

Hydroloop

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The purpose of this project is to attempt to combine the hyperloop with other techniques to make it cost-effective while being just as efficient. With the idea of Elon Musk's hyperloop, combined with the concept of the aqueduct and the speed of a water jet, I believe it could be much more inexpensive and still be quick. To build this project, I had to first saw a 2 cm. incision onto the PVC pipe, followed by constructing the outer body. That can be done by either a 3D printer, or a 2.75 lt. soda bottle. Then, I made a chassis that attached to the motor and the battery and combined it with the outer body. After, I ran 6 trials with the same distance of 10 feet. Throughout the trials, the Hydroloop showed mainly positive results. When converted, its scale speed moves comparable to that of a car, and something that I noticed is over time, the pod would begin to move faster as it advanced through the track. With longer distances, it could go quicker, and that's one thing I would want to test further into the project. In conclusion, my hypothesis was correct. With the materials I used, the Hydroloop was able to function in an efficient and quick manner. The concept tested, however, isn't the finalized model. It just uses the power of the water jet. With the fully developed model, aqueduct and tube, I believe it will be even more efficient while remaining inexpensive.