

# **Gahanna Division of Police**

Jeffrey B. Spence, Chief of Police



**Field Services Subdivision**

**Traffic Survey**

**Highbury Crescent 04-15-22 to 05-03-22**

460 Rocky Fork Blvd.  
Gahanna, Ohio 43230  
614-342-4240

[WWW.GAHANNA.GOV](http://WWW.GAHANNA.GOV)

**Survey Device:** Speed Monitoring and Notification Device (SMND) # 1129

**Survey Operator:** Lt. Ethan Moffitt # L-58

**Device Location:** Highbury Crescent south of Chapelfield Road

**Device Direction:** Facing southbound (facing traffic coming from Chapelfield Road)

**Speed Limit:** 25 MPH

**Survey Dates:** 04-15-22 to 05-03-22

**Survey Reason:** Neighborhood complaint of speeding vehicles

### **Summary –**

On 04-15-22, SMND # 1129 was deployed on Highbury Crescent. This roadway serves as north-south route between Chapelfield Road and Rugby Lane in the Imperial Rise neighborhood.

The SMND recorded the speed of 8,863 vehicles (combined southbound and northbound traffic), a relatively low traffic. Of those, 241, or just under 3%, were traveling in excess of the posted speed limit - the average speed of these vehicles was just under 29 MPH. The remaining 8,622 vehicles, or just over 97%, were traveling below the speed limit. The average speed of all vehicles (those both above and below the speed limit) was just over 15 MPH.

The 85th percentile speed was 20 MPH, meaning that 85% of all vehicles were traveling at a speed of 20 MPH or less. Twenty-four (24) vehicles were traveling in excess of 35 MPH, accounting for less than 1% of the total count (8,863) and 10% of the over-limit count (241). Conversely, more than 99% of vehicles traveling above the speed limit were going between 26 and 34 MPH.

The survey results demonstrate that the presence of the SMND was an effective mitigation measure. There was substantial compliance with the posted speed limit during the deployment period and few excessive speed violations.

# Gahanna Division of Police

## Survey Description

### Survey Details

<b>Survey Location</b>	215 Highbury Crescent, Gahanna, OH	
<b>Survey GPS Coordinates</b>	40.025214,-82.883559	
<b>Survey Dates</b>	<b>Start</b>	<b>Stop</b>
	Friday, 4/15/2022 11:21 AM	Tuesday, 5/3/2022 10:36 AM
<b>Posted Speed Limit</b>	25 ( mph)	
<b>Traffic Zone</b>	Normal	
<b>File Name</b>	HighburyC2escentApril2022SMND2.xml	
<b>Device Type</b>	Traffic Trailer	
<b>Device Serial Number</b>	SNAA000000	
<b>Survey Note</b>	SMND 2	

<b>Total Vehicle Count</b>	8863	
<i>Traffic Direction</i>	<b>South (Closing)</b>	<b>North (Away)</b>
<i>Vehicle Count</i>	3841	5022

### Survey Map



# Gahanna Division of Police

## Survey Summary

### Survey Description

<b>Survey Location</b>	215 Highbury Crescent, Gahanna, OH	
<b>Survey GPS Coordinates</b>	40,025214,-82.883559	
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<b>Posted Speed Limit</b>	25 ( mph)	
<b>Traffic Zone</b>	Normal	

### Survey Result

Total Vehicle Count		8863		
	Traffic Direction	Closing South	Away North	Combined
	Vehicle Count	3841	5022	8863
Posted Speed Limit		25 ( mph)		
	Vehicles Under the Speed Limit Count	3756	4866	8622
	Vehicles Under the Speed Limit Percentage	97.79%	96.89%	97.28%
	Vehicles Over the Speed Limit Count	85	156	241
	Vehicles Over the Speed Limit Percentage	2.21%	3.11%	2.72%
Excessive Speed Threshold		35 ( mph)		
	Vehicles Over the Excessive Speed Count	3	21	24
	Vehicles Over the Excessive Speed Percentage	0.08%	0.42%	0.27%
	Average Speed Over Limit	27.73 ( mph)	29.19 ( mph)	28.67 ( mph)
Speed Profile				
	Average Speed	15.19 ( mph)	15.19 ( mph)	15.19 ( mph)
	Minimum Speed	2 ( mph)	3 ( mph)	2 ( mph)
	Maximum Speed	44 ( mph)	46 ( mph)	46 ( mph)
	85th Percentile Speed	20 ( mph)	20 ( mph)	20 ( mph)
	Standard Deviation	5 ( mph)	5 ( mph)	5 ( mph)
	10 mph Pace	11-20 ( mph)	11-20 ( mph)	11-20 ( mph)
	In Pace Count	2257	2973	5230
Data Recording Limits				
	Highest Speed Allowed	120 ( mph)		
	Lowest Speed Allowed	10 ( mph)		
	Minimum Following Time	2 Second(s)		

## Gahanna Division of Police

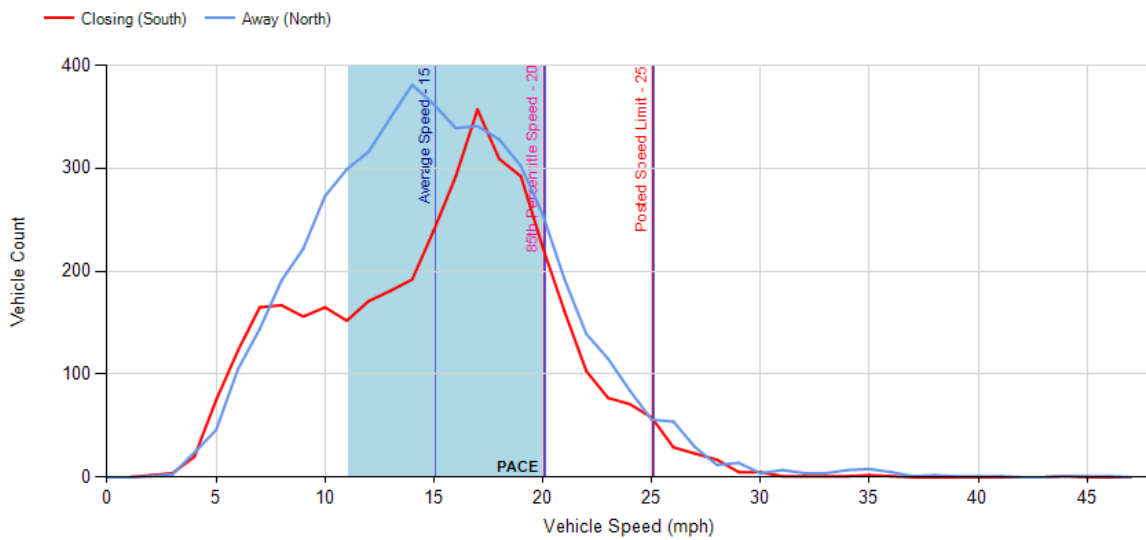
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### Count vs Speed - Line Chart

Date Range: 2022-04-15 - 2022-05-03

Direction: Both



# Gahanna Division of Police

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### Survey Map





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## Gahanna Division of Police

### Survey Description

**Survey Location** 215 Highbury Crescent, Gahanna, OH  
**Survey GPS Coordinates** 40,025214,-82.883559  
**Survey Dates** **Start** Friday, 4/15/2022 11:21 AM **Stop** Tuesday, 5/3/2022 10:36 AM  
**Posted Speed Limit** 25 ( mph)  
**Traffic Zone** Normal

### Speed - Volume Matrix

Date Range: 2022-04-15 - 2022-05-03

Direction: Both

Date Span	Total	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81-85	86+
00:00 - 00:59	155	115	33	6	1													
01:00 - 01:59	90	54	26	7	3													
02:00 - 02:59	340	211	107	19	2	1												
03:00 - 03:59	325	240	70	11	3	1												
04:00 - 04:59	183	17	84	70	8	1	3											
05:00 - 05:59	565	90	175	217	72	11												
06:00 - 06:59	510	105	171	186	42	5	1											
07:00 - 07:59	395	75	128	131	46	8	4	1	2									
08:00 - 08:59	453	101	143	149	48	10	2											
09:00 - 09:59	510	94	155	182	58	19	1	1										
10:00 - 10:59	511	81	132	197	83	15	2		1									
11:00 - 11:59	446	59	142	169	59	13	2	1	1									
12:00 - 12:59	680	113	213	246	91	13	4											
13:00 - 13:59	601	93	202	220	61	16	6	2		1								
14:00 - 14:59	534	84	167	191	78	11	2	1										
15:00 - 15:59	736	155	219	232	105	20	4	1										
16:00 - 16:59	557	68	138	229	102	20												
17:00 - 17:59	468	51	120	221	60	14	2											
18:00 - 18:59	376	31	101	177	59	6	2											
19:00 - 19:59	205	19	52	86	44	3		1										
20:00 - 20:59	126	9	38	53	22	3		1										
21:00 - 21:59	57	10	16	25	4	2												
22:00 - 22:59	29	3	9	12	5													
23:00 - 23:59	11	7	2	2														

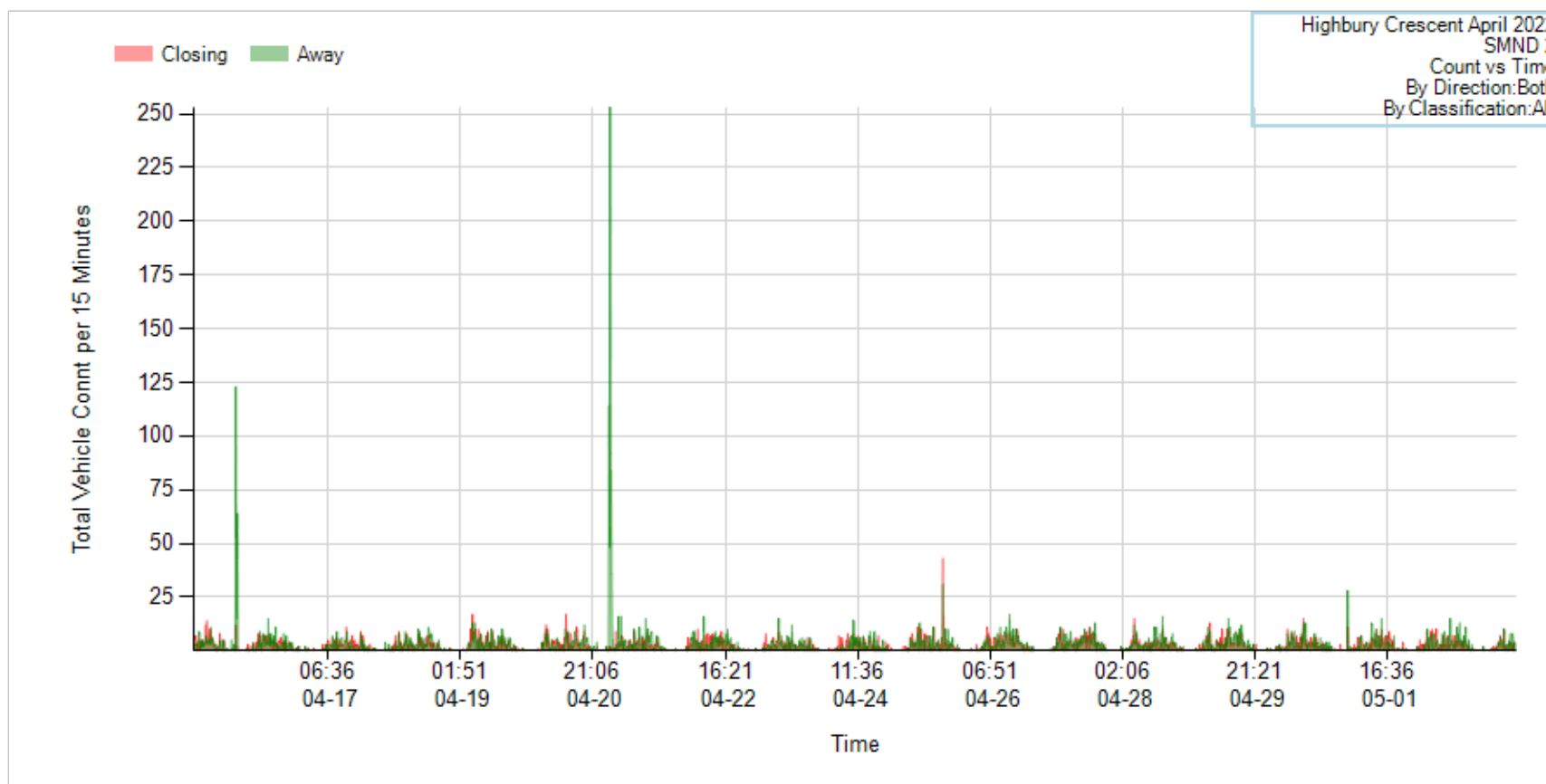




# Gahanna Division of Police Highbury Crescent April 2022 Speed Survey



Count vs. Time



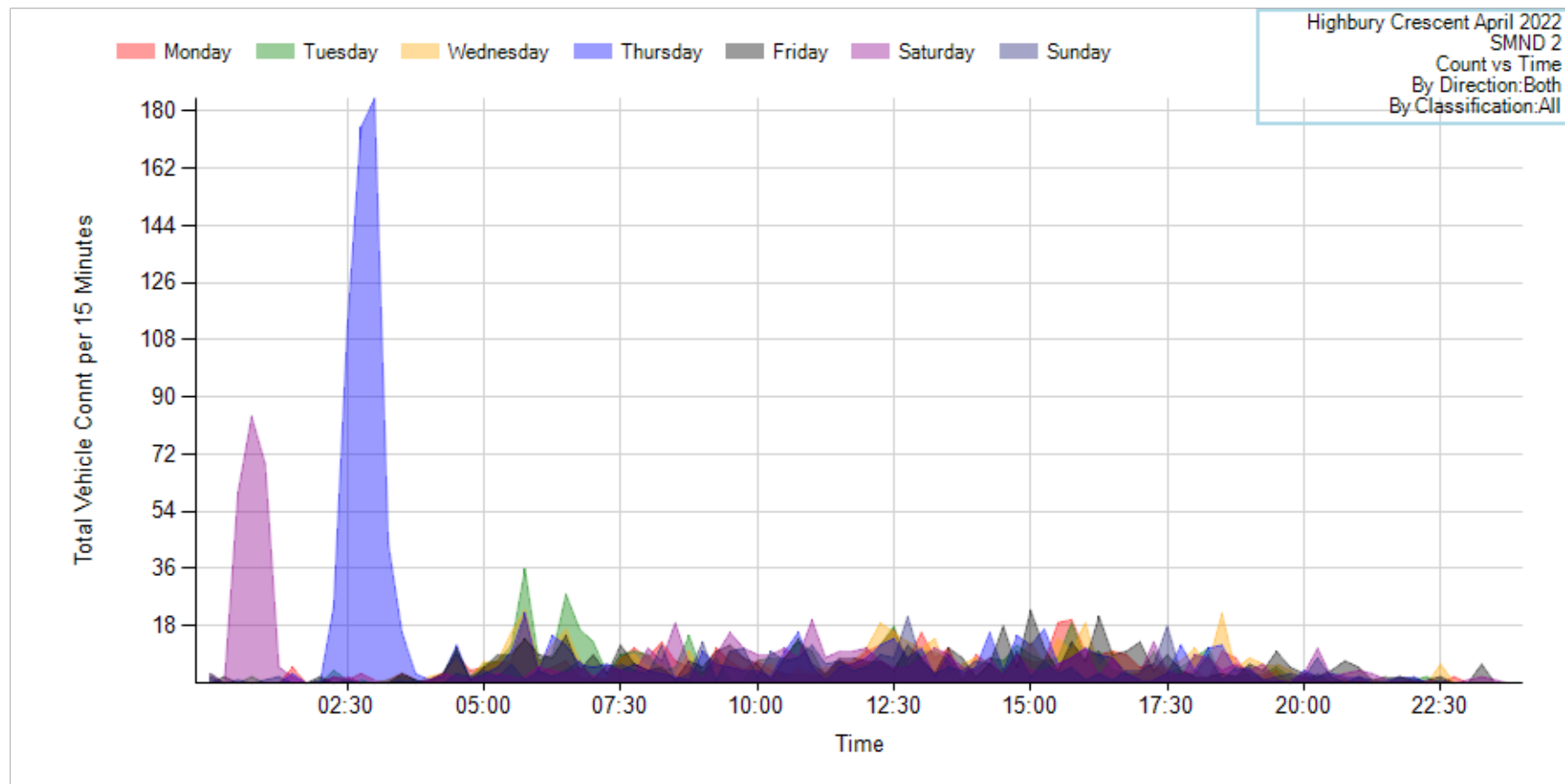
Survey Name	Highbury Crescent April	Speed Unit	Miles/Hour	Average Speed	15.2	MPH	Total Volume	8915	100%
Start Date	2022-04-15	Speed Limit	25	Max Speed	46	MPH	Over Limit Count	241	2.7%
Stop Date	2022-05-03			Min Speed	2	MPH	Under Limit Count	8674	97.3%
				85th Percentile	20	MPH	Over Threshold Count	24	0%
				10 MPH Pace	11 - 20	MPH	In Pace Count	5257	59.0%



# Gahanna Division of Police Highbury Crescent April 2022 Speed Survey



Weekly Count vs. Time



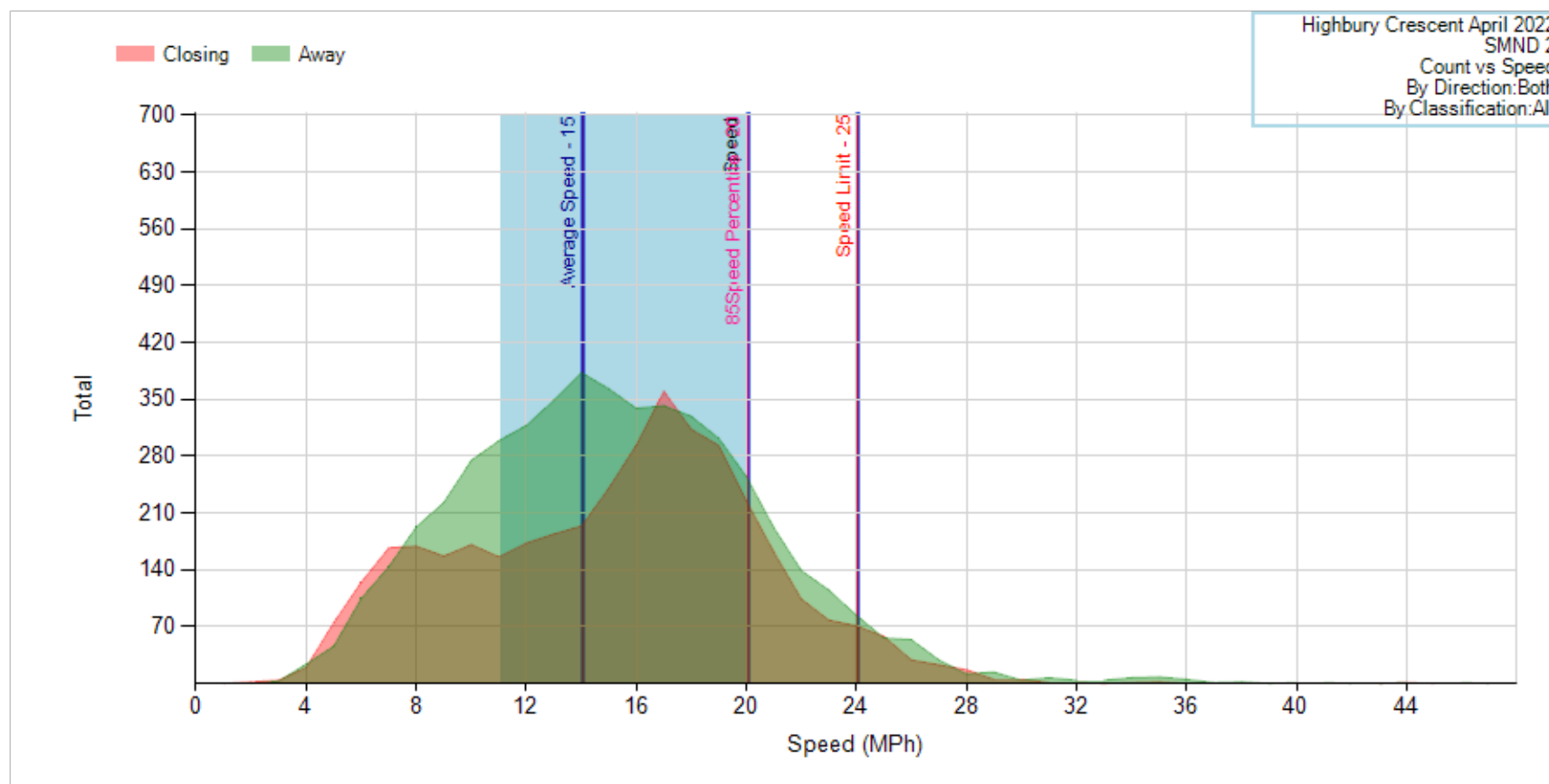
Survey Name	Highbury Crescent April	Speed Unit	Miles/Hour	Average Speed	15.2	MPH	Total Volume	8915	100%
Start Date	2022-04-15	Speed Limit	25	Max Speed	46	MPH	Over Limit Count	241	2.7%
Stop Date	2022-05-03			Min Speed	2	MPH	Under Limit Count	8674	97.3%
				85th Percentile	20	MPH	Over Threshold Count	24	0%
				10 MPH Pace	11 - 20	MPH	In Pace Count	5257	59.0%



# Gahanna Division of Police Highbury Crescent April 2022 Speed Survey



Count vs. Speed



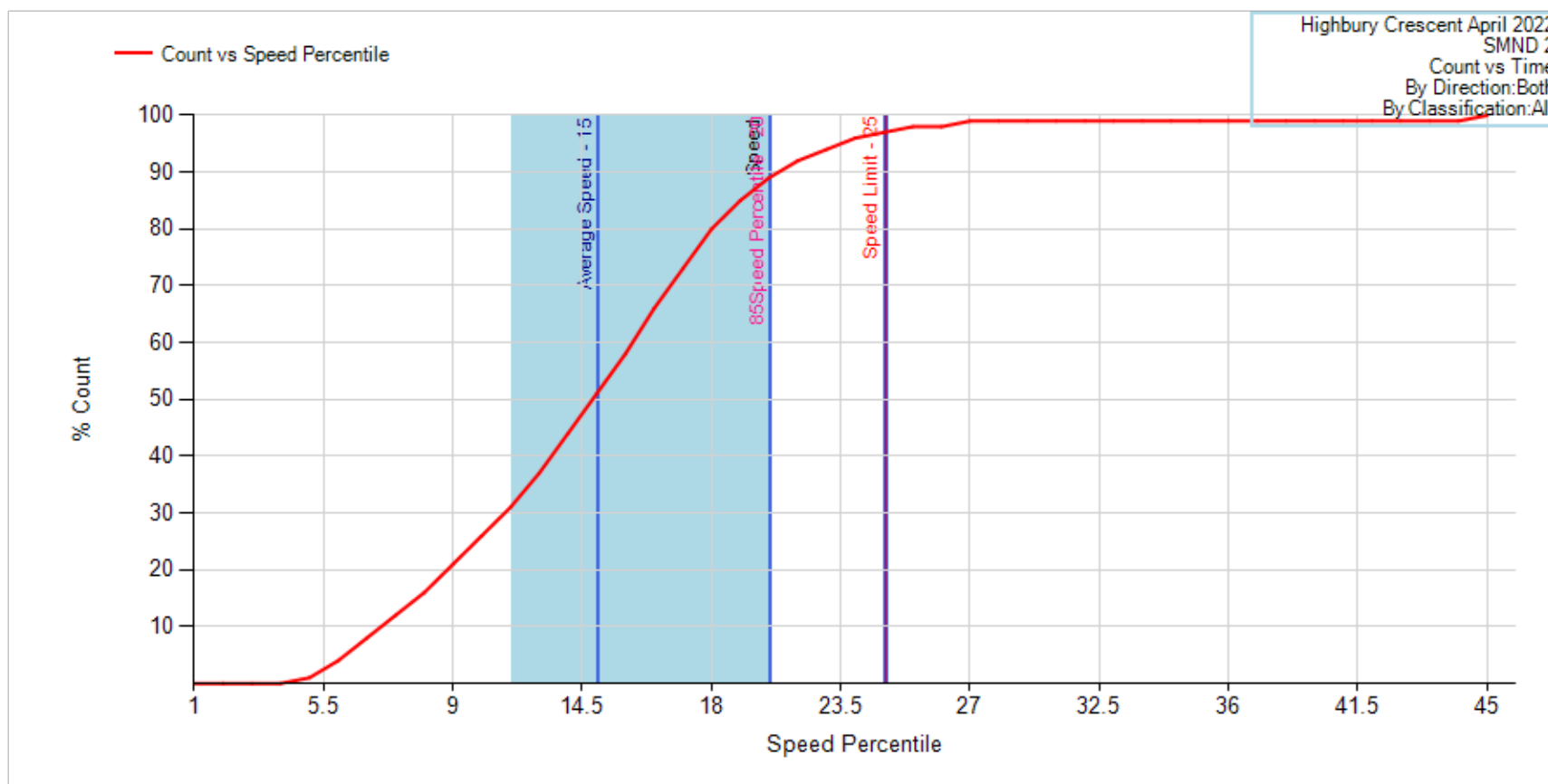
Survey Name	Highbury Crescent April	Speed Unit	Miles/Hour	Average Speed	15.2	MPH	Total Volume	8915	100%
Start Date	2022-04-15	Speed Limit	25	Max Speed	46	MPH	Over Limit Count	241	2.7%
Stop Date	2022-05-03			Min Speed	2	MPH	Under Limit Count	8674	97.3%
				85th Percentile	20	MPH	Over Threshold Count	24	0%
				10 MPH Pace	11 - 20	MPH	In Pace Count	5257	59.0%



# Gahanna Division of Police Highbury Crescent April 2022 Speed Survey



Percentile Chart



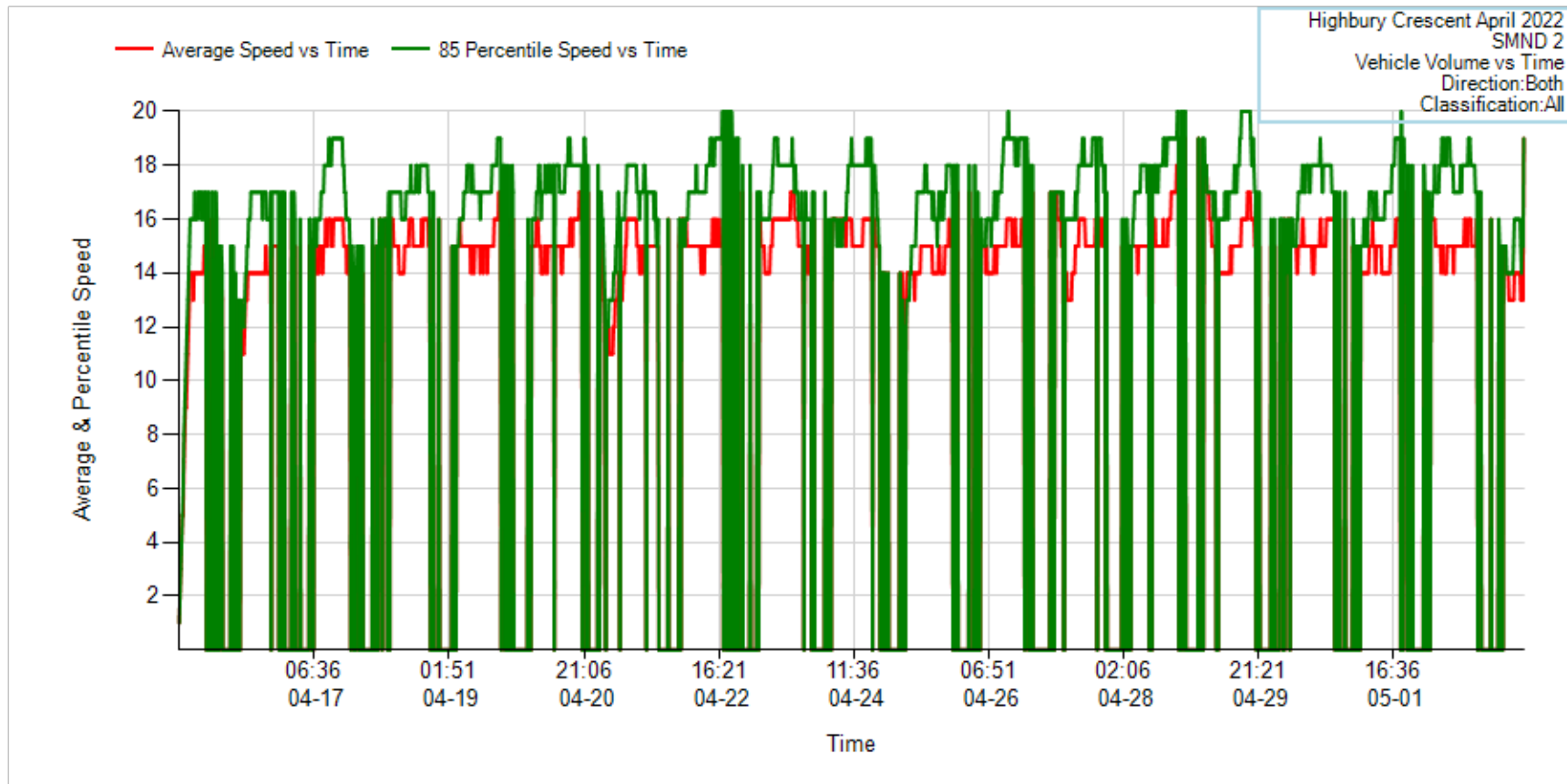
Survey Name	Highbury Crescent April	Speed Unit	Miles/Hour	Average Speed	15.2	MPH	Total Volume	8910	100%
Start Date	2022-04-15	Speed Limit	25	Max Speed	46	MPH	Over Limit Count	241	2.7%
Stop Date	2022-05-03			Min Speed	2	MPH	Under Limit Count	8669	97.3%
				85th Percentile	20	MPH	Over Threshold Count	24	0%
				10 MPH Pace	11 - 20	MPH	In Pace Count	5255	59.0%



# Gahanna Division of Police Highbury Crescent April 2022 Speed Survey



Average Speed vs. Time



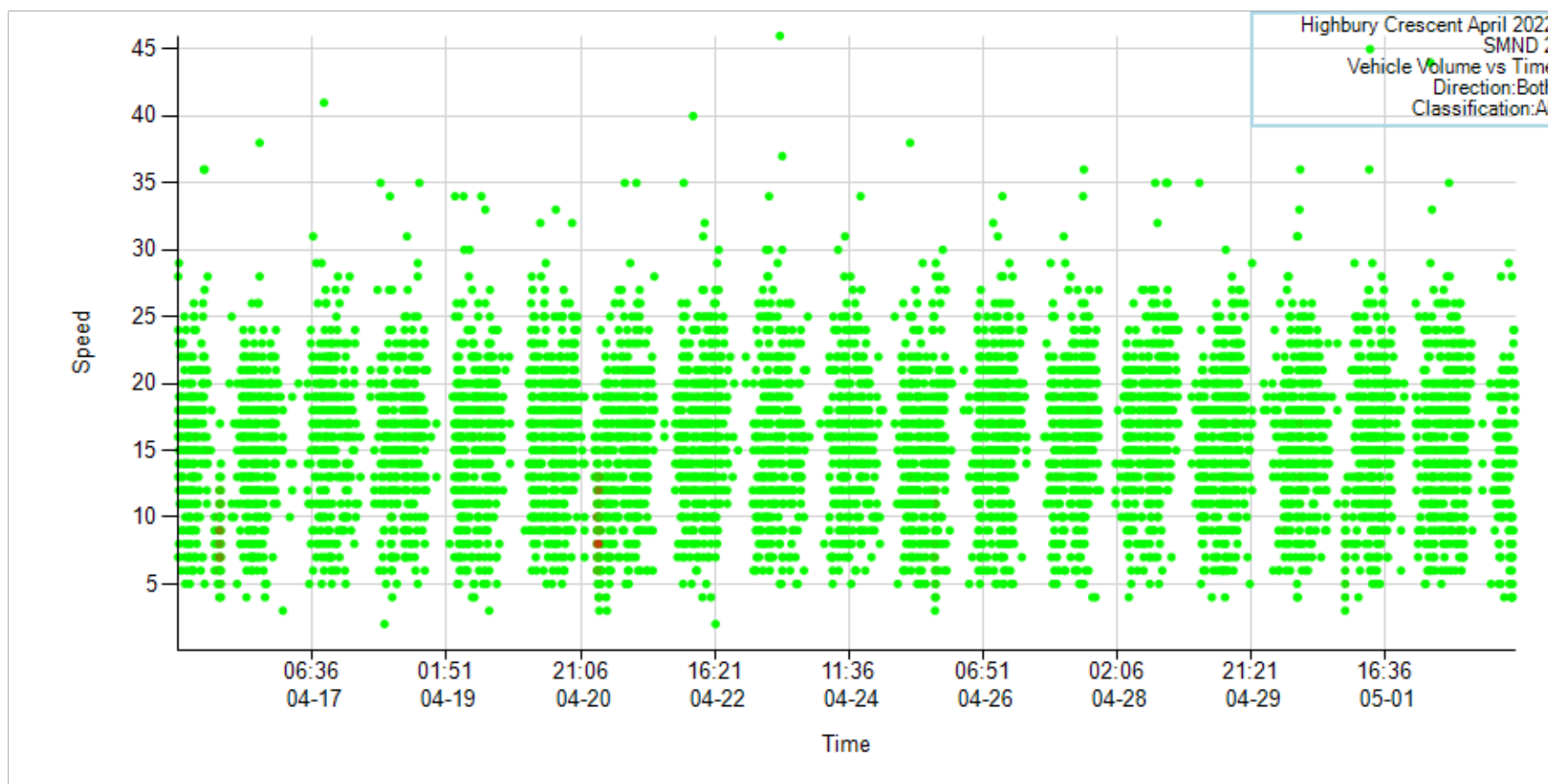
Survey Name	Highbury Crescent April	Speed Unit	Miles/Hour	Average Speed	15.2	MPH	Total Volume	8915	100%
Start Date	2022-04-15	Speed Limit	25	Max Speed	46	MPH	Over Limit Count	241	2.7%
Stop Date	2022-05-03			Min Speed	2	MPH	Under Limit Count	8674	97.3%
				85th Percentile	20	MPH	Over Threshold Count	24	0%
				10 MPH Pace	11 - 20	MPH	In Pace Count	5257	59.0%



# Gahanna Division of Police Highbury Crescent April 2022 Speed Survey



Speed vs. Time Bubble Chart



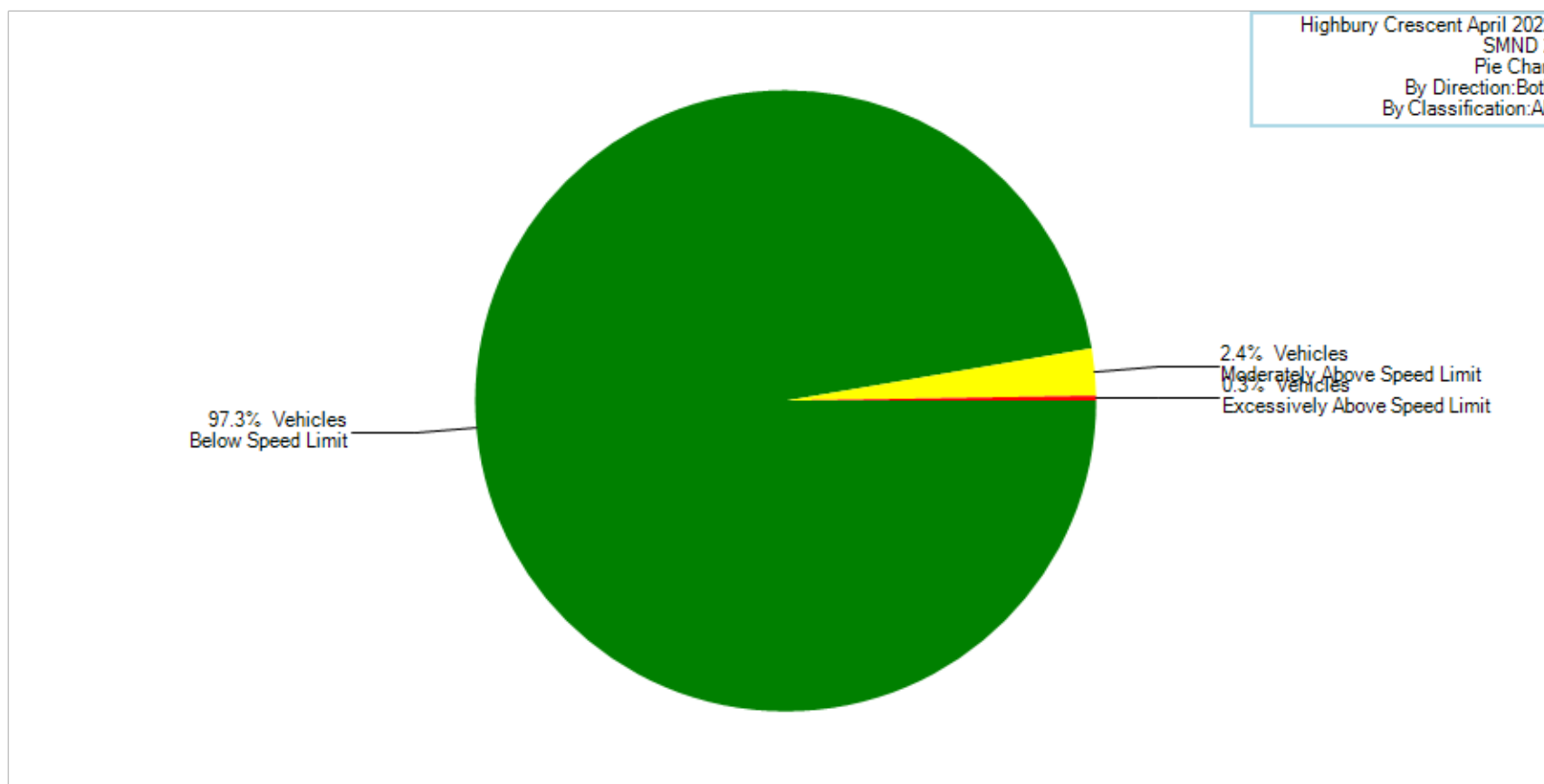
Survey Name	Highbury Crescent April	Speed Unit	Miles/Hour	Average Speed	15.2	MPH	Total Volume	8915	100%
Start Date	2022-04-15	Speed Limit	25	Max Speed	46	MPH	Over Limit Count	241	2.7%
Stop Date	2022-05-03			Min Speed	2	MPH	Under Limit Count	8674	97.3%
				85th Percentile	20	MPH	Over Threshold Count	24	0%
				10 MPH Pace	11 - 20	MPH	In Pace Count	5257	59.0%



# Gahanna Division of Police Highbury Crescent April 2022 Speed Survey



Enforcement Evaluator



Survey Name	Highbury Crescent April	Speed Unit	Miles/Hour	Average Speed	15.2	MPH	Total Volume	8915	100%
Start Date	2022-04-15	Speed Limit	25	Max Speed	46	MPH	Over Limit Count	241	2.7%
Stop Date	2022-05-03			Min Speed	2	MPH	Under Limit Count	8674	97.3%
				85th Percentile	20	MPH	Over Threshold Count	24	0%
				10 MPH Pace	11 - 20	MPH	In Pace Count	5257	59.0%





## Gahanna Division of Police Highbury Crescent April 2022 Speed Survey



Survey Name	Highbury Crescent April 2022 ...	Location	215 Highbury Crescent,Gahan...	Speed Unit	Miles/Hour
Start	2022-04-15 11:21	Traffic Direction	Undefined	Speed Limit	25
Stop	2022-05-03 10:36	Zone	Normal	Min Speed Threshold	10
Operator	Traffic Trailer	Min Following Time	0.0	Max Speed Threshold	120
Survey Direction	Both	Time Resolution	1	Speed Resolution	1

Total Vehicle Count	8915	100%	Average Speed	15.2	MPH	In Pace Count	5257	58%
Under Limit Count	8674	97%	Minimum Speed	2	MPH	10 mph Pace	11 - 20	MPH
Over Limit Count	241	3%	Maximum Speed	46	MPH	Standard Deviation	5	MPH
10 Over Limit Count	24	0%	85Speed Percentile	20	MPH	Average Speed Over Limit	28.7	MPH



## Survey Report Quick Guide/Reference

### Over Threshold Count

The default threshold (amount over the posted speed limit) is 10 MPH. The **Over Threshold Count** is the number of vehicles traveling in excess of the selected threshold. For example, if the threshold is set at the 10 MPH default, this would indicate the number of vehicles (within the Total Volume) that were traveling at 10 MPH over the posted limited.

### Count vs. Time

The **Count vs Time Chart** shows the number of vehicles per unit of time traveling on the monitored roadway.

### Weekly Count vs. Time Chart

The **Weekly Count vs. Time Chart** mode shows the vehicle count per day over a 7-day period. If the survey period extends beyond one 7- day week, the values of each overlapped week day will be the average values for those overlapped week days.

### Count vs. Speed Chart

The **Count vs. Speed Chart** selection shows the total vehicle count for each speed group. The size of the speed group can be set by the operator (**Speed Resolution** selection in the **Analysis Control**).

### Percentile Chart

The **Percentile Chart** shows the cumulative percentage of vehicles that are at or below a given speed

### Average Speed vs. Time Chart

The **Average Speed vs. Time Chart** shows the average and the 85<sup>th</sup> Percentile Speeds of the vehicles over time.

### Speed vs. Time Bubble Chart

The **Speed vs. Time Bubble Chart** plots both vehicle speed and volume against time. The size of the bubble represents the number of cars at a particular speed group at a particular time. This chart is useful in showing traffic bunching.

### Average Speed

The average speed of all vehicles

### 85Speed Percentile

The speed at which 85% of the traffic was traveling **at or less than**. The 85<sup>th</sup> percentile is considered to be a key metric because it is generally considered to be representative of the prevailing traffic conditions (the speed vehicles on the roadway are going most of the time).