Vision Zero - Reducing Fatal and Serious Injury Crashes to Zero

Public Meeting
March 23, 2019
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This is unacceptable! This is a public health crisis!
Arizona pedestrians among nation's most likely to die in fatal crash
Robert Gunstman, The Republic | azcentral.com
Published 5:24 p.m. MT Dec. 5, 2017 | Updated 8:24 a.m. MT Dec. 6, 2017

2-vehicle crash kills one person in Tempe
By: FOX 10 Staff
POSTED: JUL 31 2017 10:39PM MST
UPDATED: AUG 01 2017 04:35AM MST

Two killed in Tempe crash, police say
Alison Eisinger, 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: Lisa Valentinie
POSTED: 11:00 PM, Nov 14, 2017

ASU doctoral student, renowned pianist Xiaoying Wen killed in Tempe crash
By: Clayton Klapper
POSTED: 6:30 PM, Nov 21, 2017
WE MUST

DO BETTER
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
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.
January 11, 2018:
- Staff presented to the Mayor and Council

February 8, 2018:
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
What types of crashes are happening?

NOTE: “OTHER” Includes nearly all Bicycle & Pedestrian crashes
What are the lighting conditions?

**LIGHTING CONDITIONS DURING CRASHES**

- Daylight
- Dark Lit
- Dusk
- Dawn
- Dark Unknown
- Dark
Who were “unit #1” and “unit #2 in the crash? 

**WHO WAS “UNIT 1” IN THE CRASH?**

- Mode: Driver
- Pedalcyclist
- Pedestrian

- 39
- 43
- 377

**WHO WAS “UNIT 2” IN THE CRASH?**

- Mode: Driver
- Pedalcyclist
- Pedestrian
- Driverless

- 2
- 11
- 27
- 366
What was the “unit #1” “action” in the crash?

Factors in crashes with fatal or serious injuries (by party ‘A’)

- Failed to Yield Right of Way: 100
- Speed too Fast For Conditions: 94
- Disregarded Traffic Signal: 72
- Other: 20
- Inattention Distraction: 27
- Made Improper Turn: 24
- Did Not use Crosswalk: 22
- Drove Rode in Opposing Traffic Lane: 17
- Unknown: 6
- Failed to Keep in Proper Lane: 6

Mode: Driver, Pedestrian, Motorist
Was impairment a factor?

**Was Alcohol a Factor?**
- Mode: No Apparent Influence
  - 59
- Alcohol
  - 400

**Were Drugs a Factor?**
- Mode: No Apparent Influence
  - 14
- Drugs
  - 445
Vision Zero Tempe’s Action Areas:

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

4. Provide free bicycle safety giveaways to improve visibility via community outreach events.

✓ 75% complete on residential streetlight conversions
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)!

ALONE, WE CANNOT SOLVE THIS PROBLEM.
TOGETHER, WE CAN.
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