### 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

AS AMENDED, HOUSE OF REPRESENTATIVES, OCTOBER 17, 2018

#### A RESOLUTION

1 2 3 4 5 6 7 8	Directing the Legislative Budget and Finance Committee PENNSYLVANIA TURNPIKE COMMISSION, IN CONSULTATION WITH THE DEPARTMENT OF TRANSPORTATION, 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.	< <
9	WHEREAS, People have been dreaming of high-speed travel in	
10	tubes, including in vacuum, for more than a century; and	
11	WHEREAS, Elon Musk, the CEO of the aerospace firm SpaceX, as	
12	well as Tesla, first described his idea for the futuristic	
13	transportation system in August 2013; and	
14	WHEREAS, The concept of a hyperloop seemed hypothetical at	
15	the time, but, a handful of states and firms are currently	
16	competing to develop the necessary technologies and to study the	
17	feasibility of this system; and	
18	WHEREAS, While it is understood that many engineering and	
19	regulatory hurdles must be addressed before the technology is	
20	ready for paying customers, the Commonwealth cannot stand idly	

1 by as surrounding states put resources toward making this
2 hypothetical concept a reality; and

3 WHEREAS, In 2018, transportation agencies in the Columbus, 4 Ohio, region and in Illinois announced they would cosponsor a 5 \$1.2 million study of a hyperloop connecting Columbus, Ohio, to 6 Chicago, Illinois, thus cutting the 350-mile journey to just 30 7 minutes; and

8 WHEREAS, The hyperloop would also connect Columbus, Ohio, to 9 Pittsburgh, Pennsylvania; and

10 WHEREAS, It is the fourth public study of the transportation 11 mode to be recently undertaken; and

12 WHEREAS, In 2017, Elon Musk, founder of The Boring Company, 13 announced that his company received verbal government approval 14 to build a hyperloop connecting New York City, New York, to 15 Washington, DC, with a projected travel time of 29 minutes and 16 planned stops in Philadelphia, Pennsylvania, and Baltimore, 17 Maryland; and

18 WHEREAS, This Commonwealth has a rich history in regards to 19 transportation; and

20 WHEREAS, In 1791, the General Assembly approved a Statewide 21 transportation plan, and one year later created the Philadelphia 22 and Lancaster Turnpike Road Company; and

23 WHEREAS, The Pennsylvania Turnpike officially entered service 24 in 1940 as the first of its kind, spanning just 160 miles from 25 Carlisle, Pennsylvania, to Irwin, Pennsylvania; and

26 WHEREAS, In 2018, the Pennsylvania Turnpike spans 552 miles, 27 serves an average of 550,000 motorists a day traveling a total 28 of 5.7 billion miles annually; and

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

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1 WHEREAS, The Pennsylvania Railroad was established and 2 headquartered in Philadelphia, Pennsylvania, in 1846, and was 3 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 8 of about 250,000 individuals; and

9 WHEREAS, There has not been a major new form of 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 13 modes; and

14 WHEREAS, A growing global economy requires faster, cheaper, 15 safer and more efficient transportation methods which tend to be more of a mix of expensive, slow and environmentally harmful; 16 17 and

18 WHEREAS, These emergent transportation systems need to be studied to fully understand the capabilities and feasibility of 19 20 each; and

WHEREAS, Hyperloop transportation has the capability to move 21 freight and people quickly, safely, on demand and direct from 22 23 origin to destination at two to three times faster than high-24 speed rail and magnetic levitation trains and 10 to 15 times 25 faster than traditional rail via electric propulsion through a low pressure tube; and 26

WHEREAS, The hyperloop vehicle floats above the track using 27 28 magnetic levitation and glides for long distances due to ultra-29 low aerodynamic drag; and

30 WHEREAS, Pods accelerate until they reach a speed where they 20180HR1057PN4298

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1 levitate, like a boat moving along the water; and

2 WHEREAS, A series of vacuum pumps removes much of the tube's 3 air, to the point where the atmosphere is similar to being 4 200,000 feet above sea level; and

5 WHEREAS, While traditional trains are limited by friction, 6 both against the air ahead and the ground beneath, hyperloop 7 drastically reduces friction in both of these areas; and 8 WHEREAS, Companies such as Virgin Hyperloop One and Hyperloop 9 Transportation Technologies have undertaken the challenge of 10 turning a hyperloop into a reality; and

11 WHEREAS, The Commonwealth has an opportunity to further 12 benefit from hyperloop technology by leveraging corporate and 13 institutional talent and resources to participate in the 14 research and development of the technology, and the supply chain 15 needed to produce and construct hyperloop corridors; therefore 16 be it

17 RESOLVED, That the House of Representatives recognize 18 Pennsylvania's role as a leader in the field of transportation 19 and direct the Legislative Budget and Finance Committee to-<---20 authorize to contract with an independent, third party which is 21 currently involved in a similar study; and be it further 22 RESOLVED, That the House of Representatives direct the 23 Legislative Budget and Finance Committee PENNSYLVANIA TURNPIKE <---24 COMMISSION, IN CONSULTATION WITH THE DEPARTMENT OF 25 TRANSPORTATION, to conduct a study for the potential of a 26 hyperloop system that would run from Pittsburgh, Pennsylvania, 27 to Philadelphia, Pennsylvania, with a stop in Harrisburg, 28 Pennsylvania, as well as a northeast extension that would 29 operate between Harrisburg, Pennsylvania, and Wilkes-30 Barre/Scranton, Pennsylvania; and be it further

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1 RESOLVED, That this contracted entity be a fully integrated <--2 professional and technical service firm positioned to design, 3 build, finance and operate infrastructure assets around the world for public and private sectors; and be it further 4 5 RESOLVED, That the Legislative Budget and Finance Committee < or its contractor be authorized to assemble and subcontract with-6 academic institutions in this Commonwealth that are-7 8 acknowledged, recognized and capable leaders within the transportation industry; and be it further 9 10 RESOLVED, That the study examine the potential for a hyperloop system that would run from Pittsburgh, Pennsylvania, <--11 to Philadelphia, Pennsylvania, with a stop in Harrisburg, 12 13 Pennsylvania, as well as a northeast extension that would 14 operate between Harrisburg, Pennsylvania, and Wilkes-15 Barre/Scranton, Pennsylvania, while considering the geographical 16 barriers to the most optimal route; and be it further 17 RESOLVED, That the study identify new economic and social 18 opportunities for companies and citizens in this Commonwealth; 19 and be it further 20 RESOLVED, That the study develop findings and recommendations on the potential impact that a hyperloop system would have on 21 22 the established rail and aviation systems throughout this 23 Commonwealth; and be it further 24 RESOLVED, That the <del>Legislative Budget and Finance Committee <--</del> PENNSYLVANIA TURNPIKE COMMISSION AND DEPARTMENT OF 25 26 TRANSPORTATION JOINTLY issue a report of its findings and recommendations to the House of Representatives within 18 months 27 28 of the adoption of this resolution.

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