

# Introduction to the US DOT Human Factors Coordinating Committee

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# Agenda

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- Introduction
- Challenges / Best Practices
  - Multi-modal approach
  - Networking with DOD and others
- Accomplishments
- Future
- Resources



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# US DOT Human Factors Coordinating Committee

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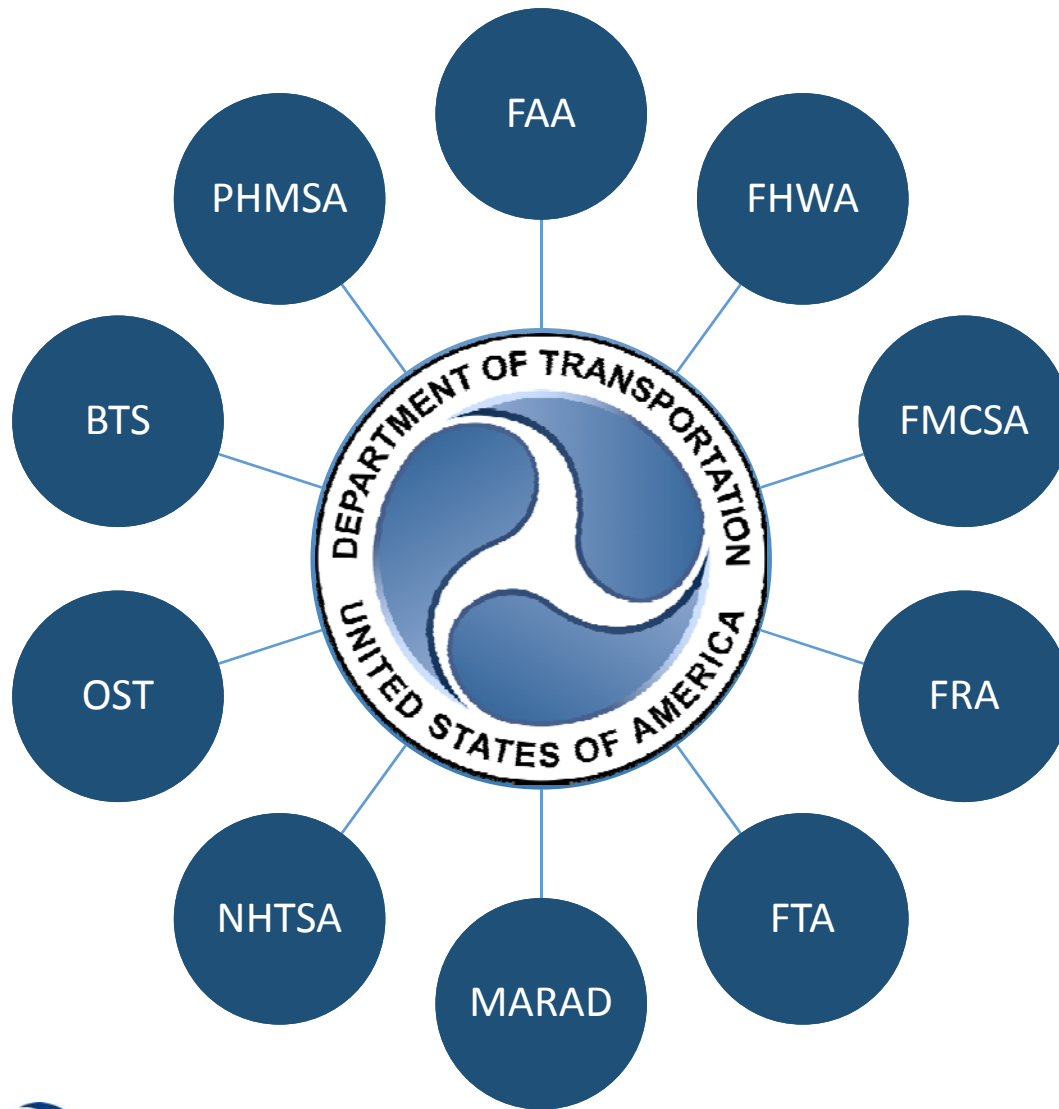
## Mission

Enhance awareness, understanding, application, and evaluation of human factors in transportation.



**HFCC**

# Who is the HFCC?



Executive Agent  
**Volpe**  
The National Transportation Systems Center

## Beyond DOT:



**HFCC**



# 25 Year History

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- Established in 1992 by the Secretary of Transportation.
- We foster government-wide liaisons to address cross-cutting human factors and safety issues in every mode of transportation.
- Throughout our history, the HFCC has:
  - Influenced the implementation of transportation-centered safety and human factors projects
  - Provided a mechanism for the exchange of human factors (and related) technical information across DOT
- In 2007, DOT recognized our exemplary work by creating seven additional DOT Research Working Groups modeled after the HFCC.



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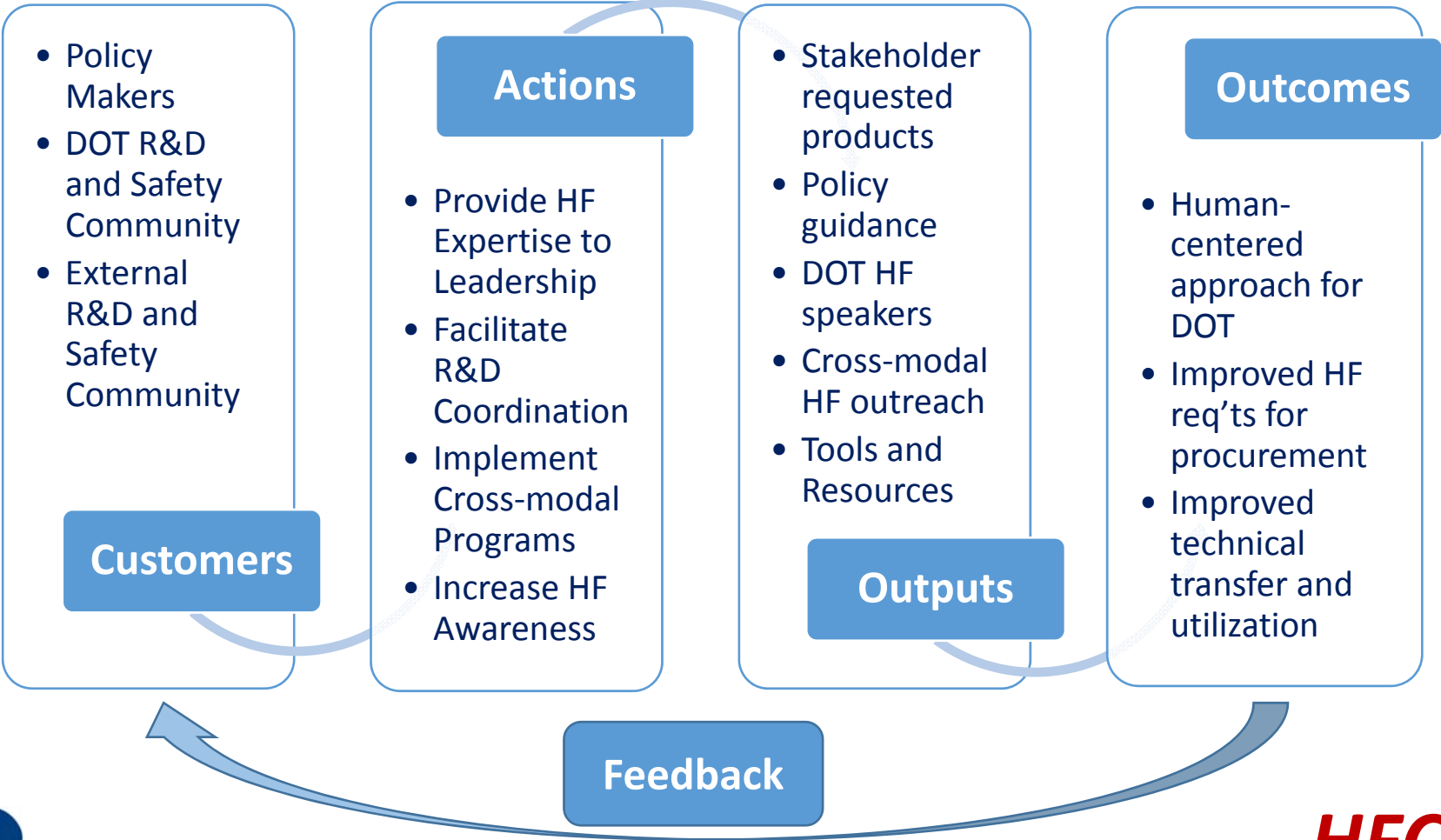
# What we do

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- Coordinate human factors activities across all modes of transportation (groundbreaking for DOT).
- Provide human factors information and support to DOT senior level policy and decision makers.
- Promote human factors research and applications in transportation.
- Serve as DOT's human factors liaisons with the international transportation research and development community.



# How we do it





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# Multi-modal / Cross-government

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- Meet monthly (in person and via webinar) at DOT HQ to identify and address emerging or persistent transportation-related HF issues
- Invite 1-2 HF reps from each modal administration
- Invite 1 HF rep from other federal agencies
  - CDC, DHS (USCG), DOD (AF, Army, Navy), NASA, NTSB, TRB
- US DOT Volpe Center serves as Executive Agent
  - Organize meetings and other activities
  - Maintain communications
  - Funded via Inter-Agency Agreements



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# Challenges / Best Practices

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- Focus on mutual topics of interest, how to leverage all members' expertise
- Regularly evaluate our impact
  - Check-in with DOT Safety Council, OST-R
- Maintain momentum – don't let meetings lapse!
- Occasionally use alternate meeting locations to encourage participation
- Ask members to share information from HF-related conferences they attend
- Hold annual "HF Research Cluster" webinars
  - Invite academia and industry participants
  - Roundtable discussion of HF issues



# Networking with DOD & others

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- Engage with DOD (and other) participants to discuss HF hot-topics with links to transportation
  - UAS
  - Other automated systems / HSI
  - Operator impairment (distraction, fatigue, drug/alcohol, aging operators, other)
- Recent joint efforts (*seeking DOD HFE Tag inputs*)
  - Establish new OPM Job Series for HF practitioners
  - Challenge need for OMB/PRA approval of safety-critical research



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# Case Stories: Operator Fatigue

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- Operator fatigue is a critical safety issue that cuts across all modes and operations in the transportation industry.
- HFCC developed a suite of tools to manage operator fatigue.
- HFCC conducted meeting: *Partnering for Transportation Safety: Human-Centered Systems.*



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# Case Stories: Operator Distraction

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- Distraction is another safety issue that cuts across modes and beyond DOT.
- DOT Safety Council asked HFCC to work on a common definition ...

*The diversion of attention from activities critical for safe operation of the vehicle, vessel, or control setting to a competing activity.*



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# Recent Panels and Workshops

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**Human Factors and  
Ergonomics Society**



- **HFCC panels at HFES**

- 2016 *The Evolving Role of Automation in Transportation:  
HF Lessons Learned from the Different Modes*

- 2012 *Transportation Research into Practice:  
A Multi-Agency Government Perspective*

- **HFCC workshops at TRB**

- 2016 *Cross-Modal Distributed Simulation*

- 2015 *Operator Distraction*



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# Future Directions

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- Continue & grow relationships beyond DOT  
E.g., connecting with **DOD HFE TAG**
- Establish a “Future of Human Factors in Transportation” report on a set cycle period
- Serve as a peer-review resource for transportation-related HF products
- Foster growth through detail opportunities
- Internship and Sabbatical programs
- Social Media presence



# Resources

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- **HFCC Website:** <https://hfcc.dot.gov/>
- **Chair**  
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