

**COUNTERMEASURE PAIRING**

**VISION**

**ZERO**

**SACRAMENTO**

**ZERO TRAFFIC DEATHS**



# PROCESS

**1 SET GOALS  
AND POLICY**

**2 DATA  
COLLECTION**

**3 DATA  
ANALYSIS**

**4 COLLISION  
PROFILES**

**5 COUNTER-  
MEASURES**

**6 ACTION  
PLAN**

# **ENGINEERING COUNTERMEASURES**

# SIGNALIZATION



Source: LADOT

bicycle signal phase



Source: Leo Suarez, youtube.com

leading pedestrian interval



Source: Fehr & Peers

rectangular rapid flashing  
beacon (RRFB)



Source: Benny Mazur, pedbikesafe.org

protected left turn





traffic circle



pedestrian refuge island



curb extension



traffic diverter



# SIGNS, MARKINGS, OPERATIONAL



Source: Michele Weisbart, pedbikesafe.org

crosswalk lighting



Source: NACTO

bike box



Source: FHWA

all-way stop control



Source: Fehr & Peers

buffered bike lane



# SPEED CONTROL & OTHER



radar speed sign



speed table



school zone 15 mph speed limit



hazard identification program

# **OTHER COUNTERMEASURES**



# EDUCATION & ENFORCEMENT PLANNING & POLICY



vision zero annual report



education campaign about speed



expand traffic enforcement team



expand red light camera program

# COUNTERMEASURE MATRIX

Collision Profiles		Mode	Primary Countermeasure	Secondary Countermeasure	Notes
1	Unsafe speed on non-local streets	All modes			
2	Alcohol involved	All modes			
3	35+ mph streets	All modes			
4	30+ mph streets	Bicycle			
5	Broadside collisions	Bicycle			
6	Driver making left or right turn	Bicycle & pedestrian			
7	Commercial areas	Bicycle & pedestrian			
8	60+ year old victims	Pedestrian			
9	Pedestrian crossings outside of an intersection and crosswalk	Pedestrian			
10	Near transit stops	Pedestrian			

**COUNTERMEASURE PAIRING**

# **VISION ZERO**

**SACRAMENTO**

**ZERO TRAFFIC DEATHS**







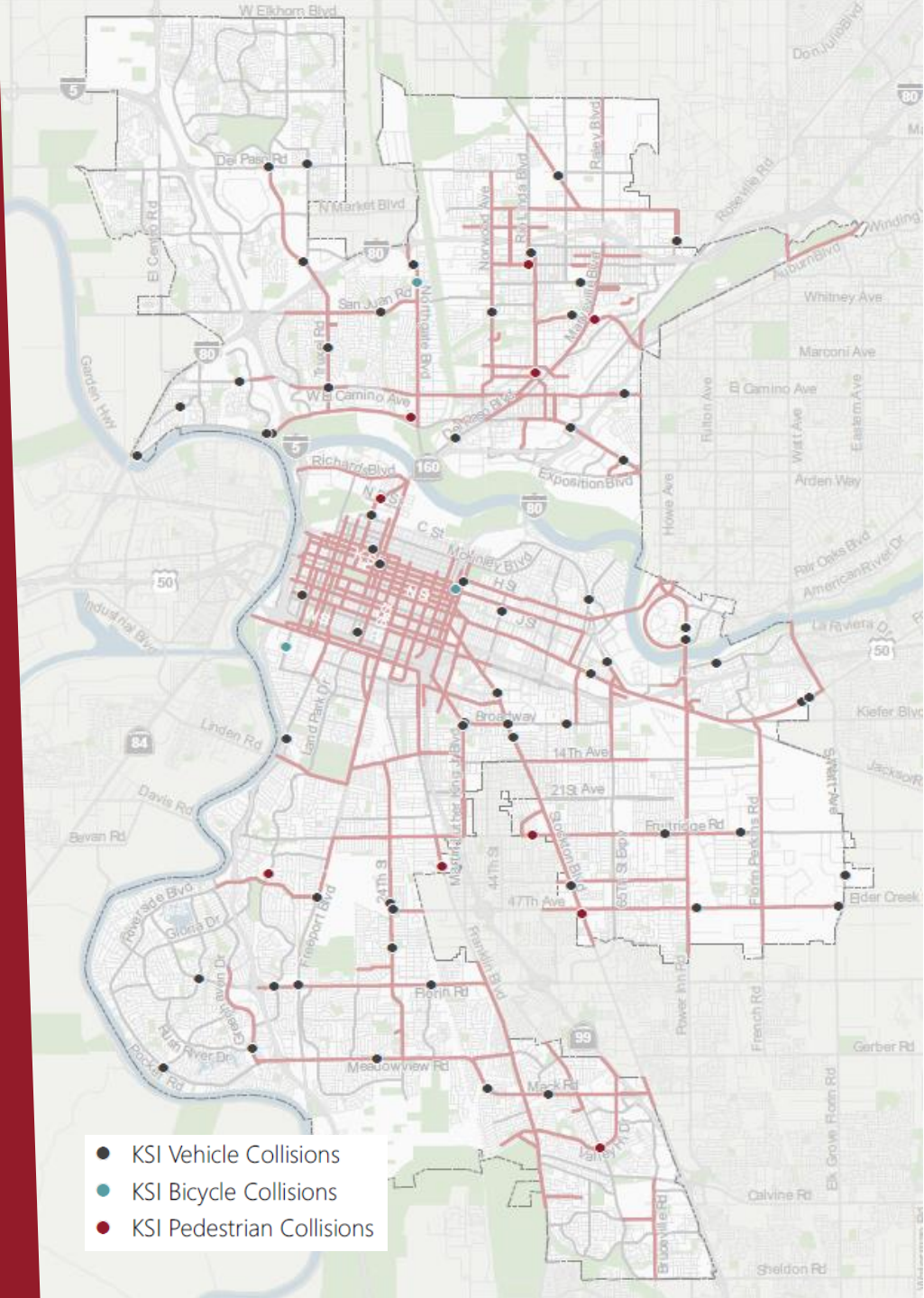
# PROFILES



# **PROFILE 1**

unsafe speed on non-local streets

# PROFILE 1



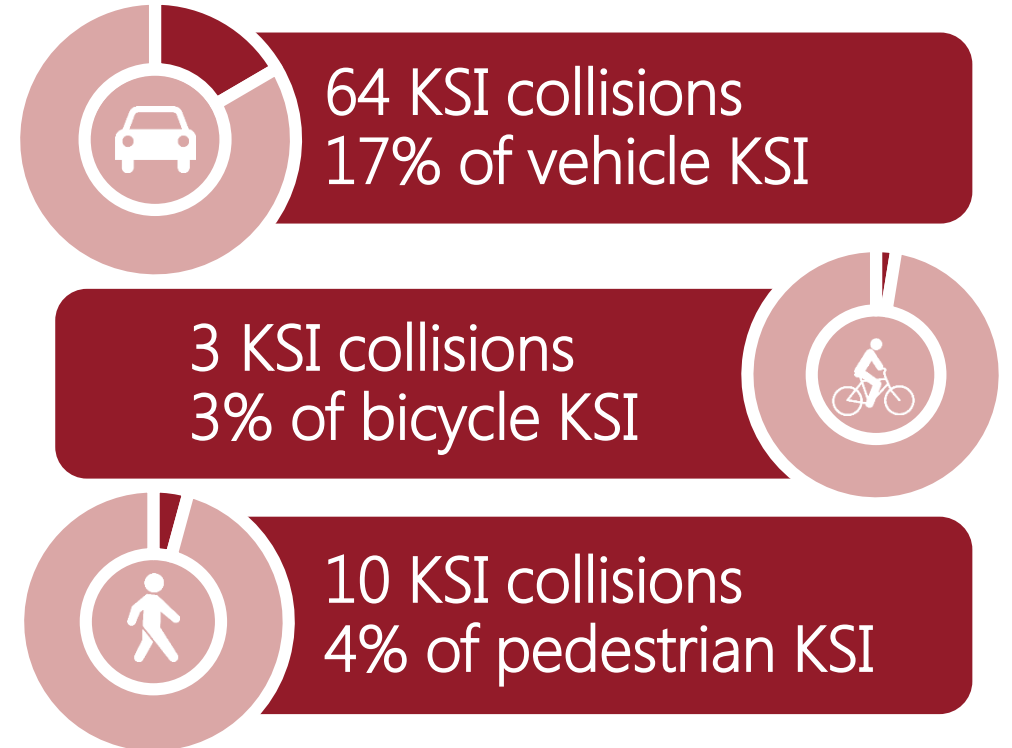
## COLLISION STATS DEFINITION

all modes

primary collision factor = “unsafe speed”  
(driver was driving faster than was “reasonable”)

on arterial or collector streets

77 KSI collisions | 10% of KSI collisions



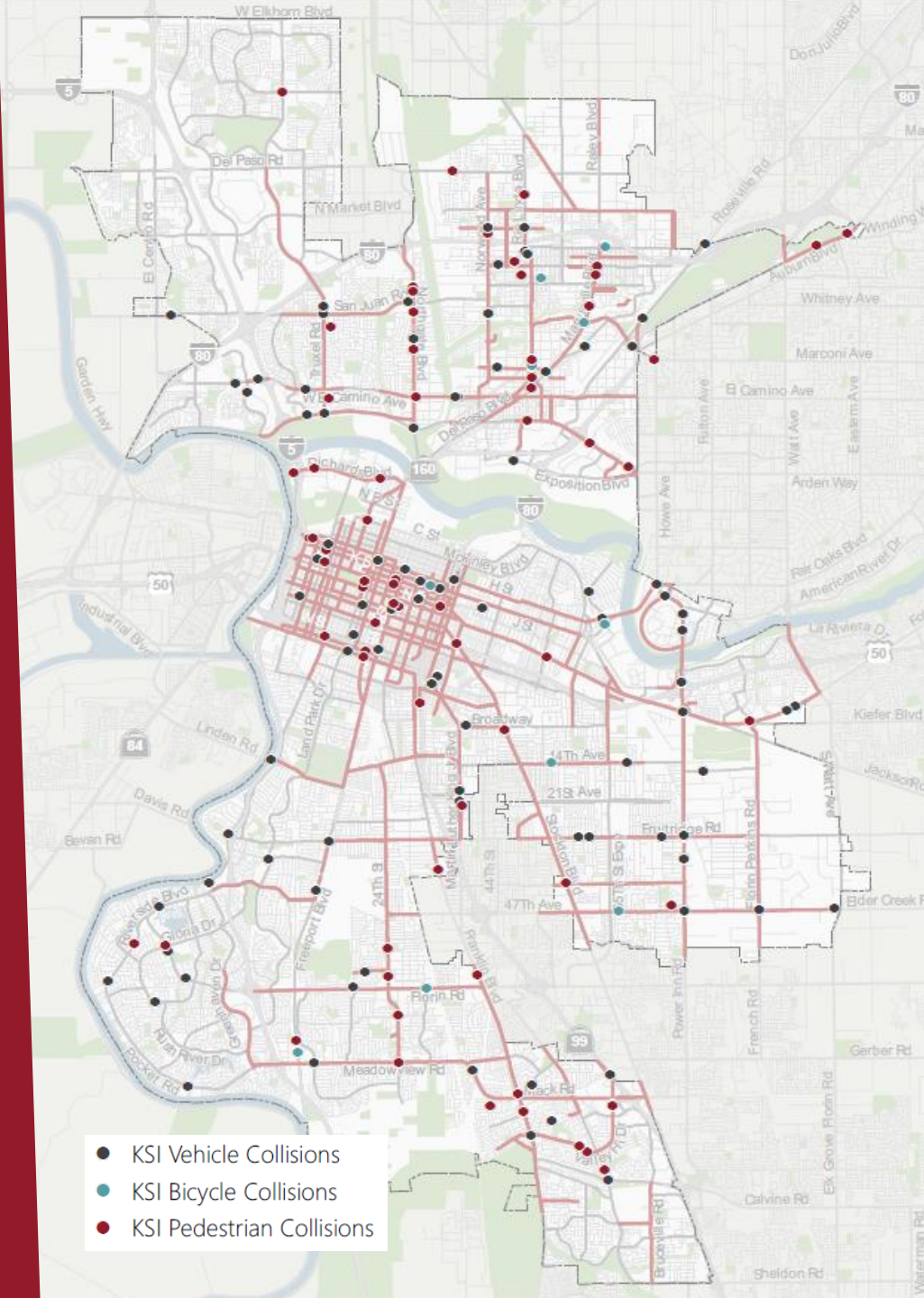




# PROFILE 2

alcohol involved

# PROFILE 2

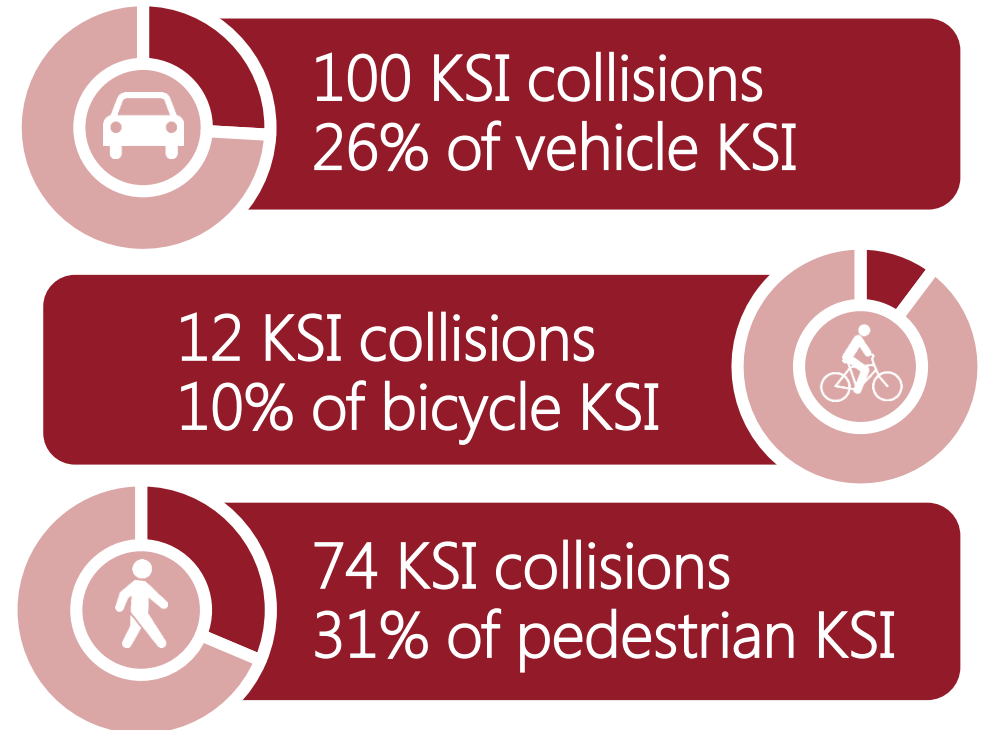


## COLLISION STATS DEFINITION

all modes

alcohol involved

186 KSI collisions | 25% of KSI collisions



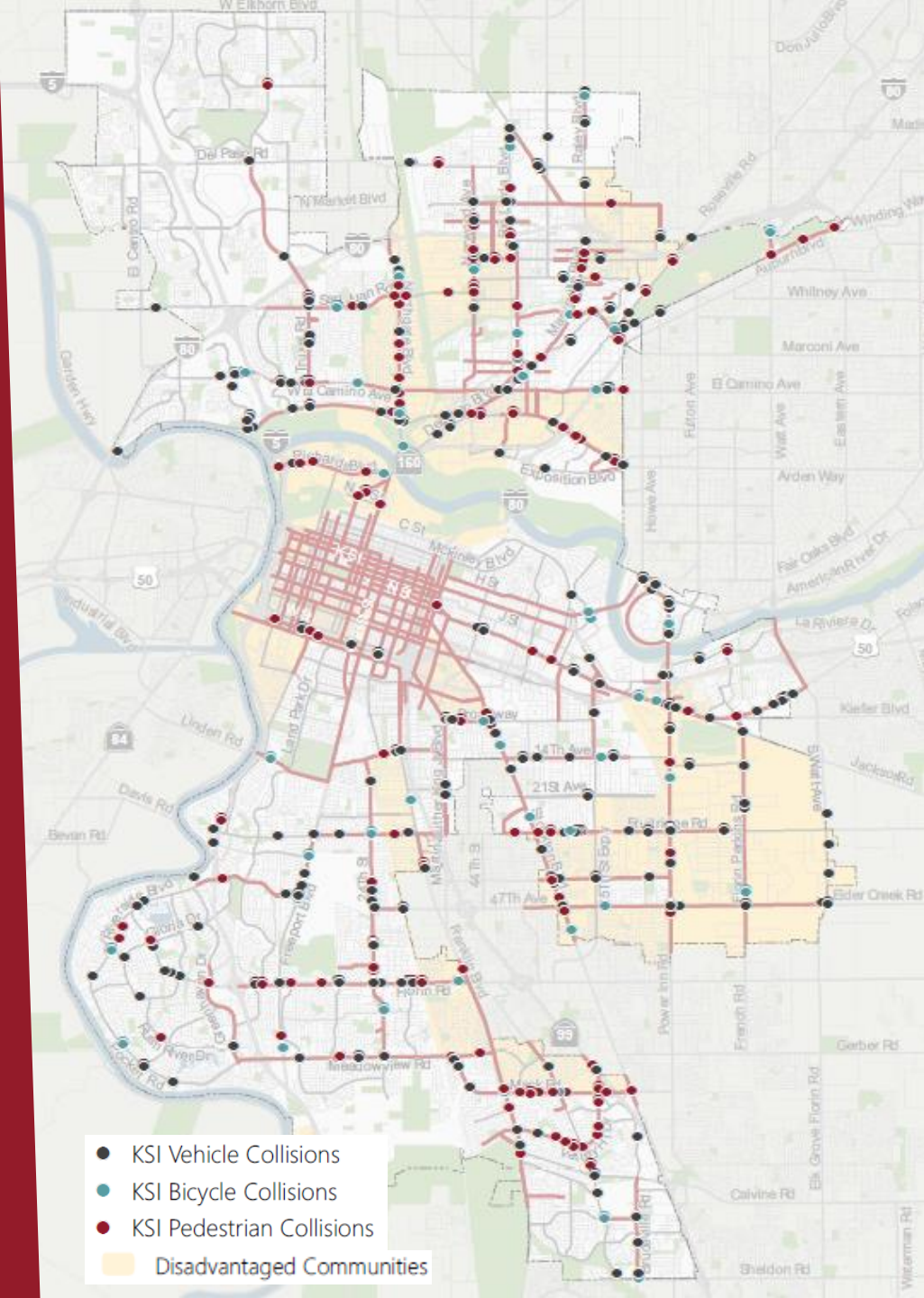


# **PROFILE 3**

posted speed 35+ mph



# PROFILE 3

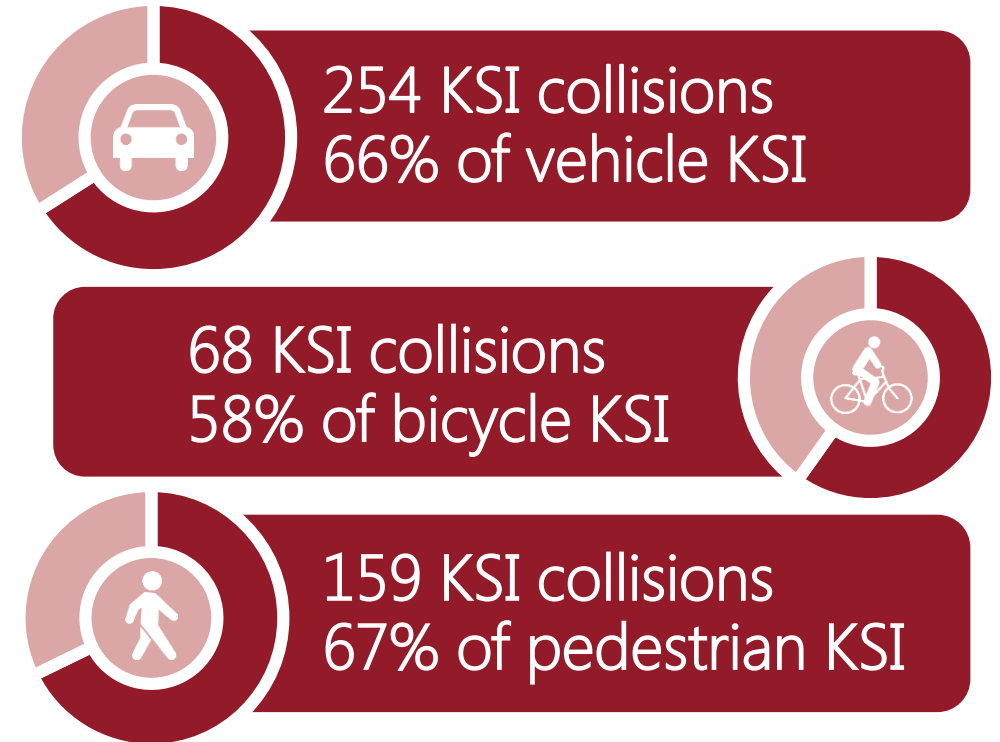


## COLLISION STATS DEFINITION

all modes

on streets with posted speed 35+ mph

480 KSI collisions | 65% of KSI collisions

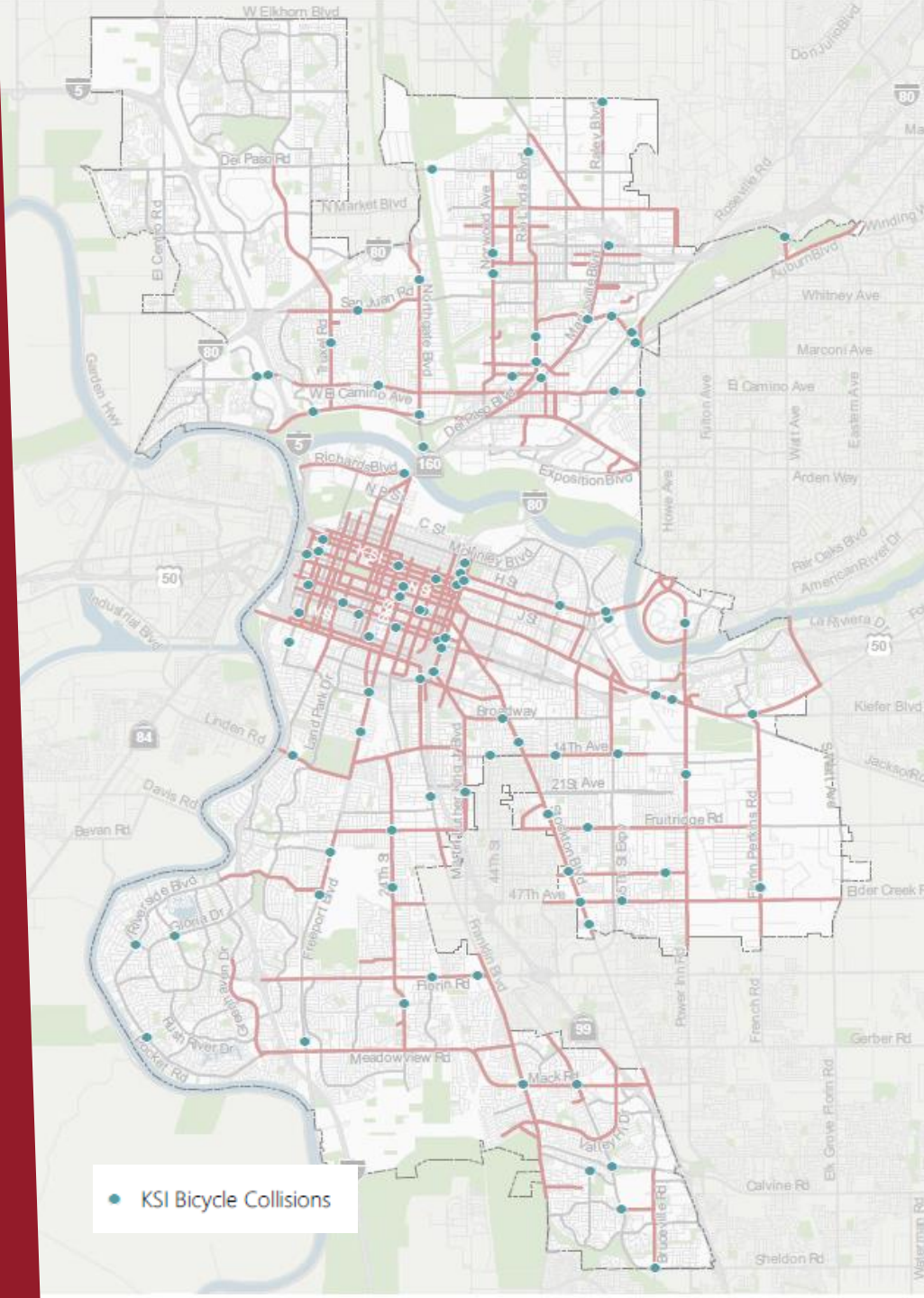




# PROFILE 4

bike collisions on 30+ mph streets

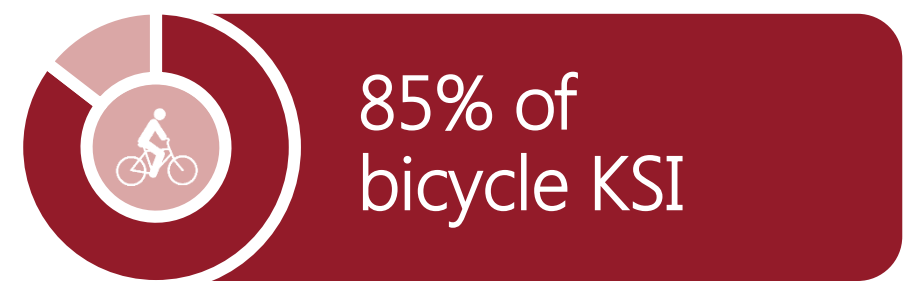
# PROFILE 4



## COLLISION STATS DEFINITION

bicycle collisions  
on streets with posted speed 30+ mph

100 KSI collisions | 14% of KSI collisions



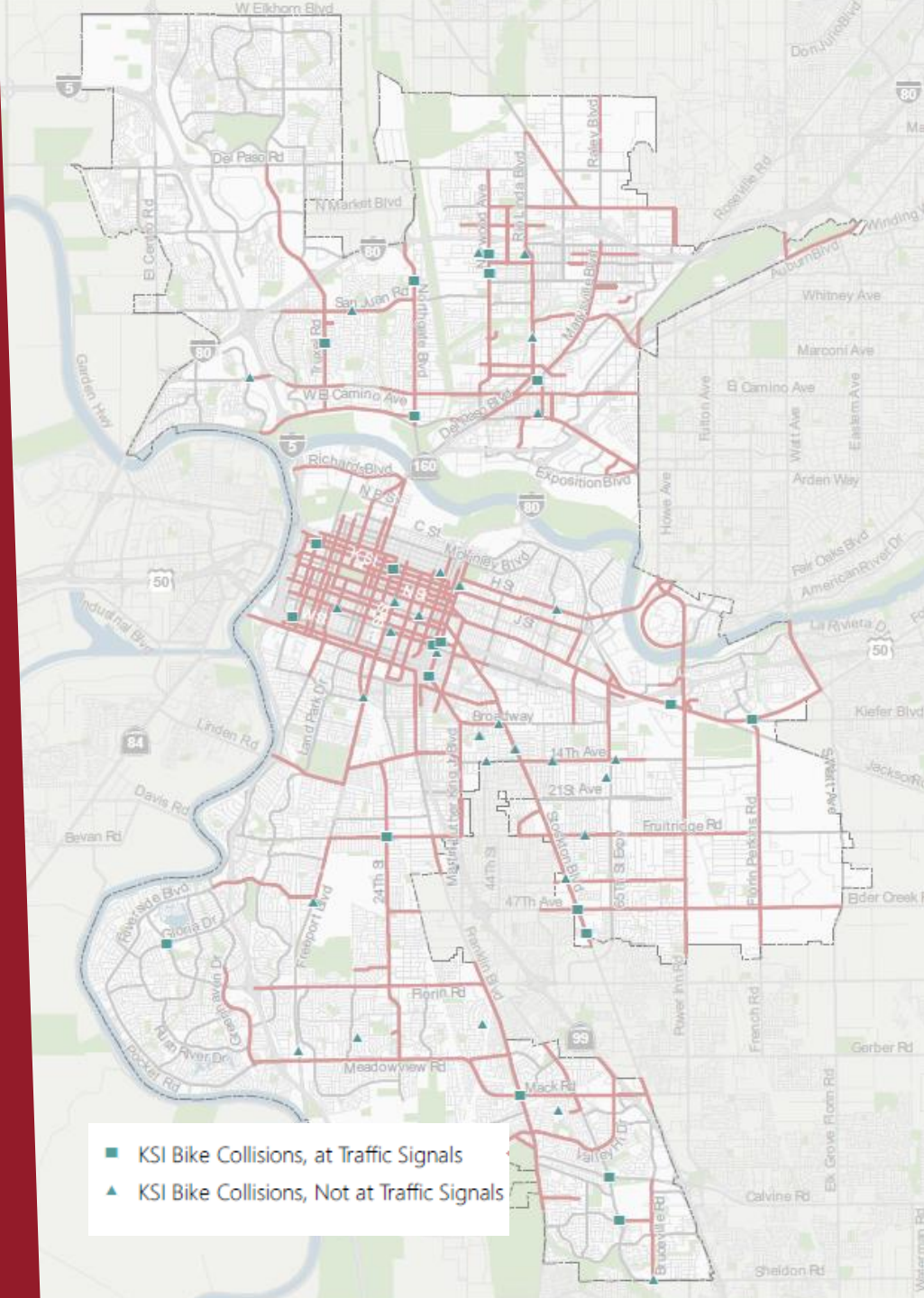




# **PROFILE 5**

broadside bike collisions

# PROFILE 5

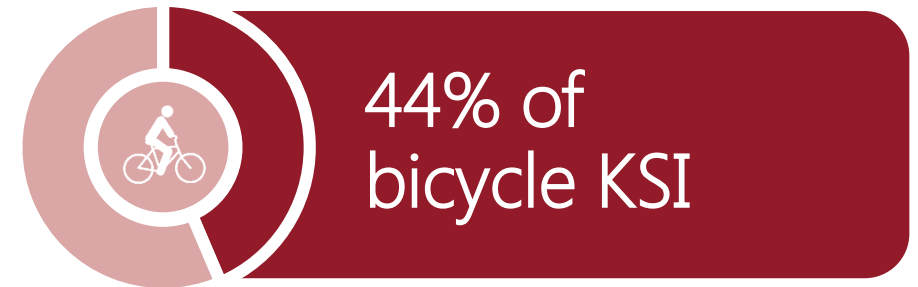


## COLLISION STATS DEFINITION

bicycle collisions

collision type = broadside

51 KSI collisions | 7% of KSI collisions

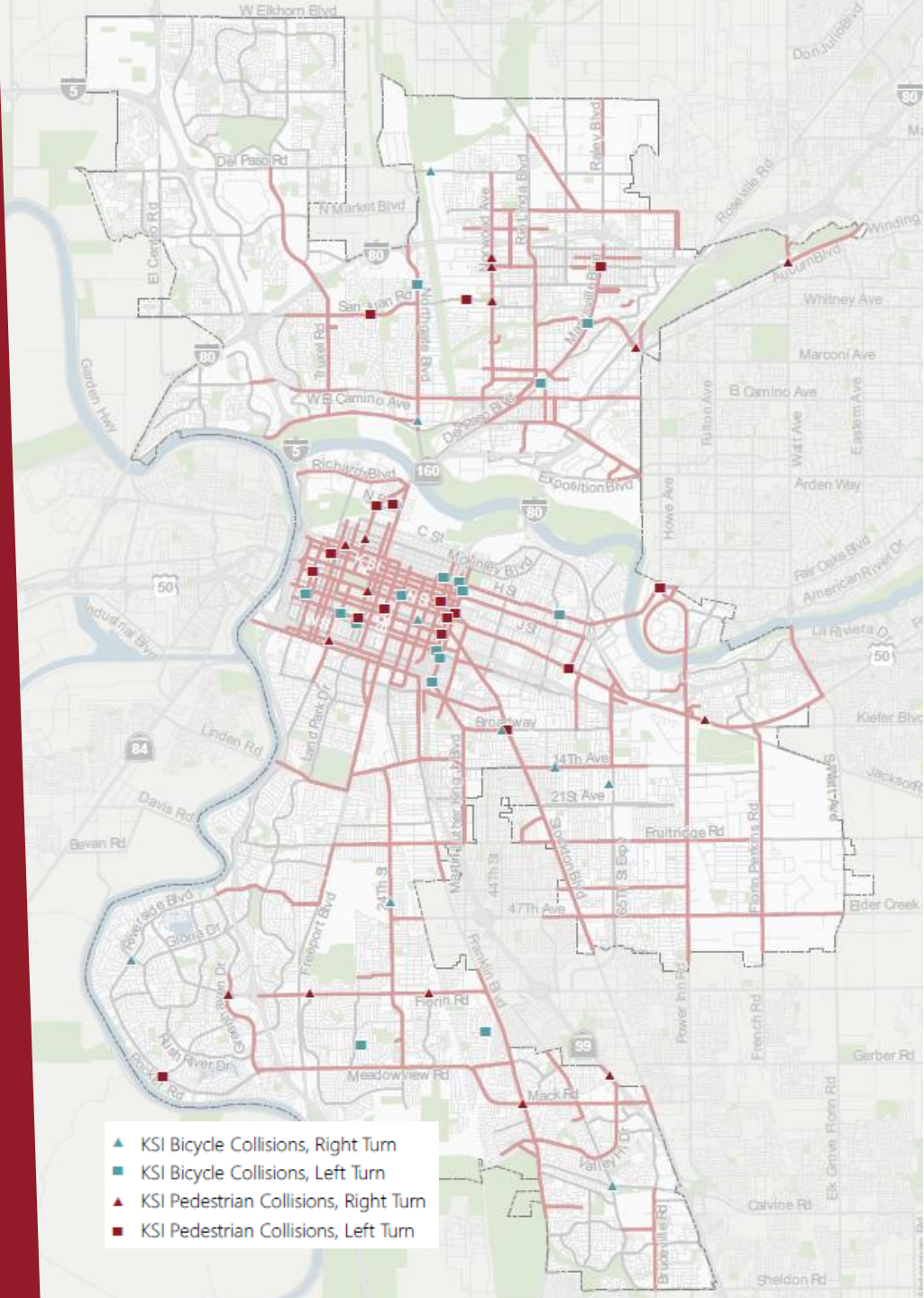




# PROFILE 6

driver turning (bike/ped collisions)

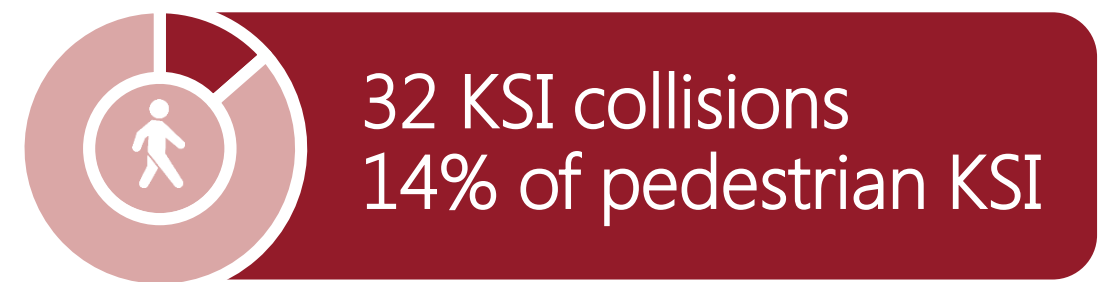
# PROFILE 6



## COLLISION STATS DEFINITION

pedestrian or bicycle collisions  
driver making left or right turn

58 KSI collisions | 8% of KSI collisions



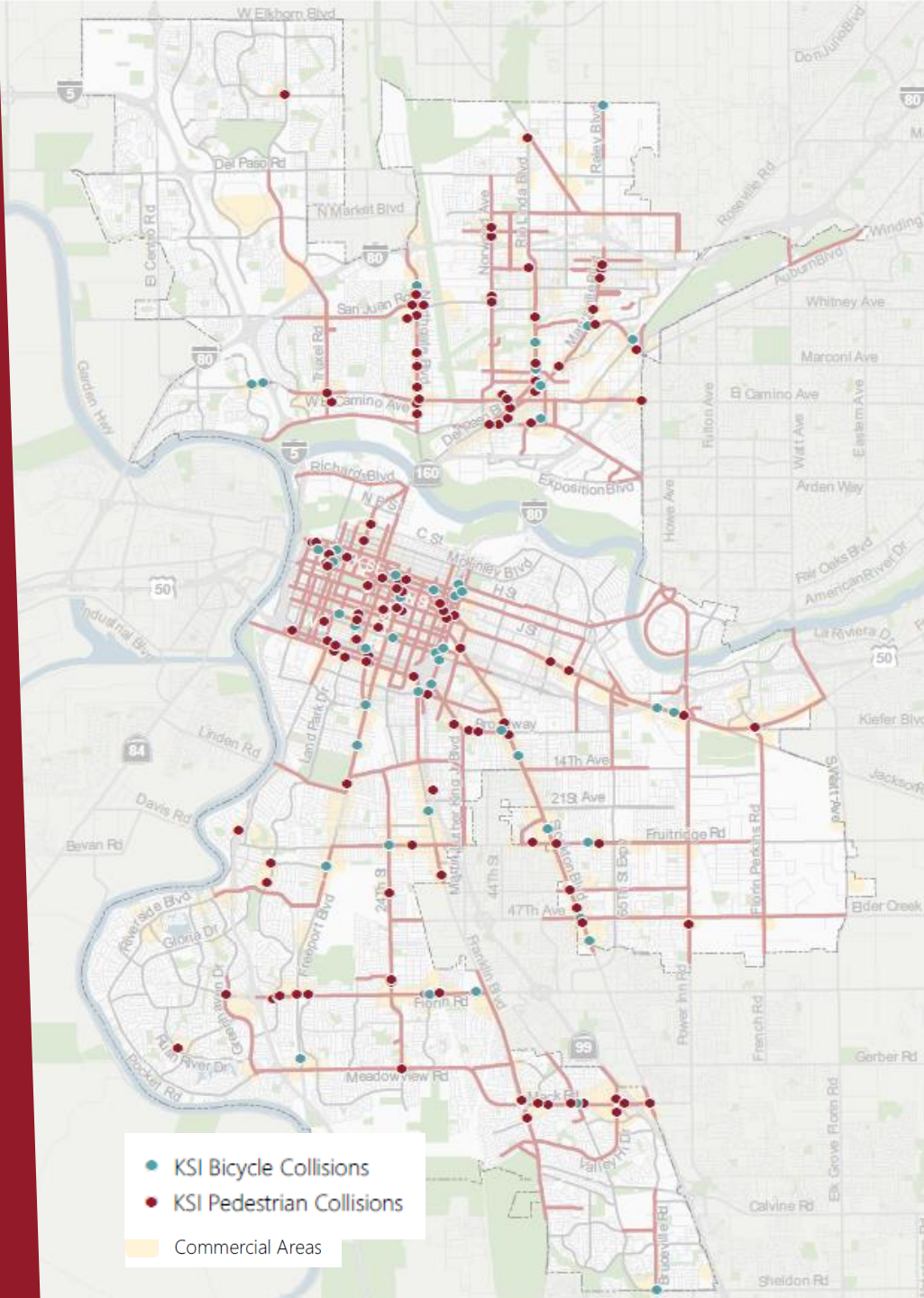




# **PROFILE 7**

collisions in commercial areas

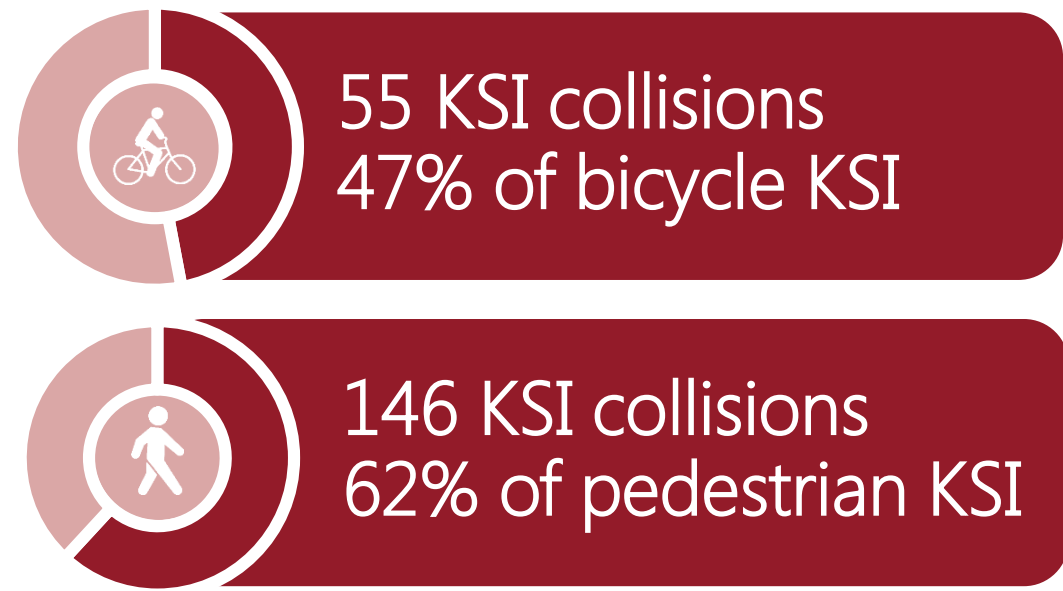
# PROFILE 7



## COLLISION STATS DEFINITION

pedestrian or bicycle collisions  
within 500 feet of retail or recreation commercial land use

200 KSI collisions | 27% of KSI collisions

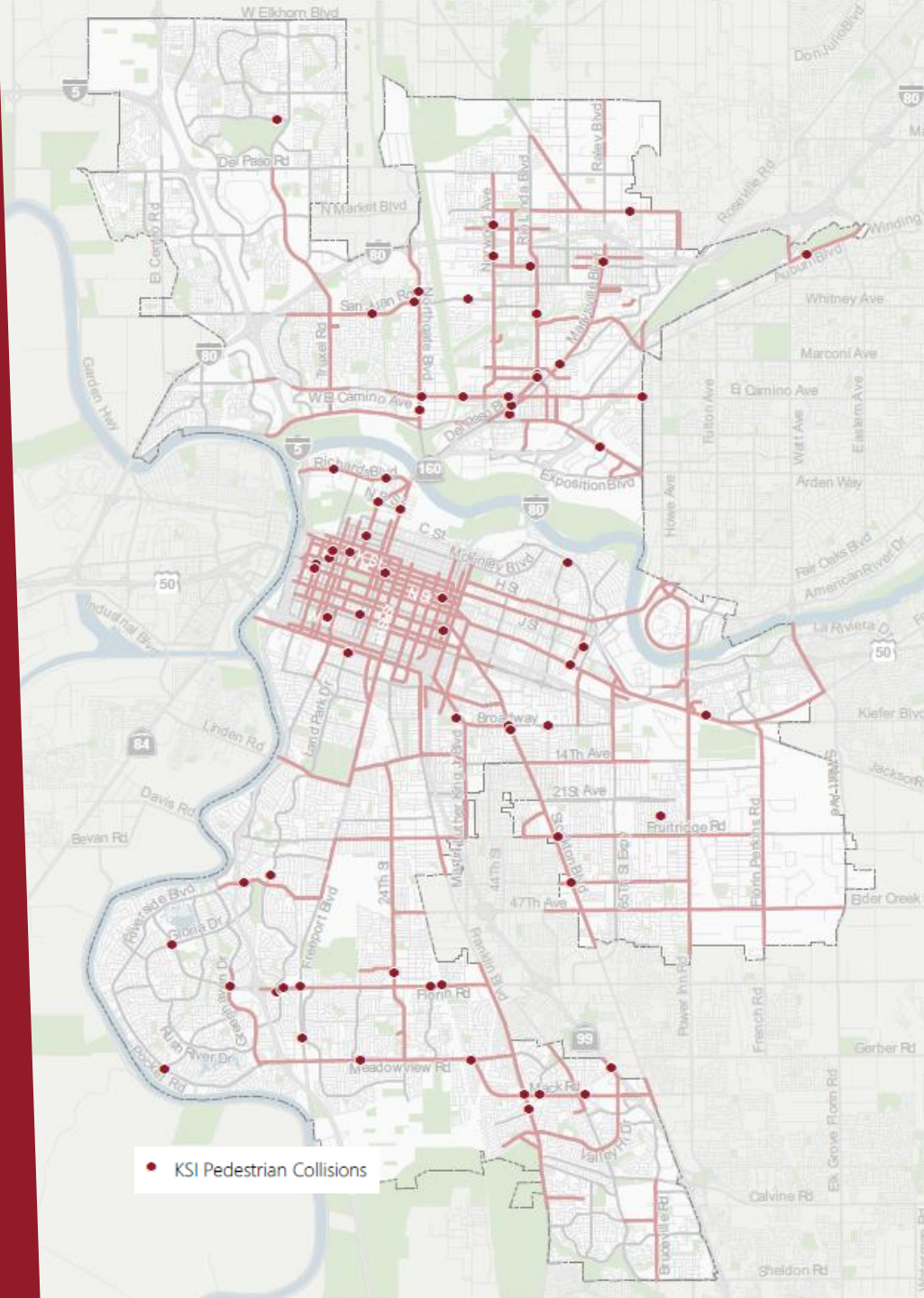




# PROFILE 8

60+ year old pedestrians

# PROFILE 8



## COLLISION STATS DEFINITION

pedestrian collisions  
victim is 60+ years old

70 KSI collisions | 9% of KSI collisions



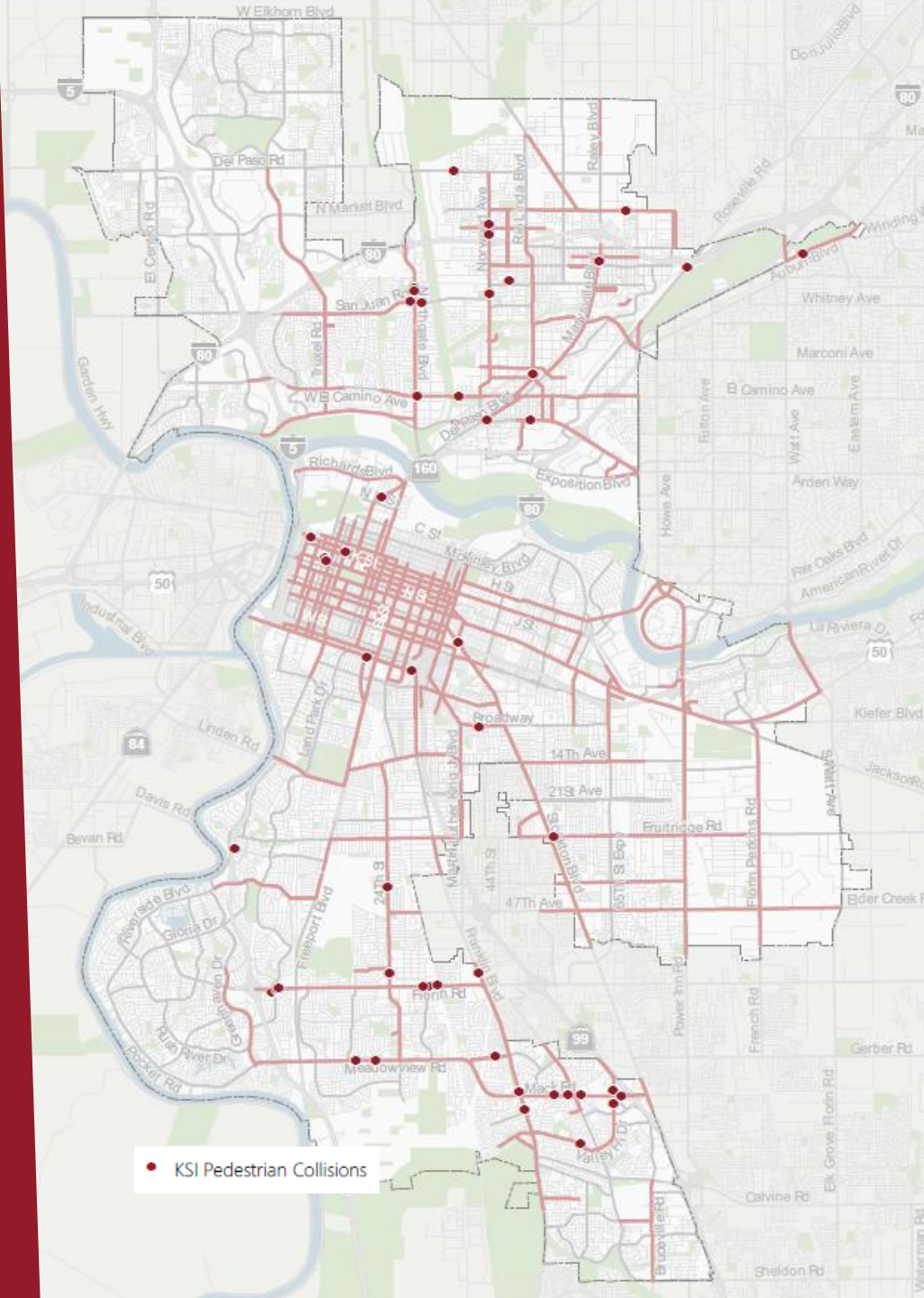




# **PROFILE 9**

pedestrian crossing outside of an  
intersection and crosswalk

# PROFILE 9



## COLLISION STATS DEFINITION

- pedestrian collisions
  - pedestrian crossing not in crosswalk
  - more than 100 feet from intersection
- 53 KSI collisions | 7% of KSI collisions

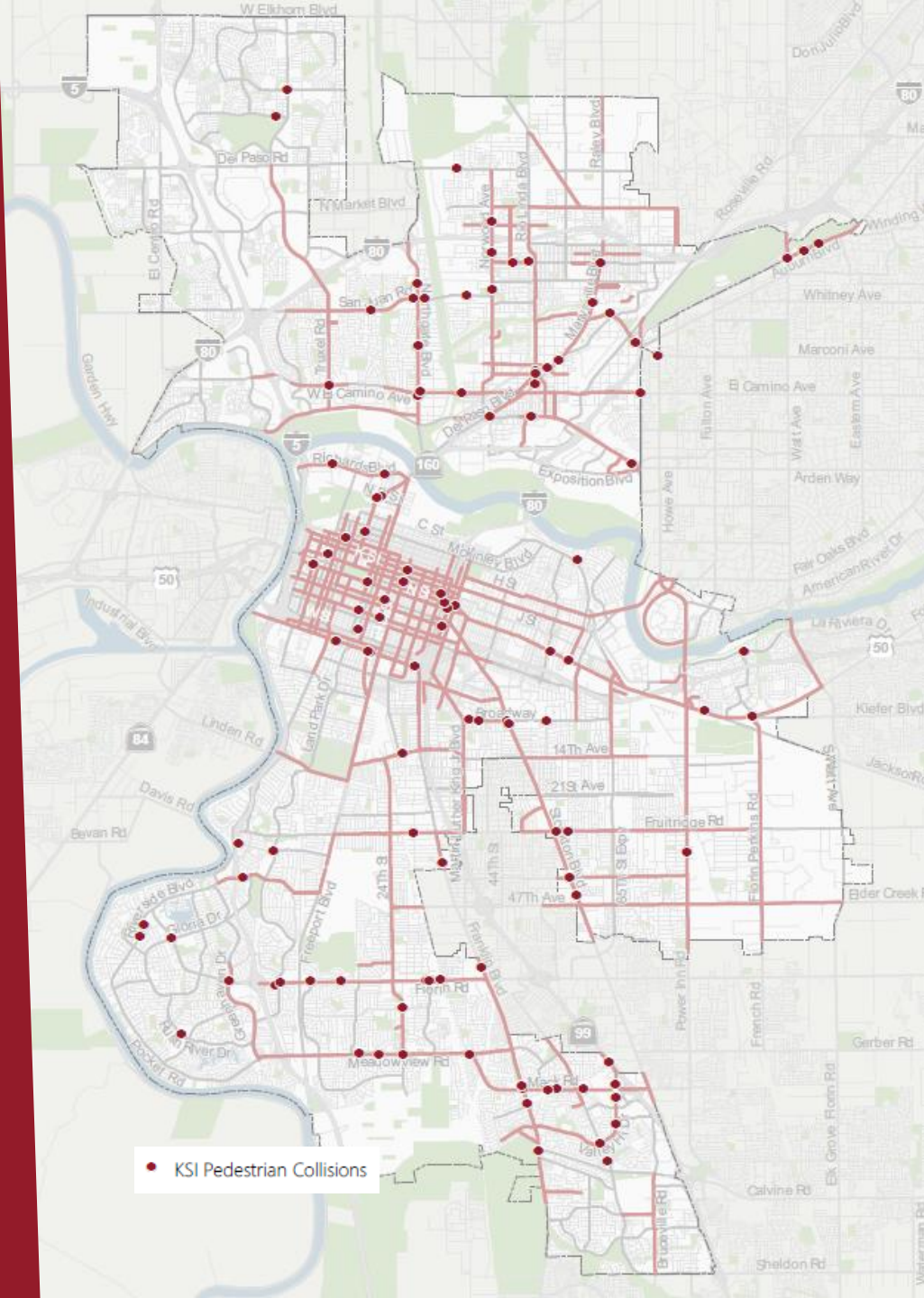




# **PROFILE 10**

pedestrian collisions near transit  
stops

# PROFILE 10



## COLLISION STATS DEFINITION

pedestrian collisions

within 200 feet of light rail station or bus stop

128 KSI collisions | 17% of KSI collisions



54% of  
pedestrian KSI