Pinal County
Strategic Transportation Safety Plan Update

Pinal County Board of Supervisors
January 22, 2025





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Metropolitan Planning Organization

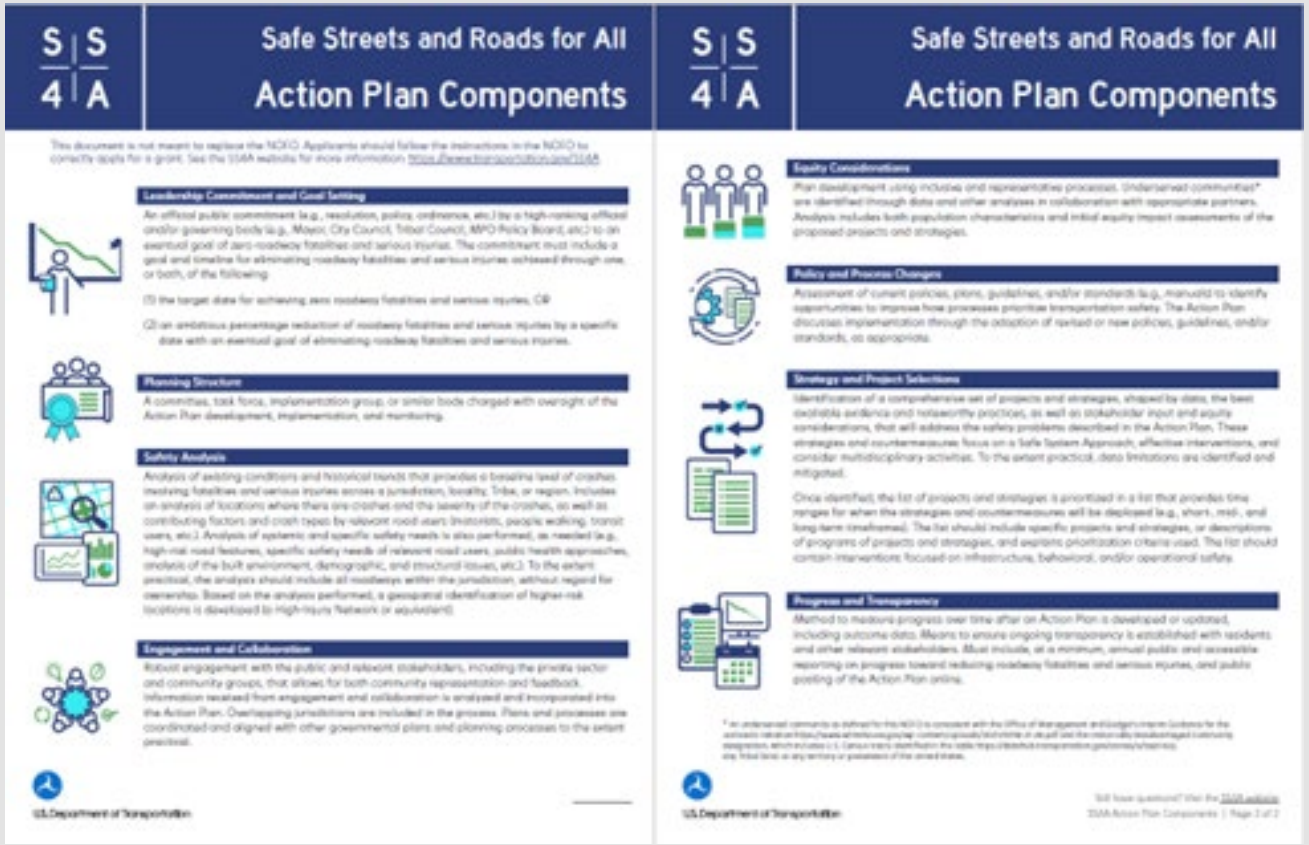
Greenlight
Traffic Engineering

Background

360 people died and 10,473 people were injured in 22,429 reported crashes over the past 5 years (2018-2022) in Pinal County

Safe Streets and Roads for All (SS4A)

- This Pinal County Strategic Transportation Safety Plan (STSP) update will meet all SS4A criteria and can be used for pursuing SS4A Implementation funds
- Pinal County was awarded SS4A Planning funds in 2024 which will be used to supplement this STSP update



Promoting Safety Culture

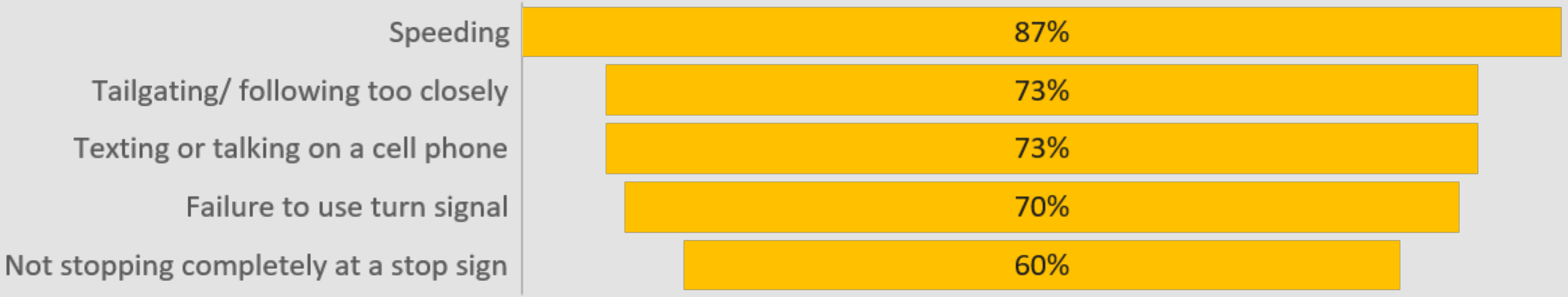
- Public Outreach Events
  - March 1st Coolidge Cotton Days
  - March 26th Ironwood Village presentation
  - April 6th Casa Grande Public Safety Day
  - September 24th Casa Grande Silent Witness Night
  - Two tentative public events in early 2025



- Pinal County Board of Supervisors presentation
- TAC and Executive Board presentations for SCMPO, CAG, and MAG

Public Surveys

- 6-month online survey received 560 responses
- 54% of motorists feel unsafe on the roads
- Reported feeling least safe: bicyclists, elderly and/or disabled persons, pedestrians, and motorcyclists
- Reported behaviors: hurried, distracted, inattentive, and frustrated/angry



Top 5 Safety Concerns Observed by Respondents

Equity Analysis

- Required for SS4A implementation funding pursuit
- Used the USDOT's Equitable Transportation Community (ETC) Explorer
- Identified priority equity areas in the study area

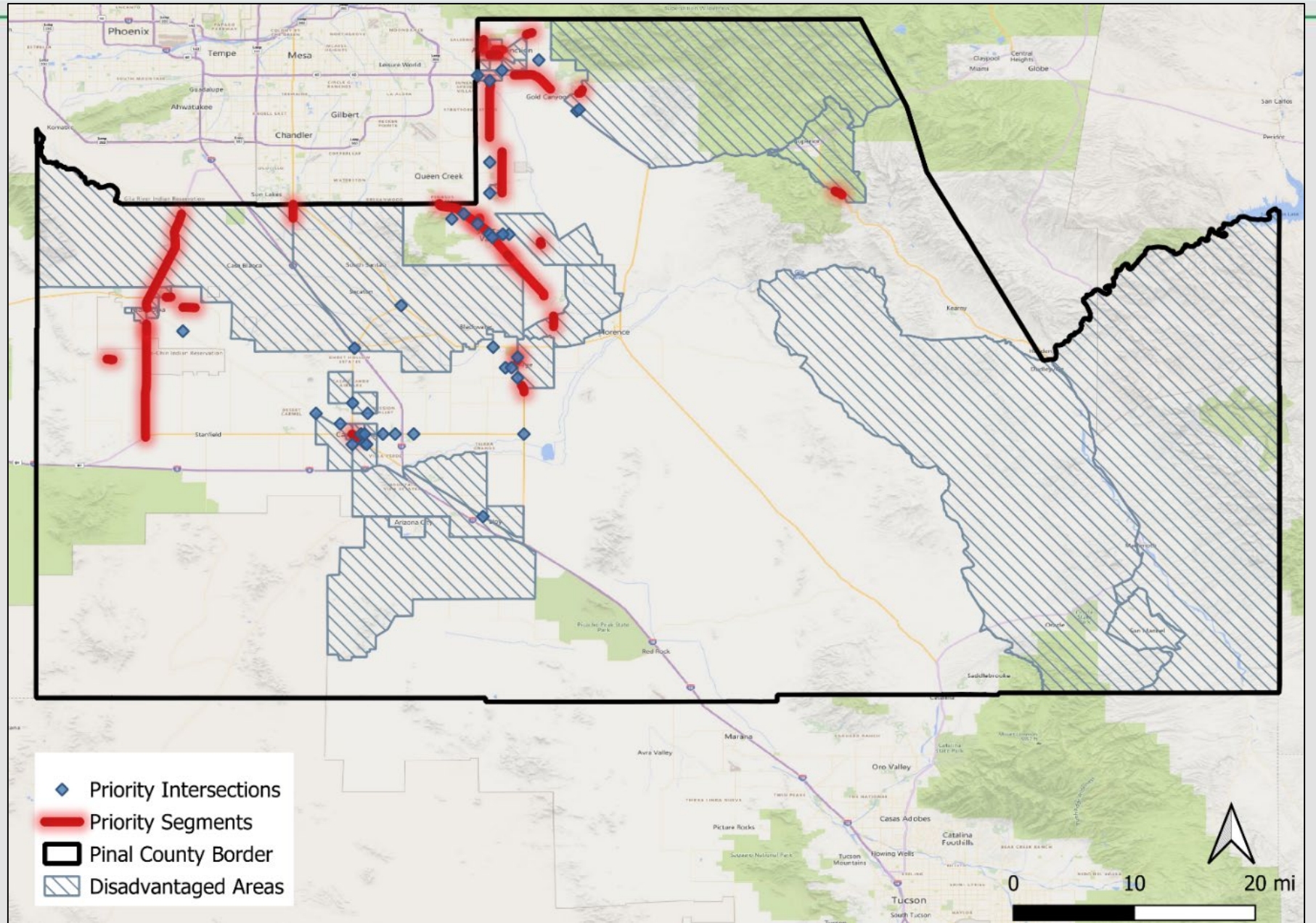
Proportion of Fatal or Suspected Serious Injury Crashes in Disadvantaged Areas

Number of Fatal or Suspected Serious Injury Crashes in County	Number of Fatal or Suspected Serious Injury Crashes in Disadvantaged Areas in County	% of Fatal or Suspected Serious Injury Crashes in Disadvantaged Areas in the County
1,164	948	81.4%

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Safety Performance

Data Source: ADOT ACIS crash data from 2018 to 2022

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Crash Severity by Agency

Agency	No Injury	Possible Injury	Suspected Minor Injury	Suspected Serious Injury	Fatal	Grand Total
Ak-Chin Indian Community	18	6	6	2	3	35
Apache Junction	1,825	396	384	107	23	2,735
Arizona City	81	14	19	1	1	116
Casa Grande	2,622	703	367	131	20	3,843
Coolidge	552	174	134	56	7	923
Eloy	478	98	116	35	20	747
Florence	307	75	74	37	6	499
Gila River Indian Community	2,061	332	497	80	60	3,030
Kearny	29	2	3	3	1	38
Mammoth	5	2	1			8
Maricopa	1,335	349	205	37	12	1,938
Pinal County	3,756	636	823	255	132	5,602
Queen Creek	156	29	17	5	2	209
San Tan Valley	1,833	379	325	105	17	2,659
Superior	10	4	2		1	17
Tohono O'odham Nation	17	5	3	1	4	30
Grand Total	**15,085**	**3,204**	**2,976**	**855**	**309**	**22,429**

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Crash Type by Agency

Agency	Angle	Head On	Left Turn	Other	Rear End	Sideswipe Opposite Direction	Sideswipe Same Direction	Single Vehicle	U Turn	Unknown	Total
Ak-Chin Indian Community	3		2	2	11	2	2	12		1	**35**
Apache Junction	548	40	415	130	833	38	293	392	14	32	**2,735**
Arizona City	28	5	9	8	34	3	6	18	2	3	**116**
Casa Grande	671	62	642	187	1,101	66	466	583	28	37	**3,843**
Coolidge	196	26	118	61	207	27	83	192	4	9	**923**
Eloy	122	14	57	51	187	21	86	202	4	3	**747**
Florence	56	7	79	24	144	14	37	132	2	4	**499**
Gila River Indian Community	103	27	84	106	1,499	29	400	764	12	6	**3,030**
Kearny	1		4	10	6	2	1	12		2	**38**
Mammoth	2		2			1		3			**8**
Maricopa	211	62	355	100	680	47	198	261	4	20	**1,938**
Pinal County	397	92	322	233	1,484	104	604	2,320	23	23	**5,602**
Queen Creek	18	7	57	8	64	6	24	21	4		**209**
San Tan Valley	369	61	545	78	883	60	262	353	27	21	**2,659**
Superior	1		2	2	1	1	4	5		1	**17**
Tohono O'odham Nation				2	1	1		25		1	**30**
Total	**2,726**	**403**	**2,693**	**1,002**	**7,135**	**422**	**2,466**	**5,295**	**124**	**163**	**22,429**

Emphasis Areas

- Behavior Related: Speeding, Impaired Driving, Not Wearing Seat Belt
- Intersection
- Lane Departure
- Nighttime
- Age-related: Under 25, Over 64

Vision and Goal

Vision: “STRIVING FOR ZERO DEATHS – One is too many!”

Goal: "Reduce serious injuries and deaths on public roads within Pinal County by 20% by 2030.“

Vision Zero is required for SS4A

Network Screening and Areas of Opportunity

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Top 20 Intersections

Intersection	Owner
SR 87 & Skousen Rd	ADOT
I-10 Ramp East (Exit) & SR 387	ADOT
Peters Rd & Florence St	Casa Grande
Ironwood Dr & Pima Rd	Pinal County
SR 287 & Hacienda Rd	Casa Grande
SR 87 & Vah Ki Inn Rd	ADOT
Battaglia Rd & Frontier St	Eloy
SR 87 & SR 187	ADOT
SR 287 & SR 87	ADOT
SR 88 & Southern Ave	ADOT
Bella Vista Rd & Gantzel Rd	Pinal County
Hunt Hwy & Mountain Vista Blvd	Pinal County
Pinal Ave & Rodeo Rd	Casa Grande
SR 87 & Martin Rd	ADOT
Ironwood Dr & Baseline Ave	Apache Junction
SR 287 & Brown Ave	Casa Grande
White & Parker Rd & Maricopa Casa Grande Hwy	Maricopa
SR 287 & Cacheris Ct	Casa Grande
US 60 & Peralta Rd	ADOT
Meridian Rd & US 60 East (Ramp)	Pinal County

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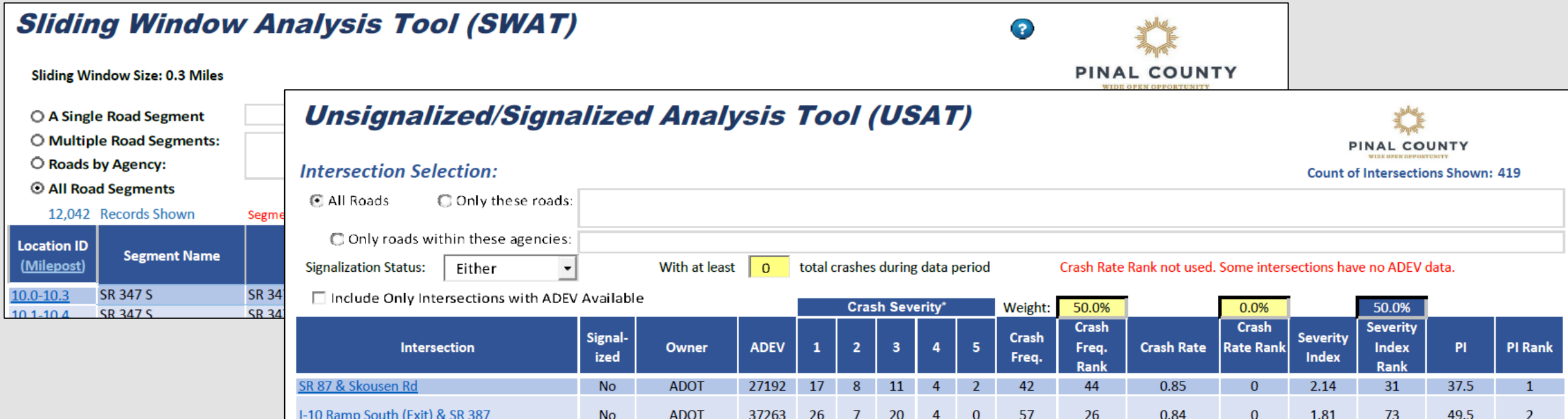
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Top 20 Segments

On Road	Owner
SR-347: Sonoran Desert Pkwy to Juan St	ADOT
SR-87: 0.4 mile south of Bartlett Rd to 0.3 mile north of Bartlett Rd	ADOT
SR-79: SR 77 to 0.4 mile west of SR 77	ADOT
Superstition Boulevard: 400 ft west of San Marcos Dr to Idaho Rd	Apache Junction
SR-88: 650 ft east of Hackamore Rd to Mountain View Rd	ADOT
Coolidge Avenue: 15th St to 10th St	Coolidge
SR 177: 2 Miles south of E Tu Ranch 1 to 2.6 Miles South of E Tu Ranch 1	ADOT
Delaware Drive: Foothill St to Shiprock St	Apache Junction
Papago Rd: 0.1 Miles east of White Rd to 0.2 Miles east of White Rd	Pinal County
Quail Run: Judd Rd to 0.3 miles north of Judd Rd	Florence
SR-347: Sonoran Desert Pkwy to Juan St	ADOT
SR-87: 0.4 mile south of Bartlett Rd to 0.3 mile north of Bartlett Rd	ADOT
SR-79: SR 77 to 0.4 mile west of SR 77	Florence
Superstition Boulevard: 400 ft west of San Marcos Dr to Idaho Rd	ADOT
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Coolidge Avenue: 15th St to 10th St	Maricopa
SR 177: 2 Miles south of E Tu Ranch 1 to 2.6 Miles South of E Tu Ranch 1	Apache Junction
Delaware Drive: Foothill St to Shiprock St	Pinal County
Papago Rd: 0.1 Miles east of White Rd to 0.2 Miles east of White Rd	ADOT
Quail Run: Judd Rd to 0.3 miles north of Judd Rd	Pinal County

Intersection and Segment Screening Tools

The SWAT and USAT tools contain the full ranked results for intersections and segments. They allow Pinal County staff to easily change the analysis parameters, including weights associated with each scoring criterion.



Sliding Window Analysis Tool (SWAT)

Sliding Window Size: 0.3 Miles

- A Single Road Segment
- Multiple Road Segments:
- Roads by Agency:
- All Road Segments

12,042 Records Shown

Location ID (Milepost)	Segment Name	
10.0-10.3	SR 347 S	SR 34
10.1-10.4	SR 347 S	SR 34

Unsignalized/Signalized Analysis Tool (USAT)

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Intersection Selection:

Count of Intersections Shown: 419

All Roads Only these roads:

Only roads within these agencies:

Signalization Status: Either With at least 0 total crashes during data period

Crash Rate Rank not used. Some intersections have no ADEV data.

Include Only Intersections with ADEV Available

Crash Severity* Weight: 50.0% 0.0% 50.0%

Intersection	Signal-ized	Owner	ADEV	1	2	3	4	5	Crash Freq.	Crash Freq. Rank	Crash Rate	Crash Rate Rank	Severity Index	Severity Index Rank	PI	PI Rank
SR 87 & Skousen Rd	No	ADOT	27192	17	8	11	4	2	42	44	0.85	0	2.14	31	37.5	1
I-10 Ramp South (Exit) & SR 387	No	ADOT	37263	26	7	20	4	0	57	26	0.84	0	1.81	73	49.5	2

Safety Strategies

Safe System Approach strategies were developed for Emphasis Areas using various resources, including:

- FHWA's Proven Safety Countermeasures
- National Highway Traffic Safety Administration's (NHTSA) "Countermeasures that Work"
- FHWA's Crash Modification Factors Clearinghouse

Strategies were also categorized into the 4 E's of traffic safety:

- Engineering
- Enforcement
- Education
- Emergency Response

Safety Strategies

- 97 safety strategies identified
- Sample speeding strategies:
  - Engineering: Dynamic speed feedback signs
  - Education: Defensive driving courses
  - Enforcement: High-visibility speed enforcement
  - Emergency Response: Traffic incident management



Implementation Plan

- Incorporate Safety into Project Development
- Adopt Policy and Process Changes
  - Complete Streets
  - Active Transportation Plan
  - Road Safety Assessments
  - Annual Safety Performance Report
  - Fatal Crash Team
- Safety Committee members from County, local agencies, SCMPO, CAG, MAG, and ADOT for implementation oversight

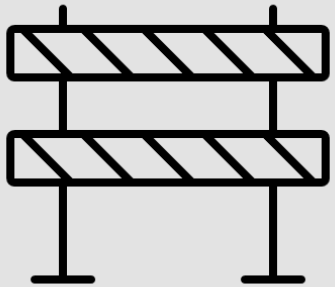
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THE SAFE SYSTEM APPROACH

Zero is our goal. A Safe System is how we get there.

Implementation Plan

- Projects selected via crash data, agency comments, and public comments
- A total of 96 potential safety projects



Agency	Spot Projects	Systemic Projects
Apache Junction	8	3
Casa Grande	13	3
Coolidge	9	1
Eloy	1	
Florence	2	
Maricopa	3	1
Pinal County	42	5
Queen Creek	1	
San Tan Valley	3	1

Sample Spot Projects

- Coolidge: SR 287 & Vah Ki Inn Rd
  - Install retroreflective signal backplates and protected/permissive left turn signal phasing
  - $209,000 cost
- Casa Grande: SR 287 & Hacienda Rd
  - Install a traffic signal or roundabout
  - $1,100,000 cost





Sample Systemic Projects

- Apache Junction: Superstition Blvd: Rennick Dr to Idaho Rd, SR 88: Mountain View Rd to Hackamore Rd
  - Install speed feedback signs
  - $83,000 cost



- Pinal County: Hunt Hwy: Magma Rd to 0.3 mi south of Magma Rd, SR 587 Rainbows Ends St to Hunt Hwy
  - Install intersection lighting
  - $164,000 cost



HSIP Projects

HSIP Projects from SCMPO Region 2014-2016

- Coolidge: Citywide Striping, $245,075
- Eloy: Street Signs, $61,860
- Eloy: Upgrade Pavement Markings, $260,771
- Casa Grande: Upgrade Ped Heads, $91,222
- Coolidge: SR87/Randolph Rd Intersection Improvement, $650,000
- Pinal County: Sign Upgrade, $234,048
- Eloy: Upgrade Regulatory Signs, $189,048
- Coolidge: SR87 and Ruins Traffic Signal, $828,258

Total Funding: $2,560,282

HSIP Projects from SCMPO 2016 STSP

- Casa Grande: Dilemma zone detection, rumble strips on Jimmie Kerr Blvd, $388,607
- Coolidge: Rumble strips on Macrae Rd, $333,428
- Casa Grande: Left-turn lane and transverse rumble strips on Peart Rd, $615,012

Total Funding: $1,337,047

HSIP Projects from 2019 Pinal County STSP

- Apache Junction: Lighting on Apache Trail, Superstition Blvd, $2,436,000
- Apache Junction: Shoulders, rumble strips, cable barrier on Ironwood Dr, $2,008,618
- Pinal County: Sidewalk on Gantzel Rd, $315,000
- Pinal County: LED flashing stop signs at 13 locations, $400,575
- ADOT: Left-turn lanes at SR 87/Kleck Rd, $613,373
- Casa Grande: Pedestrian hybrid beacon at Cottonwood Ln/Kadota Ave, $360,000
- ADOT: Rumble strips on SR 287, Hacienda Rd to SR 87, $632,688
- Casa Grande and Coolidge: Rumble strips on Overfield Rd, Signal Peak Rd, $368,083
- ADOT: Turn lanes at SR 87/Kenworthy Rd, SR 87/Christensen Rd, $693,882
- Coolidge: Rumble strips on Skousen Rd, Eleven Mile Rd, $735,525
- Pinal County: FYA, median mods, sidewalk on Gantzel Rd, Hunt Hwy, $1,394,584

Total Funding: $9,958,328

Supplemental 2022 HSIP Projects

- ADOT: Signal at SR 87/Skousen Rd, $1,899,864
- ADOT: Pedestrian hybrid beacon at SR 387/Viola St, $568,570
- ADOT: Passing lanes on SR 79, $6,398,703
- Casa Grande: Raised median on Florence Blvd near Colorado St, $588,040
- Casa Grande: Improve turn lane offsets at Florence Blvd/Peart Rd, $504,083
- Eloy: Lighting at Battaglia Dr/Tweedy Rd, $277,397
- Pinal County: Paved shoulders on Battaglia Dr, $3,396,875
- Pinal County: Paved shoulders, rumble strips on Sunland Gin Rd, $1,440,510

Total Funding: $15,074,042

HSIP Applications Submitted May 2024

- Apache Junction: Flashing yellow arrows on Ironwood Dr, $1,460,977
- Maricopa: Speed feedback signs on high priority streets, $987,720
- Queen Creek: Street lights on Gary Rd from north of Empire Blvd, $1,378,936
- Pinal County: Signal at Thompson Rd/Mountain Vista Blvd, $1,534,107
- Casa Grande: Reflectorized backplate borders citywide, $1,405,197
- Casa Grande: Signal at Jimmy Kerr Blvd/Earley R, $1,605,642
- Eloy: Speed feedback signs on high priority streets, $1,587,035
- Coolidge: Signal at Coolidge Ave/9th St, $1,833,586
- Coolidge: Speed feedback signs on high priority streets, $1,133,485
- ADOT: Paved shoulders and rumble strips SR 177, MP 161.2-162.7, $7,482,125

Total Funding Request: $20,408,810

Total HSIP Funding FY 2014-2026

$28,929,699 for 31 Projects in Pinal County

HSIP Applications Submitted May 2024

$20,408,810 for 10 Projects in Pinal County

$49,338,509 for 41 Projects



- Installation of a Pedestrian Hybrid Beacon on Cottonwood Lane at Kadota Avenue



- Traffic signal at the intersection of Arizona Boulevard (SR 87) and Ruins Drive



- Pinal County LED Stop Sign Installation, Various two-way stop-controlled intersections in Pinal County within the City of Casa Grande, City of Coolidge, Town of Eloy, and Gila River Indian Community



- Street Lighting on Apache Trail (Meridian to SR 88) & Superstition Blvd (Meridian to SR 88)



- Ironwood (Baseline to Elliot) Paved Shoulders & Edgeline Rumble Strips

Next Steps

- 30-Day Public Comment Period: January 16 – February 15, 2025
- SCMPO Executive Board Approval: March 2025
- Pinal County Board of Supervisors Resolution of Support: April 2025

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Questions?

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