



# MAG Strategic Transportation Safety Plan

MAG Transportation Review Committee

October 24, 2013



# MAG Strategic Transportation Safety Plan (STSP)

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- ▶ Plan development is underway with oversight provided by the Transportation Safety Committee
- ▶ To guide systematic road safety improvements regionwide
- ▶ Recommendations will be included in the NextGen RTP
- ▶ Closely coordinated with the state's Strategic Highway Safety Plan
- ▶ Consultant Team: Lee Engineering & Texas Transportation Institute; Completion – Jan 2014; Budget - \$300,000

# 2005 MAG STSP — Key Accomplishments

## Regional Transportation Safety Information Management System (RTSIMS):

- ▶ Crash Data Analysis Software
- ▶ Crash Data Archive 1999 - 2012
- ▶ SOON - Access to RTSIMS via the web for authorized staff at member agencies

## Road Safety Assessment (RSA) Program:

- ▶ 26 signalized intersections reviewed since 2011

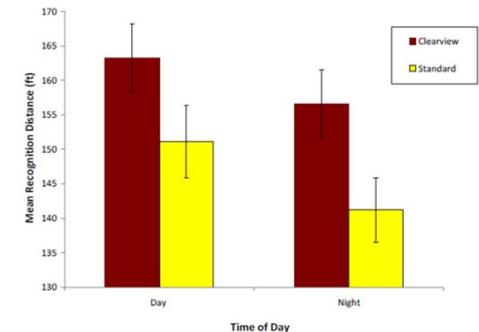


# 2005 MAG STSP — Key Accomplishments

## MAG Elderly Mobility Sign Project

- ▶ Installed 2700 Street name Signs with Clearview Font
- ▶ MAG sponsored ASU study found: Clearview signs recognized at a significantly greater distance
- ▶ RESULT: Clearview font has been adopted by many local agencies as the standard font for street name signs

Clearwater Rd



# 2005 MAG STSP - Accomplishments

## MAG Safe Routes to School Program

- ▶ Annual Crossing Guard Training Workshops
  - ▶ 2013 workshops - 465 crossing guards
- ▶ Guardians of the Future – training video
  - ▶ Produced by MAG in partnership with Avondale, Glendale, Mesa, Phoenix, Tempe, Peoria

SafeRoutes



# Key Project Tasks

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## Completed:

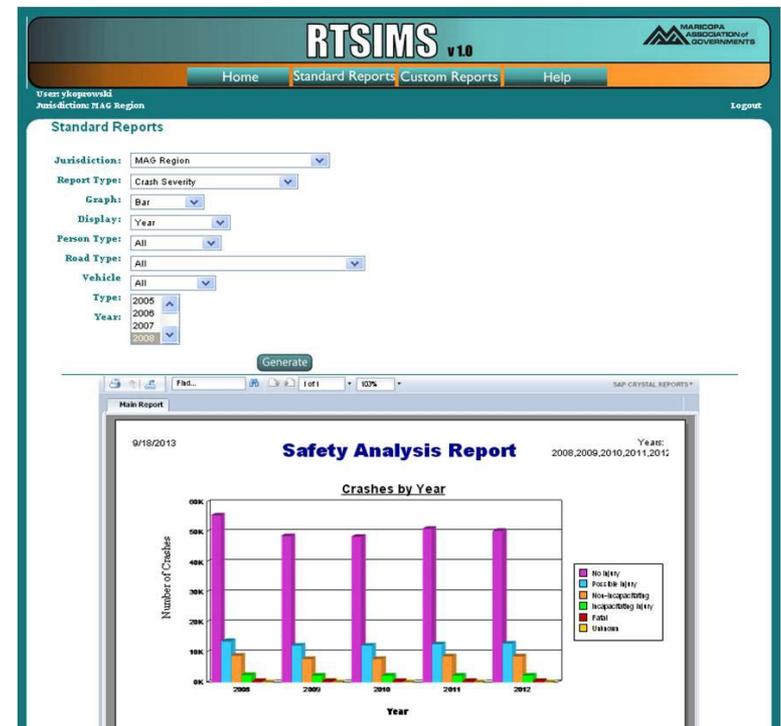
- ▶ Review road safety in the MAG region
- ▶ Compare MAG region to similar urban regions
- ▶ Establish Regional Vision and Goals

## Ahead:

- ▶ Develop Action Areas , Strategies, and Performance Measures
- ▶ Recommend Methods to Prioritize Road Safety Needs
- ▶ Incorporate Safety in the Regional Transportation Plan
- ▶ Develop a Strategy to Incorporate Safety Enhancements in Road Infrastructure Projects
- ▶ Monitoring and Reporting on System Performance and Program Effectiveness
- ▶ Implementation Plan 2015 – 2025

# Current State of Transportation Safety

- ▶ Analysis of 2008 – 2012 crash data
- ▶ Focus on fatal (K) and serious injury (A)
- ▶ Regional Transportation Safety Information Management System (RTSIMS)
- ▶ Crash Tree
  - ▶ Visual tool to help identify the locations where target crash types occur most frequently



# Crash Tree of Fatal Crashes

Statewide  
Fatal Crashes  
2008-2012  
3744

47%

Rest of State  
1970 – 53%

MAG Planning Area  
1774 – 47%

80%

Freeway  
352 – 20%

Arterials & Local Roads  
1422 – 80%

Older Driver – 67 (17%)  
Younger Driver – 114 (28%)  
Teen Driver – 31 (8%)  
Truck – 110 (27%)  
Motorcycle – 64 (16%)  
Young Drvr/ Mtrcyl – 13 (20%)

**Single Vehicle 50%**

Rear End – 80 (23%)  
Head On – 19 (5%)  
Sideswipe (Same Dir) – 16 (5%)

Not Inters-Related  
869 – 40%

Older Driver – 112 (13%)  
Younger Driver – 264 (30%)  
Teen Driver – 84 (10%)  
Pedestrian – 145 (28%)  
Bicyclist – 44 (5%)  
Truck – 83 (10%)  
Motorcycle – 221 (25%)  
Young Drvr/ Mtrcyl – 55 (25%)

**Single Vehicle 43%**

Other – 240 (28%)  
Head-On – 83 (10%)  
Rear End – 52 (6%)  
Angle – 51 (6%)  
Left Turn – 28 (3%)  
Sideswipe (Same Dir) – 17 (2%)

Inter-Related  
1422 – 80%

Inter-Related  
553 – 60%

Signalized  
304 – 55%

**Angle 38%**  
**Left Turn 27%**

Other – 50 (16%)  
Single Vehicle – 34 (11%)  
Rear End – 23 (8%)

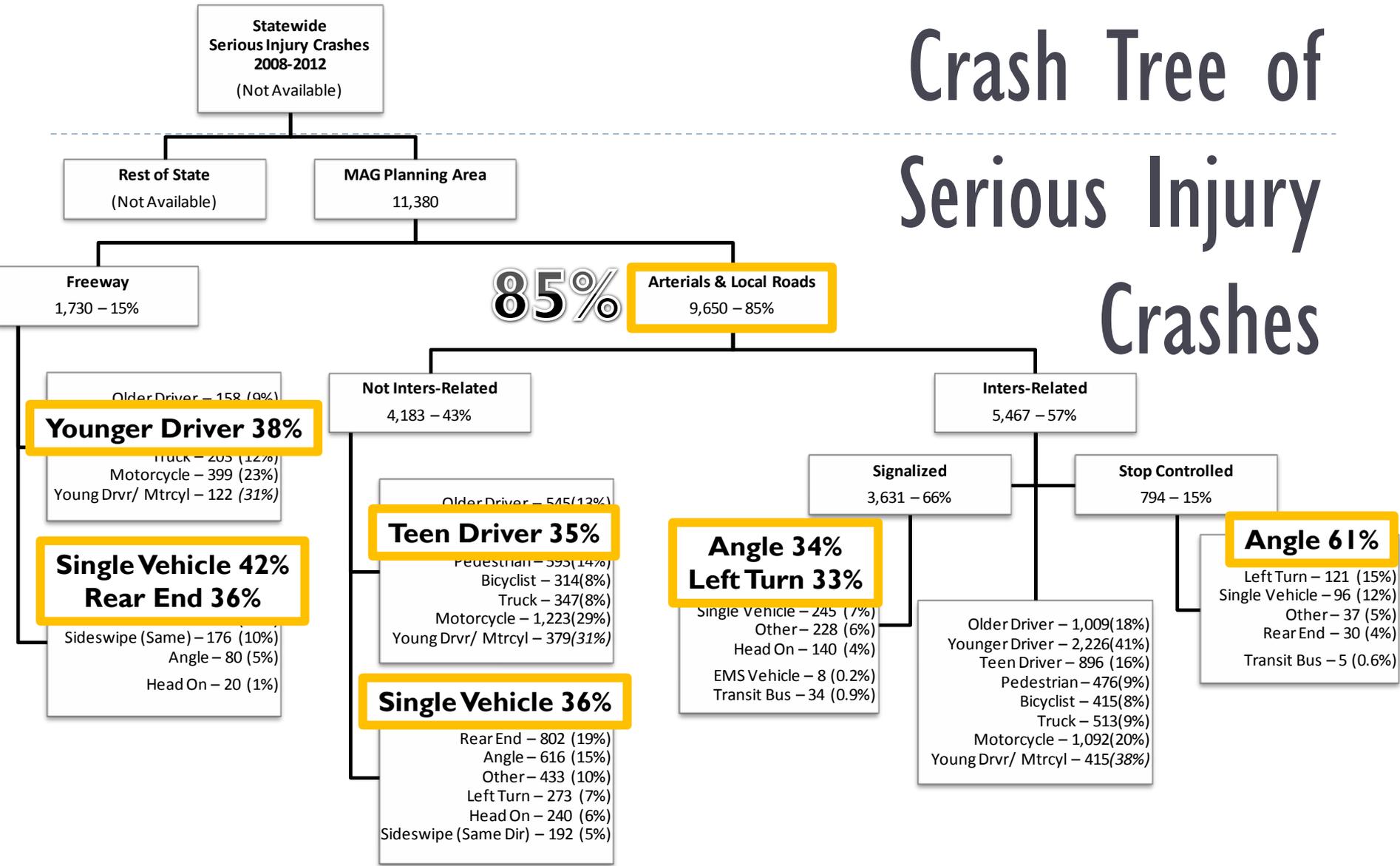
Stop Controlled  
129 – 23%

**Angle 65%**

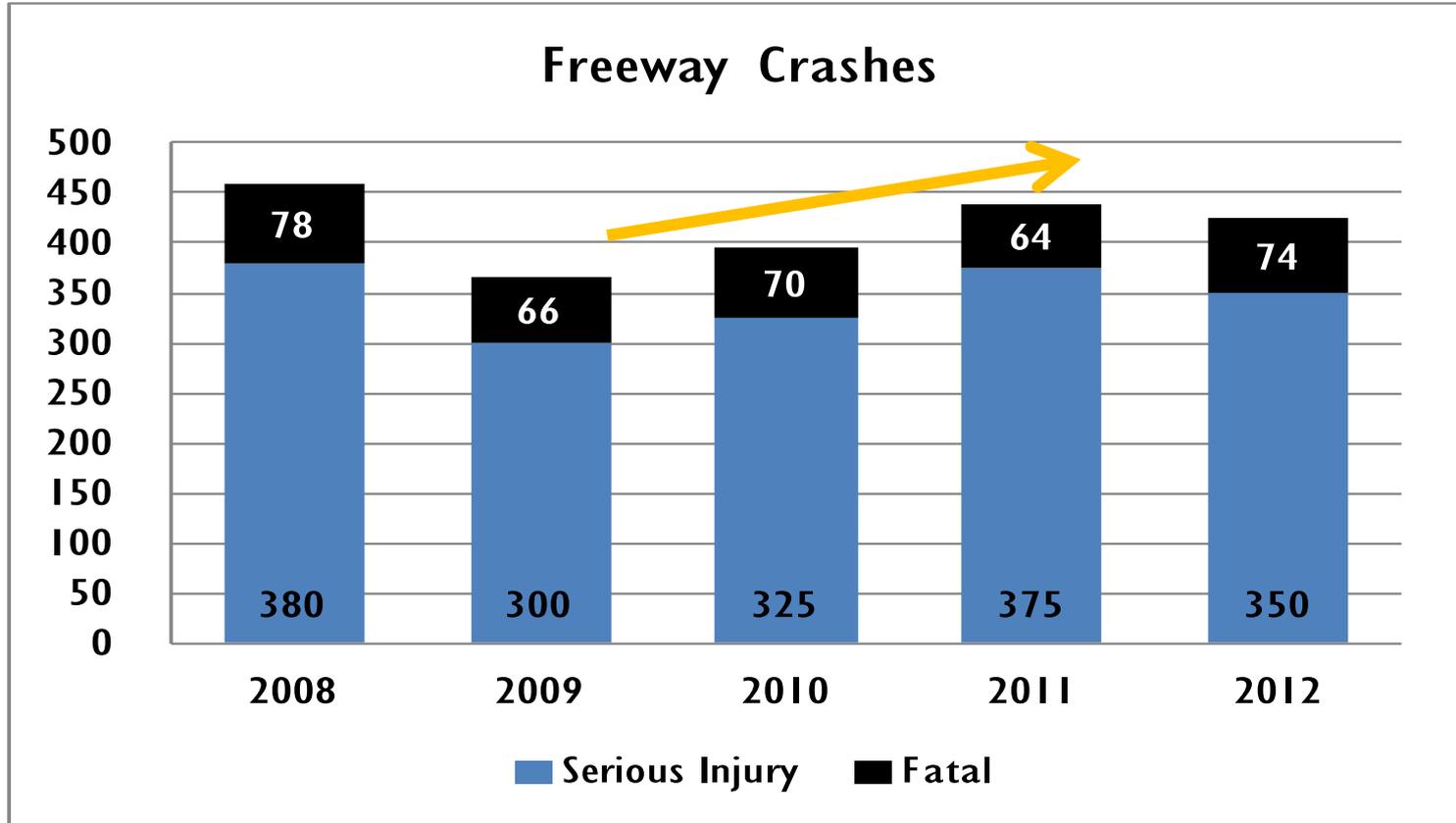
Single Vehicle – 17 (18%)  
Other – 13 (14%)  
Rear End – 2 (2%)  
Left Turn – 1 (1%)  
Transit Bus – 2 (1.6%)

Older Driver – 126 (23%)  
Younger Driver – 217 (39%)  
Teen Driver – 76 (14%)  
Pedestrian – 99 (18%)  
Bicyclist – 27 (5%)  
Truck – 66 (12%)  
Motorcycle – 158 (29%)  
Young Drvr/ Mtrcyl – 62 (39%)

# Crash Tree of Serious Injury Crashes

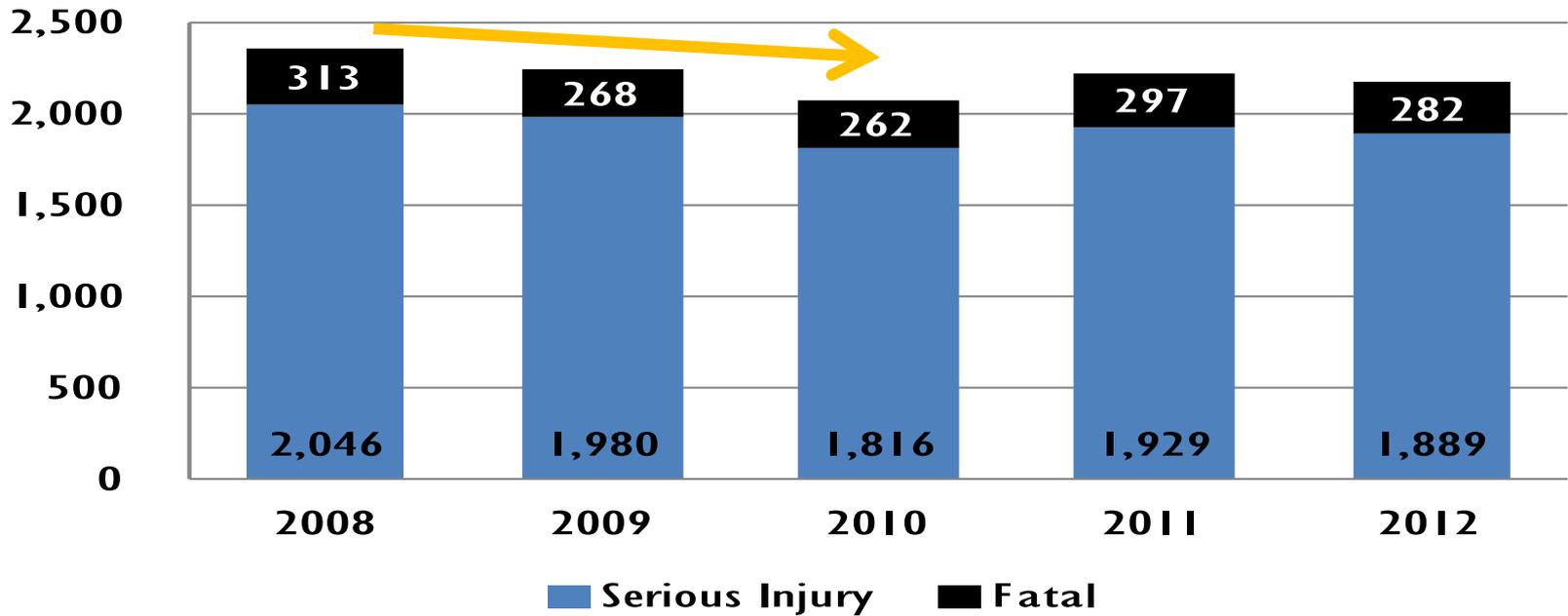


# Freeway K + A Crashes



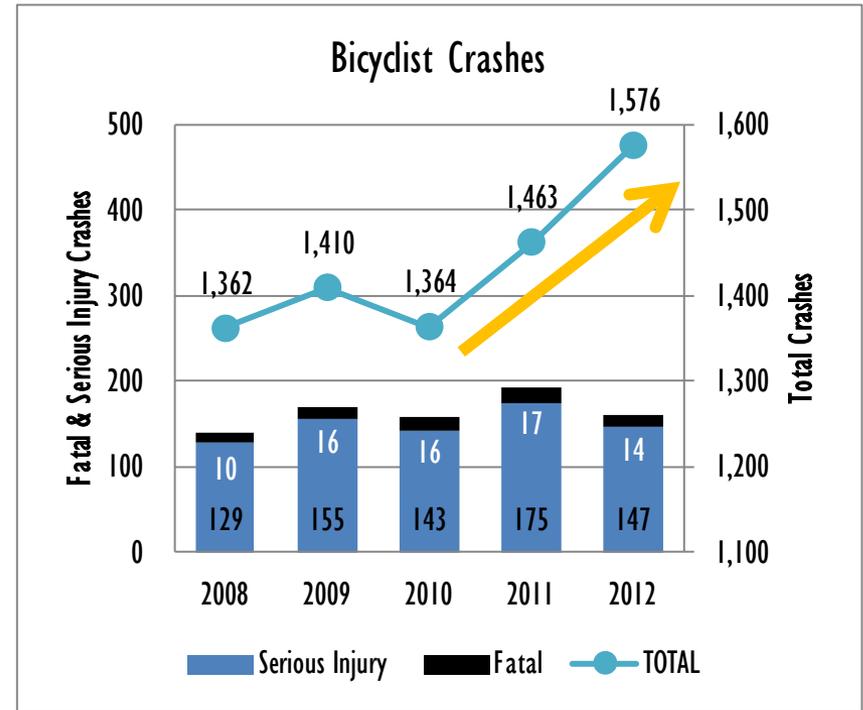
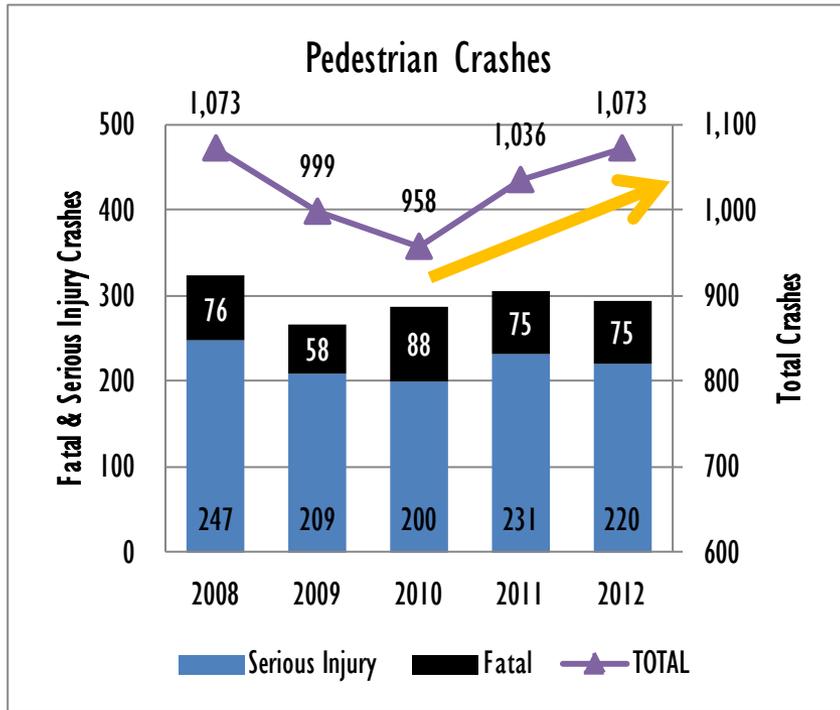
# Arterial & Local Road K + A Crashes

Arterial and Local Roads Crashes



**K + A crashes on arterials is about 5 times as that on freeways**

# Vulnerable Users – Pedestrians & Bicyclists



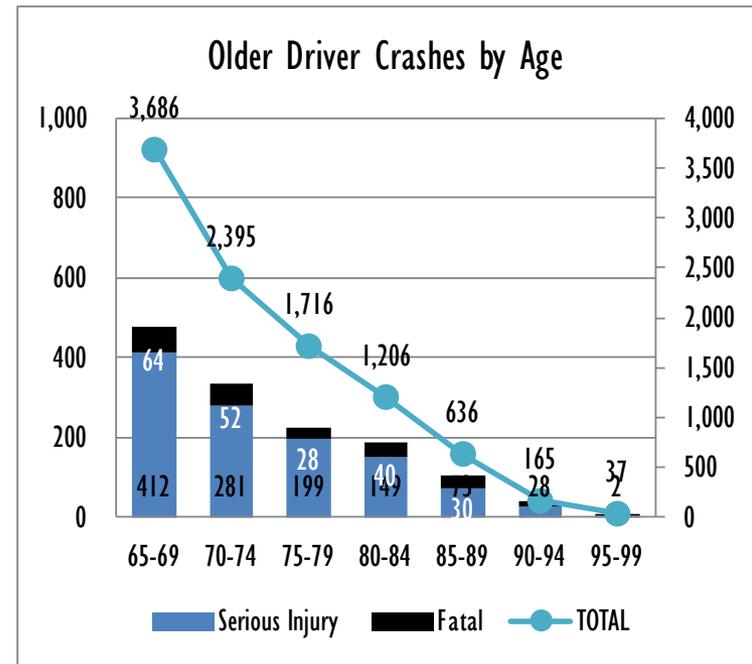
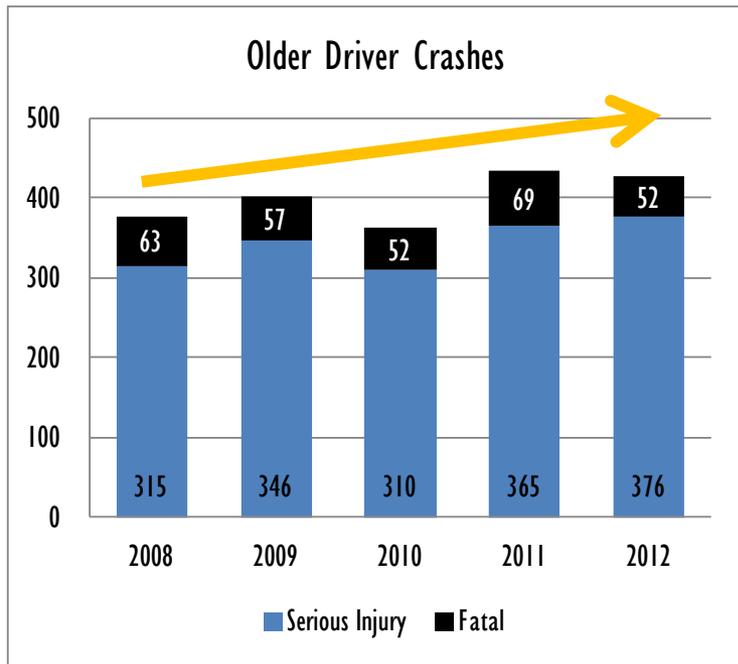
**Inters Related**  
575 (40.7%)

**Non-Inters Related**  
838 (59.3%)

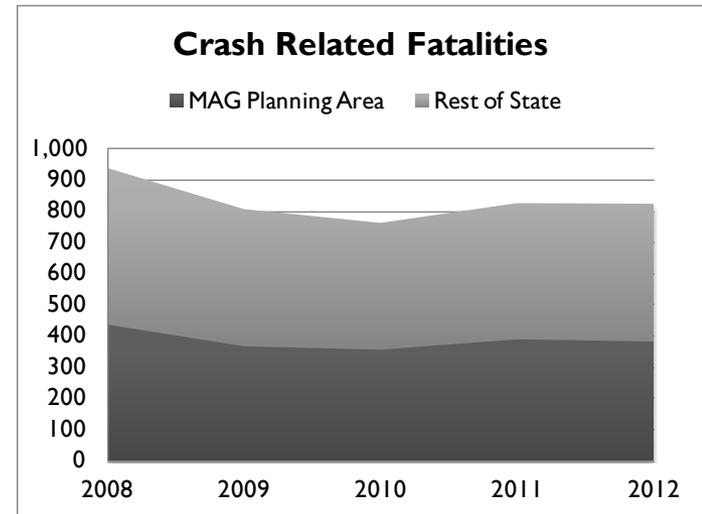
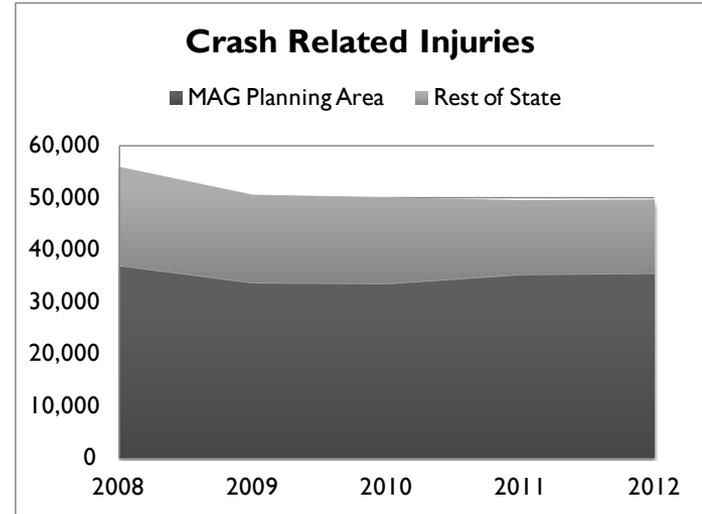
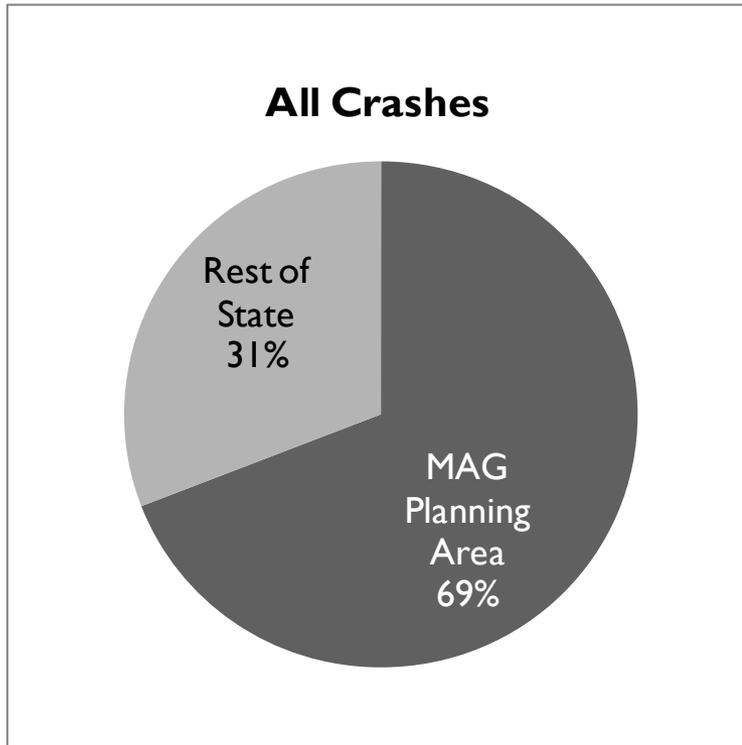
**Inters Related**  
442 (55.3%)

**Non-Inters Related**  
358 (44.7%)

# Older Drivers

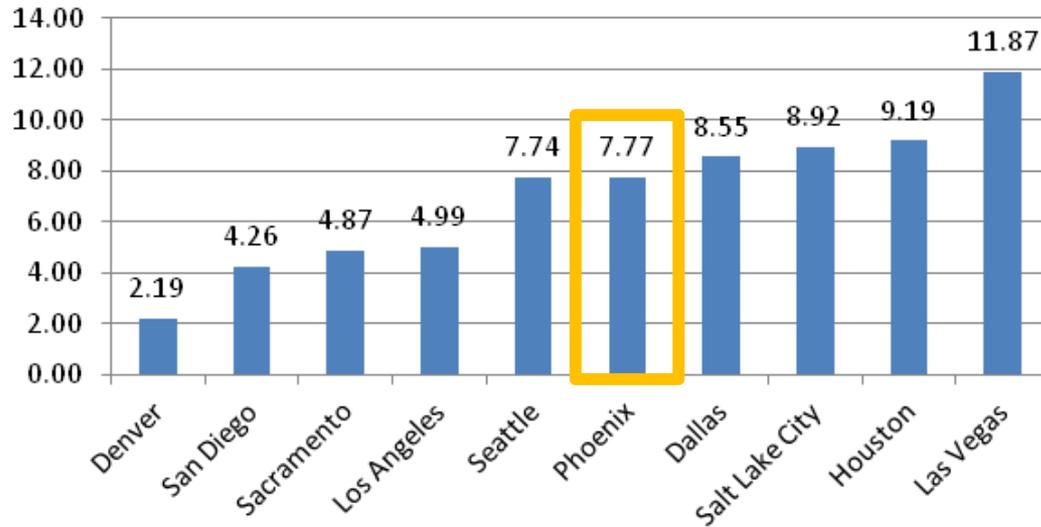


# Comparison to the State

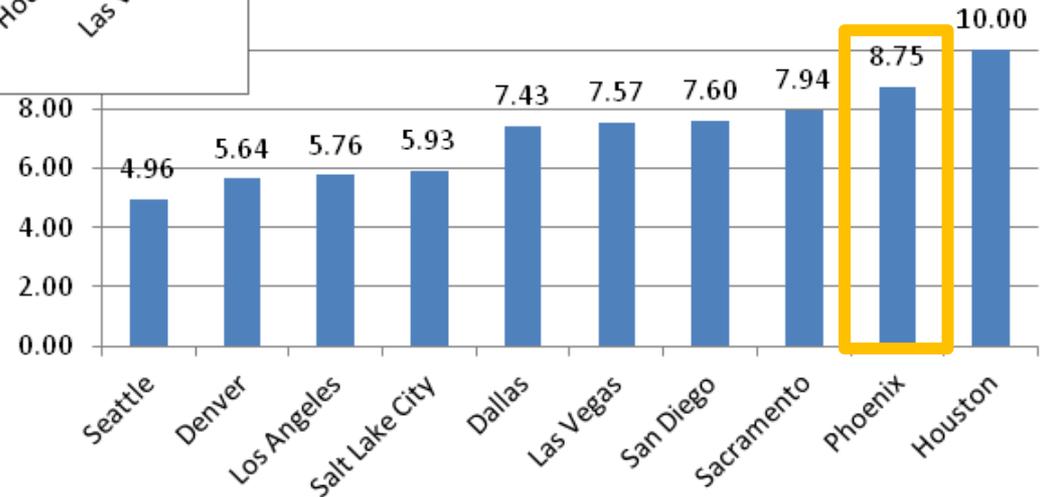


# Comparison to Selected Urban Regions

Injuries per 1,000 persons



Fatalities per 100,000 persons



# Vision & Goals for Road Safety

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- ▶ Sept 24<sup>th</sup> Visioning Workshop
  - ▶ Included a wide range of agencies with a stake in road safety
- ▶ “What should be the region’s Vision for Road Safety?”
- ▶ Regional Road Safety Vision:

**Zero Deaths – Zero Injuries**

# Thank You!

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