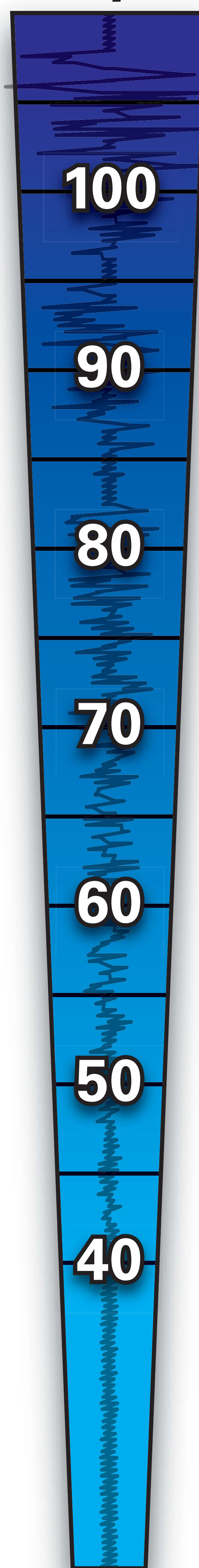


Commuter Rail Vibration Level Comparison

HUMAN/STRUCTURAL RESPONSE

- Threshold, minor cosmetic damage fragile buildings
- Difficulty with tasks such as reading a VDT screen
- Perception within buildings, infrequent events
- Perception within buildings, frequent events
- Limit for vibration sensitive equipment. Approximate threshold for human perception of vibration

Velocity Level*



TYPICAL SOURCES (50 ft. from Source)

- Blasting from construction projects
- Bulldozers and other heavy tracked construction equipment
- Freight rail typical
- Proposed Gold Line Train (unmitigated), typical
- Bus or truck, typical
- Typical background vibration

*RMS Vibration Velocity Level in VdB relative to 10^{-6} inches/second