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SURFACE VEHICLE INFORMATION REPORT

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Definitions and Data Sources for the Driver Vehicle Interface (DVI)

RATIONALE

The information in this document is intended to aid researchers and facilitate improved Driver Vehicle Interface (DVI) design and usability by establishing working definitions of key concepts and providing references to existing research in this area.

New automotive technologies such as crash avoidance systems, Connected Vehicles [1] (i.e., V2X), and vehicle automation offer many opportunities for improving mobility and driving safety. However, if in-vehicle systems, particularly the driver-vehicle interface (DVI), are not designed in a manner consistent with driver limitations and capabilities, these potential advantages may not be realized and these technologies can even lead to unintended negative outcomes.

Common definitions of key concepts are important for scientific advancement in these areas for several reasons. First, they enable effective communications among researchers and industry. Without common definitions, the relevance of others' work may not be recognized, or conflicting data may result due to the failure to detect that datasets are actually dealing with different in-vehicle systems. Second, it helps focus future research by ensuring researchers are working from a common reference. Third, it is difficult to compare and replicate studies if they do not use common definitions. Lastly, it helps establish credibility for the profession. Overall, having common definitions helps researchers avoid publishing research results that are unclear, inaccurate, misinterpreted, or inconsistent with related publications.

A comprehensive list of references to existing research is helpful to quickly discovering and accessing prior work; thus facilitating scientific advancement, and enabling effective communications among researchers. In this regard, the references to existing research in this document are deliberately limited to juried publications. However, other relevant data sources are available, and the reader is encouraged to pursue discovery and review of additional information such as related patents, scholarly opinion, newer publications, internet discussions, and news media articles.

NOTE: The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights.

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[1] "Connected Vehicles" refers to "a multimodal initiative that aims to enable safe, interoperable networked wireless communications among vehicles, the infrastructure, and passengers' personal communications devices" (see also http://www.its.dot.gov/connected_vehicle/connected_vehicles_FAQs.htm).

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INTRODUCTION

This information report provides a summary of the activities to-date of Task Force #1 - Research Foundations – of the SAE's Driver Vehicle Interface (DVI) committee. There are many promising technology-based solutions that address distracted driving by developing interfaces that mitigate, optimize, and minimize the attentional and physical demands of in-vehicle systems. However, an important key to their success is to integrate the technology properly - with both the driver and with the tasks that comprise driving (Angell, 2010). If this is done well, then technology can help the driver focus attention. If this is done poorly, then technology can further complicate, interfere with, and distract the driver.

The challenge of integrating the driver, the technology they use, and the task of driving is a difficult one – especially given that technologies may be carried into the vehicle (e.g., mobile phone, personal navigation device, etc.), transmitted into the vehicle (e.g., roadside unit, cloud-based server, etc.), or downloaded into an embedded vehicle module after the time of manufacture. A systems-level perspective and technology standards to ensure interoperability between subsystems should be used; for example, to preserve the manufacturer's ability to lock-out functions and features that would violate applicable driver distraction guidelines. It also requires a fundamental understanding of the part the driver plays in safe driving – with a priority on supporting the driver's ability to focus attention on the primary task of driving.

As technology progresses, there are some areas that are important for helping to prevent and mitigate distraction and high workload (see also Angell, 2010, 2012), for example:

1. Assuring that technologies are designed, developed, and integrated within the driver interface to minimize distraction and workload. This has to do with the need to assure that the basic technologies of the driver interface achieve this goal. It involves:

   - The application of good, basic DVI design practices

   - Harnessing techniques for: de-cluttering, lock-outs when demand is excessive, and perhaps safety-coaching and embedded training; maybe even very low-level dialog managers (e.g., delaying a phone call when the turn signal is on)

2. Developing and integrating new advanced technologies which can actively prevent and reduce distraction, as well as support the driver in managing attention and workload. This reflects the need to develop and apply technologies that actively support the driver in preventing distraction – or in preventing or mitigating safety conflicts or crashes should they arise. Such technologies/capabilities could include:

   - Active attention monitoring

   - Cueing the driver to return their attention to the road

   - Triggering of active safety and/or driver assistance systems (e.g., collision-imminent braking, lane-departure warning or prevention, etc.)

To support approaches such as these, this Information Report has been developed to provide information in each of these areas to aid the design and development of the driver-vehicle interface of in-vehicle technologies, systems, and applications. It does this by providing working definitions of key concepts and references to research in these areas.

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1. SCOPE

This document provides a summary of the activities to-date of Task Force #1 - Research Foundations – of the SAE’s Driver Vehicle Interface (DVI) committee. More specifically, it establishes working definitions of key DVI concepts, as well as an extensive list of data sources relevant to DVI design and the larger topic of driver distraction.

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2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

SAE J1138 Design Criteria - Driver Hand Controls Location for Passenger Cars, Multipurpose Passenger Vehicles, and Trucks (10 000 GVW and Under)

SAE J2364 Navigation and Route Guidance Function Accessibility While Driving

SAE J2395 ITS In-Vehicle Message Priority

SAE J2396 Definitions and Experimental Measures Related to the Specification of Driver Visual Behavior Using Video Based Techniques

SAE J2400 Human Factors in Forward Collision Warning Systems: Operating Characteristics and User Interface Requirements

SAE J2802 Blind Spot Monitoring System (BSMS): Operating Characteristics and User Interface

SAE J2830 Process for Comprehension Testing of In-Vehicle Icons

2.1.2 Other Publications

Angell, L.S. (2010). *Using Technology to Prevent & Reduce Distraction*. Invited presentation to the USDOT National Distracted Driving Summit, September 21, 2010. Washington, DC.

Angell, L. S. (2012). *Driver Attention & Scanning: A Focus Area for Enhancing Safety in the Connected Vehicle Era.* Center for Automotive Research, Invited Talk, Breakfast Briefing Series. September 28th, 2012. Livonia, Michigan.

Foley, J. P., Young, R., Angell, L., & Domeyer, J. E. (2013). Towards operationalizing driver distraction. *Proceedings of the Seventh International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, 57-63.

Regan, M.A., Hallett, C., & Gordon, C. P. (2011). Driver distraction and driver inattention: Definition, relationship and taxonomy. *Accident Analysis & Prevention*, 43(5), 1771-1781.

2.2 Related Publications

The following publications are provided for information purposes only and are not a required part of this SAE Technical Report.

2.2.1 ANSI Accredited Publications

Copies of these documents are available online at http://webstore.ansi.org/

ANSI/HFES 100-2007 Human Factors Engineering of Computer Workstations. Santa Monica, CA: Human Factors and Ergonomics Society.

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2.2.2 ISO Publications

Copies of these documents are available online at http://webstore.ansi.org/

ISO 15008 Road Vehicles - Ergonomic Aspects of Transport Information and Control Systems - Specifications and Test Procedures for In-Vehicle Visual Presentation. Geneva: International Organization for Standardization (ISO).

ISO 15623 Transport Information and Control Systems - Forward Vehicle Collision Warning Systems - Performance Requirements and Test Procedures. Geneva: International Organization for Standardization (ISO).

ISO 16673 Road Vehicles - Ergonomic Aspects of Transport Information and Control Systems - Occlusion Method to Assess Visual Demand Due to the use of In-Vehicle Systems. Geneva: International Organization for Standardization (ISO).

ISO 17361 Intelligent Transport Systems - Lane Departure Warning Systems - Performance Requirements and Test Procedures. Geneva: International Organization for Standardization (ISO).

ISO 17387 Intelligent Transport Systems - Lane Change Decision Aid Systems (LCDAS) - Performance Requirements and Test Procedures. Geneva: International Organization for Standardization (ISO).

ISO 2575 Road Vehicles - Symbols for Controls, Indicators and Tell-Tales. Geneva: International Organization for Standardization (ISO).

ISO 3461-1 General Principles for the Creation of Graphical Symbols, Part I: Graphical Symbols for use on Equipment. Geneva: International Organization for Standardization (ISO).

ISO 7731 Danger Signals for Public and Work Areas - Auditory Danger Signals. Geneva: International Organization for Standardization (ISO).

2.2.3 FMVSS Publications

Copies of this document are available online at http://icsw.nhtsa.gov/cars/rules/standards/FMVSS-Regs/index.htm.

Federal Motor Vehicle Safety Standard (FMVSS) No. 208, *Occupant crash protection [Docket No. 74-14; Notice 103], RIN 2127-AG14*, to be codified at 49 C.F.R. pt. 571. 208. Retrieved from http://www.nhtsa.dot.gov/cars/rules/rulings/Labels5.mlv.html.

3. WORKING DEFINITIONS

3.1 DEFINITION OF DRIVER DISTRACTION

3.1.1 Driver Distraction

The diversion of attention away from activities critical for safe driving toward a competing activity, which may result in insufficient or no attention to activities critical for safe driving (Regan, et al., 2011, p. 1776).

3.1.2 Competing Activity

An activity or activities which place/s demands upon cognitive, auditory, vocal/verbal, visual, motoric, and other resources separately or in any combination-demands that are the same as or similar to the resources demanded by safe driving (hence giving rise to resource-competition), and which occur concurrently while driving (Foley et al., 2013, p. 61).

3.1.3 Subsidiary Definitions Relevant to “Competing Activity” (all from Foley et al., 2013, p. 62)

3.1.3.1 Visual Distraction

Any glance that competes with activities necessary for safe driving.

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3.1.3.2 Manual Distraction

Any physical manipulation that competes with activities necessary for safe driving.

3.1.3.3 Auditory Distraction

Any period of aural stimulation that competes with activities necessary for safe driving.

3.1.3.4 Vocal Distraction

Any vocal utterance (or covert sub-vocal utterance) that competes with activities necessary for safe driving.

3.1.3.5 Cognitive Distraction

Any epoch of cognitive loading that competes with activities necessary for safe driving.

3.2 DEFINITIONS FOR RESOURCES

Resources are defined as (all from Foley et al., 2013, p. 61):

3.2.1 Cognitive

The alerting, executive, and orienting attentional networks singly or in combination, as well as the memory and representational systems (e.g., working and long- term) from which information may be retrieved and in which it may be held and operated upon.

3.2.2 Auditory

The sensory organs and associated neurological structures, pathways, and processes by which hearing and perceiving sound occurs.

3.2.3 Vocal/Verbal

The structures, pathways, and processes associated with speaking, verbalizing, or making utterances covertly or overtly.

3.2.4 Visual

The visual sensory organs and associated neurological structures, pathways, and processes.

3.2.5 Motoric

The motor/biomechanical system and associated structures of movement within the body.

3.2.6 Other

While not typically included in the discussion of resources in the context of driving, activation of "other" resources (for example, the structures, pathways, and processes associated with somatosensory/vestibular functions, smell, or taste) may also impact attention and result in distraction.

3.3 DEFINITION OF DRIVER WORKLOAD

3.3.1 Global definition of Driver Workload

The amount of physical and mental activity that is required to perform a particular task or set of tasks while driving.

3.3.1.1 Overall Driver Workload

The amount of physical and mental activity that is required to perform a particular task or set of tasks while driving.

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3.3.1.2 Average Driver Workload

The amount of physical and mental activity that is required to perform a particular task or set of tasks while driving over the time it takes to complete them.

3.3.1.3 Instantaneous Driver Workload

The amount of physical and mental activity over a specified unit of time that is required to perform a particular task or set of tasks while driving.

3.4 DEFINITION OF DISTRACTION MITIGATION SYSTEMS RELEVANT TO DVI DESIGN

Driver distraction and mitigation systems are likely to consist of several, somewhat independent, subsystems. Therefore, working definitions of the overall system, as well as each of the major subsystems, are needed to facilitate discussions on the topic. Below are some terms and associated definitions related to driver distraction and workload mitigation systems.

3.4.1 Definition for the Complete System Used to Mitigate Driver Distraction and Workload

3.4.1.1 Driver distraction and workload mitigation system

A system, sometimes made up of several distributed subsystems with their own inputs and outputs, which helps a driver maintain situational awareness (or enhancing attentiveness) by drawing the driver's attention towards important roadway events and controlling the timing and format of communications with other objects (e.g., device and cloud-based applications, vehicle systems, etc.) based on the current roadway situation, driver abilities, and vehicle status.

3.4.2 Definitions for each of the Subsystems Used to Mitigate Driver Distraction and Workload

3.4.2.1 Situational Awareness (SA) management subsystem

A subsystem of a "driver distraction and workload mitigation system" that controls when and how communications is presented to the driver based on information received from other subsystems that are responsible for monitoring the current roadway situation, driver abilities, and vehicle status.

3.4.2.2 Roadway situation subsystem

A subsystem of a "driver distraction and workload mitigation system" that monitors the roadway situation via on-board sensors and communications with external objects (e.g., other vehicles, roadside infrastructure, cloud-based servers, etc.) to detect roadway hazards, predict escalating crash situations, and assess driver distraction and workload caused by the current roadway situation.

3.4.2.3 Driver abilities subsystem

A subsystem of a "driver distraction and workload mitigation system" that assesses the abilities of a driver to handle driving and non-driving tasks based on stored driver profile data (e.g., deaf driver, historical driving behavior, etc.) and monitoring the current driver state (e.g., driver-facing camera, vehicle control data, etc.).

3.4.2.4 Vehicle status subsystem

A subsystem of a "driver distraction and workload mitigation system" that monitors the status of vehicle controls and systems to assess driver distraction and workload caused by current interactions with the vehicle (e.g., adjusting climate control, etc.) and predict escalating crash situations (e.g., current speed, etc.).

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4. SUMMARY OF DATA SOURCES RELEVANT TO DVI DESIGN AND CONCEPTUALIZING DRIVER DISTRACTION

4.1 Key Data Sources

Appendix A provides a list of search terms that can be used to identify literature relevant to specific issues or topics, and to generate candidate data sources/publications for use in DVI design.

Appendix B provides a list of publications that may be helpful for conceptualizing and developing DVIs for advanced automotive technologies and systems.

Appendix C provides a list of publications helpful for conceptualizing and defining driver distraction.

As noted above, the information provided in these appendices can help researchers and system developers discover and access prior work, thus facilitating scientific advancement in this area. In this regard, the references to existing research in this document are deliberately limited to published data sources. However, other relevant data sources are available, and the reader is encouraged to pursue discovery and review of additional information such as related patents, scholarly opinion, newer publications, internet discussions, and news media articles.

5. NOTES

5.1 Revision Indicator

A change bar (l) located in the left margin is for the convenience of the user in locating areas where technical revisions, not editorial changes, have been made to the previous issue of this document. An (R) symbol to the left of the document title indicates a complete revision of the document, including technical revisions. Change bars and (R) are not used in original publications, nor in documents that contain editorial changes only.

PREPARED BY THE SAE SAFETY AND HUMAN FACTORS STANDARDS STEERING COMMITTEE

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APPENDIX A – PRELIMINARY SEARCH TERMS FOR DVI DESIGN

- Accuracy
- Arbitration of Crash Warning Messages
- Automation to Reduce Workload and Distraction
- Characteristics of Controls (control movement compatibility)
- Coding for Physical and Virtual Controls, and Labeling
- Compatibility
- Complexity
- Consistency
- Conspicuity
- Customization
- Driver Distraction
- Designing Messages for Driver Comprehension
- Display Glare
- Display Type
- Distinctiveness
- Driver Training
- False and Nuisance Warnings
- General DVI-Driver Interactions
- General Guidelines for Automated Systems
- General Support to the Driver
- Guidance for Active Control
- Guidance for Partial Automation
- Guidance for Promoting/Maintaining Driver Vigilance and Situation Awareness
- Integration of Nomadic and Aftermarket Devices
- Legibility of Icons and Text
- Location or Placement of a Visual Display
- Message Repetition
- Non-critical Information
- Obstruction
- Physical and Functional Aspects of Integration
- Prioritization of Messages to the Driver
- Procedures for Assessing Cognitive Load
- Procedures for Assessing Visual Load
- Providing Feedback to the Driver

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- Selection of Sensory Modality (compatibility, use of hands-free interactions, use of redundant modalities)
- Signal Characteristics (distinctiveness, loudness, urgency, localization, use of speech)
- System Error Handling/Recovery
- System Status
- Use of Color
- Using Naturalistic Driving Data to Assess Crash Risk
- Using Secondary Tasks to Assess Driver Load
- Timeliness
- Virtual Controls
- Voice Recognition Inputs
- Workload

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APPENDIX B

INITIAL LIST OF DATA SOURCES HELPFUL FOR CONCEPTUALIZING AND DEVELOPING DVIS

Reference	DVI Design Topic(s)
AAA Foundation for Traffic Safety. (2008). *Use of advanced in-vehicle technology by younger and older early adopters*. Washington, DC.	System Integration
Abbink, D. A., Mulder, M., van der Helm, F. C. T., Mulder, M., & Boer, E. R. (2011). Measuring neuromuscular control dynamics during car following with continuous haptic feedback. *IEEE Transactions on Systems, Man, and Cybernetics—Part B, 41*(5), 1239-1249.	Haptic Interfaces
Abbink, D., Mulder, M. & Boer, E. (2012). Haptic shared control: Smoothly shifting control authority? *Cognition, Technology, & Work, 14*(1), 19-28.	Automation
Abe, G. & Richardson, J. (2004). The effect of alarm timing on driver behaviour: an investigation of differences in driver trust and response to alarms according to alarm timing. *Transportation Research Part F: Traffic Psychology and Behaviour*, *7*(4-5), 307-22.	Haptic Interfaces
Abe, G. & Richardson, J. (2005). The influence of alarm timing on braking response and driver trust in low speed driving. *Safety Science*, *43*(9), 639-654.	Driver Needs, Safety Messages, Haptic Interfaces
Abe, G. & Richardson, J. (2006). Alarm timing, trust and driver expectation for forward collision warning systems. *Applied Ergonomics*, *37*(5), 577-586.	Driver Needs, Message Characteristics, Safety Messages
Abe, G. & Richardson, J. (2006). The influence of alarm timing on driver response to collision warning systems following system failure. *Behaviour & Information Technology, 25*(5), 443-452.	Haptic Interfaces
Ablaßmeier, M., Poitschke, T., Wallhoff, F., Bengler, K., & Rigoll, G. (2007). Eye gaze studies comparing head-up and head-down displays in vehicles. *2007 IEEE International Conference*, 2250-2252.	Visual Interfaces
Adell, E., & Varhelyi, A. (2006). Development of HMI components for a driver assistance system for safe speed and safe distance. *Proceedings of the 13th ITS World Congress*.	Visual Interfaces, Auditory Interfaces
Adell, E., Varhelyi, A., Fontana, M. D., & Bruel, L. (2008). Test of HMI alternatives for driver support to keep safe speed and safe distance-A simulator study. *Open Transportation Journal*, *2*, 53-64.	Driver Needs, Visual Interfaces, Auditory Interfaces, Haptic Interfaces, Safety Messages
Adrian, W., & Bhanji, A. (1991). Fundamentals of disability glare: A formula to describe stray light in the eye as a function of glare angle and age. *Proceedings of the First International Symposium on Glare* (pp. 185-193). New York: Lighting Research Institute.	Visual Interfaces
Advanced Systems Technology Branch. (1993). *Preliminary human factors design standards for airway facilities* (ACD-350). Atlantic City International Airport, NJ: Federal Aviation Administration Technical Center.	Auditory Interfaces
Ahlstrom, V., & Longo, K. (2003). *Human factors design standard* (HF-STD-001). Atlantic City International Airport, NJ: Federal Aviation Administration Williams J. Hughes Technical Center.	Message Characteristics, Visual Interfaces, Auditory Interfaces, Automation
Alders, M., van Hemert, J. M., Pauwelussen, J., Heffelaar, T., Happee R., & Pauwelussen, J. (2012, August). Managing driver workload using continuous driver workload assessment. In A. J. Spink, F. Grieco, O.E. Krips, L.W.S. Loijens, L.P.J.J. Noldus, & P.H. Zimmerman, *Proceedings of Measuring Behavior 2012* (pp. 38-29). Utrecht, The Netherlands.	Integration
Aldridge, L.C. & Lansdown, T.C. (1999). Driver preferences for speech based interaction with in-vehicle systems. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 977-981.	Driver Inputs

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Reference	DVI Design Topic(s)
Allen, R. W. (1995). The driver's role in collision avoidance systems. *Workshop on Collision Avoidance Systems*, 33-57.	Driver Needs
Allen, R.W. & Howe, C. (2013). *Volume 4 - Scheduling of messages to maximize driver performance* (Unpublished Task 4 interim report prepared for National Highway Traffic Safety Administration under contract DTNH22-121R-00629).	Integration
Allen, R.W. (1994, March). The driver's role in collision avoidance systems. *Workshop on Collision Avoidance Systems sponsored by the IVHS America Safety & Human Factors Committee and the National Highway Traffic Safety Administration* (pp. 33-57), Reston, VA.	Driver Information
Alliance of Automobile Manufacturers (AAM). (2006). *Statement of principles, criteria and verification procedures on driver interactions with advanced in-vehicle information and communication systems, including 2006 updated sections* [Report of the Driver Focus-Telematics Working Group]. Washington, DC: Author. Retrieved from http://www.autoalliance.org/index.cfm?objectid=D6819130-B985-11E1-9E4C000C296BA163.	General DVI Requirements, Driver Needs, Message Characteristics, Driver Inputs, Visual Interfaces, Assessing Driver Performance
Alm, H., & Nilsson, L. (2000). Incident warning systems and traffic safety: A comparison between the Portico and Melyssa test site systems. *Transportation Human Factors, 2*(1), 77-93.	General DVI Requirements, Driver Needs, Message Characteristics
Altmann, E. & Trafton, J. (2002). Memory for goals: An activation-based model. *Cognitive Science: A Multidisciplinary Journal, 26*(1), 39-83.	Integration
Amditis, A., Bekiaris, E., Montanari, R., Baligand, B., Perisse, J., Belotti, F., et al. (2001). An innovative in-vehicle multimedia HMI based on an intelligent information manager approach: The comunicar design process. *Proceedings of the 8th World Congress on Intelligent Transport Systems.*	System Integration
Amditis, A., Bertolazzi, E., Bimpas, M., Biral, F., Bosetti, P., Da Lio, M., et al. (2010). A holistic approach to the integration of safety applications: The INSAFES subproject within the European Framework Programme 6 Integrating Project PReVENT. *IEEE Transactions on Intelligent Transportation Systems, 11*(3), 554-566.	System Integration
Amditis, A., Pagle, K., Tsogas, M., Bekiaris, E., Panou, M., Veste, H. T., et al. (2007). A real time platform for estimating the driver – vehicle – environment state in AIDE integrated project. *Proceedings of the 14th World Congress on Intelligent Transport Systems.*	System Integration
Angell, L., Auflick, J., Austria, P.A., Kochhar, D., Tijerina, L., Biever, W., . . . Kiger, S. (2006). *Driver workload metrics. Task 2 final report* (DOT HS 810 635). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements, Assessing Driver Performance
Angell, L., Cooper J.M., McGehee, D.V., & Chrysler S.T. (2010). *Test procedures for evaluating distraction potential in IntelliDrive systems – Task 1 literature review* (Unpublished report for the National Highway Traffic Safety Administration under contract DTNH22-05- D01002 TO20).	Integration
Angell, L.S. (2010a). A comparison of the modified Sternberg method, peripheral detection tasks, and other surrogate techniques. In G.L. Rupp, (Ed.), *Performance Metrics for Assessing Driver Distraction: The Quest for Improved Road Safety*. Warrendale, PA: SAE International.	Assessing Driver Performance
Angell, L.S. (2010b). Conceptualizing effects of secondary task demands on event detection during driving: Surrogate methods and issues. In G.L. Rupp, (Ed.), *Performance Metrics for Assessing Driver Distraction: The Quest for Improved Road Safety*. Warrendale, PA: SAE International.	Assessing Driver Performance
Angell, L.S. (2012, September). *Driver attention & scanning: A focus for enhancing safety in the connected vehicle era* [Presentation]. Retrieved from: http://www.cargroup.org/assets/files/bb120928/angell.pdf	Integration

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Reference	DVI Design Topic(s)
Angell, L.S., McGehee, D.V., & Cooper, J. M. (2011). *Test procedures for evaluating distraction potential in connected vehicle systems: Task 5 performance metrics* (DTNH22-05-D01002 TO20). Washington, DC: National Highway Traffic Safety Administration.	Assessing Driver Performance
ANSI/HFES 100-2007 (2007). *Human factors engineering of computer workstations.* Santa Monica, CA: Human Factors and Ergonomics Society.	Visual Interfaces
Antoniou, C. (2002). Classification of driver-assistance systems according to their impact on road safety and transiency. *Transport Reviews (22)*2., pp. 179-196	System Integration
Arroyo, E., Sullivan, S., & Selker, T. (2006). CarCoach: A polite and effective driving coach. *Proceedings of CHI '06 Extended Abstracts on Human Factors in Computing Systems*, 357-362.	Automation
Auvray, M., Gallace, A., Tan, H. Z., & Spence, C. (2007). Crossmodal change blindness between vision and touch. *Acta Psychologica*, *126*(2), 79-97.	Driver Needs
Baber, C., & Wankling, J. (1992). An experimental comparison of test and symbols for in-car reconfigurable displays. *Applied Ergonomics*, *23*(4), 255-262.	Visual Interfaces
Bainbridge, L. (1983). Ironies of automation. *Automatica, 19*(6), 775-779.	Automation
Baldwin, C. L. & May, J. F. (2011). Loudness interacts with semantics in auditory warnings to impact rear-end collisions. *Transportation Research Part F: Traffic Psychology and Behaviour, 14*(1), 36-42.	Auditory Interfaces
Baldwin, C. L. (2011). Verbal collision avoidance messages during simulated driving: Perceived urgency, alerting effectiveness and annoyance. *Ergonomics*, *54*(4), 328-337.	Auditory Interfaces
Baldwin, C. L., Reagan, I., Lawrence, J. H., & Turner, T. R. (2007). Auditory in-vehicle technologies to support older drivers. *Proceedings of the Fourth International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design*, 371-372.	Auditory Interfaces
Bar, T., Kohlhaas, R. Zollner, J. M., & Scholl, K. (2011). Anticipatory driving assistance for energy efficient driving. *Proceedings of the Integrated and Sustainable Transportation System (FISTS), Karlsruhe, Germany*, 1-6.	System Integration
Barham, P., Oxley, P., Thompson, C., Fish, D., & Rio, A. (1999). Jaguar cars' near infrared night vision system-Overview of human factors research to date. *Vision in Vehicles (VII)*, 177-85.	Visual Interfaces
Barker, P. & Woodcock, A. (2011). Driver skills, education and in-vehicle technology. *International Journal of Vehicle Design, 55*(2-4), 189-207.	Driver Training, Driver Needs
Barrow, J. H. & Baldwin, C.L. (2009). Verbal-spatial cue conflict: Implications for the design of collision-avoidance warning systems. *Proceedings of the 5th International Driving Symposium on Human Factors in Driving Assessment, Training and Vehicle Design*, 405-411.	Auditory Interfaces
Barton, J. E., & Cohn, T. E. (2005). Towards a complete human driver model – The effect of vision on driving performance. *Proceedings of the 12th World Congress on Intelligent Transport Systems*.	Driver Needs
Battelle. *Safety pilot project report.* Forthcoming.	HV Design Considerations
Becic, E., Manser, M., Creaser, J., & Donath, M. (2012). *Cooperative intersection collision avoidance system – Stop sign assist: Experiments to validate use of an in-vehicle interface design*. (Report No. CTS 12-09). Minneapolis: University of Minnesota Center for Transportation Studies.	Driver Needs , Assessing Driver Performance
Begault, D. R., & Pittman, M. T. (1996). Three-dimensional audio versus head-down Traffic Alert and Collision Avoidance System displays. *International Journal of Aviation Psychology*, *6*(1), 79-93.	Auditory Interfaces

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Reference	DVI Design Topic(s)
Belz, S. M., Robinson, G. S., & Casali, J. G. (1999). A new class of auditory warning signals for complex systems: Auditory icons. *Human Factors*, *41*(4), 608-618.	Auditory Interfaces, Sensory Modality for HVs, HV Auditory Displays
Belz, S.M., Robinson, G.S., & Casali, J.G. (1998). Auditory icons as impending collision system warning signals in commercial motor vehicles. *Proceedings of the Human Factors and Ergonomics Society 42nd Annual Meeting*, 1127-1131.	Driver Needs, Auditory Interfaces, Safety Messages
Belz, S.M., Robinson, G.S., & Casali, J.G. (1999). A new class of auditory warning signals for complex systems: Auditory icons. *Human Factors, 41*(4), 608-618.	Auditory Interfaces, Sensory Modality for HVs
Benedict, D.R. & Angell, L.S. (2010). Modified Sternberg method for assessing event detection while driving. In G.L. Rupp, (Ed.), *Performance Metrics for Assessing Driver Distraction: The Quest for Improved Road Safety*. Warrendale, PA: SAE International.	Assessing Driver Performance
Ben-Yaacov, A., Maltz, M., & Shinar, D. (2000). Driver performance with a collision avoidance system. *Proceedings of the Human Factors and Ergonomics Society 44th Annual Meeting*, *3*, 3-312-3-314.	Driver Needs
Beruscha, F., Augsburg, K., & Manstetten, D. (2011). Haptic warning signals at the steering wheel: A literature survey regarding lane departure warning systems. *Haptics-e, The Electronic Journal Of Haptic Research*, *4*(5), 1-6.	Haptic Interfaces
Bhise, V.D. (2011). *Ergonomics in the automotive design process*. Boca Raton, FL: CRC Press.	Driver Inputs
Bian, Z., Kang, J. J., & Andersen, G. J. (2010). Changes in extent of spatial attention with increased workload in dual-task driving. *Transportation Research Record*, *2185*, 8-14.	General DVI Requirements, Driver Needs, Assessing Driver Performance
Bielaczek, C., Barz, M., Breuer, B., Rohmert, W., & Breuer, J. (1996). Development of warning strategies and driver-vehicle interfaces. *Proceedings of the Fifteenth International Technical Conference on the Enhanced Safety of Vehicles,* 305-316.	Auditory Interfaces
Bisantz, A.M. & Pritchett, A.R. (2003). Measuring the fit between human judgments and automated alerting algorithms: A study of collision detection. *Human Factors, 45*(2), 266-280.	Automation
Bloomfield, J.R., Carroll, S.A., Papelis, Y.E., & Bartelme, M.J. (1996). *The driver's response to an automated highway system with reduced capacity* (FHWA-RD-96-067). McLean, VA: Federal Highway Administration.	Automation
Bloomfield, J.R., Grant, A.R., Levitan, L., Cumming, T.L., Maddhi, S., Brown, T.L. & Christensen, J.M. (1998). Using an automated speed, steering, and gap control system and a collision warning system when driving in clear visibility and in fog. (Report No. FHWA-RD-98-050). McLean, VA: Federal Highway Administration.	Automation
Boer, E. R., & Ward, N. J. (2003). Event-based driver performance assessment. *Proceedings of the Second International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design*, 119-124.	Assessing Driver Performance
Boff, K.R. & Lincoln, J.E. (Eds.). (1988). *Engineering data compendium: Human perception and performance*. Wright-Patterson Air Force Base, OH: Armstrong Aerospace Medical Research Laboratory.	Driver Inputs
Boot, W.R., Basak, C., Erickson, K.I., Neider, M., Simons, D.J., Fabiani, M., Kramer, A.F. (2010). Transfer of skill engendered by complex task training under conditions of variable priority. *Acta Psychologia, 135*, 349-357.	Driver Training, Automation
Brock, J.F., McFann, J., Inderbitzen, R.E., & Bergoffen, G. (2007). *Effectiveness of commercial motor vehicle driver training curricula and delivery methods* (CTBSSP Synthesis MC-13). Washington, DC: National Academy Press.	Driver Training, HV Haptic Displays, Automation

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Brook-Carter, N., Stevens, A., Reed, N., & Thompson, S. (2008). Practical issues in the application of occlusion to measure visual demands imposed on drivers by in-vehicle tasks. *Ergonomics, 52*(2), 1-15.	Assessing Driver Performance
Brookhuis, K.A., van Driel, C.J.G., Hof, T., van Arem, B., & Hoedemaeker, M. (2008). Driving with a congestion assistant; mental workload and acceptance. *Applied Ergonomics, 40*, 1019-1025. doi: 10.1016/j.apergo.2008.06.010	General DVI Requirements, Automation
Brooks, C., & Rakotonirainy, A. (June, 2007). In-vehicle technologies: Advanced driver assistance systems and driver distraction: research challenges. In *International Conference on Driver Distraction*, Sydney, Australia. p. 471-486.	General DVI Requirements
Brown, C.M. & Noy, Y.I. (2004). Behavioral adaptation to in-vehicle safety measures: Past ideas and future directions. *Proceedings of the International Conference on Traffic and Transport Psychology* (pp. 25-46). Bern, Switzerland: Swish Council for Accident Protection.	Automation
Brown, C.M. (2001). The concept of behavioural adaptation: Does it occur in response to land departure warnings? *Proceedings of the International Conference on Traffic and Transport Psychology.*	Automation
Brown, J. L., Reagle, G., Richard, C., Campbell, J. L, and Lichty, M. G. (2010). *Commercial vehicle driver-vehicle interface needs specification. Task 3 report: Conduct interviews.* (Report to Virginia Tech Transportation Institute for National Highway Traffic Safety Administration). Seattle, WA: Battelle.	Message Characteristics, Sensory Modality for HVs
Brown, J., McCallum, M., Campbell, J., & Richard, C. (2007). *Integrated Vehicle-Based Safety System (IVBSS) heavy truck driver vehicle interface (DVI) specifications (final version)* (UMTRI-2008-27). Ann Arbor: University of Michigan Transportation Research Institute.	HV Design Considerations
Brown, J.L., Reagle, G., Richard, C., Campbell, J. L., & Lichty, M. G. (2010). *Commercial vehicle driver-vehicle interface needs specification. Task 3 report: Conduct interviews*. Seattle, WA: Battelle.	Sensory Modality for HVs, HV Visual Display Location
Brown, J.L., Richard, C., Campbell, J.L., & Lichty, M.G. (2012). *Human factors support for safety pilot. Task 2: Interface criteria for safety pilot, model deployment* (Final report to Federal Highway Administration). Seattle, WA: Battelle Center for Human Performance & Safety.	System Integration
Brown, S.B., Lee, S.E., Perez, M.A., Doerzaph, Z.R., Neale, V.L., & Dingus, T.A. (2005). Effects of haptic brake pulse warnings on driver behavior during an intersection approach. *Proceedings of the Human Factors and Ergonomics Society 49th Annual Meeting,* 1892-1896.	Haptic Interfaces
Brown, T. L., Lee, J. D., & McGehee, D. V. (2000). Attention-based model of driver performance in rear-end collisions. *Transportation Research Record*, 1724, 14-20.	General DVI Requirements
Brown, T. L., Lee, J. D., & Mcgehee, D. V. (2001). Human performance models and rear-end collision avoidance algorithms. *Human Factors*, *43*(3), 462-482.	Assessing Driver Performance
Bruyas, M.-P., Brusque, C., Tattegrain, H., Auriault, A., Aillerie, I., & Duraz, M. (2008). Consistency and sensitivity of lane change test according to driving simulator characteristics. *IET Intelligent Transport Systems*, *2*(4), 306-314.	Assessing Driver Performance
Burns, P.C., Bengler, K., & Weir, D.H. (2010). Driver metrics, an overview of user needs and uses. In G.L. Rupp, (Ed.), *Performance Metrics for Assessing Driver Distraction: The Quest for Improved Road Safety*. Warrendale, PA: SAE International.	Assessing Driver Performance
Butler, R. (2005). Safety with subtlety. *Professional Engineering*, 43-44.	Driver Inputs
Caird, J. K., Chisholm, S. L., & Lockhart, J. (2008). Do in-vehicle advanced signs enhance older and younger drivers' intersection performance? Driving simulation and eye movement results. *International Journal of Human-Computer Studies, 66*(3), 132-144.	General DVI Requirements, Visual Interfaces, Assessing Driver Performance
Caird, J. K., Chisholm, S. L., Lockhard, J., Vacha, N., Edwards, C. J., Creaser, J. I., & Hatch, K. (2006). *In-vehicle intelligent transportation system (ITS) countermeasures to improve older driver intersection performance*. (Report No. TP 14610E). Ontario: Transport Canada.	Message Characteristics, Visual Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Cairney, P. (2003). *Implications of intelligent transport systems for high risk road users and high risk situations*. Sydney, Australia: Austroads Inc.	General DVI Requirements
Campbell, J. L., Carney, C., and Kantowitz, B. H. (1998). *Human factors design guidelines for advanced traveler information systems (ATIS) and commercial vehicle operations (CVO)* (FHWA-RD-98-057). Washington, DC: Federal Highway Administration.	General DVI Requirements, Driver Needs, Message Characteristics
Campbell, J. L., Richard, C. M., Brown, J. L., & McCallum, M. (2007). *Crash warning system interfaces: Human factors insights and lessons learned*. (Report No. DOT HS 810 697). Washington, DC: National Highway Traffic Safety Administration.	Driver Needs, Visual Interfaces, Auditory Interfaces
Campbell, J. L., Richman, J. B., Carney, C., and Lee, J. D. (2004). *In-vehicle display icons and other information elements, Volume I: Guidelines* (FHWA-RD-03-065). McLean, VA: Federal Highway Administration.	Driver Needs, Message Characteristics, Driver Inputs, Visual Interfaces
Campbell, J.L., Bittner, A.C., Jr., Lloyd, M., Mitchell, E., & Everson, J.H. (1997). *Driver-vehicle interface (DVI) design guidelines for the intersection collision avoidance (ICA) system* (Final Report). Seattle, WA: Battelle Human Factors Transportation Center.	Auditory Interfaces
Campbell, J.L., Carney, C., and Kantowitz, B.H. (1998). *Human factors design guidelines for advanced traveler information systems (ATIS) and commercial vehicle operations (CVO)* (FHWA-RD-98-057). Washington, DC: Federal Highway Administration.	Visual Interfaces, Driver Inputs
Campbell, J.L., Hooey, B.H., Carney, C., Hanowski, R. J., Gore, B. F., Kantowitz, B. H., & Mitchell, E. (1996). *Investigation of alternative displays for side collision avoidance systems* (Final Report). Seattle, WA: Battelle Seattle Research Center.	Auditory Interfaces, Driver Inputs
Campbell, J.L., Richard, C.M., Brown, J.L., & McCallum, M. (2007). *Crash warning system interfaces: Human factors insights and lessons learned, final report* (DOT HS 810 697). Washington, DC: National Highway Traffic Safety Administration. Retrieved from http://www.nhtsa.gov/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/2007/CWS_HF_Insights_Task_5_Final_Rpt.pdf	Driver Information, Visual Interfaces, Auditory Interfaces, HV Visual Displays
Campbell, J.L., Richman, J.B., Carney, C., & Lee, J.D. (2004). *In-vehicle display icons and other information elements, Volume I: Guidelines* (FHWA-RD-03-065). McLean, VA: Federal Highway Administration. Retrieved from http://www.fhwa.dot.gov/publications/research/safety/03065/index.cfm	Message Characteristics, Auditory Interfaces, Driver Inputs
Carney, C., Campbell, J. L., & Mitchell, E. A. (1998). *In-vehicle display icons and other information elements: Literature review* (Report No. FHWA RD 98 164). Washington, DC: Federal Highway Administration.	Visual Interfaces
Carsten, O. (2001). Driver assistance systems: Safe or unsafe. *Proceedings of the International Conference on Traffic and Transport Psychology – ICTTP 2000*. Bern, Switzerland: Swiss Council for Accident Prevention.	Driver Inputs, Automation
Carsten, O., Lai, F.C.H., Barnard, Y., Jamson, A.H., & Merat, N. (2012). Control task substitution in semiautomated driving: Does it matter what aspects are automated? *Human Factors: The Journal of the Human Factors and Ergonomics Society, 54*(5), 747-761. doi: 10.1177/0018720812460246	Automation
Cassidy, A.M. (2009). Mental models, trust, and reliance: Exploring the effect of human perceptions on automation use. (Master's Thesis). Naval Postgraduate School, Monterey, CA.	Automation
Castro, C., & Horberry, T., (Eds.). (2004). *The Human Factors of Transport Signs*. Boca Raton, FL: CRC Press.	Visual Interfaces
Catchpole, K. R., KcKeown, J. D., & Withington, D. J. (2004). Localizable auditory warning pulses. *Ergonomics*, *47*(7), 748-771.	Auditory Interfaces
Chan, A.H.S. & Ng, A.W.Y. (2009). Perceptions of implied hazard for visual and auditory alerting signals. *Safety Science*. *47*, 346-352.	Visual Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Chang, S.-H., Lin, C.-Y., Fung, C.-P., Hwang, J.-R., & Doong, J.-L. (2008). Driving performance assessment: Effects of traffic accident location and alarm content. *Accident Analysis & Prevention*, *40*(5), 1637-1643.	Auditory Interfaces
Chang, S.-H., Lin, C.-Y., Hsu, C.-C., Fung, C.-P., & Hwang, J.-R. (2009). The effect of a collision warning system on the driving performance of young drivers at intersections. *Transportation Research Part F: Traffic Psychology and Behaviour*, *12*(5), 371-380.	Auditory Interfaces
Chapman, P., Underwood, G., & Roberts, K. (2002). Visual search patterns in trained and untrained novice drivers. *Transportation Research Part F: Traffic Psychology and Behaviour*, *5*(2), 157-167.	Driver Needs
Charissis, V. & Papanastasiou, S. (2010). Human-machine collaboration through vehicle head up display interface. *Cognition, Technology and Work, 12*(1), 41-50.	Visual Interfaces
Charissis, V., & Naef, M. (2007). Evaluation of prototype automotive head-up display interface: Testing driver's focusing ability through a VR simulation. *2007 IEEE* Intelligent Vehicles Symposium (pp. 560-565).	Visual Interfaces
Charissis, V., Naef, M., Papanastsiou, S., & Vlanchos, G. (2008). Investigation of users' age and driving performance with the use of prototype automotive HUD system. *Proceedings of the 15th World Congress on Intelligent Transport Systems and ITS America's 2008 Annual Meeting*.	Visual Interfaces
Charlton, S. (2006) Conspicuity, memorability, comprehension, and priming in road hazard warning signs. *Accident Analysis & Prevention*, 38(3), 496-506.	Driver Needs
Chen, W.-H., Lee, S.-W., Kao, K.-C., & Chiou, J.-M. (2007). Young driver preferences and experimental investigation of audio and visual interface designs for in-vehicle information systems. *Transportation Research Board 86th Annual Meeting Compendium of Papers [CD ROM]*.	Visual Interfaces
Chen, W.-H., Lin, C.-Y., & Doong, J.-L. (2005). Effects of interface workload of in-vehicle information systems on driving safety. *Transportation Research Record, 1937*, 73-78.	Auditory Interfaces, System Integration
Chiang, D., Brooks, A., & Llaneras, E. (2004). *Final task report: Investigation of multiple collision alarm interference driving simulator study* (Report for the National Highway Safety Administration). Torrance, CA: Dynamic Research.	Auditory Interfaces, System Integration
Chien, C. & Ioannou, P.A. (1992). Automatic vehicle following. *Proceedings of the 1992 American Control Conference*. (pp. 1748-1752). Chicago, IL: IEEE	Automation
Cholewiak, R.W. & Craig, J.C. (1984). Vibrotactile pattern recognition and discrimination at several body sites. *Perception and Psychophysics, 35*(6), 503-514.	Haptic Interfaces
Chun, J., Han, S.H., Park, G., Seo, J., Lee, I., & Choi, S. (2012). Evaluation of vibrotactile feedback for forward collision warning on the steering wheel and seatbelt. *International Journal of Industrial Ergonomics, 42*, 443-448.	Haptic Interfaces
CIE 146:2002. (2002). *CIE equations for disability glare*. Vienna, Austria: International Commission on Illumination.	Visual Interfaces
Cnossen, F., Brookhuis, K. A., & Meijaman, T. (1997). The effects of in-car information on mental workload: A driving simulator study. Simulators and Traffic Psychology. *Proceedings of the Human Factors and Ergonomics Society HFES Europe Chapter Annual Meeting* (pp. 151-161). Groningen State University, The Netherlands.	General DVI Requirements
Cohn, T. E. (1995). Engineered visibility warning signals: An IDEA project. *Proceedings of Step Forward. Intelligent Transport Systems World Congress,* 452-457.	Visual Interfaces
Cole, B.L. & Hughes, P.K. (1984). A field trial of attention and search conspicuity. *Human Factors*, *26*, 299-313.	Assessing Driver Performance
Commission of the European Communities (2007). *Commission recommendation on safe and efficient in-vehicle information and communication systems: Update of the European Statement of Principles on human machine interface.* Brussels, Belgium: European Union. Retrieved October 28, 2010 from http://www.umich.edu/~driving/safety/guidelines.html	Message Characteristics, Visual Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
COMSIS Corporation. (1996). *Preliminary human factors guidelines for crash avoidance warning devices* (NHTSA Project No. DTNH22-91-07004). Silver Spring, MD: Author.	Safety Messages, Message Characteristics, Visual Interfaces, Auditory Interfaces, Driver Inputs, HV Design Considerations
Cullinane, B. & Kirn, C. (2012). Timely comprehension: A methodology for evaluating integration of in-vehicle warning systems. *Presented at SAE 2012 World Congress & Exhibition.* doi:10.4271/2012-01-0100	Message Characteristics
Cummings, M., Kilgore, R., Wang, E., Tijerina, L., & Kochhar, D. (2007). Effects of single versus multiple warnings on driver performance. *Human Factors, 49*(6), 1097-1106.	System Integration
Daimon, T., Kawashima, H., Yamada, S., & Iwasaki, Y. (2000). Study on human interface for multi-information environment of in-vehicle information systems-Integration of headway warning and blind-spot warning information. *Proceedings of the 7th World Congress on Intelligent Systems.*	System Integration
Danielsson, L., Lind, H., & Jonasson, S. (2007). INSAFES HCI principles for integrated ADAS applications. *Universal Access in Human-Computer Interaction, Ambient Interaction, 4555*.	System Integration
Davidse, R. J., Hagenzieker, M. P., van Wolffelaar, P. C., & Brouwer, W. H. (2009). Effects of In-Car Support on Mental Workload and Driving Performance of Older Drivers. *Human Factors*, *51*(4), 463-476.	General DVI Requirements
Davis, G. A., Hourdos, J., Xiong, H., & Chatterjee, I. (2011). Outline for a causal model of traffic conflicts and crashes. *Accident Analysis & Prevention*, *43*(6), 1907-1919.	Assessing Driver Performance
De Boer, J., Chaziris, A., Vreeswijk, J., Bie, J., & Van Arem, B. (2010). The accuracy and timing of pedestrian warnings at intersections: The acceptance from drivers and their preferences. *13th International IEEE Conference*, 1849-1854.	Message Characteristics
de Groot, S., de Winter, J. C. F., Garcia, J. M. L., Mulder, M., & Wieringa, P. A. (2011). The effect of concurrent bandwidth feedback on learning the lane-keeping task in a driving simulator. *Human Factors*, *53*(1), 50-62	Haptic Interfaces
de Vos, A.P., Godthelp, J., & Kappler, W.D. (1999). Subjective and objective assessment of manual, supported, and automated vehicle control. In: J.P. Pauwelussen (Ed.), *Vehicle Performance* (pp. 97-120). Exton, PA: Swets and Zeitlinger, Lisse.	Assessing Driver Performance
Deatherage, B. H. (1972). Auditory and other sensory forms of information presentation. In H.P. Van Cott & R.G. Kinkade (Eds.), *Human engineering guide to equipment design* (rev. ed.) (pp. 123-160). Washington, DC: U.S. Government Printing Office.	Message Characteristics, Automation
DeLucia, P. R., & Tharanathan, A. (2009). Responses to deceleration during car following: Roles of optic flow, warnings, expectations, and interruptions. *Journal of Experimental Psychology: Applied*, *15*(4), 334-350.	Driver Needs
Dementienko, V. V., & Markov, A. G. (2006). Alertron – Monitoring driver's vigilance based on electrodermal activity. *Proceedings of the 13th ITS World Congress.*	Automation
Desmond, P. A., & Hancock, P. A. (2001). Active and passive fatigue states. In P.A. Hancock & P.A. Desmond (Eds.) *Human factors in transportation: Stress, workload, and fatigue* (pp. 455-465). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers, Mahwah, N	General DVI Requirements
Di Stasi, L. L., Contreras, D., Canas, J. J., Candido, A., Maldonado, A., & Catena, A. (2010). The consequences of unexpected emotional sounds on driving behavior in risky situations. *Safety Science*, *48*(10), 1463-1468.	Auditory Interfaces
Dick, V., Murray, D., and Houser, A. (2006). A synthesis of commercial motor vehicle safety technology surveys: What have we learned? *Transportation Research Board 2006 Annual Meeting Compendium of Papers* [CD ROM].	Driver Needs
Diederichs, J. P. F., Marberger, C., & Hinder, V. (2010). Iterative design and assessment of an audio visual warning concept for Car2x communication systems. *Proceedings of the 17th ITS World Congress*.	Auditory Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Dijksterhuis, C., Kroiss, C., & Waard D. (2010). Adaptive driving support: Information about the vehicle's lateral position. Human Factors: A System View of Human, Technology And Organisation. *Annual Conference of the European Chapter of the Human Factors And Ergonomics Society 2009* (pp. 71-87). Maastricht, The Netherlands: Shaker Publishing.	Visual Interfaces, System Integration, Automation
Dinges, D., Maislin, G., Krueger, G., Brewster, R., & Carroll, R. (2005). *Pilot test of fatigue management technologies* (RN-FMCSA-RT-05-002). Washington DC: Federal Motor Carrier Safety Administration.	System Integration, CWS Driver Controls in HVs
Dingus, T. A., Hetrick, S., & Mollenhauer, M. (1999). Empirical methods in support of crash avoidance model building and benefits estimation. *ITS Journal*, *5*(2), 93-125.	Assessing Driver Performance
Dingus, T. A., Jahns, S. K., Horowitz, A. D., and Knipling, R. (1998). Human factors design issues for crash avoidance systems. In W. Barfield and T. A. Dingus (Eds.), *Human factors in intelligent transportation systems* (pp. 55– 93). Mahwah, NJ: Lawrence Erlbaum Associates.	Driver Needs, Message Characteristics
Dingus, T. A., Klauer, S. G., Neale, V. L., Petersen, A., Lee, S. E., & Sudweeks, J. D. et al. (2006). *The 100-car naturalistic driving study, phase II – Results of the 100-car field experiment* (Report No. DOT HS 810 593). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements, Assessing Driver Performance
Dingus, T. A., McGehee, D. V., Manakkal, N., & Jahns, S. K. (1997). Human factors field evaluation of automotive headway maintenance/collision warning devices. *Human Factors, 39*(2), 216-229.	Visual Interfaces, Auditory Interfaces
Dobbins, T. & McKinley, A. (2008). Integration issues of tactile displays in military environments. In J. B. F. van Erp & B.P. Self (Eds.), *RTO-TR-HFM-122 - Tactile displays for orientation, navigation and communication in air, sea and land environments* (Chapter 5). NATO Science and Technology Organization. Retrieved from https://www.cso.nato.int/pubs/rdp.asp?RDP=RTO-TR-HFM-122	Haptic Interfaces
Doerzaph, Z., Sullivan, J., Bowman, D. & Angell, L. (2013). *Connected vehicle integration research and design guidelines development: Integration, Task 5* (Report submitted to National Highway Traffic Safety Administration; Contract No. DTNH22-11-D-00236/0001). Blacksburg: Virginia Tech Transportation Institute.	System Integration
Döetzer, F., Kosch, T., & Strassberger, M. (2005). Classification for traffic related inter-vehicle messaging. *Proceedings of the 5th IEEE International Conference on ITS Telecommunications*.	System Integration
Dorneich, M.C., Ververs, P.M., Mathan, S., Whitlow, S., & Hayes, C.C. Considering etiquette in the design of an adaptive system. *Journal of Cognitive Engineering and Decision Making, 6* (2), 243-265.	Automation
Doshi, A., Cheng, S.U., & Trivedi, M.M. (2009). A novel active heads-up display for driver assistance. *IEEE Transactions on Systems, Man, and Cybernetics - Part B: Cybernetics, 39*(1), 85-93.	Visual Interfaces
Dozza, M. (2013). What factors influence drivers' response time for evasive maneuvers in real traffic. *Accident Analysis and Prevention, 58*, 299-308.	Safety Messages
Dragutinovic, N., Brookhuis, K.A., Hagenzieker, M.P. & Marchau, V.A. (2005). Behavioural effects of Advanced Cruise Control use-A meta-analytic approach. *European Journal of Transport and Infrastructure Research, 5*(4), 267-280.	Automation
Duchowski, A. (2007) Eye-tracking methodology: Theory and practice (2nd Ed.). London: Springer –Verlag.	Assessing Driver Performance
Easterby, R.S. (1970). The perception of symbols for machine displays. *Ergonomics*, *13*(1), 149-158.	Message Characteristics
Edworthy, J. & Hellier, E. (2000). Auditory warnings in noisy environments. *Noise Health, 2*(6), 27-40.	Auditory Interfaces
Edworthy, J., Hellier, E., & Rivers, J. (2003). The use of male or female voices in warnings systems: A question of acoustics. *Noise Health, 6*(21), 39-50.	Auditory Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Edworthy, J., Loxley, S., & Dennis, I. (1991). Improving auditory warning design: Relationship between warning sound parameters and perceived urgency. *Human Factors, 33*(2), 205-231.	Auditory Interfaces
Eick, E.-M. & Debus, G. (2005). Adaptation effects in an automated car-following scenario. *Proceedings of the International Conference of Traffic and Transport Psychology*. (pp. 243-255). Nottingham, England: Elsevier.	Automation
Enders, S. (2006). Effects of warning-coordination in vehicles – A new method to reduce the number of warnings in driving situations with coinciding warnings improves traffic safety. *Proceedings of the 13th ITS World Congress.*	System Integration
Endsley, M.R. & Kiris, E.O. (1995). The out-of the loop performance problem and level of control in automation. *Human Factors, 37*(2), 381-394.	Automation
Endsley, M.R. (2012). Situation awareness. In Salvendy, G. (Ed.), *Handbook of human factors and ergonomics, Fourth ed.* (Chapter 19). Hoboken, NJ: John Wiley & Sons.	Message Characteristics
Endsley, M.R., & Kaber, D.B. (1999). Level of automation effects on performance, situation awareness and workload in a dynamic control task. *Ergonomics, 42*(3), 462-492.	Automation
Engstroem, J. & Maard, S. (2007). *SafeTE final report* (Report No. 2007:36). Vaegverket. Retrieved from the Transportation Research Board TRID website at http://trid.trb.org/view.aspx?id=862648	Assessing Driver Performance
Engstroem, J. (2010). The tactile detection task as a method for assessing drivers' cognitive load. In G.L. Rupp, (Ed.), *Performance Metrics for Assessing Driver Distraction: The Quest for Improved Road Safety*. Warrendale, PA: SAE International.	Assessing Driver Performance
Engstrom, J., & Hollnagel, E. (2007). A general conceptual framework for modelling behavioural effects of driver support functions. In, P.C. Cacciabue (Ed.), *Modelling Driver Behaviour in Automotive Environments. Critical Issues in Driver Interactions with Intelligent Transport Systems* (pp. 61-84). Springer, New York, NY.	Message Characteristics, System Integration
Engstrom, J., Johansson, E., & Ostlund, J. (2005). Effects of visual and cognitive load in real and simulated motorway driving. *Transportation Research Part F: Traffic Psychology and Behaviour, 8*(2), 97-120.	Integration
Eoh, H., Green, P. A., Schweitzer, J., & Hegedus, E. (2006). *Driving performance analysis of the advanced collision avoidance system (ACAS) field operational test (FOT) data and recommendations for a driving workload manager*. (Report No. UMTRI-2006-18). Ann Arbor: University of Michigan Transportation Research Institute.	General DVI Requirements
Ericson, M.A., Bolia, R.S. & Nelson, W.T. (1999). Operational constraints on the utility of virtual audio cueing. *Proceedings of the Human Factors and Ergonomics Society 43rd Annual Meeting***,** 1206-1209.	Auditory Interfaces
Eriksson, H. G. (2009). The VAIST concept to train novice driver: An approach taking advantage of temporal sequence learning with a closed loop check procedure to mentally program a driver. *Proceedings of the16th ITS World Congress and Exhibition on Intelligent Transport Systems and Services.*	Driver Needs
Erp, J. B. F. (2005) Vibrotactile spatial acuity on the torso: Effects of location and timing parameters. Proceedings of the First Joint Eurohaptics Conference and Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems. Washington, DC: IEEE Computer Society.	Haptic Interfaces
Ervin, R., Bogard, S. & Fancher, P. (2000). Exploring implications of the deceleration authority of adaptive cruise control for driver vigilance. *Proceedings of the 7th World Congress on Intelligent Systems*.	Automation
Fagerlönn, J. (2010). Distracting effects of auditory warnings on experienced drivers. *The 16th International Conference on Auditory Display (ICAD-2010).*	General DVI Requirements, Auditory Interfaces
Fagerlönn, J. (2011). *Designing auditory warning signals to improve the safety of commercial vehicles* [Doctoral Thesis]. Luleå University of Technology, Sweden. Retrieved from http://www.dissertations.se/dissertation/a18581656e/	Auditory Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Fagerlönn, J. (2011). Urgent alarms in trucks: Effects on annoyance and subsequent driving performance. *IET Intelligent Transport Systems*, *5*(4), 252-258	Auditory Interfaces
Fagerlönn, J., & Alm, H. (2010). Auditory signs to support traffic awareness. *IET Intelligent Transport Systems*, *4*(4), 262-269.	Auditory Interfaces
Falkmer, T., & Gregerson, N. P. (2005). A comparison of eye movement behavior of inexperienced and experienced drivers in real traffic environments. *Optometry and Vision Science*, *82*(8), 732-739.	Assessing Driver Performance
Farber, E., & Matle, C. (1989). PCDETECT: A revised version of the DETECT seeing distance model. *Transportation Research Record, 1213,* 11-20.	Visual Interfaces
Federal Aviation Administration. (2013). *Manual flight operations* (Safety Alert for Operators (SAFO) 13002). Retrieved from the Federal Aviation Administration website at http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo/all_safos/media/2013/SAFO13002.pdf.	Automation
Federal Highway Administration (FHWA). (2009). *Manual on uniform traffic control devices, 2009 edition*. Washington, DC: Author.	Visual Interfaces
Federal Motor Carrier Safety Administration (FMCSA). (2013). *Summary of HOS regulations as of July 1, 2013*. Available online: http://www.fmcsa.dot.gov/documents/hos/HOS-RegulationsSummary-7-1-2013.pdf	HV Auditory Displays
Federal Motor Carrier Safety Administration (FMCSA). (n.d.). *Share the road safely. Supporting materials campaign graphics* [webpage]. Retrieved from http://www.sharetheroadsafely.org/SupportingMaterials/Graphics.asp	HV Visual Display Location
Federal Motor Vehicle Safety Standard (FMVSS) No. 101, *Controls and displays*, 36 FR 22902 (proposed Dec. 2, 1971) to be codified at 49 C.F.R. pt.571.101. sec. 5.2.9. Retrieved from http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR	Driver Inputs
Federal Motor Vehicle Safety Standard (FMVSS) No. 208, *Occupant crash protection* [Docket No. 74-14; Notice 103], RIN 2127-AG14, to be codified at 49 C.F.R. pt. 571. 208. Retrieved from http://www.nhtsa.dot.gov/cars/rules/rulings/Labels5.mlv.html	Visual Interfaces
Fitch, G. M., Hankey, J. M., Kleiner, B. M. & Dingus, T. A. (2011). Driver comprehension of multiple haptic seat alerts intended for use in an integrated collision avoidance system. *Transportation Research Part F: Traffic Psychology and Behavior, 14*(4), 278-290.	Haptic Interfaces
Fitch, G. M., Keifer, R. J., Hankey, J.M., & Kleiner, B. M. (2007). Toward developing an approach for alerting drivers to the direction of a crash threat. *Human Factors*, *49*(4), 710.-720.	Haptic Interfaces, Safety Messages
Fitch, G. M., Keifer, R. J., Kleiner, B. M., & Hankey, J.M. (2007). Identifying the pattern of localization responses with a haptic seat indented to alert drivers to the direction of a crash threat. *Proceedings of the Human Factors and Ergonomics Society 51st Annual Meeting*, 1517-1521.	Haptic Interfaces
Fitch, G.M., Blanco, M., Camden, M. C., Olson, R.L., McClafferty, J., Morgan, J.F., Hanowski, R.J. (2011). *Field demonstration of heavy vehicle camera/video imaging systems: Final report* (DOT HS 811 475). Washington, DC: National Highway Traffic Safety Administration.	HV Visual Displays
Fitch, G.M., Hankey, J.M., Kleiner, B.M., & Dingus, T. (2011). Driver comprehension of haptic seat alerts intended for use in an integrated collision avoidance system. *Transportation Research Part F: Traffic Psychology and Behaviour, 14*, 278-290.	Haptic Interfaces
Fitts, P.M. (1951). *Human engineering for an effective air navigation and traffic control system*. National Research Council: Washington, DC.	Automation
Flemisch, F., & Schieben, A.(Eds.) (2009). *Validation of preliminary design by simulation* (Deliverable No. 33.3). Retrieved from the Highly Automated Vehicles for Intelligent Transport (HAVEit) website at http://haveit-eu.org/LH2Uploads/ItemsContent/24/HAVEit_212154_D33.3_Superfinal.pdf	Automation

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Foley, J. P. (2009). Now you see it, now you don't: Visual occlusion as a surrogate distraction measurement technique. In J. D. L. &. K. L. Y. M.A. Regan (Editors), *Driver Distraction: Theory, Effects, and Mitigation* (pp. 123-134). Taylor & Francis.	Assessing Driver Performance
Forkenbrock, G., Snyder, D., Heitz, M., Hoover, R. L., O'Harra, B., Vasko, S., & Smith, L. (2011). *A test track protocol for assessing forward collision warning driver-vehicle interface effectiveness.* (Report No. DOT HS 811 501). Washington, DC: National Highway Traffic Safety Administration.	Message Characteristics, Assessing Driver Performance, Haptic Interfaces
Frascara, J. (2006). Typography and the visual design of warnings. In M.S. Wogalter (Ed.) *Handbook of Warnings* (pp. 385-406). Mahwah, NJ: Erlbaum.	Visual Interfaces
Fricke, N. & Manfred, T. (2009). Complimentary audio-visual collision warnings. *Proceedings of the Human Factors and Ergonomics Society 53rd Annual Meeting*. 1815-1819.	Safety Messages
Fricke, N. (2007). Effects of adaptive information presentation. *Proceedings of the 4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, 292-298.	Driver Needs, Auditory Interfaces, Safety Messages
Fu, J.S., Calcagno, J.A., Davis, W.T., & Alvarez, A. (2010). Evaluation of noise level, whole-body vibration, and air quality inside cabs of heavy-duty diesel vehicles. *Transportation Research Record,* 2194, 29-36. doi: 10.3141/2194-04	HV Design Considerations
Fuller, H., & Tsimhoni, O. (2009). *Glance strategies for using an in-vehicle touch-screen monitor*. (Report No. UMTRI-2009-5). Ann Arbor, MI: University of Michigan Transportation Research Institute.	General DVI Requirements
Gallace, A., Ho, T.Z., & Spence, C. (2007). Multisensory numerosity judgments for visual and tactile stimuli. *Perception & Psychophysics, 69*, 487-501.	Haptic Interfaces
Gallace, A., Tan, H.Z. & Spence, C. (2007). The body surface as a communication system: The state of the art after 50 years. *Presence, 16* (6), 655-676.	Haptic Interfaces
Garvey, P.M., Pietrucha, M.T., & Meeker, D. (1997). Effects of font and capitalization on legibility of guide signs. *Transportation Research Record, 1605*, 73-79.	Visual Interfaces
Gelau, C., Jahn, G., Krems, J. F., Uno, H., Kircher, A., Ostlund, J., & Nilsson, L. (2003). State-of-the-art of the SNRA/JARI/BAST joint research on driver workload measurement within the framework of IHRA-ITS. *Proceedings of 18th International Technical Conference on The Enhanced Safety of Vehicles*.	Message Characteristics, Assessing Driver Performance
Gelau, C., Sirek, J., & Dahmen-Zimmer, K. (2011). Effects of time pressure on left-turn decisions of elderly drivers in a fixed-base driving simulator. *Transportation Research Part F: Traffic Psychology and Behaviour, 14*(1), 76-86.	Message Characteristics
Gellatly, A.W. & Dingus, T.A. (1998). Speech recognition and automotive applications: Using speech to perform in-vehicle tasks. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 1247-1251.	Driver Inputs
General Motors and Delphi Delco Electronics Systems. (2002). *Automotive collision avoidance field operation test. Warning cue implementation summary report.* (Report No. DOT HS 809 462). Washington, DC: National Highway Traffic Safety Administration.	Driver Needs, Visual Interfaces, Safety Messages, Auditory Interfaces
General Motors Corporation. (2005). *Automotive collision avoidance system field operational test (ACAS FOT) final program report* (DOT HS 809 886). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements, Driver Needs, System Integration, Safety Messages, Driver Inputs
Gerdes, A. (2006). Driving manoeuvre recognition. *Proceedings of the 13th ITS World Congress.*	Automation
Gershon, P., Ben-Asher, N., & Shinar, D. (2012). Attention and search conspicuity of motorcycles as a function of their visual context. *Accident Analysis & Prevention*, *44*(1), 97-103.	Driver Needs

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Gibson, C. P. (1980). Binocular disparity and head-up displays. *Human Factors*, *22*(4), 435-444.	Visual Interfaces
Gibson, J.J. & Crooks, L. (1938). A theoretical field-analysis of automobile driving. *American Journal of Psychology, 51*, 435-471.	Driver Training
Giddings, B.J. (1972). Alpha-numerics for raster displays. *Ergonomics, 15*(1), 65-72.	Visual Interfaces
Gish, K. W., & Staplin, L. (1995). *Human factors aspects of using head up displays in automobiles: A review of the literature*. (Report No. DOT HS 808 320). Washington, DC: National Highway Traffic Safety Administration.	Visual Interfaces
Gish, K., Staplin, L., Stewart, J., & Perel, M. (1999). Sensory and cognitive factors affecting automotive head-up display effectiveness. *Transportation Research Record*, *1694*, 10-19.	Visual Interfaces
Gkikas, N., Hill, J. R., & Richardson, J. H. (2010). Reset to Zero and Specify Active Safety Systems according to Real-World Needs. *Journal of Transportation Engineering*, *136*(5), 465-471.	General DVI Requirements
Göbel, M., Springer, J., & Scherff, J. (1998). Stress and strain of short haul bus drivers: Psychophysiology as a design oriented method for analysis. *Ergonomics, 41*(5), 563-580.	HV Visual Display Location
Gold, C., Damböck, D., Lorenz, L., & Bengler, K. (2013). "Take over!" How long does it take to get the driver back into the loop? *Proceedings of the Human Factors and Ergonomics Society 57th Annual Meeting*, 1938-1942.	Automation
Gold, C., Lorenz, L., Damböck, D., Bengler, K. (2013, November). *Partially automated driving as a fallback level of high automation*. Paper presented at Tagung Fahrerassistenzsysteme: Der weg zum automatischen fahren. Retrieved from http://mediatum.ub.tum.de/doc/1187198/1187198.pdf	Automation
Gonzalez, C., Lewis, B.A., Roberts, D. M., Pratt, S.M., & Baldwin, C.L. (2012). Perceived urgency and annoyance of auditory alerts in a driving context. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 56*(1), 1684-1687.	Auditory Interfaces
Goodrich, M.A. & Boer, E.R. (1999). Multiple mental models, automation strategies, and intelligent vehicle systems. *Proceedings of the IEEE/IEEJ/JSAI Conference on Intelligent Transportation Systems.* Tokyo, Japan.	Automation
Goodrich, M.A., & Boer, E.R. (2003). Model-based human-centered task automation: A case study in ACC system design. *IEEE Transactions on Systems, Man, and Cybernetics, Part A, Systems and Humans, 33*(3), 325-336.	Automation
Goodrich, M.A., Boer, E.R., & Inoue, H. (1999). A model of human brake initiation behavior with implications for ACC design. *Proceedings of IEE/IEEJ/JASI International Conference on Intelligent Transportation Systems*, 86-91.	Automation
Gorjestani, A., Shankwitz, C., & Donath, M. (June, 2000). Impedance control for truck collision avoidance. *Proceedings of the American Control Conference.* Chicago, IL.	HV Haptic Displays
Graham, R. (1999). Use of auditory icons as emergency warnings: Evaluation within a vehicle collision avoidance application. *Ergonomics*, *42*(9), 1233-1248.	Auditory Interfaces
Granda, T. M. (2001). Every user wins. *Traffic Technology International, Aug/Sep*, 106-108.	Visual Interfaces
Graving, J.S., Easterlund, P.A., & Manser, M.M. (2011). Developing a bus driver training program for a driver assistive system. *Proceedings of the Human Factors and Ergonomics Society 55th Annual Meeting*, 1543-1547.	Driver Training, Automation
Gray, R. (2011). Looming auditory collision warnings for driving. *Human Factors*, *53*(1), 63-74.	Driver Needs, Auditory Interfaces
Green, M. (2000). How long does it take to stop? Methodological analysis of driver perception-brake time. *Transportation Human Factors*, *2*(3), 195-216.	Safety Messages
Green, M. (2009). Perception-reaction time: Is Olson (and Sivak) all you need to know? *Collision, 4*(2), 88-93.	Safety Messages
Green, P. (1999). *Visual and task demands of driver information systems* (No. UMTRI-98-16). Ann Arbor: University of Michigan Transportation Research Institute.	Visual Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Green, P. (1999, April). The 15-second rule for driver information systems. *Proceedings of the ITS America Ninth Annual Meeting*.	General DVI Requirements
Green, P. (1999, September). Estimating compliance with the 15-second rule for driver-interface usability and safety. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 43*(18), 987-991.	Assessing Driver Performance
Green, P. (2004). Driver distraction, telematics design, and workload managers: Safety issues and solutions. *Convergence International Congress and Exposition on Transportation Electronics.*	System Integration
Green, P. (2008). Driver interface/HMI standards to minimize driver distraction/overload (SAE paper 2008 21-2002). *Convergence Conference Proceedings*. Warrendale, PA: Society of Automotive Engineers.	General DVI Requirements
Green, P. and Park, J.-S. (2013). Evaluation of a navigation radio using the think-aloud method. *International Journal of Vehicular Technology. 2013*, Article ID 705086, 12 pages. doi:10.1155/2013/192516	Assessing Driver Performance
Green, P., Levison, W., Paelke, G., and Serafin, C. (1995). Preliminary human factors guidelines for driver information systems (FHWA-RD-94-087 / UMTRI-93-21). Retrieved from http://deepblue.lib.umich.edu/bitstream/handle/2027.42/1098/88512.0001.001.pdf?sequence=2	General DVI Requirements
Green, P., Paelke, G., and Boreczky, J. (1992). The "potato head" method for identifying driver preferences for vehicle controls. *International Journal of Vehicle Design, 13*(4), 352-364.	Assessing Driver Performance
Green, P., Sullivan, J. M., Tsimhoni, O., Oberholtzer, J., Buonarosa, M. L., Devonshire, J., Schweitzer, J., Baragar, E., & Sayer, J. (2008). Integrated vehicle-based safety systems (IVBSS): Human factors and driver-vehicle interface (DVI) summary report. (Report No. DOT HS 810 905). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements, Auditory Interfaces, System Integration
Grote, G., Weik, S., Wäfler, T. & Zölch, M. (1995). Complementary allocation of functions in automated work systems. In Y. Anzai, K. Ogawa, & H. Mori (Eds.), *Symbiosis of Human and Artifact.* Amsterdam: Elsevier.	Automation
Grubb, G., Jakobsson, E., Beutner, A., Ahrholdt, M. & Bergqvist, S. (2009). Automatic queue assistance to aid under-loaded drivers. *Proceedings of the 16th ITS World Congress and Exhibition on Intelligent Transport Systems and Services*.	Message Characteristics , Automation
Grudin, J. (1989). The case against user interface consistency. *Communications of the ACM, 32*(10), 1164-1173.	General DVI Requirements
Guilluame, A., Drake, C., Rivenez, M., Pellieux, L., & Chastres, V. (2002). Perception of urgency and alarm design. *Proceedings of the 8th International Conference on Auditory Display*.	Auditory Interfaces
Gupta, S., Olson, R., & Hanowski, R. (2009). *Defensive driving tips for CMV drivers: An internet-based approach* (FMCSA RRT-09-003). Washington, DC: Federal Motor Carrier Safety Administration.	Considerations for DVIs in HVs
Habenicht, S., Winner, H., Bone, S., Sasse, F., & Korzenietz, P. (2011). A maneuver-based lane change assistance system. *IEEE Intelligent Vehicles Symposium (IV)*, Baden-Baden, Germany, 375-380.	Safety Messages
Haber, R. N. (1983). The impending demise of the icon: A critique of the concept of iconic storage in visual information processing. *The Behavioral and Brain Sciences, 6*(1), 1-54.	Visual Interfaces
Habibovic, A., & Davidsson, J. (2011). Requirements of a system to reduce car-to-vulnerable road user crashes in urban intersections. *Accident Analysis & Prevention*, *43*(4), 1570-1580.	Driver Needs, Message Characteristics, Safety Messages
Hancock, P.A. (2007). On the process of automation transition in multi-task human-machine systems. *Transaction of the IEEE on Systems, Man, and Cybernetics, Part A: Humans and Systems, 37*(4), 586-598.	Automation

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Hancock, P.A., Parasuraman, R. & Byrne, E.A. (1996). Driver-centered issues in advanced automation for motor vehicles. In R. Parasuraman & M. Mustapha (Eds.), *Human factors in transportation: Automation and human performance* (pp. 337-364.) Mahwah, NJ: Lawrence Erlbaum, Inc.	Automation
Hara, M., Ohta, M., Yamamoto, A., Yoshida, H. (1998). *Development of the brake assist system* (Paper No. 98-S2-P-17). Paper presented at the 16th International Technical Conference on the Enhanced Safety of Vehicles. Windsor, Canada. Available at http://www-nrd.nhtsa.dot.gov/pdf/esv/esv16/98s2p17.pdf	Safety Messages
Harb, R. C., Yan, X., Radwan, E., & Su, X. (2008). Crash avoidance analysis using classification trees and random forests. *Transportation Research Board 87th Annual Meeting Compendium of Papers* [CD ROM].	General DVI Requirements
Harbluk, J. L., Burns, P. C., Lochner, M., & Trbovich, P. L. (2007). Using the Lane-Change Test (LCT) to assess distraction: Tests of visual-manual and speech-based operation of navigation system interfaces. *Proceedings of the 4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, 16-22.	Assessing Driver Performance
Harbluk, J. L., Mitroi, J. S., & Burns, P. C. (2009). Three navigation systems with three tasks: Using the Lane-Change Test (LCT) to assess driver distraction demand. *Proceedings of the Fifth International Driving Symposium on Human Factors in Driving Assessment, Training and Vehicle*, 24-30.	Assessing Driver Performance
Harder, K. A., Bloomfield, J., & Chihak, B. J. (2003). *The effectiveness of auditory side- and forward-collision avoidance warnings in winter driving conditions*. (Final Report MN/RC-2003-14). St. Paul: Minnesota Department of Transportation.	Auditory Interfaces
Harms, L. & Tornos, J. (2004). The brake activity of car drivers and that of an automatic brake system in simulated critical and non-critical driving scenarios. In T. Rothengatter & R.D. Huguenin (Eds.), *Proceedings of Traffic and Transport Psychology* (pp. 317-322). Kidlington, UK: Elsevier.	Automation
Harpster, J., Huey, R., Lerner, N., Steinberg, G., & Perel, M. (1997). Preliminary human factors guidelines for automobile backing warning systems. *Merging the Transportation and Communications Revolutions. Abstracts for ITS America Seventh Annual Meeting and Exposition.*	Visual Interfaces
Hart, S.G. & Staveland, L.E. (1988). Development of NASA TLX (Task Load Index): Results of empirical and theoretical research. In P.A. Hancock and N. Meshkati (Eds.), *Human mental workload* (pp. 139-183). Amsterdam: New Holland Press.	General DVI Requirements
Hassan, R. & McManus, K. (2002). Perception of low frequency vibrations by heavy vehicle drivers. *Journal of Low Frequency noise, Vibration and Active* Control*, 21*(2), 65-76.	HV Haptic Displays
Hatakenaka, H., Kanoshima, H., Aya, T., Nishii, S., Mizutani, H., & Nagano, K. (2008). Development and verification of effectiveness of an AHS safe merging support service. *Proceedings of the 15th World Congress on Intelligent Transport Systems and ITS America's 2008 Annual Meeting.*	Visual Interfaces, Auditory Interfaces
Haufe, S., Treder, M. S., Gugler, M. F., Sagebaum, M., Curio, G., & Blankertz, B. (2011). EEG potentials predict upcoming emergency brakings during simulated driving. *Journal of Neural Engineering, 8*(5), 1-11.	Message Characteristics
Hecht, D. & Reiner, M. (2009). Sensory dominance in combinations of audio, visual and haptic stimuli. *Experimental Brain Research, 193*, 307-314.	Safety Messages
Heide, A. & Henning, K. (2006). The "cognitive car": A roadmap for research issues in the automotive sector. *Annual Reviews in Control, 30*(2). 197-203.	Automation
Hellier, E. & Edworthy, J. (1989). Quantifying the perceived urgency of auditory warnings. *Canadian Acoustics, 17*(4), 3-11.	Auditory Interfaces
Hensher, D.A. (2014). The relationship between bus contract costs, user perceived service quality and performance assessment. *International Journal of Sustainable Transportation, 8:5* (27), 5-27. doi: 10.1080/15568318.2012.758454 (Accepted author version posted online: 22 Jan 2013. Published online: 24 Jun 2013).	HV Haptic Displays

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Hickman, J. S., Hanowski, R. J., & Bocanegra, J. (2009). *Distraction in commercial trucks and buses: Assessing prevalence and risk in conjunction with crashes and near-crashes* (Report No. FMCSA-RRR-10-049).Washington, DC: Federal Motor Carrier Safety Administration.	General DVI Requirements
Higuchi, M. & Raksincharoensak, P. (2010). Seat vibrotactile warning interface for forward vehicle collision avoidance. *Proceedings of the SICE Annual Conference 2010*, 1370-1373.	Haptic Interfaces
Hilburn, B., Molloy, R., Wong, D., & Parasuraman, R. (1993). Operator versus computer control of adaptive automation. *Proceedings of the 7th International Symposium on Aviation Psychology* (pp. 161-166). Columbus, OH: The Ohio State University.	Automation
Hirst, S., & Graham, R. A. (1997). The format and presentation of collision warnings. In Y. I. Noy (Ed.), *Human Factors in Transportation: Ergonomics and Safety of Intelligent Driver Interfaces.* Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.	Visual Interfaces, Auditory Interfaces, System Integration
Hjalmdahl, M. & Varhelyi, A. (2004). Speed regulation by in-car active accelerator pedal - Effects on driver behavior. *Transportation Research Part F: Traffic Psychology and Behaviour, 7*, 77-94.	Haptic Interfaces
Ho, A. W. L., Cummings, M. L., Wang, E., Tijerina, L., & Kochhar, D. S. (2006). Integrating intelligent driver warning systems: Effects of multiple alarms and distraction on driver performance. *Proceedings of the 85th Transportation Research Board Annual Meeting Compendium of Papers* [CD ROM].	System Integration
Ho, C. & Spence, C. (2008) *The multisensory driver: Implications for ergonomic car interface design*. Hampshire, England: Ashgate.	Driver Needs
Ho, C. & Spence, C. (2009). Using peripersonal warning signals to orient a driver's gaze. *Human Factors, 51*(4), 539-556.	Driver Needs, Auditory Interfaces
Ho, C., Reed, N., & Spence, C. (2006). Assessing the effectiveness of "intuitive" vibrotactile warning signals in preventing front-to-rear-end collisions in a driving simulator. *Accident Analysis & Prevention*, *38*(5), 988-996.	Haptic Interfaces
Ho, C., Reed, N., & Spence, C. (2007). Multisensory in-car warning signals for collision avoidance. *Human Factors*, *49*(6), 1107-1114.	Driver Needs
Ho, C., Tan, H. Z., & Spence, C. (2005). Using spatial vibrotactile cues to direct visual attention in driving scenes. *Transportation Research Part F: Traffic Psychology and Behaviour, 8*(6), 397-412.	Haptic Interfaces
Ho, C., Tan, H. Z., & Spence, C. (2006). The differential effect of vibrotactile and auditory cues on visual spatial attention. *Ergonomics*, *49*(7), 724-738.	Auditory Interfaces, Haptic Interfaces
Hoc, J.-M., Young, M.S., & Blosseville, J.-M. (2009). Cooperation between drivers and automation: Implications for safety. *Theoretical Issues in Ergonomics Science, 10*(2), 135-160.	Automation
Hoedemaeker, M. & Kopf, M. (2001). Visual sampling behaviour when driving with adaptive cruise control. *Paper presented at the Vision-in-Vehicles IX Conference,* Brisbane, Australia.	Assessing Driver Performance
Hoedemaeker, M., & Neerincx, M. (2007). Attuning in-car user interfaces to the momentary cognitive load: Foundations of augmented cognition. *FAC'07 Proceedings of the 3rd International Conference on Foundations of Augmented Cognition.*	System Integration
Hoeger, R., Zeng, H., Hoess, F., Kranz, T., Boverie, S., Straus, M., Jakobsson, E., … Nilsson, A. (2011). *The future of driving. Deliverable D61.1. Final Report. Version 1.0* (Report for the Highly Automated Vehicles For Intelligent Transport [HAVEit] 7th Framework Programme). Retrieved from http://www.haveit-eu.org/displayITM1.asp?ITMID=24&LANG=EN	Automation
Hoffman, J. D., Lee, J. D., McGehee, D. V., Macias, M., & Gellatly, A. W. (2005). Visual sampling of in-vehicle text messages: Effects of number of lines, page presentation, and message control. *Transportation Research Record, 1937*, 22-30.	Message Characteristics, Driver Inputs , Visual Interfaces

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Reference	DVI Design Topic(s)
Hogema, J. H., & Janssen, W. H. (1996). Effects of intelligent cruise control and driving behavior: A simulator study. *Intelligent Transportation: Realizing the Future. Abstracts of the Third World Congress on Intelligent Transport Systems.*	Driver Inputs
Hogema, J. H., De Vries, S. C., Van Erp, J. B. F., & Kiefer, R. J. (2009). A tactile seat for direction coding in car driving: Field evaluation. *IEEE Transactions on Haptics*, *2*(4), 181-188.	Haptic Interfaces
Hogema, J.H., Sjoerd, C.D.V., Van Erp, J., & Kiefer, R.J. (2009). A tactile seat for direction coding in car driving: Field evaluation. *IEEE Transaction on Haptics*, *2*(4), 181-188.	Haptic Interfaces
Hollnagel, E. (2004). Automation and human work. In C. Sandom & R.S. Harvey, (Eds.), *Human Factors for Engineers.* London: Institute of Engineering and Technology.	Automation
Hollnagel, E., & Bye, A. (2000). Principles for modeling function allocation. *International Journal of Human-Computer Studies, 52*(2), 253-265.	Automation
Holmes, L., Doerzaph, Z., Klauer, S., & Smith, R. (2013). *Volume 5 - Driver vehicle interface (DVI) interaction and task interruption final research report* (Unpublished Task 4 interim report prepared for National Highway Traffic Safety Administration under contract DTNH22-12R-00629).	Integration
Holmquist, K., Nyström, M., Andersson, R., Dewhurst, R., Jaradzka, H., & van de Weijer, J. (2011). *Eye-tracking: A comprehensive guide to methods and measures.* Oxford: Oxford University Press.	Assessing Driver Performance
Horberry, T., Stevens, A., Cotter, S., Robbins, R., & Brunett, G. (2007). *Development of an occlusion protocol with design limits for assessing driver visual demand*. (Report No. PPR256). TRL.	Assessing Driver Performance
Horberry, T., Stevens, A., Cotter, S., Robbins, R., & Brunett, G. (2008). *Development of an occlusion protocol with design limits for assessing driver visual demand* (Report No. PPR256). Retrieved from the TRL website at http://www.trl.co.uk/online_store/reports_publications/trl_reports/cat_intelligent_transport_systems/report_development_of_an_occlusion_protocol_with_design_limits_for_assessing_driver_visual_demand.htm	Assessing Driver Performance
Horowitz, A.D. & Dingus, T.A. (1992). Warning signal design: A key human factors issue in an in-vehicle front-to-rear-end collision warning system. *Proceedings of the Human Factors Society 36th Annual Meeting*, 1011-1013.	Driver Needs, Safety Messages
Horrey, W. J., & Wickens, C. D. (2004). Driving and side task performance: The effects of display clutter, separation, and modality. *Human Factors*, *46*(4), 611-624.	Message Characteristics
Horrey, W., & Wickens, C. (2007). In-vehicle glance duration: Distributions, tails, and model of crash risk. *Transportation Research Record*, *2018*, 22-28.	Driver Needs, Visual Interfaces
Horrey, W.J., Wickens, D.D., & Alexander, A.L. (2003). The effects of head-up display clutter and in-vehicle display separation on concurrent driving performance. *Proceedings of the Human Factors and Ergonomics Society 47th Annual Meeting*. 1880-1884.	Visual Interfaces
Horvitz, E. (1999). Principles of mixed-initiative user interfaces. *Proceedings of CHI '99, ACM SIG-CHI Conference on Human Factors in Computing Systems*, Pittsburgh, PA.	Automation
Houser, A., Pierowicz, J., & Fuglewicz, D. (2005). *Concept of operations and voluntary operational requirements for Lane Departure Warning System (LDWS) on-board commercial motor vehicles* (FMCSA-MCRR-05-055). Washington, DC: Federal Motor Carrier Safety Administration.	Haptic Interfaces
Houser, A., Pierowicz, J., & McClellan, R. (2005a). *Concept of operations and voluntary operational requirements for Forward Collision Warning Systems (CWS) and Adaptive Cruise Control (ACC) systems on-board commercial motor vehicles* (FMCSA-MCRR-05-007). Washington, DC: Federal Motor Carrier Safety Administration.	Driver Needs
Houser, A., Pierowicz, J., & McClellan, R. (2005b). *Concept of operations and voluntary operational requirements for automated cruise control/collision warning systems (ACC/CWS) on-board commercial motor vehicles*. Washington, DC: Federal Motor Carrier Safety Administration.	HV Haptic Displays, CWS Driver Controls in HVs, HV Design Considerations

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Howell, W.C. & Kraft, C.L. (1959). *Size, blur, and contrast as variables affecting the legibility of alphanumeric symbols on radar-type displays* (WADC Technical Report 59-536). Wright-Patterson Air Force Base, OH: Wright Air Development Center (DTIC No. AD-232 889).	Visual Interfaces
Hsieh, L., Young, R., & Seaman, S. (2012) Development of the enhanced peripheral detection task: A surrogate test for driver distraction. *SAE International Journal of Passenger Cars - Electronic and Electrical Systems, 5*(1):317-325. doi:10.4271/2012-01-0965.	Assessing Driver Performance
Hughes, P. K., & Cole B. L. (1988). The effect of attentional demand on eye movement behavior when driving. In A.G Gale, M.H. Freeman, C.M. Haslegrave (Eds.), *Vision in Vehicles II* (pp. 221-230). Amsterdam: North Holland.	Assessing Driver Performance
Hughes, P. K., & Cole, B. L. (1986). Can the conspicuity of objects be predicted from laboratory experiments? *Ergonomics*, *29*(9), 1097-1111.	Driver Needs
Hwang, S. & Ryu, J. (2010). The haptic steering wheel: Vibro-tactile based navigation for the driving environment. In *8th IEEE International Conference on Pervasive Computing and Communications, PerCom 2010,* 660-665. doi:10.1109/PERCOMW.2010.5470517	Haptic Interfaces
Iavecchia, J. H., Iavecchia, H. P., & Roscoe, S. N. (1988). Eye accommodation to head-up virtual images. *Human Factors*, *30*(6), 689-702.	Visual Interfaces
Inagaki, T. (2003). Adaptive automation: Sharing and trading of control. In E. Hollnagel (Ed.), *Handbook of Cognitive Task Design*. Mahwah, NJ: Erlbaum.	Automation
Inagaki, T. (2010). Traffic systems as joint cognitive systems: Issues to be solved for realizing human-technology coagency. *Cognition, Technology & Work*, *12*(2), 153-162.	Driver Needs, Automation
Independent research by Dutch research institute TNO shows that satellite navigation systems have a positive influence on road safety. Key findings. (2007). Retrieved from the TNO website at http://www.tno.nl/downloads/pb_2007_13_32324_tno_es_uk.pdf	General DVI Requirements
Inman, V. W. & Davis, G. W. (2010). Effects of an in-vehicle and infrastructure-based collision warnings to nonviolating drivers at signalized intersections. *Transportation Research Record, 2189*, 17-25.	Haptic Interfaces
International Organization for Standardization (ISO) (1984). *Development and principles for application of public information symbols.* (ISO/TR 7239). Geneva: Author.	Visual Interfaces
International Organization for Standardization (ISO). (2004). *Road vehicles - Ergonomic aspects of transport information and control systems (TICS) - Procedures for determining priority of on-board messages presented to drivers* (ISO/TS 16951). Geneva: Author.	System Integration
International Organization for Standardization (ISO). (2005). *Road vehicles - Ergonomic aspects of in-vehicle presentation for transport information and control systems - Warning systems* (ISO/TR 16352). Geneva: Author.	Message Characteristics, Visual Interfaces, Auditory Interfaces
Isler, R.B. & Starkey, N.J. (2010). Evaluation of a sudden brake warning system: Effect on the response time of the following driver. *Applied Ergonomics*. *4,* 569-576.	Visual Interfaces
ISO 15005. (2002). *Road vehicles - Ergonomic aspects of transport information and control systems - Dialogue management principles and compliance procedures*. Geneva: International Organization for Standards (ISO).	Automation
ISO 15008. (2009). *Road vehicles - Ergonomic aspects of transport information and control systems - Specifications and test procedures for in-vehicle visual presentation.* Geneva: International Organization for Standardization (ISO).	Visual Interfaces
ISO 15623 (2013). *Transport information and control systems - Forward vehicle collision warning systems - Performance requirements and test procedures*. Geneva: International Organization for Standardization (ISO)	Safety Messages
ISO 17361 (2007). *Intelligent transport systems - Lane departure warning systems - Performance requirements and test procedures*. Geneva: International Organization for Standardization (ISO).	Haptic Interfaces, HV Haptic Displays

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
ISO 17387 (2008). *Intelligent transport systems - Lane change decision aid systems (LCDAS) - Performance requirements and test procedures*. Geneva: International Organization for Standardization (ISO).	General DVI Requirements, Safety Messages, Haptic Interfaces
ISO 2575 (2010). *Road vehicles - Symbols for controls, indicators and tell-tales*. Geneva: International Organization for Standardization (ISO).	Driver Inputs
ISO 3461-1 (1988). *General principles for the creation of graphical symbols, Part I: Graphical symbols for use on equipment.* Geneva: International Organization for Standardization (ISO).	Visual Interfaces
ISO 7731 (2003). *Danger signals for public and work areas - Auditory danger signals*. Geneva: International Organization for Standardization (ISO).	Auditory Interfaces
Isomura, A. (2003). The safety impact of substituting manual operation of in-vehicle tasks with voice control. *Proceedings of the 18th International Technical Conference on the Enhanced Safety of Vehicles*.	Driver Inputs
Ito, T., Hiroshima, Y., & Nishioka, K. (1995). Fuzzy reasoing method with learning function for rear-end collision avoidance system. *Steps Forward. Intelligent Transport Systems World Congress*, 1175-1180.	Driver Needs
Itti, L., & Koch, C. (2000). A saliency-based search mechanism for overt and covert shifts of visual attention. *Vision Research*, *40*(10-12), 1489-1506.	Driver Needs
Ivancic, K., & Hesketh, B. (2000). Learning from errors in a driving simulation: Effects on driving skill and self-confidence. *Ergonomics, 43*(12), 1966-1984.	Driver Training, Automation
Jamson, A.H., Merat, N., Carsten, O.M.J., & Lai, F.C.H. (2013). Behavioural changes in drivers experiencing highly-automated vehicle control in varying traffic conditions. *Transportation Research Part C: Emerging Technologies, 30*, 116-125.	Automation
Japan Automobile Manufacturers Association (JAMA). (2004). *JAMA guidelines for in-vehicle display systems - version 3.0*. Tokyo: Author.	Driver Inputs, Assessing Driver Performance
Jenness, J.W., Lerner, N.D., Mazor, S., Osberg, J.S., & Tefft, B.C. (2008). *Use of advanced in-vehicle technology by young and older early adopters. Selected results from five technology surveys* (DOT HS 811 004). Washington, DC: National Highway Traffic Safety Administration.	Driver Information
Ji, Y. G, Lee, K., & Hwang, W. (2010). Haptic perceptions in the vehicle seat. *Human Factors and Ergonomics in Manufacturing & Service Industry, 21*(3), 305-325.	Haptic Interfaces
Jones, C. M., Gray, R., Spence, C., & Tan, H. Z. (2008). Directing visual attention with spatially informative and spatially noninformative tactile cues. *Experimental Brain Research*, *186*(4), 659-669.	Haptic Interfaces
Jones, L. A., & Sarder, N. B. (2008). Tactile displays: Guidance for their design and application. *Human Factors*, *50*(1), 90-111.	Haptic Interfaces
Jonnson, I.-M. (2009). *Social and emotional characteristics of speech-based in-vehicle information systems: Impact on attitude and driving behavior*. Linkoping, Sweden: Linkoping University, Institute of TEMA Research.	Message Characteristics
Jonsson, I., & Dahlbaeck, N. (2010). Impact of voice variation in speech-based in-vehicle systems on attitude and driving behaviour. *Human Factors: A System View of Human, Technology, and Organisation. Annual Conference of the Europe Chapter of the Human Factors and Ergonomics Society 2009*, 395-408.	Auditory Interfaces
Jonsson, I.-M. (2009). *Social and emotional characteristics of speech-based in-vehicle information systems: Impact on attitude.* Linkoping, Sweden: Linkoping University Department of Computer and Information Science.	Auditory Interfaces
Jorvanis, P. P. (1996). *Rapid prototyping of collision warning alerts: Draft final report. (Report No. UCD-ITS-RR-96-7)*. Davis: University of California.	Visual Interfaces, Auditory Interfaces, System Integration

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Jurgen, R.K. Ed. (2007). *Object detection, collision warning and avoidance systems, Volume 2*. Warrendale, PA: Society of Automotive Engineers.	General DVI Requirements
Kaber, D. B., Alexander, A. L., Stelzer, E. M., Kim, S.-H., Kaufmann, K., & Hsiang, S. (2008). Perceived clutter in advanced cockpit displays: Measurement and modeling with experienced pilots. *Aviation, Space, and Environmental Medicine, 79*(11), 1007-1018.	Message Characteristics, Visual Interfaces
Kaber, D. B., & Endsley, M.R. (2004). The effects of level of automation and adaptive automation on human performance, situation awareness and workload in a dynamic control task. *Theoretical Issues in Ergonomics Science, 5*(2), 113-153. doi: 10.1080/1463922021000054335	Automation
Kandel, E.R., Schwartz, J.H., & Jessell, T.M. (2000). *Principles of neural science* (4th Ed.). New York: McGraw-Hill Health Professions.	Haptic Interfaces
Kantowitz, B. H. (2000). Effective utilization of in-vehicle information: Integrating attraction and distractions. *International Congress on Transportation Electronics.*	System Integration
Kantowitz, B. H., & Simsek, O. (2001). Secondary-task measures of driver workload. In P.A. Hancock & P. A. Desmond (Eds.) *Human factors in Transportation: Stress, Workload, and Fatigue*. Mahwah, NJ, US: Lawrence Erlbaum.	Assessing Driver Performance
Kantowitz, B. H., Simsek, O., & Bittner, A. C. (1999). *Development of human factors guidelines for advanced traveler information systems (ATIS) and commercial vehicle operations (CVO): Integration of ATIS and crash avoidance in-vehicle information: Preliminary simulator study.* (Report No. FHWA-RD-99-133). McLean, VA: Federal Highway Administration.	System Integration
Kaseyama, H., Asanuma, N., & Mashimo, H. (2006). Experimental evaluation of the human-machine interface for the collision avoidance support system in the Honda Advanced Safety Vehicle-3 (ASV-3). *Proceedings of the 13th ITS World Congress.*	Haptic Interfaces
Kaufmann, C., Risser, R., Geven, A., Sefelin R., & Tscheligi, M. (2008). LIVES (LenkerInnenInteraktion mit VErkehrstelematischen Systemen)-driver interaction with transport-telematic systems. *IET Intelligent Transport Systems, 2*(4).	System Integration
Kauvo, K., Tarkianen, M., Koskienen, H., Kompfner, P., & Amditis, A. (2006). In-vehicle integration of nomadic devices. *Proceedings of the 13th ITS World Congress.*	System Integration
Kazi, T.A., Stanton, N.A., Walker, G.H. & Young, M.S. (2007). Designer driving: Drivers' conceptual models and level of trust in adaptive cruise control. *International Journal of Vehicle Design, 45* (3), 339-360.	Automation, Automation
Kellogg, W.A. (1987). Conceptual consistency in the user interface: Effects on user performance. In H. J. Bulinger & B. Shackel (Eds.), *Human-computer interaction; INTERACT '87IFIP Conference on Human-Computer Interaction* (pp. 389–394). Amsterdam, The Netherlands: Elsevier.	General DVI Requirements
Kiefer, R. J. (2000). Developing forward collision warning system timing and interface approach by placing drivers in realistic rear-end crash situations. *Proceedings of the 14th Triennial Congress of the International Ergonomics Association and 44th Annual Meeting of the Human Factors and Ergonomics Society*, 3-308-3-311.	Visual Interfaces , Auditory Interfaces
Kiefer, R. J., Cassar, M. T., Flannagan, C. A., Jerome, C. J., & Palmer, M. D. (2005). *Surprise braking trials, time-to-collision judgments, and "first look" maneuvers under realistic rear-end crash scenarios*. (Report No. DOT HS 809 902). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements, Driver Needs, Auditory Interfaces
Kiefer, R., LeBlanc, D., Palmer, M., Salinger, J., Deering, R., & Shulman, M. (1999). *Development and validation of functional definitions and evaluation procedures for collision warning/avoidance systems* (Final Report DOT HT 808 964). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements, Safety Messages, Driver Needs, Message Characteristics, Driver Inputs, Visual Interfaces, Auditory Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Kiefer, R.J. (1996). A review of driver performance with head-up displays. *Third World Congress on Intelligent Transport Systems* [CD-ROM]. Washington, DC: ITS America.	Visual Interfaces
Kikuchi, K. & Fujii, T. (2005). Research on the evaluation method of driver behavior using driving support systems. *Proceedings of the 19th International Technical Conference on the Enhanced Safety of Vehicles*.	Automation
Kim, H., Seo, C., Lee, J., Ryu, J., Yu, S., Lee, S. (September, 2006). Vibrotactile display for driving safety information. *Proceedings of the IEEE Intelligent Transportation Systems Conference, Toronto, Canada.*	Haptic Interfaces
Kim, M. H., Yong Tae Lee, & Joonwoo Son. (2010). Age-related physical and emotional characteristics to safety warning sounds: Design guidelines for intelligent vehicles. *IEEE Transactions on Systems, Man, and Cybernetics, Part C: Applications and Reviews*, *40*(5), 592-598.	Auditory Interfaces
Kim, S.-Y., Kang, J.-K., Oh, S.-Y., Ryu, Y.-W., Kim, K., Park, S.-C., & Kim, J. (2008). An intelligent and integrated driver assistance system for increased safety and convenience based on all-around sensing. *Journal of Intelligent and Robotic Systems Theory and Applications, 51*(3) 261-287.	System Integration
Klauer, S.G., Dingus, T.A., Neale, V.L., Sudweeks, J.D., & Ramsey, D.J. (2006). *The impact of driver inattention on near-crash/crash risk: An analysis using the 100-car naturalistic driving study data* (DOT HS 810 594). Washington, DC: National Highway Traffic Safety Administration.	Assessing Driver Performance
Klunder, G., Li, M. & Minderhoud, M. (2009). Traffic flow impacts of adaptive cruise control deactivation and (re)activation with cooperative driver behavior. *Transportation Research Record, 2129*, 145-151.	Driver Inputs, Automation
Knake-Langhorst, S., & Schiessl, C. (2009). Local traffic condition: Improvement of a vehicle-based measurement approach. *IET Intelligent Transport Systems*, *3*(1), 32-41.	Driver Inputs
Kondo, S., Asanuma, N., Ishida, S., Ikegaya, M., & Tanaka, J. (November, 1999). Evaluation of driver assistance system. *Proceedings of 6th World Congress on Intelligent Transport Systems*.	General DVI Requirements
König, W. & Mutschler, H. (2002). *MMI of warning systems in vehicles*. (Technical Report, Draft, Reference No. ISO/TC22/SC13/WG8). International Organization for Standardization (ISO).	General DVI Requirements, Driver Needs
Koslowski, T. (2013). *Forget the internet of things: Here comes the 'internet of cars'.* Retrieved from: http://www.wired.com/opinion/2013/01/forget-the-internet-of-things-here-comes-the-internet-of-cars/	Integration
Kramer, A. F., Cassavaugh, N., Horrey, W. J., Becic, E., & Mayhugh, J. L. (2007). Influence of age and proximity warning devices on collision avoidance in simulated driving. *Human Factors*, *49*(5), 935-949.	Safety Messages, Driver Needs, Auditory Interfaces, System Integration
Kullack, A., Ehrenpfordt, I., & Eggert, F. (2009). How Behaviorally Assisted Car Driver Interaction Can Improve Traffic Safety. *Proceedings of the 16th ITS World Congress and Exhibition on Intelligent Transport Systems and Service*.	General DVI Requirements
Kun, A., Paek, T., Medenica, Z. (2007). The effect of speech interface accuracy on driving performance. *Proceedings of the 8th Annual Conference of the International Speech Communication Association (Interspeech 2007)*, 2332-2335.	Driver Inputs
Kuroda, K., Izumikawa, I., & Kouketsu, O. (2009). Logical meditation structures for Toyota's driver support systems. *Proceedings of the 21st (ESV) International Technical Conference on the Enhanced Safety of Vehicles*.	Driver Inputs, System Integration
Kussmann, H., Modler, H., Engstrom, J., Agnvall, A., Piamonte, P., Markkula, G., et al. (2004). *Requirements for AIDE HMI and safety functions: Design and development of an adaptive integrated driver-vehicle interface: Specifications and system architecture*. Gothenburg, SW: Information Society Technologies (IST) Programme. Retrieved from http://www.aide-eu.org/pdf/sp3_deliv_new/aide_d3_2_1_summary.pdf	System Integration

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Landau, F. H. (1995). Human factors design of collision warning systems. *Steps Forward. Intelligent Transport Systems World Congress*, *3*, 1223-1228.	Visual Interfaces, Auditory Interfaces
Lange, C. (2013). Evaluation of automotive HMI using eye-tracking - a revision of the EN ISO 15007-1 & IOS TS 15007-2. In N.A. Stanton (Ed.), *Advances in Human Aspects of Road and Rail Transportation* (Chapter 62). Boca Raton, FL: CRC Press.	Assessing Driver Performance
Larburu, M., Martin, A., Rodriguez, D. J., & Urquiza, A. (2010). Adaptive human vehicle interface: Different types of interaction in a virtual environment. *Human Factors: A System View of Human, Technology, and Organisation. Annual Conference of the European Chapter of the Human Factors and Ergonomics Society 2009* (pp. 89-98). Shaker Publishing.	Visual Interfaces
Larsson, A. (2009). Reclaiming control from advanced driver assistance systems. *Proceedings of the 16th ITS World Congress and Exhibition on Intelligent Transport Systems and Service*.	Automation
Larsson, P., Opperud, A., Fredriksson, K., Västfjäll, D. (2009). Emotional and behavioral response to auditory icons and earcons in driver-vehicle interfaces. (Paper Number 09-0104). *Proceedings of the 21st International Technical Conference on the Enhanced Safety of Vehicles (ESV)*. Retrieved from http://www-nrd.nhtsa.dot.gov/departments/esv/21st	HV Auditory Displays
Laurienti, P. J., Burdette, J. H., Maldjian, J. A., & Wallace, M. T. (2006). Enhanced multisensory integration in older adults. *Neurobiology of Aging*, *27*(8), 1155-1163.	Driver Needs, Safety Messages
Lavie, N. (1995). Perceptual load as a necessary condition for selective attention. *Journal of Experimental Psychology-Human Perception and Performance, 21*(3), 451-468.	Integration
Lavie, N. (2005). Distracted and confused? Selective attention under load. *Trends in Cognitive Sciences, 9*(2), 75-82.	Integration
Lavie, N., Hirst, A., de Fockert, J.W., & Viding, E. (2004). Load theory of selective attention and cognitive control. *Journal of Experimental Psychology-General, 133*(3), 339-354.	Integration
LeBlanc, D. J., Bareket, Z., Ervin, R. D., & Fancher, P. (2002). Scenario-based analysis of forward crash warning system performance in naturalistic driving. *Proceedings of the 9th World Congress on Intelligent Transport Systems*.	Assessing Driver Performance
LeBlanc, D., Sayer, J., Winkler, C., Ervin, R., Bogard, S., & Devonshire, S., Gordon, T. (2006). *Road departure crash warning system field operational test. Volume 2: Appendices* (UMTRI-2006-9-2). Ann Arbor: University of Michigan Transportation Research Institute.	Assessing Driver Performance
LeBlanc, D., Sayer, J., Winkler, C., Ervin, R., Bogard, S., & Devonshire, S., Gordon, T. (2006). *Road departure crash warning system field operational test: Methodology and results* (UMTRI-2006-9-1). Ann Arbor, MI: University of Michigan Transportation Research Institute.	General DVI Requirements, System Integration
Lee, J. D. & See, K.A. (2004). Trust in automation: Designing for appropriate reliance. *Human Factors, 46*(1) 50-80.	Automation
Lee, J. D. (2006). Human factors and ergonomics in automation design. In G. Salvendy (Ed.), *Handbook of human factors and ergonomics* (pp.1570-1596). Hoboken, NJ: Wiley & Sons.	Automation
Lee, J. D., & Kantowitz, B. H. (1998). Perceptual and cognitive aspects of intelligent transportation systems. In W. Barfield, & T.A. Dingus (Eds.), *Human factors in transportation: Human factors in intelligent transportation systems* (pp. 31-54). Mahwah, NJ: Lawrence Erlbaum.	General DVI Requirements
Lee, J. D., & Moray, N. (1994). Trust, self-confidence, and operators' adaptation to automation. *International Journal of Human-Computer Studies, 40,* 153-184.	Automation
Lee, J. D., Caven, B., Haake, S., & Brown, T. L. (2001). Speech-based interaction with in-vehicle computers: The effect of speech-based e-mail on drivers' attention to the roadway. *Human Factors, 43* (4), 631-640.	General DVI Requirements

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Lee, J. D., Hoffman, J. D., & Hayes, E. (2004). Collision warning design to mitigate driver distraction. *Proceedings of the SIGCHI Conference on Human Factors in Computing Sciences* (pp. 65-72). Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.77.2168&rep=rep1&type=pdf	Safety Messages
Lee, J. D., Hoffman, J. D., Brown, T. L., & McGehee, D. V. (2002). *Comparison of driver braking responses in a high fidelity driving simulator and on a test track*. (Report No. DOT HS 809 447). Washington, DC: National Highway Traffic Safety Administration.	Assessing Driver Performance
Lee, J. D., McGehee, D. V, Brown, T. L, &Marshall, D. C. (2009). Effects of adaptive cruise control and alert modality on driver performance. *Accident Reconstruction Journal 19*(5), 10-17.	Auditory Interfaces
Lee, J. D., McGehee, D. V., Brown, T. L., & Marshall, D. (2006). Effects of adaptive cruise control and alert modality on driver performance. *Transportation Research Record, 1980*, 49-56.	Safety Messages, Haptic Interfaces, Automation
Lee, J. D., McGehee, D. V., Brown, T. L., & Nakamoto, J. (2007). Driver sensitivity to brake pulse duration and magnitude. *Ergonomics*, *50*(6), 828-836.	Haptic Interfaces
Lee, J. D., McGehee, D. V., Brown, T. L., & Reyes, M. L. (2002). Collision warning timing, driver distraction, and driver response to imminent rear-end collisions in a high-fidelity driving simulator. *Human Factors*, *44*(2), 314-334.	Driver Needs
Lee, J. D., McGehee, D. V., Brown, T. L., & Reyes, M. L. (2002). Driver distraction, warning algorithm parameters, and driver response to imminent rear-end collisions in a high-fidelity driving simulator (DOT HS 809 448). Washington DC: National Highway Traffic Safety Administration.	Auditory Interfaces
Lee, J. D., McGehee, D. V., Brown, T.L., & Reyes, M.L. (2002). Collision warning timing, driver distraction and driver response to imminent rear-end collisions in a high-fidelity simulator. *Human Factors*, *44*(2), 314-334.	Safety Messages
Lee, J. D., Schmidt, K., & Bral, T. (2001). Distraction potential of speech-based driver interfaces. Presentation at the *First International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design*.	Driver Inputs, Auditory Interfaces
Lee, J. D., Young, K. L., & Regan, M .A. (2009). Defining driver distraction. In (Eds.) M.A. Regan, J.D. Lee, & K.L. Young (Eds.) *Driver distraction: Theory, effects, mitigation* (pp. 31-40). Boca Raton, FL: CRC Press.	General DVI Requirements
Lee, J. D. & Seppelt, B. D. (2012). Human factors and ergonomics in automation design. In G. Salvendy (Ed.), *Handbook of Human Factors and Ergonomics, fourth edition* (pp.1615-1642). Hoboken: Wiley & Sons.	Automation
Lee, S. E., Knipling, R. R., DeHart, M. C., Perez, M. A., Holbrook, G.T., Brown, S. B., Olson, R.L. (2004). *Vehicle-based countermeasures for signal and stop sign violations: Task 1. Intersection control violation crash analyses. Task 2. Top-level system and human factors requirements* (DOT HS 809 716). Washington, DC: National Highway Traffic Safety Administration.	Driver Needs, Auditory Interfaces
Lee, S. E., Olsen, E. C. B., & Wierwille, W. W. (2004). *A comprehensive examination of naturalistic lane-changes.* (Report No. DOT HS 809 702). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements, Driver Needs
Lee, S. E., Perez, M. A., Doerzaph, Z. R., Stone, S. R., Neale, V. L., Brown, S. B., Dingus, T.A. (2007). Intersection collision avoidance - violation project: Final project report (DOT HS 810 749). Washington, DC: National Highway Traffic Safety Administration.	Auditory Interfaces
Lee, W.-S., & Nam, H.-K. (October, 2003). A Study on Driver Acceptance of Adaptive Cruise Control Using a Driving Simulator. *Driving Simulation Conference, North America*, Dearborn, MI.	General DVI Requirements
Lee, Y.-C., Lee, J. D., & Boyle, L. N. (2009). The interaction of cognitive load and attention-directing cues in driving. *Human Factors*, *51*(3), 271-280.	General DVI Requirements
Lee, Y.-L. (2010). The effect of congruency between sound-source location and verbal message semantics of in-vehicle navigation systems. *Safety Science*, *48*(6), 708-713.	Auditory Interfaces

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Reference	DVI Design Topic(s)
Lees, M. N., & Lee, J. D. (2007). The influence of distraction and driving context on driver response to imperfect collision warning systems. *Ergonomics*, *50*(8), 1264-1286.	Driver Needs
Lehto, M. R., Papastavrou, J. D., Ranney, T. A., & Simmons, L. A. (2000). An experimental comparison of conservative versus optimal collision avoidance warning system thresholds. *Safety Science*, *36*(3), 185-209.	Driver Needs
Leibowitz, H.W. & Owens, D.A. (1977). Nighttime driving accidents and selective visual degradation. *Science, 197*(4302), 422-423.	Integration
Lenn, M. G., Salmon, P. M., Triggs, T. J., Cornelissen, M., & Tomasevic, N. (2011). How does motion influence the use of touch screen in-vehicle information systems? *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *55*(1), 1855-1859.	Driver Inputs
Leonard, S.D. (1999). Does color of warning affect risk perception? *International Journal of Industrial Ergonomics, 23*, 499-504.	Visual Interfaces
Lerner, N. D., Dekker, D. K., Steinberg, G. V., & Huey, R. W. (1996). *Inappropriate alarm rates and driver annoyance*. (Report No. DOT HS 808 533). Washington, DC: National Traffic Safety Administration.	Driver Needs , Auditory Interfaces
Lerner, N., Jenness, J., Robinson, E., Brown, T., Baldwin, C., & Llaneras, R. (2011). *Crash warning interface metrics: Final report* (DOT HS 811 470a). Washington, DC: National Highway Traffic Safety Administration.	Haptic Interfaces
Lerner, N., Robinson, E., Singer, J., Jenness, J., Huey, R., Baldwin, C., Ward, N., & Fitch, G. (2011). *Human factors for connected vehicles. Task 4 Report: Research findings*. Rockville, MA: Westat.	System Integration
Lerner, N., Robinson, E., Singer, J., Jenness, R., Baldwin, C., Ward, N., Fitch, G. (2011). *Human factors for connected vehicles. Task 4 Report: Research findings: Task order 21* (Prepared for the National Highway Traffic Safety Administration under contract DTNH22-05-D-01002).	Integration
Lerner, N., Steinberg, G., & Perel, M. (1997). Auditory warning signals for crash avoidance warning devices. *Merging the Transportation and Communications Revolutions, ITS America Seventh Annual Meeting and Exposition*.	Auditory Interfaces
Lerner, N.D., Kotwal, B.M., Lyons, R.D., & Gardner-Bonneau, D.J. (1996). *Preliminary human factors guidelines for crash avoidance warning devices. Interim report* (DOT HS 808 342). Washington, DC: National Highway Traffic Safety Administration.	Message Characteristics, Haptic Interfaces
Lervag, L.-E., Moen, T., & Jenssen, G. D. (2010). User acceptance of HMI solutions for lane departure warning system. *Proceedings of the European Transport Conference, 2010*.	Auditory Interfaces, System Integration
Levitan, L. & Bloomfield, J.R. (1998). Human factors design of automated highway systems. In W. Barfield, & T.A. Dingus (Eds.), *Human factors in transportation: Human factors in intelligent transportation systems* (pp. 131-163). Mahwah, NJ: Lawrence Erlbaum.	Driver Inputs, Automation
Levitan, L., Bunus, M., Dewing, W. L., Reinhart, W., Vora, P.B., & Llaneras, R. E. (1997). *Preliminary human factors guidelines for automated highway system designers (2nd Ed.)* (FHWA-RD-97-125). McLean, VA: Federal Highway Administration.	Automation
Liang, Y., & Lee, J. D. (2010). Combining cognitive and visual distraction: Less than the sum of its parts. *Accident Analysis & Prevention*, *42*(3), 881-890.	General DVI Requirements, Assessing Driver Performance
Liang, Y., Reyes, M. L., & Lee, J. D. (2007). Real-time detection of driver cognitive distraction using support vector machines. *IEEE Transactions on Intelligent Transportation Systems*, *8*(2), 340-350.	General DVI Requirements, Assessing Driver Performance
Lichty, M.G., Bacon, L.P., & Campbell, J.L. (2013). *Connected vehicle DVI design research and distraction assessment. Activity 3: Human factors design guidelines development. Task 13: Stakeholder and end-user feedback study (heavy vehicles)* (Report to Virginia Tech Transportation Institute). Seattle, WA: Battelle Center for Human Performance & Safety.	HV Visual Displays, Considerations for DVIs in HVs

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Reference	DVI Design Topic(s)
Lim, J. H., Tsimhoni, O., & Liu, Y. (2010). Investigation of driver performance with night vision and pedestrian detection systems-Part I: Empirical study on visual clutter and glance behavior. *IEEE Transactions on Intelligent Transportation Systems*, *11*(3), 670-677.	Visual Interfaces
Lin, Y., Tang, P., Zhang, W. J., & Yu, A. (2005). Artificial neural network modelling of driver handling behaviour in a drive-vehicle-environment, *International Journal of Vehicle Design, 37*(1), 24-45.	General DVI Requirements
Lind, H. (2007). An efficient visual forward collision warning display for vehicles. *SAE World Congress.* doi:10.4271/2007-01-1105	Safety Messages, Visual Interfaces
Lindgren, A. (2009). Driving safe in the future: HMI for integrated advanced driver assistance systems [Doctoral Thesis]. Göteborg, Sweden: Chalmers University of Technology.	System Integration
Lindgren, A., Angelelli, A., Mendoza, P. A., & Chen, F. (2009). Driver behaviour when using an integrated advisory warning display for advanced driver assistance systems. *IET Intelligent Transport Systems*, *3*(4), 390-399.	Driver Needs
Liu, Y.-C. (2003). Effects of using head-up display in automobile context on attention demand and driving performance. *Displays*, *24*(4-5), 157-165.	General DVI Requirements, Visual Interfaces
Liu, Y.-C., & Wen, M.-H. (2004). Comparison of head-up display (HUD) vs. head-down display (HDD): Driving performance of commercial vehicle operators in Taiwan. *International Journal of Human-Computer Studies, 61*(5), 679-697.	Message Characteristics
Llaneras, R. E., Salinger, J., & Green, C. A. (2013). Human factors issues associated with limited ability autonomous driving systems: Drivers' allocation of visual attention to the forward roadway. *Proceedings of the International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design, 7*, 92-98.	Visual Interfaces, Haptic Interfaces
Lloyd, M. M., Wilson G.D., Nowak, C. J., & Bittner, A. C. (1999). Brake pulsing as haptic warning for an intersection collision avoidance countermeasure. *Transportation Research Record, 1694*.	Message Characteristics, Haptic Interfaces
Lo, V. E-W. and Green, P.A. (2013). Development and evaluation of automotive speech interfaces: Useful information from the human factors and related literature. *International Journal of Vehicular Technology. 2013*, Article ID 924170, 13 pages. doi:10.1155/2013/924170	Driver Inputs
Lu, S. A., Wickens, C. D., Sarter, N. B., & Sebok, A. (2011). Informing the design of multimodal displays. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *55*(1), 1170-1174.	Driver Needs, Auditory Interfaces, Haptic Interfaces, Automation
Lumsden, J. (2008). *Handbook of research on user interface design and evaluation for mobile technology, Volume I*. Retrieved from http://www.comm.rwth-aachen.de/files/lumsden122.pdf	Driver Inputs
Lyons, R. D., Lerner, N., & Kotwal, B. (1994). Preliminary human factors guidelines for crash warning devices. *Moving Toward Deployment. Proceedings of the 1994 Annual Meeting of IVHA America.*	Driver Needs
Ma, R. & Kaber, D.B. 2005. Situation awareness and workload in driving while using adaptive cruise control and a cell phone. *International Journal of Industrial Ergonomics, 35*(10), 939-953.	Automation
Machida, T., Kurahashi, T., Iwase, T., Mori, H., & Kitaoka, H. (2008). STREET: Simulator for safety evaluation - Cognition model. *Proceedings of the 15th World Congress on Intelligent Transport Systems and ITS America's Annual Meeting.*	General DVI Requirements
Magnusson, T. (2005). Help for drowsy motorists. *Nordic Road and Transport Research, 17*(1), 6.	Automation
Maltz, M. & Shinar, D. (2004). Imperfect in-vehicle collision avoidance warning systems can aid drivers. *Human Factors, 46*, 357-366.	Safety Messages, Driver Needs
Mansfield, N. J., & Griffin, M. J. (2000). Difference thresholds for automobile seat vibration. *Applied Ergonomics*, *31*(3), 255-261.	Haptic Interfaces

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Marchau, V., Molin, E.J.E., & van der Heijden, R.E.C.M. (2004). User choices regarding vehicle-driving automation. *Proceedings of Urban Transport X. Urban Transport and the Environment in the 21st Century*, 443-455.	Automation
Marks, P. (2006). Driven to distraction by your own vehicle. *New Scientist*, *192*(2575), 30-31.	Driver Needs
Marrkula, G., & Engtroem, J. (2006). A steering wheel reversal rate metric for assessing effects of visual and cognitive secondary task load. *Proceedings of the 13th ITS World Congress*.	Assessing Driver Performance
Marshall, D. C., Lee, J. D., & Austria, P. A. (2007). Alerts for in-vehicle information systems: Annoyance, urgency, and appropriateness. *Human Factors*, *49*(1), 145-157.	Auditory Interfaces
Martens, M., Pauwelussen, J., Schieben, A., Flemisch, F., Merat, N., Jamson, A. H., & Caci, R. (2008). *Human factors' aspects in automated and semi-automatic transport systems: State of the art* (Report 3.2.1). Brussels: European Commission.	Message Characteristics
Martens, M., & Van Winsum, W. (2001). Effects of speech versus tactile driver support messages on driver behaviour and workload. *Proceedings of the 17th International Technical Conference on the Enhanced Safety of Vehicles.*	Auditory Interfaces, Haptic Interfaces
Mathern, B., Bonnard, A., & Tattegrain, H. (2009). Method of driving assistance system design to improve human-vehicle interactions and safety technologies developments for trucks. *Proceedings of the 21st (ESV) International Technical Conference on the Enhanced Safety of Vehicles*.	General DVI Requirements
Matsuo, N. O. (1998). The effect on driving behaviour of reaction to an unexpected auditory stimulus in a simulator experiment. *Towards the New Horizon Together. Proceedings of the 5th World Congress on Intelligent Transport Systems*.	Auditory Interfaces
Mazureck, U., & van Hattem, J. (2006). Rewards for safe driving behavior Influence on following distance and speed. *Transportation Research Record, 1980*, 31-38.	Message Characteristics
Mazzae, E. & Garrott, W. (1995). *Human performance evaluation of heavy truck side object detection systems* (SAE Technical Paper No. 951011). Warrendale, PA: Society of Automotive Engineers.	HV Visual Displays
Mazzae, E.N. & Garrott, R. (2008). *Light vehicle rear visibility assessment* (DOT HS 810 909). Washington, DC: National Highway Traffic Safety Administration.	Safety Messages
McDougall, S., Tyrer, V., & Folkard, S. (2006). Searching for signs, symbols, and icons: Effects of time of day, visual complexity, and grouping. *Journal of Experimental Psychology, 12*(2), 118-128. doi: 10.1037/1076-898X.12.2.118	Message Characteristics, Visual Interfaces
McFarlane, D. & Latorella, K. (2002). The scope and importance of human interruption in human-computer interaction design. *Human - Computer Interaction, 17*(1), 1-61.	Integration
McGehee, D. V., Brown, T. L., Lee, J. D., & Wilson, T. B. (2002). Effect of warning timing on collision avoidance behavior in a stationary lead vehicle scenario. *Transportation Research Record*, *1803*, 1-7.	Visual Interfaces, Auditory Interfaces
McGehee, D. V., Dingus, T. A., & Horowitz, A. D. (1992). The potential value of a front-to-rear-end collision warning system based on factors of driver behavior, visual perception and brake reaction time. *Proceedings of the 36th Human Factors Society Annual Meeting*, 1003-1005.	Visual Interfaces
McGehee, D.V. & Rakauskas, M.E. (2010). Driver performance metrics in interface design: Results of the 2nd international driver metrics workshop. In G.L. Rupp, (Ed.), *Performance Metrics for Assessing Driver Distraction: The Quest for Improved Road Safety*. Warrendale, PA: SAE International.	Assessing Driver Performance
McKeown, D., Isherwood, S., & Conway, G. (2010). Auditory displays as occasion setters. *Human Factors*, *52*(1), 54-62.	Auditory Interfaces
McKinney, F., Hayden, J., Topham, D., Lee, T. Y., McMurran, R., Fowkes, M., Szczygiel, M., Ross, T., Frampton, R., Robinson, T., & Clare, N. (2008). Co-driver alert project - Hazard alert system for aftermarket. *15th World Congress on Intelligent Transport Systems and ITS America's 2008 Annual Meeting.*	System Integration

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
McKnight, J. & Adams, B. (1970). *Driver education and task analysis, Volume 1: Task descriptions* (DOT HS 800 367). Washington DC: National Highway Traffic Safety Administration.	Driver Training, Automation
McLaughlin, S. B., Hankey, J. M., & Dingus, T. A. (2008). A method for evaluating collision avoidance systems using naturalistic driving data. *Accident Analysis & Prevention*, *40*(1), 8-16.	Assessing Driver Performance
Mehler, B., Reimer, B., & Wang, Y. (2011). A comparison of heart rate and heart rate variability indices in distinguishing single-task driving and driving under secondary cognitive workload. *Proceedings of the 6th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, 590-597.	Assessing Driver Performance
Mendel, J. & Pak, R. (2009). The effect of Interface Consistency and Cognitive Load on user performance in an information search task. *Proceedings of the Human Factors and Ergonomics Society 53rd Annual Meeting*.	General DVI Requirements
Mendoza, P. A., Angelelli, A., & Lindgren, A. (2009). An ecologically designed human machine interface for advanced driver assistance systems. *Proceedings of the 16th ITS World Congress and Exhibition on Intelligent Transport Systems and Services.*	Auditory Interfaces
Mendoza, P. A., Angelelli, A., & Lindgren, A. (2011). Ecological interface design inspired human machine interface for advanced driver assistance systems. *IET Intelligent Transport Systems, 5*(1), 53-59.	General DVI Requirements, Driver Needs, Auditory Interfaces
Mendoza, P.A., Angelelli, A., & Lindgren, A. (2011). Ecological interface design inspired human machine interface for advanced driver assistance systems. *IET Intelligent Transport Systems, 5*(1), 53-59.	Safety Messages
Merat, N. & Jamson, A. H. (2009). How do drivers behave in a highly automated car? *Proceedings of the International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design, 5*, 514-521.	Automation
Meyer, J. (2004). Conceptual issues in the study of dynamic hazard warnings. *IEEE Intelligent Transportation Systems Magazine*, *3*(2), 196-204.	General DVI Requirements
Michalke, T., & Kastner, R. (2011). The attentive co-pilot: Towards a proactive biologically-inspired advanced driver assistance system. *IEEE Intelligent Transportation Systems Magazine*, *3*(3), 6-23.	General DVI Requirements
Michon, J.A. (1985). A critical view of driver behavior models: what do we know, what should we do? In L. Evans & R. C. Schwing (Eds.), *Human Behavior and Traffic Safety* (pp. 485-520). New York: Plenum Press.	Integration
Miki, Y., Yoshitsugu, H., & Ito, K. (2003). Driver's laod of voice interaction system in vehicles. *Proceedings of 18th International Technical Conference on the Enhanced Safety of Vehicles.*	Driver Inputs
Miller, C.A. & Funk, H.B. (2001). Associated with etiquette: Meta-communication to make human-automation interaction more natural, productive, and polite. *Proceedings of the 8th European Conference on Cognitive Science Approaches to Process Control*. Munich, Germany.	Automation
Miller, C.A., & Parasuraman, R. (2007). Designing for flexible interaction between humans and automation: Delegation interfaces for supervisory control. *Human Factors, 49*(1), 57-75.	Automation
MIL-STD-1472G (2012). *Human engineering*. Washington, DC: Department of Defense.	Auditory Interfaces, Driver Inputs
Mitsopoulos, E., Regan, M.A., Triggs, T.J., & Tierney, P. (2003). Evaluating multiple in-vehicle intelligent transport systems: The measurement of driver acceptability, workload, and attitudes in the tac safecar on-road study. *Proceedings of the Road Safety Research, Policing, and Education Conference, 7*(1), 176-184.	Assessing Driver Performance
Mohebbi, R., Gray, R., & Tan, H. Z. (2009). Driver reaction time to tactile and auditory rear-end collision warnings while talking on a cell phone. *Human Factors*, *51*(1), 102-110.	Auditory Interfaces, Haptic Interfaces

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Reference	DVI Design Topic(s)
Mollenhauer, M.A., Dingus, T.A., Carney, C., Hankey, J.M., & Jahns, S. (1997). Anti-lock brake systems: An assessment of training on driver effectiveness. *Accident Analysis and Prevention, 29*, 97-108.	Driver Information
Molloy, R. & Parasuraman, R. (1996). Monitoring an automated system for a single feature: Vigilance and task complexity effects. *Human Factors*, *38*(2), 311-322	Automation
Mongeot, H., Naude, C., Lechner, D., & Marchi, M. (2006). Use of EDR in French DOT cars: Initial results of the experimentation. *Proceedings of the 13th ITS World Congress.*	General DVI Requirements
Monk, C.A. & Kidd, D.G. (2007). *R* we fooling ourselves: Does the occlusion technique shortchange *R* estimates? *Proceedings of the 4th International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design,* 2-8. Retrieved from http://drivingassessment.uiowa.edu/node/2	Assessing Driver Performance
Montanari, R., Wenzel, G., Mattes, S., Kuhn, F., Bellotti, F., & Morreale, D. (2002). Comunicar: Integrated on-vehicle human machine interference designed to avoid driver information overload. *Proceedings of the 9th World Congress on Intelligent Transport Systems ITS America.*	System Integration
Moon, H. D. (1998). The analysis of ergonomic design requirement for head-up display. Towards the New Horizon Together. *Proceedings of the 5th World Congress on Intelligent Transport Systems*.	Visual Interfaces
Morgan, J.F., Tidwell, S., Medina, A., & Blanco, M. (2011). On the training and testing of entry-level commercial motor vehicle drivers. *Accident Analysis and Prevention*, *43*(4), 1400-1407.	HV Haptic Displays, Considerations for DVIs in HVs
Morrell, J. & Wasilewski, K. (2010, March). Design and evaluation of a vibrotactile seat to improve spatial awareness while driving. *IEEE Haptics Symposium*, Waltham, MA.	Haptic Interfaces
Mourant, R.R. & Langolf, G.D. (1976). Luminance specifications for automobile instrument panels. *Human Factors, 18*(1), 71-84.	Visual Interfaces
Muir, B.M. & Moray, N. (1996). Trust in automation, Part II: Experimental studies of trust and human intervention in a process control simulation. *Ergonomics, 39*(3), 429-460.	Automation
Murphy, D. O., & Woll, J. D. (1992) *A review of Vorad TM vehicle detection and driver alert system* (Paper No. 922495). Warrendale, PA: Society of Automotive Engineers. doi:10.4271/922495.	General DVI Requirements
NASA Ames Research Center Color Usage Research Lab. (n.d.) *Using color in information display graphics.* Retrieved from the NASA Ames Research Center Color Usage Research Lab website at http://colorusage.arc.nasa.gov/index.php	Visual Interfaces
National Highway Traffic Safety Administration (2011). *Integrated DVI-based subsystems in connected vehicles Task 1: Draft concept of operation* (DTNH22-11-D-00236/0001). Washington, DC.	Integration
National Highway Traffic Safety Administration (NHTSA) (2013). *Visual-manual NHTSA driver distraction guidelines for in-vehicle electronic devices* (DOT 37-13; Docket No. NHTSA-2010-0053). Retrieved from http://www.nhtsa.gov/About+NHTSA/Press+Releases/U.S.+DOT+Releases+Guidelines+to+Minimize+In-Vehicle+Distractions	General DVI Requirements, Driver Inputs, Integration
National Highway Traffic Safety Administration (NHTSA) (2011). *Crash warning interface metrics, phase 2* (DOT HS 811 471). Washington, DC: National Highway Traffic Safety Administration.	Assessing Driver Performance, Message Characteristics
National Highway Traffic Safety Administration. (2013). *Preliminary statement of policy concerning automated vehicles* (NHTSA 14-13). Retrieved from http://www.nhtsa.gov/About+NHTSA/Press+Releases/U.S.+Department+of+Transportation+Releases+Policy+on+Automated+Vehicle+Development	Automation
Navarro, J., Mars, F., Forzy, J., El-Jaafari, M., & Hoc, J. (2010). Objective and subjective evaluation of motor priming and warning systems applied to lateral control assistance. *Accident Analysis & Prevention*, *42*(3), 904-912.	Haptic Interfaces

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Reference	DVI Design Topic(s)
Neale, V. L., & Dingus, T. A. (2006). Motor vehicle warnings. In V. L. Neale, T. A. Dingus (Eds.) *Human factors and ergonomics: Handbook of warnings.* (pp. 687-700). Mahwah, NJ: Lawrence Erlbaum.	Auditory Interfaces
Neale, V.L., Dingus, T.A., Klauer, S.G., Sudweeks, J.D., & Goodman, M.J. (2005). An overview of the 100-car naturalistic study and findings. *Proceedings of the 19th International Technical Conference on the Enhanced Safety of Vehicles*. Retrieved from http://www-nrd.nhtsa.dot.gov/pdf/nrd-01/esv/esv19/05-0400-W.pdf	Assessing Driver Performance
Needham, P. L. (2001). Collision prevention: The role of an accident data recorder (ADR). *Proceedings of the International Conference on Advanced Driver Assistance Systems (ADAS 2001)*, 48-52.	General DVI Requirements
Neurauter, M. L. (2005). Multimodal warnings: Curve-warning design. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *49*(22), 1945-1949.	Driver Needs, Visual Interfaces, Auditory Interfaces, Haptic Interfaces, Safety Messages
NHTSA's National Center for Statistics and Analysis. (2010). *Traffic safety facts: Distracted driving 2009*. (Report No. DOT HS 811 379). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements
Nielsen, J. (1989). Executive Summary: Coordinating User Interfaces for Consistency. In J. Nielsen (Ed.), *Coordinating User Interfaces for Consistency* (pp. 1-7). San Francisco, CA: Morgan Kaufmann.	General DVI Requirements
Nilsson, L. (2005). Automated driving does not work without the involvement of the driver. In G. Underwood (Ed.), *Proceedings of the International Conference of Traffic and Transport Psychology*. (pp. 293-301). Kidlington, UK: Elsevier.	Automation
Nilsson, T. (2005). Legibility of Warnings in Color. (In W. Karwowski and Y.I. Noy, Eds.) *Handbook of Human Factors in Litigation* (pp. 32-1 – 32-18). CRC Press.	Visual Interfaces
Norman, D.A. (1990). The problem of automation: Inappropriate feedback and interaction, not over-automation. *Philosophical Transactions of the Royal Society of London*, B, 1-18.	Automation
Normark, C. J., Tretten, P., & Garling, A. (2009). Do redundant head-up and head-down display configurations cause distractions? *Proceedings of the Fifth International Driving Symposium on Human Factors in Driving Assessment, Training and Vehicle Design,* 398-404.	Driver Needs, Visual Interfaces
Noy, Y. I. (Ed.). (1997). *Ergonomics and safety of intelligent driver interfaces.* Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.	Message Characteristics, Visual Interfaces
O'Day, S. & Tijerina, L. (2011). Legibility: Back to the basics. *SAI International Journal of Passenger Cars - Mechanical Systems, 4*(1), 591-604.	Visual Interfaces
Ohm, C. & Ludwig, B. (2013). Estimating the driver's workload. In I. J. Timm & M. Thimm (Eds.), *KI 2013: Advances in Artificial Intelligence* (pp. 130-139). Berlin: Springer Berlin Heidelberg.	Integration
Okabayashi, S., Sugie, N., Imaizumi, M., Furukawa, M., & Hatada, T. (1999). Visual perception of HUD (head-up display) image with small angle of depression in practical automotive use. *Electronics and Communications in Japan (Part III: Fundamental Electronic Science)*, *82*(4), 1-9.	Visual Interfaces
Olsen, E.C.B. (2004). Lane change warning design guidelines. *Proceedings of the 48th Human Factors and Ergonomics Society Annual Meeting*¸ 2237-2241.	Safety Messages
Olson, R. L. (2009). *Driver distraction in commercial vehicle operations*. (Report No. FMCSA-RRR-09-042). Washington, DC: Federal Motor Carrier Safety Administration.	General DVI Requirements
Ostlund, J., Peters, B., Thorslund, B., Engstroem, J., Markkula, G., Keinath, A., Foehl, U. (2005). *Adaptive integration driver-vehicle interface (AIDE). Driving performance assessment—Methods and metrics* (IST-1-507674-IP). Retrieved from http://www.aide-eu.org/pdf/sp2_deliv_new/aide_d2_2_5.pdf	Assessing Driver Performance

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Reference	DVI Design Topic(s)
Owens, J. M., McLaughlin, S. B., & Sudweeks, J. (2011). Driver performance while text messaging using handheld and in-vehicle systems. *Accident Analysis & Prevention, 43*, 939-947. doi: doi:10.1016/j.aap.2010.11.019	Driver Inputs
Oxley, P. R. (1996). Elderly drivers and safety when using IT systems. *IATSS Research, 20*(1), 102-110.	Message Characteristics
Page, Y., Cuny, S., Zangmeister, T., Kreiss, J.-P., & Hermitte, T. (2009). The evaluation of the safety benefits of combined passive and on-board active safety applications. *Annals of Advances in Automotive Medicine: 53rd Annual Scientific Conference of the Association for the Advancement of Automotive Medicine* (pp. 117-127). Association for the Advancement of Automotive Medicine.	Message Characteristics
Page, Y., Hermitte, T., Chauvel, C., Van Elslande, P., Hill, J., & Kirk, A.et al. (2009). Reconsidering accident causation analysis and evaluating the safety benefits of technologies: Final results of the TRACE project. *Proceedings of the 21st (ESV) International Technical Conference on the Enhanced Safety of Vehicles.*	General DVI Requirements
Panou, M. C., Bekiaris, E. D., & Touliou, A. A. (2010). ADAS module in driving simulation for training young drivers. *Proceedings of the Intelligent Transportation Systems (ITSC), 2010 13th International IEEE Conference*, 1582-1587.	Driver Needs, Automation
Panou, M., & Bekiaris, E. (2007). A new concept on the integration of driving simulators in driver training – The train-all approach. *Road Safety on Four Continents: 14th International Conference.* Linköeping: Swedish National Road and Transport Research Institute (VTI).	Driver Needs
Parasuraman, R. & Miller, C.A. (2004). Trust and etiquette in high-criticality automated systems. *Communications of the ACM, 47*(4), 51-55.	Automation
Parasuraman, R. & Wickens, C.D. (2008). Humans: Still vital after all these years of automation. *Human Factors, 50*(3), 511-520.	Automation
Parasuraman, R. and Riley, V. (1997). Humans and automation: Use, misuse, disuse, abuse. *Human Factors, 39*(2), 230-253.	Automation
Parasuraman, R., Hancock, P. A., & Olofinboba, O. (1997). Alarm effectiveness in driver-centered collision-warning systems. *Ergonomics, 40*(3), 390-9.	General DVI Requirements, Driver Needs
Parasuraman, R., Hilburn, B., Molloy, R., & Singh, I. (1991). *Adaptive automation and human performance: III. Effects of practice on the benefits and costs of automation shifts* (Report No. NAWCADWAR-92037-60). Warminster, PA: Naval Air War Center-Aircraft Division.	Automation
Parasuraman, R., Sheridan, T.B., & Wickens, C.D. (2000). A model of types and level of human interaction with automation. *IEEE Transactions on Systems, Man and Cybernetics, Part A, Systems, and Humans, 30*(3), 286-297.	Automation
Park, G. D., Allen, R. W., & Cook, M. L. (2013). *Volume 4 – Scheduling of messages to maximize driver performance* (Report No. DTNH22-12R-00629). Washington, DC: National Highway Traffic Safety Administration.	General DVI Requirements
Parkes, A.M., Ward, N.J., & Bossi, L.L.M. (1995). The potential of vision enhancement systems to improve driver safety. *Le Travail Humain: A Bilingual and Multi-Disciplinary Journal in Human Factors, 58*(2), 151-169.	General DVI Requirements
Patten, C. J. (2007). *Cognitive workload and the driver. Understanding the effects of cognitive workload on driving from a human information processing perspective* [Doctoral Dissertation]. Stockholm, Sweden: Stockholm University.	General DVI Requirements, Assessing Driver Performance
Pauzie, A. (2008). A method to assess the driver mental workload: The driving activity load index (DALI). *IET Intelligent Transport Systems*, *2*(4), 315-322.	Assessing Driver Performance
Pauzie, A., Manzano, J., & Dapzol, N. (2007). Driver's behavior and workload assessment for new in-vehicle technologies design. *Proceedings of the 4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, 572-580.	Assessing Driver Performance

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Reference	DVI Design Topic(s)
Pelli, D.G., Tillman, K.A., Freeman, J., Su, M., Berger, T.D., & Majaj, N.J. (2007). Crowding and eccentricity determine reading rate. *Journal of Vision, 7*(2):20. doi: 10.1167/7.2.20	Visual Interfaces
Perez, M. A., Neale, V. L., & Kiefer, R. J. (June, 2009). Test and evaluation of the Cooperative Intersection Collision Avoidance System for Violations (CICAS-V) driver-vehicle interface. *Proceedings of The 21st International Technical Conference On The Enhanced Safety Of Vehicles*, Stuttgart, Germany.	Visual Interfaces, Auditory Interfaces, Haptic Interfaces
Perez, M.A., Angell, L.S., & Hankey, J.M. (2010). Naturalistic driving: Crash and near-crash surrogate distraction metrics. In G.L. Rupp, (Ed.), *Performance Metrics for Assessing Driver Distraction: The Quest for Improved Road Safety*. Warrendale, PA: SAE International.	Assessing Driver Performance
Perez, M.A., Kiefer, R. J., Haskins, A., & Hankey, J.M. (2009). Evaluation of forward collision warning system visual alert candidates and SAE J2400. *SAE International Journal of Passenger Cars - Mechanical Systems*, *2*(1), 750-764.	Assessing Driver Performance, Safety Messages, Visual Interfaces
Pessaro, B. & Nostrand, C.V. (2011). *Cedar Avenue driver assist system evaluation report* (FTA Report No. 0010). Washington, DC: Federal Transit Administration. Retrieved from http://www.nbrti.org/docs/pdf/FTA_Report_No%20_0010_Cedar_Avenue_DAS_Evaluation_Report.pdf	Sensory Modality for HVs, HV Visual Displays, HV Visual Display Location, HV Haptic Displays, HV Design Considerations
Pettitt, M. (2007). *Development of an extended keystroke level model for predicting the visual demand of in-vehicle interfaces* [Doctoral Dissertation]. University of Nottingham.	Message Characteristics
Pick, H. L. (2010). *Spatial orientation and navigation in elderly drivers*. (Report No. CTS 103). Minneapolis: University of Minnesota Center for Transportation Studies.	General DVI Requirements
Pickrell, T. M. & Liu, C. (2014). *Seat belt use in 2013: Overall results* (Report No. DOT HS 811 875). Washington, DC: National Highway Traffic Safety Administration.	Haptic Interfaces
Piepenbrock, C., Mayr, S., & Buchner, A. (2014). Positive display polarity is particularly advantageous for small character sizes: Implications for display design. *Human Factors, 56*(5), 942-951. doi: 10.1177/0018720813515509.	Visual Interfaces
Pierowicz, J., Jocoy, E., Lloyd, M., Bittner, A., & Pirson, B. (2000). *Intersection collision avoidance using ITS countermeasures* (DOT HS 809 171). Washington, DC: National Highway Traffic Safety Administration. Retrieved from http://ntl.bts.gov/lib/9000/9900/9902/L01.pdf	Safety Messages
Plavsic, M., Klinker, G., & Bubb, H. (2010). Situation awareness assessment in critical driving situations at intersections by task and human error analysis. *Human Factors in Ergonomics and Manufacturing*, *20*(3), 177-191.	General DVI Requirements
Pohl, J., & Ekmark, J.(May, 2003). A lane keeping assist system for passenger cars – design aspects of the user interface. *Proceedings of 18th International Technical Conference on The Enhanced Safety of Vehicles*.	Haptic Interfaces
Pollock, E., Chandler, P., & Sweller, J. (2002). Assimilating complex information. *Learning and Instruction, 12*, 61-68.	Automation
Polson, P. G. (1988). The consequences of consistent and inconsistent user interfaces. In R. Guindon (Ed.) *Cognitive Science and its Applications for Human Computer Interaction* (pp. 59-108). Hillsdale, NJ: Lawrence Erlbaum.	General DVI Requirements
Pomerleau, D., Jochem, T., Thorpe, C., Batavia, P., Pape, D., Hadden, J., Everson, J. (1999). *Run-off-road collision avoidance using IVHS countermeasures, Final report* (DOT HS 809 170). Washington, DC: National Highway Traffic Safety Administration.	Driver Inputs, Auditory Interfaces
Popp, M.M. & Faerber, B. (1993). Feedback modality for nontransparent driver control actions: Why not visually? In A.G. Gale, I.D., Brown, C.M. Haslegrave, H.W. Kryusse, & S.P. Taylor (Eds.), *Vision in Vehicles - IV* (pp.263-270). Amsterdam: Elsevier Science.	Driver Inputs

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Porter, M.M. (2013). Older driver training using video and global positioning system technology - a randomized controlled trial. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences, 68*(5), 574-580. doi:10.1093/Gerona/gls160. Epub 2012 Aug 9	Driver Training, Automation
Prakah-Asante, K., Filev, D., & Lu, J. (2010). Hybrid intelligent system for driver workload estimation for tailored vehicle-driver communication and interaction. *Proceedings of the IEEE International Conference on Systems, Man, & Cybernetics*, Istanbul, Turkey (p. 1178-1184).	Integration
Pretorius, L., & Hanekom, J. J. (2006). An accurate method for determining the conspicuity area associated with visual targets. *Human Factors*, *48*(4), 774-784.	Driver Needs
Prinzel, L.J. & Risser, M. (2004). *Head-up displays and attention capture* (NASA/TM-2004-213000). Retrieved from the NASA Technical Reports Server (NTRS) website at http://naca.larc.nasa.gov/search.jsp?R=20040065771&qs=N%3D4294966788%2B4294724598%2B4294323833	Visual Interfaces
Proctor, R. W. & Proctor, J.D. (2012). Sensation and perception. In Salvendy, G. (Ed.), *Handbook of Human Factors and Ergonomics, Fourth ed*. (Chapter 3). Hoboken, NJ: John Wiley & Sons.	Haptic Interfaces
Rajaonah, B., Anceaux, F., & Vienne, F. (2006). Trust and the use of adaptive cruise control: A study of a cut-in situation. *Cognition, Technology, & Work, 8*(2) 146-155.	Automation
Ranney, T.A. (2008). *Driver distraction: A review of the current state-of-knowledge* (DOT HS 810 787). Washington, DC: DOT.	General DVI Requirements
Rasmussen, J. (1983). Skills, rules, and knowledge: Signals, signs, and symbols, and other distinctions in human performance models. *IEEE Transactions on Systems, Man, and Cybernetics, SMC-13*(3), 257-266. doi: 10.1109/TSMC.1983.6313160	Driver Training, Integration, Automation
Ratwani, R. & Trafton, J.G. (2010). An eye movement analysis of the effect of interruption modality on primary task resumption. *Human Factors, 52*(3), 370-380.	Integration
Rauch, N., Gradenegger, B. & Kruger, H.P. (2008). User strategies for the interaction with in-vehicle devices while driving. *Intelligent Transport Systems, IET, 2*(4), 266-275.	Automation
Rauch, N., Kaussner, A., Kruger, H.-P., Boverie, S. & Flemisch, F. (2009). The importance of driver state assessment within highly automated vehicles. *Proceedings of the 16th ITS World Congress and Exhibition on Intelligent Transport Systems and Services*.	Automation
Recarte, M.A. & Nunes, L. M. (2000). Effects of verbal and spatial-imagery tasks on eye fixations while driving. *Journal of Experimental Psychology-Applied, 6*(1), 31-43.	Integration
Redding, R.E., Cannon, J.R., & Seamster, T.L. (1992). Expertise in air traffic control (ATC): What is it, and how can we train for it? *Proceedings of the Human Factors and Ergonomics Society, 36*, 1326-1330.	Automation
Regan, M., Young, K., Triggs, T., Tomasevic, N., Mitsopoulos, E., Tierney, P., Healy, D., Connelly, K., & Tingvall, C. (2005). Final results of a long-term evaluation of intelligent speed adaptation, following distance warning and seatbelt reminder systems: System and interactive effects. *Proceedings of the 12th World Congress on Intelligent Transport Systems.*	Driver Inputs
Regan, M.A., Lee, J. D., & Young, K. L. (Eds.). (2009). *Driver distraction. Theory, effects, and mitigation.* Boca Raton, FL: CRC Press.	General DVI Requirements, Considerations for DVIs in HVs
Regan, M.A., Stephen, K., Mitsopoulose, E., Young, K., Ttriggs, T., & Tomasevic, N. et al. (2007). The effect on driver workload, attitudes and acceptability of in-vehicle intelligent transport systems: selected final results from the TAC SafeCar project. *Journal of the Australasian College of Road Safety*, *18*(1), 30-6.	General DVI Requirements, Assessing Driver Performance
Reichart, G. & Kopf, M. (2001). Where are the limits for driver assistance systems? *Proceedings of Technical Congress 2001 – Where Cars and Future Technology Meet-Vehicle Safety, Energy and Environment*. (pp. 79-86). Frankfurt, Germany.	Automation

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
Reimer, B., Mehler, B., Dobres, J., Coughlin, J.F., Matteson, S., Gould, D., Chahine, N. & Levantovsky, V. (2014). Assessing the impact of typeface design in a text rich automotive user interface. *Ergonomics*. doi:10.1080/00140139.2014.940000	Visual Interfaces
Reinach, S. & Everson, J. (2001a). Driver-vehicle interface requirements for a transit bus collision avoidance system (SAE Paper No. 2001-01-0052). *Society of Automotive Engineers 2001 World Congress.*	HV Design Considerations, Sensory Modality for HVs
Reinach, S. & Everson, J. (2001b). The preliminary development of a driver-vehicle interface for a transit bus collision avoidance system. *Intelligent Transportation Society of America Eleventh Annual Meeting and Exposition.*	Visual Interfaces, Sensory Modality for HVs, HV Visual Display Location, HV Auditory Displays, CWS Driver Controls in HVs
Reiner, A. (2010). Sensor-actuator supported implicit interaction in driver assistance systems. Wiesbaden, Germany: Vieweg+Teubner.	Haptic Interfaces
Reisner, P. (1990). What is consistency? *Proceedings of the IFIP Third International Conference*, 175-181.	General DVI Requirements
Research and Innovative Technology Administration (RITA). (2013). *Intelligent Transportation Systems Joint Programs Office*. Washington, DC: United States Department of Transportation. Available from http://www.its.dot.gov/index.htm	Integration
Richardson, J., & Abe, G. (2006). Driver response to forward collision warning systems. *Proceedings of the 13th ITS World Congress*.	Driver Needs
Rimini-Doering, M., & Dambier, M. (2007). I-TSA traffic safety assessment in a simulator experiment with integrated information and assistance systems. *Proceedings of the Fourth International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design.*	System Integration
Rimini-Doering, M., Altmueller, T., Ladstaetter, U., & Rossmeier, M. (2005). Effects of lane departure warning on drowsy drivers' performance and state in a simulator. *Proceedings of the Third International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design.*	General DVI Requirements
Robinson, G., Casali, J., & Lee, S. (1997). *The role of hearing in commercial motor vehicle operation: An evaluation of the FHWA hearing requirement, final report*. Blacksburg, VA: Auditory Systems Laboratory, Virginia Polytechnic Institute and State University.	HV Design Considerations
Rosario, H., Louredo, M., Diaz, I., Soler, A., Gil, J. J., Solaz, J. S., & Jordi, J. (2010). Efficacy and feeling of a vibrotactile frontal collision warning implemented in a haptic pedal. *Transportation Research Part F: Traffic Psychology and Behaviour*, *13*(2). 80-91.	Haptic Interfaces
Rudin-Brown, C.M. & Noy, Y.I. (2002). Investigation of behavioral adaptation to lane departure warnings. *Transportation Research Record, 1803*, 30-37.	Automation
Rudin-Brown, C.M. & Parker, H.A. (2004). Behavioural adaptation to adaptive cruise control (ACC): Implications for preventative strategies. *Transportation Research Part F: Traffic Psychology and Behaviour, 7*, 59-76.	Automation
Rupp, G. (Ed.) (2010). *Performance metrics for assessing driver distraction: The quest for improved road safety*. Warrendale, PA: SAE International.	Assessing Driver Performance
Ryu, J., Chun, J., Choi, S., & Han, S.H. (April, 2010). Vibrotactile feedback for information delivery in the vehicle. *IEEE Transactions on Haptics*, 3(2), 138-149.	Haptic Interfaces
SAE J1138 (2009). *Design criteria - Driver hand controls location for passenger cars, multipurpose passenger vehicles, and trucks (10,000 GVW and under*). Warrendale, PA: SAE International.	Driver Inputs
SAE J2395 (2002). *ITS in-vehicle message priority.* Warrendale, PA: SAE International.	System Integration

SAENORM.COM : Click to view the full PDF of j3077_201512

Reference	DVI Design Topic(s)
SAE J2399. (2003). *Adaptive cruise control (ACC) operating characteristics and user interface*. Warrandale, PA: SAE International.	Automation
SAE J2400 (2003). *Human factors in forward collision warning systems: Operating characteristics and user interface requirements*. Warrendale, PA: SAE International.	Message Characteristics, Driver Inputs
SAE J2802. (2010). *Blind spot monitoring system (BSMS): Operating characteristics and user interface.* Warrendale, PA: SAE International.	Safety Messages
SAE J2830. (2008). *Process for comprehension testing of in-vehicle icons*. Warrendale, PA: SAE International.	Message Characteristics
SAE J287 (2007). *Driver hand control reach*. Warrendale, PA: SAE International.	Driver Inputs
Salinger, J. (2012). *Human factors for limited-ability autonomous driving systems*. Retrieved from http://onlinepubs.trb.org/onlinepubs/conferences/2012/Automation/presentations/Salinger.pdf	Automation
Salman, Y. B., Kim, Y.-H., & Cheng, H.-I. (2010). Senior – friendly icon design for the mobile phone. *Proceedings of the 6th International Conference on Digital Content, Multimedia Technology and Its Applications (IDC)*, 103-108.	Visual Interfaces
Salvucci, D. & Taatgen, N. (2008). Threaded cognition: An integrated theory of concurrent multitasking. *Psychological Review, 115*(1), 101-130.	Integration
Salvucci, D.D. (2002). The time course of a lane change: Driver control and eye-movement behavior. *Transportation Research Part F: Traffic Psychology and Behaviour, 2*, 123-132.	Safety Messages
Sanchez, J. (2006). *Factors that affect trust and reliance on an automated aid [*Doctoral Dissertation]. Georgia Institute of Technology.	Automation
Sanders, M.S. & McCormick, E.J. (1993). *Human factors in engineering and design* (7th ed.). New York: McGraw-Hill.	Driver Inputs
Santos, J., Merat, N., Mouta, S., Brookhuis, K., & de Waard, D. (2005). The interaction between driving and in-vehicle information systems: Comparison of results from laboratory, simulator, and real-world studies. *Transportation Research Part F: Traffic Psychology and Behaviour*, *8*(2), 135-146.	Assessing Driver Performance
Sarter, N.B., & Woods, D.D. (1995). How in the world did we ever get into that mode? Mode error and awareness in supervisory control. *Human Factors, 37*, 5-19. doi: 10.1518/001872095779049516	Automation
Sarter, N.B., Woods, D.D., & Billings, C.E. (1997). Automation surprises. In G. Salvendy (Ed.), *Handbook of Human Factors and Ergonomics, Second Edition* (pp. 1926-1943). Hoboken: Wiley & Sons.	Automation
Satzinger, J., & Olfman, L. (1998). User interface consistency across end-user applications: The effects on mental models. *Journal of Management Information Systems, 14*, 167-193.	General DVI Requirements
Sayer, J. R., Bogard, S.E., Buonarosa, M.L., LeBlanc, D.J., Funkhouser, D.S., Bao, S., . . . Winkler, C.B. (2011). *Integrated vehicle-based safety systems light-vehicle field operational test key findings report.* Washington, DC: National Highway Traffic Safety Administration.	Safety Messages, Integration
Sayer, J. R., Funkhouser, D.S., Bao, S., Bogard, S.E., LeBlanc, D.J., & Blankespoor, A.D., Winkler, C.B. (2010). *Integrated vehicle-based safety systems heavy-truck field operational test methodology and results report* (UMTRI-2010-27). Ann Arbor: University of Michigan Transportation Research Institute.	Assessing Driver Performance
Sayer, J. R., Mefford, M. L., Shirkey, K., & Lantz, J. (2005). Driver distraction: A naturalistic observation of secondary behaviors with the use of driver assistance systems. *Proceedings of the Third International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, 262-268.	General DVI Requirements, Assessing Driver Performance

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Reference	DVI Design Topic(s)
Sayer, J., LeBlanc, D., Bogard, S., Funkhouser, D., Bao, S., Buonarosa, M. L., & Blankespoor, A. (2011). *Integrated vehicle-based safety systems field operational test final program report.* (Report No. DOT HS 811 482). Washington, DC: National Highway Traffic Safety Administration.	System Integration
Sayer, J.R., Bogard, S.E., Funkhouser, D., LeBlanc, D.J., Bao, S., & Blankespoor, A.D., Winkler, C.B. (2010). *Integrated vehicle-based safety systems heavy-truck field operational test key findings report* (Report No. DOT HS 811 362). Washington, DC: National Highway Traffic Safety Administration.	Assessing Driver Performance, CWS Driver Controls in HVs
Schieber, F. (June, 2002). Searching for fluorescent colored highway signs: Bottom-up versus top-down mechanisms. *Proceedings of the 16th Biennial Symposium on Visibility*.	Driver Needs
Schiller, B., Vassilos, M. & Donath, M. (1998). Collision avoidance for highway vehicles using the virtual bumper controller. *Proceedings of the 1998 IEEE International Conference on Intelligent Vehicles,* 149-155.	Automation
Schmidt, G. (2008). Applying the RESPONSE Code of Practice for evaluation of driver assistance systems: driver age and perception of steering torque signals. *IET Intelligent Transport Systems*, *2*(4), 229-237	Haptic Interfaces
Schumann, J., Godthelp, H., Farber, B., & Wontorra, H. (1993). Breaking up open-loop steering control actions the steering wheel as an active control device. In A.G. Gale, I.D., Brown, C.M. Haslegrave, H.W. Kryusse, & S.P. Taylor (Eds.), *Vision in Vehicles - IV* (pp. 321-332). Amsterdam: Elsevier Science.	Haptic Interfaces
Schumann, J., Godthelp, H., Farber, B., & Wontorra, H. (1993). Breaking up open-look steering control actions - The steering wheel as an active control device. In A.G. Gale et al. (Eds.), *Vision in Vehicles IV*. Amsterdam: Elsevier Science.	Assessing Driver Performance
Scott, J. J., & Gray, R. (2008). A comparison of tactile, visual, and auditory warnings for rear-end collision prevention in simulated driving. *Human Factors*, *50*(2), 264-275.	Message Characteristics, Driver Needs, Auditory Interfaces, Haptic Interfaces
Scott, S. (1997). ITS in-vehicle systems safety and human factors standards needs. *Merging the Transportation and Communications Revolutions. Abstracts for ITS America 7th Annual Meeting and Exposition.*	System Integration
Seller, P., Song, B., & Hedrick, J. K. (1998). Development of a collision avoidance system. *Automotive Engineering International*, 106(9), 24-28.	Driver Inputs
Seppelt, B.D. & Lee, J.D. (2007). Making adaptive cruise control (ACC) limits visible. *International Journal of Human-Computer Studies*, *65*, 192-205.	Automation
Seppelt, B.D., Lees, M.N. & Lee, J.D. (2005). Driver distraction and reliance: Adaptive cruise control in the context of sensor reliability and algorithm limits. *Proceedings of the Third International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, 255-261.	Automation
Serrano, J., Di Stasi, L. L., Megias, A., & Catena, A. (2011). Effect of directional speech warnings on road hazard detection. *Traffic Injury Prevention*, *12*(6), 630-635.	Auditory Interfaces
Seto, Y., Takae, Y., Sugano, T., Sato, R., Kurata, K. & Kobayashi, M. (2008). Development of distance control assist system with accelerator force control and braking force control. *Proceedings of the 15th World Congress on Intelligent Transport Systems and ITS America's 2008 Annual Meeting*.	Automation
Sheridan, T.B. and Parasuraman, R. (2005). Human-automation interaction. *Reviews of Human Factors and Ergonomics, 1*, 89-129.	Automation
Shinar, D., Meir, M., & Ben-Shoham, I. (1998). How automatic is manual gear shifting? *Human Factors, 40* (4), 647-654.	General DVI Requirements
Shutko, J. (2001). *An investigation of collision avoidance warnings on brake response times of commercial motor vehicle drivers.* Unpublished master's thesis, Virginia Polytechnic Institute and State University, Blacksburg, VA.	Sensory Modality for HVs

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Reference	DVI Design Topic(s)
Sinatra, A.M., Sims, V.K., Najle, M.B., & Bailey, S.K.T. (2012). The impact of synthetic and accented speech on unattended recall in a dichotic listening task. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 56*(1), 1635-1638. doi: 10.1177/1071181312561327	Auditory Interfaces
Singer, G., & Dekker, S. (2000). Pilot performance during multiple failures: an empirical study of different warning systems. *Transportation Human Factors, 2*(1) 63-76.	System Integration
Smith System Driver Improvement Institute, Inc. (2014.) *The Smith 5 keys* [Training Product]. Retrieved from https://store.smith-system.com/index.php/product/product/48/	Sensory Modality for HVs, Considerations for DVIs in HVs
Smith, D. L., Chang, J., Glassco, R., Foley, J., & Cohen, D. (2005). Methodology for capturing driver eye glance behavior during in-vehicle secondary tasks. *Transportation Research Record, 1937*, 61-65.	Assessing Driver Performance
Smith, M.R.H., Witt, G.J., Bakowski, D.L. LeBlanc, D. & Lee, J.D. (2009). Adapting collision warnings to real-time estimates of driver distraction. In M.A. Regan, J.D. Lee, & K.L. Young (Eds.), *Driver distraction: Theory, effects, and mitigation.* (pp. 501-518). Boca Raton, FL: CRC Press.	Automation
Smith, P., Shah, M., & da Vitoria Lobo, N. (2003). Determining driver visual attention with one camera. *IEEE Transactions on Intelligent Transportation Systems*, *4*(4), 205-218.	General DVI Requirements
Sohn, H., Lee, J.D., Bricker, D.L., & Hoffman, J.D. (2008). A dynamic programming algorithm for scheduling in-vehicle messages. *IEEE Transactions on Intelligent Transportation Systems, 9*(2), 226-234.	Integration
Son, J., & Park, S. (2011, October). Cognitive workload estimation through lateral driving performance. *Proceedings of the 16th Asia Pacific Automotive Engineering Conference*, Chennai, India, SAE2011-28-0039.	Integration
Song, L. (2004). Modeling, analyzing, and mitigating dissonance between alerting systems. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 64*(9-B).	General DVI Requirements
Sorkin, R. D., Wightman, F. L., Kistler, D. S., & Elvers, G. C. (1989). An exploratory study of the use of movement-correlated cues in an auditory head-up display. *Human Factors*, *31*(2), 161-166.	Auditory Interfaces
Spain, R.D. & Madhavan, P. (2009). The role of automation etiquette and pedigree in trust and dependence. *Proceedings of the Human Factors and Ergonomics Society 53rd Annual Meeting*, 339-343.	Automation
Spence, C. & Ho, C. (2008). Multisensory warning signals for event perception and safe driving. *Theoretical Issues in Ergonomics Science, 9*(6), 523-554.	Safety Messages, Automation
Spence, C., Ngo, M. K., Lee, J.-H., & Tan, H. (2010). Solving the correspondence problem in haptic/multisensory interface design. In M.H. Zadeh (Ed.). *Advances in Haptics* (pp. 47-74). Available from: http://www.intechopen.com/books/advances-in-haptics/solving-thecorrespondence-problem-in-haptic-multisensory-interface-design	Safety Messages, Haptic Interfaces
Stanley, L. M. (2006). Haptic and auditory cues for lane departure warnings. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 50*, 2405-2408. doi: 10.1177/154193120605002212	Message Characteristics
Stanley, L. M. (2006). *Haptic and auditory interfaces as a collision avoidance technique during roadway departures and driver perception of these modalities* [Doctoral Dissertation]. Bozeman: Montana State University.	Auditory Interfaces, Haptic Interfaces
Stanton, N. A. & Young, M. S. (1998). Vehicle automation and driving performance. *Ergonomics, 41*(7), 1014-1028.	Automation
Stanton, N. A. & Young, M. S. (2005). Driver behaviour with adaptive cruise control. *Ergonomics, 48*(10), 1294-1313.	Automation, Message Characteristics
Stanton, N. A., & Marsden, P. (1996). From fly-by-wire to drive-by-wire: Safety implications of vehicle automation. *Safety Science, 24,* 35-49.	Automation

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