PUBLIC SPEAKING ASSESSMENT

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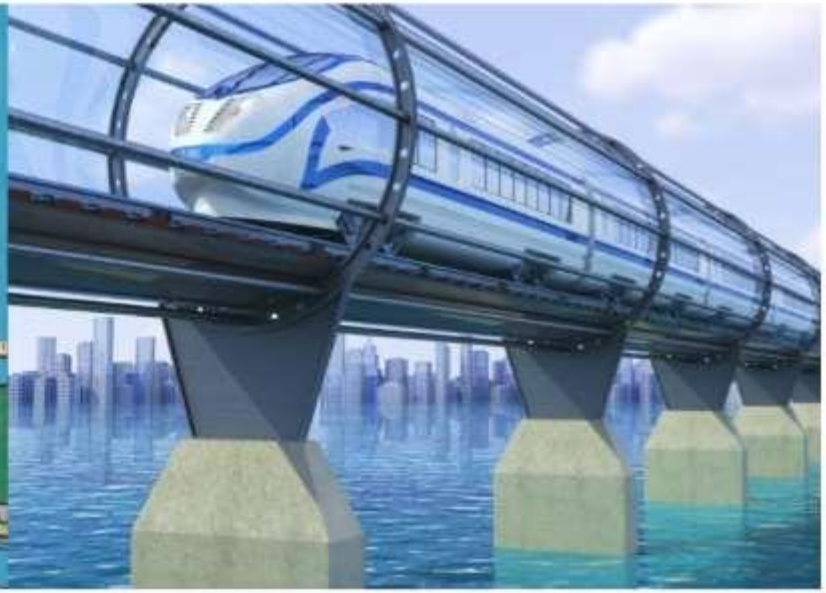
HYPERLOOP

PASSENGER TRANSPORTATION SYSTEM

The 5th form of transportation?



CONVENTIONAL MODES OF TRANSPORTATION:

1. RAIL relatively slow and expensive
2. ROAD relatively slow
3. WATER relatively slow
4. AIR expensive

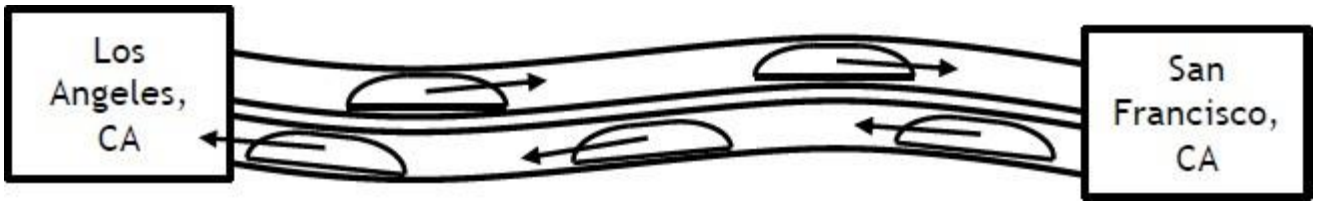
HYPERLOOP:

- Hyperloop is a new mode of transport ?
- Proposed by ELON MUSK.
- A high-speed train travel.
- Twice the speed of a commercial aircraft

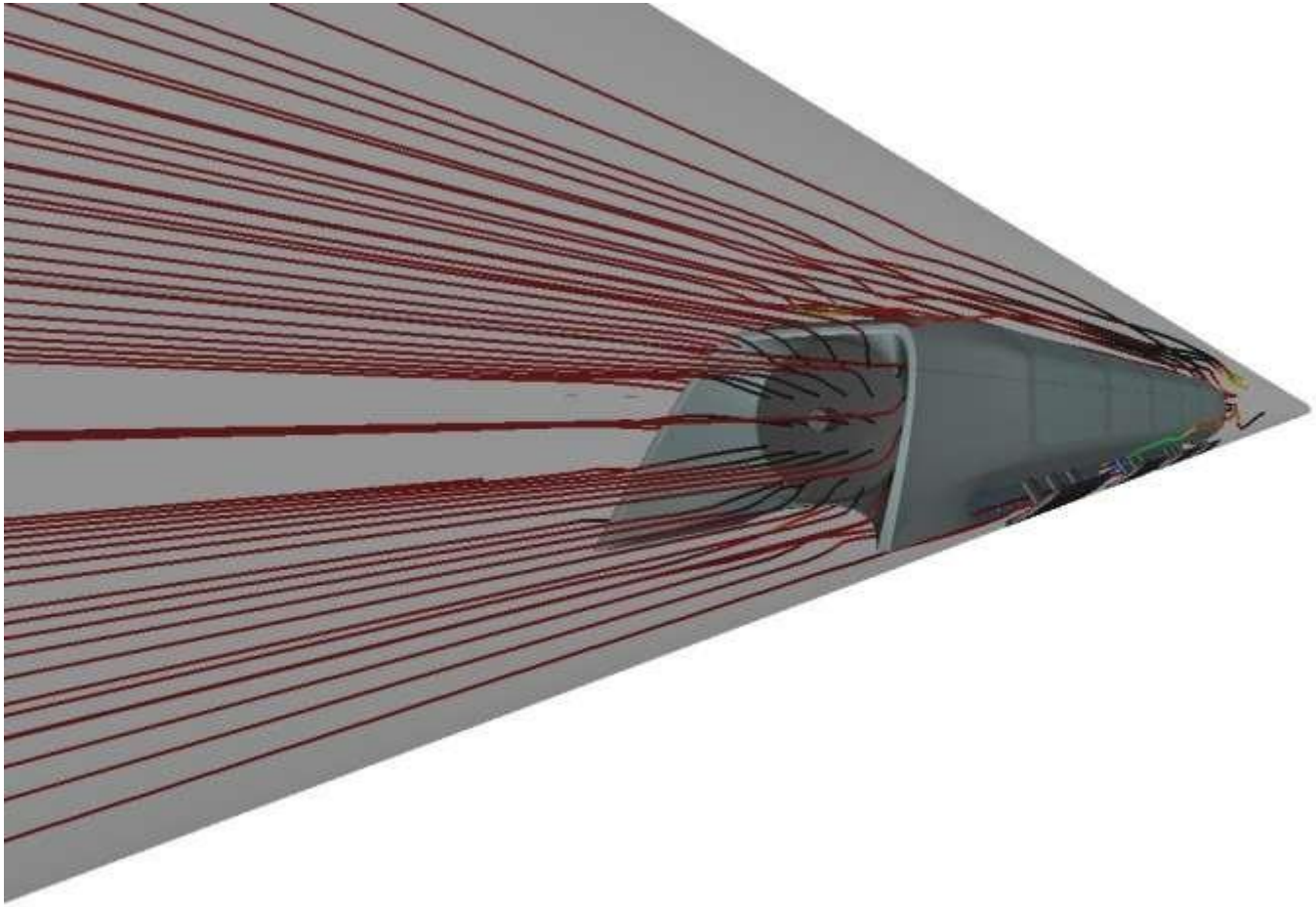
- A high-level alpha design (August 12, 2013)
- Open source design - anyone free to use and modify it.

- Elevated, reduced-pressure tube that contains pressurized capsules driven within the tube by a number of linear electric motors.”
- Average speed - 598 mph (962 km/h)
- Top speed of 760 mph (1,220 km/h).

- Hyperloop consists of a low pressure tube with capsules that are transported at both low and high speeds throughout the length of the tube.



Hyperloop conceptual diagram.

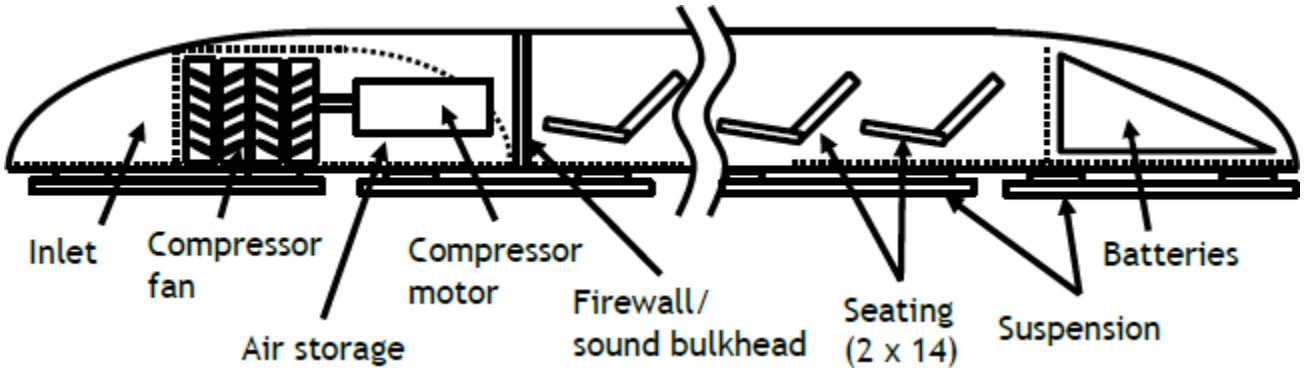


Streamlines for capsule traveling at high subsonic velocities inside Hyperloop.

Components of Hyperloop Transportation System

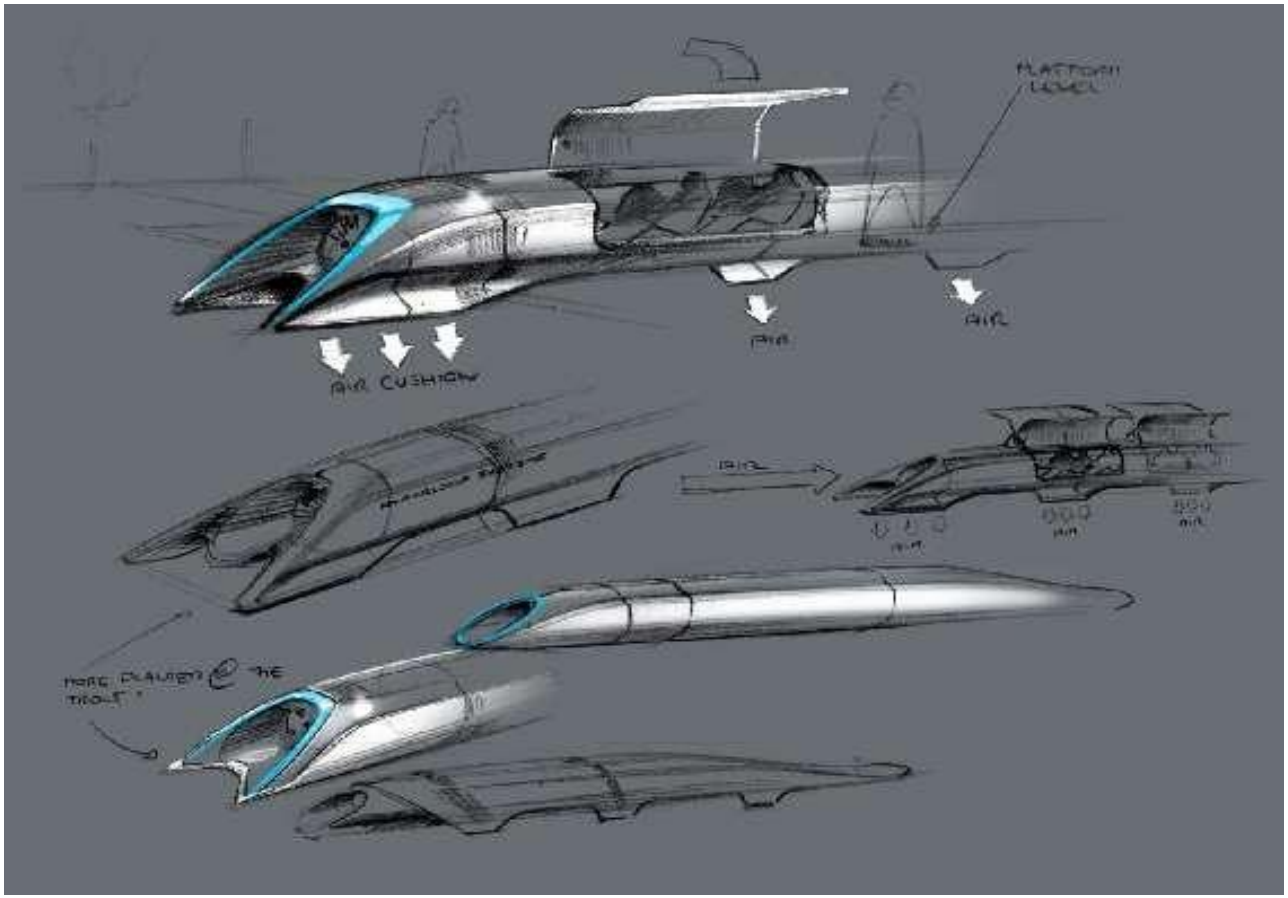
1. Capsule
2. Tube
3. Propulsion
4. Route

- Accelerated via a magnetic linear accelerator with help of rotors.



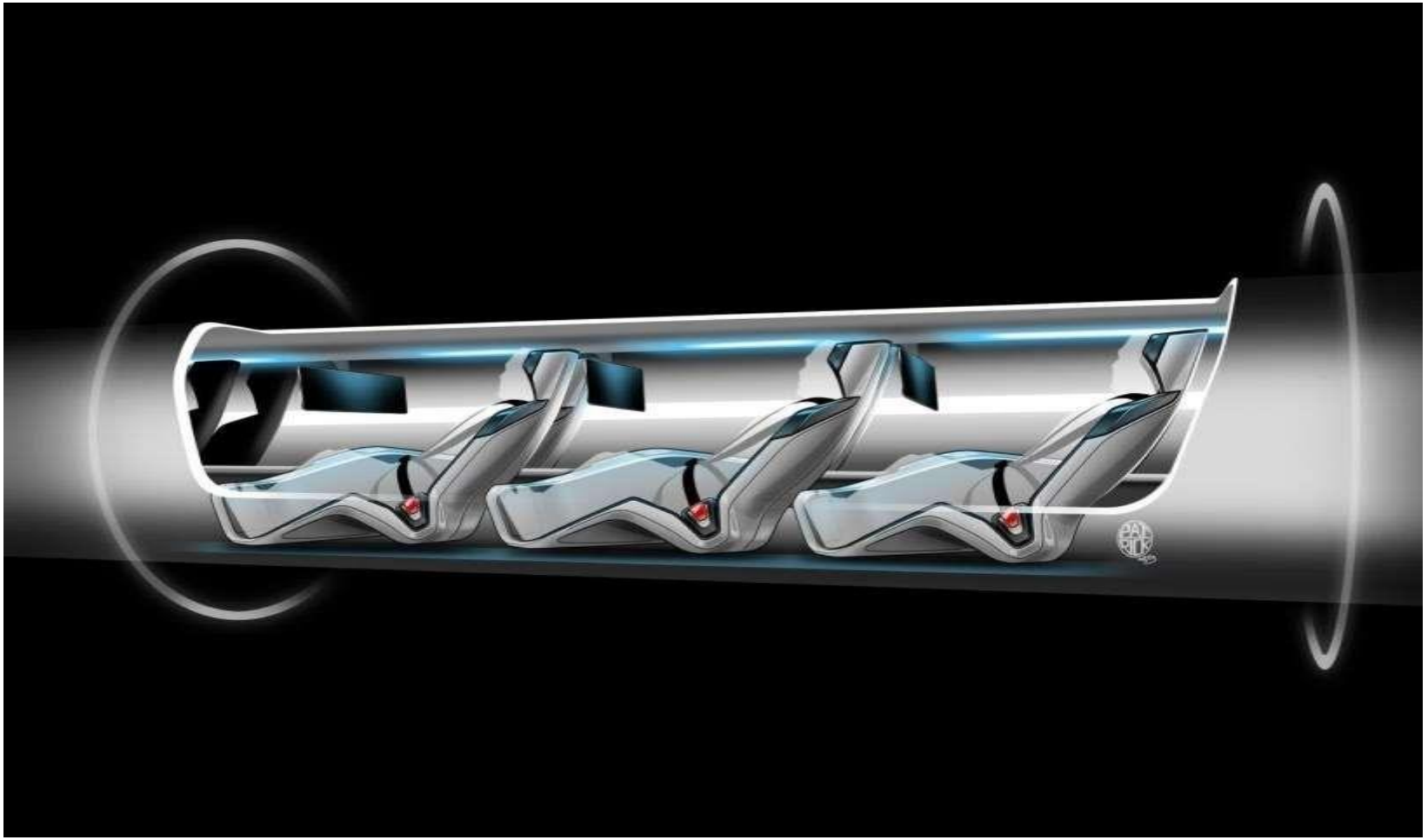
Hyperloop passenger capsule subsystem notional locations (not to scale).

- The pressure of air in Hyperloop is about 1/6 the pressure of the atmosphere on Mars.

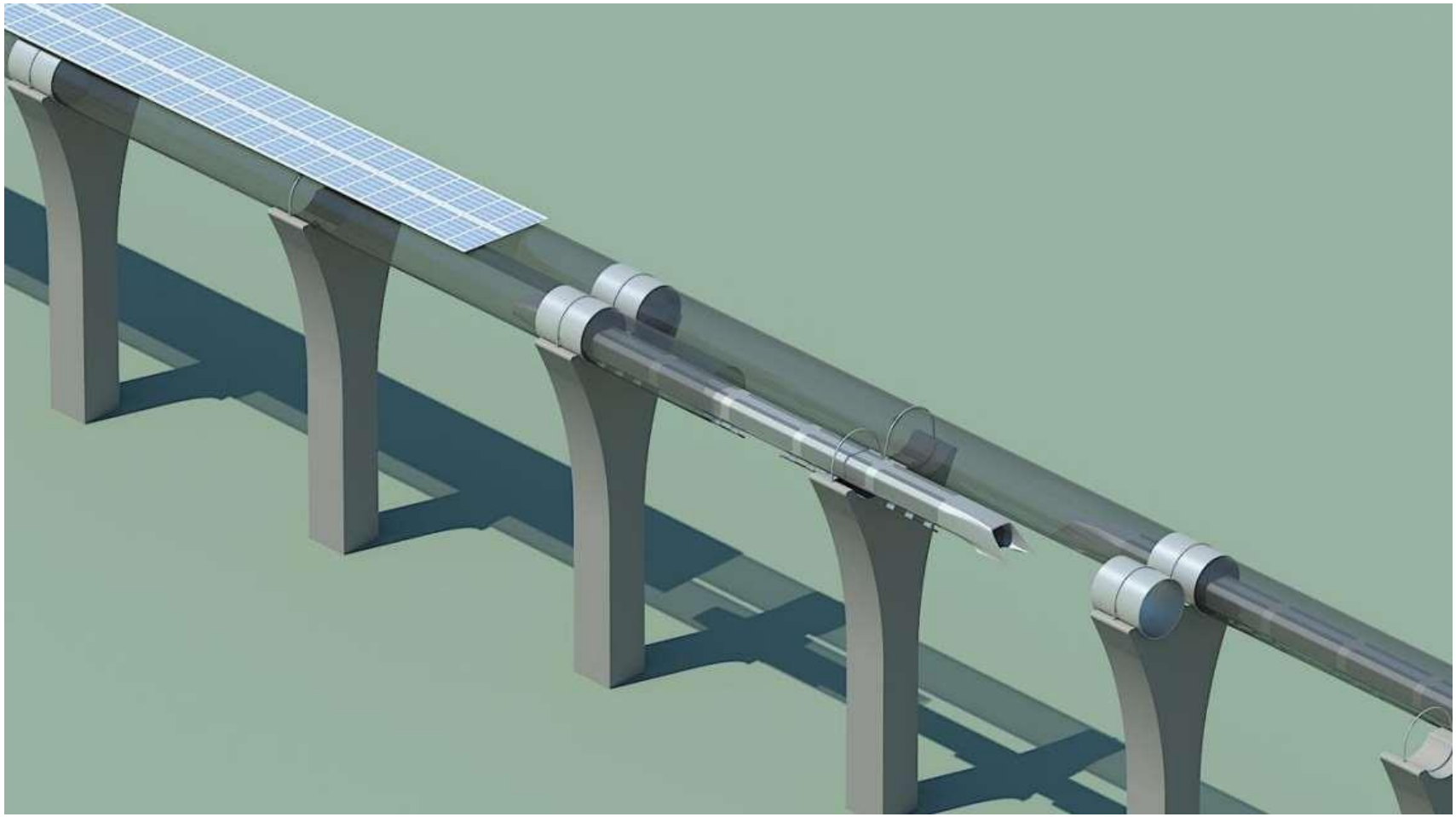


Hyperloop passenger transport capsule conceptual design sketch.

Hyperloop passenger capsule version with doors open at the station.



Hyperloop passenger capsule version cutaway with passengers onboard.



Hyperloop capsule in tube cutaway with attached solar arrays.

- Station at Los Angeles and San Francisco.

- Several stations along the way will be possible with splits in the tube.

Hyperloop tube stretching from Los Angeles to San Francisco.

Overview of Hyperloop route from Los Angeles to San Francisco.

Advantages;

- Ready when the passenger is ready to travel (road)
- Inexpensive (road)
- Fast (air)
- Environmentally friendly (rail/road via electric cars)
- Sustainable (uses solar energy)
- Runs trough the median of existing highway

Limitations;

- US$6 billion price tag.

- Designing, developing, constructing and testing an all-new form of transportation.

REFERENCES:

- “Hyperloop” ,Wikipedia
- "Beyond the hype of Hyperloop: An analysis of Elon Musk's proposed transit system".*Gizmag.com*. August 22, 2013.
- Garber, Megan (July 13, 2012). "The Real iPod: Elon Musk's Wild Idea for a 'Jetson Tunnel' from S.F. to L.A.". *The Atlantic*.
- Bilton, Nick. "Could the Hyperloop Really Cost $6 Billion? Critics Say No". *The New York Times*.

THANK YOU