

# Ready for Some (Hyper)-Loop-De-Loop?

## High-Speed Transit System the Dreamwork of Ideators — or Idiots?

**OK**—going to Mars, it is not. But if Elon Musk has his way—and he often does—we'll be able to travel distances up to 1,000 miles, in about 90 minutes—at 800 mph.

And the Hyperloop is the magic carpet ride that will get us there.

Musk, the entrepreneurial, hi-tech wunderkind (Tesla Motors, SpaceX), presented his concept (back in the day, things like this were called “gizmos”) this summer in a 58-page proposal. Initial reaction was predictably skeptical—if not downright insulting. Essayist Tad Friend, in the *New Yorker*, referred to Musk's vacuum train as little more than a “napkin doodle.” The engineering community seemed to agree. Others highly doubt it can be built for the \$6 billion that Musk claims will be sufficient.

The proposed—beta, you might say—route for the high-speed system is Los Angeles to San Francisco. Travel time? Approximately 30 minutes. In part, the Hyperloop is Musk's response to California's proposed high-speed train, a project Musk has deemed inferior on several levels, including speed and cost. So politics—and greed (\$6 billion vs. \$70 billion)—will play a role in determining the Hyperloop's development—or lack of same.

Significantly, however, after the initial scoffers weighed in, a group of would-be angels have stepped up to help make the Hyperloop a reality. According to a Nick Statt *CNET* article last month, *JumpStartFund* (since 2002, a California-based online, crowdsourcing nexus for hi-tech entrepreneurs, rainmakers, investors and inventors; *jumpstartfund.com*) has dedicated a Hyperloop marketing/funding platform on its site in order to attract other entrepreneurs and big-brain types for investment and engineering support—and credibility.

“We want to be the ones that actually make (the Hyperloop) happen,” said Dirk Ahlborn, CEO and co-founder of *JumpStartFund*, in a recent inter-

view. “So of course we need to create a corporation. Whoever decides to dedicate more time to this than just logging onto the (site) deserves to be part of this company.” Guided by Musk's proposal, Ahlborn said his group is working towards sometime next year to have the “train” in a more complete design stage, from which a prototype will hopefully emerge.

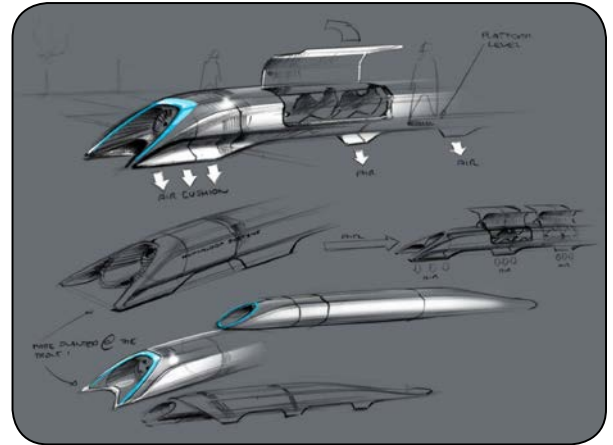
### How it works (theoretically):

According to Musk, the Hyperloop would consist of elevated (think El in Chicago's Loop) aluminum pods suspended on a thin layer of air inside two steel tubes—one running in each direction. The reduced-pressure tube would contain pressurized capsules driven within the tube by a number of linear electric motors. The design also requires a capsule that would ride on “skis” outfitted with air bearings to provide a cushion of air that is forced through multiple openings on the capsule's bottom. Green-wise, Hyperloop would deploy solar panels atop the tubes for its primary power source.

The concept received a huge boost when ANSYS, the design software supplier, conducted simulations and, according to a *Discovery News* report, announced that—with some further R&D—this thing could actually work.

Meanwhile, *JumpStartFund* says things are now at “in progress” mode. Also joining and adding luster to the work-in-progress team are engineers Marco Villa, formerly of SpaceX, and Patricia Galloway, a former U.S. National Science Board member and vice chairwoman.

According to the *CNET* report, “*JumpStartFund* is also accepting applications from members of the site to work full-time on the Hyperloop project in exchange for equity in the company. “We want to find a way to give everyone the ability to be a part of this



project,” said Ahlborn. “Everything is going to be very transparent, and we intend to reserve a percent of future (equity) revenues for people that work with us on the platform.”

In just a few days after start-up, reportedly, “more than 20,000 people” visited *JumpStartFund*'s website expressing, at minimum, curiosity—if not serious interest—in Hyperloop. One can easily imagine *Facebook* and others being only a quick click away from joining in on the fun. Indeed, Ahlborn is hoping others will jump in with—if not capital—expertise to help move the project to fruition.

For some feasibility vs. fantasy perspective, Samuel R. Staley in *CNN.com* points out that throughout history, technology advances have been considered impossible to realize—until someone went ahead and made them. Invoking the steam-powered locomotive as an example, Staley points out that while it “was considered the stuff of fancy” when William Murdoch built his engine prototype in the 1780s, a legitimate railroad industry emerged within just a few decades. And this from *Gizmodo.com*'s Joel Johnson: “We should be cheering Musk on.”

Added *JumpStartFund*'s Galloway in, perhaps, a bit of unintended irony (or hedging): “I believe this project will revolutionize how transportation will be viewed for future travel, to and from major cities—similar to the way the Concorde almost changed air travel.”

“Almost”?! **PTE**