



Denver Vision Zero

Current Program and Beyond

Denver City Council
Safety, Housing, Education & Homelessness Committee
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Denver Public Works Transportation Planning and Design



WHAT IS VISION ZERO?

Nationwide in 2017 year, more than 37,000 people were killed travelling on public streets.

Last year (2018)

In Colorado 629 people were killed travelling on public streets.

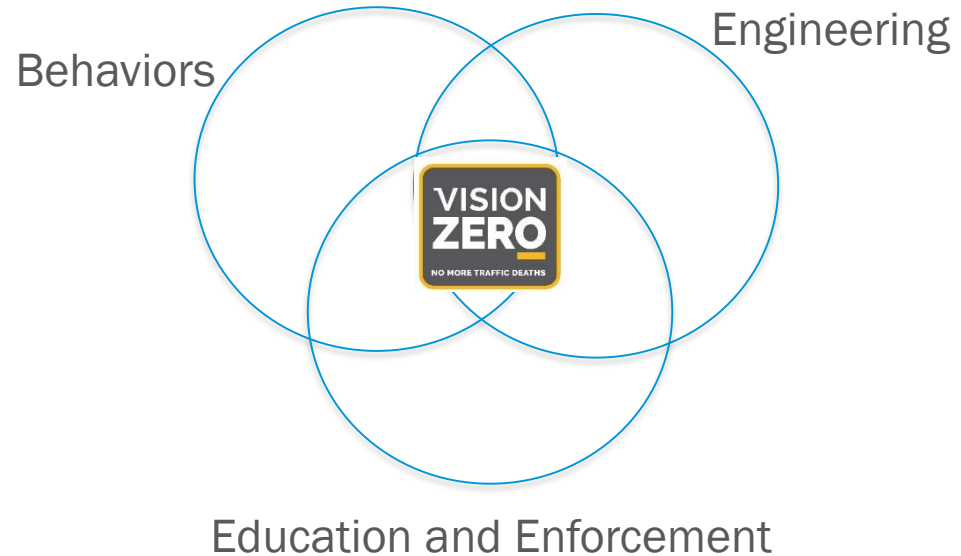
In Denver 59 people were killed travelling on our streets.

Vision Zero views traffic fatalities as
unacceptable and *preventable*

Measurable goals and strategies

Data-driven, systems-level, transparent &
multidisciplinary

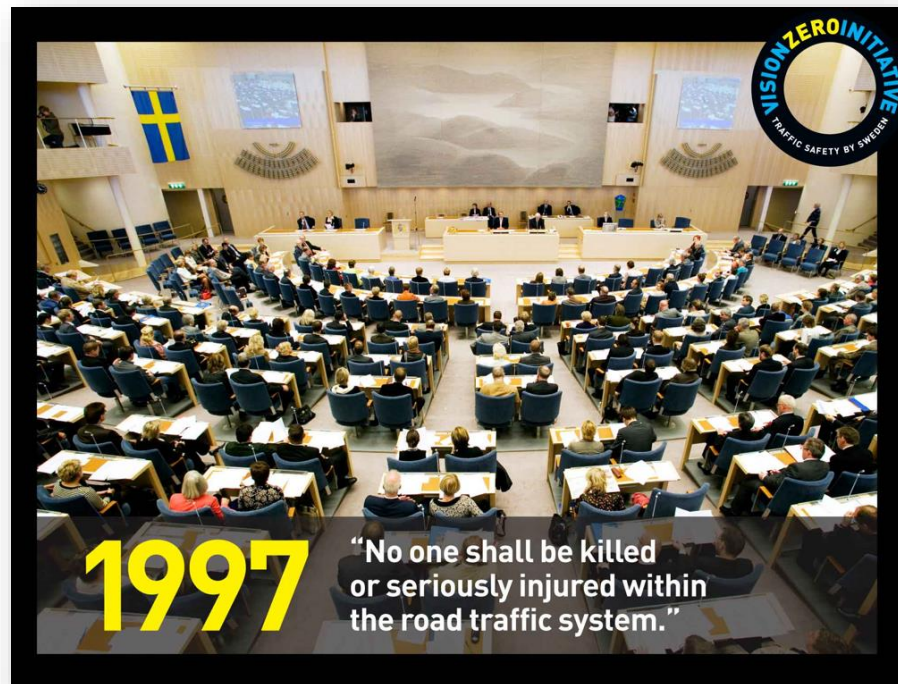
Focus on **equity**



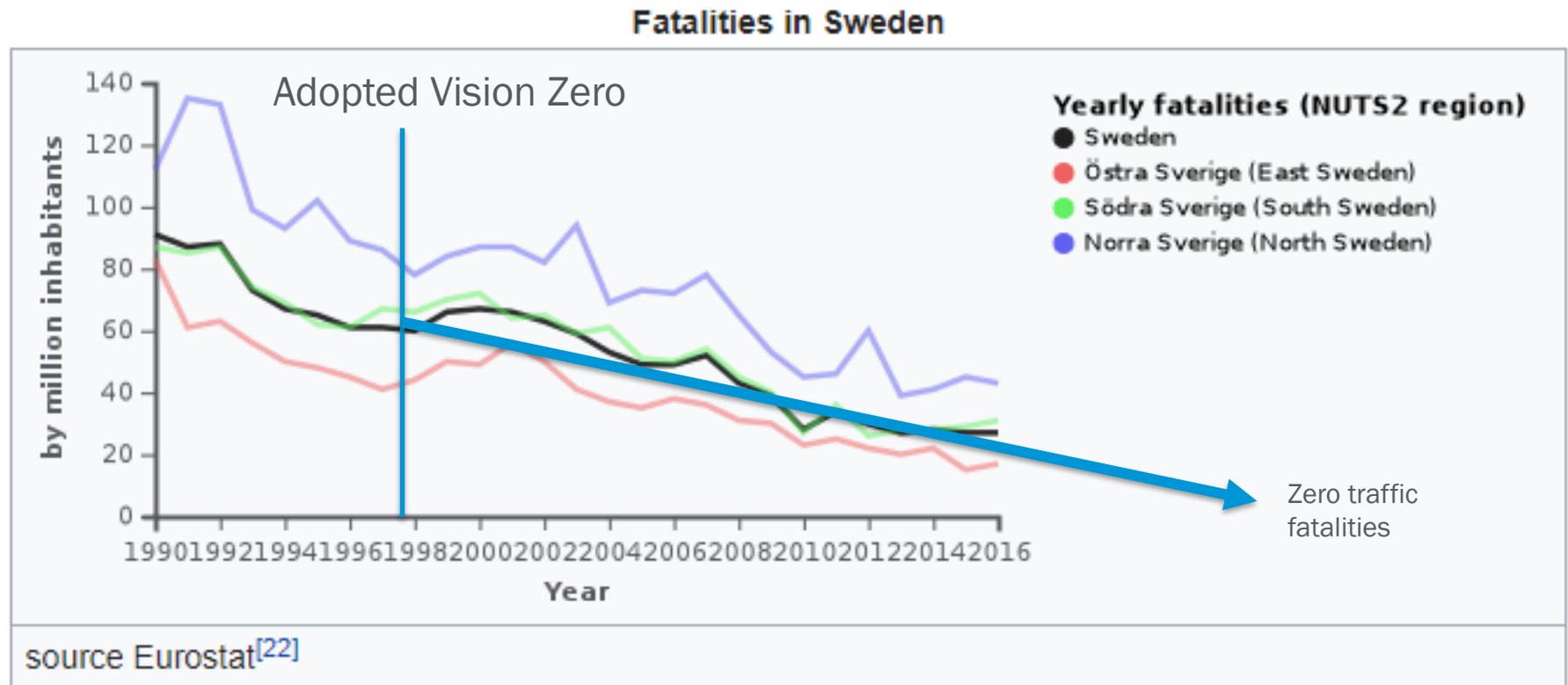
Recognize that people will make mistakes and build a transportation system that minimizes the consequences of human error.

Speed is fundamental to reducing crash frequency and severity.

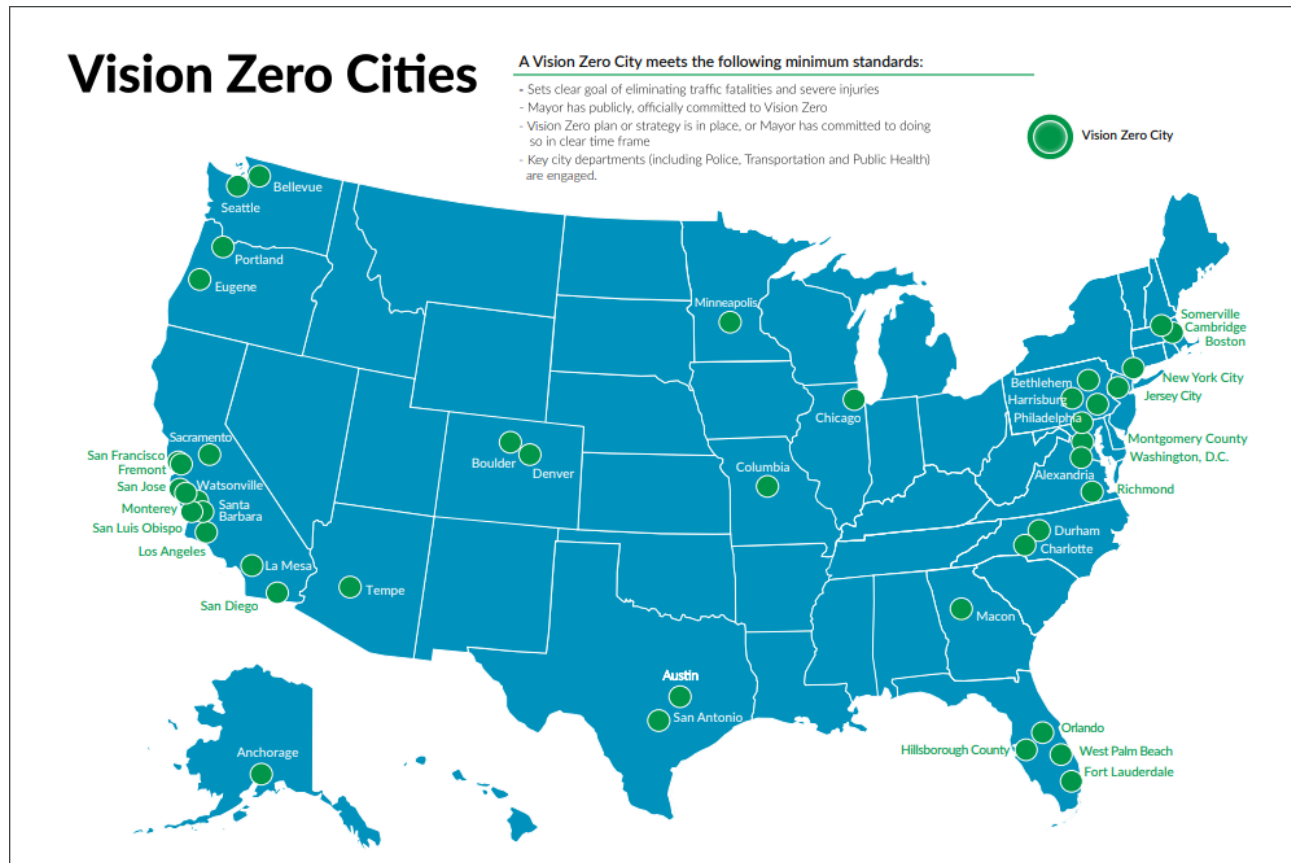
Vision Zero in Sweden



Vision Zero in Sweden



- Since 2014, 42 US Cities have committed to Vision Zero



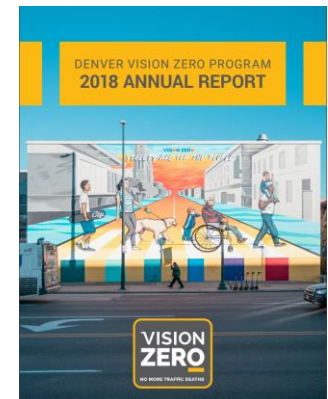
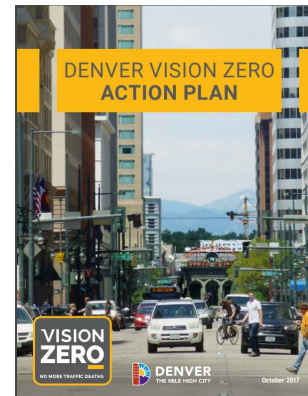
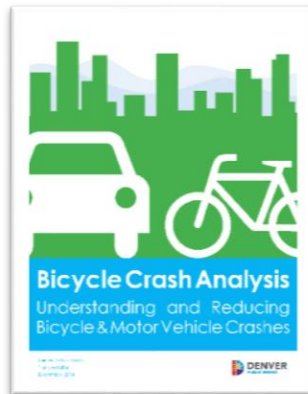
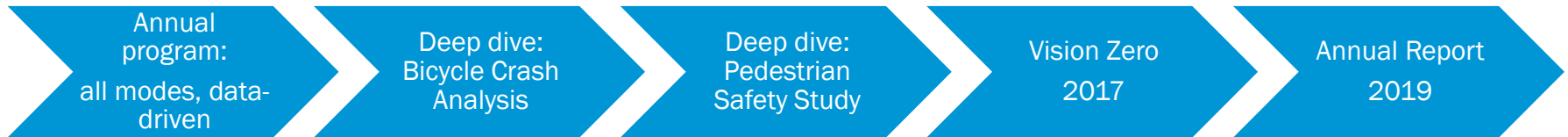


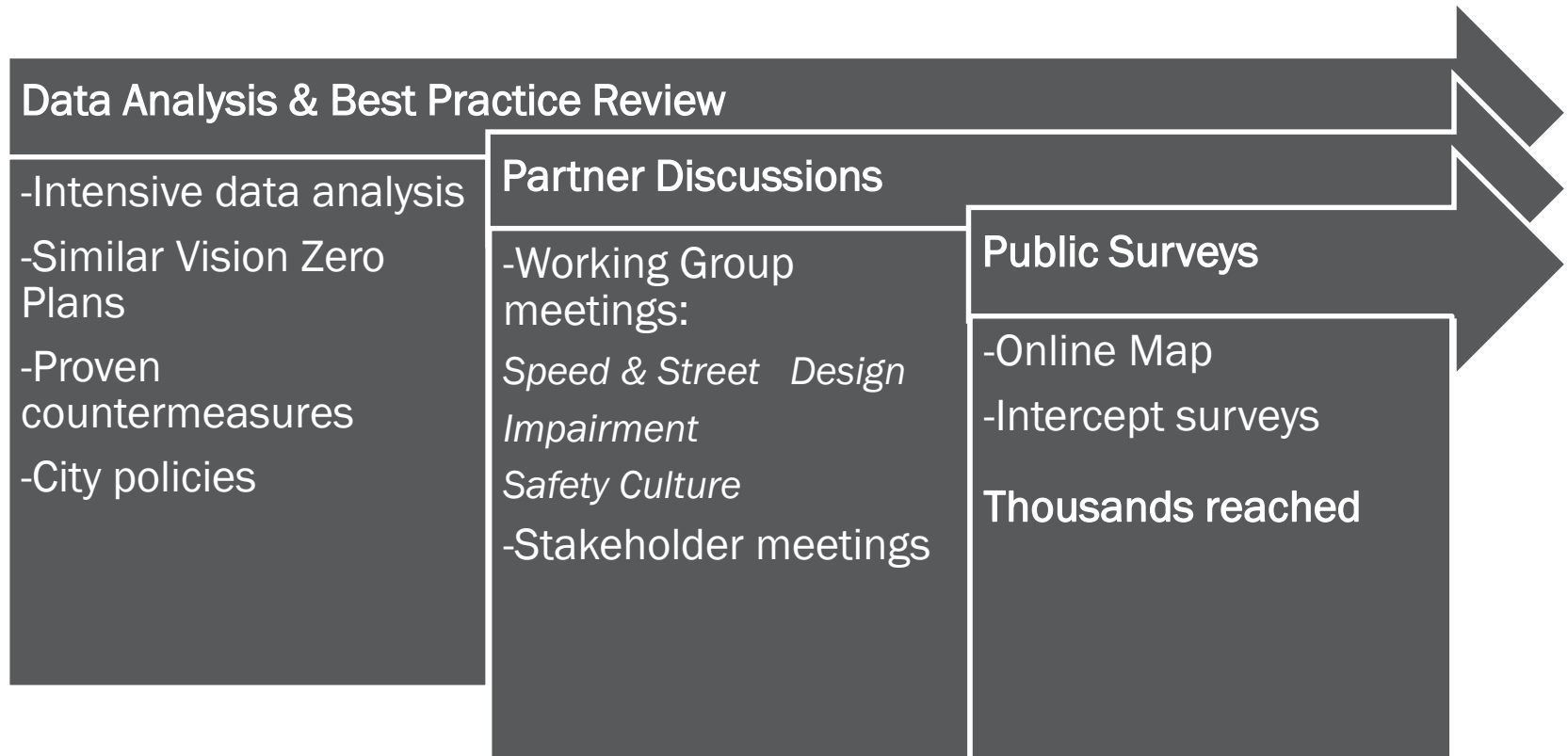
DENVER'S VISION ZERO PAST AND PRESENT

- February 17, 2016
- City's formal commitment to eliminate traffic related deaths and serious injuries



Denver's evolving safety program





- Deaths are unacceptable and preventable.
- Traffic deaths have risen over time, and our crash rate is higher than most of our peer cities.

2018 Crash Statistics



This is a five-year Action Plan for eliminating traffic deaths by 2030.

Someone loses their life every **six days** while traveling in our city. We do not have to accept this as inevitable.

1. Enhance Processes and Collaboration
2. Build Safe Streets for Everyone
3. Create Safe Speeds
4. Promote a Culture of Safety
5. Improve Data and Be Transparent

Focusing efforts on the most dangerous streets and in the most vulnerable communities is a responsible use of limited City resources.

In Denver, compared to a motorist:



Pedestrians are approximately **30 times** more likely to die in a crash

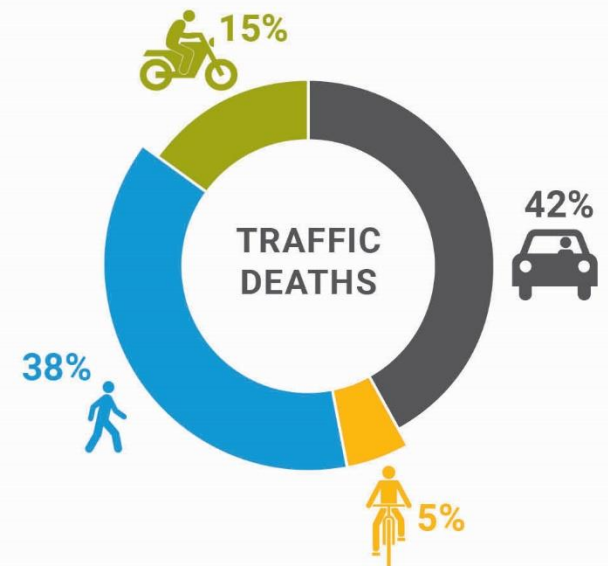
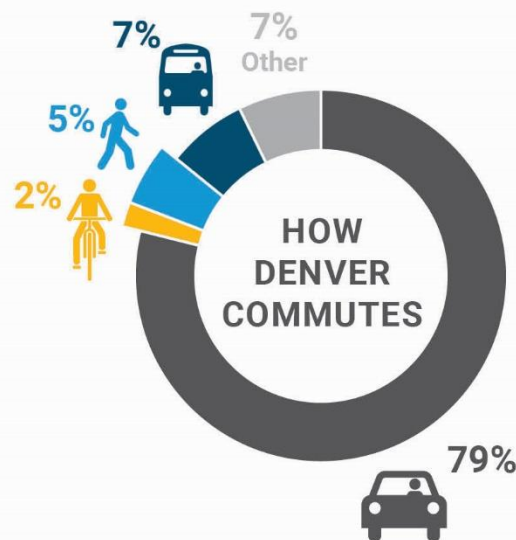


Motorcyclists are nearly **13 times** more likely to die in a crash



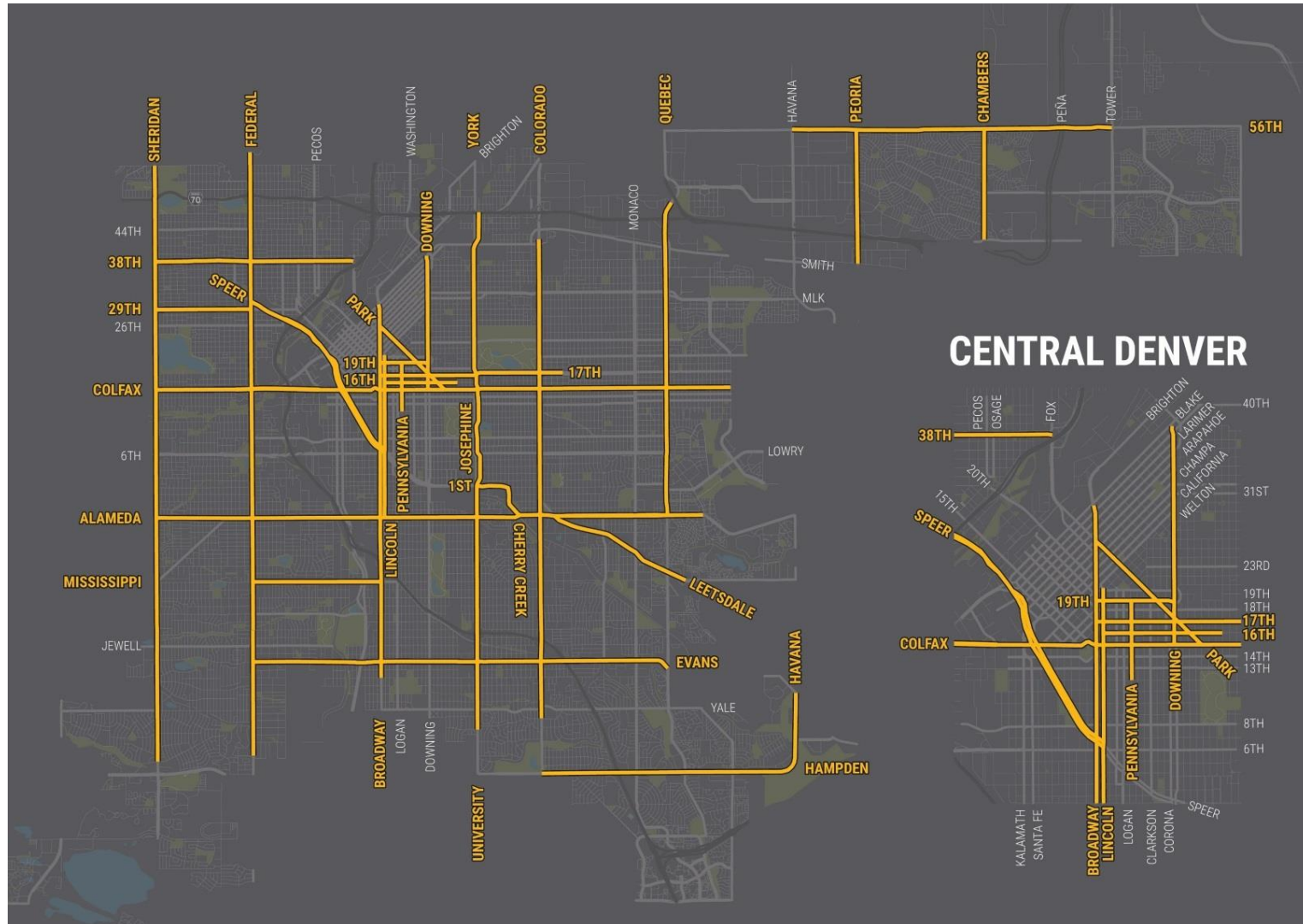
Bicyclists are **6.5 times** more likely to die in a crash

Denver traffic modes versus traffic deaths:

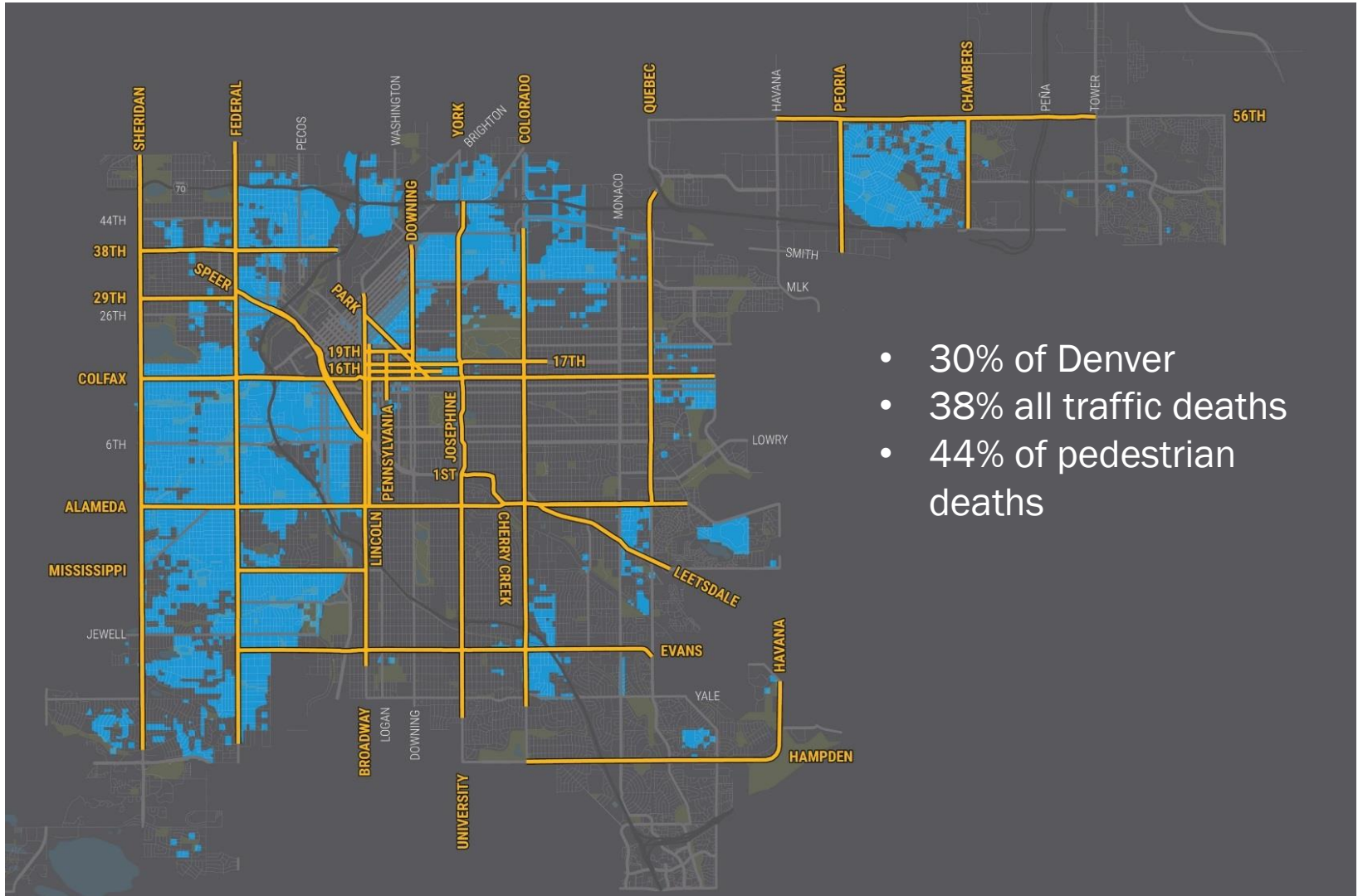


High Injury Network

- 123 miles
- Around 5% of Denver's street network
- ~ 50% of fatalities



Communities of Concern (CoC)





WHAT WAS COMPLETED IN 2018



19th Avenue and Sherman Street (installed May 2018)



East Colfax (installed April 2018). Photo credit: Denver Vision Zero Coalition

19 miles
of new bike lanes



26 city-led
Vision Zero-related
community
outreach events

25 bicycle education
events at 12
different schools

1 Vision Zero
Community Forum

12 outreach events
led by the
Denver
Vision Zero
Coalition



9 intersections redesigned to increase safety



35th Avenue and Julian Street (installed August 2018)

Upgraded pedestrian crossings at
4 locations



Before



After

In response to a fatal pedestrian crash in 2017, Albrook Drive east of Peoria Street was reconfigured in December 2018 to improve safety for pedestrians and motorists.

Hired **4** new staff
members dedicated
to Vision Zero



Vision Zero is the City and County of Denver's program
to eliminate traffic deaths and serious injuries by 2030.


2018 BY THE NUMBERS

13 intersections
redesigned
to increase safety



19 miles
of new bike lanes



 **DPD issued 8,465**
citations in school zones

202,376
photo
enforcement citations



26 city-led
Vision Zero-related
community
outreach events

25 bicycle education
events at 12
different schools
1 Vision Zero
Community Forum

Hired **4** new staff
members dedicated
to Vision Zero



3 Smart City
intersection
improvements



Operational improvements
43 implemented at
intersections



Upgraded pedestrian
crossings at
4 locations



1,975 new curb ramps
installed

6 miles of new
sidewalks **\$49** million
for sidewalk
construction

 **1,881** DUI/DUID arrests

12 outreach events
led by the
Denver
Vision Zero
Coalition



DENVER VISION ZERO ACTION PLAN

2018 Action Plan Progress

	In Progress	Completed	Future
Enhance Processes and Collaboration	7	1	6
Build Safe Streets for Everyone	3	6	3
Create Safe Speeds	3	0	5
Promote a Culture of Safety	13	2	5
Improve Data and Be Transparent	9	1	3

**VISION
ZERO**

NO MORE TRAFFIC DEATHS



DENVER
THE MILE HIGH CITY

October 2017



WHAT'S NEXT

Engineering/Capital Investments

- Make more improvements and investments on High-Injury Network corridors
- Continue to build out the pedestrian network and the enhanced bikeway network
- Upgrade street lighting along corridors to improve visibility
- Increase the number of dedicated left turn arrows where current traffic signal equipment will allow



Enforcement

- Prioritize enforcement against dangerous moving violations
- Work to reduce speeds, which will include completion of a citywide speed limit evaluation, enhanced speed management, and implementation of engineering countermeasures



Education

- Partner with students at CU Denver to launch a “Community Voices” project, which will create four videos that promote safe travel behavior and reflect the

voices and ideas of our community members

- Implement Safe Routes to School programs in Greater Park Hill, Montbello, and Southwest Denver



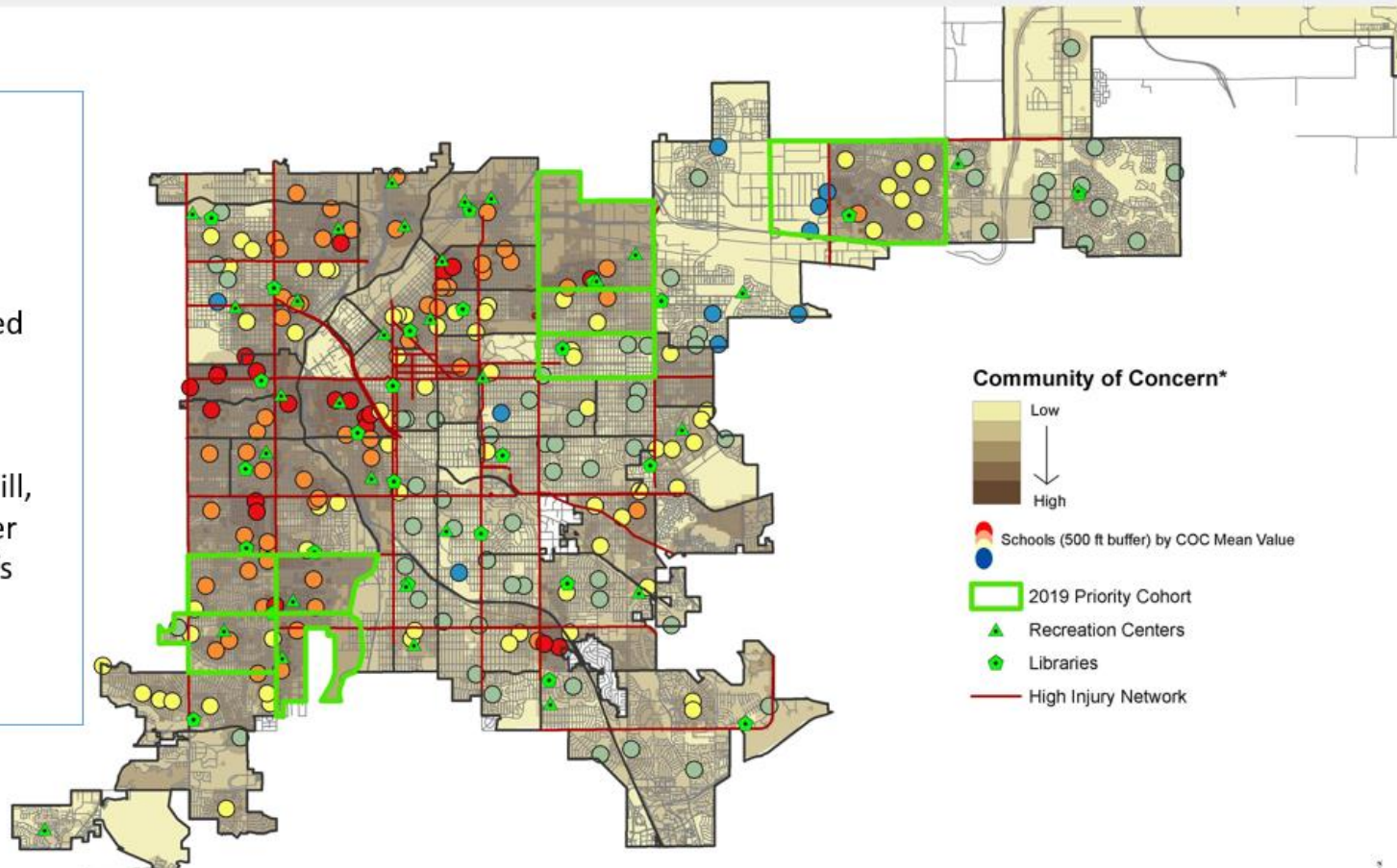
Priority Schools & 2019 Infrastructure Cohorts

Safe Routes to School: Target Schools
Community of Concern -Estimation of Demand/Alternatives

2019 Cohorts selected by:

1. Communities of Concern
2. Current/other initiatives involving extensive community engagement
3. Schools are prioritized (red highest, blue lowest)

- Currently: Greater Park Hill, Montbello and SW Denver
- Other opportunities CPD's Neighborhood Planning Initiative (East Colfax)



Policy

- Implement policy changes for right-of-way construction permitting to reduce the impact on those who walk and ride bikes – these changes will aim to increase the use of pedestrian canopies and reduce the total amount of right-of-way closed during a construction project.
- Continue to institutionalize Vision Zero within City and State processes
- Develop Complete Street Design Guidelines to ensure city streets prioritize safe and convenient access for those who walk, bike, drive, and take transit.





Medians and Pedestrian Crossing Islands in Urban and Suburban Areas



Median and pedestrian crossing islands near a roundabout.
Source: www.pedbikeimages.org / Dan Burden

SAFETY BENEFITS:

Raised Median
46%

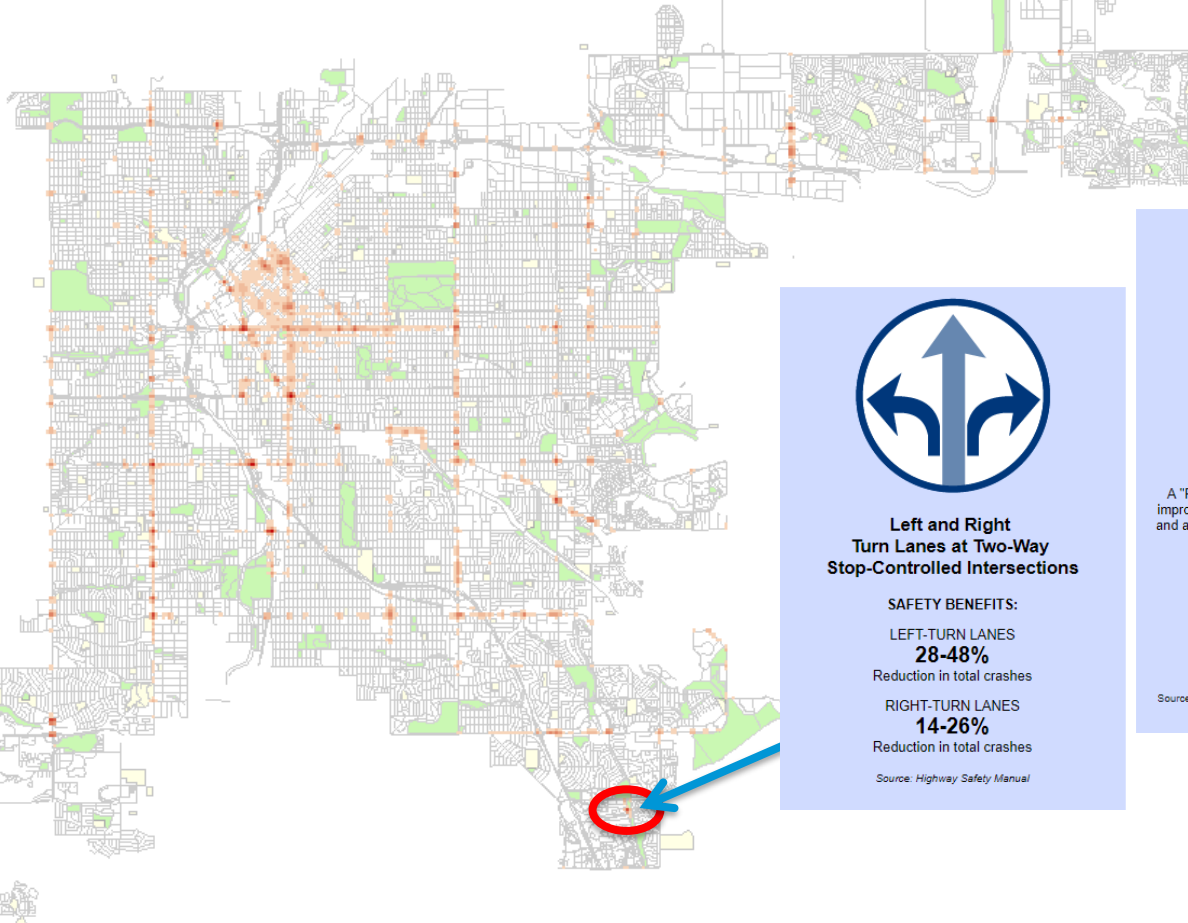
Reduction in pedestrian crashes

Pedestrian Crossing Island
56%

Reduction in pedestrian crashes

Source: Desktop Reference for Crash Reduction Factors, FHWA-SA-08-011, September 2008, Table 11.

Proven Safety Countermeasures



Walkways

SAFETY BENEFITS:

Sidewalks 65-89%

Reduction in crashes involving pedestrians walking along roadways

Paved Shoulders 71%

Reduction in crashes involving pedestrians walking along roadways



Example of a paved shoulder.
Source: www.pedbikeimages.org / Dan Burden

Source: Desktop Reference for Crash Reduction Factors, FHWA-SA-08-011, Table 11.



Left and Right Turn Lanes at Two-Way Stop-Controlled Intersections

SAFETY BENEFITS:

LEFT-TURN LANES
28-48%

Reduction in total crashes

RIGHT-TURN LANES
14-26%

Reduction in total crashes

Source: Highway Safety Manual



Road Diets (Roadway Reconfiguration)

A "Road Diet," or roadway reconfiguration, can improve safety, calm traffic, provide better mobility and access for all road users, and enhance overall quality of life.

SAFETY BENEFIT:

4-Lane → 3-Lane

Road Diet Conversions

19-47%

Reduction in total crashes

Source: Evaluation of Lane Reduction "Road Diet" Measures on Crashes, FHWA-HRT-10-053.

Note: Crashes are weighted 2 x Seriously Injured and 3 x Fatal with 1 otherwise.



VISION ZERO

NO MORE TRAFFIC DEATHS



DENVER
THE MILE HIGH CITY

Thank you

www.denvergov.org/visionzero