

# The Future of Transportation

Presented by: Dr. Nick Tepylo

Transportation is one of the most fundamental engineering problems as seen by the fact that nearly all MAE Capstone projects involve the movement of a payload from A to B. The world of transportation is on the cusp of a transformative revolution, driven by innovative engineering solutions and cutting-edge technologies. This talk aims to introduce students to the exciting prospects and challenges that lie ahead in the future of the transportation industry. We will explore key trends shaping the future, including autonomous vehicles, electric mobility, urban air mobility, and sustainable transportation systems. By delving into the latest advancements in these areas, students will gain insights into the engineering marvels driving this revolution. The discussion will also highlight the critical role engineers play in addressing complex transportation issues, such as traffic congestion, environmental sustainability, and safety. We will delve into the design and development of autonomous vehicles and smart infrastructure, showcasing the opportunities for innovation and entrepreneurship in this dynamic field. Furthermore, the talk will emphasize the importance of interdisciplinary collaboration and ethical considerations in shaping the future of transportation. As future engineers, students will be at the forefront of creating solutions that redefine how people and goods move, ushering in a new era of mobility. By the end of this talk, attendees will have a deeper understanding of the challenges and opportunities awaiting them in the evolving landscape of transportation engineering, preparing them to contribute to a sustainable, efficient, and interconnected transportation ecosystem.

As a part of this talk, Dr. Tepylo will be collecting data on awareness and intention to use future transportation modes:

- This study aims to understand how individuals have historically traveled, what factors influence their travel decisions, and if they would consider traveling via urban air mobility.
- The survey is anonymous and can be completed before or during the session (time will be provided). It should take about 10 minutes to complete.
- Your participation in this survey is voluntary.
- Completion or non-participation will not influence your grade in any way.
- No compensation will be provided for participating.
- Approved by Carleton University Research Ethics Board – B
- Survey link:

[https://carletonu.az1.qualtrics.com/jfe/form/SV\\_5b8jEe0mqRDCsnA](https://carletonu.az1.qualtrics.com/jfe/form/SV_5b8jEe0mqRDCsnA)

Survey QR code



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