# Fatigue Management Plans 101: Background, Potential Content, and Regulations for Pilot Programs

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#### What I'll Talk About ...

- FMP 101
  - What is a FMP is and is not
  - What might be included in an FMP
  - Science-based case for sleep
- Collaboration historical and current
- Part 381 requirements for pilot programs
  - Legislative history
  - Subpart D elements
  - Subpart E administrative procedures
  - 2 requests for pilots
- Questions

#### What an FMP is ...

- A tool to help close gaps between safety and operational needs — and potentially improve both!
- An "overlay" that goes above minimum regulatory requirements
- Collaborative and cooperative activities involving drivers, dispatchers, and customers

#### What an FMP is not ...

- A substitute for compliance with <u>any</u> HOS regulations.
  - Although they might offer potential alternatives (exemptions or pilot programs)
- A substitute for oversight of driver health and safety.
- Requirements imposed upon drivers only
  - FMPs involve drivers, dispatchers, logistics staff, ...

# What an FMP might include ...

- Assessment of schedules and various measures (safety outcomes, absenteeism, operational errors)
- Recommendations for adjustments or revisions to duty and off-duty schedules
  - Short nap periods, longer rest periods, shift start and end times
- Recommendations to consider health assessments, possible interventions
  - Sleep disorders screening, improved availability of "healthier choice" foods
- Education for operators, operators' families, direct supervisors, and managers

### What is the "fatigue" in an FMP?

- "Driver fatigue" ≡ sleep-related loss of alertness behind the wheel
- Reasons: Insufficient quantity and/or quality of sleep
- Why: Short, or poorly-timed sleep periods; possible presence of an untreated sleep disorder.

# Science-Based Case for Sleep

- Regularity of work day to maintain circadian rhythm.
- Provide opportunity daily and weekly sleep.
- Driving in any duty shift should generally not exceed 12 hours.
- Consider the time of day when driving is performed.

# Address 6 aspects of driver fatigue/loss of alertness (LOA)

- Acute fatigue/LOA
- Cumulative fatigue/LOA
- Short-term recovery sleep, naps
- Longer-term recovery sleep
- Circadian rhythm disruption
- Medical factors

#### Collaboration -- historical

#### Research:

- 1990s: Driver fatigue/LOA with Transport Canada, Trucking Research Institute of ATA Foundation
- Today: North American Fatigue Management Program
- Education and outreach:
  - ATAF and NPTC: "Awake at the Wheel" brochures (more than 1 M)
  - ATAF: "The Alert Driver" (train-the-trainer materials: reached more than 35,000 carriers)
  - OOIDA: "Dealing with Truck Driver Fatigue"
  - "Getting' in Gear" wellness program

#### Collaboration: Current

- Commercial Truck and Bus Safety Synthesis Program (CTBSSP)
- North American Fatigue Management Program (U.S. and Canada)

#### **NAFMP**

- Phase I: Requirements identified, approach developed
- Phase II: Educational materials, field testing procedures and assessments developed
- Phase III: Field operational test
- Phase IV: Revision/improvement of program and materials; finalized practice guidelines, manuals, and other training materials

### Part 381, Subpart D: Pilot Programs

- Authority: Section 4007 of TEA-21
- Purpose: To evaluate alternatives to regulations relating to motor carrier, CMV, and driver safety.
- May include exemptions from one or more regulations.
- Must publish in Federal Register and provide opportunity for public comment.
- FMCSA must ensure safety level equivalent to, or greater than, safety achieved through compliance with the safety regulations.
- Duration limited to 3 years from the starting date.
- Report to Congress is required.

# Subpart D: more details

- A pilot program is a study that gives temporary regulatory relief to a person or class of persons subject (or intending to be subject) to the FMCSRs.
- Initiated when FMCSA determines there may be an effective alternative to 1 or more FMCSRs, but does not have sufficient data to support the development of an NPRM.
- The number of participants must be large enough to ensure statistically valid findings.
- Pilot programs must include an <u>oversight plan</u>:
  - Ensure that participants comply with the terms and conditions of participation,
  - Procedures to protect the health and safety of study participants and the general public.

#### Section 381.410(a) requirements

- (1) Estimate of potential benefits ...
- (2) Estimate time needed to conduct the pilot
- (3) Regulation(s) requiring an exemption
- (4) Recommend number of participants
- (5) Suggest monitoring plan
- (6) Suggestions for plan to protect participants and the general public
- (7) Assess safety impacts of the exemption
- (8) Design safety measures to provide equivalent or greater level of safety than would be obtained by complying with regulation

# Home Heating Oil Pilot

- Term: November 1, 2001 April 30, 2003
- Participants:
  - Start: 74 carriers, 1,784 drivers, 1,937 CMVs
  - End: 63 carriers, 902 drivers, 1,083 CMVs
- HOS regulation of interest:
  - "Reset" of 60/70 h limit if driver received an offduty period of 2 consecutive nights, including period of midnight to 6:00 am
- Outcomes:
  - No reported accidents, no discernable increased incidence of unintentional discharges of HHO.

# Dart Transit Company Application for Exemption

- Pool of up to 200 single (non-team) drivers
- Up to 11 h driving in a 24-h period starting at 3 am
- Minimum 6 consecutive hours off-duty or sleeper berth time, 9 pm - 9 am.
- Additional "floating" off-duty or sleeperberth periods to provide a minimum 10 hours off-duty in any 24-h period.
- Docket FMCSA-2007-0056

# Summary

- FMPs: What they are, what they are not, and what they should consider and include.
- FMCSA's historical and current FMP-related collaborative activities.
- Part 381 Subpart D requirements for Pilot Programs; 2 projects, 2 outcomes.

# Thank you! Questions?

