

# TERMON AVENUE TRAFFIC CALMING



Pittsburgh Department of  
Mobility and Infrastructure

Traffic Bureau

November 3, 2021

# Traffic Calming Goals & Objectives

## Goals

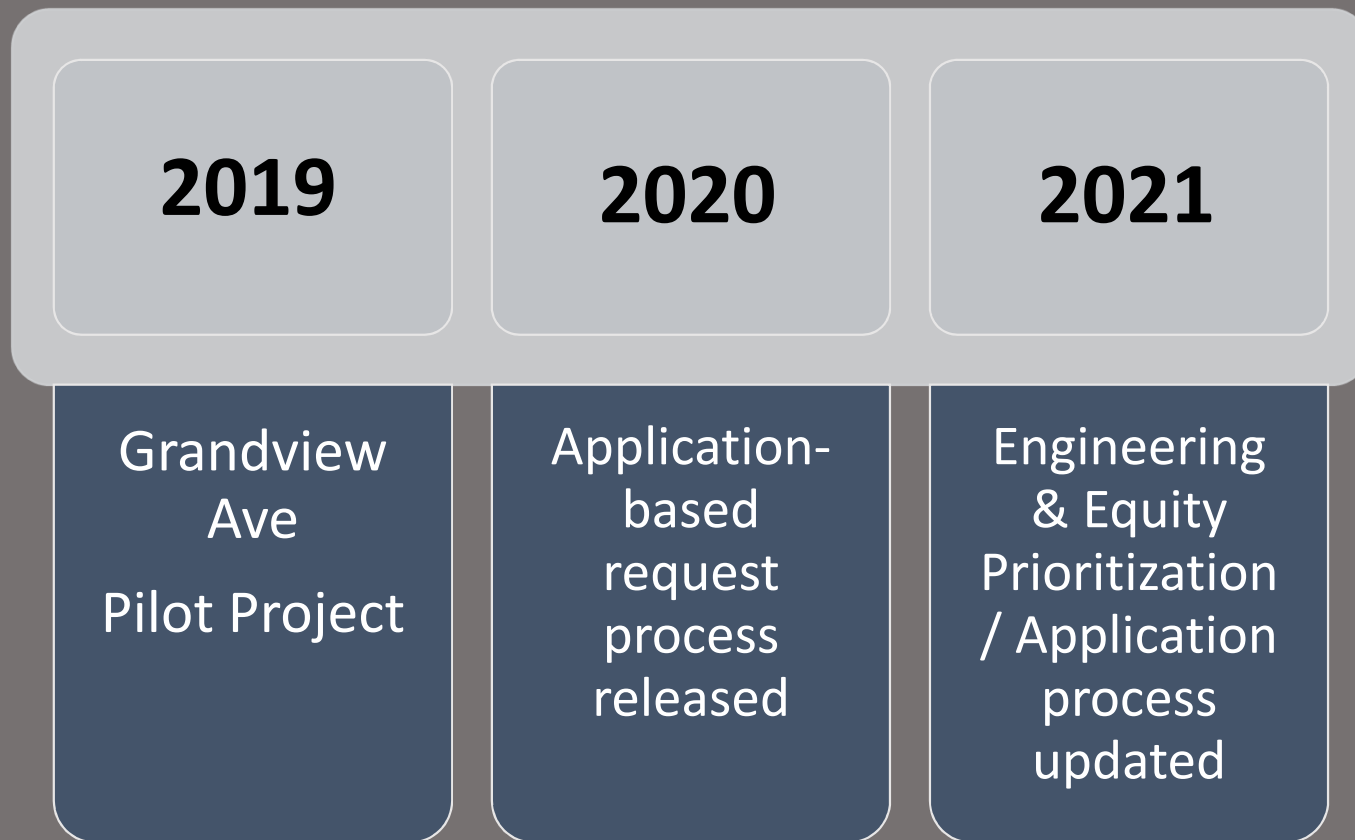
- Create safe and attractive streets
- Reduce the negative effects of motor vehicles on the environment
- Promote pedestrian, cycle and transit use

## Objectives

- Reduce motorist ***speeds*** and/or ***volumes***
- Self-enforcing, reduce need for police intervention



# Evolution of DOMI Traffic Calming Program



# Evolution of Traffic Calming Program

	Prioritization Criteria	Score	How Scored	Where data can be found
Engineering/Safety Criteria (scored out of 100)  Scored by staff engineers	Speed (85th Percentile)	0-35	2 points for every 1 mph over posted speed limit	Traffic counters (data collected during Step 2. Speed and Volume collection)
	Volume	0-20	0 points if volume is less than or equal to 1000 vehicles; 1 point for every 200 vehicles above the 1000 vehicle threshold with the maximum 20 points applying to volumes greater than or equal to 5000 vehicles	Streetlight/Traffic counters (data collected during Step 2. Speed and Volume collection)
	Crash History (last 3 years)	0-20	1 point for every crash; 2 points if crash involved pedestrian or cyclist, or if resulted in serious injury; 3 points if crash involved fatality	PCIT
	Pedestrian Generators	0-15	3 points for every park, school, grocery/convenience store, transit stop, or City senior center that abuts the street or is adjacent to an intersection within the corridor	Google maps
	Pedestrian Access	0-10	0 points if fully accessible sidewalk on both sides; 5 points if accessible sidewalk on only one side of the street; 10 points if no accessible sidewalk on either side of the street	Google maps or SPC sidewalk map (found at <a href="http://www.pasda.psu.edu/uci/DataSummary.aspx?dataset=1623">http://www.pasda.psu.edu/uci/DataSummary.aspx?dataset=1623</a> )



# Evolution of Traffic Calming Program

## Lessons Learned:

- Line striping and signage alone has minimal impact on speeding
- Speed humps most effective at reducing 85% speeds above 25 mph
- Uses of street extremely important when programming speed humps:
  - Extra care needed on transit and emergency services routes
  - Cannot deploy speed humps along entire street

# Termon Ave Traffic Speed and Volume Data

## Installed between Brighton Road and California Avenue

- 2021
  - Average Daily Traffic: 3,000 vpd
  - Median Speed: 33 mph
  - 85th Percentile Speed: 37 mph
  - **Percent of Motorists Driving over the Speed Limit: 95%**

Location: **Termon**  
 Cross Street: California  
 Cross Street: Brighton  
 Neighborhood: Brighton Heights  
 Dates: 7/9/2021 7/20/2021  
 Sensor type: StatTrak  
 Inbound: Westbound

H6	Westbound	OUT	All
85% speed	38	37	37
95% speed	42	40	41
Median sp	33	33	33
Cars over 6	14698	18678	33376
Heavy Veh	0		
Speed Limi	25		
Max Speed	69		
Avg below	21.9	21.7	21.8
Average sp	33.7	33.3	33.5
% over 25	95%	95%	95%
% over 35	30%	25%	27%

		Westbound	OUT	Total
partial	7/9	860	1129	1989
Sat	7/10	1253	1648	2901
Sun	7/11	982	1443	2425
Mon	7/12	1331	1683	3014
Tue	7/13	1346	1805	3151
Wed	7/14	1508	1844	3352
Thu	7/15	1507	1869	3376
Fri	7/16	1443	1768	3211
Sat	7/17	1213	1594	2807
		Avg cars/day		ADT
		1339	1723	3061

	VOL BY HOUR						SPEED BY HOUR			
	Westbound		OUT		OVERALL		Westbound		OUT	Avg
	Total	Avg/day	Total	Avg/day	Avg/hr	%	mph	mph	mph	
00:	176	16	294	27	43	1.4%	33	34	33	
01:	111	10	187	17	27	0.9%	34	34	34	
02:	60	5	138	13	18	0.6%	34	35	35	
03:	69	6	106	10	16	0.5%	33	34	33	
04:	106	10	57	5	15	0.5%	35	35	35	
05:	252	23	128	12	35	1.1%	34	34	34	
06:	422	38	382	35	74	2.4%	35	34	34	
07:	742	68	610	56	124	4.1%	33	33	33	
08:	824	75	710	65	141	4.6%	33	32	33	
09:	816	74	889	82	156	5.1%	32	32	32	
10:	815	74	977	90	164	5.4%	32	32	32	
11:	847	77	1061	98	175	5.7%	33	32	32	
12:	913	83	1291	119	202	6.6%	32	32	32	
13:	962	88	1218	112	200	6.5%	33	32	32	
14:	980	89	1218	112	202	6.6%	33	33	33	
15:	1053	96	1349	124	220	7.2%	34	33	33	
16:	1097	100	1419	131	231	7.5%	34	33	33	
17:	997	91	1439	133	224	7.3%	34	33	33	
18:	813	74	1270	117	191	6.2%	34	33	33	
19:	790	72	1134	105	177	5.8%	33	33	33	
20:	667	61	892	82	143	4.7%	33	33	33	
21:	546	50	830	77	126	4.1%	33	33	33	
22:	378	34	640	59	93	3.1%	33	33	33	
23:	262	24	439	40	64	2.1%	33	34	33	

# Termon Ave Crash Data

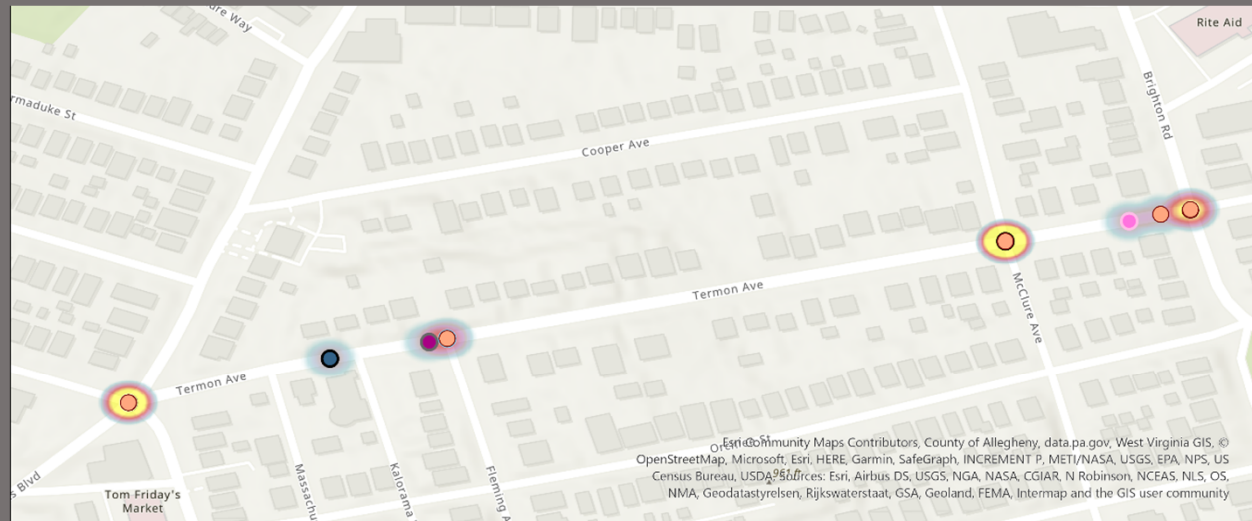
Date range: 2016-2020

Limits: Brighton Road to California Avenue

Light/Road Condition	Number of Crash
Dark - street lights	6
Dry	3
Wet	3
Daylight	21
Dry	20
Wet	1
<b>GrandTotal</b>	<b>27</b>

Type of Crash	Number of Crash
Angle	18
Head-on	1
Hit fixed object	2
Non collision	1
Rear-end	1
Sideswipe (same dir.)	4
<b>GrandTotal</b>	<b>27</b>

3/18/2022



Year	Injury/Unknown Severity	Not injured	Possible Injury	Suspected Minor Injury	Suspected Serious Injury	Unknown	Grand Total
2016	1	1	1				3
2017	2	1			1	3	7
2018	1	4		3			8
2019		5		1			6
2020	1	2					3
<b>GrandTotal</b>	<b>5</b>	<b>13</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>27</b>

Termon Avenue Traffic Calming

# Speed Mitigation Strategies

## Horizontal Deflection

- Road Diet
- Pinchpoint / Curb Extension
- 2-way + Parking (Yield Street)
- Splitter Island
- Traffic Circle

## Vertical Deflection

- Speed Humps
- Speed Tables

Speed Hump Project Before/ After Data

	<u>Median Speed</u>	<u>85% Speed</u>	<u>% Speeding</u>
<u>Before</u>	28.4	32.5	62.5
<u>After</u>	22.1	26.5	24.7
<u>Change</u>	-6.3	-6.1	-37.8



# Options for Potential Improvements

## Speed Humps

- Raised parabolic asphalt hump spanning both lanes, 3" high by 12' long
- Spaced every 300'-500', minimum distance of 150' from stop-controlled intersection and 250' from signalized intersection



# Options for Potential Improvements

## Traffic Circles

- Raised island in middle of intersection that requires all vehicles entering intersection to yield to those already in circle
- Effective at calming speeds and eliminating dangerous angle crashes



# Options for Potential Improvements

## Chicanes

- Series of three bumpouts on alternating sides of street that induce slower speeds
- Requires full parking removal through limit of chicane
- Yet to be trialed in Pittsburgh





# Options for Potential Improvements

## Combined Features

- Traffic calming devices can be combined along a corridor for best result



*Termon Ave Concept Sketch – For Information Only*



# Termon Ave Timeline

## Project Schedule

- May 27: Traffic Calming requested
- June 7: Application confirmed
- July 20: Data Collection complete
- November 3: Public Meeting #1
- *January 2022*: Public Meeting #2
- *May 2022*: Construction

# COMMENTS & QUESTIONS



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