

ACEC/MDOT Design Basic Training

February 25, 2019 9 am to 4:30 pm

Lake Huron Room @ Horatio S. Earle Learning Center

9 am – Noon **Guardrail Design - Carlos Torres.**

Carlos is the Crash Barrier Engineer and the chairperson of the Barrier Advisory Committee for MDOT. He has held both roles since 2004.

Topics to be covered in this training include:

- Provide an overview of guardrail design
 - Clear zone concept
 - Roadside topography and its effects on guardrail design
 - Overview of different guardrail types and related features
 - Guardrail types
 - Approach terminals
 - Departing terminals
 - Anchorages
 - Curved guardrail
 - Long span details
 - Other guardrail features
 - Guardrail design terminology and applications
 - Methodology for calculating minimum length of need
 - Focus on recent changes to the Road Design Manual and the use of MASH-compliant guardrail and guardrail terminals
- Provide a brief overview of MDOT standards and guidelines related to guardrail
- Solve guardrail design example problems
 - MDOT Guardrail Worksheet
 - Type MGS-8 Guardrail
 - Type 2M Guardrail Approach Terminals

Noon – 1pm Lunch – (*pending catered lunch*) – networking time

1 pm – 4:30 pm **Guardrail Design** – *continuation of above topics*