

Commonwealth of Pennsylvania

Inclement Winter Weather

Travel Restriction and Ban Framework



October 2023

Summary of Changes

Date of Change	Page Number(s)	Summary of Changes	Agency
01/14/2020	9	Added “without chains or Alternate Traction Devices (ATDs)” to bullet point #1, sub-bullet on school buses, commercial buses and motor coaches	PEMA
	10	Added “without chains or Alternate Traction Devices (ATDs) and all school buses, commercial buses and motor coaches regardless of availability of chains or ATDs” to bullet #2	PEMA
	10	Added “including those towing loaded tandem trailers with chains or ATDs” under bullet #3	PEMA
	21	Added the following under the header Alternate Traction Devices (ATDs) – “ATDs for buses also include commercial manufactured devices approved for specific bus designs with low clearance, such as motor coaches, which completely encircle the drive wheels to provide increased traction”	PEMA
	23 Appendix F	<p>Updated chart as follows:</p> <p>Tier 1 (Description) – added “without chains or Alternate Traction Devices (ATDs)” for school buses, commercial buses or motor coaches</p> <p>Tier 2 (Description) – added “without chains or Alternate Traction Devices (ATDs)” for CMVs towing loaded tandem trailers <u>and</u> “All school buses, commercial buses and motor coaches regardless of availability of chains or ATDs”</p> <ul style="list-style-type: none"> • Tier 3 (Description) – added “All CMVs towing loaded tandem trailers regardless of availability of chains or Alternate Traction Devices (ATDs).” 	PEMA

10/22/2020	23 Appendix F	Added additional clarifying information in footnote for restrictions indicating that tire chains or ATDs need to be readily available but are not required to be installed for travel.	PEMA
11/25/2020	Pages 9, 23 Appendix F	Added clarifying information that speed and/or right lane restrictions can be implemented independently or in conjunction with restrictions and bans tiers.	PEMA
11/2/2021	Pages 10-11	Added language to the commercial ban exception at request of PSP	PEMA
10/3/2022	Pages 9-10 Appendix F	Clarified that Box/Cargo delivery trucks are treated as other or tractor trailer CMV based on loading and chains.	PEMA
9/14/2023		No changes	PEMA

Record of Review

Date	Reviewed By
11/3/2021	PEMA (R. Meinert), PennDOT (D. Whetzel), PTC (T. Scanlon), PSP (R. Krol)
10/20/22	Workshop review with PEMA, PennDOT, PTC, and PSP representatives
9/14/2023	Workshop review with PEMA, PennDOT, PTC, and PSP representatives

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Background

The Commonwealth of Pennsylvania serves as a major transportation corridor in the northeast United States for both personal and commercial vehicle travel. The Commonwealth's many miles of interstate highways carry a significant amount of traffic on a regular basis. During times of inclement weather, these interstate highway systems can be susceptible to extended closures because of several factors. These extended closures have the potential to trap the motoring public on the roadway in their vehicles for many hours, unnecessarily exposing motorists to potential life and safety threats. This is especially true for vulnerable populations, such as the very young, very old, and those with special healthcare needs.

In 2016, the Pennsylvania Emergency Management Agency (PEMA), Pennsylvania State Police (PSP), Pennsylvania Department of Transportation (PennDOT), and the Pennsylvania Turnpike Commission (PTC) developed the State Highway Closure Framework because of a winter storm in January of that year that resulted in hundreds of individuals being trapped on the Pennsylvania Turnpike for nearly 24 hours during a severe winter storm. The closure framework was designed to address situations in which a limited-access roadway was closed for extended periods of time to reduce the potential life threat to the motoring public trapped on the roadway. The approach consisted of a common timeline and specific actions to be taken to address individuals' needs if trapped on the roadway, all while coordinating efforts to open the roadway and release trapped motorists. Since finalizing the State Highway Closure Framework, PEMA has coordinated annual workshops involving PSP, PennDOT, and PTC to review the key principals of the framework and outline expectations for all partners.

Since the implementation of the State Highway Closure Framework in 2016, there have continued to be incidents during times of inclement winter weather resulting in limited-access highways being closed for extended periods of time, trapping motorists for many hours. Despite the best efforts of state agency personnel, county emergency management agencies (EMA), 9-1-1 centers, and local responders, motorists' lives continued to be put in jeopardy with these extended closures, especially vulnerable populations within the motoring public. In many areas of the state, volunteer emergency responders in sufficient quantities are not readily available to adequately respond and assist motorists during extended closures. Additionally, despite efforts to provide for the quick and efficient clearance of incidents, such as prestaging heavy wreckers and quantities of food and water, these efforts have failed to produce the desired results to lessen the life threat to those vulnerable populations on the roadways during a winter weather event.

In looking at the data and trends associated with road closures during winter weather conditions, it has become apparent that if commercial vehicles are involved in the initial accident, lose traction and become stuck on the roadway, or become stationary and are sitting in a trapped queue, the

ability to rapidly recover and reopen the roadway is greatly hindered. This is due to several factors such as those listed below:

- When commercial vehicles are involved in an accident it takes significantly longer to clear and open the roadway since they are much larger, require larger wreckers and heavy equipment to remove, and often block multiple lanes.
- Commercial vehicles involved in accidents often involve hazardous materials, breach of cargo, or release of large quantities of diesel fuel which significantly extends clean-up times.
- When commercial vehicles are stopped on the roadway for extended periods of time during winter weather, they are unable to get moving under their own power and usually require heavy wreckers to tow them to an area of the roadway with better traction, which is a long arduous process to restore traffic flow.

Despite all previous efforts, incidents continued to occur during inclement winter weather that resulted in extended closures of limited-access highways. Most of these incidents resulted in hundreds of motorists becoming stranded on the roadways for time periods exceeding eight hours. Many of these incidents taxed the ability of the local responders to respond effectively and efficiently to perform health and safety checks and provide necessities (food, water, etc.) as outlined in the State Highway Closure Framework. Additionally, the ability to respond to anyone experiencing a medical emergency or having special healthcare needs in the trapped queue was significantly impeded. Thus, emphasis has moved from being reactive to an incident and attempting to quickly mitigate to being proactive and trying to prevent these incidents from occurring. This has resulted in the implementation of a strategy to restrict or ban certain types of commercial and motor vehicle use on limited-access highways during times of inclement winter weather to prevent extended duration closures and the resultant life threats to the motoring public.

Data from the preliminary use of commercial vehicle restrictions and bans from 2018 and early 2019 have shown a significant decrease in highway incidents resulting in extended closures on limited-access highways. Based on data provided by PSP, one such comparison of similar winter weather incidents from November of 2018 and January of 2019 showed a near 90 percent decrease in accidents involving commercial vehicles when commercial vehicle restrictions and/or bans were implemented. Additionally, the data has shown that if there are closures of limited-access highways during times when travel restrictions and bans have been implemented, the resulting time of the closures has been significantly reduced to within an acceptable time frame which reduces potential threats to stranded motorists' lives.

The goals of implementing this travel restriction and ban framework are as follows:

1. Significantly reduce or eliminate extended duration closures on limited-access highways within the Commonwealth.
2. Prevent incidents that result in extended closures.

3. Be responsive to commercial vehicle operators' needs to ensure that restrictions and bans are:
 - a. Implemented in a timely, efficient manner.
 - b. Communicated as early as possible so operators can make alternate plans as necessary.
 - c. Modified or rescinded in a timely manner to minimize disruption to the flow of commerce, and thus reduce any potential financial impact to the commercial trucking industry, and other stakeholders that rely on over the road commodity transport.

Purpose

This document outlines the following as it pertains to travel restrictions and bans on Commonwealth highways:

1. Considerations, timelines, and decision points for travel restrictions and bans during inclement winter weather conditions.
2. Communications procedures for disseminating information regarding travel restrictions and bans.

Scope

This framework covers travel restrictions and bans on Commonwealth roadways under PennDOT's and PTC's statutory authority, to include limited-access highways, during periods of inclement winter weather. These restrictions and bans are applicable to both passenger vehicles and commercial vehicles as delineated in the document. For the purposes of this framework any applicable travel restrictions or bans apply regardless of whether a Governor's Proclamation of Disaster Emergency is in effect in the Commonwealth.

State Agency Roles and Responsibilities

Pennsylvania Emergency Management Agency (PEMA)

PEMA's primary role is the coordination and direction of state agencies during times of disasters and other emergencies to support local needs. Three primary responsibilities of the agency include maintaining Situational Awareness across the Commonwealth 24/7 through the Commonwealth Watch and Warning Center (CWWC), communicating a Common Operating Picture (COP), and coordinating any informational or resource needs of local governments or other state agencies during disasters or emergencies. When activated, the Commonwealth Response Coordination Center (CRCC) serves as the primary coordination point for the state's response and is staffed by

Agency Representatives (AREPs) from various state agencies, as needed to coordinate any response activities.

For the purposes of this framework, PEMA:

1. Serves as the primary coordinating agency between PSP, PennDOT, and PTC.
2. Maintains Situational Awareness of travel impacts during periods of inclement winter weather.
3. Coordinates response needs to extended closure incidents with county Emergency Management agencies or 9-1-1 centers.
4. Activates and staffs the CRCC in response to winter weather events.
5. Works to notify any affected commercial haulers - and companies that rely on transportation - of travel restrictions and bans through the Pennsylvania Business Emergency Operations Center (PABEOC) and Private Sector Integration Group.
6. Coordinates with the five National Weather Service (NWS) offices in the Commonwealth through the State Meteorologist to ensure weather forecasts and models are updated regularly and weather impacts are continuously monitored during an inclement weather event.

Pennsylvania State Police (PSP)

PSP serves as the Commonwealth’s primary law enforcement agency and has the legal authority to enforce Vehicle Code violations that occur on Commonwealth owned roads and highways. PSP responds to incidents and accidents for the purposes of rendering aid and investigation.

For the purposes of this framework, PSP:

1. Participates in the planning and decision-making process with PEMA, PennDOT, and PTC relative to the types of travel restrictions or bans that are implemented, modified, or removed for any given event.
2. Enforces restrictions and/or bans pursuant to PSP’s statutory authority.
3. Staffs the CRCC, when activated, in support of a winter weather event.
4. Communicates any changes to travel restrictions or bans through AREPs in the CRCC to field personnel so that they have the most up-to-date information regarding travel restrictions and/or bans.

Pennsylvania Department of Transportation (PennDOT)

PennDOT is primarily responsible for the maintenance of the 40,000 miles of state-owned roads and bridges throughout the Commonwealth. Through their Statewide Traffic Management Center (STMC) and Regional Traffic Management Centers (RTMC) they monitor traffic conditions 24/7 throughout the state, monitor the Roadway Condition Reporting System (RCRS), coordinate any

support needed for long term closures with various entities, and provide coordinated messaging to motorists using Variable Message Signs (VMS), Highway advisory radio system, social media channels, 511 PA, and other applicable means.

PennDOT's Area Command is activated within the CRCC during inclement winter weather events to monitor road conditions across the Commonwealth, coordinate with the PennDOT District Incident Command Centers (ICC), PTC Area Command, and manage resources as needed in support of the ICC's.

For the purposes of this framework, PennDOT:

1. Develops and implements travel restrictions and/or bans pursuant to PennDOT's statutory authority.
2. Issues any travel exemptions, as required, for specific types of vehicles pursuant to PennDOT's statutory authority.
3. Coordinates with neighboring state Departments of Transportation (DOTs), Turnpike, or Thruway Associations, regarding the implementation and release of travel restrictions and/or bans across state lines.
4. Coordinates with the PTC regarding travel restrictions and/or bans throughout the Commonwealth.
5. Provides coordinated messaging with other applicable state agencies regarding the implementation or cancellation of any travel restriction or ban.

Pennsylvania Turnpike Commission (PTC)

The PTC is responsible for the maintenance and operations of both the mainline turnpike extending from Ohio to New Jersey, the northeast extension as well as several smaller connector routes in Western Pennsylvania (PTC System). PTC maintains a 24/7 Operations Center which handles incidents on the system. During inclement winter weather incidents, the PTC activates its version of an Area Command Center with additional staffing to monitor conditions and respond to any incidents.

For the purposes of this framework, the PTC:

1. Participates in the planning of travel restrictions and/or bans throughout the state with the other state agencies involved in the process.
2. Provides staffing, as needed, for PennDOT Area Command in the CRCC.
3. Makes specific decisions regarding travel restrictions and/or bans within the PTC system.
4. Supports messaging throughout the PTC System to alert of off-system travel restrictions and/or bans.
5. Coordinates with neighboring state's tolling agencies, as needed.

6. Provides coordinated messaging with other applicable state agencies regarding the implementation or cancellation of any travel restriction or ban.

Decision-Making Process and Timelines

In general, the process will start once there is a determination that inclement winter weather may impact the Commonwealth and create difficult or hazardous travel conditions. The main determining factor when deciding on implementation of travel restrictions or bans will be the anticipated travel impacts and the potential threat to the impacted public if stranded on the roadway for an extended period. Appreciating the economic impact of travel restrictions and bans on commercial haulers and transportation companies, every effort will be made to only implement travel restrictions and/or bans when needed, and to keep them in place for the shortest duration possible.

No one factor will determine whether to implement a travel restriction or ban. Instead, multiple factors will be considered for each winter weather event. Refer to Appendix A for a list of the factors that are considered when deciding on the implementation of travel restrictions and/or bans.

The following general timeline will be utilized:

Timeline (Hours)		Actions
Pre-Onset	48-72	<ul style="list-style-type: none"> • Obtain weather forecast/briefing • Coordination call with PEMA, PSP, PennDOT, and PTC • Develop draft travel restriction/ban plan depending on confidence level of forecast • Message stakeholders regarding potential for travel restrictions and/or bans <ul style="list-style-type: none"> ○ PABEOC/Private Sector Integration ○ Legislative Affairs • Continue to monitor weather forecast
	24-48	<ul style="list-style-type: none"> • Develop and/or refine draft travel restriction/ban plan • Distribute initial travel restriction/ban plan to stakeholders <ul style="list-style-type: none"> ○ Initial press release ○ Include map with proposed restrictions • Continue to monitor weather forecast
	12-24	<ul style="list-style-type: none"> • Refine draft travel restriction/ban plan and timing

Timeline (Hours)		Actions
		<ul style="list-style-type: none"> • Distribute updated draft plan to stakeholders, as needed • Continue to monitor weather forecast for changes
	0-12	<ul style="list-style-type: none"> • Finalize travel restriction/ban plan and timing • Distribute finalized plan to stakeholders • Finalize activation and timing for CRCC and PennDOT Area Command • Monitor implementation of plan and timing • Continue to monitor weather forecast for changes

Post Onset	0-24	<ul style="list-style-type: none"> • Monitor travel restrictions/bans • PEMA, PSP, PennDOT and PTC meet every 2-4 hours (or sooner) to adjust restrictions or bans • Adjust travel restrictions/bans as warranted based on weather and road conditions • Communicate any changes or adjustments to affected stakeholders
	24+	<ul style="list-style-type: none"> • Monitor travel restrictions/bans <ul style="list-style-type: none"> ○ Reassess every 2-4 hours as warranted • Adjust travel restrictions/bans as warranted based on weather and road conditions • Communicate any changes or adjustments to affected stakeholders • Consider other vehicle/use-case exemptions for restrictions/bans lasting > 24 hours

Once travel restrictions and bans have been implemented, roadway travel conditions will be re-evaluated every 2-4 hours, or sooner based on weather conditions (Reference Appendix B). All decisions to remove or implement additional travel restrictions and bans will be coordinated through PennDOT Area Command and involve input from PEMA, PSP, and PTC, and Incident Command Centers (ICCs); neighboring states’ DOTs, TRANSCOM, Turnpike, or Thruway Commissions; 9-1-1 centers, and county level emergency management agencies, as warranted.

The following factors will be considered when deciding to release or add travel restrictions and bans:

- Current and projected weather.
- Current and projected roadway and travel conditions.
- Roadway Weather Information System (RWIS) data.
- Roadway and travel conditions in neighboring states.
- Status of any travel restrictions and bans in effected contiguous states.

All efforts will be made to phase the release of travel restrictions and bans between PennDOT and PTC, as well as with contiguous states to provide a coordinated approach to the restoration of traffic flow.

Speed and Right Lane Only Restrictions

Speed restrictions will be implemented as needed during winter weather events based on road conditions and will be coordinated through PennDOT Area Command with the PennDOT District ICC's. The PTC will coordinate speed restrictions for its system, as needed, based on travel conditions. Both agencies will message any speed restrictions using their VMS systems, Highway Advisory Radio System, social media channels, 511 PA, and any other applicable means. *When speed restrictions are in place for inclement weather, a right lane only restriction will also be imposed for all Commercial Motor Vehicles (CMVs) and passenger vehicles towing trailers, this includes enclosed cargo trailers, open cargo trailers, vehicle trailers, recreational vehicle travel trailers and fifth wheel trailers.* Speed and right lane only restrictions can be implemented independently or in conjunction with additional tiered restrictions and bans.

Additional Travel Restriction and Ban Options

The following options will be considered for additional restrictions and bans based on the anticipated travel impacts caused by inclement weather. These will be implemented incrementally but not necessarily sequentially using a phased approach (1-5) and only to the degree necessary to limit the potential of an extended duration limited-access highway closure. The categories below will be combined with speed limit and right lane restrictions described above as needed during any event.

1. Unloaded and lightly loaded Commercial Motor Vehicles (CMVs), passenger vehicles towing trailers, recreational vehicles, buses, and motorcycles, to include the following:
 - a. Tractors without trailers
 - b. Tractors towing unloaded or lightly loaded enclosed trailers, open trailers, or tank trailers

- c. Tractors towing unloaded or lightly loaded tandem trailers
 - d. Enclosed unloaded or lightly loaded cargo delivery trucks/box trucks that meet the definition of a CMV
 - e. Passenger vehicles (cars, SUV's, pick-up trucks, etc.) towing trailers, to include:
 - 1) Recreational travel trailers and fifth wheel trailers
 - 2) Enclosed cargo trailers
 - 3) Open cargo trailers
 - 4) Vehicle transport trailers
 - f. Recreational vehicles/motorhomes
 - g. School buses, commercial buses and motor coaches not carrying chains or Alternate Traction Devices (ATDs)
 - h. Motorcycles
2. CMVs towing loaded tandem trailers without chains or ATDs and all school buses, commercial buses, and motor coaches regardless of availability of chains or ATDs
 3. All CMVs towing loaded tandem trailers regardless of whether they have chains or ATDs, and all other loaded CMVs, including enclosed cargo delivery/box trucks, except for:
 - a. Those carrying full coverage tire chains for at least two drive wheels, *or*
 - b. Those with approved Alternate Traction Devices (ATDs) – *See Appendix E*
 4. All CMVs, including enclosed cargo delivery/box trucks, regardless of loading or availability of tire chains (complete CMV ban)
 5. All passenger vehicles

Commercial Vehicle Exemptions

As a rule the following categories and use cases are exempted from any travel restrictions and/or bans developed under this framework (with the exception of speed and lane restriction), unless specifically noted and included in the notification (Reference Appendix D for a complete description of categories):

- Electric utility restoration crews and support vehicles directly responsible for responding to emergencies involving downed electric utility lines and/or restoration of power (this includes power restoration crews passing through Pennsylvania headed to other impacted states).
- Gas utility restoration crews and support vehicles directly responsible for responding to emergencies involving gas outages and/or leaks for purposes of critical utility restoration or mitigating life-threatening situations.

- Water utility restoration crews and support vehicles responding to emergencies involving significant water main breaks and other emergency situations causing or risking a life threat.
- Telecommunications utility restoration crews and support vehicles responding to restore telecommunications capabilities (voice and data) to critical infrastructure nodes such as Public Safety Answering Points (PSAPs)/9-1-1 centers, hospitals, and healthcare facilities where communication disruptions may adversely impact the public’s safety.
- Emergency services/public safety vehicles (law enforcement, fire, EMS, and Emergency Management).
- State, county, and municipal public works vehicles (including contracted vehicles) specifically engaged in emergency support operations (snow removal, debris clearance, etc.).
- Liquid fuels delivery vehicles (propane, fuel oil, gasoline, etc.) making emergency deliveries to individuals, critical infrastructure nodes, businesses, emergency services or public works agencies without fuel or dangerously low on fuel which could result in a life safety issue or inability to sustain response operations if not accomplished.

***NOTE:** For the purposes of this framework “dangerously low” is defined as 36 hours or less of remaining fuel supply.*

- Tow trucks and commercial recovery vehicles responding to roadway incidents for the purposes of removing passenger or commercial vehicles, opening roadways and providing other emergency support to public safety or public works agencies.
- Salt delivery vehicles making deliveries to public works agencies.
- Public transportation and public transit authorities which operate buses and passenger transport vehicles on established routes as part of a public transportation system or a public transit authority.

Under certain circumstances, specific local exemptions can be granted for operators that have an extenuating need to transit short sections of a limited-access highway that is under a travel restriction or ban. In these situations, the road conditions need to be favorable to permit commercial vehicle travel, there needs to be a compelling reason to permit such movement, and the benefit of allowing travel needs to outweigh any potential life-threatening conditions that may develop by exempting the travel restriction or ban. These situations will be approved on an as needed basis by the PennDOT Area Commander (in consultation with PSP, PEMA and PTC) and coordinated through PennDOT Area Command in the CRCC.

The following exemptions *may* be considered and granted by PennDOT or other applicable state agencies with statutory authority when travel restrictions and/or bans extend greater than 24 hours:

- Bulk liquid fuels delivery to support critical infrastructure and back-up power operations.
- Hospital and healthcare supplies (including medical gases) to resupply medical facilities.
- Transport of other critical commodities, as needed, to support life safety and sustainment operations.

Any approved exemptions will be communicated to affected stakeholders and will be distributed via the same channels utilized by state agencies as part of the coordinated messaging plan.

Coordinated Messaging

Every effort will be made to notify stakeholders and affected parties as early as possible regarding a potential need for travel restrictions or bans so they can make alternate travel plans as necessary. These notifications will be multi-modal and involve e-mail notifications, press releases, dissemination via social media channels, and posting to the PABEOC Dashboard. The goal is to provide the widest dissemination of information to reach the affected stakeholders in the shortest amount of time. All state agencies will participate in coordinated messaging of travel restrictions and/or bans in accordance with their state agency communications plans and procedures.

Any changes to travel restrictions and/or bans will be coordinated with the PSP, prior to release of updated information to stakeholders and affected parties to mitigate ongoing enforcement activities when travel restrictions/bans have been lifted or removed.

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Appendix A: Travel Ban and Restriction Complexity Analysis Tool

Factors to Consider	Responses	
Event Forecast Factors	Yes	No
Significant snow accumulation forecast? <ul style="list-style-type: none"> • >6 inches in 12 hours -OR- >12 inches in 24 hours? • Lake effect snow >12 inches in 12 hours (NWPA)? 		
Icing forecast factors? <ul style="list-style-type: none"> • Any freezing rain on previously untreated roadways? • Greater than 0.10” on roadways for event? 		
Long duration winter weather event (>24hours)?		
Complex weather forecast with mixing or change in precipitation type?		
Low/marginal confidence, or significant uncertainty in weather forecast?		
Snowfall rates >1 inch/hour for >2 hours or >2 inches/hour for >1 hour?		
Blizzard or near blizzard conditions forecast? <ul style="list-style-type: none"> • Including blowing snow during or after event? • Snow squall potential? 		
Snowfall timing and intensity at onset?		
Seasonal factors? <ul style="list-style-type: none"> • First snowfall of season? • Early season snowfall? 		
Flash freeze potential?		
Cold exposure hazards during or post storm?		

Travel and Roadway Factors	Yes	No
Event forecast to span peak travel times? <ul style="list-style-type: none"> • Weekday commute, holidays, large events, etc. 		
Event forecast to impact majority of limited-access highways throughout state?		
Event forecast to impact known or suspected problematic areas? <ul style="list-style-type: none"> • Construction zones, steep grades, etc. 		
Pretreatment of, or residual treatment on road surfaces?		
Forecast for at or below freezing roadway temps or declining road grip for event?		
No effective detour route available or able to be maintained if closure occurs?		
High potential for cascading sequence of events if closure or stoppage occurs?		
Contiguous states implementing travel bans or restrictions?		
Manpower and Equipment Factors	Yes	No
District or county equipment deficiencies identified?		
District or county personnel deficiencies identified?		
District or county materials deficiencies identified?		
Limited or no ability to preposition or surge resources within a county or district to accommodate for changes in forecast or incidents that may potentially occur?		
Ability for responders to provide health and safety checks in a timely manner?		

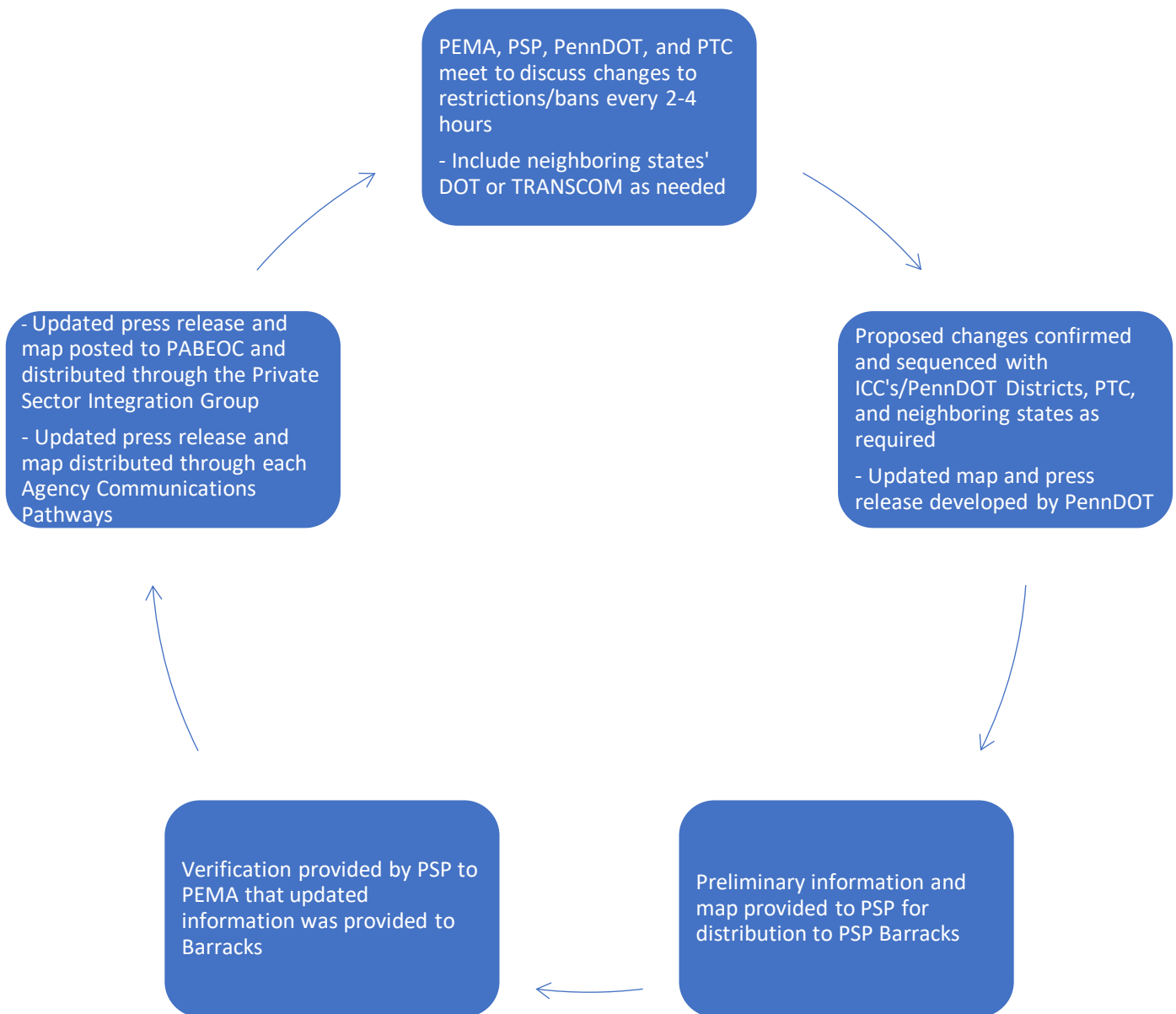
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Appendix B: Planning Timeline

Travel Restriction/Ban Planning Timeline					
Pre-Onset				Post-Onset	
48-72 Hours	24-48 Hours	12-24 Hours	0-12 Hours	0-24	24+
<ul style="list-style-type: none"> Obtain weather forecast/briefing Coordination call with PEMA, PSP, PennDOT, and PTC Develop draft travel restriction/ban plan depending on confidence level of forecast Message stakeholders regarding potential for travel restrictions and/or bans <ul style="list-style-type: none"> PABEOC/Private Sector Integration Legislative Affairs 	<ul style="list-style-type: none"> Develop and/or refine draft travel restriction/ban plan Distribute initial travel restriction/ban plan to stakeholders <ul style="list-style-type: none"> Initial press release Include initial map with proposed restrictions/bans 	<ul style="list-style-type: none"> Refine draft travel restriction/ban plan and timing Distribute updated draft plan to stakeholders as needed 	<ul style="list-style-type: none"> Finalize travel restriction/ban plan and timing Distribute finalized plan to stakeholders (if needed based on any changes) Finalize activation schedule and timing for CRCC and PennDOT Area Command Monitor implementation of plan and timing 	<ul style="list-style-type: none"> Monitor travel restrictions/bans PEMA, PSP, PennDOT and PTC meet every 2-4 hours (or sooner) to adjust restrictions/bans Adjust restrictions/bans as warranted based on weather and road conditions Communicate any changes or adjustments to affected stakeholders 	<ul style="list-style-type: none"> Monitor travel restrictions/bans Continue to reassess every 2-4 hours as warranted Adjust restrictions/bans as needed based on weather and road conditions Communicate any changes or adjustments to affected stakeholders <i>Consider other vehicle/use-case exemptions for restrictions/bans lasting > 24 hours</i>
<p><i>Continue to Monitor Weather Forecast and Adjust Travel Restrictions/Bans as Necessary</i></p>					

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Appendix C: Re-Assessment Process Post Onset of Restrictions/Bans Every 2-4 Hours



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Appendix D: Commercial Vehicle Ban Standard Exemptions Table

General Category/Sector	Situations/Use Cases
Electric Utility Restoration Crews and Support Vehicles	<p>Commercial vehicles directly responsible for responding to emergencies involving downed electric utility lines creating or potentially causing life threatening situations and/or involved in the restoration of power.</p> <ul style="list-style-type: none"> • <i>Includes power restoration crews passing through Pennsylvania headed to other impacted states.</i>
Gas Utility Restoration Crews and Support Vehicles	<p>Commercial vehicles directly responsible for responding to emergencies involving gas outages and/or leaks for purposes of critical utility restoration or mitigating life threatening situations.</p>
Water Utility Restoration Crews and Support Vehicles	<p>Commercial vehicles responding to emergencies involving significant water main breaks and other emergency situations where the control and repair of the leak is critical to supporting public safety operations or there is a potential life threat to citizens or the community.</p>
Telecommunications Utility Restoration Crews and Support Vehicles	<p>Commercial vehicles responding to restore telecommunications capabilities (voice and data) to critical infrastructure nodes such as Public Safety Answering Points (PSAPs)/9-1-1 centers, hospitals, and healthcare facilities where communication disruptions may adversely impact the public's safety.</p>
<p>Emergency Services and Public Safety Vehicles:</p> <ul style="list-style-type: none"> • Law Enforcement • Fire Department 	<p>Vehicles engaged in public safety (law enforcement, fire, and EMS) and emergency management operations such as responding to emergencies and other emergent calls for assistance.</p>

General Category/Sector	Situations/Use Cases
<ul style="list-style-type: none"> • Emergency Medical Services (EMS) • Emergency Management • National Guard 	
State, County, and Municipal Public Works Vehicles (including contracted vehicles in support of situations listed)	Vehicles specifically involved in public safety or emergency support operations such as: <ul style="list-style-type: none"> • Snow removal • Debris management and clearance • Emergency maintenance or repair
Tow Trucks and Commercial Recovery Vehicles	Vehicles responding to roadway incidents for the purposes of removing passenger or commercial vehicles, opening roadways, and providing other emergency support to public safety or public works agencies.
Liquid Fuels Delivery Vehicles: <ul style="list-style-type: none"> • Gasoline • Fuel Oil/Kerosene • Propane 	Those commercial vehicles making emergency deliveries to individuals, critical infrastructure nodes, businesses, emergency services or public works agencies without fuel or dangerously low on fuel which could result in a life safety issue or inability to sustain response operations if not accomplished. <ul style="list-style-type: none"> • <i>For the purposes of this framework “dangerously low” is defined as 36 hours or less of remaining fuel supply</i> • This does not include routine fuel delivery to gas stations or residents as part of a routine or automatic delivery schedule

General Category/Sector	Situations/Use Cases
Salt Delivery Vehicles	Vehicles making deliveries of salt, anti-skid and other materials for winter road maintenance to public works facilities.
Public Transportation and Public Transit Authorities	Buses and passenger transport vehicles that operate on established routes as part of a public transportation system or a public transit authority will be considered exempted from travel restrictions and bans, unless otherwise specifically listed.

Appendix E: CMV Tire Chain Information and ATDs

Tire Chains and Cables

- Where specified, Commercial Motor Vehicles (CMVs) must carry tire chains for at least two of the drive wheels.
 - Chains do not need to be installed on tires but must be readily available for installation by the driver to regain traction in instances when the CMV is stopped and unable to restart because of loss of traction.


When applied, chains must be applied to tires on the opposite ends of the same drive axle.
- Tire chains used on CMVs need to meet the following specifications: *
 - Consist of two circular metal loops, one on each side of the tire.
 - Be connected by not less than nine evenly spaced chain loops across the tire tread.



***NOTE:** Tire cables with high strength steel cross member rollers 0.415 inches or greater in diameter, which can be used on all commercial vehicles may be used in place of tire chains but must have one cable loop on each side of the tire, connected by not less than nine evenly spaced cable loops across the treads.*

Alternate Traction Devices (ATDs)

- ATDs approved in Pennsylvania consist of the following:
 - Wheel sanders – which must carry enough sand to get the vehicle through any restricted areas.
 - Pneumatically driven chains – which spin under the drive wheels automatically as traction is lost.
- ATDs for buses also include commercial manufactured devices approved for specific bus designs with low clearance, such as motor coaches, which completely encircle the drive wheels to provide increased traction

Appendix F: Speed Restriction, Vehicle Restriction and Travel Ban Phasing Approach

Tier	<i>Progression</i> 				
	1	2	3	4	5
Description	<ul style="list-style-type: none"> • Tractors without trailers • Tractors towing unloaded or lightly loaded enclosed trailers, open trailers or tank trailers • Tractors towing unloaded or lightly loaded tandem trailers • Enclosed unloaded or lightly loaded cargo delivery/box trucks that meet the definition of a CMV • Passenger vehicles (cars, SUV's, pick-up trucks, etc.) towing trailers, to include: <ul style="list-style-type: none"> ○ Recreational travel trailers and fifth wheel trailers ○ Enclosed cargo trailers ○ Open cargo trailers ○ Vehicle transport trailers • Recreational vehicles/motorhomes • School buses, commercial buses and motor coaches without available chains or Alternate Traction Devices (ATDs)* • Motorcycles 	<p>Tier 1, <i>plus the following:</i></p> <ul style="list-style-type: none"> • CMVs towing loaded tandem trailers without chains or Alternate Traction Devices (ATDs)* • All school buses, commercial buses and motor coaches regardless of availability of chains or ATDs 	<p>Tier 1 and 2, <i>plus the following:</i></p> <ul style="list-style-type: none"> • All CMVs towing loaded tandem trailers regardless of availability of chains or Alternate Traction Devices (ATDs). • All other loaded CMVs including enclosed cargo delivery/box trucks except for: <ul style="list-style-type: none"> ○ Those carrying full coverage tire chains for at least two drive wheels, <i>or</i> ○ Those with approved Alternate Traction Devices (ATDs)* 	<p>Tier 1, 2, and 3, <i>plus the following:</i></p> <ul style="list-style-type: none"> • All CMVs including enclosed cargo delivery/box trucks regardless of loading or availability of tire chains or approved Alternate Traction Devices (ATDs) • Referred to as a complete CMV ban 	<p>Tier 1, 2, 3, and 4, <i>plus the following:</i></p> <ul style="list-style-type: none"> • All passenger vehicles

Notes	<ul style="list-style-type: none"> A lightly loaded CMV is defined as a vehicle that is less than 1/3rd of the GVWR (vehicle weight and cargo weight combined) 		<ul style="list-style-type: none"> See Appendix E for additional information 		<i>Only used in extreme situations when roads are expected to be impassable for extended periods of time</i>
	<p style="text-align: center;">Speed restrictions, <i>and</i> right lane only travel restriction for the following:</p> <div style="display: flex; justify-content: space-between; align-items: center;">  <ul style="list-style-type: none"> All CMVs All passenger vehicles (cars, SUV's, pick-up trucks, etc.) towing trailers  </div> <p style="text-align: center;">NOTE: Speed and right lane only restrictions may be implemented independently or in conjunction with any of the tiered restrictions and bans listed above.</p>				

** Tire chains or ATDs do not need to be installed, but need to be readily available for use should the vehicle become stuck and not be able to move because of poor traction*

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Appendix G: Weather Event Speed/Vehicle Restriction Plan



Weather Event Speed/Vehicle Restriction Plan

TRAVEL RESTRICTIONS (MAY BE POSTED ON SOME PORTIONS OF THE ROADWAY)

REDUCED
SPEED LIMIT
45

All Vehicles – 45 mph Speed Limit

NO TRUCKS

LEFT LANE

Commercial Right Lane Only

BANNED VEHICLE TIERS

- ⊘ Not Permitted
- ⊘ Not Permitted EXCEPT with Chains/Traction Devices on Board
- ✔ Permitted

	BANNED VEHICLE TIERS				
	1	2	3	4	5
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	⊘	⊘	⊘	⊘	⊘
	✔	⊘	⊘	⊘	⊘
	✔	✔	⊘	⊘	⊘
	✔	✔	⊘	⊘	⊘
	✔	✔	⊘	⊘	⊘
	✔	✔	✔	✔	⊘
	✔	✔	✔	✔	⊘
	✔	✔	✔	✔	✔

**A vehicle hauling 1/3 of its GVW is considered a full load.*