Regional Strategic Transportation Safety Plan DRAFT





APPENDIX A

Stakeholder and Public Engagement Summaries

NO ROOM FOR ONE MORE

Tell us about potential dangers on the road before another fatal crash happens.



Drivers, bicyclists and pedestrians: We need your input NOW. Because there is no room for one more.

Take our transportation survey at **gci.mysocialpinpoint.com/nacog#** to help improve traffic safety in Northern Arizona.



For additional information please contact Project Manager at 928-213-5245 or planning@nacog.org



FMPO Stakeholder Workshop Agenda

Date: August 3, 2017 **Time:** 3:00pm – 4:30pm

Location: East Flagstaff Community Library

3000 N. 4th Street, Suite 5 Flagstaff, Arizona 86004

Time	Task	Lead
3:00pm	WelcomeWorkshop PurposeIntroductions	David Wessel, FMPO
3:10pm	RSTSP Overview	Bahram Dariush, ADOT
3:20pm	Project Process/Data Analysis	Dana Biscan, Burgess & Niple
3:45pm	Survey/Polling/Mapping Tool Unsafe driving behaviors observed Opinion of causes	Alex Albert, GCI Jaye Allen, GCI
4:00pm	 RSTSP Vision and Goal Video Building on the National, State and Regional Vision What is the future to which we aspire? Group discussion and selection of a vision and goals 	Alex/Jaye, GCI Group Exercise
4:25pm	Next Steps Online Survey/Mapping: https://www.surveymonkey.com/r/FMPO Schedule	David Wessel, FMPO
4:30pm	Adjourn	



Meeting Purpose

- 1. Review and discuss crash data
- 2. Identify unsafe driver behaviors
- 3. Analysis of crash locations
- 4. Create a Vision and GOAL
- 5. Select Action Areas





Dave Wessel

INTRODUCTIONS





Tips for a Good Meeting

- Listen constructively
- Respect other's opinions
- Think "outside of the box"
- Stay focused avoid side conversations

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- Phones on vibrate but keep handy!
- HAVE FUN!





Bahram Dariush
WHAT IS AN STSP?

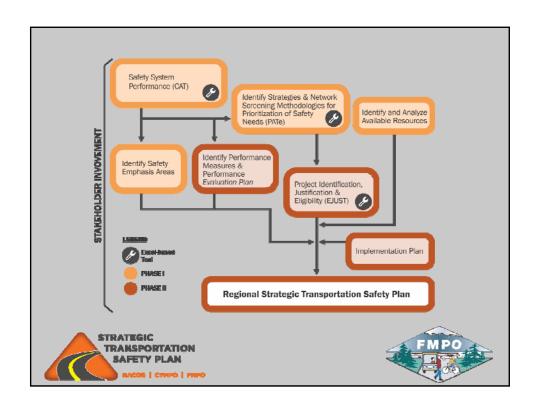


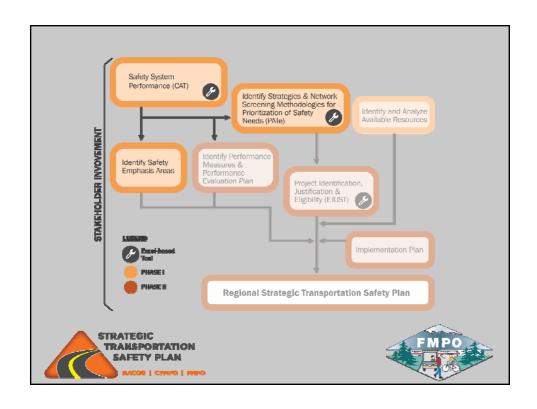


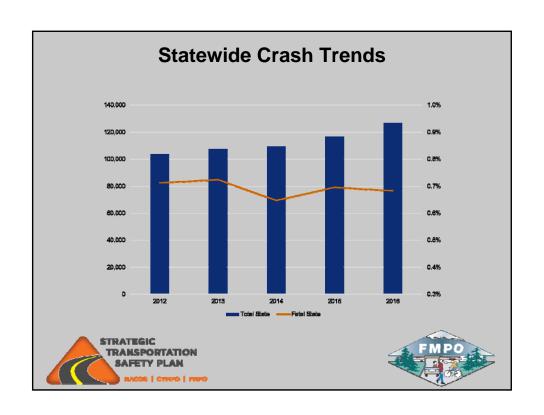
Dana Biscan

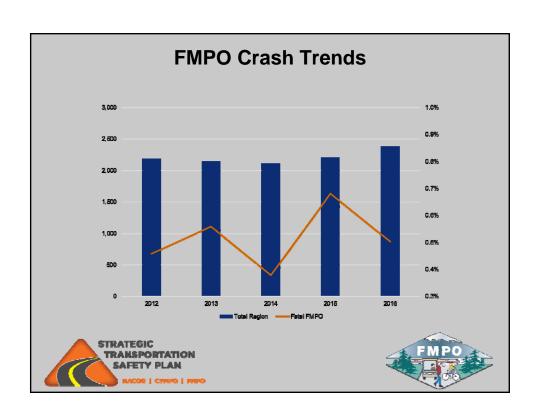
PROJECT PROCESS AND DATA ANALYSIS





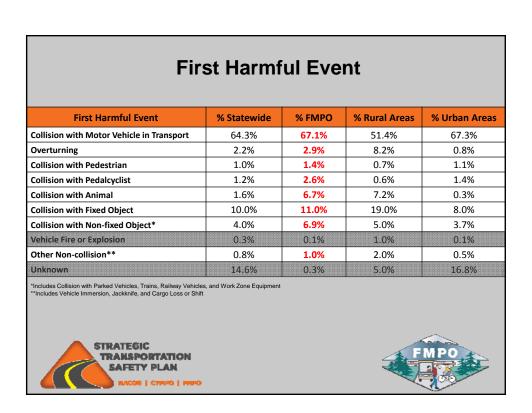


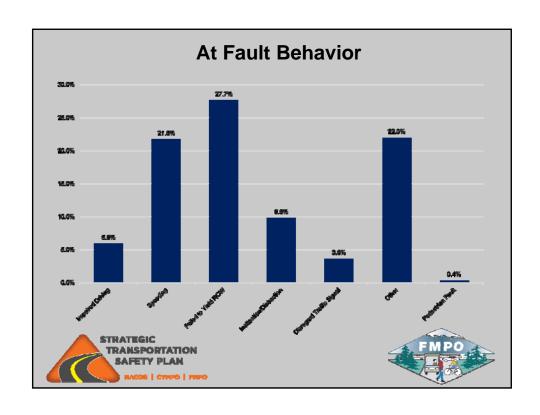


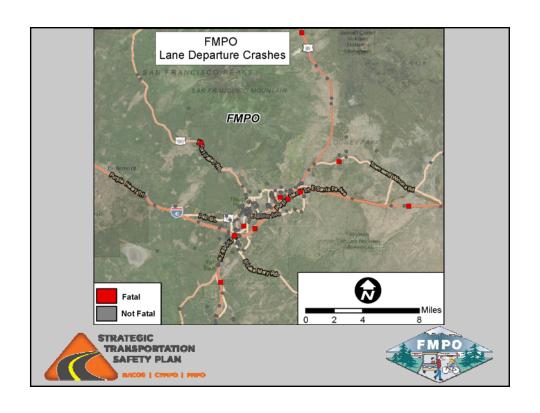


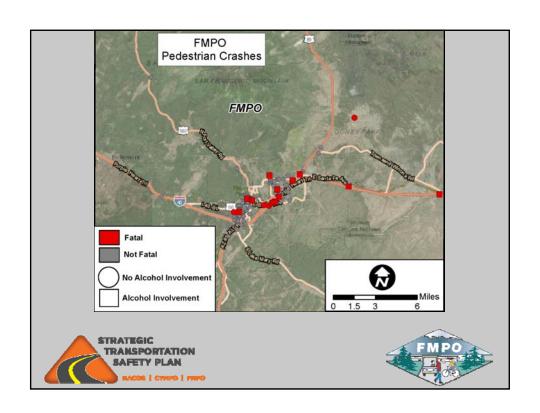
Em	phasis Areas	
Emphasis Area	SHSP	FMPO
Animal-Involved	0.3%	0.0%
Bicyclists	2.8%	1.8%
Weather-Related	3.7%	5.3%
Motorcycles	16.1%	3.5%
Distracted Driving	14.3%	31.6%
Driver Age > 64 YO	18.2%	12.3%
Pedestrians	17.1%	35.1%
Driver Age < 25 YO	29.7%	24.6%
Impaired Driving	34.1%	40.4%
Speeding and Aggressive Driving	36.7%	35.1%
Roadway Departure	51.1%	59.6%
Unrestrained	46.8%	33.3%
Heavy Vehicles/Buses/Transit	12.4%	21.1%
Work Zones	1.4%	3.5%
Intersection related	23.8%	12.3%

SAFETY PLAN







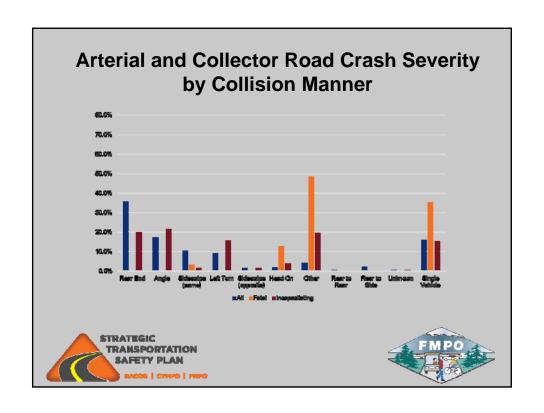


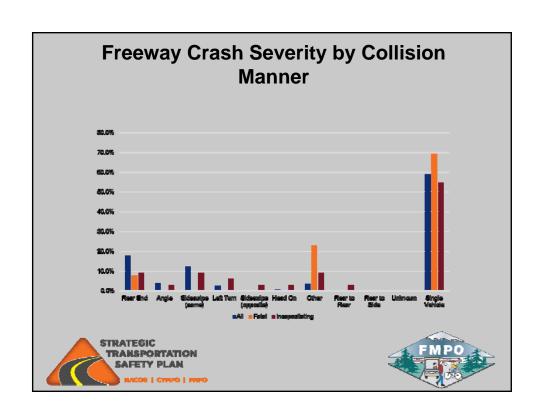
Pedestrian Crashes

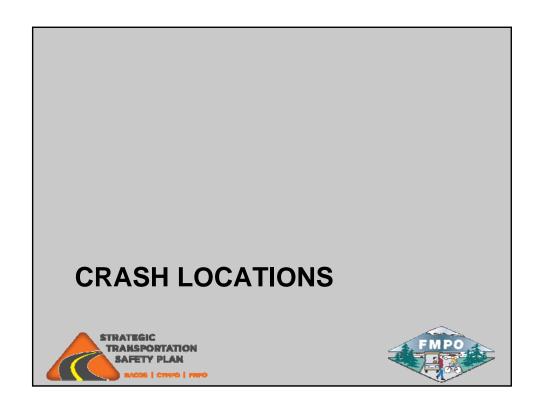
Distribution	Fatal	Incapacitating	Total
Total	20	27	163
Alcohol Involved	14	9	45
No Lighting	7	5	16
Alcohol Involved & No Lighting	7	2	11

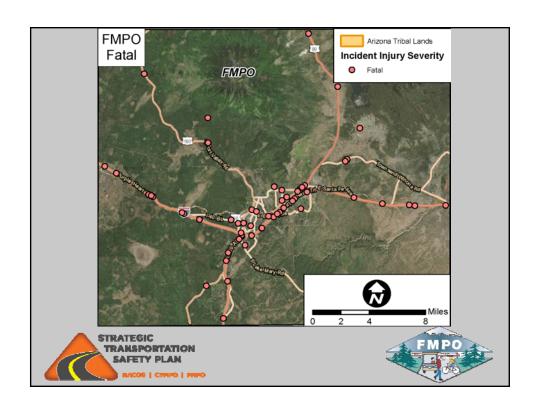


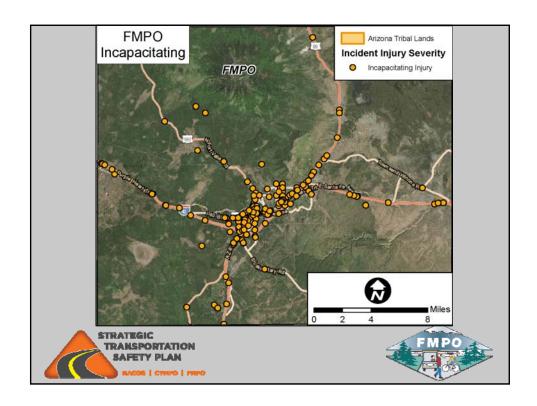


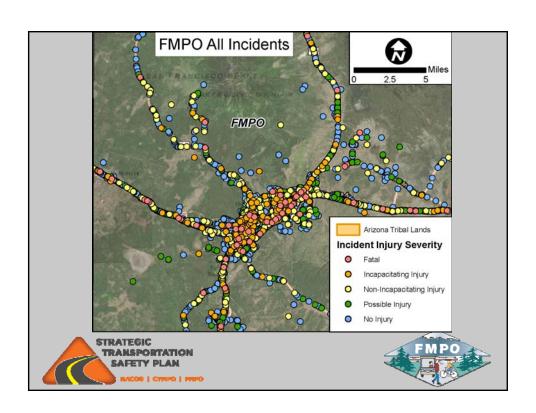












Alex Albert

POLL EVERYWHERE AND MAPPING/SURVEY OUTREACH

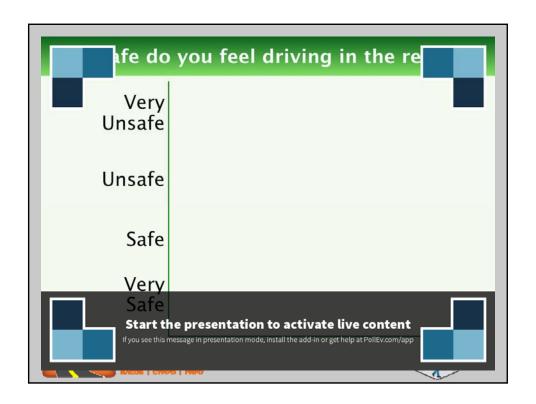


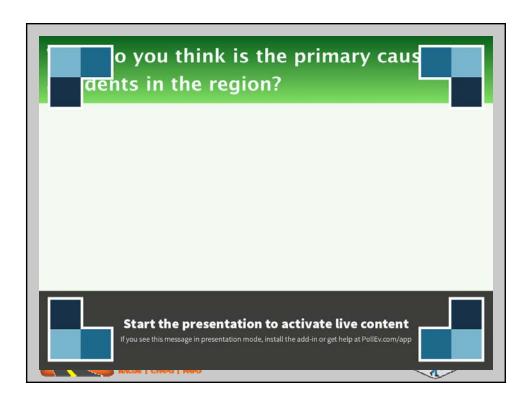
POLL EVERYWHERE

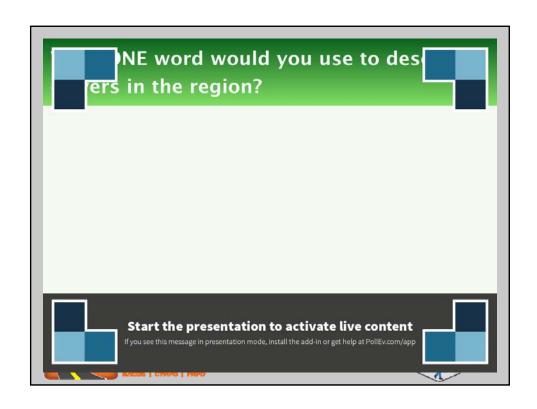
- Send text
 - TO: 22333
 - MESSAGE: gciaz
- Will receive a reply "you've joined"
- Instructions on table if you want to use app or participate online

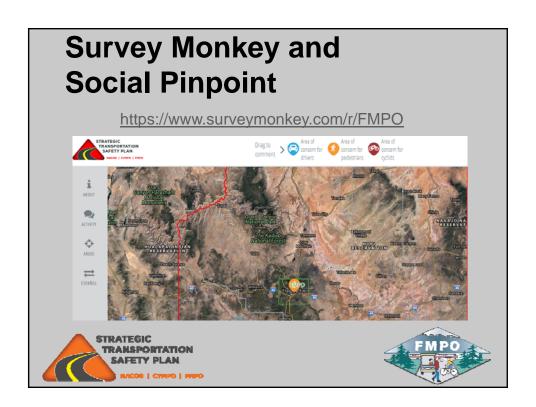


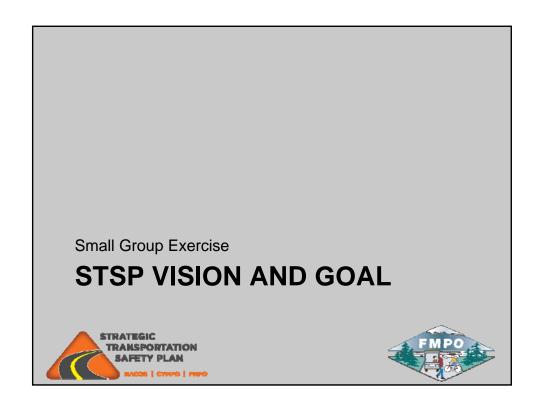


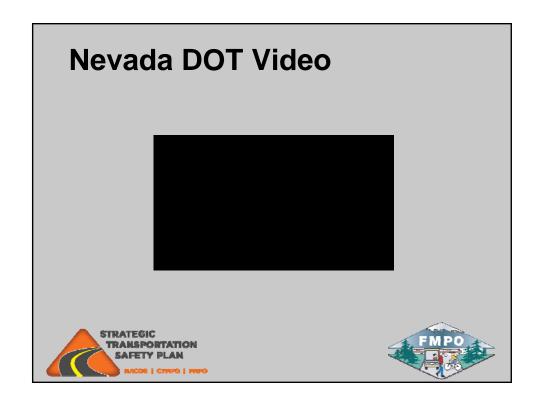












National, State, Regional Visions

FHWA Vision

Towards zero deaths and serious injuries on the Nation's roadways.

Arizona Vision

Towards zero deaths by reducing crashes for a safer Arizona.

MAG Vision
 Zero deaths - Zero Injuries.





Regional Goals

- "Reduce the number of fatalities and serious injuries in Arizona (region) by 3 to 7 percent during the next 5 years."
- "Reduce the number of fatalities and serious injuries in the region by 3% annually."
- "Reduce the number of fatal and serious injury crashes in the region by 7 to 10% during the next 5 years."





Group Discussion

- Create an aspirational vision statement and goal
 - 10 minutes
- Report to the full group
- Select preferred vision and goal





Dave Wessel

NEXT STEPS





Next Steps

- Launching online survey and mapping https://www.surveymonkey.com/r/fmpo
- Network screening Fall 2017
- Predictive analysis Fall 2017
- Countermeasure development Winter 2017
- Benefit to cost ratio and draft report Spring 2018





Thank you for participating!

QUESTIONS / COMMENTS





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FMPO Stakeholder Meeting #1

Thursday, August 3, 2017

East Flagstaff Community Library

Please sign in to indicate you are attending this meeting.

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Carlton Johnson	Martin Ince	Frank Higgins	Mark Haughey	Mark Gaillard	Dan Gabiou	Sara Dechter	Bahram Daiush	Tim Dalegowski	Denise Burley	Brett Brawley	Dana Biscan	Jerry Bills	Rick Barrett	Kim Austin	Ravi Ambadipudi	Jaye Allen	Alex Albert	Monique Adakai	NAME
City of Flagstaff	City of Flagstaff	Coconino County	AZDPS	City of Flagstaff	ADOT	City of Flagstaff	ADOT	Coconino County	Coconino County	Northern Arizona Health	Burgess & Niple	City of Flagstaff	City of Flagstaff	Coconino County	Burgess & Niple	GCI	GCI	Coconino County	COMPANY / ORGANIZATION
Cjohnson @ flags laft az. gov	mince eflagstaffar opv			Msailland @ flassa FFAZ, gov			bolonnish a az dot for						rbarrettoflagstaffaz.gov						EMAIL ADDRESS
	978 7/7 7685						602-712-2332						607-3908						PHONE



FMPO Stakeholder Meeting #1

Thursday, August 3, 2017 East Flagstaff Community Library

Please sign in to indicate you are attending this meeting.

WITINI STANDARD INITIAL		COMPANY / ORGANIZATION Peak Engineering NAU Greater Flagstaff Chamber of Commerce NAU City of Flagstaff	
The state of the s	Stuart McDaniel Bradley Mihalik Gary Miller Chris Page Dusty Rhoton Brendan Russo Ed Smaglik	Greater Flagstaff Chamber o NAU City of Flagstaff ADOT City of Flagstaff NAU NAU	nber of Commerce gstaff gstaff
'	Tom Smith Sam Taylor	Peak Engineering	
	David Wessel	FMPO	
	Mark Wilson LeAnne Little	Flagstaff Fire Department	Public Works
3	Emmanuel James Doyna Washy	FMPO I NAITA	
	Morrique Adakai	CCPH5D ARCT	
	DAME DIMO	MAIDA	

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STRATEGIC TRANSPORTATION SAFETY PLAN NACOG | CYMPO | FMPO

NACOG Strategic Transportation Safety Plan

FMPO Stakeholder Meeting #1

DATE/TIME: August 3, 2017 – 3:00 pm – 4:30 pm

LOCATION: East Flagstaff Community Library, 3000 N. 4th Street, Suite 5, Flagstaff

Attendees

Stakeholders

Monique Adakai, Coconino County

Kim Austin, Coconino County

Rick Barrett, City of Flagstaff

Lindsey Daley, Coconino County

Bahram Dariush, ADOT

Ann Dunne, NAIPTA

Dan Gabiou, ADOT

Mark Gaillard, City of Flagstaff

Mark Haughey, AZDPS

Martin Ince, City of Flagstaff

Emmanuel James, NAU

Carlton Johnson, City of Flagstaff

Julie Leid, Peak Engineering

LeAnne Little, Coconino County

Greg Mace, NAU

Stuart McDaniel, Greater Flagstaff

Chamber of Commerce

Bradley Mihalik, NAU

Nate Reisner, ADOT

Brendan Russo, NAU

Stephanie Sarty, City of Flagstaff

Ed Smaglik, NAU

Sam Taylor, NAU

Dana Wasley, NAIPTA/FMPO

Zeke Zesiger, AZDPS

Project Team

Alex Albert, GCI

Jaye Allen, GCI

Ravi Ambadipudi, Burgess & Niple

Dana Biscan, Burgess & Niple

Dusty Rhoton, FMPO

Dave Wessel, FMPO

Welcome and Introductions

Dave Wessel welcomed the group and introduced study team members in attendance. Mr. Wessel thanked attendees for participating and explained the purpose of the study. Mr. Wessel invited attendees to introduce themselves by name and organizational affiliation.

Presentation

Bahram Dariush presented a brief description of a Strategic Transportation Safety Plan (STSP).

Dana Biscan provided information on the study process and the data that has been gathered and generated, including: crash trends, statistics on emphasis areas and the first harmful events, at fault behavior and crashes by collision manner. Ms. Biscan then presented various maps showing crash locations.



NACOG Strategic Transportation Safety Plan

Alex Albert provided an overview of the community outreach approach and requested attendees join a Poll Everywhere, real-time electronic poll to provide their feedback on questions related to the attendees' personal experiences as drivers in the region. Ms. Albert showed the group the Survey Monkey online surveys and the Social Pinpoint map commenting site that will be used during the summer and fall to obtain public input. Ms. Albert played a video from NDOT which underscores the importance of reducing fatal crashes. Ms. Albert requested attendees participate as a group in an exercise to brainstorm ideas for a study vision and goals. Results from the discussion are summarized below.

Mr. Wessel presented the project schedule, thanked the group for their participation and adjourned the meeting.

Group Discussion Results

Vision Statements:

- Low hanging fruit are there realistic, short term things that can be done to improve safety rapidly?
- The vision should be realistic, something like "Towards Zero Deaths"
- Awareness must be a focus
- Comprehensive approach

Overarching Goals:

- Growth in Arizona population might factor into changes in statistics
- Additional data collection will be helpful in defining goals
- Lighting and speed are key factors in crashes

Take a Brief Survey to Help Improve Traffic Safety!

The Flagstaff Metropolitan Planning Organization (FMPO) is currently designing a strategic transportation safety plan to identify current roadway conditions, develop strategies to reduce the number of crashes, and implement solutions for safer travel in the area. The community is asked to share experiences and observations from the road and tell us about areas of concern. Please click on the link below to complete a brief survey that will provide valuable information for our study team:

BEGIN SURVEY NOW





For more information

please contact Jaye Allen

Public Outreach Manager

(602) 361-5438 or jallen@gciaz.com.

Para obtener más información en Español Ilamada (623) 258-3128.

To view a map of the FMPO area boundaries, please visit: http://www.azmag.gov/archive/AZ-COGs/index.asp



NACOG Strategic Transportation Safety Survey

FMPO Area Report

JANUARY 2018 | VERSION 2

PREPARED BY:



ON BEHALF OF:

BURGESS & NIPLE

INTRODUCTION

As the Northern Arizona and Central Yavapai County areas' population and traffic congestion grow, safety has emerged as a critical issue. The Northern Arizona Council of Governments (NACOG), Central Yavapai Metropolitan Planning Organization (CYMPO) and the Flagstaff Metropolitan Planning Organization (FMPO) are collaborating to develop a Regional Strategic Transportation Safety Plan (RSTSP).

The RSTSP is being developed to reduce risk of death and serious injury on roadways by identifying and prioritizing hazards and hazard areas, and developing and implementing projects to mitigate the hazards.

1. OVERVIEW

The purpose of the Strategic Transportation Safety Plan Survey is to seek input from the public in identifying hazards. Information obtained through the survey and other sources will be used to customize the approach for the planning process to meet the unique needs of the community.

Three specific groups are addressed:

- Those included in the Northern Arizona Council of Governments area, which includes the CYMPO and FMPO areas as well as Apache, Coconino, Navajo and Yavapai counties.
- Those included in the Central Yavapai Metropolitan Planning Organization area only.
- Those included in the Flagstaff Metropolitan Planning Organization area only.

This report summarizes the experiences of stakeholders who responded to the FMPO-area meetings and survey opportunities. Additional reports that summarize the experiences of those in the CYMPO-area and the NACOG area as a whole are available separately.

This report includes information on the survey process (Section 2) including dates responses were received and survey notification methods. Survey results (Section 3), includes summary information and conclusions for each question. Complete responses and verbatim answers to questions are shown in survey responses (Section 4).

KEY ISSUES

The majority of survey respondents lives in Flagstaff and is between 35 and 64 years old. More women than men responded to the survey. The majority of respondents are motorists.

Key issues identified include:

- Most people feel safe traveling in the community.
- The majority of residents believe the roadways in the region are safe for drivers and to a lesser extent motorcyclists. However, they don't believe it is safe for bicyclists, the elderly or disabled, youths or pedestrians.
- Respondents believe the community exhibits safety attitudes to some extent toward drivers, but vulnerable road users are left out.
- Four key factors observed each by 95% of respondents or more include distracted driving, speeding, failure to yield to other cars/bicyclists/pedestrians, and failure to stop at traffic signals and signs.
- Driver behaviors reported by more than half of respondents included distracted, hurried, and inattentive driving.
- The vast majority of motorists report feeling unsafe around pedestrians or cyclists to some degree.
- Nearly half of community members believe distracted driving, primarily from cell phone use, causes crashes.
- Suggestions to increase safety include infrastructure improvements such as new/improved roads traffic lights and signal timing, better signage and lane striping. Other suggestions include cell phone laws and enforcement of existing laws.

2. SURVEY PROCESS

The survey was available online from August 3 through November 17, 2017. Printed copies of the survey were also available at meetings as noted. There were 183 responses received (see Figure 1 below). (Please note: although the survey remained open, only two additional responses were received after the week of October 2.)

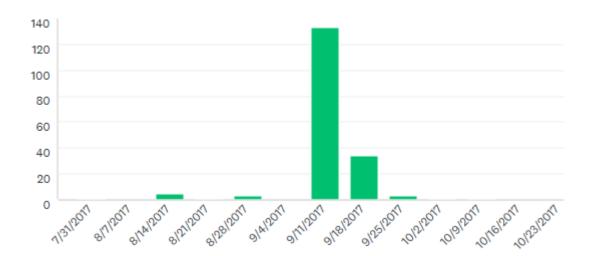


Figure 1: Survey Responses by Week (Week of July 31 through October 2)

NOTIFICATION

Notification regarding the availability of the survey and/or opportunities to complete printed copies at a meeting included:

- August, 2017: FMPO website notice publicizing the survey and online link
- 8-3-17: NACOG/FMPO Stakeholder meeting with 25 attendees
- 8-25-17: Press release sent to 15 local media outlets to publicize the availability of the survey

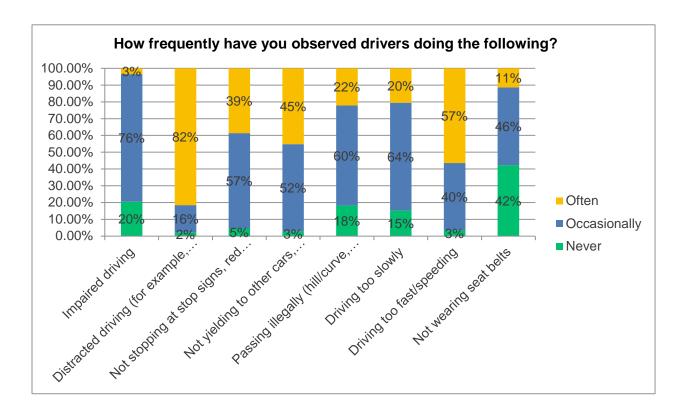
3. SURVEY RESULTS

An overview of responses follows. In some cases, categories were applied to "other" responses and open-ended questions after the responses were received. This information is noted. Generally, percentages shown reference the number of people who answered a given question. In calculating percentages for open-ended questions, percentages represent all people who responded to the survey.

1. How frequently have you observed drivers doing the following?

Of the 183 respondents, 181 people (99%) answered this question. The following unsafe behaviors (with highest combined scores of "often observed" and "occasionally observed") were reported most frequently:

- 98% Distracted driving (for example, using phone)
 - o (82% often and 16% occasionally observed)
- 97% Driving too fast/speeding
 - o (57% often and 40% occasionally observed)
- 97% Not yielding to other cars, bicycles and pedestrians
 - o (45% often and 52% occasionally observed)
- 95% Not stopping at stop signs, red lights, or crosswalks
 - o (39% often and 57% occasionally observed)

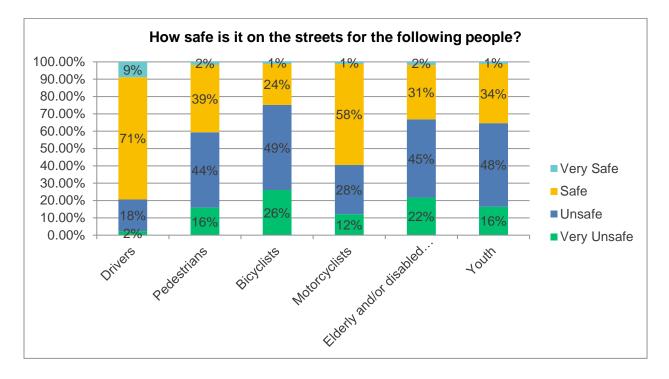


2. How safe is it on the streets for the following? (Very Unsafe, Unsafe, Safe, Very Safe)

172 people (94%) answered this question. The groups below are shown in order from "most safe" to "least safe" (using the highest combined scores of "very safe" and "safe").

More than half of people felt it was safe on the streets for drivers and motorcyclists. Less than half felt it was safe for pedestrians, youths, elderly/disabled person, and bicyclists.

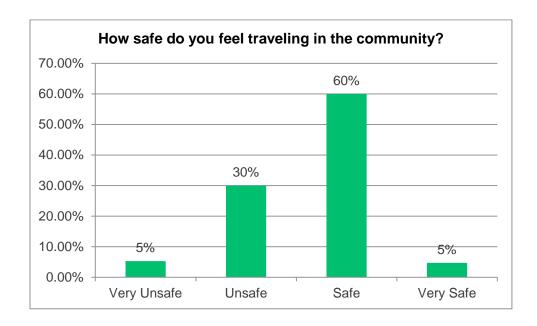
- Drivers
 - o 80% Safe or very safe
- Motorcyclists
 - o 59% Safe or very safe
- Pedestrians
 - o 41% Safe or very safe
- Youth
 - o 35% Safe or very safe
- Elderly and/or disabled persons
 - o 33% Safe or very safe
- Bicyclists
 - o 25% Safe or very safe



3. How safe do you feel traveling in the community?

Approximately 93% (170 people) responded to this question.

Most people (65%) feel safe traveling in the community, with 60% reporting that they feel safe and 5% reporting that they feel very safe. The remaining 35% of respondents reported feeling unsafe (30%) or very unsafe (5%).



4. What words best describe the behavior of drivers on area streets? (Select all that apply)

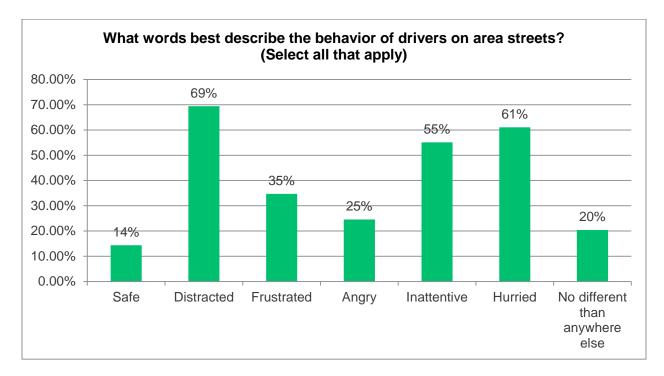
Approximately 91% (167 people) responded to this question.

Behaviors of drivers noted by more than half of respondents include:

- 69% Distracted
- 61% Hurried
- 55% Inattentive

Behaviors of drivers receiving the lowest percentage include:

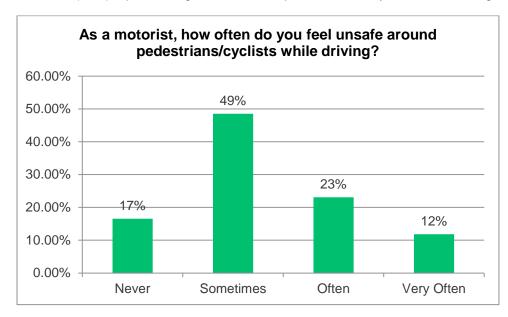
- 14% Safe
- 20% No different than anywhere else



5. As a motorist, how often do you feel unsafe around pedestrians/cyclists while driving?

169 people (92%) responded to this question.

Only 17% of motorists reported never feeling unsafe around pedestrians or cyclists. The vast majority of motorists (83%) report feeling unsafe around pedestrians or cyclists to some degree.



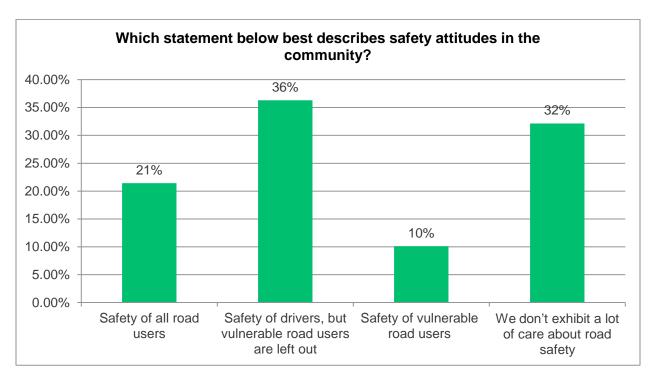
6. Which statement below best describes safety attitudes in the community?

Approximately 92% (168 people) responded to this question.

Respondents believe the community exhibits safety attitudes to some extent toward drivers, but vulnerable road users are left out (36%). However, 32% believe that the community does not exhibit care about road safety.

Safety attitudes were rated in the following order:

- 36% We care about the safety of drivers, but vulnerable road users are left out (pedestrians/bikes/motorcycles/elderly)
- 32% We don't exhibit a lot of care about road safety
- 21% We exhibit care about the safety of all road users
- 10% We particularly exhibit care about the safety of vulnerable road users (pedestrians/bikes/motorcycles/elderly)



7. What do you think is the primary cause of crashes in the area? (Open-ended)

Approximately 81% (149 people) responded to this question. Categories indicated below were applied during analysis and were not part of the survey process. Verbatim answers are available in Section 4, Survey Responses.

Nearly half on all respondents (45%) indicated that distracted driving was a cause of crashes. The only other behavior reported at a notable percentage was speeding/hurried/impatient driving (10%).

- 45% Distracted driving, including inattentiveness and cell phone use
- 10% Other
- 10% Speeding/hurried/impatient
- 9% Other behaviors
- 5% Congestion/population
- 2% Bicyclist/Pedestrian issues

8. What do you think needs to be changed to make it safer to travel? (Open-ended)

Approximately 79% (144 people) responded to this question. Categories indicated below were applied during analysis and were not part of the survey process. Verbatim answers are available in Section 4, Survey Responses.

Approximately 34% of respondents provided suggestion that would involve infrastructure improvements including new and improved roads (9%) or other improvements (25%) such as traffic lights and traffic light timing, better signage and lane striping. The next most significant response categories included cell phone laws (13%) as well as enforcement (10%).

- 25% Infrastructure including traffic lights/timing, signs, striping
- 13% Cell phone laws
- 11% Other
- 10% Enforcement
- 9% Infrastructure including new/improved roads
- 5% Education
- 3% Other bicyclist/pedestrian issues
- 2% Maintenance

9. What would help you to drive more safely? (Open-ended)

Approximately 66% (120 people) responded to this question. Categories indicated below were applied during analysis and were not part of the survey process. Verbatim answers are available in Section 4, Survey Responses.

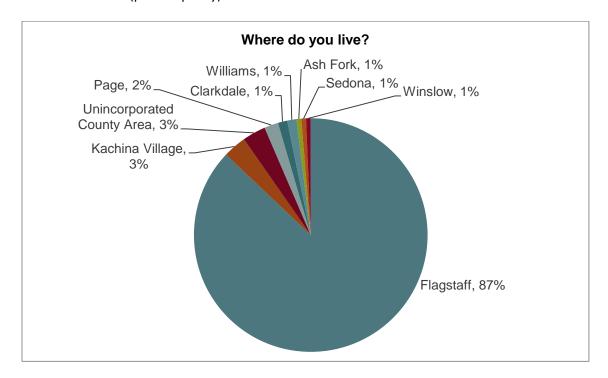
A variety of responses was received including other comments (10%) and suggestions for personal behavior (8%) and the behavior of others (4%). Though still a small percentage of total responses, the most significant response categories included addressing infrastructure through new or improved roads (7%), issues related to bicyclists or pedestrians (6%).

- 10% Other
- 8% My behavior
- 7% Infrastructure including new/improved roads
- 6% Bicyclist/pedestrian issues
- 5% Less traffic/congestion
- 5% Speed issues
- 5% Traffic control including lights, timing
- 4% Behavior of others
- 4% Enforcement
- 4% Less distracted drivers/cell phone laws
- 2% Education
- 2% Lighting
- 2% Maintenance

10. Where do you live?

155 people (85%) responded to this question. The vast majority (87%) lived in Flagstaff. "Other" replies are shown in Section 4, Survey Responses.

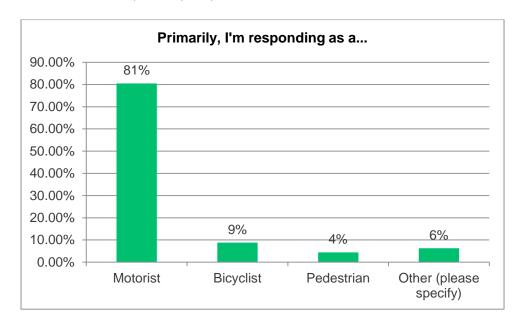
- 1% Ash Fork
- 1% Clarkdale
- 87% Flagstaff
- 3% Kachina Village
- 2% Page
- 1% Sedona
- 1% Williams
- 3% Unincorporated County Area
- 5% Other (please specify)



11. Primarily, I'm responding as a...

Approximately 87% (159 people) responded to this question. The vast majority (81%) identified themselves as motorists. Those who selected "other" included users of multiple modes of transportation, motorcyclists and transit users. "Other" responses are provided verbatim in Section 4, Survey Responses.

- 81% Motorist
- 9% Bicyclist
- 4% Pedestrian
- 6% Other (please specify)

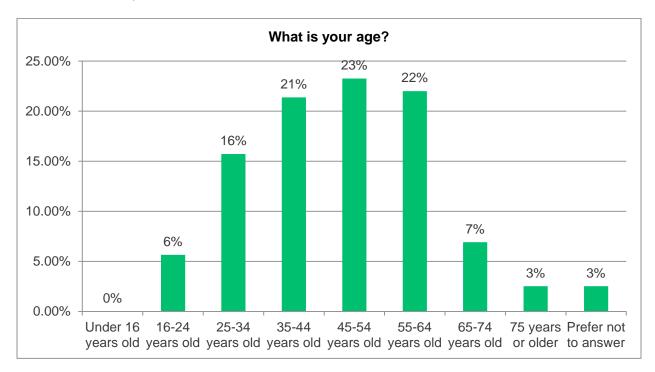


12. What is your age?

159 people (87%) responded to this question. The majority (66%) were between 35 and 64 years old. Only 22% reported being 34 years old or younger, and 10% reported being 65 years old or older.

- 0% Under 16 years old
- 6% 16-24 years old
- 16% 25-34 years old
- 21% 35-44 years old
- 23% 45-54 years old

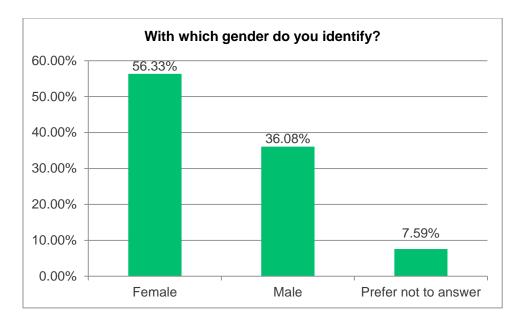
- 22% 55-64 years old
- 7% 65-74 years old
- 3% 75 years or older
- 3% Prefer not to answer



13. With which gender do you identify?

158 people (86%) responded to this question. Slightly more than half (56%) identified themselves as female; however, due to the number who selected the option "prefer not to answer" (8%), only 36% of the remaining respondents identified themselves as male.

- 56% Female
- 36% Male
- 8% Prefer not to answer



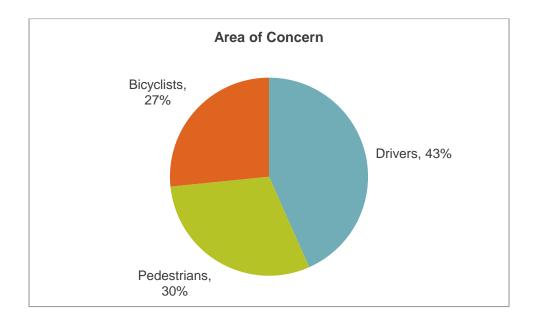
14. If you'd like to receive updates regarding THIS PROJECT ONLY please provide your contact information. Otherwise, skip this question.

26 respondents provided their names and email addresses for inclusion on the project mailing list. Complete information is available in Section 4, Survey Responses.

15. The next step is to identify unsafe locations on the map. Click on the link below. You can add as many locations to the map as you want. When you are finished close the window.

56 people reported 173 unsafe locations. Locations reported included 75 areas of concern for drivers (43%), 52 areas of concern for pedestrians (30%), and 46 areas of concern for bicyclists (27%).

Complete information is available in Section 4, Survey Responses. The mapped comments are also available in an interactive format at: https://gci.mysocialpinpoint.com/nacog#/.



4. SURVEY RESPONSES

Survey questions and verbatim responses are included below.

1. How frequently have you observed drivers doing the following? (Never, Occasionally, Often)

(Please note: categories shown under "other" were applied during analysis and were not part of the survey process.)

- Impaired driving
 - o 20% Never, 76% Occasionally, 3% Often
- Distracted driving (for example, using phone)
 - o 2% Never, 16% Occasionally, 82% Often
- Not stopping at stop signs, red lights, or crosswalks
 - o 5% Never, 57% Occasionally, 39% Often
- Not yielding to other cars, bicycles and pedestrians
 - o 3% Never, 52% Occasionally, 45% Often
- Passing illegally (hill/curve, across double lines)
 - o 18% Never, 60% Occasionally, 22% Often
- Driving too slowly
 - o 15% Never, 64% Occasionally, 20% Often
- Driving too fast/speeding
 - o 3% Never, 40% Occasionally, 57% Often
- Not wearing seat belts
 - o 42% Never, 46% Occasionally, 11% Often
- Other (please specify) 16%/29 responses:

Behaviors

- (1)Tail gating (2)constant changing of lanes which I believe is slowing down car traffic. I
 would like to see a scientic study about that subject..
- o driving aggressively
- o Driving and cell phones are a norm now...unfortunately
- Driving slowly and driving wrong way are the biggest issues
- o Driving without headlights/tail lights, driving the wrong way on a one way
- o Going the wrong way on one-way roads
- o Hwy 87 between Strawberry & Happy Jack, not enough speed limit signs
- o intimidating other drivers by following too closely or flashing lights
- o Occasionally, there are also wrong way drivers on one way streets, ie: McCreary Dr.
- Road rage
- So many people run red lights in this town! A light turning from yellow to red means speed up?
- o talking on the phone and driving
- Texting in crosswalks
- o Usually notice distracted driving because vehicle crosses lane lines.

Bicycling/pedestrian comments

- o Bicycles are by far the biggest safety issue on the road and on the sidewalk
- Bicyclists not obeying rules often

- Bicyclists wearing dark clothes, no reflectors on bike, no helmet at night and not following motorists regulations
- Driving too close to a bicyclist.
- O I was walking at a crosswalk by the High Country Conference Center Parking Garage and NAU's Printing Services. I was using the crosswalk, and a driver, who appeared to be a student, turned into me and was seconds away from hitting me. I moved out of the way, and the driver did not acknowledge that he almost hit me. Frequently, at crosswalks, drivers do not yield to pedestrians or even acknowledge that they see them. This is a safety hazard.
- Navigating intersections in Flagstaff while school is in session is tricky at best.
 Pedestrians and bicyclists can appear to materialize out of no where during peak periods when there is a lot of activity to notice and keep track of.
- Not yielding to bicycles and pedestrians is way more common than not yielding to cars
- o What about bikes not obeying traffic laws??

Other comments

- As I'm driving I don't look to see if people are wearing seat belts
- o Country Club and Solaire
- How about a 'not applicable' option. How can we see in a car to see if someone has a seat belt on?
- o How does one know if another driver is impaired?
- I don't keep my eyes on occupants long enough to see if they're wearing a seat belt or
- I don't look to see if driver has seat belt on.
- o Young men in their pickups and sports cars having no regard for humanity. Period.

2. How safe is it on the streets for the following? (Very Unsafe, Unsafe, Safe, Very Safe)

- Drivers
 - o 2% Very Unsafe, 18% Unsafe, 71% Safe, 9% Very Safe
- Pedestrians
 - o 16% Very Unsafe, 44% Unsafe, 39% Safe, 2% Very Safe
- Bicyclists
 - o 26% Very Unsafe, 49% Unsafe, 24% Safe, 1% Very Safe
- Motorcyclists
 - o 12% Very Unsafe, 28% Unsafe, 58% Safe, 1% Very Safe
- Elderly and/or disabled persons
 - o 22% Very Unsafe, 45% Unsafe, 31% Safe, 2% Very Safe
- Youth
 - o 16% Very Unsafe,48 % Unsafe, 34% Safe, 1% Very Safe

3. How safe do you feel traveling in the community?

- 5% Very Unsafe
- 30% Unsafe
- 60% Safe
- 5% Very Safe

4. What words best describe the behavior of drivers on area streets? (Select all that apply)

(Please note: categories shown under "other" were applied during analysis and were not part of the survey process.)

- 14% Safe
- 69% Distracted
- 35% Frustrated
- 25% Angry
- 55% Inattentive
- 61% Hurried
- 20% No different than anywhere else
- 14% (24 responses) Other (please specify):
 - Annoyed by the amount of traffic
 - Annoyed with bicyclists
 - o confused, slow
 - driving too fast through neighborhoods
 - o Egocentric
 - Egotistical
 - o Even when if I drive 5-10 over the speed limit, there are ALWAYS tailgaters.
 - o ignorant
 - o Impatient
 - o Lost
 - Lost, unsure of where they are going especially wrong way on one way streets w
 - people text and just as bad use cellphones
 - Quick lane changes
 - o SLOW; Confused
 - Speeding and tailgating.
 - o Stupid/Lack of Common Sense
 - o Too many tourists speeding

Other comments

- Continuous rotation of traffic patterns by the traffic department means drivers rarely know how to get from point A to B
- o gets worse in the summer when Phoenicians come up to Flagstaff. Also, in the winter, when conditions are icy people don't care.
- I believe it is worse when school is in session Little difference any longer between driving in Flagstaff main roads and Phoenix as far as driver metalities and congestion.
- It seems that bicyclists and motorcylclists are not bound by that the same traffic laws as are trucks and autos
- o students do not have any respect for drivers on campus
- Traffic in Williams is usually very light
- Why are you lumping cyclists with pedestrians? Cyclists are completely unpredictable;
 do not stop at stop signs, and weave in and out of the bike lanes

5. As a motorist, how often do you feel unsafe around pedestrians/cyclists while driving?

- 17% Never
- 49% Sometimes
- 23% Often
- 12% Very Often

6. Which statement below best describes safety attitudes in the community?

- 21% We exhibit care about the safety of all road users
- 36% We care about the safety of drivers, but vulnerable road users are left out (pedestrians/ bikes/motorcycles/elderly)
- 10% We particularly exhibit care about the safety of vulnerable road users (pedestrians/bikes/motorcycles/elderly)
- 32% We don't exhibit a lot of care about road safety
- 0% Other (please specify)

7. What do you think is the primary cause of crashes in the area? (Open-ended)

(Please note: categories shown below were applied during analysis and were not part of the survey process.)

Distracted driving, including inattentiveness and cell phone use (82 responses, 45%)

- A. Operators paying more attention to operating their phones than to their vehicle operation. B. Operators operating vehicles under the influence of drugs or alcohol. C. Speeding and weaving (lunging with out signals) through traffic.
- Being on cell phone, distracted for other reasons.
- cell phones
- cell phones
- Cell phones and other causes of distracted drivers seems to be the big one! There really should not be any reason to rear-end another driver if you are paying attention.
- cellphone use & text
- Construction and inattentive drivers.
- Distracted and hurried drivers. People routinely run red lights they don't even make an
 attempt to stop for yellow lights. Drivers unaware of anything but themselves. As a pedestrian,
 I'm very careful to stay in crosswalks and wait for crossing lights. Drivers seem to think they
 ALWAYS have right of way. I've had some pretty close calls. Cyclists blatantly disobeying basic
 traffic rules: running through stop signs, weaving in and out of lanes, riding on sidewalks, riding
 against traffic. As a law abiding cyclist that drives me crazy because it gives all of us a bad name.
- Distracted drivers
- Distracted drivers
- Distracted drivers
- distracted drivers and bicyclists not following the rules
- distracted drivers and driver who are in a hurry
- Distracted drivers and lost tourists
- Distracted drivers and speed
- Distracted drivers who are in too much of a hurry, and not paying attention.
- Distracted drivers who are texting and bicycle riders who routinely ignore traffic laws.
- distracted drivers-frustrated drivers-overpopulation, congestion, and poor city and building planning-the need for more clearly labeled crosswalks and enforcement of laws that protect

pedestrians-bicyclists who do not adhere to the rules of the road, such as by riding their bikes in the middle of the road, and who do not demonstrate adequate awareness of drivers and pedestrians

- Distracted drivers, and bicyclists being idiots and not following road rules
- Distracted drivers, and people's lack of common sense. Distracted drivers are people who are texting while driving, drivers staring at buildings/roadways while driving (for example, tourists who stop on San Francisco to see if they want to make a turn or keep going forward making everyone else stop abruptly behind them and causing crashes), etc. Lack of common sense are things such as not following the sign to say right turns go into the right lane to then merge with traffic and drivers stop all traffic because they want to be in the left lane and cause others to stop and cause rear-endings because other drivers were trying to be nice and let them in. Or lack of common sense includes drivers who stop abruptly when they are in one lane and they want to be in the other lane to make a turn, and they stop all traffic flow because no one understands what they are doing so drivers get frustrated and try to go around them and have an accident because they could not see around the stopped vehicle.
- distracted drivers, especially on phones or texting
- Distracted drivers, fast lane changes, and not stopping for people or bikers.
- Distracted drivers, or trying to make it through after light turns red
- Distracted driving
- distracted driving and illegal pedestrians crossing road randomly unmarked crossings
- distracted driving, ignorance of traffic rules
- Distracted or Driving under the influence
- Distracted or impatient driving
- Distraction
- Distraction
- distraction and inattention
- Distraction and speeding
- distraction on phones and inattention
- distraction or rushing
- Distraction, caused by electronic devices, and confusion, caused by tourists.
- distractions
- Distractions
- Distractions Hurriedness
- Distractions, congestion.
- Driver detracted, poor ped and cycling infrastructure, peds and cyclists not following rules and vice versa with motorists
- Drivers looking at their phones.
- Drivers not looking out for pedestrians and bicyclists but then again bicyclists are not slowing down and making sure the vehicles are stopping before they go through intersections.
- Honestly, I'm not really sure. I think there are distracted drivers out there, and there are people who are in a hurry that don't take the safest precautions.
- Hurried/inattentive driving

- Hurry, inattention
- Inattention
- inattention
- Inattention too many people on their cell phones, too many tourists, too many NAU students from California
- Inattention and distracted driving.
- Inattention to surroundings and weather conditions.
- Inattention, rushing, trying to beat the person crossing the road, distractions inside the car.
- Inattentive drivers
- Inattentive drivers
- Inattentive drivers
- Inattentive drivers who are distracted by their hand-held devices. I have witnessed City of Flagstaff police officers nearly crash due to being distracted by their electronics in their vehicles.
- Inattentive drivers, poor timing on traffic signals
- Inattentive/distracted driving, poorly signed areas, and intersections that encourage going on the red because there is no turn signal.
- Inattentive/distracted driving. Inappropriate speed limits in certain areas.
- inattentiveness
- inattentiveness and fiddling with phones; last minute lane changes for turns and exits
- Not paying attention
- Not paying attention and speeding.
- not paying attention while driving; being distracted with cell phone or impaired
- Not paying attention, hand held cell phones
- Not paying attention, traffic backup.
- People are extremely distracted (mostly by their phones) that they aren't paying adequate attention to others around them. This is also true of pedestrians. Every day I see pedestrians and skateboarders looking down at their phones and not watching where they're going. It's common to see them suddenly step into the street without looking to see if a car is right there. Another problem: road conditions and a narrowing of road width in construction areas make driving difficult especially when bicyclists, skateboarders and pedestrians are also near the construction area. Often bicyclists don't ride far to the right and traffic prevents cars from giving a wider berth around them. Another problem: as student populations grow, traffic becomes more dangerous as roads become more congested with not only cars, but many more skateboarders, pedestrians and bicyclists. Traffic becomes extremely backed up at intersections and even police aids directing traffic isn't enough. There are some intersections where there is no intervention by police to help traffic. We have major issues with a very long line of cars waiting for a steady stream of students to exit the sidewalks. Many pedestrians not even looking before stepping right in front of cars. I've seen bicyclists suddenly taking a sharp left directly in front of a car without looking. He was lucky the car didn't hit him. Skateboarders do the same thing. I've seen skateboarders run down and hit pedestrians and one came inches from hitting me head on, on the pedway. This campus is extremely dangerous."
- People not paying attention and not realizing that traffic in Flagstaff (especially on Fridays) can get very backed up.
- People on their phones! Always on their phones. An hour doesn't go by when I don't see it.
- People that are distracted
- People thinking their the most important person on the road (their being late to an appointment is more important than a bicyclist's safety for example, or it's okay to cut someone off in traffic

because they think others should be responsible in avoiding them, rather them having responsibility, or etc).

- People using cellphones and being distracted while driving on the roadways.
- Tailgating and cell phone.
- texting
- Texting
- texting / cell phone use
- texting and talking on the phone. as a cyclist, it is horrifying to see how little attention drivers actually pay to the road.
- Texting while driving and driving too fast for conditions

Other (19 responses, 10%)

- 1. Intersections that require a stop sign/traffic light (Zuni and Lonetree, for example). Crashes and near crashes happen daily at this intersection. I have seen drivers take big risks after waiting for an opportunity to get on the road, which endangers everyone. 2. Bicyclists that collide with cars because some bicyclists fail to stop for stop signs or even slow down to make eye contact with the driver and drivers are unaware of the presence of the bicyclist until it's too late. I have also seen drivers who do not give bicyclists enough space on the road. 3. Drivers who do not use their mirrors and check around them before lane changes if driving a big car, especially, smaller cars/motorcyclists/bicyclists are vulnerable.
- accidents
- CLOSE NAU WHEN THERE IS A BAD BLIZZARD. SERIOUSLY.
- Don't know.
- Icy/snowy roads especially when they are not plowed. During good weather, drivers being distracted while driving. Pedestrians and bicyclists not following rules of road. Intersections that have lights that switch too quickly between yellows, reds, and greens.
- Lack of square (90 degree) intersections. Road construction poorly marked.
- Not enough (none at the moment) infrastructure has been added to support the additional housing and drastic increase in the number of drivers, bicyclists and pedestrians that come with additional housing and people in already congested areas.
- Not enough SAFE biking and walking paths. A painted line on the road is not enough, nor is sharing the road with cars. It needs to be separated by some kind of barrier, for example by a curb or vegetation.
- Not enough traffic lights. Not enough roads
- Our roadway infrastructure can't support amount of traffic and it is greatly increasing each year.
- poor intersections (Lockett, 66/89, and Kaspar), speeding (especially in neighborhoods)
- Poor traffic planning
- stuff
- The Traffic Department! Everything is designed to disrupt flow of traffic and make sure
 everyone needs to focus their attention away from where it should be (i.e., having to focus on
 lights instead of pedestrians because no way to determine when you will have right of way,
 lights that skip their cycle because a car was not already stopped at the intersection, stupid
 lights that go from yellow to green or switch back to red immediately after turning green, etc.)
- Tourists and drunk, uninsured citizens from the reservation
- Tourists that do not know what they are doing.
- Tourists, congested Milton traffic, bicyclist who think they are above the law and other users of the road, egocentric drivers

- traffic lights that aren't timed well for traffic flow, especially in areas with long stretches of lights, traffic comes up to speed to get through major intersections, but then quickly slows down 2 lights up due to back ups at a light that is red, but the in between light is still green.
- turn movements

Speeding/hurried/impatient (18 responses, 10%)

- Drivers being in a hurry. Drivers not being attentive to what is going on around them. Drivers following other cars too close. Distracted drivers.
- For cars speeding. For bicycle riders the lack of knowledge abut the "Rules of the Road". Bicycle Riders going the wrong way in bicycle lanes or not wearing helmets worry me a lot. For ped its inattentive drivers (cell phones!) and right hand turn on red by drivers.
- In congested areas, people getting in a hurry and then trying to make a turn across traffic or not noticing pedestrians or biclyclists.
- People are impatient, with so much traffic and so many traffic lights, it seems like people don't want to stop since they will stop 20 feet down the road. Running a red light, passing in a turn lane and always trying to get one more car ahead is a daily occurrence.
- People being in a hurry and putting their need to get somewhere first before safety.
- People being too pushing or rushed and want to make lights
- People in a hurry, too much congestion, distracted driving.
- Probably speed and driving too close but drivers using hand held phones and walkers, cyclist on the sidewalk!-cyclist jumping between sidewalk and street-cyclist running traffic signals seem to cause quite a few near misses.
- Rushing to somewhere, distracted, impatient, weather conditions.
- Same as any city vs. a small town, people hurry, people are more than not on their phones.
- Speed
- Speed and distracted driving.
- speed, inattention, crowded roadways
- Speed/distraction
- Speed/hurriedness, trying to get through traffic congestion and beat the light
- Students who drive too fast, particularly in icy / snowy conditions. Bicycles are unpredictable; students with smart phones are in a fog when they cross the street.
- Too fast driving. Inattentive while driving.
- too fast for conditions, i.e. driving into sun and not slowing down; inattention = cell phone use; inexperience

Other behaviors (17 responses, 9%)

- Disregard for traffic rules due to impatience
- Drivers who are not familiar with the area and don't understand the particular care we need to take in Flagstaff, for pedestrians and bicycles.
- Drunk drivers and bike riders breaking laws
- drunk driving
- DUI or DWI related
- failing to stop at stop signs,,,, some off ramps need rumble strips to warn drivers exiting the freeway to stop.
- following too closely
- I think slow drivers and lost drivers are a major issue; whether appropriate or not, it leads to other drivers trying to move past creating greater risk for all. Wrong way drivers downtown and

on the 40 seem to be increasing in frequency. This is particularly dangerous downtown where vulnerable commuters are more abundant. I think overall, our roads were not built for the level of traffic we're experiencing. Tourism and temporary residents have increased dramatically so we're seeing more traffic and more accidents.

- Impaired driving alcohol mostly, also looking at phones Also, tourists that are looking for places and not sure where they are going
- passing in an unsafe area. Tailgating
- People not knowing the area and not paying attention
- People not knowing where they are going, texting, traffic.
- Poor drivers, Bicyclists who do not give the right of way to vehicles, and pedestrians who are not paying attention
- Running red lights
- Running red lights, distracted driving
- trying to turn on a yellow light while the on coming car is racing to beat the light.
- unfamiliarity with yellow turning signals, distracted and hurried drivers, bicyclists who do not know or do not follow rules,

Congestion/population (10 responses, 5%)

- congestion
- Congestion
- Congestion on main streets
- Congestion.
- I know it is well known that Milton and Route 66, being the main venue for traffic is just not accommodating the volume of traffic that Flagstaff now has.
- Roads are too conjested
- The population of Flagstaff continues to grow as NAU continues to recruit more and more students.
- There is very little flow of traffic during high driving times. Everyone is generally in bumper to bumper traffic, not moving. Causing a lot of frustration and hurried driving. Night time drivers do NOT pay close enough attention. The light at Milton and Butler is EXTREMELY dangerous for pedestrians crossing. Drivers do NOT come to a complete stop or fully look to make sure nobody is walking. I've avoided getting hit 7+ times in less than nine months at the Bulter/Milton intersection.
- Too many visitors and students on Milton and now elsewhere
- Too much traffic, and not enough stop lights. Not enough secondary routes across town. Yes, driver distractedness does add to the problems, but if we weren't driving on top of each other all the time, it wouldn't be as bad.

Bicyclist/Pedestrian issues (3 responses, 2%)

- Crack down on bicyclists. They ignore laws constantly.
- In Flagstaff, on the NAU Campus, students will cross a street with no crosswalk, assuming drivers will stop for them, then rear ends happen because someone slows for a student crossing, and a driver behind them doesn't see them slowing or is going too fast.
- students on bikes/skate boards, not yielding at stop signs. Students walking focusing on cell phones not paying attention to their surroundings.

8. What do you think needs to be changed to make it safer to travel? (Open-ended)

(Please note: categories shown below were applied during analysis and were not part of the survey process.)

Infrastructure including traffic lights/timing, signs, striping (45 responses, 25%)

- Add stop light(s) on west 66, maybe at one of the entrances for Railroad Springs.
- Alleviate the backup on busy roads. I'm not sure how this might be possible, though.
- Allow traffic to flow, use what traffic sensors you have to reduce congestion not to stop any
 traffic approaching an intersection, get rid of improper parallel parking areas and segregate
 vehicles not capable of doing speed limit from those that are (i.e., put the idiots that puts bikes
 in the middle of traffic lanes in jail and be done with them)
- Attention paid to certain intersections. For example, Butler at San Francisco and Beaver need south turn signals and Steves at Route 66 desperately needs a right turn lane.
- better bike and ped access/lanes.
- better bike/ ped facilities and crossings
- Better facilities for vulnerable road users
- Better infrastructure design. Avoid cyclists in blind spots, road diets to slow motorists speeds, more ped connections
- Better signal spacing, medians and driveway (access) consolidation on all of Milton Road. The Milton section from W. Route 66 to Humphreys needs a plan to widen to 6 travel lanes.
- Better timing of traffic lights on the main arteries. Larger space for Mountain line buses to fully
 exit the road way at bus stops, especially along main arteries (Butler). Keeping up on roadway
 painting. I like the dark skies piece of flagstaff, but traffic lines can be hard to see at night,
 especially in bad weather.
- Better traffic timing, more traffic guards in places like NAU's campus. Cars can't get anywhere
 when there are 100 students crossing streets. If pedestrian traffic could be better controlled
 then drivers wouldn't be so frustrated and impatient.
- bike lanes
- Bike lanes that are out of traffic are a worthwhile investment in public safety. The FUTS trail all Rt 66 is great I use it every day!
- Cameras at stoplights because there are rarely consequences for red light runners.
- Capital: better pedestrian and bike facilities -construct those broken/missing connections in the FUTS and Sidewalks. Add ABOVE grade crossings along Milton and DT/Beaver. Education: Require drivers education in high school. Train youth how to use pedestrian signals.
- Clear road signs and markings
- dedicated bike lanes, more pedestrian walkways (cleared of snow in winter)
- Get the traffic lights in sync
- I really think that most areas are pretty safe. One place I always see potential dangers is at the light heading south on Steves. The light never lasts long enough to let enough people through, and then traffic from 7th Ave. there is always congested and people are always squeaking their way in somewhere in a dangerous place.
- I think Flagstaff seriously needs to consider its infrastructure and future demands because this
 town is only going to get bigger. I also think we need better signage for speed limits and
 restrictions (like one way/wrong way signs.
- Improve traffic and pedestrian flow in the Butler & 66 through Humphreys & Columbus areas.
- Improved Pedestrian/Bike systems, additional travel lanes or routes, traffic overpasses at railroad crossings.

- Independent bike lanes
- Lower speed limits, put in speed bumps/control, force people not to drive.
- More bike lanes on major streets. ie. Butler from Ponderosa to Fox Glenn. More signs for drivers to be aware of pedestrians during high traffic times. (My son got hit by a car on his bike in a crosswalk, yesterday I saw a bicyclist hit in a crosswalk)"
- More bike lanes. Traffic signals that don't bottleneck traffic. Snow removal. Traffic control in areas that have grown in population.
- More clear bike lanes all the way through town, ESPECIALLY down Milton. Why are there no bike lanes on Milton? It's very unsafe there for cyclists and drivers alike. Add stop lights where there is continued congestion. The stretch of road going north on Milton to Humphrey's is a good example of that. Left turn lanes into Santa Fe Ave and the other one onto Humphrey's gets so backed up that cars are just stopped in the middle of lanes which makes you feel like a sitting duck and causes more accidents.
- More flashing lights at crosswalks on busy streets (e.g. 180 Fort Valley Road), more bike lanes (e.g. San Francisco Street south of the tracks). Something needs to be done about the left turn lane just past the underpass on Milton/Route 66. The traffic backs up for those waiting to turn left onto Santa Fe Avenue, and people cannot get around them to go straight or try to get to the left turn lane at Humphreys. There is a huge potential for an accident there.
- More lights would help regulate traffic
- More traffic lights around campus, more sidewalks. ENFORCE bike laws.
- More visible signage. For example, more visual signage of one-ways downtown. So many out-of-town people do not see the one-way on Beaver outside of Biff's Bagels and Altitudes. You would think that people would see that there is not a traffic light on Beaver facing south at Route 66, just north of the tracks, and think that there is something wrong. But with wrong-way drivers driving on Beaver multiple times an hour to me, that is a clear indication that the signage is not visual enough for people see and potentially avoid accidents.
- Need more stop lights to keep the flow of traffic going. At a four way stop, you can have one
 student after another crossing the street, leaving cars going out of San Francisco street waiting
 for long stretches at a time...backing up traffic, causing frustration, and drivers trying to cut in
 front of students after waiting to long for a break so that they can move forward.
- need more traffic speed limit signs between Strawberry and Happy Jack on Hwy 87 When valley visitors don't see 55 mile per hour signs, they think the speed limit goes to 65.
- On streets where there are bike lines, rather than just a line painted on the road, there needs to be a physcial divider, or at least a rumble strip since drivers are often texting while driving. At smart stop lights, buttons for the crosswalk light change should be at easy access for cyclists otherwsie we need to ride up on the sidewalk to press the crosswalk button, and then come back down to the street. Penalties for cars "hazing" cyclists should be stiffer, and police need training for cyclists' right (many surprisingly have no idea what cyclists' rights are). The crosswalk light on Blutler needs to be red, not yellow cars don't realize they need to stop for pedestrians.
- Over road pedestrian walkways. Better paint used on streets so you can see the lines at night. Better logistics on the roads too many cars, not enough lanes. Street lights don't give enough time for people who are making a left arrow turn.
- Pedestrian crossings NEED flashing lights. The Butler/Milton intersection needs a pedestrian bridge/tunnel flashing lights to warn drivers making right hand turns to LOOK.
- pedestrian walkways over certain roads, butler, lone tree so that traffic flows more smoothly and non-motorists are safer.
- Review the timing of the traffic signals especially on Milton Avenue! The intersection at Riordan is especially problematic with a long wait to cross Milton and a very short window once you get

a green light. Allow time for cars to make turns after the walk signal ends (also at many other locations). Fourth Street intersection - having both directions turn left at the same time with no barriers is ridiculous. I am fearful of making a left turn there and avoid whenever possible. Very dangerous. Butler Ave Intersection - if you are not from Flagstaff AND very familiar of what lane to be in ahead of time, this main high traffic intersection is highly confusing and downright dangerous

- rumble strips at the end of exit ramps. Williams is full of tourists who are looking around and often fail to stop at the stop signs, particularly at the I-40 161 eb off ramp.
- Somehow make roads less congested, time traffic lights better, more and better crosswalks and bike lanes.
- Stop light/stop sign/roundabout/some form of traffic control at the intersection of Zuni and Lonetree to deal with massive amount of impatient, erratic traffic, especially during Coconino Community College hours.
- The intersection of Highway 89 and country club motorists turning from Highway 89 to country club for access to Highway 89 are backed up for miles on Fridays Saturdays and Sundays . Please consider adjusting the turning lane to accommodate a better flow of traffic .
- The lights at the intersections on W. Riordan Road and then S Plaza road on Milton never light up at the same time, so traffic gets blocked. Green light at Riordan Road while there is a red light at Plaza Road, so the traffic gets blocked and can't go further. Also the intersection at Beulah and Forest Meadows, in front of Coco's Restaurant. There are two lanes that turn left and one land goes straight, people always try to drive straight from the 2nd turn lane and cause accidents.
- thinking about butler, huntington and ponderosa parkway lots of last minute lane changes. perhaps start turn lane striping earlier or a better arrow sign by Sam's Club
- Timing of traffic signals

Cell phone laws (24 responses, 13%)

- ban and strict enforcement of cell phone use while driving; strict enforcement of stop sign / traffic light violations
- Ban cell phone use handheld all together, not just prohibit texting.
- Ban cell phone use of any type. Lots of traffic calming devices.
- Ban cell phones when driving and impose fines. I recently saw a motorcyclist texting while driving his motorcycle!
- ban use of cell phones while driving
- distracted driving laws, higher penalties for collisions leading to injury/death, increased penalties for hazardous traffic violations, primary seatbelt law, mandatory helmet law, less crowded roadways
- ENFORCE the hand-held device prohibited laws!
- Enforcement of hand free policy.
- Everyone needs to pay attention and not be on there phones.
- Fine drivers caught texting driving or in a crosswalk
- Fine drivers who use hand held phones. Expand bike lanes and make riding a bike on the sidewalk illegal. Provide covered parking for cyclists
- Expanded public transportation options. Do a better job keeping sidewalks clear of snow -both businesses and the city. Provide financial incentives to those who don't drive to work
- hands free phone use only
- Law to ban phone use

- laws on texting and cell phone use, then enforcement.
- make it a law hands free cellphone use only no holding your phone while driving and absolutely no NO no texting \$500.00 fine mim. for texing and driving
- Make it illegal to talk on phone or text while driving. Start ticketing people who don't use turn signals. Start ticketing people who drive over the speed limit. Post more speed limit signs.
- Make texting while driving illegal and develop dedicated bike paths and require bicycle riders to use them. Ban bicycle riding on sidewalks in all of Flagstaff, not just downtown.
- More cell phone enforcement
- no phone policy / texting
- Pass a law that no longer allows cellphone use while driving.
- Prohibit cell phones
- require hands free cell phone use, clear vegetation and obstructions at intersections
- take away interior distractions

Other (20 responses, 11%)

- -analysis of the impact of overpopulation on the safety of transportation and the community strategic city planning -the need for more clearly labeled crosswalks and enforcement of laws
 that protect pedestrians (please see above) -provide possible solutions to the NAU community
 and Flagstaff community. Take a vote on how to resolve these issues.
- Attention to zoning (buildings, too many cars for the infrastructure), better signage, better
 management of winter weather conditions (as many young drivers in the area are unfamiliar
 with snow/ice and drive 2-wheel drive vehicles), bypass (!!!!), sensor/better timed traffic lights,
 addressing the Rt 66/Miltion to Santa Fe turn/backup
- CLOSE NAU WHEN THERE IS A BAD BLIZZARD. SERIOUSLY.
- Crazy intersections like butler and Huntington are a nightmare for tourists
- Don't know.
- driver awareness
- Drivers who are in a hurry and cut in and out dangerously.
- Fewer vehicles
- I don't know
- I-40/Hwy 180 corridor west of town
- Minimize night time driving.
- More public transit options that extend to neighborhoods outside city limits. Perhaps a
 pedestrian bridge to NAU campus over Beulah from both new student housing complexes being
 built on McConnell drive. More exit options on and off of the NAU campus in order to alleviate
 congestion and frustrated drivers/pedestrians.
- Not be so appealing to tourists.
- People need to take responsibility for others' safety and be more concerned about things outside of themselves.
- Really, the problem in my mind is difficult to solve because we're going to have tourists, and I can't think of ways to influence tourist behavior. Also, I think pedestrians and bicyclists need to be aware that, while they have the right of way, drivers may not understand that.
- Stop right hand turn s by cars. Casr are supposed to stop and proceed with caution. They are not
 doing that. Instead they are barely slowing down and make the turn regardless of the
 circumstances.
- STOP the growth of NAU!! Flagstaff was not designed to be a metropolis.
- stuff

- Travel where and what mode? Maybe a TSA style system would help
- Yearly required drivers license renewal testing and knowledge, more blinking/warning lights, increased fines for traffic violations, including minor ones.

Enforcement (18 responses, 10%)

- At the very least more traffic control from the police department. It is very rare that you see the
 police department around or even stopping people who have committed a violation right in
 front of them. BUILD MORE ROADS.
- Better enforcement. We have good laws but need a higher visible response to unsafe behavior, including unsafe pedestrian and cyclist behavior.
- Bicyclist being held accountable to observe all traffic laws.
- Certainly an increase of traffic law enforcement. Perhaps a police presence dedicated to traffic detail would be beneficial.
- ENFORCE BICYCLE RULES. Red traffic lights and stop signs seem only to be suggestions that
 cyclists stop. Give students walking from Walmart to NAU a sidewalk. It is dangerous for
 pedestrians to walk from Walmart, under I-40 with NO SIDEWALK, across both an on ramp and
 an off ramp, and across muddy lots to NAU
- Enforce traffic laws.
- Enforcement
- enforcement
- Harsher DUI laws, lengthy (if not permanent barring some kind of successful addiction treatment) revocation of license for repeat offenders
- Law enforcement.
- More enforcement for drivers going too fast, driving while distracted (texting, etc.), not obeying laws/signs, and driving too slow. This last (too slow) is a particular problem for me (I live in Kachina Village); when driving home on I-17, some drivers will slow down to the 50's or even 40's well ahead of the off-ramp from I-17 to Kachina Village. They should use the off-ramp for most of their slowing, not the freeway; it can be dangerous with big trucks coming at 75mph+ when I have to brake for somebody slowed down to 45 on the Interstate.
- More law reinforcement
- More officers on the road
- More patrol cars in traffic.
- More police enforcement.
- More Police patrol and present
- More police presence or cameras
- more police presence; police stopping vehicles if driver is on cell phone

Infrastructure including new/improved roads (17 responses, 9%)

- additional traffic thoroughfares
- Alternative routes needs to be created or current roads widened.
- Another artery besides Milton and the physical reduction of NAU by 50%.
- Honestly, they either need to build or expand roads, or get rid of some cars on the road, which is
 not feasible. There are just too many cars in the infrastructure was never designed to handle it.
 Flagstaff was not planned to grow this much, the sheer number of NAU students in the new
 developments on the west side is going to overwhelm the roads
- Improved road infrastructure especially Milton and Butler

- Improved roads to handle the traffic flow (wider for additional lanes) and better synchronization of traffic signals.
- In Flagstaff: Extend the urban trail system to all corners of Flagstaff so people have an alternative route to travel from A to B on bike or foot. 89A through through Oak Creek Canyon: build separate biking and walking lanes wherever possible. Build a parking space outside Sedona, and offer a GOOD shuttle service to Sedona, and all popular spots, including Oak Creek Canyon.
- Increased roads built and cell phone user laws
- Milton there needs to be a way to access North Flagstaff on the west side of town as well. The only way to get to Flagstaff High School if you are on the west side is to use Rt. 66 or Milton and the part of Milton that extends between Rt. 66 and Humphreys is always stopped.
- More arteries
- more routes, less congestion on major roads, bypasses for people to easily travel
- More routes/roads around the city. Cyclists wearing headphones should be fined. Fix pot holes.
 Better snow management to stop blocking driveways in the winter so people are not in a rush on dangerous road conditions.
- More street improvements
- More travel lanes, more funds for law enforcement traffic enforcement (DPS etc), DUI task forces
- More under passes or over passes of railroad tracks.
- widen streets more lanes
- Wider streets, additional roadways. The south entrance to NAU is particularly dangerous, with freeway ramps being used as crosswalks. It is very stressful to drive in that area during peak times. Also building all those apartments between Walmart and Kohls will lead to additional traffic (both vehicles and pedestrian) which will compound the already existing problem.

Education (10 responses, 5%)

- Better (and more) education on traffic safety for pedestrians and skateboarders. Pedestrians feel they always have the right of way even when it means crossing against traffic lights. Stopping at stop signs and red lights needs to be enforced for bicyclists for their own safety. Skateboarders need to be educated on where it's safe to ride and should not use the areas of the pedways designated for pedestrians. At peak traffic hours, have more police traffic aids directing traffic to keep pedestrians safe while also allowing traffic to flow. We had some very good traffic controllers last year. We have new ones this year who don't seem to know what they're doing and in some areas, traffic is just as backed up with or without them (McConnell/Knoles and McConnell/Pine Knoll). Find a way to make construction zones safer for all who use the roads near them.
- Bicyclists need to be required to do a course and learn the rules of the roads, as they tend to think they're exempt, especially at stop signs and making turns.
- educate bicyclists!!!
- Educating bicyclists about the fact they're required to follow road laws if they ride on the road, and doing something about distracted students/tourist drivers
- Education about bicycle laws to both motorists and cyclists. Heavy citations for texting and driving. Heavy citations for distracted walking!
- Heartfelt public awareness campaigns (like Zaadii) to make people want to be their best selves behind the wheel. Random radio PSA's, billboards, digital freeway and roadside signs, etc... Frequent reminders about kindness and awareness.

- It might be as simple as more public awareness campaigns
- mandatory driver training, more police officers
- More safety classes at NAU, maybe they have to pass a short safety demo before getting bikes registered and they need to make sure they are aware of what is going on.
- People need to be reminded not to block intersections with their vehicle.

Other bicyclist/pedestrian issues (5 responses, 3%)

- Bicyclists need to obey road laws just like cars and pedestrians do. I see so much of them crossing on a don't walk signal, weaving into turn lanes, etc, and it requires defensive driving on the part of the vehicle drivers.
- Bike laws
- bike riders need to obey laws. Drunk drivers do not care.
- cyclists need to follow the rules of the road, no texting and driving, maintaining proper lookout
- Ensure that all bicyclists and pedestrians stay on sidewalks and paths, not on the roadways.

Maintenance (4 responses, 2%)

- Fix the roads, clear debris and paint lines more often.
- Improve road construction signage.
- road conditions (especially potholes)
- Roads need to be plowed much more often during stormy weather. Pedestrians and bicyclists need to be monitored more often to ensure that they are following the rules of the road. Intersections shouldn't switch between yellow and red so quickly; yellows should remain yellow for longer before going to red.

9. What would help you to drive more safely? (Open-ended)

(Please note: categories shown below were applied during analysis and were not part of the survey process.)

Other (19 responses, 10%)

- 🤅
- A better car.
- A car with blind spot monitoring, or a Tesla Model X
- Being used to the area, I believe ADOT does an awesome job to warn motorists about deer / elk and other traffic.
- CLOSE NAU WHEN THERE IS A BAD BLIZZARD. SERIOUSLY.
- Don't know
- Eliminate other drivers.
- finding other transportation into town
- I am a safe driver.
- Many areas in town have impaired viewing due to trees and many streets are missing signs!
 This causes problems when driving to various locations in town.
- more people taking the bus
- Points against my driving record and \$
- ride the bus
- see above
- stuff
- Taking the bus

- The above.
- The city would stop planting trees and wasting water.
- The work on State Route 89A is ridiculous --- I am surprised there are not more accidents and car repairs due to the awful construction company doing that work.

My behavior (13 responses, 8%)

- Being aware that even in congested times, getting from one point to another is very quick in Flagstaff.
- Being extra observant and avoid driving on the main roads on the weekends.
- Continue being attentive.
- I already do
- I am one of the safest, most defensive drivers on the road when I am traveling. I yield, I use signals, I stop at stop signs and I leave a legal following distance between my car and the car ahead of me. The only way I could be safe is to never get in a vehicle at all.
- I happen to be an excellent driver being very aware of my surroundings and non-motor vehicle traffic.
- If I stopped looking for distracted and inattentive drivers.
- just more awareness of what others are doing.
- Leaving an hour early to go across town.
- · Leaving earlier.
- Pay attention to what I'm doing -be mindful of other people trying to get to where they want to go. Use public transportation more.
- Staying alert and being cognizant that there are people in the cars on the road.
- The ability to determine at least a few seconds in advance what will happen a few car lengths ahead instead of having to focus only on what is changing within a foot of you r front bumper.

Infrastructure including new/improved roads (12 responses, 7%)

- Additional routes through town.
- alternate routes into town, more bicycle lanes, create wider roads that have heavy traffic and narrow down to one lane.
- Better roads surface, wider roads.
- I believe that all drivers would be safer if the volume capacity of the roadways were increased. From Switzer Canyon to I-17, it may require a 3 to 4 traffic signal change sequence to progress through each intersection. On many occasions, traffic from one direction fills the intersection, blocking flow from the other. Although the installation and use of "RED LIGHT" cameras would encroach upon a driver's apparent "right" to maliciously endanger the motoring public. When I have seen (positively) FUSD bus run a red traffic light, I can't help but wonder if MY kid is riding in it.
- If roads weren't so tight and narrow. If pedestrians and bicyclists followed the rules of the road.
- Locals only roads? Realistically, I think the items mentioned above would be helpful. I feel safer
 driving in the winter because there's less traffic and people seem more attentive to signage and
 the flow of traffic around them.
- More alternate route to get around town.
- More roads to access between east and west side of Flagstaff. Not just two major roadways.
- More roads.
- Traffic/Road Infrastructure updates being required as part of new housing developments.
- wider roads

• Wider roads and/or more roadways for people to use. With this being such a small town, there are only a few ways to get from Point A to Point B. If there were multiple ways to drive around town, the frustration of traffic (avoidance of tourist traps where people don't know what they are doing in general) would diminish. I understand that a bypass might hurt some businesses on Milton - but the extent of hurting the entire town (and possibly deterring people from coming to Flagstaff in the first place) is not a valid excuse to not put in a bypass or multiple road options.

Bicyclist/pedestrian issues (11 responses, 6%)

- Being able to count on bicycle riders to obey the rules that motor vehicle drivers must follow.
- better bike paths, turning Leroux into a one-way road without stop signs during construction on Beaver
- Bicyclist need to obey traffic laws. Students need to use crosswalks.
- Don't know. Being a frequent pedestrian and driver it seems that all that can be done to maintain safety is being done. During periods of peak pedestrian and bicycle activity requires being extremely alert and observant.
- educate bicyclists!!!
- Enforce bicycle laws so we know what to expect from all bicyclists.
- I am a safe driver, but I sure would like to see bicyclists follow the rules
- If pedestrians, skateboarders, bikers would not just walk out in traffic. They need to use crosswalks.
- It students would not be riding skateboards, not be looking at phones, not be wearing earbuds and would pay attention when crossing roads!
- More and pedestrian facilities
- Safer bicyclists. Also, desperately need a PEDESTRIAN PATH on the west side of 4th street between Butler and Sparrow, and along Butler to I-40.

Less traffic/congestion (10 responses, 5%)

- Better management of traffic/pedestrian flows during peak times. Educate everyone on the
 importance of paying attention whether you're walking or driving. Offenders who commit
 dangerous offenses should be cited, not just warned. If word gets around that NAU is serious
 about safety and will cite bicyclists, drivers, skateboarders for unsafe road use, we may see
 some improvement. Also educating and promoting courteous road behavior couldn't hurt.
- Better traffic flow
- It would be beneficial if these issues were addressed and appropriate action, based on research,
 Flagstaff citizens' votes, and the NAU community's vote, is taken to resolve the traffic and
 congestion on NAU's campus and in Flagstaff.
- Less cars on the road! I try to drive as little as possible now that traffic is so clogged in Flagstaff. I love the city buses and my bike. Promoting public transportation would help. Since NAU is a BIG part of the problem, I think they should be an active partner in reducing student traffic.
- Less congestion.
- Less traffic
- Less traffic
- More roads. Too much congestion
- Spread out traffic across more streets
- Traffic congestion relieved by making more roads/routes

Speed issues (10 responses, 5%)

- Allow more time to and from destination, understand we live in a tourist town, slow down in poor weather conditions
- Drivers observing the speed limit and bicyclists and pedestrians observing the law to help make them safer. Lots of jaywalkers and bicyclists who switch between sidewalks and streets.
- If people from the Valley knew the speed limit and weren't in such a hurry, I could concentrate more on my driving
- If people would at the least drive the speed limit.
- more speed limit signs
- never running late
- People driving slower
- Slow down and pay attention to the situation at hand. Be more patient and courteous to others.
- Slow down the speed limits, and perhaps make the one-way streets one lane for cars with a wide bike lane and much wider sidewalks
- Slowdown and be more aware.

Traffic control including lights, timing (10 responses, 5%)

- a little more coordination of traffic light controls; if more regulated, it would be a bit safer
- Better lane systems and lights that coordinate with one another.
- Better signal spacing, medians and driveway (access) consolidation on all of Milton Road. The Milton section from W. Route 66 to Humphreys widened to 6 travel lanes.
- Better traffic patterns on the roads
- fewer unassisted left turns, such as onto Milton and W 66
- Having more traffic control at problematic intersections as mentioned earlier. Also, I wish Flagstaff drivers in general would show more patience and understanding that we are "all in this together" and getting to our destination one minute earlier is not worth the risk of getting in a crash/causing injuries.
- I feel like the City of Flagstaff and ADOT need to complete a comprehensive analysis to update traffic signal timing throughout the City to improve overall traffic flow. I've lived here 20 years and it seems like traffic and roads have not been updated and planned for with all the new construction in town and in the neighborhoods.
- More traffic control
- More traffic control and better education and enforcement to students about the riding their bikes following the legal regulations.
- Well-timed stoplights.

Behavior of others (8 responses, 4%)

- Everyone using their signals correctly when they are about to turn!
- if people did not merge into lanes when they shouldn't and too early
- It's not so much me it's others.
- less dumb-asses
- Not having to worry about people constantly running red lights
- other drivers following the laws such as stopping at stop signs, following the speed limit, and getting off my back bumper.
- others driving more safely

• Somehow - drivers need to be more aware that it's not okay to follow someone from inches away - just because they are in a hurry and can't pass for some reason. It makes me feel unsafe when other cars follow me too closely and I am going the speed limit or over the speed limit. Not fair.

Enforcement (7 responses, 4%)

- I'm old so I try to leave a car length (or two) between me and the next car. Impossible! cars just dart in the hole willy nilly on their quest to get there first. Eforce the excessive lane changing laws and take down those speeding. Complete the FUTS and connect the bike lanes.
- I consider myself a very safe and defensive driver; the only thing that would help is if there weren't so many bad drivers out there. More enforcement would help.
- I would like to feel that the cops will stop people who are driving irresponsibly, and won't waste time on niggly stuff like registration windshield cracks and dark tinted windows.
- increased traffic enforcement around the state
- Knowing that If I call 911 because someone just ran a lightband nearly killed me, the cops would actually go after them.
- more police presence to enforce traffic laws
- Stricter/more enforcement

Less distracted drivers/cell phone laws (7 responses, 4%)

- Increase Fines for Texting/Cell Phone use make it harsh penalty.
- Get the idiots off their cell phones.
- Reduction of distracted driving; higher level of road courtesy by all road users
- Fewer distractions
- Less distracted drivers and more intelligent tourists drivers, so they follow our rules of the city streets.
- Less distractions
- I feel I,m a fairly safe driver if other drivers would stop texting NO !!!!!!!!!!! texting

Education (3 responses, 2%)

- Friendly reminders listed above.
- College kids understanding traffic, pedestrian and bicycle laws and safety.
- I've never gotten a ticket or been in an accident, so I believe I am a cautious driver, but believe everyone can benefit from more education.

Lighting (3 responses, 2%)

- Better lighting, better signage
- Increase the lighting in Flagstaff.
- More street lights at night

Maintenance (3 responses, 2%)

- Better plowed roads in Flagstaff during winter. Walking lanes for pedestrians and bicyclist on 89A in Oak Creek Canyon. Better policing of illegally parked cars in Oak Creek Canyon.
- Better snow removal and use salt. Lower traffic density.
- Fix the roads, clear debris and paint lines more often.

10. Where do you live?

- 0% Arcosanti
- 1% Ash Fork
- 0% Baghdad
- 0% Bellemont
- 0% Black Canyon City
- 0% Camp Verde
- 0% Chino Valley
- 1% Clarkdale
- 0% Congress
- 0% Cordes Lakes
- 0% Cornville
- 0% Cottonville
- 0% Cottonwood
- 0% Dewey-Humbolt
- 0% Drake
- 0% Eagar
- 87% Flagstaff
- 0% Grand Canyon
- 0% Hillside
- 0% Holbrook
- 0% Jerome
- 3% Kachina Village
- 0% Kayenta
- 0% Mayer
- 2% Page
- 0% Paulden
- 0% Peeples Valley
- 0% Perkinsville
- 0% Pinetop-Lakeside
- 0% Prescott
- 0% Prescott Valley
- 1% Sedona
- 0% Seligman
- 0% Show Low
- 0% Snowflake
- 0% Springerville
- 0% Spring Valley
- 0% St. Johns
- 0% Taylor
- 0% Tuba City
- 0% Tusayan
- 0% Village of Oak Creek
- 0% Wickenburg
- 0% Wilhoit
- 1% Williams

- 0% Williamson
- 0% Winslow
- 0% Yarnell
- 0% Yava
- 3% Unincorporated County Area
- 5% Other (please specify)
 - o Cosnino
 - o Doney Park
 - o Parks
 - o Parks
 - o Specifically Doney Park area
 - o Specifically Doney Park.
 - o Starlight Pines, Happy Jack
 - o Strawberry

11. Primarily, I'm responding as a...

- 81% Motorist
- 9% Bicyclist
- 4% Pedestrian
- 6% Other (please specify):
 - o All three of the above.
 - City employee who uses a city vehicle in my job duties, and is on the road 5 -6 hours a day.
 - o driver and pedestrian
 - o I'm a motorist who would prefer to walk but doesn't feel safe.
 - Motorcycle Rider
 - Motorist and bicyclist
 - Motorist and bicyclist
 - State Trooper assigned to work the Williams area.
 - Transit rider
 - o transit rider

12. What is your age?

- 0% Under 16 years old
- 6% 16-24 years old
- 16% 25-34 years old
- 21% 35-44 years old
- 23% 45-54 years old
- 22% 55-64 years old
- 7% 65-74 years old
- 3% 75 years or older
- 3% Prefer not to answer

13. With which gender do you identify?

- 56% Female
- 36% Male
- 8% Prefer not to answer

14. If you'd like to receive updates regarding THIS PROJECT ONLY please provide your contact information. Otherwise, skip this question.

Name	Organization (if applies)	Email Address
Brittneigh Campbell	NAU Alumni	bc636@nau.edu
Shawn Stice	Arizona Department of Public Safety	sstice@azdps.gov
Alyssa		fortunagecko@gmail.com
Kate Carey	NAU	kate.carey@nau.edu
Antoinette Reutimann		as92@nau.edu
Martin Majeski		inspector-signals@msn.com
Ryan Poirier	AZDPS	rpoirier@azdps.gov
Jason Ellico	AZ DPS	jellico@azdps.gov
	Board Member of the Flagstaff Biking Organization and member of the Flagstaff Ped	
Jack Welch	Advisory Committee	ADILLLO@aol.com
Dina Barnese		dinabarnese@gmail.com
Mena Begay		meana78@gmail.com
Eric		eric.scott@nau.edu
Margery Sorensen	Ms.	margerysorensen@gmail.com
Tonya Essary		tonyaessary@icloud.com
Holly Troy		holly.troy@nau.edu
Veronica Tapia		vtapia777@yahoo.com
Adam		ajbelmo@gmail.com
Heather Butterworth		heather_ann_10@yahoo.com
Jon Matthies		jmatthies@gmail.com
Rick		environmeddler@gmail.com
Suzanne Knighton	Realty Executives Northern Arizona	upontherim@gmail.com
Debbie		mercury2go@yahoo.com
Edward J Smaglik	Northern Arizona University	edward.smaglik@nau.edu
Rance Coons		icons@icloud.com
Brendan Russo	Northern Arizona University	brendan.russo@nau.edu
Samuel Taylor	NAU	sgt9@nau.edu

15. The next step is to identify unsafe locations on the map. Click on the link below. You can add as many locations to the map as you want. When you are finished close the window.

Table includes nearest city, intersection, and verbatim comment. Numbered comments in blue represent areas of concern for drivers, yellow represents areas of concern for pedestrians, and red represents areas of concern for bicyclists. The mapped comments are also available in an interactive format at: https://gci.mysocialpinpoint.com/nacog#/.

NACOG Areas of Concern/FMPO area		
City	Intersection	Comment
		17 Road Conditions are very bad with pot holes and many folks seem to get flat tires in this
Bellemont	S of I-40	area which can cause crashes and distracted drivers as well
	Switzer	
	Canyon/Canyon	147 frequent congestion at this intersection, roundabout might help
Flagstaff	Terrace/Turquoise	
Flagstaff	US 180/Switzer Canyon Dr	157 cars running red lights
Flagstaff	Aspen/Leroux	119 Brillant Idea: Close north of Route 66 from Beaver to San Francisco on Aspen and Birch Avenues to cars. Make this six square blocks of downtown a "walking mall" like downtown Denver. It would improve the area. I know it won't fly with CofC, and local businesses, but it would work. Wish List:
Flagstaff	Beal/Navajo	116 Lots of drivers RUN THIS STOP SIGN HEADING WEST ON BEALE. I know they are upper, upper middle class residents, but they should not make it unsafe for pedestrians crossing in the evening! Repaint some cross walks North South could help. Better law enforcement would help as well.
Flagstaff	Beaver, S of Franklin	54 too many cars at 3-5 pm or on game days
Flagstaff	Beulah, N of Woodlands Village Blvd	66 horrible crossing area
Flagstaff	Beulah, S of Palmer Ave	84 need dedicated bike lanes
		104 Cars and cyclists crossing Birch cannot see oncoming traffic, which does not stop at LeRoux. It is a Russian roulette - you have to get out into the intersection before you can see
Flagstaff	Birch/Leroux	if it is safe.
		105 Drivers exiting from I-17 into Kachina Village often slow down too much on the
Flagstaff	Birch/Leroux	Interstate, causing dangerous conditions.
		70 When they redid this area six or so years ago, this corner became a squish point for
		bicyclist. for a number of reasons: 1. drivers go to fast. 2. Yellow line should be moved to the
Flagstaff	Bonito, N of Elm	west more, especially since FMS closed and no buses park there now. 3. take out the bus

		parking on the west side of the road. 4. REMOVE THE DRAIN GRATE THAT IS IN THE MIDDLE
		OF THE "bike lane" in the APEX OF THE CORNER!!!
		71 Remove some of the squish point so bicyclists don't get squished into the curb by passing
		automobiles! This is a BAD SPOT from 7am to 8:10am every morning, made worse by FJA
		parent drop offs using the loop drive, and not parking in the parking lot and dropping off
Flagstaff	Bonito, N of Elm	their children.
Flagstaff	Bonito/Thorpe	115 Drivers run the stop sign frequently.
Flagstaff	Butler near Kendrick	64 pedestrian crosswalk on butler needs a red light, not yellow
		79 Cars travel very close and pass bicyclists very quickly. Almost everyday, a car comes
	Butler, E of Herold	within 1-2 feet of me while I am riding. Please at least put a shoulder on this road or have
Flagstaff	Ranch Rd	police stationed to give citations!!!
Flagstaff	Butler, E of Ponderosa	78 After the bicycle lane ends, cars travel very close to bicyclists.
Flagstaff	Butler, W of Fourth St	57 Need a pedestrian path between 4th street and I-40.
		65 Pedestrians don't always press the flashing light when crossing Butler which is essential
Flagstaff	Butler/Beaver	for drivers in the right lane, despite a left lane car that might be stopped for the pedestrian.
Flagstaff	Butler/Humphreys	26 Shrubbery in median can make it difficult to spot pedestrians waiting there.
Flagstaff	Butler/Humphreys	28 Pedestrians should always use the crosswalk alert lights!!
		60 The crosswalk on Beaver has no light that indicates to pedestrians when it's okay to walk.
		We have to rely on cars coming to a stop. Sometimes cars stop prematurely because they
		see someone crossing in the opposite lane. While polite, it's dangerous because the far lane
		may not know why the other vehicle stopped. I've had to run from on coming traffic. One
		time I took a moment to push the button even though one car had stopped and the driver
Flagstaff	Butler/Humphreys	got mad and took off and almost hit me.
		65 This is a "smart" traffic light. If i am coming from butler on the west side (from natural
		grocers). The problem is bikes are too light, so we may have to wait for light changes before
		we can actually cross the road. there should be a button here on the outer edge of the
Flagstaff	Butler/Knoles	sidewalk for cyclists to press.
		68 very dangerous for cars and peds with drivers running red lights. I've seen 3-4 blast
Flagstaff	Butler/Milton	through after the turn arrow is gone.
		132 Butler Ave Intersection - if you are not from Flagstaff AND very familiar of what lane to
Flagstaff	Butler/Ponderosa	be in ahead of time, this main high traffic intersection is highly confusing!
		2 Many pedestrians (high numbers of youth) cross here instead of signal because of
Flagstaff	Cedar, W of East St.	shopping, transit and access to neighborhood. Cars speeding downhill and thru the Cedar

it is a one way street. I got hit here once nd time. Need more signage. week with cars not yielding to
nd time. Need more signage. week with cars not yielding to
week with cars not yielding to
• •
around 7:15 when I'm crossing Country
ter; While on the way to the bus stop,
g, and/or high banks of plowed snow
ey see the green light, roar around to
ing to cross to the bus stop. I was nearly
nave taken my life. Since then, I've
the winter
extra careful to triple check for
n and cyclist bridge
Tand Cyclist bridge
et on the west side of flagstaff. being a
represents a death wish.
rsection is one of the reasons I gave up
Meadows St. MANY times drivers will
into drivers next to them in the
Meadows St. Many times illegally
ff other drivers.
a turn lane into Coco's, so, people in the
going straight, which causes a collision.
e is too short of a time to switch between
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

		30 It is difficult to cross Forest or Fort Valley roads here in the cross walks. Many cars simply
Flagstaff	Forest/Fort Valley Rd	will not stop, even when they have a stop sign.
riagstaii	Forest/Fort valley Nu	35 Flashing crossing lights would be safest. Sometimes you can't see a pedestrian in the
Flagstaff	Forest/Fort Valley Rd	crosswalk because cars block them from view.
riagstaii	rorest/rort valley Ru	37 It is difficult to cross Fort Valley Road. There is a crosswalk but cars often do not stop.
Flagetaff	Forest/Fort Valley Dd	· · · · · · · · · · · · · · · · · · ·
Flagstaff	Forest/Fort Valley Rd	Flashing lights would help immensely.
Flagstaff	Forest/Fort Valley Rd	96 Traffic to this intersection backs up to San Francisco
Flagstaff	Forest/Turquoise	12 Add bike slip lane here so you can bike thru intersection in bike lane then access FUTS.
		117 The access to many of these streets onto N. Fort Valley Road should be closed, and let
		the traffic exit at a light controlled intersection. They would have to drive west on their
		streets to Bonito, and then access whichever street is then equipped with a light controlled
-1	Fort Valley	intersection, but it would make this 2 mile section of Ft. Valley safer for cars, pedestrians,
Flagstaff	Rd/Havasupai	and bicyclists.
		3 Needs identified (signal?) crossing. There are many pedestrians (youth and families)
Flagstaff	Fort Valley/Meade	crossing from neighborhood to coffee shop/restaurant.
Flagstaff	Fourth St., N of Soliere	11 congested narrow bridge, needs protected bike and pedestrian access
		63 No sidewalk for pedestrians. Drivers take this turn fast and are not in the driving lane
Flagstaff	Fourth St./Soliere	from 4th across soliere intersection. Not safe for anyone walking or riding a bike.
Flagstaff	Fourth St./Soliere	152 No right turning lane to 4th street, people never stop at the red light.
Flagstaff	Fourth St/6th Ave	156 So many people turning left on to 4th before the light at 7th
Flagstaff	Fouth St, N of Butler	56 Need a pedestrian path. There is no place to walk on west side of the street.
	Historic Rte 66 E of	61 sidewalks are missing in several places along Rte 66
Flagstaff	Thompson St	of sidewarks are missing in several places along rite oo
	Historic Rte 66, E of	68 People often walk across R66 here, trusting the car traffic.
Flagstaff	Metz Walk	08 People often wark across noo here, trusting the car traffic.
	Historic Rte 66, E of	100 When pulling out from Northwestern onto 66 in either direction, it can be difficult to get
Flagstaff	Northwestern	up to speed when other vehicles are bearing down on you.
	Historic Rte 66, N of	46 People run across Rt. 66 because there are not enough cross walks on a long stretch of
Flagstaff	Riordan	road.
	Historic Rte 66, W of	OC Needs dedicated hike lane or hike noth
Flagstaff	Railroad Spring Blvd	86 Needs dedicated bike lane or bike path
	Historic Rte 66, W of	20 No sidewalks makes walking unattractive alternative. Especially dangerous in winter
Flagstaff	Thompson St	months when there's snow and pedestrians are forced to walk in or very close to the road.

		55 Many people live north of this intersection. To get downtown or down Milton it is often
		necessary to turn right and go west to W. Riordan Rd and turn left to avoid making a left turn
		east to get to S. Milton intersection. Occasionally a driver can go south straight across the
	Historic Rte 66/Metz	intersection to S Metz towards W. Riordan Rd to get into S. Milton traffic at the W.
Flagstaff	Walk	Riordan/S. Milton intersection.
	Historic Rte	145 definitely a dangerous intersection, especially to make a left turn onto Rte 66 from
Flagstaff	66/Riordan	Riordan
Flagstaff	Historic Rte 66/Thompson St	23 No pedestrian crossing to reach bus stop on Thompson.
	Historic Rte	143 A stoplight at this intersection is needed for the safety of drivers pedestrians, and
Flagstaff	66/Thompson St	cyclists
Flagstaff	Humphreys/Cherry	47 There is a crosswalk here but cars do not observe it. Very dangerous to cross here.
Flagstaff	I-40 (business route)/Butler	76 Some cars turning right do not yield to bicyclists.
	I-40 near Woodlands	43 Tough sight lines from WB to SB, then tight corner and uphill acceleration to go WB to
Flagstaff	Village Blvd	NB.
		153 Drivers use the middle turning lane to pass cars driving the speed limit or slowing to
Flagstaff	I-40, NE of FoxLair Dr	make a right turn all along Soliere Ave.
Flagstaff	I-40/Arrowhead Ave	91 cars running red lights
		128 Heavy evening traffic trying to get on 40 East from Butler is dangerous. The traffic will
		back up to the intersection and beyond creating greater risk for accidents. The same
Flagstaff	I-40/Butler	congestion is often seen in the Butler left turn lane to take 40 West.
		151 Trucks exiting Little America truck station frequently pull out into the oncoming traffic
		going eastbound on Butler. Truckers frustrated by inability to get onto Butler and auto
Flagstaff	I-40/Butler	drivers frustrated by truckers. Area needs more traffic control.
Flagstaff	Knoles, N of Riordan Rd	103 All of knoles dr is EXTREMELY unsafe for pedestrians and bikers
		73 The bicycle lane sign has an ENDS HERE sign under it at this spot. The ENDS HERE SHOULD
		BE REMOVED. 1. The lane has bicycle full lane usage painted on it north of here, which is a
		contradiction. 2. This has parallel parked cars at meters, which creates a classic DOORED
		section, and many campus bicyclists are not seasoned to the danger of car doors. 3. The new
		contruction on the pedway north of here 100 yards has made the lane narrower, more
Flagstaff	Knoles, N of Tormey	reason for bicyclists to take the entire lane.

		106 NAU should add a traffic light at the crosswalk in front of Cline Library. Traffic is backed
Flagstaff	Knoles, S of McCreary	up a long way at times.
Tiugstuii	Knoics, 5 of Wicercary	118 Remove this stop sign on the north bound lane. Is this a cash generator? It makes no
		sense, and was gone for a few years, and then reappeared. The road turns, and it is not an
Flagstaff	Knoles/Dupont	intersection.
Tiugstuii	Lake Mary Rd, S of	120 During the winter, the snow removal on Lake Mary Road is slow and sloppy. The street is
Flagstaff	High Country Trail	never completely de-iced or plowed.
Tiugstuii	Lone Tree Rd, S of	45 There is a lot of university and college traffic here where children cross the road. Elevated
Flagstaff	Paseo Del Flag	walkway over the road here would be ideal
Tiugstuii	Lone Tree Rd, S of	waikway over the road here would be lacal
Flagstaff	Paseo Del Flag	63 Horribly planned intersection
Tiugstuii	Lone Tree Rd/O'Leary	
Flagstaff	St St	34 Side walk abruptly ends. PUT IN A SIDEWALK, IT'S NOT ROCKET SCIENCE!
· iaBotaii	Lone Tree Rd/Paseo	31 Kids walking to school are not safe here. Students with no regard for the community
Flagstaff	Del Flag	leaving this neighborhood are at fault.
Flagstaff	Lone Tree, S of Zuni	42 Increasing traffic levels and speeds = limited gaps. Need a roundabout
		112 This is a dangerous area for all (drivers, bicyclists, motorcyclists and walkers). It needs a
		traffic control system - stop sign/light/roundabout. Collisions and near collisions happen
		daily here. Coconino Community College is a busy school and this intersection desperately
Flagstaff	Lone Tree, S of Zuni	needs traffic control system. Thank you.
		40 Again, why is a crosswalk here when there's a dedicated pedestrian pathway on the other
		side of the street? This area is especially dangerous to pedestrians, as there are cars
		constantly turning from two directions onto the on-ramp. Require pedestrians to use the
	McConnell, W of	infrastructure built for them and get rid of this dangerous crosswalk. Also, there is no
Flagstaff	Milton	sidewalk from here to campus.
	McConnell, W of	139 Tough for cars heading west on McConnell to turn left onto highway - need a light - can't
Flagstaff	Milton	see oncoming cars driving quickly.
		39 Why was a pedestrian crosswalk put here when there's a dedicated pedestrian pathway
		just to the north of this spot? There's no established sidewalk on this street, meaning
		pedestrians are often walking the wrong direction (with traffic) right next to the street. This
	McConnell, W of Pine	crosswalk should be eradicated and all pedestrians required to use the dedicated pathway
Flagstaff	Knoll Dr	literally on the other side of the street, where there's no danger of being run over.
Flagstaff	McConnell, W of Pine	59 Need a stoplight that tells pedestrians when to cross

	Knoll Dr				
_, _,	McConnell, W of Pine	138 Need a stoplight			
Flagstaff	Knoll Dr				
		21 Pedestrians are not very visible from right turn lanes in this area. Utility poles block the			
Flagstaff	McConnell/Beulah	view of people trying to cross north.			
Flagstaff	McConnell/Beulah	98 SB Beulah drivers trying to turn W out of La Quinta don't have good access.			
Flagstaff	McConnell/Beulah	130 High traffic congestion area			
		123 It is basically the whole NAU campus that is dangerous for all drivers, pedestrians &			
		bicycles. Bikes don't follow traffic signs, pedestrians don't caution to bad drivers & drivers			
		are in too much of a hurry in a 15mph campus. Major intersections on campus are horrible			
Flagstaff	McConnell/Knoles	for all 3 also.			
		142 Round-a-bout would be good to reduce traffic jams off highway and on/off campus at			
		nearby 4-way stop, as well as make it safer to go left off of highway. It should include a			
	McConnell/Pine Knoll	bridge/underpass or walkway on north side for pedestrians/bicycles on/off campus too, so			
Flagstaff	Dr	they're not in the midst of the traffic flow.			
	McConnell/Woodlands	168 Needs to be a light here for people making a left from McConnell Dr onto Woodlands			
Flagstaff	Village Blvd	Village Blvd			
	Milton, N of Chambers	4 Narrow			
Flagstaff	Dr				
		66 This long stretch of Milton has no pedestrian options so they risk it and run into the			
	Milton, N of Chambers	center of the road. There are so many lane changes and it feels dangerous for both drivers			
Flagstaff	Dr	and pedestrians.			
	Milton, N of Chambers	69 No good routes across Milton, without walking a long way.			
Flagstaff	Dr				
		125 Milton Road in general is a mess. There's too much traffic, the speed limit and "normal"			
		flow of traffic don't line up so slower drivers create riskier traffic situations. Pedestrians			
	Milton, N of Chambers	jaywalking are often difficult to see at night or impede traffic flow. Alternate routes needed			
Flagstaff	Dr	for drivers and perhaps bridges or underpasses for pedestrians and cyclists would be helpful.			
Flagstaff	Milton, N of I-40	15 Unsafe with the amount of distracted drivers and bike lanes are practically non-existent.			
		135 Very dangerous to have two on-ramps entering a 2 lane road from both sides at the			
Flagstaff	Milton, N of I-40	same place - where I-17 ends and Milton begins.			
Flagstaff	Milton, N of I-40	137 Tough to exit			
Flagstaff	Milton, N of Malpais	7 Narrow			

Flagstaff	Milton, N of Malpais	93 Anyone who rides a bike on Milton is crazy.
Flagstaff	Milton, N of Phoenix	8 Narrow
		42 Widen this section of the separated sidewalk to accommodate the shared use of bicycles
		and pedestrians. Dividing the current sidewalk with a paint line would help for now. Many
		cyclists use this, and don't warn pedestrians as they pass, causing many near collisions. It
		doesn't feel safe to walk this! Also remove the street light that is on the sidewalk, as this
Flagstaff	Milton, N of Phoenix	creates a squish point!
		134 We need another road like Milton on the West side that will connect to Fort Valley Rd.
		Milton is just too congested and it is the only way to get to North Flag. This road should pass
		by Flagstaff High School as well. Milton (between Rt. 66 and Humphreys) is a nightmare in
		the mornings for taking my kids to school and after work, and at lunch, and almost always
Flagstaff	Milton, N of Phoenix	now. It's always stopped and unsafe.
	Milton, S of Chambers	22 Pedestrians Frequently cross mid block in several location along Milton. Especially
Flagstaff	Dr	hazardous at night.
Flagstaff	Milton, S of Plaza Way	102 extremely unsafe for all
Flagstaff	Milton, S of Riordan	5 Narrow
Flagstaff	Milton, S of Riordan	101 extremely unsafe for all
Flagstaff	Milton, S of University	3 Narrow
Flagstaff	Milton, S of University	83 dangerous intersection - need a light - can't see people biking
		136 dangerous intersection - need a light - or no left turn allowed for people entering Milton
Flagstaff	Milton, S of University	from W. University Dr.
	Milton, S. of Historic	6 Narrow
Flagstaff	Rte 66	
		24 Turning cars do not yield to pedestrians walking in the crosswalk with the light. This
Flagstaff	Milton/Butler	happens nearly every time I am crossing. Cyclists are also in danger at this intersection
		29 I've arrived at the corner a few seconds after the Walk sign is on but drivers turning right
		onto Butler don't stop, I've had to stop in the middle of the E-bound lane to wait for cars to
		stop when crossing from the N side, and I always turn to look back at the car coming from Rt
		66 to turn right on Butler before I stop onto the road. I'm a 50 year resident of Flagstaff and
		it was safer to cross when the walk signs didn't work (yes we have more traffic now but too
Flagstaff	Milton/Butler	much rush.
		41 A crosswalk should be installed on the south side of W. Butler from W. Clay Ave, so
Flagstaff	Milton/Butler	pedestrians crossing from NAU to Natural Grocers or Old Viejo, don't have to cross Butler

		Lead the CAChes and additional Change to The Cache and Change the Change to The Cache and Cache
		north, then S. Milton west, and then W. Clay Ave. south. Three crossings to get to the other
		side of the road is a time-muncher for pedestrians, who are not contributing to the traffic
		jams at that intersection.
Flagstaff	Milton/Butler	52 ironic that I might die by being hit by a car while walking to the health food store
		64 Frequently see right turners try to get onto Butler before pedestrians or cyclists get to
Flagstaff	Milton/Butler	center of the road.
Flagstaff	Milton/Butler/Clay	99 heavily congested for cars. Highly unsafe for bikes and pedestrians. Need raised walkways
		124 There should be a turn signal into Clay Ave or into Natural Grocer's from Rt. 66 or
		Milton. I saw a truck in the middle of the intersection waiting to turn left onto Clay, there
		was no signal and she was stuck in the middle of the intersection while cars drove the other
Flagstaff	Milton/Butler/Clay	direction around her.
	Milton/Forest	2 Narrow
Flagstaff	Meadows	2 Natiow
Flagstaff	Milton/Historic Rte 66	51 this is another terrible place to try to cross the street on foot.
Flagstaff	Milton/Historic Rte 66	67 heavy traffic, long distance across streets
Flagstaff	Milton/Historic Rte 66	169 Bad traffic
Flagstaff	Milton/McConnell	1 Narrow
		108 People trying to turn left onto Santa Fe backs up traffic trying to go straight, and those
Flagstaff	Milton/Old Santa Fe	trying to turn left at Humphreys.
Flagstaff	Milton/Old Santa Fe	129 all I can say is Yikes, this is a crazy bad intersection. abandon all hope etc etc.
		53 the occasional jay walking pedestrian here is a hazard for drivers. jay walking in flagstaff
Flagstaff	Milton/Phoenix	was okay about 30 years ago, but now it's just dangerous!!!
		50 potholes, distracted confused drivers, general animosity toward bike riders and walkers
Flagstaff	Milton/Plaza Way	make this a truly horrible intersection for the nonmotorist.
		131 Area of concern for both drivers and pedestrians. Review the timing of the traffic signals
		especially on Milton Avenue! The intersection at Riordan is especially problematic with a
		long wait to cross Milton and a very short window once you get a green light. Allow time for
		cars to make turns after the walk signal ends (also at many other locations throughout
Flagstaff	Milton/Riordan	town).
		164 Traffic gets backed up. Drivers making a left onto Milton cannot make lefts due to too
Flagstaff	Milton/Riordan	much traffic being stopped at the intersection between S Plaza Way and Milton.
Flagstaff	Milton/University	58 dangerous intersection - need a light - can't see people walking
Flagstaff	Milton/University	113 This has too much traffic for the turn lanes. People trying to enter or exit W. University

	Ave. are blocked by traffic stopped at the light at W. University heading onto campus.				
Milton/University	144 congested and difficult to turn in any direction				
	160 Need a light for people making a left onto Milton and for people on Milton making a left				
Milton/University	onto W University Ave.				
Paseo Del Flag/Woodlands Way	3 A moronic intersection that is dangerous to everyone. No sidewalks and speeding drivers.				
Pine Knoll near Jen Dr	32 People living in these apartment complexes use this road to race their cars. If someone doesn't stop this, someone else will.				
Plaza Way, W of	165 Dangerous turn in - Drivers making a left or right into this part of the parking lot of				
Milton	Safeway back up traffic or never get a chance to turn out.				
	48 pedestrians just walk out because they don't know what else to do. This intersection				
Plaza Way/Riordan	needs a stop sign or a signal or a roundabout.				
Riordan Ranch/Chambers	161 Need two stop signs here for people driving into parking lot from Chambers Dr.				
Riordan Rd/Riodan Ranch St	25 Drivers do not watch for pedestrians and drive too fast on Riordan				
Riordan/Milton	27 Cars turning while pedestrians are crossing in the crosswalk				
	70 My wife got hit here while walking. The driver was looking left, then turned right to hit				
	her. It was not reported to police because injuries were minor and she did not get the				
Riordan/Milton	license number (they fled the scene without stopping!!!)				
Riordan/Plaza Way	121 The lights for Riordan and Plaza Way are never red or green at the same time. One turns green, while the other is red so traffic gets backed up.				
Riordan/Riordan Ranch St	81 I have seen several bike riders get hit here and it only gets worse every year.				
Riordan/Riordan Ranch St	162 Dangerous intersection. Drivers have a hard time making a left onto W Riordan Rd due to traffic backing up. Some drivers making a left onto S Riordan Ranch St almost collide with drivers making left onto W Riordan Rd.				
San Francisco, N of	69 drivers don't realize that the right lane on SF is also a bike lane - I've experienced				
Butler	dangerous aggression on South SF.				
	74 Designate both lanes as bicycle lanes from Route 66 to Birch Ave. since a LARGE number of bicyclists riding legally north bound turn west on Birch Ave. This is a narrow section of				
San Francisco, N of US	road, with parking on both sides and it is difficult for a bicyclist to merge to the left lane to				
180	make their turn on Birch Ave, if they wait until after crossing Aspen Ave.				
	Milton/University Paseo Del Flag/Woodlands Way Pine Knoll near Jen Dr Plaza Way, W of Milton Plaza Way/Riordan Riordan Ranch/Chambers Riordan Rd/Riodan Ranch St Riordan/Milton Riordan/Milton Riordan/Plaza Way Riordan/Riordan Ranch St Riordan/Riordan Ranch St San Francisco, N of Butler San Francisco, N of US				

	San Francisco, N of US	77 Going west on the Urban trail, many cars are not looking for bicyclists coming from the
Flagstaff	180	East.
		80 The one-way streets of downtown in general are dangerous for bicycles. It is not clearly
	San Francisco, N of US	indicated on the streets that the right-hand lanes are bike lanes. The paint is completely
Flagstaff	180	faded and the signage is not clear.
	San Francisco, S of	67 No bike lane from here to Aspen.
Flagstaff	Butler	of No bike faile from here to Aspen.
	San Francisco, S of	75 saw result of a bicyclist get hit by a car
Flagstaff	Butler	
		44 cars have green left turn arrow going from Beulah to Lake Mary Rd while pedestrians
		have a walk signal. pedestrians not aware that traffic may be turning into their path as they
Flagstaff	SR 89A/Lake Mary Rd	proceed on crosswalk
		140 Lights in this section of town behave differently than the rest of the city ie flashing
		yellow arrow. It's confusing to drivers who expect lights to behave the same throughout the
Flagstaff	SR 89A/Lake Mary Rd	city.
		58 Travelling from NAU to Ponderosa Trails on a bike requires 2 left turns with vehicles,
Flagstaff	SR 89A/McConnell	unless the sidewalks are used. This area needs improvement for cyclists.
		86 Drivers are turning left into the parking lot over a double yellow line from Sweitzer
	Switzer Canyon Dr, N	Canyon into the Fry's parking lot. There needs to be a barrier to stop drivers from making an
Flagstaff	of US 180	illegal left turn.
		159 This intersection gets congested. Drivers making a left from Nimarcos going towards
		ADOT almost never have a chance to get out. Drivers making a left to turn into Target, turn
		lane often gets backed up. This makes it so that people making a left at the
Flagstaff	University, E of Milton	Milton/University intersection can't be in the appropriate turn lane
Flagstaff	University, W of Yale	62 small section of sidewalk missing here
		109 The traffic lights in this intersection seem to always be malfunctioning. The left turn
		lanes from 66 onto Cummings often never give the left turn arrow, especially for N
		Cummings, forcing drivers to yield to traffic that is often exceeding speed limits. Also, the
		left turn arrow from Cummings on the north side of Rt 89 almost never turns green, while it
		always turns green for cars waiting on the Mall side of Cummings. This frustrates many
Flagstaff	UR 180/Cummings	drivers, which leads to frustrated drivers.
		3 This oddball intersection is a mess especially at peak AM/PM hours. Lots of tourists
Flagstaff	UR 180/Lockett	unfamiliar with the dynamics of this area, parked cars along Kaspar, wondering pedestrians

		to the convenient store and commuters making right turn from Hwy 89. This is area of
		concern for cars, peds and bikes.
		107 People are constantly making illegal left turns here, both coming off of Rt 66 and turning onto Rt 66. I've seen many close calls here and I have almost been run over while on a bicycle by a driver making an illegal left into the gas station over two sets of double yellow
Flagstaff	UR 180/Lockett	lines.
Flagstaff	US 180, E of Fourth Street	13 Some of the road crossings on the 66 FUTS are not very visible to cars.
Flagstaff	US 180, W of Cosnino at AZ Trail	89 Needs a better under road crossing, culvert is often flooded out and muddy.
Flagstaff	US 180, W of Flagstaff	93 Overly congested. US 180 needs an alternate route built
Flagstaff	US 180, W of Flagstaff	94 US 180 is overly congested from Route 66 to snowbowl road. Needs new road built as alternate. 180 bypass
Flagstaff	US 180/Beaver	4 Consider above grade bike and ped crossing here. Huge numbers of pedestrians and bikes with congested area.
		97 Traffic backs up here, back to San Francisco. Drivers also don't leave the intersection clear on 66 so people trying to cross 66 on Beaver often miss the light because they can't get
Flagstaff	US 180/Beaver	through.
Flagstaff	US 180/Fourth St	1 Extremely wide crossing
Flagstaff	US 180/Fourth St	133 Fourth Street intersection - having both directions of 2 lane traffic turn left at the same time with no barriers or clearly marked lanes is ridiculous. I am fearful of making a left turn there and avoid whenever possible. Very dangerous.
Flagstaff	US 180/Humphreys	9 Narrow
		72 The FUTS trail bicyclists have the right a way since they do not have a stop sign. All these streets along here have the same issue: Cars heading east on these streets, race to the end, go across the crosswalk BEFORE stopping, and they DO NOT LOOK RIGHT FOR bicyclists! Sometimes NEVER! They are checking the Ft. Valley Road traffic to see if they can "slip in"
Flagstaff	US 180/Humphreys	without waiting too long.
Flagstaff	US 180/Humphreys	90 Drivers running red lights is common, every cycle of the light almost.
		126 Need better signage for one way streets. Wrong way drivers are frequent, particularly
Flagstaff	US 180/Leroux	during tourist season, and are a risk to drivers, pedestrians, and cyclists.
Flagstaff	US 89/Railhead	89 This intersection is usually congested and motorists are hurried
Flagstaff	US 89/Townsend	60 No bike lanes at intersection of Townsend/Winona Rd and Hwy 89. High-speed area.

Flagstaff	US 89/Townsend	61 No bike lanes in high-speed area				
Flagstaff	US 89/Townsend	8 Needs a better under road crossing for the Arizona trail				
	Woodlands Village, N	148 the utility boxes along Woodlands Village Blvd are placed too close to the street making				
Flagstaff	of Plaza Way	it difficult to see oncoming traffic when pulling out from Home Depot				
	Woodlands	167 Needs to be a light here for people making a left onto Woodlands Village Blvd.				
Flagstaff	Village/Plaza Way	Needs to be a light here for people making a left onto woodiands village blvd.				
	Woody	07 Dike meth on leng to compact the least trail with FUTC trail				
Flagstaff	Mountain/Presidio	87 Bike path or lane to connect the loop trail with FUTS trail.				

	Area of	Additional Comments			
Date and time 2017-08-16 02:07:01 +1000	concern Cyclists	Comment Add bike slip lane here so you can bike thru intersection in bike lane then access FUTS.	email gadunno@yahoo.c om	Receipt NAC43584B	Latitude Longitude 35.21059 -111.6395
2017-09-16 03:27:26 +1000	Cyclists	After the bicycle lane ends, cars travel very close to bicyclists.	eric.scott@nau.edu	ı NAC5FF1A8	35.19206 -111.6255
2017-09-21 14:13:19 +1000	Cyclists	Anyone who rides a bike on Milton is crazy.	jm436mc@gmail.co m	NACE21CF5	35.19411 -111.6566
2017-09-17 07:24:10 +1000	Cyclists	Bike lane taken out for apartment L turn lane	robr526@gmail.co m	NAC7EC528	35.17922 -111.6692
2017-09-17 07:26:31 +1000	Cyclists	Bike path or lane to connect the loop trail with FUTS trail.	robr526@gmail.co m	NAC26476E	35.18303 -111.6924
2017-09-20 03:34:02 +1000	Cyclists	cars running red lights	lmnop@gmail.com	NACEB30F4	35.20005 -111.6185
2017-09-16 03:28:41 +1000	Cyclists	Cars travel very close and pass bicyclists very quickly. Almost everyday, a car comes within 1-2 feet of me while I am riding. Please at least put a shoulder on this road or have police stationed to give citations!!!	eric.scott@nau.edu	ı NACB17010	35.19353 -111.6142
2017-08-16 02:01:01 +1000	Cyclists	congested narrow bridge, needs protected bike and pedestrian access	gadunno@yahoo.c om	NACF92C7E	35.20206 -111.6085
2017-09-16 06:43:14 +1000	Cyclists	dangerous intersection - need a light - can't see people biking	alm385@nau.edu	NAC056C80	35.18396 -111.6616

2017-09-16 Cyclists 03:17:31 +1000	Designate both lanes as bicycle lanes from Route 66 to Birch Ave. since a LARGE number of bicyclists riding legally north bound turn west on Birch Ave. This is a narrow section of road, with parking on both sides and it is difficult for a bicyclist to merge to the left lane to make their turn on Birch Ave, if they wait until after crossing Aspen Ave.	kiteartist@gmail.co NAC3F817B m	35.19754 -111.6479
2017-09-16 Cyclists 02:46:54 +1000	drivers don't realize that the right lane on SF is also a bike lane - I've experienced dangerous aggression on South SF.	holly.troy@nau.edu NAC976EAC	35.19394 -111.6495
2017-09-19 Cyclists 04:04:56 +1000	Drivers running red lights is common, every cycle of the light almost.	rbarrett@flagstaffa NAC73A677 z.gov	35.19809 -111.6513
2017-09-16 Cyclists 03:26:41 +1000	Going west on the Urban trail, many cars are not looking for bicyclists coming from the East.	eric.scott@nau.edu NACBA53F5	35.19702 -111.648
2017-09-16 Cyclists 02:15:27 +1000	horrible crossing area	holly.troy@nau.edu NACEED864	35.17535 -111.6628
2017-09-16 Cyclists 02:01:38 +1000	Horribly planned intersection	ajbelmo@gmail.co NACD2CC84 m	35.18115 -111.6483

2017-09-16 04:04:39 +1000	Cyclists	I have seen several bike riders get hit here and it only gets worse every year.	This is a horrible intersection for walkers, riders, and cars. No one seems to know what to do here, with strange angles, driveways, lots and lots of traffic, and just plain old bad driving. Please put in a light or a roundabout.	•	NACBC6D8E	35.18969 -	111.6599
2017-08-10 08:13:44 +1000	Cyclists	Narrow		brian.fellows@ame cfw.com	NAC496933	35.17765 -	111.6613
2017-08-10 08:14:17 +1000	Cyclists	Narrow		brian.fellows@ame cfw.com	NAC04B344	35.17897 -	111.6613
2017-08-10 08:14:34 +1000	Cyclists	Narrow		brian.fellows@ame cfw.com	NAC4B6FC9	35.18285 -	111.6614
2017-08-10 08:14:51 +1000	Cyclists	Narrow		brian.fellows@ame cfw.com	NAC3F929E	35.18616 -	111.6615
2017-08-10 08:15:08 +1000	Cyclists	Narrow		brian.fellows@ame cfw.com	NAC6C703A	35.19007 -	111.6611
2017-08-10 08:15:22 +1000	Cyclists	Narrow		brian.fellows@ame cfw.com	NACDE66E3	35.19235 -	111.6588
2017-08-10 08:15:40 +1000	Cyclists	Narrow		brian.fellows@ame cfw.com	NAC1F25CD	35.19456	-111.656

2017-08-10 Cyclis 08:15:56 +1000	ts Narrow		brian.fellows@ame cfw.com	NAC186B6A	35.19778	-111.654
2017-08-10 Cyclis 08:16:14 +1000	ts Narrow		brian.fellows@ame cfw.com	NAC4B6472	35.19818	-111.6518
2017-09-17 Cyclis 07:23:01 +1000	ts need dedicated bike lanes		robr526@gmail.co m	NAC879044	35.16248	-111.6757
2017-09-17 Cyclis 07:36:22 +1000	Needs a better under road crossing for the Arizona trail		robr526@gmail.co m	NAC995B9C	35.24445	-111.5647
2017-09-17 Cyclis 07:37:55 +1000	Needs a better under road crossing, culvert is often flooded out and muddy.		robr526@gmail.co m	NAC5FDC9E	35.20312	-111.4853
2017-09-17 Cyclis 07:25:19 +1000	Needs dedicated bike lane or bike path		robr526@gmail.co m	NAC8FDB51	35.18768	-111.6823
2017-09-16 Cyclis 02:36:05 +1000	ts No bike lane from here to Aspen.	Add a bike lane. It says bikes should take the road, but I don't think most vehicles are patient enough to follow bikes	trent_lori@hotmail. com	NACBED8C7	35.19314	-111.6499
2017-09-15 Cyclis 04:12:47 +1000	No bike lanes at intersection of Townsend/Winona Rd and Hwy 89. High-speed area.		environmeddler@g mail.com	NACF4F4F7	35.24422	-111.5656
2017-09-15 Cyclis 04:13:34 +1000	ts No bike lanes in high-speed area	This is a growing area with high-volume traffic	environmeddler@g mail.com	NACEACOA3	35.24422	-111.5656
2017-09-16 Cyclis 02:10:14 +1000	pedestrian crosswalk on butler needs a red light, not yellow		holly.troy@nau.edu	NAC4961CA	35.19324	-111.6544

2017-09-16 02:54:57 +1000	Cyclists	Remove some of the squish point so bicyclists don't get squished into the curb by passing automobiles! This is a BAD SPOT from 7am to 8:10am every morning, made worse by FJA parent drop offs using the loop drive, and not parking in the parking lot and dropping off their children.	see comment.	kiteartist@gmail.co m	NACE7F847	35.2064 -111.6	6526
2017-09-16 03:24:58 +1000	Cyclists	saw result of a bicyclist get hit by a car		eric.scott@nau.edu	NACA1935B	35.19341 -111.0	6498
2017-09-16 03:25:49 +1000	Cyclists	Some cars turning right do not yield to bicyclists.		eric.scott@nau.edu	NACFB11F9	35.19492 -111.6	6285
2017-08-16 02:38:48 +1000	Cyclists	Some of the road crossings on the 66 FUTS are not very visible to cars.		kateo58@yahoo.co m	NACB9E3E8	35.21123 -111.6	6005
2017-09-16 03:11:37 +1000	Cyclists	The bicycle lane sign has an ENDS HERE sign under it at this spot. The ENDS HERE SHOULD BE REMOVED. 1. The lane has bicycle full lane usage painted on it north of here, which is a contradiction. 2. This has parallel parked cars at meters, which creates a classic DOORED section, and many campus bicyclists are not seasoned to the danger of car doors. 3. The new contruction on the pedway north of here 100 yards has made the lane narrower, more reason for bicyclists to take the entire lane.	downward slope, making it easier for a bicyclist to easily approach the 15 mph speed limit.	kiteartist@gmail.co m	NAC7EE33C	35.19276 -111.6	6565

2017-09-16 Cyclists 03:02:50 +1000

The FUTS trail bicyclists have the right a way since they do not have a stop sign. All these streets along here have the same issue:

The advertising "banner holder" that was put in the island northwest of Mama Burgers creates a blind spo

Cars heading east on these streets, race to the end, go across the crosswalk BEFORE stopping, and they DO NOT LOOK RIGHT FOR bicyclists! Valley Road who are turning Sometimes NEVER! They are checking east on W. Navajo Rd. DON'T the Ft. Valley Road traffic to see if they can "slip in" without waiting too long.

holder" that was put in the Burgers creates a blind spot for bicyclists coming onto the FUTS trail from N. Kendrick St. Cars west bound on Ft. Valley Road who are turning the sidewalk entering W. Navajo Rd. because they get HIDDEN behind the banners on this Chamber of Commerce advertisement signboard. Then the drivers turn east w/o checking the crosswalk, turning into bicyclists. A sign at the east end of all the tribal streets announcing to DRIVERS TO WATCH FOR PEDESTRIAN AND BICYCLIST TRAFFIC

m

 $kiteartist@gmail.co\ NAC18D1D6\ 35.20723\ -111.6486$

would help!!!

2017-09-16 Cyclists 03:38:42 +1000

The one-way streets of downtown in general are dangerous for bicycles. It is not clearly indicated on the streets that the right-hand lanes are bike lanes. The paint is completely faded and the signage is not clear.

dinabarnese@gmail NACCEDF45 35.1969 -111.6483 .com

2017-09-16 02:13:51 +1000	Cyclists	This is a "smart" traffic light. If i am coming from butler on the west side (from natural grocers). The problem is bikes are too light, so we may have to wait for light changes before we can actually cross the road. there should be a button here on the outer edge of the sidewalk for cyclists to press.	A safety crossing bridge for both pedestrians and cyclists woul dbe good here. This is a particularly busy and hazardous spot for people who are not in cars	holly.troy@nau.edu	NAC2C0BAD	35.19352	-111.6558
2017-09-14 06:41:29 +1000	Cyclists	Travelling from NAU to Ponderosa Trails on a bike requires 2 left turns with vehicles, unless the sidewalks are used. This area needs improvement for cyclists.		edward.smaglik@n au.edu	NAC32D1DA	35.17662	-111.6632
2017-08-26 01:48:30 +1000	Cyclists	Unsafe with the amount of distracted drivers and bike lanes are practically non-existent.		flagstaffpro@outlo ok.com	NAC031172	35.17549	-111.6613
2017-09-16 02:36:47 +1000	Cyclists	very dangerous for cars and peds with drivers running red lights. I've seen 3-4 blast through after the turn arrow is gone.		margerysorensen@ gmail.com	NAC46D81F	35.1951	-111.6551

2017-09-16 Cyclists 02:52:59 +1000

When they redid this area six or so years ago, this corner became a squish point for bicyclist. for a number of reasons:

- 1. drivers go to fast.
- 2. Yellow line should be moved to the west more, especially since FMS closed and no buses park there now. 3. take out the bus parking on the west side of the road. 4. REMOVE THE DRAIN GRATE THAT IS IN THE MIDDLE OF THE "bike lane" in the APEX OF THE CORNER!!!

kiteartist@gmail.co NAC359188

35.20508 -111.6528

m

see comment.

p.shanholtzer@nau NAC0FB6B6 2017-09-16 Cyclists who designed this stupid intersection? pedestrians are expected to 35.17891 -111.6631 04:11:08 +1000 this intersection is one of the reasons I cross either in the midst of gave up riding my bike on Flagstaff traffic (the urban trail) or in streets!!!! front of cars and trucks that can't see them. ditto for bikes. drivers ignore the pedestrians in the crosswalk across Beulah and just blast through. add lost tourists, nau students late for class, snow, rain, or human folly and this is a horrible intersection. 2017-09-16 Drivers A stoplight at this intersection is jessicabuckley2@g NACC1834E 35.1878 -111.6749 needed for the safety of drivers 12:45:21 +1000 mail.com pedestrians, and cyclists

2017-09-16 04:28:25 +1000	Drivers	all I can say is Yikes, this is a crazy bad intersection. abandon all hope etc etc.	this is a typical bad intersection in flagstaff - it's been like this for years, and traffic has increased by a factor of 10. in the winter it's particularly scary. Perhaps there will be less traffic because everyone will refuse to go downtown because of the new parking meters? who knows, this whole area is a big mess.	p.shanholtzer@nau .edu	NAC249235	35.19872 -111.6533
2017-09-16 01:52:40 +1000	Drivers	All of knoles dr is EXTREMELY unsafe for pedestrians and bikers		cjburrell@gmail.co m	NACC302EA	35.18849 -111.6572

Area of concern for both drivers and lauribud@gmail.co NACFA3037 2017-09-16 **Drivers** 35.19038 -111.6611 05:41:32 +1000 pedestrians. Review the timing of the m traffic signals especially on Milton Avenue! The intersection at Riordan is especially problematic with a long wait to cross Milton and a very short window once you get a green light. Allow time for cars to make turns after the walk signal ends (also at many other locations throughout town). 2017-09-21 Drivers Bad traffic jm436mc@gmail.co NAC465030 35.19278 -111.6584 14:03:33 +1000 m

2017-09-16 Drivers 03:20:16 +1000	Brillant Idea: Close north of Route 66 from Beaver to San Francisco on Aspen and Birch Avenues to cars. Make this six square blocks of downtown a "walking mall" like downtown Denver. It would improve the area. I know it won't fly with CofC, and local businesses, but it would work. Wish List:	kiteartist@gmail.co NAC	C32DAA3 35.19846 -111.6487
2017-09-16 Drivers 05:44:19 +1000	Butler Ave Intersection - if you are not from Flagstaff AND very familiar of what lane to be in ahead of time, this main high traffic intersection is highly confusing!	lauribud@gmail.co NAC m	CDF12EA 35.19206 -111.628
2017-09-16 Drivers 01:59:17 +1000	Cars and cyclists crossing Birch cannot see oncoming traffic, which does not stop at LeRoux. It is a Russian roulette - Or, get rid of parkin you have to get out into the intersection before you can see if it is safe. Simple - the solutio way stop at this into so that the oncomir can be seen, and se first option seems of popular.	ersection. du g on Birch og traffic e. THe	CB70F5A 35.19936 -111.6483
2017-09-20 Drivers 03:34:35 +1000	cars running red lights	lmnop@gmail.com NAC	C91F494 35.19359 -111.6342
2017-09-16 Drivers 12:51:21 +1000	congested and difficult to turn in any direction	jessicabuckley2@g NAC mail.com	C3E9029 35.18425 -111.6614

2017-09-16 Dr 06:44:14 +1000	dangerous intersection - need a light - or no left turn allowed for people entering Milton from W. University Dr.	alm385@nau.edu	NAC2B3FE7	35.18393	-111.6614
2017-09-20 Dr 04:47:42 +1000	Dangerous intersection. Drivers have a hard time making a left onto W Riordan Rd due to traffic backing up. Some drivers making a left onto S Riordan Ranch St almost collide with drivers making left onto W Riordan Rd.	fortunagecko@gma il.com	NAC1A4256	35.18967	-111.6599
2017-09-20 Dr 04:50:09 +1000	Dangerous turn in - Drivers making a left or right into this part of the parking lot of Safeway back up traffic or never get a chance to turn out.	fortunagecko@gma il.com	NACE31BCA	35.18918	-111.6622
2017-09-16 Dr 12:52:34 +1000	definitely a dangerous intersection, especially to make a left turn onto Rte 66 from Riordan	jessicabuckley2@g mail.com	NACC9BE6E	35.19151	-111.6631
2017-09-14 Dr 08:49:06 +1000	Drivers are turning left into the parking lot over a double yellow line from Sweitzer Canyon into the Fry's parking lot. There needs to be a barrier to stop drivers from making an illegal left turn.	colebrue@yahoo.c om	NACAB006F	35.19438	-111.6343
2017-09-16 Dr 02:27:28 +1000	Drivers exiting from I-17 into Kachina Village often slow down too much on the Interstate, causing dangerous conditions.	dannyspleen@gmai l.com	NAC8F3058	35.09182	-111.6856

2017-09-20 Drive 04:38:06 +1000	rs Drivers get cut off here ans switch lanes. There is too short of a time to switch between lanes	fortunagecko@gma NAC8712F0 il.com	35.17888 -111.663
2017-09-21 Drive 14:12:09 +1000	rs Drivers in right land turn left not realizing that it is a one way street. I got hit here once by an out of town driver, and almost got hit a second time. Need more signage.	jm436mc@gmail.co NAC1A334A m	35.19594 -111.651
2017-09-16 Drive 02:55:43 +1000	rs Drivers run the stop sign frequently. comment	kiteartist@gmail.co NAC9FBA0E m	35.20763 -111.6524
2017-09-19 Drive 01:23:43 +1000	rs Drivers use the middle turning lane to pass cars driving the speed limit or slowing to make a right turn all along Soliere Ave.	azfig@msn.com NACD2714B	35.20537 -111.6017
2017-09-16 Drive 03:32:41 +1000	on Lake Mary Road is slow and sloppy. The street is never completely de-iced or plowed.	rachel.nixon- NAC8C15D3 bacon@nau.edu	35.16434 -111.6637
2017-09-16 Drive 01:51:57 +1000	rs extremely unsafe for all	cjburrell@gmail.co NAC34813D m	35.18898 -111.6616
2017-09-16 Drive 01:51:22 +1000	rs extremely unsafe for all	cjburrell@gmail.co NACC74AA1 m	35.19001 -111.6612

2017-09-16 Drivers 05:46:10 +1000	Fourth Street intersection - having both directions of 2 lane traffic turn left at the same time with no barriers or clearly marked lanes is ridiculous. I am fearful of making a left turn there and avoid whenever possible. Very dangerous.	lauribud@gmail.co m	NACDAEC5C	35.20604 -111.6132
2017-09-16 Drivers 12:54:59 +1000	frequent congestion at this intersection, roundabout might help	jessicabuckley2@g mail.com	NAC65350C	35.20141 -111.6376
2017-09-16 Drivers 12:53:15 +1000	frequent red light runners at this intersection	jessicabuckley2@g mail.com	NACCA5ACA	35.19366 -111.6343
2017-09-16 Drivers 02:54:35 +1000	having almost got killed here, I as a driver, am extra careful to triple check for pedestrians here	someone@flagests de	NAC2B228B	35.21132 -111.5779
2017-09-16 Drivers 01:50:30 +1000	heavily congested for cars. Highly unsafe for bikes and pedestrians. Need raised walkways	cjburrell@gmail.co m	NAC17D8FF	35.19482 -111.6552

2017-09-16 04:00:10 +1000	Drivers	Heavy evening traffic trying to get on 40 East from Butler is dangerous. The traffic will back up to the intersection and beyond creating greater risk for accidents. The same congestion is often seen in the Butler left turn lane to take 40 West.	I was rear ended at a fairly high rate of speed in this intersection a few weeks ago. The traffic had backed up to the 40W off ramp intersection which was unexpected. I had stopped to keep the intersection clear (there was no room for me to move forward without having to stop in the intersection) and was rear ended maybe 15 seconds later by someone who likely didn't anticipate a stopped vehicle at a green light. I've often observed people having to break quickly or swerve because the unexpected traffic.		NAC3E1A6C	35.1919	-111.623
2017-09-16 04:48:07 +1000	Drivers	High traffic congestion area		cicero14@gmail.co m	NACA2DECE	35.17708	-111.663
2017-08-30 05:31:32 +1000	Drivers	Increasing traffic levels and speeds = limited gaps. Need a roundabout		dwessel@flagstaffa z.gov	NAC6BF58C	35.16662	-111.6469

2017-09-16 03:37:41 +1000	Drivers	It is basically the whole NAU campus that is dangerous for all drivers, pedestrians & bicycles. Bikes don't follow traffic signs, pedestrians don't caution to bad drivers & drivers are in too much of a hurry in a 15mph campus. Major intersections on campus are horrible for all 3 also.	meana78@gmail.co NAC3A8B63 m	35.17922 -111.6577
2017-09-16 07:27:28 +1000	Drivers	Lights in this section of town behave differently than the rest of the city ie flashing yellow arrow. It's confusing to drivers who expect lights to behave the same throughout the city.	molly.harmon@nau NAC977AAC .edu	35.17055 -111.6665
2017-09-16 02:57:30 +1000	Drivers	Lots of drivers RUN THIS STOP SIGN HEADING WEST ON BEALE. I know they are upper, upper middle class residents, but they should not make it unsafe for pedestrians crossing in the evening! Repaint some cross walks North South could help. Better law enforcement would help as well.	kiteartist@gmail.co NAC5CD081 m	35.21103 -111.6524

2017-09-16 03:53:40 +1000	Drivers	Milton Road in general is a mess. There's too much traffic, the speed limit and "normal" flow of traffic don't line up so slower drivers create riskier traffic situations. Pedestrians jaywalking are often difficult to see at night or impede traffic flow. Alternate routes needed for drivers and perhaps bridges or underpasses for pedestrians and cyclists would be helpful.	mjg2834@gmail.co NACDA06AB m	35.187 -111.6616
2017-09-16 02:29:49 +1000	Drivers	NAU should add a traffic light at the crosswalk in front of Cline Library. Traffic is backed up a long way at times.	dannyspleen@gmai NAC64C125 l.com	35.18989 -111.6572
2017-09-20 04:43:14 +1000	Drivers	Need a light for people making a left onto Milton and for people on Milton making a left onto W University Ave.	fortunagecko@gma NAC48ADAF il.com	35.1843 -111.6615
2017-09-16 06:46:09 +1000	Drivers	Need a stoplight	alm385@nau.edu NAC8B2941	35.1777 -111.6604
2017-09-16 03:55:43 +1000	Drivers	Need better signage for one way streets. Wrong way drivers are frequent, particularly during tourist season, and are a risk to drivers, pedestrians, and cyclists.	mjg2834@gmail.co NACF9EF1F m	35.19737 -111.6492
2017-09-20 04:44:49 +1000	Drivers	Need two stop signs here for people driving into parking lot from Chambers Dr.	fortunagecko@gma NAC6995D8 il.com	35.18578 -111.6601

2017-09-20 04:52:15 +1000	Drivers	Needs to be a light here for people making a left from McConnell Dr onto Woodlands Village Blvd		fortunagecko@gma il.com	NACFE0743	35.17733	-111.6684
2017-09-20 04:51:17 +1000	Drivers	Needs to be a light here for people making a left onto Woodlands Village Blvd.		fortunagecko@gma il.com	NACDD67C3	35.18588	-111.6684
2017-09-19 01:16:08 +1000	Drivers	No right turning lane to 4th street, people never stop at the red light.	There is a green arrow for the drivers turning from 4th to Soliere. There is no green arrow for drivers to turn right from Soliere to 4th at the same time. Everyday people just turn right without stopping.	_	NACFC80B9	35.20096	-111.6072
2017-09-15 05:23:56 +1000	Drivers	Overly congested. US 180 needs an alternate route built		ebrown@flagstaffa z.gov	NAC93F2A1	35.21982	-111.687
2017-09-16 02:30:28 +1000	Drivers	People are constantly making illegal left turns here, both coming off of Rt 66 and turning onto Rt 66. I've seen many close calls here and I have almost been run over while on a bicycle by a driver making an illegal left into the gas station over two sets of double yellow lines.	of Rt 66 onto Rt 66 from this	becclestonjr@gmail .com	NACDD2643	35.2165	-111.5944

2017-09-16 02:34:36 +1000	Drivers	People trying to turn left onto Santa Fe backs up traffic trying to go straight, and those trying to turn left at Humphreys.	The left turn onto Santa Fe should be eliminated and the left turn lane onto Humpreys should be extended.	trent_lori@hotmail. NAC63B12F com	35.19848 -111.6533
2017-09-16 03:13:34 +1000	Drivers	Remove this stop sign on the north bound lane. Is this a cash generator? It makes no sense, and was gone for a few years, and then reappeared. The road turns, and it is not an intersection.		kiteartist@gmail.co NAC581399 m	35.19429 -111.6557
2017-08-26 01:45:48 +1000	Drivers	Road Conditions are very bad with pot holes and many folks seem to get flat tires in this area which can cause crashes and distracted drivers as well	When leaving the Arizona area and traveling to other states, you can immediately notice a difference in road conditions! Due to the poor pavements and potholes, many semi's now drive in the fast lane alot more often	flagstaffpro@outlo NACCB75E5 ok.com	35.19177 -111.779
2017-09-16 07:39:10 +1000	Drivers	Round-a-bout would be good to reduce traffic jams off highway and on/off campus at nearby 4-way stop, as well as make it safer to go left off of highway. It should include a bridge/underpass or walkway on north side for pedestrians/bicycles on/off campus too, so they're not in the midst of the traffic flow.		ljbventures@hotma NAC3CB7F5 il.com	35.17823 -111.6599

2017-09-16 Drivers 01:48:58 +1000	SB Beulah drivers trying to turn W out of La Quinta don't have good access.	judyulrich@yahoo.c om	NAC370570	35.17718 -111.663
2017-09-20 Drivers 03:33:03 +1000	So many people turning left on to 4th before the light at 7th	lmnop@gmail.com	NAC1DA6B6	35.21067 -111.6135
2017-09-16 Drivers 03:00:26 +1000	The access to many of these streets onto N. Fort Valley Road should be closed, and let the traffic exit at a light controlled intersection. They would have to drive west on their streets to Bonito, and then access whichever street is then equipped with a light controlled intersection, but it would make this 2 mile section of Ft. Valley safer for cars, pedestrians, and bicyclists.	omment. kiteartist@gmail.co m	NAC4A64AA	35.21022 -111.6491
2017-09-16 Drivers 03:33:34 +1000	The lights for Riordan and Plaza Way are never red or green at the same time. One turns green, while the other is red so traffic gets backed up.	rachel.nixon- bacon@nau.edu	NAC8834D1	35.19042 -111.6611
2017-09-16 Drivers 03:35:10 +1000	The single straight lane looks as if it should be a turn lane into Coco's, so, people in the middle turn lane go straight while someone else is going straight, which causes a collision.	rachel.nixon- bacon@nau.edu	NAC4AF9E9	35.17903 -111.663

2017-09-16 02:39:41 +1000 Drivers

The traffic lights in this intersection seem to always be malfunctioning. The left turn lanes from 66 onto Cummings often never give the left turn arrow, especially for N Cummings, forcing drivers to yield to traffic that is often exceeding speed limits. Also, the left turn arrow from Cummings on the north side of Rt 89 almost never turns green, while it always turns green for cars waiting on the Mall side of Cummings. This frustrates many drivers, which leads to frustrated drivers.

The traffic lights often don't give drivers coming from or turning onto Cummings the green turn arrow.

The traffic lights often don't becclestonjr@gmail NAC910094 35.22362 -111.5842 give drivers coming from or .com

2017-09-16 Drivers 12:56:24 +1000 the utility boxes along Woodlands
Village Blvd are placed too close to the
street making it difficult to see
oncoming traffic when pulling out from
Home Depot

jessicabuckley2@g NACE6E3BF 35.18647 -111.6687 mail.com

There should be a turn signal into Clay 2017-09-16 **Drivers** rachel.nixon-NAC9CDDAD 35.1951 -111.6555 03:39:15 +1000 Ave or into Natural Grocer's from Rt. bacon@nau.edu 66 or Milton. I saw a truck in the middle of the intersection waiting to turn left onto Clay, there was no signal and she was stuck in the middle of the intersection while cars drove the other direction around her. This has too much traffic for the turn 2017-09-16 Drivers see my original comment. kiteartist@gmail.co NAC292E14 35.18431 -111.6615 lanes. People trying to enter or exit W. 02:43:50 +1000 m University Ave. are blocked by traffic stopped at the light at W. University heading onto campus.

2017-09-20 Drivers 04:41:53 +1000	This intersection gets congested. Drivers making a left from Nimarcos going towards ADOT almost never have a chance to get out. Drivers making a left to turn into Target, turn lane often gets backed up. This makes it so that people making a left at the Milton/University intersection can't be in the appropriate turn lane	fortunagecko@gma NAC35D73A il.com	35.18331 -111.6602
2017-09-15 Drivers 03:38:40 +1000	This intersection is usually congested and motorists are hurried	mercury2go@yaho NACD10B63 o.com	35.22561 -111.5814
2017-09-16 Drivers 02:42:39 +1000	This is a dangerous area for all (drivers, bicyclists, motorcyclists and walkers). It needs a traffic control system - stop sign/light/roundabout. Collisions and near collisions happen daily here. Coconino Community College is a busy school and this intersection desperately needs traffic control system. Thank you.	tricia.fortin@nau.e NAC0FDBC7 du	35.16758 -111.6471
2017-08-16 Drivers 01:58:20 +1000	This oddball intersection is a mess especially at peak AM/PM hours. Lots of tourists unfamiliar with the dynamics of this area, parked cars along Kaspar, wondering pedestrians to the convenient store and commuters making right turn from Hwy 89. This is area of concern for cars, peds and bikes.	gadunno@yahoo.c NAC7A8B08 om	35.217 -111.5942

2017-09-16 06:48:06 +1000	Drivers	Tough for cars heading west on McConnell to turn left onto highway - need a light - can't see oncoming cars driving quickly.		alm385@nau.edu NACE156EE	35.177 -111.6619
2017-08-30 05:33:23 +1000	Drivers	Tough sight lines from WB to SB, then tight corner and uphill acceleration to go WB to NB.		dwessel@flagstaffa NACED8C41 z.gov	35.17546 -111.6688
2017-09-16 06:45:36 +1000	Drivers	Tough to exit		alm385@nau.edu NACB82EE7	35.17539 -111.6614
2017-09-16 01:47:28 +1000	Drivers	Traffic backs up here, back to San Francisco. Drivers also don't leave the intersection clear on 66 so people trying to cross 66 on Beaver often miss the light because they can't get through.		lallybroch9@hotma NAC3E665C il.com	35.19792 -111.6501
2017-09-20 04:48:58 +1000	Drivers	Traffic gets backed up. Drivers making a left onto Milton cannot make lefts due to too much traffic being stopped at the intersection between S Plaza Way and Milton.		fortunagecko@gma NAC47404B il.com	35.19038 -111.6611
2017-09-16 01:45:33 +1000	Drivers	Traffic to this intersection backs up to San Francisco		lallybroch9@hotma NACE4FF79 il.com	35.21063 -111.6489
2017-09-18 05:53:17 +1000	Drivers	Trucks exiting Little America truck station frequently pull out into the oncoming traffic going eastbound on Butler. Truckers frustrated by inability to get onto Butler and auto drivers frustrated by truckers. Area needs more traffic control.	Truckers leaving Little America might benefit from them having a routing that makes it easier for them to enter onto Butler. Area needs traffic lights to reduce potential for collisions.	jbrookehal@gmail.c NAC3BE80C om	35.19065 -111.6187

2017-09-16 I 02:40:27 +1000	Drivers	Two lanes turn east from 89A onto W. Forest Meadows St. MANY times drivers will change lanes as they turn, cutting off, or swerving into drivers next to them in the appropriate lane.	kiteartist@gmail.co m	NAC3652AB	35.17886	-111.663
2017-09-16 (02:41:57 +1000	Drivers	Two lanes turn east off of 89A onto W. see my first comment. Forest Meadows St. Many times illegally switching lanes in the middle of the turn, cutting off other drivers.	kiteartist@gmail.co m	NACD5F5BE	35.17888	-111.663
2017-09-15 I 05:25:50 +1000	Drivers	US 180 is overly congested from Route 66 to snowbowl road. Needs new road built as alternate. 180 bypass	ebrown@flagstaffa z.gov	NAC847530	35.27926	-111.7557
2017-09-16 I 06:41:34 +1000	Drivers	Very dangerous to have two on-ramps entering a 2 lane road from both sides at the same place - where I-17 ends and Milton begins.	alm385@nau.edu	NACB52A11	35.1743	-111.6617
2017-09-16 [06:37:47 +1000	Drivers	We need another road like Milton on the West side that will connect to Fort Valley Rd. Milton is just too congested and it is the only way to get to North Flag. This road should pass by Flagstaff High School as well. Milton (between Rt. 66 and Humphreys) is a nightmare in the mornings for taking my kids to school and after work, and at lunch, and almost always now. It's always stopped and unsafe.	alm385@nau.edu	NAC007715	35.19787	-111.6538

2017-09-16 01:51:21 +1000	Drivers	When pulling out from Northwestern onto 66 in either direction, it can be difficult to get up to speed when other vehicles are bearing down on you.	The additional town homes and 70 new houses going in around Railroad Springs will only increase congestion and parking issues.	jmatthies@gmail.co NAC7CED42 m	2 35.18766 -111.685
2017-09-16 02:47:04 +1000	Pedestrians	A crosswalk should be installed on the south side of W. Butler from W. Clay Ave, so pedestrians crossing from NAU to Natural Grocers or Old Viejo, don't have to cross Butler north, then S. Milton west, and then W. Clay Ave. south. Three crossings to get to the other side of the road is a timemuncher for pedestrians, who are not contributing to the traffic jams at that intersection.	see my original comment. And get rid of this addtl comment box!	kiteartist@gmail.co NAC5AD93I m	35.1952 -111.6555
2017-09-16 02:04:16 +1000	Pedestrians	A moronic intersection that is dangerous to everyone. No sidewalks and speeding drivers.		ajbelmo@gmail.co NACB97E71 m	35.18338 -111.6451

2017-09-16 Again, why is a crosswalk here when becclestonjr@gmail NACBA0308 Pedestrians Dangerous, yet unnecessary 35.17723 -111.6619 02:45:47 +1000 there's a dedicated pedestrian crosswalk, when there's a .com pathway on the other side of the dedicated pedestrian street? This area is especially pathway literally on the other dangerous to pedestrians, as there are side of the street. cars constantly turning from two directions onto the on-ramp. Require pedestrians to use the infrastructure built for them and get rid of this dangerous crosswalk. Also, there is no sidewalk from here to campus. 2017-09-16 **Pedestrians** Am a Mountain Line passenger most of The lightning of this anonymous@flagea NAC3D202F 35.21155 -111.5781 02:51:02 +1000 intersection could be better the winter; While on the way to the stside bus stop, have to cross CC Drive. Many during dark hours time the poor lighting, and/or high banks of plowed snow makes it very unsafe. Drivers from Solaire, once they see the green light, roar around to make their left turn right into pedestrians attempting to cross to the bus stop. I was nearly pinned under a pickup truck and this event could have taken my life. Since then, I've attempted to always wear a reflective vest during the winter

2017-09-16 Pedestrians 02:41:40 +1000	As a pedestrian, I have about 2-3 close calls per week with cars not yielding to pedestrians in the crosswalk. This is early morning around 7:15 when I'm crossing Country Club to get to the bus stop on Soliere.		margerysorensen@gmail.com	NAC6D429F	35.21153 -111.5777
2017-09-16 Pedestrians 02:15:52 +1000	Bad crosswalk design - should have a pedestrian and cyclist bridge		holly.troy@nau.edu	NAC5CC3BD	35.19324 -111.6551
2017-09-16 Pedestrians 02:58:21 +1000	cars have green left turn arrow going from Beulah to Lake Mary Rd while pedestrians have a walk signal. pedestrians not aware that traffic may be turning into their path as they proceed on crosswalk		abakula10@gmail.c om	NACBC8EF3	35.17009 -111.6669
2017-09-16 Pedestrians 01:57:14 +1000	Cars turning while pedestrians are crossing in the crosswalk	Not sure how to solve, other than somehow getting cars to be patient.	michael.ort@nau.e du	NACACF738	35.19031 -111.661
2017-08-16 Pedestrians 02:05:26 +1000	Consider above grade bike and ped crossing here. Huge numbers of pedestrians and bikes with congested area.	·	gadunno@yahoo.c om	NAC10A2A2	35.19775 -111.6503
2017-09-16 Pedestrians 06:42:48 +1000	dangerous intersection - need a light - can't see people walking		alm385@nau.edu	NAC6D018E	35.18419 -111.6614
2017-09-16 Pedestrians 01:54:27 +1000	Drivers do not watch for pedestrians and drive too fast on Riordan		kah26@nau.edu	NAC2954B2	35.18882 -111.6596
2017-06-10 Pedestrians 00:53:20 +1000	Extremely wide crossing		dwessel@flagstaffa z.gov	NACB56AA3	35.20606 -111.6129

2017-09-16 Pedestrians 02:10:03 +1000	Flashing crossing lights would be safest. Sometimes you can't see a pedestrian in the crosswalk because cars block them from view.		vtapia777@yahoo.c NAC7BC286 om	35.21043 -111.6491
2017-09-20 Pedestrians 02:57:05 +1000	Frequently see right turners try to get onto Butler before pedestrians or cyclists get to center of the road.		kate.carey@nau.ed NACED7BD3 u	35.19502 -111.6553
2017-09-21 Pedestrians 14:04:43 +1000	heavy traffic, long distance across streets		jm436mc@gmail.co NAC11C318 m	35.1928 -111.6584
2017-09-16 Pedestrians 04:23:48 +1000	ironic that I might die by being hit by a car while walking to the health food store	this is another horrible pedestrian/bike crossing area. no one knows what to do here, including bike riders walkers or drivers. also, it's a short cut and impatient drivers drive too fast on clay ave.	p.shanholtzer@nau NACA34F01 .edu ,	35.19522 -111.6553
2017-09-16 Pedestrians 02:01:25 +1000	It is difficult to cross Forest or Fort Valley roads here in the cross walks. Many cars simply will not stop, even when they have a stop sign.	This intersection probably simply needs a traffic light. It is bad for cars, pedestrians, and cyclists.	michael.ort@nau.e NAC88558C t du	35.21057 -111.6491
2017-09-16 Pedestrians 02:38:02 +1000	It is difficult to cross Fort Valley Road. There is a crosswalk but cars often do not stop. Flashing lights would help immensely.	Add flashing lights to this crosswalk	trent_lori@hotmail. NACF3B93D com	35.21046 -111.6492

2017-09-16 02:01:10 +1000	Pedestrians	I've arrived at the corner a few seconds after the Walk sign is on but drivers turning right onto Butler don't stop, I've had to stop in the middle of the E-bound lane to wait for cars to stop when crossing from the N side, and I always turn to look back at the car coming from Rt 66 to turn right on Butler before I stop onto the road. I'm a 50 year resident of Flagstaff and it was safer to cross when the walk signs didn't work (yes we have more traffic now but too much rush.	alonzom2067@gma NAC3F74C1 il.com	35.19509 -111.6553
2017-09-16 02:02:23 +1000	Pedestrians	Kids walking to school are not safe here. Students with no regard for the community leaving this neighborhood are at fault.	ajbelmo@gmail.co NAC3A6F51 m	35.18167 -111.6482
2017-08-16 01:54:44 +1000	Pedestrians	Many pedestrians (high numbers of youth) cross here instead of signal because of shopping, transit and access to neighborhood. Cars speeding downhill and thru the Cedar intersection along with busy commercial doctor office driveway and busses make this area extra dangerous for pedestrians.	gadunno@yahoo.c NAC9F97E6 om	35.21797 -111.6208

2017-09-16 Pedestrians 05:01:43 +1000	Many people live north of this intersection. To get downtown or down Milton it is often necessary to turn right and go west to W. Riordan Rd and turn left to avoid making a left turn east to get to S. Milton intersection. Occasionally a driver can go south straight across the intersection to S Metz towards W. Riordan Rd to get into S. Milton traffic at the W. Riordan/S. Milton intersection.	I don't have any particular suggestions to fix problems. I've just noted a difficulty that exists.	steven.biondi@nau NAC64D575 .edu	35.1928 -111.6606
2017-09-21 Pedestrians 14:09:41 +1000	My wife got hit here while walking. The driver was looking left, then turned right to hit her. It was not reported to police because injuries were minor and she did not get the license number (they fled the scene without stopping!!!)		jm436mc@gmail.co NAC777D2A m	35.19031 -111.661
2017-09-16 Pedestrians	Need a pedestrian path between 4th street and I-40.		apes2733@aim.co NACCE2F54	35.19479 -111.6095
05:03:12 +1000 2017-09-16 Pedestrians 05:02:35 +1000	Need a pedestrian path. There is no place to walk on west side of the street.		m apes2733@aim.co NACA143C7 m	35.19527 -111.6078
2017-09-16 Pedestrians 06:46:52 +1000	Need a stoplight that tells pedestrians when to cross		alm385@nau.edu NACC9F973	35.17751 -111.6604
2017-08-16 Pedestrians 02:03:41 +1000	Needs identified (signal?) crossing. There are many pedestrians (youth and families) crossing from neighborhood to coffee shop/restaurant.	d	gadunno@yahoo.c NAC18344B om	35.2179 -111.6507
2017-09-21 Pedestrians 14:07:04 +1000	No good routes across Milton, without walking a long way.		jm436mc@gmail.co NAC2CE575 m	35.18741 -111.6616

2017-09-16 Pedestrians 01:53:24 +1000	No pedestrian crossing to reach bus stop on Thompson.		jmatthies@gmail.co NACA52DA5 m	35.18749 -111.6749
2017-09-19 Pedestrians 01:19:38 +1000	No sidewalk for pedestrians. Drivers take this turn fast and are not in the driving lane from 4th across soliere intersection. Not safe for anyone walking or riding a bike.		azfig@msn.com NAC476787	35.20108 -111.6074
2017-09-16 Pedestrians 01:49:24 +1000	No sidewalks makes walking unattractive alternative. Especially dangerous in winter months when there's snow and pedestrians are forced to walk in or very close to the road.		jmatthies@gmail.co NAC55F187 m	35.18791 -111.6775
2017-09-16 Pedestrians 01:50:22 +1000	Pedestrians are not very visible from right turn lanes in this area. Utility poles block the view of people trying to cross north.		judyulrich@yahoo.c NACE92B09 om	35.17707 -111.6628
2017-09-20 Pedestrians 02:58:03 +1000	Pedestrians don't always press the flashing light when crossing Butler which is essential for drivers in the right lane, despite a left lane car that might be stopped for the pedestrian.		kate.carey@nau.ed NACCEEEF0 u	35.19411 -111.652
2017-09-16 Pedestrians 01:52:39 +1000	Pedestrians Frequently cross mid block in several location along Milton. Especially hazardous at night.		judyulrich@yahoo.c NACD3E647 om	35.18499 -111.6613
2017-09-16 Pedestrians 04:08:09 +1000	pedestrians just walk out because they don't know what else to do. This intersection needs a stop sign or a signal or a roundabout.	this intersection was designed for the traffic of 20 years ago. time to upgrade to a four way stop.		35.18877 -111.6604
2017-09-16 Pedestrians 01:58:19 +1000	Pedestrians should always use the crosswalk alert lights!!		marycsnow@msn.c NAC039783 om	35.19443 -111.6532

2017-09-16 Pedestrians 02:03:34 +1000	People living in these apartment complexes use this road to race their cars. If someone doesn't stop this, someone else will.		ajbelmo@gmail.co m	NACF5EBAE	35.18075 -111.6437
2017-09-21 Pedestrians 14:06:03 +1000	People often walk across R66 here, trusting the car traffic.		jm436mc@gmail.co m	NAC39C902	35.19275 -111.6603
2017-09-16 Pedestrians 03:29:59 +1000	People run across Rt. 66 because there are not enough cross walks on a long stretch of road.	Rt.66 is a fast road, 45 miles per hour, there are not enough cross walks for people, so people run across the road, or wait in the middle lane to cross the whole way. There is too much distance between cross walks.	rachel.nixon- bacon@nau.edu	NAC8E6DAF	35.19204 -111.6625
2017-09-16 Pedestrians 04:18:59 +1000	potholes, distracted confused drivers, general animosity toward bike riders and walkers make this a truly horrible intersection for the nonmotorist.		p.shanholtzer@nau .edu	NACDE1067	35.18928 -111.6616
2017-09-16 Pedestrians 01:55:13 +1000	Shrubbery in median can make it difficult to spot pedestrians waiting there.		jmatthies@gmail.co m	NAC48C364	35.19447 -111.6531
2017-09-16 Pedestrians 02:05:09 +1000	Side walk abruptly ends. PUT IN A SIDEWALK, IT'S NOT ROCKET SCIENCE!		ajbelmo@gmail.co m	NACACDAD7	35.18725 -111.6463
2017-09-16 Pedestrians 12:49:07 +1000	sidewalks are missing in several places along Rte 66		jessicabuckley2@g mail.com	NACC205D0	35.18796 -111.6726
2017-09-16 Pedestrians 12:50:20 +1000	small section of sidewalk missing here		jessicabuckley2@g mail.com	NAC1C984F	35.18413 -111.6632

2017-09-16 Pedestrians 07:22:53 +1000	The crosswalk on Beaver has no light that indicates to pedestrians when it's okay to walk. We have to rely on cars coming to a stop. Sometimes cars stop prematurely because they see someone crossing in the opposite lane. While polite, it's dangerous because the far lane may not know why the other vehicle stopped. I've had to run from on coming traffic. One time I took a moment to push the button even though one car had stopped and the driver got mad and took off and almost hit me.		molly.harmon@nau NACFEC463 .edu	35.19445 -111.6531
2017-09-16 Pedestrians 04:26:44 +1000	the occasional jay walking pedestrian here is a hazard for drivers. jay walking in flagstaff was okay about 30 years ago, but now it's just dangerous!!!	flagstaff needs to ticket jaywalkers for their own safety, and also provide safe alternatives to just heading out in front of cars randomly.	p.shanholtzer@nau NAC743619 .edu	35.1975 -111.6542
2017-09-16 Pedestrians 03:37:13 +1000	There is a crosswalk here but cars do not observe it. Very dangerous to cross here.		dinabarnese@gmail NACA67A53 .com	35.20105 -111.6501
2017-09-16 Pedestrians 03:01:35 +1000	There is a lot of university and college traffic here where children cross the road. Elevated walkway over the road here would be ideal		abakula10@gmail.c NAC1C6819 om	35.18106 -111.6483

2017-09-16 F 04:19:52 +1000	Pedestrians	this is another terrible place to try to cross the street on foot.	motorists are so confused by the intersection and don't see pedestrians and bike riders.	p.shanholtzer@nau .edu	NACD56DD1	35.19287 -	-111.6585
2017-09-16 F 04:16:15 +1000	Pedestrians	•	the urban trail dumps into a confusing feeder lane to turn right. how about a pedestrian/bike overpass?	p.shanholtzer@nau .edu	NAC394429	35.17894 -	-111.6631
2017-09-20 F 03:29:17 +1000	Pedestrians	This long stretch of Milton has no pedestrian options so they risk it and run into the center of the road. There are so many lane changes and it feels dangerous for both drivers and pedestrians.		kate.carey@nau.ed u	NAC68CB2E	35.1872 -	-111.6615
2017-09-16 F 04:43:14 +1000	Pedestrians	too many cars at 3-5 pm or on game days		rgh9@nau.edu	NACC53AF6	35.19128	-111.653

2017-09-16 01:54:12 +1000 Pedestrians

Turning cars do not yield to pedestrians walking in the crosswalk with the light. This happens nearly every time I am crossing. Cyclists are also in danger at this intersection

This is an intersection where there should be no right turns on red (I have seen car crashes from that here), and then have one single pedestrian green light when ALL traffic is stopped, so pedestrians can cross in any direction safely (a scramble amble) and then be out of the way of the reckless drivers. This would lower the drivers' frustration, as they would not be waiting to turn while pedestrians cross legally.

This is an intersection where michael.ort@nau.e NAC1DB3B6 35.19496 -111.6552

2017-09-16 02:43:21 +1000	Pedestrians	Why was a pedestrian crosswalk put here when there's a dedicated pedestrian pathway just to the north of this spot? There's no established sidewalk on this street, meaning pedestrians are often walking the wrong direction (with traffic) right next to the street. This crosswalk should be eradicated and all pedestrians required to use the dedicated pathway literally on the other side of the street, where there's no danger of being run over.		becclestonjr@gmail NACF72ACE .com	35.17808 -111.6603
2017-09-16 02:50:25 +1000	Pedestrians	Widen this section of the separated sidewalk to accommodate the shared use of bicycles and pedestrians. Dividing the current sidewalk with a paint line would help for now. Many cyclists use this, and don't warn pedestrians as they pass, causing many near collisions. It doesn't feel safe to walk this! Also remove the street light that is on the sidewalk, as this creates a squish point!	see comment.	kiteartist@gmail.co NAC914329 m	35.1979 -111.6541

Regional Strategic Transportation Safety Plan DRAFT





APPENDIX B

Implementation Plan: Sites and Countermeasures

Countermeasure Category	Countermeasure	CMF ID	CMF	Crash Type Mitigated	Area Limitations	Injury Severity	Unit Cost	Unit
	Shoulder widening	6658	0.688	All	Rural, multi-lane	K, A, B, C	\$350k-\$2M	mile, each side
pe	Install centerline rumble strips	3360	0.55	Head On, Sideswipe	Rural, undivided, 2 lane	K, A, B, C	\$8k	mile
Lane Departure-Related	Install shoulder rumble strips	3454	0.64	Run off road	Rural, undivided, 2 lane	K, A, B, C	\$8k	mile, each side
arture	Install edgeline rumble strips	3394	0.67	Run off road	Rural, undivided, 2 lane	K, A, B, C	\$8k	mile
Эер	Install new guardrail	38	0.53	Run off road	Not specified	A, B, C	\$10	linear foot
Lane [Install Safety Edge treatment	4303	0.923	All	Rural	All	\$700k	mile, each side
	Striping (thermoplastic)	101	0.76	All	Rural, undivided, 2+ lanes	A,B,C	\$3.5k	mile of stripe
Nighttime: Segment	Install centerline RPMs	107	0.76	Nighttime	Rural, 2 lane	All	\$1,200	mile
Night Segr	Provide highway lighting	192	0.72	Nighttime	All	А, В, С	\$750k	mile
es	Install chevron signs on horizontal curves	2438	0.84	Non- intersection	Rural, undivided, 2 lane	K, A, B, C	\$450	each
Horizontal Curves	Install a combination of chevron signs, curve warning signs, and/or sequential flashing beacons	1851	0.606	All	Principal arterial, freeways, expressways, 4 lanes	All	\$100k	each
oriz	Install in-lane curve warning pavement markings	9167	0.616	All	Not specified	All	\$800	each
Ĭ	Install new fluorescent signage/upgrade existing at horizontal curves	2433	0.75	Non- intersection	Rural, undivided, 2 lane	K, A, B, C	\$500	each
trian	Install pedestrian hybrid beacon w/ advanced yield or stop markings and signs	9022	0.82	All	Urban	All	\$150k	each
Pedest	Install raised median with crosswalk	8800	0.742	All	Urban, minor arterial, 2 to 8 lanes	All	\$75k	each
tion	Construct raised median	3035	0.56	All	Divided by median	К, А	\$350k- \$750k	mile
Segment or Intersection	Add left turn lane on one major-road approach	264	0.65	All	Rural, 4-leg stop- controlled	K, A, B, C	\$500	linear foot
nt or Ir	Add right turn lane on one major-road approach	288	0.91	All	Signalized, 3- & 4-leg	К, А, В, С	\$500	linear foot
Segme	Install (solar-powered) dynamic speed feedback sign	6885	0.95	All	Rural, undivided, 2 lane, speed limit 50-65	All	\$15k	each

Countermeasure Category	Countermeasure	CMF ID	CMF	Crash Type Mitigated	Area Limitations	Injury Severity	Unit Cost	Unit
Visibility	Install dynamic signal warning flashers (solar powered)	4199	0.792	Rear end	All	All	\$90k	each
Warning/Signal Visibilit	Provide flashing beacons at stop-controlled intersections	449	0.87	Angle	Urban/rural, 4-leg stop- controlled, 2 lane	All	\$30k	each
-	Systemic signing and marking improvements at stop- controlled intersections	8867	0.899	All	3- & 4-leg stop- controlled, 2 & 4 lanes	K, A, B, C	\$25k	intersection
ctic	Improve signal visibility, including signal lens size upgrade,	4111	0.902	Nighttime	4-leg, signalized	K, A, B, C	\$600	each
Intersection	Add 3-inch yellow retroreflective sheeting for signal backplates	1410	0.85	All	Urban, signalized intersection	All	\$600	each
Intersection	Construct high speed roundabout	9156	0.28	All	Not specified	K	\$1.5M-\$3M	intersection
	Provide intersection illumination	433	0.62	Nighttime	Not specified	A,B,C	\$200k	intersection

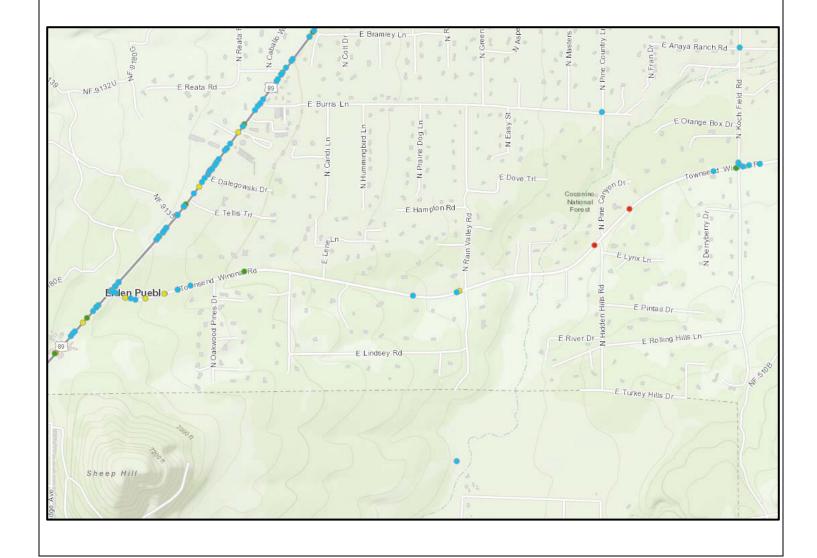
Townsend-Winona Road – US 89 to I-40

Segment Length: 10.22 Miles Posted speed: 50 mph

Typical section: Two-lanes, 4 to 6-foot paved shoulder

Roadside: Approximately 4 feet of paved shoulder and 4 feet of unpaved shoulder, no rumble strips

Crash Map





Crash Data

Emphasis Area Analysis									
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal					
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	50%					
Impaired Driving	40.4%	35.4%	34.1%	100%					
Occupant Protection	33.3%	40.9%	46.8%	0%					
Motorcycles	3.5%	17.5%	16.1%	50%					
Distracted Driving	31.6%	39.0%	14.3%	0%					
Roadway Infrastructure and Operations:	59.6%	47.4%	51.1%	100%					
Lane/Roadway Departure	33.070	17.170	31.170	10070					
Roadway Infrastructure and Operations:	12.3%	27.2%	23.8%	0%					
Intersections/Railroad Crossings	12.570	27.270	23.070	070					
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%					
Age Related: Older Drivers	12.3%	22.0%	18.2%	50%					
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	0%					
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%					
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%					
Natural Risks: Weather	5.3%	2.9%	3.7%	0%					
Natural Risks: Animal	0.0%	0.2%	0.3%	0%					
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%					
*Red, bold text indicates the crash rate for this emphasis area was higher than 2012 to 2016 statewide incident reports.									

Summary of Crashes by First Harmful Event (All severities)									
First Harmful Event	Seg	ment	% Statewide	% Rural Areas	% Urban				
riist naiiiiui event	Total	%	% Statewide	% Kurai Areas	Areas				
Collision with Motor Vehicle in Transport	4	26.7%	64.3%	51.4%	67.3%				
Overturning	2	13.3%	2.2%	8.2%	0.8%				
Collision with Pedestrian	1	6.7%	1.0%	0.7%	1.1%				
Collision with Pedalcyclist	0	0.0%	1.2%	0.6%	1.4%				
Collision with Animal	2	13.3%	1.6%	7.2%	0.3%				
Collision with Fixed Object	6	40.0%	10.0%	19.0%	8.0%				
Collision with Non-fixed Object*	0	0.0%	4.0%	5.0%	3.7%				
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%				
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%				
Unknown	0	0.0%	14.6%	5.0%	16.8%				
Total	15	100.0%							

*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

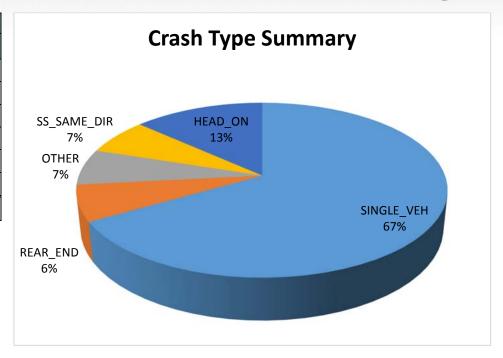
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift



Crash Summary: All Years								
Crash Type Total %								
Fatal	2	13.3%						
Incapacitating	0	0.0%						
Injury	4	26.7%						
Possible Injury	1	6.7%						
PDO	8	53.3%						
Multi-Vehicle	5	33.3%						
Single-Vehicle	10	66.7%						
Total	15	100.0%						

At-Fault Unit Driver Behavior									
Action	Total	% of Total	Fatal	% of Fatal					
No Improper Action	3	20.0%	0	0.0%					
Impaired Driving	4	26.7%	2	100.0%					
Speeding	4	26.7%	0	0.0%					
Failed to Yield ROW	3	20.0%	0	0.0%					
Inattention/Distraction	1	6.7%	0	0.0%					
Disregard Traffic Signal	0	0.0%	0	0.0%					
Unsafe Passing/Lane Change	0	0.0%	0	0.0%					
Failed to Keep in Lane	1	6.7%	0	0.0%					
Pedestrian Fault	0	0.0%	0	0.0%					
No Restraint	0	0.0%	0	0.0%					
Other	3	20.0%	2	100.0%					
	•	•	•						

Crashes by Lighting Condition (All severities)								
Condition	Total	% of Total						
Daylight	9	60.0%						
Dawn	0	0.0%						
Dusk	1	6.7%						
Dark - Lighted	0	0.0%						
Dark - Not Lighted	5	33.3%						
Dark - Unknown Lighting	0	0.0%						
Total	15	100.0%						



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2831703	Tuesday, February 04, 2014	1:47:00 PM	FATAL	MOTOR_VEHICLE_IN_TRANSPORT	HEAD_ON	DAYLIGHT	CLOUDY		1		1		4 - WEST	UNKNOWN
2730817	Saturday, June 08, 2013	3:53:00 PM	FATAL	OVERTURN_ROLLOVER	SINGLE_VEH	DAYLIGHT	CLEAR	1	1		1		3 - EAST	OVERTAKING_PASSING



Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Centerline and edgeline rumble strips (ID 3394)	33	Run off road	K,A,B,C	\$24,000/mile	10.22	\$245,280	0.13	0.07	\$792,000	21.2
	US 89 to I-40											
		Combined Project										
		Combined Brainst										
		Combined Project										
Notes:	es: 22 of 44 crashes along Townsend-Winona Road during the five-year period were lane departure crashes, of all severities. The ten-mile stretch may be HSIP eligible. The B/C ratio assumes a 10-year project life for a \$250,000 project.											

BURGESS & NIPLE
Engineers Planners



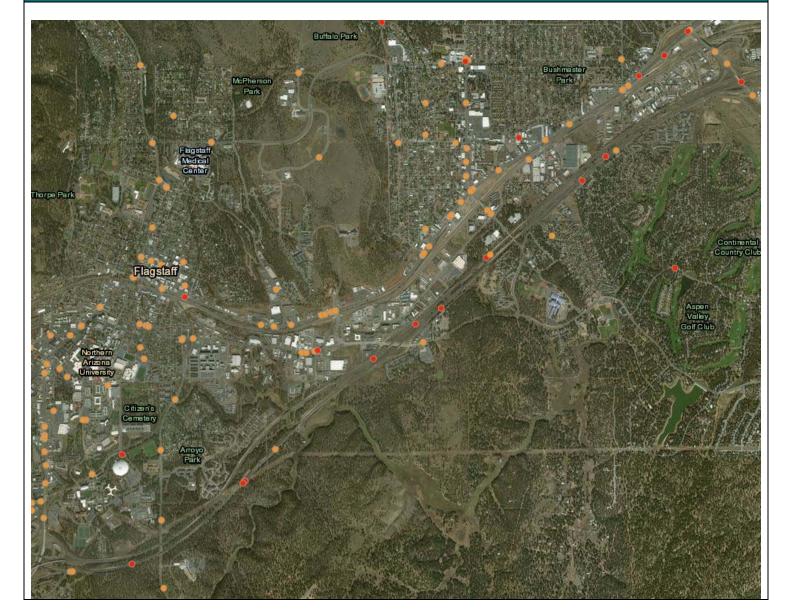
Segment Length: 5.42 Miles Posted speed: 65 mph

Typical section:

4 lanes (2 per direction) divided by landscape median, w/ center & lane RPMS 3-foot paved inside shoulder, 8-foot paved outside shoulder, rumble strips both sides, intermittent Roadside:

guardrail

Crash Map





Crash Data

Emphasis Area Analysis									
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal					
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	11.1%					
Impaired Driving	40.4%	35.4%	34.1%	22.2%					
Occupant Protection	33.3%	40.9%	46.8%	22.2%					
Motorcycles	3.5%	17.5%	16.1%	0%					
Distracted Driving	31.6%	39.0%	14.3%	33.3%					
Roadway Infrastructure and Operations:	59.6%	47.4%	51.1%	33.3%					
Lane/Roadway Departure	33.070	77.770	31.170						
Roadway Infrastructure and Operations:	12.3%	27.2%	23.8%	0%					
Intersections/Railroad Crossings	12.570	27.270	25.070						
Age Related: Young Drivers	22.8%	26.0%	29.7%	11.1%					
Age Related: Older Drivers	12.3%	22.0%	18.2%	11.1%					
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	55.6%					
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%					
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	22.2%					
Natural Risks: Weather	5.3%	2.9%	3.7%	0%					
Natural Risks: Animal	0.0%	0.2%	0.3%	0%					
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%					
*Red, bold text indicates the crash rate for this emphasis an	rea was higher than 2012 t	o 2016 statewide incide	ent reports.						

Summary of Crashes by First Harmful Event (All severities)									
First Harmful Event	Seg	ment	% Statewide	0/5 14	% Urban				
riist naiiiiui Eveiit	Total	%	% Statewide	% Rural Areas	Areas				
Collision with Motor Vehicle in Transport	118	39.3%	64.3%	51.4%	67.3%				
Overturning	29	9.7%	2.2%	8.2%	0.8%				
Collision with Pedestrian	7	2.3%	1.0%	0.7%	1.1%				
Collision with Pedalcyclist	0	0.0%	1.2%	0.6%	1.4%				
Collision with Animal	53	17.7%	1.6%	7.2%	0.3%				
Collision with Fixed Object	60	20.0%	10.0%	19.0%	8.0%				
Collision with Non-fixed Object*	25	8.3%	4.0%	5.0%	3.7%				
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%				
Other Non-collision**	8	2.7%	0.8%	2.0%	0.5%				
Unknown	0	0.0%	14.6%	5.0%	16.8%				
Total	300	100.0%							

*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

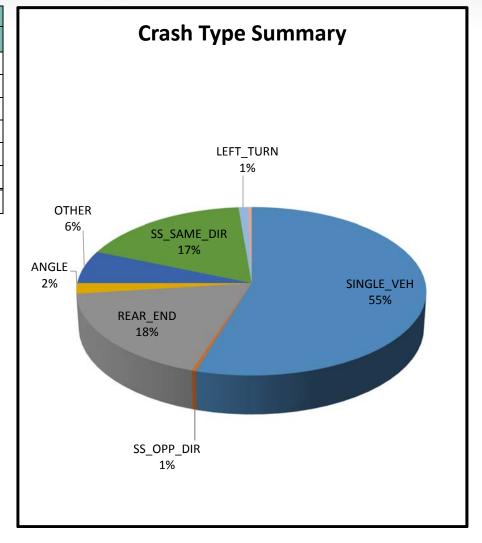
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift



Crash Summary: All Years								
Crash Type Total %								
Fatal	9	3.0%						
Incapacitating	4	1.3%						
Injury	34	11.3%						
Possible Injury	19	6.3%						
PDO	234	78.0%						
Multi-Vehicle	136	45.3%						
Single-Vehicle	164	54.7%						
Total	300	100.0%						

At-Fault Unit Driver Behavior									
Action Total % of Total Fatal % of Fa									
No Improper Action	124	41.3%	0	0.0%					
Impaired Driving	20	6.7%	2	22.2%					
Speeding	73	24.3%	1	11.1%					
Failed to Yield ROW	40	13.3%	5	55.6%					
Inattention/Distraction	7	2.3%	0	0.0%					
Disregard Traffic Signal	1	0.3%	0	0.0%					
Unsafe Passing/Lane Change	30	10.0%	1	11.1%					
Failed to Keep in Lane	10	3.3%	1	11.1%					
Pedestrian Fault	2	0.7%	1	11.1%					
No Restraint	17	5.7%	2	22.2%					
Other	13	4.3%	0	0.0%					

Crashes by Lighting Condition (All severities)							
Condition	Total	% of Total					
Daylight	170	56.7%					
Dawn	14	4.7%					
Dusk	17	5.7%					
Dark - Lighted	27	9.0%					
Dark - Not Lighted	71	23.7%					
Dark - Unknown Lighting	1	0.3%					
Total	300	100.0%					





ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2943679	Thursday, April 16, 2015	2:05:00 PM	FATAL	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLOUDY						3 - EAST	OTHER
2664395	Saturday, September 08, 2012	7:58:00 PM	FATAL	PEDESTRIAN	OTHER	DARK_NOT_LIGHTED	CLEAR	1					4 - WEST	UNKNOWN
2711331	Tuesday, March 26, 2013	11:07:00 AM	FATAL	EMBANKMENT	SINGLE_VEH	DAYLIGHT	CLOUDY	1			1	1	3 - EAST	GOING_STRAIGHT_AHEAD
2740446	Tuesday, July 09, 2013	1:46:00 AM	FATAL	PEDESTRIAN	OTHER	DARK_NOT_LIGHTED	CLEAR	1					99 - UNKNOWN	UNKNOWN
2820202	Thursday, March 13, 2014	7:29:00 PM	FATAL	PEDESTRIAN	OTHER	DUSK	CLEAR						4 - WEST	CROSSING_ROAD
3117585	Saturday, July 02, 2016	10:25:00 PM	FATAL	PEDESTRIAN	OTHER	DARK_LIGHTED	CLOUDY	1					2 - SOUTH	CROSSING_ROAD
3075528	Wednesday, March 30, 2016	5:44:00 AM	FATAL	OVERTURN_ROLLOVER	SINGLE_VEH	DARK_NOT_LIGHTED	CLOUDY	1			1		3 - EAST	GOING_STRAIGHT_AHEAD
3157394	Sunday, November 13, 2016	6:41:00 AM	FATAL	PEDESTRIAN	OTHER	DAWN	CLEAR						99 - UNKNOWN	CROSSING_ROAD
3059690	Wednesday, December 09, 2015	3:13:00 PM	FATAL	EMBANKMENT	SINGLE_VEH	DAYLIGHT	CLEAR					1	3 - EAST	GOING_STRAIGHT_AHEAD
2629946	Monday, July 09, 2012	8:21:00 PM	INCAPACITATING_INJURY	GUARDRAIL_FACE	SINGLE_VEH	DARK_LIGHTED	CLEAR	1			1		3 - EAST	OTHER
2798508	Saturday, December 28, 2013	10:21:00 PM	INCAPACITATING_INJURY	OVERTURN_ROLLOVER	SINGLE_VEH	DARK_NOT_LIGHTED	CLEAR					1	3 - EAST	GOING_STRAIGHT_AHEAD
2652739	Sunday, September 09, 2012	2:26:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	SS_SAME_DIR	DAYLIGHT	CLOUDY					1	4 - WEST	GOING_STRAIGHT_AHEAD
3124327	Monday, August 29, 2016	8:59:00 AM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DAYLIGHT	CLEAR						2 - SOUTH	CROSSING_ROAD



Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction (crashes/yr)	Incapacitating Crash Reduction (crashes/yr)	Annual Benefit	Preliminary B/C
		Lighting (CMF ID 578)	32	All	A,B,C	\$750k/mile	5.42	\$4,065,000	0.32	0.06	\$1,881,600	3.9
		Combined Project										
				\perp								
		Combined Project										

Notes: Extents of this lighting project are consistent with extents for pedestrian improvements outlined in the I-40 East Corridor Profile Study. Coordinate application CMF with ADOT TSS. Crashes with lighting conditions coded dark not lighted, dusk, and dawn in this calculation.

Milton Road – McConnell Drive to Ponderosa Parkway

Segment Length: 3.5 Miles Posted speed: 30 mph

McConnell Drive to Forest Meadows Street

Typical section: Four lanes with concrete median, designated left-turn lane

Roadside: Curb and gutter, some guardrail, sidewalk, lighting
Forest Meadows Street to Clay Avenue/Butler Avenue to Phoenix Avenue

Typical section: Four lanes with TWLTL, right-turn pockets at some minor roads and businesses

Roadside: Curb and gutter, sidewalk, lighting

Phoenix Avenue to Humphreys Street

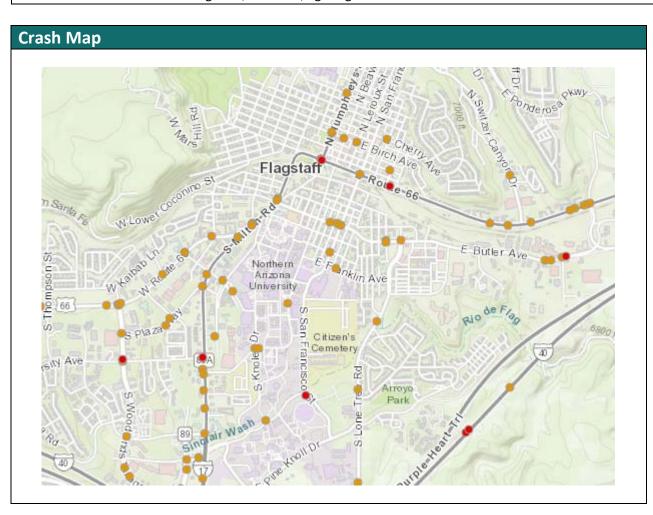
Typical section: Four lanes with concrete median and designated left turn lanes, 90 deg horizontal curve

Roadside: Curb and gutter, sidewalk, lighting

Humphreys Street to Ponderosa Parkway

Typical section: Four lanes with painted median and designated left turn lanes

Roadside: Curb and gutter, sidewalk, lighting







Crash Data

Emphasis Area Analysis								
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal				
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%				
Impaired Driving	40.4%	35.4%	34.1%	0%				
Occupant Protection	33.3%	40.9%	46.8%	0%				
Motorcycles	3.5%	17.5%	16.1%	0%				
Distracted Driving	31.6%	39.0%	14.3%	0%				
Roadway Infrastructure and Operations:	59.6%	47.4%	51.1%	0%				
Lane/Roadway Departure	39.0%	47.470	51.1%					
Roadway Infrastructure and Operations:	12.3%	27.2%	23.8%	0%				
Intersections/Railroad Crossings	12.5/0	27.2/0	23.0/0					
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%				
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%				
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	100%				
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%				
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%				
Natural Risks: Weather	5.3%	2.9%	3.7%	0%				
Natural Risks: Animal	0.0%	0.2%	0.3%	0%				
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%				
*Red, bold text indicates the crash rate for this emphasis ar	rea was higher than 2012 t	o 2016 statewide incide	ent reports.					

Summary of Crashes by First Harmful Event (All severities)									
First Harmful Event	Seg	ment	% Statewide	% Rural Areas	% Urban				
First nariiiui event	Total	%	% Statewide	% Kurai Areas	Areas				
Collision with Motor Vehicle in Transport	14	82.4%	64.3%	51.4%	67.3%				
Overturning	0	0.0%	2.2%	8.2%	0.8%				
Collision with Pedestrian	2	11.8%	1.0%	0.7%	1.1%				
Collision with Pedalcyclist	0	0.0%	1.2%	0.6%	1.4%				
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%				
Collision with Fixed Object	1	5.9%	10.0%	19.0%	8.0%				
Collision with Non-fixed Object*	0	0.0%	4.0%	5.0%	3.7%				
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%				
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%				
Unknown	0	0.0%	14.6%	5.0%	16.8%				
Total	17	100.0%							

^{*}Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

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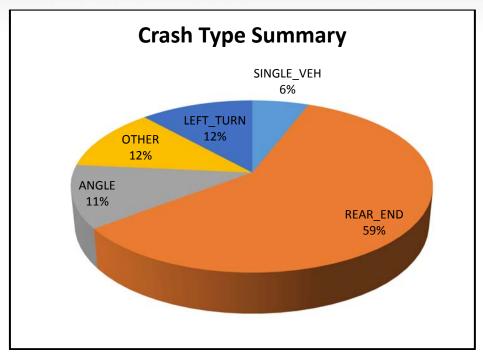
^{**}Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift



Crash Summ	ary: All Y	'ears		
Crash Type	Total	%		
Fatal	1	5.9%		
Incapacitating	16	94.1%		
Injury	0	0.0%		
Possible Injury	0	0.0%		
PDO	0	0.0%		
Multi-Vehicle	16	94.1%		
Single-Vehicle	1	5.9%		
Total	17	100.0%		

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	1	5.9%	1	100.0%
Impaired Driving	2	11.8%	0	0.0%
Speeding	7	41.2%	0	0.0%
Failed to Yield ROW	3	17.6%	0	0.0%
Inattention/Distraction	4	23.5%	0	0.0%
Disregard Traffic Signal	1	5.9%	0	0.0%
Unsafe Passing/Lane Change	0	0.0%	0	0.0%
Failed to Keep in Lane	0	0.0%	0	0.0%
Pedestrian Fault	0	0.0%	0	0.0%
No Restraint	3	17.6%	0	0.0%
Other	1	5.9%	0	0.0%

Crashes by Lighting Condition (All severities)									
Condition	Total	% of Total							
Daylight	14	82.4%							
Dawn	0	0.0%							
Dusk	0	0.0%							
Dark - Lighted	3	17.6%							
Dark - Not Lighted	0	0.0%							
Dark - Unknown Lighting	0	0.0%							
Total	17	100.0%							



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2902238	Friday, November 21, 2014	5:45 PM	FATAL	PEDESTRIAN	OTHER	DARK_LIGHTED	CLEAR	1	0	0	0	0	4 - WEST	GOING_STRAIGHT_AHEAD
2619416	Tuesday, May 29, 2012	4:45 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	0	0	1	0	0	3 - EAST	SLOWING_IN_TRAFFICWAY
2642196	Sunday, August 19, 2012	10:53 PM	INCAPACITATING_INJURY	CURB	SINGLE_VEH	DARK_LIGHTED	CLOUDY	0	0	1	0	1	4 - WEST	MAKING_RIGHT_TURN
2644719	Wednesday, August 29, 2012	7:52 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DARK_LIGHTED	CLEAR	1	0	1	1	0	2 - SOUTH	GOING_STRAIGHT_AHEAD
2685081	Thursday, January 3, 2013	11:35 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	0	0	1	0	0	2 - SOUTH	GOING_STRAIGHT_AHEAD
2801231	Monday, January 20, 2014	5:21 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	0	0	0	0	0	2 - SOUTH	GOING_STRAIGHT_AHEAD
2825884	Monday, March 24, 2014	8:48 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DAYLIGHT	CLEAR	0	0	0	0	1	1 - NORTH	GOING_STRAIGHT_AHEAD
2860711	Thursday, July 24, 2014	4:24 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DAYLIGHT	RAIN	0	0	1	0	0	8 - SOUTHEAST	MAKING_LEFT_TURN
2894385	Wednesday, November 12, 2014	2:35 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	0	0	0	0	0	3 - EAST	GOING_STRAIGHT_AHEAD
2947021	Friday, April 10, 2015	8:18 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	0	0	1	0	0	4 - WEST	GOING_STRAIGHT_AHEAD
2963265	Thursday, June 4, 2015	10:12 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	0	0	0	0	0	1 - NORTH	SLOWING_IN_TRAFFICWAY
2967616	Friday, June 19, 2015	3:04 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	1	0	1	1	0	3 - EAST	GOING_STRAIGHT_AHEAD
3086411	Friday, April 29, 2016	1:11 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DAYLIGHT	RAIN	0	0	0	0	0	3 - EAST	MAKING_LEFT_TURN
3099894	Saturday, June 11, 2016	12:54 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DAYLIGHT	CLEAR	0	0	1	0	0	1 - NORTH	GOING_STRAIGHT_AHEAD
3141697	Saturday, October 1, 2016	10:46 AM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DAYLIGHT	CLEAR	0	0	0	0	0	3 - EAST	CROSSING_ROAD
3151605	Thursday, October 20, 2016	3:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	0	0	1	0	0	3 - EAST	GOING_STRAIGHT_AHEAD
3162926	Tuesday, November 22, 2016	2:50 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	0	0	0	0	1	4 - WEST	GOING_STRAIGHT_AHEAD



Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Install variable speed limit signs (CMF ID 3340)*	8	All	All	\$25k per sign and additional equipment	10	\$250k	0.02	0.26	\$195,000	3.5
		Combined Project										
		Combined Project										

Notes: Variable speed limit B/C assumes project life of 6 years. Excluded crashes at intersections EXCEPT for rear end.

Milton Road/E. Route 66 - McConnell Drive to Elden Street

Segment Length: 2.1 Miles Posted speed: 30 mph

McConnell Drive to Forest Meadows Street

Typical section: Four lanes with concrete median, designated left-turn lane

Roadside: Curb and gutter, some guardrail, sidewalk, lighting
Forest Meadows Street to Clay Avenue/Butler Avenue to Phoenix Avenue

Typical section: Four lanes with TWLTL, right-turn pockets at some minor roads and businesses

Roadside: Curb and gutter, sidewalk, lighting

Phoenix Avenue to Humphreys Street

Typical section: Four lanes with concrete median and designated left turn lanes, 90 deg horizontal curve

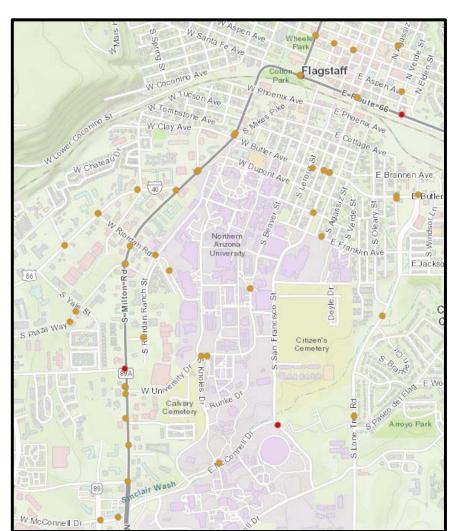
Roadside: Curb and gutter, sidewalk, lighting

Humphreys Street to Elden Street

Typical section: Four lanes with painted median and designated left turn lanes

Roadside: Curb and gutter, sidewalk, lighting

Crash Map







Crash Data

Emphasis Area Analysis									
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal					
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%					
Impaired Driving	40.4%	35.4%	34.1%	0%					
Occupant Protection	33.3%	40.9%	46.8%	0%					
Motorcycles	3.5%	17.5%	16.1%	0%					
Distracted Driving	31.6%	39.0%	14.3%	0%					
Roadway Infrastructure and Operations:	59.6%	47.4%	51.1%	0%					
Lane/Roadway Departure	39.0%	47.470	31.170						
Roadway Infrastructure and Operations:	12.3%	27.2%	23.8%	0%					
Intersections/Railroad Crossings	12.570	27.270	23.870						
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%					
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%					
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	100%					
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%					
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%					
Natural Risks: Weather	5.3%	2.9%	3.7%	0%					
Natural Risks: Animal	0.0%	0.2%	0.3%	0%					
Traffic Incident Management (Work Zones)	Traffic Incident Management (Work Zones) 3.5% 1.3% 1.4% 0%								
*Red, bold text indicates the crash rate for this emphasis area	a was higher than 2012 to	2016 statewide incide	ent reports.						

Summary of Crashes by First Harmful Event (All severities)									
First Harmful Event	Seg	ment	% Statewide	% Rural Areas	% Urban				
First nariiiui event	Total	%	% Statewide	% Kurai Areas	Areas				
Collision with Motor Vehicle in Transport	1,429	91.3%	64.3%	51.4%	67.3%				
Overturning	1	0.1%	2.2%	8.2%	0.8%				
Collision with Pedestrian	24	1.5%	1.0%	0.7%	1.1%				
Collision with Pedalcyclist	58	3.7%	1.2%	0.6%	1.4%				
Collision with Animal	2	0.1%	1.6%	7.2%	0.3%				
Collision with Fixed Object	36	2.3%	10.0%	19.0%	8.0%				
Collision with Non-fixed Object*	12	0.8%	4.0%	5.0%	3.7%				
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%				
Other Non-collision**	3	0.2%	0.8%	2.0%	0.5%				
Unknown	1	0.1%	14.6%	5.0%	16.8%				
Total	1,566	100.0%			_				

^{*}Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

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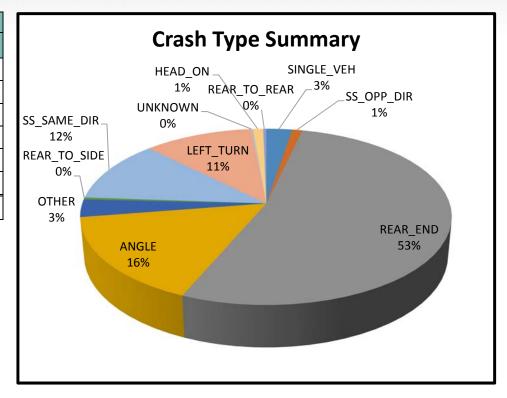
^{**}Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift



Crash Summ	ary: All Y	'ears	
Crash Type	Total	%	
Fatal	2	0.1%	
Incapacitating	9	0.6%	
Injury	106	6.8%	
Possible Injury	224	14.3%	
PDO	1225	78.2%	
Multi-Vehicle	1,527	97.5%	
Single-Vehicle	39	2.5%	
Total	1,566	100.0%	

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	63	4.0%	1	50.0%
Impaired Driving	66	4.2%	0	0.0%
Speeding	350	22.3%	0	0.0%
Failed to Yield ROW	426	27.2%	0	0.0%
Inattention/Distraction	193	12.3%	0	0.0%
Disregard Traffic Signal	74	4.7%	0	0.0%
Unsafe Passing/Lane Change	111	7.1%	0	0.0%
Failed to Keep in Lane	35	2.2%	0	0.0%
Pedestrian Fault	7	0.4%	1	50.0%
No Restraint	37	2.4%	0	0.0%
Other	307	19.6%	0	0.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	1,214	77.5%
Dawn	13	0.8%
Dusk	47	3.0%
Dark - Lighted	268	17.1%
Dark - Not Lighted	19	1.2%
Dark - Unknown Lighting	5	0.3%
Total	1,566	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
3036057	Friday, October 09, 2015	2:57:00 AM	FATAL	PEDESTRIAN	OTHER	DARK_LIGHTED	CLEAR	1					3 - EAST	CROSSING_ROAD
2902238	Friday, November 21, 2014	5:45:00 PM	FATAL	PEDESTRIAN	OTHER	DARK_LIGHTED	CLEAR	1					4 - WEST	GOING_STRAIGHT_AHEAD
3141697	Saturday, October 01, 2016	10:46:00 AM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DAYLIGHT	CLEAR						3 - EAST	CROSSING_ROAD
3099894	Saturday, June 11, 2016	12:54:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DAYLIGHT	CLEAR						1 - NORTH	GOING_STRAIGHT_AHEAD
2761207	Friday, September 06, 2013	10:03:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DARK_NOT_LIGHTED	CLEAR						3 - EAST	MAKING_LEFT_TURN
2963265	Thursday, June 04, 2015	10:12:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR						1 - NORTH	SLOWING_IN_TRAFFICWAY
2618150	Thursday, May 24, 2012	8:08:00 AM	INCAPACITATING_INJURY	PEDALCYCLE	ANGLE	DAYLIGHT	CLEAR						1 - NORTH	GOING_STRAIGHT_AHEAD
2801231	Monday, January 20, 2014	5:21:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR						2 - SOUTH	GOING_STRAIGHT_AHEAD
2685081	Thursday, January 03, 2013	11:35:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR			1			2 - SOUTH	GOING_STRAIGHT_AHEAD
2644719	Wednesday, August 29, 2012	7:52:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DARK_LIGHTED	CLEAR	1		1	1		2 - SOUTH	GOING_STRAIGHT_AHEAD
2619416	Tuesday, May 29, 2012	4:45:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR			1			3 - EAST	SLOWING_IN_TRAFFICWAY



Predictive Ar	nalysis									
		Predic	ted Crashe	s/Year	Expec	ted Crashe	s/Year		PSI	
Collisio	on Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO
Total S	egment	50.4	16.1	34.2	87.3	20.3	67.0	37.0	4.2	32.8
	Rear End	14.1	4.5	9.6	47.3	8.8	38.4	33.2	4.4	28.8
	Head On	0.2	0.2	0.1	0.2	0.2	0.1	0.0	0.0	0.0
Multi-Vehicle	Angle	1.4	0.4	1.0	4.0	0.6	3.4	2.6	0.2	2.4
Multi-Vehicle Non-Driveway Collisions	Sideswipe- Same	4.1	0.4	3.7	8.4	0.4	8.0	4.3	0.0	4.3
	Sideswipe-Opp	0.3	0.1	0.2	0.3	0.1	0.2	0.0	0.0	0.0
	Other	0.7	0.1	0.6	0.8	0.1	0.7	0.1	0.0	0.1
Non Motorized	Pedestrian	1.4	1.4	0.0	1.6	1.6	0.0	0.2	0.2	0.0
Non-Motorized	Pedalcycle	2.0	2.0	y PDO Total Inju 34.2 87.3 20. 9.6 47.3 8.8 0.1 0.2 0.2 1.0 4.0 0.6 3.7 8.4 0.4 0.2 0.3 0.1 0.6 0.8 0.1 0.0 1.6 1.6 0.0 2.2 2.2 16.1 18.8 5.5	2.2	0.0	0.2	0.2	0.0	
Drivewa	Driveway-Related		6.3	16.1	18.8	5.5	13.3	-3.6	-0.8	-2.9
Single	Vehicle	3.7	0.8	2.9	3.8	0.8	3.0	0.1	0.0	0.1

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Median (CMF ID 3035)	44	All	K, A	\$600k/mile	2.1 miles	\$1,260,000	0.18	0.79	\$1,337,600	10.4
		Combined Project										
		Install variable speed limit signs (CMF ID 3340)*	8	All	All	\$25k per sign and additional equipment	4	\$100k	0.03	0.14	\$243,200	11.2
		Combined Project										

Notes: VSL project could be limited to this extents and included as Milton Road safety project. Variable speed limit B/C assumes project life of 6 years. Pedestrian refuge with crosswalk and HAWK, RRFB, or other device could be located at University Avenue or north of Saunders Drive.

BURGESS & NIPLE Engineers Planners

Lockett Road and Fourth Street

Traffic Control: Signalized Intersection

Configuration: 4 legs, approximate 35° skew EB and WB

East-west leg: 1 thru lane per direction per leg with dedicated left- and right-turn lanes

North-south leg: 1 thru lane per direction on north leg, 1 NB and 2 SB thru lanes on south leg with dedicated left- and

right-turn lanes

Lighting: Present

Volume: Major Approach (E/W) 12,625 Minor Approach (N/S) 5,146

Aerial Map



	At-Fault Unit Direction of Travel by Crash Type													
Direction	SINGLE VEH	ANGLE	LEFT TURN	REAR END	HEAD ON	SS SAME DIR	SS OPP DIR	REAR TO SIDE	REAR TO REAR	OTHER	UNKNOWN	TOTAL		
NORTH		2	2	3		1						8		
SOUTH				5								5		
EAST	2			9		1						12		
WEST	3	2	1	2		1				1		10		
NORTHWEST		1	3									4		
NORTHEAST					1							1		
SOUTHEAST			1	4						1		6		
UNKNOWN	1			1								2		





Crash Data

	Emphasis Area Anal	ysis		
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Intersection Fatal
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	100%
Impaired Driving	40.4%	35.4%	34.1%	100%
Occupant Protection	33.3%	40.9%	46.8%	100%
Motorcycles	3.5%	17.5%	16.1%	0%
Distracted Driving	31.6%	39.0%	14.3%	100%
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	100%
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%
Age Related: Young Drivers	22.8%	26.0%	29.7%	100%
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%
Nonmotorized Users: Pedestrians	35.1%	20.4%	17.1%	0%
Nonmotorized Users: Bicyclists	1.8%	3.4%	2.8%	0%
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%
Natural Risks: Weather	5.3%	2.9%	3.7%	0%
Natural Risks: Animal	0.0%	0.2%	0.3%	0%
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%
*Red, bold text indicates the crash rate for this emphasis ar	ea was higher than 2012 to	o 2016 statewide incide	ent reports.	

Summary of Crashes by First Harmful Event (All severities)												
First Harmful Event	Inter	section	% Statewide	% Rural Areas	% Urban Areas							
First Harmiui Event	Total	%	% Statewide	% Kurai Areas								
Collision with Motor Vehicle in Transport	38	80.9%	64.3%	51.4%	67.3%							
Overturning	0	0.0%	2.2%	8.2%	0.8%							
Collision with Pedestrian	2	4.3%	1.0%	0.7%	1.1%							
Collision with Pedalcyclist	0	0.0%	1.2%	0.6%	1.4%							
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%							
Collision with Fixed Object	6	12.8%	10.0%	19.0%	8.0%							
Collision with Non-fixed Object*	1	2.1%	4.0%	5.0%	3.7%							
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%							
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%							
Unknown	0	0.0%	14.6%	5.0%	16.8%							
Total	47	100.0%										

*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

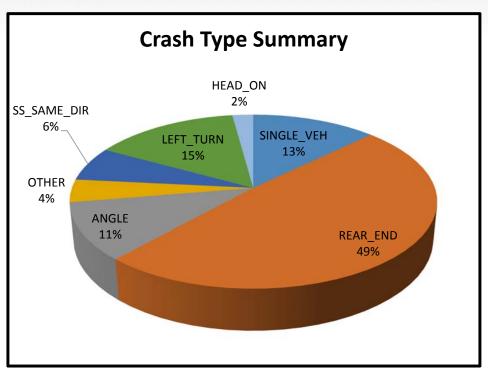
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift



Crash Summ	ary: All Y	'ears
Crash Type	Total	%
Fatal	1	2.1%
Incapacitating	1	2.1%
Injury	0	0.0%
Possible Injury	8	17.0%
PDO	37	78.7%
Multi-Vehicle	41	87.2%
Single-Vehicle	6	0
Total	47	100.0%

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	2	4.3%	0	0.0%
Impaired Driving	7	14.9%	1	100.0%
Speeding	12	25.5%	0	0.0%
Failed to Yield ROW	15	31.9%	0	0.0%
Inattention/Distraction	7	14.9%	0	0.0%
Disregard Traffic Signal	3	6.4%	0	0.0%
Unsafe Passing/Lane Change	2	4.3%	0	0.0%
Failed to Keep in Lane	0	0.0%	0	0.0%
Pedestrian Fault	1	2.1%	0	0.0%
No Restraint	3	6.4%	1	100.0%
Other	5	10.6%	1	100.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	38	80.9%
Dawn	0	0.0%
Dusk	3	6.4%
Dark - Lighted	6	12.8%
Dark - Not Lighted	0	0.0%
Dark - Unknown Lighting	0	0.0%
Total	47	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
3108728	Tuesday, July 12, 2016	7:39:00 PM	FATAL	CURB	SINGLE_VEH	DAYLIGHT	CLEAR					1	4 - WEST	GOING_STRAIGHT_AHEAD
3155214	Friday, November 04, 2016	8:54:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	HEAD_ON	DAYLIGHT	CLOUDY	1		1			6 - NORTHEAST	MAKING_RIGHT_TURN



Predictive Analysis									
	Pred	icted Crashe	s/Year	Expec	ted Crashes	/Year		PSI	
Collision Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO
Rear End	0.7	0.2	0.5	1.4	0.2	1.2	0.7	0.0	0.7
Head On	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Angle	0.4	0.2	0.3	0.6	0.2	0.4	0.2	0.0	0.1
Sideswipe	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Other Multi-Vehicle	0.2	0.0	0.2	0.2	0.0	0.2	0.0	0.0	0.0
Single Vehicle	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Pedestrian	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Pedalcycle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	1.8	0.7	1.1	2.6	0.7	1.9	0.9	0.1	0.8
*Red text indicates a pos	itive PSI								

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Install roundabout (ID 4259)	74.1	All	K,A,B,C	\$2,000,000	1 roundabout	\$2,000,000	0.15	0.15	918,840	4.5
		Combined Project				_						
		Combined Project										
Notes:	Preliminary project cos	t to be refined prior to HSIP submittal.										



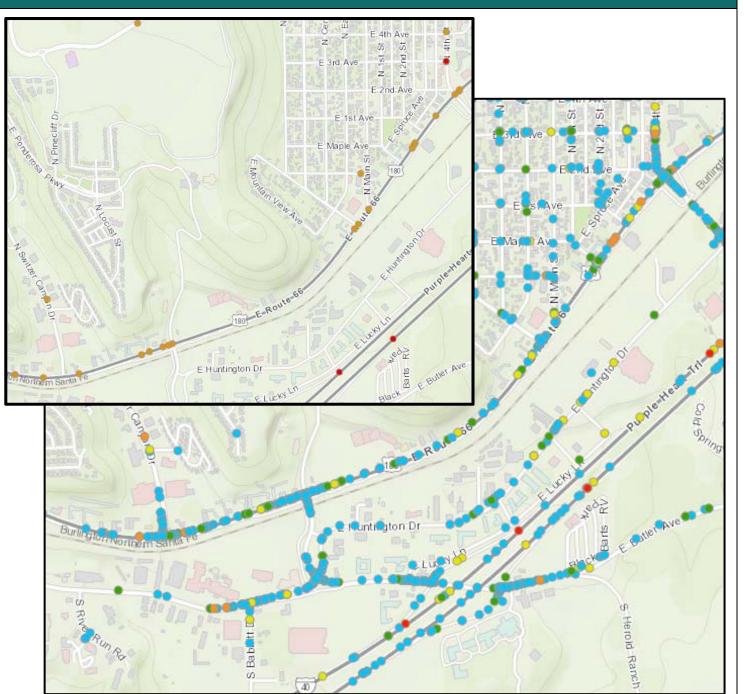
E. Route 66 – Switzer Canyon Drive to Fourth Street

Segment Length: 1.5 Miles Posted speed: 40 mph

Typical section: Four lanes with TWLTL and bike lanes, right-turn lanes at some intersections

Roadside: Curb and gutter, sidewalk

Crash Map



Crash Data

	Emphasis Area Anal	ysis		
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%
Impaired Driving	40.4%	35.4%	34.1%	0%
Occupant Protection	33.3%	40.9%	46.8%	0%
Motorcycles	3.5%	17.5%	16.1%	0%
Distracted Driving	31.6%	39.0%	14.3%	0%
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	0%
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	0%
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%
Natural Risks: Weather	5.3%	2.9%	3.7%	0%
Natural Risks: Animal	0.0%	0.2%	0.3%	0%
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%
*Red, bold text indicates the crash rate for this emphasis ar	ea was higher than 2012 t	o 2016 statewide incide	ent reports.	

Summary o	f Crashes by	First Harmful E	vent (All severities)		
First Harmful Event	Seg	ment	0/ Statewide	% Rural Areas	% Urban	
First Harmiui Event	Total	%	- % Statewide	% Kurai Areas	Areas	
Collision with Motor Vehicle in Transport	326	90.6%	64.3%	51.4%	67.3%	
Overturning	1	0.3%	2.2%	8.2%	0.8%	
Collision with Pedestrian	2	0.6%	1.0%	0.7%	1.1%	
Collision with Pedalcyclist	12	3.3%	1.2%	0.6%	1.4%	
Collision with Animal	2	0.6%	1.6%	7.2%	0.3%	
Collision with Fixed Object	13	3.6%	10.0%	19.0%	8.0%	
Collision with Non-fixed Object*	1	0.3%	4.0%	5.0%	3.7%	
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%	
Other Non-collision**	3	0.8%	0.8%	2.0%	0.5%	
Unknown	0	0.0%	14.6%	5.0%	16.8%	
Total	360	100.0%				

*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

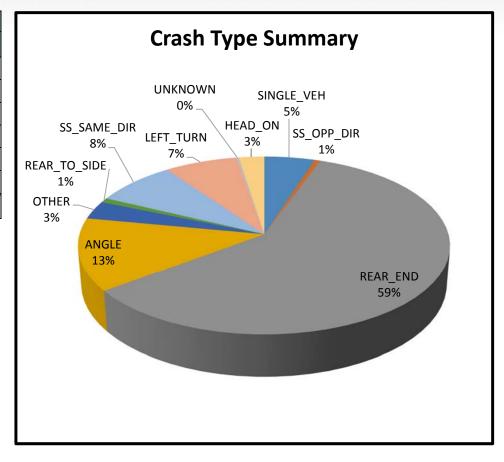
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift



Crash Summ	ary: All Y	'ears
Crash Type	Total	%
Fatal	0	0.0%
Incapacitating	10	2.8%
Injury	31	8.6%
Possible Injury	55	15.3%
PDO	264	73.3%
Multi-Vehicle	342	95.0%
Single-Vehicle	18	5.0%
Total	360	100.0%

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	21	5.8%	0	0.0%
Impaired Driving	22	6.1%	0	0.0%
Speeding	93	25.8%	0	0.0%
Failed to Yield ROW	87	24.2%	0	0.0%
Inattention/Distraction	50	13.9%	0	0.0%
Disregard Traffic Signal	7	1.9%	0	0.0%
Unsafe Passing/Lane Change	11	3.1%	0	0.0%
Failed to Keep in Lane	12	3.3%	0	0.0%
Pedestrian Fault	3	0.8%	0	0.0%
No Restraint	11	3.1%	0	0.0%
Other	76	21.1%	0	0.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	300	83.3%
Dawn	3	0.8%
Dusk	12	3.3%
Dark - Lighted	34	9.4%
Dark - Not Lighted	11	3.1%
Dark - Unknown Lighting	0	0.0%
Total	360	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2583240	Tuesday, January 17, 2012	3:49:00 AM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DARK_NOT_LIGHTED	CLOUDY						Not Reported	CROSSING_ROAD
2642196	Sunday, August 19, 2012	10:53:00 PM	INCAPACITATING_INJURY	CURB	SINGLE_VEH	DARK_LIGHTED	CLOUDY			1		1	4 - WEST	MAKING_RIGHT_TURN
2975682	Friday, July 10, 2015	11:50:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLOUDY						4 - WEST	SLOWING_IN_TRAFFICWAY
2582134	Tuesday, January 17, 2012	3:49:00 AM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DARK_NOT_LIGHTED	CLOUDY						2 - SOUTH	CROSSING_ROAD
3151605	Thursday, October 20, 2016	3:00:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR						3 - EAST	GOING_STRAIGHT_AHEAD
2894385	Wednesday, November 12, 2014	2:35:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR						3 - EAST	GOING_STRAIGHT_AHEAD
2994191	Thursday, September 03, 2015	5:11:00 PM	INCAPACITATING_INJURY	PEDALCYCLE	OTHER	DAYLIGHT	CLEAR						1 - NORTH	CROSSING_ROAD
2967616	Friday, June 19, 2015	3:04:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR	1			1		3 - EAST	GOING_STRAIGHT_AHEAD
2947021	Friday, April 10, 2015	8:18:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR						4 - WEST	GOING_STRAIGHT_AHEAD
2862384	Saturday, August 09, 2014	4:11:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	HEAD_ON	DAYLIGHT	CLEAR						3 - EAST	GOING_STRAIGHT_AHEAD



Predictive Ar	iaiysis									
		Predic	ted Crashe	s/Year	Expec	ted Crashe	s/Year		PSI	
Collisio	on Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO
Total S	egment	23.5	6.7	16.7	28.9	7.3	21.6	5.4	0.6	4.9
	Rear End	9.2	3.0	6.3	14.7	3.6	11.1	5.5	0.6	4.9
	Head On	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Multi-Vehicle	Angle	0.7	0.2	0.6	1.2	0.2	0.9	0.4	0.1	0.3
Non-Driveway Collisions	Sideswipe- Same	2.6	0.2	2.4	2.9	0.2	2.7	0.3	0.0	0.4
	Sideswipe-Opp	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0
	Other	0.3	0.1	0.3	0.4	0.1	0.3	0.0	0.0	0.0
Non Motorized	Pedestrian	0.5	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Non-Motorized	Pedalcycle	0.3	0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0
Drivewa	Driveway-Related		1.8	4.9	6.0	1.7	4.3	-0.7	-0.1	-0.6
Single	Vehicle	2.8	0.6	2.2	2.7	0.6	2 1	-0.1	0.0	-0.1



Pedestrian Crash Locations

Potential Improvements

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Combined Project				_						
		Combined Project										

Notes:

4 incapacitating rear end crashes occurred within 500 feet of the intersection with Ponderosa Parkway. 2 appear to be driveway-related; 2 appear to be intersection-related. Consider reviewing access management and congestion along the corridor.

The incapacitating bike crash occurred at E Ponderosa Pwky & Route 66. There is a cluster of lower severity bike crashes at this intersection. Consider green bike lane markings. See intersection sheet.

Pedestrian crash locations are shown above. Pedestrian crossing could be considered. Based on traffic analysis and warrants, a pedestrian crossing with crosswalk, HAWK or Rectangular Rapid Flashing Beacon, and median island may be considered.

4th Street – Andes Drive to I-40

Segment Length: 1.5 Miles

Andes Dr to Linda Vista Dr

Posted speed: 25 mph

Typical section: Two-lanes with bike lanes and 6-foot shoulders w/ on-street parking

Roadside: Rolled curb, sidewalk Linda Vista Dr to Lockett Rd (Cedar Ave)

Posted speed: 25 mph

Typical section: Two-lanes with shoulder bike lanes (unmarked).

Roadside: 6-inch curb and gutter on west side, rolled curb on east side, sidewalk. On street parking on east

shoulder.

Lockett Rd to 7th Ave

Posted speed: 30 mph

Typical section: Four lanes with TWLTL and shoulder bike lanes, 1 mid-block crossing.

Roadside: Curb and gutter, sidewalk, multiple access points.

7th Ave to Route 66

Posted speed: 35 mph

Typical section: Four lanes with TWLTL and bike lanes, 1 mid-block crossing.

Roadside: Curb and gutter, intermittent sidewalk, multiple access points.

Route 66 to Huntington Dr/Industrial Dr

Posted speed: 35 mph

Typical section: Four lanes with painted median/turn lanes, bike lanes, right-turn lane bump-outs

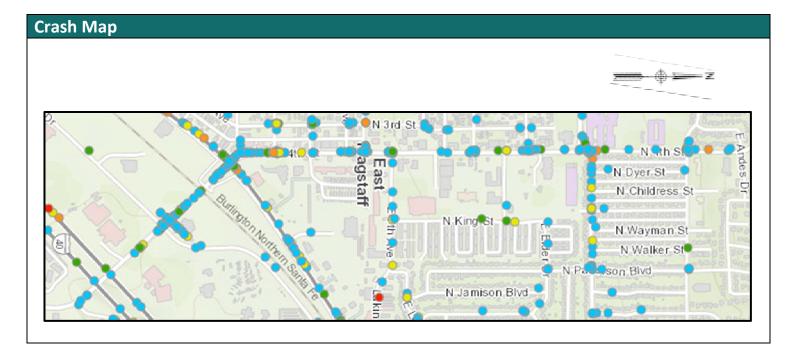
Roadside: Curb and gutter, sidewalk

Huntington Dr/Industrial Dr to I-40

Posted speed: 35 mph

Typical section: Four lanes with concrete median, designated left-turn and right-turn lanes, bike lanes

Roadside: Curb and gutter, sidewalk







Crash Data

	Emphasis Area Anal	lysis		
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%
Impaired Driving	40.4%	35.4%	34.1%	0%
Occupant Protection	33.3%	40.9%	46.8%	0%
Motorcycles	3.5%	17.5%	16.1%	0%
Distracted Driving	31.6%	39.0%	14.3%	0%
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	0%
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	100.0%
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	100.0%
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%
Natural Risks: Weather	5.3%	2.9%	3.7%	0%
Natural Risks: Animal	0.0%	0.2%	0.3%	0%
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%
*Red, bold text indicates the crash rate for this emphasis ar	ea was higher than 2012 t	o 2016 statewide incide	ent reports.	

Summary o	f Crashes by	First Harmful E	vent (All severities	s)		
First Harmful Event	Seg	ment	- % Statewide	% Rural Areas	% Urban	
First Harmiui Event	Total	%	% Statewide	% Kurai Areas	Areas	
Collision with Motor Vehicle in Transport	346	87.6%	64.3%	51.4%	67.3%	
Overturning	1	0.3%	2.2%	8.2%	0.8%	
Collision with Pedestrian	12	3.0%	1.0%	0.7%	1.1%	
Collision with Pedalcyclist	11	2.8%	1.2%	0.6%	1.4%	
Collision with Animal	2	0.5%	1.6%	7.2%	0.3%	
Collision with Fixed Object	18	4.6%	10.0%	19.0%	8.0%	
Collision with Non-fixed Object*	3	0.8%	4.0%	5.0%	3.7%	
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%	
Other Non-collision**	1	0.3%	0.8%	2.0%	0.5%	
Unknown	1	0.3%	14.6%	5.0%	16.8%	
Total	395	100.0%		<u> </u>		

*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift

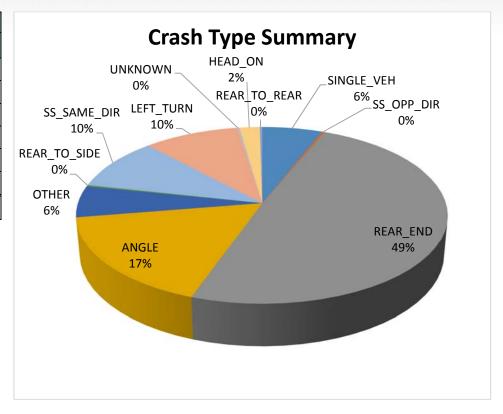
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Crash Summary: All Years								
Crash Type	Total	%						
Fatal	1	0.3%						
Incapacitating	7	1.8%						
Injury	23	5.8%						
Possible Injury	56	14.2%						
PDO	308	78.0%						
Multi-Vehicle	372	94.2%						
Single-Vehicle	23	5.8%						
Total	395	100.0%						

At-Fault Unit Driver Behavior									
Action	Total	% of Total	Fatal	% of Fatal					
No Improper Action	28	7.1%	0	0.0%					
Impaired Driving	25	6.3%	0	0.0%					
Speeding	90	22.8%	0	0.0%					
Failed to Yield ROW	128	32.4%	0	0.0%					
Inattention/Distraction	44	11.1%	0	0.0%					
Disregard Traffic Signal	22	5.6%	0	0.0%					
Unsafe Passing/Lane Change	23	5.8%	0	0.0%					
Failed to Keep in Lane	8	2.0%	0	0.0%					
Pedestrian Fault	4	1.0%	1	100.0%					
No Restraint	7	1.8%	0	0.0%					
Other	48	12.2%	0	0.0%					

Crashes by Lighting Condition (All severities)								
Condition	Total	% of Total						
Daylight	303	76.7%						
Dawn	12	3.0%						
Dusk	17	4.3%						
Dark - Lighted	56	14.2%						
Dark - Not Lighted	5	1.3%						
Dark - Unknown Lighting	2	0.5%						
Total	395	100.0%						



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2969261	Wednesday, April 29, 2015	8:33:00 PM	FATAL	PEDESTRIAN	OTHER	DARK_LIGHTED	CLEAR	1					3 - EAST	LYING
2637792	Friday, August 03, 2012	11:53:00 AM	INCAPACITATING_INJURY	TREE_BUSH_STUMP_STANDING	SINGLE_VEH	DAYLIGHT	CLOUDY						2 - SOUTH	DRIVERLESS_MOVING_VEHICLE
2747891	Friday, July 19, 2013	4:24:00 PM	INCAPACITATING_INJURY	PEDALCYCLE	ANGLE	DAYLIGHT	CLOUDY						3 - EAST	MAKING_RIGHT_TURN
2912376	Sunday, November 30, 2014	6:21:00 PM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DARK_LIGHTED	CLEAR						4 - WEST	CROSSING_ROAD
3155214	Friday, November 04, 2016	8:54:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	HEAD_ON	DAYLIGHT	CLOUDY						6 - NORTHEAST	MAKING_RIGHT_TURN
3041303	Wednesday, January 13, 2016	5:50:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DUSK	CLEAR						2 - SOUTH	MAKING_LEFT_TURN
3171023	Friday, December 09, 2016	3:59:00 PM	INCAPACITATING_INJURY	PEDALCYCLE	OTHER	DAYLIGHT	CLEAR						2 - SOUTH	GOING_STRAIGHT_AHEAD
3143495	Wednesday, October 05, 2016	8:20:00 PM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DARK_LIGHTED	CLEAR						3 - EAST	CROSSING_ROAD



Predictive Analysis									
	Predic	ted Crashe	s/Year	Expec	ted Crashe	s/Year		PSI	
Collision Type	Total	Fatal &	PDO	Total	Fatal &	PDO	Total	Fatal &	PDO

		Predic	ted Crashe	s/Year	Expec	ted Crashe	s/Year		PSI	
Collision Type		Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO
Total Segment		14.0	4.2	9.8	16.9	4.5	12.4	2.9	0.3	2.6
	Rear End	4.0	1.3	2.7	6.1	1.5	4.6	2.1	0.2	1.8
	Head On	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Multi-Vehicle Non-	Angle	0.4	0.1	0.3	1.1	0.2	0.9	0.7	0.0	0.6
Driveway Collisions	Sideswipe-Same	1.1	0.1	1.0	1.8	0.1	1.7	0.7	0.0	0.7
	Sideswipe-Opp	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0
	Other	0.2	0.1	0.2	0.3	0.0	0.2	0.0	0.0	0.0
Non-Motorized	Pedestrian	0.3	0.3	0.0	0.4	0.4	0.0	0.1	0.1	0.0
	Pedalcycle	0.2	0.2	0.0	0.3	0.3	0.0	0.1	0.1	0.0
Driveway-Related		5.8	1.6	4.1	5.0	1.5	3.5	-0.8	-0.1	-0.6
Single \	/ehicle	1.7	0.4	1.3	1.8	0.4	1.4	0.1	0.0	0.1



Pedestrian crashes near aquatic center in the past five years. Blue is incapacitating, grey is lower severity.

Potential Improvements

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Green bike lanes at 6th Avenue and Felice Avenue*										
		Combined Project										
		Combined Project										

Pedestrian crash locations are shown above. Pedestrian crossing could be considered. Based on traffic analysis and warrants, a pedestrian crosswalk, HAWK or Rectangular Rapid Flashing Beacon, and median island may be

5 lower severity bike and ped crashes at 6th Avenue intersection. 2 bike crashes (1 incapacitating) at Felice Avenue caused by vehicles making right turns.

*not in CMF clearinghouse. Requires ADOT coordination or other funding source.

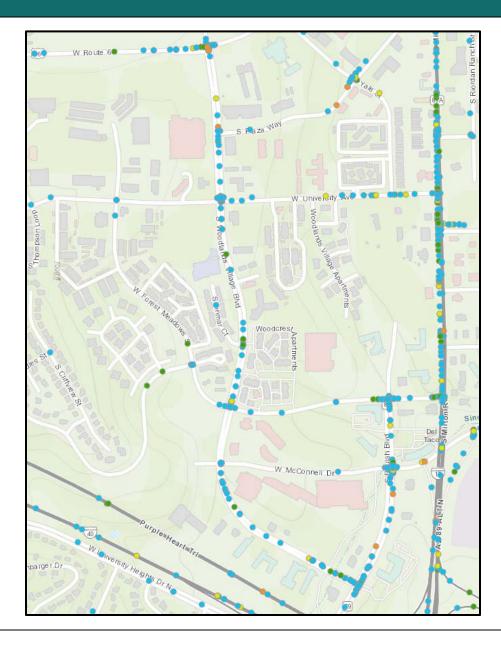
Woodlands Village Boulevard – B-40 to Beulah Boulevard

Segment Length: 1.1 Miles
Posted speed: 40 mph

Typical section: Four-lanes, concrete/landscaped median, dedicated left-turn lanes

Roadside: Curb and gutter, sidewalk, lighting

Crash Map





Crash Data

	Emphasis Area Anal	ysis		
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%
Impaired Driving	40.4%	35.4%	34.1%	0%
Occupant Protection	33.3%	40.9%	46.8%	100%
Motorcycles	3.5%	17.5%	16.1%	100%
Distracted Driving	31.6%	39.0%	14.3%	0%
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	100%
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	0%
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%
Natural Risks: Weather	5.3%	2.9%	3.7%	0%
Natural Risks: Animal	0.0%	0.2%	0.3%	0%
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%
*Red, bold text indicates the crash rate for this emphasis ar	ea was higher than 2012 t	o 2016 statewide incide	ent reports.	

Summary of	Summary of Crashes by First Harmful Event (All severities)											
First Harmful Event	Seg	ment	- % Statewide	O/ Daniel Amara	% Urban							
First Harmiui Event	Total	%	% Statewide	% Rural Areas	Areas							
Collision with Motor Vehicle in Transport	209	90.9%	64.3%	51.4%	67.3%							
Overturning	3	1.3%	2.2%	8.2%	0.8%							
Collision with Pedestrian	5	2.2%	1.0%	0.7%	1.1%							
Collision with Pedalcyclist	3	1.3%	1.2%	0.6%	1.4%							
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%							
Collision with Fixed Object	7	3.0%	10.0%	19.0%	8.0%							
Collision with Non-fixed Object*	2	0.9%	4.0%	5.0%	3.7%							
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%							
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%							
Unknown	1	0.4%	14.6%	5.0%	16.8%							
Total	230	100.0%										

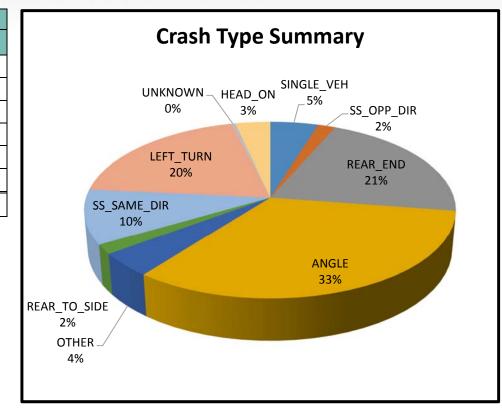
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment



Crash Summ	ary: All Y	'ears
Crash Type	Total	%
Fatal	1	0.4%
Incapacitating	3	1.3%
Injury	27	11.7%
Possible Injury	23	10.0%
PDO	176	76.5%
Multi-Vehicle	219	95.2%
Single-Vehicle	11	4.8%
Total	230	100.0%

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	14	6.1%	0	0.0%
Impaired Driving	8	3.5%	0	0.0%
Speeding	36	15.7%	0	0.0%
Failed to Yield ROW	102	44.3%	0	0.0%
Inattention/Distraction	18	7.8%	0	0.0%
Disregard Traffic Signal	19	8.3%	0	0.0%
Unsafe Passing/Lane Change	10	4.3%	0	0.0%
Failed to Keep in Lane	3	1.3%	0	0.0%
Pedestrian Fault	1	0.4%	0	0.0%
No Restraint	9	3.9%	1	100.0%
Other	27	11.7%	1	100.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	164	71.3%
Dawn	2	0.9%
Dusk	7	3.0%
Dark - Lighted	48	20.9%
Dark - Not Lighted	5	2.2%
Dark - Unknown Lighting	4	1.7%
Total	230	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2730737	Sunday, June 09, 2013	8:38:00 AM	FATAL	CURB	SINGLE_VEH	DAYLIGHT	CLEAR					1	6 - NORTHEAST	MAKING_LEFT_TURN
3144068	Sunday, October 02, 2016	9:10:00 AM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DAYLIGHT	CLEAR						1 - NORTH	CROSSING_ROAD
2994234	Friday, August 28, 2015	3:01:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	SS_SAME_DIR	DAYLIGHT	CLOUDY						5 - NORTHWEST	UNKNOWN
2842472	Monday, June 02, 2014	11:29:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DAYLIGHT	CLOUDY					1	6 - NORTHEAST	MAKING_LEFT_TURN

BURGESS & NIPLE
Engineers Planners



Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Combined Project										
		Combined Project										

Notes: Suggest field review for northbound left at McConnell Drive to confirm appropriate sight distance.

Consider pedestrian refuge and striped crosswalk to existing median south of McConnell Drive if pedestrian volumes are high. Note that this must be combined with another project to meet the minimum HSIP project cost.

Per 2016 crash facts, angle and left-turn crashes account for roughly 30% of all crashes. In this segment, they are roughly 50%. Consider improvements other than HSIP.

I-40 – Transwestern Road to Flagstaff Ranch Road

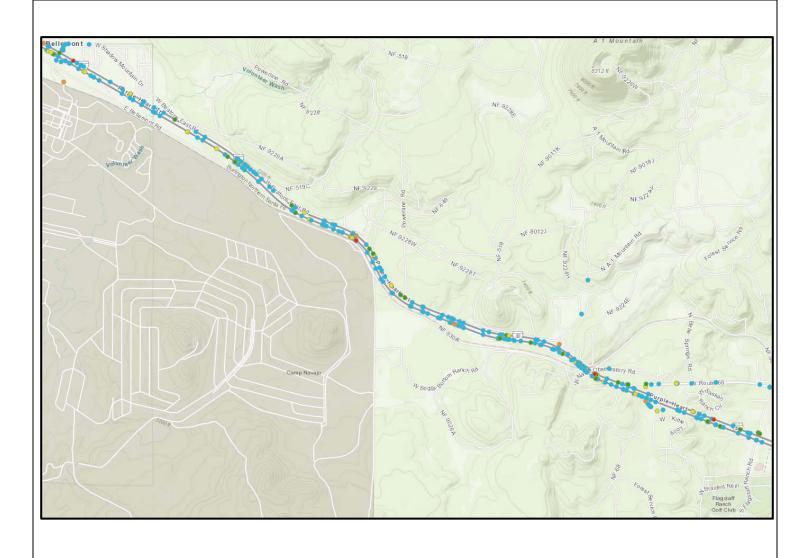
Segment Length: 7.5 Miles Posted speed: 75 mph

Typical section: Four-lane divided highway, 4-ft paved shoulder on inside, 12-ft paved shoulder on outside, bridge

structures at Naval Observatory Rd

Roadside: Rumble strips, unpaved shoulders adjacent to paved shoulders, intermittent guardrail

Crash Map





Crash Data				
	Emphasis Area Anal	ysis		
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	57.1%
Impaired Driving	40.4%	35.4%	34.1%	14.3%
Occupant Protection	33.3%	40.9%	46.8%	42.9%
Motorcycles	3.5%	17.5%	16.1%	0%
Distracted Driving	31.6%	39.0%	14.3%	28.6%
Roadway Infrastructure and Operations:	59.6%	47.4%	51.1%	85.7%
Lane/Roadway Departure	55.670	.,,,,	02.270	
Roadway Infrastructure and Operations:	12.3%	27.2%	23.8%	0%
Intersections/Railroad Crossings	12.570	27.270	23.070	070
Age Related: Young Drivers	22.8%	26.0%	29.7%	28.6%
Age Related: Older Drivers	12.3%	22.0%	18.2%	14.3%
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	0%
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	28.6%
Natural Risks: Weather	5.3%	2.9%	3.7%	0%
Natural Risks: Animal	0.0%	0.2%	0.3%	0%
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	14.3%
*Red, bold text indicates the crash rate for this emphasis ar	ea was higher than 2012 t	o 2016 statewide incide	ent reports.	

Summary of Crashes by First Harmful Event (All severities)											
First Homeful Front	Seg	ment	0/ Statewide	9/ Dunal Anges	% Urban						
First Harmful Event	Total	%	- % Statewide	% Rural Areas	Areas						
Collision with Motor Vehicle in Transport	62	22.5%	64.3%	51.4%	67.3%						
Overturning	45	16.4%	2.2%	8.2%	0.8%						
Collision with Pedestrian	1	0.4%	1.0%	0.7%	1.1%						
Collision with Pedalcyclist	0	0.0%	1.2%	0.6%	1.4%						
Collision with Animal	61	22.2%	1.6%	7.2%	0.3%						
Collision with Fixed Object	83	30.2%	10.0%	19.0%	8.0%						
Collision with Non-fixed Object*	15	5.5%	4.0%	5.0%	3.7%						
Vehicle Fire or Explosion	1	0.4%	0.3%	1.0%	0.1%						
Other Non-collision**	7	2.5%	0.8%	2.0%	0.5%						
Unknown	0	0.0%	14.6%	5.0%	16.8%						
Total	275	100.0%									

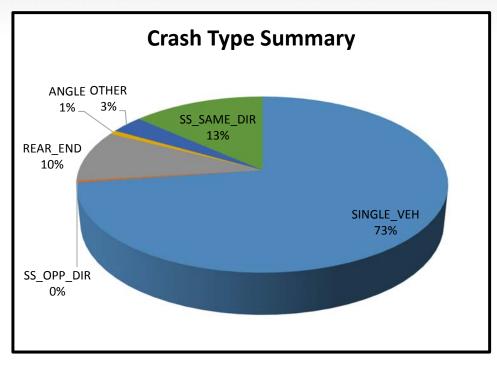
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment



Crash Summ	ary: All Y	'ears		
Crash Type	Total	%		
Fatal	7	2.5%		
Incapacitating	4	1.5%		
Injury	30	10.9%		
Possible Injury	26	9.5%		
PDO	208	75.6%		
Multi-Vehicle	75	27.3%		
Single-Vehicle	200	72.7%		
Total	275	100.0%		

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Crashes by Lighting Con	dition (All	severities)			
Condition	Total	% of Total			
Daylight	148	53.8%			
Dawn	13	4.7%			
Dusk	7	2.5%			
Dark - Lighted	9	3.3%			
Dark - Not Lighted	98	35.6%			
Dark - Unknown Lighting	0	0.0%			
Total	275	100.0%			



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2873011	Monday, August 25, 2014	11:02:00 AM	FATAL	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR						4 - WEST	SLOWING_IN_TRAFFICWAY
3047235	Friday, September 25, 2015	9:07:00 PM	FATAL	TREE_BUSH_STUMP_STANDING	SINGLE_VEH	DARK_NOT_LIGHTED	CLEAR						4 - WEST	GOING_STRAIGHT_AHEAD
3137481	Friday, July 22, 2016	6:46:00 AM	FATAL	EMBANKMENT	SINGLE_VEH	DAYLIGHT	CLEAR				1		3 - EAST	GOING_STRAIGHT_AHEAD
2872633	Friday, August 15, 2014	3:07:00 AM	FATAL	CONCRETE_TRAFFIC_BARRIER	SINGLE_VEH	DARK_NOT_LIGHTED	CLEAR					1	3 - EAST	GOING_STRAIGHT_AHEAD
2643837	Saturday, July 21, 2012	7:59:00 PM	FATAL	GUARDRAIL_FACE	SINGLE_VEH	DUSK	CLOUDY						3 - EAST	GOING_STRAIGHT_AHEAD
3125650	Tuesday, July 12, 2016	3:30:00 PM	FATAL	OVERTURN_ROLLOVER	SINGLE_VEH	DAYLIGHT	CLEAR					1	3 - EAST	GOING_STRAIGHT_AHEAD
2615878	Monday, May 07, 2012	12:56:00 PM	FATAL	OVERTURN_ROLLOVER	SINGLE_VEH	DAYLIGHT	CLEAR					1	3 - EAST	GOING_STRAIGHT_AHEAD
2996891	Tuesday, September 29, 2015	11:44:00 AM	INCAPACITATING_INJURY	OVERTURN_ROLLOVER	SINGLE_VEH	DAYLIGHT	CLEAR				1		4 - WEST	NEGOTIATING_A_CURVE
2853080	Saturday, June 14, 2014	10:57:00 PM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DARK_NOT_LIGHTED	CLEAR		1				99 - UNKNOWN	STANDING
2899019	Saturday, November 22, 2014	3:17:00 PM	INCAPACITATING_INJURY	OVERTURN_ROLLOVER	SINGLE_VEH	DAYLIGHT	CLEAR			1		1	3 - EAST	NEGOTIATING_A_CURVE
3053085	Friday, January 15, 2016	12:50:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	SNOW						4 - WEST	GOING_STRAIGHT_AHEAD



Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Add shoulder rumble strips to outside EB shoulder	36	Run off road	K, A, B, C	\$8,000/mile	0.71 miles					
		Combined Project										
		Combined Project										

Notes: Project cost too low for HSIP. Rumble strips are present except in a limited stretch in this location.



The rumble strips may have been paved over on the EB outside stretch leading up to this curve. Putting in rumble strips at only this spot would mitigate 3 fatal and 1 incapacitating crashes.

B-40 – Woody Mountain Road to Woodlands Village Boulevard

Segment Length: 1.2 Miles

Woody Mountain Rd to Hidden Hollow Mobile Home Park

Posted speed: 45 mph

Typical section: Two-lanes, left and right-turn lanes at intersections

Roadside: Paved 8-foot shoulders, unpaved shoulders of varying width adjacent to paved shoulders

Hidden Hollow Mobile Home Park to Railroad Spring Blvd

Posted speed: 45 mph

Typical section: Three-lanes (2 WB, 1 EB), painted median/TWLTL/left-turn lane

Roadside: 6 to 8-ft paved shoulder on south side, curb and gutter on north side, sidewalk on north side,

intermittent guardrail and unpaved shoulder on south side

Railroad Spring Blvd to Thompson St

Posted speed: 45 mph

Typical section: Two-lanes, intermittent painted median, right-turn lane bump-outs at intersections

Roadside: Intermittent curb and gutter, intermittent sidewalk, intermittent guardrail and unpaved shoulder on

south side, paved and unpaved shoulder of varying width on south side, undefined driveways for

some adjacent properties

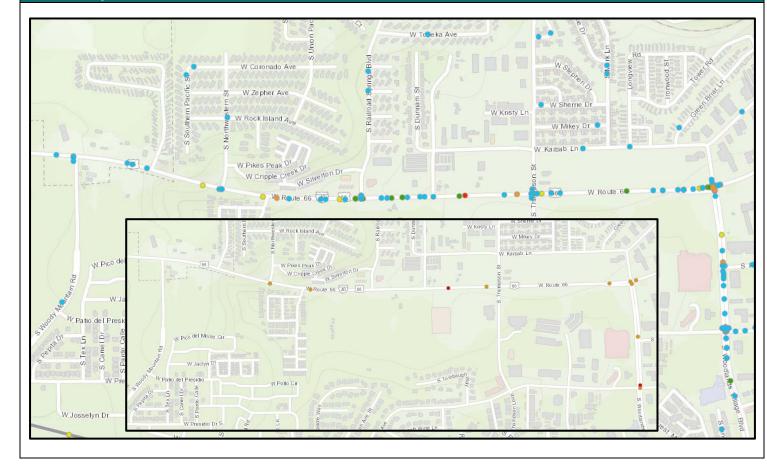
Thompson St to Woodlands Village Blvd

Posted speed: 40 mph EB, 45 mph WB

Typical section: Two-lanes with TWLTL, right-turn lane bump-outs

Roadside: Intermittent curb and gutter, intermittent sidewalk, varying paved and unpaved shoulder widths

Crash Map







Crash Data

	Emphasis Area Anal	ysis		
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%
Impaired Driving	40.4%	35.4%	34.1%	0%
Occupant Protection	33.3%	40.9%	46.8%	0%
Motorcycles	3.5%	17.5%	16.1%	0%
Distracted Driving	31.6%	39.0%	14.3%	0%
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	0%
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	100%
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%
Natural Risks: Weather	5.3%	2.9%	3.7%	0%
Natural Risks: Animal	0.0%	0.2%	0.3%	0%
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%
*Red, bold text indicates the crash rate for this emphasis an	rea was higher than 2012 t	o 2016 statewide incide	ent reports.	

Summary of	f Crashes by	First Harmful E	vent (All severities)		
First Harmful Event	Seg	ment	0/ Ctatawida	0/ Dunal Anges	% Urban	
First Harmful Event	Total	%	- % Statewide	% Rural Areas	Areas	
Collision with Motor Vehicle in Transport	67	79.8%	64.3%	51.4%	67.3%	
Overturning	0	0.0%	2.2%	8.2%	0.8%	
Collision with Pedestrian	1	1.2%	1.0%	0.7%	1.1%	
Collision with Pedalcyclist	2	2.4%	1.2%	0.6%	1.4%	
Collision with Animal	4	4.8%	1.6%	7.2%	0.3%	
Collision with Fixed Object	10	11.9%	10.0%	19.0%	8.0%	
Collision with Non-fixed Object*	0	0.0%	4.0%	5.0%	3.7%	
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%	
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%	
Unknown	0	0.0%	14.6%	5.0%	16.8%	
Total	84	100.0%				

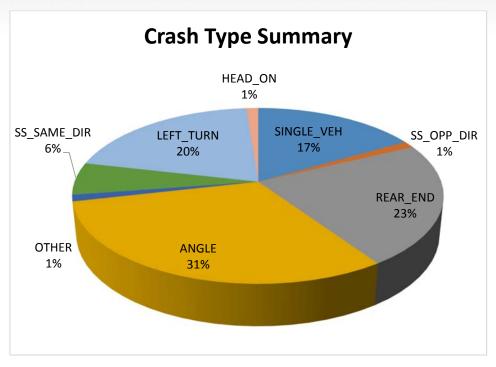
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment



Crash Summ	ary: All Y	'ears		
Crash Type	Total	%		
Fatal	1	1.2%		
Incapacitating	5	6.0%		
Injury	8	9.5%		
Possible Injury	19	22.6%		
PDO	51	60.7%		
Multi-Vehicle	70	83.3%		
Single-Vehicle	14	16.7%		
Total	84	100.0%		

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	9	10.7%	0	0.0%
Impaired Driving	4	4.8%	0	0.0%
Speeding	12	14.3%	0	0.0%
Failed to Yield ROW	41	48.8%	0	0.0%
Inattention/Distraction	9	10.7%	0	0.0%
Disregard Traffic Signal	1	1.2%	0	0.0%
Unsafe Passing/Lane Change	0	0.0%	0	0.0%
Failed to Keep in Lane	2	2.4%	0	0.0%
Pedestrian Fault	1	1.2%	1	100.0%
No Restraint	6	7.1%	0	0.0%
Other	9	10.7%	0	0.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	61	72.6%
Dawn	2	2.4%
Dusk	4	4.8%
Dark - Lighted	8	9.5%
Dark - Not Lighted	9	10.7%
Dark - Unknown Lighting	0	0.0%
Total	84	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
3151552	Monday, September 19, 2016	6:55:00 PM	FATAL	PEDESTRIAN	OTHER	DARK_NOT_LIGHTED	CLEAR						99 - UNKNOWN	CROSSING_ROAD
2613662	Tuesday, May 01, 2012	5:54:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DAYLIGHT	CLEAR			1			4 - WEST	MAKING_LEFT_TURN
2969773	Sunday, June 14, 2015	6:00:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR						3 - EAST	GOING_STRAIGHT_AHEAD
3028423	Thursday, October 01, 2015	12:33:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	REAR_END	DAYLIGHT	CLEAR						3 - EAST	GOING_STRAIGHT_AHEAD
2605513	Tuesday, April 10, 2012	8:01:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DAYLIGHT	CLEAR			1			2 - SOUTH	MAKING_LEFT_TURN
3059163	Wednesday, February 10, 2016	12:35:00 PM	INCAPACITATING_INJURY	CURB	SINGLE_VEH	DAYLIGHT	CLEAR				1		4 - WEST	GOING_STRAIGHT_AHEAD



Predictive An	alysis									
		Predic	ted Crashe	s/Year	Expec	ted Crashes	s/Year		PSI	
Collision Type		Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO
Total S	egment	3.2	0.9	2.3	3.5	1.0	2.5	0.3	0.1	0.2
	Rear End	1.5	0.4	1.1	1.7	0.4	1.2	0.1	0.0	0.1
	Head On	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi-Vehicle	Angle	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.1
Non-Driveway Collisions	Sideswipe- Same	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0
	Sideswipe-Opp	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	Other	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Non Motorized	Pedestrian	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-Motorized	Pedalcycle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Driveway	/-Related	0.6	0.2	0.4	0.6	0.2	0.4	-0.1	0.0	-0.1
Single '	Vehicle	0.6	0.2	0.5	0.7	0.2	0.6	0.1	0.0	0.1

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Install dynamic signal warning flashers (CMF ID 4199) for EB traffic approaching Woodlands Village Boulevard	20.8	Rear end	All	<\$250,000						
		Combined Project										
		Combined Project										

Notes: 37 of 57 crashes at Woodlands Village and B-40 were rear-end collisions; north and east bound crashes were most prevalent. Suggest restriping per MUTCD Figure 3B-11 with sign R3-7 "Right Lane Must Turn Right" on the northbound approach. Suggest review of crash reports; verify whether rear-end collisions are congestion related or related to right-turn lane, potential to convert Home Depot driveway west of intersection to RIRO and right-turn lane delineation between the driveway and signal with a bump out or painted island. If congestion related, suggest extending through lane present east of intersection to the west.

7th Avenue/Lakin Drive - 4th Street to Steves Boulevard

Segment Length: 0.46 Miles

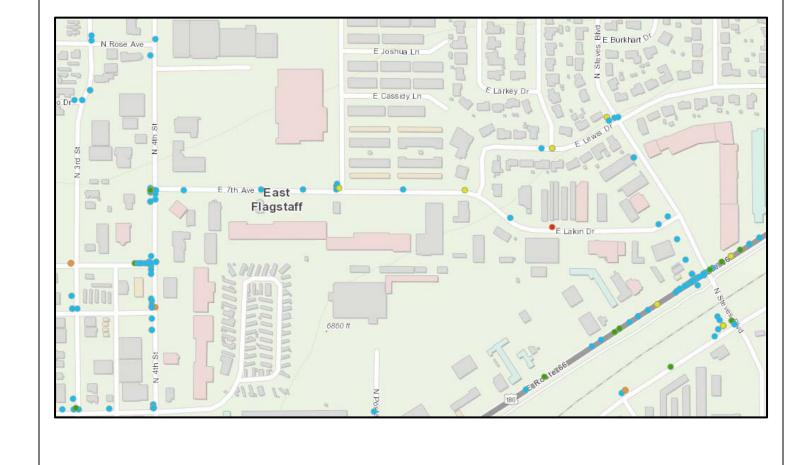
Willow Lake Road to Twisted Trail

Posted speed: 30 mph

Typical section: Two-lanes with TWLTL

Roadside: Bike lanes, curb and gutter, sidewalk

Crash Map





Crash Data

	Emphasis Area Analysis										
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal							
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	100%							
Impaired Driving	40.4%	35.4%	34.1%	100%							
Occupant Protection	33.3%	40.9%	46.8%	100%							
Motorcycles	3.5%	17.5%	16.1%	0%							
Distracted Driving	31.6%	39.0%	14.3%	100%							
Roadway Infrastructure and Operations:	59.6%	47.4%	51.1%	100%							
Lane/Roadway Departure											
Roadway Infrastructure and Operations:	12.3%	27.2%	23.8%	0%							
Intersections/Railroad Crossings	12.070		20.070								
Age Related: Young Drivers	22.8%	26.0%	29.7%	100%							
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%							
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	0%							
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%							
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%							
Natural Risks: Weather	5.3%	2.9%	3.7%	100%							
Natural Risks: Animal	0.0%	0.2%	0.3%	0%							
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%							
*Red, bold text indicates the crash rate for this emphasis ar	ea was higher than 2012 t	o 2016 statewide incide	ent reports.								

Summary of Crashes by First Harmful Event (All severities)									
First Harmful Event	Seg	ment	% Statewide	% Rural Areas	% Urban				
riist naiiiiui Eveiit	Total	%	% Statewide	% Rurai Areas	Areas				
Collision with Motor Vehicle in Transport	7	70.0%	64.3%	51.4%	67.3%				
Overturning	0	0.0%	2.2%	8.2%	0.8%				
Collision with Pedestrian	0	0.0%	1.0%	0.7%	1.1%				
Collision with Pedalcyclist	0	0.0%	1.2%	0.6%	1.4%				
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%				
Collision with Fixed Object	3	30.0%	10.0%	19.0%	8.0%				
Collision with Non-fixed Object*	0	0.0%	4.0%	5.0%	3.7%				
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%				
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%				
Unknown	0	0.0%	14.6%	5.0%	16.8%				
Total	10	100.0%							

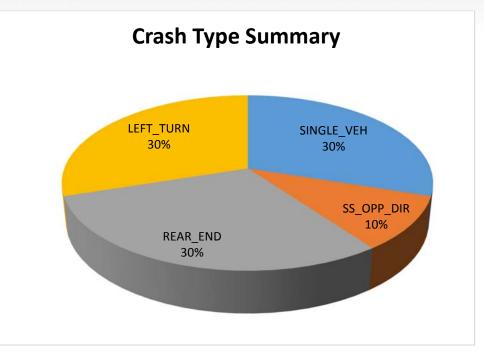
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment



Crash Sumn	nary: All Y	'ears
Crash Type	Total	%
Fatal	1	10.0%
Incapacitating	0	0.0%
Injury	2	20.0%
Possible Injury	0	0.0%
PDO	7	70.0%
Multi-Vehicle	7	70.0%
Single-Vehicle	3	30.0%
Total	10	100.0%

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	1	10.0%	0	0.0%
Impaired Driving	1	10.0%	1	100.0%
Speeding	2	20.0%	0	0.0%
Failed to Yield ROW	4	40.0%	0	0.0%
Inattention/Distraction	0	0.0%	0	0.0%
Disregard Traffic Signal	0	0.0%	0	0.0%
Unsafe Passing/Lane Change	0	0.0%	0	0.0%
Failed to Keep in Lane	0	0.0%	0	0.0%
Pedestrian Fault	0	0.0%	0	0.0%
No Restraint	1	10.0%	1	100.0%
Other	3	30.0%	1	100.0%

Crashes by Lighting Con	dition (All	severities)						
Condition	Total	% of Total						
Daylight	8	80.0%						
Dawn	0	0.0%						
Dusk	1	10.0%						
Dark - Lighted	0	0.0%						
Dark - Not Lighted	1	10.0%						
Dark - Unknown Lighting	0	0.0%						
Total	10	100.0%						



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
3030654	Tuesday, November 03, 2015	10:50:00 AM	FATAL	CURB	SINGLE_VEH	DAYLIGHT	RAIN	1	1		1	1	3 - EAST	NEGOTIATING_A_CURVE



Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	•	Annual Benefit	Preliminary B/C
		Combined Project										
		Combined Project										

Notes: Consider installing curve warning signs along curve. Cost too low for HSIP.

Butler Avenue – Sawmill Road to Ponderosa Parkway

Segment Length: 0.7 Miles **Sawmill Road to Babbitt Drive**Posted speed: 40 mph

Typical section: Four lanes with TWLTL and bike lanes

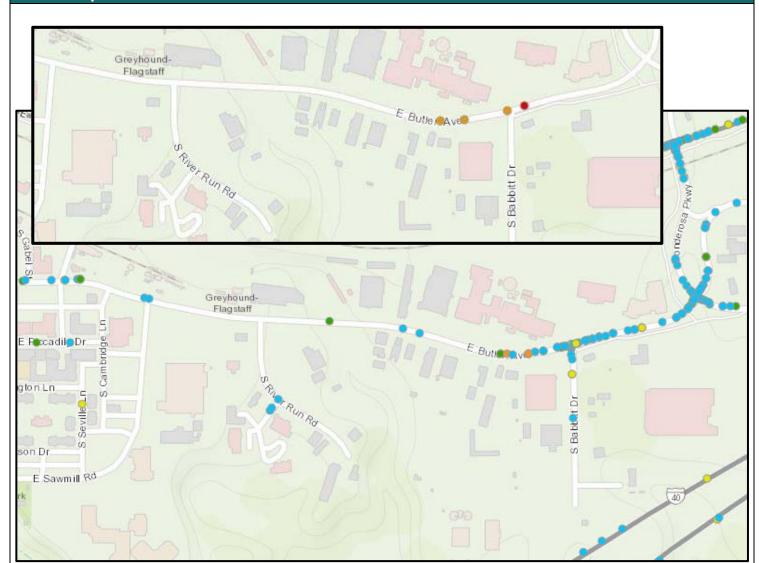
Roadside: Curb and gutter, sidewalk, intermittent guardrail, multiple driveways

Babbitt Drive to Ponderosa Parkway

Posted speed: 40 mph

Typical section: Four lanes with TWLTL, bike lanes, right-turn lanes Roadside: Curb and gutter, sidewalk, multiple driveways

Crash Map





Crash Data

	Emphasis Area Anal	ysis		
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%
Impaired Driving	40.4%	35.4%	34.1%	0%
Occupant Protection	33.3%	40.9%	46.8%	0%
Motorcycles	3.5%	17.5%	16.1%	0%
Distracted Driving	31.6%	39.0%	14.3%	0%
Roadway Infrastructure and Operations:	59.6%	47.4%	51.1%	0%
Lane/Roadway Departure	39.0%	47.470	31.1/0	
Roadway Infrastructure and Operations:	12.3%	27.2%	23.8%	0%
Intersections/Railroad Crossings	12.570	27.270	23.670	
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%
Age Related: Older Drivers	12.3%	22.0%	18.2%	100%
Non-motorized Users: Pedestrians	35.1%	20.4%	17.1%	100%
Non-motorized Users: Bicyclists	1.8%	3.4%	2.8%	0%
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%
Natural Risks: Weather	5.3%	2.9%	3.7%	0%
Natural Risks: Animal	0.0%	0.2%	0.3%	0%
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%
*Red, bold text indicates the crash rate for this emphasis ar	rea was higher than 2012 t	o 2016 statewide incide	ent reports.	

Summary of Crashes by First Harmful Event (All severities)								
First Harmful Event	Seg	ment	% Statewide	0/ D A	% Urban			
First Harmiui Event	Total	%	- % Statewide	% Rural Areas	Areas			
Collision with Motor Vehicle in Transport	49	79.0%	64.3%	51.4%	67.3%			
Overturning	1	1.6%	2.2%	8.2%	0.8%			
Collision with Pedestrian	2	3.2%	1.0%	0.7%	1.1%			
Collision with Pedalcyclist	6	9.7%	1.2%	0.6%	1.4%			
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%			
Collision with Fixed Object	3	4.8%	10.0%	19.0%	8.0%			
Collision with Non-fixed Object*	0	0.0%	4.0%	5.0%	3.7%			
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%			
Other Non-collision**	1	1.6%	0.8%	2.0%	0.5%			
Unknown	0	0.0%	14.6%	5.0%	16.8%			
Total	62	100.0%						

*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

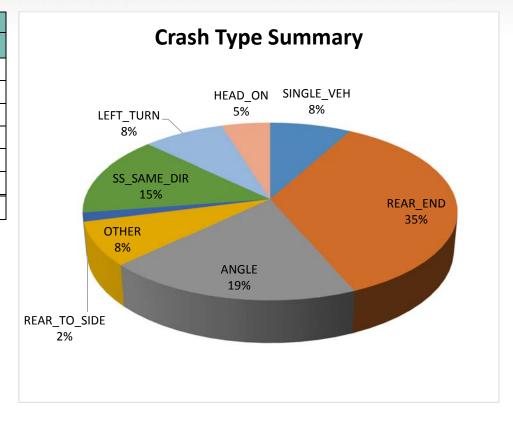


Crash Summ	ary: All Y	'ears					
Crash Type	Total	%					
Fatal	1	1.6%					
Incapacitating	2	3.2%					
Injury	5	8.1%					
Possible Injury	12	19.4%					
PDO	42	67.7%					
Multi-Vehicle	57	91.9%					
Single-Vehicle	5	8.1%					
Total	62	100.0%					
Note: Intersection eraches were not sounted							

Note: Intersection crashes were not counted in segments. Thus, intersection-related crashes captured on the crash map are not reflected in this crash summary. However, crashes occurring at driveways were included.

At Foult	Unit Driv	ver Behavior		
At-rault	Unit Driv	ver benavior		T .
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	1	1.6%	0	0.0%
Impaired Driving	6	9.7%	0	0.0%
Speeding	9	14.5%	0	0.0%
Failed to Yield ROW	21	33.9%	1	100.0%
Inattention/Distraction	7	11.3%	0	0.0%
Disregard Traffic Signal	0	0.0%	0	0.0%
Unsafe Passing/Lane Change	8	12.9%	0	0.0%
Failed to Keep in Lane	3	4.8%	0	0.0%
Pedestrian Fault	0	0.0%	0	0.0%
No Restraint	2	3.2%	0	0.0%
Other	13	21.0%	0	0.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	53	85.5%
Dawn	0	0.0%
Dusk	2	3.2%
Dark - Lighted	7	11.3%
Dark - Not Lighted	0	0.0%
Dark - Unknown Lighting	0	0.0%
Total	62	100.0%



Fatal and Incapacitating Crash Data

ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2736582	Wednesday, June 26, 2013	10:28:00 AM	FATAL	PEDESTRIAN	OTHER	DAYLIGHT	CLEAR						1 - NORTH	MAKING_RIGHT_TURN
2607224	Tuesday, March 20, 2012	5:06:00 PM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DAYLIGHT	CLEAR						6 - NORTHEAST	MAKING_RIGHT_TURN
2611827	Wednesday, March 21, 2012	1:45:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	HEAD_ON	DAYLIGHT	CLEAR				1		4 - WEST	GOING_STRAIGHT_AHEAD



Predictive Ana	Predictive Analysis												
		Predict	ed Crashes	/Year	Expect	ed Crashe	s/Year		PSI				
Collisio	on Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO			
Total S	egment	13.2	3.8	9.4	11.9	3.5	8.4	-1.3	-0.3	-1.0			
	Rear End	4.7	1.5	3.2	4.1	1.2	2.9	-0.6	-0.3	-0.3			
	Head On	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0			
Multi-Vehicle	Angle	0.4	0.1	0.3	0.6	0.1	0.4	0.2	0.0	0.2			
Non-Driveway Collisions	Sideswipe-Same	1.3	0.1	1.2	1.2	0.1	1.1	-0.2	0.0	-0.2			
	Sideswipe-Opp	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0			
	Other	0.2	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0			
Non Motorized	Pedestrian	0.3	0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0			
Non-Motorized	Pedalcycle	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.0	0.0			
Drivewa	Driveway-Related		1.3	3.4	4.0	1.1	2.8	-0.7	-0.1	-0.6			
Single	Single Vehicle			1.1	1.3	0.3	1.0	-0.1	0.0	-0.1			

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Combined Project										
		Combined Project										
Notes:	Pedestrian crashes wer	e at driveways. Consider prohibiting right-turn-on-red at	the driveway at	the intersect	ion of Babbitt Drive and Butl	er Avenue.						

BURGESS & NIPLE Engineers Planners

San Francisco Street – Pine Knoll Drive to E. Route 66

Segment Length: 1.4 Miles

Pine Knoll Drive to Mountain View Drive

Posted speed: 15 mph

Typical section: Two lanes, w/ median separated multi-use path on east side

Roadside: Curb and gutter, sidewalk, intermittent cable barrier on east side, intermittent guardrail on west

side, lighting

Mountain View Drive to McCreary Drive, McCreary Drive to Franklin Avenue

Posted speed: 15 mph Typical section: Two lanes

Roadside: Curb and gutter, wide sidewalk on east side of street, lighting

Franklin Avenue to Butler Avenue

Posted speed: 25 mph

Typical section: Two lanes, on-street parking on west side, bike lane on east side

Roadside: Curb and gutter, sidewalk, lighting

Butler Avenue to Phoenix Avenue

Posted speed: 25 mph

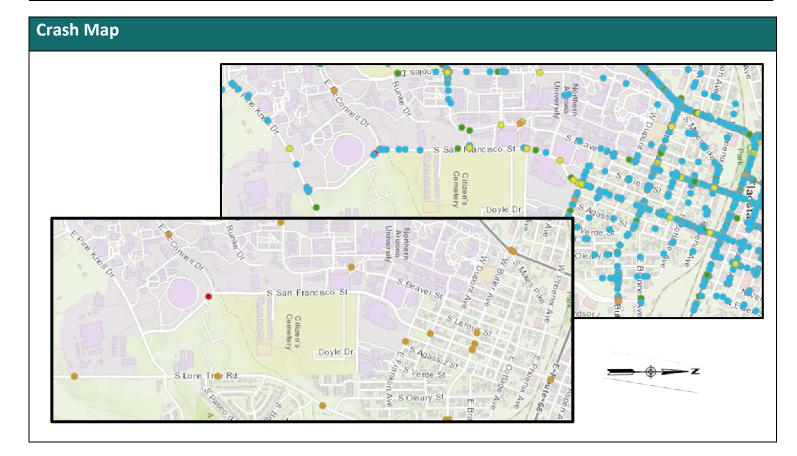
Typical section: One-way street, two lanes, right-lane shared with bicyclists, on-street parking both sides

Roadside: Curb and gutter, sidewalk, lighting

Phoenix Avenue to E. Route 66Posted speed: 25 mph

Typical section: One-way street, three-lanes, right-turn lane pocket

Roadside: Curb and gutter, sidewalk, lighting





Crash Data

Emphasis Area Analysis											
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Segment Fatal							
Speeding and Aggressive Driving	34.1%	32.0%	36.7%	100%							
Impaired Driving	31.8%	35.4%	34.1%	100%							
Occupant Protection	47.7%	40.9%	46.8%	100%							
Motorcycles	29.5%	17.5%	16.1%	0%							
Distracted Driving	43.2%	39.0%	14.3%	100%							
Roadway Infrastructure and Operations:	CF 00/	47.40/	F1 10/	100%							
Lane/Roadway Departure	65.9%	47.4%	51.1%								
Roadway Infrastructure and Operations:	2/1/10/	27.20/	22 00/	0%							
Intersections/Railroad Crossings	34.1%	27.2%	23.8%								
Age Related: Young Drivers	27.3%	26.0%	29.7%	0%							
Age Related: Older Drivers	29.5%	22.0%	18.2%	0%							
Non-motorized Users: Pedestrians	13.6%	20.4%	17.1%	0%							
Non-motorized Users: Bicyclists	2.3%	3.4%	2.8%	0%							
Heavy Vehicles/Buses/Transit	9.1%	12.9%	12.4%	0%							
Natural Risks: Weather	2.3%	2.9%	3.7%	0%							
Natural Risks: Animal	0.0%	0.2%	0.3%	0%							
Traffic Incident Management (Work Zones)	2.3%	1.3%	1.4%	0%							
*Red, bold text indicates the crash rate for this emphasis a	rea was higher than 2012 t	o 2016 statewide incide	ent reports.								

Summary o	f Crashes by	First Harmful E	vent (All severities	:)	
First Harmful Event	Seg	ment	- % Statewide	% Rural Areas	% Urban
riist naiiiiui Eveiit	Total	%	% Statewide	% Kurai Areas	Areas
Collision with Motor Vehicle in Transport	70	61.9%	64.3%	51.4%	67.3%
Overturning	2	1.8%	2.2%	8.2%	0.8%
Collision with Pedestrian	3	2.7%	1.0%	0.7%	1.1%
Collision with Pedalcyclist	6	5.3%	1.2%	0.6%	1.4%
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%
Collision with Fixed Object	10	8.8%	10.0%	19.0%	8.0%
Collision with Non-fixed Object*	22	19.5%	4.0%	5.0%	3.7%
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%
Unknown	0	0.0%	14.6%	5.0%	16.8%
Total	113	100.0%			

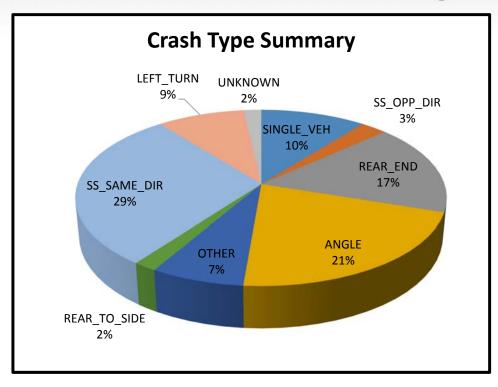
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment



Crash Summ	ary: All Y	'ears
Crash Type	Total	%
Fatal	1	0.9%
Incapacitating	1	0.9%
Injury	7	6.2%
Possible Injury	10	8.8%
PDO	94	83.2%
Multi-Vehicle	101	89.4%
Single-Vehicle	12	10.6%
Total	113	100.0%

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	9	8.0%	0	0.0%
Impaired Driving	7	6.2%	1	100.0%
Speeding	11	9.7%	1	100.0%
Failed to Yield ROW	40	35.4%	0	0.0%
Inattention/Distraction	14	12.4%	0	0.0%
Disregard Traffic Signal	3	2.7%	0	0.0%
Unsafe Passing/Lane Change	12	10.6%	0	0.0%
Failed to Keep in Lane	9	8.0%	0	0.0%
Pedestrian Fault	1	0.9%	0	0.0%
No Restraint	7	6.2%	1	100.0%
Other	14	12.4%	0	0.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	90	79.6%
Dawn	0	0.0%
Dusk	1	0.9%
Dark - Lighted	19	16.8%
Dark - Not Lighted	3	2.7%
Dark - Unknown Lighting	0	0.0%
Total	113	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
3036018	Saturday, May 23, 2015	2:53:00 AM	FATAL	CURB	SINGLE_VEH	DARK_LIGHTED	CLEAR	1			1	1	2 - SOUTH	NEGOTIATING_A_CURVE
3003685	Friday, October 02, 2015	11:16:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DAYLIGHT	CLEAR						1 - NORTH	MAKING_LEFT_TURN

BURGESS & NIPLE Engineers Planners



Predictive Ar	nalysis										
		Predic	ted Crashe	s/Year	Expec	ted Crashes	s/Year	PSI			
Collisio	on Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	
Total S	egment	3.2	1.1	2.2	4.3	1.2	3.2	1.1	0.1	1.0	
	Rear End	0.9	0.3	0.6	1.1	0.4	0.7	0.2	0.1	0.1	
	Head On	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Multi-Vehicle	Angle	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	
Non-Driveway Collisions	Sideswipe- Same	0.1	0.0	0.1	0.7	0.0	0.7	0.6	0.0	0.6	
	Sideswipe-Opp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Other	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	
Non-Motorized	Pedestrian	0.1	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0	
NOII-MOUTZEG	Pedalcycle	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	
Drivewa	y-Related	1.0	0.3	0.7	1.0	0.3	0.7	0.0	0.0	0.1	
Single	Single Vehicle		0.2	0.6	1.0	0.2	0.8	0.2	0.0	0.1	

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
	San Francisco Street											'
	and Ellery Avenue*											
		Combined Project										
		Combined Project										
Notes:	Incapacitating left-turn	crash occurred at San Francisco Street and Ellery Avenue	. Monitor this lo	cation; it doe	s not currently meet crash h	nistory criteria in	MUTCD Section	n 2B.07 to co	nvert to an all	-way stop.		

BURGESS & NIPLE Engineers Planners

US 89 and Marketplace

Traffic Control: Signalized, pedestrian crosswalks on all legs

Configuration: 4 legs

Northwest- 1 thru lane per direction on northwest leg, 1 NWB thru lane and 2 SEB thru lanes on southeast leg,

Southeast leg: dedicated left and right turn lanes

Northeast- 3 thru lanes per direction, dedicated left turn lanes, NB right-turn

Southwest leg:

Lighting: Present

Volume: Major approach (N/S) 34,293 Minor Approach (E/W) 10,812

Aerial Map



	At-Fault Unit Direction of Travel by Crash Type												
Direction	SINGLE VEH	ANGLE	LEFT TURN	REAR END	HEAD ON	SS SAME DIR	SS OPP DIR	REAR TO SIDE	REAR TO REAR	OTHER	UNKNOWN	TOTAL	
NORTH		2	2	5		2						11	
SOUTH		5	10	17		2						34	
EAST	1	6	2	2								11	
WEST			2	6	1	2						12	
NORTHWEST		1	1	1	1							4	
NORTHEAST		3		1								4	
SOUTHWEST		1	2						1			5	
SOUTHEAST		5	3									9	
UNKNOWN			1									1	





Crash Data

	Emphasis Area Analysis										
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Intersection Fatal							
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%							
Impaired Driving	40.4%	35.4%	34.1%	0%							
Occupant Protection	33.3%	40.9%	46.8%	0%							
Motorcycles	3.5%	17.5%	16.1%	0%							
Distracted Driving	31.6%	39.0%	14.3%	0%							
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	0%							
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%							
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%							
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%							
Nonmotorized Users: Pedestrians	35.1%	20.4%	17.1%	0%							
Nonmotorized Users: Bicyclists	1.8%	3.4%	2.8%	0%							
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%							
Natural Risks: Weather	5.3%	2.9%	3.7%	0%							
Natural Risks: Animal	0.0%	0.2%	0.3%	0%							
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%							
*Red, bold text indicates the crash rate for this emphasis as	rea was higher than 2012 t	o 2016 statewide incide	ent reports.	•							

F	Inter	section	0/ 01 -1 - 1-1	0/ 5 1 4	% Urban	
First Harmful Event	Total %		% Statewide	% Rural Areas	Areas	
Collision with Motor Vehicle in Transport	89	97.8%	64.3%	51.4%	67.3%	
Overturning	0	0.0%	2.2%	8.2%	0.8%	
Collision with Pedestrian	1	1.1%	1.0%	0.7%	1.1%	
Collision with Pedalcyclist	0	0.0%	1.2%	0.6%	1.4%	
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%	
Collision with Fixed Object	1	1.1%	10.0%	19.0%	8.0%	
Collision with Non-fixed Object*	0	0.0%	4.0%	5.0%	3.7%	
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%	
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%	
Unknown	0	0.0%	14.6%	5.0%	16.8%	
Total	91	100.0%				

*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift

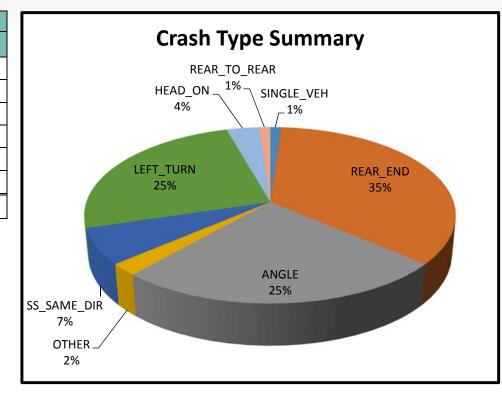
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Crash Summ	ary: All Y	'ears
Crash Type	Total	%
Fatal	0	0.0%
Incapacitating	5	5.5%
Injury	12	13.2%
Possible Injury	12	13.2%
PDO	62	68.1%
Multi-Vehicle	90	98.9%
Single-Vehicle	1	1.1%
Total	91	100.0%

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	2	2.2%	0	0.0%
Impaired Driving	3	3.3%	0	0.0%
Speeding	14	15.4%	0	0.0%
Failed to Yield ROW	40	44.0%	0	0.0%
Inattention/Distraction	6	6.6%	0	0.0%
Disregard Traffic Signal	5	5.5%	0	0.0%
Unsafe Passing/Lane Change	5	5.5%	0	0.0%
Failed to Keep in Lane	1	1.1%	0	0.0%
Pedestrian Fault	0	0.0%	0	0.0%
No Restraint	3	3.3%	0	0.0%
Other	18	19.8%	0	0.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	77	84.6%
Dawn	1	1.1%
Dusk	3	3.3%
Dark - Lighted	9	9.9%
Dark - Not Lighted	1	1.1%
Dark - Unknown Lighting	0	0.0%
Total	91	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2753805	Thursday, August 01, 2013	8:03:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DUSK	CLEAR					1	6 - NORTHEAST	MAKING_RIGHT_TURN
3018112	Saturday, October 24, 2015	12:25:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DAYLIGHT	CLOUDY						4 - WEST	MAKING_LEFT_TURN
2736477	Friday, June 14, 2013	2:05:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DAYLIGHT	CLEAR						2 - SOUTH	MAKING_LEFT_TURN
2696903	Thursday, January 31, 2013	2:31:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DAYLIGHT	CLEAR			1			3 - EAST	GOING_STRAIGHT_AHEAD
2767989	Saturday, October 05, 2013	9:12:00 AM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DAYLIGHT	CLEAR						8 - SOUTHEAST	MAKING_LEFT_TURN

BURGESS & NIPLE Ingineers Planners



Predictive Analysis											
	Predi	icted Crashe	s/Year	Expec	ted Crashes	/Year		PSI			
Collision Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO		
Rear End	2.8	0.9	1.9	4.4	0.9	3.5	1.7	0.0	1.7		
Head On	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0		
Angle	1.6	0.7	0.9	3.4	1.4	1.9	1.7	0.7	1.0		
Sideswipe	0.3	0.2	0.1	0.4	0.2	0.2	0.0	0.0	0.1		
Other Multi-Vehicle	0.9	0.1	0.8	0.9	0.1	0.8	-0.1	0.0	-0.1		
Single Vehicle	0.3	0.1	0.2	0.3	0.1	0.2	0.0	0.0	0.0		
Pedestrian	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Pedalcycle	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0		
Total	6.3	2.2	4.1	9.7	2.9	6.8	3.4	0.7	2.7		

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Flashing yellow arrow on all approaches (ID 4177)	19.4	Left Turn	All	\$15,000	1	\$15,000	0	0.12	\$46,560	
		Change from permitted-protected to protected phasing on major approach	99	Angle	All	N/A			0	0.79	\$317,408	
		Combined Project										
		Combined Project										
Notes:	City indicated they are	in the process of installing FYA.										

BURGESS & NIPLE Engineers Planners

Route 66 and Ponderosa Parkway/Enterprise Road

Traffic Control: Signalized Intersection Configuration: 4-legs at intersection

East-west leg: 2 thru lanes per direction, designated left and right turn lanes

North-south leg: 3 thru lanes on south leg, (1 NB, 2 SB) 1 thru lane per direction on north leg, designated left and right

turn lanes on both legs

Lighting: Present

Volume: Major approach (E/W) 30,579 Minor Approach (N/S) 10,821

Aerial Map



	At-Fault Unit Direction of Travel by Crash Type													
Direction	SINGLE VEH	ANGLE	LEFT TURN	REAR END	HEAD ON	SS SAME DIR	SS OPP DIR	REAR TO SIDE	REAR TO REAR	OTHER	UNKNOWN	TOTAL		
NORTH	4	2		7		3				4		20		
SOUTH	2	2		14		2						20		
EAST		3	1	40		4		1				49		
WEST		5		37		3				2		47		
NORTHWEST	1											1		
NORTHEAST		1										1		
SOUTHWEST	1			1								2		
SOUTHEAST			1	1								2		
UNKNOWN				3		1						4		





Crash Data

	Emphasis Area Anal	ysis		
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Intersection Fatal
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%
Impaired Driving	40.4%	35.4%	34.1%	0%
Occupant Protection	33.3%	40.9%	46.8%	0%
Motorcycles	3.5%	17.5%	16.1%	0%
Distracted Driving	31.6%	39.0%	14.3%	0%
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	0%
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%
Nonmotorized Users: Pedestrians	35.1%	20.4%	17.1%	0%
Nonmotorized Users: Bicyclists	1.8%	3.4%	2.8%	0%
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%
Natural Risks: Weather	5.3%	2.9%	3.7%	0%
Natural Risks: Animal	0.0%	0.2%	0.3%	0%
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%
*Red, bold text indicates the crash rate for this emphasis ar	ea was higher than 2012 t	o 2016 statewide incide	ent reports.	•

Summary o	f Crashes by I	irst Harmful E	vent (All severities)		
First Harmful Event	Inters	section	% Statewide	% Rural Areas	% Urban	
First Harmiui Event	Total %		% Statewide	% Kurai Areas	Areas	
Collision with Motor Vehicle in Transport	129	88.4%	64.3%	51.4%	67.3%	
Overturning	1	0.7%	2.2%	8.2%	0.8%	
Collision with Pedestrian	0	0.0%	1.0%	0.7%	1.1%	
Collision with Pedalcyclist	8	5.5%	1.2%	0.6%	1.4%	
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%	
Collision with Fixed Object	5	3.4%	10.0%	19.0%	8.0%	
Collision with Non-fixed Object*	1	0.7%	4.0%	5.0%	3.7%	
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%	
Other Non-collision**	2	1.4%	0.8%	2.0%	0.5%	
Unknown	0	0.0%	14.6%	5.0%	16.8%	
Total	146	100.0%				

^{*}Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

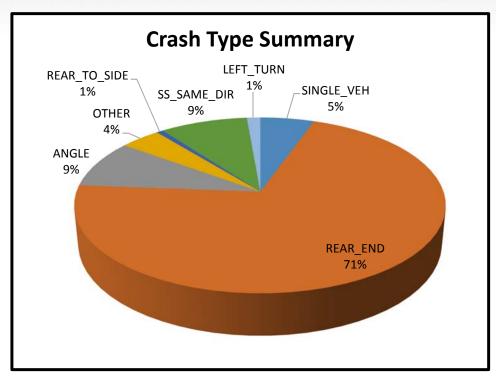
^{**}Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift



Crash Summ	ary: All Y	'ears	
Crash Type	Total	%	
Fatal	0	0.0%	
Incapacitating	3	2.1%	
Injury	15	10.3%	
Possible Injury	16	11.0%	
PDO	112	76.7%	
Multi-Vehicle	138	94.5%	
Single-Vehicle	8	5.5%	
Total	146	100.0%	

Unit Driv	ver Behavior							
Total	% of Total	Fatal	% of Fatal					
12	8.2%	0	0.0%					
5	3.4%	0	0.0%					
38	26.0%	0	0.0%					
31	21.2%	0	0.0%					
20	13.7%	0	0.0%					
6	4.1%	0	0.0%					
7	4.8%	0	0.0%					
3	2.1%	0	0.0%					
1	0.7%	0	0.0%					
6	4.1%	0	0.0%					
28	19.2%	0	0.0%					
	Total 12 5 38 31 20 6 7 3 1 6	12 8.2% 5 3.4% 38 26.0% 31 21.2% 20 13.7% 6 4.1% 7 4.8% 3 2.1% 1 0.7% 6 4.1%	Total % of Total Fatal 12 8.2% 0 5 3.4% 0 38 26.0% 0 31 21.2% 0 20 13.7% 0 6 4.1% 0 7 4.8% 0 3 2.1% 0 1 0.7% 0 6 4.1% 0					

Crashes by Lighting Con	dition (All	severities)	
Condition	Total	% of Total	
Daylight	119	81.5%	
Dawn	2	1.4%	
Dusk	4	2.7%	
Dark - Lighted	15	10.3%	
Dark - Not Lighted	5	3.4%	
Dark - Unknown Lighting	1	0.7%	
Total	146	100.0%	



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action	V2Travel Direction	V2 Unit Action
3151605	Thursday, October 20, 2016	3:00:00 PM	INCAPACITATING_IN JURY	MOTOR_VEHICLE_IN_ TRANSPORT	REAR_END	DAYLIGHT	CLEAR						3 - EAST	GOING_STRAIGHT_AHEAD		
2894385	Wednesday, November 12, 2014	2:35:00 PM	INCAPACITATING_IN JURY	MOTOR_VEHICLE_IN_ TRANSPORT	REAR_END	DAYLIGHT	CLEAR						3 - EAST	GOING_STRAIGHT_AHEAD		
2994191	Thursday, September 03, 2015	5:11:00 PM	INCAPACITATING_IN JURY	PEDALCYCLE	OTHER	DAYLIGHT	CLEAR						1 - NORTH	CROSSING_ROAD	4 - WEST	GOING_STRAIGHT_AHEAD
	Bike Crash Data All Other Severities															
2654209	Tuesday, September 25, 2012	7:02 PM	NON_INCAPACITATI NG_INJURY	PEDALCYCLE	ANGLE	DARK_NOT_LIGHTE D	CLEAR	1	0	0	0	0	2 - SOUTH	CROSSING_ROAD	3 - EAST	GOING_STRAIGHT_AHEAD
2778456	Thursday, November 14, 2013	6:53 PM	NON_INCAPACITATI NG_INJURY	PEDALCYCLE	ANGLE	DARK_LIGHTED	CLEAR	0	0	0	0	0	3 - EAST	WALKING_WITH_TRAFFIC	3 - EAST	MAKING_RIGHT_TURN
2842530	Friday, May 30, 2014	9:23 AM	NON_INCAPACITATI NG_INJURY	PEDALCYCLE	ANGLE	DAYLIGHT	CLOUDY	0	0	0	0	0	1 - NORTH	MAKING_RIGHT_TURN	4 - WEST	CROSSING_ROAD
2924920	Sunday, February 1, 2015	9:59 AM	NON_INCAPACITATI NG_INJURY	PEDALCYCLE	ANGLE	DAYLIGHT	CLEAR	0	0	1	0	0	1 - NORTH	MAKING_RIGHT_TURN	4 - WEST	CROSSING_ROAD
2989591	Wednesday, August 12, 2015	12:09 PM	NON_INCAPACITATI NG_INJURY	PEDALCYCLE	OTHER	DAYLIGHT	CLOUDY	0	0	0	0	0	4 - WEST	MAKING_RIGHT_TURN	4 - WEST	GOING_STRAIGHT_AHEAD
2998429	Wednesday, July 8, 2015	6:21 PM	NON_INCAPACITATI NG_INJURY	PEDALCYCLE	OTHER	DAYLIGHT	CLEAR	0	0	1	0	0	1 - NORTH	UNKNOWN	3 - EAST	UNKNOWN
2867331	Tuesday, August 19, 2014	3:06 PM	NON_INCAPACITATI NG_INJURY	PEDALCYCLE	ANGLE	DAYLIGHT	CLOUDY	1	0	0	0	0	4 - WEST	CROSSING_ROAD	1 - NORTH	MAKING_RIGHT_TURN



	Pred	icted Crashe	s/Year	Expec	ted Crashes	/Year	PSI		
Collision Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO
Rear End	1.8	0.6	1.2	7.7	1.3	6.4	5.9	0.7	5.2
Head On	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Angle	1.1	0.5	0.6	1.3	0.4	0.9	0.2	0.0	0.3
Sideswipe	0.2	0.1	0.1	0.3	0.1	0.2	0.1	0.0	0.1
Other Multi-Vehicle	0.6	0.1	0.5	0.7	0.1	0.6	0.0	0.0	0.0
Single Vehicle	0.2	0.1	0.2	0.3	0.1	0.2	0.1	0.0	0.1
Pedestrian	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Pedalcycle	0.1	0.1	0.0	0.2	0.2	0.0	0.1	0.1	0.0
Total	4.3	1.5	2.7	10.7	2.3	8.4	6.4	0.7	5.6

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Bicycle green lanes	N/A									
		Combined Project										
		Combined Project										
Notes:	Based on predictive an	alysis, rear end collisions have a PSI of 5.9. Consider assess	ing signal timi	ng/vellow pha	se and/or means to mitigate	congestion.						•

BURGESS & NIPLE Engineers Planners

US 89 and Cummings Street

Traffic Control: Signalized intersection

Configuration: 4 legs

East-west leg: 2 thru lanes (1 per direction per leg) with dedicated left-turn lane North-south leg: 6 thru lanes (3 per direction per leg) with dedicated left-turn lane

Lighting: Present

Volume: Major approach (N/S) 41,684 Minor approach (E/W) 1,503

Aerial Map



	At-Fault Unit Direction of Travel by Crash Type											
Direction	SINGLE VEH	ANGLE	LEFT TURN	REAR END	HEAD ON	SS SAME DIR	SS OPP DIR	REAR TO SIDE	REAR TO REAR	OTHER	UNKNOWN	TOTAL
NORTH	1	3	5	12		3						24
SOUTH	1	3	3	17		4		1	1	1		29
EAST	1	1	2	4		1						11
WEST		5	1	9	1	2	1					19
NORTHWEST		1	3	1			1					6
NORTHEAST		2	5							1		8
SOUTHWEST		5	1	7								13
SOUTHEAST		1				1						2
UNKNOWN										2		3





Crash Data

Emphasis Area Analysis									
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Intersection Fatal					
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%					
Impaired Driving	40.4%	35.4%	34.1%	0%					
Occupant Protection	33.3%	40.9%	46.8%	0%					
Motorcycles	3.5%	17.5%	16.1%	0%					
Distracted Driving	31.6%	39.0%	14.3%	0%					
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	0%					
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%					
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%					
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%					
Nonmotorized Users: Pedestrians	35.1%	20.4%	17.1%	100%					
Nonmotorized Users: Bicyclists	1.8%	3.4%	2.8%	0%					
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%					
Natural Risks: Weather	5.3%	2.9%	3.7%	0%					
Natural Risks: Animal	0.0%	0.2%	0.3%	0%					
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%					
*Red, bold text indicates the crash rate for this emphasis at				1					

Summary o	Summary of Crashes by First Harmful Event (All severities)								
First Harmful Event	Inter	section	% Statewide	% Rural Areas	% Urban Areas				
First Harmiui Event	Total	%	% Statewide	% Kurai Areas					
Collision with Motor Vehicle in Transport	109	94.8%	64.3%	51.4%	67.3%				
Overturning	0	0.0%	2.2%	8.2%	0.8%				
Collision with Pedestrian	2	1.7%	1.0%	0.7%	1.1%				
Collision with Pedalcyclist	0	0.0%	1.2%	0.6%	1.4%				
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%				
Collision with Fixed Object	3	2.6%	10.0%	19.0%	8.0%				
Collision with Non-fixed Object*	1	0.9%	4.0%	5.0%	3.7%				
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%				
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%				
Unknown	0	0.0%	14.6%	5.0%	16.8%				
Total	115	100.0%							

*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

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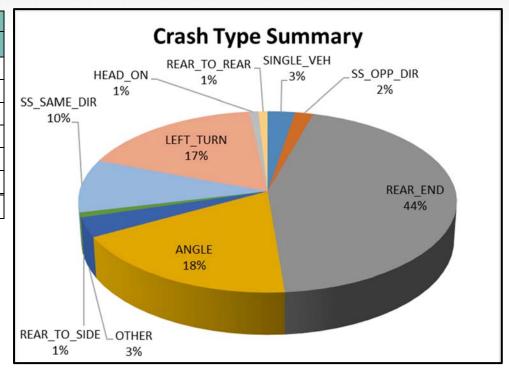
^{**}Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift



Crash Summ	ary: All Y	'ears		
Crash Type	Total	%		
Fatal	1	0.9%		
Incapacitating	1	0.9%		
Injury	17	14.8%		
Possible Injury	17	14.8%		
PDO	79	68.7%		
Multi-Vehicle	112	97.4%		
Single-Vehicle	3	2.6%		
Total	115	100.0%		

At-Fault	At-Fault Unit Driver Behavior									
Action	Total	% of Total	Fatal	% of Fatal						
No Improper Action	4	3.5%	0	0.0%						
Impaired Driving	5	4.3%	0	0.0%						
Speeding	27	23.5%	0	0.0%						
Failed to Yield ROW	38	33.0%	0	0.0%						
Inattention/Distraction	7	6.1%	0	0.0%						
Disregard Traffic Signal	3	2.6%	0	0.0%						
Unsafe Passing/Lane Change	12	10.4%	0	0.0%						
Failed to Keep in Lane	1	0.9%	0	0.0%						
Pedestrian Fault	1	0.9%	1	100.0%						
No Restraint	4	3.5%	0	0.0%						
Other	22	19.1%	0	0.0%						

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	89	77.4%
Dawn	1	0.9%
Dusk	10	8.7%
Dark - Lighted	12	10.4%
Dark - Not Lighted	3	2.6%
Dark - Unknown Lighting	0	0.0%
Total	115	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
2676384*	Thursday, December 06, 2012	5:52:00 PM	FATAL	PEDESTRIAN	OTHER	DARK_NOT_LIGHTED	CLEAR	1					UNKNOWN	WALKING_AGAINST_TRAFFIC
2660336	Wednesday, October 24,2012	7:16:00 AM	INCAPACITATING_INJURY	PEDESTRIAN	OTHER	DAYLIGHT	CLEAR	1					UNKNOWN	MAKING_LEFT_TURN
*Unclear as	*Unclear as to whether this can be attributed to the intersection.													

BURGESS & NIPLE
Engineers Planners



Predictive Analysis											
	Pred	Predicted Crashes/Year Expected Crashes/Year						PSI			
Collision Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO		
Rear End	2.1	0.7	1.3	4.8	1.0	3.7	2.7	0.3	2.4		
Head On	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0		
Angle	1.2	0.5	0.7	2.6	1.0	1.7	1.4	0.4	1.0		
Sideswipe	0.2	0.2	0.1	0.3	0.2	0.2	0.1	0.0	0.1		
Other Multi-Vehicle	0.7	0.1	0.6	0.6	0.1	0.5	0.0	0.0	0.0		
Single Vehicle	0.2	0.0	0.2	0.2	0.0	0.2	0.0	0.0	0.0		
Pedestrian	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0		
Pedalcycle	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0		
Total	4.7	1.8	2.9	8.9	2.5	6.4	4.2	0.8	3.4		

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Combined Project										
		Combined Project										

Notes: Review pedestrian interval- note pedestrian alcohol use in both crashes, not driver.

Consider protected left-turn signal phasing for dual-left turn lanes and/or positive offset for mainline left-turn lanes.

Woodlands Village Boulevard and University Avenue

Traffic Control: Signalized intersection

Configuration: 4 legs

East-west leg: 2 thru lanes (1 per direction per leg) with dedicated left-turn lane North-south leg: 4 thru lanes (2 per direction per leg) with dedicated left-turn lane

Lighting: Present

Volume: Major approach (N/S) 16,355 Minor approach (E/W) 5,050

Aerial Map



				At-Fau	lt Unit [Direction of	Travel by	Crash Ty	ре			
Direction	SINGLE VEH	ANGLE	LEFT TURN	REAR END	HEAD ON	SS SAME DIR	SS OPP DIR	REAR TO SIDE	REAR TO REAR	OTHER	UNKNOWN	TOTAL
NORTH		7	1	6		2				1		17
SOUTH	1	6	3	1	1	1				2		15
EAST		2	6	2						1		11
WEST	1	5	2	6				1		1		16
NORTHWEST	1					1						2
NORTHEAST		1			1							2
SOUTHWEST		1										1
SOUTHEAST			2									2
UNKNOWN			1	2		1						4





Crash Data

Emphasis Area Analysis											
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Intersection Fatal							
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%							
Impaired Driving	40.4%	35.4%	34.1%	0%							
Occupant Protection	33.3%	40.9%	46.8%	0%							
Motorcycles	3.5%	17.5%	16.1%	0%							
Distracted Driving	31.6%	39.0%	14.3%	100%							
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	0%							
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%							
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%							
Age Related: Older Drivers	12.3%	22.0%	18.2%	100%							
Nonmotorized Users: Pedestrians	35.1%	20.4%	17.1%	100%							
Nonmotorized Users: Bicyclists	1.8%	3.4%	2.8%	0%							
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	100%							
Natural Risks: Weather	5.3%	2.9%	3.7%	0%							
Natural Risks: Animal	0.0%	0.2%	0.3%	0%							
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	0%							
*Red, bold text indicates the crash rate for this emphasis as	rea was higher than 2012 to	o 2016 statewide incide	ent reports.	•							

First Harmful Event	Inter	section	- % Statewide	0/ 5 1 4	% Urban	
First Harmful Event	Total	%	% Statewide	% Rural Areas	Areas	
Collision with Motor Vehicle in Transport	60	85.7%	64.3%	51.4%	67.3%	
Overturning	1	1.4%	2.2%	8.2%	0.8%	
Collision with Pedestrian	4	5.7%	1.0%	0.7%	1.1%	
Collision with Pedalcyclist	2	2.9%	1.2%	0.6%	1.4%	
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%	
Collision with Fixed Object	2	2.9%	10.0%	19.0%	8.0%	
Collision with Non-fixed Object*	1	1.4%	4.0%	5.0%	3.7%	
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%	
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%	
Unknown	0	0.0%	14.6%	5.0%	16.8%	
Total	70	100.0%				

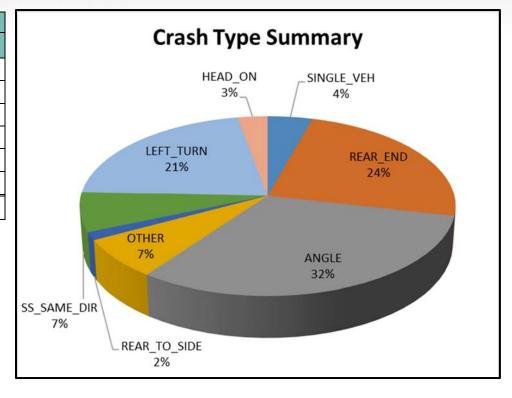
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment



Crash Summ	ary: All Y	'ears
Crash Type	Total	%
Fatal	1	1.4%
Incapacitating	1	1.4%
Injury	7	10.0%
Possible Injury	6	8.6%
PDO	55	78.6%
Multi-Vehicle	67	95.7%
Single-Vehicle	3	4.3%
Total	70	100.0%

At-Fault	Unit Driv	ver Behavior		
Action	Total	% of Total	Fatal	% of Fatal
No Improper Action	6	8.6%	0	0.0%
Impaired Driving	2	2.9%	0	0.0%
Speeding	12	17.1%	0	0.0%
Failed to Yield ROW	27	38.6%	0	0.0%
Inattention/Distraction	5	7.1%	0	0.0%
Disregard Traffic Signal	8	11.4%	0	0.0%
Unsafe Passing/Lane Change	3	4.3%	0	0.0%
Failed to Keep in Lane	1	1.4%	0	0.0%
Pedestrian Fault	1	1.4%	1	100.0%
No Restraint	0	0.0%	0	0.0%
Other	7	10.0%	0	0.0%

Crashes by Lighting Con	dition (All	severities)
Condition	Total	% of Total
Daylight	44	62.9%
Dawn	1	1.4%
Dusk	2	2.9%
Dark - Lighted	19	27.1%
Dark - Not Lighted	2	2.9%
Dark - Unknown Lighting	2	2.9%
Total	70	100.0%



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
3012895	Thursday, October 15, 2015	6:30:00 AM	FATAL	PEDESTRIAN	OTHER	DAWN	CLEAR						4 - WEST	CROSSING_ROAD
3129679	Friday, September 09, 2016	12:48:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	ANGLE	DAYLIGHT	CLEAR						4 - WEST	GOING_STRAIGHT_AHEAD

BURGESS & NIPLE
Engineers Planners



Predictive Analysis	;									
	Pred	icted Crashe	s/Year	Expec	ted Crashes	/Year	PSI			
Collision Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	
Rear End	1.1	0.3	0.7	1.7	0.3	1.4	0.6	0.0	0.7	
Head On	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	
Angle	0.6	0.3	0.4	1.4	0.3	1.1	8.0	0.1	0.7	
Sideswipe	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	
Other Multi-Vehicle	0.4	0.0	0.3	0.4	0.0	0.4	0.0	0.0	0.0	
Single Vehicle	0.2	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0	
Pedestrian	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	
Pedalcycle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total	2.6	0.9	1.7	4.1	1.0	3.1	1.5	0.1	1.5	

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Combined Project										
		Combined Project										
Notes:	City staff indicated they	y are converting to Flashing Yellow Arrow (FYA).										

BURGESS & NIPLE Engineers Planners

E Route 66 and Humphreys Street

Traffic Control: Signalized Intersection

Configuration: 3 legs

East-west leg: 4 thru lanes (2 per direction) with dedicated left-turn lane in EB direction

North-south leg: SB dedicated right- and left-turn lanes

Lighting: Present

Volume: Major approach (E/W) 39,102 Minor approach (N/S) 15,205

Aerial Map



	At-Fault Unit Direction of Travel by Crash Type														
Direction	SINGLE VEH	ANGLE	LEFT TURN	REAR END	HEAD ON	SS SAME DIR	SS OPP DIR	REAR TO SIDE	REAR TO REAR	OTHER	UNKNOWN	TOTAL			
NORTH		3	2	3	1					1		10			
SOUTH	1	2	1	5		3				1		13			
EAST	2	2	1	35		8	1	1		2		52			
WEST	2	5	4	14		5	1	1		2		34			
NORTHEAST			2	1	1							4			
SOUTHWEST	1											1			
UNKNOWN			2	1								3			



Crash Data

Emphasis Area Analysis											
Emphasis Area	FMPO Fatal	State Fatal	SHSP Fatal	Intersection Fatal							
Speeding and Aggressive Driving	35.1%	32.0%	36.7%	0%							
Impaired Driving	40.4%	35.4%	34.1%	0%							
Occupant Protection	33.3%	40.9%	46.8%	0%							
Motorcycles	3.5%	17.5%	16.1%	0%							
Distracted Driving	31.6%	39.0%	14.3%	100%							
Roadway Infrastructure and Operations: Lane/Roadway Departure	59.6%	47.4%	51.1%	0%							
Roadway Infrastructure and Operations: Intersections/Railroad Crossings	12.3%	27.2%	23.8%	0%							
Age Related: Young Drivers	22.8%	26.0%	29.7%	0%							
Age Related: Older Drivers	12.3%	22.0%	18.2%	0%							
Nonmotorized Users: Pedestrians	35.1%	20.4%	17.1%	100%							
Nonmotorized Users: Bicyclists	1.8%	3.4%	2.8%	0%							
Heavy Vehicles/Buses/Transit	21.1%	12.9%	12.4%	0%							
Natural Risks: Weather	5.3%	2.9%	3.7%	0%							
Natural Risks: Animal	0.0%	0.2%	0.3%	0%							
Traffic Incident Management (Work Zones)	3.5%	1.3%	1.4%	100%							
*Red, bold text indicates the crash rate for this emphasis a	rea was higher than 2012 t	o 2016 statewide incide	ent reports.	•							

Summary of Crashes by First Harmful Event (All severities)													
First Harmful Event	Inter	section	% Statewide	% Rural Areas	% Urban								
First Harmiui Event	Total %		% Statewide	% Kurai Areas	Areas								
Collision with Motor Vehicle in Transport	100	85.5%	64.3%	51.4%	67.3%								
Overturning	1	0.9%	2.2%	8.2%	0.8%								
Collision with Pedestrian	1	0.9%	1.0%	0.7%	1.1%								
Collision with Pedalcyclist	8	6.8%	1.2%	0.6%	1.4%								
Collision with Animal	0	0.0%	1.6%	7.2%	0.3%								
Collision with Fixed Object	6	5.1%	10.0%	19.0%	8.0%								
Collision with Non-fixed Object*	0	0.0%	4.0%	5.0%	3.7%								
Vehicle Fire or Explosion	0	0.0%	0.3%	1.0%	0.1%								
Other Non-collision**	0	0.0%	0.8%	2.0%	0.5%								
Unknown	1	0.9%	14.6%	5.0%	16.8%								
Total	117	100.0%		-									

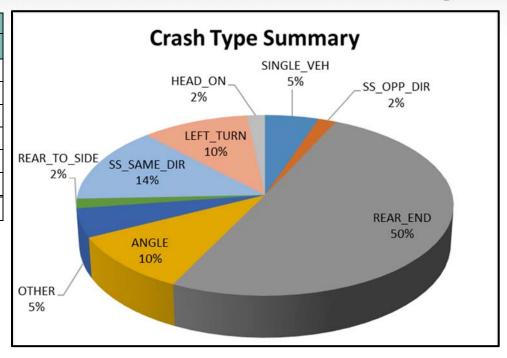
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment



Crash Summ	ary: All Y	'ears
Crash Type	Total	%
Fatal	1	0.9%
Incapacitating	3	2.6%
Injury	5	4.3%
Possible Injury	20	17.1%
PDO	88	75.2%
Multi-Vehicle	111	94.9%
Single-Vehicle	6	5.1%
Total	117	100.0%

At-Fault	At-Fault Unit Driver Behavior													
Action	Total	% of Total	Fatal	% of Fatal										
No Improper Action	3	2.6%	0	0.0%										
Impaired Driving	5	4.3%	0	0.0%										
Speeding	28	23.9%	0	0.0%										
Failed to Yield ROW	31	26.5%	0	0.0%										
Inattention/Distraction	10	8.5%	0	0.0%										
Disregard Traffic Signal	11	9.4%	0	0.0%										
Unsafe Passing/Lane Change	10	8.5%	0	0.0%										
Failed to Keep in Lane	0	0.0%	0	0.0%										
Pedestrian Fault	1	0.9%	1	100.0%										
No Restraint	2	1.7%	0	0.0%										
Other	23	19.7%	0	0.0%										

Crashes by Lighting Con	dition (All	severities)		
Condition	Total	% of Total		
Daylight	98	83.8%		
Dawn	3	2.6%		
Dusk	5	4.3%		
Dark - Lighted	10	8.5%		
Dark - Not Lighted	0	0.0%		
Dark - Unknown Lighting	1	0.9%		
Total	117	100.0%		



ID	Date	Time	Injury Severity	First Harmful	Collision Manner	Light Condition	Weather	Alcohol	Drug	Distracted	Impaired	Unrestrained	V1Travel Direction	V1 Unit Action
3013351	Tuesday, October 20, 2015	12:25:00 AM	FATAL	PEDESTRIAN	OTHER	DARK_LIGHTED	CLEAR	1	1				3 - EAST	WALKING_WITH_TRAFFIC
2786980	Friday, October 18, 2013	2:01:00 PM	INCAPACITATING_INJURY	OVERTURN_ROLLOVER	OTHER	DAYLIGHT	CLEAR						4 - WEST	GOING_STRAIGHT_AHEAD
2654211	Tuesday, September 25, 2012	5:06:00 PM	INCAPACITATING_INJURY	MOTOR_VEHICLE_IN_TRANSPORT	LEFT_TURN	DUSK	CLEAR					1	6 - NORTHEAST	MAKING_LEFT_TURN
2729105	Monday, May 27, 2013	7:54:00 PM	INCAPACITATING_INJURY	FENCE	SINGLE_VEH	DUSK	CLEAR						2 - SOUTH	GOING_STRAIGHT_AHEAD

BURGESS & NIPLE
Engineers Planners



	Pred	icted Crashe	s/Year	Expec	ted Crashes	/Year		PSI	
Collision Type	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO	Total	Fatal & Injury	PDO
Rear End	3.4	1.0	2.4	7.1	1.2	5.9	3.7	0.2	3.5
Head On	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0
Angle	1.4	0.5	0.9	2.0	0.7	1.3	0.6	0.1	0.4
Sideswipe	1.5	1.4	0.1	1.3	1.0	0.3	-0.3	-0.4	0.1
Other Multi-Vehicle	1.0	0.1	0.9	0.9	0.1	0.8	0.0	0.0	0.0
Single Vehicle	0.4	0.1	0.3	0.4	0.1	0.3	0.1	0.0	0.1
Pedestrian	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedalcycle	0.1	0.1	0.0	0.2	0.2	0.0	0.1	0.1	0.0
Total	7.9	3.3	4.6	12.0	3.3	8.7	4.1	0.0	4.1

Project No.	Location	Countermeasure	CRF (%)	Crash Type Mitigated	Crash Severity	Unit Cost	No. Units	Estimated Cost	Fatal Crash Reduction	Incapacitating Crash Reduction	Annual Benefit	Preliminary B/C
		Install FYA (ID 4177)	19.4	Left turn	All	\$5,000	3	\$15,000	0	0.04	\$15,520	
		Improve signal visibility (ID 4111)	9.8	Nighttime	K,A,B,C	\$600/signal head	10	\$6,000	0.02	0.04	129,360	
		Combined Project										
	Milton Rd and											
	Humphreys St											
		Combined Project										

Notes: Costs too low for HSIP unless combined with other project.

Consider adding Signal Ahead (W3-3) if sight distance is less than required eastbound per MUTCD Table 4D-2 with flashers. Consider bike lane improvements, such as bike lane widening, green paint, and bike boxes.