

THE FUTURE OF RAILROADS

Presenters: James Ferguson, Loegan McDonald, Dahlila Medina,
Micah Heitmann, Tyler Brett

Project Details: Middle schoolers explored real-world transportation issues through creative projects that encouraged research, problem-solving, and teamwork. This presentation gave them the chance to practice public speaking and share their innovative ideas. Join us as they showcase what they've thought about the future of railroads.

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**Special thank you to
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Topic Overview

- Solar Powered Trains
- AI Railroad / Train
- Hovering Trains
- Aquatic Trains



Solar Powered Trains by: Micah Heitmann

- The trains will have solar panels in the future
- reduces carbon emissions
- more cost efficient
- the sun is a clean renewable source
- lots of space on the top of train so put on top
- no tunnels
- put it on only the passenger trains
- trains can be parked in sunlight to charge



AI Railroad/Train by: Tyler Brett

Positives of AI driven trains:

- AI can reduce the cost of paying workers
- AI can be more environmentally beneficial
- AI has enhanced safety
- AI doesn't make many mistakes

Negatives of AI driven train:

- AI will displace jobs for humans
- AI could get hacked



Hovering Trains by: Loegan McDonald

- Energy-efficient, reducing carbon footprints and noise pollution
- Safety features include collision avoidance systems and efficient emergency braking
- High construction expenses leading to funding issues
- Limited global use
- **High speeds:** Hover trains can travel at speeds of up to 250 mph, over double the current standard train speeds



Aquatic Trains: James Ferguson

- trains would be built in plexiglass tunnels one inch thick
- allows you to observe aquatic life
- incase of emergency, there is an escape hatch every 360 feet
- alarm will sound when opened
- artificial island with button to call for help
- built on wooden foundation them stainless steel for the base
- can change transportation forever



Conclusion

With what we could see in the future can change the world for the better or worse. With each different power each every one of these futuristic railways hold, it could be life changing for the world.



Sources

- <https://www.trains.com/trn/news-reviews/news-wire/railroads-ramp-up-the-use-of-artificial-intelligence/> (Opened: May 23, 2025)
- <https://www.bridgestone.com/bwsc/stories/article/2019/06/17-2.html> (Opened: May 23, 2025)
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- <https://wonderopolis.org/wonder/how-do-you-build-a-tunnel-underwater>



Thank you!

Group members:

- James Ferguson
- Loegan McDonald
- Dahlila Medina
- Micah Heitmann
- Tyler Brett

