



Payson Transportation Study

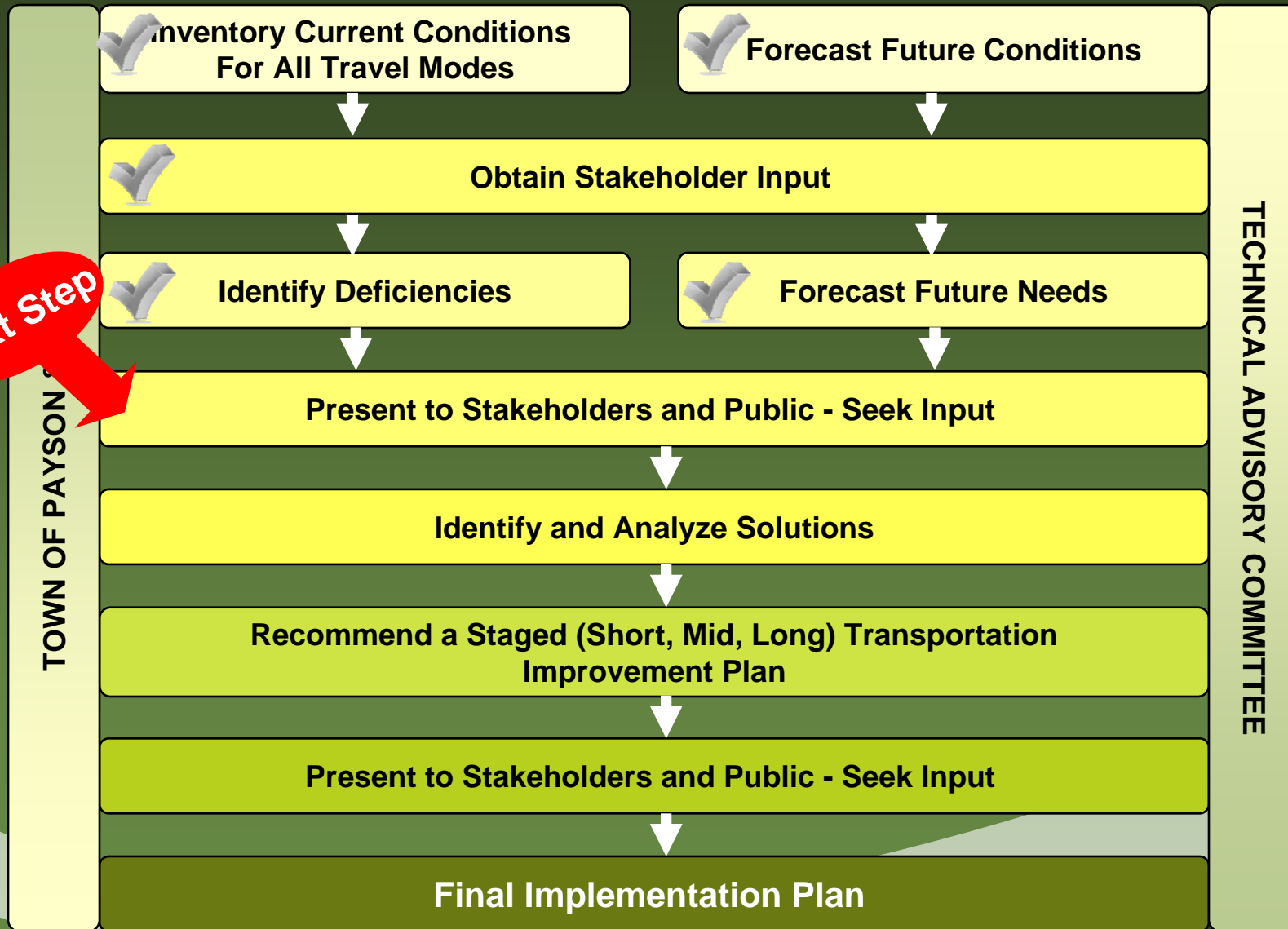
Technical Advisory Committee Meeting

August 19th, 2009



JACOBS

Transportation Plan Process



Working Paper 1: Existing Conditions

Working Paper 1 Outline

- ❑ Study Purpose, Objectives, Study Area, Planning Process
- ❑ Review of Previous Studies, Reports, and Plans
- ❑ Existing Land Use and Socioeconomic Conditions
 - Land Ownership Status
 - Socioeconomic Conditions
 - Environmental Justice Review (Title VI)
 - Environmental and Cultural Resources Overview
- ❑ Existing Transportation Conditions
 - Existing Roadway System
 - Crash Data Analysis
 - Existing Traffic Conditions
 - Other Modes of Transportation
 - Access Management
- ❑ Transportation Issues Summary

Programmed and Scoping Projects

ADOT

Project Name	Location	Cost	Status
System enhancement - safety improvements	SR 87: Payson to Pine	\$800,000	Bid date: 5/26/09
Shoulder widening, left turn lanes	SR 87: Payson to Pine	\$6,810,000	Bid date: 3/27/09

CAAG TIP

Project Name	Cost	Year
East Bonita Street - Phase I - Hwy 87 to Saint Phillips Street, (Construction)	\$432,107	2011
East Bonita Street - Phase II - Hwy 87 to Saint Phillips Street, (Construction)	\$1,020,274	2012
East Phoenix Street - Hwy 87 to Sycamore Street, (Construction)	\$788,219	2013
Main Street Revitalization - Green Valley Redevelopment, (TE)	\$315,815	TBD

Programmed and Scoping Projects

PAYSON Capital Improvements Program

Project Name
Airport Road Roundabout
Rumsey Drive - McLane Road to SR 87
Mud Springs Road Phase 2
Wade Lane Sidewalk - Meadow Street to McLane Road
Manzanita Drive - Timber Drive to Shopping Center
Colcord Road - Main Street to Longhorn Road
Longhorn Road South Side C, G & S/W
Phoenix Street. - SR 87 to Sycamore Street
McLane Road - Airport Road to Payson Ranchos
Airport Road - Airport Road to Vista Road
Goodnow Road - SR 260 to Bonita Street
McLane Road - Main Street to Phoenix Street
Easy Street - Evergreen Street to Forest Drive
Rim Club Parkway - Rim Club Parkway to Granite Dells Road
Frontier Street - SR 87 to McLane Road
Mud Springs Road - Cedar Lane to Frontier Street
Easy Street - Forest Drive to Gila Drive
Easy Street - Gila Drive to Bradley Drive

Payson Airport Improvements - Table 2.5

Existing Land Use and Socioeconomic Conditions

□ Land Ownership

- 19.5 square miles land area
- 65% private, 34% Tonto National Forest
- 10% of total land going through land exchange process

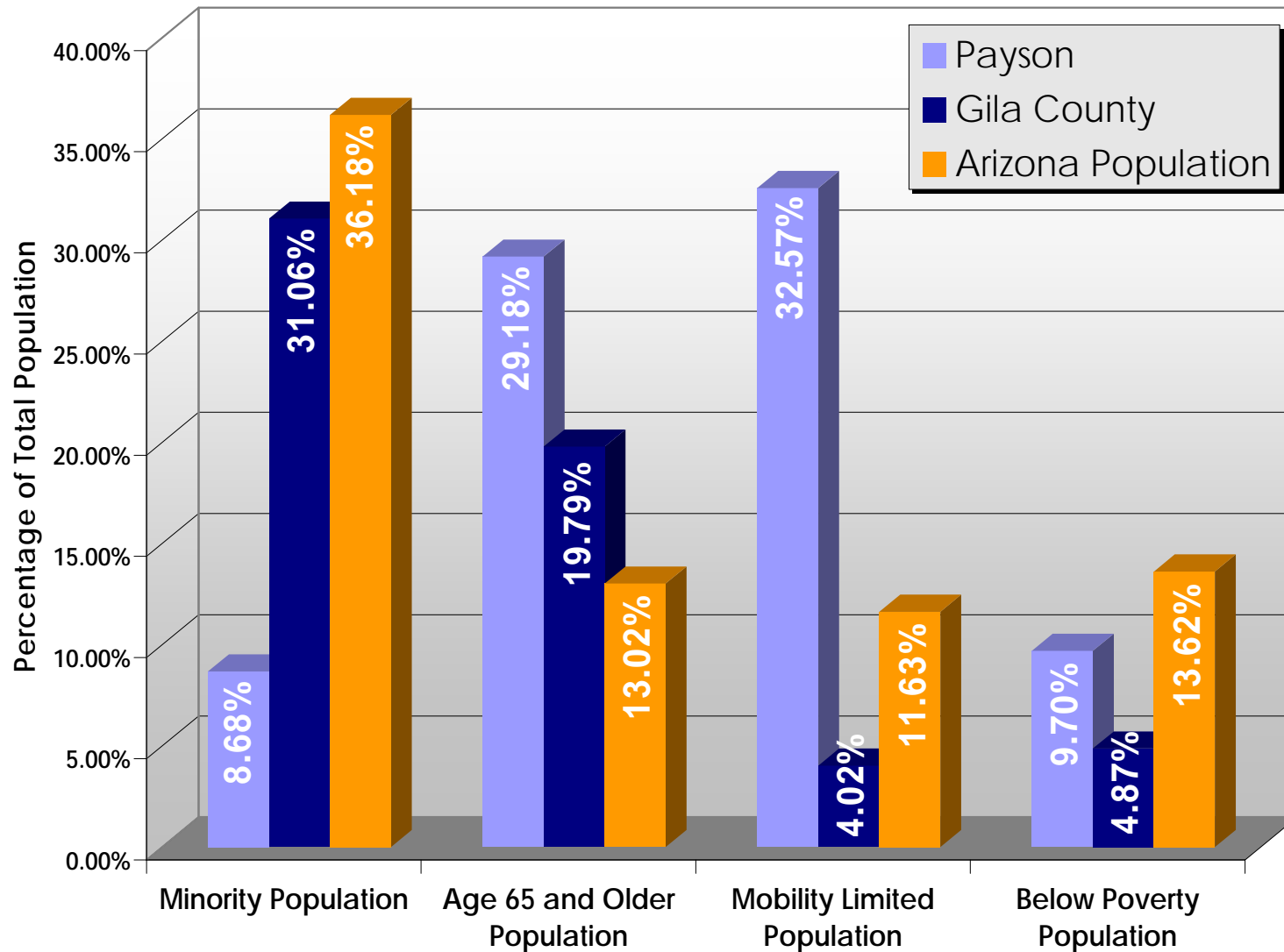
□ Socioeconomic Conditions

➤ Population and Housing Units

Geographic Area	Population		Population Growth Rate	Housing Units		Housing Units Growth Rate
	2000	2008		2000	2008	
Town of Payson	13,620	16,965	3.07%	7,033	8,526	2.65%
Gila County	51,335	57,361	1.47%	28,189	-	-
State of Arizona	5,130,632	6,629,455	3.65%	2,189,189	-	-

- Employment – 6,714 employees

Environmental Justice Review



Environmental Concerns

Within the proximity of the study area Arizona Game & Fish has identified the following species and habitat as:

Species of Concern:

Animal Life (Fauna):

- Arizona Toad
- Desert Sucker
- Maricopa Tiger Beetle
- Narrow-headed Gartersnake
- Bobolink

Plant Life (Flora):

- Baboquivari Giant Hyssop

Candidate Species:

Animal Life (Fauna):

- Headwater Chub

Sensitive Species:

Animal Life (Fauna):

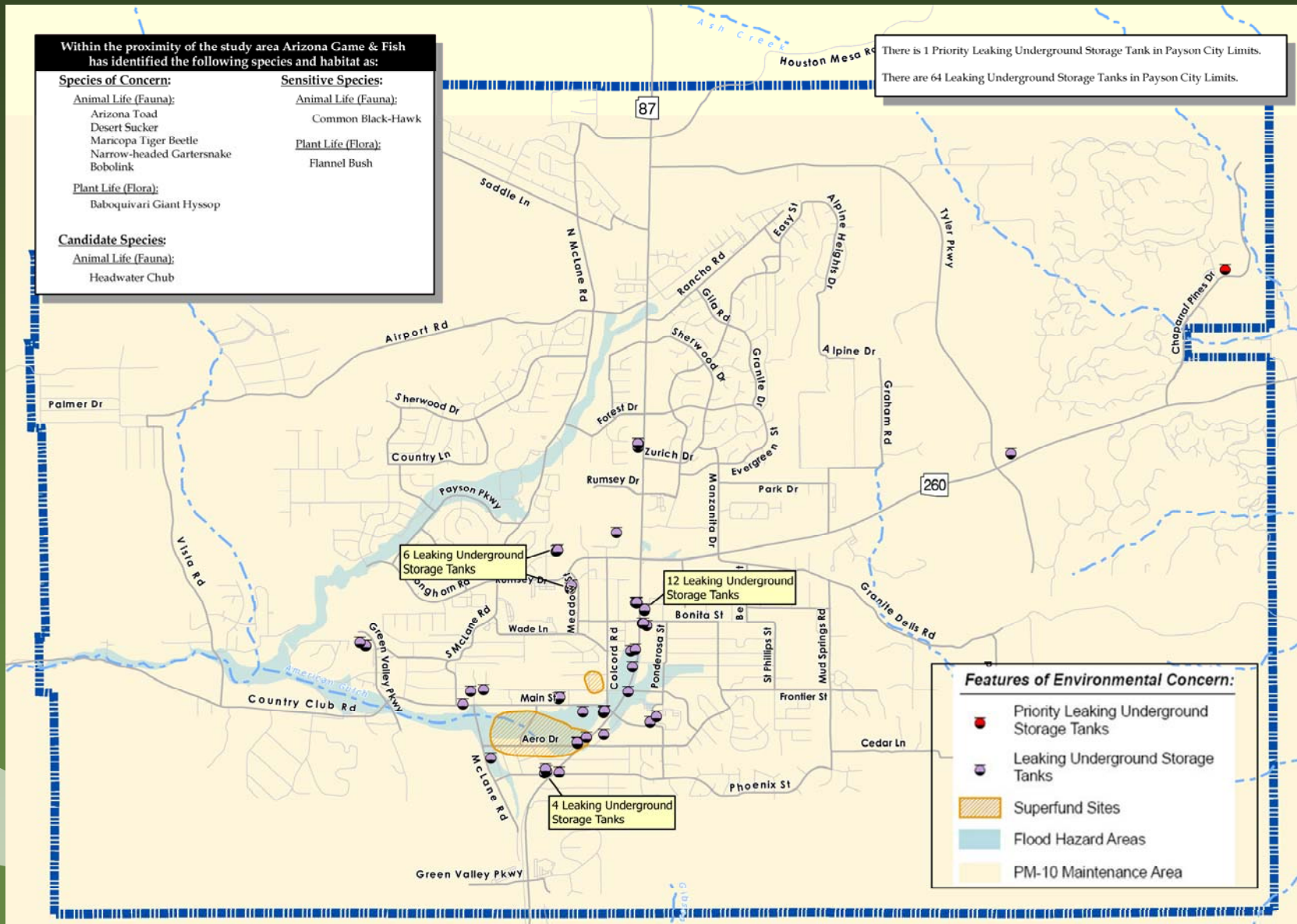
- Common Black-Hawk

Plant Life (Flora):

- Flannel Bush

There is 1 Priority Leaking Underground Storage Tank in Payson City Limits.

There are 64 Leaking Underground Storage Tanks in Payson City Limits.



Features of Environmental Concern:

- Priority Leaking Underground Storage Tanks
- Leaking Underground Storage Tanks
- Superfund Sites
- Flood Hazard Areas
- PM-10 Maintenance Area

Roadway Characteristics & Conditions

Roadway Functional Classification

- Major Arterials - SR 87, SR 260
- Minor Arterials - McLane Road, Main Street
- Collectors and Locals – All other roads

Lanes & Posted Speeds – Figures 4.2, 4.3

6 traffic signals

Pavement Condition

- 3.2 miles – Poor condition
- 0.3 miles – Very poor condition

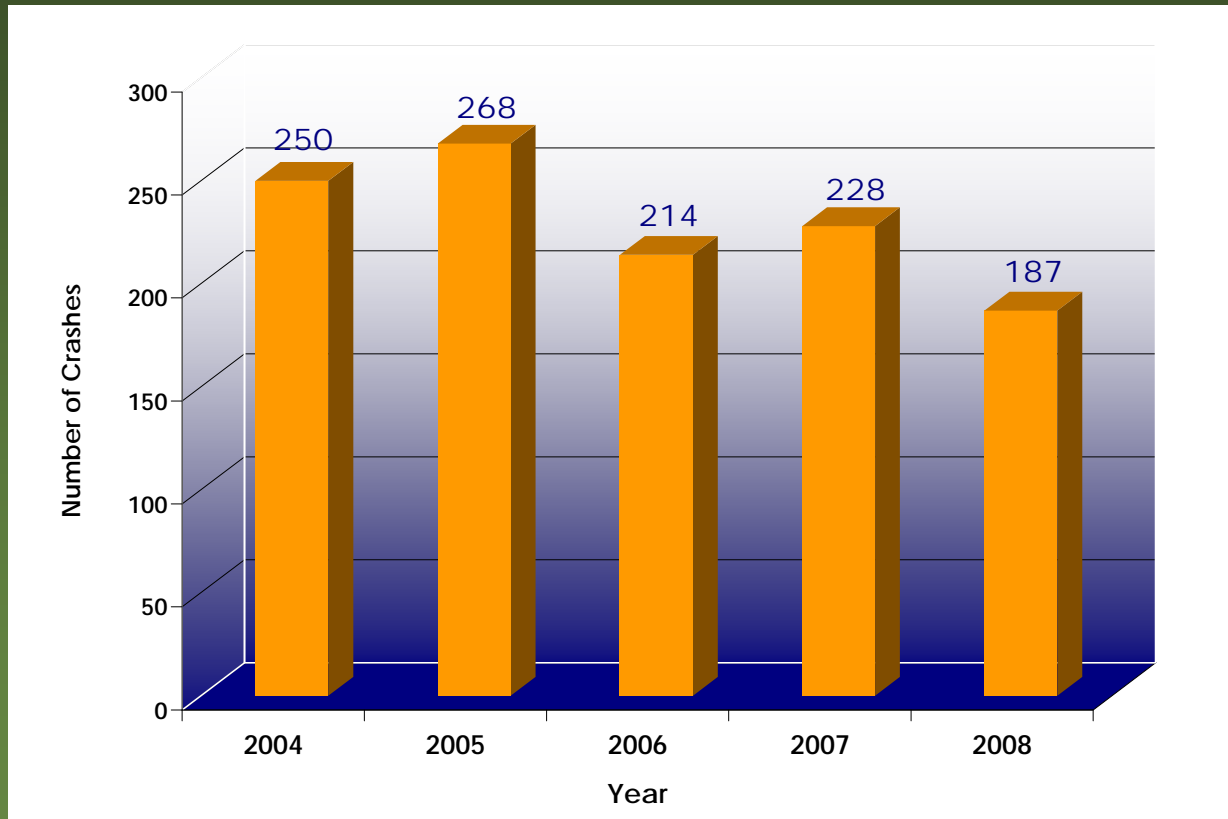
Bridges in good condition

NEEDS

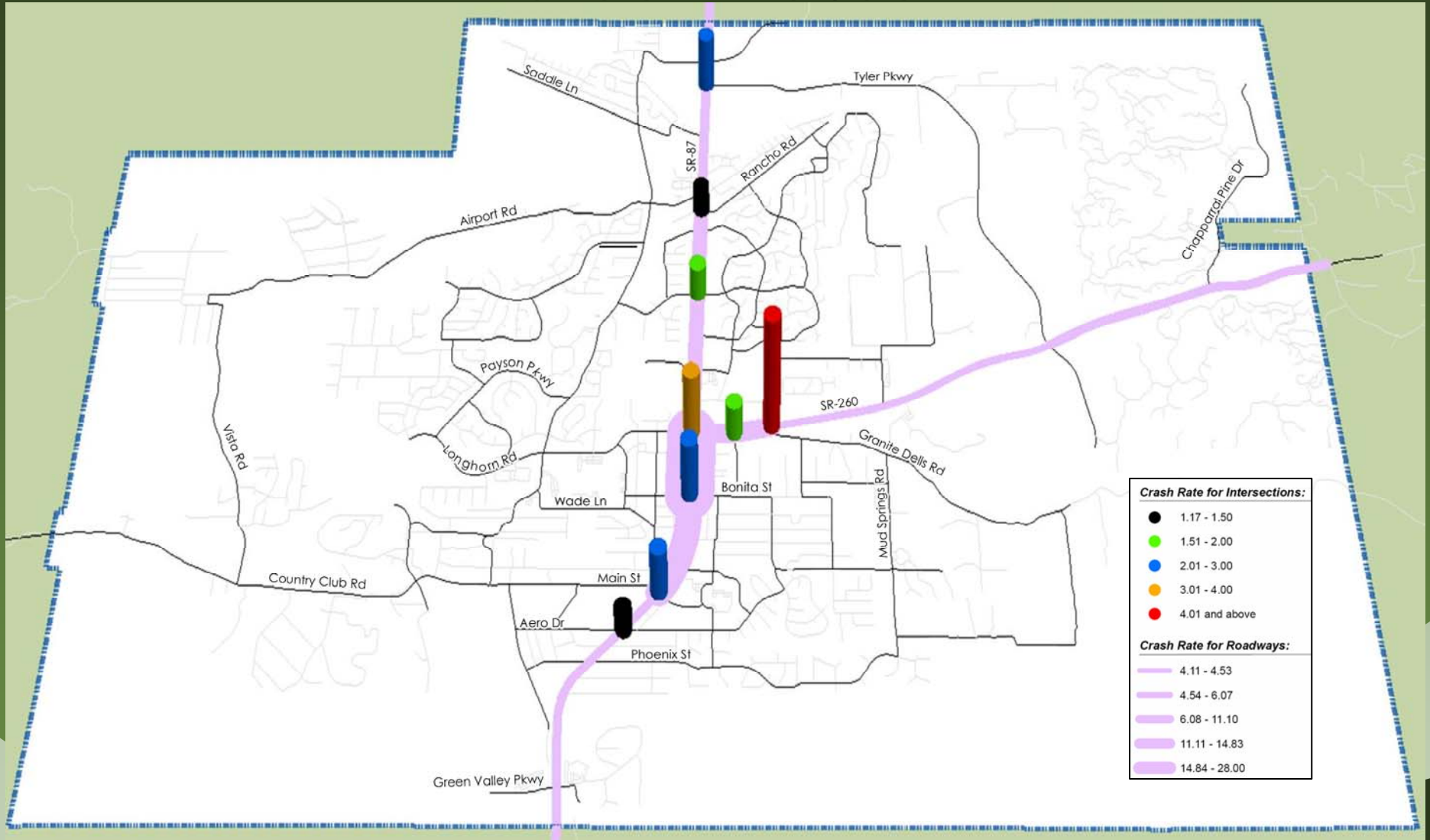
- **Redefine Functional Classification**
- **Improve pavement conditions for Manzanita Dr and other roads with poor pavement condition**

Crash Analysis

□ 1,147 crashes in 5 years (2004 – 2008)



Crash Rates



Crash Analysis – Key Observations

□ Key Observations

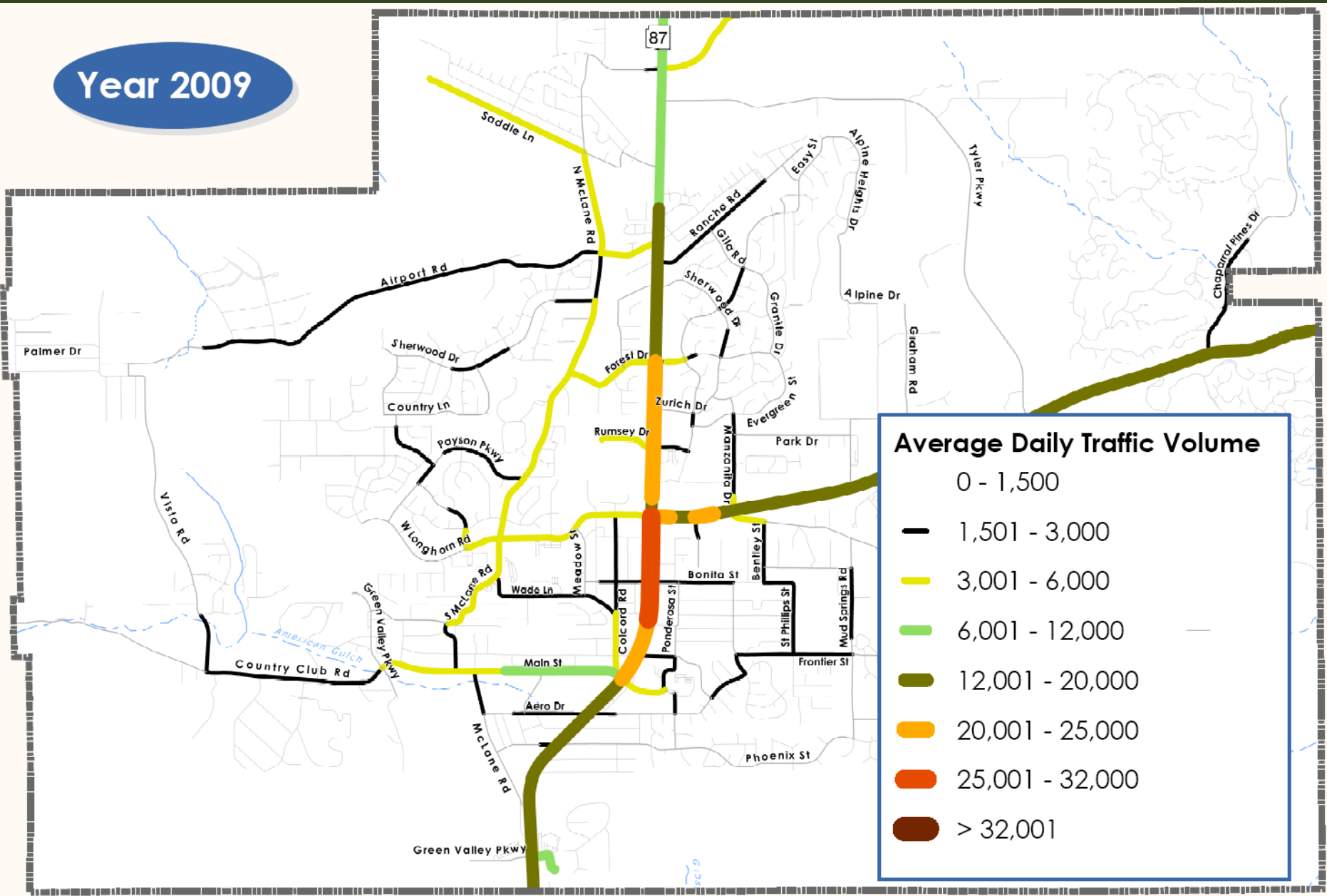
- 59% intersection and driveway related crashes
- 33% crashes had an injury
- 45 crashes or 4% involved pedestrians and cyclists
- 4 fatal crashes
- Predominant violation types – **Speed too fast for conditions, failed to yield ROW, Inattention**
- 69% of all crashes on SR 87 and SR 260
- Manzanita Drive/SR 87 – intersection with highest crash rate
- SR 87: Bonita Street to SR 260 – segment with highest crash rate

□ NEEDS

- **Access Management**
- **Improved sidewalks, bike lanes, and other pedestrian facilities**
- **Review roadway speed limits**
- **Improve intersections and road segments with high crash rates**

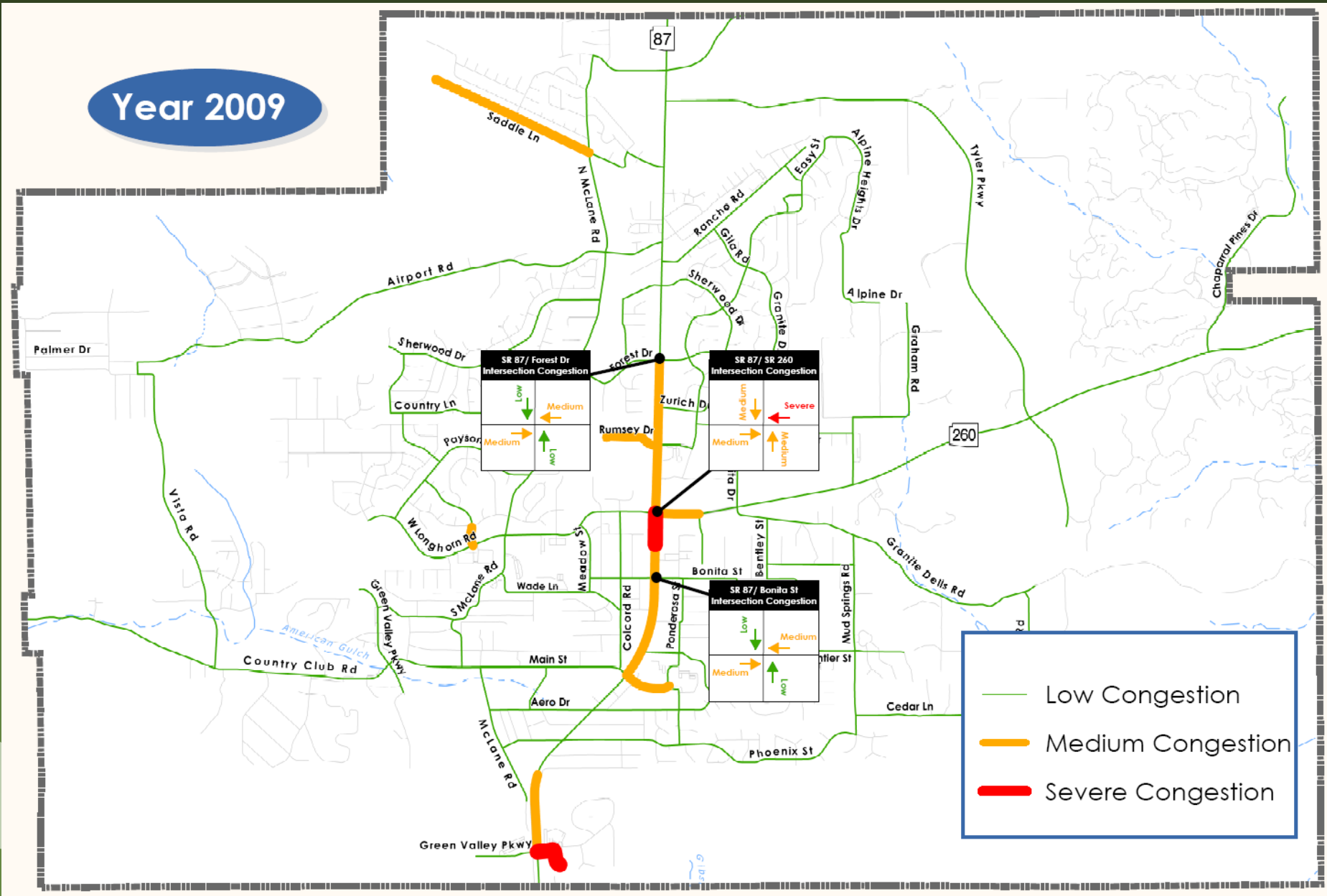
Existing Traffic Conditions – Daily Traffic Volumes

Year 2009

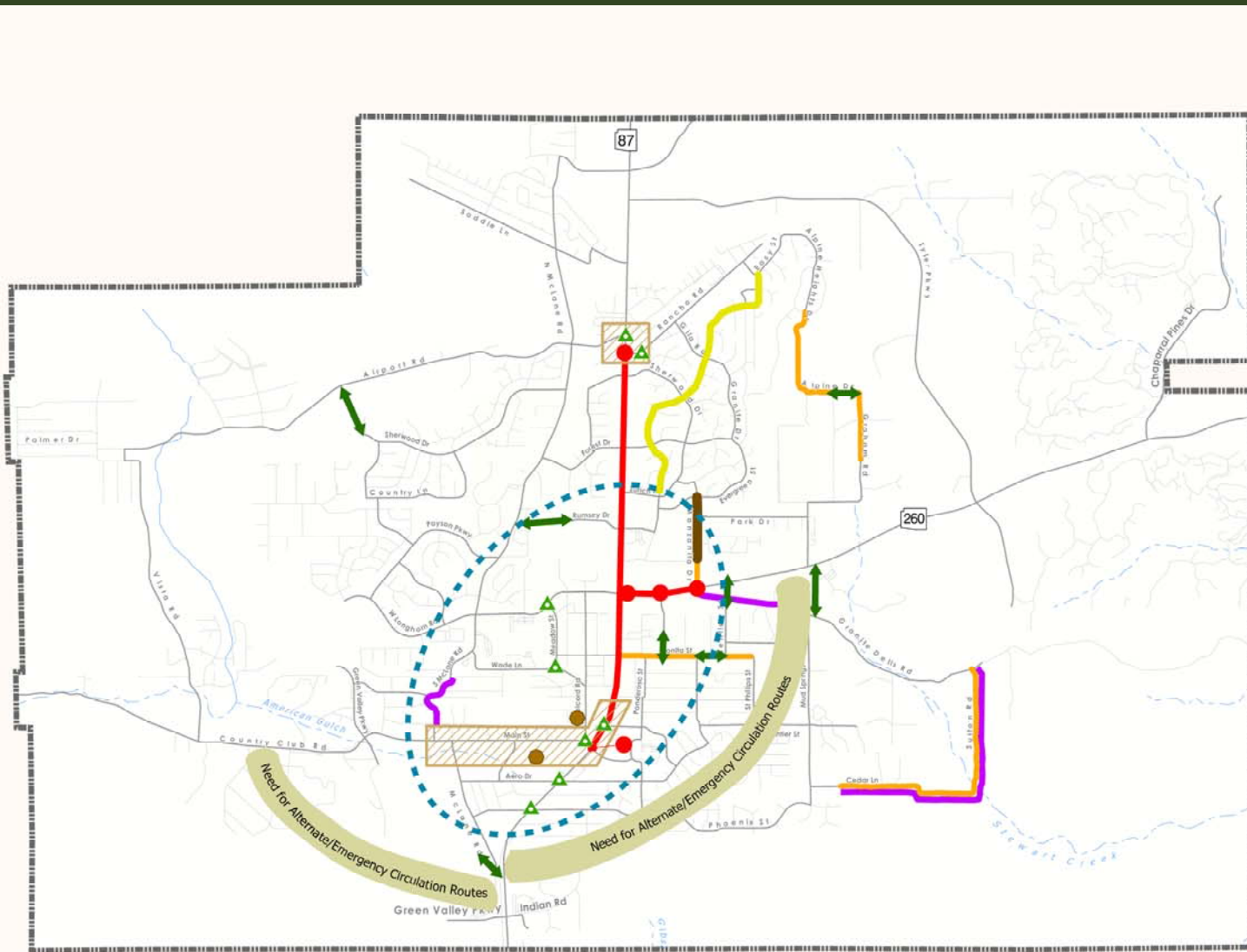


Existing Traffic Conditions – Congestion Level

Year 2009



Transportation Issues Summary



Safety Issues:

- High Crash Rate Intersections
- High Crash Rate Roadway Segments
- ▲ Intersection Sight Distance and Approach Angle Issues
- Steep Grades
- Narrow Right-of-Way

Traffic Circulation Issues:

- Need for Alternate/Emergency Regional and Local Traffic Circulation Routes
- ↔ Need for Connectivity
- Need for Improving Signage Along SR 87 and SR 260

Pavement Condition Issues:

- Very Poor
- Poor

Environmental Issues:

- Superfund Sites that require cleanup
- Flood Hazard Locations
- Leaking Underground Storage Tanks that require cleanup

Regional Issues:

- Need for roadway improvements to promote better circulation.
- Lack of local and regional transit service.
- Need for safe school bus pull-outs.
- Need for access management guidelines.
- Need for improving aesthetics along SR 87 and SR 260.
- Need for improved walking and biking facilities.
- Need for emergency evacuation plan.

Working Paper 2: Future Conditions

Working Paper 2 Outline

Future Socioeconomic Conditions

- Population and Housing Units Forecasts
- Employment Forecasts
- Travel Demand Model

Future Transportation Conditions

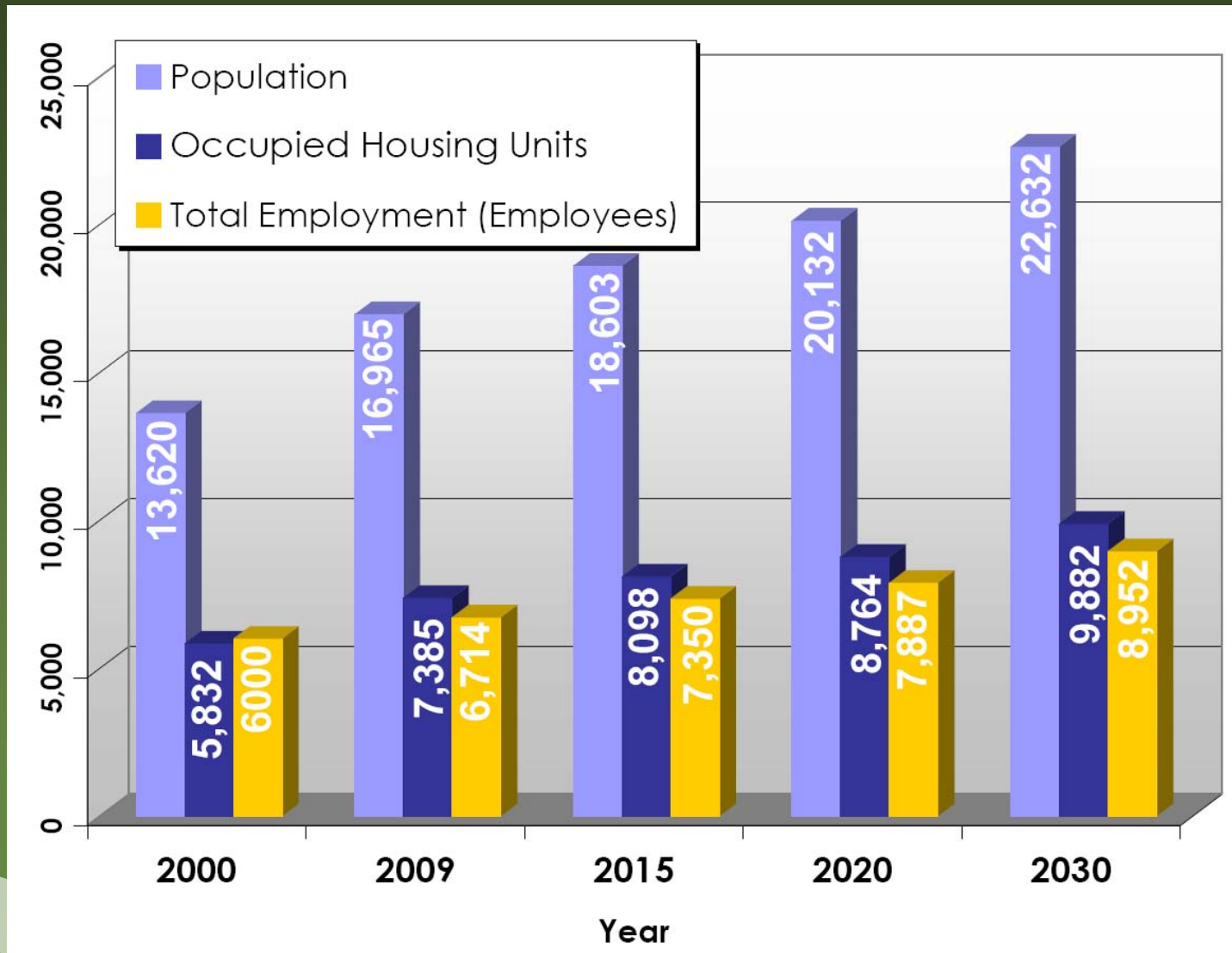
- Projected 2015 Traffic Conditions
- Projected 2020 Traffic Conditions
- Projected 2030 Traffic Conditions

Summary of Findings

Future Socioeconomic Conditions

- ❑ Horizon years – 2015, 2020, 2030
- ❑ Population Projections from Arizona Department of Commerce
- ❑ Housing Unit Projections
 - Total housing units forecasts based on assumption that the Population/Housing Unit ratio remains constant.
 - New Housing Units allocated throughout the study area based on the Town's inventory and location of Planned Developments.
 - Used General Land Use Plan as a guide.
- ❑ Employment Forecasts
 - Total employment forecasts based on assumption that the current "Employment/Population" ratio remains constant.
 - New Employment distributed throughout study area based on General Land Use Plan's proposed locations for new commercial and employment land uses.

Population, Housing Units, and Employment Forecasts for 2015, 2020, 2030



Future Daily Traffic Volume Forecasts

- ❑ Traffic volume forecasts based on existing transportation infrastructure and 2015, 2020, 2030 population and employment growth conditions
- ❑ Purpose of this assumption is identify roadway capacity deficiencies in the future if not roadway improvements are made
- ❑ TransCAD travel demand was developed and used for traffic forecasting purposes

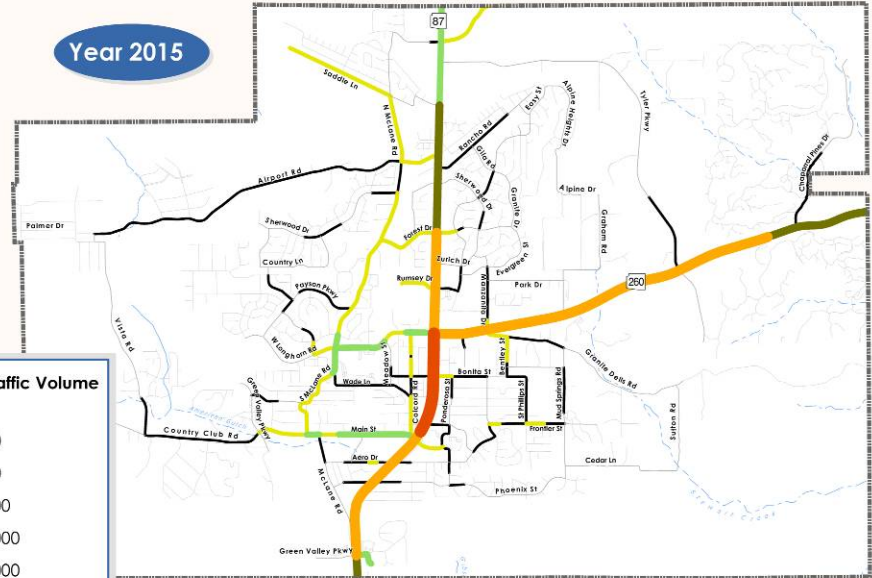
Traffic Volume Forecasts

Year 2009

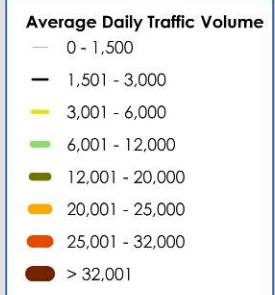


Year 2009 traffic volume estimates are based on existing roadway conditions with existing population and employment growth conditions.

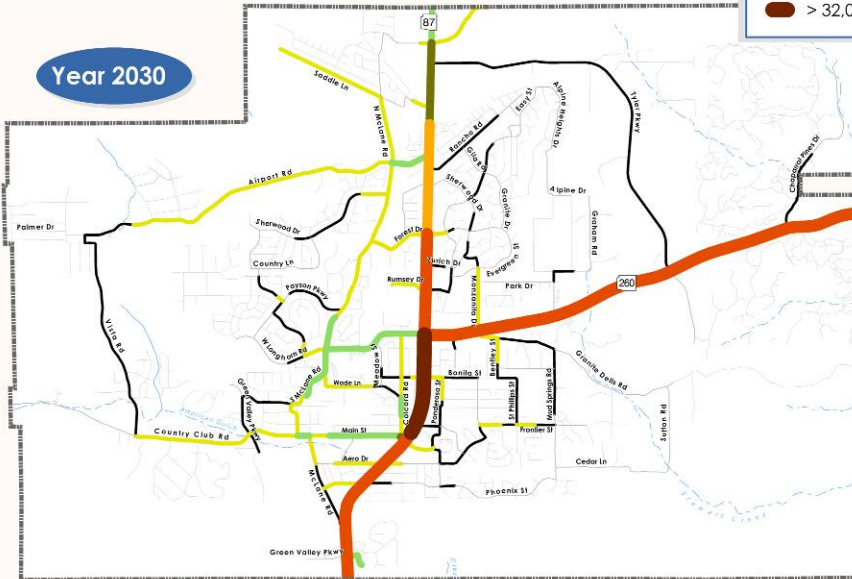
Year 2015



Year 2015 traffic volume estimates are based on existing roadway conditions with projected 2015 population and employment growth conditions.

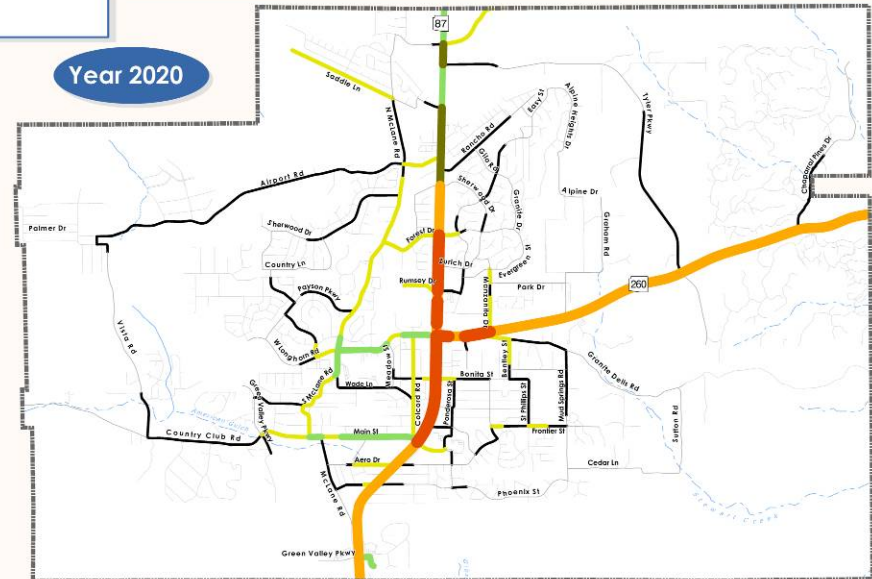


Year 2030



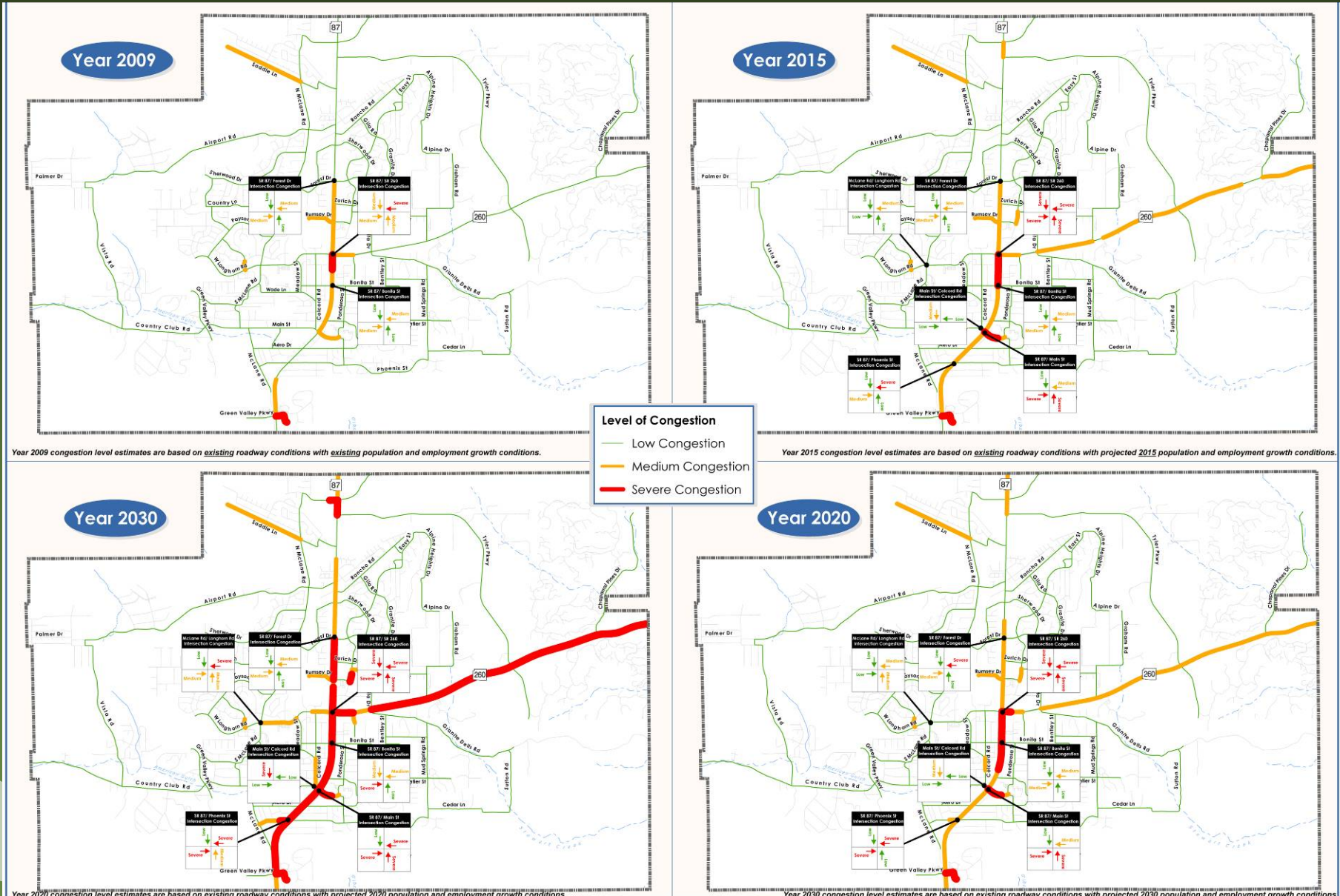
Year 2030 traffic volume estimates are based on existing roadway conditions with projected 2030 population and employment growth conditions.

Year 2020



Year 2020 traffic volume estimates are based on existing roadway conditions with projected 2020 population and employment growth conditions.

Projected Levels of Traffic Congestion



Public Meetings Boards