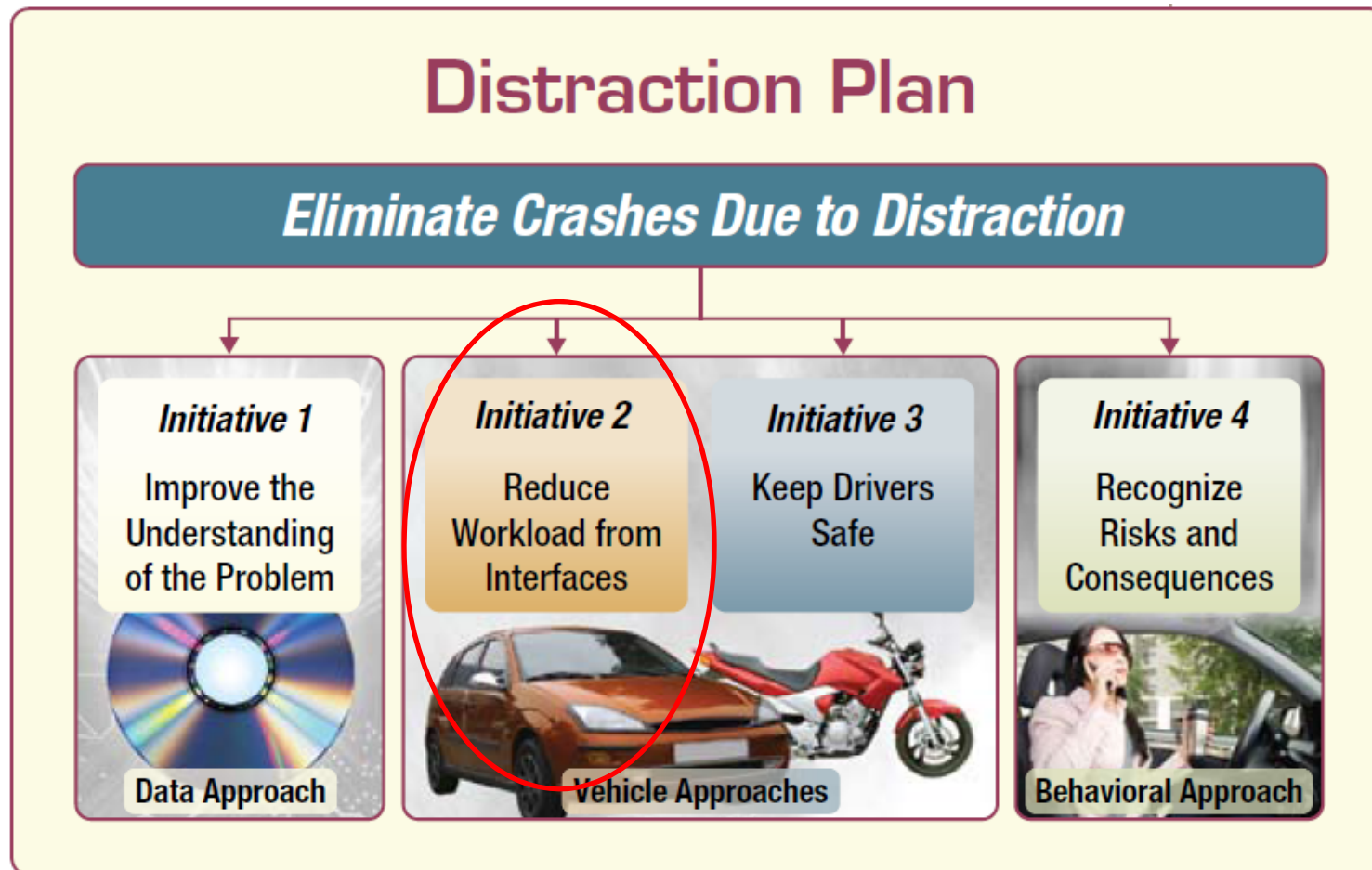


NHTSA's Driver Distraction Guidelines

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NHTSA's Distraction Plan



- Guidelines are significant portion of Initiative 2

Goal of NHTSA's Driver Distraction Guidelines

- Minimize driver distraction created by electronic devices by encouraging better driver-device interfaces
 - Conformance is voluntary; these are not a FMVSS
- Guidelines implementation in three phases:
 - Phase 1 – Visual-manual interfaces for devices installed by OE vehicle manufacturers
 - Phase 2 – Portable and Aftermarket Devices (PAD)
 - Phase 3 – Auditory-vocal interfaces



Distraction Guidelines

Phase 1

- Visual-Manual NHTSA Driver Distraction Guidelines for In-Vehicle Electronic Devices
 - Released for public comment in Feb 2012
 - Final published in April 2013



Basis for NHTSA Guidelines Development

- Majority of basis came from current Industry guidelines combined with NHTSA research findings
- NHTSA research examined
 - Distraction measurement protocols
 - Robust distraction metrics
 - Distraction threshold criteria

Fundamental Principles

1. The driver's eyes should usually be looking at the road ahead
2. The driver should be able to keep at least one hand on the steering wheel while performing a secondary task (both driving-related and non-driving related)
3. The distraction induced by any secondary task performed while driving should not exceed that associated with a baseline reference task (manual radio tuning)
4. Any task performed by a driver should be interruptible at any time
5. The driver, not the system/device, should control the pace of task interactions
6. Displays should be easy for the driver to see and content presented should be easily discernible

Phase 1 Approach

- Tasks/devices not suitable for performance while driving should be **locked out**
- Two methods for determining if task/device should be locked out:
 - **Per se** for certain devices/tasks
 - Based on law or policy
 - **Acceptance test** to determine whether tasks can be safely performed while driving
- Devices/tasks subject to **per se lock out** or that **do not meet test criteria** should not be accessible if engine turned on unless vehicle is in “Park”

Phase 1 Approach

- **Acceptance test**
 - Test procedures use human participants
 - Manual radio tuning as reference task representing threshold of “acceptable” distraction
- **NHTSA’s selected test protocols:**
 - Driving simulator with eye glance measurement
 - Similar to Alliance 2.1A test protocol in Alliance Guidelines
 - Occlusion testing
 - Based on ISO 16673:207 test protocol
 - Shuttered goggles open and close at 1.5 second intervals while participant performs secondary task
- **NHTSA’s acceptance threshold: 2/12 per task**
 - 2 second maximum individual glance duration
 - 12 second maximum eyes-off-road time

Per Se Lock Outs

- **Particular functions or features that should be locked out regardless**
 - Device functions and tasks not intended to be used by a driver while driving. (e.g., setting the clock)
 - Manual Text Entry
 - Locks out text messaging, chatting, internet browsing
 - Displaying Video
 - Displaying Images
 - Automatically Scrolling Text
 - Displaying Text to Be Read
 - Locks out the display of books, web page content, social media content, etc.

Additional Information

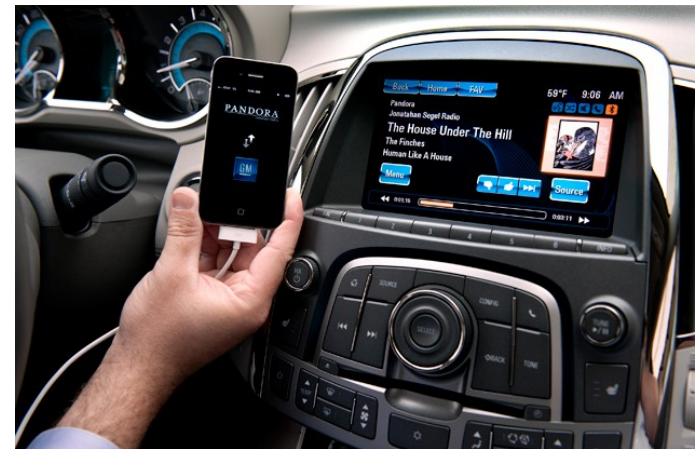
- Driver Distraction Guidelines Docket:
 - Website: www.regulations.gov
 - Docket Number: **NHTSA-2010-0053**

- FYI: National Survey on Distracted Driving Attitudes and Behaviors
 - www.nhtsa.gov/staticfiles/nti/pdf/811729.pdf

Distraction Guidelines

Phase 2

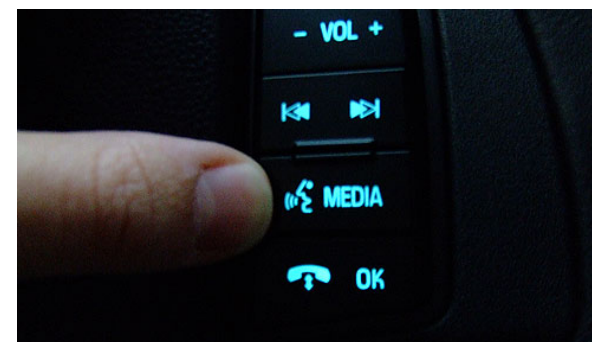
- Visual-Manual Interfaces for Portable and Aftermarket Devices
 - No current Industry guidelines
 - Currently under development
 - Based on same fundamental principles as Phase 1 Distraction Guidelines, but applied to PAD



Distraction Guidelines

Phase 3

- Auditory-vocal Interfaces for In-Vehicle Electronic Devices, Portable, and Aftermarket Devices
 - No published industry guidelines
 - Research currently underway



Questions?

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