

Vision Zero - Reducing Fatal and Serious Injury Crashes to Zero

**Public Meeting
March 23, 2019**



Why are we here?



In the past five years, nearly **60 people** lost their lives in vehicle crashes on Tempe streets.
...in addition more than **400 people** were seriously injured.

Why are we here?



In the past five years, nearly **60 people** lost their lives in vehicle crashes on Tempe streets.
...in addition more than **400 people** were seriously injured.

This is unacceptable! This is a public health crisis!



Arizona pedestrians among nation's most likely to die in fatal crash

Robert Gundran, The Republic | azcentral.com Published 5:24 p.m. MT Dec. 5, 2017 | Updated 8:24 a.m. MT Dec. 6, 2017

Tempe police investigating deadly rollover crash near Kyrene/Baseline roads

BY: Morgan Tanabe
POSTED: 11:00 PM, Jun 25, 2017

2-vehicle crash kills one person in Tempe

By: FOX 10 Staff



POSTED: JUL 31 2017 10:33PM MST
UPDATED: AUG 01 2017 04:53AM MST

Two killed in Tempe crash, police say

Alexis Egeland, The Republic | azcentral.com Published 9:05 p.m. MT Oct. 2, 2017 | Updated 12:03 p.m. MT Oct. 3, 2017

Mother who lost her son in a deadly crash gets help from her friends

BY: Jason Valentine
POSTED: 10:00 PM, Nov 14, 2017

1 dead after SUV with 3 teens hits man on Tempe sidewalk

Posted: Jun 16, 2017 1:31 AM

Woman on scooter killed in Tempe crash involving semitruck

Alexis Egeland, The Republic | azcentral.com Published 9:15 p.m. MT Nov. 20, 2017

ASU doctoral student, renowned pianist Xiaoying Wen killed in Tempe crash

BY: Clayton Klapper
POSTED: 6:50 PM, Nov 21, 2017



Arizona pedestrians among nation's most likely to die in fatal crash

Robert Gundran, The Republic | azcentral.com Published 5:24 p

2-vehicle crash kills one person in Tempe

By: FOX 10 Staff

POSTED: JUL 31 2017 10:33PM MST
UPDATED: AUG 01 2017 04:53AM MST

1 dead after SUV with 3 teens on sidewalk

Posted: Jun 16, 2017 1:31 AM

Woman on scooter killed in Tempe crash involving semitruck

Alexis Egeland, The Republic | azcentral.com Published 9:15 p.m. MT Nov. 20, 2017

Tempe police investigating deadly rollover crash near Kyrene/Baseline roads

Jun 25, 2017

Day

Wed 12:03 p.m. MT Oct. 3, 2017

er son in a
help from her

WE MUST DO BETTER

er son in a help from her ral student, renowned pianist, 11-year-old Wen killed in Tempe crash

BY: Clayton Klapper
POSTED: 6:50 PM, Nov 21, 2017

Vision Zero

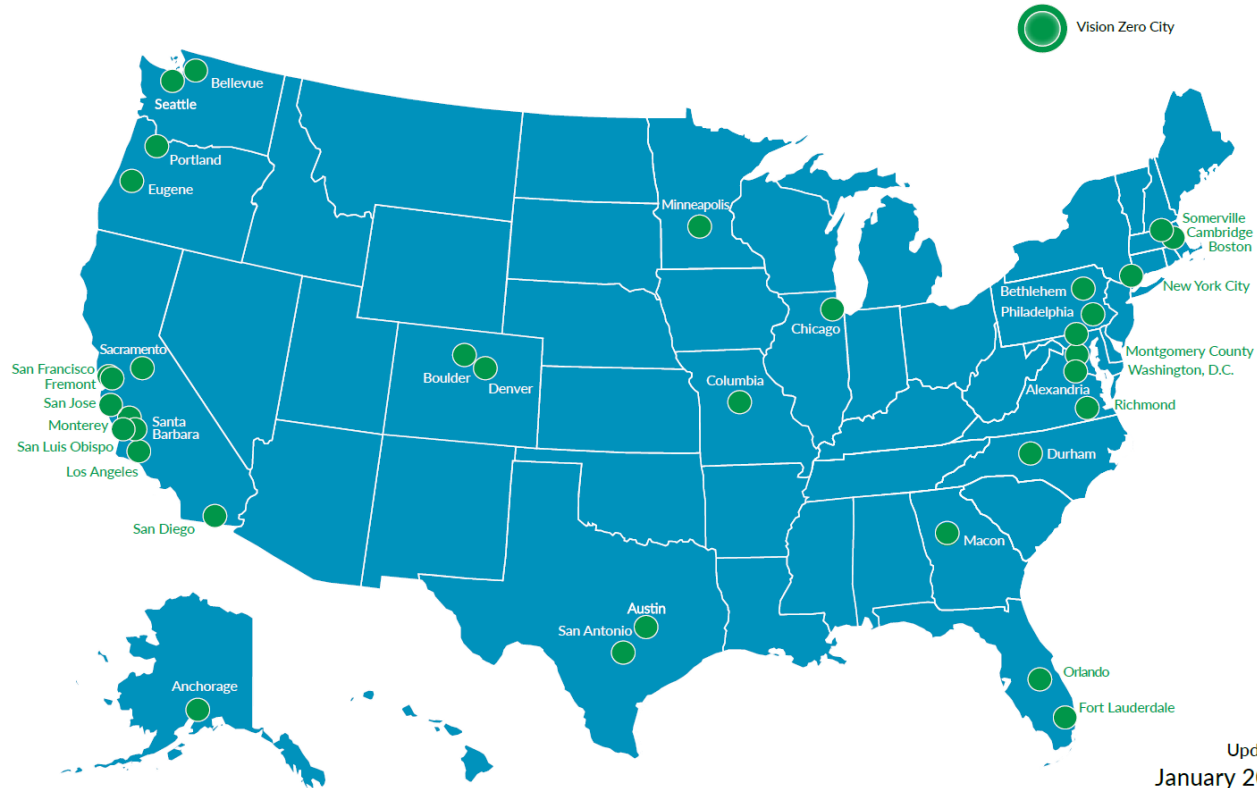
- Started in Sweden in the late 1990s
- Adopted by the Swedish Parliament
- In response to a national realization that too many people were dying on Swedish roads.



Vision Zero

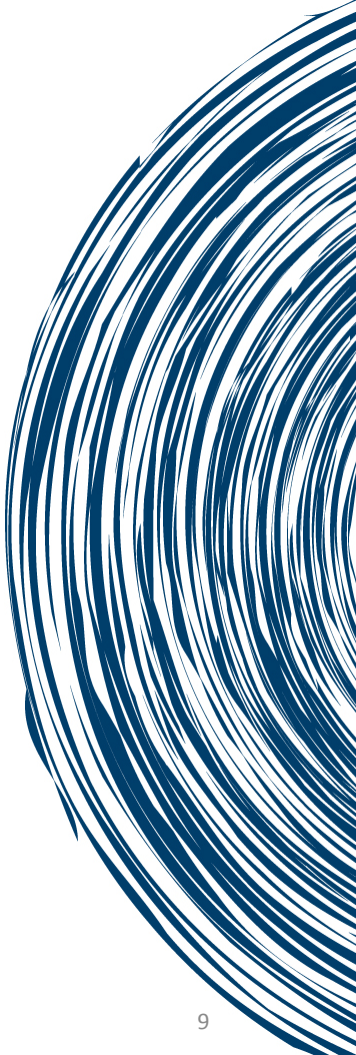
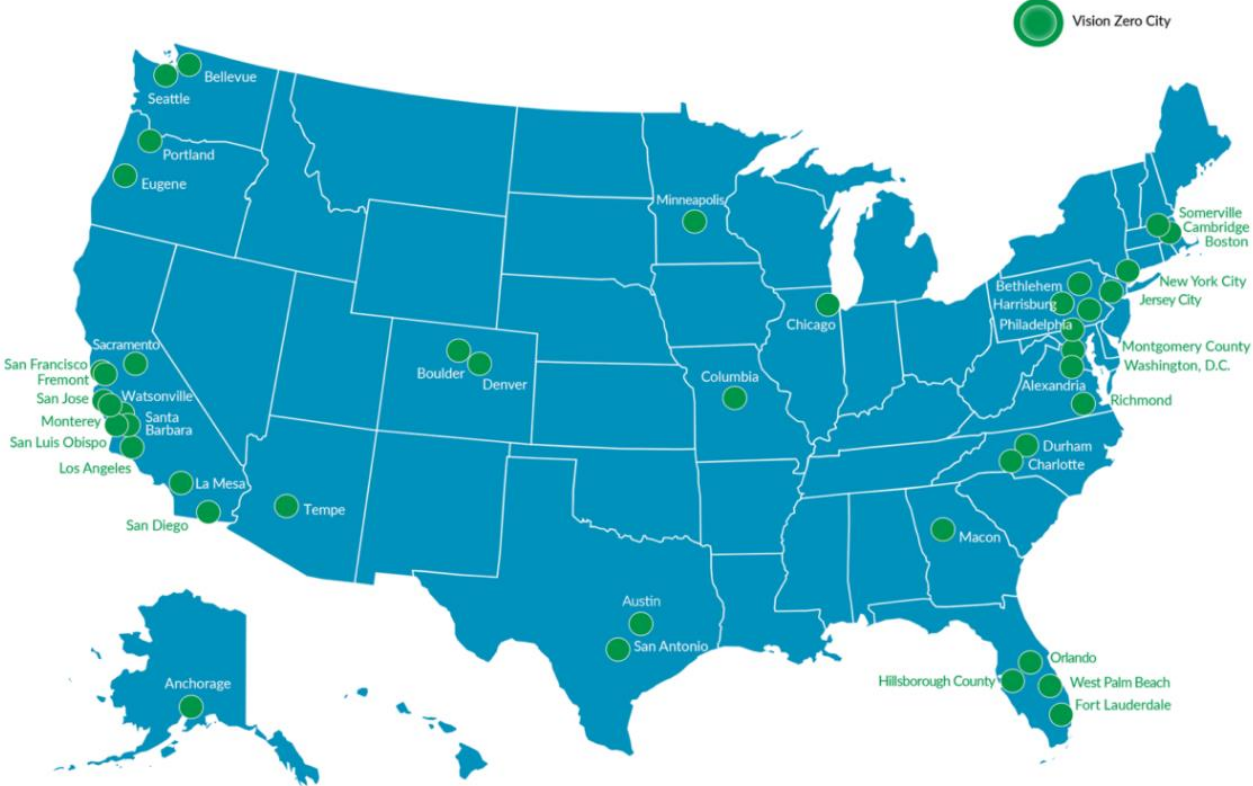
- It's a traffic safety policy that takes an **ethical approach** toward achieving safety for **all road users**.
- Key principles:
 - Traffic deaths and severe injuries are **preventable**.
 - Crashes will occur, but **severity** can be reduced.
 - Safety is **everybody's** responsibility, particularly the roadway engineers/designers and policymakers.

Vision Zero Cities

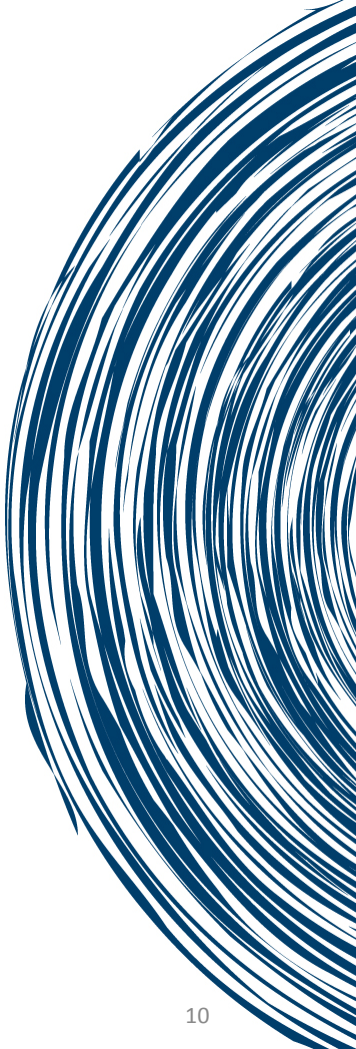


Updated
January 2018

Vision Zero Cities

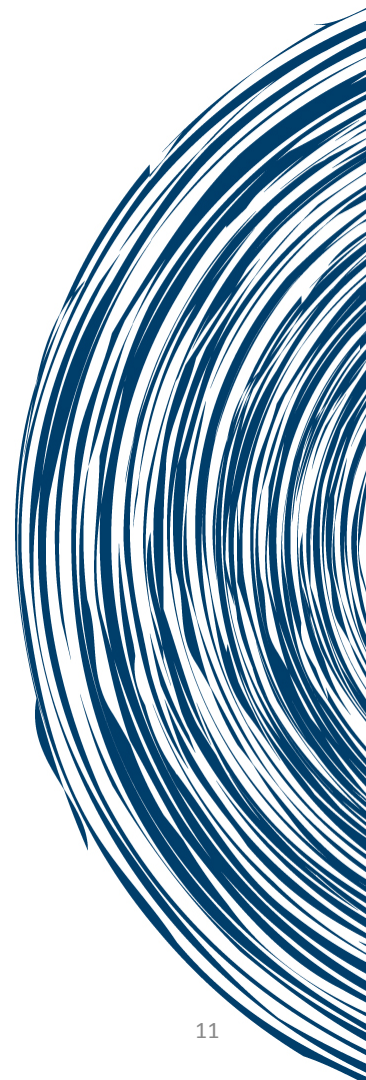


Vision Zero Cities



What makes a Vision Zero city?

- Setting a **clear goal** of eliminating traffic fatalities and severe injuries.
- The Mayor and Council publicly, **officially committing** to Vision Zero.
- Key **city departments** (including police, transportation, fire) and **community stakeholders** (ex: ASU, school districts, public health agencies), **are engaged**.
- A Vision Zero **plan or strategy** is in place, or the city commits to doing so in a clear time frame.

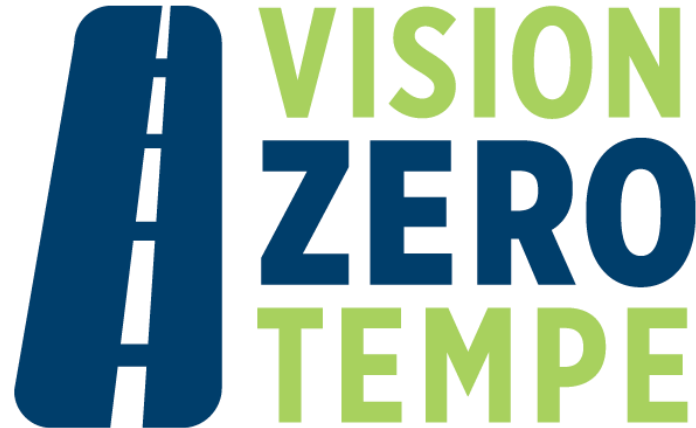


A Clear Goal of Eliminating Traffic Fatalities and Severe Injuries



● Performance Measure (2018):

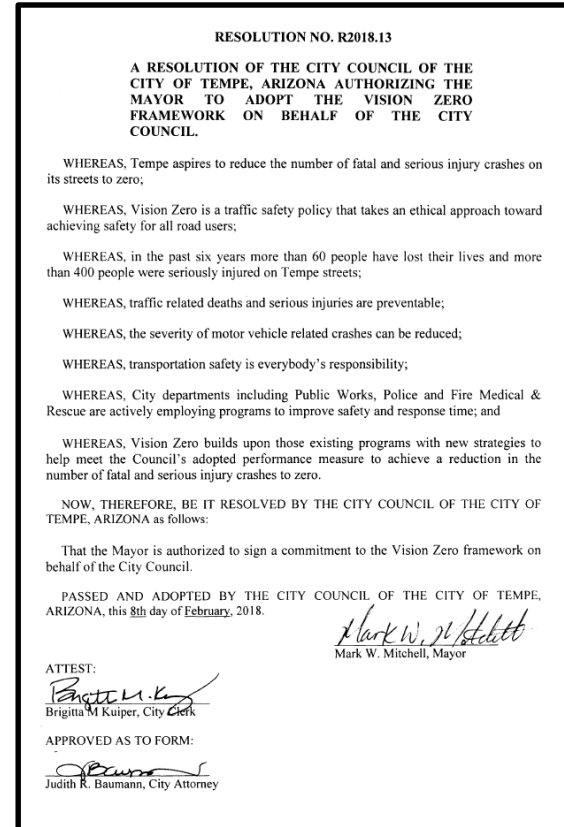
1.08: Achieve a reduction in the number of fatal and serious injury crashes to zero.



The Mayor and Council Publicly, Officially Committing to Vision Zero



- January 11, 2018:
 - Staff presented to the Mayor and Council
- February 8, 2018:
 - Mayor and Council unanimously approved Resolution No. R2018.13 formally committing to Vision Zero.





Key City Departments and Community Stakeholders are Engaged

- COT Fire & Medical
- COT Manager's Office
- COT Mayor & Council
- COT Neighborhood Services
- COT Police
- COT Sustainability
- COT Transportation
- AARP
- ADOT
- Advocacy Groups (TBAG, etc.)
- ASU
- Healthcare & Hospitals
- Large Employers (SRP, etc.)
- MAG
- Neighboring City Staff
- Neighborhood Groups
- Non-Profits
- Public Health
- Schools
- Transportation Commission
- Tempe Residents

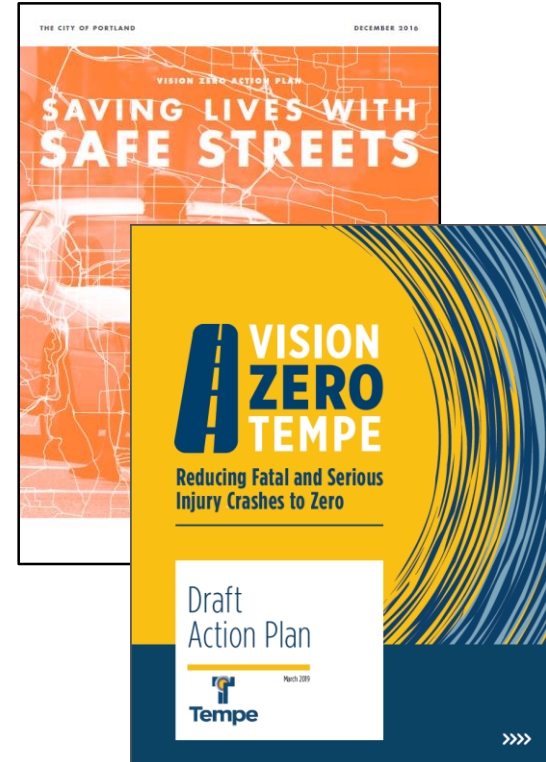


Vision Zero Action Plan



● We are on Schedule!

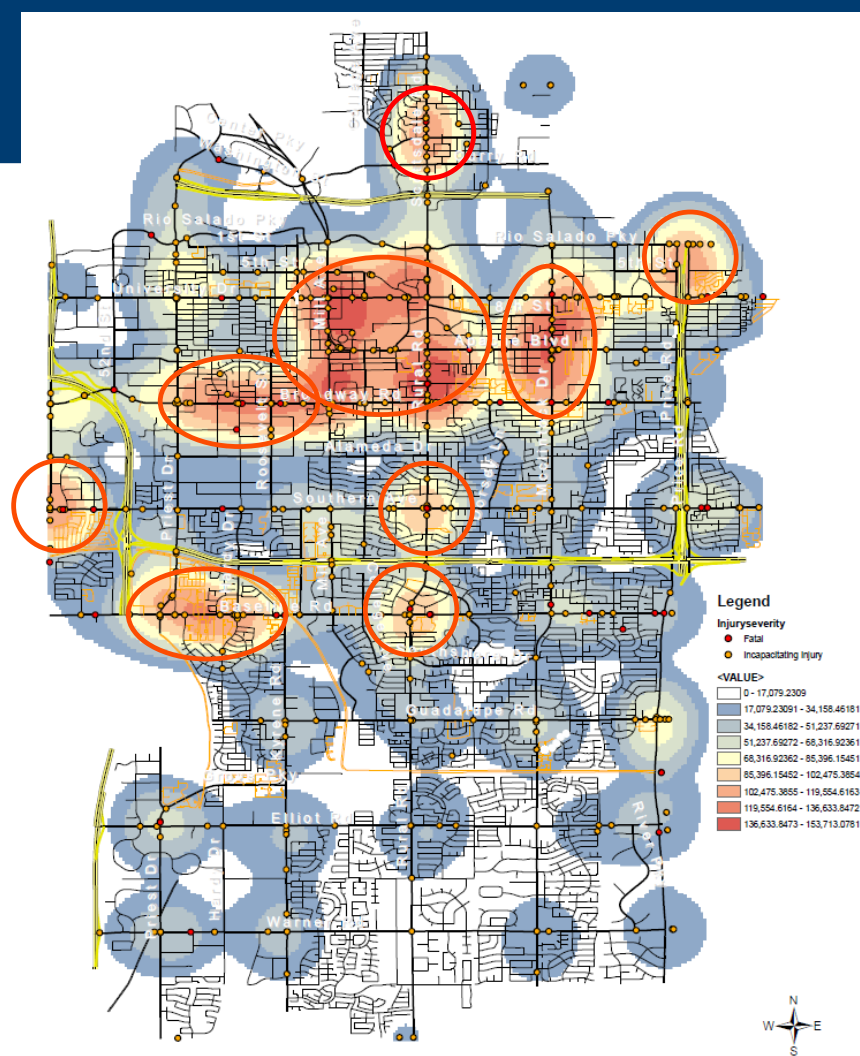
- June 19, 2018: Visioning Workshop
- August & October 2018: Working Group Meetings – Identify Goals & Strategies
- January 2019: Follow-Up Workshop – Prioritize Strategies
- February/March 2019: Produce a “Draft” Action Plan
- March 2019: Share “Draft” Action Plan (Public Meetings)
- April 2019: Finalize Action Plan
- May 2019: Present to the Mayor & City Council



We identified where crashes are happening

Where are high severity crashes happening?

- Scottsdale Rd: Curry to McKellips
- Rio Salado & Price/SR101
- ASU/Downtown
- McClintock: University to Broadway
- Broadway: Priest to Mill
- 48th Street & Southern
- Rural & Southern
- Baseline: I-10 to Kyrene
- Baseline & Rural



We looked at data



Crashes with Fatal or Serious Injuries (2012-2017)



Gender Party 'A'

No Filter Male Female Unknown

Gender Party 'B'

No Filter Male Female Unknown

Lighting Condition

Daylight Dark Lighted Dusk Dawn

Dark Unknown Lighting Dark Not Lighted

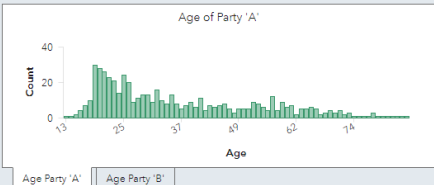
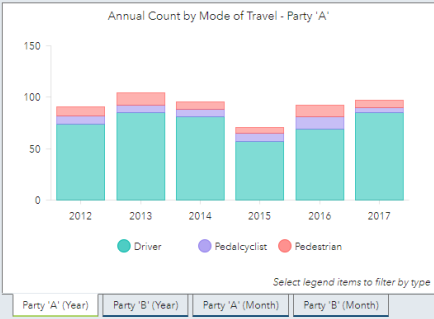
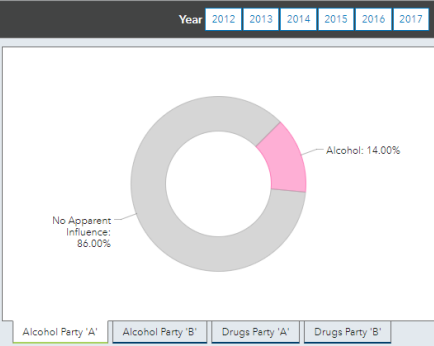
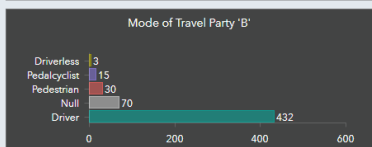
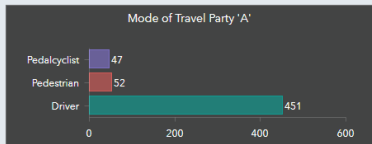
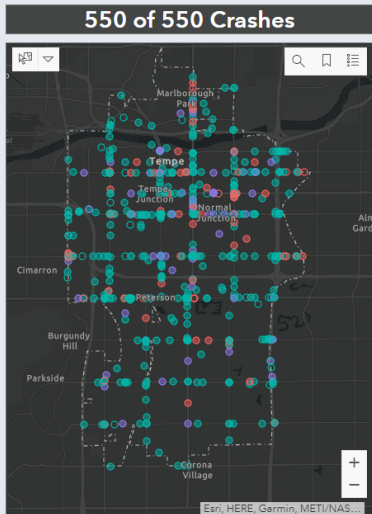
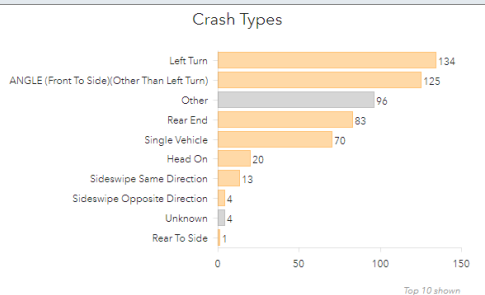
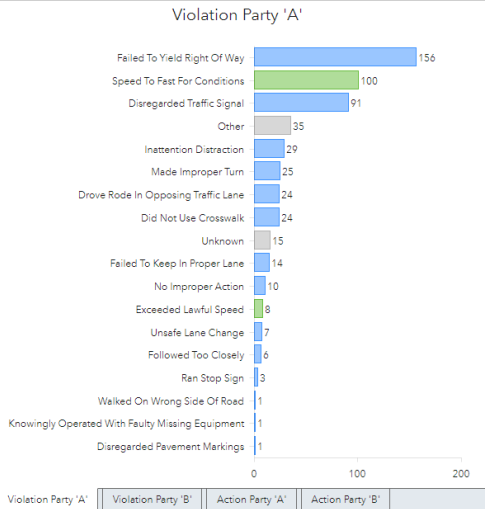
Incident Junction Type

None

About this Dashboard

To gain insight into crash occurrence in the City of Tempe, an analysis of crash data was performed for the years 2012 through 2017. The results of this analysis provide an overview of road safety in the City of Tempe and are illustrated in interactive visuals on this webpage. Crash trends and patterns for fatalities and serious injuries are presented.

Visualizations on this page can be used to cross-filter and cross-highlight the other visualizations on the page. For example, selecting the bar for left turn crashes filters all other charts, tables, and map on the page to display only data that applies to that one crash type.

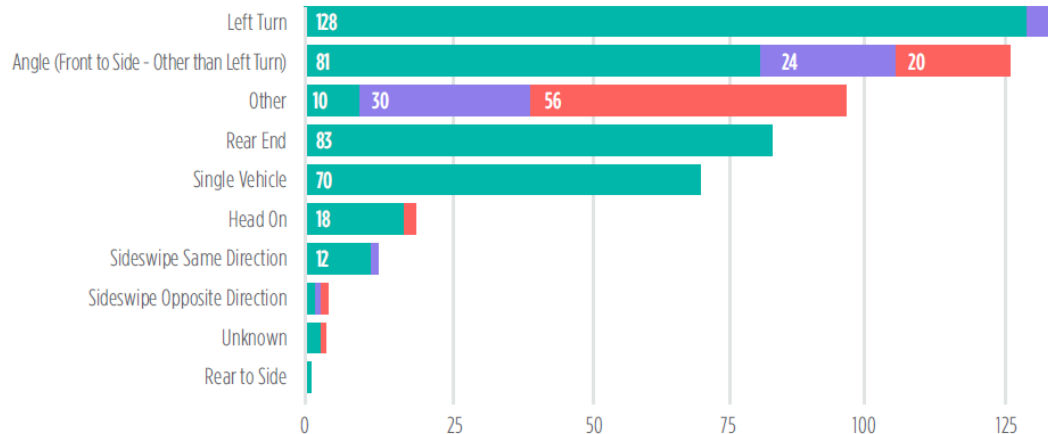




What types of crashes are happening?

CRASH TYPES WITH FATAL OR SERIOUS INJURIES

Mode: ● Driver ● Pedalcyclist ● Pedestrian

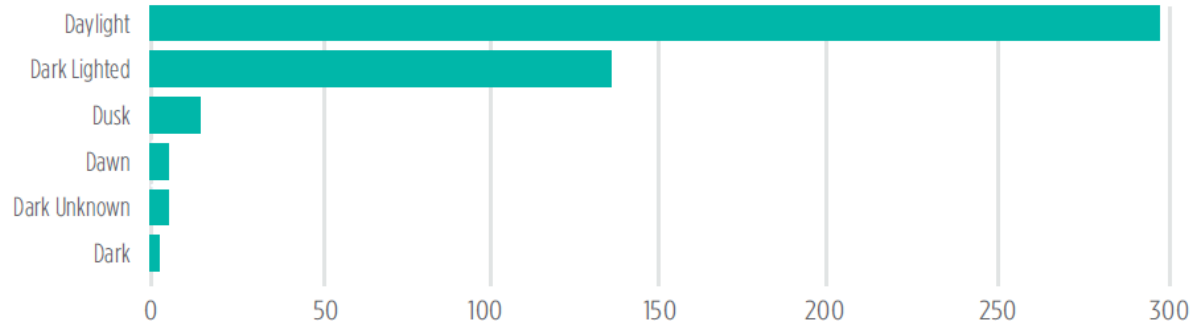


NOTE: "OTHER" Includes nearly all Bicycle & Pedestrian crashes



What are the lighting conditions?

LIGHTING CONDITIONS DURING CRASHES

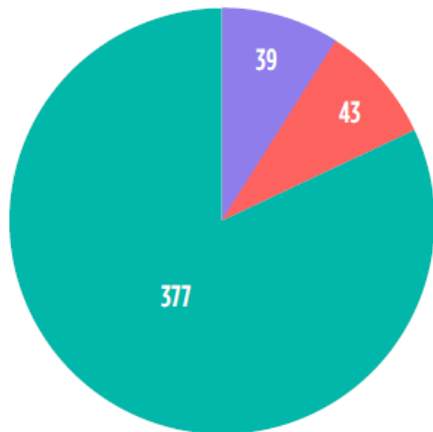




Who were “unit #1” and “unit #2” in the crash?

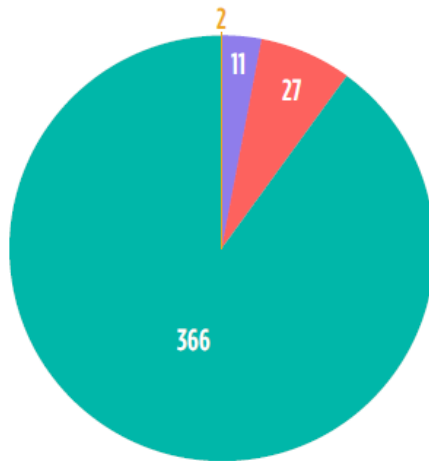
WHO WAS “UNIT 1” IN THE CRASH?

Mode: ● Driver ● Pedalcyclist ● Pedestrian



WHO WAS “UNIT 2” IN THE CRASH?

Mode: ● Driver ● Pedalcyclist ● Pedestrian ● Driverless

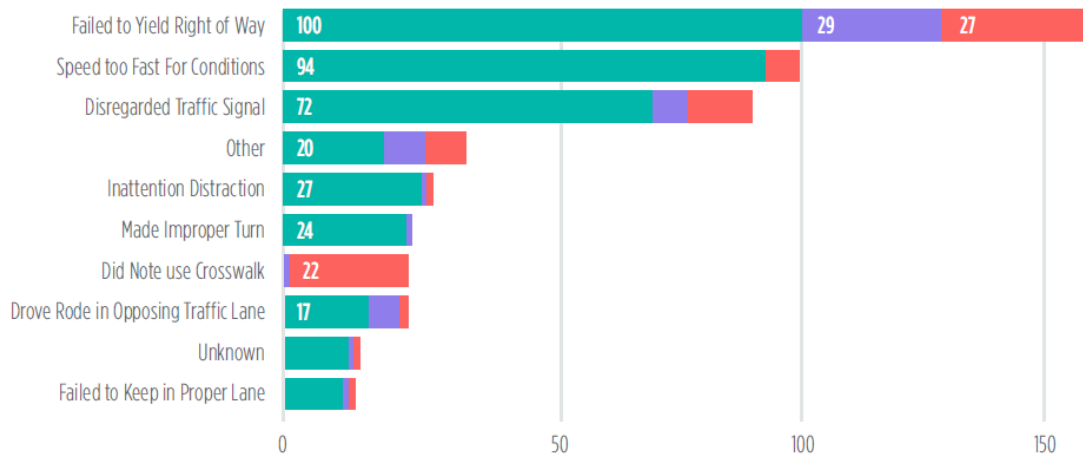




What was the “unit #1” “action” in the crash?

FACTORS IN CRASHES WITH FATAL OR SERIOUS INJURIES (BY PARTY 'A')

Mode: ● Driver ● Pedalcyclist ● Pedestrian

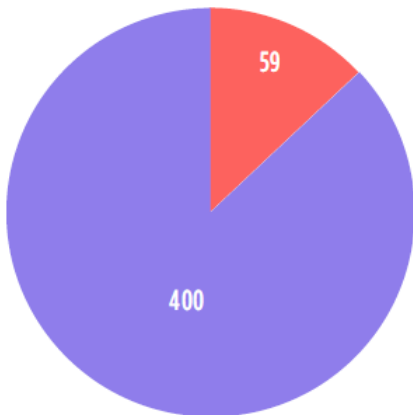




Was impairment a factor?

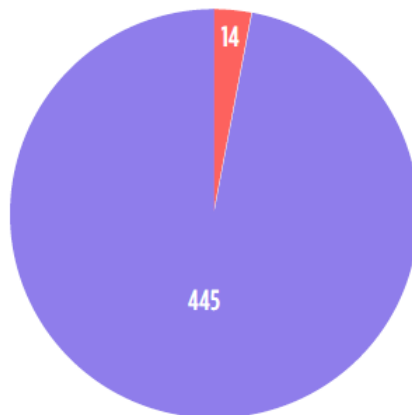
WAS ALCOHOL A FACTOR?

Mode: ● No Apparent Influence ● Alcohol



WERE DRUGS A FACTOR?

Mode: ● No Apparent Influence ● Drugs

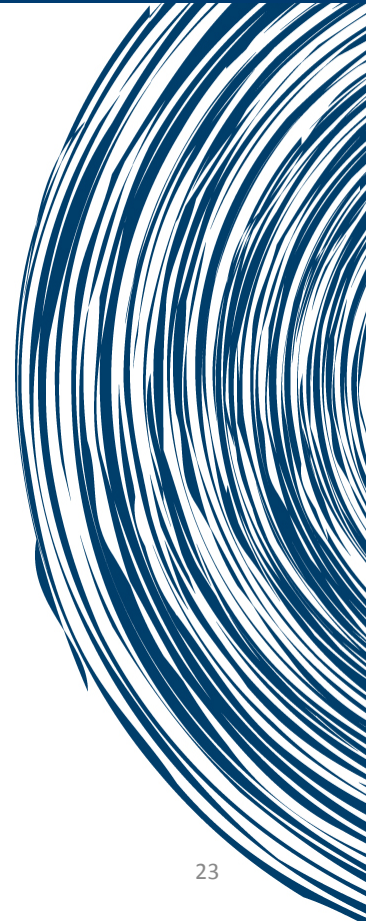


A Vision Zero Action Plan



Vision Zero Tempe's Action Areas:

-  Intersections
-  Bicycles & Scooters
-  Pedestrians
-  Nighttime
-  Impairment
-  Inexperienced and Very Experienced Road Users
-  Distraction
-  “General”



Draft Strategies

General

1. Provide residents with an annual Vision Zero report.
2. Invest in neighborhood traffic calming.
3. Continue to analyze safety data annually to identify high severity crash areas and implement countermeasures at prioritized locations.
4. Initiate a citywide speed limit evaluation with the safe systems approach to incorporate other critical factors, such as crash history and the safety of people walking and bicycling.
5. Identify partners to develop and market training for transportation safety that targets all road users and all ages.
6. Warn and educate road users of high severity crash areas.
7. Initiate a multidepartment Fatal Crash Review Committee.
8. Improve data sharing between the Transportation Division and Police Department.
9. Distribute educational “top 10” Vision Zero education door hangers to ASU dorms and multifamily residential units.
10. Obtain and deploy mobile VMS boards to educate drivers and support Police Department efforts.



Draft Strategies

Intersections

1. Identify intersections for low cost pedestrian and bicyclist safety countermeasures (e.g., pavement markings, signal timing, signs).
2. Identify intersections that could benefit from converting to protected left turns.
3. Implement leading pedestrian intervals at select intersections.
4. Proactively identify locations where sight visibility is obstructed.
5. Conduct regular red light enforcement and education campaigns.



Bicycles & Scooters

1. Identify locations that could benefit from positive guidance to bicyclists and drivers including bike lanes, sharrows and signs.
2. Coordinate bicycle and pedestrian expert reviews of project designs.
3. Identify locations that could benefit from new and/or improved bicycle detection.



Pedestrians

1. Develop guidelines for installation of high visibility crosswalks (May include shared use path crossings and school areas).
2. Identify corridors that could benefit from the installation of raised medians and pedestrian refuge islands.
3. Identify locations with excessive pedestrian delay at signalized intersections and examine opportunities to improve pedestrian wait time.
4. Identify locations that could benefit from grade separated pedestrian crossings.
5. Educate pedestrians that they can be the victims of distraction and provide smart behaviors to adopt.
6. Initiate an annual or biennial comprehensive bicycle/pedestrian/scooter count program.



Night Time

1. Identify non-signalized marked crosswalks that could benefit from additional lighting.
2. Analyze lighting conditions at high crash locations and improve deficiencies.
3. Develop implementation plan for conversion of all city street lighting to LED (4,000K for all collectors and arterials).
✓ 75% complete on residential streetlight conversions
4. Provide free bicycle safety giveaways to improve visibility via community outreach events.



Impairment

1. Promote safe driving options, including transit, rideshare and taxis.
2. Provide visible pick-up/drop-off zones and enhance the convenience of rideshare and taxis in the downtown and during special events.
3. Continue to and expand engagement with businesses and establishments that serve/provide alcohol and drugs (pharmacies, medical marijuana dispensaries) to be an increased part of the solution.



Inexperienced and Very Experienced Road Users

1. Promote alternative mobility options (like rideshare) to older drivers and adults caring for their parents or other relatives that are older drivers.
2. Improve driver compliance by converting “24 hour” 35 MPH high school zones to time-of-day with flashing warning lights.
3. Develop guidelines for installation of additional pavement markings and signs to enhance school zones.
4. Evaluate transportation needs of older residents to ensure mobility as they age in place.



Distraction

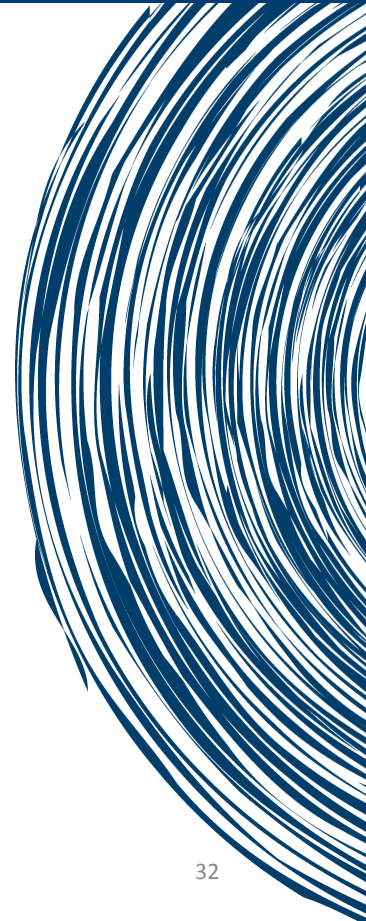
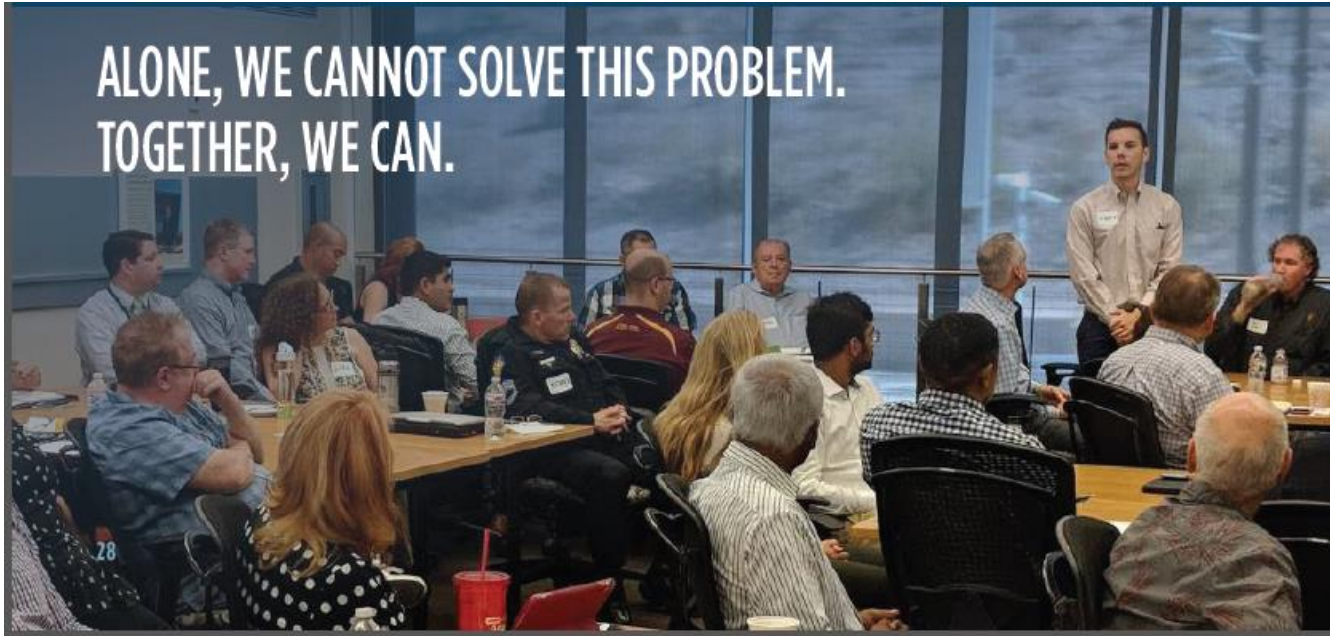
1. Advocate for the Arizona state legislature to adopt legislation that bans texting while driving and is enforceable as a primary offense.
2. Modify city code to ban the use of electronic devices while driving.

✓ 2/28/19



Next Steps

- Please provide feedback (in person or online)!





Vision Zero Network:

<https://visionzeronetwork.org/>



City of Tempe Vision Zero:

<https://www.tempe.gov/government/public-works/transportation/vision-zero>

Julian Dresang, PE, PTOE

City Traffic Engineer

Julian_dresang@tempe.gov

(480) 350-8025

