Performance-Based Planning for Safety in a Vision Zero World

AAMPO study area today

2 million residents
10,000 lane miles
50 million miles traveled daily
1,600+ roadway fatalities and serious injuries yearly
Five federal safety performance measures

1. Number of Fatalities
2. Rate of Fatalities
3. Number of Serious Injuries
4. Rate of Serious Injuries
5. Number of Non-motorized Fatalities and Serious Injuries

One of the **biggest challenges** AAMPO faced when setting safety targets was trying to reconcile the need to set data-driven targets in a “Vision Zero” world.
Who here is familiar with Vision Zero?

Who is from a region that has committed to Vision Zero?

Vision Zero is…

Vision Zero is a traffic safety approach that resolves to reduce traffic fatalities and serious injuries to zero

TRADITIONAL APPROACH
- Traffic deaths are INEVITABLE
- PERFECT human behavior
- Prevent COLLISIONS
- INDIVIDUAL responsibility
- Saving lives is EXPENSIVE

VS

VISION ZERO
- Traffic deaths are PREVENTABLE
- Integrate HUMAN FAILING in approach
- Prevent FATAL AND SEVERE CRASHES
- SYSTEMS approach
- Saving lives is NOT EXPENSIVE
San Antonio was first in Texas to adopt Vision Zero

September 2015

San Antonio was first in Texas to adopt Vision Zero

A Resolution in Support of the Vision Zero Initiative for the City of San Antonio and Other Communities Within the Region

WHEREAS, the Alamo Area Metropolitan Planning Organization (MPO) is responsible for a multi-jurisdictional transportation planning process and

WHEREAS, the MPO provides local direction for urban transportation planning and the allocation of Federal transportation funds to cities within the region; and

WHEREAS, San Antonio is experiencing the nation's greatest population-fueled growth and has been named a Pedestrian Safety Focus City by the Federal Highway Administration; and

WHEREAS, in 2012, the MPO adopted a Pedestrian Safety Action Plan to help address safety concerns for the region; and

WHEREAS, the safety of people walking, riding a bicycle, driving, or operating a motor vehicle is a core component of the Alamo Area; and

WHEREAS, the MPO’s ongoing development, testing, and implementation of transportation solutions from studies and plans, including the City of San Antonio Regional Transportation Plan and the Alamo Area Metropolitan Transportation Plan; and

WHEREAS, on September 16, 2015, the City of San Antonio endorsed a Vision Zero Initiative, which calls for:

- Diverting deaths and severe injuries from traffic crashes
- Ensuring pedestrian, bicycle, and transit accessibility and connectivity for local and regional needs
- Creating safer streets that are a priority in selection of transportation projects
- Implementing strategies and policies that emphasize transportation development
- Converting the options of transportation technology and the usage of data-driven decision making to encourage small investments in non-motorized travel

NOW, THEREFORE BE IT RESOLVED that the Alamo Area Metropolitan Planning Organization (MPO) strongly encourages all policies that support the implementation of the City of San Antonio’s Vision Zero initiative.

PASSED AND ADOPTED this 27th day of October, 2015.

Rita Lopez, Chair
Alamo Area Metropolitan Planning Organization
San Antonio was first in Texas to adopt Vision Zero
San Antonio was first in Texas to adopt Vision Zero

Our target-setting process

- Evaluate: Summer 2017
- Develop: Fall 2017 / Winter 2018
- Discuss: Ongoing (First federal assessment of state targets: March 2020)
Developing a target

AAMPO calculated a linear trend based on five years of crash data and projected it to 2022, the horizon year of Texas’ Strategic Highway Safety Plan.

Developing a target

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AAMPO

www.alamoareampo.org
Our target-setting process

- **Evaluate**
- **Develop**
- **Discuss**

**Ongoing**
(First federal assessment of state targets: March 2020)

**Summer 2017**

**Fall 2017 / Winter 2018**

Discussing scenarios

Staff developed scenarios initially considered by our Bicycle, Pedestrian and Technical Committees:

- **Vision Zero**
- **Return to 2018**
- **Statewide Trend**
- **Projection**

Projected Number of Fatalities in the Alamo Area MPO

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2029</th>
<th>2040</th>
</tr>
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<tr>
<td></td>
<td>272</td>
<td>518</td>
<td>470</td>
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<tr>
<td></td>
<td>274</td>
<td></td>
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</tr>
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</table>
Discussing scenarios

What we heard:
Focus on near-term projections for federal targets
Many committee members accepted the statewide target
Some members strived for more aggressive targets

Target scenarios

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>State Target for 2018</th>
<th>Committee Recommended Percent Reduction in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BMAC</td>
</tr>
<tr>
<td>Number of Fatalities</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Rate of Fatalities</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Number of Serious Injuries</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Rate of Serious Injuries</td>
<td>Maintain</td>
<td>Maintain</td>
</tr>
<tr>
<td>Number of Non-Motorized Fatalities &amp; Serious Injuries</td>
<td>0.4%</td>
<td>2.0%</td>
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</tbody>
</table>
Questions at the policy level

What is the region already doing?
What are other areas doing to improve?
Where are severe crashes happening?

Road diets help “right size” roadways and provide for safe multimodal travel

“Super 2” or passing lanes improve safety by allowing room to pass slower traffic on rural roads

Traffic calming techniques such as roundabouts, chicanes, bulb-outs, and speed tables reduce speeds

A lot!

Access management reduces conflict points through raised medians and driveway consolidation

Greenway trails, bike lanes, and multimodal infrastructure separate modes

Safety is considered through AAMPO’s project submittal, scoring, and funding process

Complete Streets and Vision Zero resolutions adopted locally emphasize safety

Engineering guidelines (i.e. AASHTO and NACTO) evolve roadway design
“A generation ago, driving in the United States was relatively safe.” Today, Americans travel on the most dangerous roads in the industrialized world.

-David Leonhardt, The New York Times

Evidence-based campaigns

What are other areas doing to improve?

Adapted from The New York Times

Source: Organisation for Economic Co-operation and Development

Deaths per billion vehicle miles traveled

2015 and 1990

0 5 10 15 20 25 30

United States
France
Israel
Australia
Germany
Canada
United Kingdom
Sweden

12.0
12.8
14.5
19.7
22.4
25.7
12.9
3.2
3.4
4.5
4.6
4.9
5.1
7.0

0 5 10 15 20 25 30

United States
France
Israel
Australia
Germany
Canada
United Kingdom
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12.0
12.8
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4.9
5.1
7.0

“A generation ago, driving in the United States was relatively safe.” Today, Americans travel on the most dangerous roads in the industrialized world.


Deaths per billion vehicle miles traveled
2015 and 1990

<table>
<thead>
<tr>
<th>Country</th>
<th>1990</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td>United States</td>
<td>7.0</td>
<td>12.9</td>
</tr>
<tr>
<td>France</td>
<td>5.9</td>
<td>12.4</td>
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<tr>
<td>Israel</td>
<td>5.1</td>
<td>12.4</td>
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<tr>
<td>Germany</td>
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<tr>
<td>Canada</td>
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<td>14.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3.4</td>
<td>12.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.2</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Source: Organisation for Economic Co-operation and Development
New York City

2017 was our safest year on record! The streets of New York City have been the safest they’ve ever been since 1910.

- Overall fatalities down 28%
- Pedestrian deaths down 45%

Slowing speeds *
Speed camera programs *

* Would need changes to current state law

Bill de Blasio @NYCMayor - 23h
Queen Blvd alone has seen a major turnaround. In the last three years, we’ve lost no cyclists or pedestrians on what used to be called the “Boulevard of Death.” In the years to come we’ll keep working to redesign streets and intersections to make the city safe for everyone.

Bill de Blasio @NYCMayor - 23h
They said our vision for zero traffic-related deaths was too audacious. But we’ve proven that for New York City’s pedestrians, cyclists, and motorists, Vision Zero is the only way forward. We will keep working until we make our vision a reality.
Where are severe crashes happening?

Fatal crash
Serious injury crash

2014-2016 Total Crashes

Source: Alamo Area MPO analysis of TxDOT CRIS (12/15/17)
Target-setting methodology

In January 2018, the AAMPO Transportation Policy Board approved targets in line with the statewide targets.

**0.4% reduction**
from expected increases

**Maintain**
expected decrease in Serious Injury Rate

Our target-setting process

- **Ongoing** (First federal assessment of state targets: March 2020)
- **Summer 2017**
- **Fall 2017 / Winter 2018**

Evaluate

Discuss

Develop
Lesson learned:
In a region committed to Vision Zero, setting safety targets will be a springboard for discussion

The Vision Zero Network published six recommendations for MPO leadership and staff

https://visionzeronetwork.org/mpo_safety/
Next steps:
Proactively share resources with partners.
Host trainings, if needed
Next steps:
Conduct regional crash analyses.
Next steps:
Publicize commitment to safety and equity.
Offer trainings.

First Vision Zero Summit in the region
Thank you!
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