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Item 1
Core Competencies For Highway Safety Professionals
TRANSPORTATION RESEARCH BOARD
NCHRP RRD 297 • 2006

This digest presents the results of a study conducted by Paul Jovanis and Frank Gross, Pennsylvania State University. The TRB Joint Subcommittee for Highway Safety Workforce Development initiated and guided the work. The study identified core competencies for safety professionals that can be used for safety education and professional development.
Full-text PDF of this report is available for free download at
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rrd_302.pdf

Item 2
Core Competencies For Highway Safety Professionals
TRANSPORTATION RESEARCH BOARD
NCHRP RRD 302 • 2006

This digest presents the results of a study conducted by Paul Jovanis and Frank Gross, Pennsylvania State University. The TRB Joint Subcommittee for Highway Safety Workforce Development initiated and guided the work. The study identified core competencies for safety professionals that can be used for safety education and professional development.
Full-text of this report is available for viewing at
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rrd_302.pdf

Item 3
Safety Impacts And Other Implications Of Raised Speed Limits On High-Speed Roads
TRANSPORTATION RESEARCH BOARD
NCHRP RRD 303 • 2006

This digest summarizes the results of NCHRP Project 17-23, "Safety Impacts and Other Implications of Raised Speed Limits on High-Speed Roads." The digest is based on a report by Kara Kockelman of the University of Texas at Austin under subcontract to Jon Bottom of CRA International. The project objective was to determine the effects of raised speed limits from 55 mph or greater on freeways and non-freeways, in both rural and urban settings. The effects considered included safety, operations, socioeconomics, and environmental. The final report is available on the TRB website as NCHRP Web-Only Document 90.Full-text PDF of this report is available for free download at
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rrd_303.pdf

Item 4

Surface Transportation Security Volume 11: Disruption Impact Estimating Tool - Transportation (DIETT): A Tool for Prioritizing High-Value Transportation Choke Points

TRANSPORTATION RESEARCH BOARD
NCHRP Report 525 Vol. 11 • 2006

This eleventh volume of NCHRP Report 525: Surface Transportation Security will assist transportation, security, and emergency-preparedness planners as they identify and prioritize potential high-value transportation choke points (TCPs) such as bridges, tunnels, and passes. These high-value TCPs are located predominantly along major transportation routes. A key area of concern is how disruptive events will affect the flow of commercial traffic through TCPs. The Disruption Impact Estimating Tool—Transportation (DIETT) is an electronic analytical tool that calculates direct transportation and economic impacts (costs) of an event that precludes the use of a TCP, and it prioritizes TCPs on the basis of these criteria. DIETT does not calculate replacement costs. Using DIETT's prioritized sets of outputs, along with other risk information, decision makers will be able to better focus their capital resource, security, and emergency-preparedness planning.
Full-text PDF of this report is available for free download from
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_525v11.pdf

Item 5

Simple Performance Tests: Summary of Recommended Methods and Database

TRANSPORTATION RESEARCH BOARD
NCHRP Report 547 • 2006

This report summarizes key information on three recommended simple performance tests for permanent deformation of hot mix asphalt (HMA). In the final phase of the work described here, and as described in two companion reports to be published later, the candidate tests for permanent deformation were validated with field performance data, and specifications for their use were developed. The report will be of particular interest to materials engineers in state highway agencies, as well as to materials suppliers and paving contractor personnel responsible for designing and producing HMA.
Full-text PDF of this report is available for free download from
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_547.pdf

Item 6

Guide to Contracting ITS Projects

TRANSPORTATION RESEARCH BOARD
NCHRP Report 560 • 2006

This report provides guidance on the procurement of intelligent transportation systems (ITS), including variable message signs, traffic detectors, signal controllers, and a variety of other hardware and software that entails applications of advanced electronics and information management to regulate and facilitate traffic flow. This guide should be useful to government officials, traffic engineers, system integrators, and others involved in the specification and purchasing of ITS installations.
Full-text PDF of this report is available for free download from
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_560.pdf

Item 7
Pavement Markings - Design and Typical Layout Details
TRANSPORTATION RESEARCH BOARD
NCHRP Synthesis 356 • 2006

This synthesis identifies variations in pavement marking designs, practices, and policies, as provided by 48 of 50 state departments of transportation, and transit agencies from the District of Columbia, Puerto Rico and four cities. This information will be valuable to FHWA and the National Committee on Uniform Traffic Control Devices as they consider the need for revisions to the 2008 edition of Part 3 of the Manual on Uniform Traffic Control Devices. In addition, the information will be useful to state and local government agencies as they develop or revise their pavement marking design standards. This synthesis does not specifically address the safety aspects or cost-effectiveness of the pavement marking layout policies and practices of the various agencies.
Full-text PDF of this report is available for free download from
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_356.pdf

Item 8
Use of Geophysics for Transportation Projects
TRANSPORTATION RESEARCH BOARD
NCHRP Synthesis 357 • 2006

This synthesis presents the state of the practice regarding the use of geophysics for transportation projects. The report focuses on U.S. state and Canadian provincial departments of transportation (DOTs), and U.S. federal transportation agencies. The main points addressed include who is using geophysics and why, which methods and applications are the most commonly used, the use of in-house expertise compared with contracting private consultants, and how geophysical service contracts are procured and implemented. The scope was limited to how geophysics is being applied by geotechnical engineers during highway planning and construction activities.
Full-text PDF of this report is available for free download at
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_357.pdf

Item 9
Innovative Techniques In The Planning And Financing Of Public Transportation Projects
TRANSPORTATION RESEARCH BOARD
TCRP RRD 77 • 2006

This TCRP digest summarizes the mission performed October 20- November 5, 2005, under TCRP Project J-3, "International Transit Studies Program." This digest includes transportation information on the cities and facilities visited. This digest was prepared by staff of the Eno Transportation Foundation and is based on reports filed by the mission participants.
Full-text PDF of this report is available for free download at
http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rrd_77.pdf

Item 10
Research on Women's Issues in Transportation Report of a Conference Volume 1: Conference Overview And Plenary Papers
TRANSPORTATION RESEARCH BOARD
TRB Conference Proceedings 35 Vol. 1 • 2006

TRB Conference Proceedings 35, Research on Women's Issues in Transportation, Volume 1: Conference Overview and Plenary Papers contains the conference summary, the four peer-reviewed overview papers presented by the topic leaders, and a list of conference participants from a November 18--20, 2004, conference held in Chicago, Illinois. The conference was designed to identify and explore additional research and data needed to inform transportation policy decisions that address women's mobility, safety, and security needs and to encourage research by young researchers.
Full-text PDF of this report is available for free download at
http://onlinepubs.trb.org/onlinepubs/conf/CP35v1.pdf

Item 11
Future Truck and Bus Safety Research Opportunities
TRANSPORTATION RESEARCH BOARD
TRB Conference Proceedings 38 • 2006

TRB Conference Proceedings 38: Future Truck and Bus Safety Research Opportunities are the proceedings from a conference held on March 23-24, 2005, in Arlington, Virginia. The purpose of the conference was to ponder the future of the commercial vehicle industry and to explore the types of research needed to meet the challenges of the future. These proceedings summarize the issues, comments, future scenarios, and other information addressed during the conference. The authored research papers presented at the conference are also included. The conference committee net following the event to synthesize the information presented and discussions held and to deliberate on its findings and recommendations for future research, which are also presented in the report.
Full-text PDF of this report is available for free download at
http://www.trb.org/publications/conf/CP38.pdf

Item 12
The Fuel Tax and Alternatives for Transportation Funding
TRANSPORTATION RESEARCH BOARD
TRB Special Report 285 • 2006

TRB Special Report 285: The Fuel Tax and Alternatives for Transportation Funding examines the viability of existing revenue sources, the merits of present transportation finance arrangements, and potential directions for reform of transportation finance. According to the report, fuel taxes can remain the primary funding source for the nation's highways for at least another decade, but eventually replacing them with a system for metering road use and charging accordingly could benefit travelers and the public. In addition, the committee that developed the report suggests that while the current funding system helps maintain existing highways and build new ones and ensures that users pay most of these costs, it does not help transportation agencies alleviate congestion or target investment in the most valuable projects. A press release on the report is also available.
Full-text PDF of this report is available for free download at http://trb.org/publications/sr/sr285.pdf

Item 13

Tires and Passenger Vehicle Fuel Economy: Informing Consumers, Improving Performance

TRANSPORTATION RESEARCH BOARD

TRB Special Report 286 • 2006

TRB and the Board on Energy and Environmental Systems, part of the National Academies' Division on Engineering and Physical Sciences (DEPS), have released Special Report 286, Tires and Passenger Vehicle Fuel Economy: Informing Consumers, Improving Performance. This report examines the contribution of tires to vehicle fuel consumption and the prospects for improving tire energy performance without adversely affecting tire life, traction capability, and retail prices. The report reviews the technical literature and analyzes energy performance data from nearly 200 passenger tires on the market today. National fuel savings from improving the energy efficiency of passenger tires by 10 percent are quantified and the implications for consumer spending on tires, motor vehicle safety, and scrap tire generation are considered. Observing that consumers are given little, if any, information on the fuel economy effects of tires, the report recommends that government and industry cooperate to fill this information gap. A spreadsheet containing measurements of the energy and performance characteristics of the nearly 200 passenger tires examined in the report is also available. DEPS and TRB are divisions of the National Academies, which include the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council.

Full-text PDF of this report is available for free download at http://www.trb.org/publications/sr/sr286.pdf

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❑ 4	NCHRP Report 525 Vol. 11	❑ 11	TRB Conference Proceedings 38
❑ 5	NCHRP Report 547	❑ 12	TRB Special Report 285
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