Advance Warning for End-of-Green System (AWEGS)

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AWEGS Objectives

- **Provide advance warning (≈ 6 sec) for end of green**
- **Improve dilemma zone protection**
- **Reduce red light running**
- **Improve safety**

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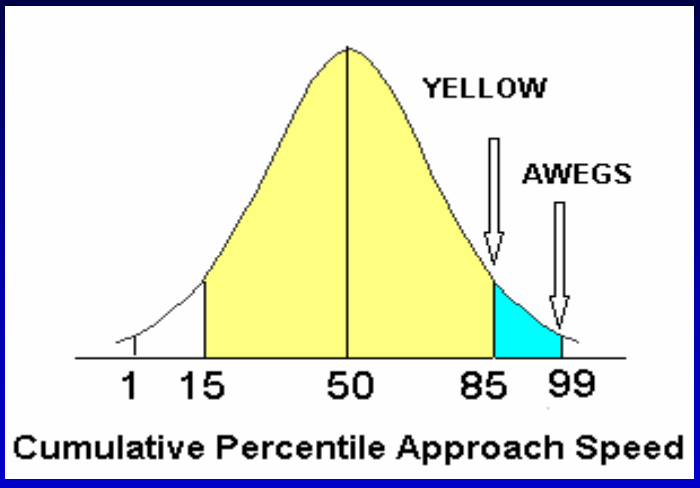
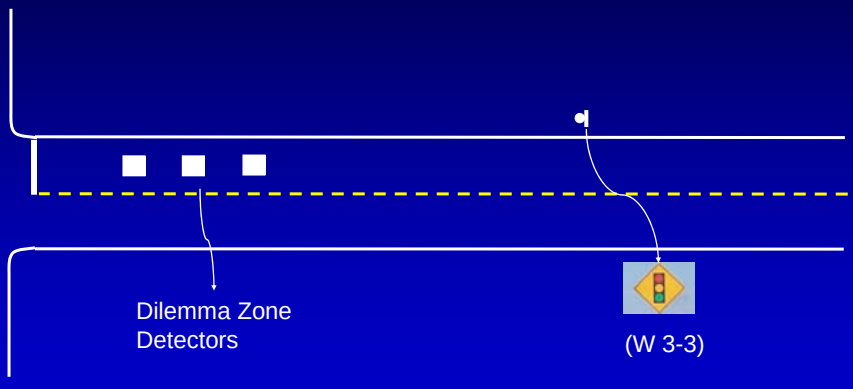
TxDOT Projects

- 0-4260 – (2001 – 2003)
  - Develop a prototype
  - Implement in two sites
- 0-5113 – (2004 – 2006)
  - Improve algorithm
  - Implement at new site
  - Implement improvements at previous sites
- 5-5113 – (2007-2008)
  - Implement at four sites

Potential Benefits



Standard Approach Layout



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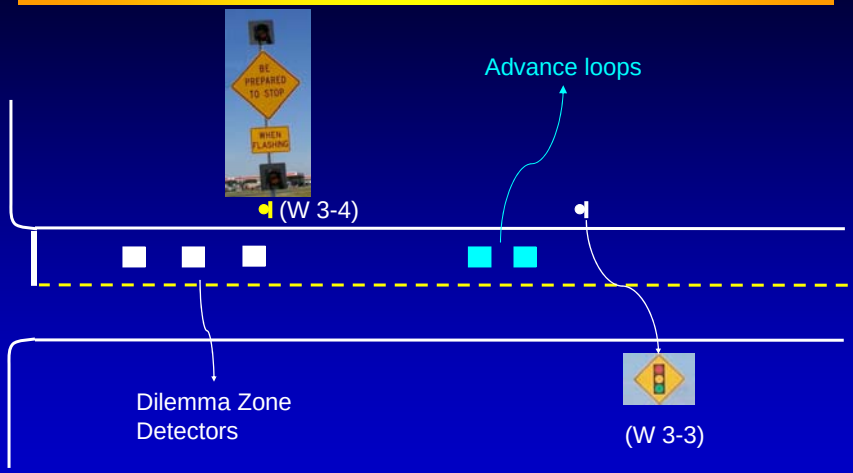
AWEGS Layout



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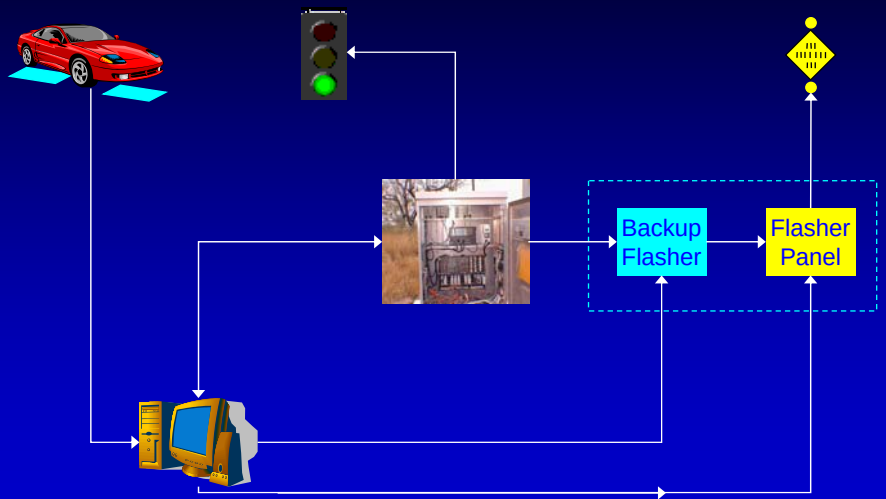
AWEGS System Concept



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AWEGS Methodology

- **Will not take away existing dilemma zone protection**
- **Predicts controller operations**
  - **Predicts most cases**
  - **Accounts for all cases**
- **Minimum impacts on controller operation**
  - **Occasional Phase Hold**
  - **1 second delay for side street detector**
  - **1 second delay for arterial left turn detector**

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Development and Testing

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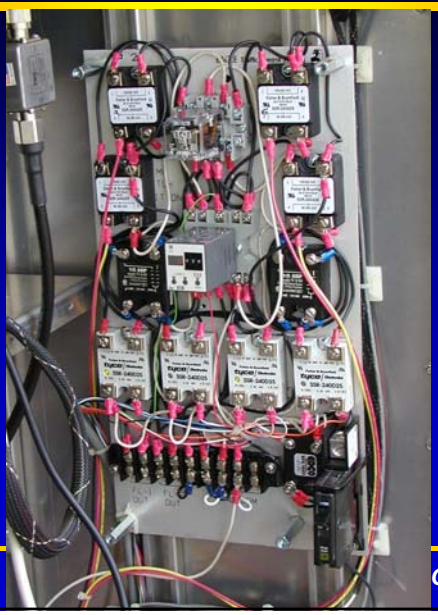
Flasher Panel



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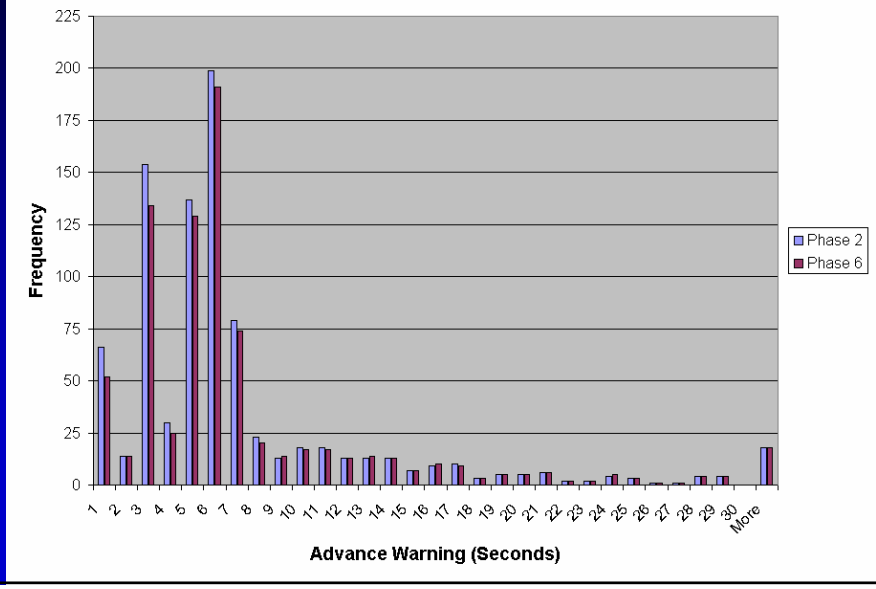
Advance Warning Distribution



0-4260 Sites

Waco

Brenham

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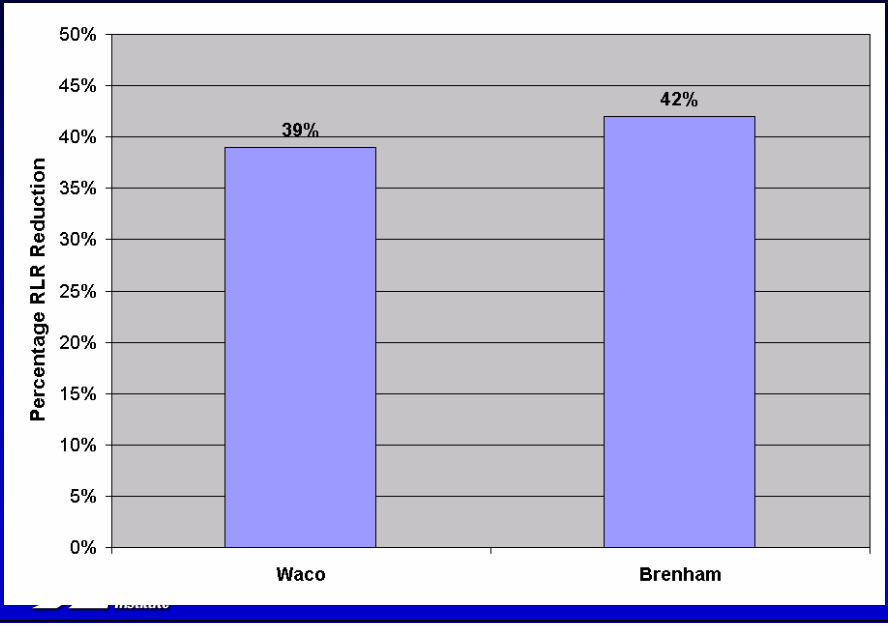
Red-Light-Running

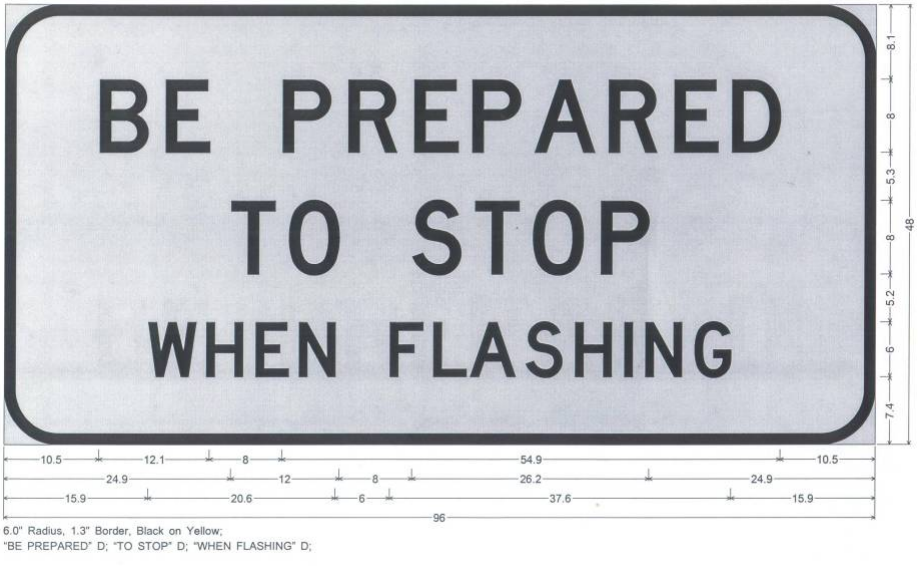


Algorithm Improvements

- **Detector failures**
  - Advance detectors
  - Dilemma zone detectors
- **Phasing sequences**
  - All types of left-turns
- **Standardized implementation**
  - Single lane or two lane
- **Failure notification**
  - Phone line to communicate

Queue Treatment

Sign Design

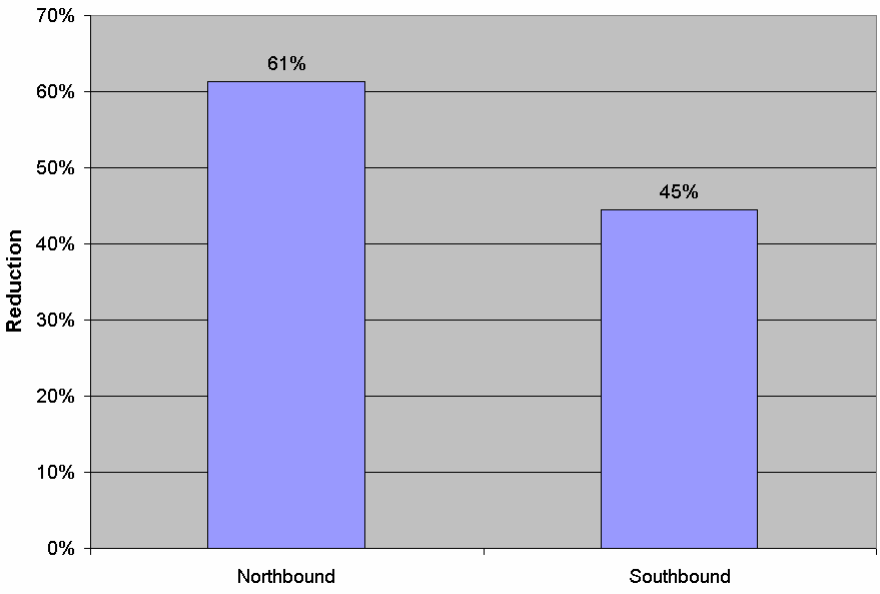


6.0" Radius, 1.3" Border, Black on Yellow;
"BE PREPARED" D; "TO STOP" D; "WHEN FLASHING" D;

Stutter Flash

College Station Site

Red-Light-Running



Lubbock Site

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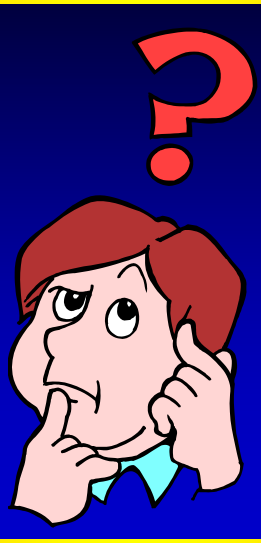
Questions



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