DANGEROUS BY DESIGN

Why we need safer streets and how to do it.

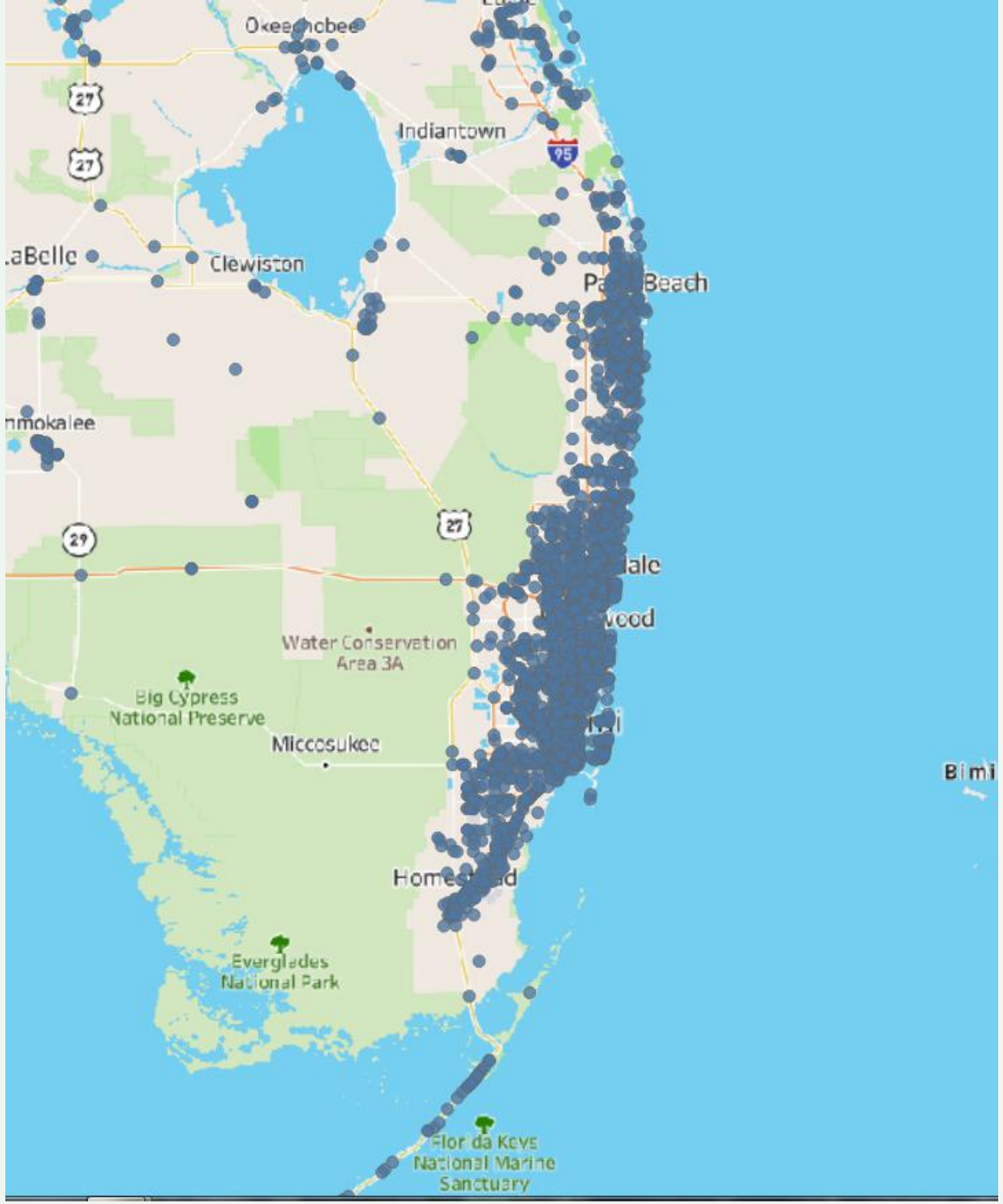
LIFE LESSON & MY REALIZATION

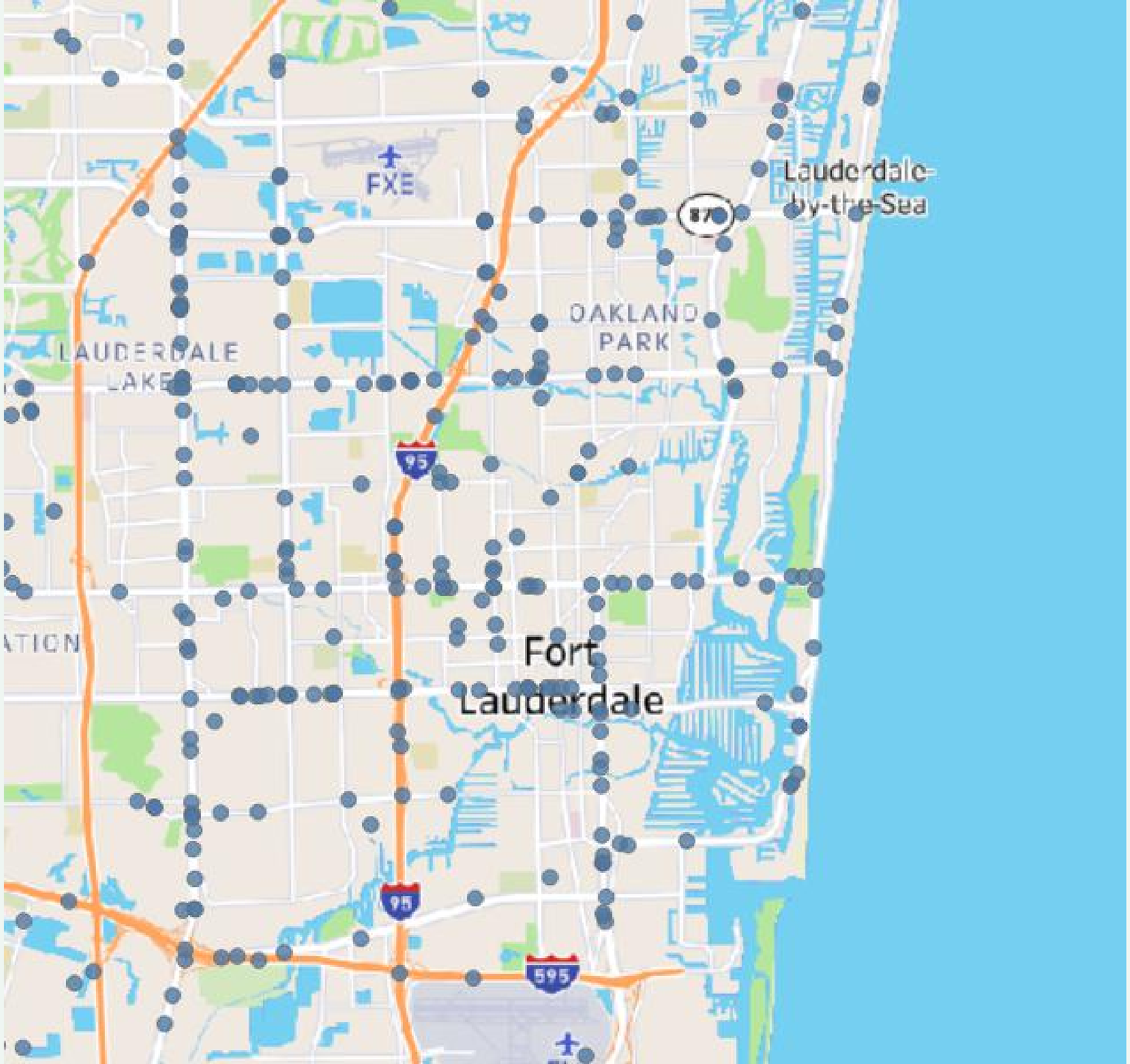
THE NUMBERS

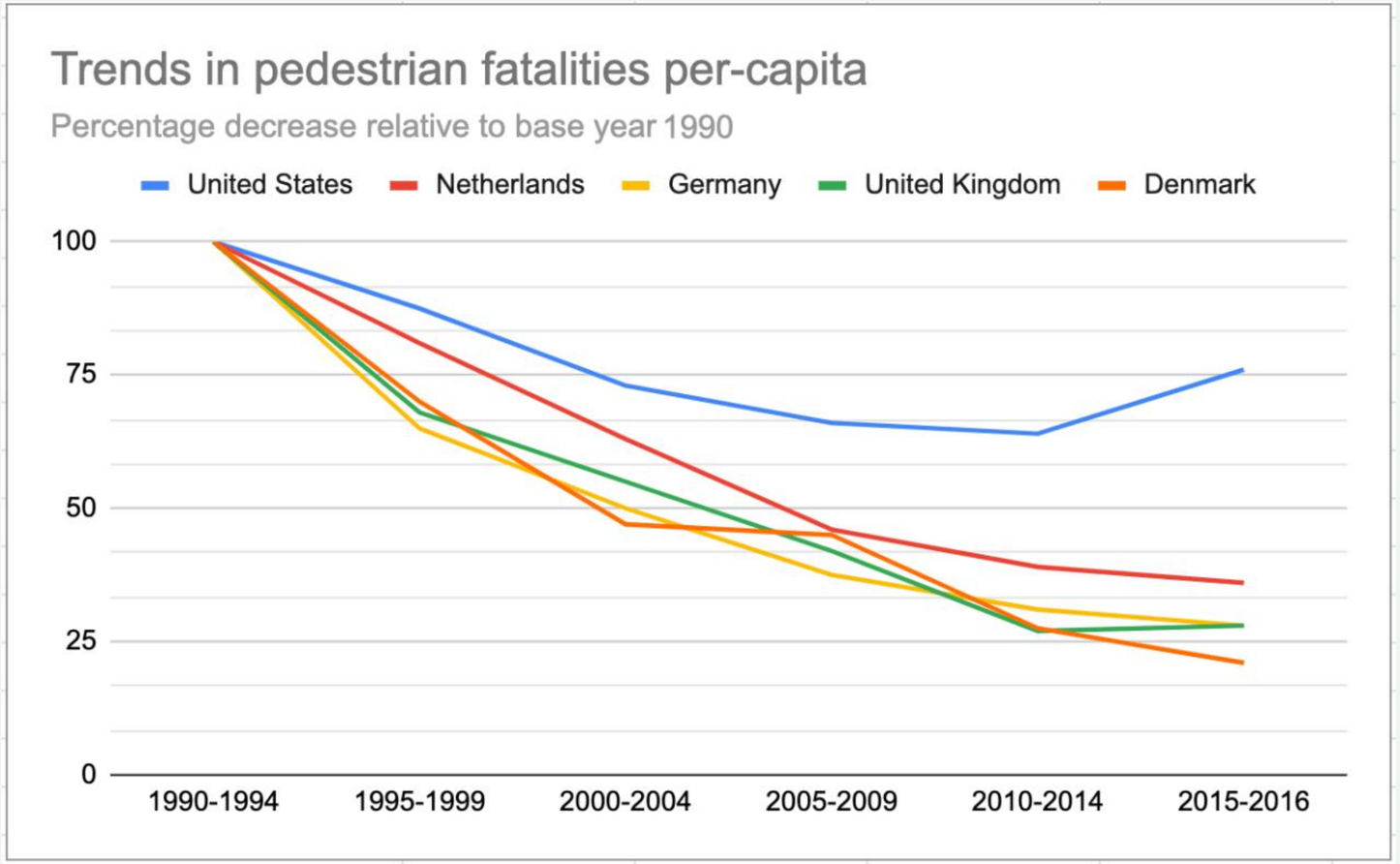
Part 1

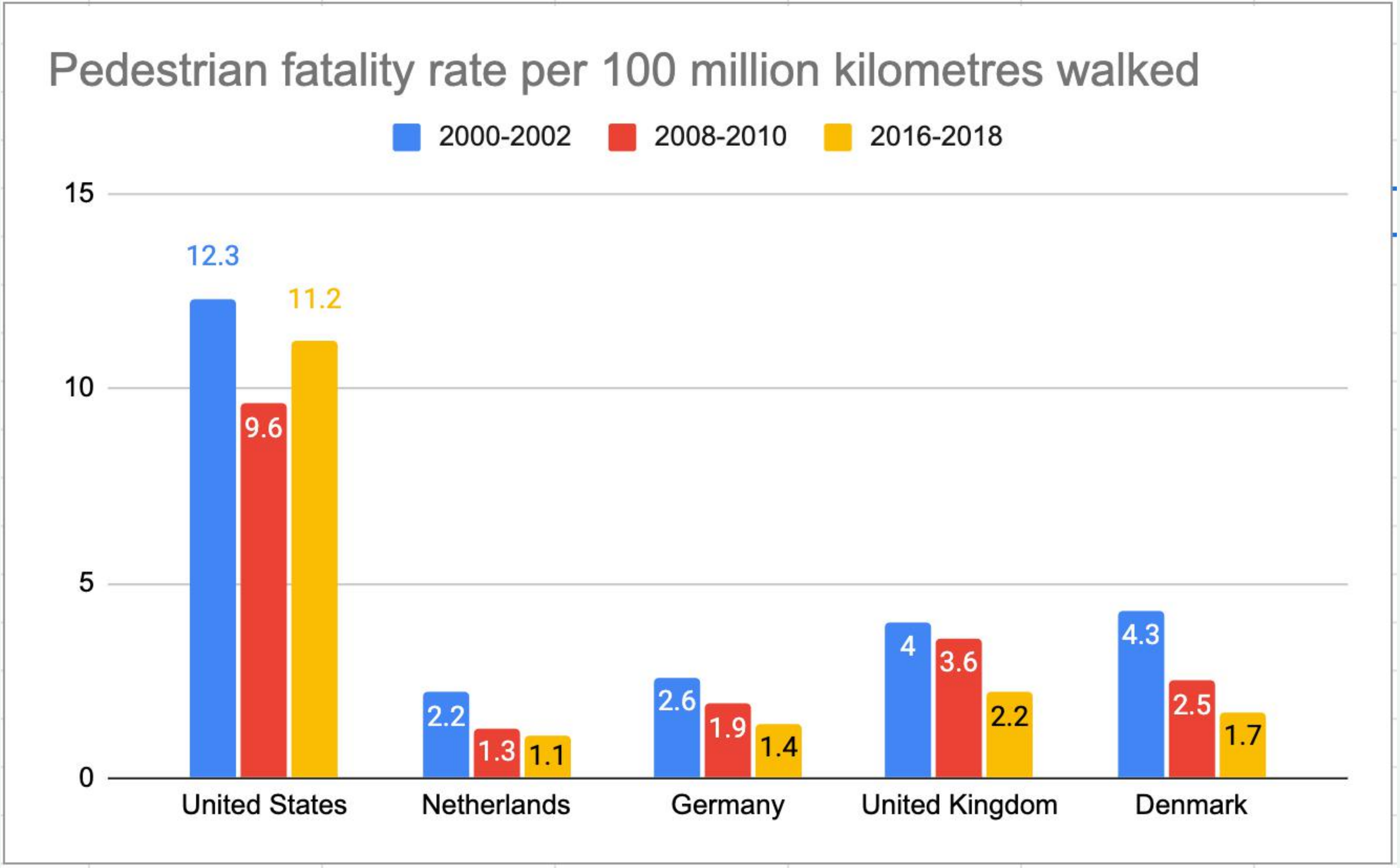
Rank	Metro area	Average ped deaths/100k people per year	Pedestrian deaths (2016-2020)	Difference in average daily walking trips, 2019 to 2020*	Pandemic change in fatality rate (avg. 2016-19 vs 2020)	Long term trend in fatality rate (Five-year averages for 2011-15 vs 2016-20)
1	Deltona-Daytona Beach-Ormond Beach, FL	4.25	140	61%	0.68	0.97
2	Albuquerque, NM	4.19	192	35%	-0.48	1.91
3	Memphis, TN-MS-AR	3.93	264	49%	2.15	1.77
4	Tampa-St. Petersburg-Clearwater, FL	3.55	559	50%	-0.41	0.54
5	Charleston-North Charleston, SC	3.54	140	56%	1.36	1.57
6	Jacksonville, FL	3.44	264	60%	0.19	0.24
7	Bakersfield, CA	3.41	152	31%	0.06	0.68
8	Orlando-Kissimmee-Sanford, FL	3.37	431	22%	-0.72	0.6
9	Stockton, CA	3.35	126	44%	-0.74	1.52
10	Fresno, CA	3.25	161	24%	1.22	1.24
11	Baton Rouge, LA	3.2	137	58%	1.54	0.93
12	Palm Bay-Melbourne-Titusville, FL	3.13	93	60%	-0.39	0.24
13	Tucson, AZ	3.12	162	44%	0.77	1.16
14	Miami-Fort Lauderdale-Pompano Beach, FL	3.11	954	34%	-0.01	0.48
14	Riverside-San Bernardino-Ontario, CA	3.11	716	35%	0.41	1.02

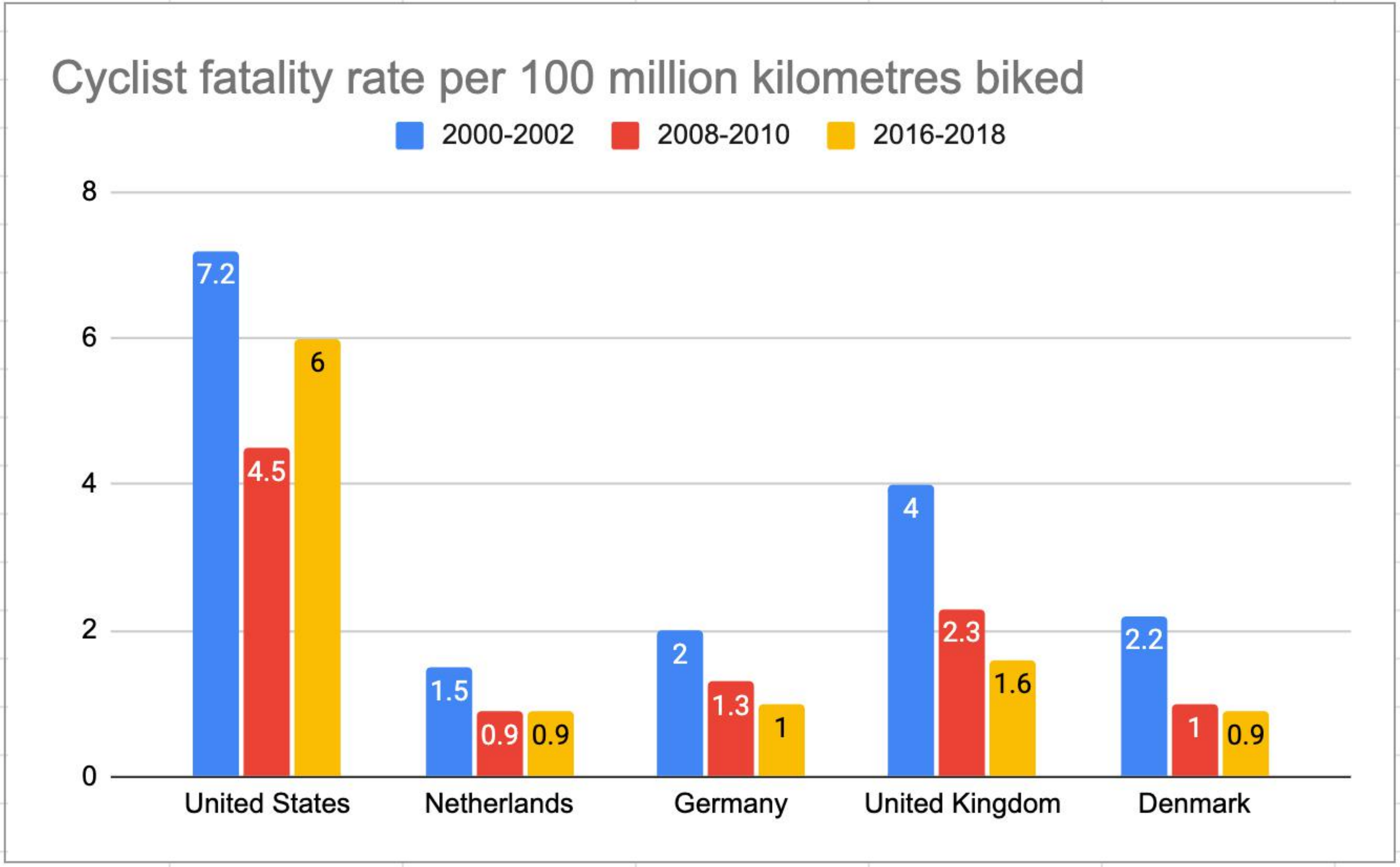
Rank	State	Average ped deaths/100k people per year	Pedestrian deaths (2016 - 2020)	Difference in average daily walking trips, 2019 to 2020*	Pandemic change in fatality rate (2016-19 vs. 2020)	Long term trend in fatality rate (Five-year averages for 2011-15 vs. 2016-20)
1	New Mexico	3.76	394	39%	0.01	1.09
2	Florida	3.22	3,420	48%	0.02	0.49
3	South Carolina	3.19	811	72%	0.56	0.82
4	Arizona	2.98	1,070	53%	0.08	0.82
5	Delaware	2.89	140	50%	-0.42	0.04
6	Louisiana	2.86	668	53%	0.28	0.62
7	Mississippi	2.6	388	82%	1.19	0.83


Okeechobee
27
27
Indiantown
95
LaBelle
Clewiston
Beach
Immokalee
29
27
Water Conservation
Area 3A
Big Cypress
National Preserve
Miccosukee
Bimi
Everglades
National Park
Florida Keys
National Marine
Sanctuary


FXE
Lauderdale-
by-the-Sea
OAKLAND
PARK
LAUDERDALE
LAKES
95
Fort
Lauderdale
595


Trends in pedestrian fatalities per-capita
Percentage decrease relative to base year 1990
United States
Netherlands
Germany
United Kingdom
Denmark
100
75
50
25
0
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2016


Pedestrian fatality rate per 100 million kilometres walked
2000-2002
2008-2010
2016-2018
15
10
5
0
12.3
11.2
9.6
2.2
1.3
1.1
2.6
1.9
1.4
4
3.6
2.2
4.3
2.5
1.7
United States
Netherlands
Germany
United Kingdom
Denmark


Cyclist fatality rate per 100 million kilometres biked
2000-2002
2008-2010
2016-2018
8
6
4
2
0
7.2
4.5
6
1.5
0.9
0.9
2
1.3
1
4
2.3
1.6
2.2
1
0.9
United States
Netherlands
Germany
United Kingdom
Denmark

19,384
42,000
42,915

SOURCES: CDC & NHSTA

IT'S TIME **WE** TAKE RESPONSIBILITY

WHY SHOULD WE SLOW OUR ROADS?

Part 2

SAVE LIVES

BETTER QUALITY OF LIFE

- Even without infrasture people will be inclined to walk and bike more.
- Healthier population

INCREASED TAX BASE

- More developable land
- Reverse cost outflows and increase cash inflows

WIN ELECTIONS

Safety is a bread & butter issue that voters overwhelmingly side with.

HOW WE GET THEIR

Part 3

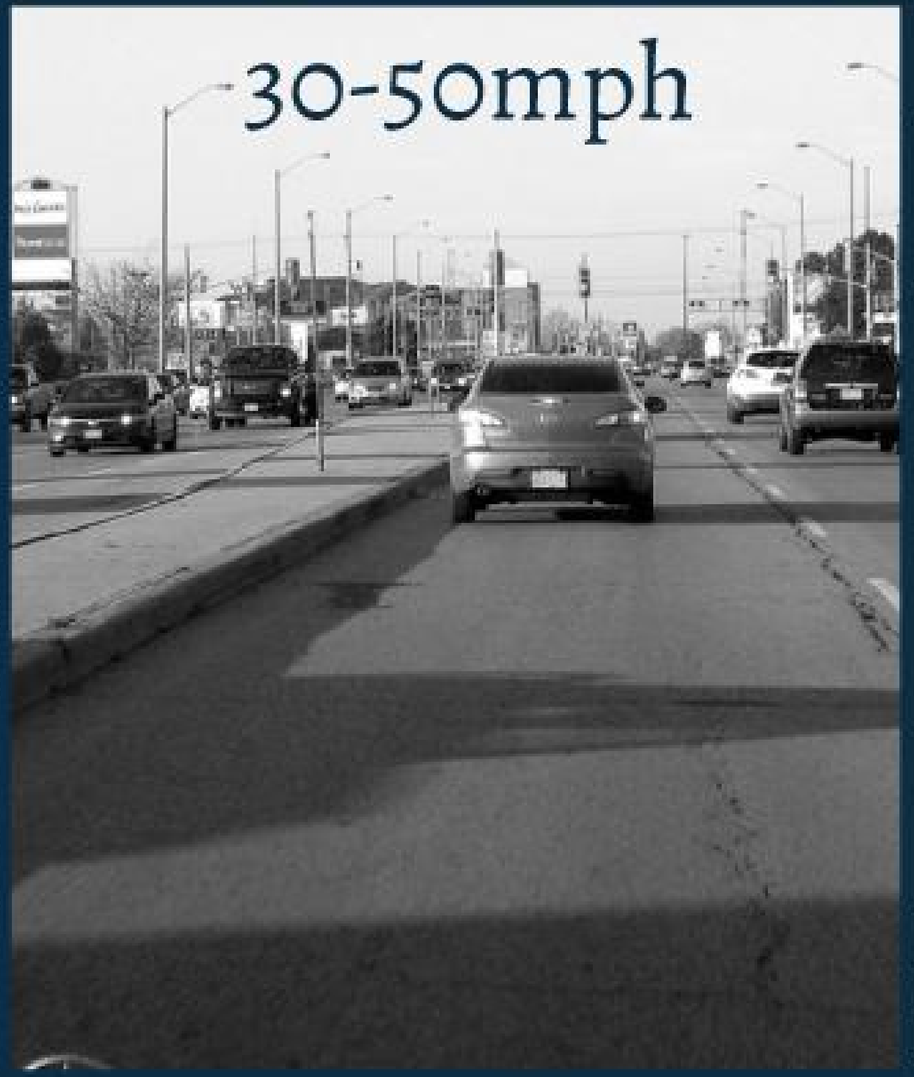
DIAGNOSE DANGEROUS STREETS

Make a streets team

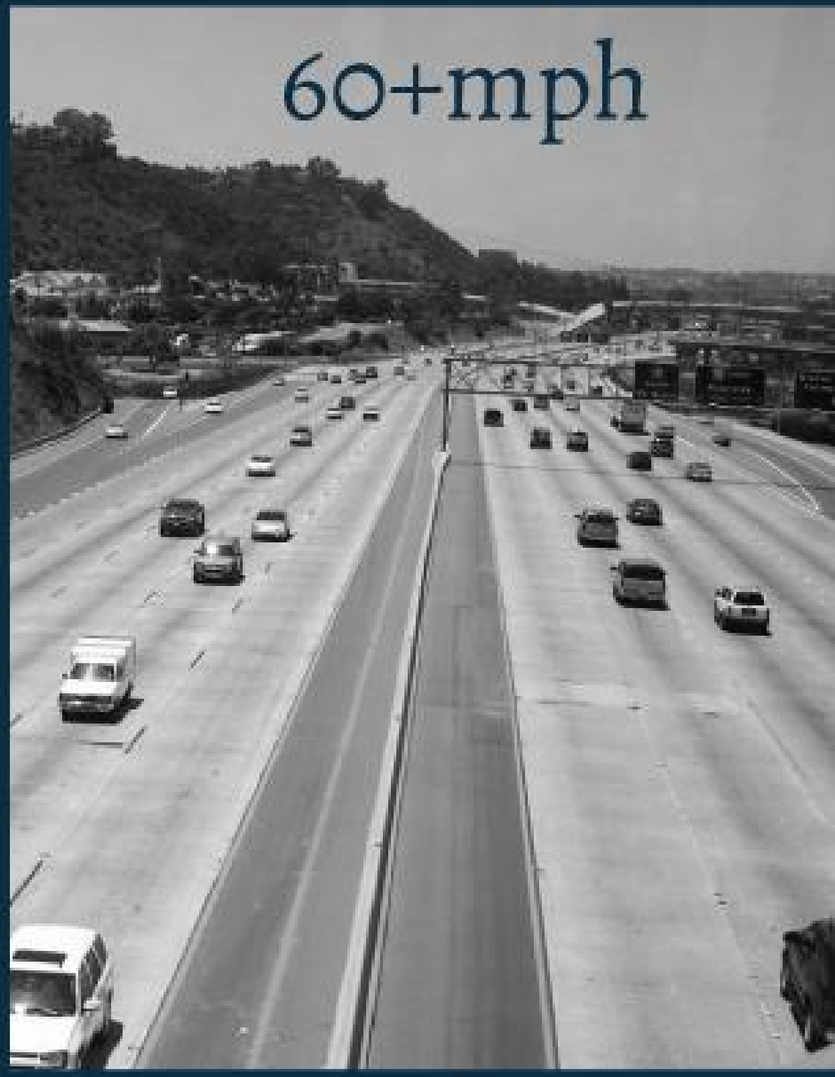
DESIGN MATTERS

STRONG TOWNS

Safe



Deadly



Safe

STROAD

STREET ⇐ ⇐ into a ⇒ ⇒ ROAD

Purpose:
Building community wealth within a successful place.

Purpose:
Moving people and goods quickly between two successful places.

1. Slow traffic.
2. Put people, bicyclists and transit first, not cars.
3. Focus on building, filling gaps and expanding existing structures.
4. Embrace complexity. Stay adaptable.

1. Limit access. Seek to close existing accesses.
2. Keep people and bikes away from cars in a separate, safe place.
3. Don't try to build anything.
4. Simplify. Move vehicles quickly. Period.

CULTIVATE!

CULTIVATECOLLABORATIVE.ORG

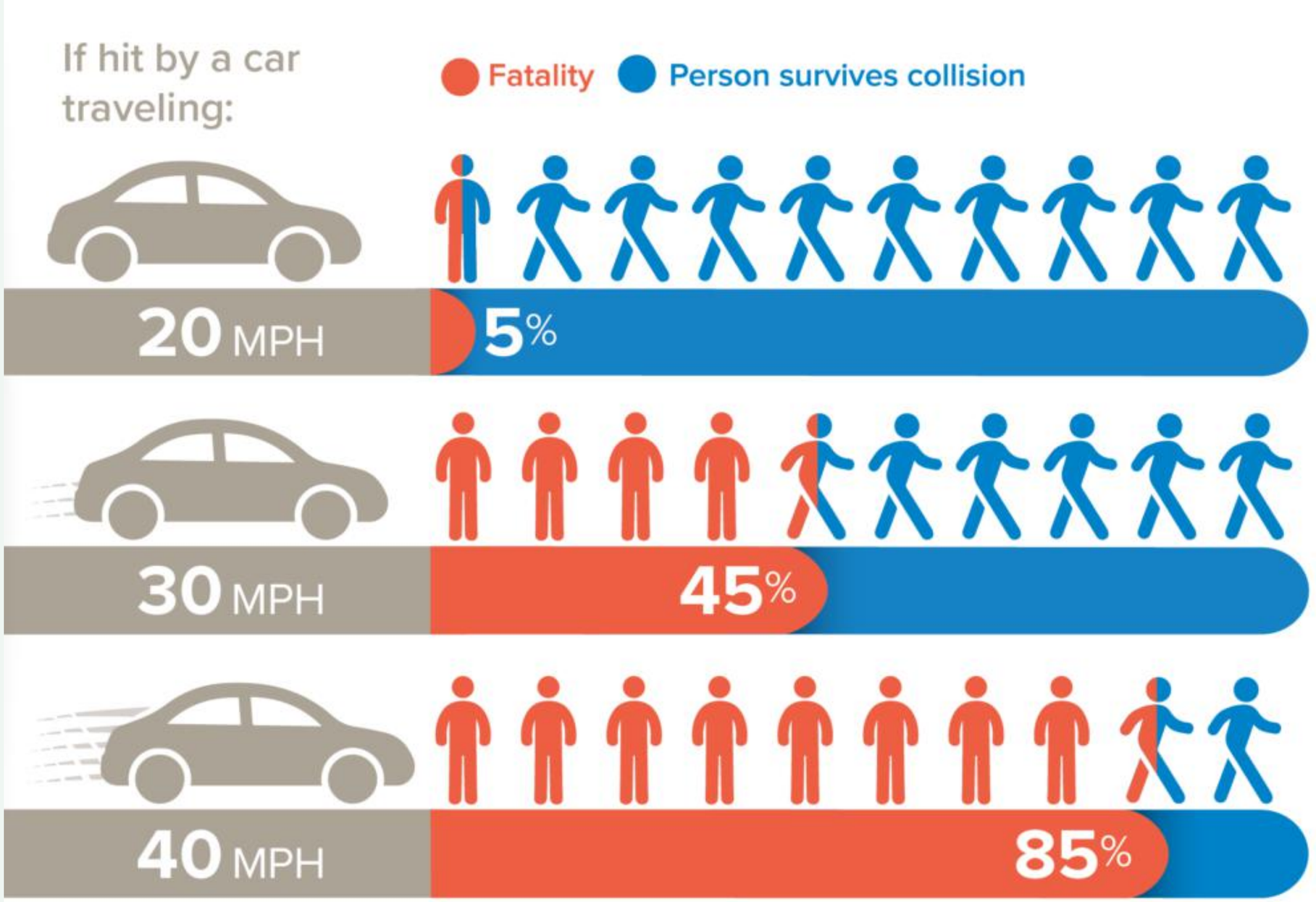
UTILIZE STAFF

The tools are known to most of your staff

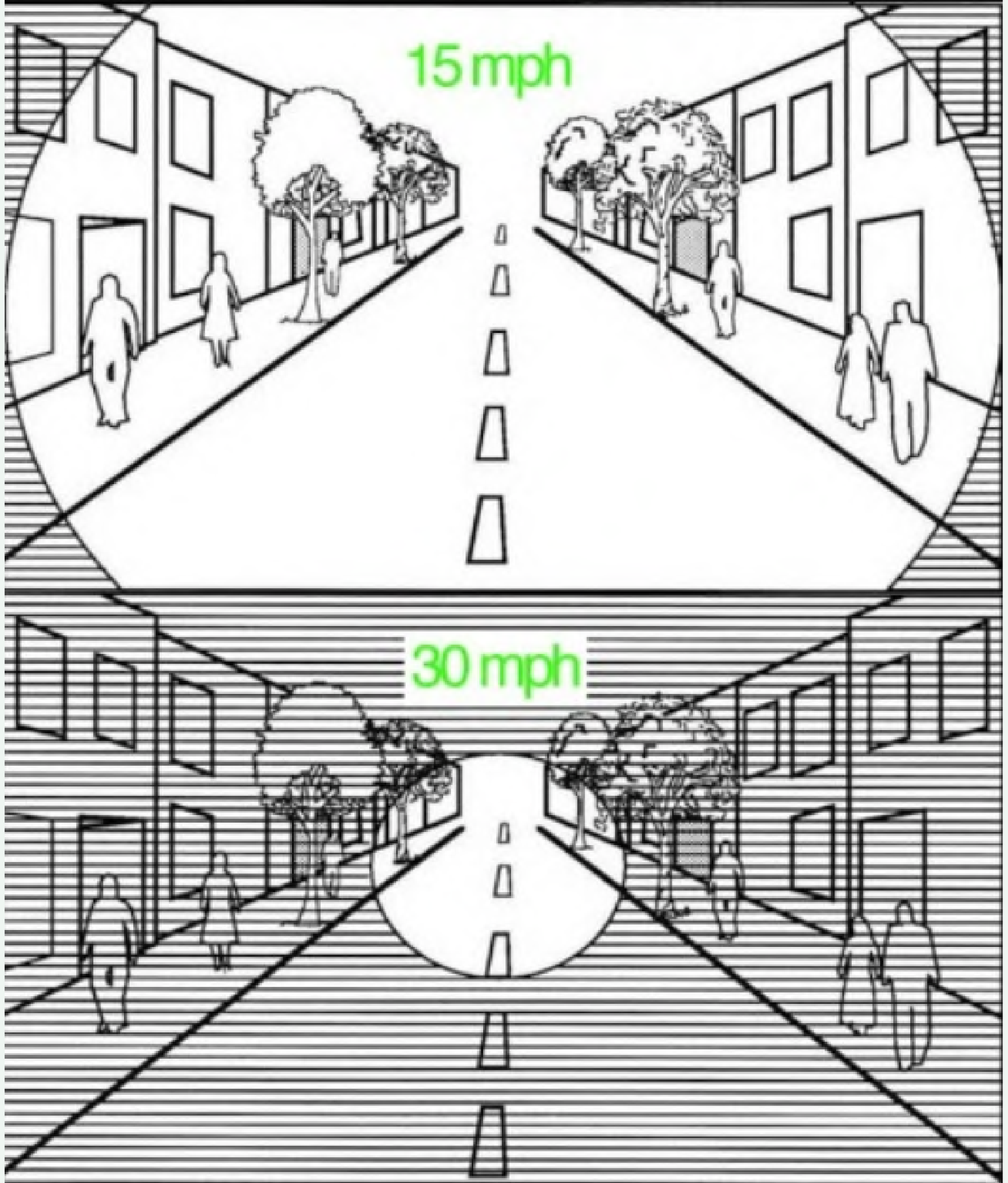
TAKE ON FDOT

Push harder against their speed at all cost mentality

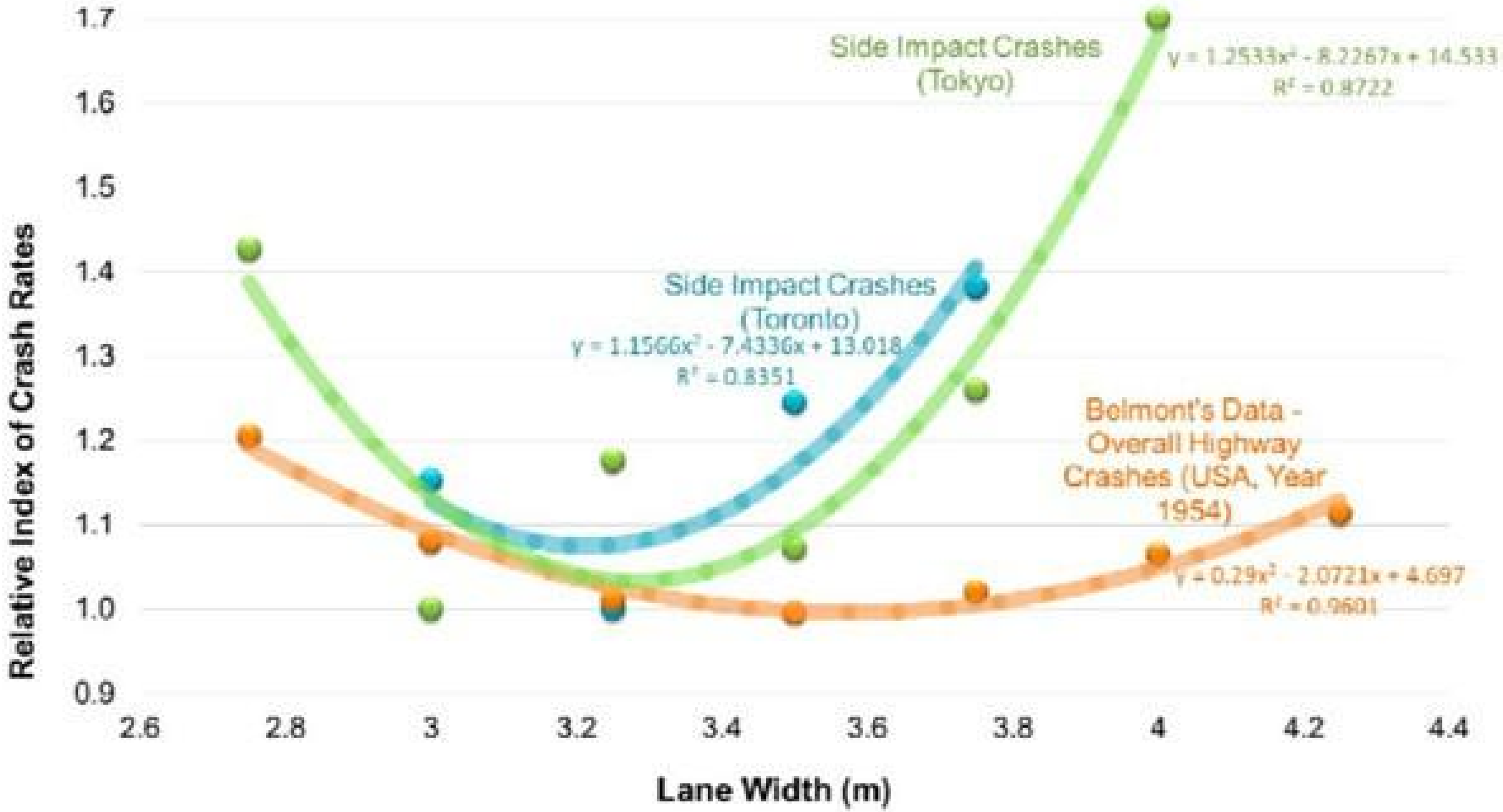
SPEED ORDINACES



National Traffic Safety Board (2017) Reducing Speeding-Related Crashes Involving Passenger Vehicles. Available from: https://www.ntsb.gov/safety/safety-studies/Documents/SS1701.pdf


15 mph
30 mph

NARROW LANES


Relative Index of Crash Rates
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
2.6
2.8
3
3.2
3.4
3.6
3.8
4
4.2
4.4
Lane Width (m)
Side Impact Crashes (Tokyo)
y = 1.2533x² - 8.2267x + 14.533
R² = 0.8722
Side Impact Crashes (Toronto)
y = 1.1566x² - 7.4336x + 13.018
R² = 0.8351
Belmont's Data - Overall Highway Crashes (USA, Year 1954)
y = 0.29x² - 2.0721x + 4.697
R² = 0.9601

THANK YOU