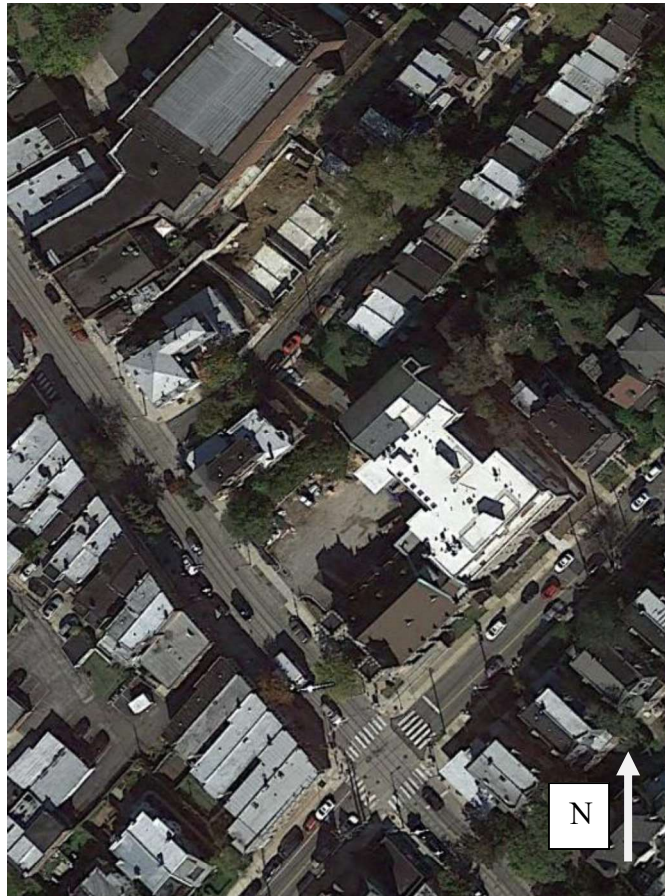

LANTERN THEATER COMPANY - NEW THEATER

PARKING STUDY REPORT

PHILADELPHIA COUNTY, PA

SEPTEMBER 30, 2021



PREPARED BY:
DAWOOD ENGINEERING, INC
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KING OF PRUSSIA, PA 19406



PARKING STUDY REPORT
LANTERN THEATER COMPANY – NEW THEATER

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PARKING STUDY REPORT

LANTERN THEATER COMPANY – NEW THEATER

1.0 INTRODUCTION / PROJECT SUMMARY

The purpose of this study is to determine the current parking demands for the area surrounding a proposed theater. The 3,000 square foot theater will be established within the existing structure located at 7111 Germantown Avenue. It is proposed that the theater will have a maximum capacity of 180 patrons. This is proposed to be an additional theater for use by the Lantern Theater Company that also utilizes an existing theater located in Center City, Philadelphia.

The study area consists of the residential and commercial roadways surrounding the proposed theater location in Philadelphia County, PA. The surrounding area currently contains approximately 821 parking spaces, which includes parallel on-street parking and off-street parking lots with access on the nearby roadways.

Parking inventory counts were conducted on September 21–26, 2021 along the roadways surrounding the proposed theater starting one hour prior to the provided performance times listed below.

- Tuesday at 6:30PM
- Wednesday at 2:00PM and 7:00PM
- Thursday at 7:00PM
- Friday at 8:00PM
- Saturday at 2:00PM and 8:00PM
- Sunday at 2:00PM

This study will determine the current parking availability and necessary parking demands for the addition of Lantern Theater to Germantown Avenue.

2.0 EXISTING STUDY AREA CONDITIONS

The Lantern Theater Company theater is proposed to be located on Germantown Avenue between E. Mount Pleasant Avenue and E. Durham Street in Philadelphia County, PA. The proposed location of the project site is depicted in **Figure 1**. The neighborhood area is mostly residential, but the corridors of Germantown Avenue, West Sedgwick Street, and Mount Airy Avenue contain commerce and retail uses. There is an existing park and playground located at the corner of Germantown Avenue and East Sedgwick Street. The streets used for the parking study consist of: Germantown Avenue and Chew Avenue from E Sedgwick Street to E Mount Airy Avenue, Sedgwick Street from Boyer Street to 300' NE from Mower Street, Mount Pleasant Avenue from Boyer Street to Mower Street, Durham Street from Boyer Street to Cresheim Road, Mount Airy Avenue from Chew Avenue to Bryan Street, and Bryan Street from Mount Pleasant Avenue to Mount Airy Avenue. These streets provide parallel on-street parking and off-street parking lots. The extent of the studied parking areas, as discussed with the client, is depicted in yellow in **Figure 1**.



PARKING STUDY REPORT
 LANTERN THEATER COMPANY – NEW THEATER

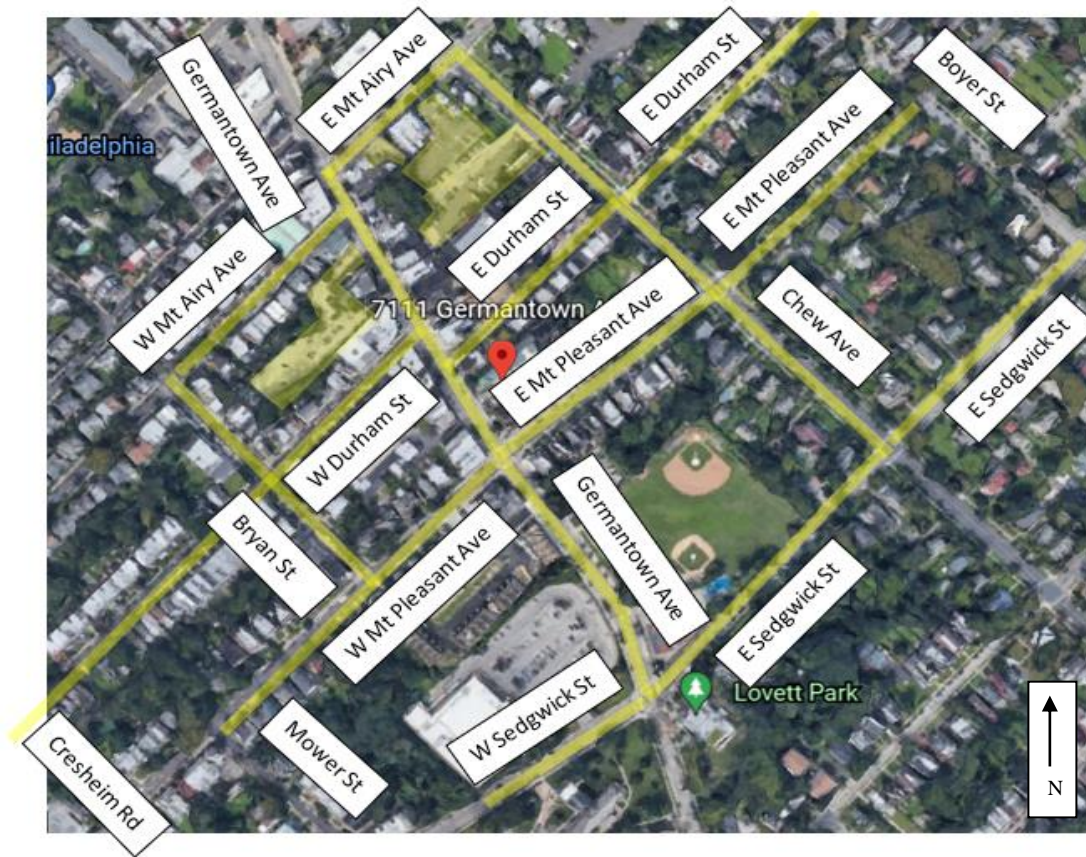


Figure 1. Site Location

The surrounding parking study area is characterized as an urban district. A typical description of some major roadways within the study is presented in **Table 1** as follows:

Street Name	Functional Class¹	ADT²	Parking Permitted?	Surface	Speed Limit
Germantown Avenue (SR 4007)	Urban Principal Arterial	11,325	YES	Concrete / Cobblestone	25 MPH
Chew Avenue (SR 4004)	Urban Principal Arterial	6,294	YES	Asphalt	25 MPH
E. Mt Airy Avenue (SR 4021)	Urban Principal Arterial	5,340	YES	Asphalt	25 MPH
W. Mt Pleasant Avenue	Urban Minor Arterial	10,191	YES	Asphalt	25 MPH

¹ data obtained using PennDOT’s County Functional Class Maps

² data obtained from TIRE by PennDOT



PARKING STUDY REPORT LANTERN THEATER COMPANY – NEW THEATER

Within three blocks of the proposed theater location, there are three parking lots and both metered and non-metered parallel on-street parking. Along Germantown Avenue and Mt Airy Avenue, the metered parking is for 2 hours maximum between the hours of 8am to 6pm, Monday through Friday. Payment can be completed via a parking application and some locations have a coin payment option.

Currently, SEPTA public bus routes (Route H and 23) service the Mount Pleasant Avenue and Germantown Avenue corridors, respectively. Additionally, ride-share programs, like Uber and Lyft, are also available for travel to and from the proposed theater location in the project area.

3.0 PARKING INVENTORY / EXISTING PARKING DEMAND

A 3,000 square foot theater will be rehabilitated within an existing structure. It is proposed that the theater will have a maximum capacity of 180 patrons. In similar venues with the Lantern Theater Company, the theater has operated at 60% to 70% capacity; however, to ensure conservative trip generation calculations, the maximum capacity value will be applied.

Due to the availability of the SEPTA bus routes and ride-share options, it is assumed that a portion of theater visitors will use public transportation to the theater. The Lantern Theater Company representative indicated that 50% of patrons utilize public transportation at their existing theater site in Center City, Philadelphia. However, to be conservative, this study assumes 0%.

Furthermore, it is anticipated that a portion of the patrons will arrive in pairs or groups, therefore further decreasing the need for parking. To be conservative, we assumed that each vehicle would have only one patron.

At the corner of Germantown Avenue and West Sedgwick Street, there is a large existing parking lot for the ACME supermarket. The Lantern Theater Company indicated they have been in contact with ACME to seek permission for theater patrons to park in their lot. Those discussions have not been finalized so, to be conservative, the ACME lot was not included in our count.

A chart of the occupied parking spaces is presented in **Table 2**. The total number of open on-street and off-street parking lot spaces within the project area's designated three-block radius are 646 and 175, respectively. The sum of all open parking spaces in the project area is 821 spaces.



PARKING STUDY REPORT
 LANTERN THEATER COMPANY – NEW THEATER

Table 2				
Date/Time of Performance	# of Occupied On-Street Parking	# of Occupied Off-Street Parking	# of Occupied Parking Total	Total % of Occupied Spaces**
Tuesday 6:30 PM	432	138*	432	51%
Wednesday 2:00 PM	396	138*	396	48%
Wednesday 7:00 PM	433	138*	433	53%
Thursday 7:00 PM	462	120	582	71%
Friday 8:00 PM	505	138	643	78%
Saturday 2:00 PM	414	99	513	62%
Saturday 7:00 PM	397	84	481	59%
Sunday 2:00 PM	408	89	497	61%

*Off-street parking lots were not counted on these dates, but to be most conservative, the highest counted value was entered from other count data

**Based on 821 total parking spaces

During the time of the counts on Sunday, September 26th, it should be noted that The Chestnut Hill Fall for the Arts Festival was taking place between the hours of 11AM to 5PM. It did not appear to adversely affect the open parking available for the project area as the occupancy for this date and time was 61% or availability of 324 parking spaces.

Using the Institute of Transportation’s (ITE) *Trip Generation Manual, 10th Edition*, it was determined that the theater most closely fits into the land use for movie theater (Land Use Code 444). Therefore, the ITE data for this land use was used to estimate the maximum number of site trips expected during typical operations of the proposed theater. See **Table 3** for the trip generation data.

Table 3: Trip Generation			
Time	Independent Variable	Average Rate	# of Trips
Weekday PM	3,000 SF	14.06	42
Friday	3,000 SF	26.71	80
Saturday	3,000 SF	27.40	82
Sunday	3,000 SF	10.76	32
Weekday PM	180 seats	0.32	58
Friday	180 seats	0.36	65
Saturday	180 seats	0.46	83
Sunday	180 seats	0.24	43
Site Max			83



**PARKING STUDY REPORT
LANTERN THEATER COMPANY – NEW THEATER**

This evaluation indicates that a maximum of 83 trips are anticipated to be generated by the theater during a typical show. Therefore, a maximum of 83 open parking spaces must be available in the surrounding area to accommodate the theater patrons. Please note the comparison of open parking spaces and required parking spaces for each performance time in **Table 4** below.

Table 4		
Date/Time of Performance	# of Available Parking Spaces	# of Required Parking spaces
Tuesday 6:30 PM	389	58
Wednesday 2:00 PM	423	58
Wednesday 7:00 PM	388	58
Thursday 7:00 PM	239	58
Friday 8:00 PM	178	80
Saturday 2:00 PM	308	83
Saturday 7:00 PM	340	83
Sunday 2:00 PM	324	43

Per coordination with the theater company, the performances are expected to run at a length of two (2) hours. This will provide ample time for patrons to exit the project area from the former performance prior to the need for the parking spaces for the latter performance.

4.0 CONCLUSIONS

Based on the collected parking count inventory data, the area surrounding the proposed theater will be able to accommodate the additional parking needs for the proposed theater. Friday night was the highest parking occupancy of the studied performance times, which was inventoried at 78% occupancy. This means that there are approximately 178 spaces available for parking at that time. In other words, if each of the 83 trips generated by the site were to travel by their own vehicles, they would be able to locate open parking spaces in this project area during any of the aforementioned performance times. In accordance with the ITE Trip Generation Handbook, it is anticipated that a percentage of patrons will walk, bike, or utilize public transit or ride-share programs in this urban environment, which reduce the demand for parking. It should also be noted that the draw for parking will be reduced as it is anticipated that patrons will travel in pairs or groups in single vehicles. Based on the results of the parking study, it is determined that the currently available parking in the area will satisfy the parking needs for the proposed theater.



APPENDIX A



Movie Theater (444)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
PM Peak Hour of Generator

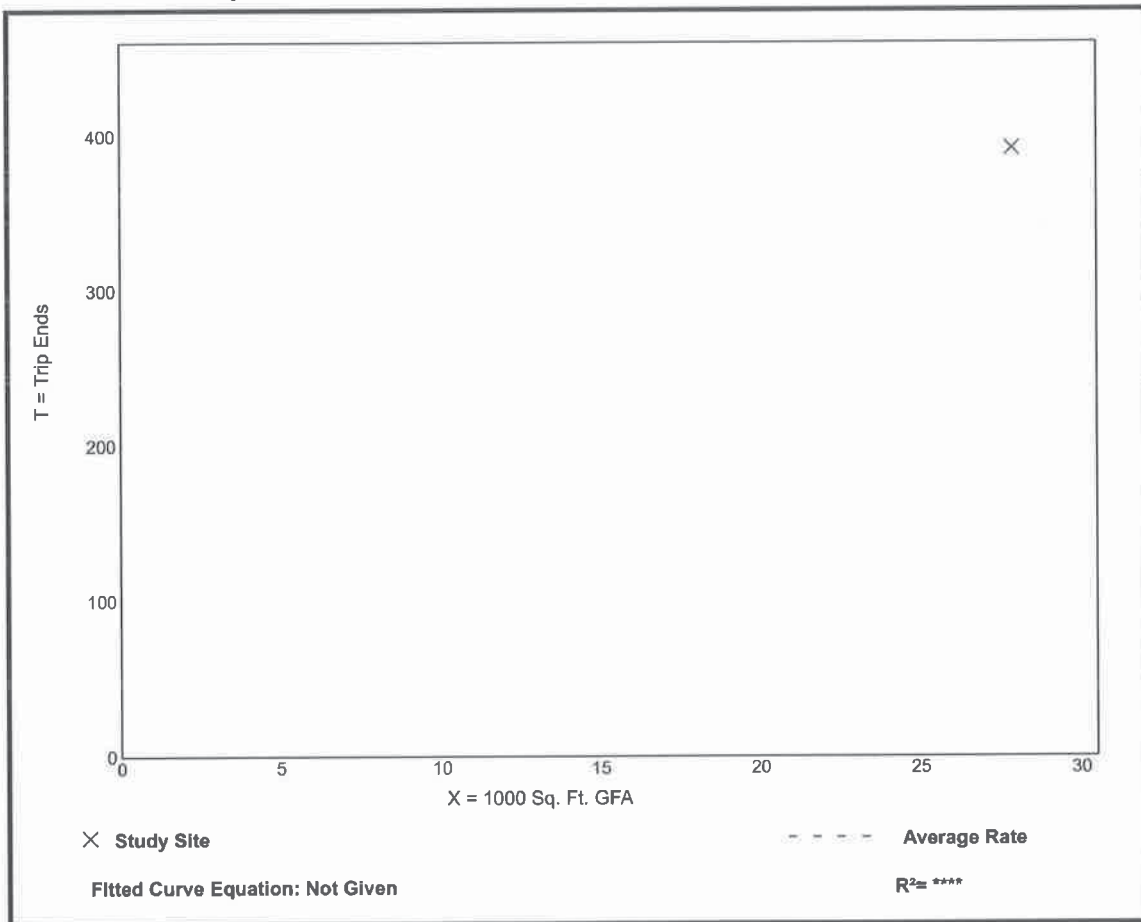
Setting/Location: General Urban/Suburban
Number of Studies: 1
1000 Sq. Ft. GFA: 28
Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
14.06	14.06 - 14.06	*

Data Plot and Equation

Caution – Small Sample Size



Movie Theater (444)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Friday,
PM Peak Hour of Generator

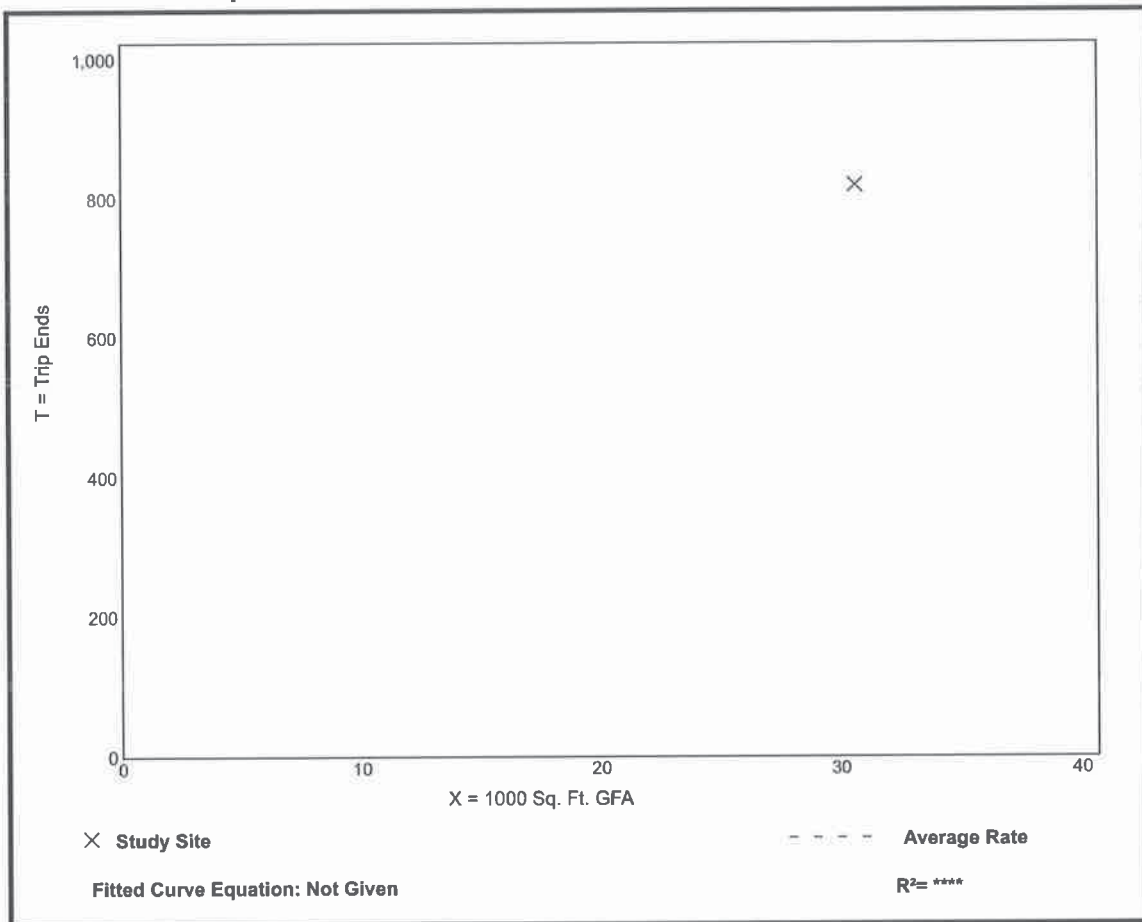
Setting/Location: General Urban/Suburban
 Number of Studies: 1
 1000 Sq. Ft. GFA: 31
 Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
26.71	26.71 - 26.71	*

Data Plot and Equation

Caution – Small Sample Size



Movie Theater (444)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

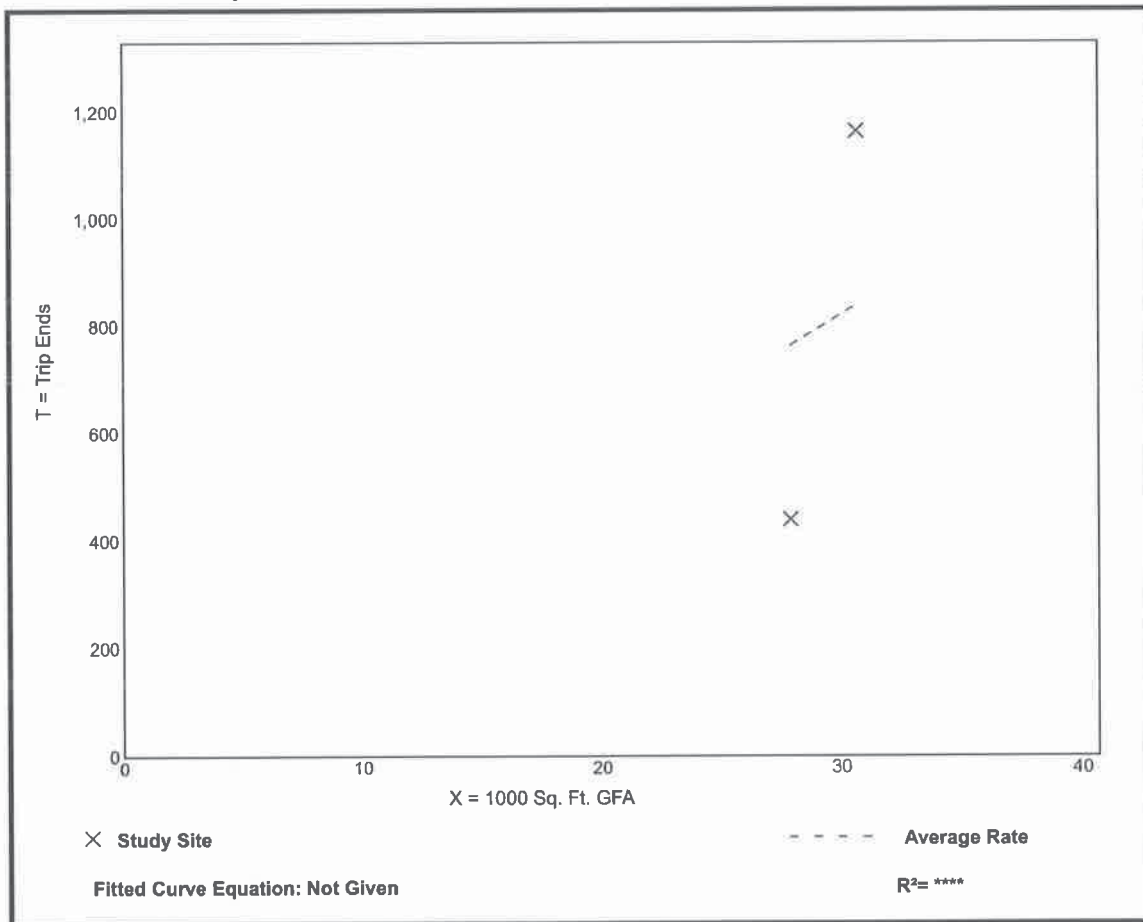
Setting/Location: General Urban/Suburban
Number of Studies: 2
1000 Sq. Ft. GFA: 29
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
27.40	15.78 - 37.96	*

Data Plot and Equation

Caution – Small Sample Size



Movie Theater (444)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Sunday, Peak Hour of Generator

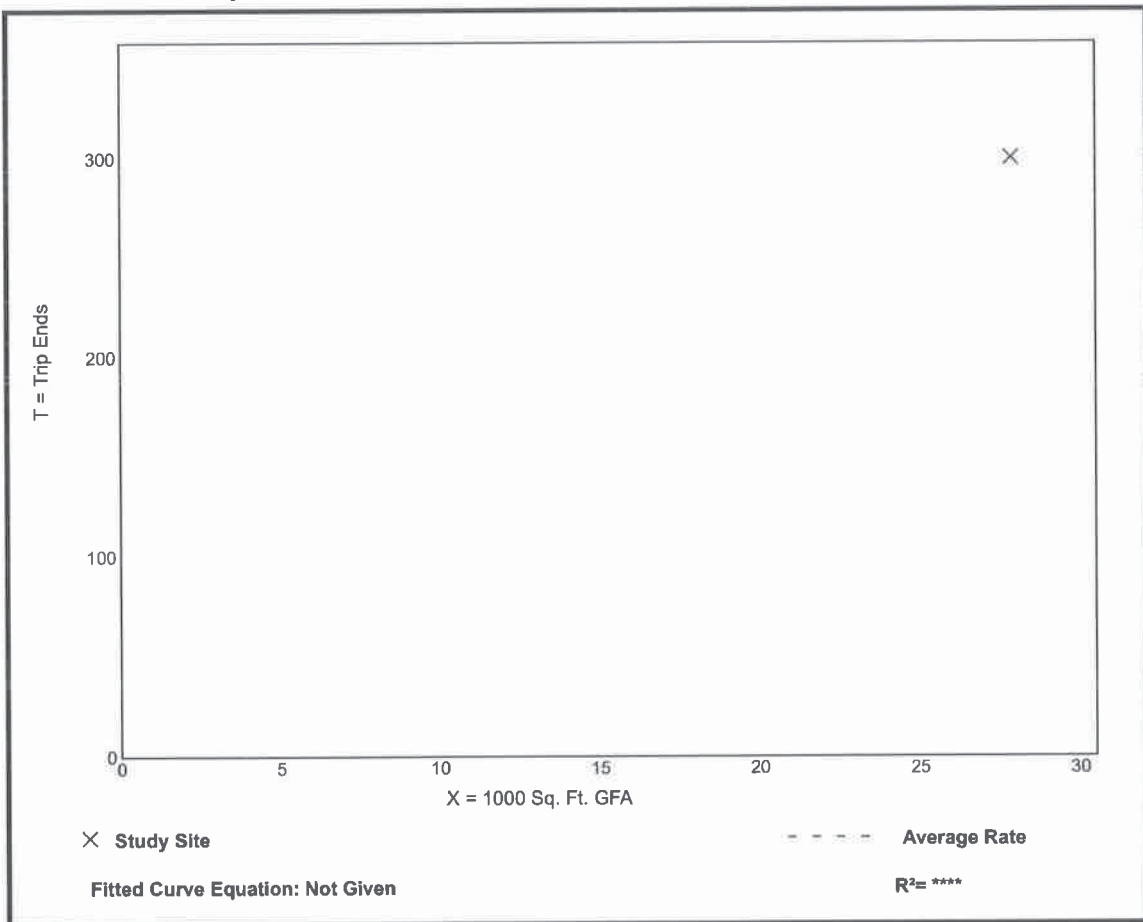
Setting/Location: General Urban/Suburban
 Number of Studies: 1
 1000 Sq. Ft. GFA: 28
 Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.76	10.76 - 10.76	*

Data Plot and Equation

Caution – Small Sample Size



Movie Theater (444)

Vehicle Trip Ends vs: Seats
On a: Weekday,
PM Peak Hour of Generator

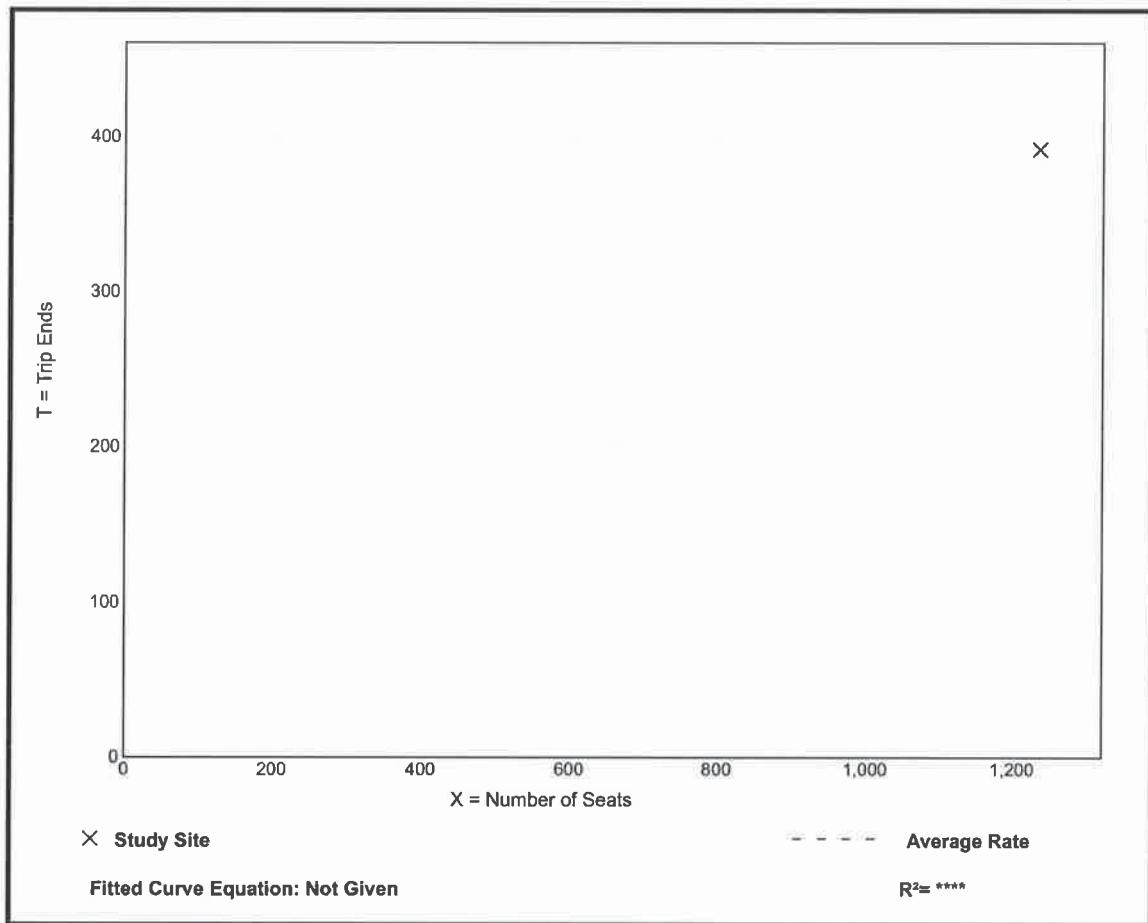
Setting/Location: General Urban/Suburban
 Number of Studies: 1
 Avg. Num. of Seats: 1236
 Directional Distribution: Not Available

Vehicle Trip Generation per Seat

Average Rate	Range of Rates	Standard Deviation
0.32	0.32 - 0.32	*

Data Plot and Equation

Caution – Small Sample Size



Movie Theater (444)

Vehicle Trip Ends vs: Seats
On a: Friday,
PM Peak Hour of Generator

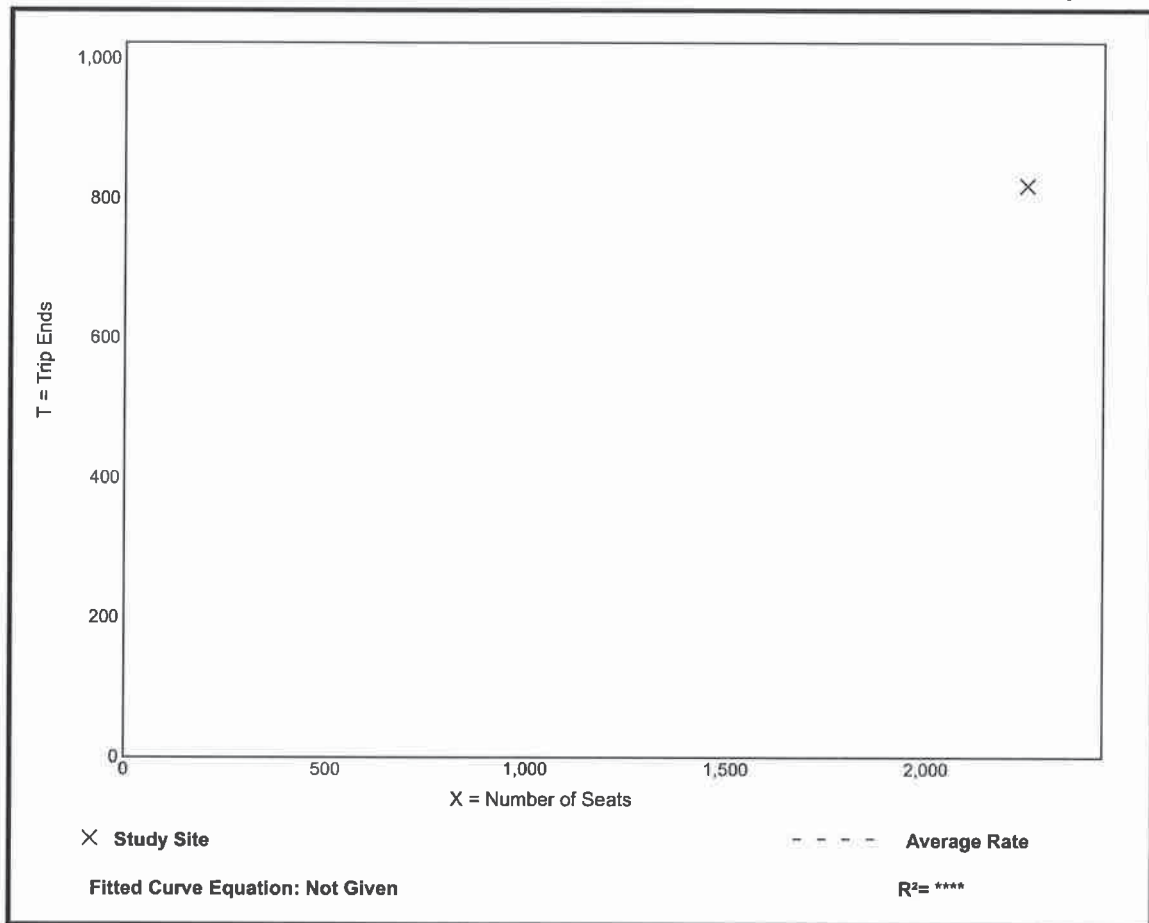
Setting/Location: General Urban/Suburban
 Number of Studies: 1
 Avg. Num. of Seats: 2250
 Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per Seat

Average Rate	Range of Rates	Standard Deviation
0.36	0.36 - 0.36	*

Data Plot and Equation

Caution – Small Sample Size



Movie Theater (444)

Vehicle Trip Ends vs: **Seats**
On a: **Saturday, Peak Hour of Generator**

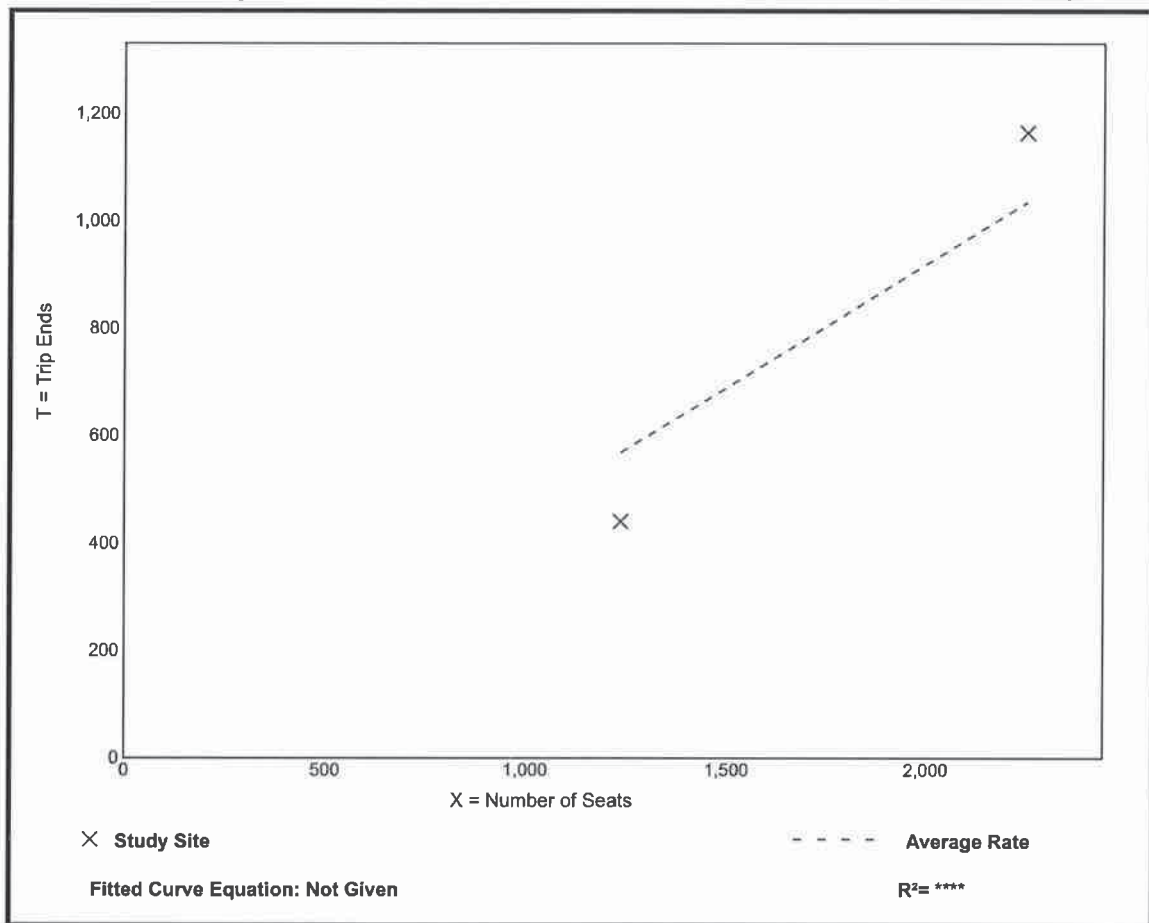
Setting/Location: General Urban/Suburban
Number of Studies: 2
Avg. Num. of Seats: 1743
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per Seat

Average Rate	Range of Rates	Standard Deviation
0.46	0.36 - 0.52	*

Data Plot and Equation

Caution – Small Sample Size



Movie Theater (444)

Vehicle Trip Ends vs: **Seats**
On a: **Sunday, Peak Hour of Generator**

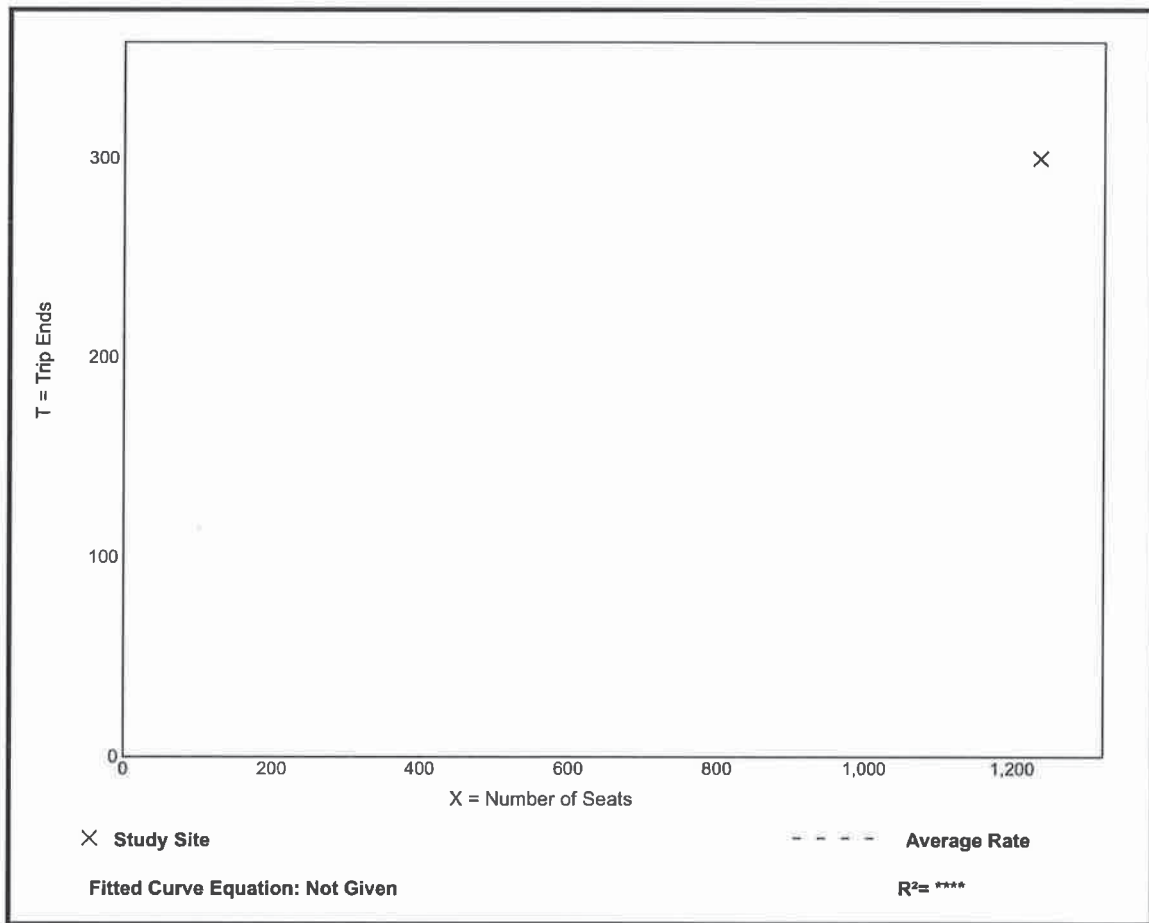
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Seats: 1236
Directional Distribution: Not Available

Vehicle Trip Generation per Seat

Average Rate	Range of Rates	Standard Deviation
0.24	0.24 - 0.24	*

Data Plot and Equation

Caution – Small Sample Size



APPENDIX B



9-21 (Wednesday)



total occupied = 432

214

30
29



E Durham St (western side)
21 # parked cars
X # parked trucks/buses

E Durham St (eastern side)
30 # parked cars
X # parked trucks/buses

E Mt Pleasant Ave
6 # parked cars
X # parked trucks/buses

E Sedgwick St (western side)
1 # parked cars
X # parked trucks/buses

E Sedgwick St (eastern side)
1 # parked cars
X # parked trucks/buses

28

WB
2



E Mt Airy Ave (western side)
4 # parked cars
X # parked trucks/buses

Chew Ave (northern side)
35 # parked cars
X # parked trucks/buses

Chew Ave (southern side)
31 # parked cars
X # parked trucks/buses

E Durham St
17 # parked cars
X # parked trucks/buses

Germantown Ave (southern side)
9 # parked cars
X # parked trucks/buses

E Mt Pleasant Ave
22 # parked cars
X # parked trucks/buses

Germantown Ave (northern side)
10 # parked cars
X # parked trucks/buses

35 32 31 33 34

47 46 45 48

36

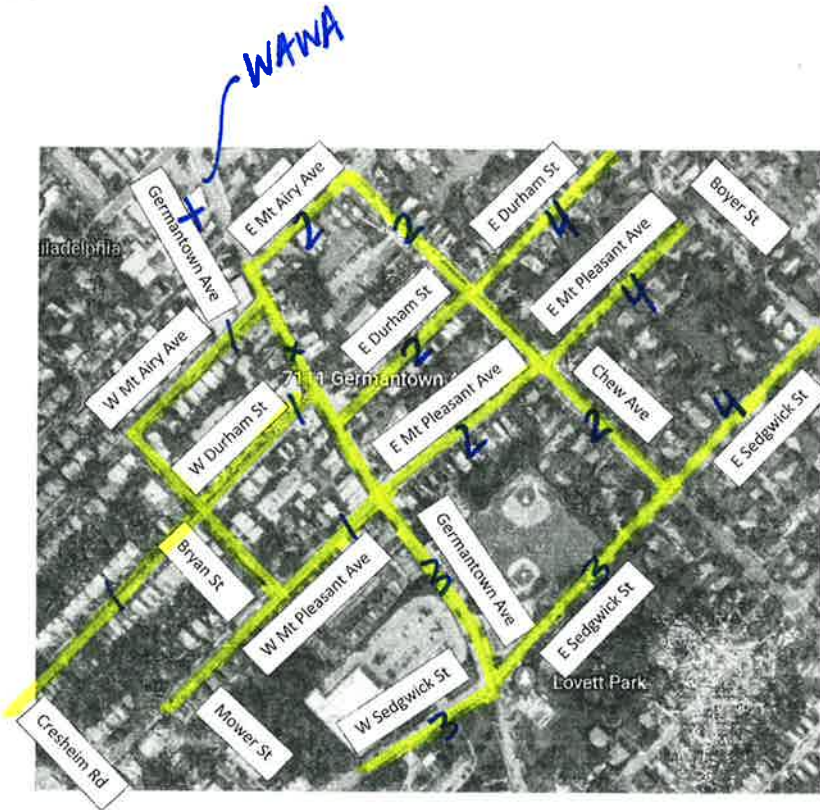
37 38 39 40 41 42 43 44 49 50
Germantown Ave
South side

41 42 43 44 45 46 47 48 49 50 51 52

128
11

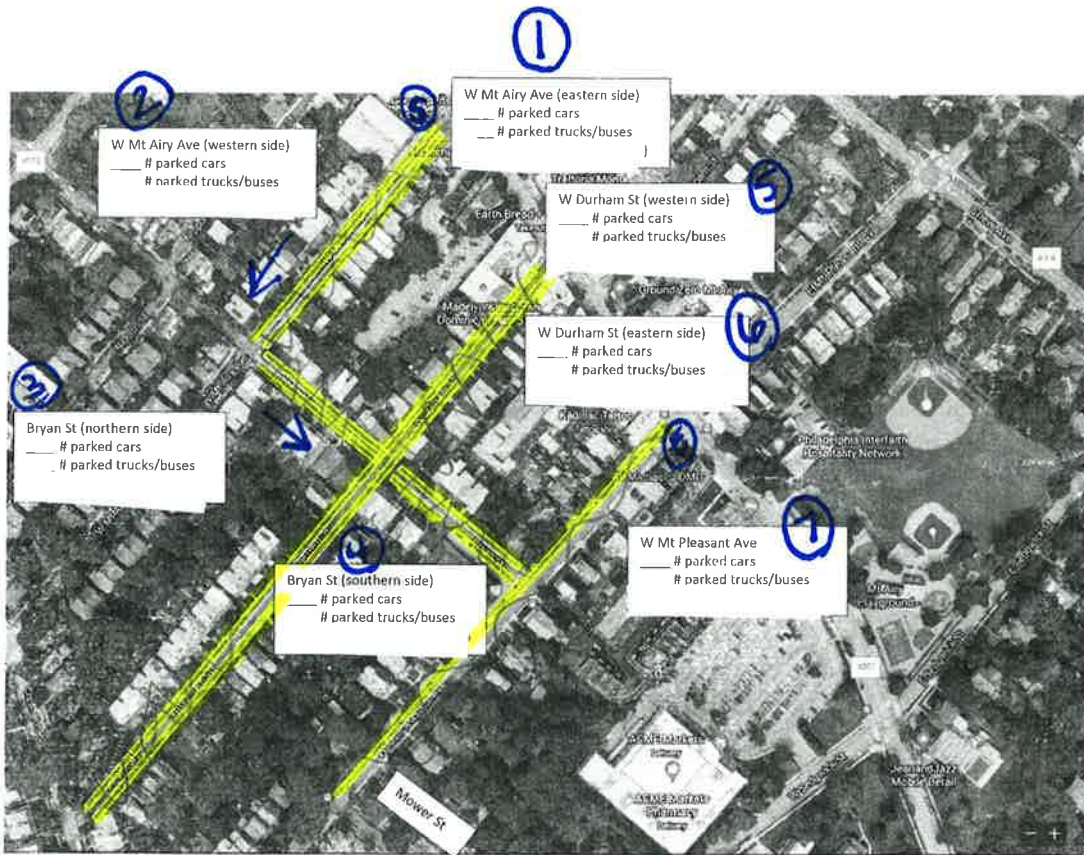
2pm Wed 09-22

x - municipal parking = free
nearby Rothe Florists



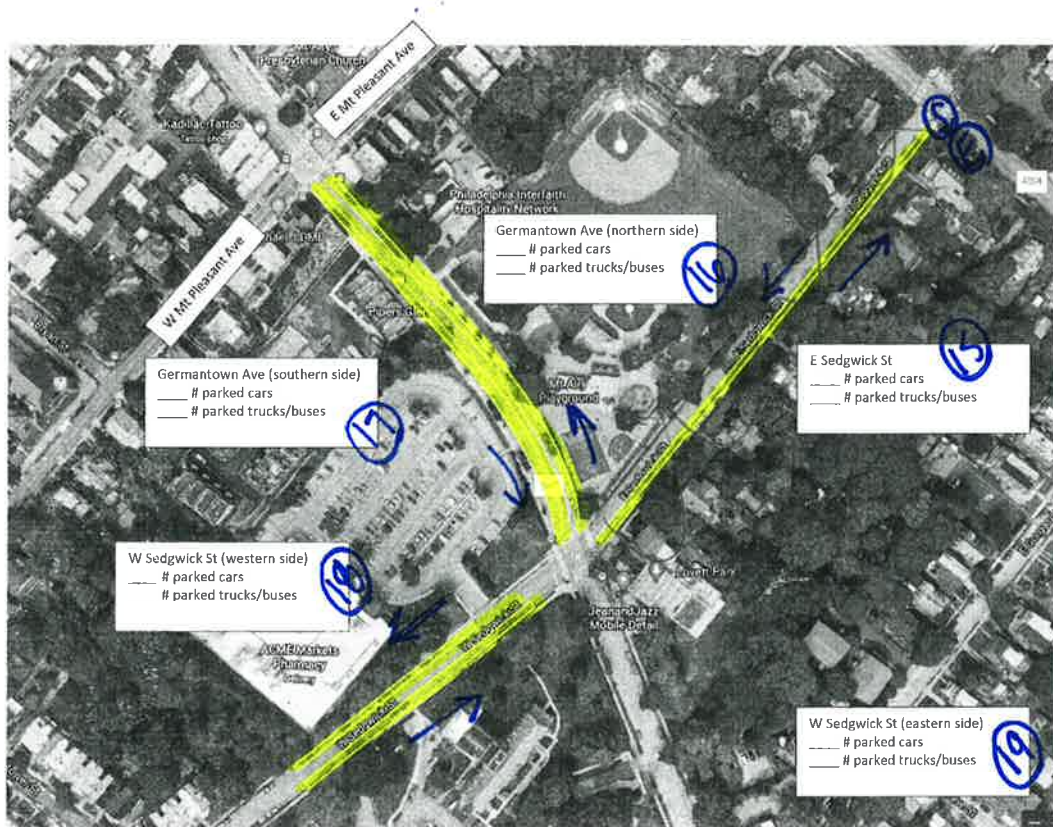
Lot occupied =
Street occupied = 396

2pm wed 9-22



#	cars	trucks/busses
1	 	18
2	 	19
3	 	22
4	 	19
5	 	31 1
6	 	40
7	before mowen st. 	22 1

173
①



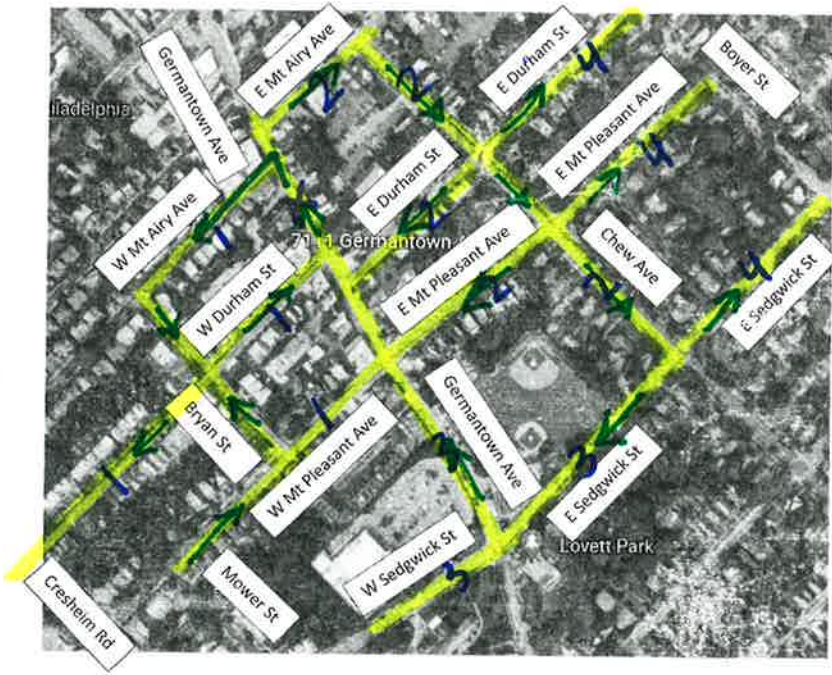
#	CARS	TRUCKS/BUSES
15		
		5
16		
	+ 1 mc	11
17		
		6
18		
		12
19		
		14

49
3



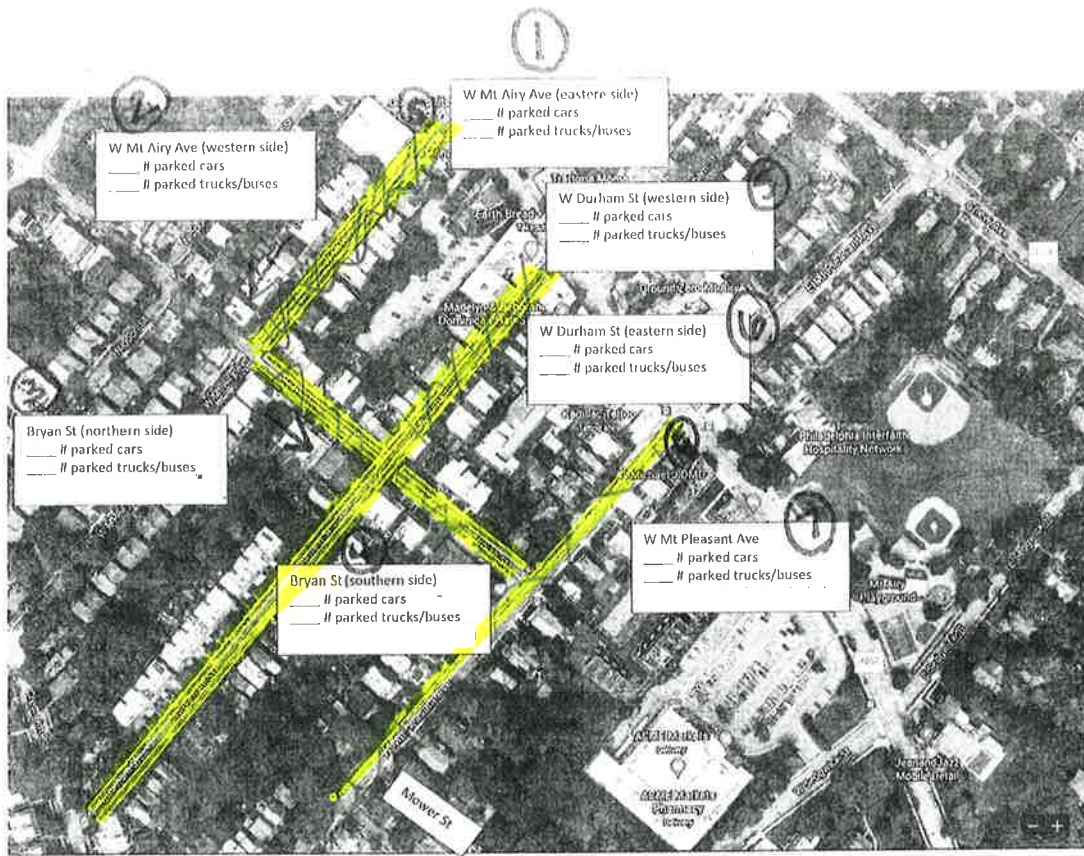
#	CARS	TRUCKS/ BUSES
20	1	1
21	11	2
22		6
23		17
24		20
		46

7pm wed 09-22



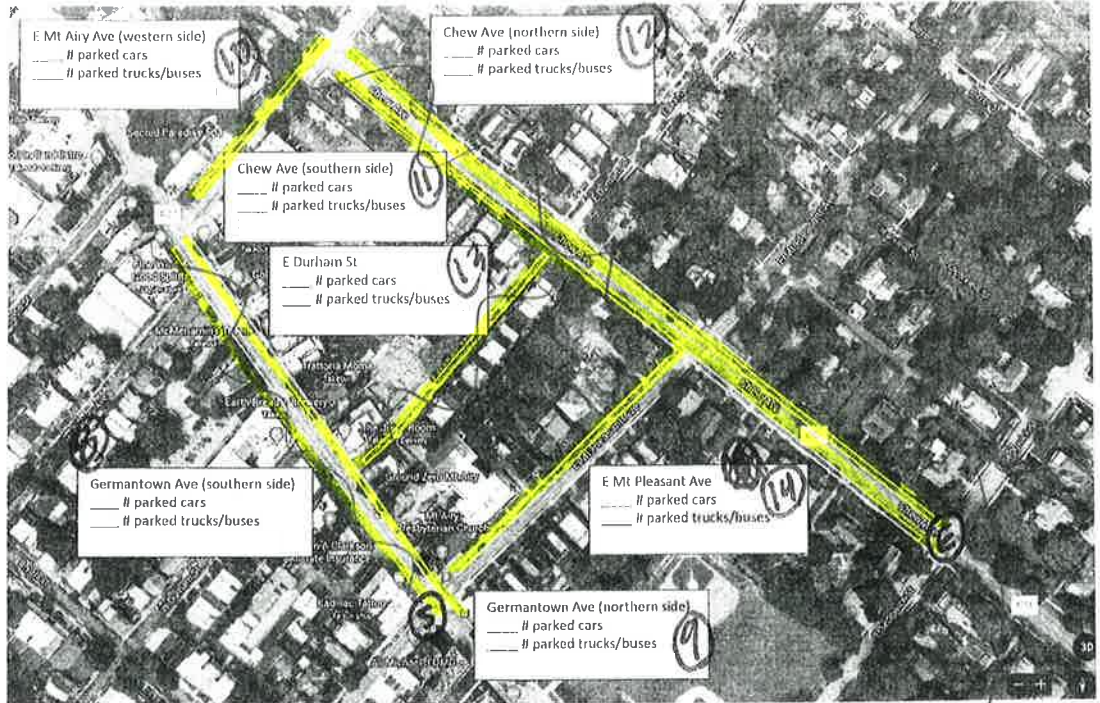
Lot occupied =
Street occupied = 433

7pm wed 9-22



1	 	24
2	 	22
3	 	50
4	 	50
5		
6		16
7	 	17
		32

211

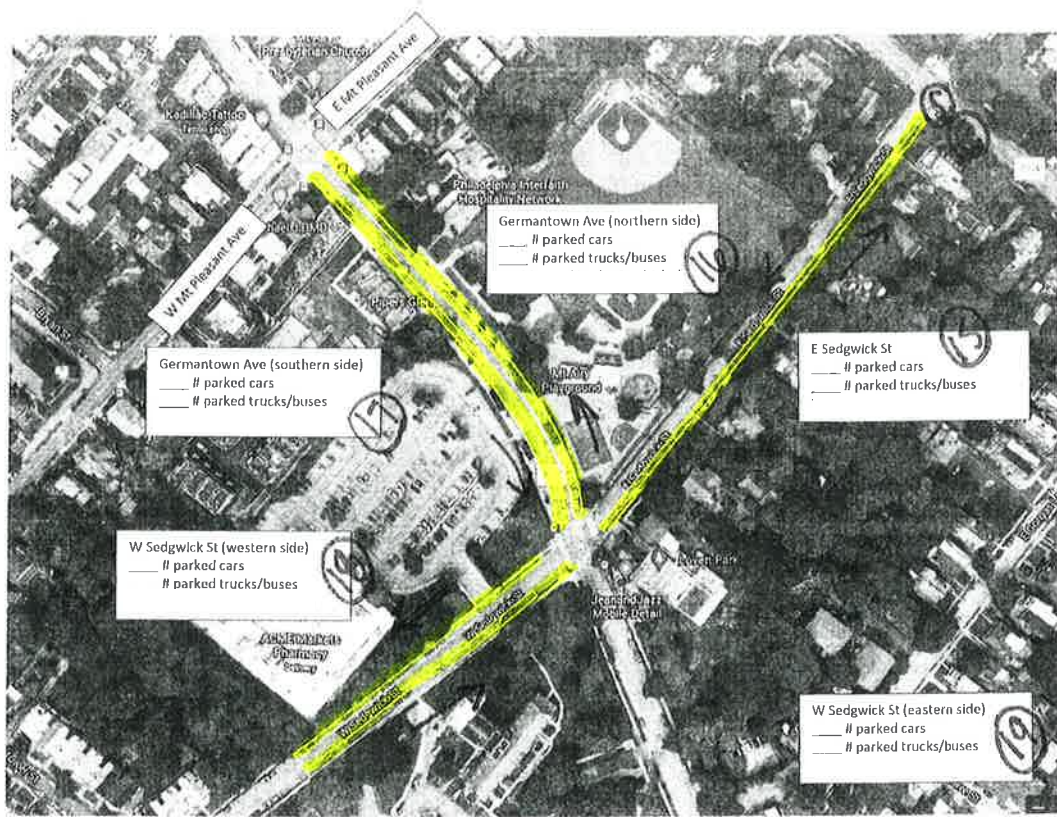


pg 4
pg 4

8		
9		10
10	1	15
11		1
12		27
13		27
14		18
		19

pg 4

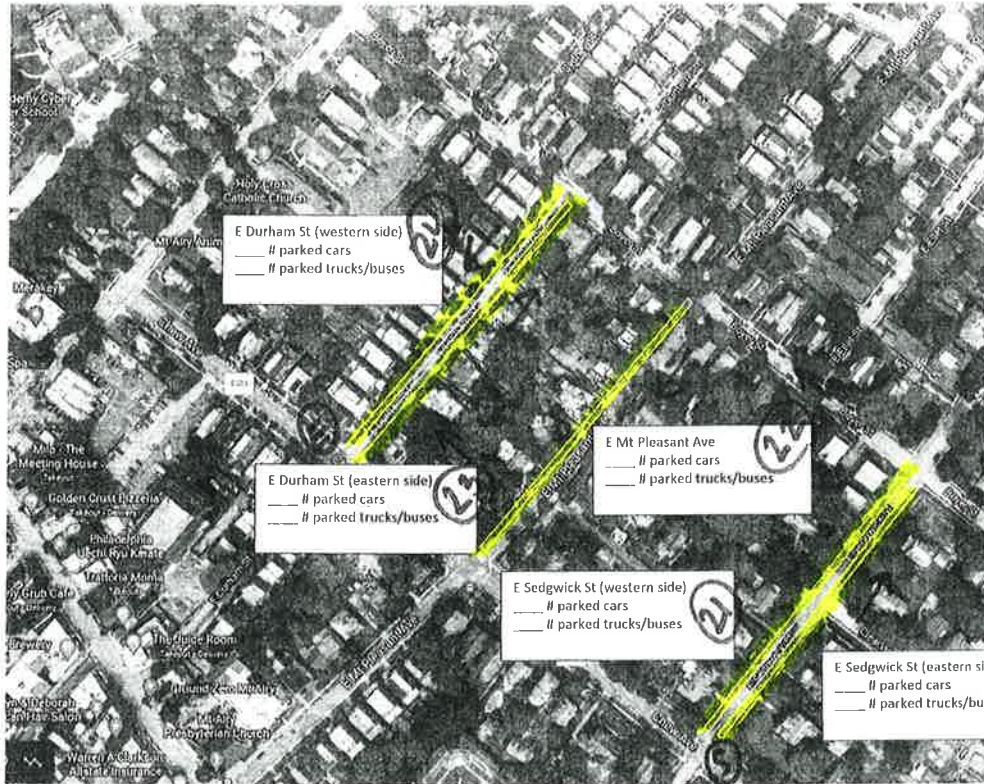
117



15 ~~||||~~ ~~||||~~ 1

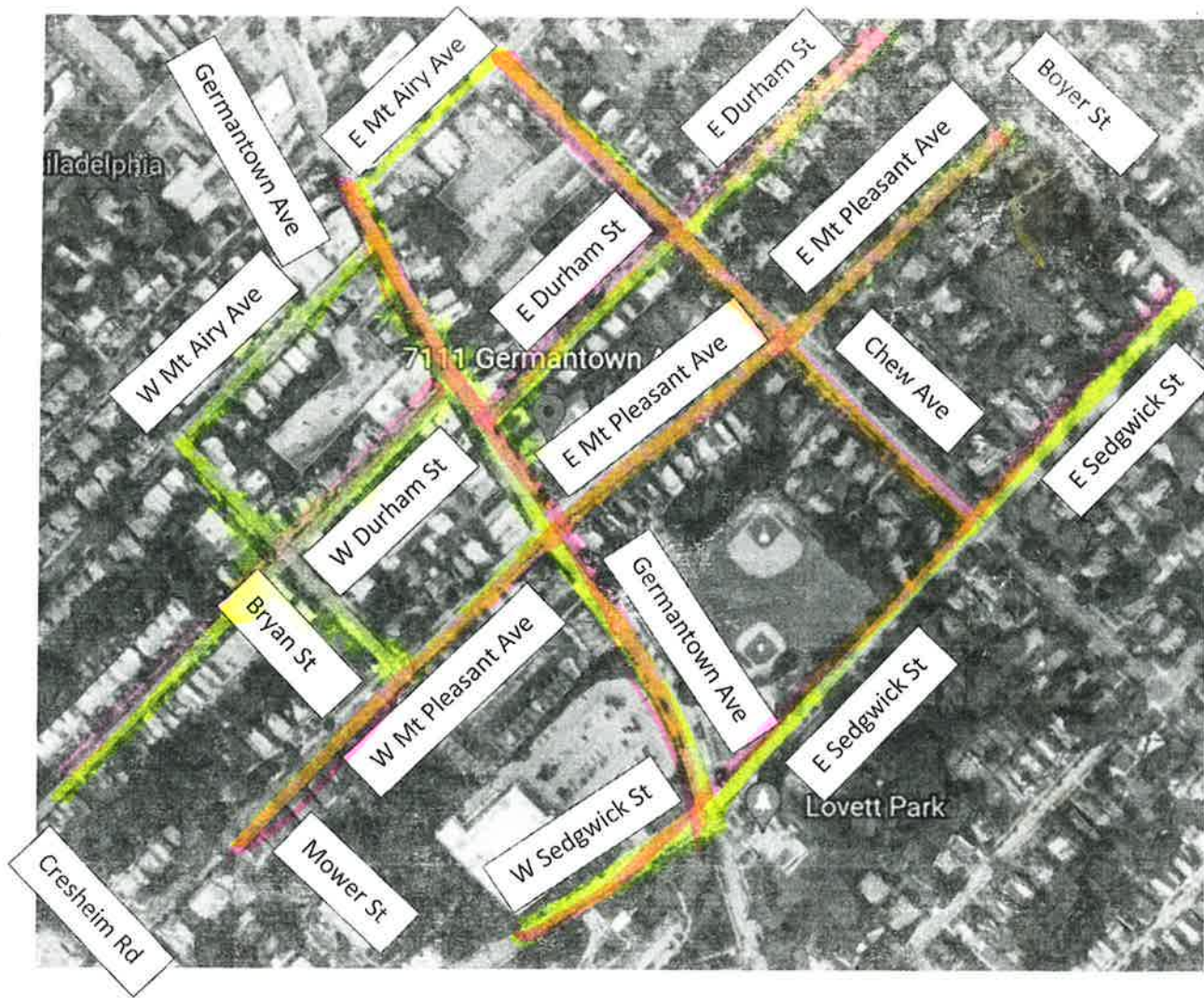
15	 1	11
16	 	
17	+ 1 MC 	20
18		17
19	0	3
		0

51



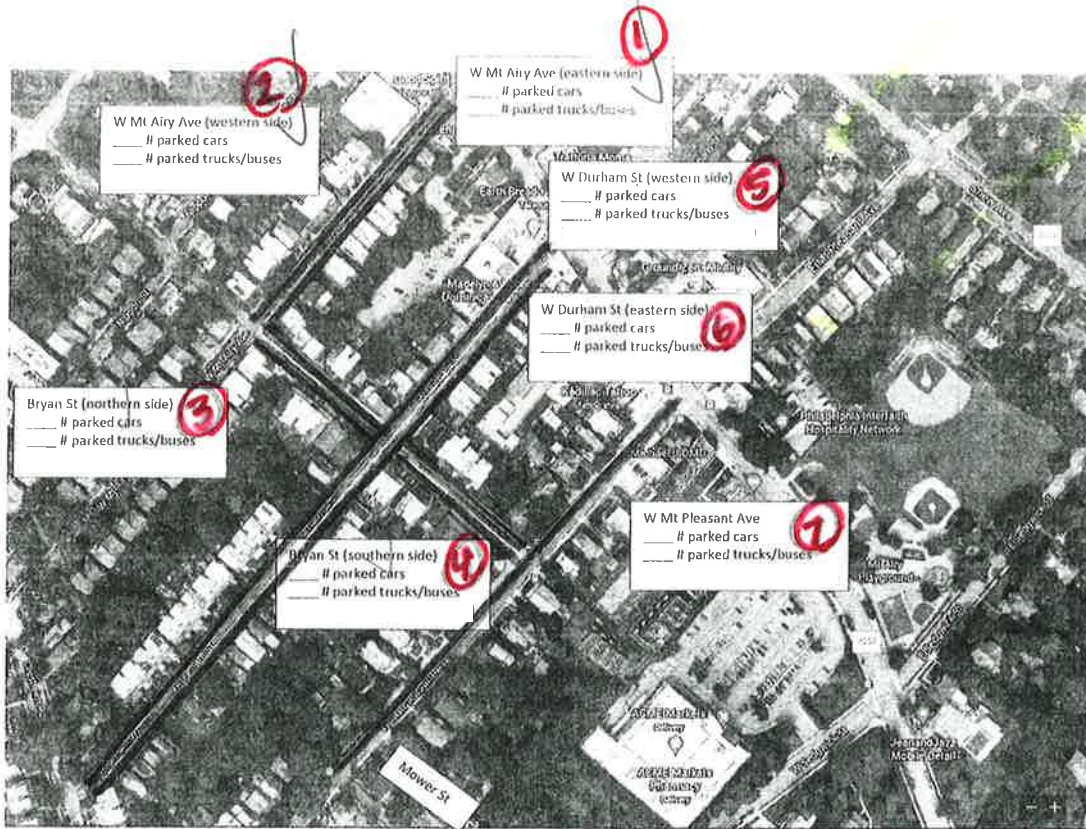
20		
21	0	3
22		0
23		6
24		20
		25

54



7pm
thurs 9-23

Lot occupied = 120
Street occupied = 462



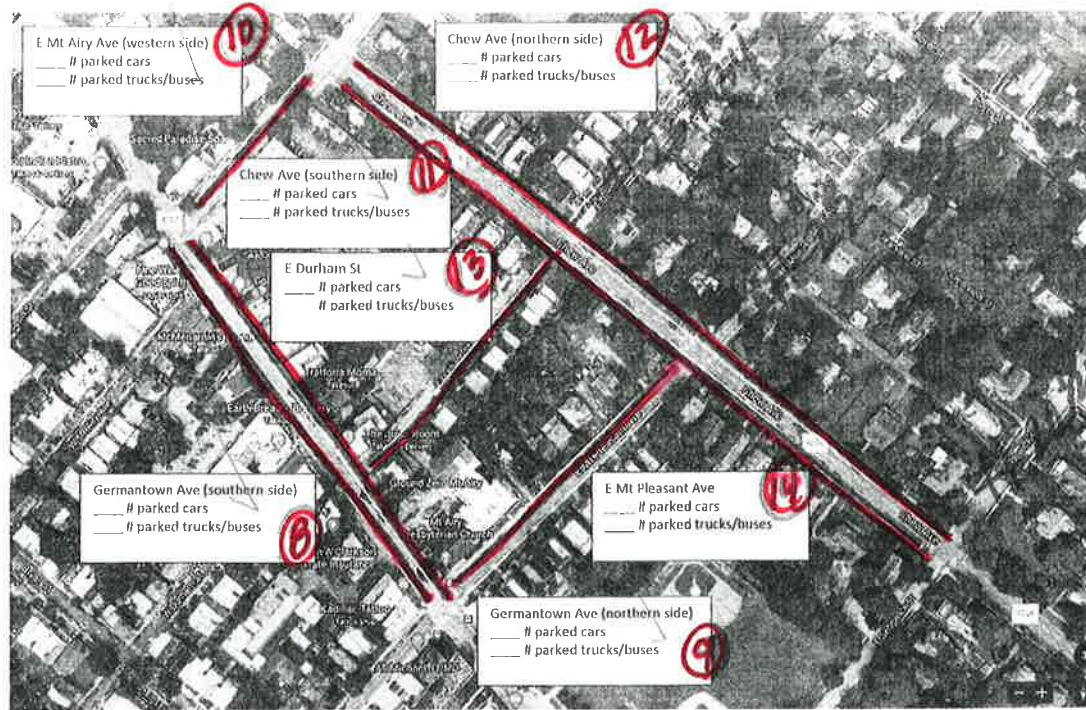
1		25
2	 	28
3		22
4		25
5	 	41
6	 	53
7	 	

32

232

cars

trucks/buses

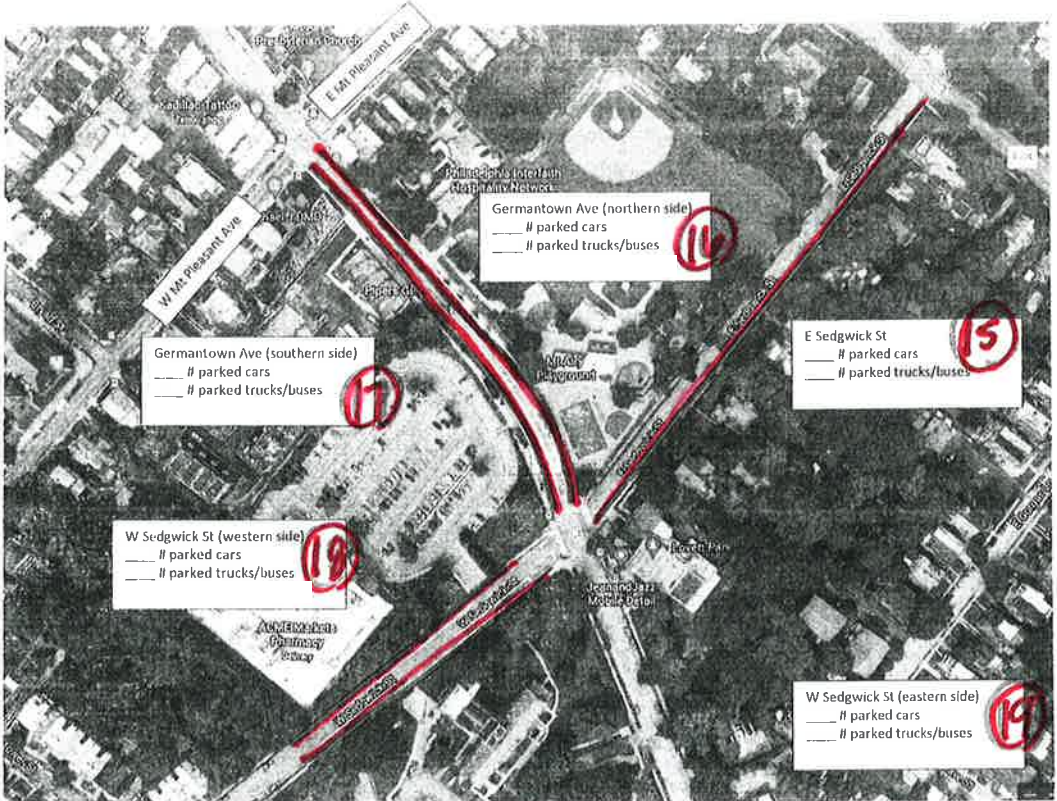


8		17
9		21
10	5	
11		38
12		31
13	18	
14	20	

150

cars

trucks/
busses

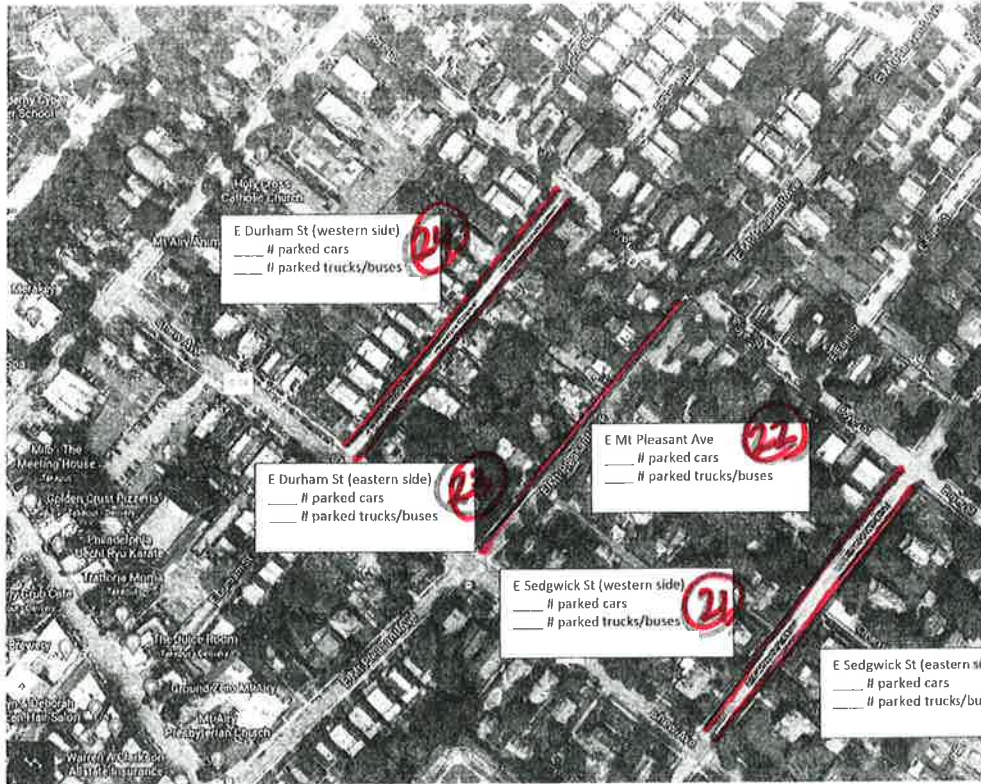


15		3
16		15
17		8
18	3	
19	1	

30

cars

trucks/
busses



20 0

23 3

22 5

23 19

24 23

50

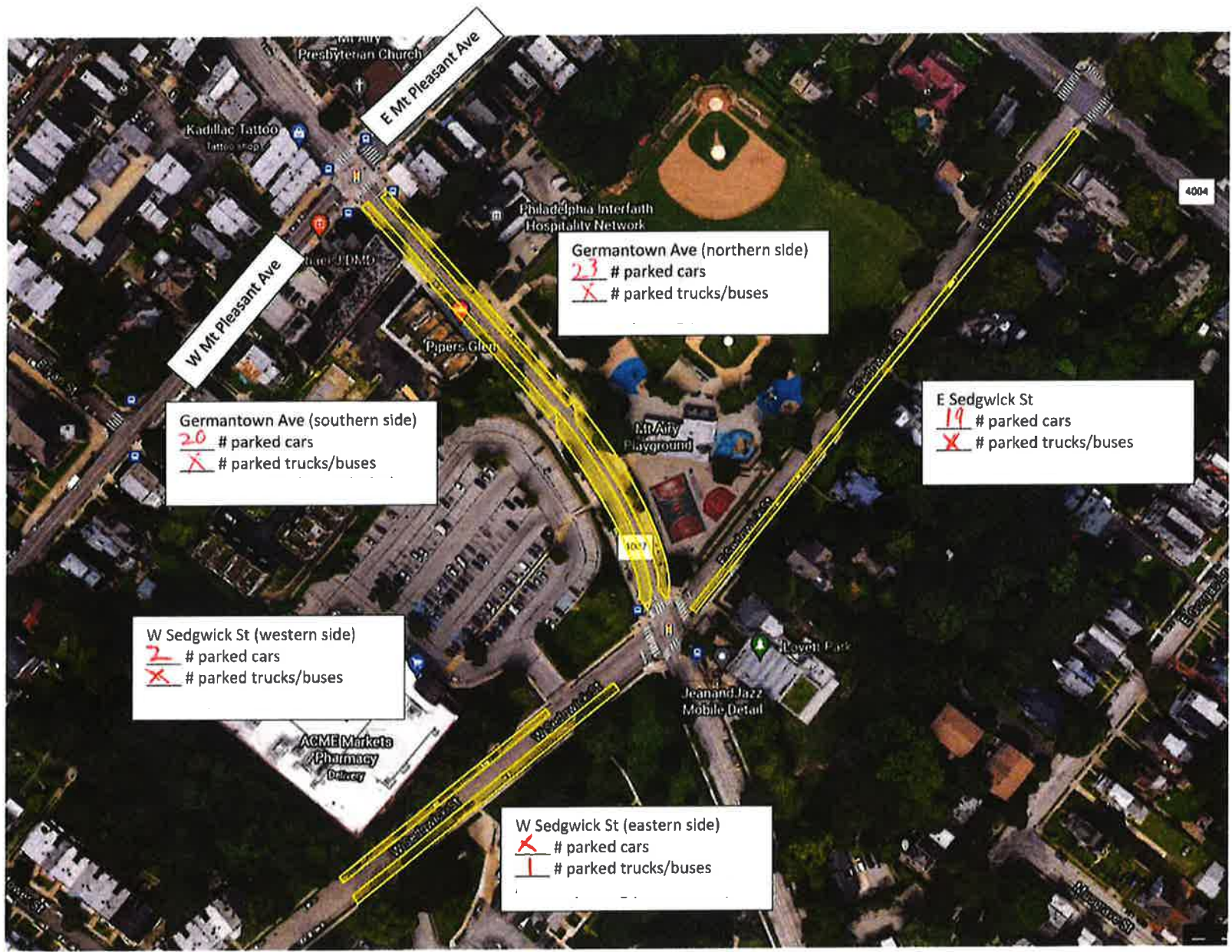


#	CARS	TRUCKS/ BUSSES
1	12	3 pics
2	33	
3	 	3 photos
4	 	12
		63
		120

9-24 Friday
8 pm



217



65



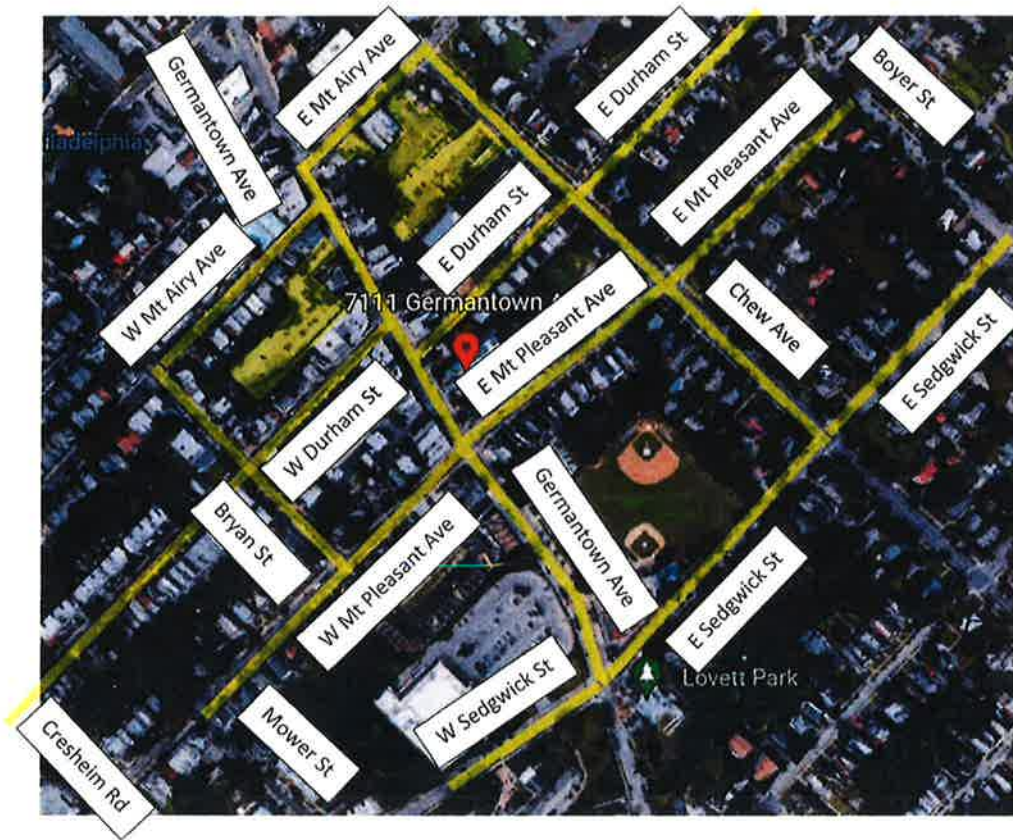
55



168



138



9-25 Saturday
1:00 - 2:30

Lot = 99
Streets = 414



204



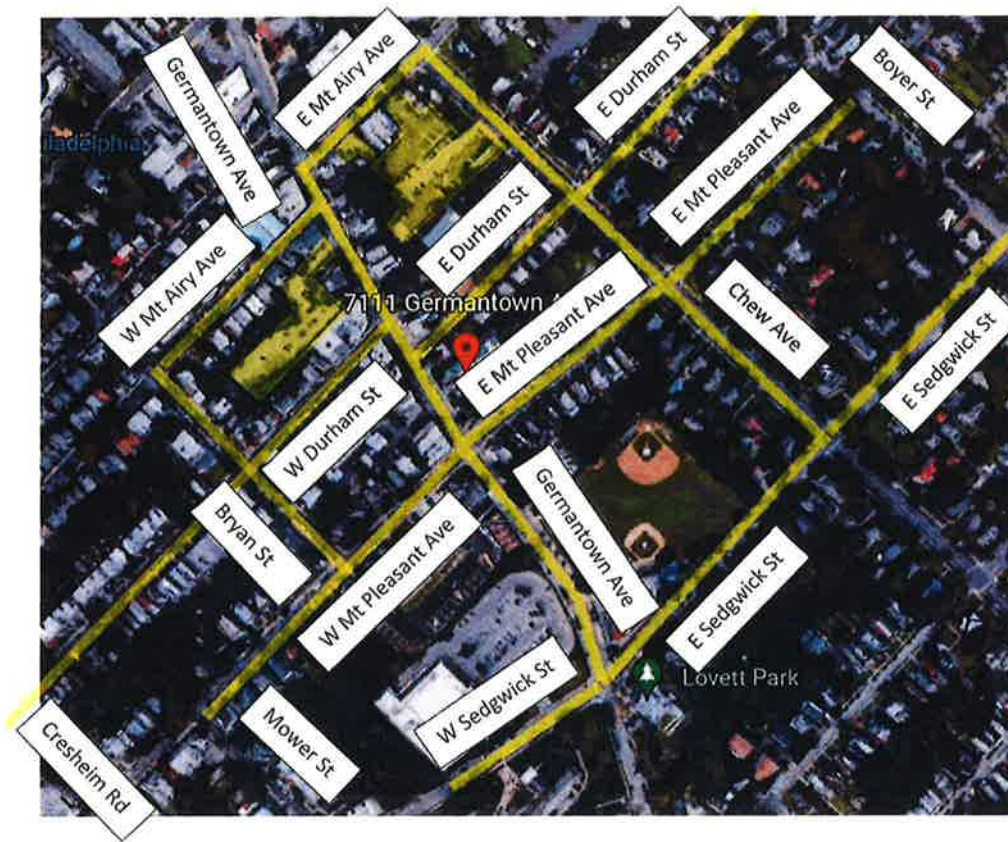
128







99



9-25 Saturday

7:00 - 8:30

Lot = 84
Streets = 397



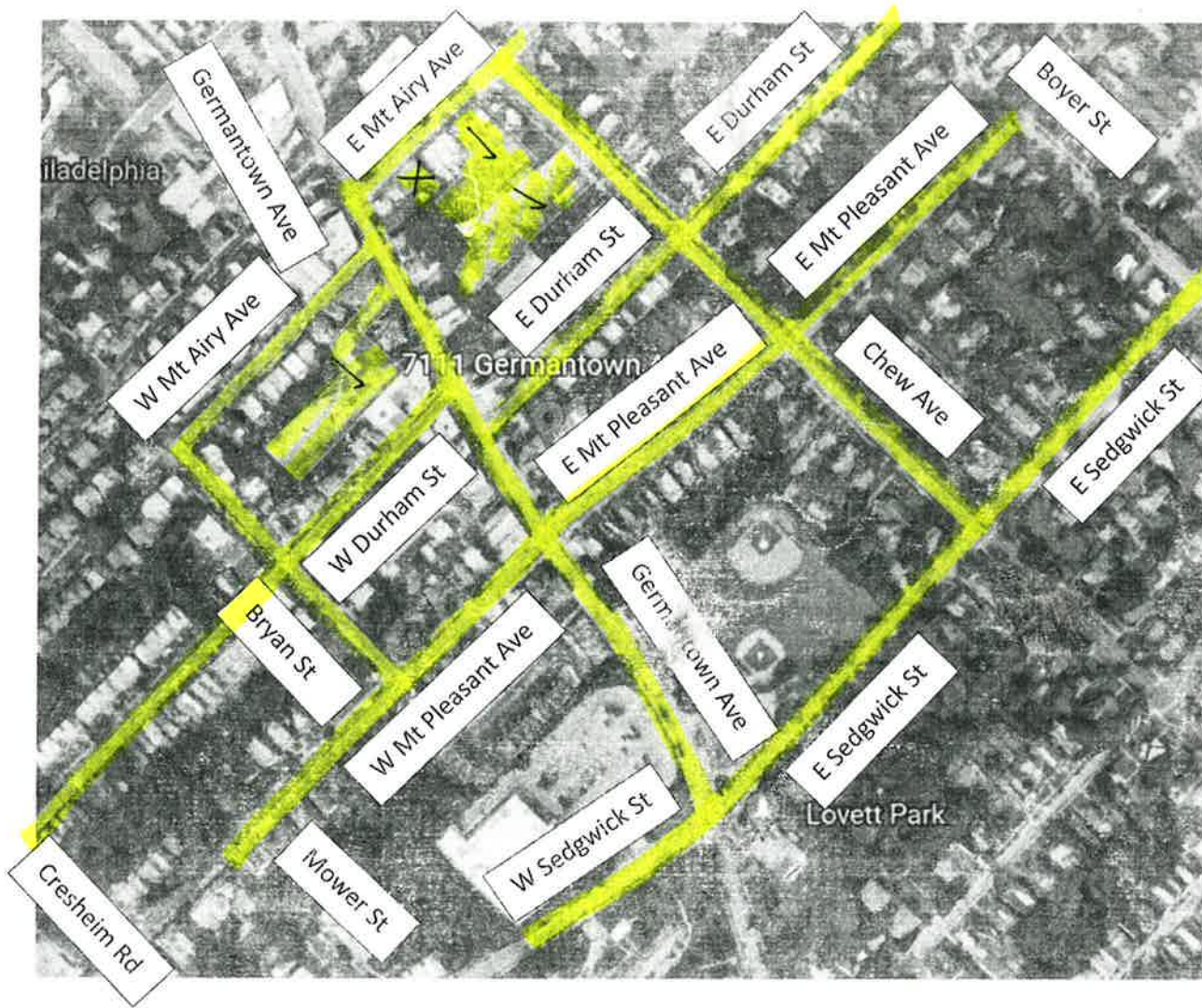
120





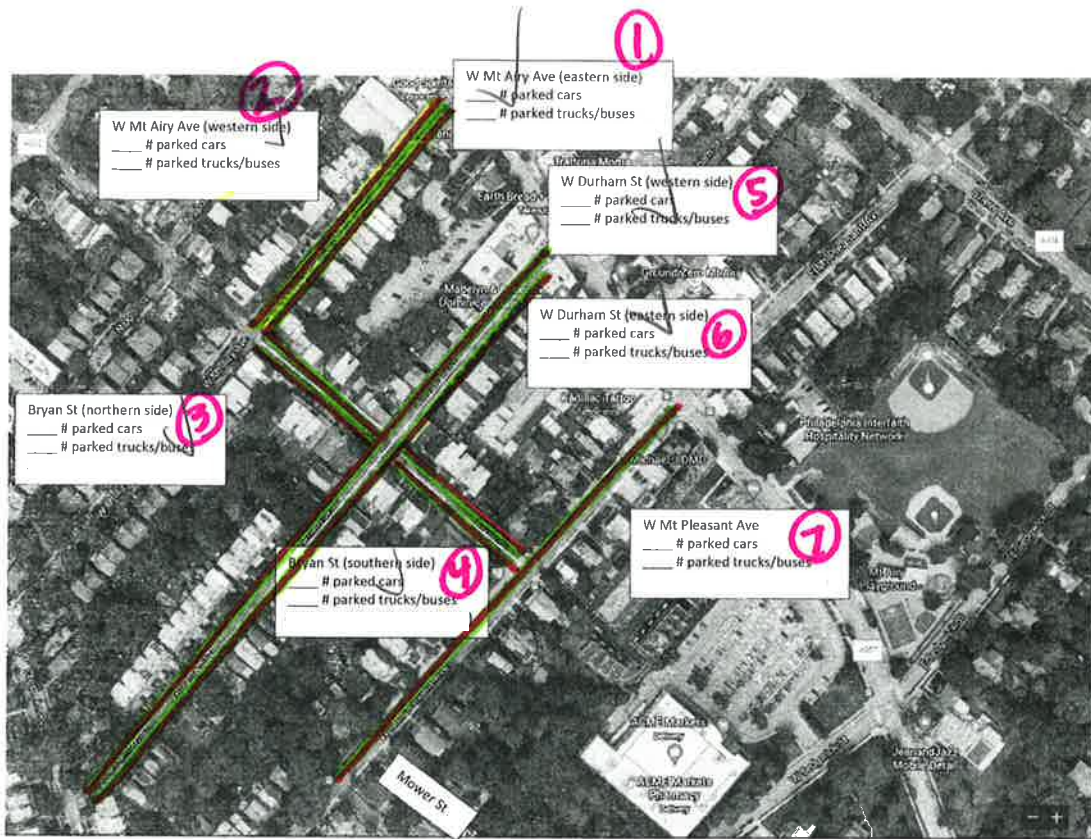


04

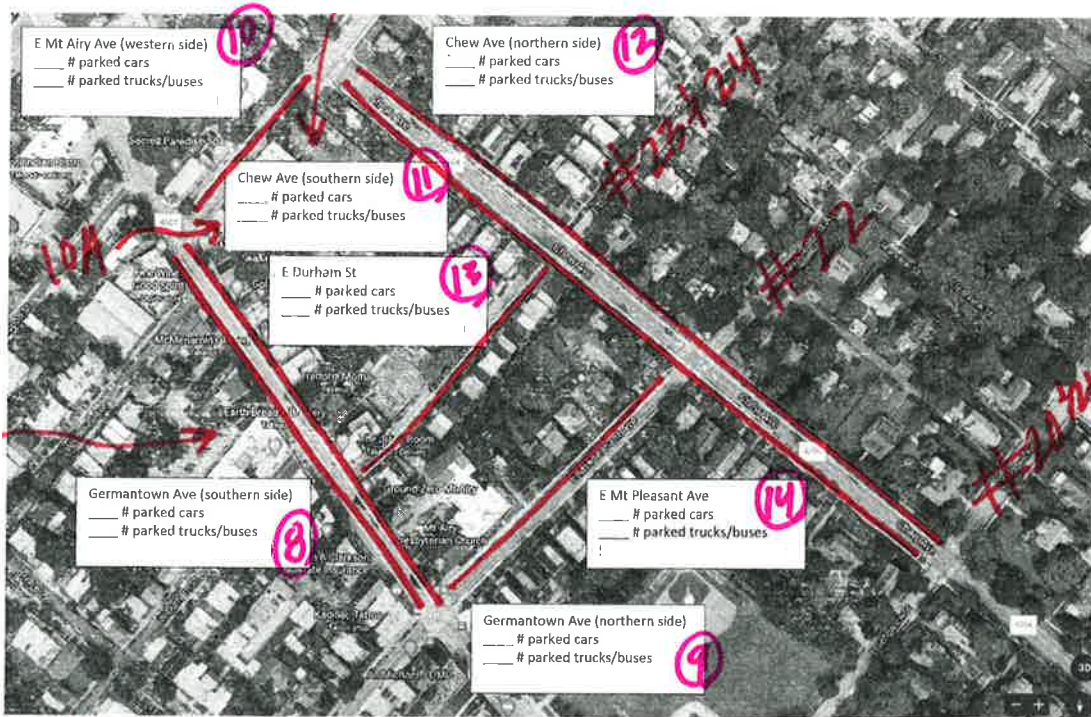


2pm
Sunday 9-26

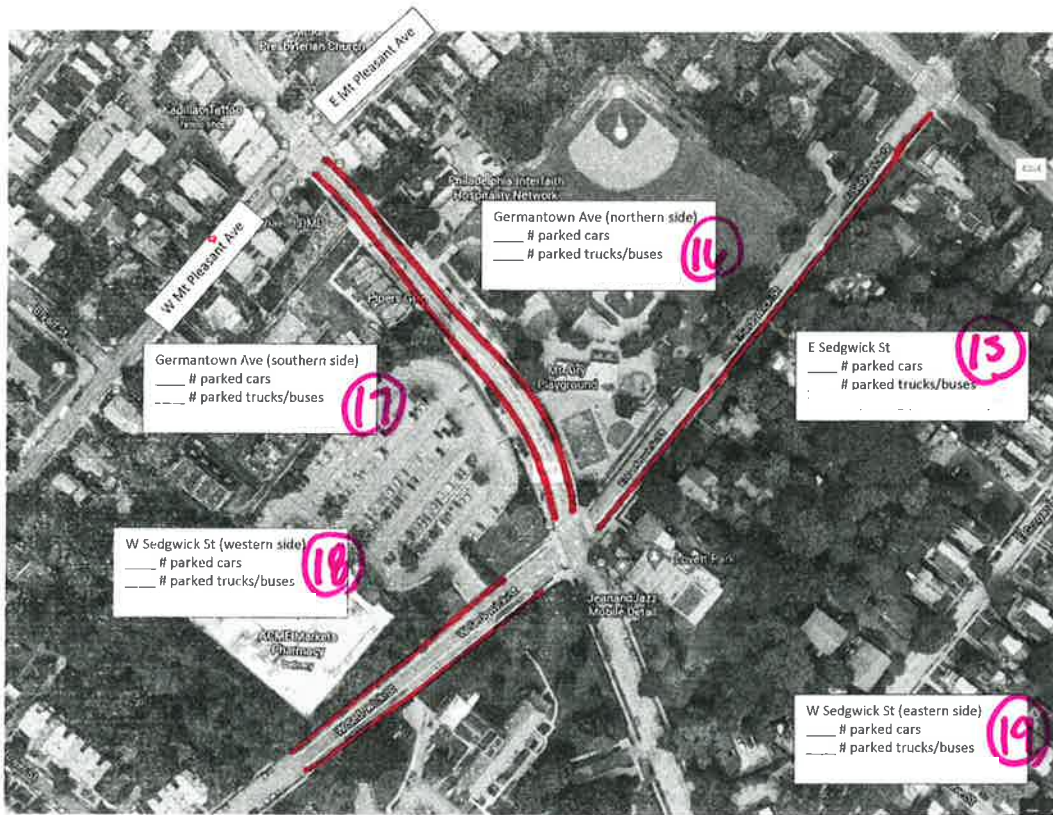
lot occupied = 89
street occupied = 408



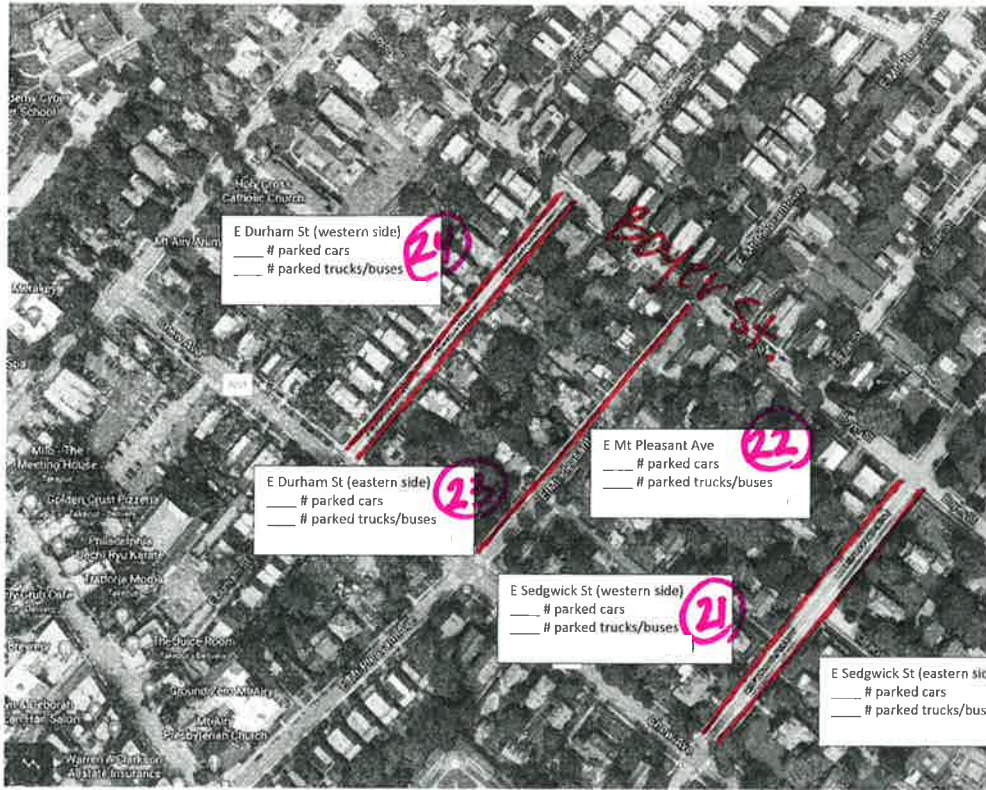
#	cars	trucks buses
1		
2		17 <i>2 spots marked off</i>
3		21
4		19
5		14
6		49
7		51
		27
		<u>198</u>



#	CARS	TRUCKS & BUSES
8		12
9		1
10		6
11		33
12		21
13		18
14		24
		<u>140</u>



#	CARS	TRUCKS/ BUSES
15		
16		1
17		6
18		4
19	0	1
		1/2
		19



#	CARS	TRUCKS/ BUSES
20	0	
21		
22		4
23		1
24		17
		23
		<u>51</u>



#	Cars	Trucks/Busses
1		
2	 	
3		
4	 	
		8
		31
		6
		39
		39

5
 30

89