Signs should only be used when warranted by:

- The MUTCD
- ALDOT's Criteria
- Crash History
- Field Studies

MUTCD 2C.02

The use of warning signs shall be based on an engineering study or on engineering judgment.

Guidance:

The use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs. In situations where the condition or activity is seasonal or temporary, the warning sign should be removed or covered when the condition or activity does not exist.
Signs Should Only Be Placed as Warranted

Concerns related with over-signing:

- Information Overload
- Driver Expectancy

Considerations from Field Studies

- Places to avoid sign placement
  - Short Sags
  - Beyond a vertical Crest
  - Where sign may be obscured by parked cars
  - Where sign would create obstructions for pedestrians or cyclist
  - Interferes with driver visibility and causes hazard
  - Areas where sign will be covered by foliage

Among the established engineering practices that are appropriate for the determination of the recommended advisory speed for a horizontal curve are the following:

A. An accelerometer that provides a direct determination of side friction factors
B. A design speed equation
C. A traditional ball-bank indicator using the following criteria:
   1. 16 degrees of ball-bank for speeds of 20 mph or less
   2. 14 degrees of ball-bank for speeds of 25 to 30 mph
   3. 12 degrees of ball-bank for speeds of 35 mph and higher

Placement of Advance Warning Signs

- The MUTCD defines two conditions under which warning signs should be placed
  1. Condition A. A complex judgment condition that requires the driver to use extra time in making and executing a decision because of a complex driving maneuver (e.g., speed reduction, lane changing in heavy traffic).
  2. Condition B. A condition in which the driver will likely be required to decelerate to a stopped condition or to an advisory speed for the condition.
Condition B shall be used for the placement of Horizontal Curve Warning Signs.

Curve/Turn Warning Sign Placement
1. Speed Determination
2. Roadway Alignment
3. Posted Speed
4. Crash History
5. Urban / Rural
6. Public Reaction
7. Turn vs. Curve

Warning Signs needed for Vertical Curves

Curve/Turn Warning Sign Placement
8. Advisory Speed Plaques
9. Combination Curve
10. Flashers
11. Hairpin Curve / Loop Signs
12. Chevrons
13. Large Arrows
14. Truck Rollover Warning
W1-10 Series

Use of Delineators

Horizontal Alignment Signage and the MUTCD
ATAP - Alabama Transportation Assistance Program

QUESTIONS?

High Friction Surface Treatment
ATAP - Alabama Transportation Assistance Program