



Safety Training and Analysis Center (STAC)

AASHTO SHRP2 Safety Data Implementation Workshop
March 2014

Monique R. Evans, P.E.
Director, FHWA Office of Safety R&D



U.S. Department of Transportation
Federal Highway Administration



Safety Training and Analysis Center (STAC)

Why establish a STAC at TFHRC?

To accelerate and proliferate use of the data... to improve safety.



FHWA Turner-Fairbank Highway Research Center (TFHRC)





Safety Training and Analysis Center (STAC)

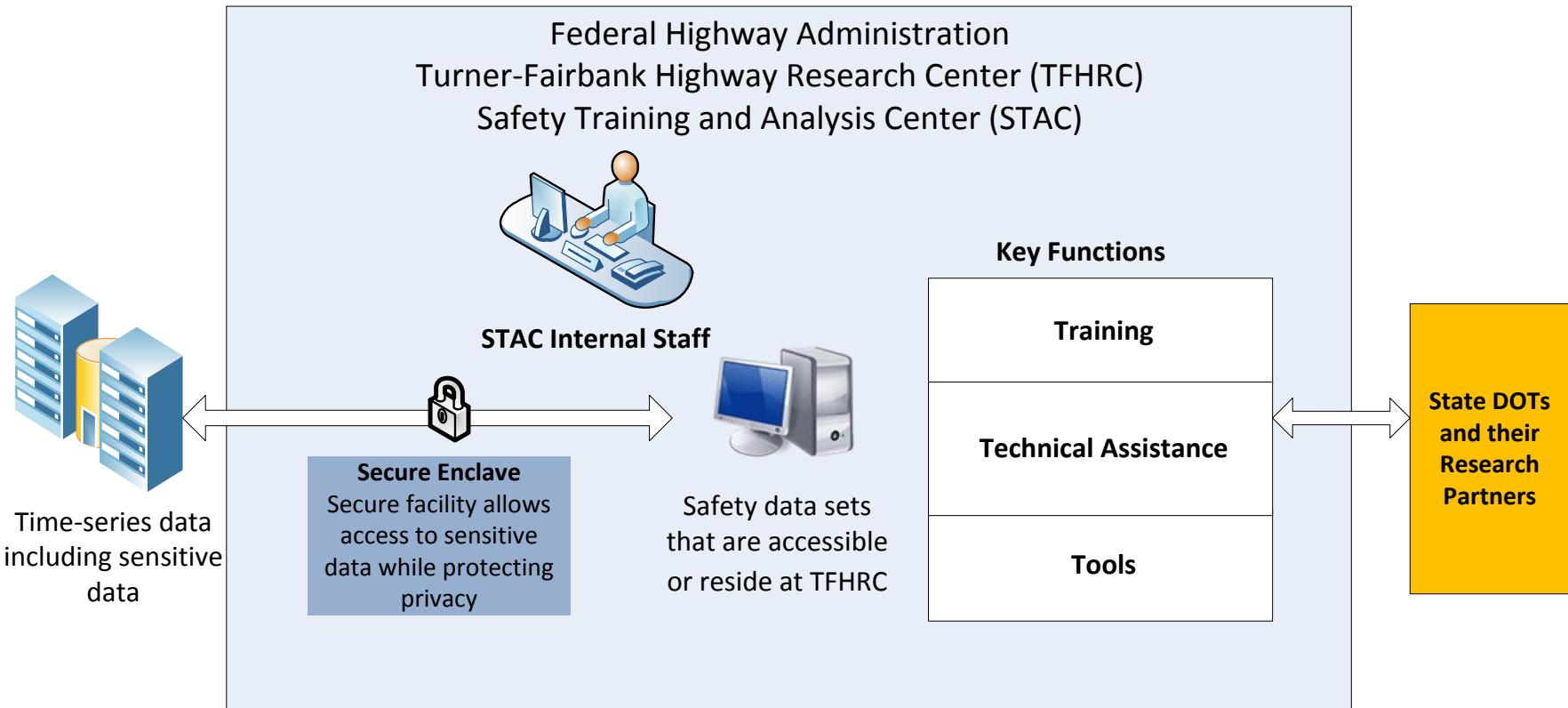


STAC Initial Service Goals:

- Provide training and technical assistance for State DOTs, to expand their knowledge of the data and its potential uses
- Provide opportunities for graduate students, fellows and post docs to gain experience working with the data
- Support U.S. DOT Research Agenda



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STAC Training Goals



- Nurture greater understanding of the data and its uses among State DOTs and their research partners
- Develop interest among State DOTs in using the data to improve safety
- Spur research ideas and proposals
- Increase demand – for more research using the data





STAC Technical Assistance Goals



- Provide guidance in developing research questions
- Assist with selecting data that responds to research inquiry
- Deliver individual on-call support to State DOTs
- Support U.S. DOT research



STAC Tool Development Goals

- Create analytic tools to assist researchers and others in using safety data sets.
- Create “how to” and summary documents for key stakeholders and other transportation decision makers
- Provide ways to link other high value safety datasets with the SHRP2 Safety data.





STAC Feasibility Study



Three-Part Feasibility Study conducted by Volpe

1. Environmental scan of practices at other organizations with large data sets
2. Analysis of stakeholder needs for data access and user support
3. Scoping study of technical requirements and costs





STAC Feasibility Study



Environmental Scan

- Interviews with organizations with large databases, PII, dispersed users
- Discussion of training and technical support, security requirements, access requirements
- Scan completed and submitted





STAC Feasibility Study



Stakeholder Analysis

- Interviews with State DOTs, university researchers, advocacy organizations
- Stakeholders Workshop
- Identification of needs and gaps in training, technical assistance and tools
- Stakeholder Analysis completed and submitted



Stakeholder Analysis – State DOT Feedback

Training Needs:

- Basic instruction on gaining access to and using the data.
- Technical guides and materials.
- On-call training support.



Stakeholder Analysis – State DOT Feedback

Technical Assistance Needs:

- Identifying the types of research that the data could be used for, including previous NDS studies.
- Structuring specific research questions and selecting the appropriate data elements (sensitive versus non-sensitive, driver and trip characteristics, roadway features).
- Estimating the cost of a research project when using this data.
- Guidance on protocols for using Personally Identifiable Information (PII) and Institutional Review Board (IRB) processes.
- Access to expert staff to answer specific questions and troubleshoot issues that may arise during a specific research project.



Stakeholder Analysis – State DOT Feedback

Desired Tools:

- A central Web site providing information on a variety of related topics, including frequently asked questions (FAQs), data access, user tools, and training.
- “Peer forums” hosted on the Web site in which DOTs and researchers could collaborate on ongoing research and share lessons learned.
- Reduced data sets.
- Smaller, sanitized data sets to help refine queries.
- Trip file summaries.
- Easy-to-use interface tools for viewing non-sensitive data.
- NDS data linked to the RID.
- Visualization tools, including GIS or other methods, to allow State DOTs to “localize” and overlay state-specific data.



Feasibility Study



Scoping Document and Cost Model

- Data access and user support model
- Training, technical assistance, and tools
- Data access and hardware requirements
- Implementation planning and schedule
- Budget
- Scoping Document and Cost Model submitted, under Review





Tool Development Projects



Active Projects

- Automated video decoding/data extraction
- Automated extraction of facial features from video
- Automated masking of identity of participants

Potential New Starts

- Small non-sensitive linked “practice” data sets
- Data visualization tools on GIS platform
- “how to” documents and other products



Other Implementation Activities

1. MOU – TRB/FHWA/AASHTO/NHTSA
2. Assistance Agreement – FHWA/TRB
3. Hire additional STAC staff
4. Training for FHWA staff (and later for others)
5. Construction of STAC secure facility.
6. Identify and prioritize topics for new research



Thank You



Monique R. Evans, P.E.
Director, FHWA Office of Safety Research and Development
SHRP2 Safety TCC Liaison
monique.evans@dot.gov

