# TLNA Traffic Safety Discussion

Christ Presbyterian Church April 17, 2017

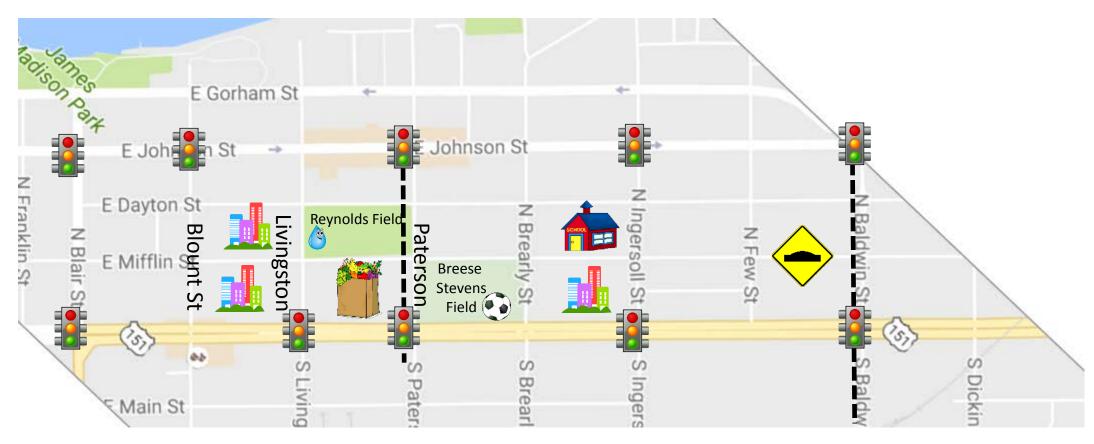
## Neighborhood Traffic

### Today:

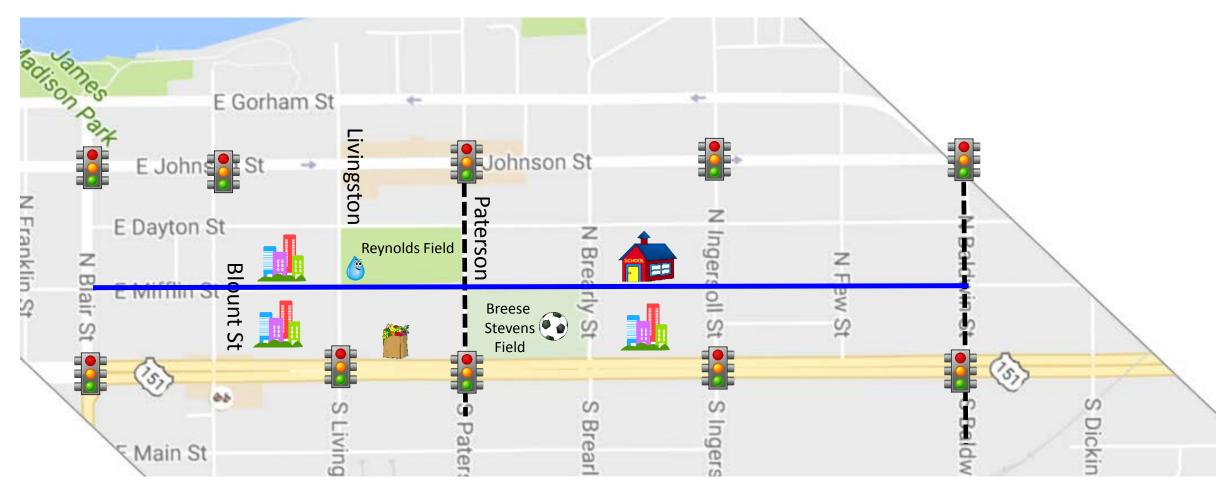
- 1) Identify preliminary traffic issues
- 2) Quickly touch on some preliminary data
- 3) Review options, answer questions





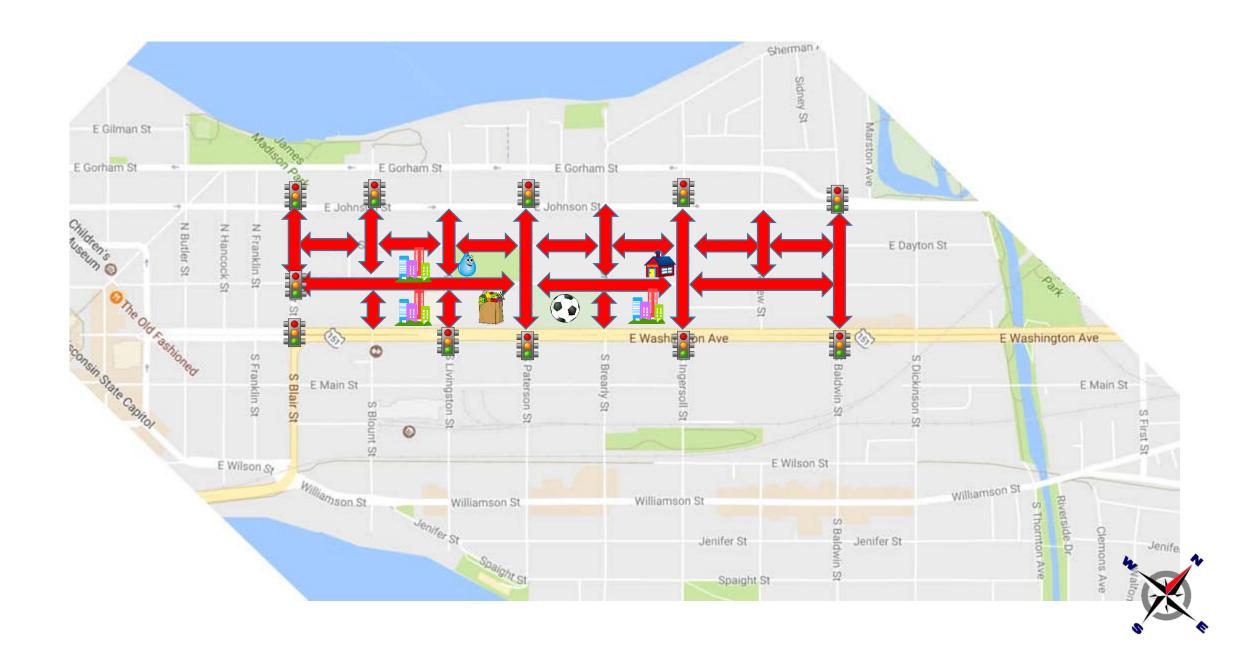






Further complicated by designation as a low speed bike boulevard





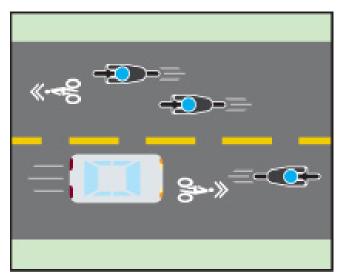
# Parking on E Mifflin Street



## What is a bike boulevard?



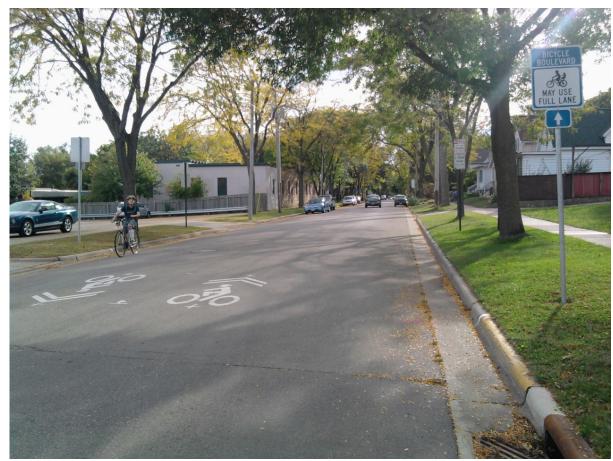
#### **BICYCLE BOULEVARD**



Bicycle boulevards are low speed, low (motor vehicle) traffic volume, local streets that are designated for use primarily by bicyclists. Motor vehicles are welcome on bicycle boulevards. Special blue street signs and shared lane (sharrow) pavement markings signify that motor vehicles must be attentive to the large numbers of cyclists and lower their speeds.

Sharrows: how to use shared lane markings (PDF)





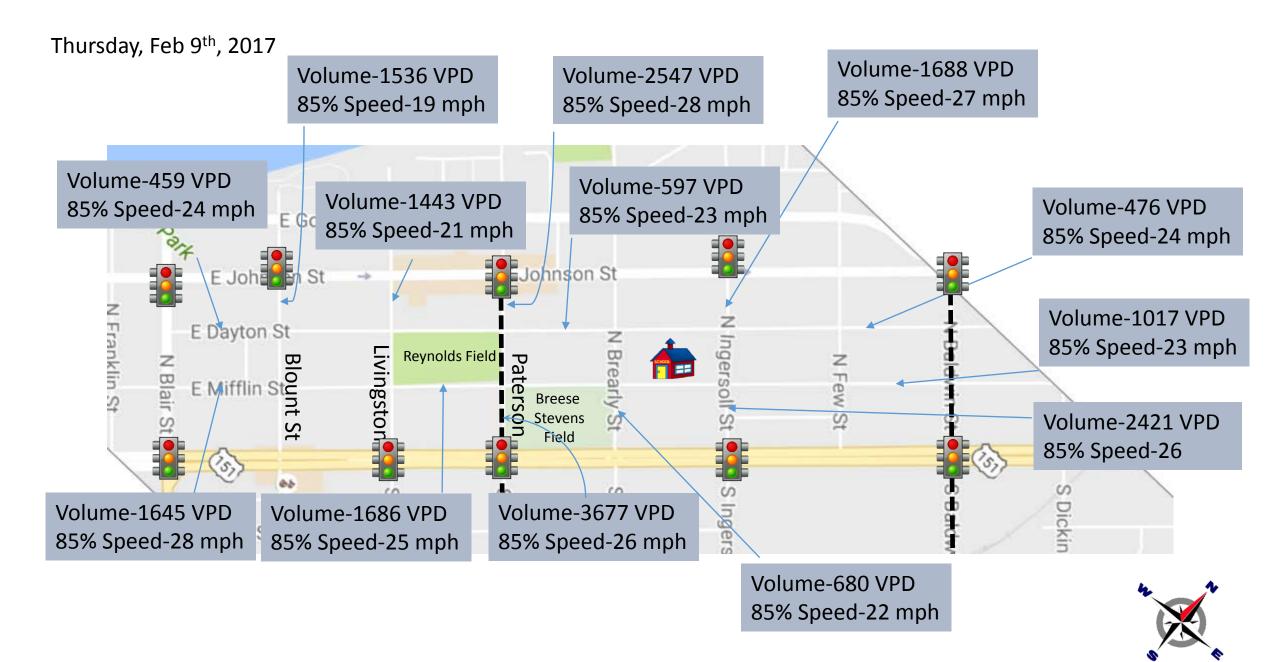


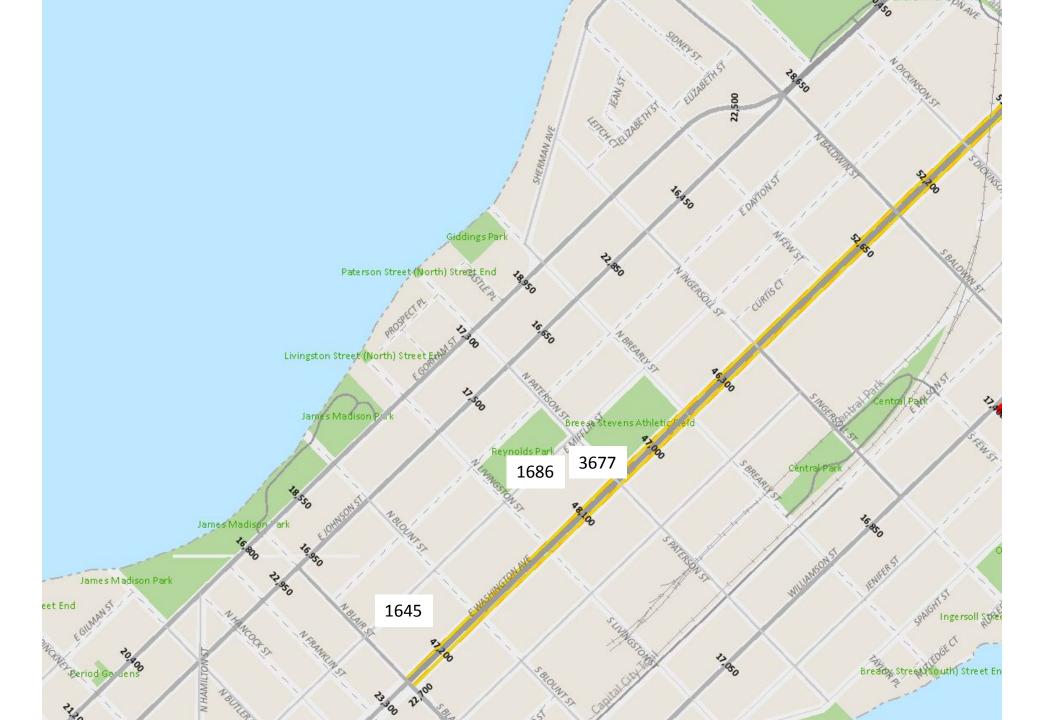
Madison, WI



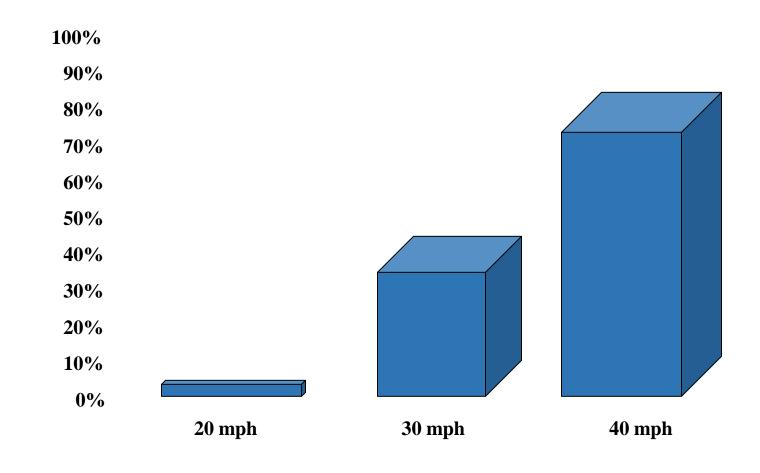
Projects > Palo Alto Bicycle Boulevards Feasibility and Design

# Southern California version of bike boulevard





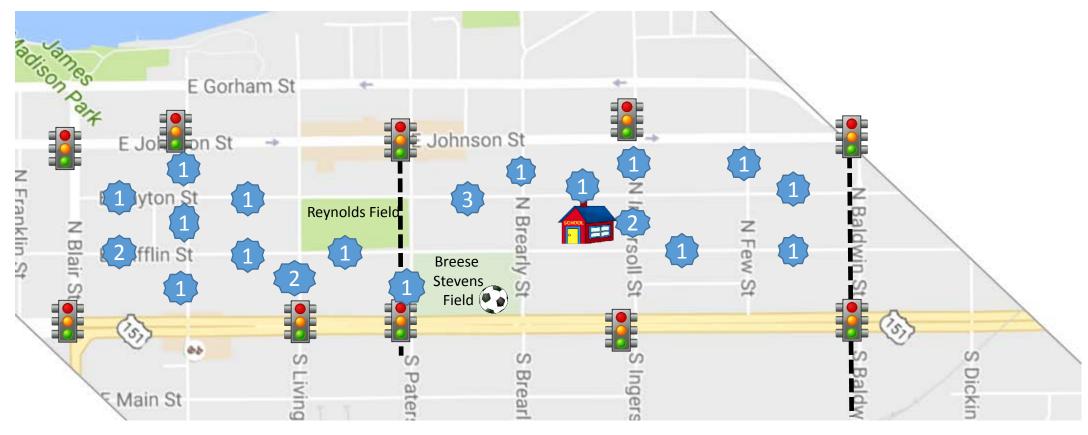
# Pedestrian's Chance of Being Killed If Hit By A Vehicle, Based On Vehicle Speed



#### 85th

85th Percentile Speeds	
Old Middleton	36
Portland Pkwy	35
•	
Dominion	34
Ellen	34
Prairie	34
Academy	33
Turner	32
Portland Pkwy	32
Wedgewood	32
Dempsey	32
Potter	32
Golden Leaf	31
Dean	31
Easley	30
Acewood	30
Monterey	29
Trailsway	29
Russett	29
Ashford	29
Dean	29
Thackeray	29
Amsterdam	29
Dempsey	29
Rutledge	29
100 N Baldwin	29
Haywood	28
Lewon	28
Lewon  600 E Mifflin	
	28
600 E Mifflin	28 28
600 E Mifflin 900 E Mifflin	28 28 28
600 E Mifflin 900 E Mifflin 300 N Paterson	28 28 28 28
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer	28 28 28 28 28
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol	28 28 28 27 27
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol Hillcrest	28 28 28 27 27 26
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol Hillcrest 300 N Livingston	28 28 28 27 27 26
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol Hillcrest 300 N Livingston 100 N Paterson	28 28 28 27 27 27 26 26 26
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol Hillcrest 300 N Livingston 100 N Paterson	28 28 28 27 27 26 26 26
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600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol Hillcrest 300 N Livingston 100 N Paterson 100 N Ingersol 300 N Baldwin Ziegler 800 E Mifflin 600 E Dayton 300 N Brearly	288 288 288 288 288 288 288 288 288 288
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol Hillcrest 300 N Livingston 100 N Paterson 100 N Ingersol 300 N Baldwin Ziegler 800 E Mifflin 600 E Dayton 300 N Brearly 1200 E Dayton 1200 E Mifflin	28 28 28 28 28 28 28 28 28 28 28 28 28 2
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol Hillcrest 300 N Livingston 100 N Paterson 100 N Ingersol 300 N Baldwin Ziegler 800 E Mifflin 600 E Dayton 300 N Brearly 1200 E Dayton 1200 E Mifflin	28 28 28 28 28 28 28 28 28 28 28 28 28 2
600 E Mifflin 900 E Mifflin 300 N Paterson Jenifer 300 N Ingersol Hillcrest 300 N Livingston 100 N Paterson 100 N Ingersol 300 N Baldwin Ziegler 800 E Mifflin 600 E Dayton 300 N Brearly 1200 E Dayton 1200 E Mifflin 900 E Dayton	212 22 22 22 22 22 22 22 22 22 22 22 22

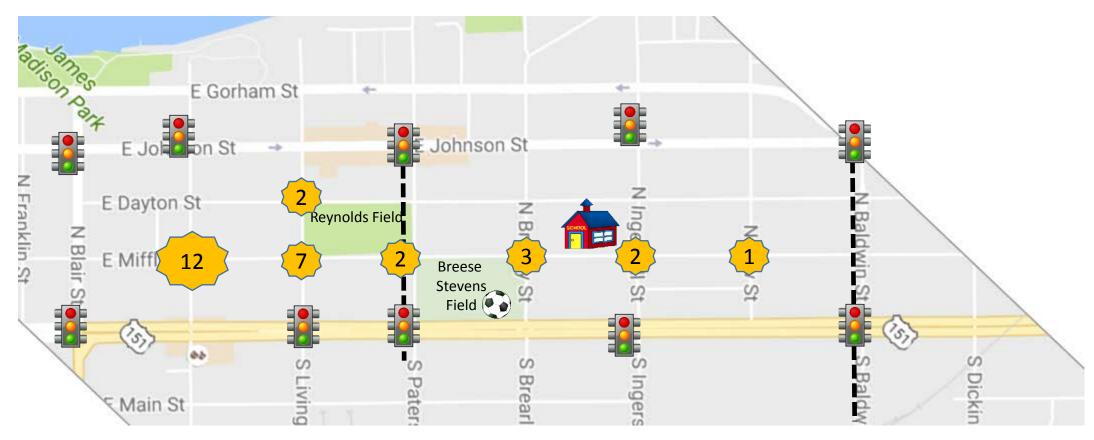
#### Midblock Crashes (2013-2015)

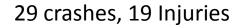






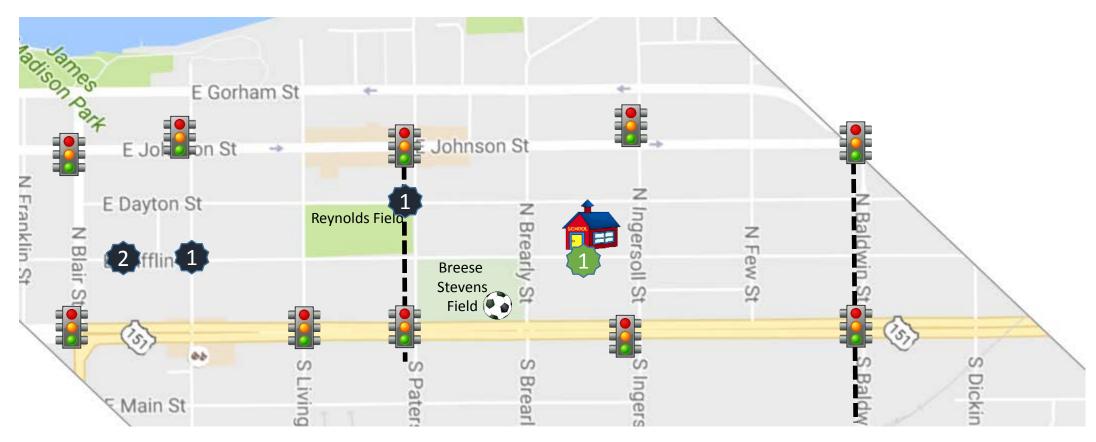
#### Intersection Crashes (2013-2015)







### Bike & Pedestrian Crashes (2013-2015)



4 bike crashes, 1 pedestrian crash, 3 injuries



## Two Types of Traffic Control

- 1) Passive
- 2) Active

### **Passive Devices**

Depend on self-compliance and law enforcement to be effective







- Used where assignment of the right-of-way is confusing
- •Generally considered ineffective speed control devices

## **Active Devices**

Physically influence the driver to be effective

# Neighborhood Traffic Circles





# Traffic Circles Pros and Cons

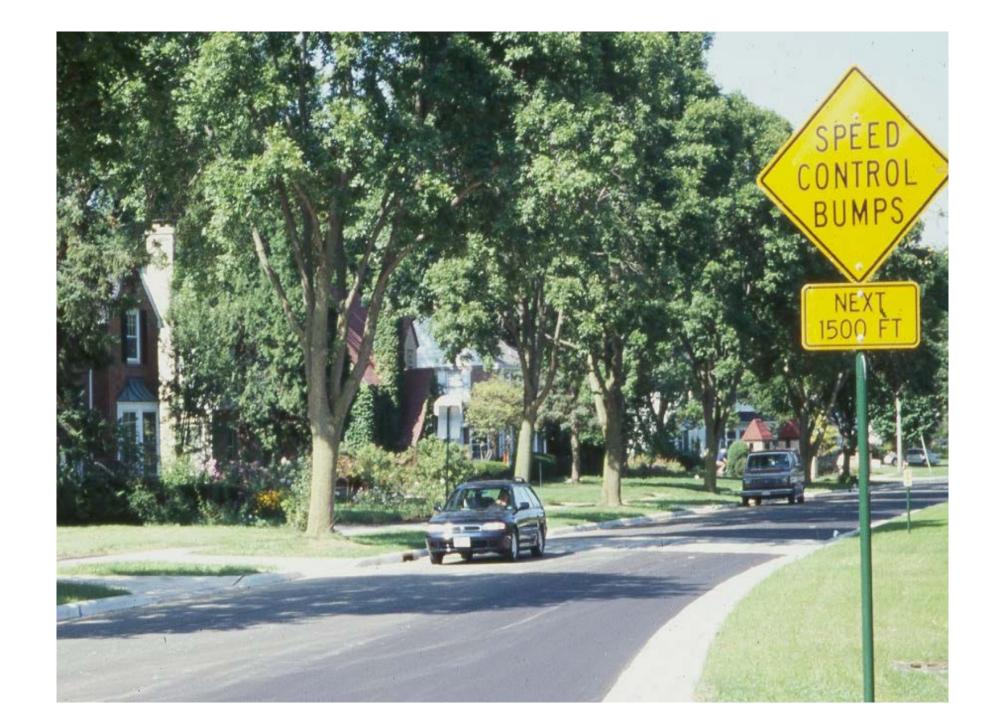
#### Pros:

- Can reduce speeds through an intersection
- Can treat two streets simultaneously
- •Can change the "feel" of the street
- Can be attractively landscaped
- Crashes tend to be less severe

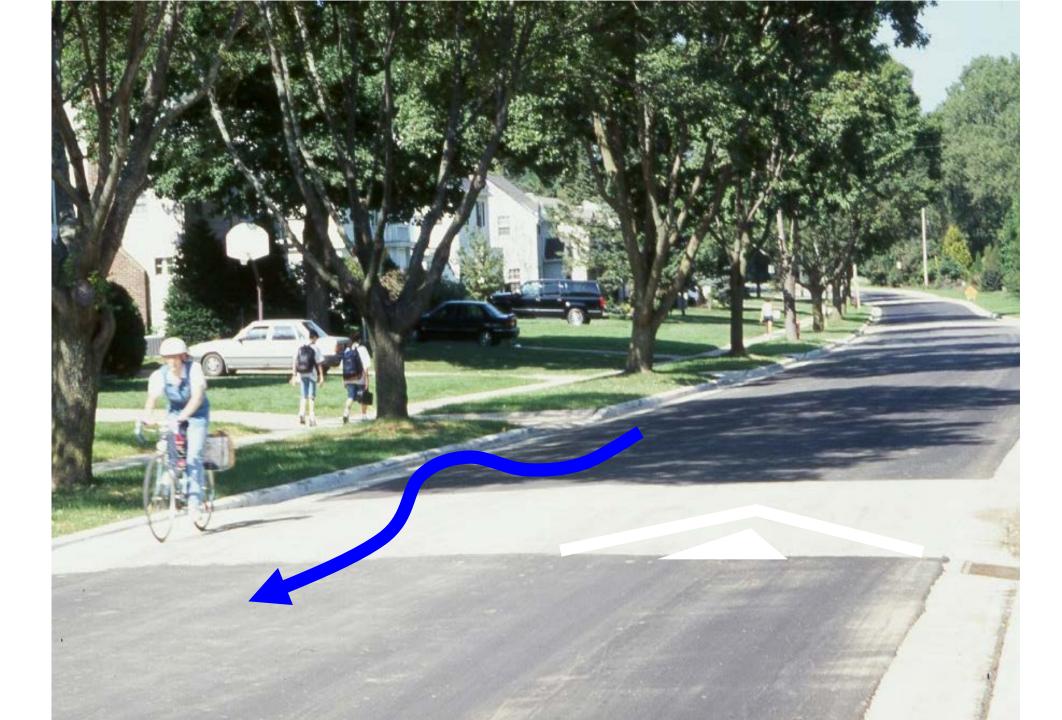
#### Cons:

- •Landscape maintenance
- May need to restrict some parking
- •Snow removal challenges-must be designed for a plow to pass
- •Some cyclists feel uncomfortable with mixed traffic

# Speed Humps







A variation on the hump...

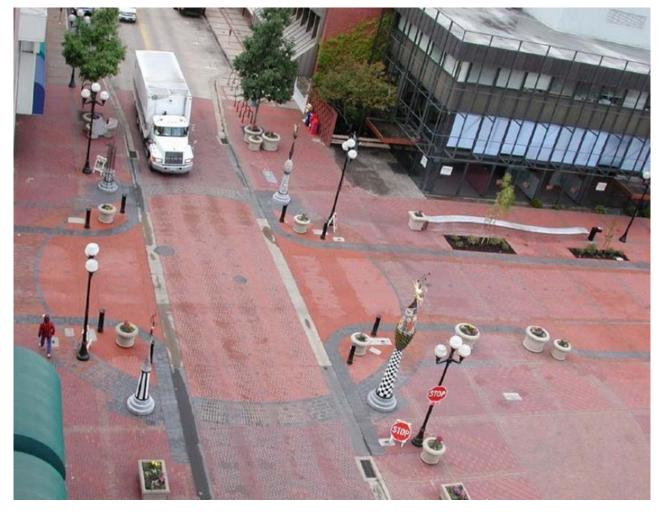
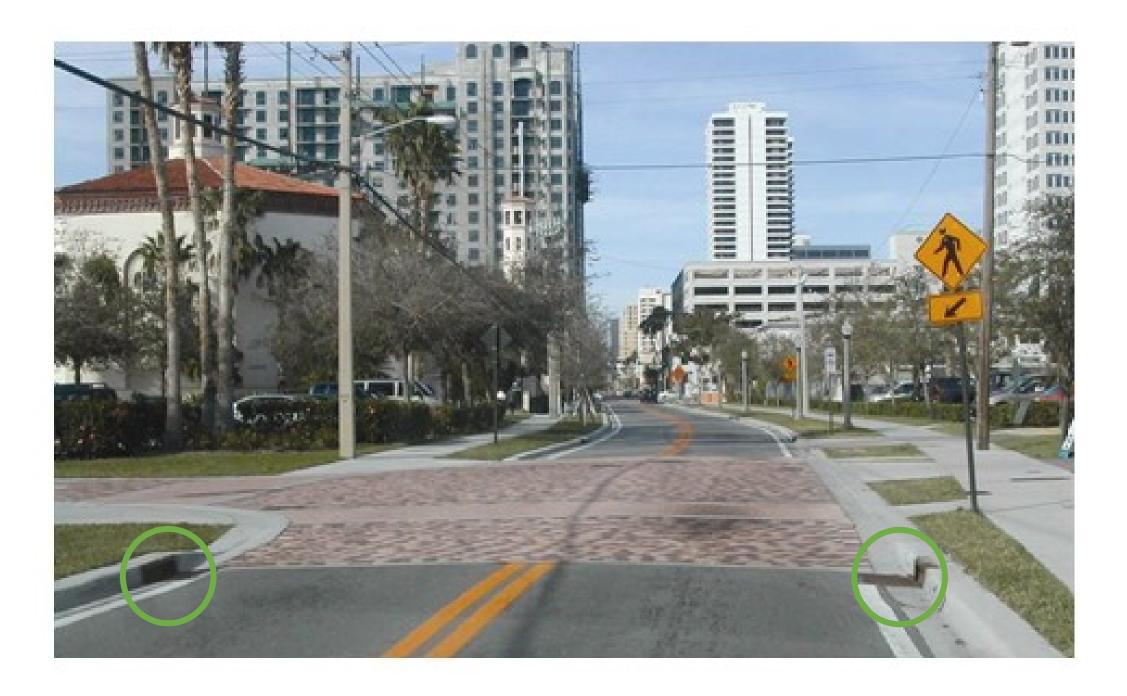


Table Top intersection



Table Top intersection



# Speed Hump Pros and Cons

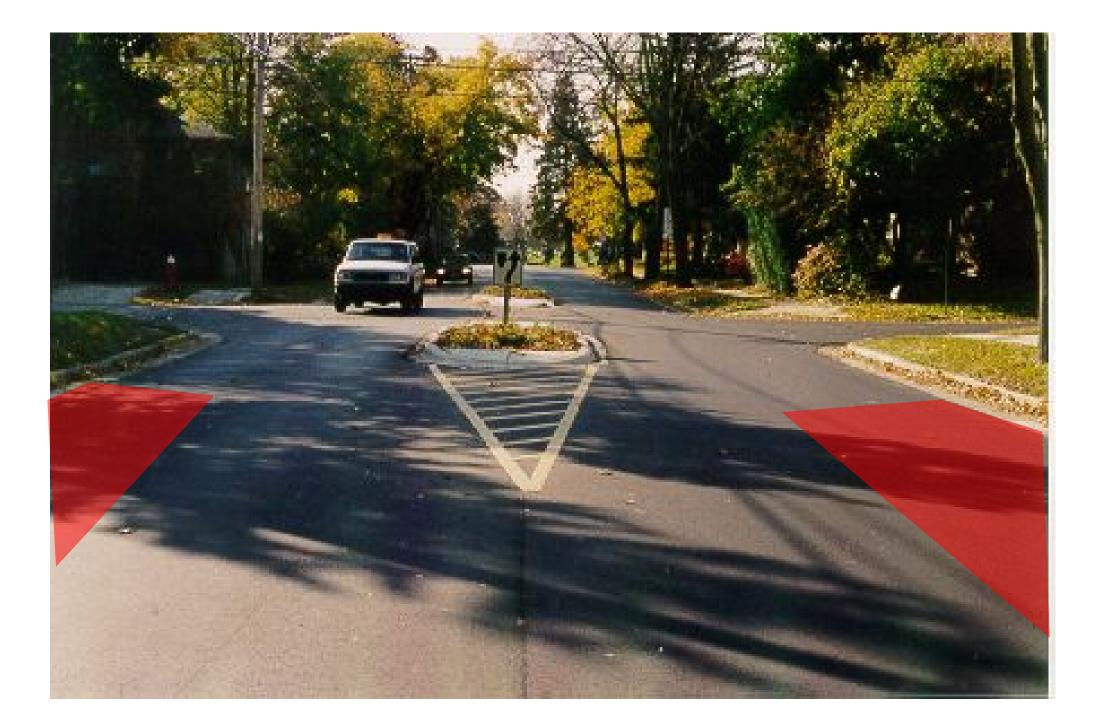
#### Pros:

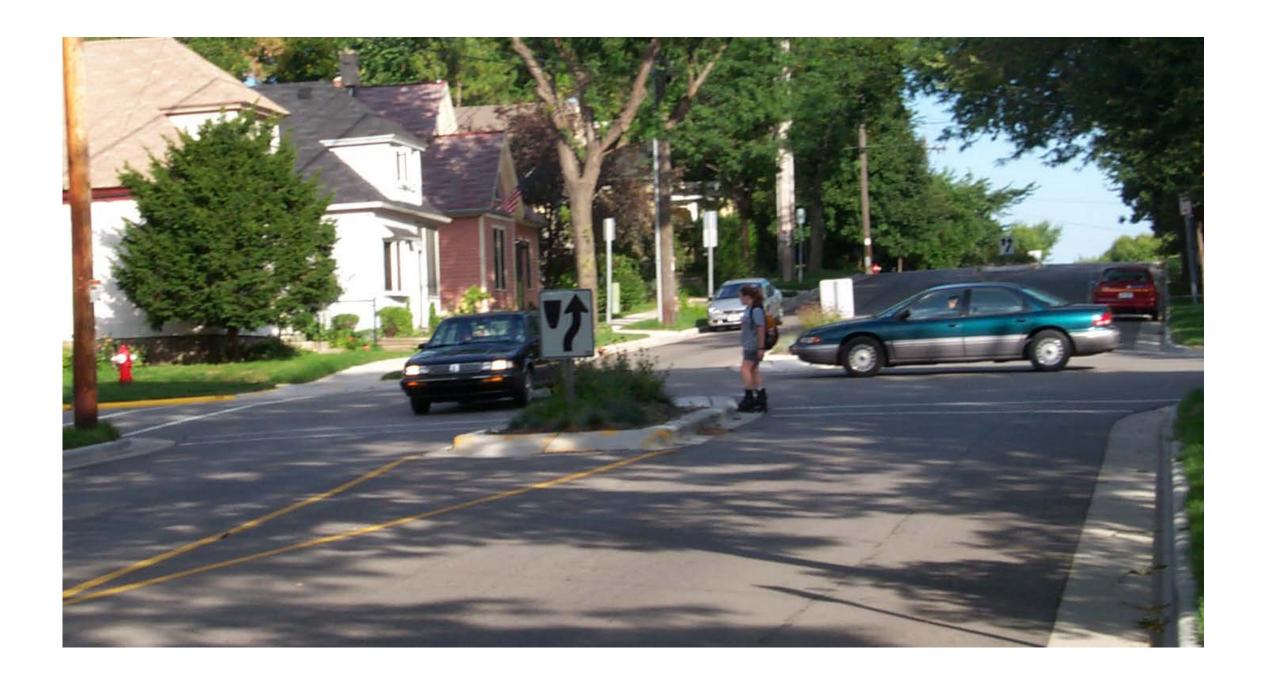
- Most effective device for reducing speed
- •Can treat the length of street
- Does not generally divert traffic
- Not a particular challenge for snow plows
- Does not remove parking

#### Cons:

- •Fire Department does not like them
- Metro Transit does not like them

## Pedestrian Refuge Islands





## Islands Pros and Cons

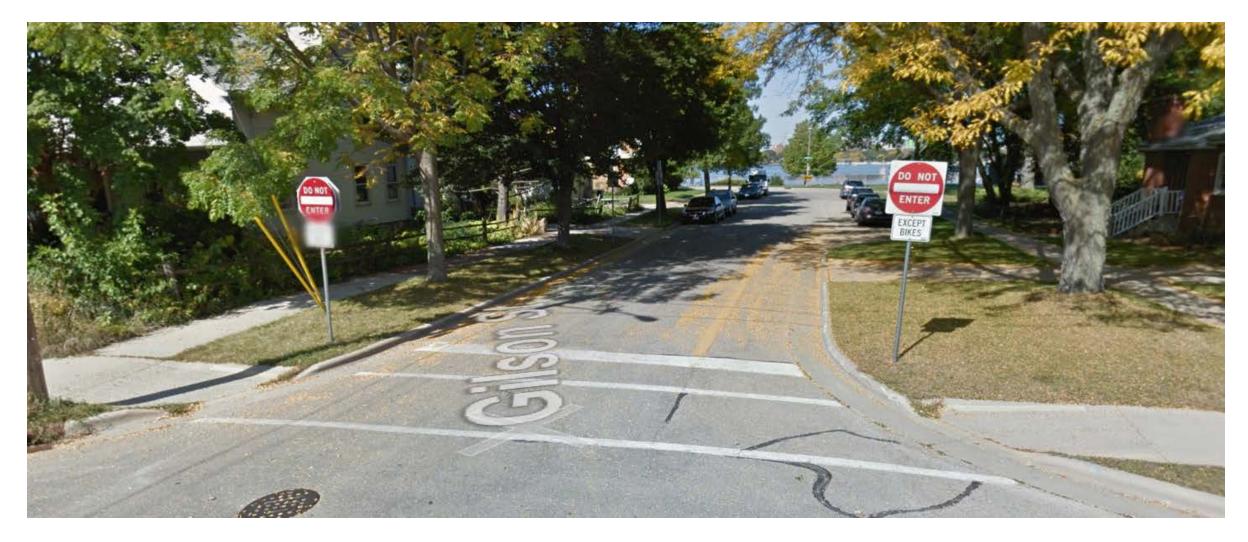
#### PROS:

- •Narrows the space available to thru traffic
- •Facilitates pedestrian crossings
- Prevents motorists from passing on the right
- Benefit of landscaping
- •Can change the feel of the street

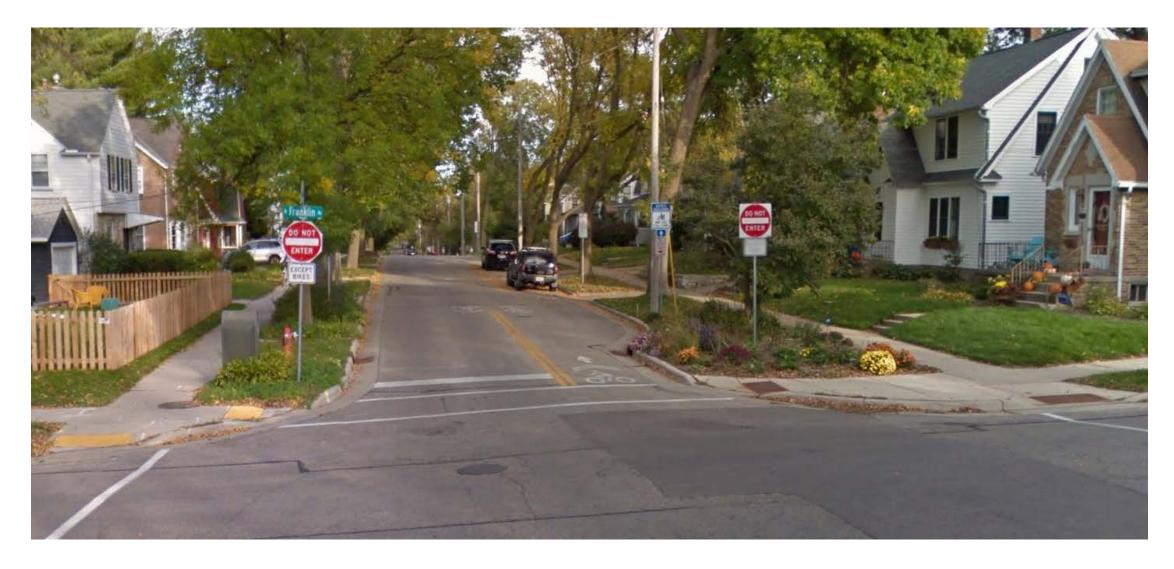
#### CONS:

- Landscape maintenance
- •Plows would prefer not to have to contend with islands
- •Some bicyclists don't like to feel "squeezed" at the island

## **Diverters and Closures**



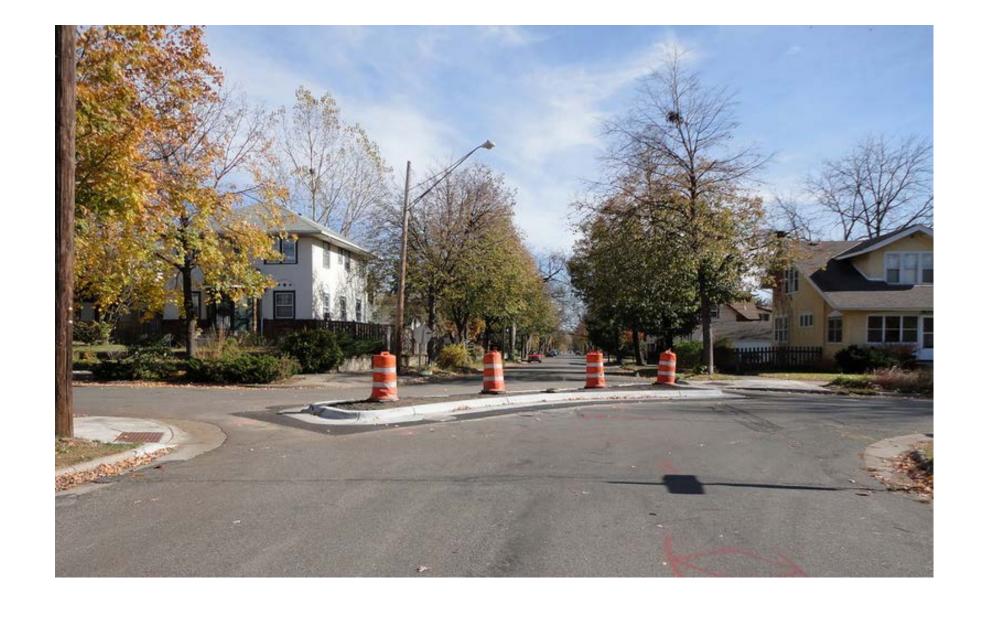
½ Closure Gilson and Lakeside, Madison, WI



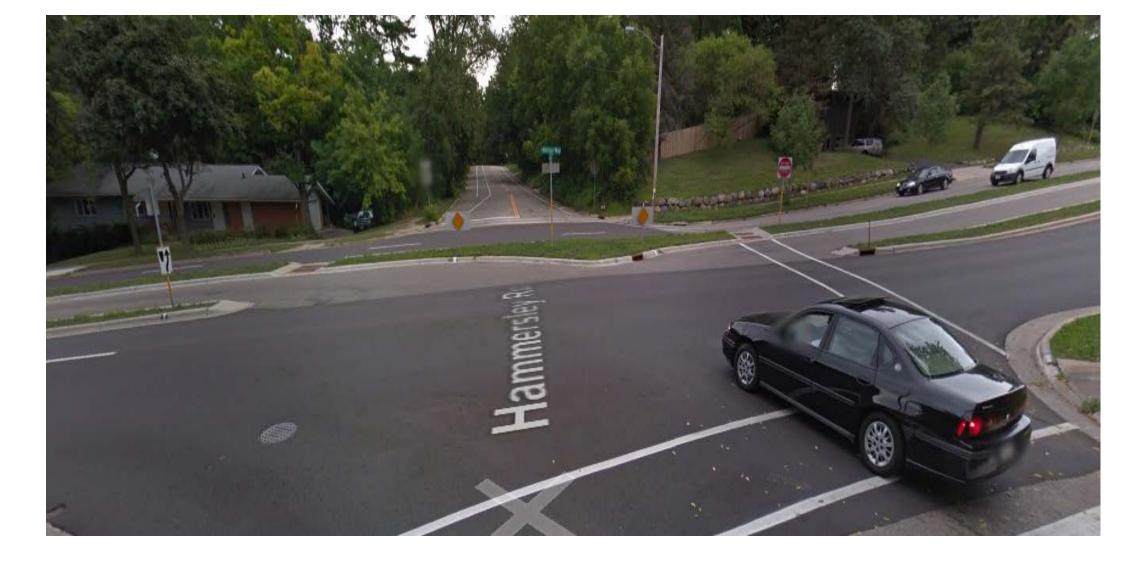
½ Closure Kendall and Franklin, Madison WI



Diagonal Diverter



Diagonal Diverter





## **Full Closure**

Full Closure Leonard St



### Diverters and Closures Pros and Cons

#### Pros:

- Do their job well
- Can direct traffic to arterial streets
- Can be constructed to allow bikes through
- Some can be landscaped

#### Cons:

- Can divert traffic to other residential streets
- Can create problems for Madison Fire Department
- Can increase travel time to access nearby properties

# Neighborhood Traffic Management Program (NTMP)

...Since 1997

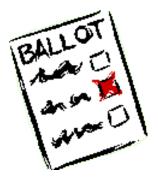
## NTMP Priority Ranking (Point Assignment)

- Average Daily Traffic Volume
- Speed
- Crash Record (police reported)
- Elementary and Middle Schools, School Walk Routes
- High Pedestrian Generators (i.e. parks)
- Designated Bike Routes

### CITY OF MADISON NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM (NTMP) 2017 NTMP Candidate Locations

					- 1	Points Criteria								Points Assignment								
Candidate Street	Year of Study	Location	# of Speed Humps	Cost	Functional Class	AWT	% Over PSL+5	School Area	Ped Gen. Area	School Walk Route	Bike Route	Prev. 3yr Crashes per block	AWT /100	% Over PSL /3	Prev. 3 yr Crashes per block	School Area	Ped Gen. Area	School Walk Route	Bike Route	Years on List	Total Points	
Dean Ave	2016	Lance Ln to Seth Cir			Local	1,286	20.99	Yes	Yes	Yes	No	0.5	12.86	7.00	2.50	5	5	5	0	3	40.4	
Thackeray Rd	2016	Sherman to Kipling	4 @ 300'	\$20,000	Local	624	13.10	Yes	Yes+	Yes	Yes	0.4	6.24	4.37	1.88	5	10	5	5	1	38.5	
Dean Ave	2016	Monona to Tyler Cir	100000000000000000000000000000000000000	201 (11)	Local	1,576	12.16	Yes	Yes	Yes	No	0.0	15.76	4.05	0.00	5	5	5	0	2	36.8	
Ashford Ln	2016	Nottingham Way to Ardsley Ln	2 @ 300'	\$10,000	Local	461	12.14	No	Yes+	Yes	No	1.0	4.61	4.05	5.00	0	10	5	0	6	34.7	
Portland Pkwv	2016	at Portland Circle	8 total: 4 per side	\$40,000	Local	644	35.11	No	Yes+	Yes	No	0.0	6.44	11.70	0.00	0	10	5	0	1	34.1	
Russett Rd	2016	Cameron to Whitney	4 @ 300'	\$20,000	Local	762	9.24	No	Yes	No	No	3.0	7.62	3.08	15.00	0	5	0	0	3	33.7	
Golden Leaf Trail	2016	Bultman Rd to Eagle Crest Dr	3 @ 300'	\$15,000	Local	1.032	17.58	No	Yes+	No	No	0.5	10.32	5.85	2.50	0	10	5	0	0	33.7	
Trailsway	2016	Monterey Dr to Sherman Ave	4 @ 300'	\$20,000	Local	1,032	10.16	No	Yes+	No	No	1.5	12.79	3.39	7.50	0	10	0	0	0	33.7	
Mavfair Ave	2016	Prairie Ave to Brigham Ave	3 @ 300'	\$15,000	Local	597	19.43	Yes	Yes	Yes	Yes	0.0	5.97	6.48	0.00	5	5	5	5	0	32.4	
	2016	Brooks and High St	2 @ 300'	\$10,000	Local	1,702	10.10	No		No	No	1.2	17.02	3.37	5.83	0		0	0		32.2	
Haywood Dr		The state of the s	2 @ 300	\$10,000	0.000.000	7.000	400000000	100000000000000000000000000000000000000	Yes		17,000	10.00	2000	9.24			5	0		4	31.4	
Turner Ave	2016	Hob to Linda Vista			Local	561	27.72	Yes	Yes	No	No	0.5	5.61		2.50	5		-	0	4		
Dominion Dr	2016	Galileo Dr to Traveler Ln	0 0		Local	1,219	36.40	No	Yes	No	No	0.0	12.19	12.13	0.00	0	5	0	0	. 1	30.3	
Gregory St	2015	Sheldon to Commonwealth	ta at		Local	866	0.99	Yes	Yes	Yes	No	1.0	8.66	0.33	5.00	5	5	. 5	0	1	30.0	
Turbot Dr	1535.00	Pike Dr - Post Rd			Local	447	13.00	Yes	Yes	Yes		1.0	4.47	4.33	5.00	5	5	5	0	0	28.8	
Lewon Dr	2016	Raymond to Black Oak Dr	1 2		Local	689	7.20	Yes	Yes	Yes	No	0.5	6.89	2.40	2.50	5	5	5	0	2	28.8	
Ziegler Rd	2016	Nakoosa Trl to Conlin St			Local	782	4.73	No	Yes	No	No	1.5	7.82	1.58	7.50	0	5	0	0	5	26.9	
Hillcrest Dr	2014	Mineral Pt. Rd to Merlham Dr.			Local	330	18.20	Yes	Yes	Yes	No	0.5	3.30	6.07	2.50	5	5	5	0	0	26.9	
Hill Creek Dr	17455907467	Red Tail to Tree Tops			Local	339	49.00	No	Yes	No	No	0.0	3.39	16.33	0.00	0	5	0	0	2	26.7	
Colby St & Van Deusen St		Lakeside to Van Deusen			Local	443	0.00	Yes	Yes+	Yes	55	0.0	4.43	0.00	0.00	5	10	5	0	2	26.4	
Academy Dr		Angel Crest Way to Woodvale Dr			Local	380	35.40	000000	S. Markey	Yes	8	1.0	3.80	11.80	5.00	0	0	5	0	0	25.6	
Hillcrest Dr		Sunset to Owen			Local	1,216	3.00			Yes		1.0	12.16	1.00	5.00	0	0	5	0	2	25.2	
Bryan St		Milwaukee St to Fair Oaks	- N		Local	564	6.99	No	Yes+	Yes	No	0.0	5.64	2.33	0.00	0	10	5	0	2	25.0	
Monterey Dr	2016	Trailsway to Wyldewood Dr			Local	478	10.47	No	Yes+	No	No	1.3	4.78	3.49	6.25	0	10	0	0	0	24.5	
Wedgewood Way	2016	Holiday Dr to Woodburn Dr	8 9		Local	353	1.19	No	Yes	Yes	No	0.5	3.53	0.40	2.50	0	5	5	0	7	23.4	
Dorsett Dr		Whitney Way to Gilbert Street			Local	217	26.50	Yes	Yes			0.0	2.17	8.83	0.00	5	5	0	0	2	23.0	
S Randall Ave	2012	250 B	8 8		Local	1,140	2.31		Yes+	ŝ	3		11.40	0.77	0.00	0	10	0	0	0	22.2	
Allis Ave	2016	Shaffer to Spaanem			Local	479	0.35	No	Yes	Yes	No	0.5	4.79	0.12	2.50	0	5	5	0	4	21.4	
Chamberlain Ave	Tri I	Franklin Av Farley Av.		8	Local	753	2.40	Yes	Yes	ŝ.	3	0.5	7.53	0.80	2.50	5	5	0	0	0	20.8	
Jupiter Dr	2014	Gemini Dr. to Hailey Way			Local	1.242	3.00	-	Yes			0.0	12.42	1.00	0.00	0	5	0	0	2	20.4	
Potter St	2015	Rowell St to Lawrence St		8	Local	206	14.60	Yes		Yes	3 3	0.0	2.06	4.87	0.00	5	0	5	0	2	18.9	
Emerald St	2015	Orchard to Mills			Local			Yes	Yes+				0.00	0.00	0.00	5	10	0	0	2	17.0	
Melody Ln	2015	Portage to Crest Line		3	Local		- 3		Yes+	Yes	8 8	10/1/01	0.00	0.00	0.00	0	10	5	0	2	17.0	
Taft St	2016				Local	633	1.00	No	Yes	No	No	1.0	6.33	0.33	5.00	0	5	0	0	0	16.7	
Easley Ln	2016				Local	182	17.60	No	Yes	No	No	0.0	1.82	5.87	0.00	0	5	0	. 0	1	13.7	

- 60% approval required of RETURNED surveys
- If there is traffic diversion to a parallel, local street, those residents will also be included in the survey.
- Construction of any approved traffic calming devices would take place in summer of 2018



## Neighborhood Meetings

Consensus is gained through neighborhood involvement.





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