Missouri’s Digital Brightness Regulation
Opposing Views

• Huge TV’s on a stick
• Project light into neighboring homes
• Magnified blight on the landscape
• Advertising’s future
• Target today’s mobile customer
• Ability to drive awareness & business
How it started...

• Missouri House Bill 1402
• Ad copy duration
• Brightness controls
• Spacing
How did we get there...
Called in the experts…

• MoDOT’s Research Analyst
• Daktronics
• FHWA
• MoDOT’s Traffic Control
What we found...

• **Illuminance** measures the amount of light being projected on a surface.
• **Luminance** measures the amount of light generated from a particular source, such as a billboard.
OVERLOAD!
Safety

Illuminance-
• Accurate readings rely on ambient light
• Unable to use emergency vehicle lighting
• Measurement location dependent on size
• Requires sign owner notification

Luminance-
• Not affected by ambient light or emergency vehicle lighting
• Wider range of measurement locations
• Does not require sign owner notification
Stakeholders...

- FHWA
- Governor’s Office
- Department of Public Safety/Highway Patrol
- Department of Economic Development
- Municipal League
- Missouri Outdoor Advertising Association
- Scenic Missouri
- Missouri Night Sky Protection
- Sierra Club
Called in more experts…

MHTC directed the department to conduct an independent study.
Unbiased Consultant...

MRIGlobal

- Review statutes & administrative rules
- Review previous research
- Determine states regulatory practices
- Conduct discussions with stakeholders
Recommendation...

Maximum brightness level of 300 candelas per square meter.

Candelas

- Safer
- Simpler
- Point & Shoot
Rules published...

Sign luminance shall not exceed 300 candelas per square meter in full white mode between the periods of sunset to sunrise as calculated by the United States Naval Observatory.
Nighttime Digital Inspections

• LS-110 Luminance Meter
• Safety is a priority
• Yearly inspections
• Documentation/Photograph
Resources

Safety Impacts of the Emerging Digital Display Technology for Outdoor Advertising Signs - Jerry Wachtel

Digital Billboard Recommendations and Comparisons to Conventional Billboards - Ian Lewin

Review of Proposed Administrative Rules on Outdoor Advertising Final Report - MRIGlobal