

Exponent®
Engineering & Scientific Consulting

Katherine Chasins, M.S.

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Professional Profile

Ms. Chasins is a proven engineering leader with automotive industry and federal government experience. Most recently, she gained expertise in vehicle automation safety through her part in establishing a new federal regulatory office focused on automation safety and through her leadership of its proposal for an automated vehicle evaluation program.

Beyond her government experience, Ms. Chasins also brings an understanding of vehicle product development. Having started her career at a vehicle manufacturer, she worked in diverse corporate functions through a rotational leadership program before gaining fundamental design and release experience, as well as systems integration experience, through subsequent roles. Collectively, this work has equipped Ms. Chasins with a unique set of skills and knowledge that she leverages to provide valuable analysis of vehicle development, safety, and policy issues, particularly those pertaining to vehicle automation technologies.

Ms. Chasins' automotive sector experience spans more than a decade. She is not only familiar with navigating vehicle product development and feature introduction but has also directly participated in regulatory consideration of novel technologies.

Prior to joining Exponent, Ms. Chasins served as the Special Programs Division Chief in the National Highway Traffic Safety Administration's (NHTSA's) Rulemaking Office of Automation Safety (OAS). Established in 2023, she helped stand up the OAS since its inception, working with agency leadership to define scope and roles, to recruit staff and other office leadership, and to develop work plans and future strategy. Within her division, she built and led a team broadly tasked with identifying and addressing emerging safety issues associated with automated driving systems (ADS) and other vehicle automation technologies. Ms. Chasins was also the technical lead for the concept development, drafting, and publication of NHTSA's 2025 ADS-equipped Vehicle Safety, Transparency, and Evaluation Program (AV STEP) Notice of Proposed Rulemaking.

Ms. Chasins originally joined NHTSA in 2020 as a Crash Avoidance Rulemaking Engineer. During her time in that role, she held various subject matter responsibilities, including for driver monitoring systems, impaired driving, vehicle to vehicle (V2V) communications, and vehicle theft prevention and rollaway, among others. For these subjects, Ms. Chasins led rulemaking initiatives, collaborated on NHTSA research and enforcement efforts, and responded to congressional and stakeholder inquiries. This experience gave her familiarity with the varied factors that inform regulatory standards and oversight, particularly with the critical role that data and testing approaches play.

Prior to her federal service, Ms. Chasins worked at Fiat Chrysler Automobiles (now Stellantis), where she held engineering and integration roles for numerous safety-critical components and systems. As part of the company's Chrysler Institute of Engineering rotational program, she received extensive training and gained first-hand experience with diverse organizations including product development, manufacturing

engineering, vehicle integration, quality engineering, and more. She went on to lead design, validation, and issue resolution activities for seat structures and systems throughout the product lifecycle, from vehicle program concept to launch. This included coordinating across internal and supplier teams to meet customer, safety, quality, and other requirements. Ultimately, her teams delivered production-ready systems for high volume vehicle programs that won industry awards and achieved top safety ratings. This background enables her to approach the continually evolving automation safety landscape with a thorough understanding of traditional manufacturer practices and constraints.

Academic Credentials & Professional Honors

M.S., Mechanical Engineering, University of Michigan, 2016

B.S., Mechanical Engineering, Massachusetts Institute of Technology (MIT), 2014

2024 NHTSA Administrator's Superior Achievement Team Award for ADS-Equipped Vehicle Safety, Transparency, and Evaluation Program Notice of Proposed Rulemaking

2024 NHTSA Administrator's Superior Achievement Team Award for Impaired Driving Advance Notice of Proposed Rulemaking

Prior Experience

Chief – Special Programs Division, National Highway Traffic Safety Administration (NHTSA) Rulemaking Office of Automation Safety, 2023-2025

Rulemaking General Engineer, NHTSA Crash Avoidance Rulemaking Office, 2020-2023

Seating System Lead, Fiat Chrysler Automobiles (FCA), 2019-2020

Seat Structure Design and Release Engineer, FCA, 2017-2019

Chrysler Institute of Engineering Program, FCA, 2014-2016

Publications

Presentations

Chasins K. Vehicle technology and the safe system approach. Speaker and panelist, Lifesavers Conference on Roadway Safety, Denver, CO, 2024.

Chasins K. Automated driving systems – testing, development, and validation. Presenter and panelist, SAE Government/Industry Meeting, Washington, DC, 2024.

Chasins K. The future is here for automated and connected vehicles. Presenter and panelist, American Association of Motor Vehicle Administrators Annual International Conference, Madison, WI, 2023.