-grade track whenever there is an opportunity to.

	Higher Speed (faster than current train travel - HrSR)	High Speed Rail (much faster than current -HSR)	Ultra-High Speed "Bullet Train" Rail ( <i>very fast</i> - <mark>uHSR</mark> )
Type of project	Electrified. Requires upgrades of existing rail corridors, improving trains' average speeds.	Electrified. Usually requires a new corridor and resource-intensive construction.	Electrified. Requires a new corridor and resource-intensive construction.
Freight Train Max. Speed	Up to <b>80 mph</b> for freight, promoting a shift of freight from trucks to rail.	Little to no freight train capacity.	No freight train capacity.
Passenger Train Max. Speed	Usually limited to 110- 125 mph, depending on the corridor; 150 mph possible on some routes. Additional train cars for package freight possible.	125-200 mph, depending on the corridor. Additional train cars for package freight possible.	>200 mph
Track Construction Requirements (and \$ cost)	Requires <b>upgrade to existing track</b> and construction of consistent double tracks – least expensive option.	Requires resource- intensive <b>new</b> <b>track</b> and structures.	Requires resource-intensive new track, bridges, tunnels also time-intensive new land purchases, new easements and impact assessments — most expensive option that would make sense for some but not all lines.
Capacity to service small towns and cities	Feasible for servicing rural stops and towns at short intervals on routes as well as cities at longer intervals.	Some feasibility for servicing rural stops and towns at short intervals on routes.	Not feasible for servicing rural stops and towns at short intervals on routes.
Solutionary Rail Recommends			

More on these issues at

www.solutionaryrail.org/factsnfalsesolutions and www.solutionaryrail.org/video

Legislators and policymakers have a lot of information to sort through -- we hope our "RailBites" will help you gather essential information about modernizing and electrifying our transportation infrastructure. Please use us as a resource! Contact <a href="mailto:info@solutionaryrail.org">info@solutionaryrail.org</a> or 206-408-8058.