Chicago to Cleveland in 32 minutes? A hyperloop system could make that possible. But first, the technology has to work.

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A hyperloop, a high-tech, high-speed transportation system, could take you from Chicago to Cleveland in 32 minutes, or less time than it takes to watch two "Hot in Cleveland" episodes on your phone.

That kind of speed—10 times faster than a car, more than twice as fast as a plane—could bring an explosion of economic growth, according to a new study.

Building a hyperloop system to carry passengers between Chicago, Cleveland and Pittsburgh could lead to more than 900,000 jobs and $47.6 billion in increased income, according to the Great Lakes Hyperloop Feasibility Study being released Monday by the Northeast Ohio Areawide Coordinating Agency, which coordinates regional transportation spending.

"I think it would be a great opportunity for transforming transportation and the way we live and work and play," said Grace Gallucci, executive director of the Cleveland-based agency. The agency shared the cost of the $1.3 million study with Hyperloop Transportation Technologies, or HyperloopTT, a California company interested in developing the route.

The technology is still in development, so the timeline for when the system could be built is still a mystery. It's hard to get too hyped over something still being tested.

"A service this fast would be exciting, but the obstacles still seem enormous," said Joseph Schwieterman, a DePaul University transportation expert.

The obstacles include technical challenges, the problem of acquiring right-of-way, and legal and regulatory issues, Schwieterman said.

A hyperloop consists of a passenger pod traveling through a metal tube maintained at a partial vacuum. Magnets cause the pod to move and levitate over the track once it picks up enough speed, explained Dirk Ahlborn, CEO and founder of HyperloopTT.

Removing air from the tube eliminates wind resistance and friction, allowing the pods to reach speeds as high as 700 mph while using little energy. Gallucci said that by using solar panels, the system could actually create more power than it uses, and feed it back into the grid.

By removing the air inside the tube, a low-pressure environment is created, similar to what an airplane encounters at high altitudes. "You can go faster with much less energy if you don't have a lot of resistance," Ahlborn said.

HyperloopTT is just one of the companies working on the technology—others are Virgin Hyperloop One and entrepreneur Elon Musk's The Boring Company. Musk proposed building something like a hyperloop between downtown and O'Hare International Airport, but without using a vacuum. Mayor Lori Lightfoot didn't support the project, and it appears to be dead.

Other hyperloop routes are being considered around the nation and the world, including in Missouri, Colorado, India and the United Arab Emirates.

HyperloopTT is testing the technology in a 320-meter tube in Toulouse, France. It has a passenger capsule that's 9 feet in diameter and similar to the body of a regional jet airplane, Ahlborn said.

HyperloopTT plans to test the pods, with people inside, in the first half of next year. Ahlborn plans to be among the first riders, along with Henriette Ardouin, a 101-year-old French woman who remembers how her father doubted airplanes could fly, and who appears in a Hyperloop promotional film.

Ahlborn is confident that the system—which uses existing technology developed by the aerospace industry—will be safe. The biggest challenge

is getting the right regulations in place to allow implementation, he said.

"You can't build anything unless you have the green light from the government," said Ahlborn, whose company is working on insurance issues and safety guidelines.

The Ohio study was conducted by Transportation Economics & Management Systems, also known as TEMS, a transportation industry research firm. The Illinois Department of Transportation and the Indiana Toll Road were among the agencies that collaborated on the project.

The study looked at three possible routes between Chicago and Cleveland, and two routes between Cleveland and Pittsburgh.

Gallucci said the Cleveland-Chicago route is the best in the country for a hyperloop pilot, since it's less than 400 miles, the land is mostly flat and there is already a lot of car and plane traffic between the two cities. Both cities have plenty to offer each other, including large research hospitals, symphonies, art museums and universities, said Gallucci, a former Regional Transportation Authority official.

"There's an opportunity for someone who lives in one city to go to work in another," Gallucci said.

There's also a right-of-way available along the Interstate 80/90 Tollway, which would eliminate much of the need for land acquisition, Gallucci said. The proposed Chicago routes range from 315 miles to 337 miles, depending on alignment, and would run mostly along I-80/I-90, the study said. The trips would range in time from about 32 to 47 minutes, at speeds of 439 to 593 mph.

The project would not require operating subsidies, and could be financed entirely by a private company, the study found. The study imagines a

possible build-out period between 2023 and 2028, from initial site work to heavy construction to testing.

A hyperloop system also offers environmental benefits, cutting carbon dioxide emissions by 143 million tons over the next 25 years, the study said. Ahlborn said it is easier for people to choose to be "green" if they have a green alternative that costs the same or less than the polluting one.

A flight to Cleveland can cost between $150 and $500, depending on the day and the airline, and take an hour and twenty minutes, not counting time spent at the airport. A car trip would take five to six hours, and cost around $57, including the cost of gas and tolls, according to the tollguru.com web site. Amtrak would take six hours and cost $60 to $92, depending on the day.

"It's great when you find alternatives that are actually better, and use green alternatives to do better business," Ahlborn said.

The current study does not address where the stations would be, land acquisition or the cost of fares, though Gallucci said the goal is to make them affordable. She said stations, which could be downtown or at airports, would link to public transit.

After the study is released Monday, the results will be submitted to the U.S. Department of Transportation, and there will be a 45-day comment period and peer review. Next will be an environmental impact study and preliminary engineering.

Rick Harnish, executive director of the Midwest High Speed Rail Association, said he wishes transportation officials were looking at high-speed trains between Cleveland and Chicago, instead of an unproven technology.

"We know the trains work," Harnish said. Countries that already have high-speed trains, which run at sustained speeds of 150 mph or more, include England, Saudi Arabia, South Korea and China.

Gallucci said her agency would consider high-speed rail between Cleveland and Chicago if approached by a private sector company. But no such company has come forward, while HyperloopTT has.

"We view Hyperloop as essentially the next generation of that high-speed concept," Gallucci said.