

HDR



SUSTAINABILITY

Setting the Stage for a Resilience Framework in Transit



OUR PANEL

Moderator

- **Janet R. Gonzalez Tudor**, Associate Vice President, Transportation Cross Sector Development Director Vice President, HDR

Panelists

- **Dr. Emmanuel "Cris" Battad Liban**, Executive Officer, Environmental Compliance and Sustainability, LA County Metropolitan Transportation Authority
- **Mark Finnicum**, Chief Operation Officer, Stark Area Regional Transit Authority, Canton, OH

SUSTAINABILITY & RESILIENCY GOALS

- Reduce exposure to natural hazards
- Decrease potential risks by implementing mitigation measures
- Enhance adaptive capacity in a changing climate
- Encourage residents to access goods and services by foot, bicycle, or transit to support climate resilience
- Develop and strengthen partnerships with municipalities, etc.



ISSUES IMPACTING GOALS

- Costs - \$\$\$ to not strengthen assets
- Aging infrastructure
- Most commuters drive their own cars
- “Fuzzy” definitions of resiliency and sustainability
- What are we trying to be resilient against?
- Resilient solutions may not be sustainable
 - Sustainable city initiatives may maximize efficiency, minimize energy, and reduce redundancy and material use
 - Resilient initiatives often require redundancy, may be counter to efficiency goals
 - Urban densification supports sustainability but may increase vulnerability



INDUSTRY RESPONSE

- Develop urban transport systems that are more sustainable
 - Infrastructure priority to non-vehicular transport (e.g., BRT)
- Nature-based solutions
 - Green rooftops
- Proper building codes and land use planning
- Collaboration across geographic borders
- Improve adaptive capacity
- Incorporate technology and data-driven decision-making





ANY QUESTIONS?