

## **Breakout 4: Roadway Safety Improvements**

Moderator: Mike Ogden, Transportation VP, Klotz Associates, Inc. & Chairman, BayTran

### Session Summary:

All three of the presentations in this session focused on engineering safety and design improvements to street and highway systems that take into account system operational requirements and the capabilities, limitations and foreseeable behavior of system users.

Meg Moore from TxDOT's Traffic Operations Division focused on four major Highway Safety Improvement Programs: TxDOT's Hazard Elimination, High Risk Roads, Safe Routes to School, and Rail Highway Crossings Programs. Numerous examples of safety improvements implemented under each of the programs were illustrated. These encompassed guardrails and guardrail end treatments, concrete and cable median barriers and a wide variety of rumble strip and crash attenuator treatments. Also discussed and shown were improvements to signing, signals, lighting and pavement markings to improve legibility and visibility. Ms Moore closed her presentation with a discussion of safety improvement funding programs and an overview of the Texas Highway Safety Bonds Program.

Mark Vincent discussed the Port of Houston Authority's traffic safety role at the project (primarily 'on-terminal') and local levels, as well as its participation in regional transportation initiatives. Port Authority operations include cargo transport by water and rail in addition to road transport. Mr. Vincent noted the importance of coordination and cooperation with numerous regional entities (including local municipalities and Harris County, H-GAC, BayTran and TxDOT) to the long-term success of all of the Port Authorities activities.

Reggie Mason provided an overview of Houston's 7.5 mile on-street light rail system and the safety and design enhancements implemented since the system became operational in 2004. During its first year, the system experienced 71 accidents. Mr. Mason described and showed examples of safety challenges, solutions and safety and design enhancements undertaken in four distinct areas of Houston served by the light rail system: Downtown, the Texas Medical Center, the Museum District and Midtown. There has not been sufficient time post enhancement to allow analysis of crash data.