

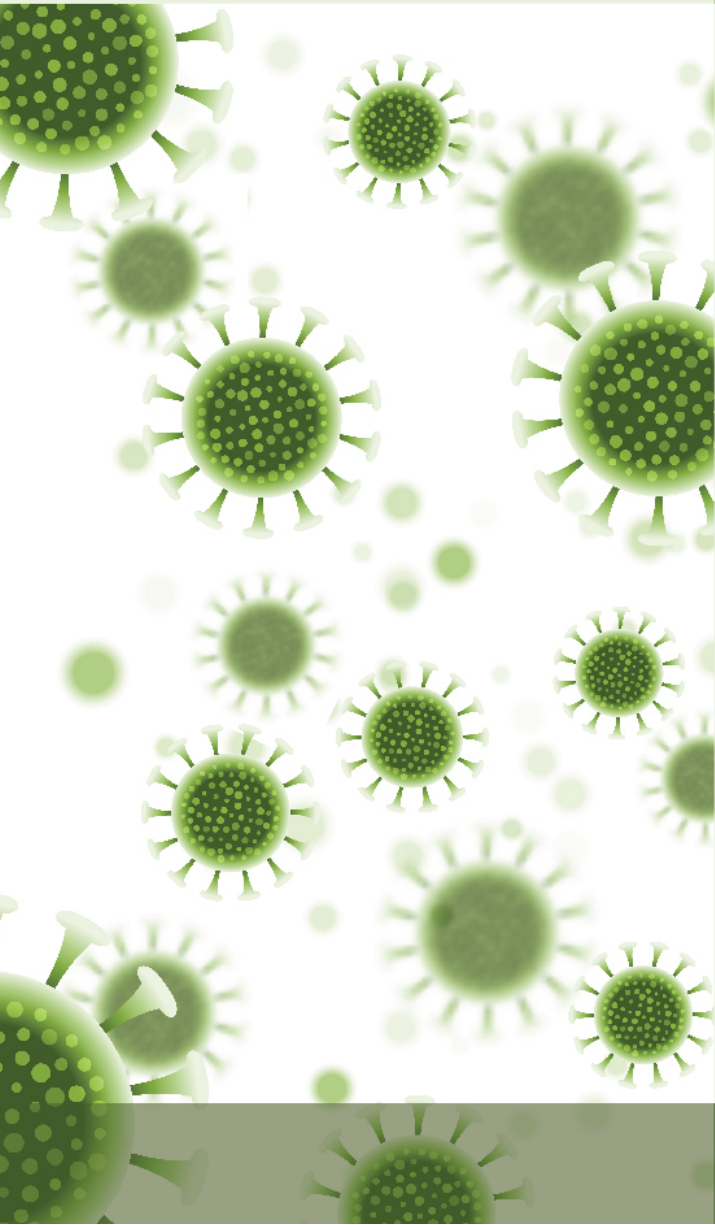


**COLORADO**  
Department of Transportation

DIVISION OF TRANSIT AND RAIL

# SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

November 2020





SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

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**Appendices**

Appendix A. Protocols Checklists

Appendix B. Summary of Interviews with Bustang/Bustang Outrider Transit Operators

A graphic on a purple background featuring several green, spherical virus particles with spikes. The word "STOP" is written in large, bold, red letters with a white outline. A red circle with a diagonal slash is superimposed over the letter "O". Below "STOP" is the word "THE" in smaller, white letters with a red outline. Below "THE" is the word "SPREAD!" in large, bold, green letters with a white outline. The entire graphic is surrounded by more green virus particles of varying sizes.

# STOP THE SPREAD!

## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

# 1 OVERVIEW

- 1.1 Introduction/Background
- 1.2 Regulatory Framework
  - 1.2.1 Federal Requirements
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- 1.3 Roles and Responsibilities
- 1.4 How to Use These Protocols



# 1.0 OVERVIEW

## 1.1 Introduction/Background

The world in 2020 is experiencing an outbreak of the latest strain of the Coronavirus Disease 2019—COVID-19. Scientific understanding of COVID-19 is rapidly evolving, as is our understanding of transmission and prevention. COVID-19 can cause varied symptoms based on a number of risk factors. The most severe cases may require hospitalization, intensive care, use of a ventilator for help breathing, or even be fatal.<sup>1</sup> The virus is primarily spread through person-to-person contact. Asymptomatic people may also be able to spread the virus. People can contract the virus from others who have the disease—primarily through breathing in droplets that have been expelled from the infected person’s nose or mouth. The virus can also land on objects or surfaces and infect those who touch them and then touch their eyes, nose, or mouth.<sup>2</sup> Transmission through aerosols, microscopic viral particles that can linger in the air and infect people who inhale clouds of those aerosolized particles, may occur in enclosed settings with poor ventilation.<sup>3</sup>

As a critical or essential business, transit agencies need to change the way they are operating to provide the best possible protection for their employees and patrons from the spread of the virus. Securing safe transit is a collective effort among transit agencies, riders, governments, and elected officials.<sup>4</sup>

It is possible to mitigate individual risk by following public health guidelines. Protections may prevent transmission from human to human and from surfaces to humans. From the onset, the need for social distancing and sanitization was clear. The most recent scientific knowledge supports masks and improved ventilation as critical interventions.<sup>5</sup>

The Colorado Department of Transportation (CDOT), an agency of the State of Colorado, manages the Bustang and Bustang Outrider interregional bus services in Colorado. CDOT has contracted with Ace Express Coaches to run Bustang’s North, South, and West Line service. Bustang Outrider is separately operated through contracts with Pueblo Senior Resource Development Agency, Alpine Express, and Southern Colorado Community Action Agency.

During the 2020 State of Colorado Stay at Home Public Health Order 20-24, the Bustang and Bustang Outrider bus services were suspended to reduce intercity travel across Colorado. As the state restrictions for travel were eased, CDOT resumed limited operations of the Bustang and Bustang Outrider bus services on June 28, 2020. Prior to resuming operations, CDOT received approval of its Bustang Restart Plan from the Colorado Department of Public Health



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and Environment (CDPHE), and Bustang and Bustang Outrider operators were required to follow those interim protocols.

CDOT has developed this document that assembles in one place a set of protocols for the Bustang and Bustang Outrider contractors for continued safe operations of bus services. This document is intended to be a resource for the bus operators and sets forth CDOT's expectation for minimizing exposure risks for bus operators and transit patrons during the current health crisis.

Protocols and best practices of international, federal, and state governments were assembled and compiled, as well as those from transit agencies and other public services. Lessons learned from Colorado bus contractors that have been operating during the pandemic have been incorporated into the document where relevant. Interviews were conducted with the four bus contractors from June 22 to July 8, 2020; a summary of Bustang and Bustang Outrider operator interviews is found in Appendix B. The document also contains helpful information related to the business side of the bus contractor operations, such legal, financial, and human resources implications from the pandemic.

Succeeding this document are longer-term protocols, "Long-Term Pandemic Protocols for Bus Operators," that will build on the short-term protocols and become part of the CDOT Division of Transit and Rail (DTR) oversight process and standard protocols during this and future health crises.

It is CDOT's intention to incorporate these protocols as amendments to existing contracts and as part of future contracts for bus services. The implementation of the protocols will be monitored as part of CDOT's oversight activities related to grant funds and contracts.

### **1.2 Regulatory Framework**

Bustang and Bustang Outrider operators must comply with federal regulations, Executive Orders issued by the Colorado Governor, and Public Health Orders issued by CDPHE. Local and county regulations must also be followed. All federal regulations are printed in the Code of Federal Regulations (CFR). Federal guidelines should also be adhered to.

#### **1.2.1 Federal Requirements**

##### **Centers for Disease Control and Prevention**

The Centers for Disease Control and Prevention (CDC) website contains health considerations and tools for operating during COVID-19. These guidelines are the basis for the Colorado Governor's Public Health Orders and CDPHE's guidelines. Several guidelines pertaining to Bustang and Bustang Outrider operations are listed below; a complete list of guidelines referenced can be found in the end notes.

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***What Bus Transit Operators Need to Know About COVID-19.*** Provides information about how employees can protect themselves and passengers and provides guidance to employers of bus operators.<sup>6</sup>

***Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19),*** May 2020.<sup>7</sup>

### Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) has developed interim guidance to help prevent worker exposure to COVID-19. All employers are required to comply with all applicable OSHA standards. They must also comply with the General Duty Clause of the Occupational Safety and Health (OSH) Act, which requires employers to keep their workplace free of serious recognized hazards.

### Federal Transit Administration

The Federal Transit Administration (FTA) has numerous resources on its website that inform and educate about how to safely operate transit services during the COVID-19 pandemic.<sup>8</sup> The FTA COVID-19 Resource tool references industry-specific resources from CDC, OSHA, the Environmental Protection Agency (EPA), and transit agencies across the United States.<sup>9</sup> FTA's regulations are found in Part 600 of Title 49, the transportation section of the CFR.



More information on OSHA's regulations can be found on [OSHA's website](#). CDC regulations are published in the Code of Federal Regulations, found on [CDC's website](#).

### 1.2.2 State Requirements

CDOT falls under the mandates of executive orders issued by the Colorado Governor and public health orders issued by CDPHE, the principal department of the Colorado state government responsible for public health and environment regulation. The pandemic's impact can be managed through public health orders that limit situations where COVID-19 can spread rapidly. Since March 11, 2020, a number of public health orders and executive orders have been issued intended to manage and protect Coloradans from the COVID-19 pandemic. These directives have expiration dates and are amended as current conditions warrant. Many aspects of the past and current orders (at the time of writing) are either directly relevant to transit operations or include general precautionary actions that should be adhered to by all people in public spaces. CDOT and bus operators are responsible for adhering to the most current directives at any given time.



All current and past State of Colorado public health and executive orders can be found at this [link](#).



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In addition, CDPHE has issued specific guidelines related to bus operations:

**COVID-19 Guidance: Public Transportation Providers.** This document provides guidance to mitigate transmission of COVID-19 through the use of communication and education, social distancing, and personal and environmental cleaning practices.<sup>10</sup>

### 1.2.3 Local Agency Requirements Related to Transit

Local governments can choose to have more restrictive rules than the State of Colorado, or they can request variances, in some cases.

“The most up-to-date information is available at the area’s local public health agency. There are two ways a local government or local public health agency can deviate from the state’s orders:

**A local public health order:** Local public health orders are more protective than the state orders.

**A variance:** Variances are less protective than the state orders.”<sup>11</sup>

Some counties and municipalities within Colorado may have stricter requirements for transit providers and the riding public. If bus operators are operating within those cities and counties, they must comply with those stricter requirements. “Under Colorado law, counties and local public health agencies have the authority to administer and enforce an order.”<sup>12</sup> Each local government and public health agency should be consulted for the complete, up-to-date public health order, variance, policy, or guideline. This information is typically available online.

## 1.3 Roles and Responsibilities

The following general roles and responsibilities are expected of CDOT and operators of Bustang and Bustang Outrider in developing and implementing protocols. This Short-Term Protocols document includes protocols recommended by CDOT, some of which are required by federal, state, or local law or executive order. These protocols are summarized in checklists for easy reference and can be found in Appendix A.

### 1.3.1 CDOT

CDOT is responsible for developing and maintaining protocols related to Bustang and Bustang Outrider operations. These protocols are submitted to CDPHE for approval and are updated as required by the state regulating agencies.

CDOT is also responsible for oversight of bus operators, as documented in the CDOT DTR State Management Plan and approved by FTA. CDOT will incorporate these Short-Term Pandemic Protocols into its contracts with bus operators and will oversee their compliance with the contract documents as part of its FTA grant oversight responsibilities.<sup>13</sup>

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### 1.3.2 Operators

Operators are required to follow these Short-Term Pandemic Protocols guidelines under contract with CDOT. CDOT will be monitoring bus operators to confirm they are compliant with these Short-Term Pandemic Protocols that are incorporated into the contract amendments.

### 1.4 How to Use These Protocols

CDOT intends that the protocols and procedures contained in this document are the guidelines by which CDOT and its contracted bus operators conduct operations during the COVID-19 pandemic and future health crises. The recommendations and best practices outlined in each of the sections are backed by sourced documents and websites with additional detail and information that bus operators can use to protect their employees and patrons (included as endnotes).

Because many of these sources are not specific to bus operations, this document summarizes the safety and health protocols that are most applicable to Bustang and Bustang Outrider operations at the time of its creation. This document is also intended as a resource for other transit agencies in Colorado. Bus operators are encouraged to keep current with recommended local, state, and federal guidelines, and not to rely entirely on what is presented in this document because the information can change quickly.<sup>14</sup>

The checklists included in Appendix A summarize CDOT's required protocols and procedures for Bustang and Bustang Outrider operators, as well as CDOT's responsibilities and expectations for transit patrons. Details about the requirements can be found throughout this document.

This document has the following topics:

- **Overview.** Background and current protocols and an overview of the document.
- **Safety and Health.** Guidelines from international, federal, state, and local government agencies, best practices, and implementation strategies. Includes sections on decontamination, hygiene, PPE, testing, screening and reporting, social distancing, and engineering controls.
- **Communications with Stakeholders.** Best practices for communication with the community and the riding public, partner agencies and vendors, and health and government officials.
- **Bus Operations.** Service planning, ticketing and fare collection, and coordination with partner transit providers.
- **Human Resources.** Overview of federal and state safety and health regulations regarding safe workplaces, employee protections, and training.



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- **Other Considerations.** Potential legal issues; physical security measures; emergency management planning and monitoring; and financial planning, tracking, and reporting.
- **Appendix A.** Protocols Checklists for CDOT, Bustang/Bustang Outrider Operators and passengers.
- **Appendix B.** Summary of Interviews with Bustang/Bustang Outrider Transit Operators completed between June 22 and July 8, 2020.



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## 2 DECONTAMINATION

- 2.1 Definitions—Cleaning and Disinfection
- 2.2 When to Clean and Disinfect
- 2.3 Determining What Needs to be Cleaned and Disinfected
- 2.4 Cleaning and Disinfection Products
  - 2.4.1 Cleaning
  - 2.4.2 Disinfection
  - 2.4.3 Selection of Surface Disinfectant Methodologies and Technologies
- 2.5 Procurement of Disinfection Products
  - 2.5.1 Other Considerations
- 2.6 How to Clean and Disinfect
  - 2.6.1 Hard/Non-Porous Surfaces
  - 2.6.2 Soft or Porous Surfaces
  - 2.6.3 Frequently Touched Electronic Surfaces
- 2.7 Other Considerations
- 2.8 Personal Safety When Cleaning and Disinfecting



## 2.0 DECONTAMINATION

Transit agencies are advised by the FTA to establish and implement policies and procedures for routine cleaning and disinfection of surfaces frequently touched by employees and passengers.<sup>15</sup> A cleaning and disinfection plan should be developed, implemented, maintained, and revised by the transit agency with input from local health agencies.<sup>16</sup> COVID-19 may remain viable for hours to days on surfaces made from a variety of materials. CDPHE states that cleaning of visibly dirty and high-touch surfaces followed by disinfection is best practice for prevention of COVID-19 and other viral respiratory illnesses community settings, like buses.<sup>17</sup>



Additional information for transit agencies to consider when developing a cleaning and disinfection plan can be found on page 3 of The American Public Transportation Association report [“Developing a Pandemic Virus Service Restoration Checklist”](#) and [CDPHE’s Environmental Cleaning Guidance for COVID-19](#).

### 2.1 Definitions—Cleaning and Disinfection

The CDC defines *cleaning* as the removal of germs, dirt, and impurities from surfaces. It does not kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.<sup>18</sup>

*Disinfection* is defined by the CDC as the use of chemicals to kill germs on surfaces. Disinfection does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.<sup>19</sup>

### 2.2 When to Clean and Disinfect

The CDC states that at a minimum, bus operators should clean and disinfect commonly touched surfaces in the vehicle at the beginning and end of each shift and between transporting passengers who are visibly sick.<sup>20</sup> According to CDPHE, bus operators should clean heavily soiled or dirty vehicle and equipment surfaces before and after operation and before disinfecting.<sup>21</sup> Operators are recommended to mist and/or wipe down frequently touched surfaces at layovers with at least 70% alcohol-based wipes or EPA-approved disinfection products.<sup>22</sup> The American Public Transportation Association (APTA) recommends the following cleaning schedule, based on CDC guidance and technical experts:<sup>23</sup>



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Activity	Frequency
Facility and vehicle routine cleaning	At least daily
Full facility and pesticide vehicle disinfecting	At least daily
Partial facility and vehicle cleaning (high-touch areas)	During shift changes
Deep facility and vehicle cleaning (all surfaces cleaned)*	At least weekly
HVAC filter change*	Per manufacturer’s recommendations but at least monthly

\*No recommendations provided by the CDC.

### 2.3 Determining What Needs to be Cleaned and Disinfected

Transit operators should focus their cleaning procedures on high-touch areas. This may include:<sup>24</sup>

- Seat belts and buckles
- Head rests (front and back)
- Armrests
- Cup holders (if applicable)
- Overhead bin doors
- Handrails for entering and exiting the vehicle
- Drivers steering wheel, center console, dash area, seatbelt/buckle, radio, microphone, and keys/keyfobs/fuel cards
- Windows/windowsills
- Restroom surfaces (faucets, toilets, door handles and handrails)
- Baggage door handles interior as well as exterior
- Exit buttons
- Seats
- Garbage cans
- Interior and exterior doorknobs/handles and surrounding surfaces
- Fare equipment
- Railings/hand rails
- Light and air controls
- All other devices used during shift

### 2.4 Cleaning and Disinfection Products

#### 2.4.1 Cleaning

Normal routine cleaning can be completed with soap and water.<sup>25</sup> Transit agencies can also use other detergents and cleaning products typically used in the course of regular cleaning.



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These products should be nontoxic and effective in cleaning away dirt, grime, and debris before a surface is disinfected. Cleaning can be done with mops, rags, spray bottles, or other common devices.<sup>26</sup>

### 2.4.2 Disinfection

Disinfection products should meet the EPA's criteria for use against SARS-CoV-2, the virus that causes COVID-19.<sup>27</sup> Typically, pesticides are used as a disinfectant against COVID-19. There are several application methods available for disinfecting using pesticides. A spray bottle or fogger device can be used, but it is crucial to follow the manufacturer's requirements for application methodology. The American Industrial Hygiene Association advises that fogging is not the preferred method of pesticide application because of the human health hazards that it can cause. Other application methods are available, but typically cost tens of thousands of dollars and are not ideal for use on buses.<sup>28</sup>

The list of EPA approved products can be found at this [link](#).



The EPA recently launched a web-based application to make it easy for individuals to identify EPA approved disinfection products, [List N Tool](#).

For information about interpreting the EPA's list of disinfection products for transit, refer to page 17 of the APTA report "[The COVID-19 Pandemic Public Transportation Responds: Safeguarding Riders and Employees.](#)"

Ultraviolet (UV) light is a surface disinfection now being used against COVID-19 and can be effective in killing bacteria, viruses, and molds. There have not been any test results verifying that this disinfection method can be effective against SARS-CoV-2; however, it has proven effective against other coronaviruses in the past.<sup>29</sup>

Antimicrobial shields are chemicals that adhere to surfaces, attract virus molecules, and kill the virus with disinfectant pesticides, such as ammonia quaternary or metal oxides. Antimicrobial shields have not been registered by the EPA.<sup>30</sup>

Transit agencies are utilizing and evaluating new technologies. The Regional Transportation District (RTD) has begun using 16 electrostatic sprayers on light rail vehicles, buses, and facilities.<sup>31</sup> New York Metropolitan Transportation Authority, Toronto Transit Commission, GO Transit (Ontario, Canada), Prague Public Transit, and Polish regional railway operator Koleje Śląskie have begun applying the antimicrobial shields to their stations and vehicles, in addition to disinfectants.<sup>32</sup> New York Metropolitan Transportation Authority, Indianapolis Public Transportation Corporation (IndyGo), Tri-County Metropolitan Transportation District of Oregon, North County Bus & Train Service, and the Greater Cleveland Regional Transit Authority have recently begun testing UV lights, in addition to disinfectants, for surface disinfection.<sup>33</sup> Furthermore, New Jersey Transit has contracted with the Rutgers Center for

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Advanced Infrastructure and Transportation to determine the best placement of a UV source and to study its effectiveness for transit.<sup>34</sup>

### 2.4.3 Selection of Surface Disinfectant Methodologies and Technologies

APTA provides guidance on selection of disinfectant methodologies and technologies and states that these should be carefully assessed by each transit agency: “In general, foggers, nebulizers and UV lights are best suited for treatment of open areas. These methodologies have not been endorsed by the CDC or EPA, are more expensive, take longer to set up, and can present difficult hazards for transit agencies to mitigate. Therefore, these methodologies are not recommended by APTA at this time and should be used only to supplement more traditional pesticide disinfectant approaches.”

Because there are not published test results, there is not a consolidated list of UV products suitable for use by transit agencies, nor are there established standards. Therefore, APTA cannot recommend the use of UV light for disinfection during the COVID-19 pandemic. Similarly, without published test results confirming efficacy, or the endorsement of the EPA and CDC, APTA *does not* recommend the use of antimicrobial products.<sup>35</sup>



Information for transit agencies about surface disinfecting products and methods, including new technologies, can be found in Section 1.5 of APTA’s report, [“Cleaning and Disinfecting Transit Vehicles and Facilities During a Contagious Virus Pandemic.”](#)

### 2.4.4 Procurement of Disinfection Products

Transit agencies are recommended to review, assess and resource EPA-recommended cleaning supplies, products, and tools. Due to potential risks in the supply chain, they should ensure that a method is in place to quickly establish alternative products and guidance for safe use.<sup>36</sup>



Information for transit agencies about procuring and buying disinfection products can be found on page 19 of APTA’s report [“The COVID-19 Pandemic Public Transportation Responds: Safeguarding Riders and Employees.”](#)

### 2.4.5 Other Considerations

- Disinfectants should be properly stored according to instructions on the label.<sup>37</sup>
- The White House advises not overuse or stockpile disinfectants or other supplies.<sup>38</sup>
- Alternative disinfectants can be used if EPA-approved disinfectants are not available (i.e., 1/3 cup of bleach added to 1 gallon of water, or 70% alcohol solutions). Employees should exercise caution when developing alternative disinfectants.<sup>39</sup>



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### 2.5 How to Clean and Disinfect

#### 2.5.1 Hard/Non-Porous Surfaces

The CDC advises, “for hard non-porous surfaces within the interior of the vehicle such as hard seats, arm rests, door handles, seat belt buckles, light and air controls, doors and windows, and grab handles, clean with detergent or soap and water if the surfaces are visibly dirty, prior to disinfectant application. For disinfection of hard, non-porous surfaces, appropriate disinfectants include:

- EPA’s Registered Antimicrobial Products for Use against Novel Coronavirus.
- Diluted household bleach solutions prepared according to the manufacturer’s label for disinfection, if appropriate for the surface.
- Alcohol solutions with at least 70% alcohol.”<sup>40</sup>

#### 2.5.2 Soft or Porous Surfaces

The CDC advises, “For soft or porous surfaces such as fabric seats, remove any visible contamination, if present, and clean with appropriate cleaners indicated for use on these surfaces. After cleaning, use products that are EPA-approved for use against the virus that causes COVID-19 and that are suitable for porous surfaces.”<sup>41</sup>

#### 2.5.3 Frequently Touched Electronic Surfaces

The CDC recommends, “for frequently touched electronic surfaces, such as tablets or touch screens used in the vehicle, remove visible dirt, then disinfect following the manufacturer’s instructions for all cleaning and disinfection products. If no manufacturer guidance is available, consider the use of alcohol-based wipes or sprays containing at least 70% alcohol to disinfect.”<sup>42</sup>



The CDC provides additional guidance on how to clean and disinfect transit vehicles at this [link](#).

### 2.6 Other Considerations

- Agencies should avoid dry sweeping methods because dry cleaning methods may cause infectious particulates to become airborne. For example, employees should not use compressed air to “blow out” coaches at vacuuming stations. Wet cleaning methods are preferred.<sup>43</sup>
- Employees should ensure adequate ventilation when chemicals are in use, such as by keeping doors and windows open when cleaning the bus.<sup>44</sup>
- Transit agencies should establish a process to regularly clean air filtration systems.<sup>45</sup>



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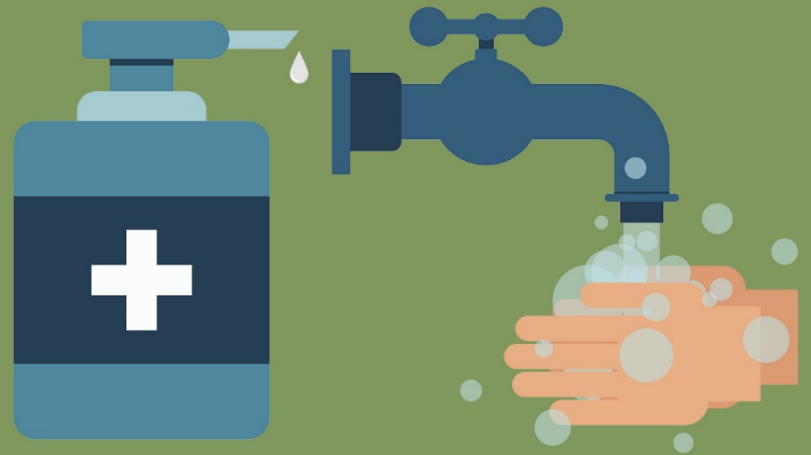
CDC's specific guidance on cleaning and disinfection after persons suspected/confirmed to have COVID-19 have been in the facility or bus is available at this [link](#).

### 2.7 Personal Safety When Cleaning and Disinfecting

Various protocols are recommended for individuals cleaning and disinfecting surfaces to ensure personal safety. After cleaning, the individual should wash their hands with soap and water for a minimum of 20 seconds.<sup>46</sup> Guidance for appropriate use of PPE while cleaning and disinfecting is covered in 4.5.



CDC's recommendations for protections while cleaning can be found at this [link](#).



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

# 3 HYGIENE

- 3.1 Respiratory Hygiene
  - 3.1.1 Guidance on Cloth Face Coverings/Masks
  - 3.1.2 Respiratory Etiquette
- 3.2 Hand Hygiene
- 3.3 Avoiding Touching Surfaces
- 3.4 Other Considerations





# 3.0 HYGIENE

The FTA advises that transit agencies promote healthy hygiene practices and adopt healthy hygiene policies.<sup>47</sup> State and local regulations for hygiene may also be applicable, as outlined in Section 1.2. At the time of writing, the State of Colorado requires all businesses and essential functions to encourage breaks for employees to wash hands or use hand sanitizer.

## 3.1 Respiratory Hygiene

Respiratory hygiene includes actions that an individual can take to protect themselves and others from spreading COVID-19. Mask wearing is critical in preventing the virus from spreading. Individuals should also practice respiratory etiquette.

### 3.1.1 Guidance on Cloth Face Coverings/Masks

The CDC recommends individuals wear a cloth face covering in public settings and at the time of writing, the State of Colorado requires that nearly all individuals wear a mask while using or waiting to use transit. CDPHE advises that transit agencies require employees and drivers to wear masks. Children between the ages 2 and 10 riding transit should be strongly encouraged to wear a mask; masks should be required for all riders over 10.<sup>48</sup> This precaution will help contain the individual's respiratory droplets and protect others, such as coworkers or the public.<sup>49</sup>

Cloth face coverings can vary in form and range from commercially produced to homemade garments, scarves, bandanas, etc. They are either reusable (once laundered) or disposable. The covering should be worn over the individual's face and mouth, with the intent of containing the wearer's potentially infected respiratory droplets. Cloth face coverings may also partially protect the wearer by reducing face touching or lowering the viral dose.<sup>50</sup> CDPHE states, "new evidence also suggests masks may also partially protect the wearer, especially from severe infection, by potentially reducing viral inoculation dose and/or face touching."<sup>51</sup> Furthermore, cloth face coverings do not replace the need to practice social distancing.<sup>52</sup>



CDC guidance on cloth face coverings, such as washing, wearing, and making the cloth face coverings, can be found at this [link](#).

CDPHE guidance on wearing masks, including the science of universal mask-wearing, can be found at this [link](#).





## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

### Cloth Face Coverings for Employees

If an employee does not require PPE according to the hazard assessment, the individual should be required to wear a cloth face covering, according to the CDC.<sup>53</sup> At the time of writing, the State of Colorado requires transit workers to wear a mask. Cloth face coverings are not considered PPE. Because they are not PPE, OSHA does not require employers to provide cloth face coverings to employees.<sup>54</sup> State and local regulations may require employers to provide face coverings. CDPHE guidelines state that cloth face coverings are advised for transit employees to preserve medical masks for health care workers and first responders.<sup>55</sup>

One of the Bustang/  
Bustang Outrider  
operators interviewed  
mentioned customer  
feedback received on  
face coverings. Seeing  
the bus driver wearing  
a mask put the  
customer at ease.

### Cloth Face Coverings for Passengers

Certain transit agencies have required passengers to wear a mask. A report issued by Campaign Green for All found that the most consistent policy that transit agencies (seven out of nine reviewed) implemented was requiring passengers to wear masks or face coverings.<sup>56</sup>

NACTO recommends that transit agencies distribute masks to the public on board vehicles and at transit stations.<sup>57</sup> Several considerations for transit agencies implementing mandatory mask policies for passengers are suggested by Campaign Green for All:

- “How are mask policies supporting riders who cannot afford or access masks on their own?
- Are mandatory mask policies flexible to accommodate the safety of people with disabilities or respiratory issues?
- Are mask policies implemented in a way that prioritizes customer care and prevents policing?”<sup>58</sup>

CDPHE staff advises that cloth face coverings for passengers is paramount to preventing a COVID-19 outbreak on a bus.<sup>59</sup> While universal mask use may not prevent infections in all circumstances, several natural experiments, observations, and analyses provide increasingly strong evidence that universal mask-wearing reduces COVID-19 transmission.<sup>60</sup>

### **3.1.2 Respiratory Etiquette**

OSHA urges employees and passengers to practice respiratory etiquette, including covering coughs and sneezes.<sup>61</sup> Covering coughs and sneezes can prevent the spread of respiratory diseases, including COVID-19. The CDC recommends the following practices to stop the spread of germs:<sup>62</sup>

- “Cover your mouth and nose with a tissue when you cough or sneeze.
- Throw used tissues in the trash.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

- If you don't have a tissue, cough or sneeze into your elbow, not your hands.
- Immediately wash your hands after blowing your nose, coughing or sneezing.”

### 3.2 Hand Hygiene

According to the CDC, hand hygiene, in addition to mask wearing, is an important measure to prevent the spread of infections, like COVID-19. Hand washing mechanically removes pathogens. Alcohol-based hand rub formulations (meeting CDC standards) will inactivate COVID-19.

Proper hand washing technique is to use soap and water and wash for at least 20 seconds. When soap and water are not available, individuals can use an alcohol-based hand sanitizer containing at least 60% alcohol.<sup>63</sup> At a minimum, hand washing should occur at the following times:

- Before, during, and after preparing food.
- Before eating food.
- After using the toilet.
- After blowing your nose, coughing, or sneezing.
- Before and after work shifts.
- Before and after work breaks.
- After touching frequently touched surfaces, such as fareboxes and handrails.
- After putting on, touching, or removing cloth face coverings.
- After removing PPE.

Alcohol-based hand sanitizer units (ideally touchless) can be placed at the entrance of the bus to provide passengers with convenient access to hand hygiene materials.<sup>64</sup> Hand sanitizer can also be distributed to passengers. CDPHE recommends transit agencies have ample supplies of hand sanitizer available for both employees and passengers.<sup>65</sup>



Best practices for hand washing from CDC are available at this [link](#).

Advice on the use of hand sanitizers from the World Health Organization is available at this [link](#).

### 3.3 Avoiding Touching Surfaces

Employees and passengers should take measures to protect themselves and avoid coming into contact with potentially contaminated surfaces. According to OSHA guidelines, employees and passengers are encouraged to avoid touching their eyes, nose, or mouth with unwashed hands.<sup>66</sup> The CDC recommends drivers take precautions to avoid touching surfaces that have



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

been touched frequently by passengers.<sup>67</sup> At the time of writing, the State of Colorado requires all employers to use touchless devices, like no touch trash cans, whenever possible.

One method to avoid touching these surfaces is to prop open doors wherever possible to reduce touching common surfaces. Drivers should also handle lost and found items with gloves.<sup>68</sup> See Section 4.3.1 for additional guidance on wearing gloves.

To minimize contamination of surfaces, bus operators can place alcohol-based wipes (at least 70% alcohol) near the entrance of bus. Transit riders should be encouraged to use a wipe while touching surfaces, like opening doors and holding grab bars.<sup>69</sup>

The National Association of City Transportation Officials (NACTO) recommends transit agencies assign operators to one bus for their entire shift and ensure operators are driving a recently sanitized bus. In Madison, Wisconsin, Metro Transit adjusted its schedule so each bus is cleaned between use by different drivers. Transit agencies can remove systems that require multiple workers to touch the same screen, keyboard, or fingerprint scanning device.<sup>70</sup>

### 3.4 Other Considerations

- APTA recommends that drivers change clothes and shower after their shift.<sup>71</sup>
- To maintain hygienic bathrooms, APTA advises bus operators to prop bathroom doors open, install hand sanitizer dispenser outside of bathroom, and install touchless devices in the bathroom such as faucets, soap dispensers, paper towel dispensers, or hand dryers.<sup>72</sup>
- APTA recommends periodic laboratory surface testing for COVID-19 to provide audits of the disinfecting process.<sup>73</sup>
- The American Bus Association recommends that passengers load their luggage on their own or the driver should wear gloves when handling luggage.<sup>74</sup>



More information about cleaning and disinfecting transit vehicles can be found in APTA's report, ["Cleaning and Disinfecting Transit Vehicles and Facilities During a Contagious Virus Pandemic."](#)



## 4 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- 4.1 Determining Appropriate PPE for Employees
- 4.2 Providing PPE to Employees
- 4.3 Guidance on Cloth Face Coverings
- 4.4 Information on Types of PPE
  - 4.4.1 Gloves
  - 4.4.2 Eye Protection
  - 4.4.3 Respirators
  - 4.4.4 Surgical Masks
- 4.5 Strategies to Optimize Supply of PPE
- 4.6 Guidance for Wearing, Removing, and Cleaning PPE



# 4.0

## PERSONAL PROTECTIVE EQUIPMENT

Because transit agency employees can be exposed to infected people and bodily fluids while working, PPE can help protect workers' health and safety.

### 4.1 Determining Appropriate PPE for Employees

The CDC and OSHA advise that transit agencies conduct a workplace hazard assessment and consider job duties to determine what PPE is appropriate for each employee.<sup>75</sup> The FTA states that transit agencies should “establish and implement policies and procedures for transit agency employees and passengers regarding the use of face coverings and PPE to reduce the risk of COVID-19 among employees and passengers.”<sup>76</sup>

### 4.2 Providing PPE to Employees

OSHA requires that transit agencies provide appropriate gloves, masks, face shields and other PPE to employees. OSHA's PPE standard (29 CFR 1910.132) states that employers must provide any necessary PPE at no cost to workers.<sup>77</sup> If regulation PPE is not available, employees should be encouraged to use alternative, reusable PPE and associated disinfection protocols between uses.<sup>78</sup> At the time of writing, the State of Colorado requires employers who operate Critical Businesses or manage Government Offices and Facilities to make every effort to provide their workforce with medical or non-medical face coverings. State and local regulations are outlined in Section 1.2. CDPHE states that transit agencies should prioritize providing appropriate PPE to employees.<sup>79</sup>

OSHA advises that employers should establish, and ensure workers follow, standard operating procedures for cleaning and laundering PPE and items such as uniforms generally functioning as PPE. There should also be enforced procedures for maintaining, storing, and disposing of PPE. Employees should always wash hands after removing PPE, and employers can ensure that hand hygiene facilities or materials are available to employees when removing PPE.<sup>80</sup>

### 4.3 Information on Types of PPE

#### 4.3.1 Gloves

The CDC recommends transit agencies provide operators with appropriate gloves.<sup>81</sup> At the time of writing, the State of Colorado requires transit employees to wear gloves when in physical contact with customers or goods if gloves are provided to workers by their employer. In addition, employers must encourage customer use of protection, like gloves.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

Based on interviews with transit labor representatives, it was found that drivers need more than one pair of gloves per day in case they become torn.<sup>82</sup> Gloves should be worn when touching potentially contaminated surfaces, such as money or lost and found items. One pair of gloves should be used per customer interaction, and the gloves should be thrown away after each use, according to CDPHE.<sup>83</sup> The appropriate way to use gloves is to wash one's hands after removing used gloves and before putting new gloves on. Gloves should not be worn continuously all day given the risk of contamination; they should be worn only when needed.<sup>84</sup>

### 4.3.2 Eye Protection

If needed, employees should wear goggles or face shields for eye protection depending on the circumstances. Personal eyeglasses are not an acceptable substitute.<sup>85</sup>

### 4.3.3 Respirators

Respirators are designed to protect individuals from inhaling small particles, including airborne transmissible or aerosolized infectious agents. OSHA's Respiratory Protection standard (29 CFR 1910.134) provides guidance on employee use of respirators.<sup>86</sup>

### 4.3.4 Surgical Masks

Surgical masks protect the wearer against splashes and sprays, such as droplets, containing potentially infectious materials. Surgical masks should be properly disposed of after use.<sup>87</sup> CDPHE staff advises that while surgical masks are not fully protective, they are considered PPE in hospitals under specific training and circumstances.<sup>88</sup> New evidence suggests masks may also partially protect the wearer from COVID-19.<sup>89</sup>



OSHA's guidance on the key differences between cloth face coverings, surgical masks, and respirators can be found at this [link](#).

More information on PPE from OSHA can be found at this [link](#).

## 4.4 Strategies to Optimize Supply of PPE

COVID-19 has caused PPE shortages in the United States. To respond to this shortage, APTA recommends transit agencies calculate the number of PPE materials that will be needed for operations and determine if the supply is sufficient. PPE can be offered to all operations staff if supplies are abundant. If supplies are inadequate, PPE should be conserved for staff who are cleaning and disinfecting vehicles and facilities. To manage

PPE shortage has been an issue for the Bustang/ Bustang Outrider operators interviewed. PPE ordered online has been subject to long delays and even some orders being cancelled. However, PPE availability has recently become less of a challenge for one of the operators.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

supplies, transit agencies could set a threshold value to determine if the PPE supplies reach a level where they should be conserved. In addition, agencies can control inventory to avoid theft of masks, gloves, sanitizer, etc.<sup>90</sup>

One way to manage supplies is to identify a responsible party or department to centralize the procurement and distribution process for the operators. This could support the decision process on what materials are best suited for the various users, e.g., individuals, stations, stops, busses, offices; identify supply sources and avoid internal competition for products.



The CDC offers strategies for optimizing the supply of PPE, including a [PPE burn rate calculator](#).

### 4.5 Guidance for Wearing, Removing, and Cleaning PPE

The CDC states that while cleaning and disinfecting, employees should wear disposable chemical (for example, nitrile) gloves compatible with the products being used, in addition to any other PPE required by the manufacturer’s instructions. Employees are also advised to wear a disposable gown. In addition, “gloves and any other disposable PPE used for cleaning and disinfecting the vehicle should be removed and disposed of after cleaning; wash hands immediately after removal of gloves and PPE with soap and water for at least 20 seconds, or use an alcohol-based hand sanitizer with at least 60% alcohol if soap and water are not available. If a disposable gown was not worn, work uniforms/clothes worn during cleaning and disinfecting should be laundered afterwards using the warmest appropriate water setting and dry items completely. Wash hands after handling laundry.”<sup>91</sup>

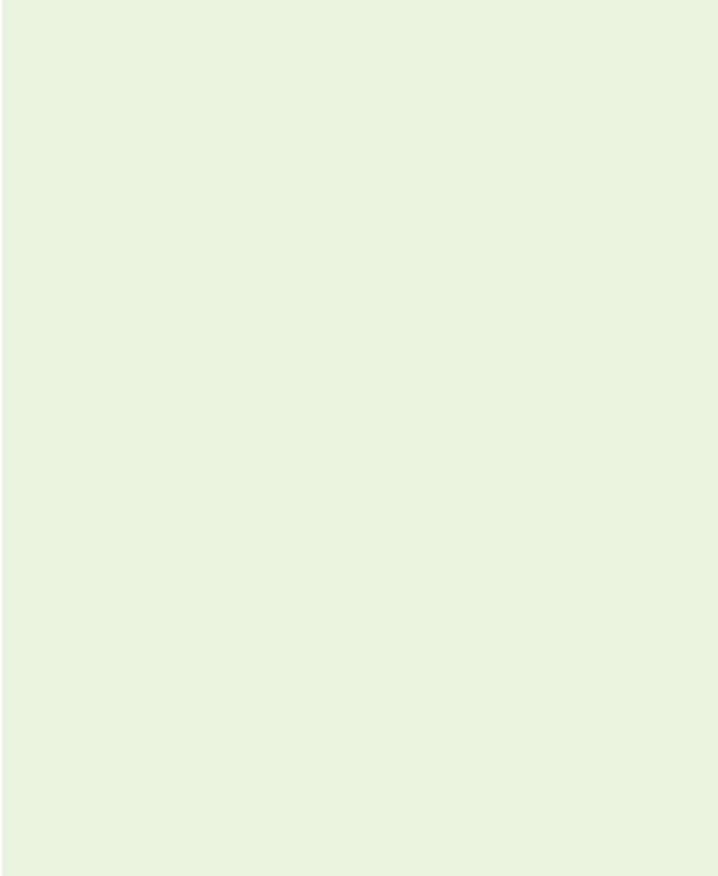
Transit agencies must train workers who are required to use PPE. Training should include the following:

- “When to use PPE.
- What PPE is necessary.
- How to properly don (put on), use, and doff (take off) PPE.
- How to properly dispose of or disinfect, inspect for damage, and maintain PPE.
- Limitations of PPE.”

Applicable OSHA standards include the PPE (29 CFR 1910.132), Eye and Face Protection (29 CFR 1910.133), Hand Protection (29 CFR 1910.138), and Respiratory Protection (29 CFR 1910.134) standards.



OSHA offers a variety of training videos about respiratory protection at this [link](#).



SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS



# 5 TESTING, SCREENING, REPORTING

- 5.1 Screening and Testing Employees
- 5.2 Screening Riders
- 5.3 Reporting System/Contact Tracing





# 5.0

## TESTING, SCREENING, REPORTING

In compliance with state and local orders, transit agencies may choose to test and screen employees and transit riders for COVID-19. Screening is the “process of identifying symptoms that may require further testing to determine the presence of an infection.” Testing is “a laboratory procedure that takes more time to produce results.” Viral (molecular) testing “determines the presence of an active infection.” Antibody (serology) testing “confirms a previous infection.”<sup>92</sup>

Transit agencies may choose to identify personnel or vendors, considering required training or qualifications, to conduct testing or screening.<sup>93</sup>

### 5.1 Screening and Testing Employees

CDPHE states that employers should consider screening employees, including taking their temperatures, when they report to work (100.4 or higher is considered a fever). The employees can be asked if they have had COVID-19 symptoms or if they have been in close contact to anyone exhibiting these symptoms. If the employee answers “yes” to any of the screening questions, they should be sent home and advised to follow the directions for quarantine (if potentially exposed) or isolation (if sick or positive). Transit agencies must maintain employee confidentiality during screening and testing.<sup>94</sup> A transit agency can coordinate with health professionals to develop screening and testing policies and procedures for staff. State and local regulations for symptom monitoring may be required, as outlined in Section 1.2. At the time of writing, the State of Colorado requires all businesses and essential functions to implement symptom monitoring protocols.



An employee health screening form is available at this [link](#).

Screening and testing policies and procedures may include the following:

- Guidance for employees to screen themselves for symptoms throughout the day and report symptom to their supervisor.
- Procedures for employees to leave work if they experience symptoms.

One of the Bustang/Bustang Outrider operators implemented additional screening measures and policies for employees who have traveled outside of the state.

## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

- Measures to track which employees have been tested, such as disposable wristbands that have a different color for each day of the week.

Protocols to follow if employees are sick or displaying symptoms of COVID-19 can be found in Section 10.1.3.

### 5.2 Screening Riders

If the transit agency chooses to screen riders, the Rural Transit Assistance Program recommends agencies make sure their processes are equivalent for fixed route and ADA complementary paratransit riders. Before each trip the dispatcher or driver can ask riders a predetermined set of questions asking about symptoms and possible exposure. Additional screening measures are being developed, and several are outlined in the following list.<sup>95</sup> CDPHE staff advises that testing passenger temperatures may not be feasible because it may require transit agencies to deny service to passengers seeking health care.<sup>96</sup>

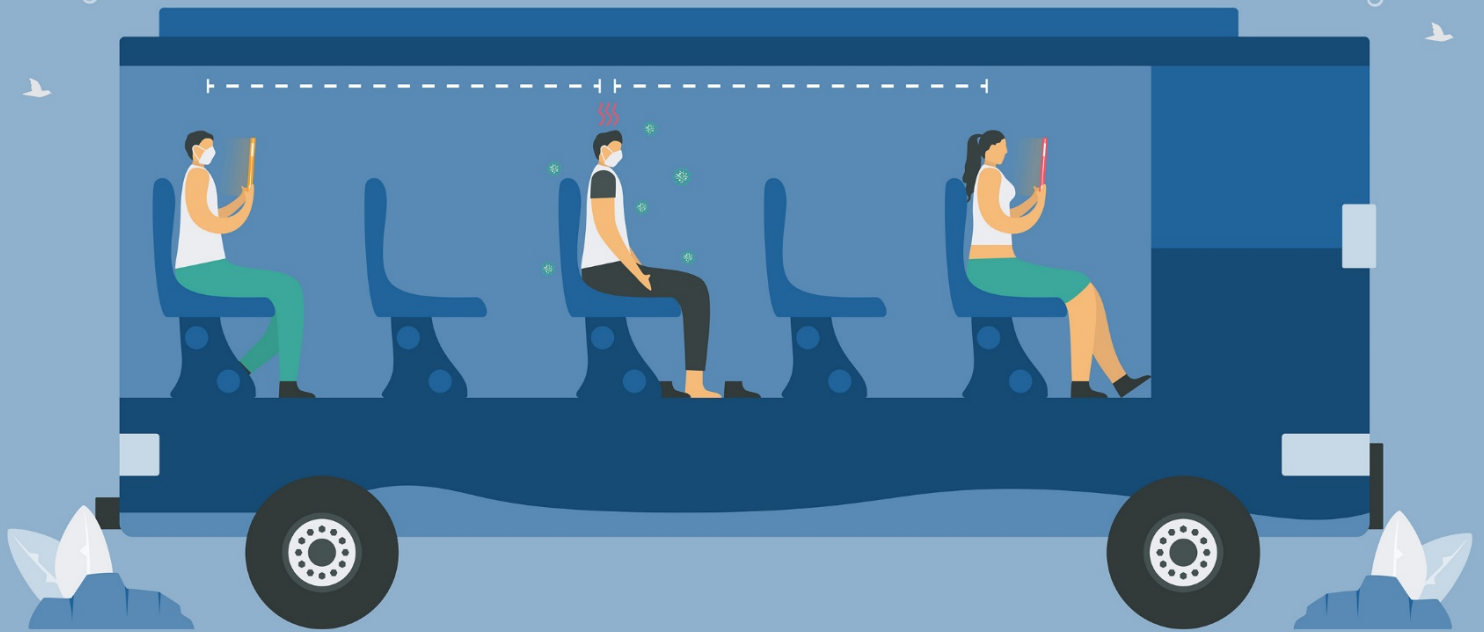
- Temperature taking cameras with thermal imaging
- Temperature screening kiosks.
- Contact tracing trackers.

### 5.3 Reporting System/Contact Tracing

A reporting system can be developed to track virus cases and presumed cases. CDPHE asks transit agencies to consider maintaining a record of riders to enable contact tracing.<sup>97</sup> Additional detail is included in the “Long-Term Pandemic Protocols for Bus Operators” document.



For a Pandemic Incident Report template, see APTA’s [“Developing a Pandemic Virus Service Restoration Checklist.”](#)



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

# 6 SOCIAL DISTANCING

- 6.1 Transit Stop
- 6.2 Boarding, Alighting, and Ticketing
- 6.3 On Board Spacing between Passengers and Employees
- 6.4 Bus Capacity



# 6.0

## SOCIAL DISTANCING

The FTA and CDPHE recommend that transit agencies establish and implement procedures to create physical separation of greater than 6 feet between transit operators and passengers to the greatest extent possible.<sup>98</sup> Limiting close contact, in addition to universal mask use, is the best way to reduce the spread of COVID-19, as COVID-19 typically spreads among people who are in close contact for a prolonged period, according to the CDC.<sup>99</sup> Social distancing protocols should be developed under the guidance of state and local health authorities.<sup>100</sup> State and local regulations for social distancing may also be applicable, as outlined in Section 1.2. At the time of writing, the State of Colorado requires people riding on public transit to comply with social distancing requirements to the greatest extent feasible.

Bustang/ Bustang Outrider operators have expressed concerns about maintaining social distancing for drivers when they are checking tickets, taking cash, taking temperature checks, etc.

### 6.1 Transit Stop

At transit stops, transit agencies can ensure passenger spacing requirements are clearly delineated to help passengers practice social distancing while waiting for the bus.<sup>101</sup> Additionally, coordination between transit agencies and local communities can help support crowd control at bus stations.<sup>102</sup>

### 6.2 Boarding, Alighting, and Ticketing

CDPHE states that transit agencies could consider having passengers board through rear doors, if available. Rear door boarding will ensure at least a 6-foot buffer around the driver. If the bus has only one front door, or fares must be put into a farebox, transit agencies could consider adopting a policy to have the driver stand outside the bus while boarding is occurring, if feasible.<sup>103</sup> Transit agencies could also implement contactless fare collection measures and move fare boxes to be accessible from the back door.<sup>104</sup>

### 6.3 On Board Spacing

The CDC and CDPHE provide guidance on maintaining 6-foot spacing on board the transit vehicle. To maintain distance between passengers and the driver, passengers could be asked not to sit or stand within 6 feet of the driver.<sup>105</sup> To maintain this distance, transit agencies could consider blocking off one or two rows of seats immediately behind or adjacent to the





## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

driver's seat. To indicate the driver's 6-foot buffer, TriMet in Portland installed yellow markers on the floor of buses.<sup>106</sup>

Operators and passengers should ensure 6 feet of physical distance between non-household groups to the greatest extent possible.<sup>107</sup> To ensure 6 feet of distance among passengers, seats or portions of the vehicle can be blocked off to ensure at least one seat or row between groups or individuals from different households.<sup>108</sup> One option is to close off every other row of seats.<sup>109</sup>

The Community Transportation Association of America (CTAA) has guidance on wheelchair securement, which cannot be done without contact between the driver and passenger. The CTAA recommends that PPE, including gloves and masks/shields, be provided to drivers securing wheelchairs.<sup>110</sup>



CTAA Guidance on wheelchair securement is available at this [link](#).

### 6.4 Bus Capacity

CDPHE requires bus capacity be limited to ensure at least 6-feet spacing between non-household groups. According to CDPHE Public Transportation Guidelines, to achieve appropriate spacing and limit an outbreak if it were to occur, the buses should limit seat capacity to 50% of posted seat capacity.<sup>111</sup> These limits may be temporarily exceeded in instances where a person with a disability needs an accommodation, where a transit vehicle is required for an emergency situation, or to prevent a risk to life or safety.<sup>112</sup> For strategies and recommendations to effectively serve riders while adhering to these guidelines, see Section 9.1.1.



SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

## 7 ENGINEERING CONTROLS

- 7.1 Ventilation
- 7.2 Barriers
- 7.3 Bathrooms
- 7.4 No-Touch Fare



# 7.0

## ENGINEERING CONTROLS

Engineering controls “protect workers by removing hazardous conditions or by placing a barrier between the worker and the hazard. They typically do not interfere with worker productivity or personal comfort and make the work easier to perform rather than more difficult. The initial cost of engineering controls can be higher than some other control methods, but over the longer term, operating costs are frequently lower, and in some instances, can provide a cost savings in other areas of the process.”<sup>113</sup>

### 7.1 Ventilation

Past studies of similar respiratory viruses to COVID-19 found ventilation to be a key prevention strategy, and health experts have suggested similar approaches to preventing the spread of COVID-19. CDPHE employees advise that in poorly ventilated enclosed areas, there may be airborne transmission of COVID-19 and recommend that ventilation be maximized.<sup>114</sup> State and local regulations for ventilation may also be applicable, as outlined in Section 1.2. At the time of writing, the State of Colorado requires all businesses and essential functions to ensure proper ventilation.

Transit agencies can employ a variety of strategies to maximize ventilation. Ventilation strategies can range from keeping the windows open (at least one on each side of the vehicle, when possible), to installing heating, ventilation, and air conditioning (HVAC) and filtration systems. Upgraded ventilation systems can include antimicrobial filtration.<sup>115</sup> To improve ventilation, bus operators can set the air ventilation/air conditioner on non-recirculation mode.<sup>116</sup> APTA recommends that transit agencies install high-efficiency air filters on the HVAC system that are MERV 13 or MERV 16 rated.<sup>117</sup> A study of Ultraviolet Germicidal Irradiation installed in transit bus air conditioning systems showed a 99% reduction in common viruses.<sup>118</sup>

### 7.2 Barriers

Barriers can encourage social distancing. Transit agencies can consider installing a temporary standee line using a chain or other barrier to delineate the 6-foot zone for the driver’s protection. This barrier should be easily removable to accommodate access to/from the wheelchair ramp as needed.<sup>119</sup> As an additional protection for drivers, transit agencies can install temporary or permanent enclosures around the operator’s seat.<sup>120</sup> Barriers can be made of Plexiglas, Lexan, polycarbonate, tempered glass, clear vinyl, or another safe, cleanable surface.<sup>121</sup> The Regional Transit Authority in New Orleans installed Plexiglas barriers, designed by in-house staff, for drivers on their entire fleet of buses.<sup>122</sup>



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

### 7.3 Bathrooms

To maintain hygienic bathrooms, APTA suggests engineering controls, such as a hand sanitizer dispenser outside of bathroom and touchless devices in the bathroom, such as faucets, soap dispensers, paper towel dispensers, or hand dryers.<sup>123</sup>

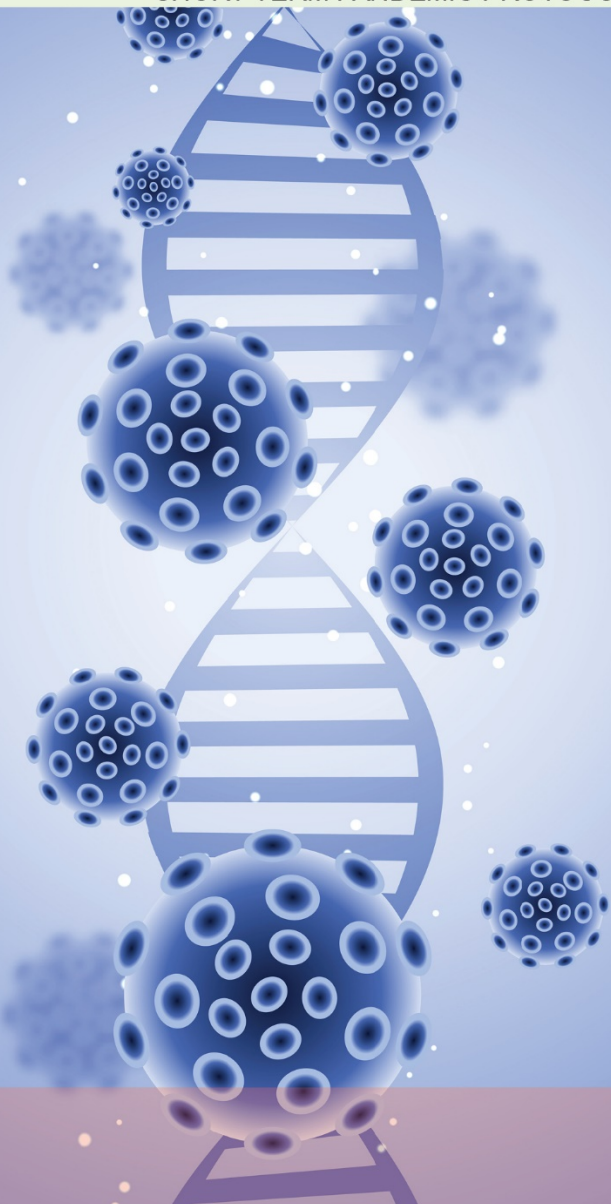
### 7.4 No-Touch Fare Collection

As recommended in Section 9.2, no-touch fare payment systems can be installed on buses.



## 8 COMMUNICATIONS WITH STAKEHOLDERS

- 8.1 Communications with Community and Riding Public
  - 8.1.1 What to Communicate
  - 8.1.2 Communication Strategies
  - 8.1.3 Enforcing Pandemic Protocols
  - 8.1.4 Other Considerations
- 8.2 Communications with Health and Government Officials







# 8.0

## COMMUNICATIONS WITH STAKEHOLDERS

### 8.1 Communications with Community and Riding Public

It can be a challenge to communicate the changing norms around transit. Transit agencies can take a transparent, multifaceted approach to communication and outreach. Transit agencies can educate the public, ease fears and concerns around riding transit, foster awareness of expectations, and promote the continued benefit of public transportation. Transit agencies can also continue to solicit feedback from the riding public.

#### 8.1.1 What to Communicate

CDPHE states that transit agencies should communicate the expectations of the public when riding transit. This includes the importance of avoiding public transportation when sick, positive for COVID-19, or if they think or know they have been exposed to COVID-19. In addition, requirements for mask-wearing and physical distancing guidelines should be conveyed, along with the importance of following guidance of operators. Transit operators are critical workers and should be regarded with utmost concern for their health and safety.<sup>124</sup>

According to APTA, transit agencies should communicate the safety and health protocols and identify opportunities to make these efforts visible to the public.<sup>125</sup> This could include cleaning and disinfection methods on the bus.<sup>126</sup>

NACTO suggests that transit agencies communicate with the public regularly regarding ridership and service changes caused by COVID-19.<sup>127</sup>

A report from the Tri-State Transportation Campaign suggests that transit agencies solicit input from the riding public on their transit experience, transportation needs, requests for service, and needs for improvement.<sup>128</sup>

Another expectation that transit agencies can consider communicating to passengers is a quiet policy. A quiet policy may reduce the chance of transmission of COVID-19, as passengers speaking softly will not be as likely to spread droplets while speaking.<sup>129</sup> Transit agencies in New Jersey and Japan have communicated to passengers to avoid talking as it may increase the expulsion range of droplets that may contain COVID-19.<sup>130</sup>



The Center for Disease control has guidance for the public on protecting oneself when riding transit, which could be utilized for outreach to the community and riding public, at this [link](#).





## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

### 8.1.2 Communication Strategies

Transit agencies can form or leverage partnerships for communication. These may include:<sup>131</sup>

- Partner agencies.
- State and local governments.
- Health authorities.
- Community leaders.
- Ticket vendors.
- Community-based organizations.

Possible channels for outreach to, and soliciting feedback from, the community and riding public may include:<sup>132</sup>

- Posted signs (State and local regulations for posting signs may also be applicable, as outlined in Section 1.2. At the time of writing, the State of Colorado requires all businesses and government functions to post signage for employees and customers on good hygiene. CDPHE advises that transit agencies post signs to remind passengers that physical distancing requirements apply to public transportation and that they can opt in to Exposure Notifications. Exposure Notifications can notify individuals if they have been exposed to a person who has tested positive for COVID-19.<sup>133</sup>)
- Social media
- Press releases
- Websites
- Virtual forums (such as town halls, live social media events, surveys, etc.)

The Bustang/Bustang Outrider operators interviewed have had success communicating with the community and riding public through social media, the company hotline, literature at bus stops and on buses, calling riders, announcements on public announcement systems prior to boarding, and playing a COVID-19 educational video on loop on board the bus.

Examples of transit agencies' communication strategies with the community and riding public regarding COVID-19 protocols can be found on the [NACTO website, under Action 4.](#)

The CDC has communication resources for communicating with the public about COVID-19, including a social media toolkit, print resources, public service announcements, etc., at this [link.](#)

Links to signs that can be posted in buses in several languages prevalent in Colorado can be found in CDPHE's [Guidelines for Public Transportation Providers.](#)



Suggestions for messages for the public in a "Rider Responsibility" and "Rider Education" campaign can be found on page 13 of the APTA guidebook, "[The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees.](#)"

National Aging and Disability Transportation Center's suggestions for communicating protocols to people with disabilities are available at this [link.](#)

More information about CDPHE's Exposure Notifications can be found at this [link.](#)



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

### 8.1.3 Enforcing Pandemic Protocols

Rider compliance is essential to controlling the spread of COVID-19 on buses.<sup>134</sup> To avoid conflict when communicating protocols, the New Mexico Department of Transportation has trained its officers in de-escalation techniques.<sup>135</sup> At the time of writing, a State of Colorado Executive Order stated that transit operators could deny admittance or service to people who are not wearing a mask. CDPHE staff advise that, given the importance of universal mask-wearing to prevent the spread of COVID-19 among passengers, transit operators should ensure that passengers wear their masks for the duration of the trip even if they are socially distanced or seated at least 6 feet apart.<sup>136</sup>

Rather than interacting directly with the riding public, transit agencies have used drones to take riders' temperatures and enforce social distancing at transit stations.<sup>137</sup>

According to a study by Green for All, transit agencies should consider enforcing COVID-19 protocols through positive reinforcement and customer care instead of law enforcement. Positive reinforcement measures may include social distancing cues, peer pressure, and friendly customer service. Transit agencies can help equip the riding public with the materials to have a safe, healthy ride, including masks, hand sanitizer, and alcohol-based wipes.<sup>138</sup>

All State of Colorado Executive Orders and Public Health Orders are enforceable: "Colorado law requires compliance with executive and public health orders; therefore, not following these orders is breaking the law. We all must do our part to ensure success, and call upon all people in Colorado to voluntarily comply. Local law enforcement agencies can enforce public health orders. State law enforcement will assist and support in any way requested, but voluntary compliance is critical. Law enforcement involvement is reserved for the most aggravated circumstances."<sup>139</sup>



For more information from the State of Colorado on enforcement, visit this [link](#).

Enforcement has not been an issue for three of the four Bustang/Bustang Outrider operators interviewed; however, one of the operators mentioned that a supervisor is available to help if there is a problem. Many passengers ride the same bus consistently and become accustomed to the new protocols. One operator advises bus drivers to be patient when explaining protocols and to set the tone for a positive interaction. The operator plans to refer passengers to the local health departments for more information if questions arise about protocols. Many different types of riders use the route, so communication tactics may need be adjusted for each individual.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

### 8.1.4 Other Considerations

APTA recommends transit agencies:<sup>140</sup>

- Designate a point person who can coordinate outreach and the delivery of the messages to the community and riding public.
- Identify transit agency employees who will communicate the protocols to riders (drivers, customer service, etc.).
- Provide coordinated responses for difficult and frequently asked questions.
- Coordinate communications efforts with government and health officials, APTA, CDC and/or the World Health Organization.
- If buses are typically reaching capacity, transit agencies can track when and where this occurs and communicate this information to the community and riding public. The transit agency can consider asking the public to travel at different times.

### 8.2 Communications with Health and Government Officials

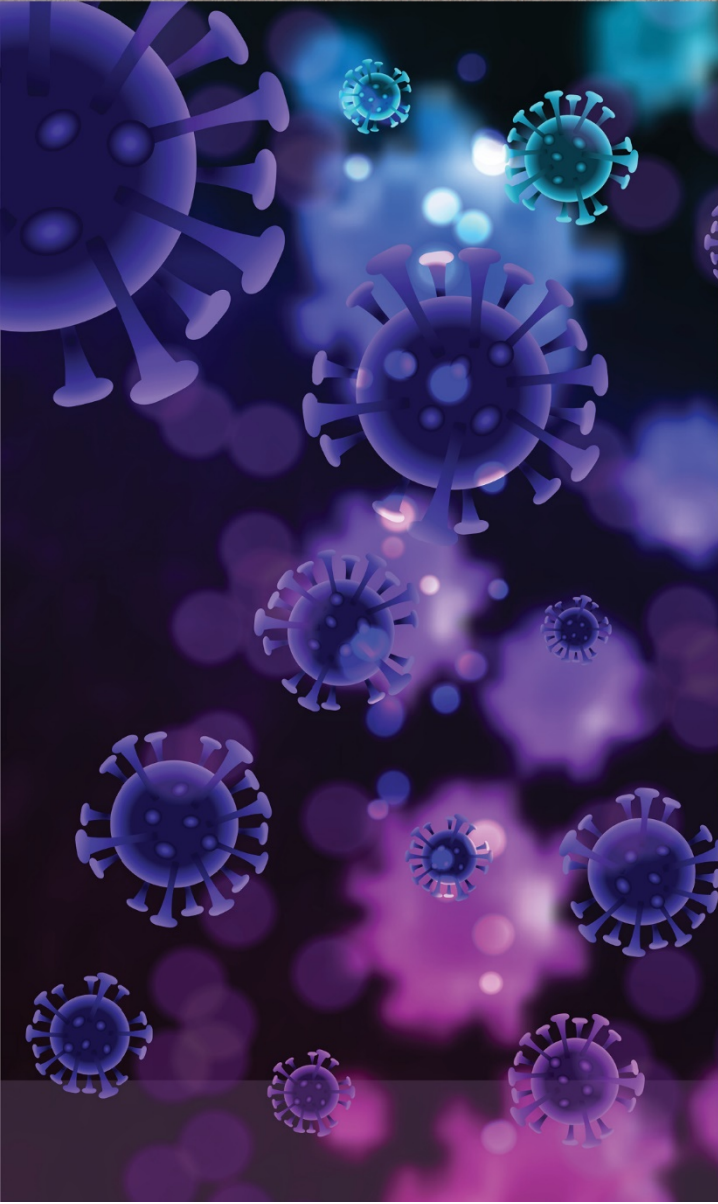
The CDC recommends that transit agencies consult with state and local health officials and other partners to develop protocols to respond to the updated circumstances of the COVID-19 pandemic.<sup>141</sup> APTA suggests that transit agencies consider the following when communicating with health and government officials:<sup>142</sup>

- Develop a strategy for advocating for funding or regulatory relief as a result of the pandemic.
- Work with government relations staff to coordinate relationships with essential services (businesses, schools, day cares, medical services, and other essential services/retailers) to prevent unintended consequences of service modifications to transit services or essential service operations.
- Work with elected officials to stagger work schedules and control crowds with police assistance, in order to address bus overcrowding.
- Maintain political support for public transportation.





SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS



# 9 BUS OPERATIONS

- 9.1 Service Development
  - 9.1.1 Modification of Service
  - 9.1.2 Responding to Capacity Limits
- 9.2 Ticketing and Fare Collection
  - 9.2.1 Cash/Card Payment
  - 9.2.2 Touchless Payment
  - 9.2.3 Fare Adjustments
- 9.3 Coordination with Transit Providers



# 9.0

## BUS OPERATIONS

### 9.1 Service Development

#### 9.1.1 Modification of Service

CDPHE states, “Transit agencies may consider modifications to service, prioritizing routes that serve medical facilities, employment center, food, and lifeline services. In emergencies, transportation providers may prioritize the immediate safety, transportation, and sheltering needs of riders and staff when in conflict with these guidelines.”<sup>143</sup> CDPHE staff advises that cohorting is an alternative to changing routes.<sup>144</sup> Cohorting is discussed in more detail in Section 10.3.

CDOT has found that the Bustang North Line and South Line are typically commuter-driven, and may take time to return to pre-pandemic levels of ridership. The Bustang West Line has exceeded ridership goals during the pandemic, and CDOT has observed that this route may serve many transit-dependent riders.

Modifications to service may be necessary to complete the cleaning and disinfection protocols or adhere to bus capacity requirements. Transit agencies may need to add longer breaks between routes to allow time to make sure the bus is properly cleaned and disinfected.<sup>145</sup> However, if service cuts are necessary, transit agencies should make strategic, equitable adaptations.<sup>146</sup>

NACTO provides several strategies for modifying service due to COVID-19, if necessary. Transit agencies may increase frequency at off-peak times on routes that serve essential locations while reducing crowding on buses. Another tactic is to suspend and relocate fleets and operators from low ridership routes to routes with higher ridership. High-priority routes that connect transit-dependent populations to essential services should be retained at normal service levels, if possible.<sup>147</sup>

Bustang/Bustang Outrider operators have expressed concerns about bus drivers following COVID-19 protocols and staying on schedule.

To comply with the required vehicle capacity limits, drivers can consider skipping transit stops if the vehicles are at capacity.<sup>148</sup> Transit agencies should monitor and communicate bus capacity trends to the community and riding public, such as what location the bus typically hits capacity and passengers are required to wait. The agencies can also create strategies to alert riders when buses reach capacity on a route. If drivers are consistently skipping stops





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with riders, increased service levels or bigger buses may be necessary to meet demand.<sup>149</sup> Road supervisors can also be available to pick up stranded passengers. Transit agencies can consider using a video counting system, which is 98% accurate and can provide live occupancy counts that can be available by smart phones or web browsers.<sup>150</sup> In San Antonio, when VIA Metropolitan Transit buses reach their capacity, operators display an “At Safe Capacity” sign and call for dispatch to request additional buses on the route.<sup>151</sup>

A report by Green for All underlines the importance of frequent, high levels of transit service to both public health and the economy. This will allow essential workers access to their jobs and transit-dependent populations access to their critical destinations. If the transit agency finds that service cuts are necessary, they should gather information on the needs of the riding public and demographics of riders at different periods. Through this community outreach, transit agencies can make strategic, equitable modifications.<sup>152</sup>

### 9.1.2 Responding to Capacity Limits

NACTO suggests strategies that transit agencies can use to address bus capacity limits. Transit agencies can stage buses for passengers who may have been passed by because of overcrowded buses. Agencies can deploy larger buses so that operations to maintain capacity. The Chicago Transit Authority has adopted both strategies. The agency is monitoring ridership and feedback from riders, and deploying longer buses or staging extra buses that can quickly go into service to pick up riders who may have been passed by.<sup>153</sup>

One of the Bustang/Bustang Outrider operators interviewed has been deploying larger buses than usual to address capacity limits. Another Bustang/Bustang Outrider operator mentioned that they have not had to add extra buses to the route yet because they are operating under capacity. Staging additional buses may be a challenge because of the uncertainty surrounding hiring additional drivers for those routes who may or may not be needed.

## 9.2 Ticketing and Fare Collection

Ticketing and fare collection should be reevaluated to avoid contact between the bus driver and passengers.

### 9.2.1 Cash/Card Payment

If cash or credit card transaction cannot be avoided, CDPHE advises that handling of money/card be done using disposable gloves (one pair of gloves per customer; throw away gloves after each use).<sup>154</sup> An alternative is to move fare boxes to the rear door of the vehicle.<sup>155</sup> CDPHE also suggests that transit agencies consider adopting a policy to have the driver stand outside during boarding and fare collection. If feasible, this will provide for





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appropriate social distancing with the driver located in an open-air setting, rather than a confined space, during boarding.<sup>156</sup>

### 9.2.2 Touchless Payment

Touchless payments can be implemented so distance between the bus driver and passengers can be maintained. State and local regulations for touchless payment may also be applicable, as outlined in Section 1.2. At the time of writing, the State of Colorado requires employers to use contactless payment solutions whenever possible.

One form of touchless payments is app-based fare collection.<sup>157</sup> Another example is hand-held mobile devices, recently adopted by New Jersey Transit, which are capable of scanning and validating both paper tickets/passes and electronic tickets/passes.<sup>158</sup> Masabi and Littlepay have developed a technology that combines ticketing and payments—passengers tap their contactless bank card or mobile phone to travel without physically interfacing with the ticketing infrastructure.<sup>159</sup> Tickets could also be sold in advance at local vendors, like convenience stores, to avoid contact with the driver.

### 9.2.3 Fare Adjustments

Transit agencies should consider adjusting off-peak and peak fares and schedules, as well as providing incentives for off-peak travel.<sup>160</sup> APTA suggests that transit agency leadership consider operating without fares or without collection enforcement.<sup>161</sup> As of April 15, 2020, 45% of transit agencies have eliminated fares temporarily.<sup>162</sup>

## 9.3 Coordination with Transit Providers

Coordination with local transit providers is crucial for a regional transit service like Bustang and Bustang Outrider. Coordination on transit station protocol, with consideration of local and state regulations, should be instituted. For example, Bustang and Bustang Outrider use Denver Union Station and therefore must coordinate with the Regional Transportation District to institute transit station protocols.<sup>163</sup>

One of the Bustang/Bustang Outrider operators interviewed has already begun coordinating with local transit agencies regarding pandemic protocols.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

# 10 HUMAN RESOURCES

- 10.1 Transit Operator Safety
  - 10.1.1 Occupational Safety and Health Administration
  - 10.1.2 Workplace Hazard Assessment
  - 10.1.3 Safeguarding Employees and the Riding Public from Infected Individuals
- 10.2 Discrimination and Health Privacy
  - 10.2.1 Title VI
  - 10.2.2 Age Discrimination in Employment Act or the Americans with Disabilities Act
- 10.3 Employee Protections
  - 10.3.1 Sick Leave Policies
  - 10.3.2 Job Protection
- 10.4 Training
  - 10.4.1 Training and Communication Tactics



# 10.0

## HUMAN RESOURCES

With the ongoing impacts to the workplace, employers and service providers must anticipate claims that could arise in connection with the pandemic. They should review current policies and update them to be specific to legal issues that have relevance with the pandemic and continue to anticipate potential claims as the public health crisis progresses. Policies need to be consistent with applicable laws, including the Americans with Disabilities Act (ADA), OSHA, and the Family and Medical Leave Act (FMLA), as well as workers' compensation and state law wage and hour regulations.

Updates to the following are recommended:<sup>164</sup>

- Pandemic health and safety plan.
- Policies around disability and leave of absence management.
- Policies around employment issues.
- Environment, Health and Safety notices.
- Labor policies.
- Privacy data and cybersecurity protocols.
- Wage and hour policies.

### 10.1 Transit Operator Safety

Transit agencies have an obligation to their employees in addition to the public that they serve. Maintaining health among employees will also avoid putting the riding public at risk and need for decreased service.<sup>165</sup> The CDC recommends that employers consider how to reduce the spread of COVID-19 and lower the impact of the pandemic in the workplace. Employers can enact protocols to maintain a healthy work environment and healthy business operations.<sup>166</sup> Employers must ensure employees maintain physical distance by staying at least 6 feet away from other employees and passengers, according to the CDPHE.<sup>167</sup>

#### 10.1.1 Occupational Safety and Health Administration

OSHA sets and enforces standards for employers, including the General Duty Clause of the OSH Act, requiring employers to keep the workplace free of serious and recognized hazards.

The General Duty Clause, Section 5(a)(1) of the OSH Act of 1970, 29 USC 654(a)(1), requires employers to furnish to each worker "employment and a place of employment, which are free

## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

from recognized hazards that are causing or are likely to cause death or serious physical harm." OSHA's PPE standards (29 CFR 1910 Subpart I) require using gloves, eye and face protection, and respiratory protection when job hazards warrant it.<sup>168</sup>

Generally, OSHA requires that when maintaining a safe workplace requires the use of PPE, the employers are responsible for providing the equipment and training employees on how to use it. Worker's compensation issues regarding shortages of PPE or its incorrect use are also likely.<sup>169</sup> In addition, an employer could be in violation if the employer's efforts to control exposure were insufficient or employees were required to perform tasks that exposed them to the virus. Contagious diseases contracted at work (except common cold or flu) must be recorded.<sup>170</sup>

Transit agencies are expected to use available funding to purchase PPE for transit workers, consistent with CDC and OSHA guidance, to the maximum extent possible, according to the FTA.<sup>171</sup>

To ensure a safe and healthy work environment, transit agencies can adopt protocols to respond to risks of COVID-19. This can include responses for workers who are sick or exhibiting symptoms of COVID-19, measures to ensure workers avoid touching potentially contaminated surfaces, and other protections and leave policies. Information about testing and screening employees can be found in Section 5.1. The CDC recommends that employers designate a point person who is responsible for responding to employee's COVID-19 concerns. The employer should make it clear to employees who the point person is and how to contact that person.<sup>172</sup> Transit agencies should be aware that older people and people with serious chronic medical conditions are at higher risk for complications due to COVID-19.<sup>173</sup>

### 10.1.2 Workplace Hazard Assessment

The CDC recommends that transit agencies conduct worksite assessments to identify COVID-19 prevention strategies.<sup>174</sup> Employers should take a proactive, ongoing approach to identifying and assessing hazards.<sup>175</sup>



OSHA COVID-19 risk exposure levels are available at this [link](#).

OSHA general information on workplace hazard assessments is available at this [link](#).

### 10.1.3 Safeguarding Employees and the Riding Public from Infected Individuals

OSHA, CDC, and CDPHE recommend that employers encourage employees who are sick or displaying symptoms of COVID-19 to stay home and notify their supervisor, if applicable. If the employee has symptoms of COVID-19, they should follow the directions for isolation and seek medical attention if needed. State and local regulations for employees reporting symptoms may also be applicable, as outlined in Section 1.2.

## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

If an employee begins to display symptoms while working, the employee should be immediately isolated, sent home, and seek medical attention, if possible.<sup>176</sup> Once the criteria to discontinue home isolation are met, in consultation with healthcare providers, the employee can return to work.<sup>177</sup>

Employers should plan for if an employee becomes sick. The White House recommends that following a COVID-19 positive test, employers develop and implement policies and procedures for workforce contact tracing.<sup>178</sup> According to the CDC and CDPHE, employees who are sick or symptomatic may be eligible to return to work if they meet the following criteria<sup>1</sup>:

- “At least 24 hours have passed since fever has resolved without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); and,
- For patients with severe illness, duration of isolation for up to 20 days after symptom onset may be warranted. Consider consultation with infection control experts.
- For persons who never develop symptoms, isolation and other precautions can be discontinued 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.”<sup>179</sup>
- “At least 10 days have passed since symptoms first appeared, and
- COVID-19 symptoms have improved.”<sup>180</sup>

If an employee is living with someone infected with COVID-19, they should notify their supervisor and follow CDC recommended precautions.<sup>181</sup> CDPHE states that employees who have been in close contact with someone who has tested positive for COVID-19 should not be expected to report to work. Employers should instruct the individual to stay home, self-quarantine, and monitor themselves for symptoms. If the individual thinks or knows they have been exposed, they should get tested as soon as possible if they develop symptoms. If the individual does not have symptoms, they should wait 7 days from when they think they were exposed to get tested.<sup>182</sup> CDPHE staff advise that the individual quarantine at home for 14 days (thought to be the maximum incubation period for COVID-19 infection), self-monitor for possible development of fever and symptoms, and maintain social distancing (at least 6 feet) from others.<sup>183</sup>

APTA recommends that employers inform fellow employees if an employee is confirmed to have a positive test. Employees should be aware of possible exposure in the workplace and should be instructed to proceed based on the CDC Public Health Recommendations for Community-Related Exposure.<sup>184</sup>

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<sup>1</sup> The information on returning to work is general guidance, and may differ based on each individual's situation.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS



CDPHE advises that transit agencies encourage employees to follow the CDC's recommendations for protecting themselves at work and at home, available at this [link](#).

## 10.2 Discrimination and Health Privacy

### 10.2.1 Title VI

Transit agencies should evaluate Title VI obligations within the context of the COVID-19 environment. The Federal Emergency Management Administration (FEMA) has outlined specific guidelines for its employees.<sup>185</sup> Considerations applicable to transit agencies include:

- **Communication access.** Provide accessible messaging and public information through traditional and social media that is accessible to people with disabilities and persons with limited English proficiency, particularly emergency-related information.
- **Inclusiveness.** Provide services in a fair and inclusive manner, including not assuming that certain groups are more likely to spread - or recover from- COVID-19 than others.
- **Physical accessibility.** Ensure vehicles and facilities are physically accessible to individuals with disabilities who are using them to travel to testing sites or medical treatment centers.
- **Environmental justice.** Ensure meaningful involvement of minority and low-income populations in the development and implementation of policy decisions during the pandemic.

### 10.2.2 Age Discrimination in Employment Act or the Americans with Disabilities Act

Liability could be claimed under the Age Discrimination in Employment Act or the ADA if an employee returning to work is based on factors, such as age or underlying health conditions. Employers may face liability if at-risk employees return to work too soon or if employees are delayed in returning to work because of inadequate accommodations. Two issues regulated by ADA include (1) inquiring about medical information and conducting medical exams, and (2) reasonable accommodations.<sup>186</sup>

Asking an employee about underlying health conditions is prohibited, but employees should be encouraged to request reasonable accommodations to return to work if needed. There is no federal statutory right for working parents or caregivers to seek reasonable accommodations, but mistreatment against working parents is sometimes a proxy for gender discrimination.<sup>187</sup>

Confidentiality requirements can conflict with the employer's requirements to verify an employee's COVID-19 status and vulnerability with underlying conditions so that workplace safety isn't compromised. Necessary inquiries need to be made to prevent the spread of the disease.





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### 10.3 Employee Protections

At the time of writing, the State of Colorado requires all businesses and essential functions to provide work accommodations flexible and remote work for certain individuals. In addition, employers are required to phase shifts and breaks to reduce density. Cohorting employees would significantly reduce the number of staff who would need to be excluded in the event of a case of COVID-19 by limiting the number of close contacts of each individual (all of whom will need to be quarantined if they have close contact with a COVID-19 case).<sup>188</sup>

One of the Bustang/Bustang Outrider operators interviewed has had success with rotating staff, or cohorting, to reduce exposure in case an employee gets sick.

#### 10.3.1 Sick Leave Policies

The CDC recommends that transit agencies monitor employee absences and have flexible sick leave policies and supportive policies and practices, as feasible. If sick leave is not available to all employees, the transit agency could consider drafting non-punitive emergency sick leave.<sup>189</sup> The protections and sick leave policies should be communicated to employees.

Transit agencies can expand protections and leave policies for transit employees. Transit agencies can explore mechanisms to allow transit operators to collect hazard pay.<sup>190</sup> A recent study found that hazard pay was the most recommended labor practice outside of providing workers with PPE. Hazard pay benefits include boosting morale, incentivizing workers, and recognizing how serious transit operator positions have become in the COVID-19 era.<sup>191</sup>

Transit agencies could consider a comprehensive paid leave policy to protect transit operators and riders, as well as a death benefit for families of transit workers who lost their lives.<sup>192</sup>

The Community Transportation Association of America recommends that transit agencies provide administrative leave to at-risk bus drivers, including those with underlying conditions. If possible, administrative leave should be available to drivers over the age of 60 and those living with someone over the age of 70 with pre-existing conditions. These drivers can be paid with Coronavirus Aid, Relief, and Economic Security (CARES) Act funding.<sup>193</sup>

#### 10.3.2 Job Protection

**Worker Adjustment and Retraining Notification Act.** Provisions in this act apply to employers with 100 or more employees who must give 60 days' notice before closing or laying off a certain number of workers.<sup>194</sup>

**Wage and hours claims.** Exempt employees must generally be paid the same minimum weekly salary, regardless of the hours they work. To avoid changing the exempt status, employers can use unpaid furlough, mandated vacation, or fixed salary and base hours reduction (only acceptable if occasional and due to an economic slowdown).<sup>195</sup>

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**Workers' compensation.** If employees are likely to encounter the coronavirus in the scope of their employment, employers need to be sure they have adequate insurance coverage and coverage limits that include occupational diseases.<sup>196</sup>

**FMLA.** Employers that are covered by the FMLA are required to provide job-protected leave and other benefits to an eligible employee who misses work due to his or her own serious health condition, or to care for a close family member who has a serious health condition.<sup>197</sup>



APTA information on general workforce resiliency is available at this [link](#).

### 10.4 Training

OSHA and the CDC recommend that transit agencies provide training to employees covering general information on COVID-19 and protocols. This training should be offered free of charge and during scheduled work times. CDPHE recommends that transit agencies educate employees on how to protect themselves at work and at home and on who is at higher risk of severe illness from COVID-19.<sup>198</sup> Other training topics may include:<sup>199</sup>

- Sources of exposure to COVID-19.
- Hazards associated with exposure to COVID-19.
- Appropriate workplace protocols in place to prevent or reduce the likelihood of exposure to COVID-19.
- How to isolate individuals with suspected or confirmed COVID-19 or other infectious diseases.
- How to report possible cases.
- Correct use of PPE, such as the proper way to wear gloves and masks.
- Correct use of disinfecting materials (materials used against contagious viruses have significant safety risks if not mitigated adequately).

Several Bustang/Bustang Outrider Operators have communicated with employees through meetings and phone calls.

#### 10.4.1 Training and Communication Tactics

Transit agencies can use posters to communicate protocols to employees and remind them of new procedures. CDPHE advises that transit agencies post signs to “remind employees to avoid touching their eyes, noses, and mouths and to practice proper sneezing and cough etiquette.”<sup>200</sup>



Sample training material include:

[Hygiene protocols](#)

[Encourage staying home when sick](#)

[Hand-washing](#)



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# 11 OTHER CONSIDERATIONS

- 11.1 Physical Security
- 11.2 Continuous Emergency Management Monitoring
- 11.3 Funding and Tracking Pandemic-Related Expenses
  - 11.3.1 CARES Act
  - 11.3.2 FTA Emergency Relief Program
  - 11.3.3 Expense Tracking



# 11.0

## OTHER CONSIDERATIONS

### 11.1 Physical Security

Procedures for protecting physical assets so that they are supporting social distancing protocols should be reviewed and updated in consultation with local intelligence centers, fusion centers and the United States Department of Homeland Security. Areas to consider include:<sup>201</sup>

- Establish partnerships with other service providers and local jurisdictions for mutual aid and backup in protecting assets.
- Protect facilities and assets with additional security forces and security sweeps, by limiting access points, and restricting numbers of visitors and vendors on property at one time.
- Use technology to limit numbers of individuals who need to access the property.
- Prevent overcrowding of public spaces.
- Track events and incident reports specific to the pandemic.

### 11.2 Continuous Emergency Management Monitoring

Monitoring the effectiveness of current emergency management and operations plans during the pandemic can inform companies about needed updates and improvements to plans and procedures. It is advised that companies document the effectiveness of the plans in place through a standardized reporting mechanism and tracked data, like a Situation Report.<sup>202</sup>

The company should continuously assess and reassess internal emergency management functions, capabilities, communication, and processes so that adjustments can be made. Emergency management planning should include immediate and long-term measures to protect employees, customers, equipment, and facilities.<sup>203</sup>

Plans and manuals should be updated based on lessons learned, best practices from other companies, and the most recent information available from the CDC, local public health departments, local offices of emergency services and emergency operations centers, OSHA, APTA, and FTA.<sup>204</sup>

Emergency management plans and procedures that should be updated include, but are not limited to:<sup>205</sup>

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- Emergency Operations Center Procedures
- Continuity of Operation Plan
- Injury and Illness Prevention Plan
- Health and Safety Plan
- Pandemic Plan

### 11.3 Funding and Tracking Pandemic-Related Expenses

Assistance for transit agencies to cover the costs of pandemic-related expenses is available from:

- CARES Act
- FTA Emergency Relief Program
- Future authorization funding

FTA's FAQs for FTA Grantees Regarding Coronavirus Disease 2019 provide clarity on how COVID-19 preparations impact certain FTA requirements under the CARES Act and formula funding under FTA's Emergency Relief Program.<sup>206</sup>

#### 11.3.1 CARES Act

The CARES Act provides emergency assistance and health care response for individuals, families and businesses affected by the COVID-19 pandemic, and it provides emergency appropriations to support Executive Branch agency operations during the COVID-19 pandemic. FTA is allocating \$25 billion to recipients of urbanized area and rural area formula funds, with \$22.7 billion to large and small urban areas and \$2.2 billion to rural areas. Funding will be provided at a 100% federal share, with no local match required, and will be available to support capital, operating, and other expenses generally eligible under those programs to prevent, prepare for, and respond to COVID-19. Operating expenses incurred beginning on January 20, 2020, for all rural and urban recipients, even those in large urban areas, are also eligible, including operating expenses to maintain transit services, as well as paying for administrative leave for transit personnel due to reduced operations during an emergency. CARES funding will be disbursed through FTA apportionments to its Urbanized Area (Section 5307) and Rural Formula (Section 5311) programs.<sup>207</sup>

CARES Act money can be used to keep drivers on the payroll during reduced operations time, as well as to buy equipment and signage.

#### 11.3.2 FTA Emergency Relief Program

FTA's Emergency Relief program, established under MAP-21 (Moving Ahead for Progress in the 21st Century Act) legislation, enables FTA to provide assistance to public transit operators in



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the aftermath of an emergency or major disaster. On March 13, 2020, FTA announced that expanded eligibility of federal assistance is available under FTA's Emergency Relief Program to help transit agencies respond to the COVID-19 pandemic in states where the Governor has declared an emergency. This includes allowing all transit providers, including those in large urban areas, to use federal formula funds for emergency-related capital and operating expenses, and raises the cap on the federal government's share of those expenses.<sup>208</sup>

### 11.3.3 Expense Tracking

Most of the programs preclude funding of the same activity by two sources. Therefore, it is advised that a company establish a master accounting framework to help monitor and document COVID-19 funding sources and expenditures due to COVID-19. It is important to develop a written policy that defines the expense categories used to account for expenditures. The framework should identify the funding source, separate general ledger accounts for expenses incurred by major type, and include a summary financial analysis of forgone revenue using a consistent methodology. The framework should support required reporting for each funding source.<sup>209</sup>

Organizations should consider FEMA and federal Uniform Guidance cost finding and documentation requirements as a guide for:

- Payroll tracking options
- Expense tracking options
- Indirect expenses

Reporting changes to hours, work assignments, purchasing, etc., must be consistent and in adequate detail to ensure eligibility and auditability. A company can consider a separate payroll job code to track expenses and overtime because of the pandemic.<sup>210</sup> Include safety improvement costs, including time and labor in the tracking system.

Revenue shortages are likely particularly if operations have been suspended. Companies should forecast costs and time to recover based on projected lost revenue. Fiscal planning needs to take into account anticipated reductions of General Fund allocations, loss of sales from business advertisers, and potential loss of ridership revenue.<sup>211</sup>

Under the CARES Act, Net Operating Losses can be carried back to each of the five taxable years preceding the taxable year in which the net operating loss (NOL) arose and may be carried forward indefinitely. NOLs may be used to offset 100% of taxable income in those taxable years. The CARES Act suspended the loss limitation rules under Code Section 461(l), which limits the amount of "net business loss" an individual may apply in a year to \$250,000 (and \$500,000 for taxpayers filing jointly). Fortunately, the CARES Act remedied this problem by making qualified improvement property 15-year property for purposes of depreciation and makes such property eligible for 100% bonus depreciation.<sup>212</sup>





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In addition, the CARES Act modified Code Section 163(j) to increase the amount of business interest expense that may be deducted in taxable years commencing in 2019 or 2020.<sup>213</sup>



Additional detail about how to identify and track expenses and foregone revenue can be found at this [link](#).

## ACRONYMS AND ABBREVIATIONS

ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
CARES	Coronavirus Aid, Relief, and Economic Security
CDC	Centers for Disease Control and Prevention
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CFR	Code of Federal Regulations
COVID-19	Coronavirus Disease 2019
CTAA	Community Transportation Association of America
DTR	Division of Transit and Rail
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Administration
FMLA	Family and Medical Leave Act
FTA	Federal Transit Administration
HVAC	heating, ventilation, and air conditioning
NACTO	National Association of City Transportation Officials
NOL	net operating loss
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PPE	personal protective equipment
UV	Ultraviolet



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

- 1 CDC. "People Who Are at Increased Risk for Severe Illness." June 25, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-increased-risk.html>
- 2 World Health Organization. "Q&A on coronaviruses (COVID-19)." April 17, 2020. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses>
- 3 CDC. "Frequently Asked Questions." October 9, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/faq.html#Spread>
- 4 Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- 5 Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19." June 10, 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>
- 6 CDC. "What Transit Workers Need to Know about COVID-19." Accessed June 9, 2020. [https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf)
- 7 CDC. "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- 8 FTA. "Novel Coronavirus (COVID-19)." June 15, 2020. <https://www.transit.dot.gov/coronavirus>
- 9 FTA. "FTA COVID-19 Resource Tool." <https://www.transit.dot.gov/regulations-and-programs/safety/fta-covid-19-resource-tool>
- 10 CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- 11 State of Colorado. "Local Orders and Variances." July 14, 2020. <https://covid19.colorado.gov/safer-at-home-in-the-vast-great-outdoors/guidance-for-everyone/local-orders-variances>
- 12 CDPHE. "Enforcement of Public Health Orders." April 2020. <https://covid19.colorado.gov/enforcement-public-health-orders>
- 13 CDOT. "2019 State Management Plan Files." July 2020. <https://www.codot.gov/programs/transitandrail/2019-state-management-plan-files>
- 14 American Bus Association. "The Motorcoach Industry's Sample Policies for Post-Pandemic Cleanliness and Safety Protocols." July 2020. [https://www.buses.org/assets/images/uploads/pdf/The\\_Motorcoach\\_Industry\\_Recommendations\\_on\\_Post-COVID\\_Travel.pdf](https://www.buses.org/assets/images/uploads/pdf/The_Motorcoach_Industry_Recommendations_on_Post-COVID_Travel.pdf)
- 15 FTA. "Recommended Actions to Reduce the Risk of Coronavirus." June 2020. [https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19_0.pdf)
- 16 The White House. "Guidance for Cleaning and Disinfecting." April 2020. <https://drive.google.com/file/d/1EYBtMgc6ZV2onawRb5qS7ioSx6vCLOjA/view>
- APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 17 CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- 18 CDC. "Cleaning and Disinfecting for Households." June 2020. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>
- 19 CDC. "Cleaning and Disinfecting for Households." June 2020. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>
- 20 CDC. "Cleaning and Disinfecting for Non-Emergency Transport Vehicles." April 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>
- 21 CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- 22 APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- 23 APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities during a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 24 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- 25 The White House. "Guidance for Cleaning and Disinfecting." April 2020. <https://drive.google.com/file/d/1EYBtMgc6ZV2onawRb5qS7ioSx6vCLOjA/view>
- 26 APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities during a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 27 CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- 28 APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities during a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 29 APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities during a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 30 APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities during a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 31 Brier, Michelle. "New Electrostatic Cleaners Make Sanitizing Easier for RTD." July 9, 2020. <https://www.rtd-denver.com/news-stop/blogs/new-electrostatic-cleaners-make-sanitizing-easier-rtd>
- 32 APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities during a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 33 APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities during a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 34 Higgs, Larry. "NJ Transit, Rutgers study UV light to rid buses of coronavirus." June 22, 2020. <https://www.nj.com/news/2020/06/nj-transit-rutgers-study-uv-light-to-rid-buses-of-coronavirus.html>
- 35 APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities during a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 36 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 37 The White House. "Guidance for Cleaning and Disinfecting." April 2020. <https://drive.google.com/file/d/1EYBtMgc6ZV2onawRb5qS7ioSx6vCLOjA/view>
- 38 The White House. "Guidance for Cleaning and Disinfecting." April 2020. <https://drive.google.com/file/d/1EYBtMgc6ZV2onawRb5qS7ioSx6vCLOjA/view>
- 39 The White House. "Guidance for Cleaning and Disinfecting." April 2020. <https://drive.google.com/file/d/1EYBtMgc6ZV2onawRb5qS7ioSx6vCLOjA/view>
- 40 CDC. "Cleaning and Disinfecting for Non-Emergency Transport Vehicles." April 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>
- 41 CDC. "Cleaning and Disinfecting for Non-Emergency Transport Vehicles." April 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>
- 42 CDC. "Cleaning and Disinfecting for Non-Emergency Transport Vehicles." April 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>
- 43 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 44 CDC. "Cleaning and Disinfecting for Non-Emergency Transport Vehicles." April 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>
- 45 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 46 CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- 47 FTA. "Safety Advisory: Recommended Actions to Reduce the Risk of Coronavirus Disease 2019 (COVID-19) Among Transit Employees and Passengers." June 2020. [https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19_0.pdf)
- 48 CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- 49 CDC. "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- 50 CDPHE. "Guidance for wearing masks." August 19, 2020. <https://covid19.colorado.gov/mask-guidance>



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

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- <sup>51</sup> CDPHE. "Guidance for wearing masks." August 19, 2020. <https://covid19.colorado.gov/mask-guidance>
- <sup>52</sup> CDC. "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- <sup>53</sup> CDC. "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- <sup>54</sup> OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- <sup>55</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>56</sup> Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- <sup>57</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>58</sup> Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- <sup>60</sup> CDPHE. "Guidance for wearing masks." August 19, 2020. <https://covid19.colorado.gov/mask-guidance>
- <sup>61</sup> OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- <sup>62</sup> CDC. "Coughing and Sneezing." November 8, 2020. [https://www.cdc.gov/healthywater/hygiene/etiquette/coughing\\_sneezing.html](https://www.cdc.gov/healthywater/hygiene/etiquette/coughing_sneezing.html)
- <sup>63</sup> CDC. "What Transit Workers Need to Know about COVID-19." Accessed June 9, 2020. [https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf)
- <sup>64</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>65</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>66</sup> OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- <sup>67</sup> CDC. "What Transit Workers Need to Know about COVID-19." Accessed June 9, 2020. [https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf)
- <sup>68</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>69</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>70</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>71</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>72</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>73</sup> APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities During a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- <sup>74</sup> American Bus Association. "The Motorcoach Industry's Sample Policies for Post-Pandemic Cleanliness and Safety Protocols." July 2020. [https://www.buses.org/assets/images/uploads/pdf/The\\_Motorcoach\\_Industry\\_Recommendations\\_on\\_Post-COVID\\_Travel.pdf](https://www.buses.org/assets/images/uploads/pdf/The_Motorcoach_Industry_Recommendations_on_Post-COVID_Travel.pdf)
- <sup>75</sup> CDC. "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- <sup>76</sup> FTA. "Safety Advisory: Recommended Actions to Reduce the Risk of Coronavirus Disease 2019 (COVID-19) Among Transit Employees and Passengers." June 2020. [https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19_0.pdf)
- <sup>77</sup> OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- <sup>78</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>79</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>80</sup> OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- <sup>81</sup> CDC. "Public Health Considerations for Opening Mass Transit During a Pandemic." June 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/pdf/MassTransit-DecisionTree.pdf>
- <sup>82</sup> Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- <sup>83</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>84</sup> Communication with Daniel Pastula, CDPHE, July 30, 2020.
- <sup>85</sup> OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- <sup>86</sup> OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- <sup>87</sup> OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/covid-19-faq.html>
- <sup>88</sup> Communication with Daniel Pastula, CDPHE, July 30, 2020.
- <sup>89</sup> CDPHE. "Guidance for wearing masks." August 19, 2020. <https://covid19.colorado.gov/mask-guidance>
- <sup>90</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>91</sup> CDC. "Cleaning and Disinfecting for Non-Emergency Transport Vehicles." April 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>
- <sup>92</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>93</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>94</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>95</sup> Rural Transit Assistance Program. "COVID-19: Information and Resources for Transit" June 2020. <http://nationalrtp.org/Resource-Center/Advanced-Search/fid/1082>
- <sup>96</sup> Communication with Daniel Pastula, CDPHE, July 30, 2020.
- <sup>97</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>98</sup> FTA. "Safety Advisory: Recommended Actions to Reduce the Risk of Coronavirus Disease 2019 (COVID-19) Among Transit Employees and Passengers." June 2020. [https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19_0.pdf)
- <sup>99</sup> CDC. "Social Distancing." July 2020. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>
- <sup>100</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>101</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>102</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>103</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>104</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>105</sup> CDC. "What Transit Workers Need to Know about COVID-19." Accessed June 9, 2020. [https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf)
- <sup>106</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>107</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>108</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>109</sup> CDC. "Public Health Considerations for Opening Mass Transit During a Pandemic." June 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/pdf/MassTransit-DecisionTree.pdf>
- <sup>110</sup> CTA. "CTAA Recommended COVID-19 Safety Protocols" Accessed July 2020. [https://cta.org/wp-content/uploads/2020/04/CTAA\\_Final\\_COVID19.pdf](https://cta.org/wp-content/uploads/2020/04/CTAA_Final_COVID19.pdf)
- <sup>111</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>112</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>113</sup> The National Institute for Occupational Safety and Health (NIOSH) "Engineering Controls." January 2015. <https://www.cdc.gov/niosh/engcontrols/>



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

- <sup>114</sup> Communication with Daniel Pastula, CDPHE, October 15, 2020.
- <sup>115</sup> Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19" June 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>, CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>116</sup> CDC. "Protect Yourself when using Public Transportation." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/using-transportation.html#PublicTransit>
- <sup>117</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>118</sup> Huston, Lee. Transportation Research Board. "Ultraviolet Germicidal Irradiation for Transit Buses" July 2009. [http://onlinepubs.trb.org/onlinepubs/archive/studies/idea/finalreports/transit/Transit53\\_Final\\_Report.pdf](http://onlinepubs.trb.org/onlinepubs/archive/studies/idea/finalreports/transit/Transit53_Final_Report.pdf)
- <sup>119</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>120</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>121</sup> Rural Transit Assistance Program. "COVID-19: Information and Resources for Transit" June 2020. <http://nationalrtap.org/Resource-Center/COVID-19-Information>
- <sup>122</sup> The National Institute for Occupational Safety and Health (NIOSH) "Engineering Controls." January 2015. <https://www.cdc.gov/niosh/engcontrols/>
- <sup>123</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>124</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>125</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>126</sup> American Bus Association. "The Motorcoach Industry's Sample Policies for Post-Pandemic Cleanliness and Safety Protocols." June 2020. [https://www.buses.org/assets/images/uploads/pdf/The\\_Motorcoach\\_Industry\\_Recommendations\\_on\\_Post-COVID\\_Travel.pdf](https://www.buses.org/assets/images/uploads/pdf/The_Motorcoach_Industry_Recommendations_on_Post-COVID_Travel.pdf)
- <sup>127</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>128</sup> Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19" June 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>
- <sup>128</sup> CDC. "Protect Yourself when using Public Transportation." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/using-transportation.html#PublicTransit>
- <sup>129</sup> Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19" June 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>
- <sup>129</sup> CDC. "Protect Yourself when using Public Transportation." May 2020.
- <sup>130</sup> NJ.com. "Talking can spread coronavirus, so new NJ Transit commuting rules say to keep quiet" June 16, 2020. <https://www.nj.com/coronavirus/2020/06/all-that-talking-can-spread-coronavirus-so-new-nj-transit-commuting-rules-say-to-keep-quiet.html>
- <sup>131</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>131</sup> Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19" June 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>
- <sup>132</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>132</sup> Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19" June 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>
- <sup>133</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>134</sup> Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19" June 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>
- <sup>135</sup> Communication with Dave Harris, Transit and Rail Division Director at New Mexico Department of Transportation, June, 2020.
- <sup>136</sup> Communication with Daniel Pastula, CDPHE, July 30, 2020.
- <sup>137</sup> Rural Transit Assistance Program. "COVID-19: Information and Resources for Transit" June 2020. <http://nationalrtap.org/Resource-Center/COVID-19-Information>
- <sup>138</sup> Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- <sup>139</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>140</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>141</sup> CDC. "Public Health Considerations for Opening Mass Transit During a Pandemic." June 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/pdf/MassTransitDecisionTree.pdf>
- <sup>142</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>143</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>144</sup> Communication with Daniel Pastula, CDPHE, July 30, 2020.
- <sup>145</sup> Rural Transit Assistance Program. "COVID-19: Information and Resources for Transit" June 2020. <http://nationalrtap.org/Resource-Center/COVID-19-Information>
- <sup>146</sup> Rural Transit Assistance Program. "COVID-19: Information and Resources for Transit" June 2020. <http://nationalrtap.org/Resource-Center/COVID-19-Information>
- <sup>147</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>148</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>149</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>150</sup> Retail Sensing. "Automated Passenger Counting." July 9, 2020. <https://www.retailsensing.com/automated-passenger-counting.html>
- <sup>151</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>152</sup> Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- <sup>153</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>154</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>155</sup> APTA. "The COVID-19 Pandemic, Public Transportation Responds: Safeguarding Riders and Employees." April 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_FINAL\\_04132020.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf)
- <sup>156</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- <sup>157</sup> Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19" June 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>
- <sup>158</sup> Mass Transit. "NJ Transit deploys new fare collection technology on trains" July 10, 2020. <https://www.masstransitmag.com/technology/fare-collection/fare-collection-equipment/press-release/21145709/new-jersey-transit-nj-transit-nj-transit-deploys-new-fare-collection-technology-on-trains>
- <sup>159</sup> Masabi US Ltd. "Masabi, Littlepay unveil contactless EMV in a box transport ticketing solution." June 9, 2020. <https://www.masstransitmag.com/technology/fare-collection/fare-collection-equipment/press-release/21141520/masabi-us-ltd-masabi-littlepay-unveil-contactless-emv-in-a-box-transport-ticketing-solution>
- <sup>160</sup> Tri-State Transportation Campaign. "Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19" June 2020. <http://www.tstc.org/wp-content/uploads/2020/06/Back-on-Board.pdf>
- <sup>161</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>162</sup> NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- <sup>163</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>164</sup> APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- <sup>165</sup> Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- <sup>166</sup> CDC. "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- <sup>167</sup> CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>





## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

- 168 OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- 169 US Chamber of Commerce. "Implementing a National Return to Work Plan." April 13, 2020. <https://www.uschamber.com/coronavirus/implementing-national-return-to-work-plan#liability>
- 170 Mondaq. "United States: Pandemic Coronavirus: Practical And Legal Issues For Employers" March 10, 2020. <https://www.mondaq.com/unitedstates/employee-benefits-compensation/902602/pandemic-coronavirus-practical-and-legal-issues-for-employers>
- 171 FTA. "Frequently Asked Questions from FTA Grantees Regarding Coronavirus Disease 2019 (COVID-19)" June 2020. <https://www.transit.dot.gov/frequently-asked-questions-fta-grantees-regarding-coronavirus-disease-2019-covid-19>
- 172 CDC. "What Transit Workers Need to Know about COVID-19." Accessed June 9, 2020. [https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf)
- 173 CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- 174 CDC. "What Transit Workers Need to Know about COVID-19." Accessed June 9, 2020. [https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf)
- 175 OSHA. "Recommended Practices for Safety and Health Programs." July 2020. <https://www.osha.gov/shpguidelines/hazard-identification.html>
- 176 OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- 177 CDC. "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- 178 The White House. "Guidance for Cleaning and Disinfecting." April 2020. <https://drive.google.com/file/d/1EYBTMgc6ZV2onawRb5qS7ioSx6vCLOjA/view>
- 179 CDC. "Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings." July 20, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html>
- 180 CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- 181 CDC. "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)." May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- 182 CDPHE. "COVID-19 Guidelines for Public Transportation." June 5, 2020. <https://covid19.colorado.gov/public-transportation>
- 183 Communication with Daniel Pastula, CDPHE, July 30, 2020.
- 184 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 185 FEMA. "Ensuring Civil Rights During the Pandemic." April 13, 2020. <https://www.fema.gov/media-library-data/1586893628400-f21a380f3db223e6075eeb3be67d50a6/EnsuringCivilRightsDuringtheCOVID19Response.pdf>
- 186 Robinson, Dipanwita Deb Amar David J. Reis Matthew R. Diton Kaitlin A. "Pandemic Coronavirus: Practical and Legal Issues for Employers" March 6, 2020. <https://www.arnoldporter.com/en/perspectives/publications/2020/03/pandemic-coronavirus-practical-and-legal>
- 187 Wigdor, Douglas. "Returning To Work During A Pandemic: 3 Legal Issues Employers Cannot Ignore" May 27, 2020. <https://www.forbes.com/sites/douglaswigdor/2020/05/27/returning-to-work-during-pandemic-3-legal-issues-employers-cannot-ignore/#26c39cbf5652>
- 188 CDE. "Planning for the 2020-21 School Year: A Framework and Toolkit for School and District Leaders." 2020. <https://www.cde.state.co.us/planning20-21/print-all>
- 189 CDC. "What Transit Workers Need to Know about COVID-19." Accessed June 9, 2020. [https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf)
- 190 NACTO. "Rapid Response. Emerging Practices for Transit Agencies." Accessed July 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>
- 191 Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- 192 Campaign Green for All. "Securing Safe Transport Before and After COVID-19" June 17, 2020. <https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>
- 193 CTA. "CTAA Recommended COVID-19 Safety Protocols" Accessed July 2020. [https://ctaa.org/wp-content/uploads/2020/04/CTAA\\_Final\\_COVID19.pdf](https://ctaa.org/wp-content/uploads/2020/04/CTAA_Final_COVID19.pdf)
- 194 Jayde M. Ashford, Susan F. Wiltsie & Robert T. Dumbacher. "Top Five Employment Law Liabilities Facing Employers Post-Pandemic" June 22, 2020. <https://www.huntonlaborblog.com/2020/06/articles/employment-policies/top-five-employment-law-liabilities-facing-employers-post-pandemic/>
- 195 Mondaq. "United States: Pandemic Coronavirus: Practical And Legal Issues For Employers" March 10, 2020. <https://www.mondaq.com/unitedstates/employee-benefits-compensation/902602/pandemic-coronavirus-practical-and-legal-issues-for-employers>
- 196 Mondaq. "United States: Pandemic Coronavirus: Practical And Legal Issues For Employers" March 10, 2020. <https://www.mondaq.com/unitedstates/employee-benefits-compensation/902602/pandemic-coronavirus-practical-and-legal-issues-for-employers>
- 197 Mondaq. "United States: Pandemic Coronavirus: Practical And Legal Issues For Employers" March 10, 2020. <https://www.mondaq.com/unitedstates/employee-benefits-compensation/902602/pandemic-coronavirus-practical-and-legal-issues-for-employers>
- 198 CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- 199 CDC. "What Transit Workers Need to Know about COVID-19." Accessed June 9, 2020. [https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf)
- OSHA. "COVID-19." Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>
- APTA. "Cleaning and Disinfecting Transit Vehicles and Facilities During a Contagious Virus Pandemic." July 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf)
- 200 CDPHE. "COVID-19 Guidelines for Public Transportation." November 8, 2020. <https://covid19.colorado.gov/public-transportation>
- 201 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 202 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 203 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 204 Francis, Rufus. Santa Cruz Metro. "Planning for Pandemics and Beyond" June 30, 2020. Webinar Presentation.
- 205 Francis, Rufus. Santa Cruz Metro. "Planning for Pandemics and Beyond" June 30, 2020. Webinar Presentation.
- 206 FTA. "Frequently Asked Questions from FTA Grantees Regarding Coronavirus Disease 2019 (COVID-19)" June 2020. <https://www.transit.dot.gov/frequently-asked-questions-fta-grantees-regarding-coronavirus-disease-2019-covid-19>
- 207 FTA. "Coronavirus Aid, Relief, and Economic Security (CARES) Act" June 15, 2020. <https://www.transit.dot.gov/cares-act>
- 208 FTA. Emergency Relief Program. July 2020. <https://www.transit.dot.gov/funding/grant-programs/emergency-relief-program>
- 209 Christman, Mark. Blessing, Brenda. "COVID-19 Expenses & Forgone Revenue: Start Accumulating Data Now" April 21, 2020. <https://www.bkd.com/alert-article/2020/04/covid-19-expenses-forgone-revenue-start-accumulating-data-now>
- 210 APTA. "Developing a Pandemic Virus Service Restoration Check List." May 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf)
- 211 Codie, III, Robert L. "LeeTran Pandemic Response and After Action Plan" June 30, 2020. Webinar Presentation.
- 212 ShepardMullin, Judith Fiorini, John Crisp and Ryan Brenner. COVID-19 Related Expenses. April 2020. <https://www.corporatesecuritieslawblog.com/2020/04/covid-19-expenses/>
- 213 ShepardMullin, Judith Fiorini, John Crisp and Ryan Brenner. COVID-19 Related Expenses. April 2020. <https://www.corporatesecuritieslawblog.com/2020/04/covid-19-expenses/>





## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

---

### BIBLIOGRAPHY

- “2019 State Management Plan Files.” Colorado Department of Transportation, January 14, 2020. <https://www.codot.gov/programs/transitandrail/2019-state-management-plan-files>.
- Amar, Dipanwita Deb. “Pandemic Coronavirus: Practical And Legal Issues For Employers - Employment and HR - United States.” Welcome to Mondaq. Arnold & Porter, March 10, 2020. <https://www.mondaq.com/unitedstates/employee-benefits-compensation/902602/pandemic-coronavirus-practical-and-legal-issues-for-employers>.
- Ashford, Jayde M., Susan F. Wiltsie, and Robert T. Dumbacher. “Top Five Employment Law Liabilities Facing Employers Post-Pandemic.” *Hunton Employment & Labor Perspectives*, June 22, 2020. <https://www.huntonlaborblog.com/2020/06/articles/employment-policies/top-five-employment-law-liabilities-facing-employers-post-pandemic/>.
- “Automatic Passenger Counting - Public Transport.” *Retail Sensing*, July 29, 2014. <https://www.retailsensing.com/automated-passenger-counting.html>.
- “Back on Board: A Guide to Safe(r) Transit in the Era of COVID-19.” Tri-State Transportation Campaign, July 28, 2020. <http://www.tstc.org/reports-1/>.
- “Cleaning and Disinfecting Transit Vehicles and Facilities During a Contagious Virus Pandemic.” *American Public Transportation Association*, June 22, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Cleaning\\_and\\_Disinfecting\\_Transit\\_Vehicles\\_and\\_Facilities\\_During\\_a\\_Contagious\\_Virus\\_Pandemic\\_FINAL\\_6-22-2020.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Cleaning_and_Disinfecting_Transit_Vehicles_and_Facilities_During_a_Contagious_Virus_Pandemic_FINAL_6-22-2020.pdf).
- “Cleaning and Disinfection for Households.” *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>.
- “Cleaning and Disinfection for Non-Emergency Transport Vehicles.” *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, April 14, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>.
- “Coronavirus Aid, Relief, and Economic Security (CARES) Act.” *Coronavirus Aid, Relief, and Economic Security (CARES) Act | FTA*, June 15, 2020. <https://www.transit.dot.gov/cares-act>.
- “Coronavirus Disease 2019 (COVID-19) Information.” COVID-19 Information. Accessed October 2, 2020. <http://nationalrtap.org/Resource-Center/COVID-19-Information>.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

---

“Coronavirus (COVID-19) Frequently Asked Questions.” *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention. Accessed October 16, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/faq.html>.

“Coughing and Sneezing.” *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, April 22, 2020. [https://www.cdc.gov/healthywater/hygiene/etiquette/coughing\\_sneezing.html](https://www.cdc.gov/healthywater/hygiene/etiquette/coughing_sneezing.html).

“COVID-19 Dial.” *Colorado COVID-19 Updates*. Accessed October 16, 2020. <https://covid19.colorado.gov/safer-at-home-in-the-vast-great-outdoors/guidance-for-everyone/local-orders-variances>.

*COVID-19 Expenses & Forgone Revenue: Start Accumulating Data Now*, April 21, 2020. <https://www.bkd.com/alert-article/2020/04/covid-19-expenses-forgone-revenue-start-accumulating-data-now>.

“COVID-19 Guidance: Businesses and Employers.” *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, May 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>.

“COVID-19 Guidelines for Public Transportation.” *Colorado Department of Public Health and Environment*, June 2020. <https://covid19.colorado.gov/guidance-resources>.

“COVID-19 Related Expenses.” *Corporate & Securities Law Blog*, April 14, 2020. <https://www.corporatesecuritieslawblog.com/2020/04/covid-19-expenses>.

“CTAA Recommended COVID-19 Safety Protocols.” *Community Transportation Association of America*, 2020. [https://ctaa.org/wp-content/uploads/2020/04/CTAA\\_Final\\_COVID19.pdf](https://ctaa.org/wp-content/uploads/2020/04/CTAA_Final_COVID19.pdf).

“Developing a Pandemic Virus Service Restoration Checklist.” American Public Transportation Association, May 20, 2020. [https://www.apta.com/wp-content/uploads/APTA\\_WP\\_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf](https://www.apta.com/wp-content/uploads/APTA_WP_Developing-Pandemic-Virus-Service-Restoration-Checklist.pdf).

“Directory of Engineering Controls.” Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, January 14, 2015. <https://www.cdc.gov/niosh/engcontrols/>.

“EIGHTH AMENDED PUBLIC HEALTH ORDER 20-28 SAFER AT HOME AND IN THE VAST, GREAT OUTDOORS.” *Colorado Department of Public Health and Environment*, June 2020. <https://www.tchd.org/DocumentCenter/View/7345/Safer-at-Home-Public-Health-Order--Eighth-Amended-?bidId=>.

“Emergency Relief Program.” *Emergency Relief Program | FTA*. Accessed July 2020. <https://www.transit.dot.gov/funding/grant-programs/emergency-relief-program>.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

---

“Enforcement of Public Health Orders.” *Colorado Department of Public Health and Environment*, April 2020. <https://covid19.colorado.gov/enforcement-public-health-orders>.

“Ensuring Civil Rights.” *FEMA*, April 13, 2020. <https://www.fema.gov/media-library-data/1586893628400-f21a380f3db223e6075eeb3be67d50a6/EnsuringCivilRightsDuringtheCOVID19Response.pdf>.

“Face Covering Order.” *Denver Public Health and Environment*, May 6, 2020. <https://www.denvergov.org/content/dam/denvergov/Portals/covid19/documents/public-orders/DDPHE-Face-Covering-Order-5-5-20.pdf>.

“FACE COVERINGS FOR CRITICAL BUSINESSES AND MASS TRANSPORTATION OPERATIONS.” *Colorado Department of Public Health and Environment*, June 30, 2020. <https://assets.bouldercounty.org/wp-content/uploads/2020/07/public-health-order-face-coverings-for-critical-businesses-and-mass-transit.pdf>.

“Frequently Asked Questions from FTA Grantees Regarding Coronavirus Disease 2019 (COVID-19).” *Frequently Asked Questions from FTA Grantees Regarding Coronavirus Disease 2019 (COVID-19) | FTA*. Accessed June 2020. <https://www.transit.dot.gov/frequently-asked-questions-fta-grantees-regarding-coronavirus-disease-2019-covid-19>.

“FTA COVID-19 Resource Tool.” *FTA COVID-19 Resource Tool | FTA*. Accessed July 2020. <https://www.transit.dot.gov/regulations-and-programs/safety/fta-covid-19-resource-tool>.

“How We're Cleaning during the Coronavirus Pandemic.” *MTA*. Accessed July 2020. <https://new.mta.info/coronavirus/cleaning>.

Huang, Pien. “WHO: Airborne Transmission Plays Limited Role In Coronavirus Spread.” *NPR*. NPR, July 9, 2020. <https://www.npr.org/sections/goatsandsoda/2020/07/09/889526937/who-report-aerosols-not-likely-to-be-significant-source-of-covid-19-transmission>.

Huston, Lee. “Ultraviolet Germicidal Irradiation for Transit Buses.” *Transportation Research Board*, July 2009. [http://onlinepubs.trb.org/onlinepubs/archive/studies/idea/finalreports/transit/Transit53\\_Final\\_Report.pdf](http://onlinepubs.trb.org/onlinepubs/archive/studies/idea/finalreports/transit/Transit53_Final_Report.pdf).

“Implementing a National Return to Work Plan.” *U.S. Chamber of Commerce*, April 13, 2020. <https://www.uschamber.com/coronavirus/implementing-national-return-to-work-plan>.

Larry Higgs | NJ Advance Media for NJ.com. “NJ Transit, Rutgers Study UV Light to Rid Buses of Coronavirus.” *Nj*, June 22, 2020. <https://www.nj.com/news/2020/06/nj-transit-rutgers-study-uv-light-to-rid-buses-of-coronavirus.html>.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

---

- Larry Higgs | NJ Advance Media for NJ.com. "Talking Can Spread Coronavirus, so New NJ Transit Commuting Rules Say to Keep Quiet." *Nj*, June 16, 2020. <https://www.nj.com/coronavirus/2020/06/all-that-talking-can-spread-coronavirus-so-new-nj-transit-commuting-rules-say-to-keep-quiet.html>.
- "New Electrostatic Cleaners Make Sanitizing Easier for RTD." *RTD*, July 9, 2020. <https://www.rtd-denver.com/news-stop/blogs/new-electrostatic-cleaners-make-sanitizing-easier-rtd>.
- "NJ Transit Deploys New Fare Collection Technology on Trains." *MassTransit*, July 10, 2020. <https://www.masstransitmag.com/technology/fare-collection/fare-collection-equipment/press-release/21145709/new-jersey-transit-nj-transit-nj-transit-deploys-new-fare-collection-technology-on-trains>.
- "Novel Coronavirus (COVID-19)." *Novel Coronavirus (COVID-19) | FTA*. Accessed June 2020. <https://www.transit.dot.gov/coronavirus>.
- "People Who Are at Increased Risk for Severe Illness." Centers for Disease Control and Prevention, June 25, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-increased-risk.html>.
- "Masabi Littlepay Unveil Contactless Ticketing Solution." *MassTransit*. Accessed July 2020. <https://www.masstransitmag.com/technology/fare-collection/fare-collection-equipment/press-release/21141520/masabi-us-ltd-masabi-littlepay-unveil-contactless-emv-in-a-box-transport-ticketing-solution>.
- "Protect Yourself When Using Transportation." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, May 26, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/using-transportation.html>.
- "Public Health Considerations for Opening Mass Transit During a Pandemic." *Center for Disease Control*, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/pdf/MassTransit-DecisionTree.pdf>.
- "Public Transportation Responds: Safeguarding Riders and Employees." APTA, August 11, 2020. [https://www.apta.com/wp-content/uploads/COVID-19\\_Transit\\_Guide\\_REVISION-2020\\_08\\_11.pdf](https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_REVISION-2020_08_11.pdf).
- "Q&A On Coronaviruses (COVID-19)." World Health Organization, April 17, 2020. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses>.
- "Rapid Response: Emerging Practices for Transit Agencies." National Association of City Transportation Officials. Accessed October 2, 2020. <https://nacto.org/covid19-rapid-response-tools-for-transit-agencies/>.



## SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

---

“Recommended Actions to Reduce the Risk of Coronavirus.” *FTA*. Accessed June 2020.  
[https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19_0.pdf).

“Recommended Practices for Safety and Health Programs.” Hazard Identification and Assessment | Occupational Safety and Health Administration. Accessed October 2, 2020.  
<https://www.osha.gov/shpguidelines/hazard-identification.html>.

“Reopening America Guidance.” *White House*. Google, April 2020.  
<https://drive.google.com/file/d/1EYBtMgc6ZV2onawRb5qS7ioSx6vCLOjA/view>.

Robert L. Codie, III. 2020. LeeTran Pandemic Response and After Action Plan . Webinar, June 30.

Rufus Francis, Santa Cruz Metro. 2020. Planning for Pandemics and Beyond. Webinar Presentation, June 30.

“Safety Advisory: Recommended Actions to Reduce the Risk of Coronavirus Disease 2019 (COVID-19) Among Transit Employees and Passengers.” *FTA*. Accessed June 2020.  
[https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-04/FTA-Safety-Advisory-20-01-COVID-19_0.pdf).

“Safety and Health Topics | COVID-19 - Control and Prevention .” *Occupational Safety and Health Administration*. Accessed July 2020. <https://www.osha.gov/SLTC/covid-19/controlprevention.html>.

“Social Distancing, Quarantine, and Isolation.” *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention. Accessed July 2020.  
<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>.

“Securing Safe Transit: Before and After COVID-19.” Dream Corps, June 17, 2020.  
<https://www.thedreamcorps.org/our-programs/green-for-all/campaigns/safetransit/>.

“THE MOTORCOACH INDUSTRY’S SAMPLE POLICIES FOR POST-PANDEMIC CLEANLINESS AND SAFETY PROTOCOLS.” American Bus Association, June 2020.  
[https://www.buses.org/assets/images/uploads/pdf/The\\_Motorcoach\\_Industry\\_Recommendations\\_on\\_Post-COVID\\_Travel.pdf](https://www.buses.org/assets/images/uploads/pdf/The_Motorcoach_Industry_Recommendations_on_Post-COVID_Travel.pdf).

“What Transit Workers Need to Know about COVID-19.” CDC . Accessed October 1, 2020.  
[https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS\\_WORKER.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/BUS_WORKER.pdf).

Wigdor, Douglas. “Returning To Work During A Pandemic: 3 Legal Issues Employers Cannot Ignore.” *Forbes*. Forbes Magazine, May 27, 2020.  
<https://www.forbes.com/sites/douglaswigdor/2020/05/27/returning-to-work-during-pandemic-3-legal-issues-employers-cannot-ignore/>.



A graphic on a purple background featuring several green, spherical virus particles with spikes. The word "STOP" is written in large, bold, red letters with a white outline. A red circle with a diagonal slash is superimposed over the letter "O". Below "STOP", the words "THE SPREAD!" are written in large, bold, green letters with a white outline. The entire graphic is surrounded by smaller green virus particles.

**STOP**  
THE  
**SPREAD!**

SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

A vertical graphic on the left side of the page showing several blue and purple virus particles with spikes, set against a dark background with bokeh light effects. The particles are of various sizes and orientations, creating a sense of movement and depth.

**Appendix A.**  
**PROTOCOLS**  
**CHECKLISTS**



## Checklists for Recommended and Required Protocols

These checklists include a summary of all protocols included in the Short Term Pandemic Protocols for Bus Operators document. These checklists assign responsibility for each protocol to CDOT, Bustang and Bustang Outrider Operators, and passengers. Certain protocols apply to multiple parties or entities.

Certain protocols that are required by federal, state, or local law, executive order, or public health order are noted in with an asterisk and **bold blue text** in the checklists. Because these are frequently changing, please consult the latest version of all laws, executive, and public health orders.

### *CDOT and Bustang and Bustang Outrider Operator Protocols*

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 Operators	 CDOT	 Operators and CDOT
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**Protocols with an asterisk (\*) and in bold blue text are required by federal, state, or local laws, executive or public health orders.**

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### **Decontamination** **(See Chapter 2 for More Information)**

- Develop and implement a plan for routine cleaning and disinfection:
  - Daily cleaning and disinfection of vehicles and facilities.
  - Weekly deep cleaning of vehicles and facilities.
    - **Cleaning and disinfection of high-touch areas at shift changes and layovers.\***
- Maintain an adequate supply of disinfectants and supplies and store them properly.
- Use disinfection products and supplies that meet EPA's criteria for use against COVID-19 and have a back-up plan with alternative methods if supplies run short.
- Use the appropriate cleaning and disinfecting supplies and methods for hard, non-porous surfaces; soft, porous surfaces; and electronic surfaces, avoiding the dry sweeping method.
- Individuals who are cleaning and disinfecting should wear nitrile gloves (compatible with products using) and their wash hands immediately after cleaning.

### **Hygiene** **(See Chapter 3 for More Information)**

- Promote and adopt healthy hygiene practices:
  - Avoid touching eyes, nose, or mouth with unwashed hands.
  - Avoid touching surfaces that have been touched frequently by passengers.
  - Practice respiratory etiquette, including covering one's mouth with a tissue when coughing or sneezing.
  - Wear a cloth face covering/mask.

## Checklists for Recommended and Required Protocols

- Provide alcohol-based hand sanitizer (at least 70% alcohol) to passengers and employees.\***
  - Install touchless units at bus entrance, and provide sachets and wipes to use during trip.
  - Install hand sanitizer dispenser outside bus and facility bathrooms and install touchless devices in the bathrooms.
- Create a safe work environment for drivers:
  - Assign operators one bus for their entire shift and ensure operators are driving a recently sanitized bus.
  - Remove keyboards, screens, and other systems that are touched by multiple workers.
  - **Ensure adequate ventilation when cleaning chemicals are used.\***
  - Provide facilities or materials for hand hygiene to use after removing PPE.
  - Prop open doors wherever possible to reduce touching common surfaces.
- Audit disinfecting protocols by testing surfaces for COVID-19.

### **PPE and Mask Use (See Chapter 4 for More Information)**

- Conduct a workplace hazard assessment to identify COVID-19 prevention strategies and determine appropriate PPE for each employee.\***
- Determine the threshold level of supplies of PPE needed, and centralize procurement and distribution of materials to prioritize materials for those cleaning and disinfecting.
- Establish and implement policies and procedures for employees regarding the use of face coverings and PPE:
  - Require all employees to wear a cloth face covering if not required to use PPE.
- Prioritize providing appropriate PPE to employees.\***
- Establish and enforce procedures for maintaining, storing, and disposing of PPE.
- Establish and monitor procedures for employee cleaning clothing and items functioning as PPE:
  - Clean hands after removing PPE.
  - Dispose of gloves and other disposable PPE after cleaning and disinfection.
  - Launder work clothes.
  - Drivers change clothes and launder after each shift.
- Train employees in the proper use of PPE:
  - Employees wear disposable gloves and gowns when cleaning and disinfecting.
  - **Employees wear a single pair nitrile exam gloves when in physical contact with customers, goods, and potentially contaminated surfaces.\***
  - Employees dispose of gloves after each customer interaction or when visibly compromised. Gloves should not be worn all day.

## Checklists for Recommended and Required Protocols

### Testing, Screening, Reporting (See Chapter 5 for More Information)

- Identify personnel or vendors to conduct testing or screening.
- Implement symptom monitoring protocols, conduct daily temperature checks and monitor symptoms in employees at the worksite to the greatest extent possible, or if not practicable, through employee self-assessment at home prior to coming to the worksite.\***
- Develop screening procedures for passengers.
- Develop a reporting system to track virus cases and presumed cases and consider maintaining a record of riders.

### Social Distancing (See Chapter 6 for More Information)

- Establish and implement social distancing protocols to create physical separation of greater than 6 feet:\***
  - Clearly delineate spacing for passengers waiting for the bus.
  - Prohibit passenger seating within one or two rows behind or adjacent to the driver's seat or install barriers or closures around driver's seat.
  - Tape or block off seats to create 6-foot spacing between non-household groups.
  - Follow CTAA guidance on wheelchair securement.
  - Limit passengers to 50% of bus capacity.
  - Coordinate with local communities to help support crowd control at stations or bus stops.
- Handle money or credit cards with one pair of disposable gloves per customer.\***

### Engineering Controls (See Chapter 7 for More Information)

- Ensure proper ventilation.\***
  - Set air systems in bus to non-recirculation mode.
  - Install high-efficiency air filters on the bus HVAC system and change them per manufacturers' recommendations, at least monthly.
  - Open windows on each side of the vehicle, if feasible.
- Use touchless payment solutions.\***

### Communications (See Chapter 8 for More Information)

- Communicate safety and health protocols to passengers and expectations of passengers when riding bus.\***
  - **Post signage for employees and customers on good hygiene, physical**

## Checklists for Recommended and Required Protocols

distancing requirements, and about CDPHE's Exposure Notification.\*

- Encourage use of PPE, like gloves.\*

- Deny admittance or service to people who are not wearing a mask waiting for or boarding the bus.\*
- Solicit support for safety and health requirements from employees and passengers.\*
- Call upon local and state law enforcement to enforce public health orders in the most aggravated circumstances.\*
- Conduct pre-trip inspections to verify social distancing protocols are in place and hand sanitizing supplies are in place.
- Designate a point person for outreach and communication to the general and riding public regarding protocols and consistent messaging.
- Coordinate communication with government health officials.
- Use social media and traditional communication methods to outreach and solicit feedback from passengers.

### **Bus Operations (See Chapter 9 for More Information)**

- Communicate to the public at what times buses are reaching capacity and suggest traveling at other times.
- Coordinate with human services agencies to prevent unintended consequences of service modifications.
- Work with elected officials to stagger work schedules to address bus overcrowding.
- Consider modifying service to prioritize routes that serve medical facilities, employment center, food, and lifeline services.
- Maintain normal service levels on routes that connect transit-dependent populations to essential services.
- If service cuts are necessary, gather input on needs and demographics to make strategic, equitable adaptations.
- Increase frequency at off-peak times on routes that serve essential locations.
- Reposition fleets and staff to higher ridership routes.
- Communicate bus capacity trends to the public and create ways to alert riders when buses are at capacity.
- Consider increased service levels or bigger buses to meet demand.
- Consider implementing a video counting system accessible by smart phones or web

## Checklists for Recommended and Required Protocols

browsers.

- Skip stops if bus is at capacity and use staged buses to pick up passengers unable to board at-capacity buses.
- Provide incentives for off-peak travel.
- Consider no fares or no enforcement for fare collection.
- Follow state and local regulations for transit station protocols.\***

### **Human Resources (See Chapter 10 for More Information)**

- Encourage employees who are sick or displaying symptoms of COVID-19 to stay home, self-quarantine, notify their supervisor (if applicable) and monitor themselves for symptoms.\*
- Establish procedures for when an employee becomes sick.\*
- Follow CDPHE criteria for an employee that displays any symptoms.\*
  - Send employee home immediately.\*
  - Increase cleaning and require social distancing of staff at least 6 feet apart from one another.\*
  - If two or more employees have these symptoms, consult CDPHE’s outbreak guidance, contact your local health department and cooperate in any disease outbreak investigations.\*
- Follow CDPHE criteria for an employee to return to work after being sick or symptomatic.\*
  - “At least 24 hours have passed since fever has resolved without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); and,
  - For patients with severe illness, duration of isolation for up to 20 days after symptom onset may be warranted. Consider consultation with infection control experts.
  - For persons who never develop symptoms, isolation and other precautions can be discontinued 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.”
  - “At least 10 days have passed since symptoms first appeared, and
  - COVID-19 symptoms have improved.”
- Establish procedures for workforce contact tracing.
- Employees who have been in close contact with someone who has tested positive for COVID-19 should stay home, self-quarantine, and monitor themselves for symptoms. Employees who think or know they have been exposed should get tested as soon as possible if they develop symptoms. Employees who don’t have symptoms should wait 7 days from when they think they were exposed to get tested.

## Checklists for Recommended and Required Protocols

- Designate a point person to respond to employee COVID-19 concerns.\***
- Establish protections and flexible sick leave policies.
- Provide work accommodations for people who are at risk of severe illness from COVID-19.\***
- Provide to the greatest extent possible flexible or remote scheduling for employees who may have child or elder care obligations, or who live with a person who still needs to observe Stay at Home due to underlying condition, age, or other factor. Encourage and enable remote work for transit agency employees if possible.\***
- Encourage breaks to wash hands or use hand sanitizer.\***
- Phase shift and breaks to reduce density and consider cohorting employees.\***
- Consider a comprehensive paid leave policy that expands protections and provides administrative leave to at-risk drivers.
- Consider hazard pay for drivers.
- Consider a death benefit for families of deceased workers.
- Provide training to employees covering COVID-19 general information and protocols.
- Use posters to communicate protocols and reminders to employees.
- Eliminate or regularly clean and disinfect any items in common spaces, such as break rooms, that are shared between individuals, such as condiments, coffee makers, vending machines.\***

### **Other Considerations (See Chapter 11 for More Information)**

- Review current emergency management and human resources and legislative policies and requirements, and update to be relevant to COVID-19 issues.
- Monitor effectiveness of the current emergency management plan with a tracking mechanism.
- Assess and reassess internal emergency management plan and make adjustments.
- Update emergency management plans and procedures to address pandemic situations.
- Update plans and manuals based on best practices and most recent information available.
- Establish an accounting framework to track COVID-19 funding sources and expenditures.



## Checklists for Recommended and Required Protocols

- Develop a strategy to advocate for funding or regulatory relief costs related to pandemic.
- Maintain political support for public transportation.

# Checklists for Recommended and Required Protocols

## *Passenger Expectations when Riding Bustang and Bustang Outrider*

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**Protocols in bold blue text are required by federal, state, or local laws, executive or public health orders.**

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### **Hygiene** **(See Chapter 3 for More Information)**

- Wear a cloth face covering while using or waiting to use transit. Children between the ages 2 and 10 riding transit are strongly encouraged to wear a mask; masks should be required for all riders over 10.\***
- Avoid touching eyes, nose, or mouth with unwashed hands.
- Practice respiratory etiquette, including covering coughs and sneezes
- Avoid touching frequently touched surfaces and use an alcohol-based wipe while touching surfaces, like opening doors and holding grab bars, when possible.
- Wash hands for 20 seconds with soap and water or rub your hands with sanitizer containing 60% alcohol after touching frequently touched surfaces and after leaving the transit stop.

## *Passenger Expectations when Riding Bustang and Bustang Outrider*

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### **Social Distancing** **(See Chapter 6 for More Information)**

- Practice social distancing by staying at least 6 feet from people who are not in your household. Look for social distancing instructions or physical guides.\***
- Follow state and local public health orders on travel restrictions.\***
- Consider traveling during non-peak hours.

## *Passenger Expectations when Riding Bustang and Bustang Outrider*

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### **PPE** **(See Chapter 4 for More Information)**

- Consider wearing other PPE, such as gloves.\***

## Checklists for Recommended and Required Protocols

### *Passenger Expectations when Riding Bustang and Bustang Outrider*

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#### **Communication** **(See Chapter 8 for More Information)**

- Voluntarily comply with all protocols expected of passengers when riding Bustang and Bustang Outrider in addition to state and local executive and public health orders.
- Check with the transit operators for the latest information on changes to services and procedures.

A graphic on a purple background featuring several green, spherical virus particles with spikes. The word "STOP" is written in large, bold, red letters with a white outline. The letter "O" in "STOP" is replaced by a white circle with a red diagonal slash, and a green virus particle is positioned inside this circle. To the right of "STOP" is the word "THE" in smaller, red, bold letters. Below "STOP THE" is the word "SPREAD!" in large, bold, green letters with a white outline. The entire graphic is surrounded by more green virus particles of varying sizes.

**STOP** THE  
**SPREAD!**

SHORT-TERM PANDEMIC PROTOCOLS FOR BUS OPERATORS

A vertical strip on the left side of the page features a background of purple and blue virus particles of various sizes, some with prominent spikes, set against a dark, bokeh-like background.

**Appendix B.**  
**SUMMARY OF**  
**INTERVIEWS WITH**  
**BUSTANG/BUSTANG**  
**OUTRIDER TRANSIT**  
**OPERATORS**

# Interview with Southern Colorado Community Action Agency: Jay Rhodes

June 22, 2020

SoCoCaa has been operating since COVID-19 (with about 75% reduction).

What company-specific protocols has your company developed?

The protocols were developed in conjunction with the City of Durango and its transit service so that they would be consistent. They include:

- passengers required to wear masks
- added driver barriers
- signage on the doors
- provide masks and hand sanitizer
- staggered seating for 6-foot social distancing
- UV light for disinfection
- foggers to spray every night
- drivers sanitize a couple of times of day

SoCoCaa put additional buses in rotation to make sure they would be sanitized. They have not had to “shadow” buses (add buses to the routes) because they are operating at a 75% reduction.

The drivers have been responsible for communicating protocols to passengers and haven't had any issues. The temperature check required by CDOT will be new to the protocols currently in place.

What sources did you consult when developing the protocols?

The local health departments provided guidance - La Plata County and San Juan County Public Health. These agencies follow CDC guidelines. There are protocols for the office staff, ticket office staff, and bus operations.

What challenges did you not anticipate when beginning service?

It may be a challenge to provide overflow busses, because extra drivers and buses will be needed. They have a bus they can put into service if needed and they can use CARES money to hire additional drivers.

The hours of service for drivers are high – 13 to 14 hour days. SoCoCaa is concerned that the Bustang protocols may require drivers to take additional time (within the hours of



service). In many locations they don't have ticket agent, so drivers take on that role. They will need to collect contact information, make sure everyone is lining up correctly, and do temperature check. SoCoCaa may need to hire additional drivers to accommodate time, but does not want to hire additional staff before a demonstrated need.

The protocols have worked well on local routes; they may have to adjust some things to follow CDOT's protocols and remain on schedule.

#### What has been working? Not working?

Developing and establishing guidelines has been most beneficial. Areas of concern include high-risk exposure for drivers while checking tickets, taking cash, taking temperature checks, etc.

It is important to get everyone on the same page through driver meetings, and making sure protocols are implemented. On the fixed routes, a lot of the same passengers ride the buses consistently; once everyone is accustomed to protocols, everything runs smoothly.

#### How did you communicate to passengers?

Communication is done through signage, use of PA systems, and gathering passengers together before boarding to explain why PPE is important. Drivers communicate hand washing techniques and remind passengers during trips to use hand sanitizers and wash hands after they get off bus.

#### How did you communicate to employees?

They make contact with drivers on a daily basis, and also have monthly driver meetings, personal phone calls, and spot checks.

#### What type of guidance or protocols from CDOT would help your company?

CDOT could provide email updates whenever possible and explain future plans for protocols.

#### Additional questions?

How do you explain to a customer with a temperature that they can't board? CDOT doesn't have an answer to that yet.

Jay's advice to drivers is that how they talk to individuals sets the tone. He encourages patience and explanations of why passengers cannot board under certain circumstances. Also, considering providing passengers with contact information for health departments in Grand Junction and Montrose if they have further questions.

There could be differences in how passengers react to protocols based on a wide range of demographics. Skiers, high-end clients, and homeless individuals are all served on the routes.



# Interview with Ace Express Coaches: Doug Mass

June 23, 2020

Ace Express Coaches (Ace) has been operating since COVID-19. Ace has contracts with DEN Airport for construction workers and flight crew.

What company-specific protocols has your company developed?

Ace has worked with the companies they have contracts with at DEN Airport. The protocols include extra cleaning on coaches, supplying drivers with wipes, hand sanitizer, and masks, and encouraging social distancing (every other row of seats is blocked off).

What sources did you consult when developing the protocols?

Ace used the CDC guidelines and also consulted in-house legal counsel.

What challenges did you not anticipate when beginning service?

There have been challenges with the implementing the increased frequency of cleaning.

What has been working? Not working?

Ace's new protocols have been working well. The biggest challenge was procuring the supplies needed for service at the beginning, like PPE. This has since improved.

How did you communicate to passengers?

Signs were posted on buses on the farebox, seats, etc. This includes information on cleaning procedures and using masks and stressed the importance of the protocols. Ace communicates information on the driver's new responsibilities and what is expected of passengers. Ace is preparing a video that will be on a loop in the coaches with the same information.

How did you communicate to employees?

Ace initiated a phone conference to brief drivers and other employees on COVID-19 protocols. This was every Friday at first, now it is less often.

What type of guidance or protocols from CDOT would help your company?

CDOT support has been good overall – specifically with providing hand sanitizer and no-touch thermometers for all buses, supervisors, and the office.

What type of feedback have you received, if any, on your current operating procedures?

Some passengers are reluctant to comply with keeping masks on and social distancing. Enforcement by drivers has been a challenge.

Additional questions?

Ace would be interested in knowing how the Outrider operators have responded to the pandemic.

# Interview with Alpine Express: Pam Cook

June 30, 2020

Alpine Express has been operating since COVID-19 (Gunnison route normally has 28 round trips and is down to 13 round trips, also does airport transportation and SMART (San Miguel Authority Regional Transportation))

What company-specific protocols has your company developed?

Alpine Express has implemented the following on buses:

- provide masks for drivers and extras for passengers
- electrostatic cleaners and sprayers
- enhanced bus cleaning
- driver barriers
- every other seat is blocked off
- passenger limits on buses dependent on size
- hand sanitizer available on buses

For drivers and office employees:

- daily check-in and out
- end of week checkup – temperature checks and health questionnaires
- anti-body testing every two weeks

What sources did you consult when developing the protocols?

CASTA information and resources, Montrose and Telluride COVID-19 town meetings, and consultations with Steamboat Springs.

What challenges did you not anticipate when beginning service?

It has not been easy to get supplies (PPE –gloves and masks). Alpine Express has been ordering PPE online with long delays (even some cases of orders being cancelled) and have purchased items from local stores. Most passengers come with their own mask, however, they do provide masks for those that do not have them. They try to educate passengers. They have not had to rely on drivers to enforce mask-use but if there is a problem supervisor are available to help.

What has been working? Not working?

Having protocols developed early was a major benefit. They have been rotating staff to reduce exposure and allow for coverage if someone calls off. They are using larger vehicles for routes that would normally require smaller vehicles. They have implemented anti-body testing for drivers every two weeks – this has been helpful for reducing exposure for staff.

How did you communicate to passengers?

Social media promotion, Alpine Express hotline, literature at bus stops, and on buses.

How did you communicate to employees?

Communication includes education on COVID-19, daily and weekly check-ins, and telling employees to stay home if feeling sick, etc.



What type of guidance or protocols from CDOT would help your company?

CDOT has done a pretty good job overall. Calls with CDOT and regular contact with Jeff Prillwitz, the Outrider Manager, have been helpful.

What type of feedback have you received, if any, on your current operating procedures?

Alpine Express's protocols have been pretty progressive and people have been pleased overall. There has been positive feedback about the hand sanitizer and masks available. Everyone has really appreciated the efforts and protocols that have been put in place to keep everyone safe. Finding supplies has been the biggest challenge. They are waiting on CDOT for more PPE.

# Interview with Senior Resource Development Agency: George Chintala

July 8, 2020

- SRDA has been operating since COVID-19 (regular SRDA transportation still operating).
- SRDA receives 5310 funding and 5311 for rural agencies. They have stayed open through the pandemic but operations have been slower than normal because of having to close facilities temporarily. They normally have 2,500 to 2,900 trips. In March, they had 1,400 trips, in April, they had 414 trips, and in May, they had 575 trips.
- The meals on wheels program has continued delivering 430 to 450 meals per day.
- There have been no cases of COVID-19 in the organization.

What company-specific protocols has your company developed?

When the pandemic first began in the United States, SRDA started using more disinfectants. Mask use was not initially required but SRDA employees transitioned to wearing them and started social distancing on vehicles. SRDA started taking temperatures of employees every day. Employees are also required to wear a mask in SRDA facilities.

What sources did you consult when developing the protocols?

The local health departments and the CDC guidelines.

What challenges did you not anticipate when beginning service?

Traveling employees out of state were asked to, get tested, self-quarantine, and miss work. There was uncertainty around which protocols to follow.

What has been working? Not working?

There have been no issues with compliance. Operations are working well.

How did you communicate to passengers?

When passengers call SRDA for appointments, a staff member provides summary of the protocols. Drivers remind passengers of protocols as well. Seeing employees with masks probably helped communicate this requirement as well.

How did you communicate to employees?

Pamphlets have been distributed to employees that include information on handwashing, social distancing, wearing masks, disinfecting, etc.

What type of guidance or protocols from CDOT would help your company?

SRDA is already operating under most of the protocols that CDOT has required. SRDA has not yet received the driver barriers/shields. SRDA would like additional equipment from CDOT - contactless thermometers. SRDA has some, but not enough. SRDA is appreciative of what CDOT has done so far.



What type of feedback have you received, if any, on your current operating procedures?

There has not been negative feedback and ridership has continued. There have not been any problems. Passengers are appreciative of drivers wearing masks and the efforts taken to keep them safe.