
Vision Zero

Oct 23 TPPB

2013 to 2017

Crashes			Public Safety
Fatalities	44	38	Homicides
Incapacitating Injuries	399	617	Rape
Non-Incapacitating Injuries	3,096	2,682	Assault
Possible Injury	5,617	1,190	Robbery
All Crashes	26,819	39,854	All Incidents

42% of operating budget

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2013 to 2017

2013-2017 Crashes	Total	Motorvehicle Only Crash	Motorcycle Flagged Crash	Moped Flagged Crash	Bike Flagged Crash	Ped Flagged Crash
Fatalities	44	22	4	-	4	14
A - Incapacitating Injury	399	248	39	13	28	71
B - Non-Incapacitating Injury	3,096	2,387	146	74	294	195
C - Possible Injury	5,617	5,215	68	38	157	139
Total Injuries	9,112	7,850	253	125	479	405
Total Crashes	26,819	25,398	316	150	537	418

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Magic Box

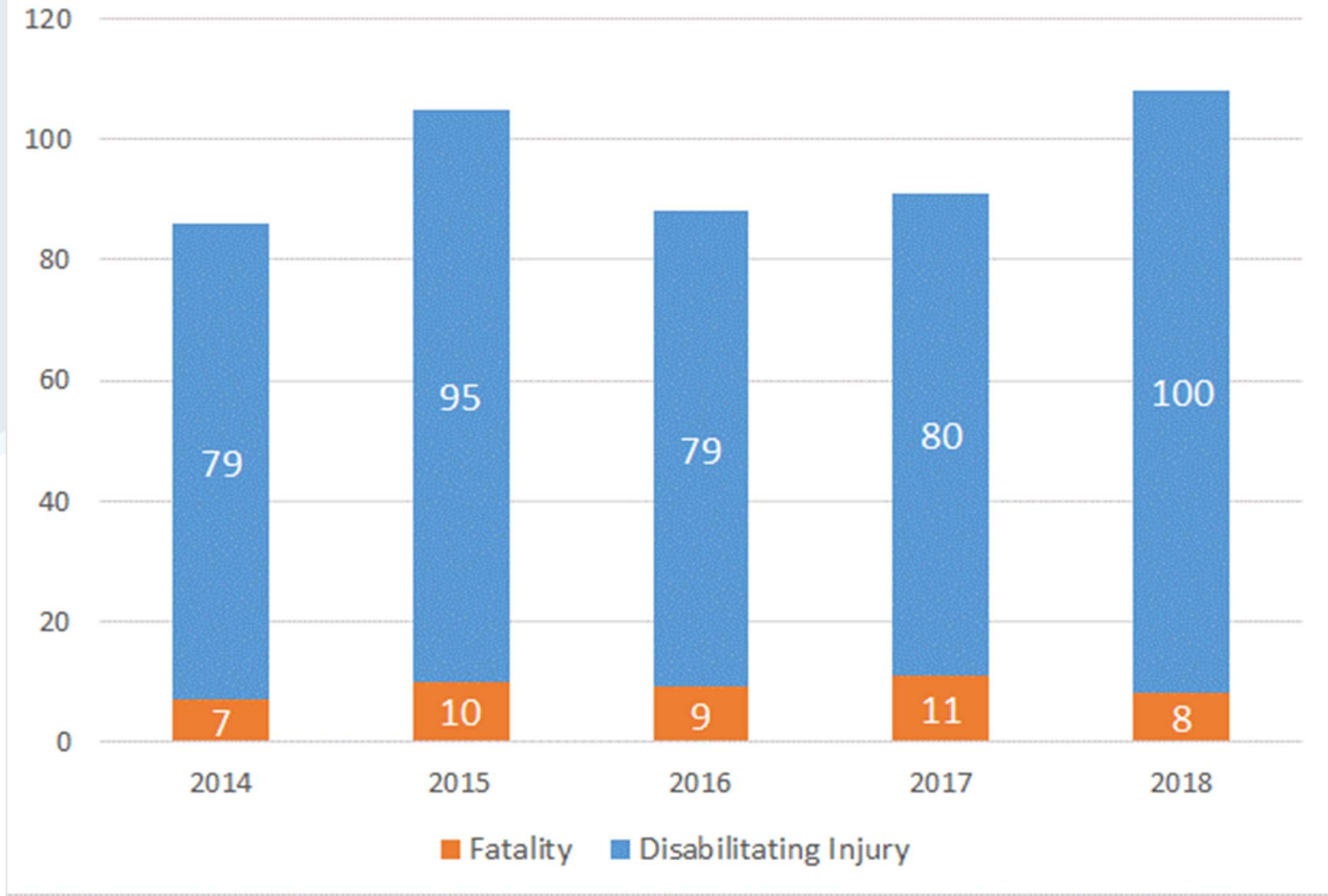
- **Speed**
- **Convenience**
- **Able to live where you want**

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Madison Severe Crashes

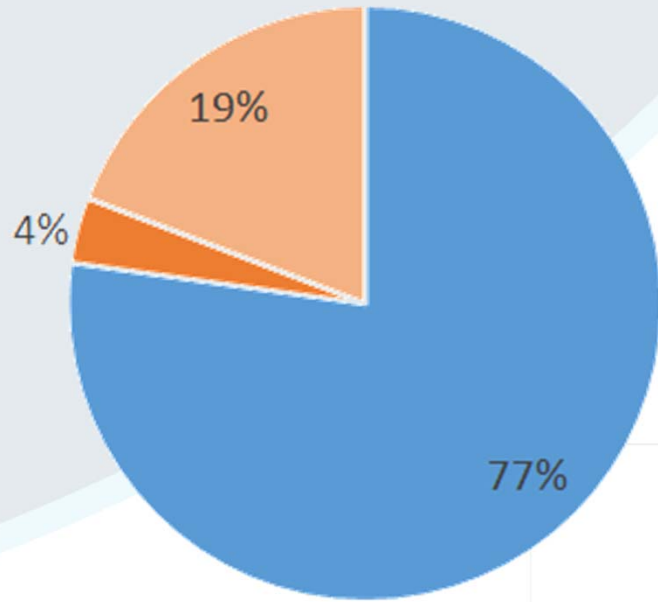


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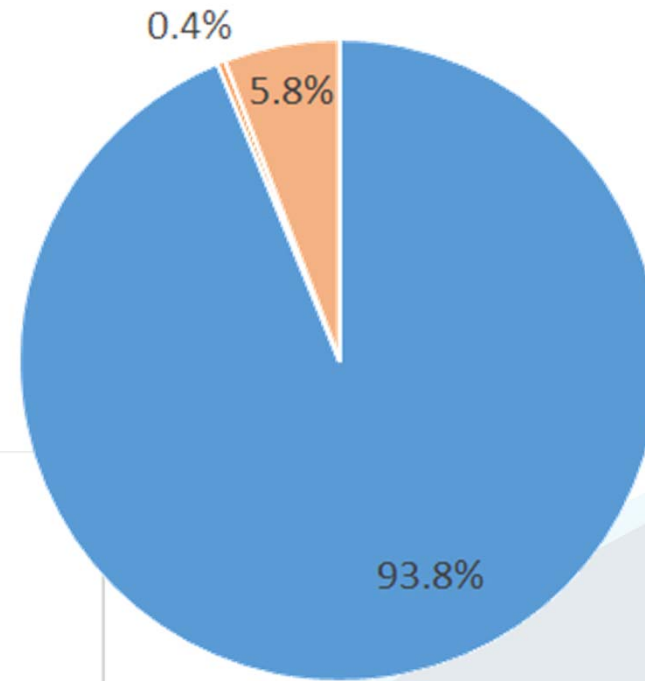
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421 Total Ped Crashes
2014-2018



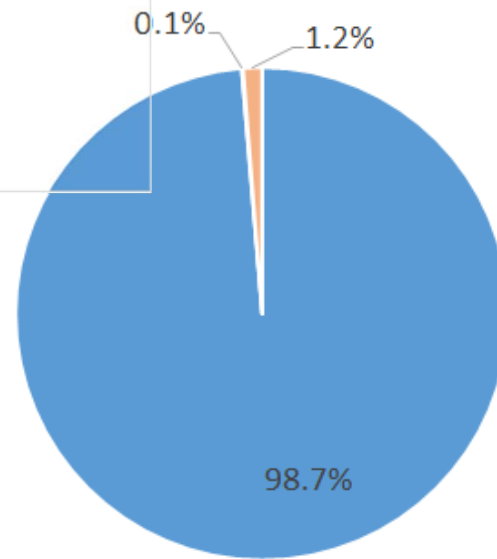
■ Ped w/o Serious Injury ■ Fatal ■ Incapacitating

531 Total Bike Crashes
2014-2018



■ Crash w/o Serious Injury ■ Fatal ■ Incapacitating

26,033 Total Motorvehicle Crashes
2014-2018



■ Crashes w/o Serious Injury ■ Fatal ■ Incapacitating



EPDO Severity Ranking Pedestrians & Bicycles 2014-2018



Ranking

- 1 - 3
- 4 - 6
- 7 - 9
- 10 - 12
- 13 - 15

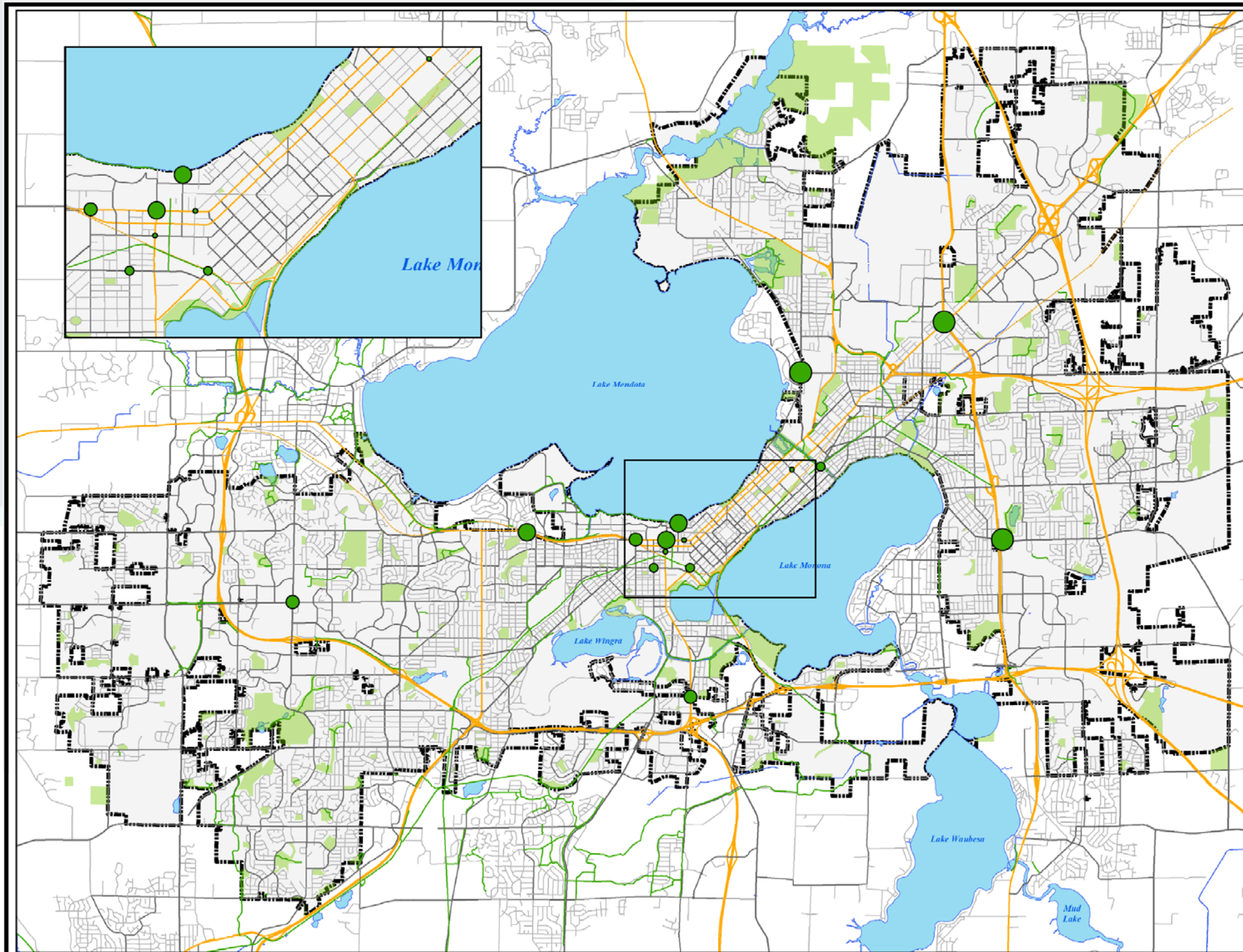
Fatal (K) = Any injury from a traffic crash which resulted in death within 30 days of the crash
A-level = Suspected Serious Injury
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Calculations based on following factors:
Fatality (K) - 72.5
Incapacitating Injury (A) - 4.25
Non-Incapacitating Injury (B) - 1.25
Possible Injury (C) - 1



Coordinate System: NAD 1983 HARN WISCRS Dane County Feet
Projection: Lambert Conformal Conic

Date Revised: 9/20/2019



	Total Serious	Total Crashes	% Serious	% Crashes
Auto	348	26033	73%	96.5%
Bike	33	531	7%	2.0%
Ped	96	421	20%	1.6%
	477	26985		

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VISION ZERO NETWORK

What is **Vision Zero**?

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has proved successful across Europe – and now it's gaining momentum in major American cities.

- 1. Traffic deaths and severe injuries are acknowledged to be preventable.**
- 2. Human life and health are prioritized within all aspects of transportation systems.**
- 3. Acknowledgement that human error is inevitable, and transportation systems should be forgiving.**
- 4. Safety work should focus on systems-level changes above influencing individual behavior.**
- 5. Speed is recognized and prioritized as the fundamental factor in crash severity.**

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**

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From Engineering to a Public Health Perspective

While traditional approaches to transportation safety have prioritized reducing or preventing collisions, Vision Zero instead advocates for the focus to be *preventing injuries*.

Instead of asking “Why did that person crash?” the Vision Zero framework examines “Why was that person so seriously injured in the crash?” This change in thinking, from collision reduction to injury prevention, represents a significant shift from an *engineering to a public health perspective*.

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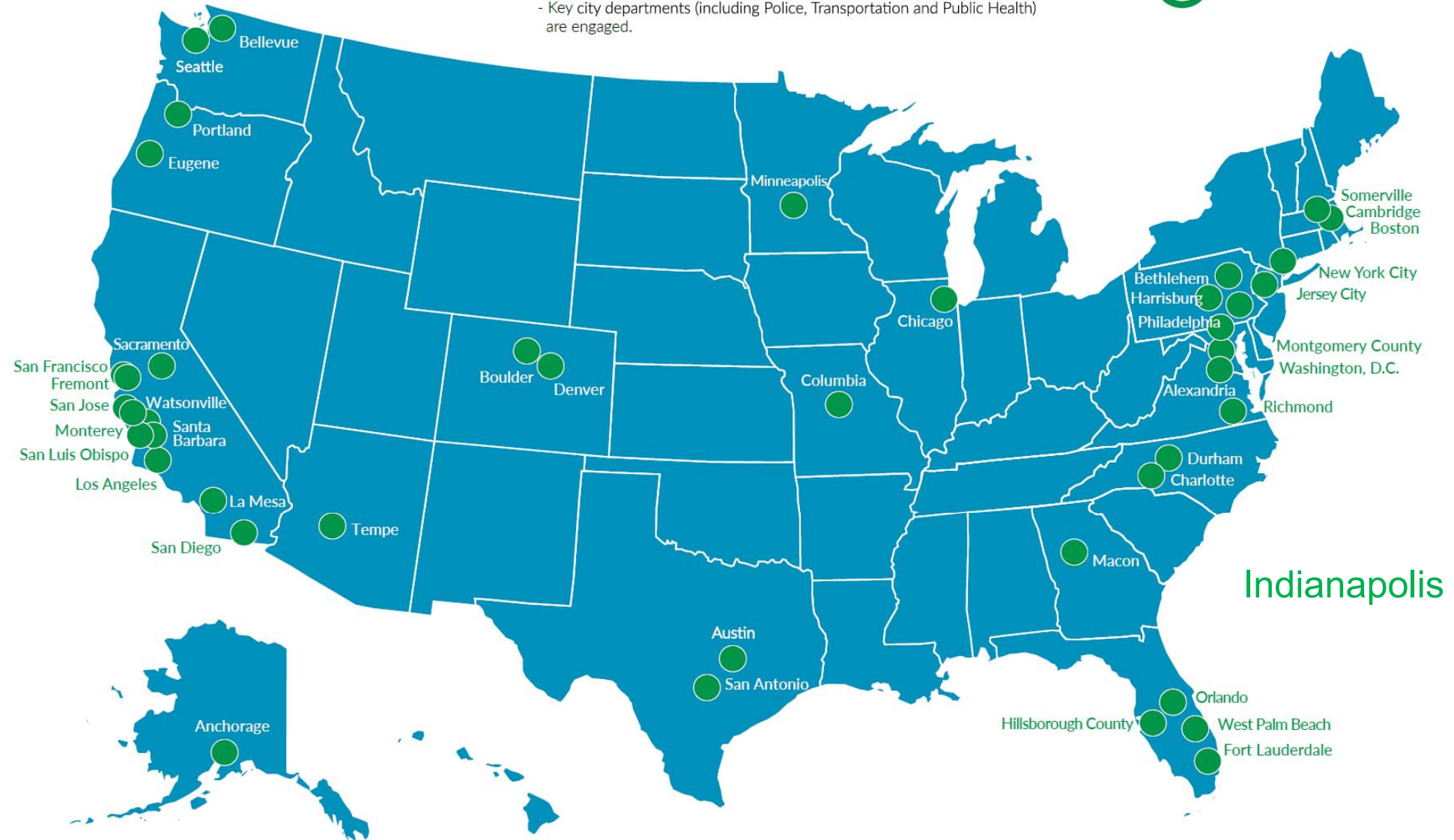


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Vision Zero Cities

A Vision Zero City meets the following minimum standards:

- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health) are engaged.



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70% of San Francisco's severe and fatal traffic injuries occur on just 12% of our streets.

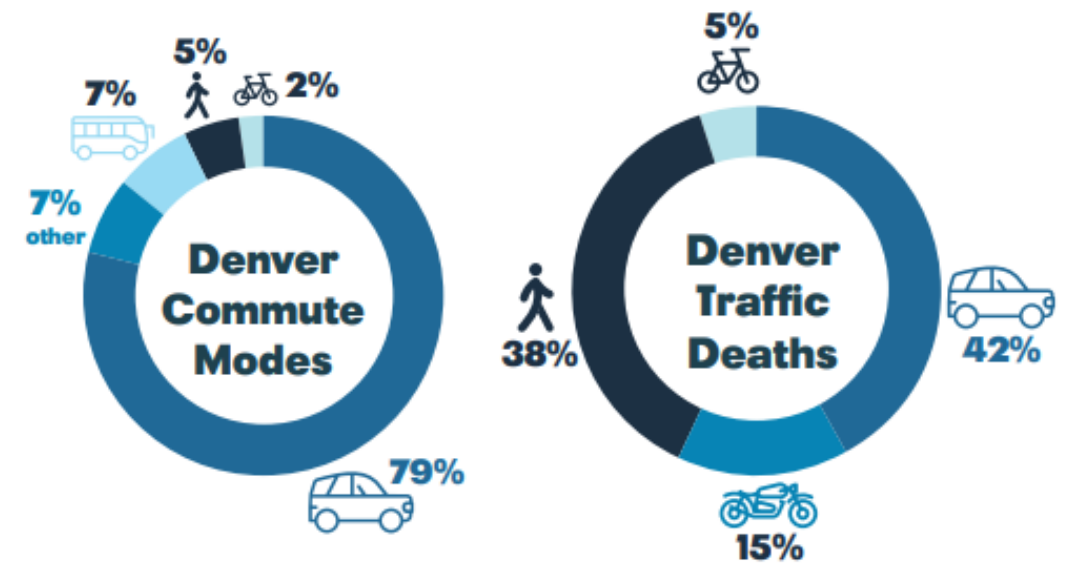
The "High Injury Network" (HIN) helps prioritize city efforts and funds, and ensures Vision Zero initiatives support the people and places most in need.

San Francisco



Denver

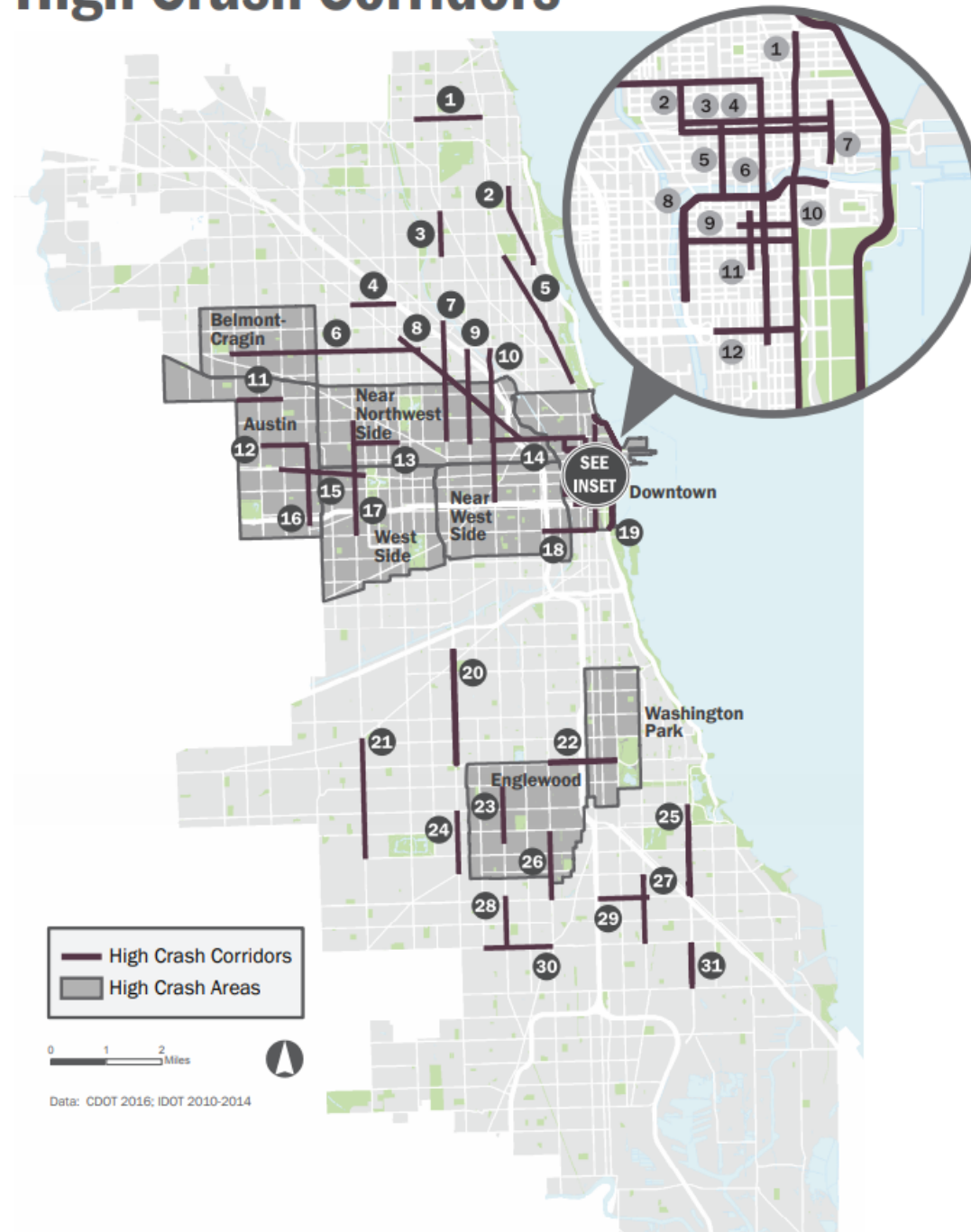
Data can help identify disproportionate safety impacts



50% of Denver's traffic fatalities occur on just 5% of their streets

High Crash Corridors

Chicago



Minneapolis

Past week

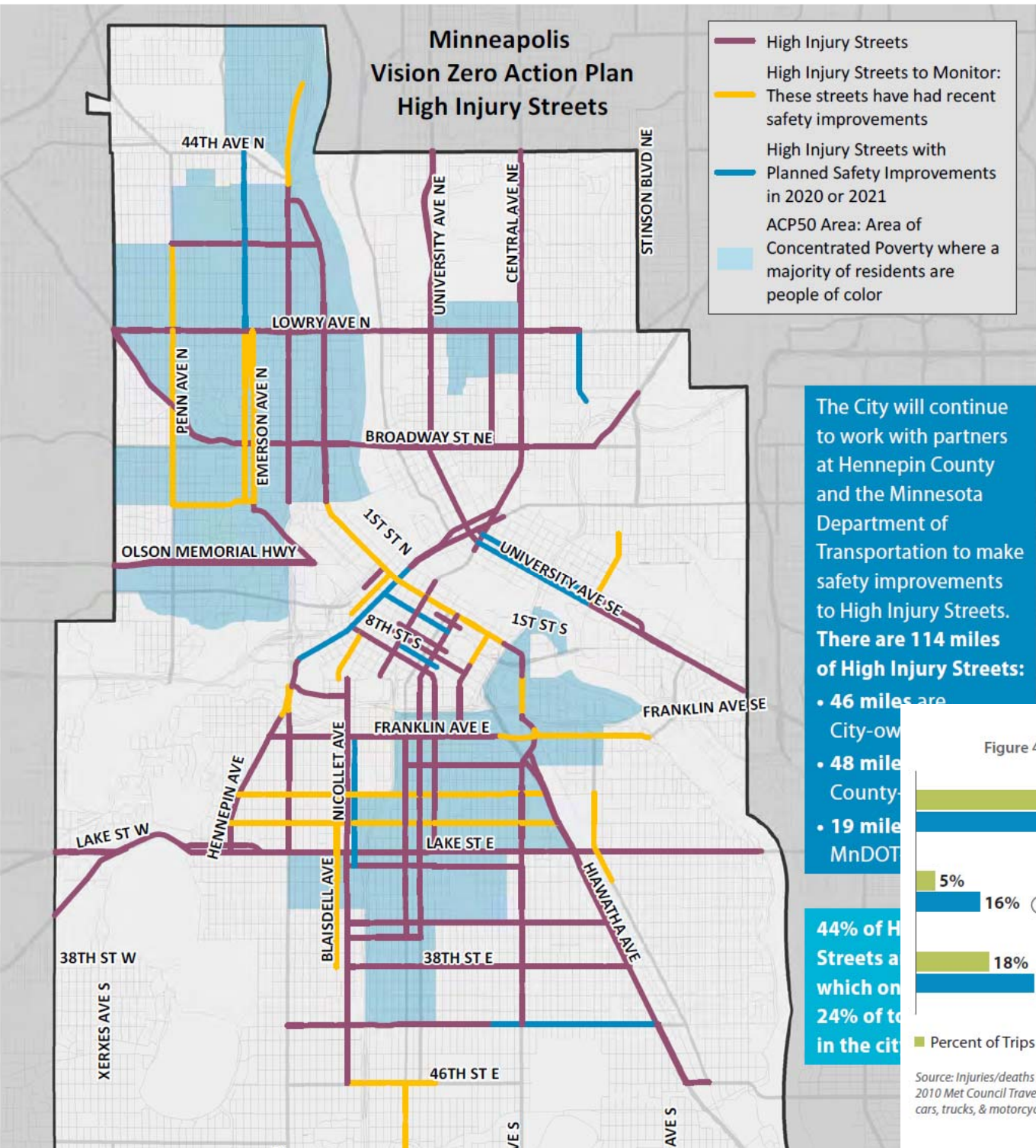
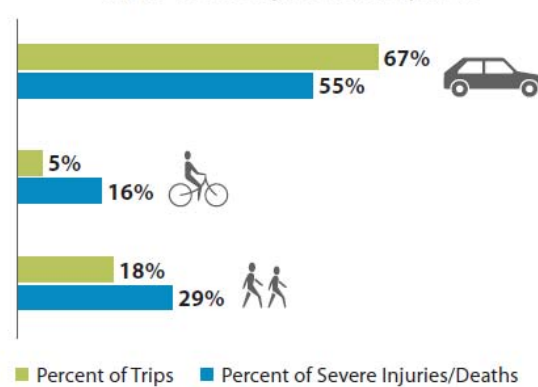
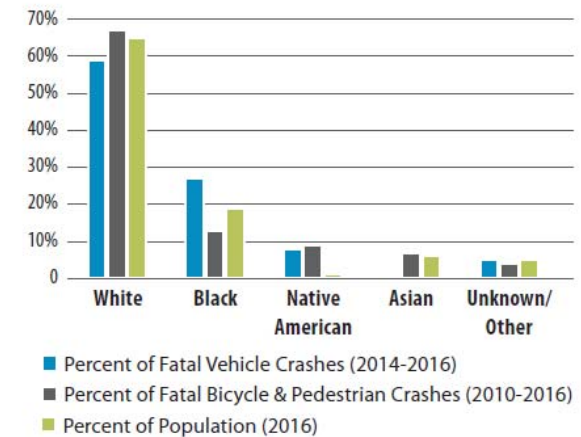


Figure 4: Severe injuries/deaths by mode



Source: Injuries/deaths from Vision Zero Crash Study, percent of trips from 2010 Met Council Travel Behavior Inventory. Automobile category includes cars, trucks, & motorcycles, but not transit.

Figure 5: Fatal crashes: demographic trends



Source: Vision Zero Crash Study analysis of national Fatality Analysis Reporting System and American Community Survey data; includes freeway crashes.

■ State of Wisconsin

Recent study by Wisconsin TOPS lab

Crash Cost by Type and Severity

SEVERITY		CRASH TYPE		
		PED	BIKE	VEH
K	Fatal	\$3,305,922	\$3,147,627	\$3,782,512
A	Incapacitating	\$433,383	\$362,759	\$389,169
B	Non-Incapacitating	\$113,100	\$90,303	\$107,674
C	Possible Injury	\$73,539	\$60,060	\$56,365
O	Property Damage	\$35,692	\$49,042	\$24,322

Motor Vehicle-Pedestrian (PED), Motor Vehicle-Bicycle (BIKE), Motor Vehicle Only (VEH)

Top 15 Injury Intersections in Madison



EPDO Severity Ranking 2014-2018

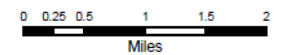


Ranking

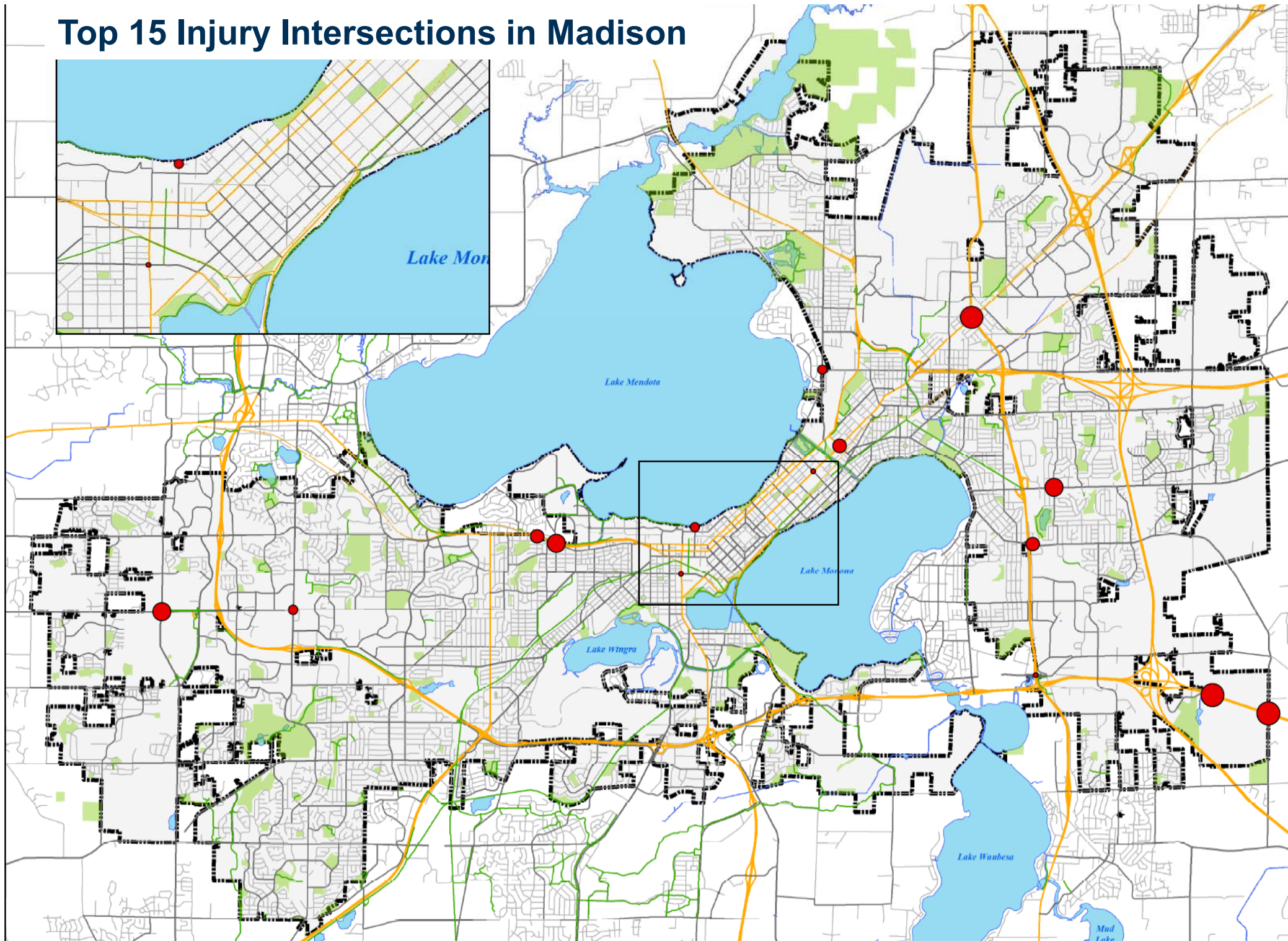
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Se Top 15 Injury Intersections in Madison

Rank (EPDO)	Intersection	Traffic Control	Severity (EPDO)	Total Crashes	Crash Severity		
					Fatal	Injury	PDO
1	N Stoughton Rd & E Washington Ave	Signal	416.7	60	2	17	41
2	US Highway 12 & 18 & Millpond Rd	Stop	287.5	44	1	15	28
3	US Highway 12 & 18 & Brandt Rd	Stop	251.7	28	1	16	11
4	Campus Dr & Farley Ave	Signal	241.9	29	1	15	13
5	Acewood Blvd & Cottage Grove Rd	Signal	210.6	28	1	13	14
6	Mineral Point Rd & N Pleasant View Rd	Yield (Round)	205.8	181	0	11	170
7	Blossom Ln & E Buckeye Rd	Stop	162.2	14	1	5	8
8	N First St & E Washington Ave	Signal	155.2	54	0	22	32
9	Ridge St & University Ave	Signal	141.4	7	1	3	3
10	Commercial Ave & N Sherman Ave	Signal	139.9	5	1	0	4
11	S Gammon Rd & Mineral Point Rd	Signal	136.6	53	0	20	33
12	N Lake St & Mendota Ct	No Control	135.9	1	1	0	0
13	N Park St & Regent St	Signal	122.6	54	0	21	33
14	N Baldwin St & E Washington Ave	Signal	118.3	53	0	16	37
15	E Broadway & S Stoughton Rd	Signal	115	57	0	23	34

Top 15 Injury Intersections in Madison – Bike Ped



EPDO Severity Ranking Pedestrians & Bicycles 2014-2018

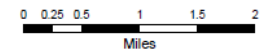
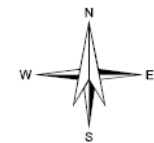


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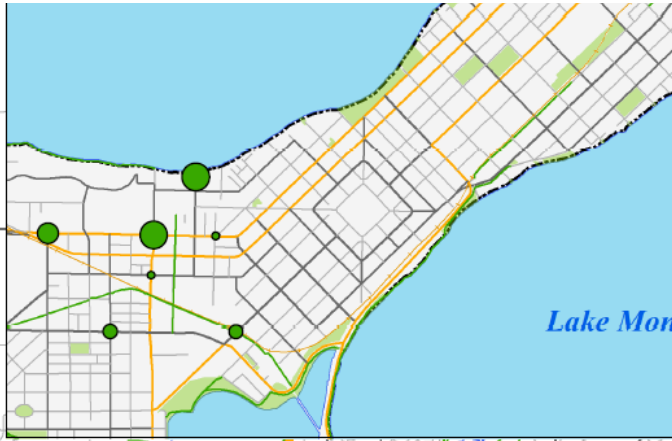
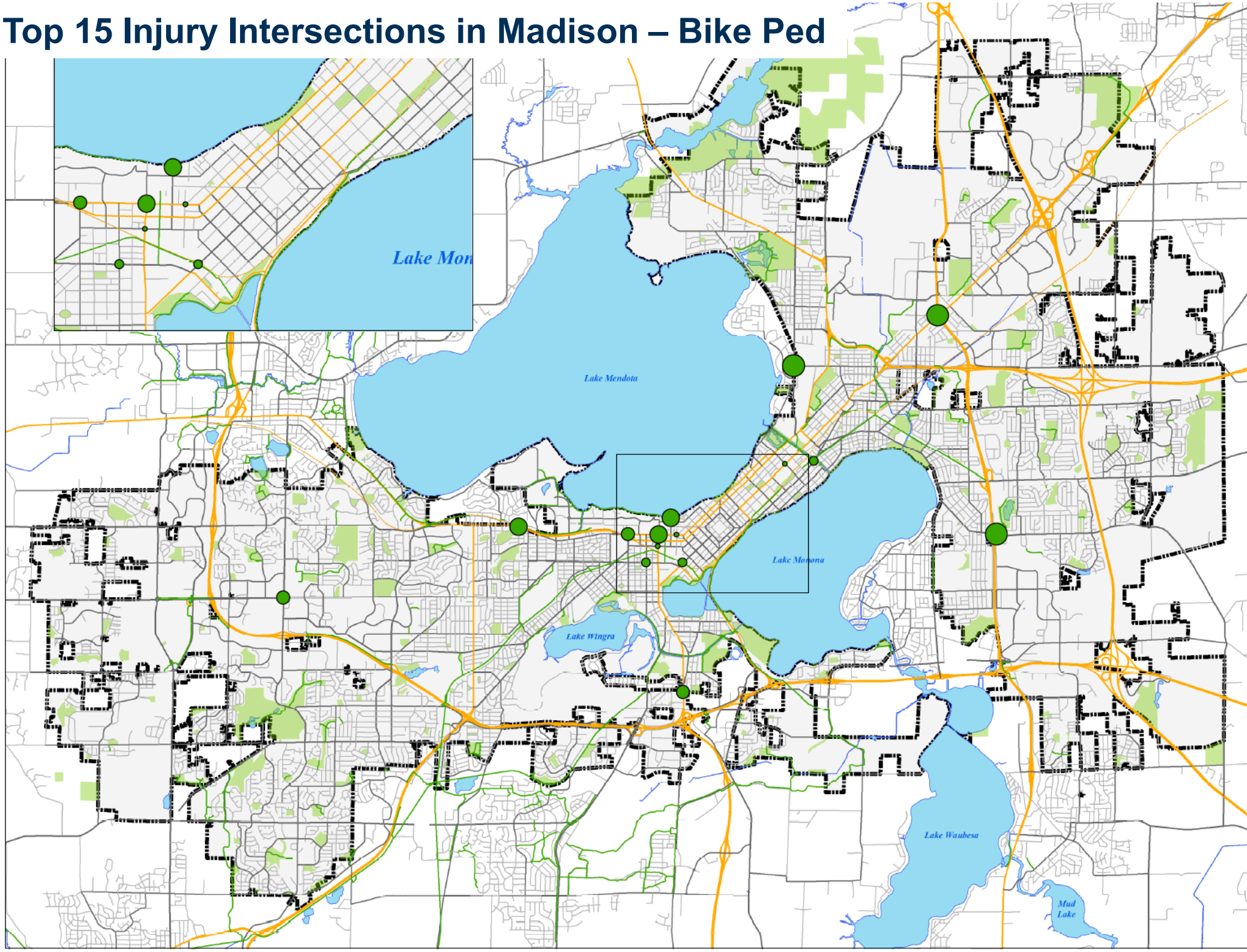
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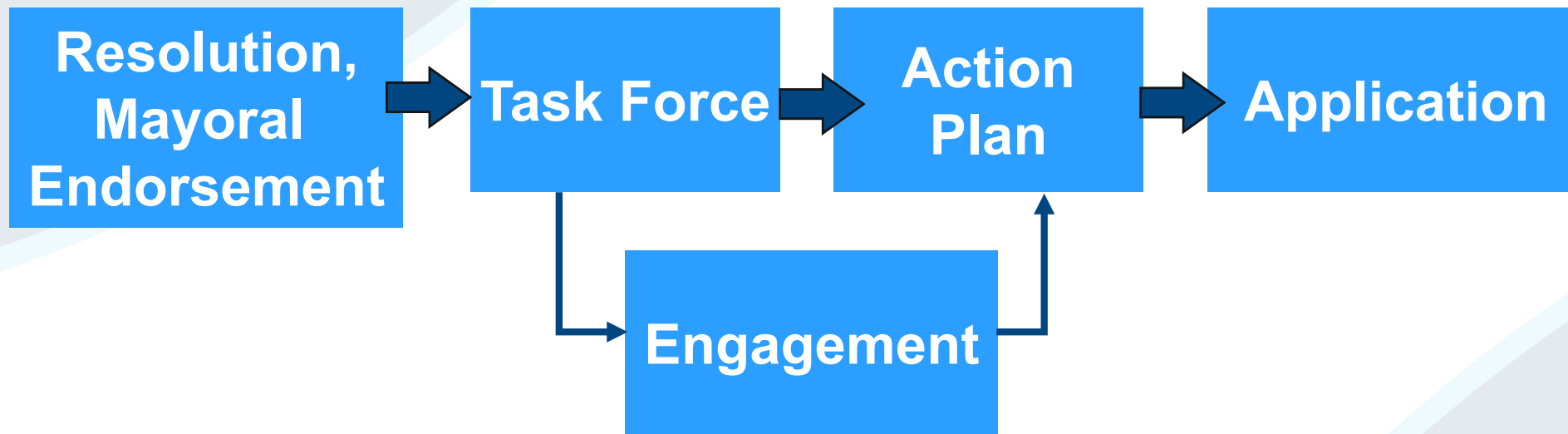
Top 15 Injury Intersections in Madison – Bike Ped

Severity Rank (EPDO)	Intersection	Traffic Control	Severity (EPDO)	Total Crashes (Ped/Bike)
1	N Stoughton Rd & E Washington Ave	Signal	177.7	5
2	Blossom Ln & E Buckeye Rd	Stop	137.4	2
3	Commercial Ave & N Sherman Ave	Signal	135.9	1
4	N Lake St & Mendota Ct	No Control	135.9	1
5	Ridge St & University Ave	Signal	129.4	1
6	N Park St & University Ave	Signal	65.8	14
7	N Randall Ave & University Ave	Signal	62.2	16
8	S Gammon Rd & Mineral Point Rd	Signal	48.3	6
9	Buick St & S Park St	Signal	44.6	5
10	N Mills St & Regent St	Signal	41.3	7
11	S Thornton Ave & Williamson St	Stop	39.3	3
12	Southwest Path & W Washington Ave	Stop	38.5	5
13	N Baldwin St & E Washington Ave	Signal	37.2	7
14	N Frances St & W Gilman St	Signal	34.7	10
15	W Dayton St & N Park St	Signal	31.9	5

The Vision Zero Network will recognize as “Vision Zero communities” those who are taking demonstrable and significant actions to advance the principles of Vision Zero to ensure safe mobility for all people. At a minimum, this includes the community meeting the following criteria:

- Setting a clear goal of **eliminating traffic deaths** and serious injuries among all road users within an **explicit timeframe** (i.e. 10 years);
- The Mayor (or top elected official) publicly, officially committing to Vision Zero within the set timeframe and directing appropriate city staff to prioritize the work;
- **A Vision Zero Action Plan or Strategy is in place**, or the Mayor and key departments have committed to creating one in a specified time frame and which includes a focus on being data driven, equitable, and including community input;
- **Key city departments**, including Transportation, Public Health, Mayor’s Office, and Law Enforcement, **are actively engaged** as leaders and partners in the process of developing the Vision Zero Plan, implementing it, and evaluating and sharing progress;
- A Vision Zero Task Force (including the agencies listed above, as well as community stakeholders, and others) meets regularly to lead and evaluate efforts.

Process



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Opportunities

- **Systems approach to speed**
 - Neighborhoods
 - Major corridors
- **Targeted Focus on Most Dangerous Intersections**
 - Top 10 to 15 gets us pretty far

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