# Hard Tech Fund: Hyperloop Research Symposium

## Overview

The Hard Tech Fund is an organization dedicated to the development of a renewable and sustainable infrastructure for new transportation paradigms. Specifically, the organization is focused on the development of the Hyperloop concept - a transportation system that utilizes pods that fit between 5 and 80 people within a vacuum chamber to allow for supersonic transportation - through the development of events and programs that provide resources and reviews of Hyperloop related projects.

## Problem

According to the World Resources Institute, transportation alone contributed to **25% of the world's CO<sub>2</sub> emissions in 2016**, and according to the Rhodium Groups was the **leading cause of emissions in the United States in 2019**. The problem is especially problematic for poorer communities, wherein the increased prevalence of motorized vehicles and roads leads to greater opportunities, with, according to the World Bank, every **\$1 Billion spent on roads leading to on average 110,000 new jobs**, but also to the construction of more oil refineries and refute sites in their neighborhoods, with almost **81% of Californians living within 3km of such a site being people of color**. Providing transportation services without detriment to a community is the only responsible way to create sustainable growth.

Developed as a concept in 2013, Hyperloop promised to be a potential solution to this problem. Hyperloop provided a new transportation paradigm that would allow people to commute between the two megapolises of California in about 45 minutes, making it potentially possible to live and work anywhere in the state and decreasing real estate costs statewide. This led to the development of the Hyperloop Competition from SpaceX, a program to help students test new pod designs in SpaceX's one mile vacuum chamber. After 5 years, there are **no details for a 2020 competition** from SpaceX, regarding cancellation or continuation. This lack of continuation is unacceptable; there are thousands of students and innovators worldwide who have raised hundreds of thousands of dollars in the hope of this new shift in transportation, and have no way to develop their product.

### Solution

To provide innovators with an avenue to present their work, the Hard Tech Fund presents the **Hyperloop Research Symposium**. This symposium will be a conference on July 22 and 23rd that will take place virtually between watch events in San Francisco, Chicago, Dublin, and other locations with strong Hyperloop interest to discuss issues regarding pod construction, track construction, track power constraints, and the Hyperloop experience. The goal of the symposium is the creation of a report on the current state of Hyperloop development; an overview of the problems, discussed solutions, and proposed projects that had risen throughout the conference. With the skills, funding, and technology all in existence and in cooperation towards a common goal, sustainable development is possible.

### Interested?

In order to participate in the Symposiums, all participants must submit a paper related to the topics of pod construction, track construction, track power constraints, and the Hyperloop experience to the Hard Tech Fund email by May 1st: info@hardtechfund.com. The Hard Tech Fund will also be holding and/or supporting events to help groups prepare for the Symposium, such as Caltrans' HackATrain for University of California/California State University students. To learn more about these, please take a look at our website <a href="http://hardtechfund.com">http://hardtechfund.com</a>