



# Local Road Safety/Action Plan Update

Stakeholder Meeting #3

June 27, 2024



# Agenda

- Countermeasures & Safety Projects
- Discussion/Questions
- Next Steps



# Countermeasures- Signalized Intersection Improvements



SI03- Improve signal timings (coordination, phases, red, yellow, or operation)



SI09- Install flashing beacons as advance warning (S.I.)



SI18PB- Install pedestrian countdown signal heads



SI21PB- Install advance stop bar before crosswalk (Bicycle Box)



SI22PB- Modify signal phasing to implement a Leading Pedestrian Interval (LPI)

# Countermeasures- Non-Signalized Intersections



NS01NT- Add intersection lighting (NS.I)



NS08- Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs



NS09- Upgrade intersection pavement markings (NS.I.)



NS11- Install flashing beacons as advance warning (NS.I)



NS16- Install raised median on approaches (NS.I.)



NS21PB- Install raised medians/refuge islands (NS.I.)

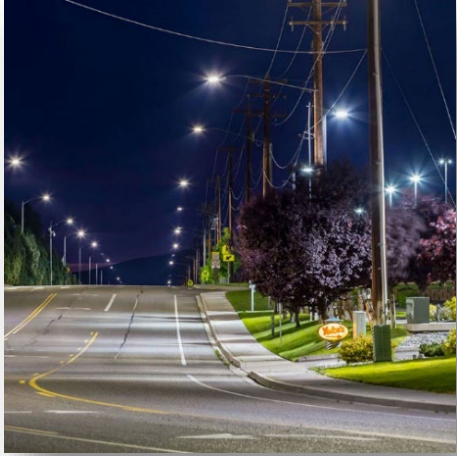


NS23PB- Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)

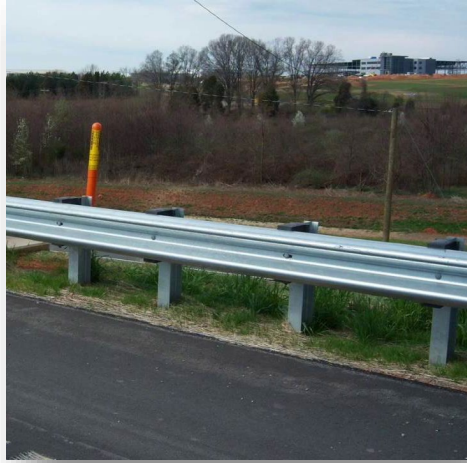


NS24PB- Install Rectangular Rapid Flashing Beacon (RRFB)

# Countermeasures- Roadway Segment Improvements



R01NT- Add segment lighting



R04- Install Guardrail



R08- Install raised median



R22- Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)



R23- Install chevron signs on horizontal curves



R24- Install curve advance warning signs



R25- Install curve advance warning signs (flashing beacon)



R26- Install dynamic/variable speed warning signs

# Countermeasures- Roadway Segment Improvements



R28- Install edge-lines and centerlines



R30- Install centerline rumble strips/strips



R34PB- Install Separated Bike Lanes



R35PB- Install sidewalk/pathway (to avoid walking along roadway)



R36PB- Install/upgrade pedestrian crossing (with enhanced safety features)



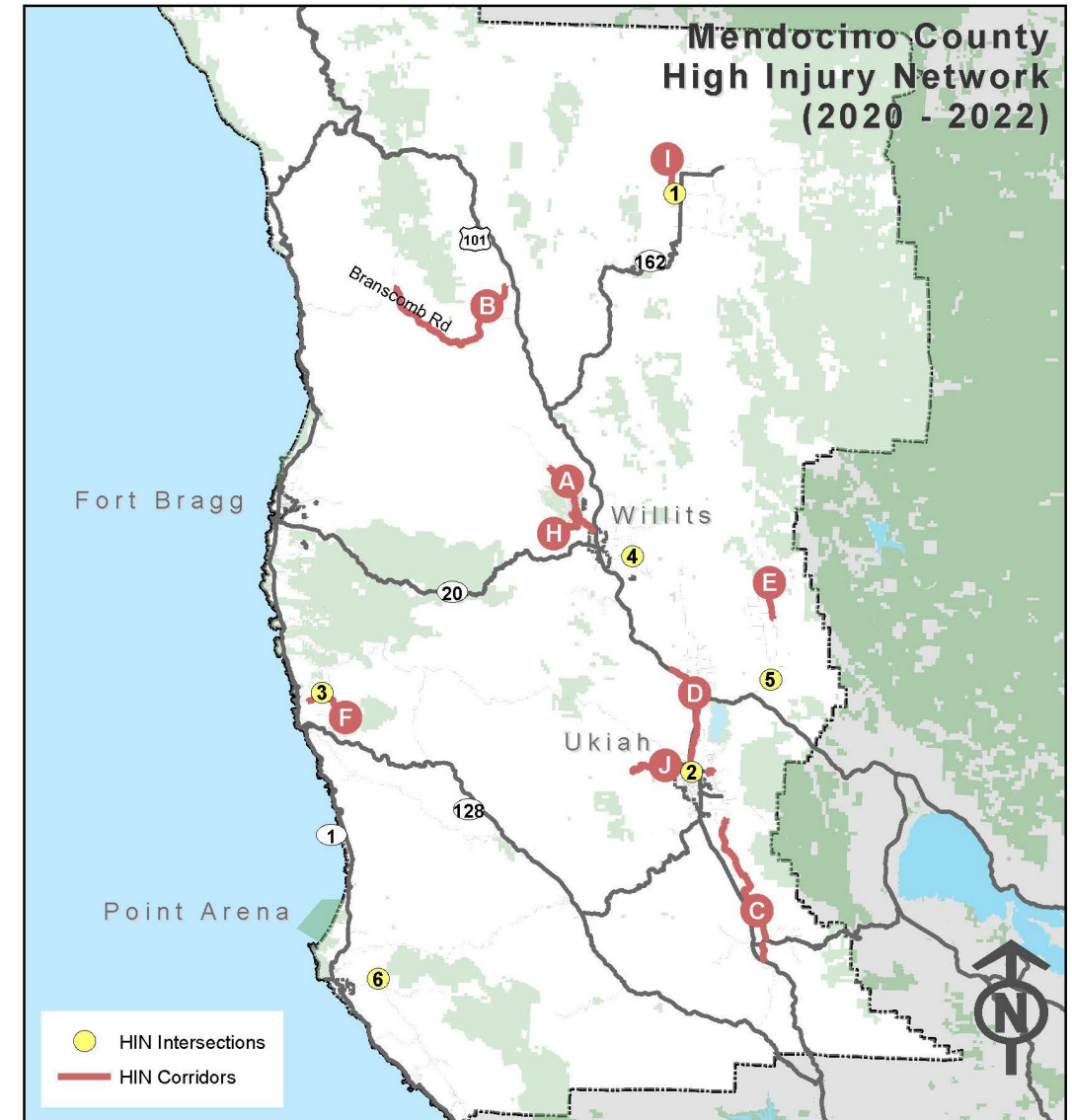
R38PB- Install Rectangular Rapid Flashing Beacon (RRFB)

# High Injury Network- Mendocino County

Mendocino County - Unincorporated (2020-2022)

ID	Intersections	Total Injury Collisions	Killed	Severe Injury	Pedestrian/Bicycle	EPDO Score
1	Foothill Blvd & Henderson Ln	4	0	1	0	193
2	N State St & Empire Dr /Ford Rd	3	0	1	0	177
3	Albion Ridge Rd & D Rd	1	0	1	0	165
4	E Hill Rd & Eastside Rd	1	0	1	1	165
5	Eastside Potter Valley Rd & E Rd	1	0	1	0	165
6	Riverside Dr/Eureka Hill Rd & Buckridge Rd	1	0	1	0	165

ID	Corridors	Total Injury Collisions	Killed	Severe Injury	Pedestrian /Bicycle	Length (miles)	EPDO Score
A	Sherwood Rd: Poppy Dr to Willits City limits	15	3	4	0	3.8	1228
B	Branscomb Rd: Bauer Rd to Wilderness Lodge Rd	13	0	4	0	14.6	749
C	Old River Rd: Hwy 101 to Ruddick Cunningham Rd	8	2	2	0	12.7	704
D	N State St: Hwy 101 to Orr Springs Rd	26	0	3	0	7.8	678
E	Eel River Rd: Gibson Ln to Main St	4	1	3	0	1.0	660
F	Albion Ridge Rd: Hwy 1 to Middle Ridge Rd	4	1	1	0	4.2	347
G	Vichy Springs Rd: Oak Manor Dr to Redmeyer Rd	3	0	2	0	1.0	341
H	Primrose Dr: Sherwood Rd to Clover Rd	3	0	2	0	1.1	341
I	Crawford Rd: Biggar Ln to Foothill Blvd	2	0	2	0	1.0	330
J	Low Gap Rd: Ukiah City limits to Pine Ridge Rd	6	0	1	1	3.7	215



Note: Green indicates locations identified as part of High Injury Network (2015-2019)

# Safety Projects- Mendocino County

## Signalized Intersections

Location	Countermeasures		
<b>Project 1: Improve Safety at Signalized Intersections.</b>			
N State St & Empire Dr/Ford Rd	SI03	SI09	

**SI03** – Improve signal timing (co-ordination, phases, red, yellow, or operation)  
**SI09**- Install flashing beacons as advance warning (S.I.)

## Non- Signalized Intersections

Location	Countermeasures		
<b>Project 2: Improve Safety at Non-Signalized Intersections.</b>			
Foothill Blvd and Henderson Ln		NS11	
Albion Ridge Rd & D Rd	NS08		
E Hill Rd & Eastside Rd	NS08	NS11	
Eastside Potter Valley Rd & E Rd	NS08		
Riverside Dr/Eureka Hill Rd & Buckridge Rd	NS08		

**NS08** – Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs  
**NS11**- Install flashing beacons as advance warning (NS.I.)



# Safety Projects- Mendocino County

## Roadways

Location	Countermeasures		
<b>Project 3: Improve Safety at Roadway Segments.</b>			
Sherwood Rd: Poppy Dr to Willits City limits	R04		
Branscomb Rd: Bauer Rd to Wilderness Lodge Rd	R04		
N State St: Hwy 101 to Orr Springs Rd	R04	R22	
Eel River Rd: Gibson Ln to Main St	R04	R22	
Albion Ridge Rd: Hwy 1 to Middle Ridge Rd	R04		
Vichy Springs Rd/Redmeyer Rd: Oak Manor Dr to Redmeyer Rd	R04		
Primrose Dr: Sherwood Rd to Clover Rd	R04	R22	
Crawford Rd: Biggar Ln to Foothill Blvd		R22	
Low Gap Rd: Ukiah City Limits to Pine Ridge Rd	R04	R22	

**R04-** Install Guardrail  
**R22** – Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)

Location	Countermeasures		
<b>Project 4: Improve Safety at Roadway Segments</b>			
Sherwood Rd: Poppy Dr to Willits City limits	R23		R25
Branscomb Rd: Bauer Rd to Wilderness Lodge Rd	R23		R25
Old River Rd: Hwy 101 to Ruddick Cunningham Rd	R23		R25
Vichy Springs Rd/Redmeyer Rd: Oak Manor Dr to Redmeyer Rd	R23	R24	
Primrose Dr: Sherwood Rd to Clover Rd	R23	R24	
Crawford Rd: Biggar Ln to Foothill Blvd	R23		
Low Gap Rd: Ukiah City Limits to Pine Ridge Rd	R23	R24	

**R23** – Install chevron signs on horizontal curves  
**R24-** Install curve advance warning signs  
**R25-** Install curve advance warning signs (flashing beacon)  
 \*Ball Bank Study will be conducted to mitigate injury collisions

# Safety Projects- Mendocino County

## Roadways

Location	Counter Measures		
<b>Project 5: Improve Safety at Roadway Segments.</b>			
Sherwood Rd: Poppy to Willits City limits	R30		
Branscomb Rd: Bauer Rd to Wilderness Lodge Rd	R30		
Old River Rd: Redwood Hwy to Ruddick Cunningham Rd	R30		
North State St: Redwood Hwy to Orr Springs Rd	R30		
Eel River Rd: Gibson Ln to Main St	R30		
Albion Ridge Rd: Shoreline Hwy to Middle Ridge Rd	R30		
Vichy Springs Rd/Redmeyer Rd: Oak Manor Dr to Redmeyer Rd	R30		
Primrose Dr: Sherwood Rd to Clover Rd	R30		
Crawford Rd: Biggar Ln to Foothill Blvd	R30		

**R30-** Install centerline rumble strips/stripes

# Additional Community Comments

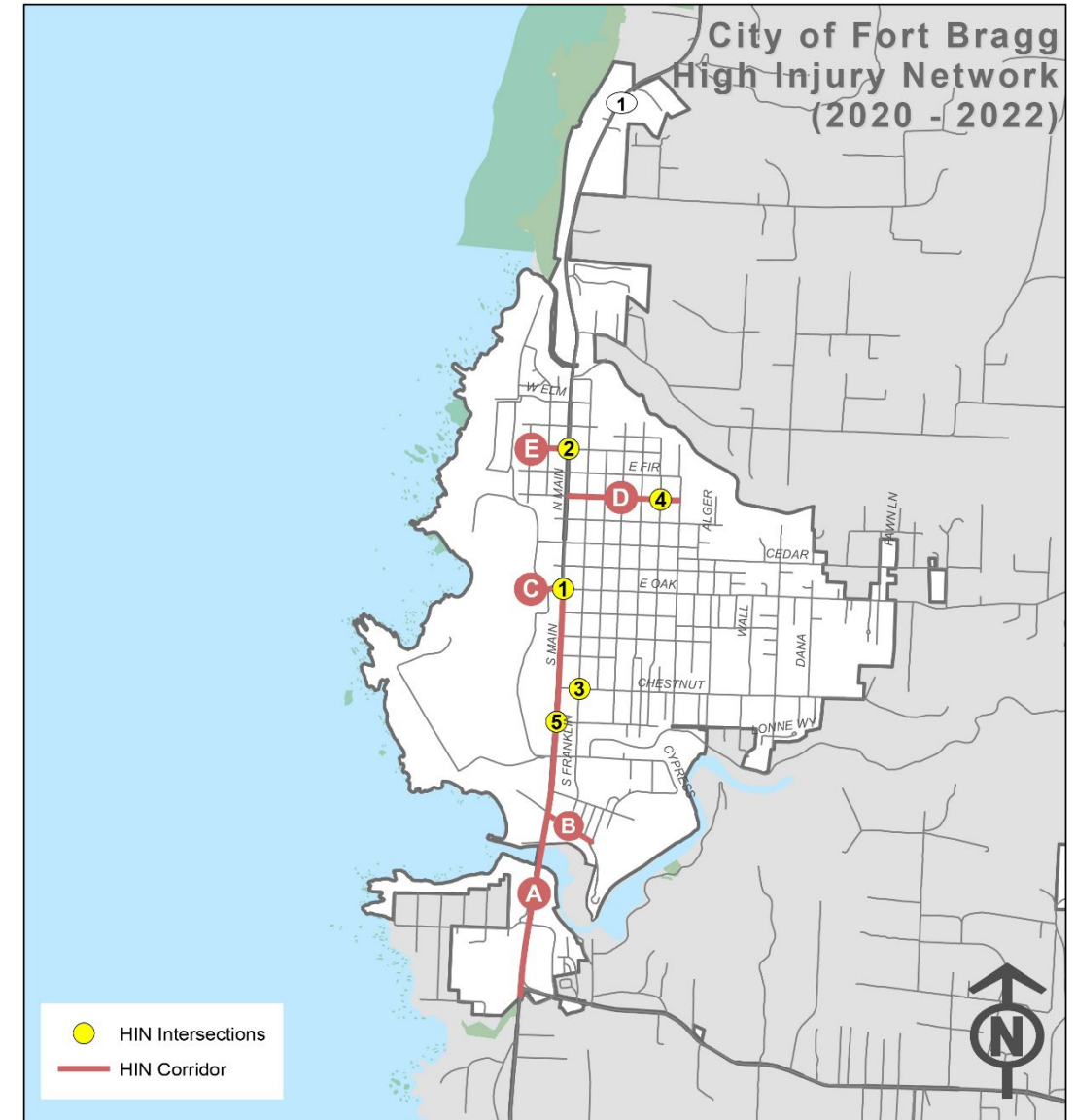
Location	Concerns	Mode
<b>Gualala area - Old Stage Road between Ocean Ridge Drive (north intersection) and Moonrise Drive.</b>	High vehicle speeds (far in excess of posted limits), horizontal and vertical curves, narrow vehicle lanes, storm water damage, and uneven shoulder ground surface are issues for pedestrians walking along this segment between residential areas and the heavily-used Bower Community Park.	Pedestrian & Bicycle
<b>Gualala area – Hwy 1 between Pacific Woods Road and Ocean Drive.</b>	As the only route for pedestrians between residential neighborhoods north of the Gualala village and sidewalk improvements intended by the SR1 Gualala Downtown Enhancements project (in design), safety of pedestrians who walk along this segment is critical	Pedestrian
<b>Gualala area – Hwy 1 intersection with Old State Highway</b>	The safety and function of this intersection and the effectiveness of motorist speed control	Motor Vehicle
<b>Mendocino area - Hwy 1 at Jug Handle</b>	Speeding at this location.	Motor Vehicle
<b>Mendocino area - Hwy 1 at Point Cabrillo Rd/Russian Gulch State Park</b>	Speeding at this location.	Motor Vehicle

# High Injury Network- Fort Bragg

City of Fort Bragg (2020-2022)

ID	Intersections	Total Injury Collisions	Killed	Severe Injury	Pedestrian/ Bicycle	EPDO Score
1	E/W Oak St & S Main St	7	0	1	4	206
2	E/W Bush St & N Main St	3	0	1	0	182
3	E Chestnut St & S Franklin St	2	0	1	0	171
4	E Pine St & N Corry St	1	1	0	0	165
5	Walnut St & S Main St	1	0	1	0	165

ID	Corridors	Total Injury Collisions	Killed	Severe Injury	Pedestrian / Bicycle	Length (miles)	EPDO Score
A	S Main St: Fort Bragg City Limit to E/W Oak St	9	0	1	3	1.0	233
B	N Harbor Dr: S Main St to Dock St & City limits (South) to Woodward St	4	0	1	1	0.8	182
C	W Oak: N Main St to Chief Celeri Dr	2	0	1	0	0.2	171
D	E Pine St: N Main St to N Harold St	1	1	0	0	0.3	165
E	W Bush: N Main St to West St	1	0	1	0	0.1	165



# Safety Projects-Fort Bragg

## Non- Signalized Intersections

Location	Countermeasures		
<b>Project 1: Improve Safety at Non-Signalized Intersections.</b>			
E Chestnut St & S Franklin St	NS01NT	NS08	
E Pine St & N Corry St	NS01NT	NS08	

**NS01NT** – Add intersection lighting (NS.I.)  
**NS08** – Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs

Location	Countermeasures		
<b>Project 2: Improve Pedestrian Safety at Non-Signalized Intersection.</b>			
S Lincoln St & Willow St	NS21PB	NS23PB	

**NS21PB** – Install raised medians/refuge islands (NS.I.)  
**NS23PB** – Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)

## Roadways

Location	Countermeasures		
<b>Project 3: Improve Safety at Roadway Segments.</b>			
N Harbor Dr: S Main St to Woodward St	R01NT		R28
E Pine St: N Main St to N Harold St	R01NT	R26	R28
W Bush: N Main St to West St	R01NT		R28
Maple St: S Main St to S Harold St	R01NT	R26	R28
Willow St : S Harold St to Wall St	R01NT	R26	R28
Elm St: Glass Beach Dr to N Franklin St	R01NT		R28
W Oak St: Chief Celeri to S Main Street			R28
E Chestnut St: S Main Street to Dana St			R28

**R01NT** – Add segment lighting  
**R26** – Install dynamic/variable speed warning signs  
**R28** – Install edge-lines and centerlines

# Safety Projects-Fort Bragg

## Roadways

Location	Countermeasures		
<b>Project 4: Improve Pedestrian/Bicycle Safety at Roadway Segments.</b>			
N Harbor Dr: S Main St to Woodward St		R35PB	
Maple St: S Main St to S Harold St		R35PB	Restripe existing bike lane
Willow St : S Harold St to Wall St		R35PB	
W Oak Street: Chief Celeri to S Main Street	R34PB	R35PB	
E Pine St: N Main St to N Harold St			Restripe existing bike lane
E Oak St: S Main St to Dana St			Restripe existing bike lane

**R34PB** – Install Separated Bike Lanes  
**R35PB** – Install sidewalk/pathway (to avoid walking along roadway)

## Citywide Projects

Location	Countermeasures		
<b>Project 5: Citywide Sign Inventory: This project will involve and include all the parts of the city to improve, replace, or install new signage throughout the entire city.</b>			
• Regulatory and warning			
Citywide Sign Inventory	R22		

**R22** – Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)

# Safety Projects-Fort Bragg

## Recommended Projects related to S Main Street/Hwy 1 (Caltrans)

### Signalized Intersections

Location	Countermeasures		
<b>Project 1: Improve Safety at Signalized Intersections.</b>			
E/W Oak St & S Main St	SI03		

**SI03** – Improve signal timing (co-ordination, phases, red, yellow, or operation)

Location	Countermeasures		
<b>Project 2: Improve Pedestrian and Bicycle Safety at Signalized Intersections.</b>			
E/W Oak St & S Main St	SI21PB	SI22PB	

**SI21PB** – Install advance stop bar before crosswalk (Bicycle Box)  
**SI22PB**- Modify signal phasing to implement a Leading Pedestrian Interval (LPI)

### Non-Signalized Intersections

Location	Countermeasures		
<b>Project 3: Improve Safety at Non-Signalized Intersections.</b>			
E/W Bush St & N Main St	NS01NT	NS08	

**NS01NT** – Add intersection lighting (NS.I.)  
**NS08** – Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs

Location	Countermeasures		
<b>Project 4: Improve Safety at Non-Signalized Intersections.</b>			
E/W Bush St & N Main St	NS09	NS11	NS23PB

**NS09** – Upgrade intersection pavement markings (NS.I.)  
**NS11**- Install flashing beacons as advance warning (NS.I.)  
**NS23PB**- Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)

# Safety Projects-Fort Bragg

## Recommended Projects related to S Main Street/Hwy 1 (Caltrans)

### Roadways

Location	Countermeasures		
<b>Project 5: Improve Safety at Roadway Segments.</b>			
<b>S Main St: Fort Bragg City Limits to Oak St</b>	R22	R26	

**R22** – Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)  
**R26** – Install dynamic/variable speed warning signs

Location	Countermeasures		
<b>Project 6: Improve Safety at Roadway Segments.</b>			
<b>S Main St: Fort Bragg City Limits to Oak St</b>	R36PB	R38PB	

**R36PB** – Install/upgrade pedestrian crossing (with enhanced safety features)  
**R38PB** – Install Rectangular Rapid Flashing Beacon (RRFB)

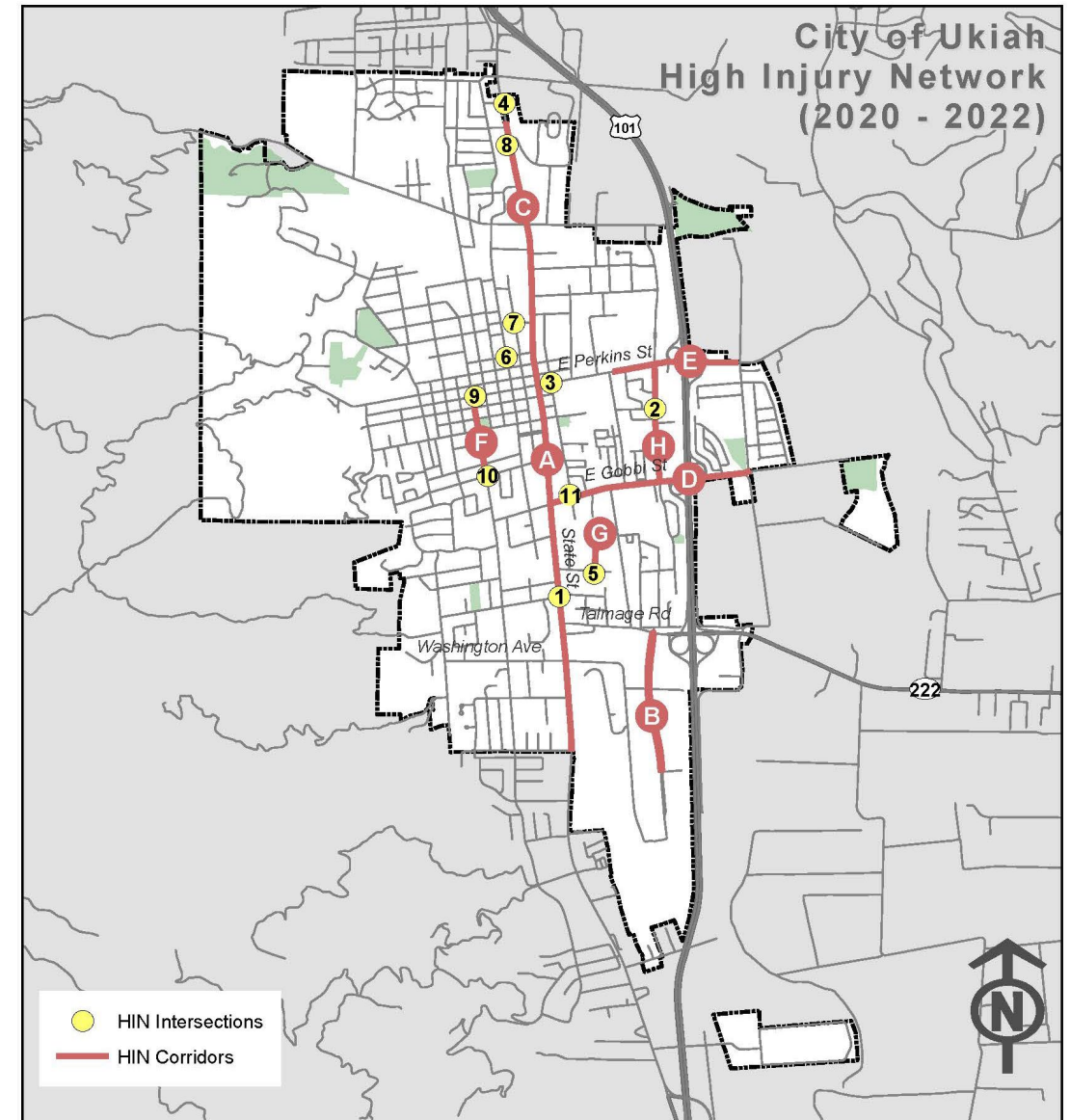


# High Injury Network- Ukiah

ID	Intersections	Total	Killed	Severe Injury	Pedestrian/ Bicycle	EPDO Score
1	S State St & Observatory Ave	6	0	2	2	359
2	S Orchard Ave & Peach St	2	0	1	1	176
3	N Main St and E Perkins St	2	0	1	1	171
4	N State St & Bricarelli Dr	2	0	1	0	171
5	Apple Ave & Cherry St	1	0	1	0	165
6	N Oak St & W Smith St	1	0	1	1	165
7	Scott St & N School St	1	0	1	1	165
8	N State St & Mazzoni St	1	0	1	1	165
9	S Dora St & W Church St	1	0	1	1	165
10	S Dora St & W Mill St	1	0	1	1	165
11	E Gobbi St & S Main St	1	0	1	0	165

ID	Corridors	Total Injury Collisions	Killed	Severe Injury	Pedestrian /Bicycle	Length (miles)	EPDO Score
A	S State St: Beacon Ln to W Perkins St	8	0	1	1	2.5	217
B	Airport Park Blvd: Talmage Rd to Entrance to Costco Warehouse	7	0	1	2	0.6	216
C	N State St: W Perkins St to Ukiah City Limit	7	0	1	2	1.1	211
D	E Gobbi St: S State St to Washo Dr	4	0	1	0	1.0	183
E	E Perkins St: S State St to Oak Manor Dr	4	0	1	0	0.8	183
F	S Dora: W Church St to W Mill St	2	0	1	1	0.3	171
G	Apple Ave: Entire length from Cherry St	1	0	1	0	0.1	165
H	S Orchard Ave: E Perkins to E Gobbi St	1	0	1	1	0.3	165

City of Ukiah (2020-2022)



Note: Green indicates locations identified as part of High Injury Network (2015-2019)

# Safety Projects-Ukiah

## Non- Signalized Intersections

Location	Countermeasures		
<b>Project 1: Improve Safety at Non-Signalized Intersections.</b>			
S State St & Observatory Ave		NS08	
S Orchard Ave & Peach St		NS08	
N Main St and E Perkins St	NS01NT	NS08	NS09
N State St & Bricarelli Dr		NS08	
Apple Ave & Cherry St		NS08	
N Oak St & W Smith St	NS01NT	NS08	
Scott St & N School St		NS08	
S Dora St & W Church St		NS08	NS09
S Dora St & W Mill St	NS01NT	NS08	
E Gobbi St & S Main St		NS08	

**NS01NT** – Add intersection lighting (NS.I.)  
**NS08** – Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs  
**NS09** – Upgrade intersection pavement markings (NS.I.)

Location	Countermeasures		
<b>Project 2: Improve Pedestrian and Bicycle Safety at Non-Signalized Intersections.</b>			
N. Orchard Ave & Clara Ave	NS23PB	NS24PB	
S Orchard Ave & Peach St	NS23PB	NS24PB	
N Main St and E Perkins St	NS23PB		
N Oak St & W Smith St	NS23PB		
Scott St & N School St	NS23PB		
S Dora St & W Church St		NS24PB	
S Dora St & W Mill St	NS23PB		

**NS23PB** – Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)  
**NS24PB** – Install Rectangular Rapid Flashing Beacon (RRFB)

# Safety Projects-Ukiah

## Roadways

Location	Countermeasures		
<b>Project 3: Improve Safety at Roadway Segments.</b>			
S State St: Beacon Ln to W Perkins St	R22	R26	
Airport Park Blvd: Talmage Rd to Entrance to Costco Warehouse		R26	
N State St: W Perkins St to Ukiah City Limits	R22	R26	
E Gobbi St: S State St to Washo Dr	R22		Re-pavement
E Perkins St: S State St to Oak Manor Dr		R26	
S Dora: W Church St to W Mill St	R22	R26	
S Orchard Ave: E Perkins to E Gobbi St	R22		

**R22** – Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)  
**R26** – Install dynamic/variable speed warning signs

Location	Countermeasures		
<b>Project 4: Improve Safety at Roadway Segments.</b>			
S State St: Beacon Ln to W Perkins St		R36PB	
Airport Park Blvd: Talmage Rd to Entrance to Costco Warehouse	R35PB	R36PB	
S Dora: W Church St to W Mill St			R38PB

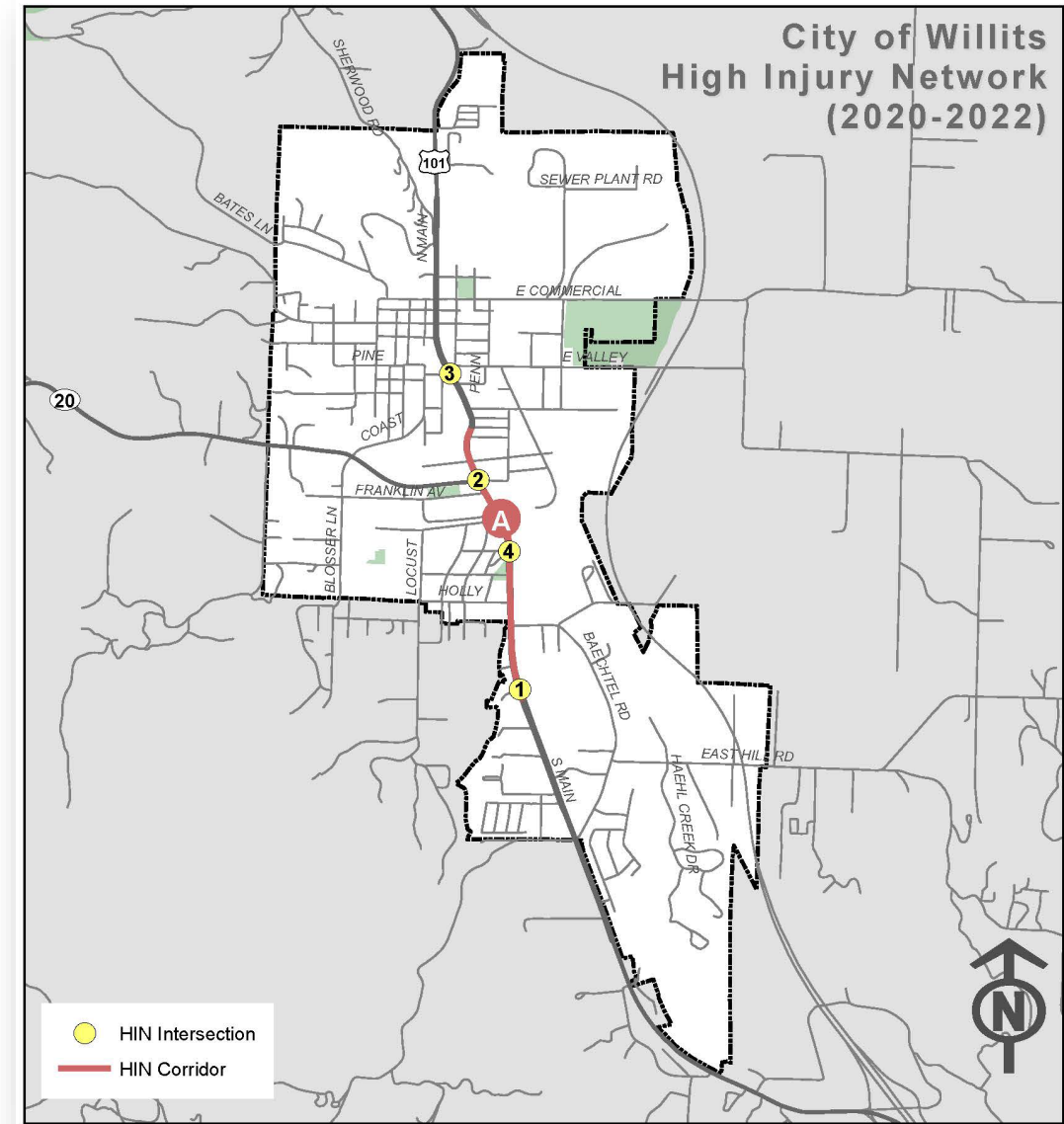
**R35PB** – Install sidewalk/pathway (to avoid walking along roadway)  
**R36PB** – Install/upgrade pedestrian crossing (with enhanced safety features)  
**R38PB** – Install Rectangular Rapid Flashing Beacon (RRFB)

# High Injury Network- Willits

ID	Intersections	Total	Killed	Severe Injury	Pedestrian/Bi cycle	EPDO Score
1	S Main St & Gregory Ln	5	1	2	1	512
2	S Main St & Fort Bragg - Willits Rd/South St	2	0	1	1	176
3	S Main St & W Valley St	1	0	1	0	165
4	S Main St & Madrone St	1	0	1	0	165

ID	Corridors	Total Injury Collisions	Killed	Severe Injury	Pedestrian/Bi cycle	Length (miles)	EPDO Score
A	S Main Street: Monroe St to Gregory Ln	2	0	1	2	0.9	176

City of Willits (2020-2022)



Note: Green indicates locations identified as part of High Injury Network (2015-2019)

# Safety Projects - Willits

## Signalized Intersections

Location	Countermeasures		
<b>Project 1: Improve Safety at Signalized Intersections.</b>			
S Main St & Fort Bragg - Willits Rd/South St	SI03	SI09	

**SI03** – Improve signal timing (co-ordination, phases, red, yellow, or operation)  
**SI09** – Install flashing beacons as advance warning (S.I.)

Location	Countermeasures		
<b>Project 2: Improve Pedestrian and Bicycle Safety at Signalized Intersections.</b>			
S Main St & Fort Bragg - Willits Rd/South St	SI18PB	SI21PB	

**SI18PB** – Install pedestrian countdown signal heads  
**SI21PB** – Install advance stop bar before crosswalk (Bicycle Box)

## Non- Signalized Intersections

Location	Countermeasures		
<b>Project 3: Improve Safety at Non-Signalized Intersections.</b>			
S Main St & Gregory Ln	NS08	NS09	NS16
S Main St & W Valley St	NS08		NS16
S Main St & Madrone St	NS08	Re-pavement	NS16

**NS08** – Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs  
**NS09** – Upgrade intersection pavement markings (NS.I.)  
**NS16** – Install raised median on approaches (NS.I.)

# Safety Projects - Willits

## Roadways

Location	Countermeasures		
<b>Project 4: Improve Safety at Roadway Segments.</b>			
<b>S Main Street: Monroe St to Gregory Ln</b>	R08	R22	R26

**R08** – Install raised median  
**R22** – Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)  
**R26** – Install dynamic/variable speed warning signs

# Next Steps

- Finalize Safety Projects and calculate BCR/cost estimates
- Finalize LRS/AP reports
- Present to applicable Boards/Councils early-August





**Discussion/Questions?**





Thank you!