



Resource Center Data & Analysis Services Technical Assistance & Training

October 2019

This document was developed to provide a reference tool for FHWA Division data and analysis specialists on available technical assistance and training resources. These are data and analysis resources that the RC TPM/AM/Freight (RC TAF) Team can deliver/deploy upon FHWA Division Office request. They are intended to support the professional capacity needs of Division Office staff as well as state DOTs and MPOs. For more information on whether a resource may be appropriate to meet partner needs, please contact the RC staff lead for that particular offering. For general questions on training and technical assistances services from the RC TAF team, please contact Lisa Randall (lisa.randall@dot.gov), Technical Director.

TECHNICAL ASSISTANCE (TA)

DOT and MPO needs. These include tailored workshops, overview webinars, on call technical assistance and program/process reviews. RC staff leads can help you scope the needs of your office and your partners, and can help identify options that might help meet your requirements. If you have a need for technical assistance on a data and analysis topic that you do not see listed or are not sure who to contact, please reach out to Lisa Randall (lisa.randall@dot.gov), Technical Director.

Forms of Technical Assistance

The Resource Center offers a variety technical assistance strategies to support customer needs on topics related to data and analysis. Examples of types of technical assistance that the RC can make available, include:

- Project (capital) level reviews and technical support for:
 - Traffic/travel forecasts
 - o Land use forecasts
 - Environmental justice impacts
 - Data considerations
 - Travel Demand Model reviews and assessments;
- Emerging data sources;

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- Enterprise Data Management;
- Congestion Management Process;
- Corridor Studies--modeling and analysis issues;
- TMA Certification Reviews--modeling and analysis;
- Modeling, analysis and data process reviews;
- Modeling, analysis and data technical needs analysis;
- Modeling, analysis and data tailored leadership briefings;
- Tailored technical assistance training on modeling/analysis and data topics;
- and other forms of customer defined assistance.

Tailored in Person Workshops or Webinars

The Resource Center offers tailored workshops based on the specific needs and issues each customer identifies. Based on the scoping of the challenge, RC specialists work to develop a unique workshop that establishes specific outcomes and objectives.

Tailored data and analysis workshops are flexible and customer driven. The RC has a wide range of technical training modules and exercises that can be "mixed and matched" based on customer need and interest. Customers also drive the length of each workshop. A key outcome of each workshop is an action plan that customers can use to implement specific strategies and improved identified during the workshop. Presentations by state, local and regional participants are encouraged and part of the design of each tailored workshop or webinar.

In addition to in person workshops, the Resource Center TAF team also provides a number of knowledge transfer activities through a *webinar format*. These can be high level overviews of a particular data and analysis topic or a more detailed examination of a technical or program area. These webinar sessions are led by a RC TAF team member and include a mix of training, discussion and web based interactivity. Sessions are generally one to 4 hours in length but can be shorter or longer based on customer need and interest.

Below is a subset of possible technical assistance topics that the RC TAF team offers in the areas of data and analysis. If you do not see a topic where your organization has a specific challenge or need, please contact Lisa Randall, the team's Technical Director, to see what additional options might be available.

Tailored in Person	Description	RC POC
Workshops or Virtual		
Webinars		
Data Management and Decision-Making	Tailored workshop with resulting action plan or virtual webinar. Length varies.	Nick Renna Eric Pihl
	Builds awareness of the basic concepts, methods, approaches to effective	
	organizational performance and development of enterprise data management with	
	focus on cross program integration and decision making. Reviews lessons learned	
	from sample DOTs and MPOs, case studies and examples for discussion and potential	
	transferability. In person workshop results in an action plan and includes presentations	
Travel Demond Medaline	from local and state representatives	Eric Pihl
Travel Demand Modeling	Tailored workshop with resulting action plan or virtual webinar. Length varies.	Nick Renna
	Provides an overview of the concepts, methods and approaches for the traditional four	Brian Betlyon
	step modeling processfrom a development and to an application stand point.	brian beciyon
	Highlights key challenges and enhancement areas for customer to consider.	
	Demonstrates uses of travel demand model outputs and sharers case studies and	
	examples for discussion and potential transferability.	
Traffic, Travel and Land	Tailored workshop with resulting action plan or virtual webinar. Length varies.	Eric Pihl
Use Forecasts	Dravidas an avaryiew of the issues and considerations with traffic travel and land use	Nick Renna
	Provides an overview of the issues and considerations with traffic, travel and land use forecasts throughout the project development processfrom planning to	
	environment/design and through operations. Highlights key validation and	
	consistency issuesparticularly in support of Division oversight on high profile projects.	
	Fosters discussion on case studies, pitfalls to avoid and effective examples for	
	discussion and potential transferability.	
Role of Analysis in	Tailored workshop with resulting action plan or virtual webinar. Length varies.	
Transportation Decision-		
Making	Builds awareness of analytical approaches and tools that can be used to support all	
	elements of transportation performance management—from strategic direction to target setting to programming/investment strategies to reporting, monitoring and	
	evaluation. Helps state DOT and MPOs identify specific strategies for improvement in	
	their analytical approaches and current tools. Highlights analytical approaches that	
	are also useful for cross program and cross asset allocation.	
Scenario Planning/Sketch	Tailored workshop with resulting action plan or virtual webinar. Length varies.	
Planning Tools and		
Methods	Provides an overview of the concepts, methods and approaches for high level strategic	
	analysis/sketch planning tools and approaches that can be used to help set a DOT's or	
	MPO's strategic direction and vision, including high level programmatic scenario	
	tradeoffs. Includes a discussion of tools from the most recent SHRP2 program (such as VisionEval). Demonstrates examples of strategic level analytical tools and approaches	
	and sharers case studies and examples for discussion and potential transferability.	
Reliability Data and	Tailored workshop with resulting action plan or virtual webinar. Length varies.	
Transportation Decision-		
Making	Provides an overview of reliability dataits collections, data concepts and definitions	

	and applications to support a variety of transportation program areas and decisions (including planning, operations, freight and TPM). Highlights key challenge and sharers case studies and examples for discussion and potential transferability.	
Congestion Management Process (CMP)	Tailored workshop with resulting action plan or virtual webinar. Length varies.Review basic CMP requirements and provides an in-depth discussion/knowledgetransfer on effective CMP implementation approaches and how to facilitate anddemonstrate connections between the CMP and other performance based plans andfederal TPM requirements. Demonstrates uses of CMP case studies and examples fordiscussion and potential transferability.	
Dynamic Traffic Assignment	Tailored workshop with resulting action plan or virtual webinar. Length varies. Provides an overview of the concepts, methods and approaches for Dynamic Traffic Assignment and leveraging connections between DTA and the traditional four step modeling process. Highlights advantages and applicability for DTA and how this approach can be used for specific needs and in conjunction with other modeling/analysis approaches during project development. Sharers case studies and examples for discussion and potential transferability.	

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NHI TRAINING

NHI Training Courses

The FHWA National Highway Institute (NHI) offers a variety of *foundational*, in person (instructor led training—ILT), blended (both in person or another format) or web based courses on various data and analysis topics. These courses are generally fee based. More information on these courses is available at: <u>https://www.nhi.fhwa.dot.gov/home.aspx.</u> Customers request NHI courses through the NHI website. Staff from

https://www.nhi.fhwa.dot.gov/home.aspx. Customers request NHI courses through the NHI website. Staff from the FHWA Resource Center typically deliver many of the instructor led (ILT) NHI courses.

NHI Course Title	Format	Description	RC Point of Contact
Role of Data in Transportation Performance Management (NHI- 138011)	ILT	Provides an overview of TPM data management needs and strategies and organizational approaches. Identifies common cross-cutting data quality issues and techniques for addressing them.	Nick Renna Eric Pihl Tom Kearney