

CITY OF OCALA

Safe Streets and Roads For All
Planning Studies



City Council Workshop

May 12, 2026

Reaching ZERO Together

PRESENTATION OUTLINE

1. Overview of Planning Studies
2. Crash Analysis Results and HIN
3. Research and Literature Review
4. Public Outreach
5. Local Road Safety Plan Emphasis Areas and Strategies
6. Speed Management/Traffic Calming Plan
7. Implementation and Reporting
8. Grant Opportunities
9. Request



CITY OF OCALA SAFE STREETS AND ROADS FOR ALL PLANNING STUDIES

- Builds upon Ocala Marion TPO's Commitment to Zero Safety Action Plan
- Focuses on local roadways within the City of Ocala limits

Development of a Local Road Safety Plan (LRSP) -

- development of high injury network
- assessment of current policies and standards
- coordination with the TPO and other location agencies
- creation of a prioritized list of issues and improvement

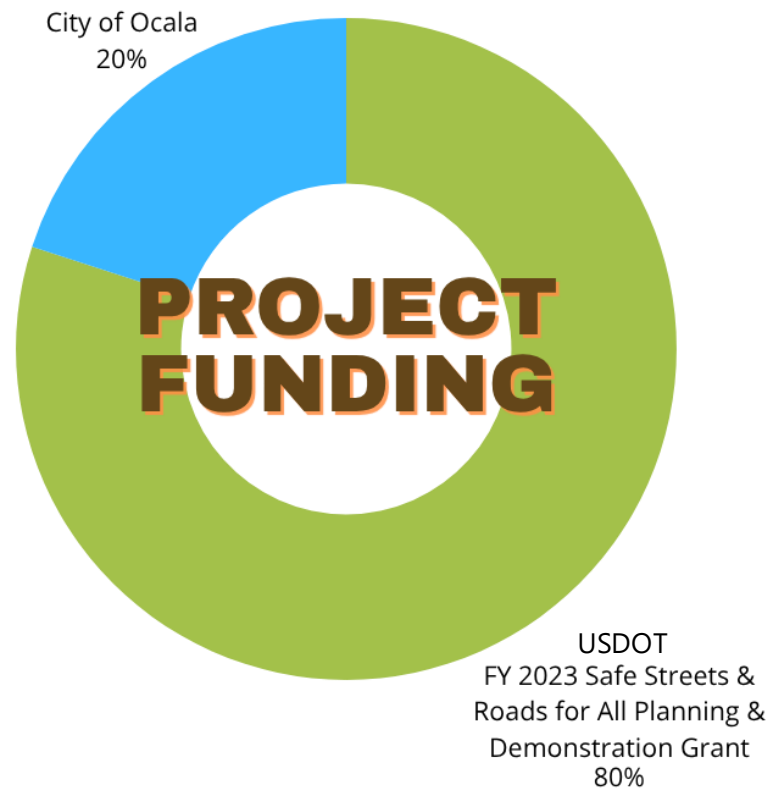


Development of a Citywide Speed Management Action Plan and Traffic Calming Policy -

- data collection and analysis
- development of appropriate speed limits/target speeds
- indication of appropriate countermeasures and strategies
- creation of a policy for speed management



FUNDING & SCOPE

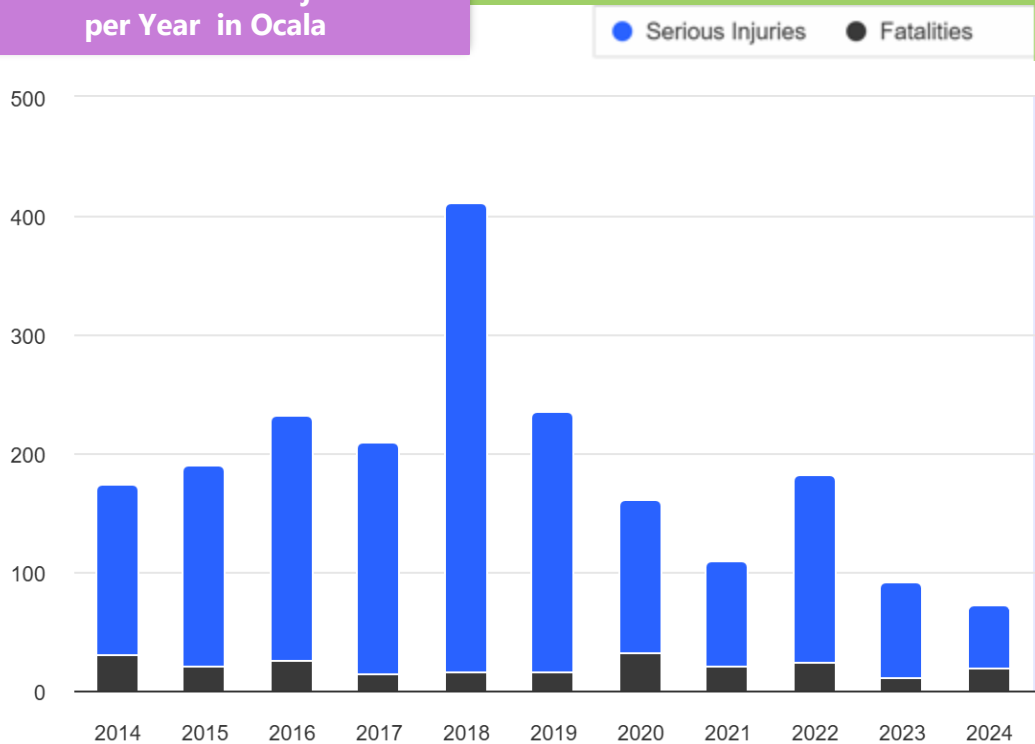


PROJECT TASKS

- Task A:** Project Administration
- Task B:** Crash Analysis
- Task C:** Research and Literature Review
- Task D:** Public Involvement
- Task E:** Local Road Safety Plan
- Task F:** Speed Management Plan & Traffic Calming Policy

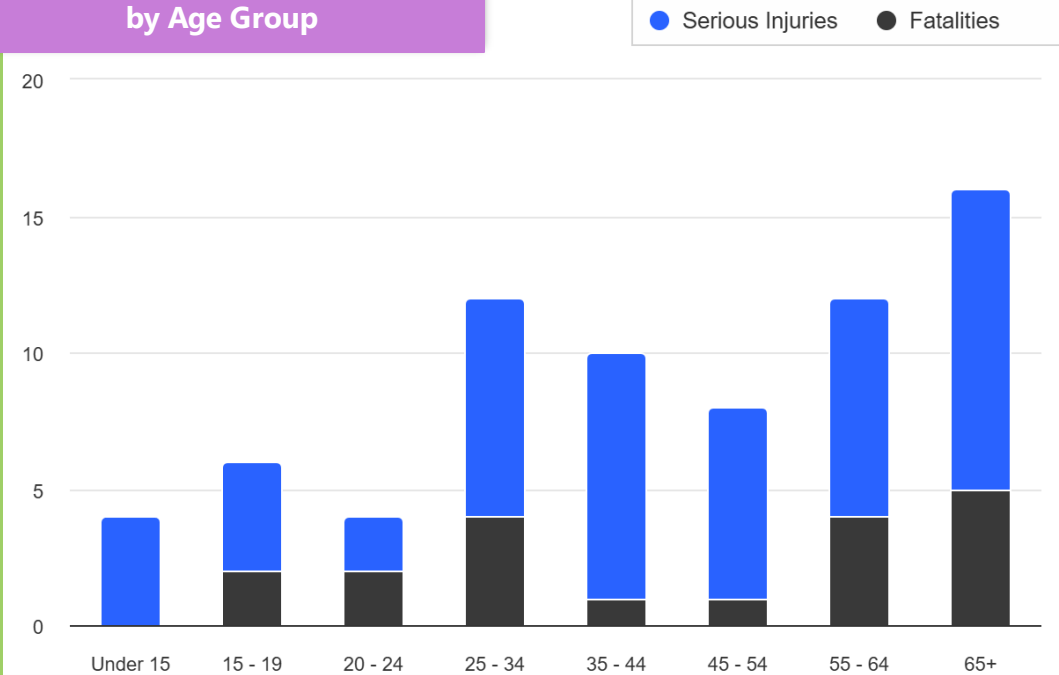
CITY OF OCALA TRENDS

Fatal and Serious Injuries per Year in Ocala



Source: Signal Four Analytics

2024 Fatal and Serious Injuries by Age Group

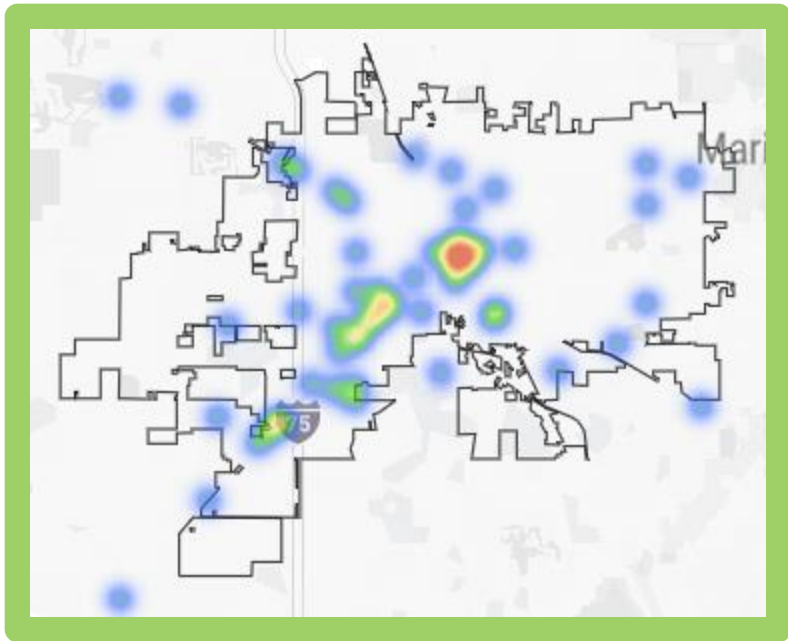


Source: Signal Four Analytics

In 2024 those **65+** are experiencing the **most fatal and serious injuries** on Ocala roadways

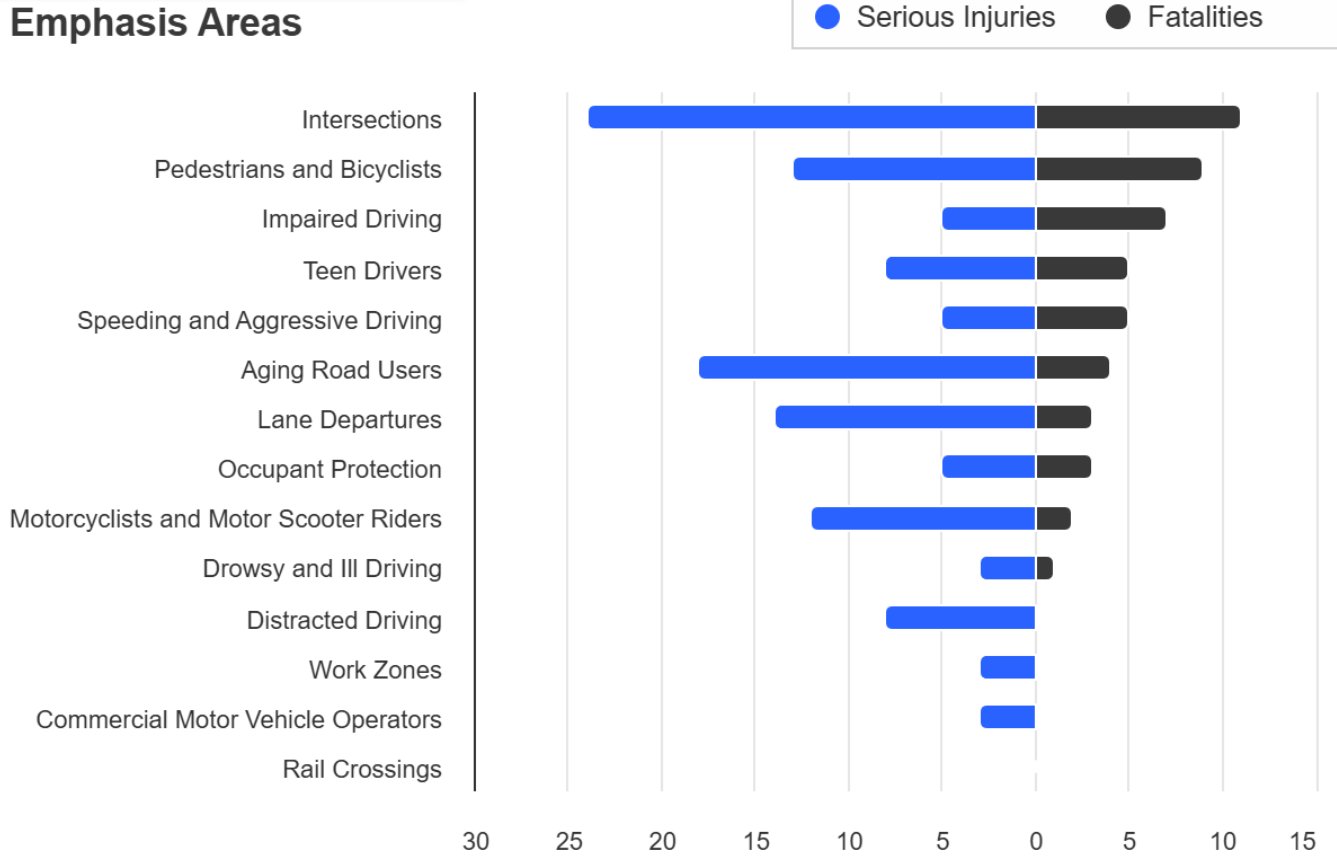


In 2024
**19 FATALITIES &
 53 SERIOUS INJURIES**
 Occurred on Ocala roadways



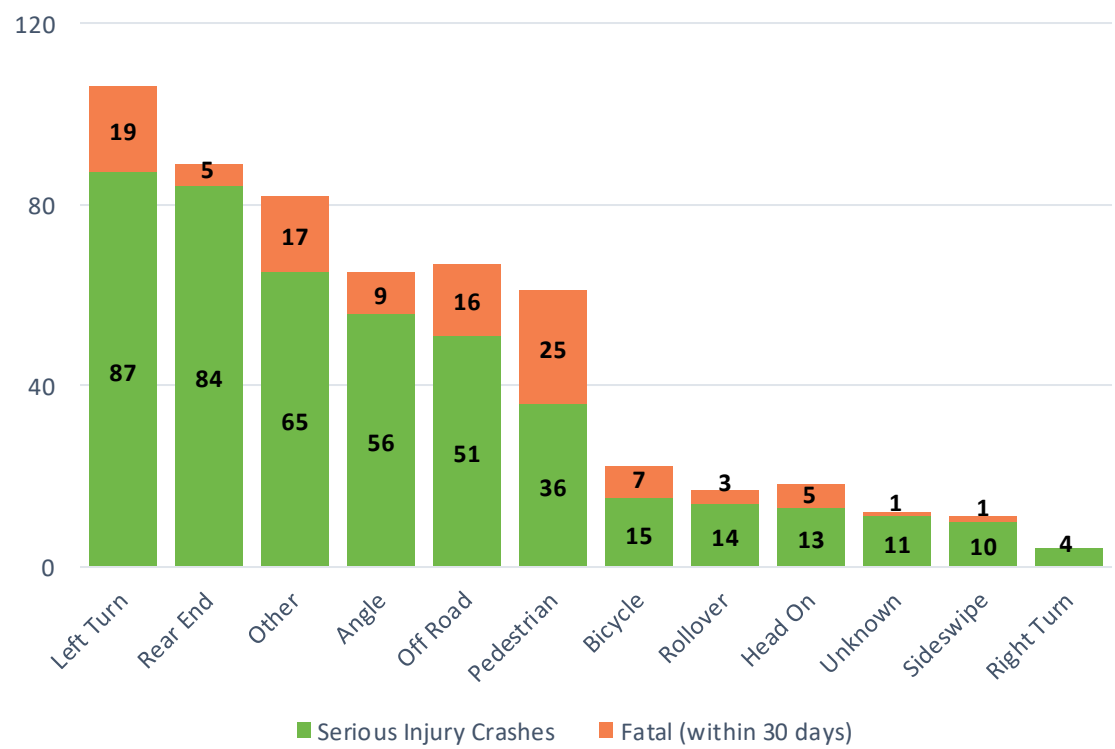
2024 Fatal and Serious Injuries
 by Emphasis Area

Emphasis Areas



TASK B: CRASH ANALYSIS

KSI Crashes by Crash Type



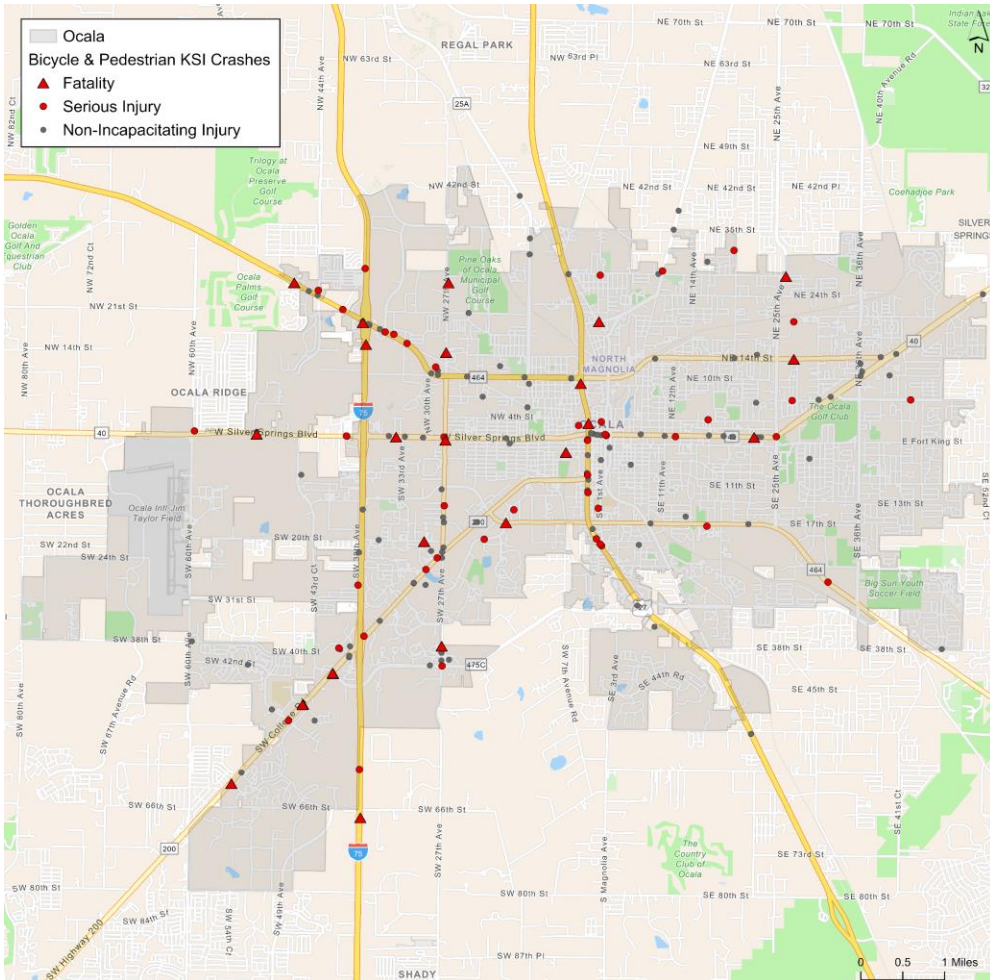
KSI Crashes by Lighting Condition

Lighting Condition	% Serious Injury Crashes	% Fatal Crashes	% of all KSI Crashes	% of all Non-KSI Crashes
Daylight	61.0%	45.4%	57.9%	76.6%
Dawn	1.1%	3.7%	1.6%	1.6%
Dusk	5.8%	4.6%	5.6%	3.2%
Dark - Lighted	19.7%	25.9%	20.9%	13.1%
Dark - Not Lighted	11.7%	19.4%	13.2%	5.1%
Dark - Unknown Lighting	0.7%	0.9%	0.7%	0.2%
Unknown	0.0%	0.0%	0.0%	0.1%

KSI = "killed or seriously injured"

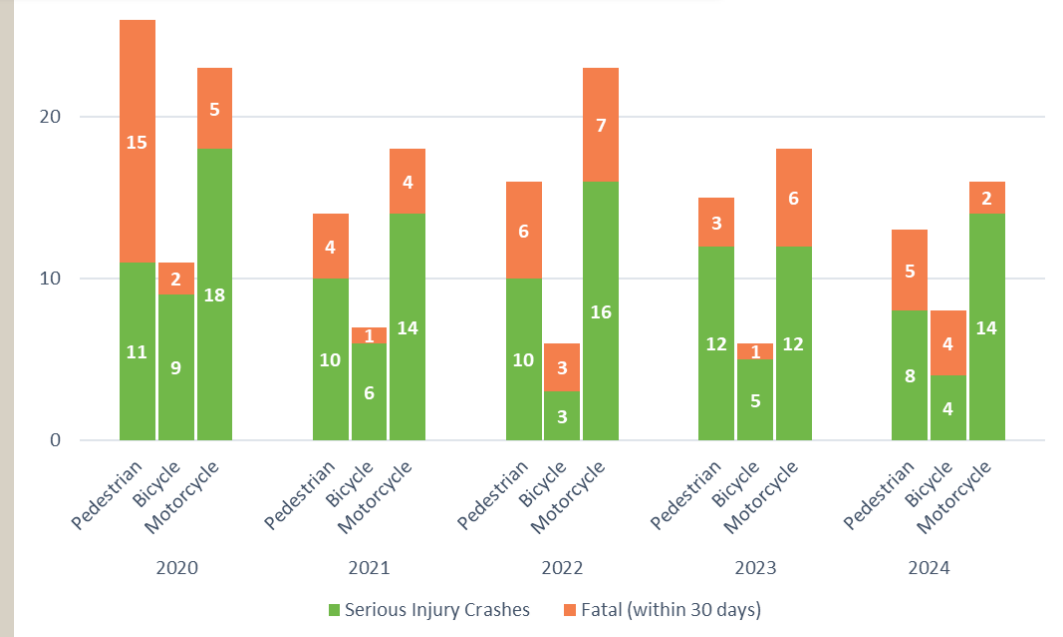
TASK B: CRASH ANALYSIS

Vulnerable Road Users



Vulnerable Road User Involved	Serious Injury Crashes		Fatal Crashes		KSI Crashes	
	Crashes	%	Crashes	%	Crashes	%
Pedestrian	51	33.6%	33	48.5%	84	38.2%
Bicycle	27	17.8%	11	16.2%	38	17.3%
Motorcycle	74	48.7%	24	35.3%	98	44.5%

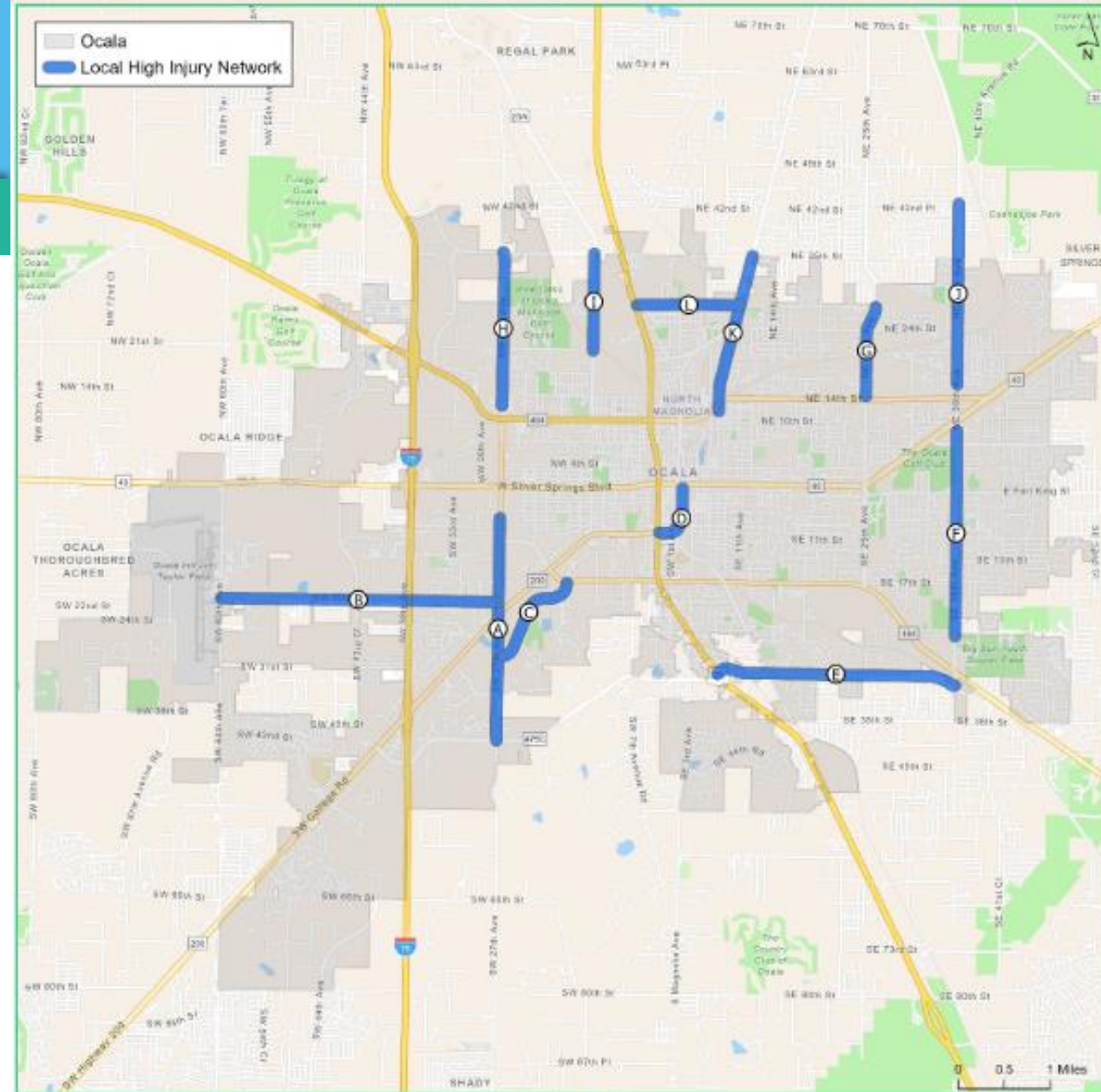
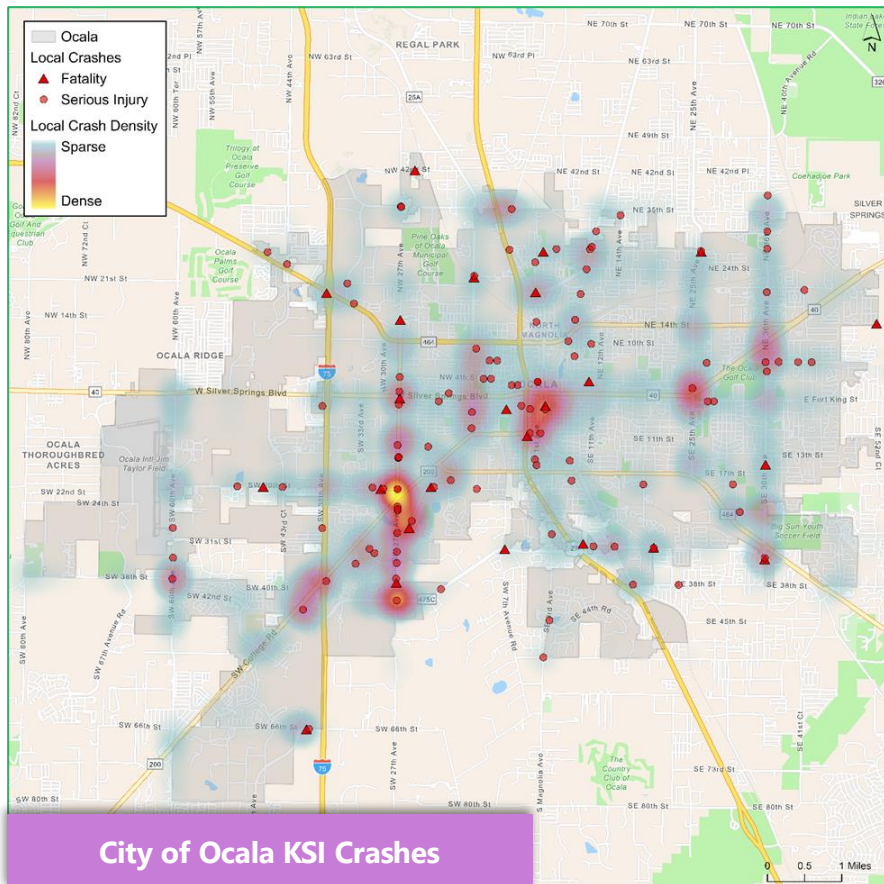
Pedestrian, Bicycle, and Motorcycle Involved KSI Crashes



KSI = "killed or seriously injured"

TASK B: CRASH ANALYSIS

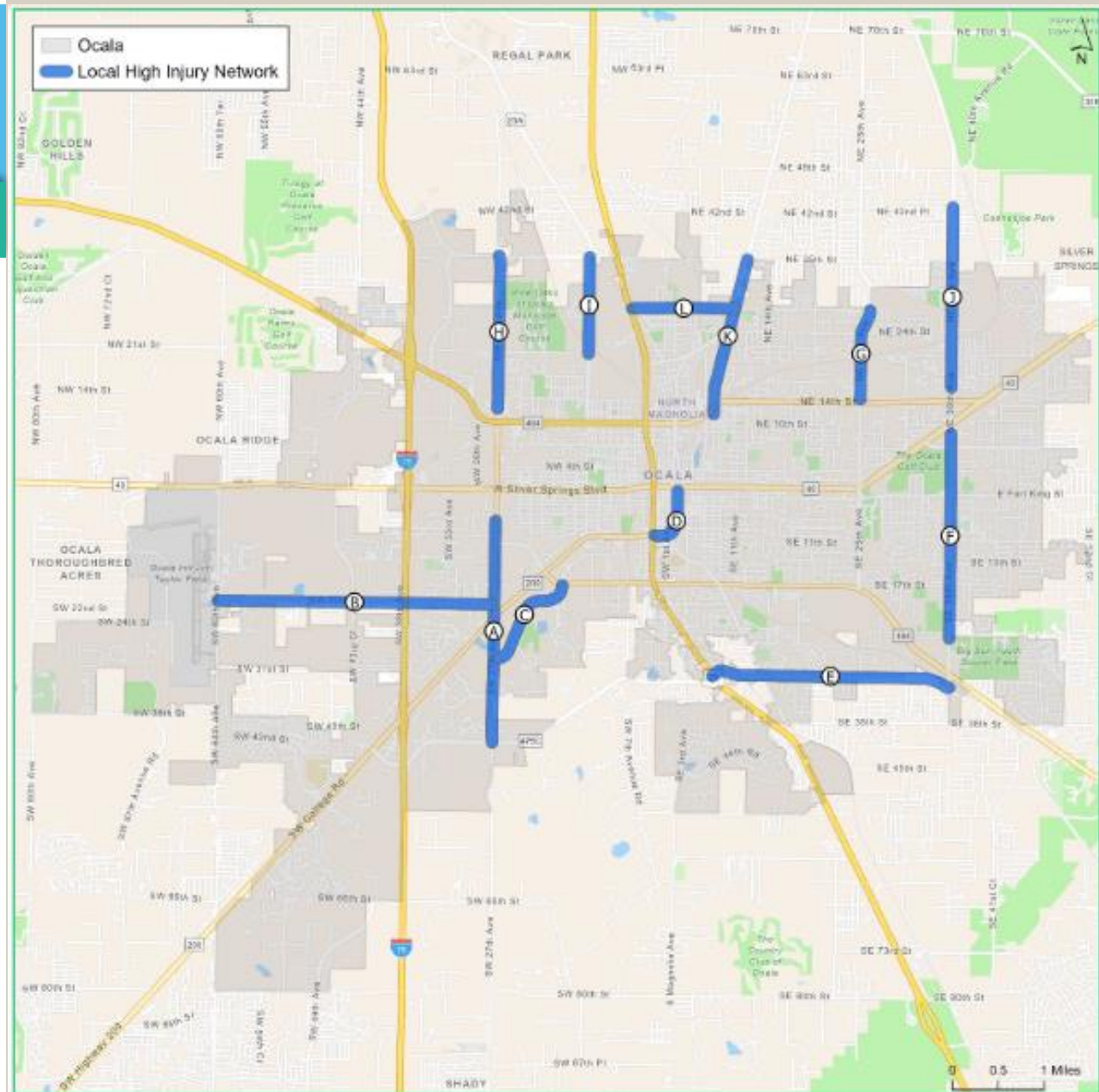
High Injury Network



TASK B: CRASH ANALYSIS

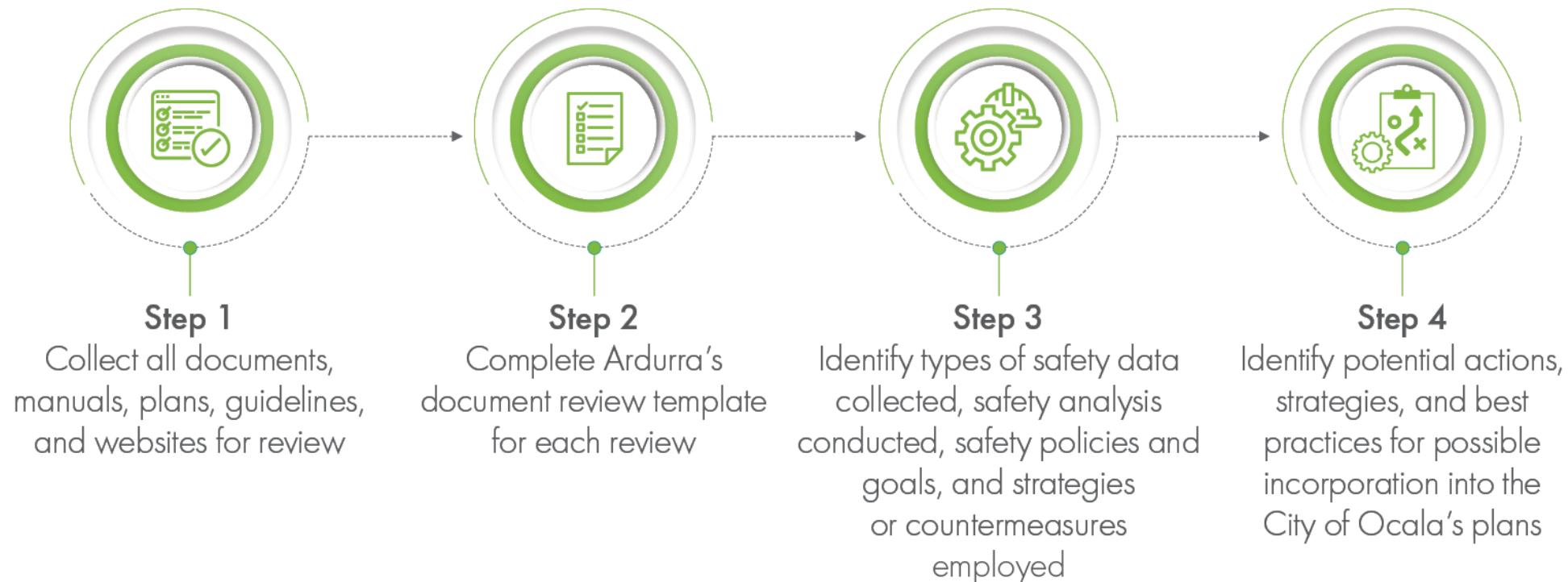
High Injury Network

ID	On Street	From/To Street	Jurisdiction	Length (Miles)	Non-KSI Crashes	Injury Crashes	KSI Crashes	Serious Injury Crashes	Fatal Crashes
A	SW 27 th Ave	SW 42 nd St to S of SR 40	City	2.416	509	174	13	12	1
B	SW 20 th St	SW 31 st Ave to W of SW 27 th Av	City	2.976	173	47	5	3	2
C	Easy St	E of SW 27 th Ave to S of SW 17 th St	City	1.174	166	69	5	3	2
D	SE 1 st Ave	SW 10 th St to S of E Silver Springs Blvd	City	0.664	114	29	4	3	1
E	SE 31 st St	E of US 301 to W of SR 464	City	2.631	82	27	4	2	2
F	SE 36 th Ave	S of SE 24 th St to NE 8 th pl	City	2.231	194	67	3	2	1
G	NE 25 th Ave	N of NE 14 th St to NE 28 th St	City	0.988	52	22	2	1	1
H	NE 27 th Ave	Old Blitchton Rd to NW 35 th St	City/County	1.668	30	16	3	2	1
I	NW MLK Jr. Ave	NW 21 st St to NW 35 th St	City/County	1.048	36	17	2	1	1
J	NE 36 th Ave	NE 17 th Pl to NE 42 nd Pl	City/County	1.962	73	25	3	3	0
K	NE 8 th / Jacksonville Rd	NE 14 th St to NE 35 th St	City/County	1.728	83	41	4	4	0
L	NE 28 th St	N Magnolia Ave to NE Jacksonville Rd	City/County	1.114	32	12	3	3	0



TASK C: RESEARCH AND LITERATURE REVIEW

Steps to conduct the Research and Literature Review:



TASK C: RESEARCH AND LITERATURE REVIEW

Review of Similar Action Plans

- City of Orlando Vision Zero Action Plan
- City of Tampa Vision Zero Action Plan
- Hillsborough County Vision Zero Action Plan
- City of Gainesville Vision Zero Action Plan

Review of Traffic Calming Guidelines

- City Speed Hump Guidelines
- ITE Traffic Calming Guidelines
- FHWA'S Traffic Calming ePrimer Website

Speed Management and Traffic Calming Policies in Florida

- City of Orlando's Steps of a Traffic Calming Study
- Seminole County's Traffic Calming Guidelines
- Hillsborough County's Traffic Calming Guidelines
- Hernando County's Traffic Calming Guidelines



TASK D: PUBLIC ENGAGEMENT

2 Stakeholder Advisory Group Meetings
1st hybrid (in-person and virtual), 2nd virtual

2 In-person Public Meetings

1 City Council Workshop

Project Webpage with Interactive Comment Map and Survey



OCALA Safe Streets & Roads For All Planning Studies Interactive Comment Map

Safety Concerns

- Driver Safety Concern or Idea
- Pedestrian Safety Concern or Idea
- Bicycle Safety Concern or Idea
- Accessibility/ADA Safety Concern or Idea
- General Safety Concern or Idea

Have you ever been involved in a traffic crash?

Yes

No

Has someone you know been seriously injured or killed in a traffic crash?

Yes

No

How safe do you feel using roadways within the City of Ocala? (Scale of 1 - 10, where 1 is "Not at All" and 10 is "Very Safe"):

...as a driver or passenger in an automobile?

N/A 1 2 3 4 5 6 7 8 9 10

...as a pedestrian?

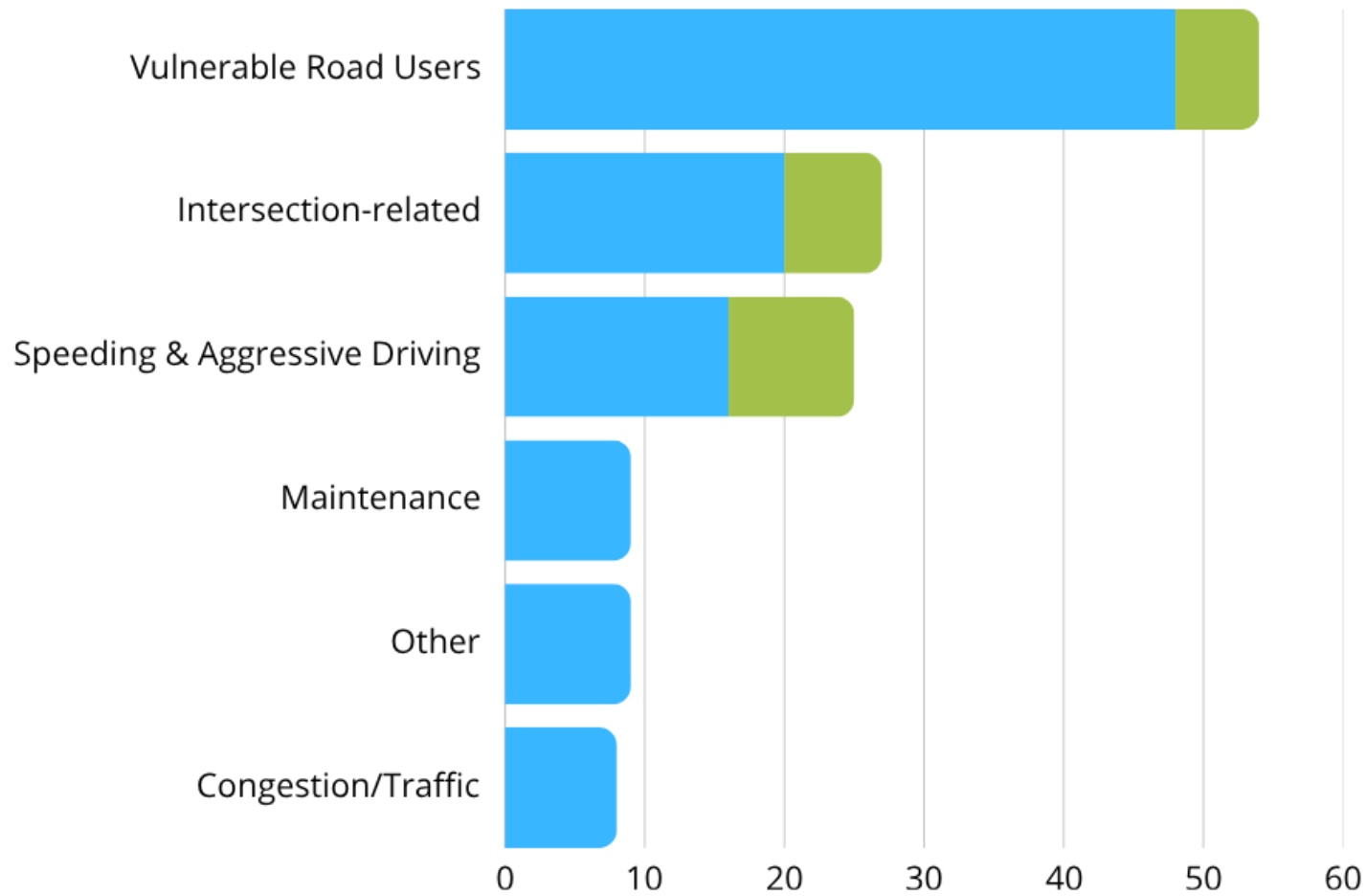
N/A 1 2 3 4 5 6 7 8 9 10



SURVEY COMMENTS

Applicable Emphasis Area

● Main Concern ● Secondary Concern



Number of Comments

TASK E: LOCAL ROAD SAFETY PLAN



Step 1: Identify Stakeholders



Step 2: Use Safety Data



Step 3: Choose Proven Solutions

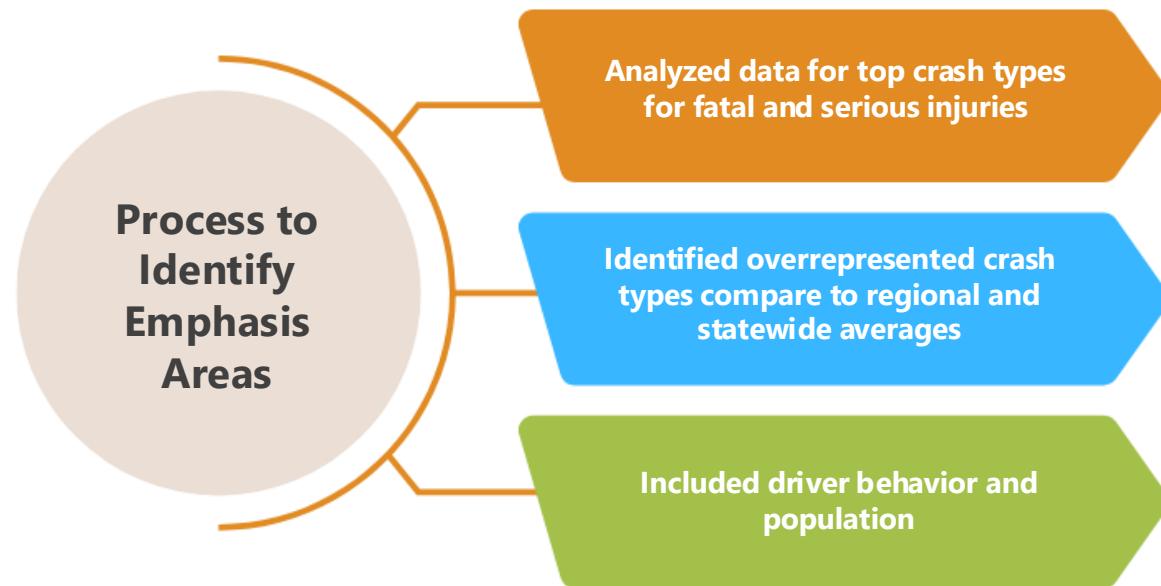


Step 4: Implement Solutions



TASK E: LOCAL ROAD SAFETY PLAN

Provides **Low-cost, high-impact** countermeasures with the greatest potential for **fatal and severe injury crash reduction**



EMPHASIS AREAS



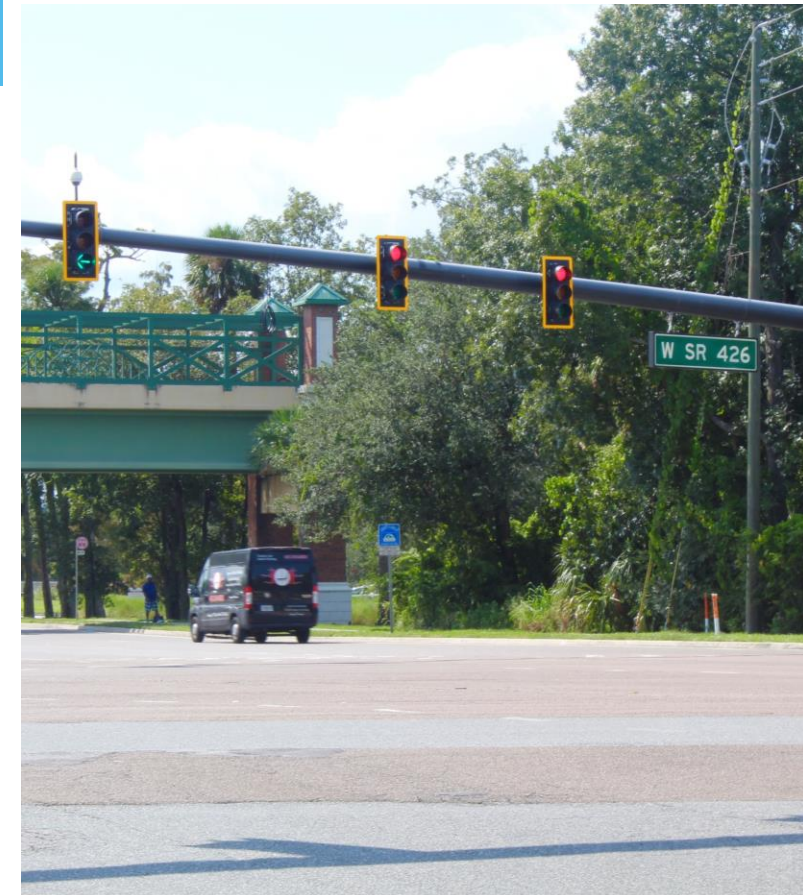
TASK E: LOCAL ROAD SAFETY PLAN

Countermeasures Toolbox – Intersection Crashes

- Left Turn is the #1 crash type for KSI crashes (19.1% of KSI crashes)
- Rear-end is the 2nd ranked KSI crash type
- Angle is the 4th ranked KSI crash type

Countermeasure	Application	Predominant Crash Type	Type (Enginee	Crash Reduction Factor	CMF ID
Flexible Retroreflective Signal Head Backplates	Signalized Intersection	All	Engineering	15%	<u>1410</u>
Increase All Red Clearance Intervals	Signalized Intersection	Rear-end	Engineering	20%	<u>4213</u>
Adjust Yellow Change Intervals	Signalized Intersection	Left Turn	Engineering	8-14%	FHWA Proven Safety Countermeasure
Protected Left Turn Phasing	Signalized Intersection	All	Engineering	43%	<u>10746</u>
Install 4-section Flashing Yellow Arrow (FYA) Signal Heads	Signalized Intersection	Left Turn	Engineering	16%	<u>7696</u>
Positively Offset Left-turn Lanes	Intersection	All	Engineering	26%	<u>276</u>
Remove Obstructions Impeding Sight Distance	Intersection	All	Engineering	48%	<u>307</u>
Upgrade/Add Intersection Lighting	Intersection	All	Engineering	42%	<u>436</u>
Convert Intersection to a Roundabout	Unsignalized Intersection	All	Engineering	82%	<u>211</u>
	Signalized Intersection	All	Engineering	78%	<u>226</u>

Source: <https://cmfclearinghouse.fhwa.dot.gov>



TASK E: LOCAL ROAD SAFETY PLAN

Countermeasures Toolbox – Vulnerable Road Users

- Pedestrians - Top crash type for fatalities – (23.1% of fatalities)
- Pedestrian, bicycle, and motorcycle crashes all overrepresented compared to regional and statewide KSI crash percentages

Countermeasure	Application	Predominant Crash Type	Type (Engineering/Non-Engineering)	Crash Reduction Factor	CMF ID
Accessible Pedestrian Signal Upgrades	Signalized Intersection	Pedestrian	Engineering	-	-
Install High-Visibility Crosswalk	Intersection	Pedestrian	Engineering	40%	4123
Leading Pedestrian Interval	Signalized Intersection	Pedestrian	Engineering	13%	9918
Upgrade/Add Crosswalk Lighting	Intersection/Mid-block	Pedestrian	Engineering	42%	436
Pedestrian Refuge Islands	Intersection	Pedestrian	Engineering	56%	175
Update/Upgrade School Zone treatments	Intersection, Segment	Pedestrian	Engineering	-	-
Restrict Right Turn on Red Movements	Signalized Intersection	Pedestrian, Bicycle	Engineering	-	-
Pavement-change warning signs	Segment	Motorcycle	Engineering	-	-
Host Outreach and Encouragement Events like Walk and Roll to School Days	Intersection, Segment	Pedestrian, Bicycle	Non-Engineering		
Conduct High Visibility Crosswalk Enforcement	Intersection, Segment	Pedestrian	Non-Engineering		



Source: <https://cmfclearinghouse.fhwa.dot.gov>

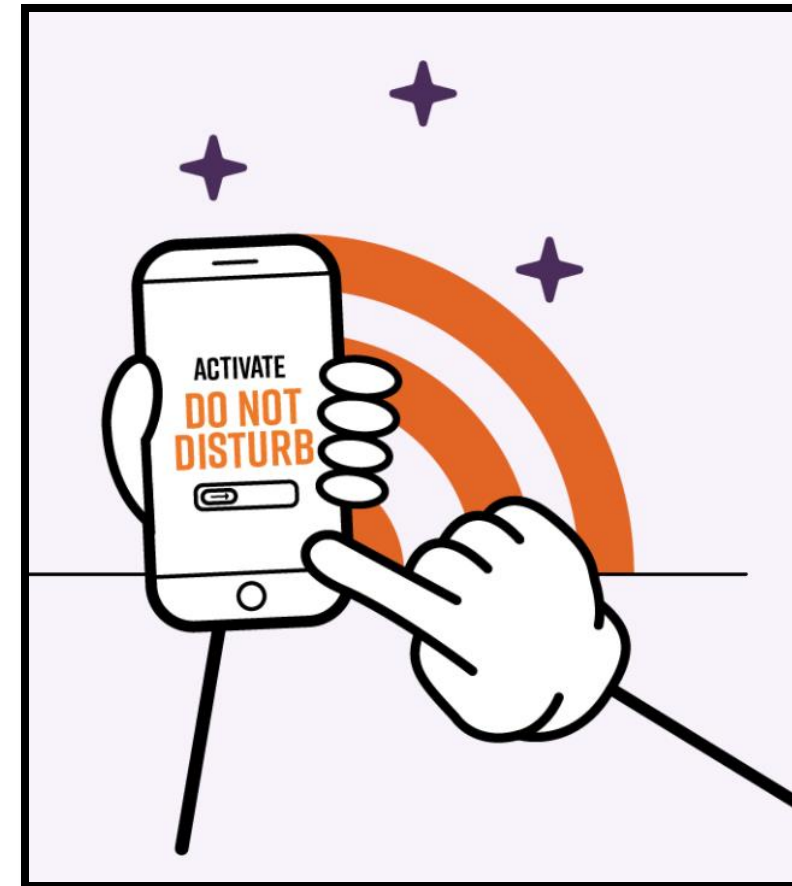


TASK E: LOCAL ROAD SAFETY PLAN

Countermeasures Toolbox – Distracted Driving

- A factor in 9.2% of all KSI crashes
- Overrepresented compared to regional KSI crashes

Countermeasure	Application	Predominant Crash Type	Type (Engineering/Non-Engineering)
Graduated Driver Licensing (GDL) Passenger Limits for Young Drivers	Everywhere	All	Non-Engineering
Conduct Age-specific Distracted Driving Campaigns	Everywhere	All	Non-Engineering
Encourage Participation in "Put the Phone Away or Pay" National High-visibility Enforcement Campaign	Everywhere	All	Non-Engineering
Install rumble strips and rumble striping	Segment	Road Departures	Engineering



TASK E: LOCAL ROAD SAFETY PLAN

Countermeasures Toolbox – Aging Road Users

- Involved in 26.4% of KSI crashes
- Overrepresented compared to statewide KSI crashes
- 65+ Population expected to increase through year 2035 (BEBR projections)
- Ocala has been an AARP Age-Friendly Community since 2019



Countermeasure	Application	Type (Engineering/Non-Engineering)	Crash Reduction Factor	CMF ID
Legislation and Licensing - License Screening and Testing - Licensing Agency Referrals - License Restrictions - Medical Review Protocols - In-Person Renewal and Vision Test	Everywhere	Non-Engineering	-	-
Formal Courses for Older Drivers (classroom + on-road feedback)	Everywhere	Non-Engineering	-	-
Encourage Participation in CarFit Educational Program	Everywhere	Non-Engineering	-	-
Improved transit services (increased routes, reduced headways, increased amenities (shelters, benches)	Intersection, Segment	Non-Engineering	-	-
Limit Turning Movement by Raised Grassy Medians	Intersection	Engineering	-	-
Oversized Glass Beads/Raised Pavement Markings (Visibility Improvements)	Intersection, Segment	Engineering	-	-
Delineation of Median Noses using Retroreflective Treatments	Intersection	Engineering	-	-
Pedestrian-scaled Lighting	Segment	Engineering	-	-
Right-Turn Channelization Design	Intersection	Engineering	38%	11152
Advance notification through advance street name signs, advance warning signs	Intersection, Segment	Engineering	-	-
Reflective border signal head backplates	Intersection	Engineering	-	-
Longer Walk Times	Intersection, mid-block crosswalk	Engineering	-	-



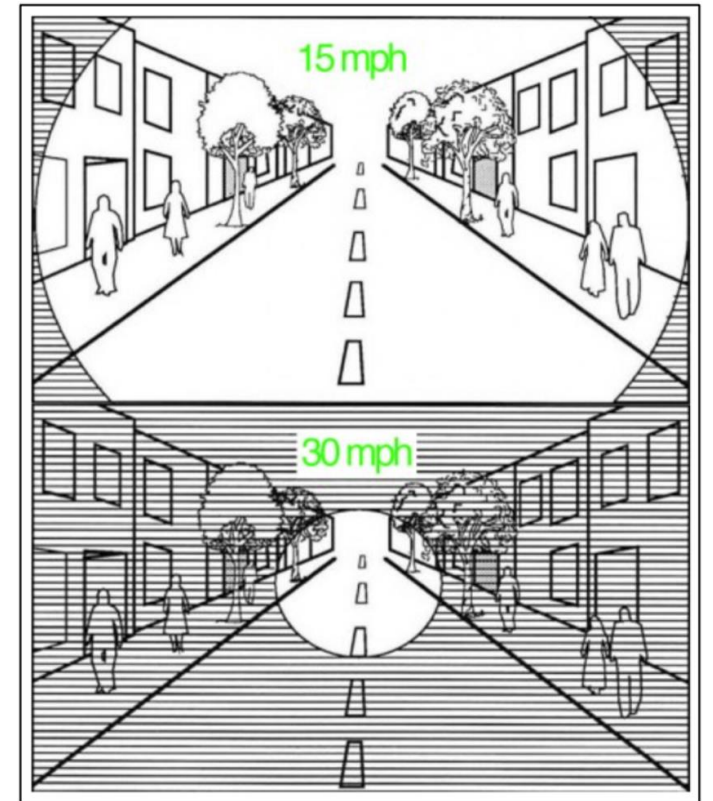
Source: <https://cmfclearinghouse.fhwa.dot.gov>



TASK E: LOCAL ROAD SAFETY PLAN

Countermeasures Toolbox – Speeding & Aggressive Driving

- A factor in 8.2% of KSI crashes
- Overrepresented compared to regional KSI crashes
- Safe Speeds is an element of the Safe System Approach
- Development of a Speed Management Plan is a focus of the SS4A grant

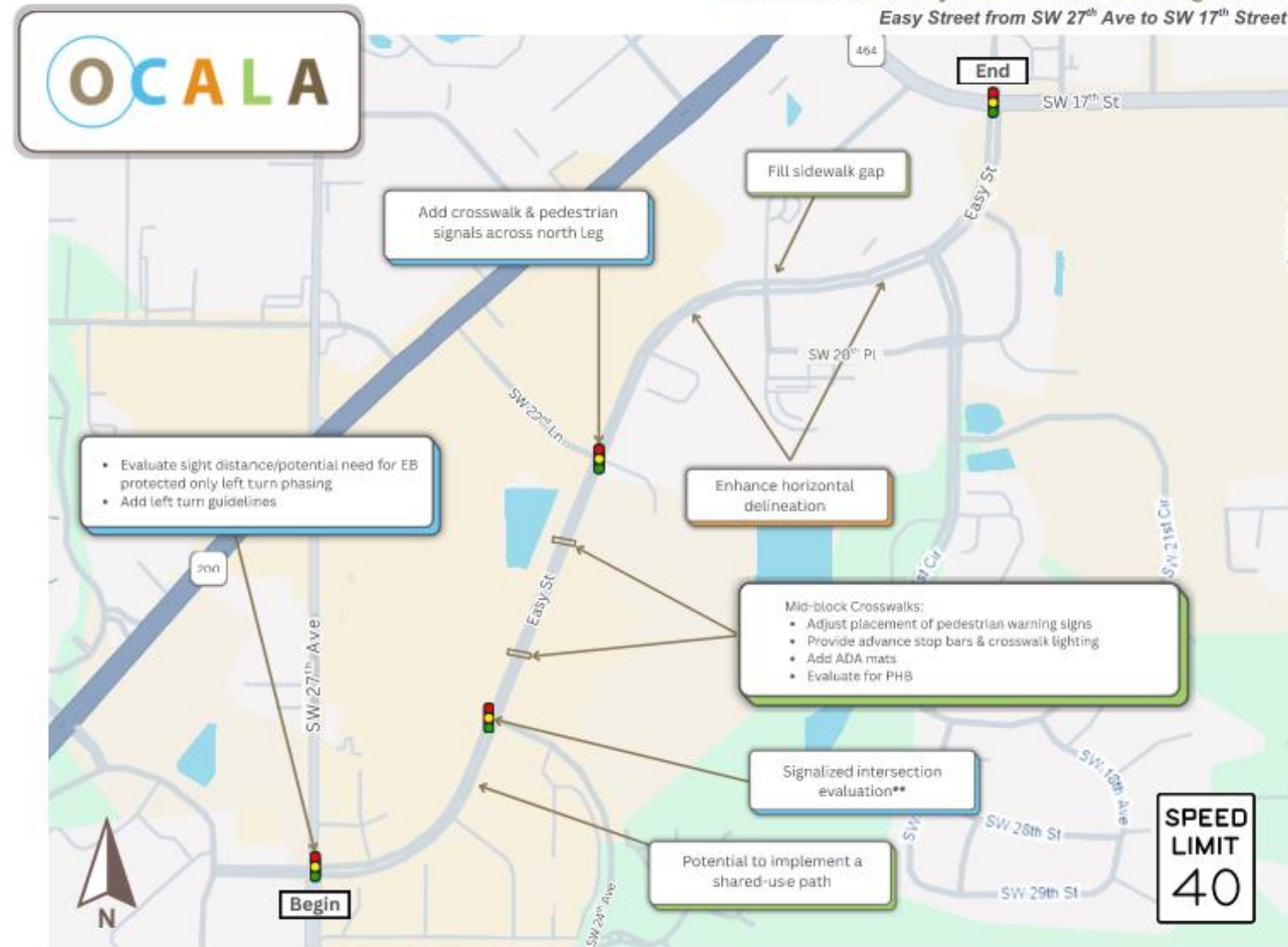


Source: America Walks



TASK E: LOCAL ROAD SAFETY PLAN

Countermeasure Exhibits

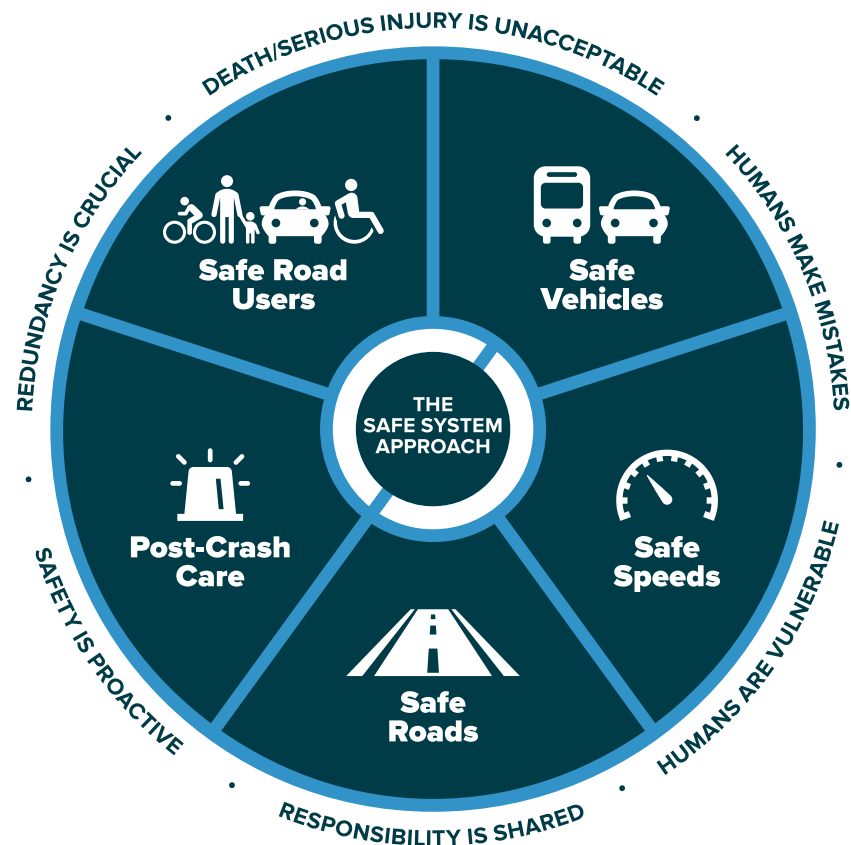


** For all signalized intersections:

Add flexible reflective border signal head backplates; provide/enhance crosswalk lighting; verify yellow clearance timing; evaluate feasibility of FYA signal heads; ADA - pushbutton reach, orientation, & separation (APS); ADA mats



TASK F: SPEED MANAGEMENT/TRAFFIC CALMING PLAN



A Safe System Approach strives to manage speeds so that impact forces experienced by road users are not beyond their physical tolerances

5-Stage Framework

1. Establish a vision and building consensus for speed management
2. Collect and analyze speed and safety data
3. Prioritize locations for speed management proactively
4. Select speed management countermeasures
5. Conduct ongoing monitoring, evaluation, and adjustment

Source: FHWA Safe System Approach for Speed Management



TASK F: SPEED MANAGEMENT/TRAFFIC CALMING PLAN

A Safe System Approach strives to manage speeds so that impact forces experienced by road users are not beyond their physical tolerances

Current Efforts and Collaboration

- Speed Trailers – City of Ocala, Ocala PD
- Speed Campaigns – Ocala PD
- Speed Studies – City of Ocala
- Targeted Enforcement – Ocala PD
- Operation Southern Slowdown – Ocala PD
- Drive-Cams – City of Ocala
- Education through TIP cards – Ocala PD
- Speed Hump Program – City of Ocala



TASK F: SPEED MANAGEMENT/ TRAFFIC CALMING PLAN

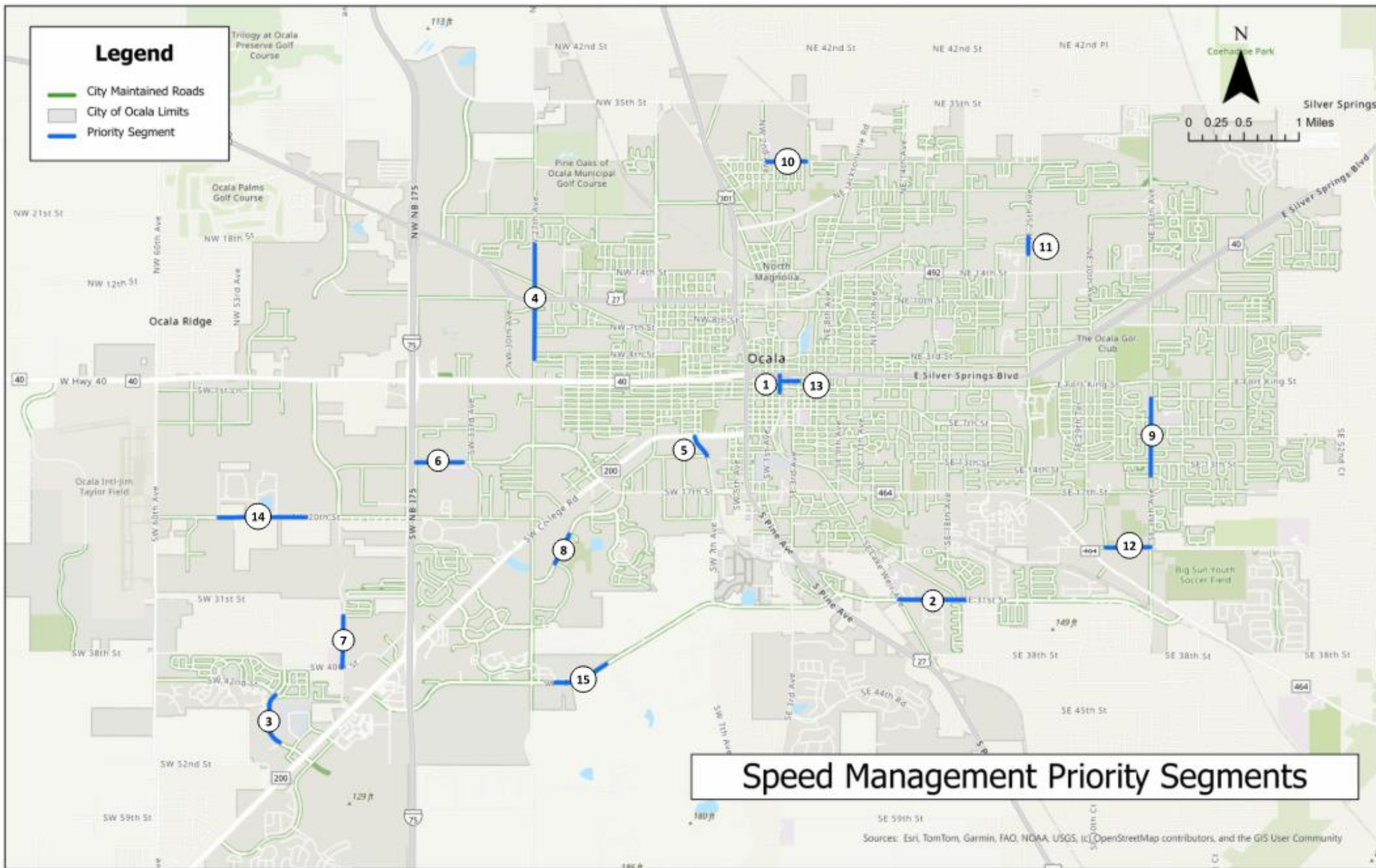
Collect and analyze speed and safety data

DATA SOURCES

- ▶ Crashes with speeding as a contributing factor
- ▶ Locations of speeding complaints
- ▶ UrbanSDK speed data (differential between 85th percentile speed and posted speed)
- ▶ Locations where speed humps have been installed

ADDITIONAL CONSIDERATIONS - PRIORITIES

- ▶ High Crash Severity
- ▶ Safety Near Schools
- ▶ Pedestrians in Downtown



TASK F: SPEED MANAGEMENT/TRAFFIC CALMING PLAN

Speed hump



Traffic circle

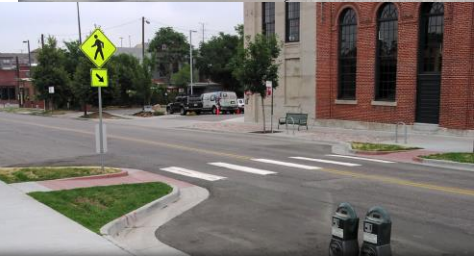


Raised crosswalk



roundabout

curb extension (bulb-out)



median island



chicane

Select Speed Management Countermeasures



TASK F: SPEED MANAGEMENT/TRAFFIC CALMING PLAN

Roadway Type 2-Lane Undivided, C3C/C3R
Target Speed 30-35 mph

High-Priority Segment		Applicable Speed Management Strategies																		
		FDM Strategies											Additional ITE / FHWA e-Primer Strategies				Other Strategies (Beacons/Signals)			
Segment	Limits	Roundabout	On-Street Parking	Chicane	Lane Narrowing	Horizontal Deflection	Street Trees	Speed Tables	Speed Feedback Signs	Bulb-outs	RRFBs	PHBs	Speed Pvmt Markings	Choker	Median Island	Traffic Circle/Mini-Roundabout	Speed Hump/Speed Cushion	School Zone Upgrades	Rest in Red	Green Wave
Segment 5: SW 7th Rd	SR 200 to SW 12th St			X		X	X	X	X		X		X	X		X				
Segment 6: SW 13th St	SW 37th Ave to College Park School			X		X	E	X	X				X	X	E		X	X		
Segment 7: SW 43rd Ct	SW 40th St to SW 33rd St			X		X	E	X	X								X	X		
Segment 10: NW 28th St	NW 2nd Ave to NE 4th Ct	X				E		X			X							X		
Segment 12: SE 24th St	SE 32nd Ave to SE 36th St			X		X	X	X	X		X		X							

Key:

X – Potential strategy for this segment

X – Recommended strategy for this segment if justified and/or feasible

E – Existing strategy for this segment



TASK F: SPEED MANAGEMENT/ TRAFFIC CALMING PLAN

Traffic Calming

- Improves the quality of life for neighborhood residents
- Promotes safer conditions for people walking and biking, including school children walking to/from bus stops and schools

Purpose of Ocala's Traffic Calming Policy

- To provide an appropriate and consistent procedure for addressing traffic calming requests from residents and HOAs

Traffic Calming Application

- Accessible to residents on the City's website



Traffic Calming Request Application Form

City of Ocala
Attn: City Engineer's Office
1805 NE 30th Ave. Building 300
Ocala, FL 34470

Date of Application Received: _____
Received By: _____

Primary Applicant Contact Information

Each request must provide a contact person who lives on the requested street within the study boundary. The contact person will receive all correspondence and be responsible for gathering evidence of support when requested.

Name _____ Email Address _____ Phone Number _____
Street Address _____ Zip Code _____

Specify the Location and Concerns

Please provide the name of the street to be considered (requested street). Indicate the boundaries of the street segment by cross street (from and to). The City of Ocala will evaluate the need for traffic calming on a segment-by-segment basis; a separate application must be submitted for any other adjacent street segments.

_____ from _____ to _____
Your Street Cross Street Cross Street

The City of Ocala Traffic Calming Program addresses cut-through traffic and speeding on neighborhood streets. Feel free to provide more detailed information about concerns on your street:

Neighborhood Petition

To be considered for traffic calming, you must use the petition form to obtain signatures from sixty-seven percent (67%) or more of the residents and/or business owners located on the section of roadway mentioned above. One signature is allowed per address.

Signatures are required as part of the application process to ensure community support before the planning process begins.

I agree to be the contact person for the above request.

Signature of Applicant: _____ Date: _____

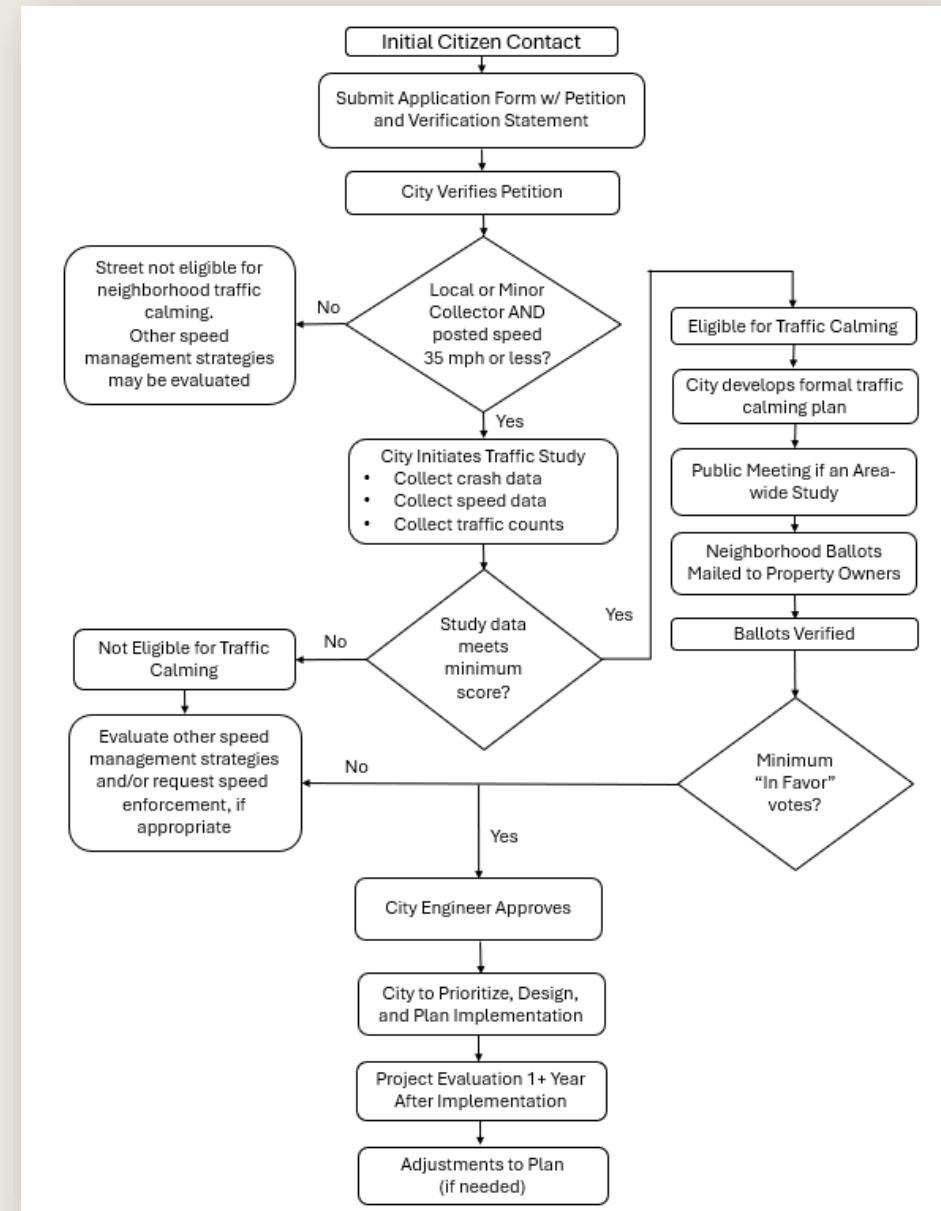
TASK F: SPEED MANAGEMENT/ TRAFFIC CALMING PLAN

The Application

- Requires a petition completed by residents and/or business owners requesting traffic calming
- Includes eligibility requirements
- Provides a flowchart of the process

The Policy Outlines

- Components of the traffic study
- Development of a formal traffic calming plan
- Steps for final approval
 - Property Owners (ballot vote showing majority in favor)
 - City Engineer approval



PLANNING STUDIES IMPLEMENTATION & REPORTING



Transparency with Public

- Planning Studies will be posted on the City website
- Progress toward meeting goals will be reported on the City website annually



Evaluation and Reporting

- Annual goals toward low-cost systemic safety improvement programs
- Annual goals toward improvements on the HIN
- Progress toward other areas of concern
- Progress toward outreach and education goals
- **Progress toward fatal and serious injury (KSI) crash reduction toward the 2045 Zero Goal**

EXAMPLE PERFORMANCE MEASURES



or % of signalized intersection outfitted with retroreflective border signal head backplates



miles of pavement markings re-applied on roadways



of HIN projects or safety countermeasures completed



of grant applications submitted/award



safety outreach campaigns and events conducted and/or attended



Reduction in the # of transportation related fatalities and serious injuries

GRANT OPPORTUNITIES

SS4A Implementation Grants (USDOT)

- Requires Comprehensive Safety Action Plan
- May 2026 NOFO application

School (SRTS) Program

- Safe Routes to School Federal funding administered through FDOT District
- City application submitted for Howard Middle School

Highway Safety Improvement Program (HSIP)

- Federal funding administered through FDOT District

FDOT State Safety Office Subgrants

- National Highway Traffic Safety Administration (NHTSA) funding administered through FDOT District



GRANT OPPORTUNITIES

Ardurra Grants Team

- \$11.02M SS4A Implementation Grant awarded in 2024 for the City of Vacaville, CA
- Helped clients secure and manage more than \$30B in public funding over the past decade.

2026 SS4A Implementation Grant (USDOT) – May 26 deadline

- SW 27th Avenue Safety Improvements
- Citywide Traffic Safety Enhancements (Signal Head Backplates)
- School Zone Safety Improvements (Speed Feedback Signs)
- Traffic Safety Campaigns
- Ocala Rapid Response Aerial Pilot (Drones) – Demonstration (OPD)



REQUEST

Adoption of Safe Streets and Roads for All (SS4A) Planning Studies

- Local Road Safety Plan
- Speed Management/Traffic Calming Plan

Adoption required by agreement and for implementation grant eligibility

May 19th City Council Meeting

