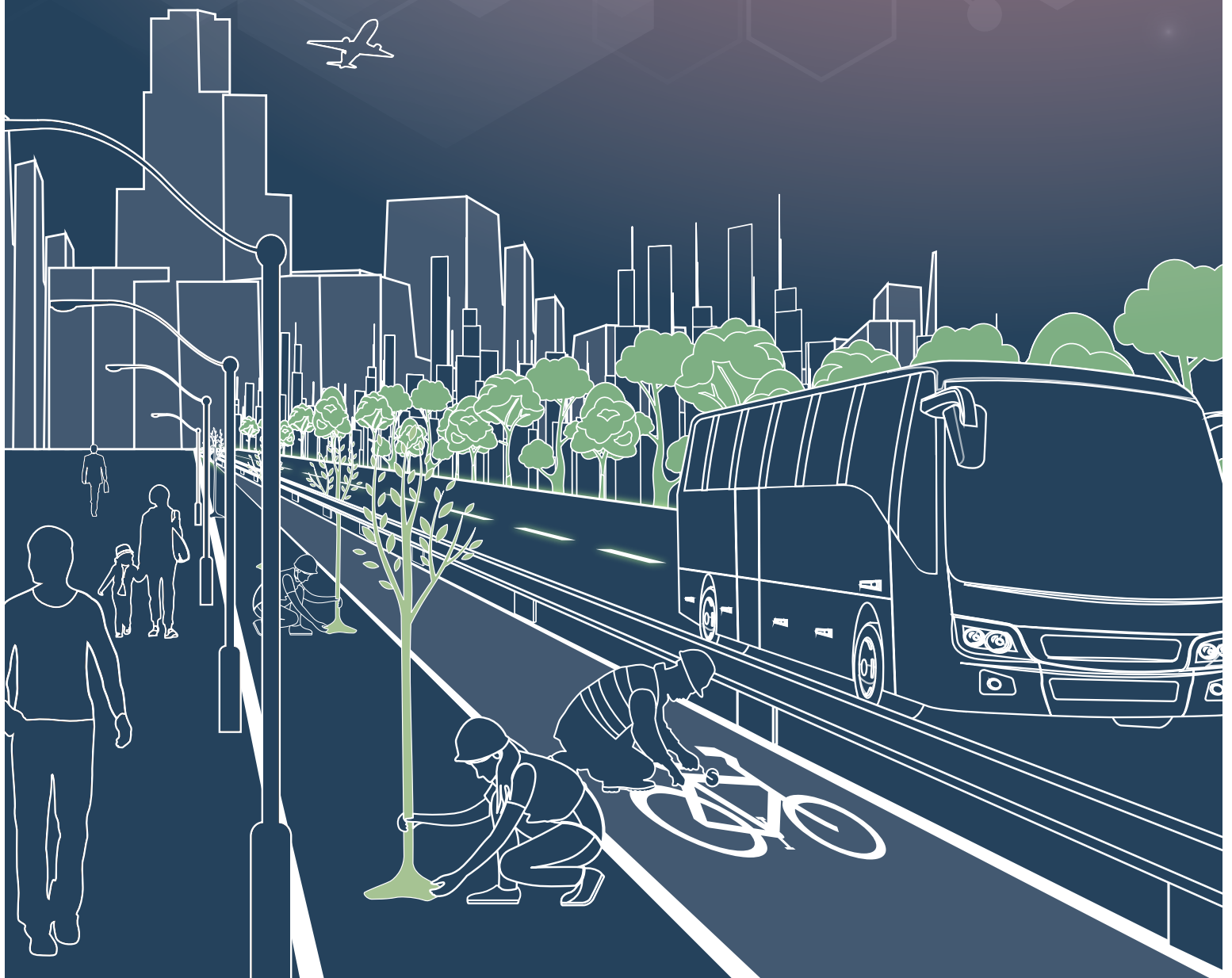


SAFETY GRAND CHALLENGE

ZERO FATALITIES

Advance a future without transportation-related serious injuries and fatalities.



SAFETY

GRAND CHALLENGE

CRITICAL RESEARCH TOPICS:

- Operator fatigue, distraction, and performance
- Safety equity analysis
- Safety infrastructure countermeasures
- Safety risk analysis methods
- Speed management
- Vehicle and aircraft safety, automation, and connectivity
- Vulnerable road user safety

VISION: Together, we must strive for zero transportation system fatalities. Zero is the only acceptable number of deaths and serious injuries on our transportation system. Achieving the vision of zero fatalities will take effort from across society to change how we design and operate our transportation system.

DESIRED OUTCOMES:

- People no longer accept a high risk of fatality or serious injury as a cost of mobility. Social norms have changed. Impaired, risky, and distracted driving is no longer accepted, and everyone wears a seatbelt.
- Work zones operate safely and the safety of our transportation workers and first responders is assured.
- Vehicle and aircraft designs incorporate proven, active and passive safety features that protect vehicle occupants and non-occupants.
- Improvements to infrastructure designs reduce the risk of severe crashes by managing speeds, reducing conflicts, and mitigating the effects of crashes.
- Accessible, connected bicycle and pedestrian networks are built out to enable safe and comfortable non-motorized travel.
- Transit, shared mobility services, and passenger trains provide convenient and affordable alternatives to driving for many trips.
- The transportation system safely accommodates the accessibility needs of people with disabilities.
- Emergency response times are shortened so that when crashes occur, victims receive effective treatment sooner and crashes are cleared more quickly to prevent secondary crashes.
- People lead healthier, more active lives, and live longer—no matter who they are or where they live. Insurance rates are lower, and people have fewer crash-related medical expenses. Law enforcement can focus on other needs besides clearing crash scenes.