Field Checklist: Variable LED Speed Limit Signs

This checklist documents observable drift between MUTCD intent and real-world driver experience. Items can be evaluated visually and behaviorally without access to internal agency data.

1. Legibility and Visual Load

[]	Speed numerals are harder to read than nearby static signs.
[]	Brightness causes glare at night or washout during the day.
[]	LED pixelation reduces clarity at highway speeds.
[]	Font weight or proportions differ from standard MUTCD legends.

2. Cue Stability

[]	Speed limits change over short roadway segments.
[]	Changes occur without advance notice.
[]	Adjacent gantries show different speeds without clear boundary.
[]	Drivers must wait to see the sign to know the rule.

3. Change Frequency and Predictability

[]	Speed limits change multiple times in a single trip.
[]	Changes occur without visible cause.
[]	The same location displays different speeds under similar conditions.
[]	Drivers slow before the sign due to uncertainty.

4. Hierarchy Conflicts

[]	Static speed signs remain without clear override.
[]	Drivers must infer which sign governs.
[]	Advisory messages resemble regulatory ones.
[]	Law versus suggestion is visually ambiguous.

5. Behavioral Evidence

[]	Widespread braking at sign approach.
[]	Increased speed variance after installation.
[]	Drivers ignore the displayed limit.
[]	Enforcement appears selective or inconsistent.