### THE GENERAL ASSEMBLY OF PENNSYLVANIA

# HOUSE RESOLUTION No. 1057 Session of 2018

## INTRODUCED BY KAUFER, COOK, PICKETT, READSHAW, MILLARD, NEILSON, RADER AND DALEY, SEPTEMBER 17, 2018

### REFERRED TO COMMITTEE ON TRANSPORTATION, SEPTEMBER 17, 2018

#### A RESOLUTION

1 2 3 4 5 6 7	Directing the Legislative Budget and Finance Committee to conduct a study for the potential of a hyperloop system that would run from Pittsburgh, Pennsylvania, to Philadelphia, Pennsylvania, with a stop in Harrisburg, Pennsylvania, as well as a northeast extension that would operate between Harrisburg, Pennsylvania, and Wilkes-Barre/Scranton, Pennsylvania.
8	WHEREAS, People have been dreaming of high-speed travel in
9	tubes, including in vacuum, for more than a century; and
10	WHEREAS, Elon Musk, the CEO of the aerospace firm SpaceX, as
11	well as Tesla, first described his idea for the futuristic
12	transportation system in August 2013; and
13	WHEREAS, The concept of a hyperloop seemed hypothetical at
14	the time, but, a handful of states and firms are currently
15	competing to develop the necessary technologies and to study the
16	feasibility of this system; and
17	WHEREAS, While it is understood that many engineering and
18	regulatory hurdles must be addressed before the technology is
19	ready for paying customers, the Commonwealth cannot stand idly
20	by as surrounding states put resources toward making this

1 hypothetical concept a reality; and

2 WHEREAS, In 2018, transportation agencies in the Columbus, 3 Ohio, region and in Illinois announced they would cosponsor a 4 \$1.2 million study of a hyperloop connecting Columbus, Ohio, to 5 Chicago, Illinois, thus cutting the 350-mile journey to just 30 6 minutes; and

7 WHEREAS, The hyperloop would also connect Columbus, Ohio, to8 Pittsburgh, Pennsylvania; and

9 WHEREAS, It is the fourth public study of the transportation 10 mode to be recently undertaken; and

11 WHEREAS, In 2017, Elon Musk, founder of The Boring Company, 12 announced that his company received verbal government approval 13 to build a hyperloop connecting New York City, New York, to 14 Washington, DC, with a projected travel time of 29 minutes and 15 planned stops in Philadelphia, Pennsylvania, and Baltimore, 16 Maryland; and

WHEREAS, This Commonwealth has a rich history in regards to transportation; and

19 WHEREAS, In 1791, the General Assembly approved a Statewide 20 transportation plan, and one year later created the Philadelphia 21 and Lancaster Turnpike Road Company; and

22 WHEREAS, The Pennsylvania Turnpike officially entered service 23 in 1940 as the first of its kind, spanning just 160 miles from 24 Carlisle, Pennsylvania, to Irwin, Pennsylvania; and

25 WHEREAS, In 2018, the Pennsylvania Turnpike spans 552 miles, 26 serves an average of 550,000 motorists a day traveling a total 27 of 5.7 billion miles annually; and

28 WHEREAS, The Pennsylvania Railroad also played a significant 29 role in the development of this Commonwealth; and 30 WHEREAS, The Pennsylvania Railroad was established and

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headquartered in Philadelphia, Pennsylvania, in 1846, and was
the largest railroad by traffic and revenue in the United States
for the first half of the 20th century; and

4 WHEREAS, At one time, the Pennsylvania Railroad was the 5 largest publicly traded corporation in the world, with a budget 6 larger than that of the United States Government and a workforce 7 of about 250,000 individuals; and

8 WHEREAS, There has not been a major new form of 9 transportation in 100 years, especially one that is ultrafast, 10 on demand, direct, emission-free, energy-efficient and quiet, 11 and has a smaller footprint than other high-speed transportation 12 modes; and

13 WHEREAS, A growing global economy requires faster, cheaper, 14 safer and more efficient transportation methods which tend to be 15 more of a mix of expensive, slow and environmentally harmful; 16 and

WHEREAS, These emergent transportation systems need to be studied to fully understand the capabilities and feasibility of each; and

20 WHEREAS, Hyperloop transportation has the capability to move 21 freight and people quickly, safely, on demand and direct from 22 origin to destination at two to three times faster than high-23 speed rail and magnetic levitation trains and 10 to 15 times 24 faster than traditional rail via electric propulsion through a 25 low pressure tube; and

26 WHEREAS, The hyperloop vehicle floats above the track using 27 magnetic levitation and glides for long distances due to ultra-28 low aerodynamic drag; and

29 WHEREAS, Pods accelerate until they reach a speed where they 30 levitate, like a boat moving along the water; and

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WHEREAS, A series of vacuum pumps removes much of the tube's
air, to the point where the atmosphere is similar to being
200,000 feet above sea level; and

WHEREAS, While traditional trains are limited by friction, both against the air ahead and the ground beneath, hyperloop drastically reduces friction in both of these areas; and WHEREAS, Companies such as Virgin Hyperloop One and Hyperloop Transportation Technologies have undertaken the challenge of turning a hyperloop into a reality; and

10 WHEREAS, The Commonwealth has an opportunity to further 11 benefit from hyperloop technology by leveraging corporate and 12 institutional talent and resources to participate in the 13 research and development of the technology, and the supply chain 14 needed to produce and construct hyperloop corridors; therefore 15 be it

16 RESOLVED, That the House of Representatives recognize Pennsylvania's role as a leader in the field of transportation 17 18 and direct the Legislative Budget and Finance Committee to 19 authorize to contract with an independent, third party which is 20 currently involved in a similar study; and be it further 21 RESOLVED, That the House of Representatives direct the Legislative Budget and Finance Committee to conduct a study for 22 23 the potential of a hyperloop system that would run from 24 Pittsburgh, Pennsylvania, to Philadelphia, Pennsylvania, with a 25 stop in Harrisburg, Pennsylvania, as well as a northeast 26 extension that would operate between Harrisburg, Pennsylvania, and Wilkes-Barre/Scranton, Pennsylvania; and be it further 27 28 RESOLVED, That this contracted entity be a fully integrated 29 professional and technical service firm positioned to design, 30 build, finance and operate infrastructure assets around the

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1 world for public and private sectors; and be it further 2 RESOLVED, That the Legislative Budget and Finance Committee 3 or its contractor be authorized to assemble and subcontract with academic institutions in this Commonwealth that are 4 acknowledged, recognized and capable leaders within the 5 transportation industry; and be it further 6 7 RESOLVED, That the study examine the potential for a 8 hyperloop system that would run from Pittsburgh, Pennsylvania, to Philadelphia, Pennsylvania, with a stop in Harrisburg, 9 Pennsylvania, as well as a northeast extension that would 10 11 operate between Harrisburg, Pennsylvania, and Wilkes-12 Barre/Scranton, Pennsylvania, while considering the geographical 13 barriers to the most optimal route; and be it further 14 RESOLVED, That the study identify new economic and social 15 opportunities for companies and citizens in this Commonwealth; 16 and be it further

17 RESOLVED, That the study develop findings and recommendations 18 on the potential impact that a hyperloop system would have on 19 the established rail and aviation systems throughout this 20 Commonwealth; and be it further

21 RESOLVED, That the Legislative Budget and Finance Committee 22 issue a report of its findings and recommendations to the House 23 of Representatives within 18 months of the adoption of this 24 resolution.

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