

Mission two: High Speed Train

London Transport Museum is on a mission to find **Planners** to be engineers of the future.

Your mission, should you choose to accept it, is to design and build a new High Speed Train to run on the planned high-speed train line.

Mission duration between 30min – 1 hour



Mission task

- Plan your train design thinking about:
 - a) Have you travelled by train before? What was it like? What would you change?
 - b) How would you make your train comfortable and safe for passengers?
- Draw the inside of your train. Highlight on your drawing what will make the train more comfortable for passengers.
- Pitch your new design to Mott MacDonald* by sharing your creation with London Transport Museum and Mott MacDonald on Twitter or via email, and you could win a prize!

For more information, visit our website at ltmuseum.co.uk/future-engineers



Mission kit - you will need:

Pens, pencils, paper, ruler



Over 7 years old? Try our extended mission:

- Complete the Mission Task above. Also consider:
 - a) How can you make space for busy rush hour crowds and luggage?
 - b) How will you make it accessible to wheelchair users and people with buggies?
- Now draw the design for the outside of your train. What shape does it need to be to travel fast at high speeds?
- Decide what materials you will use to make your train to make sure it is light, strong and fast. Point this out on your drawing.
- Is there a way you can make your train better for the environment? Decide how can it will be powered.



Need some inspiration?

See how we had a go ltmuseum.co.uk/future-engineers



*Who are Mott MacDonald?

Mott MacDonald works on some of the world's largest projects. They are currently designing a new high-speed railway that will be the backbone of Britain's rail network, connecting the largest cities in the north and south of England. Trains will be faster and more reliable, travelling at speeds of up to 225 miles per hour.