



# **Federal Railroad Administration Railroad Safety Advisory Committee**

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## **Passenger Safety Working Group: Update**

**December 2, 2003**

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for Safety Standards**

# Passenger Safety Overview

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- Progress to date
- Task force structure
- Issues
- Next steps

## Passenger Safety Progress to Date

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- **Task accepted May 20, 2003:**

“To review existing passenger safety needs and programs and to recommend consideration of specific actions useful to advance the safety of rail passenger service.”
- **New Passenger Safety Working Group**

## **Passenger Safety Progress to Date**

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### **Working group membership:**

**AAPRCO, AAR, AAHSTO, Amtrak,  
APTA, BLE, BRC, BRS, HSGTA,  
NARP, RSI, SMW, STA, TWU, UTU**

### **Associates:**

**NTSB, FTA**

### **New addition (requested):**

**BMW**

# Passenger Safety Progress to Date

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## Working group meetings:

### Sept. 9-10 -- Washington, D.C.

Briefings

Initial scoping

### Nov. 6-7 – Philadelphia

Reviewed potential issues

Prioritized issues

Established task force structure

## Next planned working group meeting:

May 11-12 (location TBD)

# Passenger Safety Task Task Force Structure

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- **General scope**
  - Loose ends from earlier rulemaking
  - New ideas from APTA PRESS effort
  - New information from intervening research
  - Lessons from experience with the existing rules / fine tuning
  - Review of E.O. 20
  - NTSB recommendations
- **Working group has considered a broad range of ideas**

## **Passenger Safety Task Task Force Structure**

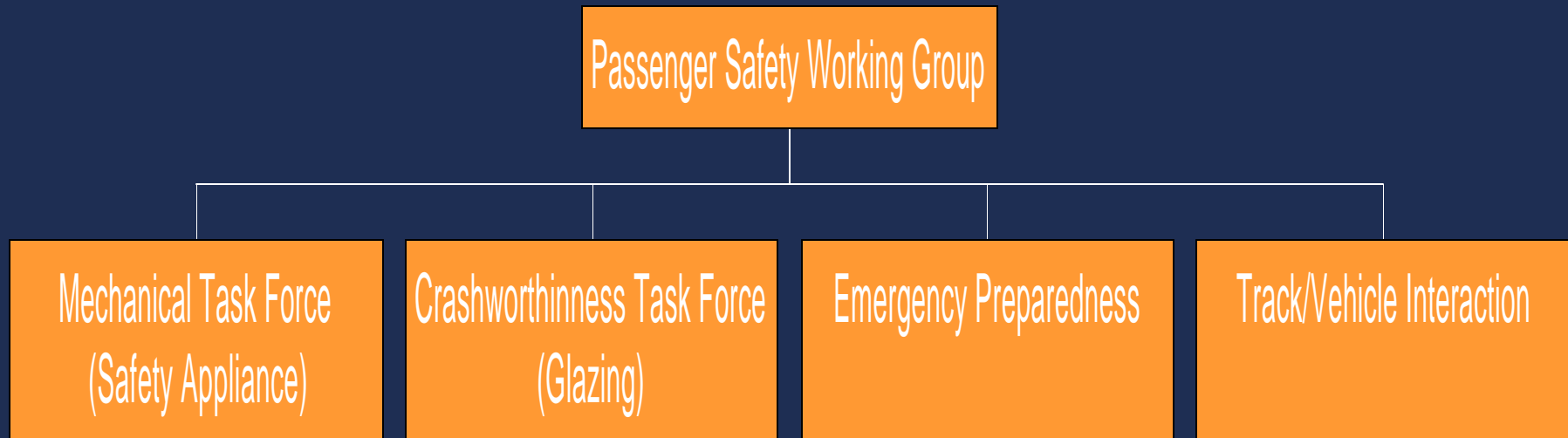
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- **What is useful to consider?**
- **What is ripe for consideration?**
- **What can we manage with the resources at hand?**

**Note: This is in effect a standing working group – do not have to tackle everything at once.**

# Passenger Safety Task Task Force Structure

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# Passenger Safety Task Issues

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- **Mechanical Task Force**
  - Safety appliance issues (welding, materials)
  - General mechanical (Part 238, etc.)

# Passenger Safety Task Issues

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- **Mechanical Task Force**
  - General mechanical (Part 238, etc.) **FIRST** priority issues
    - Class 1A brake test for 24 hour/day operations
    - Redundant cab signal inspections (236/238)
    - Combine blue card/calendar day inspection records?
    - Inspectability of brake application

# Passenger Safety Task Issues

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- **Mechanical Task Force**
  - General mechanical (Part 238, etc.)  
SECOND priority issues
    - Cab ergonomics
    - Baggage car standards (if nec. following Amtrak program)
    - Alerter/deadman issues (equipping, en route failures)

# Passenger Safety Task Issues

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- **Crashworthiness Task Force**
  - Crashworthiness of passenger-occupied vehicles
  - Glazing

# Passenger Safety Task Issues

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- **Crashworthiness Task Force**
  - FIRST priorities:
    - Cab car/MU front end optimization
    - Locomotive engineer seating for cab cars / MUs
    - Horizontal rotating seats
    - Collision post issues, misc.
    - Glazing test criteria revision
    - Tier II glazing
    - Cab side window glazing

# Passenger Safety Task Issues

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- **Crashworthiness Task Force**
  - SECOND priorities:
    - Cab car / MU occupant survival issues
    - Rebuilt / remanufactured equipment
    - DMU fuel tanks
    - Auxiliary tanks
    - Side strength
    - Push/pull configuration at speeds >79 mph (limitation?)

# Passenger Safety Task Issues

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- **Emergency Preparedness Task Force**
  - FIRST priorities:
    - Illumination, signage, exit path marking
    - Photoluminescent signage durability
    - Marking for rescue access to windows

# Passenger Safety Task Issues

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- **Emergency Preparedness Task Force**
  - SECOND priorities:
    - Emergency communications
    - Emergency lighting (backup power)
    - Egress capacity, exit types & numbers
    - Rescue access
    - Medical emergencies
    - Passenger manifest accountability



# Passenger Safety Task Issues

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- **Track/Vehicle Interaction Task Force**
  - Vehicle centered issues (e.g., truck stabilization, flange angle)
  - Instrumented wheelset tests for 90-125 mph service – necessary?
  - Consolidation of Part 213, 238 requirements
  - High speed Track Standards revisions (geometry)
  - Cant deficiency implementation

## **Passenger Safety Task Next Steps**

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- **Task forces are forming**
- **Initial meetings early '04**
- **Report initial findings, milestones to full Working Group May '04**

## Passenger Safety Task Next Steps

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- **Options for task force recommendations include**
  - No action
  - Initiate rulemaking
  - Recommend industry standard (voluntary implementation or incorp. by ref.)
  - Further research
  - Recommendations to 3<sup>rd</sup> parties

## Passenger Safety Task Next Steps

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- **Additional issues may be actively considered when—**
  - research is complete and;
  - the group is ready
- **POSSIBLE FUTURE TASK FORCES—**
  - General passenger safety
  - Fire safety