



TMC Clearinghouse Development and Initiation

Sample Resources Databases

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September 26, 2005

Database Structure

Due to the unique nature of the various resource types, the resources databases have been split into three categories: publications, courses, and practices.

Pages 2-5 provide the data structure for these databases. Pages 6-14 illustrate items that have been entered into the databases.

TMC_Publication Database Structure			
Column Name	Req'd	Type	Comments
PUBLICATION_ID	Y	NUMBER(20)	Computer generated sequence number
PUBLICATION_TITLE		VARCHAR2(255)	Publication title
AUTHOR		VARCHAR2(255)	Authors
OTHER_CONTRIBUTOR		VARCHAR2(255)	Other contributors
REFERENCE_SOURCE		VARCHAR2(1000)	Reference source
GC_REFERENCE_SOURCE_TYPE		NUMBER(20)	Reference source type
PUBLISHER		VARCHAR2(255)	Publisher
YEAR_PUBLISHED		NUMBER(4)	Year published
NUMBER_OF_PAGES		NUMBER(5)	Number of pages
ABSTRACT_LEAD_PARAGRAPH		VARCHAR2(4000)	Abstract (or lead paragraphs)
GC_NARRATIVE_TYPE		NUMBER(20)	Indicator if the above field is an abstract or lead paragraphs.
REFERENCE_NUMBER		VARCHAR2(50)	Reference number
NTIS_ACCESSION_NO		VARCHAR2(240)	NTIS accession number
GC_PUBLICATION_TYPE		NUMBER(20)	Publication Type
SUBJECTS		VARCHAR2(500)	Subjects
NOTES		VARCHAR2(1000)	Notes
WEB_SITE_LINK		VARCHAR2(255)	URL for this publication
IND_DOT_WEBSITE		VARCHAR2(1)	Indicator if the URL is a DOT site
SECONDARY_WEB_SITE_LINK		VARCHAR2(255)	Secondary URL for this publication
IND_SECONDARY_DOT_WEBSITE		VARCHAR2(1)	Indicator if the second URL is a DOT site
DATE_CREATED	Y	DATE	Date record was created
DATE_MODIFIED		DATE	Date record was last modified

TMC_Course Database Structure			
Column Name	Req'd	Type	Comments
COURSE_ID	Y	NUMBER(20)	Computer generated sequence number
COURSE_TITLE		VARCHAR2(255)	Course Title
DESCRIPTION		VARCHAR2(4000)	Description
ORGANIZATION		VARCHAR2(255)	Organization
TARGET_AUDIENCE		VARCHAR2(2000)	Target Audience
PREREQUISITE		VARCHAR2(500)	Prerequisite
COST_INFORMATION		VARCHAR2(255)	Cost information
COURSE_LENGTH		VARCHAR2(255)	Course length
OBJECTIVE		VARCHAR2(1000)	Objectives
CLASS_SIZE		VARCHAR2(255)	Class size
NOTES		VARCHAR2(2000)	Notes
CLASS_BEGIN_DATE		DATE	Class begin date
CLASS_END_DATE		DATE	Class end date
COURSE_NUMBER		VARCHAR2(100)	Course number
CE_UNIT		VARCHAR2(50)	CE unit
TMC_CONTACT1_ID		NUMBER(20)	Link to the first contact person
TMC_CONTACT2_ID		NUMBER(20)	Link to the second contact person
WEB_SITE_LINK		VARCHAR2(255)	URL for this course
IND_DOT_WEBSITE		VARCHAR2(1)	Indicator if the URL is a DOT site
DATE_CREATED	Y	DATE	Date record was created
DATE_MODIFIED		DATE	Date record was last modified

TMC_Policy_Practice Database Structure			
Column Name	Req'd	Type	Comments
POLICY_PRACTICE_ID	Y	NUMBER(20)	Computer generated sequence number
TMC_CONTACT_ID		NUMBER(20)	Link to Contact person record
TITLE		VARCHAR2(255)	Title of the policy or the best practice
LOCATION		VARCHAR2(255)	Location
REASONS_FOR_ADOPTION		VARCHAR2(4000)	Reasons for adoption
BENEFIT		VARCHAR2(4000)	Benefit
DESCRIPTION		VARCHAR2(4000)	Description
AGENCY		VARCHAR2(250)	Agency
WHEN_IMPLEMENTED		VARCHAR2(250)	When it was implemented
NOTES		VARCHAR2(500)	Notes
DATE_VERIFIED		DATE	Date the record was verified
HOW_VERIFIED		VARCHAR2(500)	How verified
WHERE_DOCUMENTED		VARCHAR2(500)	Where documented
WEB_SITE_LINK		VARCHAR2(255)	URL for this policy or best practice
IND_DOT_WEBSITE		VARCHAR2(1)	Indicator if the URL is a DOT site
DATE_CREATED	Y	DATE	Date record was created
DATE_MODIFIED		DATE	Date record was last modified

TMC_Policy_Practice_Topic Database Structure			
Column Name	Req'd	Type	Comments
TMC_POLICY_PRACTICE_ID	Y	NUMBER(20)	Link to Policy Practice record
GC_TOPIC_CODE	Y	NUMBER(20)	Topic for the associated policy/practice
DATE_CREATED	Y	DATE	Date record was created
DATE_MODIFIED		DATE	Date record was last modified

TMC_Calendar Database Structure			
Column Name	Req'd	Type	Comments
CALENDAR_ID	Y	NUMBER(20)	Computer generated sequence number
BEGIN_DATE		DATE	Event begin date
END_DATE		DATE	Event end date
GC_CATEGORY_CODE		NUMBER(20)	Event Category
SHORT_DESCRIPTION		VARCHAR2(100)	Short description
LONG_DESCRIPTION		VARCHAR2(4000)	Long description
TMC_CONTACT_ID		NUMBER(20)	Link to Contact record
TMC_COURSE_ID		NUMBER(20)	Link to detail Course record
WEB_SITE_LINK		VARCHAR2(255)	URL for this event
IND_DOT_WEBSITE		VARCHAR2(1)	Indicator if the URL is a DOT site
DATE_CREATED	Y	DATE	Date record was created
DATE_MODIFIED		DATE	Date record was last modified

Sample Publications Database

ResID	1
Created_Date	8/29/2005
Created_by	St
Title	Managing Travel for Planned Special Events Handbook
Author	Latoski, Steven P. Dunn, Jr., Walter M. Wagenblast, Bernie Randall, Jeffrey Walker, Matthew D.
Publisher	Office of Transportation Management, Federal Highway Administration
Publication_Year	2003
Abstract	This handbook presents and recommends policies, regulations, planning and operations processes, impact mitigation strategies, equipment and personnel resources, and technology applications used in the advance planning, management, and monitoring of travel for planned special events. The handbook was written to assist responsible agencies in managing the ever-increasing number of planned special events impacting transportation system operations in rural, urban, and metropolitan areas. It communicates to a wide audience, assisting readers that possess the following backgrounds: (1) novice planned special event practitioner, (2) experienced planned special event practitioner, (3) local, single-jurisdiction event planning and management, (4) regional, multi-jurisdiction event planning and management.
Reference_No	FHWA-OP-04-010
URL1	http://www.ops.fhwa.dot.gov/program_areas/sp-events-mgmt/handbook/index.htm
Modified_Date	8/29/2005
Exclude_from_Web	No
DOT_URL_Indicator	Yes
ResID	2
Created_Date	8/29/2005
Created_by	ST
Title	TRIS Online
Publisher	National Transportation Library, Bureau of Transportation Statistics
Abstract	TRIS Online is derived from TRIS, the bibliographic database of transportation research information produced by the Transportation Research Board. It is hosted by the Bureau of Transportation Statistics, National Transportation Library. TRIS Online not only provides access to the bibliographic records and abstracts found in TRIS but it also provides the value-added of links to the full text of public-domain documents or document suppliers.
URL1	http://trisonline.bts.gov/search.cfm
Modified_Date	8/29/2005
Exclude_from_Web	No
DOT_URL_Indicator	Yes

ResID 3
Created_Date 8/29/2005
Title **ITS Electronic Document Library**
Publisher ITS Joint Program Office, U.S. Department of Transportation
Abstract The Electronic Document Library contains documents on intelligent transportation systems topics published or sponsored by the U.S. Dept. of Transportation. Most of the documents are in PDF format.

URL1 <http://www.its.dot.gov/library.htm>
Modified_Date 8/29/2005
Exclude_from_Web No
DOT_URL_Indicator Yes

ResID 4
Created_Date 8/29/2005
Title **NTIS (National Technical Information Service)**
Publisher National Technical Information Service, U.S. Department of Commerce
Abstract A bibliographic database of reports & analyses of U.S. government-sponsored research and worldwide scientific, technical, engineering, and business-related information.

URL1 <http://www.ntis.gov/>
Modified_Date 8/29/2005
Exclude_from_Web No
DOT_URL_Indicator Yes

ResID 5
Created_Date 9/13/2005
Created_by mw
Title **Houston Managed Lanes Case Study: The Evolution of the Houston HOV System**
Author Turnbull, Katherine F.
Publisher Federal Highway Administration
Publication_Year 2003
Abstract A nine-mile contraflow HOV lane on the I-45 North Freeway in Houston, Texas was implemented as a demonstration project in 1979. This demonstration borrowed an off-peak direction traffic lane for use by buses and vanpools in the peak direction. Although in use only during the morning and the afternoon peak periods, the contraflow lane carried some 15,000 persons in buses and vanpools on a daily basis. The success of this facility resulted in the development and operation of the extensive system of HOV lanes, park-and-ride lots, improved transit services, and other elements. The operation of the Houston HOV system has evolved over the years to include a value pricing demonstration program in two corridors. Further, managed lanes are being developed as part of a major improvement program in one freeway corridor. This report highlights the development, operation, and use of the HOV system in Houston and the evolution toward managed lanes. The institutional arrangements supporting the development and the ongoing operation of the system are presented. As of 2003, some 100 miles of HOV lanes are in operation in six freeway corridors. The lanes are supported by 28 park-and-ride and four park-and-pool lots, transit centers, and express bus services. In 2003, the lanes carried some 121,079 passengers in buses, vanpools, and carpools on a daily basis. This report also summarizes the issues that may be associated with the development and

	operation of managed lanes. The Houston case study and the summary of issues should be of benefit to transportation professionals and policy makers interested in developing and operating HOV facilities and managed lanes.
Reference_No	FHWA-OP-04-002
Modified_Date	9/13/2005
Exclude_from_Web	No
Resource_Type	Documents
ResID	6
Created_Date	9/13/2005
Created_by	mw
Title	National ITS Architecture Version 5.1
Author	Simmons, Lee
Abstract	The National ITS Architecture provides a common framework for planning, defining, and integrating intelligent transportation systems. It is a mature product that reflects the contributions of a broad cross-section of the ITS community (transportation practitioners, systems engineers, system developers, technology specialists, consultants, etc.). The architecture defines: The functions (e.g., gather traffic information or request a route) that are required for ITS The physical entities or subsystems where these functions reside (e.g., the field or the vehicle). The information flows and data flows tat connect these functions and physical subsystems together into an integrated system.
URL1	http://www.iteris.com/itsarch/
Modified_Date	9/19/2005
Exclude_from_Web	No
DOT_URL_Indicator	No
Resource_Type	Other Web Sites

Sample Courses Database

Course_ID	1
Title	The IEEE 1512 Family of Standards: Message Sets for Traffic Incident Management
Description	This course will provide participants with the knowledge they need to initiate or participate in the development of an incident management communications system in their home agencies, centered around the IEEE 1512 Family of Standards.
Organization	Institute of Transportation Engineers
Cost_Info	No charge
Notes	University of Washington, Center for Urban Horticulture
Date_Info	October 6, 2005
CE_Units	6 PDUs
URL	http://www.ite.org/otr/item.asp?ITEM_ID=163&DEPARTMENT_ID=83
Date_Created	9/2/2005
Date_Modified	9/2/2005
Course_ID	2
Title	Managing Traffic Incident and Roadway Emergencies
Description	This course is part of the core ITS curriculum established by the ITS Professional Capacity Building (PCB) program. For more information on the core curriculum, go to URL: www.pcb.its.dot.gov/Catalogs/ITSCurriculum.htm#section2 . This course addresses institutional and technical aspects of safe and efficient resolution of traffic incidents and other roadway emergencies. The course focuses on practices to obtain good inter-agency and inter-disciplinary understanding and cooperation.
Organization	National Highway Institute
Cost_Info	\$4500 for 1-day session, \$6900 for a 2-day session
Target_Audience	Persons at mid or upper-management levels in various agencies who direct the resources of their agencies at the scene of a traffic incident or in response to an incident. Agencies which should be represented at workshops include: law enforcement, fire and rescue (including emergency medical), emergency communications, transportation (including traffic management and highway maintenance), planning, towing and recovery, traffic reporting media, hazardous materials contractors and other emergency management personnel responding to traffic emergencies on freeways and arterial streets.
Objectives	Upon completion of the course, participants will be able to: Recognize the program elements needed for a formalized multi-agency program to manage traffic incidents and roadway emergencies. Formulate techniques for effective on-site management of incidents. Identify technological solutions to facilitate the management of incidents. Develop a short-term list of 'next step' actions to improve multi-agency response to both major and minor traffic incidents.
Length	1 day or 2 days
Class_Size	Minimum 20; Maximum 35
Course_No	133048A
CE_Units	0.6 units or 1.2 units
URL	http://www.nhi.fhwa.dot.gov/coursedescribe.asp?coursenum=86
DOT_URL_Indicator	Yes
Date_Created	9/2/2005
Date_Modified	9/2/2005

Course_ID	3
Title	Freeway Traffic Operations
Description	The purpose of the Freeway Management and Operations training course is to provide participants with an appreciation of the key policies, institutional issues, challenges and barriers, technical and other issues to consider in the planning, design, implementation, management, operation, evaluation, and marketing of freeway facilities. The course is divided into nineteen (19) sessions, based on the information presented in the new Freeway Management and Operations Handbook. The course may be conducted in either a three- or a two-day format as determined by the local training coordinator.
Organization	National Highway Institute
Cost_Info	\$270 per participant for 2 days, \$400 per participant for 3 days
Target_Audience	Federal, State, and local transportation professionals involved in planning, design, and implementation of freeway improvement projects and the day-to-day management of travel and control of traffic on freeway facilities.
Objectives	<p>Upon completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> Identify the types and causes of congestion on freeway facilities. Compare the potential to improve traffic flow between roadway improvements vs. shorter-term/lower-cost operational improvements on freeway facilities. Describe the range of ramp management and control strategies and the conditions under which they might be warranted. Describe the range of lane management and control strategies and the conditions under which they might be warranted. List strategies for mitigating the impacts associated with planned special events. Identify the range of functions and elements of a transportation management system. List detection and surveillance techniques used to support freeway management and operations activities.
Length	2 days or 3 days
Class_Size	Minimum 20; Maximum 30
Course_No	133075A
CE_Units	1.2 units or 1.8 units
URL	http://www.nhi.fhwa.dot.gov/coursedesc.asp?coursenum=95
DOT_URL_Indicator	Yes
Date_Created	9/2/2005
Date_Modified	9/2/2005

Course_ID	4
Title	ITS Awareness Seminar
Description	<p>This course provides an overall understanding of Intelligent Transportation Systems (ITS) and the ITS infrastructure. The course illustrates the ITS infrastructure components by showcasing those systems that are deployed around the country and discussing multi-modal systems that will benefit from the use of the ITS infrastructure. Institutional and technical issues involved in deploying ITS infrastructure are also presented. Topics covered include: planning, design, architecture, standards, procurement, installation and construction, operation and maintenance, and funding of ITS systems. The benefits associated with various types of ITS deployment are presented and explained.</p> <p>The one-hour executive summary developed for elected and appointed officials may be requested through the National Resource Center, or the FHWA Division. Questions concerning this offering should be addressed to the Technical Information POC.</p>
Organization	National Highway Institute
Cost_Info	\$200 per participant
Target_Audience	<p>This course is intended for traffic engineers, state, federal and local transportation planners, Metropolitan Planning Organizations (MPOs), transit and highway operators, public safety responders (enforcement, fire, EMS, towing, public works), Transportation Management Center (TMC) specialists, motor carrier managers, environmental groups, IT personnel, college and university faculty and students, consultants and contractors. Other groups belong in the audience as well, namely on the "technical/professional" side: ITS (and even non-traditional ITS) vendors, practitioners in ITS-related fields, such as those in financial, marketing, media and others who are increasingly valued ITS partners. Executives and managers, elected officials, and the general public will be served well by the Executive Summary specified in the Course Description.</p>
Objectives	<p>Upon completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> Define ITS by discussing the elements, functions, and benefits of ITS. Identify essential stakeholders and the need for interaction between them. Explain the importance of integrating systems throughout a region. Compare and contrast two case studies of ITS deployments. Identify information resources, such as Websites, other training, or data libraries, for more information on ITS.
Length	1 day
Class_Size	Minimum 20; Maximum 30
Course_No	137001A
Notes	<p>This course is also available as a Web-based course at the Consortium for ITS Training and Education (CITE) located at URL: http://www.citeconsortium.org/registration.html</p>
CE_Units	0.6 units
URL	http://www.nhi.fhwa.dot.gov/coursedesc.asp?coursenum=169
DOT_URL_Indicator	Yes
Date_Created	9/2/2005
Date_Modified	9/2/2005

Course_ID	5
Title	Deploying Integrated ITS - Metropolitan
Description	<p>This course is part of the core Intelligent Transportation Systems (ITS) curriculum established by the ITS Professional Capacity Building (PCB) program. For more information on the core curriculum, go to URL: www.pcb.its.dot.gov/Catalogs/ITSCurriculum.htm#section2.</p> <p>This course supports integrated intelligent transportation system infrastructure deployment with consideration of the National ITS Architecture. The regional context in which the public components of ITS infrastructure will be implemented and integrated is emphasized. The course combines the technical and institutional components of integrated ITS infrastructure. The importance of each component is discussed and placed in context with the regional decision that must be made by State and local agencies. Transportation program managers will obtain an understanding of the technical and institutional implications for deploying integrated infrastructure within the framework of a regional architecture.</p>
Organization	National Highway Institute
Cost_Info	\$ 270 Per Participant
Target_Audience	This course is intended for state agencies, Metropolitan Planning Organizations (MPOs), City/Local/County transportation professionals, who implement ITS deployment schedules as part of the planning process, deal with public safety, plan for highway and transit; ITS specialists, who provide information or recommendations in operations; and those who fulfill regulations (oversight), manage ITS or operations providers, coordinate projects and programs, review specifications, develop regulations and specifications, and design systems; engineers; Regional Architecture developers; systems integrators; and private sector people associated with these tasks.
Objectives	<p>Upon completion of the course, participants will be able to:</p> <p>Identify the needs that can be addressed by ITS strategies.</p> <p>Select the best practices for planning and programming integrated ITS in a metropolitan area.</p> <p>Relate the need for a Regional Architecture and use of Standards to ensure integrated ITS deployment.</p> <p>Select the best practices for ITS project planning, design, construction, and implementation.</p> <p>Explain the Systems Engineering approach to ITS project implementation.</p> <p>Describe the use of a "concept of operations" to plan for integrated systems.</p> <p>Identify typical costs and benefits of different types of ITS deployments.</p>
Length	2 days
Class_Size	Minimum 20; Maximum 30
Course_No	137002A
CE_Units	1.2
URL	http://www.nhi.fhwa.dot.gov/coursedesc.asp?coursenum=170
DOT_URL_Indicator	Yes
Date_Created	9/2/2005
Date_Modified	9/2/2005

Sample Practices Database

RN	2
Date Created	9/19/2005
Date Verified	9/21/2005
Description	<p>The Transport Management Centre like many other agencies from around the world has established Traffic Emergency Patrols (TEP) as an operational extension of its centralised incident management role. The TEP are similar to the motorist's assistance programs in the USA but are more focused in dealing with emergencies. To complement the TEP and provide a higher level of sophistication in how road incidents are managed in the field the TMC has established Traffic Commanders. These TMC civilian officers are highly qualified traffic management specialists and are responsible to take control of all traffic management activities around an incident site. The Traffic Commander (TC) has a dual role, firstly the TC work's very closely with the Police Incident Site Commander or the Incident Commander of the appropriate combat agency in assisting to clear an incident. Secondly the TC will call upon Police and other resources to effect traffic control and traffic management plans including diversions. The TC free up the emergency services for dealing with the incidents themselves and provide advice on safe working practices on the road while dealing effectively with the traffic risk. The contribution of Traffic Emergency Patrols and Traffic Commanders to the effective management of road incidents has been recognised with their having attained the status of emergency workers in law. They will soon be displaying red and blue flashing lights with sirens and enjoy the same privileges as the other emergency services. In year 2000 the TEP's attended over 31,000 incidents and the Traffic Commanders attended over 2,700 incidents.</p>
Entered By	Mw
Title	Road Incident Management
Agency	Roads & Traffic Authority, NSW, Australia
Last_Name	Casuscelli
First_Name	Charles
Phone	2 8396 1401
Fax	2 8396 1425
Email	charles_casuscelli@rta.nsw.gov.au
Topic	Operational Policies, Strategies, and Plans
RN	3
Date Created	9/19/2005
Date Verified	9/21/2005
Description	<p>The NSW Transport Management Centre is responsible for planning and approving a range of transport operations services for Special Events. It has established and maintains a multi-agency process involving Police, Local Government, the Roads and Traffic Authority and Dept of Transport for processing requests to conduct special events. It drafts Transport Management Plans (TMP) in partnership with special event proponents and the aforementioned stakeholders. Other TMC staff (Traffic Operations Controllers) are then briefed on each TMP who are then responsible for the TMP's execution. In year 2000 the TMC has successfully managed the transport operations needs of over 1,050 special events, including the Sydney 2000 Olympic Games.</p>
Entered By	mw
Title	Transport Operations Support for Special Events
Agency	Roads and Traffic Authority, NSW, Australia
Last_Name	Casuscelli
First_Name	Charles
Phone	61 2 83961401

Fax
Email
Topic

61 2 8396 1425
charles_casuscelli@rta.nsw.gov.au
Operational Policies, Strategies, and Plans