

# Transit Safety and Oversight Spotlight Newsletter

U.S. Department of Transportation  
Federal Transit Administration

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## Message from the Acting Administrator

February 2021  
Vol. 6 No. 2

Dear Transit Colleagues:

I am very pleased to join FTA and serve as the Acting Administrator. As many of you may know, I also served as FTA's Deputy Administrator 20 years ago, during the Clinton Administration. I recently served as General Manager/CEO of Santa Clara Valley Transportation Authority in the San Francisco Bay area, where I was responsible for 2,100 employees, delivering projects, programs, and transit services for the people who live and work in Silicon Valley. My seven years at Santa Clara VTA was the latest chapter in my career in transportation, which spans over 35 years, and includes serving in leadership positions at the New York Metropolitan Transportation Authority, the Chicago Transit Authority and the Washington Metropolitan Area Transit Authority. For the past year and a half, I had the privilege to serve as Chair of the American Public Transportation Association. Throughout the course of my transit career, I have worked with many of you, and I share your passion, dedication and commitment to improving public transportation for America's communities.



**Nuria Fernandez**  
Acting Administrator,  
Federal Transit  
Administration

Joining me in this new Administration is our recently appointed Chief Counsel, Subash Iyer. Subash comes to us from the New York Metropolitan Transportation Authority, where he served as Special Counsel for Ethics, Risks and Compliance. FTA is fortunate to have Subash on our team! In my first few weeks, I want to reacquaint myself with the agency's current programs and practices and work with FTA's Executive Management Team to deliver on President Biden's priorities. FTA has a major role to play in helping carry out the President's agenda, including his first priority to help the nation recover [from the COVID-19 pandemic](#).

I am looking forward to working with you to support President Biden's ambitious agenda—starting with the first major task before us—implementing a [Federal mask requirement for surface transportation providers](#). To save lives and allow all Americans, including the hundreds of thousands of people employed in the transportation industry, to travel and work safely, on January 21, 2021, the Biden Administration issued Executive Order (E.O.) 13998, *Promoting Safety in Domestic and International Travel*, which required Federal agencies to act immediately to mandate masks on public forms of transportation, including transit. A [Centers for Disease Control and Prevention \(CDC\) Order](#) and [Transportation Security Administration Security Directive](#) implementing E.O. 13998 took effect on February 1, 2021. FTA will support the industry's implementation of the President's E.O. and the CDC Order. We encourage you to join our transit stakeholder calls and other outreach activities designed to mitigate the risk of COVID-19. You can register for upcoming calls and review recordings from past calls on [FTA's website](#). Please send your questions about the mask requirement to [TransitMaskUp@dot.gov](mailto:TransitMaskUp@dot.gov).

At his [Senate confirmation hearing](#), Transportation Secretary Pete Buttigieg emphasized safety as his number-one priority for the Department and the transportation industry. And safety is all the more important during this pandemic.

I look forward to working with you to help the transit industry recover from the COVID-19 pandemic and advance safety for our industry. Be well and stay safe!

Sincerely,  
Nuria Fernandez

## COVID-19 Available Guidance and Resources for the Transit Industry

FTA continues to provide [updated resources](#) and encourages transit agencies to stay informed as new COVID-19 information is released. The following resources are available:

- **NEW: [Federal Mask Requirement for Transit](#)**—Provides answers to frequently asked questions on the new Federal mask requirement.
- **NEW: [COVID-19 Recovery Practices in Transit](#)**—Provides web links to practices implemented by transit systems worldwide in response to COVID-19, updated monthly.
- **[COVID-19 Recovery Discussion Forum](#)**—An online platform for peer-to-peer exchange of transit ideas and practices during COVID-19 recovery.
- **[COVID-19 Resource Tool](#)**—A compilation of Federal COVID-19 guidance and recommendations, updated weekly.
- **[Frequently Asked Questions from FTA Grantees Regarding COVID-19](#)**—Provides clarity regarding how COVID-19 preparations impact certain FTA requirements and includes recent FAQ updates from January 14, 2021.

### Sign-Up for Updates

[Click here](#) to sign-up for FTA COVID-19 updates.

### Questions?

Contact your [FTA Regional POC](#) for COVID-19 related questions.

## Upcoming Safety Training

U.S. DOT's [Transportation Safety Institute \(TSI\)](#) is increasing its delivery of virtual classes by adding more course delivery dates and offering Safety Management Systems (SMS) Principles for Transit as a virtual course. The [FY21 training schedule](#) is available on FTA's website. The status of in-person TSI courses depends upon each host's local guidance. Please contact TSI at [TSI@dot.gov](mailto:TSI@dot.gov) or 405-954-3682. TSI can verify the status of all scheduled courses and assist with any other course-related questions.

eLearning Self-Paced Online Courses		
Bus Nomenclature	<a href="#">On demand on TSI Website</a>	Available 24/7
Curbing Transit Employee Distracted Driving	<a href="#">On demand on TSI Website</a>	Available 24/7
Fatigue and Sleep Apnea Awareness for Transit Employees	<a href="#">On demand on TSI Website</a>	Available 24/7
Rail Nomenclature	<a href="#">On demand on TSI Website</a>	Available 24/7
Roadmap to Drafting an Agency Safety Plan for Bus Agencies	<a href="#">On demand on TSI Website</a>	Available 24/7
SMS Awareness	<a href="#">On demand on TSI Website</a>	Available 24/7
Virtual Live Training		
Overseeing the Safety Management Process for SSOAs	Virtual Live Training	March 29– April 1, 2021 April 12– 15, 2021 May 11– 14, 2021
SMS Principles for Transit	Virtual Live Training	March 1– 3, 2021 April 5– 7, 2021
SMS Safety Assurance	Virtual Live Training	March 11, 2021 April 22, 2021 May 20, 2021

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The National Transit Institute (NTI) has opened registration for virtual offerings of the [Assault Awareness and Prevention for Transit Operators course](#). The course will provide transit bus operators with prevention strategies to reduce the likelihood of assault incidents. Prevention strategies focus on communication and response skills, the value of reporting incidents and the importance of seeking assistance to reduce the risk of assault incidents.

National Transit Institute Assault Awareness and Prevention for Transit Operators Course	
February 25, 2021	1:00 pm–4:30 pm ET
March 2, 2021	9:30 am–1:00 pm ET
March 4, 2021	1:00 pm–4:30 pm ET
March 9, 2021	9:30 am–1:00 pm ET
March 11, 2021	1:00 pm–4:30 pm ET
March 16, 2021	9:30 am–1:00 pm ET
March 18, 2021	1:00 pm–4:30 pm ET
March 23, 2021	9:30 am–1:00 pm ET

## FTA Awards \$15.8 Million in Grant Awards to 37 Projects Nationwide to Improve Operational Efficiency of Transit Agencies Affected by COVID-19

FTA recently announced 37 projects will receive a share of \$15.8 million in funding to support strategies that develop, deploy and demonstrate solutions that improve the operational efficiency of transit agencies and enhance rider mobility during the COVID-19 public health emergency as part of the new [FTA Public Transportation COVID-19 Research Demonstration Program](#).

This program will help invest in and promote promising, innovative solutions that address the challenges transit agencies are facing during the public health emergency. Selected projects include solutions such as implementing new cleaning and disinfecting protocols, contactless payment systems and modernized data collection and reporting on ridership, vehicle capacity and other factors to improve agency decision-making, transparency and increase rider confidence.



Kansas City Area Transportation Authority (KCATA) in Kansas City, Missouri will receive funding to implement contactless, electronic fare validation.

Here are some examples of the innovative solutions transit agencies will implement to support safe transit in their communities:

- **South Bend Public Transportation Corporation (Transpo)** in South Bend, Indiana will receive funding to implement a new, contactless payment option for riders, streamlining the boarding process and operational efficiency of each route. This solution will reduce contact between operators, riders and fare boxes to help improve safety during the COVID-19 public health emergency.
- **New Jersey Transit (NJT)** in Newark, New Jersey will receive funding to use video analytics and artificial intelligence to address COVID-19 exposures on transit vehicles via heat mapping, face mask detection and capacity management.
- **The Central Ohio Transit Authority (COTA)** in Columbus, Ohio will receive funding to develop a comprehensive data model, including incorporating cell phone data to understand travel patterns and drive decision making based on travel changes pre- and post-COVID-19. The analysis will help improve operational efficiencies and demonstrate how communities with multi-modal transit networks can provide more efficient and reliable service with data-driven decision making, especially during and after emergencies.
- **The Nashville Metropolitan Transit Authority (Nashville MTA)** in Nashville, Tennessee will receive funding to study how to transport large numbers of riders efficiently while ensuring safety with social distancing. The project will include strategies to minimize bus crowding through dynamic vehicle staging, dispatching and scheduling that will be integrated into a trip planning and crowding real-time feed, providing agencies and riders tools to make informed decisions that improve operations, safety and the rider experience.

For questions, please contact [Jamel El-Hamri](#), General Engineer for FTA's Office of Research, Demonstration and Innovation.

## Addressing Operator Assault through a Safety Management System

Between 2009 and 2018, transit agencies reported an average of 174 instances of operator assault per year as major incidents to the National Transit Database. In 2019, FTA issued a [Notice on Protecting Public Transportation Operators from the Risk of Assault](#). This Notice alerts transit agencies to address transit operator assault through the Safety Management System (SMS) processes required under the [Public Transportation Agency Safety Plan \(PTASP\) regulation](#) (49 CFR Part 673).

This article focuses on the identification of hazards related to operator assaults.

### An SMS Approach to Operator Assaults

The PTASP regulation requires transit agencies to develop and implement an SMS and associated processes for all elements of a public transportation system. This includes developing a Safety Risk Management (SRM) process to:

- Identify safety hazards and their potential consequences;
- Assess the associated safety risk and prioritize hazards based on the safety risk of their potential consequences; and
- Identify necessary mitigations or strategies to reduce the likelihood and/or severity of a hazard's potential consequence.

### Related Resources

- [Transit Advisory Committee for Safety: Preventing and Mitigating Transit Worker Assaults in the Bus and Rail Transit Industry](#)
- [Transit Cooperative Research Program: Practices to Protect Bus Operators from Passenger Assault](#)
- [PTASP Hazards and Consequences Self-Guided Learning Tool](#)
- [PTASP Safety Risk Management Webinar](#)
- [PTASP Agency Safety Plan \(ASP\) Lessons](#)

## Identifying the Hazard

It might be tempting to characterize operator assault as a hazard. However, as we know from the PTASP regulation, a hazard is “a real or potential condition that can cause injury, illness or death; damage to or loss of the facilities, equipment, rolling stock or infrastructure of a public transportation system; or damage to the environment” ([§ 673.5](#)). An assault is not a condition; it is an action taken by an individual, or individuals, that threatens the safety of the operator.

When identifying hazards related to operator assaults, agencies must determine what real or potential conditions could allow an operator to be injured by a bad actor in an operator assault scenario.

For example, what conditions in a vehicle or operating environment could allow a passenger access to the operator? Maybe the operating compartment is not physically separate from passengers, or there is seating directly behind the operator. Standing areas may be near the operator, or rules for passenger location are not enforced.

Your agency can review a variety of sources to develop operator assault scenarios (what could happen). Information sources may include reports from operators or passengers, footage from video cameras, and agency or local law enforcement records.

Such scenarios help agencies determine how their vehicles, operating practices, service characteristics and environment, and training may contribute to conditions, or hazards, that need to be addressed to reduce the risk of operator assaults. They allow agencies to use available data and subject matter experts to walk through potential assault situations and identify hazards and potential consequences before an assault occurs. In turn, this allows agencies to conduct risk assessments and identify appropriate mitigations, completing the final components of the SRM process.

Visit the [PTASP Technical Assistance Center \(TAC\) Resource Library](#) for guides, fact sheets and webinars on the PTASP regulation. Contact the PTASP TAC at 1-877-827-7243 or [PTASP-TAC@dot.gov](mailto:PTASP-TAC@dot.gov) for assistance with any PTASP-related topic.

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## FTA Publishes Crashworthiness Bus Reports



Photo Credit: iStock

Since the mid-1990s, the FTA has funded and supported the development of technical standards and recommended practices for the public transportation industry. In this effort, FTA has worked closely with the industry’s official Standards Development Organization (SDO), the American Public Transportation Association (APTA), to fund and coordinate the transit standards program.

FTA also has partnered closely with other U.S. Department of Transportation Modal Administrations, including the Federal Highway Administration, Federal Railroad Administration, National Highway Traffic Safety Administration and Federal Motor Carrier Safety Administration, on multi-modal regulations to adopt standards that may

impact public transportation.

As a part of FTA’s Standards Development Program, FTA’s Office of Transit Safety and Oversight and Office of Research, Demonstration and Innovation coordinate to develop and publish safety research reports. The following bus safety reports are the first in the series of focus area research reports that will be published.



## Crashworthiness/Crash Energy Management for Transit Bus

Collisions are a major challenge faced by the public transportation bus sector that result in high costs associated with property damage or bodily harm. Data collected through the National Transit Database shows that 411 fatal transit bus incidents occurred during 2011–2015, resulting in 427 fatalities. Further, during the same time period more than 21,500 total collisions occurred that involved buses, resulting in more than 40,600 non-fatal injuries.

Crashworthiness and Crash Energy Management (CEM) is a structural design method that seeks to control the load path into the car body thus absorbing energy and increasing the likelihood of survivability for operators, passengers and occupants of other vehicles involved in a collision.

The objective of the [Crashworthiness/Crash Energy Management for Transit Bus](#) research report was to examine the standards, guidelines and recommendations associated with crashworthiness and CEM for transit buses, including articulated buses, rapid transit buses and paratransit body-on-chassis buses, as well as U.S. and international standards, and those issued by SDOs.

Overall, the study found that the examination of safety standards, guidelines and recommendations related to crashworthiness and CEM specific to transit buses revealed limited and/or minimum standards that could be enhanced to increase occupant safety. Read the full report for specific findings and related safety information and resources to help the transit industry promote vehicles designed and built to improve safety.

## Crashworthiness/Crash Energy Management Follow-up for Less than 30 Ft Bus

This study builds upon the previously mentioned research report and examines the crashworthiness of cutaway or body-on-chassis medium-duty transit buses that are less than 30 feet long. The [Crashworthiness/Crash Energy Management Follow-up for Less than 30 Ft Bus](#) research report examined the following areas:

- Background research and analysis on existing standards and needs for new standards;
- Case study evaluations and supplemental evaluations using National Transportation Safety Board investigation reports and recommendations associated with similar vehicles; and
- Findings related to voluntary standards, guidelines or recommended practices.



Photo Credit: Courtesy of Stephanie Lewis, Center for Urban Transportation Research

The operating environments and the general characteristics of paratransit passengers further highlight the need for crashworthiness standards for cutaway vehicles as both lead to a greater likelihood of increased injury severity and fatalities when collisions occur. Although current state, U.S., and international standards exist, many applicability restrictions exclude cutaway transit buses, and many occupant protection standards are limited to drivers of the vehicles, leaving passengers vulnerable.

Overall, the study found opportunities to improve the crashworthiness of cutaway vehicles, including removing the weight applicability restrictions for several standards; developing standards for frontal, side, rear and rollover collisions; requiring manufacturers to comply with newly-developed occupant crash protection standards; and increasing roof strength standards.

Transit agencies also would benefit from additional research to support the development of industry standards or guidance designed to mitigate the injuries and fatalities associated with secondary impact collisions in cutaway vehicles. Read the full report for additional findings and information, and access all of FTA's research reports on [FTA's Reports and Publications](#) webpage.

Both research projects were conducted by the Center for Urban Transportation Research (CUTR) at the University of South Florida. For questions regarding the reports, contact [Raj Wagley](#), General Engineer for FTA's Office of Infrastructure, Safety and Asset Innovation.

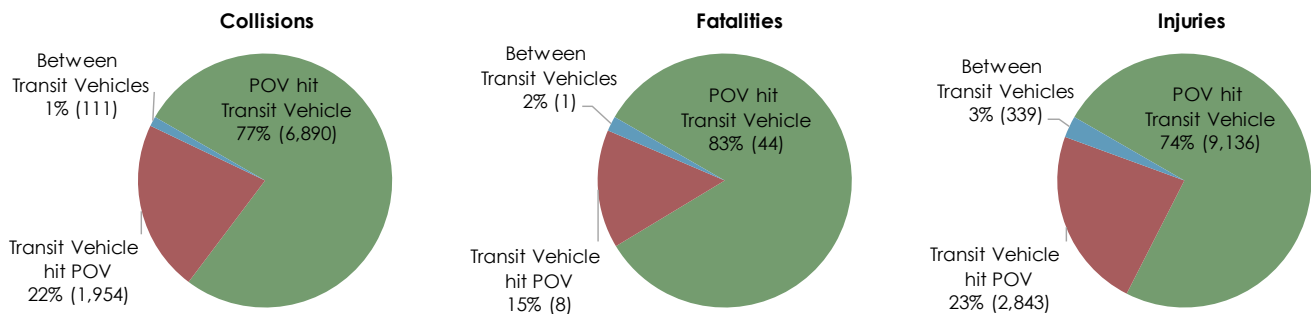
## Data Spotlight: Bus Rear-end Collisions, 2015 to Present

The *Transit Safety and Oversight Spotlight* Newsletter includes a “Data Spotlight” to share safety data trends and highlight data sets that may help the industry identify safety performance targets for their [Agency Safety Plans](#).

This month, the focus is on the National Transit Database (NTD) reporting of rear-end bus collisions<sup>1</sup> broken down by location type and roadway condition from 2015 to 2019.<sup>2</sup> Questions? Please contact [Jeff Thompson](#), General Engineer for FTA’s Office of System Safety.

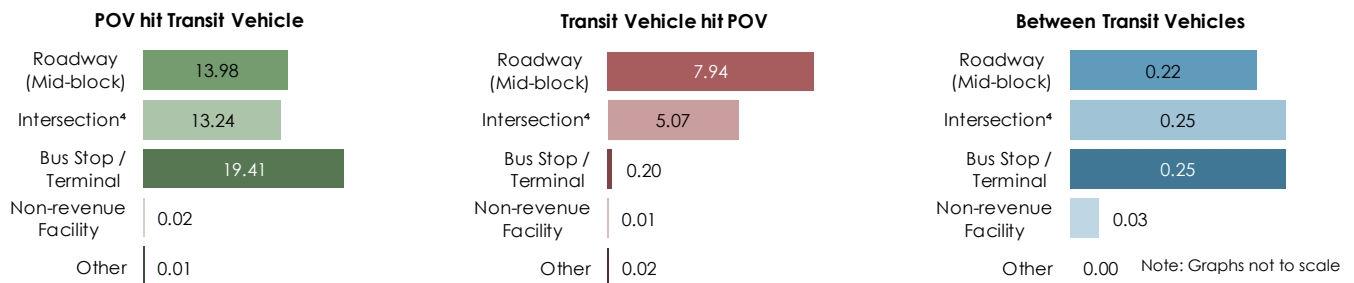
Since 2015, agencies have reported 8,955 rear-end collisions involving bus transit vehicles, including 53 fatalities and 12,318 injuries. Privately operated vehicles (POV) rear-ended bus transit vehicles in 77 percent of these events, while transit vehicles rear-ended POVs in 22 percent. The remaining one percent of rear-end collisions involved bus transit vehicles colliding with each other. Reported rear-end bus collision fatalities and injuries followed a similar distribution.

**Bus Rear-end Collisions,<sup>1</sup> Fatalities, and Injuries by Collision Type, 2015–2019<sup>2</sup>**



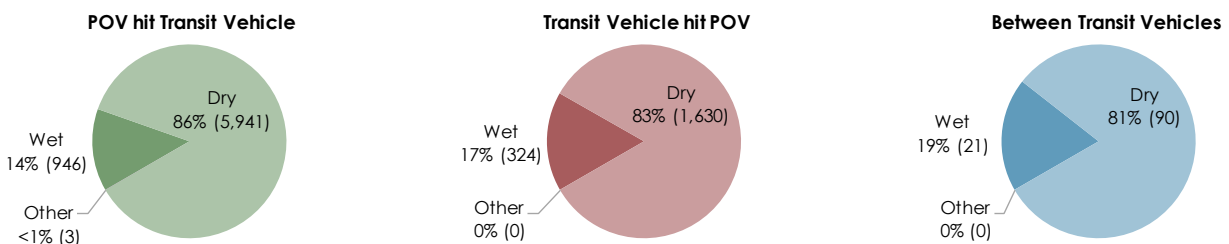
Most 60 percent reported collisions where bus transit vehicles rear-ended POVs happened mid-block on roadways. In contrast, collisions where POVs rear-ended bus transit vehicles were more evenly distributed: over 40 percent happened at bus stops,<sup>3</sup> 30 percent mid-block on roadways and 28 percent at intersections.<sup>4</sup> Rear-end collisions between transit vehicles occurred at a similar frequency at bus stops, intersections and other parts of roadways.

**Bus Rear-end Collision<sup>1</sup> Rate per 100 Million Vehicle Revenue Miles (100M VRM) by Collision Type and Location, 2015–2019<sup>2</sup>**



Wet pavement conditions factored into 14 percent of reported collisions where POVs rear-ended bus transit vehicles, 17 percent where the transit vehicles rear-ended POVs, and 19 percent of rear-end collisions between bus transit vehicles.

**Bus Rear-end Collisions<sup>1</sup> by Collision Type and Roadway Condition, 2015–2019<sup>2</sup>**



<sup>1</sup>Data only includes reporting from NTD full reporters and excludes all collisions involving suicides.

<sup>2</sup>Data submitted to the NTD for 2019 is preliminary and subject to revision.

<sup>3</sup>Bus stop collisions include those at terminal centers.

<sup>4</sup>Intersection bus collisions include those at rail grade crossings.

## FTA Safety and Oversight Employee Spotlight: Darreyl Davis



**Darreyl Davis**

Director, Office of Operations  
and Program Management,  
FTA Region II

**How would you explain your job to someone you've never met?** As the FTA Region II Director of the Office of Operations and Program Management in New York City, I lead a team who is responsible for monitoring and managing of the Region's grant portfolio of approximately \$37 billion. My team performs oversight, modifications and closeouts of each recipient's portfolio of grant awards of Federally funded projects and assists recipients' use of Federal funds in a manner consistent with their intended purpose in compliance with regulatory and statutory requirements and FTA's safety priorities. We ensure recipients' projects follow procedures that comply with Federal requirements are within scope of work and budget and completed on time.

**What excites you most about your job?** I love being able to assist recipients in the development and successful execution of their transit projects for their communities. Watching a grant project come to life is awesome. Prior to the COVID-19 public health emergency, site visits and witnessing the public use of the transit facilities was always the most exciting and rewarding part of my job.

**What is your favorite form of transportation and why?** I am a little old school and still prefer to drive when the opportunity presents itself. I always get nostalgic when reminiscing on road trips with my family from when I was younger. I loved those rides from the dynamic scenic views of highways, cities and countrysides to the stops we would make along the way. I also enjoyed meeting people during our journeys.

**When you were a child, what did you want to be when you grew up?** I did not know exactly, but I enjoyed building things. I was the kid who dismantled toys to see how they worked, especially the ones with batteries and motors, and put them back together. I may be dating myself, but my favorite toys were the Erector Sets.

**If you could take a month to travel anywhere, where would you go?** Africa—the entire continent.

**If you could learn any skill, what would it be?** I have always enjoyed music and wanted to learn how to play the lead guitar and alto saxophone. I always saw how the power of music brought people together. So, if I could learn any skill, I would definitely learn how to play a musical instrument.

**What is the best piece of advice you have been given?**

- Always have faith, never doubt yourself.
- Follow your instincts (for your instincts will always find opportunity).
- Never be afraid to reinvent yourself.

**What are you most looking forward to in 2021?** I have always been a positive and forward thinking person. Change is constant, so exciting new opportunities that reveal themselves, challenges and setbacks to overcome, experiences to go through, and a new normal post-COVID-19 is what I am looking forward to in 2021. The wisdom and, personal and professional growth that comes with those experiences is what I am most looking forward to this year. Being a part of FTA's *Transit Safety and Oversight Spotlight* Newsletter is a great start to this year!





U.S. Department of Transportation  
**Federal Transit Administration**

Federal Transit Administration  
Office of Transit Safety and Oversight  
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[Access FTA Transit Safety and Oversight Spotlight Newsletters](#) on FTA's Website

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## Upcoming Speaking Events and Webinars

### [Federal Mask Requirement Stakeholder Call](#)

February 23, 2021 | 3:00 pm ET

### [PTASP Webinar: Addressing Operator Assault Through Your Agency's Safety Management System](#)

February 24, 2021 | 1:30 pm–3:00 pm ET

### [2021 APTA Mobility Conference Virtual Event](#)

March 16-17, 2021

### [15th Annual FTA Drug and Alcohol Program National Conference](#)

May 11-14, 2021

