

- ⑥ Screening - AI, Thermal cameras, cluster info, virtual biometrics
- ⑨ Hyperloop is the new mode of ground transport to ferry passengers in a sealed tube with low air pressure & frictionless movement.
 - ① It is very High Speed Transit (VHST) system, which uses magnetic levitation train & vacuum technology.
 - ② Moves away from tradⁿ wheels → uses air bearing for pods so that they float in air → maglev
 - ③ LP → low resistance against pod moving thru tunnel → energy efficient
 - ④ Tunnels are metallic tubes with solar panels on top to generate 4 to power train

Revolutionise the conventional transport

- ① Safer mode of transport as each pod moves with spacing of 20 miles each & fitted with multiple emergency braking system
- ② Less costly & more energy efficient as tracks don't need to power pods continuously
- ③ 2x3 times faster than tradⁿ high speed rail - 16 times than regular rail
- ④ Can funcⁿ as on demand service with each pod leaving 30 secs apart and can provide door to door transpⁿ
- ⑤ Closed & compact → Immune to bad weather condⁿ & earthquake

Challenges

- ① Atmospheric pressure on tubes is 10 tonnes/m² from outside & Zero inside → risk of vacuum collapse
 - ② Large vacuum pumps need to be positioned periodically throughout route
 - ③ Air leaks can impact max speed due to ↑ air drag
 - ④ Any accident in HL → explosive decompression endangering life of passengers
As closed system → diff to evacuate
 - ⑤ High cost & low carrying capacity of capsules → mass transport x
- * Space X, Maharashtra govt developing