Gates Pass Safety Improvement
Concept Report

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Open House Outline

► Introductions
► Presentation starts at 6:15pm
  ► Purpose of the project
  ► Existing Conditions
  ► Results of Crash Analysis
  ► Potential Countermeasures
► Question & Answer Session
► Individual Discussion at Display Boards
Project Limits
Previous Project

Begin Project

Previous Project

W GATES PASS RD

End Project
Project Goals and Objectives

- Evaluate 1.5 miles of Gates Pass Road to scope appropriate crash mitigation measures
- Identify potential short, Intermediate and long-term improvements
- Identify potential funding sources
Existing Conditions

- Narrow travel lanes (11 ft)
- Minimum shoulder, minimum recovery area
Existing Conditions

- Significant curves with grades
Existing Conditions

➢ Roadway Characteristics
  • Pima County Scenic Route
  • Access to tourist destinations
  • Popular bicycle ride
  • East-west commuter route

➢ Traffic volume
  • Existing Two-way Traffic is 3,750 vehicles per day (vpd)
  • 2045 Traffic Volume Projection is 4,650 vpd
Existing Conditions

➢ Environmental Considerations
  • Land Use
  • Biological Resources
  • Water Resources
  • Floodplains
  • Noise
  • Visual Aesthetics
  • Hazardous Materials
  • Cultural Resources
Crash History

• 66 crashes in last 7 years (2010-2016); 1 bike crash
• Crash Rate: 6.55 crashes/mvm; 2.04 crashes/mvm on similar Pima County roadways
• Crash Severity Index: 0.20; 1.50 on similar Pima County roadways
Crash History

- The most common type of crash was Out of Control (lane departure)
- The most common type of violation cited was Speed to Fast for conditions
Crash History

- Most of the crashes occurred during dark or dusk conditions
- Crashes occurred most frequently during late night and early morning conditions
Crash Frequency
Potential Solutions

- Short-term Improvements
  - Additional curve warning signs
  - Wider Edge Stripe
  - Speed reduction markings
  - Edge delineators
Potential Short-term Solutions

Additional curve warning signs
Potential Short-term Solutions

Enhanced lane edge delineation
Potential Short-term Solutions

Speed reduction markings
Potential Short-term Solutions

Vertical Delineators
Potential Solutions

- Intermediate-term Improvements
  - Curve warning signs with flashing beacon
  - Speed feedback signs
  - Enhanced centerline delineation
  - Lighting at spot locations
  - Selected shoulder widening
Potential Intermediate-term Solutions

Curve warning sign with flashing beacon
Potential Intermediate-term Solutions
Speed feedback signs
Potential Intermediate-term Solutions
Enhanced centerline delineation
Potential Solutions

- Long-term Improvements
  - Safety (paved) shoulders
  - Roadway realignment / Curve Improvements
  - Widen roadway
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Thank you for coming!

Please visit the exhibits, ask questions and provide input!