



Vision Zero - Reducing Fatal and Serious Injury Crashes to Zero

**Stakeholder Workshop
January 24, 2019**

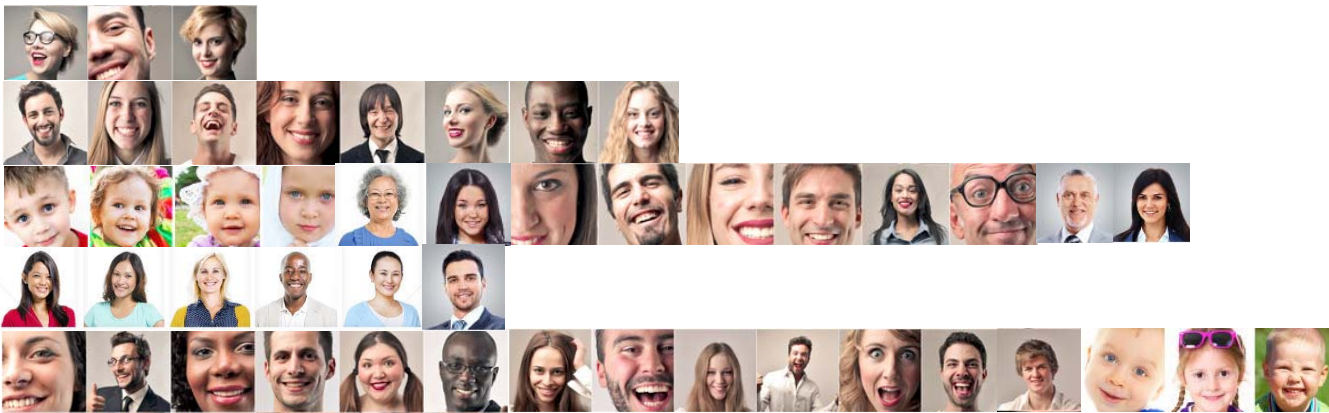


Why are we here?



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.

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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!

The Reality



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

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WE MUST DO BETTER

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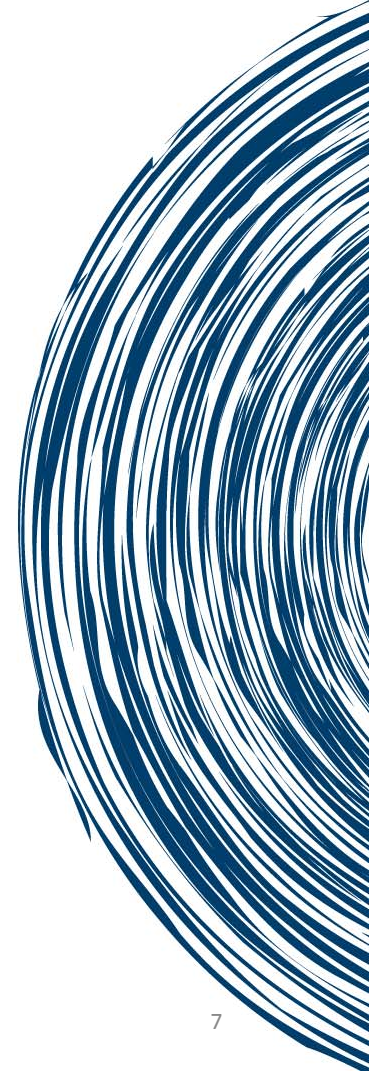
Vision Zero

- 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.

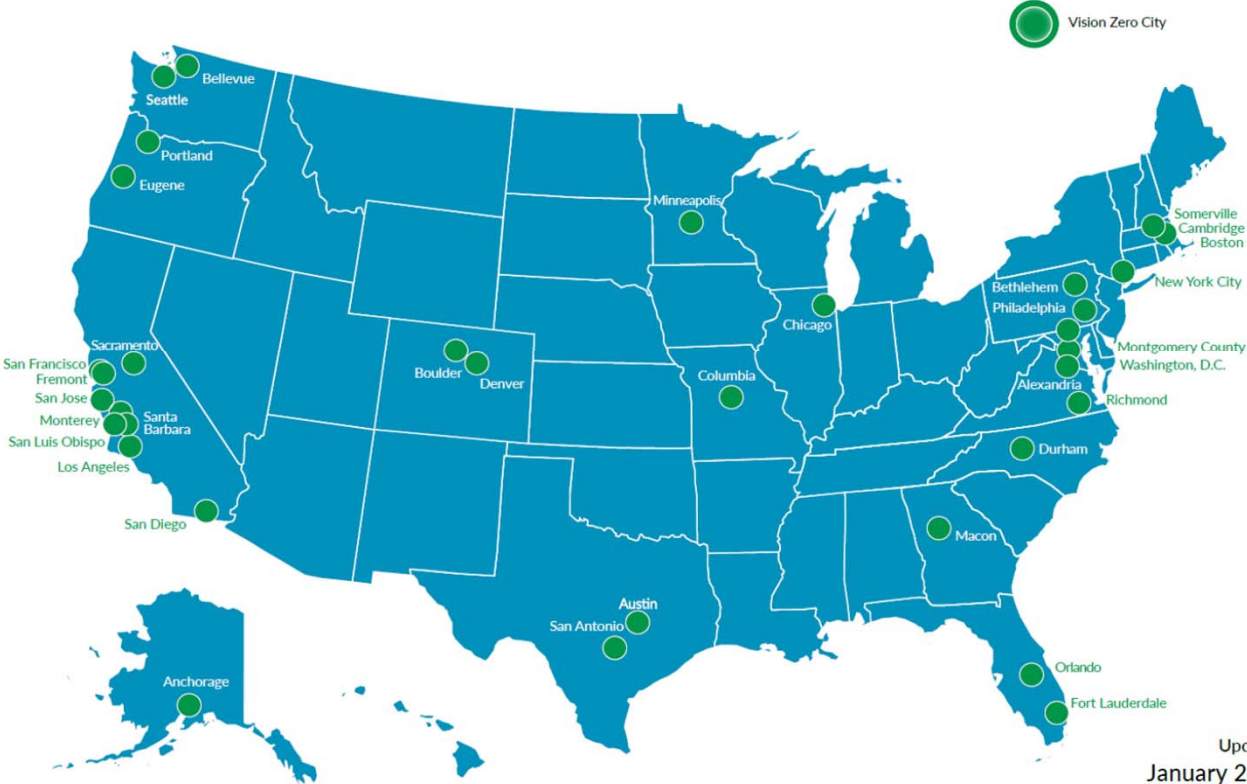


Vision Zero

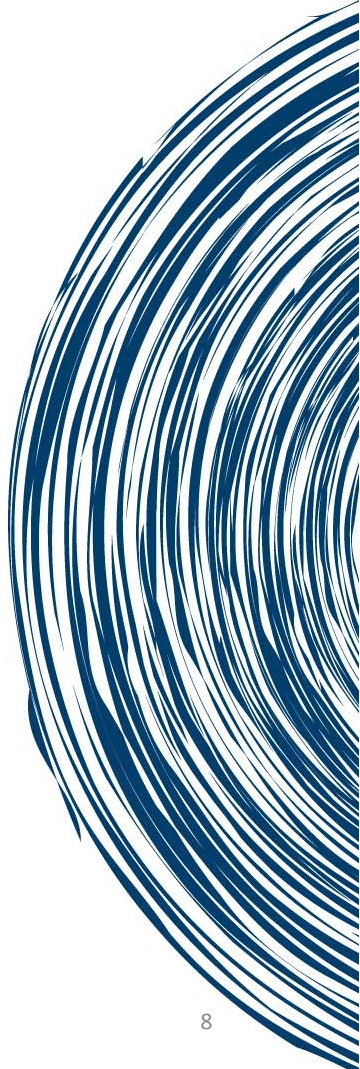
- It's a traffic safety policy that takes an **ethical approach** toward achieving safety for **all road users**.
- Key principles:
 - Traffic deaths and severe injuries are **preventable**.
 - Crashes will occur, but **severity** can be reduced.
 - Safety is **everybody's** responsibility, particularly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



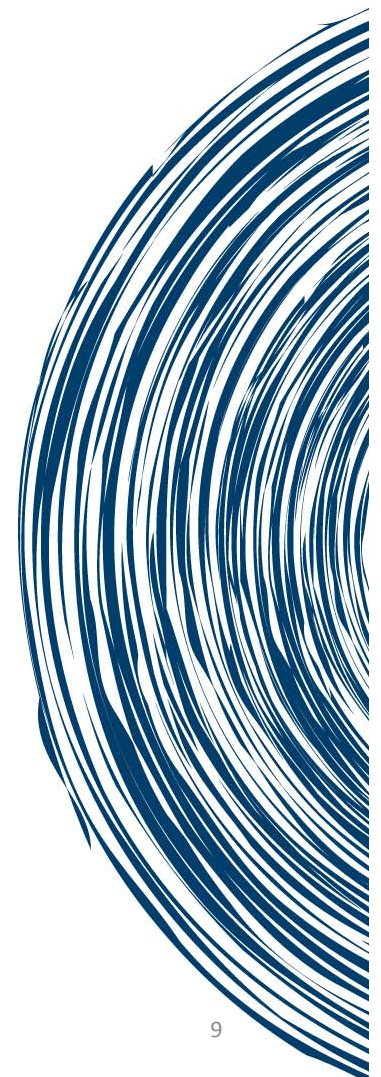
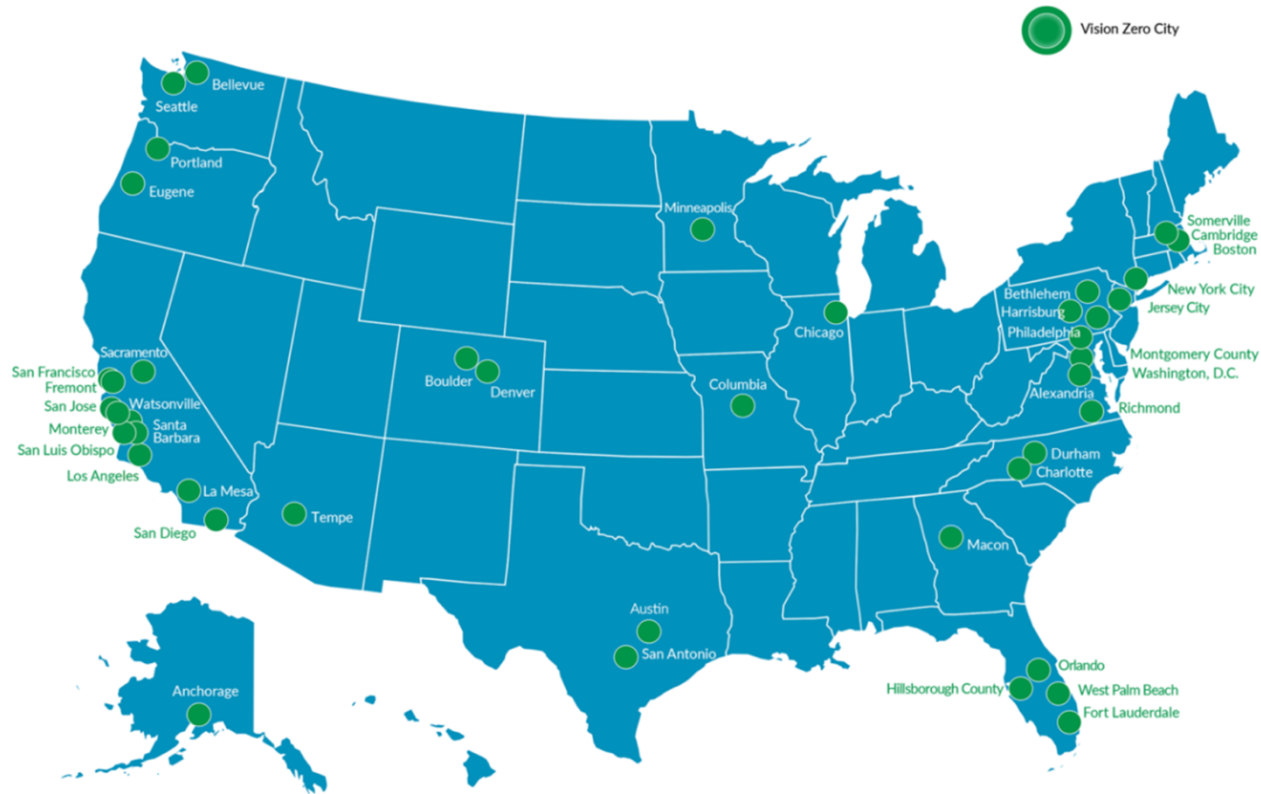
Vision Zero Cities



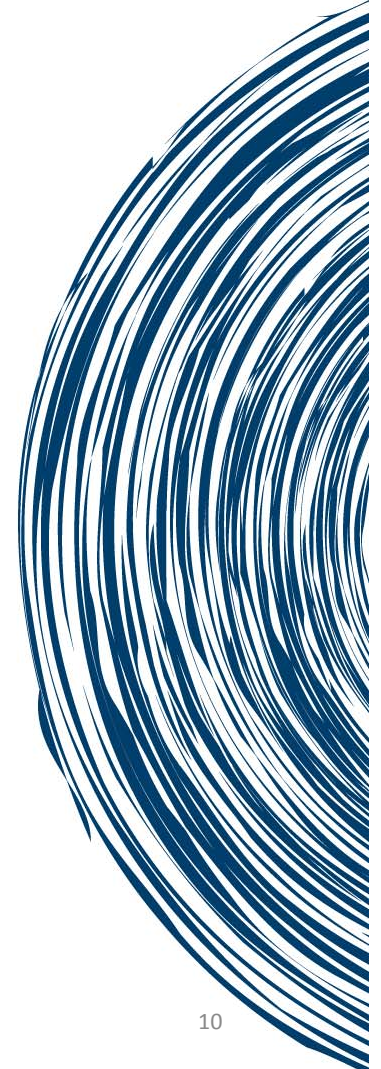
Updated
January 2018



Vision Zero Cities

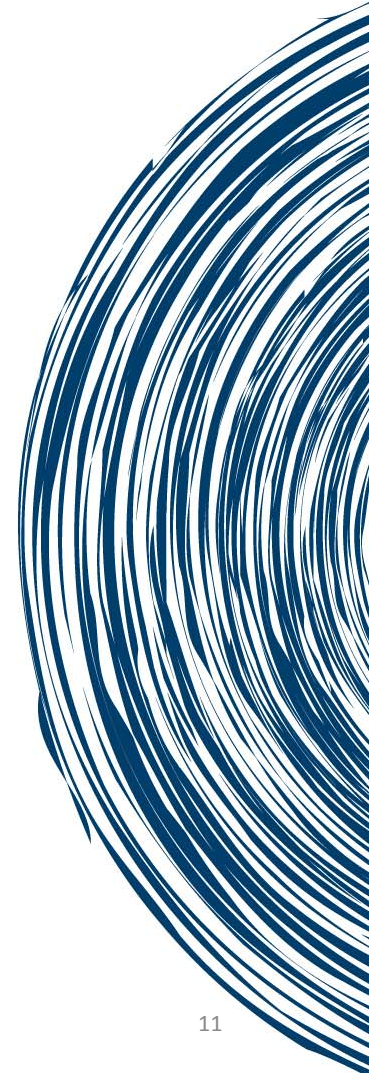


Vision Zero Cities



Strategies

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



A Clear Goal of Eliminating Traffic Fatalities and Severe Injuries



- New 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.

RESOLUTION NO. R2018.13

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA AUTHORIZING THE MAYOR TO ADOPT THE VISION ZERO FRAMEWORK ON BEHALF OF THE CITY COUNCIL.

WHEREAS, Tempe aspires to reduce the number of fatal and serious injury crashes on its streets to zero;

WHEREAS, Vision Zero is a traffic safety policy that takes an ethical approach toward achieving safety for all road users;

WHEREAS, in the past six years more than 60 people have lost their lives and more than 400 people were seriously injured on Tempe streets;

WHEREAS, traffic related deaths and serious injuries are preventable;

WHEREAS, the severity of motor vehicle related crashes can be reduced;

WHEREAS, transportation safety is everybody's responsibility;

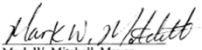
WHEREAS, City departments including Public Works, Police and Fire Medical & Rescue are actively employing programs to improve safety and response time; and

WHEREAS, Vision Zero builds upon those existing programs with new strategies to help meet the Council's adopted performance measure to achieve a reduction in the number of fatal and serious injury crashes to zero.


NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA as follows:

That the Mayor is authorized to sign a commitment to the Vision Zero framework on behalf of the City Council.


PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, this 8th day of February, 2018.


Mark W. Mitchell, Mayor

ATTEST:


Brigitta M. Kuiper, City Clerk

APPROVED AS TO FORM:

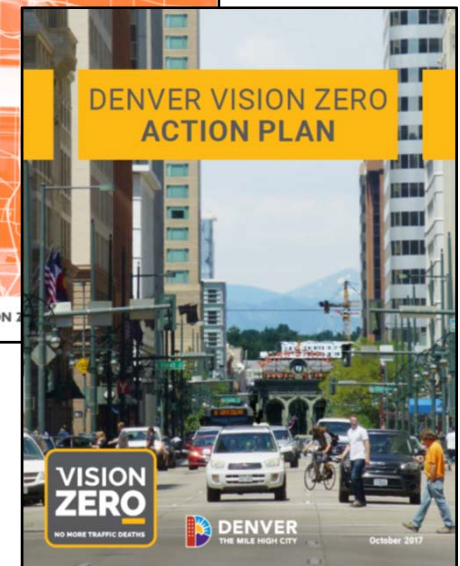
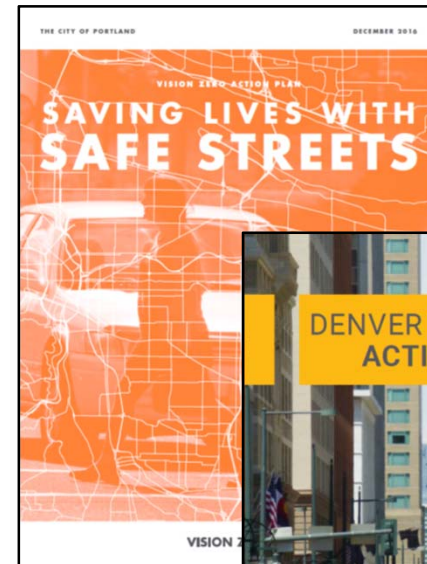

Judith R. Baumann, City Attorney

A Vision Zero Action Plan



● We are on Schedule!

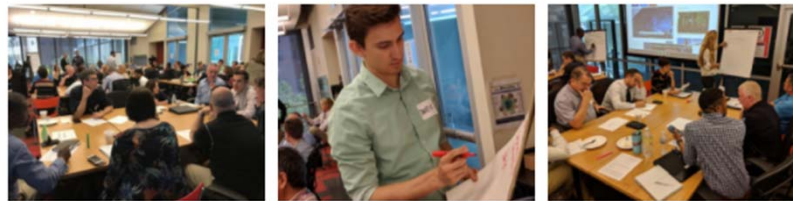
- June 19, 2018: Visioning Workshop
- August & October 2018: Working Group Meetings – Identify Goals & Strategies
- January 2019: Follow-Up Workshop – Provide Input on Goals & Strategies
- February/March 2019: Produce a “Draft” Action Plan
- March 2019: Share “Draft” Action Plan (Public Meetings)
- April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





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

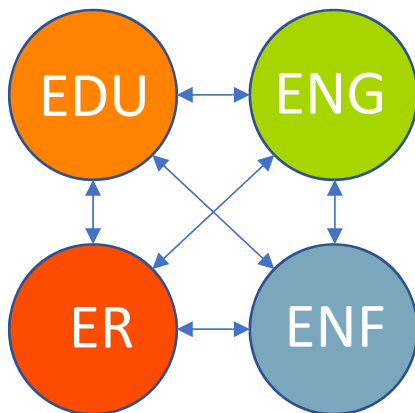


What has happened since our Visioning Workshop?

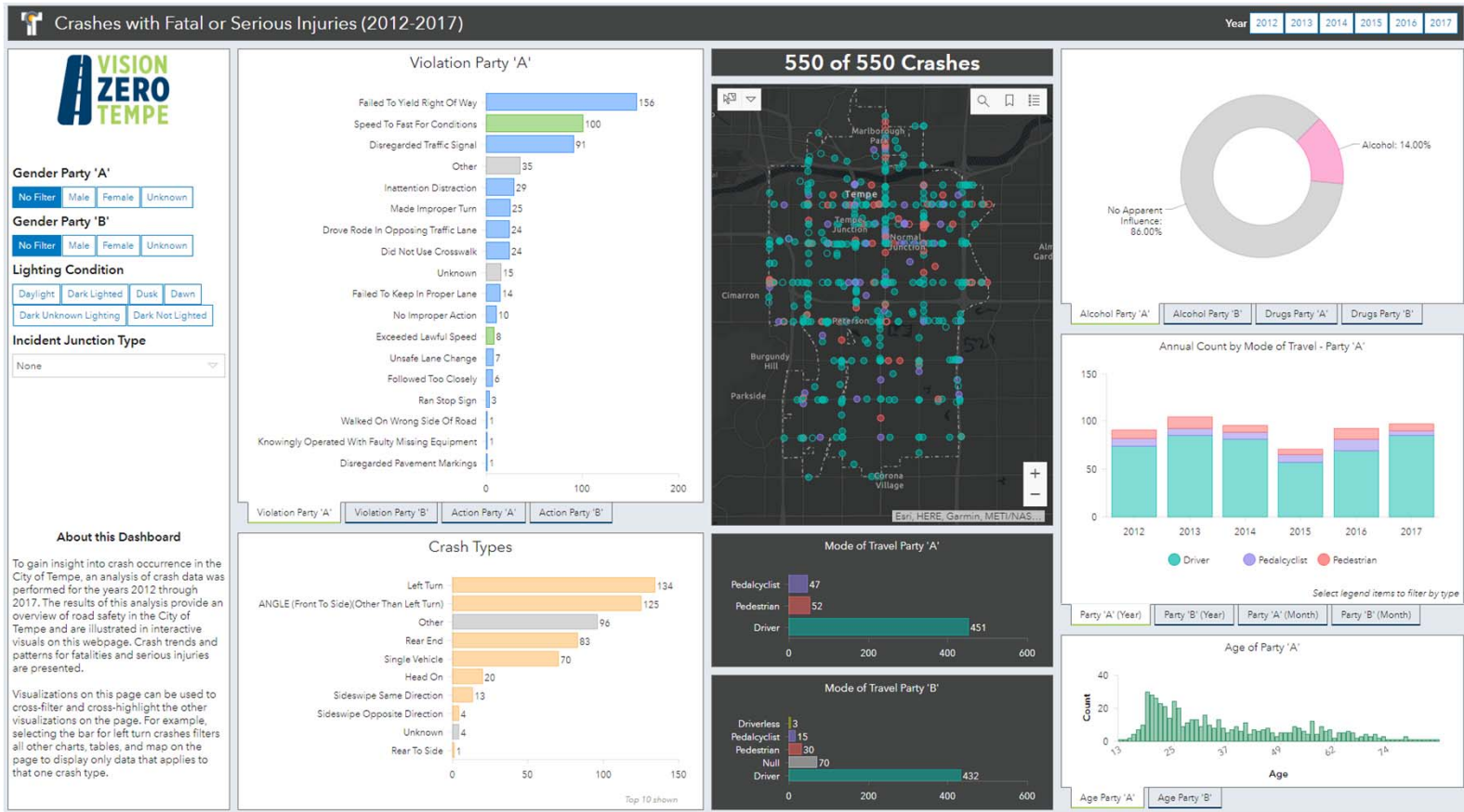


Stakeholder Group Meetings:

- Education (08/13 & 10/16)
- Engineering (08/27 & 10/18)
- Emergency Response/Enforcement (08/28 & 10/30)



We looked at data...





What types of crashes are happening?

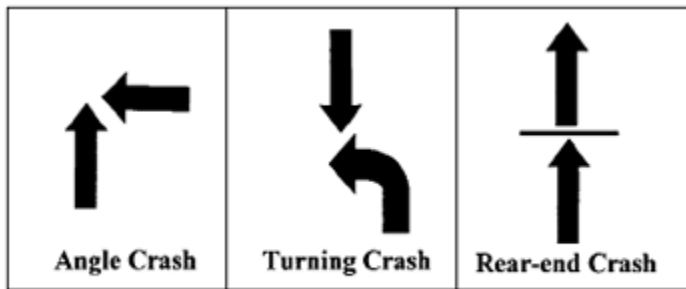


Figure 2-2. Common Crash Types Associated with Red-Light Running.

Type	#
ANGLE	95
HEAD ON	17
LEFT-TURN	114
OTHER	91
REAR END	68
REAR END TO SIDE	1
SIDESWIPE OPP DIR	3
SIDESWIPE SAME DIR	13
SINGLE VEHICLE	53
UNKNOWN	4

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



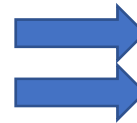
What are the lighting conditions when crashes are happening?



Light	#
DARK LIGHTED	136
DARK	2
DARK UNKNOWN	5
DAWN	5
DAYLIGHT	297
DUSK	14

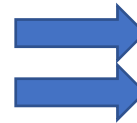


Who was “unit #1” in the crash?



Unit #1	#
DRIVER	377
PEDACYCLIST	39
PEDESTRIAN	43

Who was “unit #2” in the crash?



Unit #2	#
DRIVER	366
DRIVERLESS	2
PEDACYCLIST	11
PEDESTRIAN	27



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



Unit #1 Action	#
AVOIDING VEH/OBJECT/PERSON	5
BACKING	1
CHANGING LANES	16
CROSSING ROAD	52
GOING STRAIGHT AHEAD	200
MAKING LEFT TURN	122
MAKING RIGHT TURN	20
MAKING U-TURN	11
NEGOTIATING A CURVE	4
OTHER	7
SLOWING IN TRAFFIC	6
UNKNOWN	13
WALKING AGAINST TRAFFIC	2



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



Unit #1 Violation	
DID NOT USE X-WALK	20
DISREGARDED PAVEMENT MARKINGS	1
DISREGARDED TRAFFIC SIGNAL	75
DROVE/RODE IN OPPOSING LANE	21
EXCEEDED LAWFUL SPEED	7
FAILED TO KEEP IN PROPER LANE	11
FAILED TO YIELD ROW	146
FOLLOWED TOO CLOSELY	6
INATTENTION DISTRACTION	17
KNOWINGLY OPERATED MISSING EQUIP	1
MADE IMPROPER TURN	15
NO IMPROPER ACTION	9
OTHER	26
RAN STOP SIGN	3
SPEED TOO FAST FOR CONDITIONS	82
UNKNOWN	11
UNSAFE LANE CHANGE	7
WALKED ON WRONG SIDE OF ROAD	1



Was alcohol a factor?



Alcohol	#
ALCOHOL	59
NO APPARENT INFLUENCE	400

Were drugs a factor?



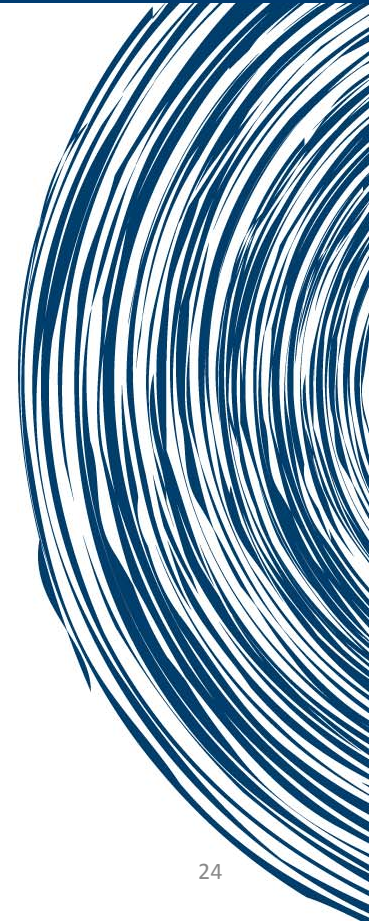
Drugs	#
DRUGS	14
NO APPARENT INFLUENCE	445

A Vision Zero Action Plan



● Tempe's Action Plan Will Target:

1. Intersections
2. Bicycles & Scooters
3. Pedestrians
4. Night Time
5. Impairment
6. Inexperienced and Very Experienced Road Users
7. Distraction
8. "General"



A Vision Zero Action Plan



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1. Intersections
 2. Bicycles & Scooters
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 4. Night Time
 5. Impairment
 6. Inexperienced and Very Experienced Road Users
 7. Distraction
 8. "General"
- Strategy #1
- Strategy #2
- Strategy #3
-
- ```
graph LR; I[Intersections] --> S1[Strategy #1]; B[Bicycles & Scooters] --> S2[Strategy #2]; P[Pedestrians] --> S3[Strategy #3];
```



# Guidelines We Used while Identifying Strategies

- Use crash-related data to target road users.
- Have a high return on investment.
- Be able to identify a champion.
- Be able to start before 2020.
- Not be constrained by County, State, or Federal processes/regulations.



# Narrowing Down the Strategies

- Intersections = 6
- Bicycles & Scooters = 7
- Pedestrians = 6
- Night Time = 7
- Impairment = 4
- Inexperienced and Very Experienced Road Users = 8
- Distraction = 4
- “General” = 15

## Narrowing Down the Strategies

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**57!!!**



**A** VISION  
**ZERO**  
TEMPE  
**Strategies**

## Narrowing Down the Strategies

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- Pedestrians = 6
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**57!!!**

**GOAL =**

**30(ish)**



**VISION  
ZERO  
TEMPE  
Strategies**



# Narrowing Down the Strategies

## ● Dot Polling Exercise:

- Each participant has been provided with 30 sticker dots.
- Round #1:
  - Place three (3) dots per board (3 dots x 9 boards = 27 dots) next to strategies that you believe will best help us to reach our Vision Zero goals.
  - Place only one (1) dot per strategy.
- Round #2:
  - Place three (3) remaining “power” dots however you like.

- NOTE: Strategies that are not included in the initial Action Plan will still be kept for future consideration based on available funding and resources.

# Next Steps

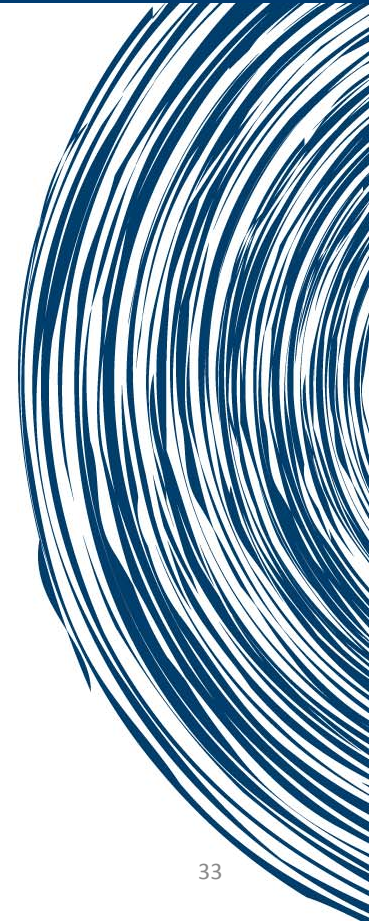
- In March we will share the “draft” Action Plan
  - Posted on our website (we will e-mail link)
  - Public Meetings:
    - March 23 (Saturday) @ 9:00am
    - March 27 (Wednesday) @ 6:00pm.
  - Please provide input and feedback (in-person or online)!

## Next Steps

- Continue to educate others about Vision Zero!
  - September 14, 2018: American Society of Civil Engineers (ASCE) Arizona Section Conference
  - October 22, 2018: Arizona State University Class
  - November 13, 2018: American Society of Highway Engineers (ASHE) monthly meeting
  - December 12, 2018: Arizona Alliance for Livable Communities
  - February 28, 2018: Institute of Transportation Engineers (ITE)/International Municipal Signal Association (IMSA) Annual Conference
  - April 2019: Arizona Roads and Streets Conference

# Thank you!!!

- Thank you for your continued participation!
- Special thank you to my “steering committee” team:
  - Laura Kajfez
  - TaiAnna Yee
  - Lt. James Peterson
  - Stephanie Deitrick
  - Yung Koprowski
  - Vanessa Spartan



# Resources



Vision Zero Network:

<https://visionzeronetwork.org/>



City of Tempe Vision Zero:

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

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