

Research Digest

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Item 1

Operational and Legal Issues with Fuel Farms

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP LRD 28 • 2016

"Airports need to provide a ready source of fuel for all of their users, including commercial airlines, general aviation, corporate aircraft operators, and other commercial operators. Fuel farms are an efficient way to provide the storage and dispensing of aviation fuels to multiple users at an airport. But there are different ownership and operating models for achieving this objective. Some airports may choose to serve as the single source of fuel, while others retain commercial providers, and still larger airports may have an airline fuel consortium. Analyzing the most appropriate model includes understanding the legal issues, safety and operational standards, risk assignment, environmental liability and other risk management issues, and insurance limits and structures, in addition to the various state, federal, and local rules and regulations. This digest is a practical guide to assist airport sponsors and their legal counselors in 1) understanding the basic legal and operational issues, and 2) evaluating the appropriate ownership and operating model at the airport." -- TRID

(32 pages)

This report is available for free download (717 KB):

http://onlinepubs.trb.org/Onlinepubs/acrp/ACRP_lrd_028.pdf

Item 2

NextGEN for Airports. Volume 1, Understanding the Airport's Role in Performance-Based Navigation. Resource Guide

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP Report 150 • 2016

"The Next Generation Air Transportation System (NextGen) refers to the federal programs (predominately airspace, air traffic, or avionics related) that are designed to modernize the National Airspace System (NAS). ACRP's NextGen initiative aims to inform airport operators about some of these programs and how the enabling practices, data, and technologies resulting from them will affect airports and change how they operate. This volume, the first report in this series, provides comprehensive information to practitioners concerning all aspects of Performance-Based Navigation (PBN) and how implementation affects overall airport operations. This Resource Guide encompasses background information, description of effects on short- and long-term airport development, impacts on safety and performance measures, and other critical factors affecting future airport operations. In addition to providing guidance to users on available resources for additional assistance, this volume also includes lessons learned and best practices based on findings from case studies that examined the airport operator's role in PBN implementation." -- from TRID

(155 pages)

This report is available for free download (6.12 MB):

http://onlinepubs.trb.org/Onlinepubs/acrp/acrp_rpt_150v1.pdf

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Item 3

Evaluating methods for determining interior noise levels used in airport sound insulation programs

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP Report 152 • 2016

"This report provides guidance for selecting and implementing methods for measuring noise level reduction in dwellings associated with airport noise insulation programs. The research complements the results of ACRP Report 89: Guidelines for Airport Sound Insulation Programs and was undertaken to assess the accuracy and validity of various noise level reduction measurement procedures currently used in airport noise insulation programs. Acoustical field measurements were made at 10 homes near San Diego International Airport and nine homes near Boston Logan International Airport. Seven measurement methods were tested: outdoor ground-level artificial sound source (loudspeaker); outdoor elevated artificial source (loudspeaker); indoor artificial sound source (loudspeaker); aircraft flyover: fixed microphone; aircraft flyover: moving microphone; architectural survey and noise reduction calculations; and acoustic intensity measurements, exterior loudspeaker and interior intensity. The report includes a summary of sound insulation theory and the science behind noise level reduction, and an overview of FAA-sponsored noise insulation programs. The report also provides guidance, including a decision matrix, for selecting an appropriate acoustical testing method. Lastly, the report provides suggested practices for each measurement technique, based on the results of the research." -- TRID
(vii, 116, A-4, B-2, C-11, D-5 pages)

This report is available for free download (16 MB):

http://onlinepubs.trb.org/Onlinepubs/acrp/acrp_rpt_152.pdf

Item 4

Improving the Airport Customer Experience

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP Report 157 • 2016

"This guidebook documents notable and emerging practices in airport customer service management that increase customer satisfaction, recognizing the different types of customers (e.g., passengers, meeters and greeters, employees) and types and sizes of airports. It also identifies what airports can do to further improve the customer experience. This guidebook will provide airport staff, specifically customer service managers and others with responsibilities for managing and improving the customer experience, with comprehensive resources of management practices and understanding of current trends, information sources on customer service improvements, and practical tools that can be used for implementing a customer service improvement program. The guidebook provides key drivers of customer satisfaction, including the top positive and negative influences for the customer experience; methods to engage airport stakeholders to improve customer satisfaction "from roadway to runway," including the use of innovative technologies; a template to implement a strategy for a customer satisfaction improvement program for a variety of types and sizes of airports, including staffing and budget considerations; and guidance to develop performance indicators to measure customer satisfaction." -- from TRID
(230 pages)

This report is available for free download (48.2 MB):

http://onlinepubs.trb.org/Onlinepubs/acrp/acrp_rpt_157.pdf

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Item 5

Addressing Significant Weather Impacts in Airports: Quick Start Guide and Toolkit

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP Report 160 • 2016

"This report provides a toolkit that raises airport operator awareness about vulnerabilities caused by significant weather events and helps airports develop more robust contingency and recovery plans, in addition to their airport emergency plans. This toolkit focuses on events that are "rare but plausible"; that is, events that may have happened in the distant past, or in adjacent geographic areas, but are not common event types at the airport itself, and therefore may not be in the forefront of the airport managers' minds. Development of the toolkit, Airport Weather Advanced REadiness (AWARE), is based on a review of the historical weather data and impacts, as well as best practices and lessons learned from airports' responses to recent significant weather events. This toolkit will assist airports of various types and sizes and their stakeholders in effectively planning for, responding to, and recovering from significant weather events. The Excel-based AWARE Toolkit first helps airports identify significant weather event types that airports may wish to prepare for, drawing on historical weather data relevant to the airport's specific location. AWARE also contains seven readiness modules that allow users to review best practices for preparing for these different weather events, assess their readiness for those events, and generate customized checklists for preparing for and recovering from weather events. The seven modules are Administration & Finance, Planning & Environment, Airfield Operations, Terminal Operations, Ground Transportation & Parking, Safety & Security, and a consolidated streamlined version of the full toolkit for Small Airports. The Toolkit also contains the Impacts Tracking Module—a tool to help airports track the costs and other impacts of weather events (e.g., flight delays) over time as events occur. ACRP Report 160 contains a Quick Start Guide for the Toolkit, followed by a more in-depth User Guide and then Case Studies." -- from TRID (various pagings)

CONTENTS

- Airport Weather Advanced REadiness (AWARE)
- AWARE Toolkit User Guide
- Chapter 1. Introduction
- Chapter 2. Toolkit Scope
- Chapter 3. Using the Toolkit
- Chapter 4. Methodological Information
- Chapter 5. Frequently Asked Questions
- References
- Airport Case Studies

This report is available for free download (Website with link to PDF.):

<http://www.trb.org/ACRP/ACRPReport160.aspx>

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Item 6

Tabletop and Full-Scale Emergency Exercises for General Aviation, Non-Hub, and Small Hub Airports: A Synthesis of Airport Practice

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP Synthesis 72 • 2016

"The focus of this report is on exercise practices that can be used by small airports; that is, general aviation, reliever, non-hub, and small hub airports. The report includes sample exercise tools and plans, the checklist of effective practices for tabletop and full-scale emergency exercises, and a road map for developing an effective exercise program. The purpose is to enable the reader to "grab and go" from the ideas and sample exercise materials, derived from a survey of 58 U.S. airports regarding specific exercise plans and procedures; and from six detailed case examples. The checklist is designed to assist airport managers, emergency managers, and planners in the development, implementation, and evaluation of effective exercise programs. Every airport in the study, general aviation as well as FAA Part 139, found benefits from going beyond regulatory minima for training and exercises. Many reported that the exercise guidance in the Department of Homeland Security Exercise and Evaluation Program (HSEEP) provides the most effective model for exercises, but most of those airports noted that extensive effort is required to prepare staff to use HSEEP and to adapt the HSEEP materials to fit the airport environment. Most often, airports said that they have received valuable assistance from local government agency partners in developing exercises, particularly exercises using HSEEP templates and forms." -- from TRID
(146 pages)

This report is available for free download (9.52 MB):

http://onlinepubs.trb.org/Onlinepubs/acrp/acrp_syn_072.pdf

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Item 7

Combining Mixed-Use Flight Operations Safely at Airports: A Synthesis of Airport Practice

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP Synthesis 74 • 2016

"The basic premise behind an airport being open to the public is that the airport will make reasonable accommodations for all types of aeronautical activities. Safety, of course, is paramount. Mixed-use aeronautical activity requires the public-use airport to accommodate all comers in compliance with Federal Aviation Administration (FAA) sponsor assurances. The different categories of aircraft can include gliders, helicopters, ultralight vehicles, balloons, airships, blimps, skydiving, aerial applications for agriculture and firefighting, banner towing, aerobatic practice, and similar flight operations. Unmanned aircraft systems and radio-controlled model aircraft activity that take place on an airport can become part of the mix of an airport's operation. Not included in this report are seaplane operations; a separate report is referenced. In accommodating mixed-use operations, an airport is challenged in two ways—with operational accommodation in the local airspace and runway environment, and with ground operational and logistical accommodation on the airfield. This report is intended to serve as an informative document for those airport operators and policymakers who seek information about how other airports have safely accommodated mixed-use flight activity on their airport. Information used in this study was acquired through a review of the literature and interviews with airport operators and industry experts. Case examples are presented to illustrate the experiences of airport operators in accommodating users safely and efficiently. The information in this report helps an airport operator to understand better the operational characteristics and needs of the various mixed aeronautical uses, especially for airports without air traffic control tower operation (i.e., uncontrolled airports)." -- TRID
(155 pages)

This report is available for free download (56.3 MB):

http://onlinepubs.trb.org/Onlinepubs/acrp/acrp_syn_074.pdf

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Item 8

Airport Advisories at Non-Towered Airports: A Synthesis of Airport Practice

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP Synthesis 75 • 2016

"This report documents the manner in which non-towered airports provide advisories to pilots regarding winds, traffic, and runways in use. Unlike with pilot advisories, there is little guidance available for airport operators in providing airport advisories. The objective of this report is to aggregate available guidance on this topic and document information from non-towered airports with at least 50,000 annual aircraft operations. The report includes a literature review and a telephone interview survey of 165 non-towered airports. More detailed interviews were conducted and used to develop six case examples that document effective airport advisory programs in place at airports. More than 90% of airports that participated in the study provide information to pilots via Automated Surface Observing System (ASOS)/Automated Weather Observing System (AWOS) and wind sock/segmented circle. Approximately one-third provide audible airport advisories, typically through the UNICOM frequency. At 43%, common traffic advisory frequency (CTAF) serves as UNICOM by sharing the same frequency. According to 85%, pilots generally adhere to published procedures, including traffic patterns. At 97%, pilots consistently communicate their intentions over CTAF. At 54%, radio frequency interference (bleed over) is a problem, whereas 11% report it as only a slight problem. Fully 95% of participating airports agree that audible airport advisories are necessary at non-towered airports. This is true even among the majority of non-towered airports currently not providing audible airport advisories, which indicates the perceived value in audible airport advisories by airport managers. Various lessons learned include the efforts by airport staff to minimize runway incursions; enhancements to the airfield; encouragement of communication; pilot meetings; safety reminders; limited access; procedural enhancements; driver training; and additional signage. Common ideas to change airport advisories in an effort to improve aviation safety include using proper phraseology, appending ASOS/AWOS broadcasts with current operationally relevant information as appropriate, and more effectively training personnel staffing the UNICOM station." -- from TRID (58 pages)

This report is available for free download (Free download options):

<https://www.nap.edu/catalog/23628>

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Item 9

Helicopter Noise Information for Airports and Communities: A Synthesis of Airport Practice

TRANSPORTATION RESEARCH BOARD (TRB)

ACRP Synthesis 76 • 2016

"This synthesis of practice provides airport operators and their communities with a better understanding of helicopter noise and a description of the current state of effective practices for managing helicopter noise. A review of the literature and the ten airport survey respondents generally agreed that outreach, helicopter noise management programs, technology, and noise abatement procedures are most effective in managing helicopter noise. All ten airport survey respondents generally agreed that community outreach was the most important part of their noise management programs. These outreach programs include updated websites, educating the public and operators in person, and notifying the public of changes in helicopter routes either for temporary purposes or permanent changes (and why). Respondents agreed that simply publishing noise mitigation procedures without making operators aware of them is not all that helpful. In the literature as well as from the airport survey, helicopter altitude was the next most cited control measure. This is subject to air traffic control and cannot be mandated by the airport. Noise reduction with increased altitude is most effective directly under the flight track and the noise reduction diminishes to the side with increasing distance. The route structures also were commonly cited in the literature as well as in the airport survey." -- from TRID
(135 pages)

This report is available for free download (Free download options):

<https://www.nap.edu/catalog/23609>

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Item 10

Evaluating Alternatives for Landside Transport of Ocean Containers

TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

NCFRP Report 34 • 2015

"This report provides a systematic method for evaluating alternatives to diesel trucks for ocean container transport to or from deep-water ocean ports and inland destinations within 100 miles. The report contains information on all known, active inland container transport proposals, based primarily on previous work in Southern California on zero-emissions container movement systems. The report also contains a set of proposed performance-based criteria reflecting the transportation, emissions, energy utilization, and congestion relief objectives and cost implications of alternative inland transport options. The criteria can be used to guide evaluations of potential alternative container transport technology and systems, both in the abstract and in specific port and terminal applications." -- from TRID
(160 pages)

CONTENTS

- Summary
- Chapter 1. Introduction
- Chapter 2. Landside Container Transport Alternatives
- Chapter 3. System Goals and Evaluation Criteria
- Chapter 4. Proposed Evaluation Method
- Chapter 5. Case Studies
- Chapter 6. Los Angeles/Long Beach Case Study
- Chapter 7. Baltimore Case Study
- Chapter 8. Findings and Conclusions

This report is available for free download (Free download options):

<https://www.nap.edu/catalog/22136>

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Item 11

Planning and Preliminary Engineering Applications Guide to the Highway Capacity Manual

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Report 825 • 2016

"This guide is designed to help planners apply the methodologies of the Highway Capacity Manual (HCM) 2016 Major Update to common planning and preliminary engineering analyses (including scenario planning and system performance monitoring). It shows how the HCM can interact with travel demand forecasting, mobile source emission, and simulation models and its application to multimodal analyses and oversaturated conditions. Three case studies (freeway master plan, arterial bus rapid transit analysis, and long-range transportation plan analysis) illustrate the techniques presented in the guide. In addition to providing a cost-effective and reliable approach to analysis, the guide provides a practical introduction to the detailed methodologies of the HCM." -- from TRID
(259 pages)

- Supplementary PowerPoint presentation available through link

CONTENTS

- Chapter A. Introduction
- Chapter B. Medium-Level (Facility-Specific) Analyses
- Chapter C. High-Level Analyses
- Chapter D. Working with Traffic Demand Data
- Chapter E. Predicting Intersection Traffic Control
- Chapter F. Default Values to Reduce Data Needs
- Chapter G. Service Volume Tables to Reduce Analysis Effort
- Chapter H. Freeway Analyses
- Chapter I. Multilane Highways
- Chapter J. Two-Lane Highways
- Chapter K. Urban Streets
- Chapter L. Signalized Intersections
- Chapter M. STOP-controlled Intersections
- Chapter N. Roundabouts
- Chapter O. Pedestrians, Bicyclists, and Public Transit
- Chapter P. Truck Level of Service
- Chapter Q. Corridor Quick Estimation Screenline Analysis
- Chapter R. Areas and Systems
- Chapter S. Roadway System Monitoring
- Chapter T. Case Study 1: Freeway Master Plan
- Chapter U. Case Study 2: Arterial BRT Analysis
- Chapter V. Case Study 3: Long-Range Transportation Plan Analysis

This report is available for free download (Web page with links to PDF and PowerPoint presentation):

<http://www.trb.org/Main/Blurbs/174958.aspx>

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Item 12

Estimating Highway Preconstruction Services Costs. Volume 1, Guidebook

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Report 826 • 2016

"This report presents guidance for state departments of transportation (DOTs) and other agencies for estimating pre-construction services (PCS) costs for transportation project development. PCS refers to a varied assortment of project-specific engineering and other professional services required before construction begins on a bridge, highway, or other transportation project, whether provided by agency staff or consultants. The guidance—a guidebook (Volume 1) and supporting research report (Volume 2)—addresses principal sources and components of PCS costs, PCS estimating methodologies, trends (such as changes in design and construction technology, design standards, program requirements, and professional workforce) likely to affect PCS costs, and advice on agency policies and practices that can help control program risk through improved PCS cost estimation." -- from TRID
(112 pages)

This report is available for free download (28.4 MB):

http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_826v1.pdf

Item 13

Estimating Highway Preconstruction Services Costs. Volume 2, Research Report

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Report 826 • 2016

"This report presents guidance for state departments of transportation (DOTs) and other agencies for estimating pre-construction services (PCS) costs for transportation project development. PCS refers to a varied assortment of project-specific engineering and other professional services required before construction begins on a bridge, highway, or other transportation project, whether provided by agency staff or consultants. The guidance—a guidebook (Volume 1) and supporting research report (Volume 2)—addresses principal sources and components of PCS costs, PCS estimating methodologies, trends (such as changes in design and construction technology, design standards, program requirements, and professional workforce) likely to affect PCS costs, and advice on agency policies and practices that can help control program risk through improved PCS cost estimation. This volume specifically documents the development, testing, validation, and packaging of an accurate, consistent, and reliable method for estimating PCS costs." -- from TRID
(87 pages)

This report is available for free download (25.5 MB):

http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_826v2.pdf

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Item 14

Leadership Guide for Strategic Information Management for State Departments of Transportation

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Report 829 • 2016

"This guidebook is intended to assist executives and managers on effectively developing and maintaining an agency's capability to provide mission-critical information when and where it is needed. The guidebook considers the importance of information to departments of transportation (DOTs) and the challenges of ensuring that good information is available for decision making, the components of an effective information governance strategy, how senior executives can assess their agency's information-governance strategy and practices, and implementation of procedures and methods for effective information management. The report will be helpful particularly to DOT senior staff responsible for ensuring an agency's access to information to support decision making" -- from TRID (101 pages)

This report is available for free download (Free download options):

<https://www.nap.edu/catalog/23480>

Item 15

State DOTs Connecting Users and Rides for Specialized Transportation. Volume 1, Research Report

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Report 832 • 2016

"Specialized transportation services such as paratransit, community volunteer drivers, and transportation voucher programs provide much needed mobility options for seniors, people with disabilities, individuals with low incomes, and veterans. This report, which is published as a two-volume set, provides information and a toolkit on designing, developing, implementing, and evaluating linkages that connect customers with specialized transportation services and programs that address their travel needs. The report also provides seven steps to planning a new linkage service. Volume 1: Research Report discusses the main components of connecting specialized transportation users and rides and describes the concepts, planning considerations, key issues, the development process, and general planning principles associated with making that linkage. In addition, Volume 1 includes findings from a literature review; interviews with employees overseeing existing linkage programs; as well as research into the coordination, marketing, and evaluation of current programs. Volume 1 also contains an analysis of the strengths, weaknesses, and opportunities presented by each type of linkage program and provides best practices for connecting specialized transportation users with the rides they need to access daily services." -- TRID (various pagings)

This report is available for free download (38.8 MB):

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_832v1.pdf

Research Digest

Item 16

State DOTs Connecting Users and Rides for Specialized Transportation. Volume 2, Toolkit for State DOTs and Others

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Report 832 • 2016

"Specialized transportation services such as paratransit, community volunteer drivers, and transportation voucher programs provide much needed mobility options for seniors, people with disabilities, individuals with low incomes, and veterans. This report, which is published as a two-volume set, provides information and a toolkit on designing, developing, implementing, and evaluating linkages that connect customers with specialized transportation services and programs that address their travel needs. Volume 2: Toolkit for State DOTs and Others provides a seven-step toolkit for planning and implementing a range of linkage services, from identifying target geographies, users, and modes to determining effective evaluation and marketing strategies."-- from TRID

(33, A-5 pages)

This report is available for free download (15.4 MB):

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_832v2.pdf

Item 17

Performance Specifications for Asphalt Mixtures: A Synthesis of Highway Practice

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Synthesis 492 • 2016

"This synthesis documents the performance tests used in conjunction with volumetric properties for mixtures. Performance tests are intended to extend service life by guiding material selection (i.e., asphalt binder and aggregate) and proportions (i.e., asphalt content and gradations). The synthesis provides examples of engineering tools used in the development and implementation of performance specifications for asphalt mixtures, examples of the contents of performance-based specifications (PBS) currently used or in development, information on test program implementation and research efforts related to PBS for asphalt mixtures, and the reported benefits and challenges with implementing PBS. Information for this report was acquired through a literature search, a survey of the use of performance specifications for asphalt mixtures, and seven case examples from six state departments of transportation, and the city of Edmonton, Alberta, Canada." -- from TRID

(89 pages)

This report is available for free download (28.9 MB):

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_492.pdf

Research Digest

Item 18

Use of Reclaimed Asphalt Pavement and Recycled Asphalt Shingles in Asphalt Mixtures: A Synthesis of Highway Practice

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Synthesis 495 • 2016

"This synthesis summarizes current practices for the use of reclaimed asphalt pavement (RAP) and recycled asphalt shingles (RAS) in the design, production, and construction of asphalt mixtures. It focuses on collecting information about the use, rather than just what is allowed, of high RAP, RAS, and/or a combination of RAP and RAS. A literature review and a survey of state agencies were used to document current knowledge and practices. Case examples were developed for five key topics. The first example shows how the Georgia Department of Transportation (DOT) developed and revised its specifications to encourage contractors to consistently submit mix designs using from 30% to 40% RAP in all pavement layers. The second example documents contractor practices and procedures used to produce and place high RAP mixtures for Georgia and five other surrounding states (Alabama, Florida, North Carolina, South Carolina, and Tennessee). The third case example provides guidance from a Missouri contractor for processing RAS for use in asphalt mixtures. The fourth case example shows how the Minnesota DOT collected performance data from nonstate agency project roadway databases (i.e., county roadways) used in surface mixtures. The fifth example documents four recent research projects (three RAP, one RAS) designed to estimate the percentage of recycled asphalt binder that can be transferred to the virgin aggregate in the asphalt plant before the virgin asphalt is added (i.e., dry mixing)." -- from TRID (122 pages)

This report is available for free download (Free download options):

<https://www.nap.edu/catalog/23641>

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Item 19

Minimizing Roadway Embankment Damage from Flooding: A Synthesis of Highway Practice

TRANSPORTATION RESEARCH BOARD (TRB)

NCHRP Synthesis 496 • 2016

"This state-of-the-practice report highlights how the transportation community is protecting roadways and mitigating damage from inundation and overtopping. In the absence of standard guidance, this report highlights major issues and design components specific to roadway embankment damage from flooding. It documents the mechanics of damage to the embankment and pavement, and the analysis tools available. The probable failure mechanisms are identified and various design approaches and repair countermeasures are highlighted. The information presented in the synthesis is based on a review of the related literature, a survey of current practice, and a series of telephone interviews with state departments of transportation. Examples of failures and repair techniques are illustrated through 14 case examples gathered from six states. The findings suggest that minimizing damage to roadway embankments can be tackled by altering the embankment design and slope protection techniques or altering the stream course, or both. The success of an approach is site-dependent because an approach that serves its intended design purpose at one site does not necessarily work at another site. To arrive at an adequate design, the following factors should be considered: hydrologic and hydraulic factors, geological and geotechnical factors, legal and funding aspects, and risk. Ideally, it is the combination of the probability of failure and the value of the consequence or risk that can most effectively guide the decision." -- from TRID (xi, 104 pages)

This report is available for free download (Free download options):

<https://www.nap.edu/catalog/23604>

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Item 20

Guidebook for Intercity Passenger Rail Service and Development

TRANSPORTATION RESEARCH BOARD (TRB)

NCRRP Report 6 • 2016

"This report presents the resources, strategies, analytical tools, and techniques for use by public agencies and private entities to support all phases of planning and decision making in the development of intercity passenger rail service at state, regional, or multistate levels. Components of this guide address three major phases required to build and operate passenger rail: planning, design and construction, and operations. Further, it breaks down each primary phase into major required subtasks. With its comprehensive approach, this guide serves as a companion report to other NCRRP series reports: Report 1: Alternative Funding and Financing Mechanisms for Passenger and Freight Rail Projects, and Report 5: Developing Multi-State Institutions to Implement Intercity Passenger Rail Programs. Given that historical roles, funding, and public support for intercity passenger rail service development vary greatly among state and regional entities, a one-size-fits-all approach was not appropriate in developing this report and conducting the research. Instead, the research team approached development of this guide primarily as an effort to create a wide-ranging collection of existing resources related to intercity passenger rail service and development and performed limited new research to cover the most critical areas where existing written guidance did not exist. Gap area topics identified during the research are addressed in detail in the appendices. The Contractor's Final Report, included as Appendix F, presents additional background information gathered during preparation of the guide: (1) a comprehensive resource matrix listing documents related to intercity passenger rail service and development; (2) generalized results extracted from interviews with public-sector representatives, Amtrak, and freight rail stakeholders; and (3) results of an online survey used to help build components of the guide. Live links in the resource matrix are accessible through the document via the TRB web page." -- TRID

(164 pages, various pagings)

This report is available for free download (30.5 MB):

http://onlinepubs.trb.org/onlinepubs/ncrrp/ncrrp_rpt_006.pdf