Podcar



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Description

*Modular cars that can drive autonomously on regular roads, join themselves and detach even when in motion, and that when joined, the doors between modules fold, creating a walkable open space among modules.

Podcars use swarm technology and modularity to enable customisation and last mile transport while providing the benefits of a mass transit mode.

1. Impact

- Safety: passenger platform has a raised height for safer impacts
- High accessibility: individual pods detach for last mile transportation
- Potential to reduce private car ownership
- Risk of congestion, given limited speed

2. Technology & infrastructure requirements

- Podcars will require autonomous road vehicle technologies (Radar, lidar, 3D cameras etc.)
 Criticality and importance of technologies will increase as podcar routing becomes more flexible and less pre-determined.
- Podcars may require a segregated lane.

3. Regulatory requirements

 Regulatory framework must be updated to reflect safety requirements for passengers and pedestrians

4. Investment requirements

- Investment requirements will depend on integration requirements, environment, system usage etc.
- Heathrow airport Ultra system costs ~11-24m USD/mile however, newer systems will have different requirements (e.g. no rail)

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Tags

Future mobility Podcar

STEEP

Technological

Links

TRENDS

Driverless Roads and Transport Infrastructure of the Future New Modes of Public Transport Self-Driving Transport

Projects

RTA Future Scanning - Information & Trends

Rating criterion	04.06.2020
Importance	

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