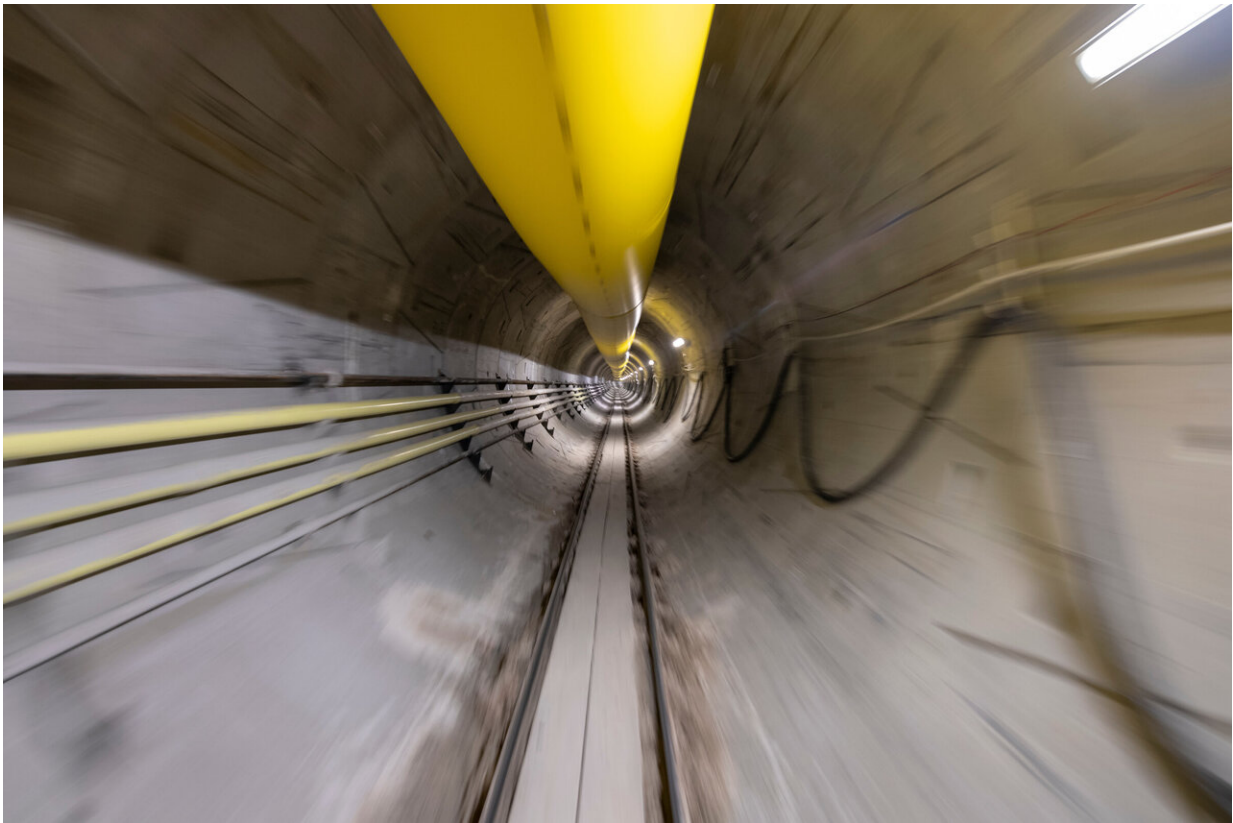


Las Vegas excavation gives new meaning to Tunnel Vision

February 17 2020, by Nancy Cohen



A view inside the Boring Company people mover tunnel, under construction beneath the Las Vegas Convention Center Central Halls, as the construction train ferries guests on Thursday, Jan. 9, 2020. Credit: Mark Damon/Las Vegas News Bureau, © Las Vegas News Bureau/Las Vegas Convention and Visitors Authority

Stress balls and sneakers have been valuable assets for any suitcase traveler going to Las Vegas on assignment. Nobody needs a reminder who has travelled to Vegas for work purposes that getting from place A to place B requires leg work or a lot of patience sitting in traffic. But then there is Elon Musk.

The Las Vegas Convention and Visitors Authority ([LVCVA](#)) recently announced that excavation was complete in the first of two tunnels in the Boring Company underground transportation system beneath the Las Vegas Convention Center campus.

The Loop will shuttle people beneath the Las Vegas Convention Center campus starting next year. The Las Vegas Convention and Visitors Authority said that excavation had finished for the first of two tunnels.

"After tunneling 40 feet underground for nearly a mile over the past three months, the boring machine hours ago broke through the concrete wall located near the 1.4 million square foot West Hall convention center expansion, currently under construction, signaling the official completion of excavation for the first of two one-way tunnels," said the release.

The Convention Center Loop is to move the thousands of convention attendees throughout the more than 200-acre campus with potential for expansion, it said, to ease congestion throughout the Las Vegas resort corridor.

"Next, the machine will be disassembled, transported via trucks and lowered back into the launch pit near the Convention Center's South Hall where it will begin boring a parallel path adjacent to the first [tunnel](#). The first commercial endeavor for the new tunneling company is designed to transport up to [4,400](#) convention attendees per hour and is scheduled to debut to the public in January 2021."

In short, this is Elon Musk's big idea for a tunnel system to alleviate road traffic and it is set to go to work in Las Vegas.

"The system will allow convention attendees to be whisked across the sprawling campus in just over one minute, free of charge, in all-electric Tesla vehicles."

Musk's Boring Company is the driving force for this type of transportation. The LVCC Loop will connect the LVCC New Exhibit Hall with the existing campus (North/Central/South Halls).

Excavation is complete for the first of two tunnels that will comprise Elon Musk's innovative underground transportation system beneath the LVCC campus. The project is scheduled to debut in January 2021. pic.twitter.com/CwpxEWDXYc

— LVCVA (@LVCVA) [February 14, 2020](#)

Shortened trip times was a big talking point. Reports said walk time between the New Exhibit Hall to the existing North/Central Hall can take up to 15 minutes. The same trip on the LVCC Loop would take about 1 minute.

Any future expansion would be designed with similar construction infrastructure and autonomous electric vehicles and would provide an express connection between any two stations. Loop extensions beyond the LVCC Loop will operate at speeds of up to 155 mph, said reports.

The [Bloomberg](#) story's headline referred to a "breakthrough." That is a strong word but justified when considering this publicly available transportation system that the Boring Company will deliver.

"This marks an important milestone in the future of transportation," said

Steve Hill, LVCVA CEO and president. "Las Vegas is proud to lead the way as the first and only destination to offer an underground transportation solution for moving visitors throughout our convention center."

A Feb. 14 news release from the LVCVA said that "The first commercial endeavor for the new tunneling company is designed to transport up to 4,400 convention attendees per hour and is scheduled to debut to the public in January 2021." Sean Szymkowski in *Roadshow* [commented](#) that "Elon Musk turned a weird idea into a real-world service."

Future expansions would carry compatible construction infrastructure and EVs, said reports.

High-occupancy vehicles will have room for 16 passengers.

Szymkowski was impressed over a video showing the Boring Company's drilling machine break through the final portion after three months of operation. "The company's machine worked 40 feet under the ground and bored through nearly a mile in that amount of time. It's pretty remarkable to see, honestly," he said.

Simon Alvarez, [Teslarati](#): "This would mark the first half of its high-speed transport system intended to shuttle convention attendees across the sprawling Las Vegas Convention campus in just over one minute, free of charge, in all-electric Tesla vehicles."

What's next? The system serving the Convention Center could be widened into the rest of Las Vegas. The second tunnel. This was brought out clearly by [Electrek](#) which explained the challenge. "The next step is to disassemble the boring machine, transport it back to the launch pit near the convention center's south hall, and start digging the second

tunnel," said Fred Lambert.

Boring has plans to build a transportation system that covers the Strip and other parts of Vegas, [said](#) Mariella Moon in *Engadget*. In brief, they are working toward a bigger potential of an expanded loop transportation system around the city, said reports, on the strip and to the airport.

The largest vehicle would hold 16 people and would be on a Tesla chassis.

Boring prides itself in coming up with a traffic solution sending vehicles underground at an affordable cost.

How did they cut costs to deliver this tunneling project?

"First, we reduced the tunnel diameter," the Boring FAQ page said. While the one-lane tunnel standard is approximately 28 feet, the use of autonomous electric vehicles meant the diameter could be reduced to less than 14 feet. Reducing the diameter in half reduces tunneling costs by three to four times. Second, they worked to increase the speed of the Tunnel Boring Machine.

A reader [comment](#) on the *Engadget* site was favorable over their cost approach:

"The Boring company uses a slightly smaller bore than most US mass transit systems use but it is bigger than some of the London Underground bores, so they can supply tunnels that can carry a LOT of people at relatively high speed. And the cost per mile is less than a third of old fashioned tunneling systems. Plus, they believe they can cut even more cost out of their tunneling process. This could be very useful for midsized to large cities looking to build mass transit systems at relatively bargain prices."

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