



NTIS Technical Reports Newsletter

Purpose: To bring you a sampling of the latest documents added to the NTIS Database and to help you gain a greater understanding of the wealth of scitech information available from the National Technical Information Service.

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U.S. Department of Commerce
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Alexandria, VA 22312

VOLUME 2
NUMBER 5
NOVEMBER 15, 2009

Category 50 Civil Engineering

ADA496274

Iraq: Reconstruction Assistance. (Updated March 12, 2009).

Department of Defense.

2009, 35p

CRS-RL31833

Related Categories/Sub-categories:

44G (Environmental & Occupational

Factors)

74 (Military Sciences)

89D (Structural Analyses)

92 (Behavior & Society)

96 (Business & Economics)

ADA503616

Heterogeneity Effects in Plutonium Contaminated Soil.

Department of Defense.

2009, 65p

AFIT/GES/ENV/09-M01

Related Categories/Sub-categories:

48E (Soil Sciences)

99D (Basic & Synthetic Chemistry)

99F (Physical & Theoretical Chemistry)

DE2009953372

Smolt Responses to Hydrodynamic Conditions in Forebay Flow Nets of Surface Flow Outlets, 2007.

Department of Energy.

2009, 81p

PNNL-17387

Related Categories/Sub-categories:

46B (Fluid Mechanics)

48G (Hydrology & Limnology)

57H (Ecology)

98F (Fisheries & Aquaculture)

N20090015896

Synthesis and Control of Flexible Systems with Component-Level Uncertainties.

NASA Goddard Space Flight Center.

2009, 18p

Related Categories/Sub-categories:

51 (Aeronautics & Aerodynamics)

84 (Space Technology)

N20090022374

Developing Soil Models for Dynamic Impact Simulations.

NASA Langley Research Center.

2009, 21p

LF99-7733

Related Categories/Sub-categories:

48E (Soil Sciences)

PB2009116003

Cost Effective Bridge Deck Reconstruction in Kansas using High-Density Concrete Overlays and Asphalt Membrane Overlays.

Federal Highway Administration.

2009, 105p

FHWA-KS-07-4

Related Categories/Sub-categories:

43G (Transportation)

71G (Corrosion & Corrosion Inhibition)

91B (Transportation & Traffic Planning)

PB2009115627

Initial Assessment of Existing Private Water Service Providers in Cambodia: Strengthening Micro, Small and Medium Enterprises in Cambodia.

Agency for International Development.

2009, 62p

Related Categories/Sub-categories:

48B (Natural Resource Management)

96G (Foreign Industry Economic Development)

PB2009115011

Synthesis of Post-Fire Road Treatments for BAER Teams: Methods, Treatment Effectiveness, and Decision Making Tools for Rehabilitation.

Rocky Mountain Research Station.

2009, 159p

RMRS-GTR-228

Related Categories/Sub-categories:

48D (Forestry)

57H (Ecology)

91C (Fire Services, Law Enforcement, & Criminal Justice)

PB2009115007

Manual for Computing bed Load Transport Using BASG (Bedload Assessment for Gravel-bed Streams) Software.

Rocky Mountain Research Station.

2009, 50p

RMRS-GTR-223

Related Categories/Sub-categories:

48G (Hydrology & Limnology)

62B (Computer Software)



Category 50 Civil Engineering

PB2009114136

Maaliikenteen ahiheuttaman runkomelun arviointi. Esiselvitys. (Assessment of Traffic-Induced Ground-Borne Noise. Preliminary Study).

Valtion Teknillinen Tutkimuskeskus, Espoo (Finland).

2009, 74p

VTT-TN-2468

ISBN-978-951-38-7270-0

Related Categories/Sub-categories:

43G (Transportation)

68B (Noise Pollution & Control)

91B (Transportation & Traffic Planning)

PB2009114135

Renkaiden puutteet kuolonkolareissa (Tire Defects in Fatal Road Accidents).

Valtion Teknillinen Tutkimuskeskus, Espoo (Finland).

2009, 52p

VTT-TN-2467

ISBN-978-951-38-7268-7

ISBN-978-951-38-7269-4

Related Categories/Sub-categories:

85D (Transportation Safety)

85H (Road Transportation)

PB2009114130

Bridge Management Systems for Transportation Agency Decision Making. A Synthesis of Highway Practice. National Cooperative Research Program 397.

Transportation Research Board

2009, 140p

NCHRP-SYN-397

ISBN-978-0-309-0983-9

LCCN-20095902559

Related Categories/Sub-categories:

43G (Transportation)

85H (Road Transportation)

91B (Transportation & Traffic Planning)

PB2009114129

Adhesive Anchors in Concrete Under Sustained Loading Conditions.

National Cooperative Highway Research Program.

Transportation Research Board.

2009, 139p

NCHRP-693

ISBN-978-0-309-11788-3

LCCCN-2009931145

Related Categories/Sub-categories:

43G (Transportation)

71B (Adhesives & Sealants)

85H (Road Transportation)

91B (Transportation & Traffic Planning)

PB2009114062

Connection Details for Prefabricated Bridge Elements and Systems.

Federal Highway Administration.

2009, 568p

FHWA-IF-09-010

Related Categories/Sub-categories:

94G (Manufacturing Processes & Materials Handling)

PB2009114037

Potential Application of Nanotechnology on Cement Based Materials.

Department of Transportation.

2009, 156p

MBTC-DOT-2095/3004

Related Categories/Sub-categories:

71D (Ceramics, Refractories, & Glass)

PB2009114011

Development of Field Data for Effective Implementation of Mechanistic Empirical Pavement Design Procedure.

Federal Highway Administration.

2009, 197p

NDOR-P300

Related Categories/Sub-categories:

43G (Transportation)

85H (Road Transportation)

Major Subject Categories

Category Codes*/Title	New for October Quantity**
41 Manufacturing Technology.....	33
43 Problem Solving Information for State & Local Governments.....	287
44 Health Care.....	222
45 Communication.....	76
46 Physics.....	243
47 Ocean Sciences & Technology.....	160
48 Natural Resources & Earth Sciences.....	243
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50 Civil Engineering.....	90
51 Aeronautics & Aerodynamics.....	65
54 Astronomy & Astrophysics.....	29
55 Atmospheric Sciences.....	37
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62 Computers, Control & Information Theory.....	128
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72 Mathematical Sciences.....	106
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76 Navigation, Guidance, & Control.....	15
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82 Photography & Recording Devices.....	6
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89 Building Industry Technology.....	34
90 Government Inventions for Licensing.....	6
91 Urban & Regional Technology & Development.....	359
92 Behavior & Society.....	721
94 Industrial & Mechanical Engineering.....	90
95 Biomedical Technology & Human Factors.....	46
96 Business & Economics.....	452
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* For a listing of Scope Notes that defines the specific topical content for each category, go to <http://www.ntis.gov/pdf/scopenotes.pdf>

** Quantities represent each new report assigned on average to 3-5 categories.

Category 50 Civil Engineering

PB2009114000

Detection of Delaminations of FRP Retrofitted Reinforced Concrete Columns.

Department of Transportation.

2009, 54p

TNW-2009-08

Related Categories/Sub-categories:

71F (Composite Materials)

99C (Polymer Chemistry)

PB2009113984

Solar Powered Lighting for Overhead Highway Signs.

Federal Highway Administration.

2009, 39p

Related Categories/Sub-categories:

43G (Transportation)

85D (Transportation Safety)

85H (Road Transportation)

97N (Solar Energy)

PB2009113979

Biological Age Dating of Infrastructure Cracks.

Department of Transportation.

2009, 128p

Related Categories/Sub-categories:

71L (Materials Degradation & Fouling)

89G (Construction Materials, Components, & Equipment)

PB2009113978

Concrete Evaluation Using Guided Waves.

Department of Transportation.

2009, 792p

Related Categories/Sub-categories:

89D (Structural Analyses)

89G (Construction Materials, Components, & Equipment)

PB2009113976

Life Cycle Cost of Bridges.

Department of Transportation.

2009, 18p

Related Categories/Sub-categories:

89 (Building Industry Technology)

PB2009113975

Introducing Size Effect into Design Practice and Codes for Concrete Infrastructure.

Department of Transportation.

2009, 479p

Related Categories/Sub-categories:

89D (Structural Analyses)

89G (Construction Materials, Components, & Equipment)

PB2009113972

Ultrasonic Technique for the In-Situ Monitoring of the Setting, Hardening and Strength Gain of Concrete.

Department of Transportation.

2009, 525p

Related Categories/Sub-categories:

89G (Construction Materials, Components, & Equipment)

PB2009113840

Real-Time Traveler Information Systems:

A Synthesis of Highway Practice. NCHRP Synthesis 399.

Federal Highway Administration.

2009, 76p

Related Categories/Sub-categories:

43G (Transportation)

85H (Road Transportation)

88B (Information Systems)

91B (Transportation & Traffic Planning)

PB2009113750

Shear Performance of Existing Prestressed Concrete Bridge Girders.

Florida State Department of Transportation.

2009, 160p

BD545-56

Related Categories/Sub-categories:

43G (Transportation)

85H (Road Transportation)

PB2009111984

Improved Correlation between Texas Cone Penetrometer Blow Count and Undrained Shear Strength of Soft Clays.

Federal Highway Administration.

2009, 139p

REPT-0-5824-1

Related Categories/Sub-categories:

48E (Soil Sciences)

PB2009111546

Automated Laboratory Testing Methods for Specific Gravity & Absorption: Verified to Match the Current Test Methods.

Federal Highway Administration.

2009, 84p

FHWA/OH-2009/3

Related Categories/Sub-categories:

94K (Laboratory & Test Facility Design & Operation)

NTNL

U.S. Department of Commerce

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For more information, go to <http://www.ntis.gov/products/ntrl.aspx>.

Key to Database Fields Used

The following NTIS database fields are used in this short listing of recently acquired technical reports.

NTIS Order Number

Title

Source

Report Year, Page Count

Report Number/ISBN13 (if available)

Related Categories/Sub-categories (where the document is also indexed)



Category 85 Transportation

ADA496821

Maritime Terrorism and the Small Boat Threat to the United States: A Proposed Response.

Department of Defense.

2009, 139p

Related Categories/Sub-categories:

- 47A (Marine Engineering)
- 74G (Military Operations, Strategy, & Tactics)
- 91I (Emergency Services & Planning)

ADA499287

U.S. Seaport Security: Critical Challenge for

Department of Homeland Security.

Department of Defense.

2009, 30p

Related Categories/Sub-categories:

- 70F (Public Administration & Government)
- 91I (Emergency Services & Planning)
- 92C (Social Concerns)

ADA499662

Simultaneous Planning and Control for Autonomous Ground Vehicles.

Department of Defense.

2009, 160p

Related Categories/Sub-categories:

- 62 (Computers, Control & Information Theory)

ADA500317

Aerospace Toxicology: An Overview.

Department of Defense.

2009, 52p

DOT-FAA-AM-09-8

Related Categories/Sub-categories:

- 51 (Aeronautics & Aerodynamics)
- 57E (Clinical Medicine)
- 57Y (Toxicology)
- 70D (Personnel Management, Labor Relations & Manpower Studies)
- 92A (Job Training & Career Development)

Subject Category Codes/ Classification

NTIS classifies citations into 39 subject categories. Each of these subject categories is divided into subcategories. This method provides sorting categories for both hard and soft sciences. All subject categories consist of three character codes: two numerics and one alpha character. The numeric codes represent entire categories, the alpha codes are used to designate subcategories within these broad categories. The number of NTIS subcategories posted to an information product average from one to five, although there are some reports with more.

DE2009947393

Evaluation of the 2008 Lexus LS 600H Hybrid Synergy Drive System (FY 2009).

Department of Energy.

2009, 91p

ORNL/TM-2008/185

Related Categories/Sub-categories:

- 70E (Research Program Administration & Technology Transfer)
- 81J (Reciprocation & Rotating Combustion Engines)
- 97B (Energy Use, Supply, & Demand)
- 97M (Batteries & Components)

DE2009948754

National Fuel Cell Bus Program: Accelerated Testing Evaluation Report and Appendices, Alameda-Contra Costa Transit District (AC Transit).

Department of Energy.

2009, 45p

FTA-CO-26-7004-2009.1, FTA-CO-26-7004-2009.1A

Related Categories/Sub-categories:

- 97O (Miscellaneous Energy Conversion & Storage)

DE2009949053

Effects of Intermediate Ethanol Blends on Legacy Vehicles and Small Non-Road Engines, Report 1 - Updated.

Department of Energy.

2009, 135p

ORNL/TM-2008-117-UPDATE, NREL/TP-540-43543

Related Categories/Sub-categories:

- 68A (Air Pollution & Control)
- 81J (Reciprocation & Rotating Combustion Engines)
- 97K (Fuels)
- 97L (Energy Studies, Energy Related)

DE2009951107

Environmental Management System Plan.

Department of Energy.

2009, 36p

LBNL-PUB-3180-2009

Related Categories/Sub-categories:

- 68 (Environmental Pollution & Control)
- 70F (Public Administration & Government)
- 97G (Policies, Regulations & Studies)

DE2009951259

Well-to-Wheels Energy Use and Greenhouse Gas Emissions Analysis of Plug-in Hybrid Electric Vehicles.

Department of Energy.

2009, 70p

ANL/ESD/09-2

Related Categories/Sub-categories:

- 68A (Air Pollution & Control)
- 97B (Energy Use, Supply, & Demand)

N20090019723

Evaluation of Fused Synthetic and Enhanced Vision Display Concepts for Low-Visibility Approach and Landing.

NASA Langley Research Center.

2009, 84p

NASA/TP-2009-215707

L-19504

LF99-7406

Related Categories/Sub-categories:

- 51B (Aeronautics)

PB2009107758

Debt Finance Practices for Surface Transportation. A Synthesis of Highway Practice.

Transtech International, Inc.

2009, 95p

NCHRP-SYN-395

Related Categories/Sub-categories:

- 43A (Finance)
- 70B (Management Practice)
- 70F (Public Administration & Government)
- 96F (Banking & Finance)

PB2009107759

Integrating Airport Information Systems.

Federal Aviation Administration.

2009, 98p

TRB-ACRP-13

Related Categories/Sub-categories:

- 70C (Management Information Systems)

PB2009107787

Quantifying the Importance of Image and Perception to Bus Rapid Transit.

Federal Transit Administration.

2009, 103p

FL-26-7109-03

Related Categories/Sub-categories:

- 43G (Transportation)
- 50 (Civil Engineering)
- 91B (Transportation & Traffic Planning)

PB2009107803

Driver-Eye-Movement-Based Investigation for Improving Work-Zone Safety.

New England Transportation Consortium.

2009, 62p

NETCR-71

Related Categories/Sub-categories:

- 43G (Transportation)
- 91B (Transportation & Traffic Planning)



Category 85 Transportation

[PB2009107823](#)

[Guidelines for Guardrail Implementation: National Cooperative Highway Research Program.](#)

Transportation Research Board.

2009, 44p

NCHRP-638

ISBN-978-030-911-781-4

Related Categories/Sub-categories:

43G (Transportation)

50A (Highway Engineering)

[PB2009107837](#)

[Feasibility Study on Evaluating Driver Education Curriculum.](#)

National Highway Traffic Safety Administration.

2009, 34p

DOT-HS-811-108

Related Categories/Sub-categories:

92D (Education, Law, & Humanities)

[PB2009107839](#)

[Modeling Truck Traffic Volume Growth Congestion.](#)

University Transportation Center for Alabama, Tuscaloosa.

2009, 76p

UTCA-07304

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

[PB2009109368](#)

[Piracy Off the Horn of Africa, April 29, 2009.](#)

Congressional Research Service.

2009, 31p

Related Categories/Sub-categories:

74G (Military Operations, Strategy, & Tactics)

92C (Social Concerns)

92E (International Relations)

96 (Business & Economics)

[PB2009109495](#)

[Serviceable Pavement Marking Retroreflectivity Levels: Technical Report.](#)

Federal Highway Administration.

2009, 150p

REPT-0-5656-1

Related Categories/Sub-categories:

50A (Highway Engineering)

91B (Transportation & Traffic Planning)

[PB2009109509](#)

[Evaluation of Enhanced Brake Lights Using Surrogate Safety Metrics. Task 1 Report: Further Characterization and Development of Rear Brake Light Signals.](#)

National Highway Traffic Safety Administration.

2009, 142p

DOT-HS-811-127

Related Categories/Sub-categories:

43G (Transportation)

50A (Highway Engineering)

91B (Transportation & Traffic Planning)

[PB2009109539](#)

[Aviation Security: TSA Has Completed Key Activities Associated with Implementing Secure Flight, but Additional Actions Are Needed to Mitigate Risks.](#)

Government Accountability Office.

2009, 68p

GAO-09-292

Related Categories/Sub-categories:

91I (Emergency Services & Planning)

92 (Behavior & Society)

[PB2009109547](#)

[Problem Definition for Pre-Crash Sensing Advanced Restraints.](#)

National Highway Traffic Safety Administration.

2009, 86p

DOT-HS-811-114

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

[PB2009110077](#)

[Mechanical Damage. Final Report.](#)

Department of Transportation.

2009, 183p

Related Categories/Sub-categories:

41 (Manufacturing Technology)

71J (Iron & Iron Alloys)

94J (Nondestructive Testing)

[PB2009110169](#)

[American Recovery and Reinvestment Act of 2009: Oversight Challenges Facing the Department of Transportation.](#)

Department of Transportation.

2009, 33p

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

91J (Economic Studies)

[PB2009110258](#)

[Vision for High-Speed Rail in America. The American Recovery and Reinvestment Act.](#)

Federal Railroad Administration.

2009, 28p

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

[PB2009110286](#)

[Rail Modernization Study: Report to Congress, April 2009.](#)

Federal Transit Administration.

2009, 60p

See also PB87-190351.

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

[PB2009110482](#)

[FTA Low-Speed Urban Maglev Research Program: Lessons Learned.](#)

Federal Transit Administration.

2009, 57p

FTA-DC-26-7260-2009.01

See also DE200515014274.

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

[PB2009110694](#)

[Characteristics of Bus Rapid Transit for Decision-Making.](#)

Federal Transit Administration

2009, 412p

FL-26-7109-05

See also PB2005100006.

Related Categories/Sub-categories:

43G (Transportation)

70B (Management Practice)

91B (Transportation & Traffic Planning)

[PB2009110695](#)

[Feasibility Study on the Use of Personal GPS Devices in Paratransit.](#)

Federal Transit Administration.

2009, 68p

Related Categories/Sub-categories:

43G (Transportation)

76C (Navigation & Guidance System Components)

85H (Road Transportation)

91B (Transportation & Traffic Planning)

[PB2009110951](#)

[Freight Rail Security: Actions Have Been Taken to Enhance Security, but the Federal Strategy Can Be Strengthened and Security Efforts Better Monitored.](#)

Government Accountability Office.

2009, 129p

GAO-09-243

Related Categories/Sub-categories:

43D (Police, Fire, & Emergency Services)

91C (Fire Services, Law Enforcement, & Criminal Justice)

92 (Behavior & Society)

RSS Feeds are available in your choice of NTIS Subject Category. For information use the **RSS link on the NTIS Homepage** and look for the **Category RSS Feeds** button.



Category 85 Transportation

PB2009110970

Design and Evaluation of Effective Crosswalk Illumination.

Federal Highway Administration.

2009, 60p

FHWA-NJ-DOT-2009-003

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

PB2009111031

Aviation and Climate Change: Aircraft Emissions Expected to Grow, but Technological and Operational Improvements and Government Policies Can Help Control Emissions.

Government Accountability Office.

2009, 100p

GAO-09-554

Related Categories/Sub-categories:

51C (Aircraft)

68A (Air Pollution & Control),

81D (Jet & Gas Turbine Engines)

PB2009111074

Aerodynamic Effects of Passing Trains to Surrounding Objects and People.

Federal Railroad Administration.

2009, 287p

DOT-VNTSC-FRA-04-05

Related Categories/Sub-categories:

43G (Transportation)

51A (Aerodynamics)

91B (Transportation & Traffic Planning)

PB2009111077

North American Joint: Positive Train Control Project.

Federal Railroad Administration.

2009, 84p

DOT/FRA/ORD-09/04

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

PB2009111132

Implementing the Results of the Second Strategic Highway Research Program: Saving Lives, Reducing Congestion, Improving Quality of Life. Special Report 296.

Federal Highway Administration.

2009, 186p

TRB-SR-296

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

PB2009111347

Analysis of Benefits and Costs of Forward Collision Warning Systems for the Trucking Industry.

Federal Motor Carrier Safety Administration.

2009, 67p

FMCSA-RRT-09-021

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

PB2009113274

Transportation Security: Key Actions Have Been Taken to Enhance Mass Transit and Passenger Rail Security, but Opportunities Exist to Strengthen Federal Strategy and Programs.

Government Accountability Office

2009, 100p

GAO-09-678

Related Categories/Sub-categories:

43G (Transportation)

91B (Transportation & Traffic Planning)

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