

FY 2011 PLANNING MENU OF SERVICES



Technical Assistance, Training, and Peer Exchanges (includes Air Quality, Environment, Freight, Operations, and Safety)

This document serves as a "Menu of Services" detailing technical assistance, training, and peer exchange options available in the transportation planning discipline. It also includes related offerings for the disciplines of air quality, environment, freight, operations, and safety. It has been developed as a resource for Federal Highway Administration (FHWA) field offices and partner agencies and is organized by subject areas. Technical assistance and training offerings listed are available from a variety of FHWA offices (including the National Highway Institute (NHI)) as well as the National Transit Institute (NTI).

The "Menu" includes offerings that may be coordinated or delivered through different FHWA units. This listing also attempts to provide an overall summary of what is currently available, and enhance awareness of these resources to build professional capacity. Included in the Menu are brief overviews of each technical assistance or training option. These include formal courses, workshops, and seminars that are delivered in person, as well as online training and technical assistance opportunities. Online training or "webinars" may be self-paced or led by an instructor, and allow participants the opportunity to access training and technical assistance without incurring travel costs. In addition to formal training, please note that on-going, general technical assistance by topic will continue to be provided to FHWA field offices and partner agencies as requested. For both the training and the technical assistance entries, the appropriate specialist's contact data is provided for further information. Points of contact, by FHWA office, are also included.

Fitting it All Together

On page 2, information by technical subject area is provided. Descriptions can be found starting on page 5. In considering which offering might be right for you, please look at both the topic and technical level.

Technical levels have been classified as "Basic," "Intermediate," and "Accomplished." Levels are defined on page 4. Please note that some workshops can be tailored to the needs/issues of a specific State or MPO. **Technical assistance is also available on most topics, but it is not listed by technical level.*



FHWA Points of Contact by Office

- FHWA Resource Center Planning Team
Lisa Randall (720) 963-3209
- FHWA Resource Center Air Quality Team
Bob O'Loughlin (415) 744-3823
- FHWA Resource Center Environment Team
Lamar Smith (720) 963-3210
- HEPP, Planning Oversight and Stewardship Team
Harlan Miller (202) 366-0847
- HEPP, Transportation Planning Capacity Building Program
Kenneth Petty (202) 366-6654
- HEPP, Transportation Systems Performance
Brian Gardner (202) 366-4061
- HEPP, Multi-State and Bi-National Planning
Roger Petzold (202) 366-4074
- HEPH, Human Environment
Shari Schafflein (Acting) (202) 366-5570
- HEPH, Livability
Gabe Rousseau (202) 366-8044
- HEPE, Project Development and Environment Review
Gerald Solomon (202) 366-2037
- HEPN, Natural Environment
April Marchese (202) 366-6724
- HEPN, Air Quality and Transportation Conformity
Cecilia Ho (202) 366-9862
- HEPN, Sustainable Transport and Climate Change
Rob Kafalenos (Acting) (202) 366-2079
- HIN, Innovative Program Delivery
Regina McElroy (202) 366-9216
- HOFM, Freight Management and Operations
Tony Furst (202) 366-2201
- HOTM, Freight Management and Operations
Wayne Berman (202) 366-4069
- HPPI, Highway Policy Information
David Winter (202) 366-0175

Technical Assistance Areas

Air Quality

- Estimating Regional Mobile Source Emissions
- Implications of Air Quality Planning for Transportation
- Introduction to Transportation/Air Quality Conformity
- Mobile Source Air Toxics
- Specialized Air Quality Workshops/Seminars

Climate Change

- Climate Change
- Climate Change in the Planning Process
- Introduction to Climate Change

Community Impact Assessment

- Community Impact Assessment

Congestion Management Process

- Congestion Management Process

Data Collection, Reporting and Applications

- Census Transportation Planning Products (CTPP)
- Development and Implementation of Travel Surveys
- Driver's License and Motor Vehicle Registration
- Financial Analysis System—Highway (FASH)
- Freight Analysis Framework (FAF2)
- Heavy Vehicle Use Tax (HVUT) Compliance Review
- Highway Information
- Highway Performance Monitoring System (HPMS)
- HPMS Software
- HPMS: Understanding its Purpose and Place
- 2010 HPMS Reassessment Implementation
- Motor Fuel Data and Its Use in Apportionment Factors, Understanding Your State's Fair Share
- Motor Fuel Tax Evasion
- National Household Travel Survey (NHTS)
- Planning Data
- Quick Response Freight Manual
- Traffic Data for HPMS Reporting
- Traffic Monitoring: An Introduction
- Traffic Monitoring Analysis System (TMAS)
- Traffic Monitoring Guide
- VTRIS and TVT Data, Understanding and Using

Environment

- Section 4(f)
- Section 7 Basic - Endangered Species Act
- Section 7 Advanced—Interagency Cooperation
- Section 10/404 - Clean Water Act
- Section 106 and Historic Preservation
- Advanced Seminar on Transportation Project Development: Navigating the NEPA Maze
- American Indian Best Practices
- Beyond Compliance: Historic Preservation in Transportation Project Development
- Bicycle Facility Design
- Biological Assessments
- Context Sensitive Solutions
- Design and Implementation of Erosion and Sediment Control
- GIS and NEPA Project Development
- Highway Traffic Noise
- Indirect and Cumulative Effects Analysis
- Introduction to Context Sensitive Solutions
- Introduction to NEPA and Transportation Decisionmaking
- Introduction to Transportation Planning for Resource Agencies
- Linking Conservation and Transportation Planning
- Linking Freight to Planning and the Environment
- Linking Planning to NEPA
- Measuring Progress in Linking Transportation Planning and Environment Analysis
- National Environmental Policy Act (NEPA)
- NEPA and Transportation Decisionmaking
- Pedestrian Facility Design
- PEL 101: Tools for Adopting and Implementing an Approach
- Practical Conflict Management Skills for Environmental Issues
- Soil Erosion/Sediment Control
- Water Quality Management of Highway Runoff
- Wetland Delineation

Environmental Justice

- Environmental Justice and Project Development
- Environmental Justice for MPOs
- Environmental Justice Refresher
- Environmental Justice/Title VI
- Fundamentals of Title VI/Environmental Justice

Federal Lands Highways

- Federal Lands 101
- Transportation Planning Cross-Training: Federal-aid and Federal Lands Highway (FLH)

Financial Planning/Fiscal Constraint
<ul style="list-style-type: none"> • Advance Construction in TIPs and STIPs • Cost Estimation for Transportation Planning and Programming • FHWA Role in Public Private Partnerships • Financial Planning in Transportation • Financing Freight Improvements • Fiscal Constraint 101 • Fiscal Constraint Process Review • Fiscal Constraint/Financial Planning • Highway Program Financing • Operations and Maintenance Costs in Planning and Programming • Specialized Innovative Finance • Transportation Revenues 101
Freight
<ul style="list-style-type: none"> • Advanced Freight Planning • Engaging the Private Sector in Freight Planning • Financing Freight Improvements • Freight • Freight Analysis Framework (FAF2) • Freight Conversion Circle • Integrating Freight in the Transportation Planning Process • <u>Keeping the Global Supply Chain Moving</u> • Linking Freight to Planning and the Environment • Principles of Effective Commercial Motor Vehicle (CMV) Size and Weight Enforcement • Quick Response Freight Manual • Talking Freight • Transportation Planning for the Private Sector
GIS and Planning/GIS and Environment
<ul style="list-style-type: none"> • Applying GIS & Spatial Data Technologies to Transportation • GIS and NEPA Project Development • GIS and Transportation Planning • Linking Conservation and Transportation Planning • Transportation Planning Applications of Google Earth • Using Visualization in Transportation Planning
Land Use and Transportation
<ul style="list-style-type: none"> • Forecasting Land Use Activity • Land Use and Transportation Planning • Transportation and Land Use

Livability
<ul style="list-style-type: none"> • Livability • Related Livability Offerings (bike and pedestrian facility design, land use, CSS, scenario planning)
Performance Measures
<ul style="list-style-type: none"> • Measuring Progress in Linking Transportation Planning and Environmental Analysis • Performance Measures for Transportation Planning
Planning and Environmental Linkages
<ul style="list-style-type: none"> • Introduction to Transportation Planning for Resource Agencies • Linking Conservation and Transportation Planning • Measuring Progress in Linking Transportation Planning and Environmental Analysis • PEL 101: Tools for Adopting and Implementing an Approach
Planning for Operations
<ul style="list-style-type: none"> • Advancing Planning for Operations in Metropolitan Areas • Congestion Management Process • Executive Session on Advancing Planning for Operations • ITS Deployment Analysis System • Operations and Maintenance Costs in Planning and Programming • Traffic Analysis Tools
Planning Fundamentals
<ul style="list-style-type: none"> • Administration of FHWA Planning and Research Grants • General Planning • Introduction to Transportation Planning for Resource Agencies • Metropolitan Transportation Planning • Metropolitan or Statewide Planning 101 • Statewide Transportation Planning • State and Metropolitan Transportation Programming • Transportation Planning Cross-Training: Federal-aid and Federal Lands Highways (FLH)
Planning Oversight and Stewardship
<ul style="list-style-type: none"> • Planning Oversight and Stewardship
Public Involvement
<ul style="list-style-type: none"> • Engaging the Private Sector in Freight Planning • Public Involvement in Transportation Decisionmaking • Public Involvement • Public Involvement Refresher • Transportation Planning for the Private Sector

Scenario Planning
<ul style="list-style-type: none"> • Scenario Planning
Security and Transportation Planning
<ul style="list-style-type: none"> • Security and Transportation Planning
Sustainability
<ul style="list-style-type: none"> • Sustainability • Related Sustainability Offerings (air quality, environment, environmental justice, land use, planning fundamentals, and financial planning)
Transportation Safety Planning
<ul style="list-style-type: none"> • Introduction to Transportation Safety Planning – Planning it Safe • Transportation Safety Planning

Travel Demand Forecasting/Modeling
<ul style="list-style-type: none"> • Estimating Travel Demand and Revenues for Toll Road Projects • How to Interpret and Communicate Forecasts for Corridor Planning • Introduction to Travel Demand Forecasting: A Webinar for FHWA Planners • Introduction to Travel Demand Forecasting: A Webinar for MPOs and DOTs • Introduction to Urban Travel Demand Forecasting • Model Validation and Quality Control Strategies for Regional Travel Models • Statewide Travel Forecasting • Travel Demand Forecasting • Travel Model Improvement Program (TMIP)
Tribal Transportation
<ul style="list-style-type: none"> • American Indian Best Practices • Tribal Transportation Planning • Tribal Consultation and Section 106

Finding the Right Training Level for Your Needs

Training in the “Menu” is classified according to a technical level of “Basic,” “Intermediate,” or “Accomplished”. This should help you to identify the appropriate offering for your needs. Each level is color coded throughout the training menu as follows: **Basic (red)**, **Intermediate (blue)**, **Accomplished (green)** for easy identification. Since technical assistance is customized, “levels” have not been denoted.

Basic

- *No matter what your background, this course/training provides an overview of the subject.*
- *No pre-requisite courses apply to this training.*
- *This training event is a good opportunity for career development, cross-training or developing a new competency.*

Intermediate

- *Participants need to have a basic understanding of the subject matter prior to attending this level of course or training event. Some practical knowledge or previous training in the subject matter is needed.*
- *Participants that use this subject knowledge or apply it on a regular basis as either a specialist, manager, or supervisor are best suited to take this training.*
- *The subject matter covered may provide a deeper knowledge to a participant in an area that is similar to what he/she is already doing, but may include a new technology (or regulations) that must be incorporated into what attendee is already doing.*

Accomplished

- *Participants need to have a good understanding of the subject matter prior to attending this level of course or training event. Either deep practical/applied knowledge and skills or previous extensive training in the subject matter is needed.*
- *Participants that use this subject knowledge and have a demonstrated mastery of the subject as a specialist, manager or supervisor are best suited to take this training.*
- *The subject matter may provide a greater depth of knowledge, an understanding and ability to apply the knowledge and judgment to problems where solutions are not always directly applicable. Participants may also need to incorporate new technology into what they are already doing.*



Technical Assistance & Training Descriptions

Air Quality

Estimating Regional Mobile Source Emissions (NHI 152071)

Provides an overview of travel demand forecasting models, emission factor models and travel related data requirements, travel model and emission factor model interactions and assessing transportation control measure (TCM) effectiveness and impacts on emissions. Length: 3.5 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov or tmip.dot.gov.

Implications of Air Quality Planning for Transportation (NHI 142044)

Explains how the integrated transportation and air quality planning process has been defined and reinforced over the past decade by regulations, guidance, and litigation. It provides a context for the various statutory and regulatory requirements, including a comprehensive review of the 1990 CAAA requirements, EPA policies related to transportation, and the process of developing SIPs. Length: 3 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov.

Introduction to Transportation/Air Quality Conformity (NTI)

Provides basic information about conformity requirements and the relationship of the transportation and air quality planning processes. Also highlights the roles and responsibilities in inter-agency coordination on air quality issues. Length: 3 days. **Level: Basic.** For more information, go to www.ntionline.com.

Mobile Source Air Toxics For practitioners and managers who will be responsible for analyzing and modeling the mobile source air toxic impacts of transportation projects in the NEPA process. Length: 2 days. **Level: Basic/Intermediate.** For more information, contact robert.o.loughlin@dot.gov.

Specialized Air Quality Workshops/Seminars Several workshops and seminars, of varying lengths, are available from the FHWA Resource Center's Air Quality Technical Service Team, including: Introduction to Transportation and Air Quality Fundamentals (AQ101), COMMUTER Model, Mobile Source Emissions Modeling (MOBILE6.2, Introduction to MOVES), Micro-Scale Air Pollution Dispersion Modeling (Project Level Hot Spot Air Quality Modeling), Modeling Mobile Source Emissions Inventory (SIP Air Quality Analyses Methodologies), MSAT (Mobile Source Air Toxics) Evaluation Methodologies, PM Modeling Practices (including AP42 Methodologies), Air Quality Analyses for NEPA (National Environmental Policy Act) Projects, Estimating Air Quality Benefits from CMAQ Projects, Transportation Conformity 101, and Modeling Mobile Source Energy/GHGs (Greenhouse Gases). **Level: Basic/Intermediate.** For more information, contact robert.o.loughlin@dot.gov.

Climate Change

Climate Change in the Planning Process Provides information on incorporating climate change considerations into transportation the planning process. This workshop highlights aspects of the planning process that are consistent with climate change goals, the links between climate change, planning and livability, and greenhouse gas reduction and adaptation strategies. Length: 2-2.5 hour Webinar. **Level: Basic.** For more information, contact jim.thorne@dot.gov.

Climate Change Technical Assistance FHWA Resource Center and Headquarters specialists provide customized assistance, to include workshops and seminars on climate change and adaptation strategies. For more information, contact jeff.houk@dot.gov, jim.thorne@dot.gov, kevin.moody@dot.gov, diane.turchetta@dot.gov, robert.kafalenos@dot.gov.

Introduction to Climate Change Provides an overview of the topic of climate change, including the basics of climate science, the potential impacts of climate change on transportation systems, transportation's role in greenhouse gas emissions, transportation emissions reduction and adaptation strategies, greenhouse gas assessment methodologies strategies, and incorporating climate change in the planning process. Length: 2-2.5 hour Webinar. **Level: Basic.** For more information, contact jeff.houk@dot.gov.

Community Impact Assessment

Community Impact Assessment A how-to companion to the FHWA's "Community Impact Assessment: A Quick Reference for Transportation" (the CIA small purple book). The course uses everyday projects as examples and includes an extensive reference of resources. Length: 2.5 days. **Level: Basic.** For more information, go to www.planning.dot.gov or contact brenda.kragh@dot.gov.

Community Impact Assessment Technical Assistance FHWA Resource Center specialists provide tailored assistance that may include case studies, workshops or facilitated seminars. The goal is to assist stakeholders to identify the potential impacts of proposed transportation activities on affected communities and populations. Assessments focus on socio-economic and cultural impacts. Length: 1-2 days. For more information, contact katiann.wong-murillo or deborah.scherkoske@dot.gov.

Congestion Management Process

Congestion Management Process Tailored to audience requirements (length and topics), it provides an overview of the requirements and components of a Congestion Management Process, including the development of performance measures, identifying alternative solutions to manage congestion, prioritizing funding strategies, and highlighting noteworthy practices. Recently updated for SAFETEA-LU. Length: 1 day Workshop, or a 2-4 hour Webinar. **Level: Basic.** For more information, contact ben.williams@dot.gov or brian.betlyon@dot.gov.

Congestion Management Process Technical Assistance

Tailored to customer requirements (length and topics), FHWA Resource Center specialists provide technical assistance and reviews on a range of Congestion Management Process topics and issues. Length: Depends on customer needs. For more information, contact ben.williams@dot.gov or brian.betlyon@dot.gov.

Data Collection, Reporting, and Applications

Census Transportation Planning Products (CTPP) Assistance A variety of technical assistance and training opportunities are available on Census data products that can be used for transportation needs. Data questions on standard Census products like ACS and custom products like CTPP can be addressed. Length: executive briefings or multi-day workshop with hands on exercises can be provided. For more information, contact ed.christopher@dot.gov or elaine.murakami@dot.gov.

Development and Implementation of Travel Surveys Provides an overview of the development and implementation of the most common types of travel surveys, including: household travel and activity, vehicle intercept, transit on-board, commercial vehicle, work place and establishment, special generator, hotel/visitor, and parking surveys. Length: 1-4 hour Webinar. **Level: Basic.** For more information, contact elaine.murakami@dot.gov.

Driver's License and Motor Vehicle Registration Tailored to Federal, State and local finance data providers and users to describe the fundamentals for collecting, processing and using these data sets for the Federal-aid program. With increasing emphasis on data quality, proper review techniques and best practices will be presented. Length: 1 day. **Level: Basic.** For more information, contact gloria.williams@dot.gov.

Financial Analysis System – Highways (FASH) FASH is a database management system that captures the overall financial status of a State's highway program. The tool is used by the FHWA, U.S. Congress, and the public for data quality initiatives. The training is tailored to Federal, State, and local finance data providers and users to demonstrate data entry and the submittal process. Length: 1.5 days. **Level: Basic.** For more information, contact clarissa.smith@dot.gov.

Freight Analysis Framework (FAF2)

See **Freight** section for description.

Heavy Vehicle Use Tax (HVUT) Compliance Review

For FHWA division office staff responsible for conducting periodic compliance reviews to enhance the HVUT enforcement process, and thereby reduce HVUT evasion. It introduces HVUT, specifies responsibilities when performing HVUT compliance reviews, outlines effective procedures for conducting compliance reviews, assists in the detection of HVUT evasion schemes, outlines new enforcement steps being taken to improve HVUT compliance, and tests understanding of the compliance process. Length: ½ day.

Level: Basic. For more information, go to <http://www.fhwa.dot.gov/policyinformation/index.cfm> or contact gloria.williams@dot.gov.

Highway Information Tailored to Federal, State, and local data providers and users to inform and discuss critical data issues including the reauthorized Federal-aid highway program, data quality, data quality initiatives, and software improvements. Data areas include HPMS, travel monitoring, motor fuel, highway finance, drivers' licenses, vehicle registrations, and NHTS. Length: 4 days. **Level: Basic/Intermediate.** For more Information, contact marsha.reynolds@dot.gov.

Highway Performance Monitoring System (HPMS) Training in the *2010 HPMS Field Manual* and data submittals for HPMS. Each section of the *Field Manual* is covered along with guidance for data providers. Federal, State, and local applications and uses of HPMS data are also discussed. Audience is FHWA division office Planners, State HPMS Coordinators and Data Program Managers, MPOs/local agencies, and consultants. Length: 1-2 days. **Level: Basic.** For more information, contact joseph.hausman@dot.gov.

Highway Performance Monitoring System (HPMS) Software Provides in-depth technical training for the HPMS Software. This may be either hands-on training or through web conferencing. Topics include the HPMS submittal and review process using the HPMS Software as a tool. The intended audience is FHWA division office planners, State HPMS coordinators and data program managers, MPOs/local agencies, and consultants. Length: 2-4 hour Webinar or 1-2 days. **Level: Basic/Intermediate.** For more information, contact thomas.roff@dot.gov.

HPMS Technical Assistance HPMS combines data on the extent, condition, performance, use, and operating characteristics of the Nation's highways into an integrated geospatial database. HPPI specialists provide technical assistance and reviews on topics related to collecting and reporting HPMS data. Length: Depends on customer requirements. For more information, contact ralph.gillmann@dot.gov.

HPMS: Understanding its Purpose and Place Otherwise known as "HPMS 101," this session provides a basic overview of the HPMS program to those new to using highway system performance data at either the technical or management level. The requirements, needs, applications, structure, and quality assurance aspects of the HPMS will be discussed to provide an understanding of the program and to gain additional support and emphasis for quality data. Length: 4 hours to 1.5 days. **Level: Basic.** For more information, contact ralph.gillmann@dot.gov.

2010 HPMS Reassessment Implementation Technical Assistance Help is available to State and local agencies in implementing the changes in HPMS resulting from the 2010 HPMS Reassessment. This includes, but is not limited to, the new Data Model, data collection and reporting requirements, submittal procedures, data reviews and edits, and establishing and coordinating databases for HPMS submittals. This will be tailored

to the specific request and can be provided in webinars, on site visits, or in conjunction with other training activities. For more information, contact ralph.gillmann@dot.gov.

Motor Fuel Data and Its Use in Apportionment Factors, Understanding Your State's Fair Share Annually each State is apportioned Federal-aid funds for the various programs authorized within that State. Such apportionments cannot be distributed without the appropriate data reported by the States. The FHWA division staff play an important role in ensuring that State-reported data is of apportionment quality. Learn how you can ensure that your State's data and resulting share of Federal-aid are correct and accurate. Length: 5 days. **Level: Basic.** For more information, contact ralph.erickson@dot.gov.

Motor Fuel Tax Evasion Provides an overview of schemes and methods commonly used to evade fuel taxes at the Federal and State level and how such evasion affects revenues. Information is provided that will help to identify evasion and steps that can be taken to minimize the potential for evaluation. Length: ½ day. **Level: Intermediate.** For more information contact michael.dougherty@dot.gov.

National Household Travel Survey (NHTS) Technical Assistance On-going training, technical assistance and user support is offered for the NHTS data. Training includes a tutorial on how to use the on-line analysis engine at <http://nhts.ornl.gov> to access the data from this valuable household travel data resource. Length: Self-paced or up to 2 days. For more information, contact tianjia.tang@dot.gov.

Planning Data Technical Assistance Data for transportation planning is a broad and vast area, and responding to individual needs can be very specific. FHWA Resource Center specialists provide tailored technical assistance (by topic and length) on a range of major data sources (including the American Community Survey), their current availability and future plans, and how they can be used for transportation planning. Specific assistance provided could be as simple as pointing to some more popular data sources to hosting a seminar on the best practices for doing a customized travel survey. Length: Depends on customer requirements. For more information, contact ed.christopher@dot.gov.

Quick Response Freight Manual Technical Assistance
See *Freight* section for description.

Traffic Data for HPMS Reporting Developed for FHWA division office staff and State DOT/MPO staffers responsible for HPMS and Traffic Monitoring. This session outlines the importance of improved traffic monitoring and to promote an interaction between the HPMS and traffic professionals. Length: ½ day Webinar. **Level: Basic.** For more information, contact tianjia.tang@dot.gov.

Traffic Monitoring, An Introduction Designed for those looking for a basic understanding of the various bits of information collected on highway traffic (i.e. traffic volume, vehicle classification, and truck weight). This course can either be offered as a webinar or delivered in person and is available for Federal, State, and MPO participants. Length: ½ day. **Level: Basic.** For more information, contact david.jones@dot.gov.

Travel Monitoring Analysis System (TMAS) Technical Assistance Provided to States using TMAS software. The TMAS assistance will be most helpful to people involved with traffic data collection at the State who submit data for the monthly Traffic Volume Trends report. Length: Depends on customer requirements. For more information, contact steven.jessberger@dot.gov.

Traffic Monitoring Guide (NHI 151018) Provides an overview of the collection and application of traffic data including traffic volume, vehicle classification, and truck weight, and it is available to the FHWA, State DOT, MPO, and consultant participants. Length: 2 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov or contact david.jones@dot.gov.

Vehicle Travel Information System (VTRIS) and Traffic Volume Trends (TVT) Data, Understanding and Using Presents an overview and hands-on tutorial of using these systems to better understand and use traffic volume, vehicle classification, and truck weight data. The intended audience is State DOT traffic data providers, as well as FHWA division office contacts with oversight for traffic data. Length: ½ to 1 day. **Level: Basic.** For more information, contact david.jones@dot.gov.

Environment

Section 4(f) Workshop and Technical Assistance FHWA Resource Center specialists provide workshops that include an overview of Section 4(f) focusing on the protection of parklands, recreation areas, wildlife and waterfowl refuges and significant historic sites. Intended for practitioners with some Section 4(f) experience. Length: 1-2 days. **Level: Intermediate/Accomplished.** For more information, contact dave.gamble@dot.gov, david.grachen@dot.gov or danw.johnson@dot.gov.

Section 7 Basic - Endangered Species Act Provides an overview of the Endangered Species Act (ESA) and the procedures and responsibilities associated with the Act. Reviews terms, roles and key sections of the Act. Length: 2 days. **Level: Basic.** For more information, contact kevin.moody@dot.gov or brian.yanchik@dot.gov.

Section 7 Advanced - Interagency Cooperation Tailored to customer requirements, provides an advanced discussion on the Endangered Species Act (ESA), section 7—interagency cooperation. Topics include: ESA definitions, prohibited acts, biological assessments, biological opinions, incidental take statements. Length: 1-2 days. **Level: Accomplished.** For more information, contact brian.yanchik@dot.gov.

Section 10/404 - Clean Water Act Provides a basic overview of the U.S. Army Corps of Engineers permitting process, with a focus on compliance and permitting requirements under the Clean Water Act Section 404 and the Rivers and Harbors Act Section 10. Length: 1-2 days. **Level: Basic.** For more information, contact brian.yanchik@dot.gov.

Section 106 and Historic Preservation Technical Assistance

Tailored to customer requirements, FHWA Resource Center specialists provide technical assistance on a range of Section 106 and Historic Preservation topics and issues. For more information, contact deborah.scherkoske@dot.gov, stephanie.stoermer@dot.gov or deborah.suciu.smith@dot.gov.

Advanced Seminar on Transportation Project Development:

Navigating the NEPA Maze (NHI 142055) Building upon demonstrated knowledge and understanding of the NEPA project development process, this advanced training provides practical tools and approaches to successfully resolve complex environmental issues and challenges. Designed in seminar format, this training is highly interactive. It guides participants through the NEPA decisionmaking process while pointing out potential pitfalls. It provides the skills and knowledge to apply critical thinking to reach defensible decisions. The course is intended for experienced environmental practitioners and project development managers. Length: 3 days. **Level: Accomplished.** For more information, go to www.nhi.fhwa.dot.gov.

American Indian Best Practices Provides the basic understanding of the need for formal consultation with federally recognized American Indian tribes and how to approach consultation with the tribes. Reviews applicable regulations and executive orders, definition of terms, cultural differences to consider and best practices. Length: 1 day. **Level: Basic.** For more information, contact david.grachen@dot.gov or stephanie.stoermer@dot.gov.

Beyond Compliance: Historic Preservation in Transportation Project Development (NHI 142049) Designed to help transportation professionals meet the new requirements of the Section 106 regulations and take advantage of the greater flexibility and autonomy offered by the recent revisions. The course focuses on the fundamentals of NEPA, Section 106, and Section 4(f) of the Department of Transportation Act, and provides techniques for coordinating transportation planning, project development and compliance with these three laws. The emphasis is on practical approaches for real-world situations and the importance of balancing stewardship and project delivery. Length: 3 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Bicycle Facility Design (NHI 142046) Assists planners and designers in learning how to apply the existing standards and how to deal with other technical issues involved. The availability of Federal, State, and local transportation funding for bicycle facilities that serve transportation and recreational users is resulting in a dramatic increase in the number of bicycling (and shared use) facilities being planned and built. Length: 1.5 days. **Level: Accomplished.** For more information, go to www.nhi.fhwa.dot.gov or contact gabe.rousseau@dot.gov.

Biological Assessments Provides scientific and regulatory discussions on preparing a biological assessment under the Endangered Species Act. Participants should have previously completed a basic ESA Section 7 course. Length: 2-3 days. **Level: Intermediate.** For more information, contact, brian.yanchik@dot.gov.

Context Sensitive Solutions (CSS) Technical Assistance FHWA Resource Center specialists provide customized assistance to develop CSS as a collaborative, interdisciplinary approach. The goal is to involve all stakeholders to develop a transportation facility that fits its physical setting and preserves the scenic, aesthetic, historic and environmental resources while maintaining safety and mobility. For more information, contact rodney.vaughn@dot.gov or deborah.scherkoske@dot.gov.

Design and Implementation of Erosion and Sediment Control (NHI 142054) Provides an overview of the components of an erosion and sediment control plan, lists sources for the plan, identifies management practices and measures for typical situations, reviews typical construction and inspection problems and strategies and reviews Federal and State regulations in this area. Length: 2 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov.

GIS and NEPA Project Development Technical Assistance

Customized technical assistance to include workshops and facilitated seminars on use of GIS to assist and facilitate effective transportation project development and NEPA analysis. For more information, contact kimberly.majerus@dot.gov.

Highway Traffic Noise (NHI 142051) Covers the requirements of 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, and the noise requirements of the National Environmental Policy Act of 1969, provides both technical and policy training, and includes basic principles of acoustics and an overview of the FHWA Traffic Noise Model (TNM). Length: 3 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Indirect and Cumulative Effects Analysis Provides an overview of the requirements and methodologies used to analyze the indirect and cumulative effects of transportation projects. Covers terminology, regulations and court cases pertaining to these analyses. The workshop can be tailored to include local case studies. Length: 1-2½ days. **Level: Intermediate/Accomplished.** For more information, contact kevin.moody@dot.gov or brian.smith@fhwa.dot.gov.

Introduction to Context Sensitive Solutions (NHI 142050)

Context sensitive solutions (CSS) – also known as context sensitive design – is a collaborative, interdisciplinary approach to a transportation project that involves stakeholders in the development of a transportation facility that equally addresses safety, mobility, and the preservation of scenic, aesthetic, historic, and environmental resources and community values. Length: 3 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.



Introduction to NEPA and Transportation Decisionmaking (NHI 142052) This web-based training is a basic introduction to the FHWA's National Environmental Policy Act (NEPA) transportation decisionmaking process. It provides an overview of the environmental process, including the integration of social, environmental, and economic factors within the framework of existing laws, regulations, policies, and guidance for transportation project decisions. Separate lessons address such topics as purpose and need, alternatives development and analysis, impact analysis, public involvement, interagency coordination, mitigation, and documentation. Length: Web-based days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Introduction to Transportation Planning for Resource Agencies
See **Planning and Environmental Linkages** section for description.

Linking Conservation and Transportation Planning
See **Planning and Environmental Linkages** section for description.

Linking Freight to Planning and the Environment (NHI 139005) See **Freight** section for description.

Linking Planning and NEPA Technical Assistance
Customized technical assistance to include workshops and facilitated seminars. Linking planning and NEPA promotes the consideration of environmental, community, and economic goals early in the transportation planning process, and supports carrying those considerations through project development, design, construction, and maintenance. These approaches can support the incorporation of environmental considerations throughout the transportation decisionmaking process. For more information, contact danw.johnson@dot.gov.

Measuring Progress in Linking Transportation Planning and Environmental Analysis
See **Performance Measures** section for description.

National Environmental Policy Act (NEPA) Executive Briefing
Provides an overview of the FHWA project development process, emphasizing topics such as innovative mitigation and enhancement, significance, streamlining, reasonable alternatives, logical termini, purpose and need, interagency coordination and public involvement. Includes background on NEPA, the processing of environmental documents and a brief overview of the Section 4(f) regulation (if desired). Length: ½ day to 2 days. **Level: Basic/Intermediate.** For more information, contact jamar.smith@dot.gov.

National Environmental Policy Act (NEPA) Technical Assistance
FHWA Resource Center specialists provide customized assistance, to include workshops and seminars on developing purpose and need statements, alternatives analysis, impact analysis, managing and streamlining the environmental review process, and improving the quality of environmental documentation. For more information, contact danw.johnson@dot.gov or david.grachen@dot.gov.

NEPA and Transportation Decisionmaking (NHI 142005)
Considers the FHWA's policies and procedures for applying the National Environmental Policy Act (NEPA) to the project development and decisionmaking processes related to transportation facilities. The course examines the evolution of environmental policy and the integration of social, environmental and economic factors into the framework of laws, regulations, policies, and guidance, which assist in achieving a decision on a transportation project that is in the best overall public interest. Length: 3 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov.

Pedestrian Facility Design (NHI 142045) Emphasizing the importance of planning for pedestrians, the course focuses on case examples involving corridor and intersection design issues. This training was developed to provide information and application opportunities to those involved in the design of pedestrian facilities. The Americans with Disabilities Act (ADA) requires newly constructed and altered sidewalks to be accessible and usable by people with disabilities, and accessibility improvements need to be implemented for existing facilities. Length: 1.5 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov or contact gabe.rousseau@dot.gov.

PEL 101: Tools for Adopting and Implementing a PEL Approach
See **Planning and Environmental Linkages** section for description.

Practical Conflict Management Skills for Environmental Issues (NHI 142060) Provides training in basic conflict management skills, including interest-based negotiation, communication and facilitation skills, as well as leadership behaviors, in the context of transportation decisionmaking where there are environmental issues. Length: 3 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Soil Erosion/Sediment Control Provides an overview of soil erosion and sediment processes, planning, site evaluations, laws and regulations. Length: 1 to 2 days. **Level: Basic.** For more information, contact brian.smith@fhwa.dot.gov.

Water Quality Management of Highway Runoff (NHI 142047)
Provides a basic understanding of water quality parameters, processes, requirements, and best management practices (BMPs) in order to provide the transportation community with guidance on how to mitigate impacts and protect water quality. Length: 2 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov.

Wetland Delineation Provides a basic overview on the application of the 1987 Wetland Delineation Manual in use by the U.S. Army Corps of Engineers. Length: 3 to 5 days. **Level: Intermediate.** For more information, contact brian.smith@fhwa.dot.gov or william.vanpeeters@dot.gov.

Environmental Justice

Environmental Justice and Project Development Tailored to audience requirements (length and topics), provides an overview of Title VI and Executive Order 12898 requirements and environmental justice objectives with particular focus on NEPA and the transportation decision-making process. Length: ½ day to 1.5 days. **Level: Basic/Intermediate.** For more information, contact katiann.wong-murillo@dot.gov.

Environmental Justice for MPOs Tailored to audience requirements (length and topics), provides an overview of Title VI and Executive Order 12898 requirements and environmental justice objectives with particular focus on MPO issues and analytical approaches to assess compliance in metropolitan plans and programs. Length: 2-8 hours. **Level: Basic.** For more information, contact brian.betlyon@dot.gov.

Environmental Justice Refresher Environmental justice should be addressed throughout the transportation development process. This webinar covers principles, definitions, and examples of environmental justice activities in key phases of the process, focusing on the planning and NEPA phases. Length: 2-4 hour Webinar. **Level: Basic.** For more information, contact jocelyn.jones@dot.gov or katiann.wong-murillo@dot.gov.

Environmental Justice/Title VI Technical Assistance Tailored to customer requirements (length and topics), FHWA Resource Center specialists provide technical assistance related to EJ/Title VI issues and the transportation planning process. Length: Depends on customer needs. For more information, contact brian.betlyon@dot.gov, jocelyn.jones@dot.gov or katiann.wong-murillo@dot.gov.

Fundamentals of Title VI/Environmental Justice (NHI 142042) Provides an overview of Title VI and Executive Order 12898 requirements and a framework for using a variety of approaches and tools for accomplishing environmental justice goals with transportation objectives. Length: 2 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Federal Lands Highways

Federal Lands 101 (NHI 310108) Provide Federal Lands Highway and Federal Lands Management Agency employees with an overview of how FLH operates in order to administer programs, deliver projects, develop and transfer technology, and provide external training. Length: 2 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Transportation Planning Cross-Training: Federal-aid and Federal Lands Highway (FLH) Provides a general understanding of the metropolitan and statewide transportation planning process/products for FLH staff and Federal Land Management Agencies, and FLH planning programs and processes for Federal-aid planners. Length: 2 hour Webinar. **Level: Basic.** For more information, contact brian.betlyon@dot.gov.

Financial Planning/Fiscal Constraint

Advance Construction in TIPs and STIPs Covers the definition of advance construction (AC), how and why States use it, the Federal requirements for accounting for AC in TIPs and STIPs, and notable examples. The audience includes the FHWA, State DOT, and MPO planners. Length: 2 hours. **Level: Basic/Intermediate.** For more information contact: ralph.j.rizzo@dot.gov.

Cost Estimation for Transportation Planning and Programming Provides an overview of issues related to cost estimation at the stage of long range planning and program development. Reviews Federal fiscal constraint requirements pertaining to costs and highlights notable MPO and State DOT practice. Length: Seminar or Webinar format. **Level: Intermediate.** For more information, contact: ralph.j.rizzo@dot.gov.

FHWA Role in Public Private Partnerships (NHI 310116) Provides participants with an awareness of various non-traditional and alternate sources of funding for construction, operation, and maintenance of U.S. Highways. The course is primarily for FHWA employees responsible for administering the Federal-Aid Program. Length: 1 day. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Financial Planning in Transportation (NTI) Provides an overview of financial planning in support of the development of transportation plans and programs as well as information on the process and the types of analyses associated with developing forecasts over the planning horizons. Length: 3 days. **Level: Basic.** For more information, go to www.ntionline.com.

Financing Freight Improvements
See **Freight** section for description.

Fiscal Constraint 101 Provides an overview of practices designed to ensure the development of fiscally-constrained plans and programs for transportation agencies. The session reviews fiscal constraint regulations and highlights revenue forecasting/cost estimation processes and tools; and reviews examples of noteworthy practices. The target audience is FHWA/FTA, MPO, and State DOT planners. Length: Seminar or Webinar format. **Level: Basic.** For more information, contact ralph.j.rizzo@dot.gov or brian.betlyon@dot.gov.

Fiscal Constraint Process Review Assistance Customized technical assistance to the FHWA division offices and the FTA region office partners in assessing compliance with fiscal constraint requirements for transportation plans and programs. Review would focus on the State DOT and development of the Statewide Transportation Improvement Program, multimodal plans, major projects and cost estimation techniques. Additional topics might include cooperative forecasting processes with MPOs and public involvement opportunities. Length: Depends on customer needs. For more information, contact ralph.j.rizzo@dot.gov or brian.betlyon@dot.gov.

Fiscal Constraint/Financial Planning Technical Assistance Tailored to customer requirements (length and topics), FHWA Resource Center specialists provide technical assistance related to fiscal constraint/financial planning, including topics related to revenues, costs and operations and maintenance. Length: Depends on customer needs. For more information, contact: ralph.j.rizzo@dot.gov.

Highway Program Financing (NHI 152072) Covers the various aspects of Federal-aid highway financing unique to the FHWA program. Length: 2 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Operations and Maintenance Costs in Planning and Programming See **Planning for Operations** section for description.

Specialized Innovative Finance Several workshops and seminars, of varying lengths are available from the Innovative Program Delivery Office, focusing on a review of traditional transportation funding sources and discussions of TIFIA, GARVEEs, RVEEs, public-private partnerships, etc. Length: Varies. **Level: Basic/Intermediate.** For more information, contact thay.bishop@dot.gov.

Transportation Revenues 101 Provides an overview of Federal fiscal constraint requirements pertaining to transportation revenues for both long range plans and programs. Reviews a range of revenue sources including Federal, State, local and innovative finance. Discusses notable practices by MPOs and DOTs and highlights effective approaches for revenue documentation. Length: Seminar or Webinar format. **Level: Basic.** For more information, contact: ralph.j.rizzo@dot.gov.

Freight

Advanced Freight Planning (NHI 139003) Expands on freight topics covered in other FHWA-developed freight planning courses to provide techniques and strategies designed for those individuals directly involved in the implementation of transportation planning, programming and allocation of resources. It provides participants with the skills needed to identify, prioritize, develop and implement

freight supportive projects. Prerequisite: Integrating Freight in the Transportation Planning Process Self-Paced or Instructor Led NHI Course. Length: 2 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov.

Engaging the Private Sector in Freight Planning This workshop provides strategies and techniques to initiate private-public sector cooperation, identifies key private sector stakeholders, and suggests ways to improve communication. Successful approaches employed at several State DOTs and MPOs are also discussed. See also **Transportation Planning for the Private Sector** on page 12. Length: 1-day Workshop or 2 hour Webinar. **Level: Intermediate.** For more information, contact jocelyn.jones@dot.gov.

Financing Freight Improvements Provides information on funding and financing multimodal freight improvement projects. It also presents examples of successful freight project financing by State DOTs, MPOs, local agencies, and the private sector. The workshop uses the FHWA handbook, *Financing Freight Improvements*, as a teaching tool. Length: 1 ½ days. **Level: Intermediate.** For more information, contact carol.keenan@dot.gov.

Freight Analysis Framework (FAF2) The FHWA has released truck flow data over the national highway network as part of the Freight Analysis Framework (version 2). These data include the FAF Highway Network and link specific FAF truck, non FAF truck, AADT, and link specific volume capacity ratio data for year 2002 and 2035. The FAF also includes Origin-Destination Database estimates of tonnage and value of goods shipped by type of commodity and mode of transportation for 114 domestic and 7 international trading regions and incorporates models to assign the detailed flows to individual highways. This two hour webinar describes the content of the underlying data, along with the strengths and limitations for 'real world' applications. Length: 2 hours. **Level: Intermediate.** For more information, contact eric.pihl@dot.gov.

Freight Conversation Circle Provides a facilitated session for the DOT, MPOs and other agencies to discuss their freight activities, ways to work together and possible action steps, particularly to engage the private sector and collect data. Length: 1-1 ½ days. **Level: Intermediate.** For more information, contact jocelyn.jones@dot.gov.

Freight Technical Assistance Tailored to customer requirements (length and topics), FHWA Resource Center specialists provide freight planning technical assistance on a range of issues, including freight studies, private sector involvement, freight and land use, data and forecasting, performance measures and intermodal connectors. Length: Depends on customer needs. For more information, contact jocelyn.jones@dot.gov, eric.pihl@dot.gov or ralph.j.rizzo@dot.gov.

Integrating Freight in the Transportation Planning Process (NHI 139006) This is the self-paced web version of the NHI course on the same topic that was previously instructor led. This course provides participants with a greater understanding of the various stakeholders, trends, and issues associated with freight transportation. It also addresses a challenge many transportation planners in the public sector face: how to best incorporate varying perspectives on freight in a way that results in safe and efficient transportation system for both people and goods. Length: Web-based days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Keeping the Global Supply Chain Moving This video showcases how freight moves through the supply chain, the importance of an efficient transportation system for reliable freight movement, and the impact the transportation system has on the economy. Length: 8 minutes. **Level: Basic.** To view the video, go to <http://www.ops.fhwa.dot.gov/publications/fhwahop09035/video.htm> or contact kate.quinn@dot.gov.

Linking Freight to Planning and the Environment (NHI 139005) Provides public and private sectors with skills to better integrate freight and environmental considerations throughout the planning, programming, and project development processes. Through case studies and hands-on exercises, the course teaches participants how to incorporate freight and environmental considerations into their existing policies and activities and helps to mainstream freight and environmental elements with State DOTs, MPOs, and other organizations. Length: 2 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

Principles of Effective Commercial Motor Vehicle (CMV) Size and Weight Enforcement (NHI 139004) Provides advanced understanding of Federal motor vehicle size and weight (VSW) regulations and the importance of state level vehicle size and weight enforcement programs. This course targets transportation professionals responsible for overseeing the preservation of Federal and State highway assets through annual VSW enforcement planning and Federal certification, as well as personnel directly involved in commercial VSW enforcement. Length: 2 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov or contact john.nicholas@dot.gov.

Quick Response Freight Manual Technical Assistance An updated version of the QRFM was released in early 2008. This report is valuable research for those agencies seeking to implement freight analytical procedures that are useful for both planning and project development activities. Length: Depends on customer requirements. For more information, contact eric.pihl@dot.gov.

Talking Freight Monthly webinars provide a convenient and no-cost way for practitioners to broaden their freight knowledge and develop new skills. They are eligible for 1.5 AICP Certification Maintenance Credits. Length: 1 ½ hours. **Level: Basic.** For more information, go to <http://www.fhwa.dot.gov/freightplanning/registration.htm>.

Transportation Planning for the Private Sector This presentation (and associated fact sheets) was developed for use by State DOTs and MPOs to provide a broad overview of the transportation planning process to private sector freight stakeholders. The goal of this effort is to foster awareness and encourage collaboration on freight issues and projects. Length: Up to 2 hours. **Level: Basic.** For more information, contact jocelyn.jones@dot.gov.

GIS and Planning/ GIS and Environment

Applying GIS and Spatial Data Technologies to Transportation (NHI 151039) Provides an overview of transportation applications that can use today's major spatial data technologies and trains participants on how to implement these applications from a planning perspective. Length: 2 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov.

GIS and NEPA Project Development Technical Assistance
See **Environment** section for description.

GIS and Transportation Planning Technical Assistance
Tailored to audience requirements (topics and length), FHWA Resource Center specialists provide technical assistance on spatial data technologies and how these can be used to enhance transportation planning. Length: Depends on customer requirements. For more information, contact ben.williams@dot.gov or brian.betlyon@dot.gov.

Linking Conservation and Transportation Planning
See **Planning and Environmental Linkages** section for description.

Transportation Planning Applications of Google Earth
Tailored to audience requirements (topics and length). Provides technical assistance on using Google Earth for transportation planning. Length: Depends on customer requirements. **Level: Basic/Intermediate.** For more information, contact mark.sarmiento@dot.gov.

Using Visualization in Transportation Planning Tailored to customer needs, this seminar covers the visualization requirements of SAFETEA-LU, the latest in visualization technology and examples of how States and MPOs are incorporating the technology in their programs. Length: 2-4 hours. **Level: Basic.** For more information, contact ben.williams@dot.gov.

Land Use and Transportation

Forecasting Land Use Activity Explains and demonstrates methods and data sources for forecasting the nature and amount of land using activities, specifically, population, dwelling units, basic employment and services employment. Length: 1 day. **Level: Basic.** For more information, contact eric.pihl@dot.gov.

Land Use and Transportation Planning Provides an overview of key issues related to the interaction of transportation planning and land use and the integration of transportation plans with local and State land use plans, with focus on innovative techniques, approaches and applications. Length: 1 day Seminar or 2-4 hour Webinar. **Level: Basic.** For more information, contact jim.thorne@dot.gov.

Land Use and Transportation Planning Technical Assistance Tailored to audience requirements (topics and length), FHWA Resource Center specialists provide technical assistance on land use issues as they relate to transportation planning, including sub-topics such as: transportation characteristics of land use patterns, agency roles and responsibilities, and developing land use and transportation plans. Length: Depends on customer requirements. For more information, contact jim.thorne@dot.gov or brian.betlyon@dot.gov.

Transportation and Land Use (NTI/NHI 151043) Provides an overview of transportation and land use planning and how they can and should interact. The course trains participants to actively participate in the development of transportation systems that support desired land uses, as well as help shape land uses that support the transportation system. Length: 3 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov or www.ntionline.com.

Livability

Related Livability Offerings Livability encompasses a broad range of specialty areas. For training on issues relevant to livability principles, see other offerings throughout this menu. Related topics include bike and pedestrian facility design, land use, CSS, and scenario planning.

Livability Technical Assistance Tailored to customer requirements, Headquarters and FHWA Resource Center specialists provide technical assistance on overall principles. Length: Depends on customer needs. For more information, contact jim.thorne@dot.gov, kevin.moody@dot.gov, or gabe.rousseau@dot.gov.

Performance Measures

Measuring Progress in Linking Transportation Planning and Environmental Analysis Webinar Based on the FHWA PEL publication of the same title, this Webinar course provides an introduction to performance measures in the context of transportation planning and environmental analysis to help transportation agencies in developing their own programs to measure the successes of PEL-related activities. Length: 2-hour Webinar. **Level: Basic.** For more information, contact michael.culp@dot.gov or sharlene.reed@dot.gov.

Performance Measures for Transportation Planning With increased public demand for accountability, limited funding for transportation, there is a new emphasis on the use of the performance measurement in the transportation planning process. This workshop/webinar on transportation planning performance measurement is designed primarily for planning and programming personnel at State DOTs, MPOs and local planning agencies. Length: 1 day Workshop or 2 hour Webinar. **Level: Basic.** For more information, contact brian.betlyon@dot.gov or ed.christopher@dot.gov.

Planning and Environmental Linkages

Introduction to Transportation Planning for Resource Agencies Enhances resource agency understanding of the transportation planning process. Length: 2 hours. **Level: Basic.** For more information, contact spencer.stevens@dot.gov.

Linking Conservation and Transportation Planning An opportunity for transportation and conservation planners to develop relationships, learn about each other's processes and data needs, find ways to improve existing processes as they currently exist, and support the integration of environmental considerations into transportation planning process. Included in this workshop is discussion of GIS based tools to aid in linking these two areas. Length: 2 days. **Level: Basic.** For more information, contact mary.gray@dot.gov.

Measuring Progress in Linking Transportation Planning and Environmental Analysis
See **Performance Measures** section for description.

PEL 101: Tools for Adopting and Implementing a PEL Approach Supports better understanding, coordination and integration of transportation and conservation planning with the environmental review process. The webinar provides transportation and resource agencies with an overview of Planning and Environment Linkages (PEL), how it works and the associated benefits, and information on the tools and methods for implementing the PEL approach. Length: 2 hours. **Level: Basic.** For more information, contact mary.gray@dot.gov.

Planning for Operations

Advancing Planning for Operations in Metropolitan Areas (NHI 133098) Covers important institutional aspects necessary for advancing an objectives driven, performance based approach for Operations in the transportation planning process for metropolitan areas which includes: (1) regional transportation operations collaboration and coordination activities; (2) enhanced levels of operations considerations in the regional transportation planning process; and (3) improved linkage opportunities between planning and operations. Length: 1.5 days. Available: End of Calendar Year 2010. **Level: Intermediate.** For more information, contact richard.backlund@dot.gov.

Congestion Management Process

See **Congestion Management** section for description.

Congestion Management Process Technical Assistance

See **Congestion Management** section for description.

Executive Session on Advancing Planning for Operations

Provides an executive level overview to raise awareness of transportation managers and decision-makers on the need for improved levels of regional transportation operations planning and collaboration activities. Length: 1- 3 hours. **Level: Basic.** For more information, contact richard.backlund@dot.gov.

ITS Deployment Analysis System (NHI 137041) Hands-on computer training session on the ITS Deployment Analysis System (IDAS) software. IDAS is a sketch-planning analysis tool that transportation practitioners can use to estimate the benefits and costs of ITS and operations investments. IDAS offers the capability for a systematic assessment of ITS and operational improvements with a single analysis tool, and can predict relative costs and benefits for more than 60 types of ITS and operations investments. Length: 2 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov or contact egan.smith@dot.gov.

Operations and Maintenance Costs in Planning and Programming

Provides an overview of Federal requirements and notable practices in showing operations and maintenance costs for highways and transit in plans and programs. The audience includes the FHWA, State DOT, and MPO planners. Length Seminar or Webinar format. **Level: Intermediate.** For more information contact ralph.j.rizzo@dot.gov.

Traffic Analysis Tools Technical Assistance The Traffic Analysis Tools Team – comprised of the FHWA's operations and modeling specialists – is available to support the implementation of both simulation and 'sketch' based analytical methods for evaluating the impacts of ITS and traffic operations improvements. Market ready operations planning tools supported by the FHWA include DynusT and IDAS. For more information, contact eric.pihl@dot.gov.

Planning Fundamentals

Administration of FHWA Planning and Research Grants (NHI 151021) Provides an overview of the responsibilities and relationships among Federal, State, and local agencies involved in administration of FHWA planning grants to States and State subgrants to Metropolitan Planning Organizations (MPOs) and local governments. Length: 1.5 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov.

General Planning Technical Assistance Planning technical assistance in general metropolitan and statewide planning issues as well as planning specialty areas is available to Division Offices and their partner agencies. This will be tailored and targeted to the specific request. Length: Based on customer requirements. For more information, contact lisa.randall@dot.gov.

Introduction to Transportation Planning for Resource Agencies

See **Planning and Environmental Linkages** section for description.

Metropolitan Transportation Planning (NHI/NTI 152069)

Provides a general introduction and overview of the metropolitan transportation planning process, including basic concepts, products, and Federal requirements. Length: 3 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov or www.ntionline.com.

Metropolitan or Statewide Planning 101 Tailored to audience requirements (topics and length), provides an overview of the basic concepts, components, and participants in the metropolitan planning and/or statewide planning process. Also highlights innovative and noteworthy practices. Length: Seminar or Webinar format. **Level: Basic.** For more information, contact lisa.randall@dot.gov.

Statewide Transportation Planning (NHI/NTI 151038)

Provides an overview of the statewide transportation planning process including tools, methods and best practices. Length: 2 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov or www.ntionline.com.

State and Metropolitan Transportation Programming (NTI)

Provides an overview of the basic concepts, components, and participants in the transportation programming process. Length: 3 days. **Level: Basic.** For more information, go to www.ntionline.com.

Transportation Planning Cross-Training: Federal-aid and Federal Lands Highway (FLH)

See **Federal Lands Highways** section for description.

Planning Oversight and Stewardship

Planning Oversight and Stewardship Program Assistance

Planning program area assistance is available to Division Offices in scoping and/or conducting reviews associated with stewardship and oversight of metropolitan and statewide transportation planning processes/programs (e.g., Transportation Management Area certification reviews, statewide planning process/program reviews, or other associated process/program reviews). Length: As deemed necessary. For more information, contact harlan.miller@dot.gov.

Public Involvement

Engaging the Private Sector in Freight Planning

See **Freight** section for description.

Public Involvement in Transportation Decisionmaking

(NHI/NTI 142036) Provides an in-depth review of the various components of public involvement in transportation decision-making, as well as specific skills, techniques and approaches for enhancing public interaction. Length: 3 days. **Level: Basic.** For more information, go to www.nhi.fhwa.dot.gov or www.ntionline.com.

Public Involvement Refresher Public involvement is a fundamental component of the overall transportation development process. This webinar covers principles and examples of public involvement activities in key phases of the process, focusing on the planning and NEPA phases. Length: 2-4 hour Webinar. **Level: Basic.** For more information, contact jocelyn.jones@dot.gov or katiann.wong-murillo@dot.gov.

Public Involvement Technical Assistance Tailored to customer requirements including workshops and seminars, Headquarters and FHWA Resource Center specialists provide technical assistance on public involvement and public participation, including SAFETEA-LU requirements relating to public participation plans and interested parties. Length: Depends on customer needs. For more information, contact jocelyn.jones@dot.gov, brenda.kragh@dot.gov or katiann.wong-murillo@dot.gov.

Transportation Planning for the Private Sector

See **Freight** section for description.

Scenario Planning

Scenario Planning Scenario planning is a process in which transportation professionals and citizens work together to analyze and shape the long-term future of their communities. Using a variety of tools and techniques, participants in scenario planning assess trends in key factors such as transportation and congestion, land use, safety, demographics, health, economic development, and the environment. Workshop presenters include peers who provide participants with an overview of the scenario planning process and share examples of scenario planning efforts. Headquarters and FHWA Resource Center specialists provide an overview of current methods and tools, and information about practices around the country. Length: Varies. **Level: Basic.** For more information, contact brian.betlyon@dot.gov, jim.thorne@dot.gov or sharlene.reed@dot.gov.

Scenario Planning Technical Assistance Tailored to customer requirements (length and topics), FHWA Resource Center specialists provide technical assistance on scenario planning, including an overview of scenario planning and how it provides a framework for developing a shared vision for the future by analyzing various forces (e.g., health, transportation, economic, environmental, land use, etc.) that affect growth. Reviews how different software packages can be used to test various future alternatives that meet State and community needs. Length: Depends on customer needs. For more information, contact brian.betlyon@dot.gov or jim.thorne@dot.gov.

Security and Transportation Planning

Security and Transportation Planning Technical Assistance

Tailored to customer requirements, Headquarters specialists provide technical assistance to explore opportunities for enhancing consideration of security in the transportation planning process. Length: Depends on customer needs. For more information, contact spencer.stevens@dot.gov or susan.grosser@dot.gov.

Sustainability

Related Sustainability Offerings Sustainability encompasses a broad range of specialty areas. For training on issues relevant to sustainability principles, see other offerings throughout this menu. Related topics include air quality, environment, environmental justice, land use, planning fundamentals, and financial planning.

Sustainability Technical Assistance Tailored to customer requirements, Headquarters and FHWA Resource Center specialists provide technical assistance on overall principles. Length: Depends on customer needs. For more information, contact brian.betlyon@dot.gov.

Transportation Safety Planning

Introduction to Transportation Safety Planning – Planning it

Safe (NTI/NHI 151042) Designed to identify opportunities for improving the manner in which safety is integrated as a key planning factor and performance measure in all transportation plans and projects. Length: 2 days. **Level: Intermediate.** For more information go to www.nhi.fhwa.dot.gov or www.ntionline.com.

Transportation Safety Planning Tailored to audience requirements (topics and length), provides an overview of innovative techniques and approaches for successfully integrating safety in the transportation planning process. Length: 1 day Seminar or 2-4 hour Webinar. **Level: Intermediate.** For more information, contact jim.thorne@dot.gov.

Transportation Safety Planning Technical Assistance FHWA Resource Center specialists provide technical assistance on transportation safety planning and work with State, MPO and Division staff to explore opportunities for enhancing consideration of safety in the planning process. Length: Depends on customer requirements. For more information, contact jim.thorne@dot.gov.

Travel Demand Forecasting/ Modeling

Estimating Travel Demand and Revenues for Toll Road Projects

Provides an overview of national experience with tolling and congestion pricing initiatives and associated benefits to transportation system users. The webcast provides examples and lessons learned based on a synthesis of the state of the practice in toll road demand forecasting. This training helps identify the appropriate questions (and issues) to consider when reviewing demand and revenue forecasts for toll facilities. Length: 2 hours. **Level: Intermediate.** For more information, contact eric.pihl@dot.gov.

How to Interpret and Communicate Forecasts for Corridor Planning

Travel forecasts are often immersed in theory and esoteric formulas, and presenting results useful for planners requires a blend of art and science. Examples of presentation techniques and reporting steps have emerged that make model derived information more accessible/useful. This workshop provides multimodal systems and corridor planning studies that have effectively presented travel forecasting information to support the evaluation of plans, policies, and projects, with an emphasis on corridor planning. Length: ½ day. **Level: Basic.** For more information, contact eric.pihl@dot.gov.

Introduction to Travel Demand Forecasting: A Webinar for FHWA Planners

A two hour web-based version of the one-day workshop on travel forecasting is targeted to the needs of the FHWA field planner. The Travel Demand Forecasting Workshop is organized around the "Checklist for Travel Forecasting Methods" used in Federal certifications reviews. This interactive session will help field planners understand: why travel demand modeling is important, how to assess the health of a model, and how to assure a healthy model is properly applied. Length: 2 hours. **Level: Basic.** For more information, contact eric.pihl@dot.gov.

Introduction to Travel Demand Forecasting: A Webinar for MPOs and DOTs

A 2- hour web-based version of the 1-day workshop on travel forecasting targeted to "customers" of travel forecasts at State and local agencies. The webinar discusses the key properties and characteristics of models – including attributes of models considered by Federal certifications reviews. The overall focus is on applications of models, data needs, and steps taken to evaluate model outputs used for a variety of planning needs. Length: 2 hours. **Level: Basic.** For more information, contact eric.pihl@dot.gov.

Introduction to Urban Travel Demand Forecasting (NHI 152054)

Provides an overview of the traditional four-step planning process of trip generation, trip distribution, mode choice and traffic assignment. Also reviews the development of land use forecasts, network and zone structures and use of Geographic Information Systems. Length: 4 days. **Level: Intermediate.** For more information, go to www.nhi.fhwa.dot.gov and tmip.dot.gov.

Model Validation and Quality Control Strategies for Regional Travel Models

Provides an overview of best practices in model validation and quality control methods for regional travel models. Key parameters and inputs that are linked to forecast error or uncertainty are discussed, as well as the use and interpretation of forecasts as a means of diagnosing errors in up-stream model components. This session also illustrates how "user benefit" calculations can be used as a model diagnostic tool for identifying and correcting errors. Length: 1 day. **Level: Basic.** For more information, contact eric.pihl@dot.gov.

Statewide Travel Forecasting

Provides State DOT, MPO, and other transportation planning practitioners an overview of state-wide travel demand forecasting models, how these models are used to analyze transportation issues and policies at the State level and the interaction with MPO travel demand models. This workshop also provides information and insight to State DOTs that are considering the development or revision of these models. Length: 1 day. **Level: Basic.** For more information, contact eric.pihl@dot.gov.

Travel Demand Forecasting

Tailored to audience requirements (topics and length), provides a general overview of travel demand forecasting, especially the traditional four-step model. Reviews the uses and applications of forecasts for planning purposes and highlights noteworthy practices and techniques. Length: 1 day. **Level: Basic.** For more information, contact eric.pihl@dot.gov or brian.betlyon@dot.gov.

Travel Demand Forecasting Technical Assistance

Tailored to customer requirements (length and topics), FHWA Resource Center specialists are available for technical support on issues related to the application of travel forecasting methods. Assistance provided to State, regional and local agencies on the incorporation of model QA/QC procedures, model validation, data collection efforts, and analytical reporting of model outputs. RC staff are also available to review technical workplans and can provide recommendations on appropriate analytical methods for planning studies ranging from traditional 4-step models to sketch planning-based methodologies. For more information, contact eric.pihl@fhwa.dot.gov, brian.betlyon@dot.gov or jim.thorne@dot.gov.

Travel Model Improvement Program The Travel Model Improvement Program (TMIP) periodically hosts seminar and webinars on topics relevant to transportation planners and modelers. Previous webinar offerings have focused on data needs, trip distribution techniques, and a case study of the Transims regional simulation model. TMIP Seminars include: Activity and Tour Based Forecasting Seminar (reviews activity and tour-based modeling procedures developed around the U.S. and abroad and identifies key areas of research interest); Forecasting Land Use Activity (describes land use models and land-use allocation procedures used in standard practice – including a discussion of advanced and emerging practices); Model Calibration, Validation and Reasonableness Checking (describes procedures for estimating, calibrating and validating travel models). The TMIP's Virtual Mentoring and Technical Support Center (VMTSC) provides a web-based forum for focused technical discussions on travel forecasting, simulations and land use forecasting. For more information, go to tmip.dot.gov or contact sarah.sun@dot.gov.

Tribal Transportation

American Indian Best Practices

See **Environment** section for description.

Tribal Transportation Planning Technical Assistance

Headquarters and FHWA Resource Center specialists provide technical assistance related to tribal consultation requirements at the transportation planning level. Specific areas include statewide and metropolitan transportation planning. In addition to technical assistance, presentations and other resource materials are also available. For more information, contact theresa.hutchins@dot.gov, lorrie.lau@dot.gov, ralph.j.rizzo@dot.gov or fawn.thompson@dot.gov.

Tribal Consultation and Section 106 Technical Assistance

Headquarters and FHWA Resource Center specialists provide technical assistance related to tribal consultation in the context of Section 106 of the National Historic Preservation Act. In addition to technical assistance, presentations and other resource materials are also available. For more information, contact david.grachen@dot.gov, deborah.scherkoske@dot.gov, maryann.naber@dot.gov, deborah.suciu.smith@dot.gov or stephanie.stoermer@dot.gov.



Peer Exchanges

- **Freight Peer-to-Peer Program**
- **Transportation Planning Capacity Building Peer Program**
- **Travel Model Improvement Program (TMIP) Peer Reviews and TMIP Technical Roundtables**

Peer Exchanges are available through the following programs: Freight, Travel Model Improvement Program (TMIP), and other planning areas (through the Transportation Planning Capacity Building Program).

The peer exchange provides transportation agencies a forum to share ideas and noteworthy practices not only to strengthen transportation planning practices, but also to build relationships and reinforce cooperation between agencies.

Freight Peer-to-Peer Program (P2P) Facilitates information sharing between public sector freight transportation professionals and provides an opportunity for public sector freight professionals to learn from their peers, the Freight P2P Program identifies and expands State and regional noteworthy practices in the freight transportation field and builds relationships, understanding, and cooperation among key stakeholders. The Freight P2P Program provides targeted, customized technical assistance on a wide variety of freight issues related to planning and operations. Length: Varies. For more information, contact kate.quinn@dot.gov.

Transportation Planning Capacity Building Peer Program

Designed to bring together practitioners from a variety of experiences and levels of expertise in a spirit of partnership and teamwork. The website contains information on how to apply as well as a summary of prior Peer Exchange activities. Length: Varies. For more information, go to www.planning.dot.gov or contact susan.grosser@dot.gov.

Travel Model Improvement Program (TMIP) Peer Review Program and TMIP Technical Roundtables

The Travel Model Improvement Program (TMIP) offers a peer review program focused on forecasting and data collection procedures to assist with model development and improvement efforts. TMIP supports peer reviews by funding travel, lodging and per diem for site visit(s) by peer review panel members. The TMIP can also assist in the selection of peer review panel members and can help document the review, if requested, by the sponsoring agency. The TMIP also periodically holds forums where experts in a particular area share ideas and discuss an emerging technical issue. Discussion results are disseminated via the TMIP website. Length: Varies. For more information, go to tmip.dot.gov or contact brian.gardner@dot.gov, sarah.sun@dot.gov or eric.pihl@dot.gov.