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 addition more than 400 people were seriously injured.

This is unacceptable! This is a public health crisis!
2-vehicle crash kills one person in Tempe

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

Woman on scooter killed in Tempe crash involving semitruck

Tempe police investigating deadly rollover crash near Kyrene/Baseline roads

Two killed in Tempe crash, police say

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

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

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

February 8, 2018:
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?

<table>
<thead>
<tr>
<th>Type</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANGLE</td>
<td>95</td>
</tr>
<tr>
<td>HEAD ON</td>
<td>17</td>
</tr>
<tr>
<td>LEFT-TURN</td>
<td>114</td>
</tr>
<tr>
<td>OTHER</td>
<td>91</td>
</tr>
<tr>
<td>REAR END</td>
<td>68</td>
</tr>
<tr>
<td>REAR END TO SIDE</td>
<td>1</td>
</tr>
<tr>
<td>SIDESWIPE OPP DIR</td>
<td>3</td>
</tr>
<tr>
<td>SIDESWIPE SAME DIR</td>
<td>13</td>
</tr>
<tr>
<td>SINGLE VEHICLE</td>
<td>53</td>
</tr>
<tr>
<td>UNKNOWN</td>
<td>4</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Light</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>DARK LIGHTED</td>
<td>136</td>
</tr>
<tr>
<td>DARK</td>
<td>2</td>
</tr>
<tr>
<td>DARK UNKNOWN</td>
<td>5</td>
</tr>
<tr>
<td>DAWN</td>
<td>5</td>
</tr>
<tr>
<td>DAYLIGHT</td>
<td>297</td>
</tr>
<tr>
<td>DUSK</td>
<td>14</td>
</tr>
</tbody>
</table>
Who was “unit #1” in the crash?

<table>
<thead>
<tr>
<th>Unit #1</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRIVER</td>
<td>377</td>
</tr>
<tr>
<td>PEDACYCLIST</td>
<td>39</td>
</tr>
<tr>
<td>PEDESTRIAN</td>
<td>43</td>
</tr>
</tbody>
</table>

Who was “unit #2” in the crash?

<table>
<thead>
<tr>
<th>Unit #2</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRIVER</td>
<td>366</td>
</tr>
<tr>
<td>DRIVERLESS</td>
<td>2</td>
</tr>
<tr>
<td>PEDACYCLIST</td>
<td>11</td>
</tr>
<tr>
<td>PEDESTRIAN</td>
<td>27</td>
</tr>
</tbody>
</table>
What was the “unit #1” “action” in the crash?

<table>
<thead>
<tr>
<th>Unit #1 Action</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVOIDING VEH/OBJECT/PERSON</td>
<td>5</td>
</tr>
<tr>
<td>BACKING</td>
<td>1</td>
</tr>
<tr>
<td>CHANGING LANES</td>
<td>16</td>
</tr>
<tr>
<td>CROSSING ROAD</td>
<td>52</td>
</tr>
<tr>
<td>GOING STRAIGHT AHEAD</td>
<td>200</td>
</tr>
<tr>
<td>MAKING LEFT TURN</td>
<td>122</td>
</tr>
<tr>
<td>MAKING RIGHT TURN</td>
<td>20</td>
</tr>
<tr>
<td>MAKING U-TURN</td>
<td>11</td>
</tr>
<tr>
<td>NEGOTIATING A CURVE</td>
<td>4</td>
</tr>
<tr>
<td>OTHER</td>
<td>7</td>
</tr>
<tr>
<td>SLOWING IN TRAFFIC</td>
<td>6</td>
</tr>
<tr>
<td>UNKNOWN</td>
<td>13</td>
</tr>
<tr>
<td>WALKING AGAINST TRAFFIC</td>
<td>2</td>
</tr>
</tbody>
</table>
What was the “unit #1” “action” in the crash?

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

<table>
<thead>
<tr>
<th>Alcohol</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALCOHOL</td>
<td>59</td>
</tr>
<tr>
<td>NO APPARENT INFLUENCE</td>
<td>400</td>
</tr>
</tbody>
</table>

Were drugs a factor?

<table>
<thead>
<tr>
<th>Drugs</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRUGS</td>
<td>14</td>
</tr>
<tr>
<td>NO APPARENT INFLUENCE</td>
<td>445</td>
</tr>
</tbody>
</table>
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
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7. Distraction
8. “General”
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

- Intersections = 6
- Bicycles & Scooters = 7
- Pedestrians = 6
- Night Time = 7
- Impairment = 4
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- Distraction = 4
- “General” = 15

57!!!
Narrowing Down the Strategies

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

GOAL = \(57\text{!!!!}
30(ish)
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 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
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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