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TRB Webinar: Legal Issues and Emerging Technologies in Public Transit

June 8, 2023

1:00 – 2:30 PM

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Purpose Statement

This webinar will provide guidance on navigating common legal challenges that arise from public transit agencies' consideration and implementation of new and emerging technologies.

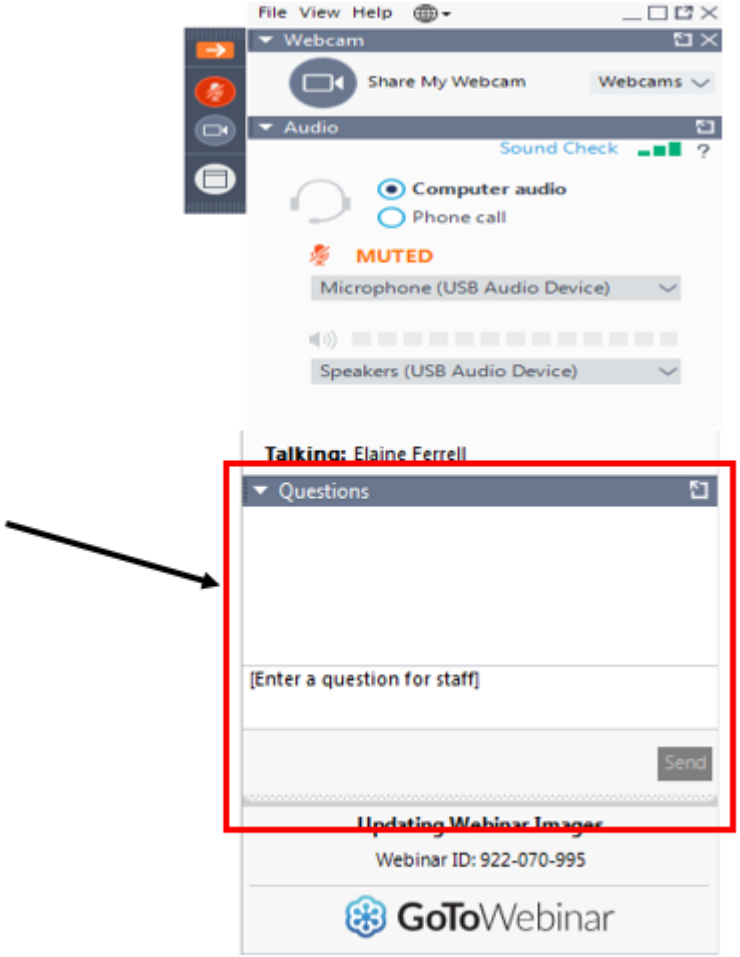
Learning Objectives

At the end of this webinar, you will be able to:

- Integrate technology innovations in public transportation and use them to enhance service
- Identify and manage common legal challenges and issues that arise from emergent transportation technologies

Questions and Answers

- Please type your questions into your webinar control panel
- We will read your questions out loud, and answer as many as time allows



Legal Issues and Emerging Technologies in Public Transit

MATTHEW W. DAUS, ESQ & WINDELS MARX STAFF

JUNE 8, 2023

WINDELS MARX

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- **Former NYC Civil Service Commissioner, NYC Human Rights Prosecutor, Special Counsel (NYC Trade Waste Commission), General Counsel (NYC Community Development Agency)**
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- **Chair, Transportation Law Committee, NYC Bar Association**
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  - *The Center for Social and Economic Mobility for People and Communities through Transportation (SEMPACT)*
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Associate Attorney

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- **Associate Attorney, Transportation Practice**
  - *Windels Marx Lane & Mittendorf, LLP* www.windelsmarx.com
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Topics for Today's Conversation

AN OVERVIEW OF EMERGING TECHNOLOGY INNOVATIONS IN PUBLIC TRANSPORTATION

COMMON LEGAL CHALLENGES AND ISSUES THAT ARISE

Emerging Innovations in Public Transportation

HOW PUBLIC TRANSIT AGENCIES ARE USING TECHNOLOGY TO ENHANCE SERVICE AND PROMOTE PUBLIC HEALTH AND SAFETY

Report: Legal Issues and Emerging Technologies

LEGAL RESEARCH DIGEST

TCRP LRD 59

OCTOBER 2022

TRANSIT COOPERATIVE RESEARCH PROGRAM

Sponsored by the Federal Transit Administration

Legal Issues and Emerging Technologies

This report was prepared under TCRP Project J-5, "Legal Aspects of Transit and Intermodal Transportation Programs," for which the Transportation Research Board is the agency coordinating the research. The report was prepared under Topic 19-02 by Matthew Daus, Windels, Marx, Lane & Mittendorf LLP, New York, NY. The opinions and conclusions expressed or implied in this digest are those of the researchers who performed the research and are not necessarily those of the Transportation Research Board; the National Academies of Sciences, Engineering, and Medicine; or the program sponsors. The responsible program officer is Gwen Chisholm Smith.

Background

The nation's 6,800 plus public transportation agencies need to have access to a program that can provide authoritatively researched, specific studies of legal issues and problems having national significance and application to the public transportation industry. Some legal issues and problems are unique to transit agencies. For example, compliance with transit-equipment and operations guidelines, FTA financing initiatives, private-sector programs, and labor or environmental standards relating to transit operations. Also, much of the information that is needed by public transit attorneys to address legal concerns is not summarized in a single source. Consequently, it would be helpful to the transit lawyer to have well-resourced and well-documented reports on specific legal topics available to the public transportation legal community.

The Legal Research Digest (LRDs) are developed to assist public transit attorneys in dealing with initiatives and problems associated with transit start-up and operations, as well as with day-to-day legal works. The LRDs address such issues as eminent domain, civil rights, constitutional rights, contracting, environmental concerns, labor, procurement, risk management, security, tort liability, and zoning. The transit legal research, when conducted through the TRB's legal studies process, either collects primary data that generally are not available elsewhere or performs analysis of existing literature.

Foreword

Technology is rapidly changing public transportation. Public transportation agencies in the United States are implementing advanced and emerging technologies such as autonomous vehicles, positive train control, electric buses, on-demand technology, open architecture concept for fare collection systems, and enterprise asset management. These technologies have significant implications for service delivery models and sometimes present legal challenges.

This legal research digest provides transportation attorneys with guidance and resources to assist with these legal changes resulting from the implementation of technology, including regulatory challenges, risk management, cybersecurity, privacy, handling confidential and proprietary information, intellectual property rights, civil rights and environmental justice compliance, labor and employment law, and procurement issues. This digest provides transit agencies with the legal context to conduct jurisdiction-specific research and analyze the legal implications of various new and emerging technologies.

This digest will be useful to transportation practitioners working at the intersection of implementing new and emerging technologies. Interested readers will include administrators, attorneys, procurement officers, and others working in the public transportation transit arena.

NATIONAL ACADEMIES Sciences Engineering Medicine

TRANSPORTATION RESEARCH BOARD

- Published October 2022
- Can be found at: https://nap.nationalacademies.org/catalog/26786/legal-issues-and-emerging-technologies

Report: Legal Issues and Emerging Technologies

What Is TCRP?

- The Transit Cooperative Research Program (TCRP) is an applied research program that develops near-term, practical solutions to problems facing public transportation.
- TCRP is sponsored by the Federal Transit Administration (FTA) and works in partnership with the American Public Transportation Association (APTA).
- TCRP is managed by the Transportation Research Board (TRB), a division of the National Academies of Sciences, Engineering, and Medicine.

Methodology

- Researched and reviewed existing regulations, legal issues, case law, and literature relating to transit agencies' use of new and emerging technologies.

Purpose of the Report

- The TRB Transit Cooperative Research Program's TCRP Legal Research Digest 59: Legal Issues and Emerging Technologies provides transportation attorneys with guidance and resources to assist with these legal changes resulting from the implementation of technology, including regulatory challenges, risk management, cybersecurity, privacy, handling confidential and proprietary information, intellectual property rights, civil rights and environmental justice compliance, labor and employment law, and procurement issues.

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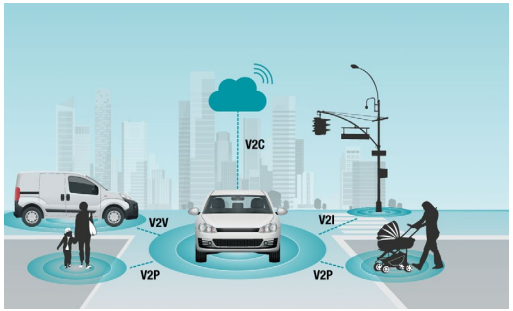
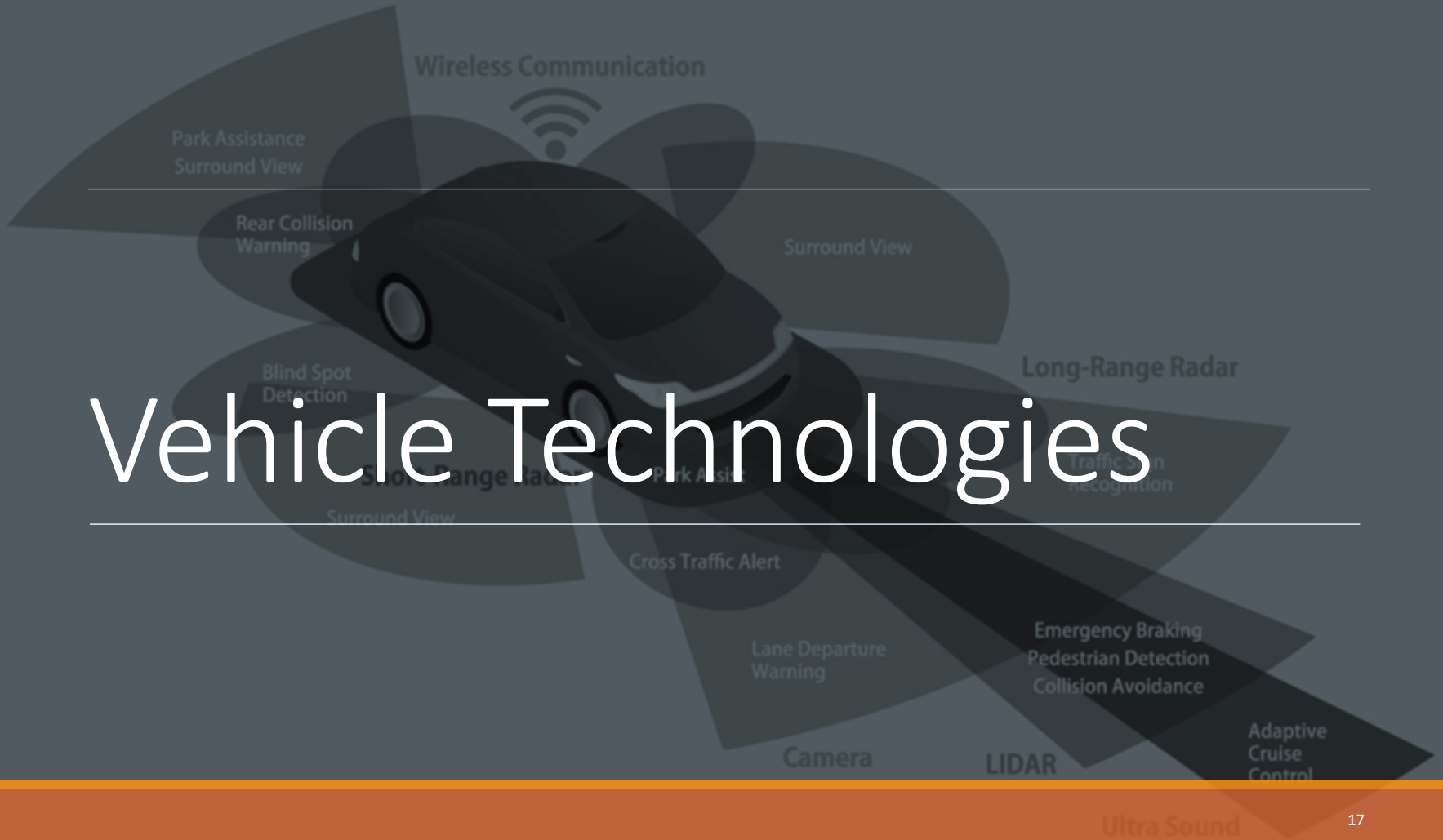
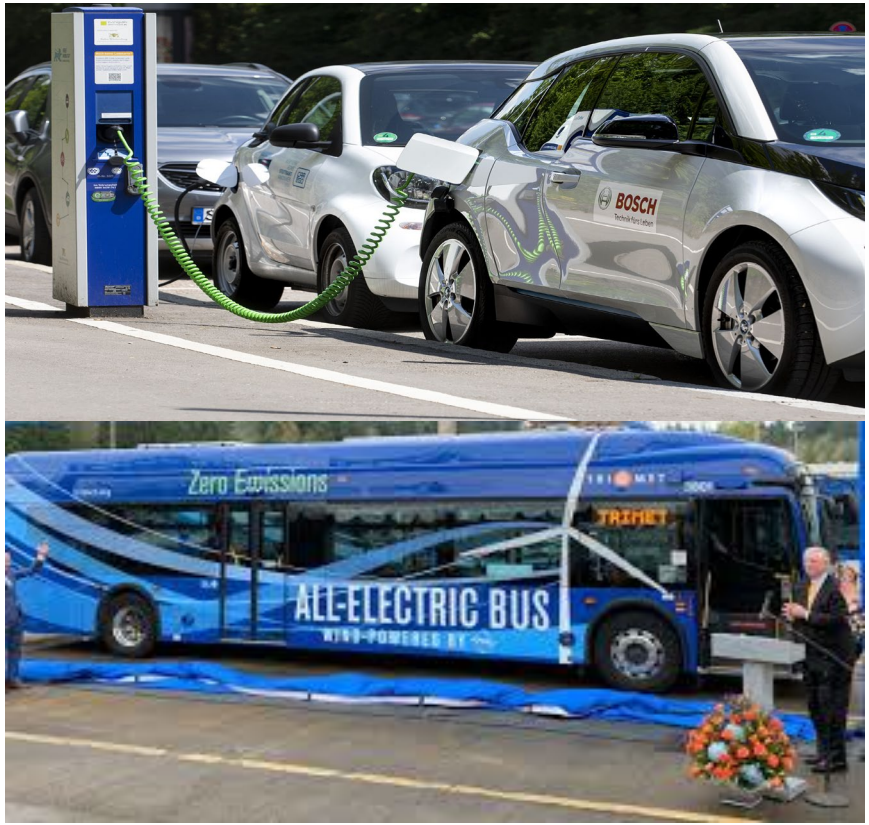


Emerging Technologies – *Categories & Themes*

- Vehicle Technologies
- Mobility Options
- System Optimization
- Smart Infrastructure
- Accessible Service
- Safety, Security, and Risk Management for Vehicles

Vehicle Technologies





Electric Vehicles & Buses

- Electric vehicles (EVs) consist of hybrid electric vehicles (HEV), fuel cell electric vehicles (FCEV) and battery electric vehicles (BEV).
  - HEVs use less fuel than conventional vehicles by employing electric-drive technologies to boost efficiency.
  - Plug-in hybrid EVs and all-electric EVs are capable of being powered only by electricity, which is produced from natural gas, coal, nuclear energy, and renewable resources

U.S. Dep't of Energy, 2020, https://afdc.energy.gov/fuels/electricity_benefits.html

Autonomous Vehicles & Buses

- Automated vehicle (AV) systems are driven by three basic sets of technology:
  - Sensors to monitor the environment around the vehicle,
  - Software systems that analyze the data collected, and
  - Actuators that operate the vehicle's systems such as steering or brakes.
- Automated systems can be applied and used for driver fatigue alerts, object detection and collision avoidance, automatic breaking, lane-keeping assist, and parking assist.
- When automated driving technologies are combined, it determines an autonomous rating on a 1–5 scale in accordance with the Society of Automotive Engineers.

Connected Vehicles

- Connected vehicle (CV) technology enables cars, buses, trucks, trains, roads, and other infrastructure, such as cellphones, to “talk” to each other.
- Cars use short-range radio signals to communicate directly, so each vehicle on the road would be aware of other vehicles nearby.
- Drivers receive notifications near dangerous situations.
- Three Different Types of Connected Vehicle Communications:
  - ***Vehicle to Vehicle (V2V)***
  - ***Vehicle to Infrastructure (V2I)***
  - ***Vehicle to Passenger (V2P)***

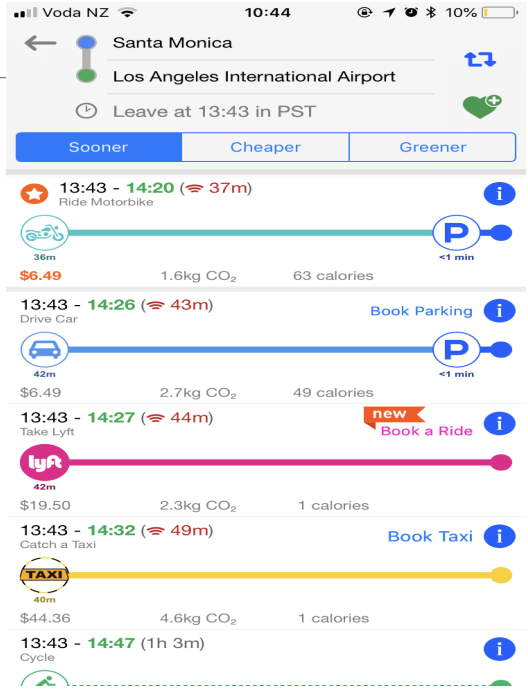
Mobility Options

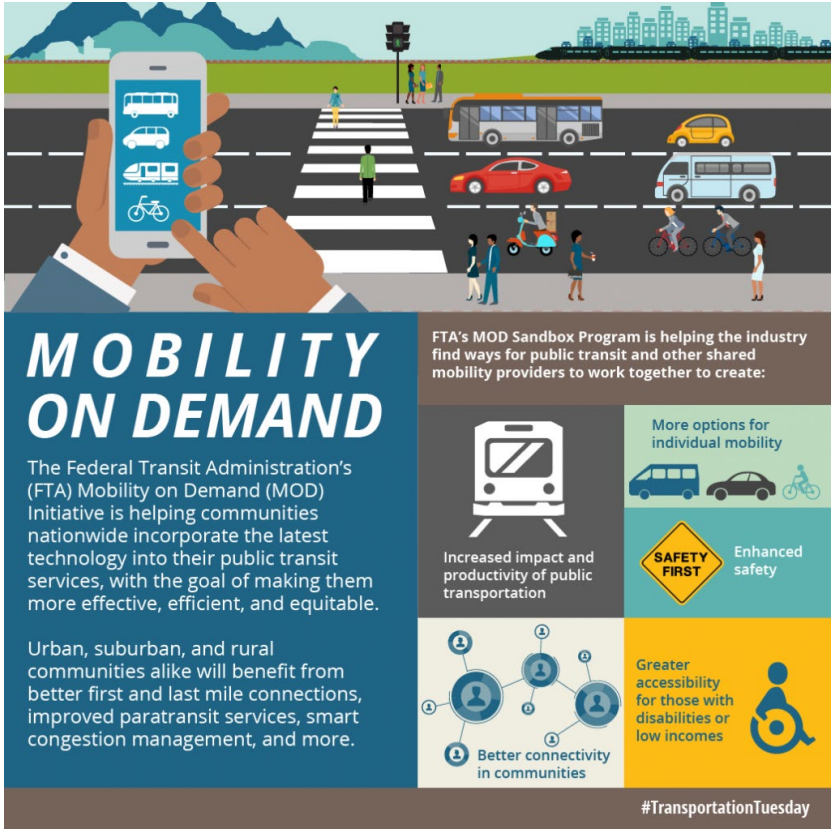
Multi-Modal Trip Planning: *Mobility-as-a-Service (MaaS)*

MaaS is the integration of multiple forms of transportation services into a single mobility service or platform that is accessible on demand.

It allows for a fluid system that incorporates various modes of transport so travelers can reach their destination seamlessly, allowing for complete point-to-point trips.

Modes that may be facilitated through a MaaS operator include ridesharing, car-sharing or bike-sharing, taxis, car rental, public transit (buses, subways, rail) or a combination thereof.





Mobility on Demand

MOD is a transportation concept where consumers can access mobility, goods, and services on-demand by dispatching or using shared mobility, courier services, unmanned and public transportation solutions.

https://www.transit.dot.gov/research-innovation/mobility-demand-mod-sandbox-program

Federal Transit Administration

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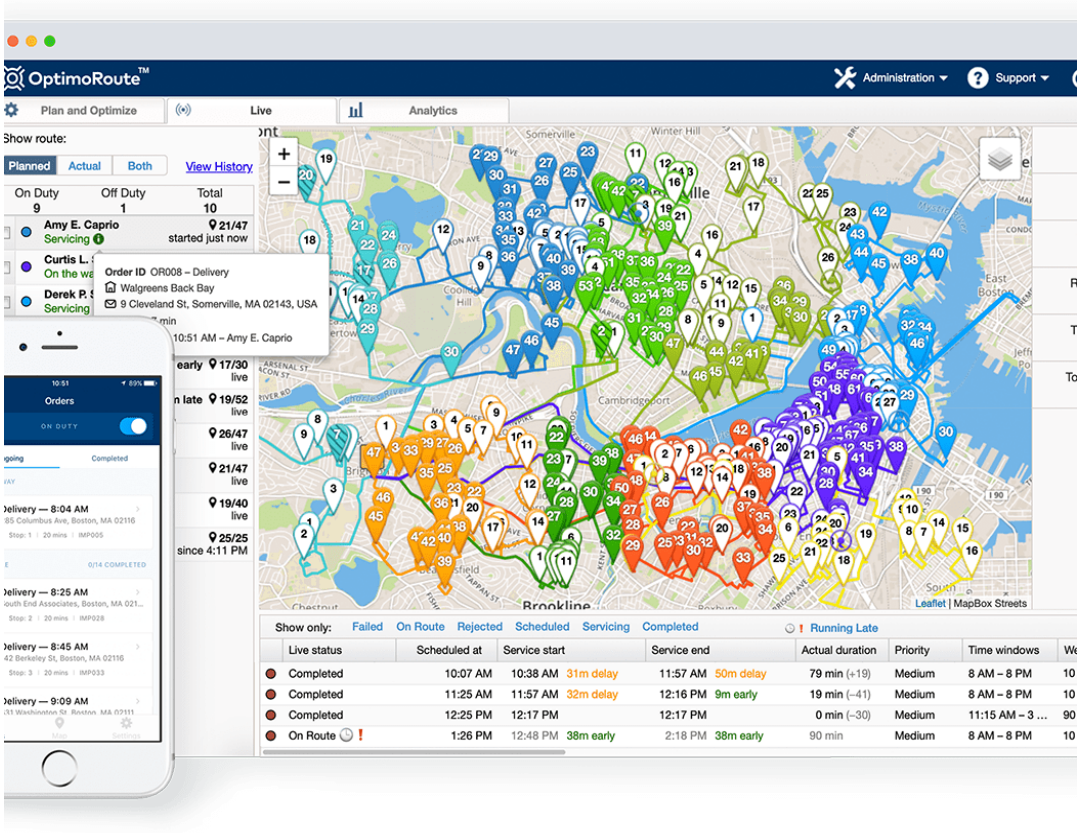
System Management & Optimization

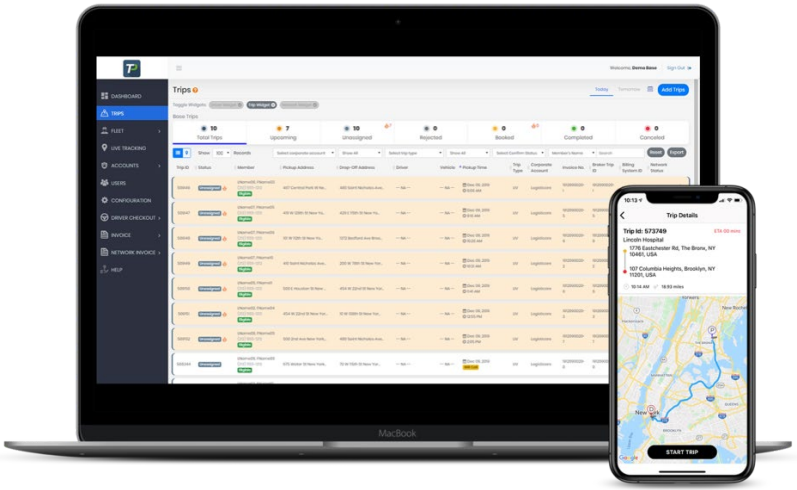
Electronic Payment Systems

- Fare technologies include magnetic stripe medium, contactless smart cards, smartphone payment, and off-board payment.
- New technologies allow alternatives for purchasing fares (*e.g.*, account-based ticketing, online account management).
- While ultimately related to the choice of the overall fare payment technology, purchasing also has its own features and options.



Route Planning & Optimization Software

- ***Route optimization is the process of finding the shortest course between these points.***
- The software quickly tests different scenarios and considers constraints (traffic congestion, vehicle availability) to provide the best possible route.
- Software can reduce transportation time, required resources (fuel), and improve customer service.



Dispatch and Scheduling Software

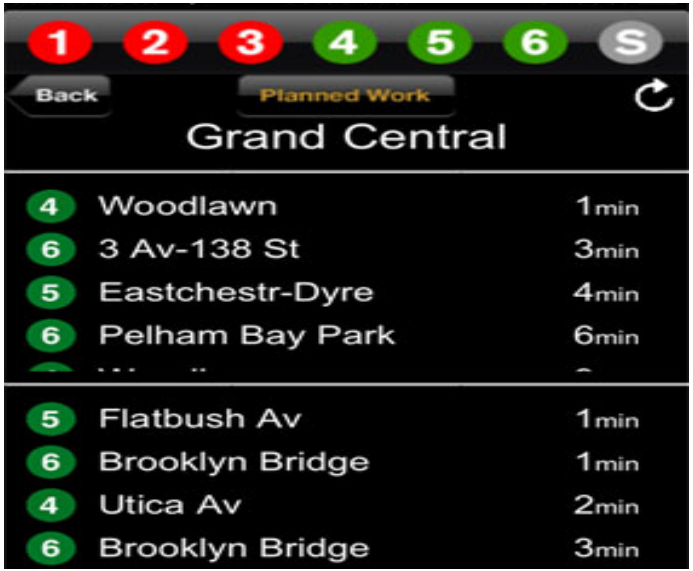
- Dispatch and scheduling software helps automate routing and scheduling processes for transportation systems, providing an easier way to coordinate routes or deliveries efficiently.

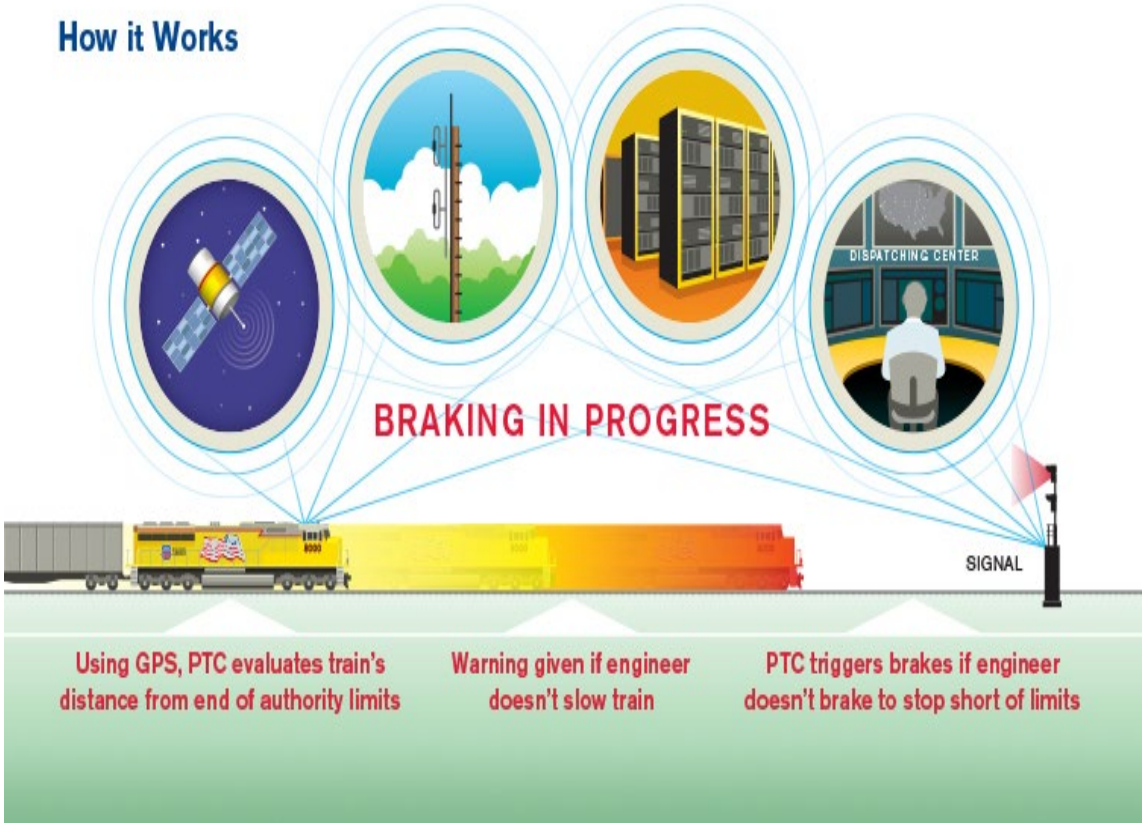
  Dispatch management systems can be used with different transportation types, from buses and shipping to taxis and airlines and paratransit brokerage systems.

Real-Time Information Technology

Passenger real-time information systems offer a communication link between transit agencies and their riders.

Potential use by transit agencies to contribute to improving Key Performance Indicator (KPI) measures of on-time performance and possibly ridership numbers.

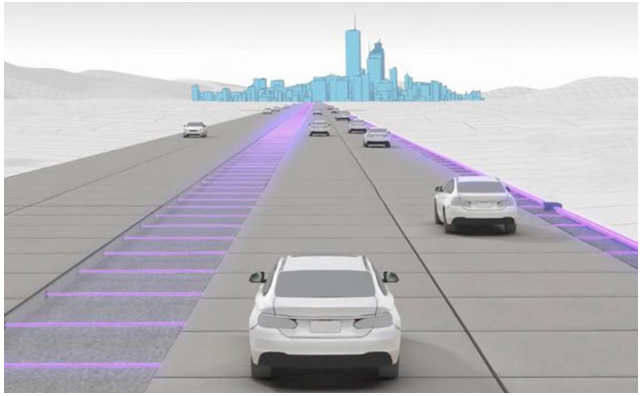




Positive Train Control

Positive Train Control (PTC) is a technology that uses a ***GPS System with radar and track sensors*** that allow computers to remotely control the train to prevent collisions and derailments.

Smart Infrastructure



Smart Pavement & Bridges: Connected & Autonomous Vehicle Networks

- Smart pavements are pavement systems that transform roads into large sensor, data, and connectivity networks for next generation and autonomous vehicles.
  - *Sensors in the roadways allow vehicles to communicate with the road, and the road with the vehicles.*
  - *They also detect moisture levels, temperature, strain, vibration and weight-in-motion, and collect data.*
- Smart bridges incorporate sensors to monitor a variety of situations, including speeding and overhead truck weight, structural health, temperature, and data transmission.

Global Legal Issues Involving the Implementation of Public Transit Technology Innovations

Legal Issues

- Many legal themes cut across new and emerging technologies. Nearly all technologies:
  - Raise concerns about ***cybersecurity, data privacy, protecting confidential and proprietary information, and liability;***
  - Require compliance with federal and state ***accessibility requirements***; and
  - Require consideration of ***Title VI and environmental justice issues*** in federally funded projects.
- At the same time, these emerging technologies present unique legal issues and challenges.

Cross-Cutting Issues for Emerging Technologies

	Liability, Insurance & Risk Management	Protecting Personal Information & Data Privacy	Protecting Confidential & Proprietary Information, Trade Secrets	Cyber Security	ADA & Accessibility	Labor & Employment	Emergency Preparedness	Regulation	Procurement	Title VI & Environmental Justice
VEHICLE TECHNOLOGIES										
Electric Vehicles (EV)				x	x		x		x	x
Automated Vehicles (AV)	x	x	x	x	x		x	x	x	x
Connected Vehicles (CV)	x	x	x	x	x		x	x	x	x
MOBILITY OPTIONS										
Mobility as a Service (Maas)		x	x	x	x		x	x	x	x
Mobility on Demand	x	x	x	x	x	x	x	x	x	x
SYSTEMS OPTIMIZATION										
Electronic Payment Systems and Emerging Fare Technology		x		x	x		x		x	x
Route Planning & Optimization Software			x	x			x		x	
Dispatch & Scheduling Software		x	x	x			x		x	
Real-Time Information Technology				x	x		x		x	
Positive Train Control (PTC)	x			x			x		x	
SMART INFRASTRUCTURE										
Smart Pavement & Bridges (Connected and Autonomous Vehicle Networks)			x	x			x		x	x
Automated Passenger Counters		x	x	x			x		x	
Transit Signal Priority	x			x			x		x	x
ACCESSIBILITY										
Accessible AVs		x	x	x			x		x	x
Accessible Demand-Responsive Transport		x	x	x			x		x	x
SAFETY, SECURITY & RISK MANAGEMENT TECHNOLOGIES FOR VEHICLES										
Telematics, general	x	x	x	x			x		x	
Collision Avoidance	x			x			x		x	
Driver Assistance	x	x		x			x		x	
Collision Notification	x			x			x		x	
Remote Vehicle Disabling	x			x			x		x	

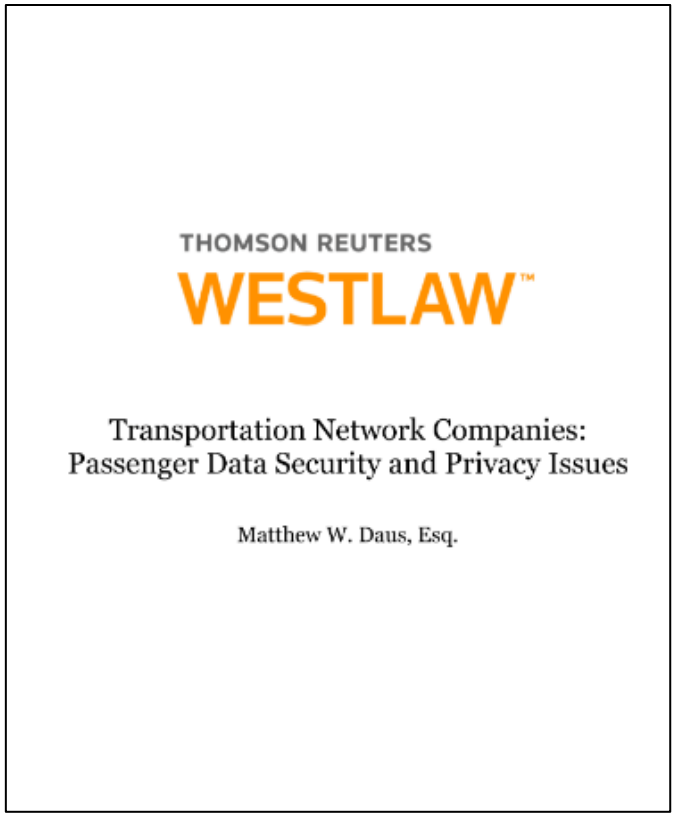
State Open Records Laws

- All fifty states and the District of Columbia have enacted statutes modeled on FOIA, often referred to as open government laws, freedom of information laws (FOIL), or sunshine laws.
- These laws apply to government information, which typically includes data in electronic form.
- Some states and the District of Columbia have adopted a “control standard” instead of a “possession standard” to determine the definition of what constitutes public records when the records were not created by an agency.
- Texas includes information where the public agency simply “has a right of access to the information” or “spends or contributes public money for the purpose of writing, producing, collecting, assembling, or maintaining the information.”
- Unless an exemption applies, the records generally must be disclosed.
  - Typically exempt disclosure of records that would constitute an unwarranted invasion of personal privacy.
  - Many states protect trade secrets and privileged or confidential information from public disclosure.

FOIL & TNC Data Litigation

TNC data exempt from disclosure?

- ***City of Columbus v. Lyft, Inc.,*** 22 N.E.3d 304 (Ohio Mun. Ct. 2014)
  - Ohio state court ruled drivers' names and contact information = trade secret exempt from disclosure.
  - Drivers' dates of birth and contact information = sensitive, personally identifiable information exempt from disclosure.
  - Drivers' physical descriptors, proof of citizenship, prior felony descriptions, and vehicle descriptions not exempt from disclosure.
- ***Lyft, Inc. v. Pennsylvania Public Utilities Commission***, 145 A.3d 1235 (Pa. Commw. Ct. 2016)
  - Pennsylvania appeals court ruled Lyft's statistics on the number of trips provided are not proprietary data and can be disclosed.
- ***Rasier-DC, LLC v. B& L Service,*** 43 Fla. L. Weekly 145 (Dist. Ct. App. 2018)
  - Florida appeals court found Uber's aggregate trip and fee data is not a trade secret and is subject to disclosure.
- ***Lyft, Inc. and Rasier, LLC, v. City of Seattle***, 94026-6, slip op. (Wash. Sup. Ct. May 13, 2018)
  - Washington appeals court ruled Uber and Lyft data on passenger pick-up and drop-off locations may be a trade secret, but Seattle should disclose such data unless doing so would **cause substantial and irreparable harm**.



"Transportation Network Companies: Passenger Data Security and Privacy Issues"

Author: Matthew W. Daus, Esq., 2017

- The full article can be accessed here: https://bit.ly/2Uwq9ct

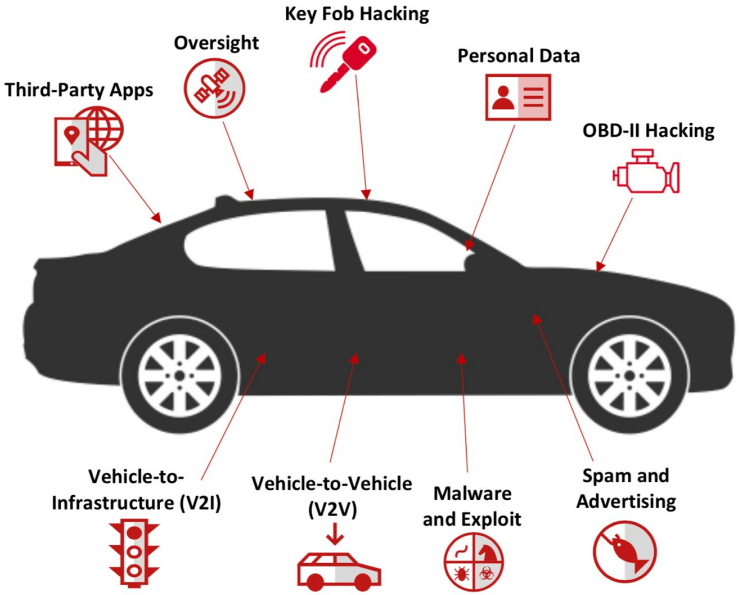
Automated & Connected Vehicles

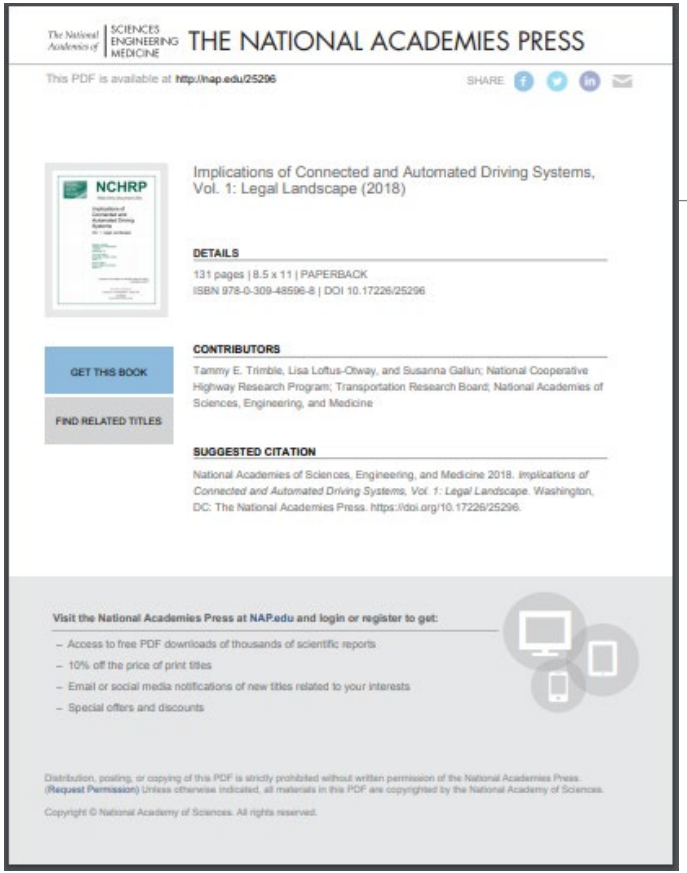
Cybersecurity

- Is it possible to be truly hack-proof?
- AV & CV technology is entirely dependent on vehicles sharing and coordinating data with each other and between the autonomous vehicles and an external network, both locally and through centralized infrastructure.

Liability

- Uncertainty about who is responsible for damages when a driverless vehicle crashes.
- The liability paradigm is complicated by the degree of human engagement with connected vehicles.
- Principles of tort law can provide guidance and may be useful in determining how liability will be determined for connected vehicle-related injuries.





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Implications of Connected and Automated Driving Systems, Vol. 1: Legal Landscape (2018)

DETAILS

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Implications of Connected and Automated Driving Systems: *Legal Landscape*

Implications of Connected and Automated Driving Systems

Vol. 1: Legal Landscape

Publication: January 2018

http://www.trb.org/NCHRP/Blurbs/178298.aspx

Mobility-as-a-Service (MaaS)

The core of MaaS is ***data***, which raises concerns regarding:

- Who owns the data?
- What constitutes appropriate use?
- Should user data be shared with law enforcement and emergency services?

Data Privacy

- Location data raises privacy concerns for passengers and drivers.

Protecting ***confidential and proprietary information*** and trade secrets:

- As part of the procurement process, companies may be required to submit confidential information.
- In the private sector, this sensitive information would be protected by bidding laws or nondisclosure agreements with their proposals. In the public sector, it may be vulnerable to disclosure under open records laws.

Dispatch and Scheduling Software, GPS

- **Data Privacy & Security**
  - Dispatch and scheduling software collects data, which raises concerns about cybersecurity, data privacy, and protecting confidential and proprietary information.
  - The software may use proprietary algorithms, making protecting confidential and proprietary information contained in this software a necessity.
  - When used for paratransit purposes, the technology raises Health Insurance Portability and Accountability Act (HIPAA) concerns.

- **Employee Privacy: Limitations on Monitoring Employees**
  - The use of telematics may include tracking employees through GPS devices. Laws vary by state, and government agencies that are considering using telematics devices to track their fleets should understand all regulations within their jurisdiction and adhere to data privacy requirements.

School Transportation Technology: Data Privacy Laws

Data Privacy: FERPA and COPPA are federal privacy laws that regulate student privacy and protect sensitive data when schools use technology. In addition, at least 40 states have passed student privacy laws

- The ***Family Educational Rights and Privacy Act (FERPA)*** protects the privacy of student education records, which includes various details about a student, such as bus route, medical information, and attendance.
- The ***Children's Online Privacy Protection Act (COPPA)*** addresses data protection for children under 13.

Student Health Information: FERPA and the ***Health Insurance Portability and Accountability Act (HIPAA)*** generally protect health information from disclosure without consent.

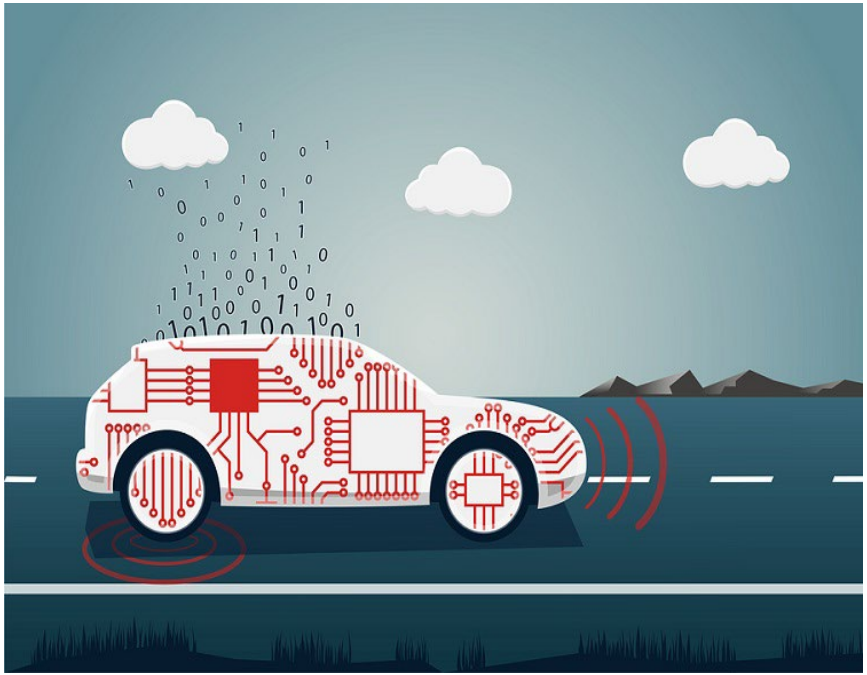
- FERPA applies to most school health records.
- Not all health data is covered under HIPAA. HIPAA applies only to **covered entities** and **business associates**, and they do not apply to 'education records' under FERPA.
- Consent is usually required to disclose personal information, but both FERPA and HIPAA have **exemptions for public health emergencies** when disclosures are necessary to protect the health or safety of others.

Electronic Payment Systems

- **Data Privacy & Security**
  - State laws, regulations, or guidelines that require data collectors and processors to limit access to and protect the security of customers' personal data.
  - Public agencies that accept payment via a customer's credit or debit card must comply with the Payment Card Industry Data Security Standard (PCI DSS).

Positive Train Control

- **Cybersecurity**
  - More entry points for hackers. The rail industry uses electronic sensors, network technology, and automation. PTC, track signals, communications systems, and power delivery all rely on these technologies
- **Liability**
  - Numerous personal injury and wrongful death lawsuits have been filed in recent years alleging that train operators negligently failed to implement PTC technology that would have avoided train accidents.
  - To the extent additional train accidents occur in trains without PTC, further litigation can be expected.
  - If train accidents occur in PTC-installed trains, it is anticipated that wrongful death and personal injury lawsuits alleging theories of product liability and negligent failure of the PTC system may be filed.



Collision Avoidance

- **Records Retention for Litigation**
  - Common law principles impose obligations to preserve data upon notice of a pending claim.
  - Once a potential claim involving a vehicle that employs telematics is known, a transit agency must impose a “litigation hold” to preserve data potentially relevant to the claim.

Procurement, Risk Management & Emergency Preparedness

Breanne Injeski

Procurement

Some considerations that may arise in the procurement context are:

- **Compatibility with existing infrastructure and operations:** Transit agencies need to ensure that new technologies can integrate smoothly with the current hardware, software, data, and communication networks, as well as with the operational procedures and policies of the agency.
- **Cost and risk of innovation:**
  - New technologies often require significant upfront investment and may entail uncertain outcomes and benefits.
  - Transit agencies need to balance the potential advantages of adopting new technologies with the financial and operational risks involved.
  - They also need to consider the long-term maintenance and upgrade costs of the new systems, as well as the availability and reliability of technical support from the vendors.

Procurement

Some other considerations that may arise in the procurement context are:

- **Confidential and proprietary information:**
  - Transit agencies may need to handle confidential and proprietary information when procuring new technologies, such as trade secrets, technical specifications, or pricing information.
  - For example, transit agencies may need to safeguard the confidentiality of their own information or that of their vendors or partners, or to comply with public disclosure laws and regulations.
- **Demonstrations and pilot programs:** Transit agencies need to adopt agile and flexible approaches to test and implement new solutions.

Risk Management

Risk management issues that arise when transit agencies use new and innovative technologies:

- **Cybersecurity:** New technologies may introduce new vulnerabilities and threats to the transit system's data, operations, and assets.
  - Transit agencies need to assess the risks and implement appropriate security measures to protect their systems and data from hackers, or to develop contingency plans in case of technology failures or malfunctions.
- **Privacy:** New technologies may collect, store, and share personal information of transit users, such as location, travel patterns, preferences, and payment methods.
  - Transit agencies need to comply with relevant privacy laws and regulations, and ensure that they have the consent and trust of their customers.

Risk Management

- **Liability:** New technologies may create new legal challenges for transit agencies, such as who is responsible for accidents or injuries involving autonomous vehicles, drones, or robots.
  - Transit agencies need to:
    - Verify claims made by the vendors before entering into a partnership agreement
    - Understand the roles and responsibilities of each partner
    - Establish clear contractual terms that define the scope, duration, cost, data ownership, and risk allocation of the project
    - Obtain adequate insurance coverage for the new technology and negotiate with insurers on the premiums, deductibles, and exclusions that may affect liability exposure.

Risk Management

Legal & Regulatory Compliance: New technologies may introduce compliance requirements for transit agencies in terms of federal, state, and local regulations and standards that apply to the new technology, such as privacy, security, accessibility, safety, and environmental standards.

- Transit agencies need to ensure that the new technologies comply with all relevant laws and regulations at the local, state, and federal levels.

Interoperability: New technologies may require transit agencies to coordinate and integrate with other entities, such as other modes of transportation, service providers, regulators, and standards organizations.

- Transit agencies need to ensure that their systems are compatible and interoperable with others, and that they can share data and information effectively.

Emergency Preparedness

Overview

- Transit agencies are responsible for ensuring their preparedness in the event of various emergency and disaster situations.
- Emergencies may take several forms, including infectious disease outbreaks or public health emergencies, earthquakes, tornadoes, fires, floods, hurricanes, and acts of terrorism
- Preparedness efforts depend on the resources and risks of a particular jurisdiction or region.
- The particular preparation measures will depend on the type of emergency or disaster.

Emergency Preparedness

Planning and Preparedness

- Emergency preparedness relates to the activities, programs, and systems developed prior to an incident, disaster, or emergency, which are used to support and enhance prevention, response, and recovery.
- When transit agencies are deciding whether to implement technology systems, they must analyze the unique procedures that should be implemented in the event of a disaster.
  - Natural disasters can disrupt or overload local infrastructure and affect the electric power supply, making access to technology systems nearly impossible.
  - Disasters can present broader data-related issues of availability, accessibility, consistency, integrity and efficient data and risk management.
- Plans should:
  - Include a contingency for failed or compromised technology resulting from the disaster;
  - Be both preventative and reactive;
  - Contemplate the relocation of the affected technology.

Emergency Preparedness

Planning and Preparedness

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Emergency Preparedness

Using Technology to Aid in Emergencies

- Technology can be used to help manage certain emergency situations and disasters, such as transit strikes, pandemics like COVID-19, and natural disasters

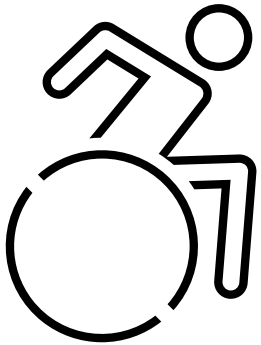
- Transit agencies have incorporated technology into their emergency response plans to coordinate vehicles, operators, dispatch, and routing for passenger evacuation and transport.

Emergency Preparedness

Using Technology to Aid in Emergencies

Examples:

- Following Hurricane Sandy, Rockland County, NY used an interactive GIS mapping tool to provide a common operating picture for emergency response agencies at the local, county, and state levels as well as the Red Cross and other emergency personnel.
- During the pandemic, many transit agencies experimented with new technologies to mitigate against the transmission of COVID-19:
  - Surface disinfection and cleaning technology
  - Air filtration and purification solutions
  - Collecting real-time passenger crowding data from buses, trains and platforms for integration with mobile apps and in-station displays
  - Wearable technology to promote worker safety and social distancing



Accessibility, Cybersecurity, Labor & Employment Issues

Patricia Gatling

Cyber Security

- ***Cybersecurity*** is the protection of computer systems and networks from the theft of or damage to their hardware, software, or electronic data, as well as from the disruption or misdirection of the services they provide. It generally protects confidentiality, integrity, and availability.
- ***No single federal law regulates cybersecurity and privacy.*** State and local government agencies are subject to a patchwork of industry-specific data security laws and other restrictions when they receive, maintain, use, or transmit data containing PII and other sensitive or confidential information.
- The **Federal Information Security Modernization Act of 2014** (FISMA) (44 U.S.C. §§ 3551, et seq.) is the cybersecurity framework for federal government; requires federal agencies and contractors to develop agency-wide information security programs.
- **Federal Cybersecurity Laws**
  - The **Stored Communications Act (SCA)** (18 U.S.C. 2701, et seq.) generally prohibits accessing stored electronic communications without authorization.
  - The **Computer Fraud and Abuse Act (CFAA)** (18 USC §§ 1030 et seq.) prohibits knowingly or intentionally accessing a computer system without authorization or exceeding authorization provided.
  - **Section 5 of Federal Trade Commission Act (FTC Act)**, 15 U.S.C.A. § 45, prohibits "unfair or deceptive acts or practices in or affecting commerce." Cybersecurity failures are an "unfair" act.
- **State Unfair and Deceptive Acts and Practices (UDAP)** statutes work alongside the FTC Act to protect consumers' privacy.
  - Range from requiring "reasonable" security plans to requiring specific steps.
  - Enforced by State AGs, these laws are largely punitive, carrying the threat of large fines, consent decrees, or lawsuits.
  - **New York** uses several sections of its General Business Law to enforce cybersecurity lapses and the statute specifically looks to Section 5 of the FTC Act to interpret what constitutes a deceptive act and practice. (N.Y. GEN. BUS. LAW Art. 22-A, §§ 349 and 350, and N.Y. GEN. BUS. LAW § 899-aa.)
  - New York courts interpret § 349 "by looking to the definition of deceptive acts and practices under [S]ection 5 of the Federal Trade Commission Act." (In re Marriott International, Inc., Customer Data Sec. Breach Litig., 2020 WL 869241, at *36 (D. Md. Feb. 21, 2020).)

Data Privacy

- Both ***federal and state laws*** protect personal information in government records.
- **Federal Laws** That Protect PPI in Government Records:
  - **Freedom of Information Act (FOIA)**
  - The **Privacy Act of 1974** (5 U.S.C. § 552a) protects the privacy of records maintained by *federal* agencies for individuals and regulates the agencies' release of private information
  - **Health Insurance Portability and Accountability Act of 1996 (HIPAA)** (Pub.L. 104–191), required the creation of national standards to protect sensitive patient health information from being disclosed without the patient's consent or knowledge.
  - **Family Education Rights and Privacy Act (FERPA) (**20 U.S.C. § 1232g), protects the privacy of student education records.
- **Often, government entities are exempt from consumer data privacy laws** that apply to the private sector.
  - For example, the California Consumer Privacy Act of 2018 (CCPA) applies only to "businesses" that are "organized or operated for the profit or financial benefit of [their] shareholders or other owners," which would not include government agencies. (CAL. CIV. CODE DIV. 3, Pt. 4, Title 1.81.5)
- **State privacy laws** and regulations deal with the storage and use of ***personally-identifiable information (PPI),*** personal healthcare information, and financial information of individuals, which can be collected by governments, public or private organizations, or other individuals.
- **New York:** Records contained in an indexed computer database may be protected by the ***NYS Personal Privacy Protection Law (PPPL)*** enacted to protect against the danger to personal privacy posed by computerized data collection and retrieval systems. (N.Y. PUB. OFF. LAW, Art. 6-A.)

Accessibility Laws

The **Americans with Disabilities Act (ADA)** and state accessibility laws apply to both public and private ground transportation providers.

- **Title II of the ADA** applies to *public* entities providing public services, including transportation services, and prohibits discrimination against individuals with disabilities by—and imposes affirmative responsibilities on—such entities related to public programs and services they provide.
- **Title III of the ADA** prohibits *private* entities that provide public transportation services from discriminating against individuals with a disability and preventing them from receiving full and equal enjoyment of specified transportation services provided by such private entities.
- **Section 504 of the Rehabilitation Act of 1973** prohibits recipients of federal financial assistance from discriminating against qualified individuals with disabilities in employment and in their programs and activities.

There are specific requirements for public transportation systems pertaining to **communication and information**, **assistance equipment**, accessible **features of vehicles**, among other things.

Technology & Accessible Vehicles

Liability

- Due to the heightened duty of care required for transporting people with disabilities, safety is the largest challenge to address for transit agencies before implementing the technology.

HIPAA

- HIPAA includes a privacy rule that provides federal protections for personal health information held by covered entities.

Public Transportation Services

ADA requirements apply to the following entities:

1) Any public entity that provides designated public transportation or intercity or commuter rail transportation;
2) Any private entity that provides specified public transportation; and
3) Any private entity that is not primarily engaged in the business of transporting people but operates a demand responsive or fixed route system.

[49 C.F.R. §37.21(a)]

Designated public transportation means transportation provided by a public entity (other than public school transportation) by bus, rail, or other conveyance (other than transportation by aircraft or intercity or commuter rail transportation) that provides the general public with general or special service, including charter service, on a regular and continuing basis. [49 C.F.R. § 37.3]

Specified public transportation means transportation by bus, rail, or any other conveyance (other than aircraft) provided by a private entity to the general public, with general or special service (including charter service) on a regular and continuing basis. [49 C.F.R. § 37.3]

Accessibility Requirements for Public Entities

FIXED ROUTE SERVICE

A "**fixed route system**" is "a system of providing designated public transportation on which a vehicle is operated along a prescribed route according to a fixed schedule."

All new vehicles that a public entity acquires for use in fixed route service **must be accessible**.

Complementary paratransit service is required where public entities provide fixed route service.

[42 U.S.C. § 12142; 49 C.F.R. § 37.5(b)-(d)]

DEMAND RESPONSIVE SERVICE

A "**demand responsive system**" is "any system of providing designated public transportation which is not a fixed route system."

Services include dial-a-ride (paratransit), taxi subsidy, vanpool, and route deviation services.

A public entity operating a demand responsive system is **not** required to buy an accessible vehicle if its system, when viewed in its entirety, "provides a level of service to such individuals equivalent to the level of service such system provides to individuals without disabilities." (aka "**equivalent service**").

[42 U.S.C. § 12141; 49 C.F.R. § 37.3.]

ADA Complementary Paratransit

Paratransit means ***comparable transportation*** service required by the ADA for individuals with disabilities who are unable to use fixed route transportation systems. (49 C.F.R. §37.3)

Complementary paratransit service is required where public entities provide fixed route service (bus and rail). The ADA's paratransit obligations do not apply to commuter bus, commuter rail, or intercity rail systems. (49 C.F.R. §37.121)

Comparability is defined and measured by the following characteristics:

- Hours and days of service (49 C.F.R. § 37.131(e))
- Service area (49 C.F.R. § 37.131(a))
- Response time (trip reservations) (49 C.F.R. § 37.131(b))
- Fares (49 C.F.R. § 37.131(c))
- Operating without regard to trip purpose (49 C.F.R. § 37.131(d))
- Absence of capacity constraints (49 C.F.R. § 37.131(f))

Accessibility Requirements for Private Companies Engaged in Transportation

TAXIS [49 C.F.R. § 37.29(B)]

Not required to purchase or lease accessible automobiles (sedans).

"Other than an automobile" (i.e., seats 8+ passengers) must be accessible unless equivalent service can be demonstrated.

SHUTTLE COMPANIES [49 C.F.R. § 37.103]

Purchase or lease a new vehicle with capacity of 8 or more:

- **Fixed Route:** it must be accessible
- **Demand Responsive:** it must be accessible, OR they must ensure the service provides "**equivalent service**"

Purchase or lease a new vehicle with capacity of less than 8, it must be accessible or "equivalent service"

Equivalent Service

"Equivalent Service" means equivalent in the following areas:

- Schedule / Response Time
- Fares
- Geographic Area of Service
- Hours and Days of Service
- Availability of Information
- Reservations capability
- Capacity
- Priority or Trip Purpose Restrictions

(49 C.F.R. § 37.105.)

How Paratransit Has Operated

Paratransit operations are often described as dial-a-ride, on-demand, curb-to-curb, or door-to-door services, but are more accurately termed “origin-to-destination” services.

By definition, complementary paratransit service is an origin-to-destination service featuring a level of personnel assistance that enables all complementary paratransit riders to travel from their origins to their destinations.

It must provide assistance to those passengers who need assistance beyond the curb to use the service unless such assistance would result in a fundamental alteration or direct threat. [49 C.F.R. § 37.3]

Traditional Paratransit Operations

Pre-Arranged Service

- Services are provided by private carriers who contract with the transit agency and use lift-equipped vans.
- Riders must pre-book trips well in advance, typically at least a day.

New Paratransit Operations

Demand-Responsive Transport (DRT)

- Using apps and brokerage services to respond to passengers' requests and provide a more flexible model.
- Book by app, phone, website.
- Allows for multi-modality and shared rides.
- Can provide "feeder service" (transport the customer for the first leg of the trip, from the starting point to a fixed-route bus/subway stop).

WAV Taxis & TNCs

- The use of apps and point-to-point wheelchair accessible TNCs and taxis is a solution to the potential lack of compliance with the spirit of the ADA.
- Service may be augmented by the use of private taxis, livery and black car services.

Can significantly reduce cost-per-trip by using these vehicles instead of the more costly vans.

FTA Accessible Demonstration Projects

MOD Sandbox Demonstration Projects:

- **Pinellas Suncoast Transit Authority (PSTA)-Public Private-Partnership for Paratransit Mobility on Demand Demonstration:** PSTA partnered with Lyft, United Taxi, CareRide, Wheelchair Transport, and others to develop and demonstrate an innovative business model aimed at increasing the efficiency and cost effectiveness of paratransit services while providing flexible and responsive transportation.
- **Dallas Area Rapid Transit (DART) First and Last Mile Solution:** The project provided same-day service for riders with disabilities who use WAVs instead of next-day, demand responsive service and to comply with the ADA through meeting an equivalent level of service requirement.

FTA's Mobility for All Pilot Program (June 2020)

- in June 5 2020, FTA announced $3.5 million in grants for 17 projects in 16 states to improve mobility and access to public transportation for older adults, people with disabilities and individuals of low income.
- **Access Services**, serving 45 agencies in Los Angeles County, will receive funding for an accessible traveler mobile app that provides real-time arrival, trip booking and integrated mobile fare payment.
- **Maine DOT** will receive funding for a project to expand on-demand bus service and daily fixed route bus service in rural areas. The project will use enhanced technology to fill gaps in service and improve access and mobility for older adults and individuals with disabilities in northern Maine.

THE TRANSPORTATION LAWYER

TLA Feature Articles

Accessible Transportation Reform: TRANSFORMING THE PUBLIC PARATRANSIT AND PRIVATE FOR-HIRE GROUND TRANSPORTATION SYSTEMS

Matthew W. Daus* and
Jason R. Mischel**

Abstract

The public paratransit system in the United States is in desperate need of significant reform. Hundreds of millions of taxpayer dollars are wasted on inefficient and unsustainable accessible transportation service, with disjointed agency coordination between multiple public agencies, private businesses and vendors. Accessible transportation is a civil right, and a new service paradigm and model can and should be developed to provide safe, reliable and ecologically sustainable vehicles, using state of the art technology.

Around the country there is a hodgepodge of extensive accessible funding through public transit and social service agencies, as well as for private for-hire transportation. There should be a consistent, uniform and coordinated method for delivering subsidized accessible ground transportation service to all disabled passengers.

This study will use the New York City system, problems and proposed solutions as a case study that may be applied in other jurisdictions.

Accessibility Overview: The Problem and Context of Study

Many communities in the U.S. and around the world – whether urban, rural or suburban – are interested in providing effective paratransit services that are also efficient performers from the viewpoint of environmental sustainability. Herein, paratransit will be understood in the general sense of flexible passenger transportation that does not follow fixed routes or schedules, and often serves the transportation needs of people with disabilities or the elderly. Typically, paratransit systems exist because laws and regulations such as the Americans with Disabilities Act (ADA) require the services to be provided. Public or private operators who deliver paratransit services often do so via fleets of vans or minibuses. Paratransit ranges widely in terms of the flexibility of the provided services, which can range from relatively inflexible transportation along a more or less defined route, to fully "demand responsive" service that offers on-demand, door-to-door transportation. Given the governmental subsidies needed to support paratransit, policymakers are considering ways to operate paratransit systems more effectively and efficiently. Likewise, they are increasingly interested in the environmental sustainability of paratransit. Service delivery efficiency not only yields environmental benefits, but also goes hand in hand with economic savings.

This study will focus on paratransit services provided by New York City Transit, and in particular on the integration of taxis (and livery and black car services) as service-providing vehicles. The overall focus will be on how such taxi integration will improve paratransit: (1) service; (2) economic efficiency; and (3) environmental sustainability. There are types and degrees of taxi and car service integration that will provide the same levels of paratransit service, for approximately the same cost, but with a measurably smaller ecological footprint.

The Evolution and History of Accessible Ground Transportation Services in the United States

Paratransit Services

Paratransit systems exist because the United States federal government enacted laws such as Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act ("ADA") which prohibit discrimination on the basis of disability in, among other areas, transportation, and which require government-sponsored/subsidized transportation to provide accessible transportation for all U.S. residents, including for individuals with disabilities.

The ADA, while exempting mandatory accessible taxicab service requirements, does provide a number of general requirements a public transportation provider must consider when planning for paratransit services, including acceptable location, reservations and fare information.

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Accessible Transportation Reform

Accessible Transportation Reform: Transforming the Public Paratransit and Private For-Hire Ground Transportation Systems

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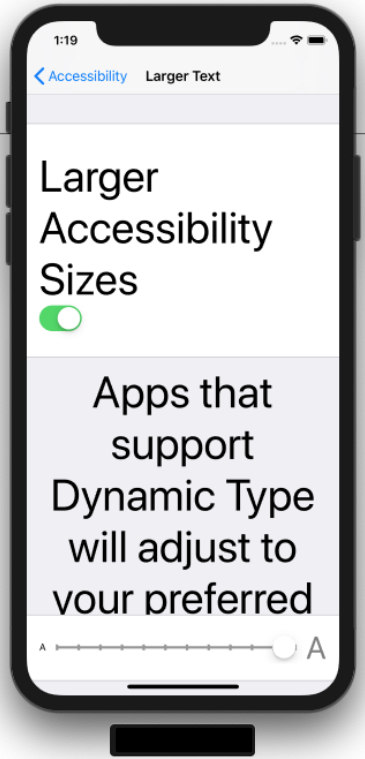
New Vehicle Technologies

Accessibility Issues

- Transit agencies that are considering adopting new vehicle technologies (AVs, CVs, EVs) to provide service to the public must ensure that those vehicles are accessible for persons with disabilities and adhere to ADA requirements.

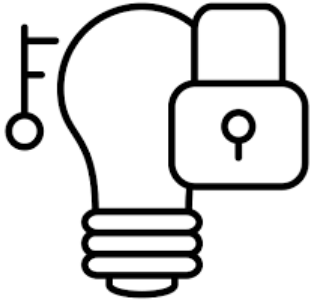
Equity Issues

- Lower income communities may lack resources for necessary infrastructure.
- Concerns if the government decides vehicle routing: government reserving access to faster routes options to those willing and able to pay for the privilege.



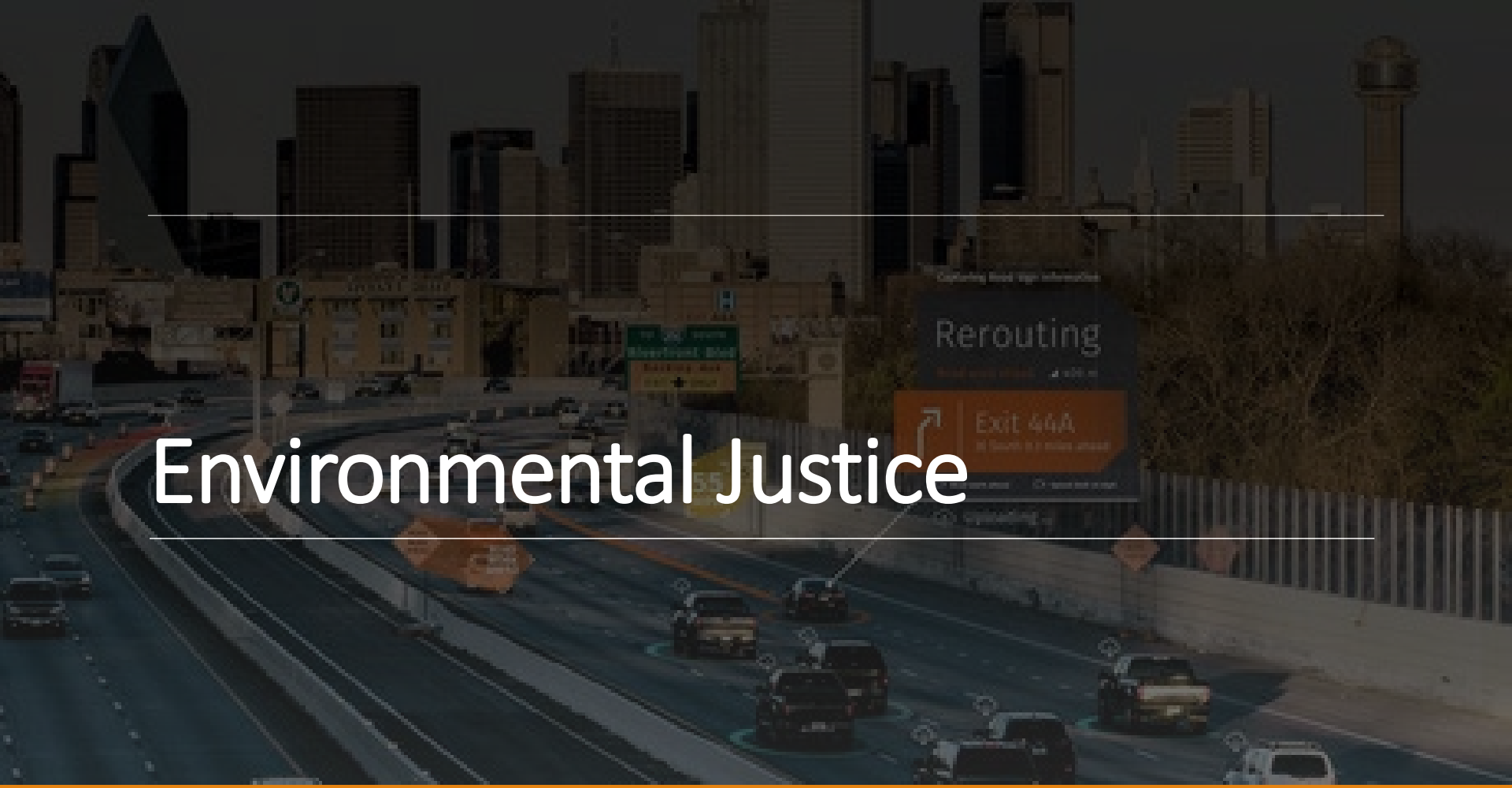
Mobile Apps & Electronic Payment Systems

- **Accessibility Issues**
  - ADA requires adequate communications and information available, using accessible formats and technology (*e.g.*, large print, braille, audiotape, and electronic files usable with text-to-speech technology) for persons with different types of disabilities.
  - Includes access without vision, with low vision, without hearing, without color perception, with limited manual dexterity, without speech
  - If the information is available on a mobile app or website, then there are additional requirements.
  - Mobile apps are generally covered by the same standards for access by people with disabilities that apply to non-mobile software and web applications.
- **Equity Issues**
  - Access issue for those who do not have a smartphone with data plan or a linked credit card/bank account.



Intellectual Property, Environmental Justice & Title VI

Sherbune Paul



Environmental Justice

Transportation Equity: Environmental Justice and Title VI of the Civil Rights Act

- Transportation equity is an integral part of transportation planning and funding.
- Title VI of the Civil Rights Act of 1964 and subsequent executive orders address transportation equity and environmental justice.
- Recent protests for racial justice have brought renewed attention to these issues.

Implications of New and Emerging Technologies

Benefits of Innovative Technologies:

- Electric vehicles (EVs) and autonomous vehicles (AVs) have the potential to benefit cities.
- EVs, with no tailpipe emissions, are safer for communities burdened by air pollution.
- New technologies can expand transportation options, improve safety and quality of service, reduce costs, and lower carbon emissions.

Equity Concerns:

- Low-income and minority populations may experience technology benefits differently.
- Transit agencies must consider the impact on these populations and ensure they do not face disproportionately high adverse effects.

Equity Concerns in Transportation Services

Unbanked and Underbanked:

- Many shared mobility services require credit/debit cards for payment.
- Underbanked and unbanked individuals, who are often lower-income, face barriers in accessing these services.
- Equity challenges arise due to disparities in access to banking services and credit cards.

The Digital Divide:

- Access to the Internet is essential for new transportation services.
- While the digital divide has narrowed, adoption gaps remain based on factors like age, income, education, and community type.
- Lack of Internet access can hinder access to innovative transportation options.

Federal Actions to Address Transportation Equity

Title VI of the Civil Rights Act:

- Prohibits discrimination based on race, color, and national origin in federally assisted programs.
- Transportation agencies must ensure compliance with Title VI requirements.
- Administrative complaints can be filed for alleged discrimination, and agencies have enforcement options.

Executive Order 12898:

- Requires federal agencies to address disproportionate adverse effects on minority and low-income populations.
- Environmental justice is integrated into the mission of federal agencies, including the U.S. DOT.
- U.S. DOT has developed strategies and guidance to achieve environmental justice in transportation programs.

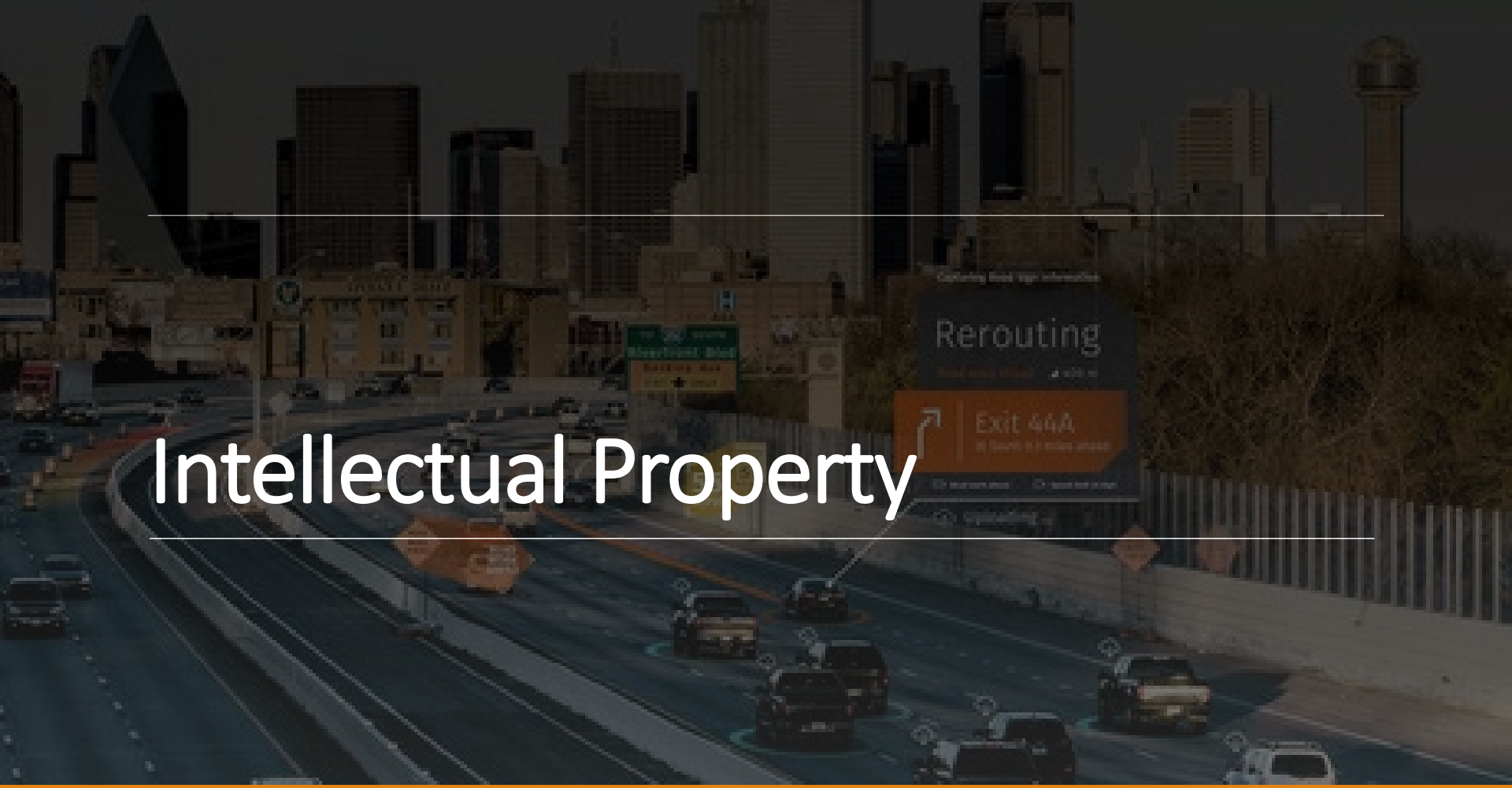
U.S. DOT's Approach to Environmental Justice

DOT EJ Order and Circular:

- U.S. DOT's Order 5610.2(a) and Circular 4703.1 provide guidance for implementing environmental justice.
- Environmental justice principles must be considered in transportation planning and programming.
- Adverse effects for environmental justice purposes include health impacts, pollution, community disruption, and denial of benefits.

Current Initiatives:

- U.S. DOT actively prevents disproportionately adverse effects on minority and low-income communities.
- Enhanced engagement and meaningful input opportunities for these communities in transportation planning.
- Transportation equity is a priority in federal and federally funded transportation programs.



Intellectual Property

Protecting Proprietary Information and Intellectual Property

- Public agencies entrusted with confidential and proprietary information and trade secrets from third-party technology providers.
- In the private sector, this information is protected by bidding laws or nondisclosure agreements, but in the public sector, it may be vulnerable to disclosure under open records laws.
- Legal issues arise regarding the use of technologies containing trade secrets and confidential information by transit agencies.

Trade Secrets Protection Generally

- Trade secrets are protected by federal and state laws, including the Economic Espionage Act and the Trade Secrets Act at the federal level.
- Most states have adopted a version of the Uniform Trade Secrets Act (UTSA) to protect trade secrets, but requirements and scope of protection vary.
- Trade secret protections generally apply to business, financial, and technical information that has independent economic value, is not generally known or readily ascertainable, and efforts are made to maintain its secrecy.

Trade Secrets Act, 18 U.S.C. § 1905 and Defend Trade Secrets Act of 2016 (DTSA)

- Trade Secrets Act imposes criminal sanctions on federal employees who disclose certain classes of information, including trade secrets and confidential statistical data.
- The DTSA provides federal criminal and civil actions for theft of trade secrets, including a private right of action.
- The DTSA defines trade secrets as various types of financial, business, scientific, technical, or engineering information that is kept secret and has independent economic value.

Uniform Trade Secrets Act and State Laws

- Technology acquired or developed by transit agencies may be protected as trade secrets under the UTSA, adopted by most states.
- The UTSA provides a private cause of action for trade secret misappropriation and remedies such as injunctions, damages, and attorneys' fees.
- Different states have variations in their definition and criteria for trade secrets, but generally, trade secrets are information with independent economic value that is not generally known and efforts are made to maintain its secrecy.

Summary

Technological advancements have brought about significant changes in the past decade and will most likely radically change transportation within the next ten years.

Technology is rapidly changing public transportation and challenging the relevancy of the current structure of public transportation systems.

Transit agencies could realize many benefits by implementing new and emerging technologies, but transportation attorneys need to exercise due diligence before doing so.

With proper planning, policies, and project oversight, transit agencies will be better able to meet their objectives and policy goals.

TCRP J-05/Topic 21-02: *"Legal Issues in Transit Agencies Providing/Subsidizing Innovative Micromobility Projects"*

- The objective of this research is to determine effective practices for transit agency support and use of micromobility modes to provide and support public transit. What legal issues and legal guidance should transit agencies and government sponsors consider in order to implement these micromobility modes effectively, equitably, and safely, in compliance with applicable laws?
- Micromobility devices include bicycles, electric bicycles, electric scooters (including adaptive scooters and electric skateboards). Such devices may be shared through rental apps or docks.
- Microtransit providers may expect passengers to make their way to and from common pick-up or drop-off points, or may allow passengers to find and leave devices at public areas.

WINDELS MARX

Thank you! Any Questions?

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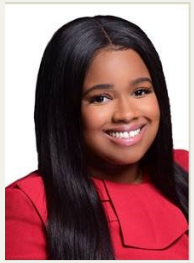

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NATIONAL ACADEMIES *Sciences Engineering Medicine*

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July 9-13, 2023

TRB's 2023 Automated Road Transportation Symposium

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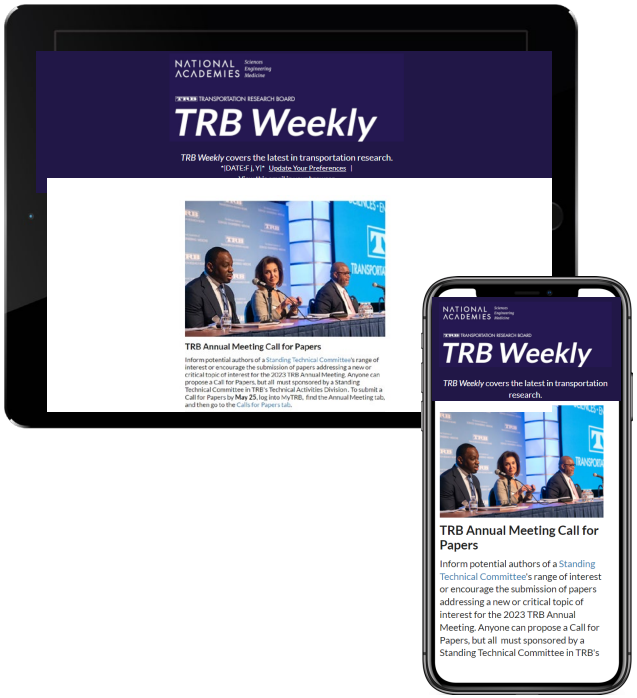

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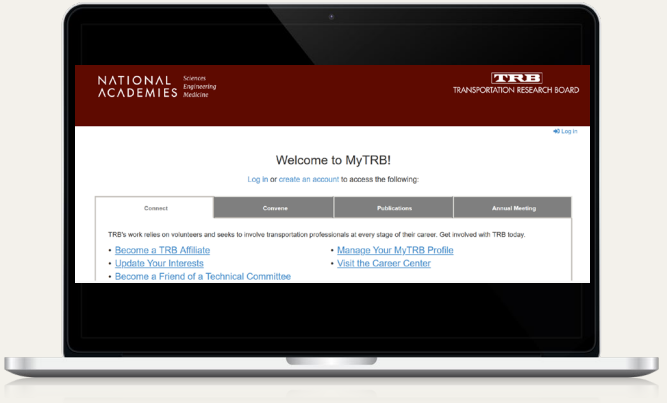

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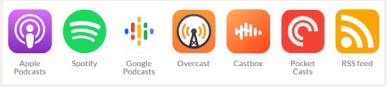

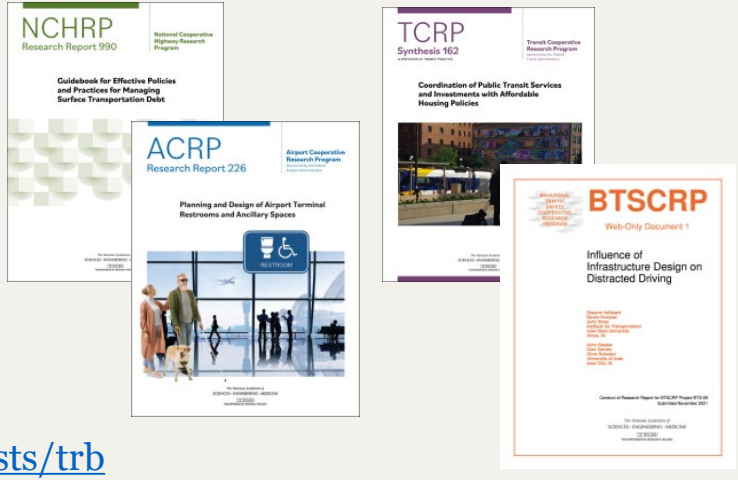

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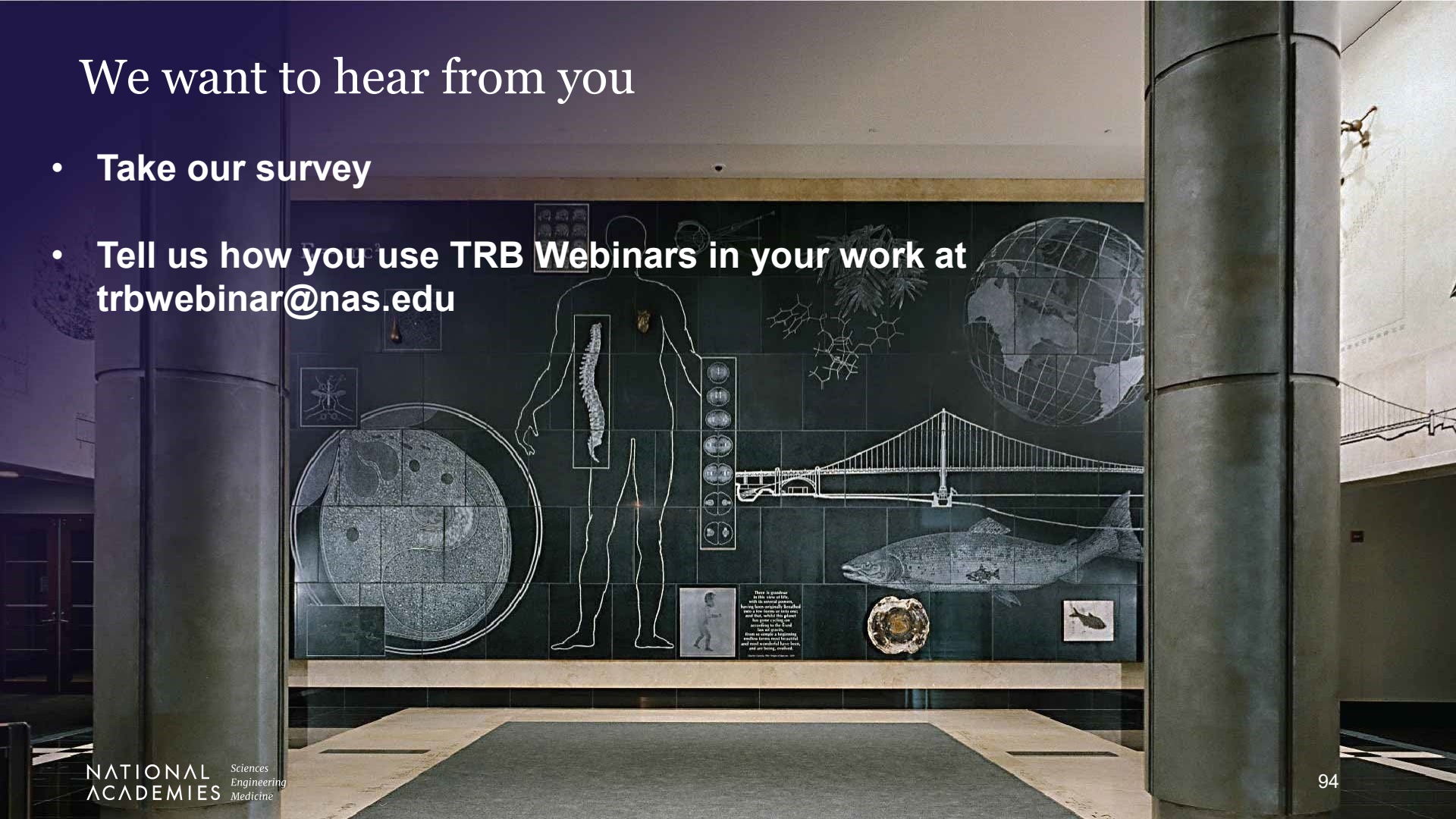

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