

# Creating a Successful Pedestrian Safety Campaign

St. Paul, MN - 2015-2017





## **The Problem**



# The Problem



- A pedestrian or bicyclist is struck by a vehicle every other day in St. Paul (.84 per day)
  - This doesn't account for the near misses or those that don't report crashes to police
- Drivers' most common reason for not stopping (or hitting a ped during crash investigation) is that they did not see the pedestrian
- Enforcement or Engineering alone won't solve the problem
  - Need a team approach with buy-in from the community

#### MN Pedestrian Crossing Statute

# • Commonly referred to as a "new law", actually dates to 1937

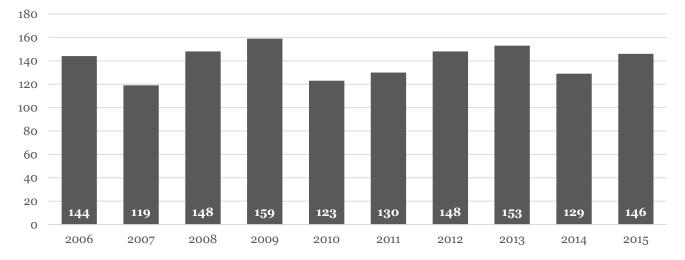
#### ARTICLE X

#### PEDESTRIANS' RIGHTS AND DUTIES

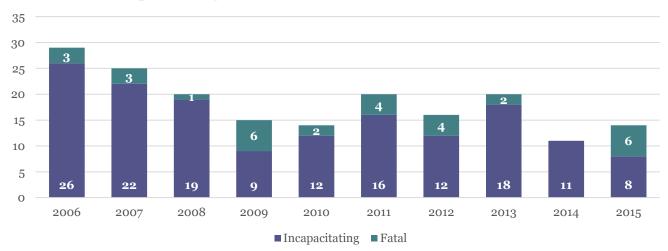
Sec. 52. Pedestrians right and duties.—Pedestrians shall be subject to traffic-control signals at intersections as heretofore declared in this act, but at all other places pedestrians shall be accorded the privileges and shall be subject to the restrictions stated in this article.

Sec. 53. Pedestrians to have right-of-way in certain cases.— (a) Where traffic-control signals are not in place or in operation the driver of a vehicle shall yield the right-of-way, slowing down or stopping if need be to so yield, to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at an intersection, except as otherwise provided in this article.

(b) Whenever any vehicle is stopped at a marked crosswalk or at any unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass such stopped vehicle. Pedestrian Crashes in Saint Paul



#### Incapacitating and Fatal Pedestrian Crashes in Saint Paul



Source: Minnesota Crash Mapping Analysis Tool Data

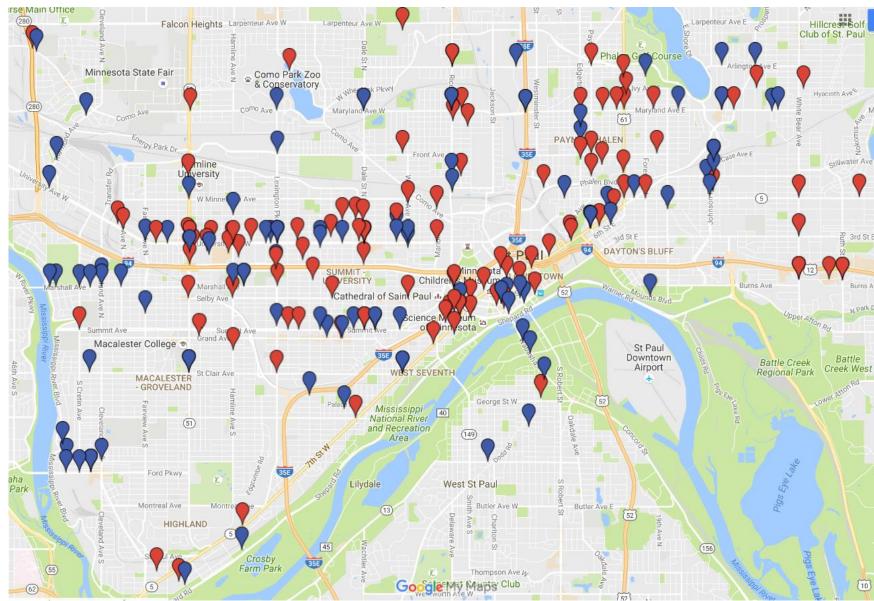
#### Crash Data Collection - Dissemination

- MN Crash Data / MN CMAT
- 911 / non-emergency calls daily query (no reports made)
- Social Media / Other Sources of Information
- Analysis St. Paul Open Data Portal

🕒 Calendar 🛞 Departments 🛞 Maps 🕞 News Room 🔳 Open Information	OR ST. PAUL PED	R ST. PAUL PEDESTRIAN & BIKE CRASHES - January 1, 2016 to Present							
				296 Days This Year /	0.83 Crashes Per Day				
*		O Num	Number of Crashes		Injury to Pedestrian		Injury to Biker		
Saint Paul Minnesota RESIDENTS	BUSINESSES GOVERNMENT	VISITORS Pedestrian	136 55.28%	Yes	112 79.43%	Yes	76	68.47%	
7 4 4 1		Bike	110 44.72%	No	24 17.02%	No	34	30.63%	
ARAA The most livable city in America		Other	0 0.00%	Not Determined	5 3.55%	Not Determined	1	0.90%	
		Total Crashes	246 100.00%	Total Pedestrians	141 100.00%	Total Bikers	111	100.00%	
		Total Crashes	246 100.00%	Total Pedestrians	141 100.00%	Total bikers	111	100.00%	
		Numb	Number of Fatalities		Pedestrian to Hospital		Biker to Hospital		
		Pedestrians Killed	3 100.00%	Yes	74 52.48%	Yes	47	42.34%	
		Bikers Killed	0 0.00%	No	64 45.39%	No	64	57.66%	
		Others Killed	0 0.00%	Not Determined	3 2.13%	Not Determined	0	0.00%	
		Total Fatalities	3 100.00%	Total Pedestrians	111 100.000	Total Bikers		100.00%	
		Total Fatalities	3 100.00%	Total Pedestrians	141 100.00%	Total Bikers	111	100.00%	
		Citations Issued / Arr	Citations Issued / Arrest (at initial police response)		Crash Reports Made by Police				
		Yes	74 29.96%	Yes	207 83.81%				
		No No	172 69.64%	No	40 16.19%				
	A MANAGER	Not Determined	1 0.40%	Not Determined	0 0.00%				
	and a start of the	and the second							
		Total Crashes	247 100.00%	Total Crashes	247 100.00%				
	Pedestrian De	Pedestrian Demographic Information		Driver Demographic Information		Biker Demographic Information			
Departments // Police		Male	61 43.26%	Male	97 39.27%	Male	83	74.77%	
	Contact	Female	66 46.81%	Female	87 35.22%	Female	20	18.02%	
		Unknown	14 9.93%	Unknown	63 25.51%	Unknown	8	7.21%	
Pedestrian and Bike Crash Data - City of St.	Paul								
	Jeremy Ellison	0-10	12 8.51%	0-10	0 0.00%	0-10	1	0.90%	
	Toward Zero Deaths (TZD) G	Grant Coordinator 21-30	21 14.89%	11-20 21-30	12 8.51% 46 32.62%	11-20 21-30	31	27.93% 22.52%	
January 1, 2016 through October 23, 2016	St. Paul Police Department	31-40	16 11.35%	31-40	30 21.28%	31-40	10	9.01%	
Sanuary 1, 2010 through October 23, 2010			15 10.64%	41-50	36 25.53%	41-50	13	11.71%	
	367 Grove Street   St. Paul, N	AN 55101 51-60	18 12.77%	51-60	35 24.82%	51-60	17	15.32%	
	Jeremy.Ellison@stpaul.gov	61-70	16 11.35%	61-70	16 11.35%	61-70	2	1.80%	
		71-80	4 2.84%	71-80	5 3.55%	71-80	3	2.70%	
	TOWAR	81+	3 2.13%	81+	3 2.13%	81+	0	0.00%	
	TOWAR	Unknown Age	15 10.64%	Unknown Age	64 45.39%	Unknown Age	9	8.11%	
		At Paul Paul dust	22 5 25 2	a part part days	0.4 0.0.000	at period and	70	74.470	
reaesmans Bicycusts		St. Paul Resident NON-St. Paul Resident	92 65.25% 49 34.75%	St. Paul Resident NON-St. Paul Resident	94 38.06% 153 61.94%	St. Paul Resident NON-St. Paul Resident	t 32	71.17% 28.83%	
Crashes: 136 Crashes: 110	DEATHS	Non-st. Paul Resident	49 34./5%	NON-St. Paul Resident	155 61.94%	NON-St. Paul Resident	32	20.00%	
		Citations to Pedestrians	5 6.76%	Citations to Drivers	64 86,49%	Citations to Bikers	4	5.41%	
Injuries: 112 Injuries: 76							يشروه ويتعاديهم		
Fatalities: 3		Total Pedestrians	141 100.00%	Total Drivers	247 100.00%	Total Bikers	111	100.00%	

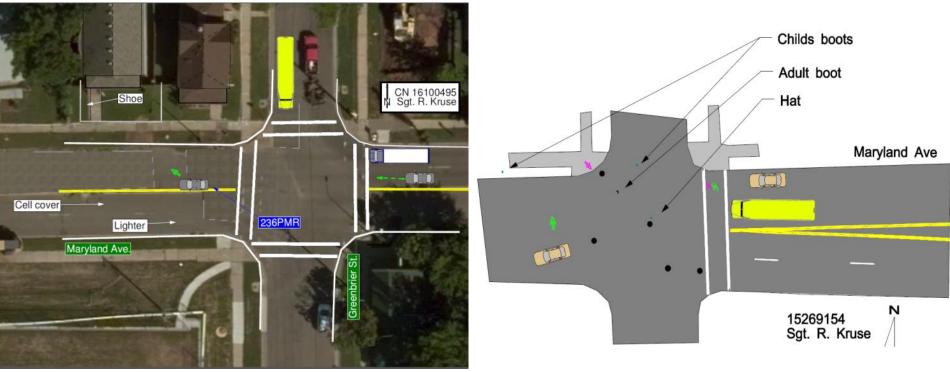
#### Data Points – Public Google Map

ThvXQ<u>uXs</u>



## Crash - Life Long Impacts

- "Statistics are human beings with the tears wiped away" many sources
  - Every crash has a story, an impact on those involved and their families and friends
    - Video of Test Crash #1 (Crash Test Dummy)
    - Video of Actual Crash #2 (WARNING!)



# Crash - Life Long Impacts

#### • Video of Test Crash #1 (Crash Test Dummy)



# Crash - Life Long ImpactsVideo of Actual Crash #2 (WARNING!)



#### Pedestrian Safety Events







#### • 2016 – 2017 Goals

- Increase awareness regarding Ped/Bike safety
- Reduce the number of ped/bike crashes
  - Specifically fatal & serious injuries
- Change driver behavior to increase compliance with crosswalk law

### Media / Publicity



St. Paul Police Department Launches 'Stop for Me' Campaign



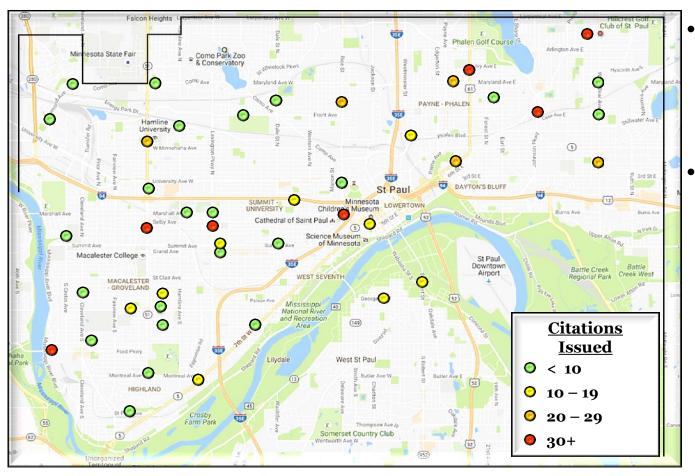


- Detailed Press Releases
- Local Papers, On-Line Bloggers, Main Stream News Media, etc.
- Social Media Twitter / Facebook
- Inviting City Council Members, Mayor, other dignitaries that will attract attention





#### 2016 Pedestrian Safety Events



- Goal = 34 Events
  - 2 in each District Council
- Actual = 60 Events
  - Some locations had multiple events

- Total Citations Issued
  - 637 Fail to Stop for Pedestrians
  - 400 Other Violations

- Warnings Issued
  - 64 Fail to Stop for Pedestrians
  - 19 Other Violations

#### Pedestrian Safety Events

- Driver Response Collection Process
- Officers do the following for every vehicle stop during a pedestrian safety event:
  - Provide a MN DOT Pedestrian Safety Card
    - Motorist / Pedestrian safety tips
  - Discuss violation and ask "Why didn't you stop for the pedestrian(s)?"
    - Record the answers using the "STEP" log for data analysis
    - Over 80 % response = "I did not see the pedestrian"
  - Issue a citation or verbal warning based on circumstances



MOTORISTS • Remember that EVERY corner is a crosswalk – stop for crossing pedestrians • Scan the road for pedestrians,

PEDESTRIAN SAFETY IS A TWO-WAY STREET.

- Scan the road for pedestrians, especially before turning
- Never pass a vehicle stopped for pedestrians

www.sharetheroadmn.org



#### PEDESTRIAN SAFETY IS A TWO-WAY STREET.

#### PEDESTRIANS

- Make eye contact with drivers before crossing the street
- Clearly show you intend to cross
- Remove headphones and stay off cell phones while crossing

www.sharetheroadmn.org

#### **Best Practices**

- Education + Enforcement = Changing Behavior
  - St. Paul Police Department provide enforcement
  - St. Paul District Councils & Community Volunteers provide education
- More than 1 E to solve the problem
  - Work closely with Engineering
- Summary reports done for every event
  - Reviewed by Steering Committee and City Engineers
  - Provides Immediate feedback to community
- Funding Options, commitment





#### Opportunities for Improvement



- Feedback
  - Distractions / sign placement
  - Hi-Visibility Enforcement Signs
- Diversity / Equity
  - Location Selection
  - Community participation
- Statewide Issue
  - Majority of drivers who crash into pedestrians and bikes in St. Paul are not from St. Paul
- Court
  - Hearing Officers, City Attorney's Office, Perception

### Materials

- District Council volunteers created a toolkit to be distributed to all event participants.
  - Toolkit included resources available to volunteers and described how to coordinate and promote crosswalk event.

#### Safety was stressed at all events.



- MnDOT provided pedestrian safety cards and banner.
- St. Paul Walks provided bumper stickers.
  - All city vehicles, Mayor and City Council commitment

### Partnerships - Key to Success

- Increased participation through partnerships
  - St. Paul Walks (Smart Trips)
  - MN Toward Zero Deaths
    - Susan Youngs (Metro TZD Coordinator)
  - St. Paul District Councils
  - City of St. Paul
    - Public Works
    - Planning and Economic Development
    - City Council
    - Police
    - Office of Technology & Communications
  - Safe Routes to Schools (funding)



## Engineering

- Street Design Manual
- 4 to 3 Lane Conversion
- Leading Pedestrian Interval (LPI)
- Test Installations
- 4 to 3 Lane Conversion





### **Centerline Pedestrian Signs**

- 40 Signs
- Deploy May thru November
- 3-4 Weeks at one location
- Education Tool





#### Dynamic Speed Display Signs

#### Permanent



Temporary



## Dynamic Speed Display Signs

- 22 Permanent
- 7 Temporary Rotate based on speed studies/complaints
- Limited Effectiveness
- Education Tool
- 85<sup>th</sup> Percentile Speed on Typical Arterial/Collector Street 33 to 37 mph
- Residential Streets typically under 30 mph. Perceived as faster than 30 based on conditions

#### Rectangular Rapid Flash Beacon(RRFB) Have installed Several Locations

Working on Developing Policy for Installation

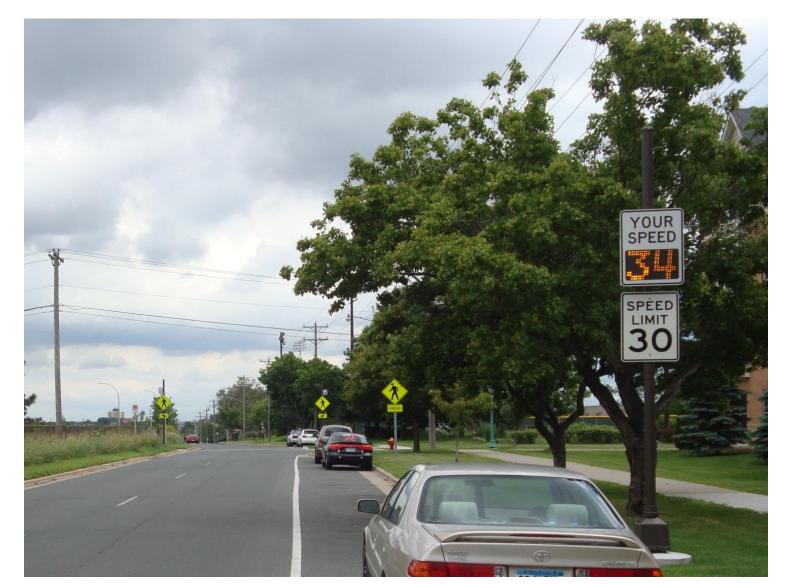
- 4 Lane Roadways
- Volume of Pedestrians
- School Crossings
- Near Senior Citizen Housing

Effectiveness vs Capital/Maintenance Costs

#### Rectangular Rapid Flash Beacon(RRFB)



### Speed Sign & RRFB



# Pedestrian Refuge Median & Advanced Stop Bar



#### Test Pedestrian Safety Improvements



#### Future Engineering Goals

- Use research based solutions
  - Gainesville, Florida Example
    - Low cost, but highly effective fixes
      - Advanced stop bars
      - Gateway treatments
  - U of M / MN DOT study
- Develop Citywide Pedestrian Plan
- High Percentage of Crashes happen on State and County roads
  - Engagement of partners and make changes
- Safe Routes to Schools
  - Schools are in nearly every part of the City, focusing on schools will result in safety for the entire city







### Future Goals and Plans

- 2017 Pedestrian Safety Advocate
  - Reports to Public Works
- Vision Zero / TZD
  - City Council Resolution and Plan
- 2017 Corridor Plan
  - 2/3 Corridor Events
  - 1/3 Neighborhood complaints
- Increased education / outreach
  - Metro Wide Outreach (Minneapolis)
- Target Captive Audiences
  - Parent drop off areas
  - More education focused





#### Resources & Contact Information

- Paul St. Martin (Assistant City Engineer)
  - Paul.St.Martin@stpaul.gov
- Kevin Gallatin (Highland District Council Transportation Chair)
  - KevinGallatinoo@gmail.com
- Jeremy Ellison (St. Paul Police Dept. TZD Grant Coordinator)
  - Jeremy.Ellison@stpaul.gov
- MN DOT Banner / Ped Safety Cards (Share the Road Materials)
- Crosswalk Event Tool Kit (MN DOT / St. Paul Specific)
- Police Operations Plan (sample)
- Hi Visibility Enforcement Signs Public Works (?)
- Compliance Rate Tally Sheets
- Volunteer Sign-In Sheets
- Safety Tips / Briefing Sheet for Volunteers
- Contact us We Will Share

#### Websites / Resources:

<u>http://StopForMe.org</u> <u>http://www.facebook.com/StopForMeStPaul</u>