

Utilizing Naturalistic Data for Driver Distraction Outreach Campaigns

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Background

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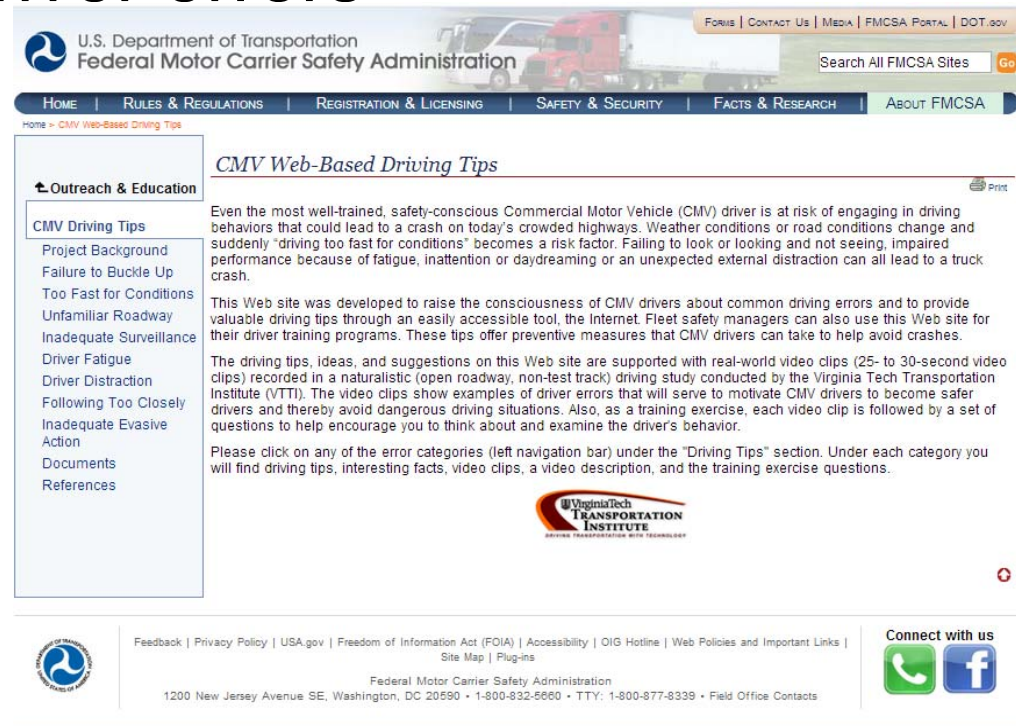
- ❑ Driver error remains a primary contributing factor in many large truck crashes
 - ▣ Previous VTTI research has identified a need for refresher training
- ❑ There are few resources available for providing this information to drivers and fleet safety managers

FMCSA Efforts

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- ❑ CMV Web-Based Driving Tips site
- ❑ Covers common driver errors

- ▣ Seat belts
- ▣ Speeding
- ▣ Fatigue
- ▣ Following distance
- ▣ **Distraction**



Goals

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- Review the CMV Web-Based Driving Tips site material on driver distraction and update, as needed, with recent research results
- Simplify the distraction site text to a readability level approximating a high school education
- Generate single-page anti-distraction tip sheets
- Translate all new materials into the Spanish language

Strengths of Naturalistic Data

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- ❑ Provides one of the highest-quality sources of information about safety-critical events available
 - ▣ Allows for capture of information otherwise lost in police reports
 - ▣ Highlights importance (frequency) of near-crashes
- ❑ Provide a powerful teaching/training tool via real-world examples
- ❑ However, safety-critical events are rare
 - ▣ Capturing these are neither common nor easy

Information Review Process

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- Recently published distraction literature reviewed focusing on
 - ▣ Commercial vehicles for risk information, and
 - ▣ Naturalistic data for examples
- Newly published naturalistic studies:
 - ▣ Distraction in commercial trucks and buses:
Assessing prevalence and risk in conjunction with crashes and near crashes
 - ▣ Driver distraction in commercial vehicle operations

Information Review Process

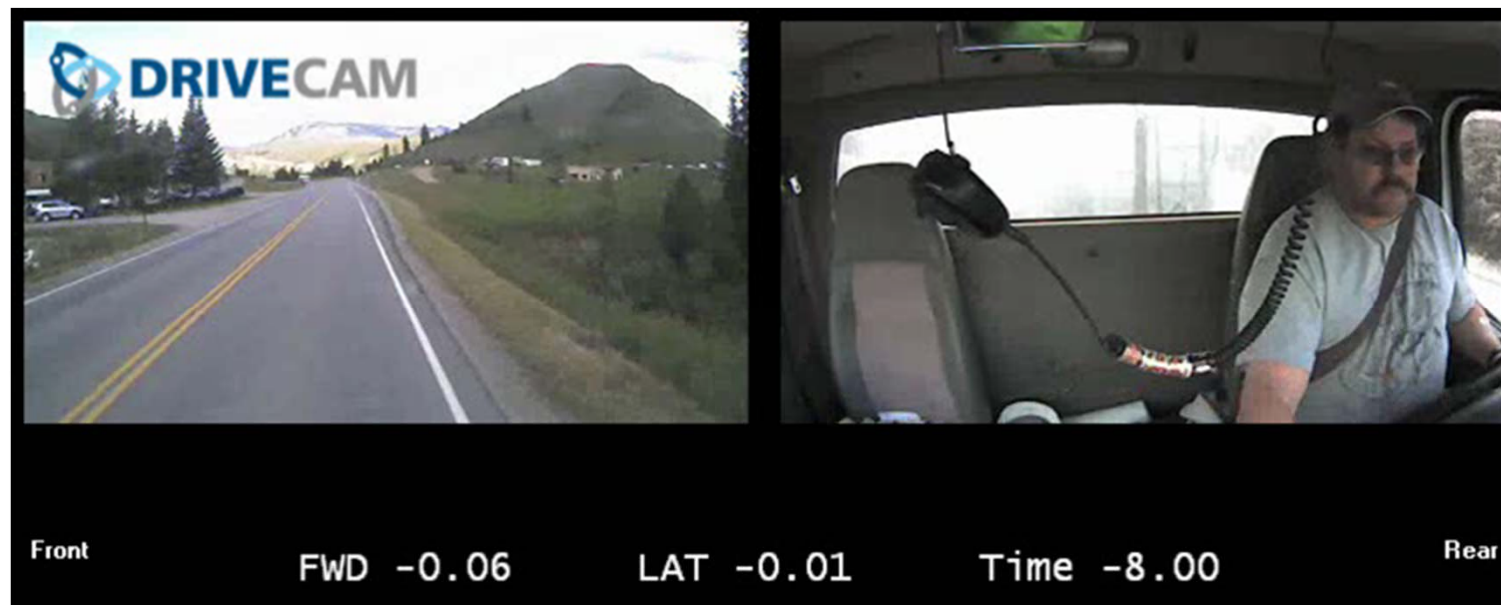
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- This review resulted in new distraction risk categories:
 - ▣ Texting
 - ▣ Dispatching devices
 - ▣ Reading, writing, using maps

Video Examples

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- Partnered with DriveCam for video examples



Video Examples

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Readability

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- ❑ Targeting audience with appropriate level of language is critical to comprehension
- ❑ Readability is the comprehension difficulty of the text
- ❑ Flesch Kincaid reading ease score
- ❑ Revision of existing text, and writing all new text, at a maximum 12th grade level

Readability

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- Before (14.0 reading ease score)

When driving, keep your mind engaged with driving-related information and try to avoid focusing on external objects such as billboards or buildings or internal objects such as a cell phone or paperwork. Remember that all distractions can be dangerous. Paying attention to driving-related information will help you determine when and where there are vehicles around you and will also enable you to react more quickly to any unforeseen event.

- After (9.5 reading ease score)

Distractions can come from both inside and outside of your truck cab. Distractions inside of your cab can include dialing cell phones, texting, using dispatching devices, eating, reading, or adjusting the radio. Distractions outside of your cab can include looking at a passing building, billboard, or person. One way to think about distraction is to ask yourself if something is drawing your attention and taking your eyes away from the road ahead of you. If the answer is “yes,” it is probably a distraction.

International Audiences

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- ❑ Spanish language translation of all materials
- ❑ Translation of all distraction materials and the tip sheet
- ❑ Translation reviewed by multiple native Spanish speakers to eliminate regional artifacts
- ❑ Readability assessed with Fernandez-Huerta scale

Other Project Work

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- ❑ Anti-distraction tip sheet
 - ▣ Single page tip sheet
 - ▣ Designed for ease of printing by drivers or distribution by safety managers
 - ▣ Produced in English and Spanish

Conclusions

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- ❑ Naturalistic data provide can provide powerful examples for outreach campaigns
- ❑ Text must target the audience
 - ▣ Readability
 - ▣ Preferred language
- ❑ These efforts support the goals of reaching a wider audience of CMV drivers and safety managers

Thank you.

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