

## Road Safety Audit:

CR 624 I (Lakeview Avenue) between Clifton Avenue and Market Street, Clifton and Paterson Cities, Passaic County



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#### **Executive Summary**

This document is the final report of the CR 624 I, Lakeview Avenue Road Safety Audit (RSA). It was conducted along Lakeview Avenue from Clifton Avenue in the City of Clifton to Market Street in and the City of Paterson, Passaic County. An RSA is an effective way of identifying crash-causing trends and appropriate countermeasures utilizing a nontraditional approach that promotes transportation safety while maintaining mobility.

Portions of this section of Lakeview Avenue were identified on NJTPA's Local Safety Program Network Screening list as high priority. According to the NJDOT crash database, 226 crashes occurred during the three-year period between January 1, 2015 and December 31, 2017 (excluding pedestrians/pedalcyclists) along the study area of Lakeview Avenue. Additionally, 14 pedestrian crashes occurred over the five-year period between January 1, 2013 and December 31, 2017.

This one-day RSA was conducted on Wednesday, October 2, 2019 from 9:30 am to 3:30 pm. The pre- and post-audit meetings were held in the Passaic County Engineering Office, located at 401 Grand Street, Paterson, NJ. Representatives from NJDOT, NJTPA and Passaic County were in attendance with NJDOT serving as the facilitator.

The RSA site and crash history are described in Sections II and III of this report, respectively. Section II also identifies previous and on-going studies conducted by the agency representatives. Corridor-wide and site-specific issues and recommendations, organized by location, are discussed in Section V. These recommendations addressed pedestrian safety by investigating curb extensions at intersections, repairing sidewalks and ensuring ADA compliance. Additionally, many suggestions were made to upgrade traffic signals, improve, and simplify signage, and improved lighting.

The recommendations contained herein were developed collaboratively with the roadway owner and local stakeholders from the RSA Team (members listed in Appendix A). The study partners have expressed interest in implementing many of the recommendations as time and funds allow. Many of the maintenance items, which are typically low cost, can be addressed without additional engineering.

Please note this RSA report does not constitute an engineering report. The agency responsible for design and construction should consult a licensed professional engineer in preparing the design and construction documents, to implement any of the safety countermeasures mentioned in this report.

#### I. Introduction

#### A. Site Selection

Portions of Lakeview Avenue were identified on NJTPA's Local Safety Program Network Screening list as a high priority location, as shown in the below rankings. Of note, these rankings are based on 2014-2016 vehicular and 2012-2016 pedestrian crash data.

Location	Ped Corridor	Regional Corridor
CR 624 I (Lakeview Ave)	#6 County (MP 0.38-1.38)	#23 County (MP 0.61-1.61)

#### Table 2 – Lakeview Ave NJTPA LSP Ranking (Intersection)

Location	Intersections	Pedestrian Intersections
Clifton Ave	#11 County	#5 County
Piaget Ave	#21 County	#59 County

#### B. What is a Road Safety Audit?

A Road Safety Audit (RSA) is a formal safety performance examination of an existing or future road or intersection by a multi-disciplinary audit team. It qualitatively estimates and reports on existing and potential road safety issues, as well as identifies opportunities for improvements in safety for all road users. RSAs can be used on any size project, from minor maintenance to mega-projects, and can be conducted on facilities with a history of crashes, or during the design phase of a new roadway or planned upgrade. RSAs consider all road users, account for human factors and road user capabilities, are documented in a formal report, and require a formal response from the road owner.

The RSA program is conducted to generate improvement recommendations and countermeasures for roadway segments demonstrating a history of, or potential for, a high frequency of crashes, or an identifiable pattern of crash types. Recommendations range from low-cost, quick-turnaround safety improvements to more complex strategies. Implementation of improvement strategies identified through this process may be eligible for Local Federal Aid Safety Funds. Because the RSA process is adaptable to local needs and conditions, recommendations can be implemented incrementally as time and resources permit.

The RSA process, one of FHWAs proven safety countermeasures, is shown in the figure below.

#### **CONDUCTING AN RSA**



#### C. The Lakeview Avenue RSA Event

This one-day RSA was conducted on Wednesday, October 2, 2019 from 9:30 am to 3:30 pm. The preand post-audit meetings were held in the Passaic County Engineering Office, located at 401 Grand Street, Paterson, NJ. Representatives from NJDOT, NJTPA and Passaic County were in attendance with NJDOT serving as the facilitator. A list of team members can be found in Appendix A.

#### II. Corridor Description and Analysis

#### A. Study Location

The study area consists of approximately 1.9 miles of Lakeview Avenue within the Cities of Clifton and Paterson. This stretch of Lakeview Avenue is a mix of commercial and residential properties. Commercial sites generally consist of small-scale retail, professional and service establishments. Residential properties are intermixed and are more predominant in the northern portion of the project limits. Two cemeteries are located along the north-bound direction from Crooks Avenue to I-80.

#### B. Roadway and Intersection Characteristics

Lakeview Avenue is classified as an urban minor arterial with a posted speed limit of 30 mph and 35 mph south and north of Roosevelt Avenue, respectively. Of note, the southbound direction is posted 25 mph in the divided section. The corridor study section is 2-lanes, undivided, with parking on both sides from Clifton Avenue to Crooks Avenue and it is 4-lanes divided between Crooks Avenue and Market Street. There are 5 signalized, 31 stop-controlled intersections and 1 traffic circle.

#### C. Existing Bicycle/Pedestrian Accommodations

Sidewalks are currently available along both sides except along the cemetery properties and range from 4-6 feet wide. Standard crosswalks are provided throughout the corridor. Sidewalk and crosswalk conditions vary from newly installed to needing maintenance. There are no bicycle lanes or other bicycling infrastructure identified along the corridor.

#### D. Traffic Volumes

Based on available data, the 2019 ADT along Lakeview Avenue ranges from approximately 12,000 to 15,000 vehicles per day. This was calculated from 2019 manual count data at Crooks Avenue and Market Street. A copy of the available data can be found in Appendix C.

#### E. Transit Service

NJ Transit bus service is provided along Lakeview Avenue via routes 703, 712 and 744. Route 703 connects Paterson to East Rutherford, NJ and Haledon, NJ. The 712 bus goes around the Market Street circle and gets on I-80 using the ramp on Lakeview Avenue. Route 712 provides service from Hackensack to Paterson to Willowbrook. Route 744 runs from Wayne through Paterson and terminates at Passaic City Hall.

#### F. Community Profile

Population and income characteristics from the 2010 Census (U.S. Census Bureau) were used to identify minority populations and low-income populations. Updates to the 2010 Census were performed by the Census Bureau through the <u>American Community Survey (ACS)</u> estimate. The latest ACS for this study area is a five-year estimate from 2012 through 2016, except for LEP, which was from the 2011-2015 ACS. A summary of the demographics is listed below.

	Characteristic	Lakeview Ave Area	County Average
Poverty		13.3%	17.0%
Race/	White	23.3%	42.0%
Ethnicity	Hispanic/Latino	55.8%	40.5%
	Asian American	2.5%	5.2%
	Black or African American	17.2%	10.6%
	American Indian/Alaskan	0.0%	0.2%
	Other <sup>1</sup>	1.2%	1.4%
Limited English Proficiency (LEP)		27.8%	20.3%

#### Table 3 – Lakeview Ave Area Demographics

In addition, approximately 11% of the population uses public transportation compared to the Passaic County average of 9%. Roughly 3% of the area population walk to work, which is slightly lower than the county average of 4%.

#### G. Redevelopment

Passaic County is currently in the preliminary stages of a new design for Lakeview Avenue north of Crooks Avenue. This section is currently a 4-lane divided roadway with 2 travel lanes in either direction and a sidewalk on the western side of the road. In an aim to reduce speed on this section of the corridor, the design includes one travel lane and a bicycle lane in either direction and a parking lane in the southbound direction, adjacent to the houses. The design will maintain a sidewalk on the western side of the road. Pedestrian safety is increased as there is only one lane of traffic to cross to access bus stops.

#### **III.** Crash Findings

The analysis used in the RSA was based on reportable crashes that resulted in a fatality, injury and/or property damage as found in the NJDOT crash database. Corridor-wide crash characteristics and overrepresentations were compared to the 2016 statewide average for the county road system as further detailed below. All crashes were plotted onto collision diagrams, which can be found in Appendix D and E. One additional pedestrian crash from 2018, which was fatal, was included in the collision diagrams. However, it is not reflected in the following charts.

Subsequent to the RSA, it was noted that not all crashes were reflected in the collision diagrams or in the charts contained herein. Due to variations in coding of the police reports, Lakeview Avenue was not always used as the major roadway. As such, searches of crash reports along the subject roadway did not produce all crashes. The table below identifies the additional crashes that should be considered for this corridor. Further details are provided in Appendix I.

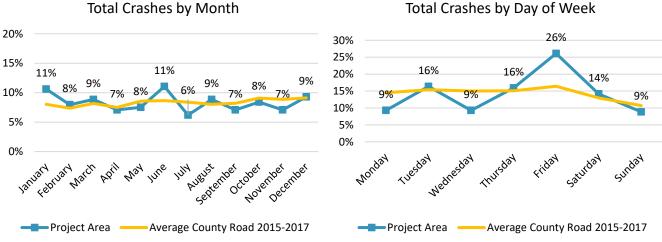
<sup>&</sup>lt;sup>1</sup> Percentages may not equal 100% due to rounding. Other includes individuals who identified themselves as 'Native Hawaiian or Pacific Islander', 'Some Other Race Alone' or 'Two or More Races'

Paterson City		Clifton City	
Location	Identified Crashes	Location	Identified Crashes
Lakeview/Market Circle	16	Crooks Ave	15
38th St & Market	12	1st St	3
37th St & Market	3	2nd St	1
Maryland Ave	13	Roosevelt Ave	2
Florida Ave	1	7th St	1
Illinois Ave	1	9th Ave	1
Michigan Ave	2	Merselis Ave	2
Delaware Ave	1	11th St	2
Dundee Ave	1	Trimble Ave	2
Knickerbocker Ave	2	Christie Ave	4
Crooks Ave	12	Bergen Ave	2
		Piaget Ave	3
		Hamilton Ave	2
		Arlington Ave	1
		Caroline Ave	1
		Mina Ave	2
		Clifton Ave	15
Paterson Total	70	Clifton Total	63

#### Table 4 – Additional Crashes Associated with Lakeview Avenue

#### A. Temporal Trends

According to the NJDOT crash database, 226 crashes occurred during the three-year period between January 1, 2015 and December 31, 2017 (excluding pedestrians/pedalcyclists) along the study area of Lakeview Avenue<sup>2</sup>. Total crashes varied from the county average in June and July and on Friday.



Total Crashes by Day of Week

Figure 1 – Vehicular Crashes by Month and Day of Week

<sup>&</sup>lt;sup>2</sup> These numbers, and any associated charts, do not include the additional crashes listed in Table 4 since the same was identified subsequent to the RSA.

Additionally, 14 pedestrian crashes occurred over the 5-year period from 2012 to 2017. The majority of these crashes included injury (one fatal), occurred at unsignalized intersections, and were split 70/30 between pedestrians and bicyclists. Nighttime crashes were overrepresented when compared to the county road average. Collisions with pedestrians trended similar to county road monthly and daily averages except for December.

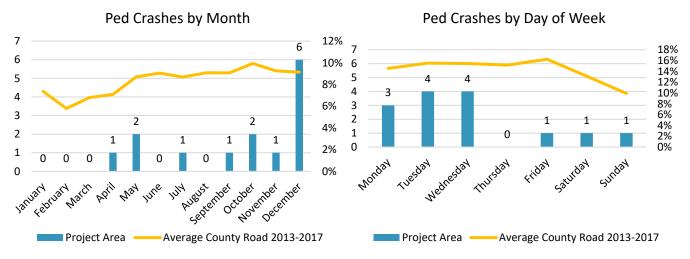


Figure 2 – Pedestrian/Bicyclist Crashes by Month and Day of Week

#### B. Collision Types

Overrepresented vehicular crash types over the three-year period from 2015 to 2017 included sideswipe, right angle, head on, parked vehicle, left turn and backing. Of the 14 pedestrian/cyclist crashes over the five-year period from 2013 to 2017, 10 were pedestrian and 4 were pedalcyclists (scooter, skateboard, or bicycle).

Collision Type	Count	% of Total	2017 County Road System Average
Sideswipe	50	22.1%	13.1%
Right Angle	66	29.2%	18.4%
Head On	10	4.4%	4.1%
Parked Vehicle	10	4.4%	4.1%
Left Turn	12	5.3%	2.2%
Backing	4	1.7%	0.3%

It should be noted that the low number of head-on, parked vehicle, left turn, and backing crashes compared to the county road system may be statistically insignificant.

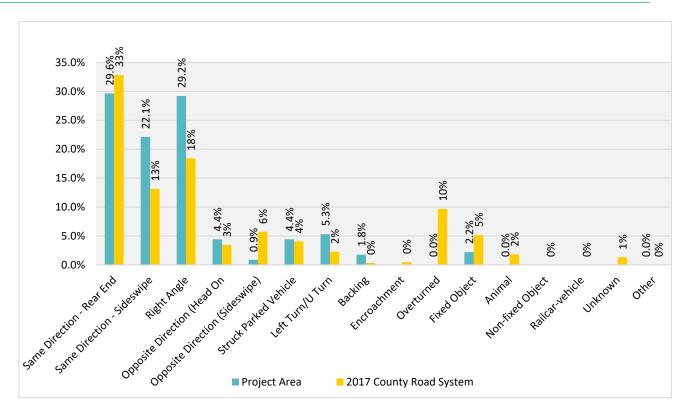


Figure 3 – Vehicular Crash Type Breakdown

#### C. Severity

Pedestrian crashes resulting in minor and moderate injury were significantly overrepresented compared to the county road system from 2013 to 2017.

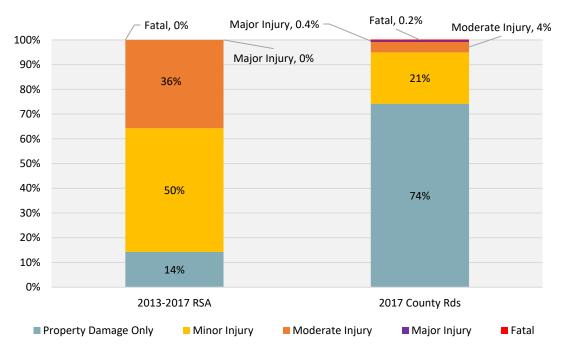
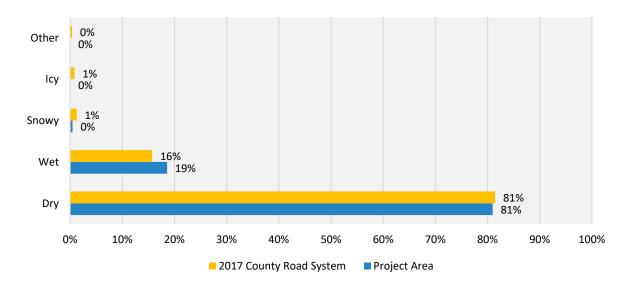


Figure 4 – Severity (Pedestrian/Bicycle Crashes)

#### D. Roadway Surface & Light Condition

Overrepresented vehicular crash types included wet surface and daytime light conditions. Dry surface conditions accounted for approximately 81% of total crashes. In addition, 27% of crashes occurred during dawn, dusk or at night.



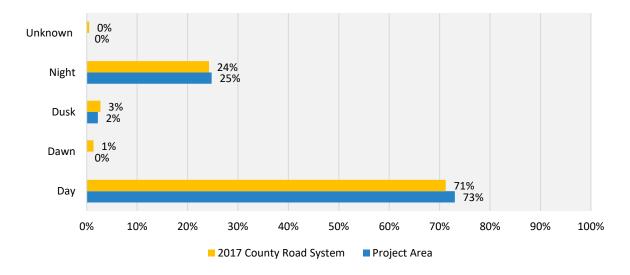
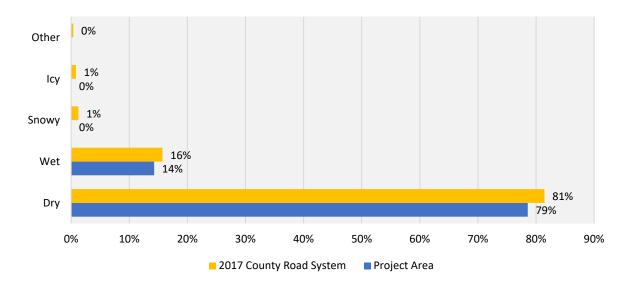


Figure 5 – Surface Conditions (Vehicular Crashes)

Figure 6 – Light Conditions (Vehicular Crashes)

Dry surface crashes involving pedestrians and bicyclists accounted for most of the crashes. In addition, 4 or approximately 29% of pedestrian crashes occurred at night, which is higher than the county road statewide average of 24%.



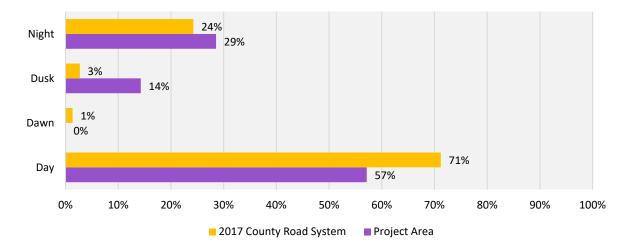
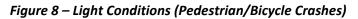


Figure 7 – Surface Conditions (Pedestrian/Bicycle Crashes)



#### E. Location

Crashes at unsignalized intersections were overrepresented compared to the county road system average. Forty-two percent (42%) of crashes occurred at unsignalized intersections compared to 22% on all county roads. Pedestrian/bicyclist crashes occurred more often at Rosalie Avenue than at any other study intersection. Crash frequency, as shown in the following figures, shows the highest concentration of vehicular and pedestrian crashes. The histogram view is grouped by 0.1-mile segments. Of note, the spike at Crooks Avenue requires further investigation, as discrepancies were noticed in the data available. This could be attributable to reporting issues, such as the jurisdiction change, incorrect coding, etc.



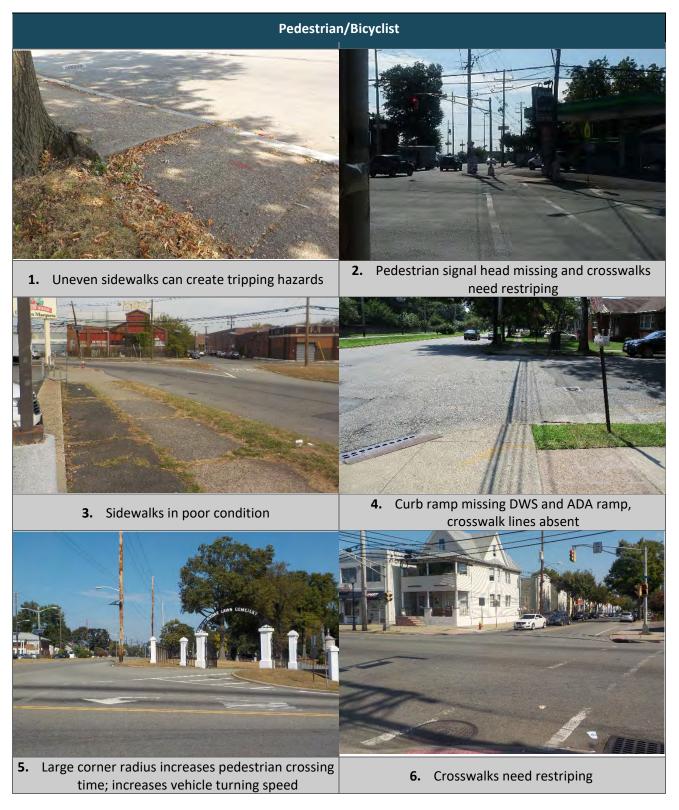
Figure 9 – Total Crash Locations (2015-2017)



Figure 10 – Pedestrian Crash Locations (2013-2017)

#### IV. Identified Issues & Observations

This section summarizes the corridor-wide safety issues identified during the RSA. They are categorized into operations (including visibility), pedestrian, bicyclist, and maintenance. Additional issues and photographs can be found in Appendix F.





12. Signs are worn and outdated

#### V. Findings and Recommendations

This section summarizes the site-specific and corridor-wide safety issues, potential strategies, and recommendations to improve the same, safety benefit, time frame, cost, and jurisdiction. Ratings used in the recommendation tables are described as follows:

Symbol	Meaning	Definition
$\checkmark$	Low safety benefit potential	May reduce total crashes by 1-25% <sup>3</sup>
$\checkmark\checkmark$	Low to moderate safety benefit potential	May reduce total crashes by 26-49% <sup>3</sup>
$\checkmark \checkmark \checkmark$	Moderate safety benefit potential	May reduce total crashes by 50-74% <sup>3</sup>
$\checkmark\checkmark\checkmark\checkmark$	High safety benefit potential	May reduce total crashes by 75+% <sup>3</sup>
\$	Low cost	Could be accomplished through maintenance
\$\$	Medium cost	May require some engineering or design and funding may be readily available
\$\$\$	High cost	Longer term; may require full engineering, ROW acquisition and new funding
O	Short term	Could be accomplished within 1 year
•	Medium term	Could be accomplished in 1 to 3 years; may require some engineering
•	Long term	Could be accomplished in 3 years or more; may require full engineering

#### A. Recommendations

The following represents the specific findings and recommendations made by the RSA team. All recommendations and designs should be thoroughly evaluated with due diligence and designed as appropriate by the roadway owner and/or a professional engineer for conformance to all applicable codes, standards, and best practices.

Table 6 – Corridor-Wide	Recommendations
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No	Recommendation	Safety Benefit	Cost	Time Frame	Jurisdiction
	Operations				
1	Investigate upgrading all ramps for ADA compliance	$\checkmark \checkmark \checkmark \checkmark 4$	\$\$\$	•	City
2	Explore conducting a parking study to Investigate on- street parking requirements where business have existing parking lots and for conformance with Title 39	√3	\$\$	•	Towns
3	Examine corridor-wide signal upgrades (replace 8" traffic signal heads with 12", install backplates with retroreflected border, evaluate clearance intervals, update to countdown pedestrian signal heads, replace push buttons in compliance with ADA, etc.)	<b>√</b> √	\$\$\$	•	City

<sup>&</sup>lt;sup>3</sup> Based on existing Crash Modification Factors (CMFs), the Highway Safety Manual (HSM), FHWA Proven Safety Countermeasures and current research, where applicable. All safety benefits are approximate.

<sup>&</sup>lt;sup>4</sup> CMF/quantitative data not available for this type of roadway or treatment. Therefore, perceived safety benefit of the same was estimated relative to other similar treatments.

No.	Recommendation	Safety Benefit	Cost	Time Frame	Jurisdiction
4	Study roadway and pedestrian scale lighting	<b>~~~~</b>	\$\$	•	County
	Bicycle/Pedestrian	,		1	
5	Inspect, repair and construct sidewalks in compliance with ADA as needed, including driveway aprons	<b>~~~~~</b>	\$\$	O	City
6	Examine inlets and install bicycle-safe grates	✓ 4	\$\$	O	County
7	Study implementation of curb extensions (bump outs) based on the site-specific recommendations to maintain consistency	<b>√ √</b> 4	\$\$	•	County
8	Examine crosswalks status: change to continental style, check placement and alignment	~~	\$	O	City
	Maintenance				
9	Inspect existing striping for wear and restripe accordingly; add raised pavement markers (RPM) where appropriate	~~	\$	•	County
10	Inspect and replace faded, damaged or incorrect/ outdated signage as needed (i.e. signs mounted below 7', on non-breakaway posts or back-to-back signs that obscure shapes [e.g. Do Not Enter behind Stop sign])	~	\$	O	City
11	Inspect drainage facilities; ensure they are free of debris	✓4	\$\$	•	County
12	Inspect and trim foliage/vegetation to improve sign visibility and sidewalk paths	✓4	\$	O	County
	Education				
13	Research sidewalk, crosswalk, multimodal education campaign and code enforcement	✓4	\$	•	Towns/ County

The following site-specific recommendations are in addition to the corridor-wide improvements, except where noted otherwise.

<sup>&</sup>lt;sup>4</sup> CMF/quantitative data not available for this type of roadway or treatment. Therefore, perceived safety benefit of the same was estimated relative to other similar treatments.

No.	Recommendation	Safety Benefit	Cost	Time Frame	Jurisdiction		
	Market St/Traffic Circle						
14	Study converting current circle to a roundabout	$\checkmark \checkmark \checkmark \checkmark$	\$\$\$	•	County		
15	Examine corridor-wide recommendation 1, 5 and 8 regarding crosswalks, sidewalk and ADA compliance	$\sqrt{\sqrt{4}}$	\$\$\$	•	City		
16	Explore restricting East 37 <sup>th</sup> and East 38 <sup>th</sup> streets to be Right-In Right-Out only	$\checkmark\checkmark$	\$\$	•	County/ City		
17	Investigate corridor-wide recommendation 9 regarding striping	$\checkmark\checkmark$	\$	O	County		
18	Evaluate adding lane use signs and pavement markings	✓	\$	O	City		
	Dual Left I-80 Ramp/Maryland Ave						
19	Investigate increasing signage; adding signal ahead	✓	\$	O	City/ NJDOT		
20	Examine the geometry of the intersection	✓	\$	O	County/ NJDOT		
21	Conduct warrant analysis for upgrading to full signalized intersection	$\checkmark\checkmark$	\$	O	County/ NJDOT		
22	Investigate closing the median at Maryland Ave to eliminate turns	<b>~ ~</b>	\$\$	•	County/ City		
	4-Lane Divided Section (Market to Crooks)						
23	Examine corridor-wide recommendation 1, 5 and 8 regarding crosswalks, sidewalk and ADA compliance	$\checkmark \checkmark \checkmark 4$	\$\$\$	•	City		
24	Conduct a speedy study	N/A	\$	O	County		
25	Investigate implementing a road diet	<b>~ ~</b>	\$\$	•	County		
26	Examine limiting turns at openings in the median	<b>√</b> √	\$\$	•	County/ City		
	Crooks Ave		1	I			
27	Examine corridor-wide recommendation 1, 5 and 8 regarding sidewalk, crosswalks, and ADA compliance	$\checkmark \checkmark \checkmark \checkmark 4$	\$\$\$	•	City		
28	Explore corridor-wide recommendation 3 regarding signal upgrades	$\checkmark\checkmark$	\$\$\$	•	City		
29	Investigate adding dedicated left lanes on Lakeview Avenue	$\checkmark\checkmark$	\$\$	•	County		
30	Investigate decreasing the turn radius along the northeast corner	~	\$	O	County		
31	Evaluate corridor-wide recommendation 9 regarding striping	<b>~ ~</b>	\$	O	County		
32	Review access management for the gas station in the southwest corner	~	\$\$	0	City		

#### Table 7 – Site-Specific Recommendations

<sup>&</sup>lt;sup>4</sup> CMF/quantitative data not available for this type of roadway or treatment. Therefore, perceived safety benefit of the same was estimated relative to other similar treatments.

No.	Recommendation	Safety Benefit	Cost	Time Frame	Jurisdiction		
33	Study adding pedestrian refuge island on north side of Lakeview Ave	<b>√</b> √ √	\$\$	•	County		
34	Analyze signal timing	~	\$	O	County		
35	Evaluate corridor-wide recommendation 7 regarding curb extensions	<b>√ √</b> <sup>4</sup>	\$\$	•	County		
	2-Lane Undivided Section (Crooks to Clifton)						
36	Evaluate corridor-wide recommendation 7 regarding curb extensions	<b>√ √</b> <sup>4</sup>	\$\$	•	County		
37	Examine corridor-wide recommendation 1, 5 and 8 regarding sidewalk, crosswalks, and ADA compliance	<b>√√√</b> <sup>4</sup>	\$\$\$	•	City		
38	Explore corridor-wide recommendation 9 regarding striping	<b>√√</b>	\$	O	County		
39	Study corridor-wide recommendation 2 regarding Title 39 violations	√4	\$\$	•	Cities		
40	Investigate conducting a lighting analysis	<b>VVV</b>	\$\$	•	County		
	4 <sup>th</sup> Street	1	1	1			
41	Examine corridor-wide recommendation 1, 5 and 8 regarding sidewalk, crosswalks, and ADA compliance	$\checkmark \checkmark \checkmark \checkmark 4$	\$\$\$	•	City		
42	Investigate adding a rectangular rapid flashing beacon (RRFB)	$\checkmark \checkmark \checkmark 4$	\$\$	•	City		
43	Evaluate corridor-wide recommendation 7 regarding curb extensions	<b>√ √</b> <sup>4</sup>	\$\$	•	County		
	Route 46 Overpass	1	1	1			
44	Investigate increasing underdeck lighting for better visibility	<b>√</b> √ √	\$\$	•	City		
	Christie Ave	1	1				
45	Examine corridor-wide recommendation 1, 5 and 8 regarding sidewalk, crosswalks, and ADA compliance	<b>√√ √</b> <sup>4</sup>	\$\$\$	•	City		
46	Explore corridor-wide recommendation 8 regarding curb extensions	<b>√ √</b> <sup>4</sup>	\$\$	•	County		
47	Investigate conducting a signal warrant analysis	$\checkmark\checkmark$	\$	O	County		
48	Evaluate corridor-wide recommendation 9 regarding striping	<i>√ √</i>	\$	O	County		
	Bergen Ave						
49	Examine corridor-wide recommendation 1, 5 and 8 regarding sidewalk, crosswalks, and ADA compliance	<b>√√√</b> <sup>4</sup>	\$\$\$	•	City		
	Piaget Ave						
50	Examine corridor-wide recommendation 1, 5 and 8 regarding sidewalk, crosswalks, and ADA compliance	$\sqrt{\sqrt{4}}$	\$\$\$	•	City		
51	Investigate adding a lead left or lag left phase	~	\$	O	City		

<sup>&</sup>lt;sup>4</sup> CMF/quantitative data not available for this type of roadway or treatment. Therefore, perceived safety benefit of the same was estimated relative to other similar treatments.

No.	Recommendation	Safety Benefit	Cost	Time Frame	Jurisdiction			
52	Evaluate corridor-wide recommendation 3 for upgrading signal heads	$\checkmark\checkmark$	\$\$\$	•	City			
	Clifton Ave							
53	Examine corridor-wide recommendation 1, 5 and 8 regarding sidewalk, crosswalks, and ADA compliance	$\checkmark \checkmark \checkmark \checkmark 4$	\$\$\$	•	City			
54	Study revising intersection geometry, specifically to tighten the radius of the SW corner	~	\$\$	•	County			
55	Evaluate corridor-wide recommendation 7 regarding curb extensions	<b>√ √</b> <sup>4</sup>	\$\$	•	County			
56	Investigate adding skip lines through intersection	$\checkmark\checkmark$	\$	o	County			
57	Review the access management	✓	\$\$	•	County			
58	Explore adding a leading pedestrian interval (LPI)	$\checkmark\checkmark\checkmark$	\$	o	City			
59	Study converting divisional island into a smart channelized right turn on the southeast corner	~~	\$\$	0	County			
60	Investigate lane designations on all legs	$\checkmark\checkmark$	\$	O	City			

#### B. Road Owner Response

An important part of the RSA process is the road owner's response: an acknowledgment of the audit's findings and recommendations, and their planned follow-up. In responding to the RSA's findings, the road owner must bear in mind all the competing objectives involved when implementing the recommendations, and foremost among them is available resources. Because the audit process generated a long and wide-ranging list of improvements, the road owner is expected to implement these recommended improvements as time and funds allow in coordination with other projects and priorities.

Passaic County delivered their response following the finalization of the findings and recommendations table, a copy of which can be found in Appendix L.

#### A. Recommendation Visualizations

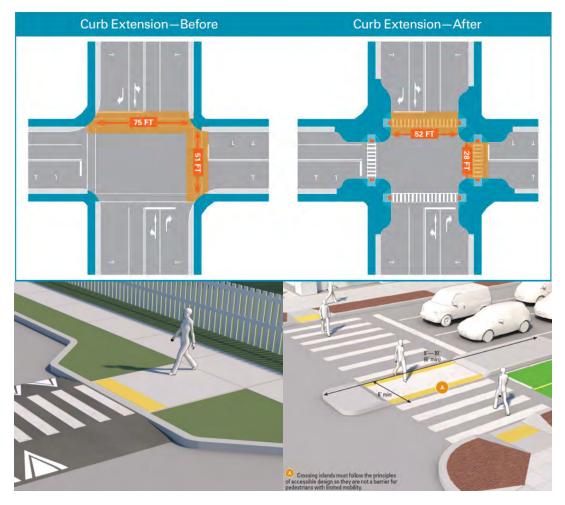
Examples of some of the site-specific and corridor-wide safety recommendations identified in Tables 5 and 6 are shown below and are based on current practices and standards. Descriptions and images of each treatment are from the *2017 NJ Complete Street Design Guide* (CSDG) and NACTO's *Urban Street Design Guide* (NACTO-US) and *Urban Bikeway Design Guide* (NACTO-UB), including sources contained therein.

#### 1. Pedestrian Facilities

Curb extensions visually and physically narrow the roadway at intersections and midblock locations, creating safer and shorter pedestrian crossings, while increasing the available space for streetscape. They increase the overall visibility of pedestrians by aligning them with the shoulder or parking lane and help prohibit vehicles from parking in violation of Title 39. Crossing islands, or

<sup>&</sup>lt;sup>4</sup> CMF/quantitative data not available for this type of roadway or treatment. Therefore, perceived safety benefit of the same was estimated relative to other similar treatments.

pedestrian refuge islands, reduce the exposure time of pedestrians to vehicular traffic. They enable pedestrians to make a crossing in two stages — crossing one direction of vehicular travel lanes, pausing at the island, and then completing the crossing. They are recommended where a pedestrian must cross three lanes of traffic in one or both directions but may be implemented on smaller cross sections where space permits.



**Figure 11 – Pedestrian Facility Examples** Top: Curb Extension. Left: Midblock Curb Extension. Right: Crossing Island (Source: CSDG)

ADA standards specify a minimum 5-foot clear path width to accommodate two wheelchairs passing each other. In addition to providing a more accessible facility, this minimum width also creates a more comfortable environment for pedestrians to walk side-by-side and pass each other. Sidewalk width should support the surrounding street context, land uses, and current and future pedestrian demand. The design of driveways should provide a continuous and level pedestrian zone across the vehicular path, encouraging drivers to stop for pedestrians on the sidewalk. Driveways should not be designed where the sidewalk is interrupted by the driveway.

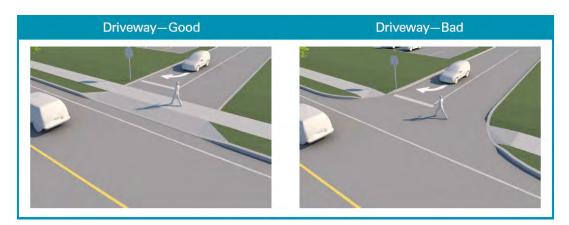


Figure 12 – Sidewalk and Driveways (Source: CSDG)

#### 2. Bicycle Facilities

Bicycle lanes provide an exclusive space for bicyclists using pavement markings and signage. Intended for one-way travel, they are typically located on both sides of a two-way street. Bicycle lanes enable bicyclists to ride at their preferred speed, free from interference from motorists. Where it is not feasible or appropriate to provide dedicated bicycle facilities, shared-lane markings (e.g. "sharrows") may be used to indicate a shared environment for bicycles and vehicles. Bicycle lanes and shared-lane markings should be extended through intersections and major driveways to enhance continuity, guide bicyclists through the intersection, and improve driver awareness of bicycle activity and movement.



Figure 13 – Bicycle Facility Examples

*Left: Bicycle Lane Adjacent to Parking or Curb (Source: NACTO-UB). Right: Sharrow Markings along Route 71/Main Street in Bradley Beach (Source: Jusel Claro Alvarez, Google Maps Photos)* 

#### 3. Roundabout

Roundabout design, which was recommended at the Lakeview Avenue and Market Street traffic circle, should create conditions that reduce vehicle speed and provide a consistent speed into, through, and out of the roundabout. Lower speeds reduce crash frequency and severity for all roadway users, allow safer and easier merging of traffic, provide more reaction time for drivers, and make the facility more accessible for novice users.



Figure 14 – Single Lane Roundabout Example (Source: CSDG)

#### 4. Roadway Reconfiguration

This treatment allows reallocation of existing street space (i.e. roadway cross section) to accommodate multi-modal users. Lane configuration and width for travel, turning movements, parking, and bicycle lanes can be adjusted to optimize use for vehicles, pedestrians, bicyclists, and transit. The most common roadway reconfiguration, known as a road diet, involves converting an existing four-lane undivided segment into a three-lane segment with two through lanes and a center two-way left turn lane (TWLTL). Other roadway reconfiguration options are shown on the following pages.



Figure 15 – Example of a Green Neighborhood Street Typology (Source: NACTO-GI)

<u>Top:</u> Many historic central medians are underused and lack recreational space. High speed crossings make it difficult for residents and children to safely access the median.

<u>Bottom:</u> Activate the central median with plantings, street trees, walkways, and seating. Broad central medians can become a community focal point as well as an active space for recreation, exercise, and leisure. Provide curb extensions and/or midblock crossings to make it safer and easier for residents to access the median. A raised cycle track takes advantage of the central right-of-way, avoids frequent conflicts with driveways and double-parked cars, and effectively expands the amount of recreational space along the corridor. Curbside parking provides access to the recreational median for visitors, space for residents' guests to park, and narrows the overall cross-section of the road, reinforcing its residential character. Where on-street parking remains underutilized, consider adding curb extensions, bicycle corrals, or expanding the sidewalk to take advantage of the excess pavement.



Figure 16 – Example of a Green Neighborhood Street Typology (Source: NACTO-GI)

<u>Top:</u> Less dense than downtowns, neighborhood main streets serve local business activity and civic life, and are characterized by high demand for a quality walking and bicycling environment, frequent parking turnover and freight access, and service by key transit routes.

<u>Bottom:</u> Green infrastructure enhances neighborhood main streets, creating more aesthetically pleasing public spaces even where the street is relatively narrow. (1) Curb extensions with bioretention facilities can be integrated at intersections and mid-block locations to improve pedestrian mobility and safety, shorten crossing distances, and calm vehicle traffic by narrowing the road; (2) transit boarding bulbs are an important opportunity to integrate green infrastructure, since sidewalk space is often not available and curbsides are at a premium; (3) Smaller green infrastructure treatments, such as bioretention planters, stormwater tree wells, or tree trenches, can be used on neighborhood main streets with space constraints and high foot traffic along the sidewalk and between the curb and storefronts; (4) the bioretention facility wall can incorporate seating and placemaking elements in the planting or furnishing zone, especially on main streets with significant foot traffic and active storefronts.



Figure 17 – Example of a Two-Lane Downtown Street Typology (Source: NACTO-US)

<u>Top:</u> The above illustration depicts a 2-way street in a central business district that is congested by buses, bikes, people, and cars. Curbside bus stops may be undermined by double-parked vehicles and heavy rush-hour traffic. Double-parking also creates conflicts and safety hazards for all modes.

<u>Bottom:</u> Bus bulbs serve as dedicated waiting areas for transit users while decreasing pedestrian exposure during crossings and can connect to existing sidewalk or be designed as a bus-boarding island with a bicycle cut-through. Delineation in the roadway can be created using striping, cycle tracks, and narrow travel lanes. Restricting delivery, encouraging off-peak delivery, and/or dedicated loading zones are critical to eliminating double-parking obstructions.

#### 5. Green Infrastructure

Bioswales are vegetated, shallow, landscaped depressions designed to capture, treat, and infiltrate stormwater runoff as it moves downstream. They are the most effective type of green infrastructure facility in slowing runoff velocity and cleansing water while recharging the underlying groundwater table. They have flexible siting requirements, allowing them to be integrated with medians, curb extensions, and other public space or traffic calming strategies.

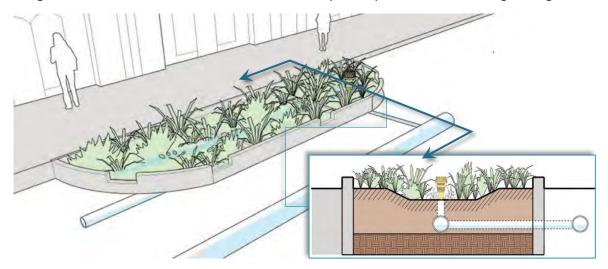


Figure 18 – Bioswale Example (Source: NACTO-US)

#### VI. Conclusions

The Lakeview Avenue RSA was conducted to identify safety issues and corresponding countermeasures that compromise multimodal use of the roadway. The team identified a long list of issues from the field visit, as well as many practical short-, mid-, and long-term improvements during the post-audit.

The recommendations documented in this report are designed to improve safety for all users of Lakeview Avenue. Some of the strategies identified can be implemented through routine maintenance; all will be constrained by available time and budgetary priorities. The audit process and the resulting final document highlight the safety issues and present the needed improvements by location organized for systematic implementation by the roadway owner.

It is important to note that when it comes to improving safety, engineering strategies alone only go so far, especially in areas undergoing redevelopment. Education, with support from a targeted enforcement campaign, is an effective approach for addressing driver and pedestrian behaviors that lead to crashes. Employing a multipronged approach is an effective course of action to advance the goal of improved safety on the corridor.

## APPENDIX A

RSA TEAM

### Audit Team

Name	Agency
Elizabeth Ward	Passaic County Planning
Jason Miranda	Passaic County Planning
Chuck Silverstein	Passaic County Engineering
Michael Lysicatos	Passaic County Planning
Angela Quevedo	NJDOT – BSBPP
Joe Rupp	NJDOT – BSBPP
Abbhirami Siddarthan	NJDOT – BSBPP
Aimee Jefferson	NJTPA
Patricia Newton	NJTPA
Julia Steponanko	Greenman-Pedersen, Inc. (NJDOT Consultant)
Andrew Halloran	Greenman-Pedersen, Inc.
Bernie Boerchers	Greenman-Pedersen, Inc.
Aidan Sheehan	Greenman-Pedersen, Inc.



## APPENDIX B

AREA MAP



## APPENDIX C

TRAFFIC DATA

ns: 🔯 Edit Ap	proaches 🔯 Edi	t Data 🖌	ATR Reporting	Advanced Reporting	Basic Reporting	Recent Reports
nmary ssification	Study ID: Configured By:	676798 Mike Dor	Status:	Complete	VCU ID: SCUBOE Classification Options	
notation	Study Name:		and Lakeview N	EAM	Vehicle: Motorcycles / Buses / Single-Unit True	
s	Project:	(none)		•	Trucks / Bicycles on Roa Ped (with direction):	
up Rating	Start Date:	06/25/2	019		/ Pedestrians	Dicycles on crosswalk
ation		7:00 AN	1	$\odot$	Study Type: TMC Total Length: 03:00:00	
iring	Notes:	_			Number of Trims: 1	
eo Sharing					Turnaround Time Selected: 72 hours	
eo Playback				11	Delivered: 47.2 hours	
eo Download				Save	Setup Rating:	<b>T</b> 宜
eo Storage				3	video snapshot(s).	Timelanda
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# Passaic County (NJ) 930 Riverview Dr. Suite 250 Totowa, New Jersey, United States 07512 9735694040 eward@passaiccountynj.org

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			Southb	ound St.			Westbound St.							Northbound St.					Eastbound St.						
			South	hbound					Wes	tbound					North	bound					East	tbound			
Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
7:00 AM	8	0	0	0	0	8	6	186	0	0	0	192	0	10	30	0	0	40	0	0	0	0	0	0	240
7:15 AM	4	0	0	0	1	4	1	249	0	0	1	250	0	11	26	0	0	37	0	0	0	0	0	0	291
7:30 AM	12	0	0	0	1	12	2	326	0	0	0	328	0	11	29	0	0	40	0	0	0	0	0	0	380
7:45 AM	20	0	0	0	1	20	6	345	0	0	0	351	0	24	46	0	0	70	0	0	0	0	0	0	441
Hourly Total	44	0	0	0	3	44	15	1106	0	0	1	1121	0	56	131	0	0	187	0	0	0	0	0	0	1352
8:00 AM	14	0	0	0	0	14	8	288	0	0	0	296	0	29	37	0	0	66	0	0	0	0	0	0	376
8:15 AM	12	0	0	0	0	12	5	289	0	0	0	294	0	22	40	0	0	62	0	0	0	0	0	0	368
8:30 AM	12	0	0	0	0	12	7	302	0	0	0	309	0	23	30	0	0	53	0	0	0	0	0	0	374
8:45 AM	17	0	0	0	0	17	11	271	0	0	2	282	0	14	35	0	0	49	0	0	0	0	0	0	348
Hourly Total	55	0	0	0	0	55	31	1150	0	0	2	1181	0	88	142	0	0	230	0	0	0	0	0	0	1466
9:00 AM	21	0	0	0	0	21	9	287	0	0	3	296	0	20	36	0	0	56	0	0	0	0	0	0	373
9:15 AM	12	0	0	0	2	12	7	213	0	0	2	220	0	22	22	0	0	44	0	0	0	0	0	0	276
9:30 AM	8	0	0	0	1	8	15	245	0	0	0	260	0	10	19	0	0	29	0	0	0	0	0	0	297
9:45 AM	14	0	0	0	0	14	12	245	0	0	1	257	0	13	29	0	0	42	0	0	0	0	0	0	313
Hourly Total	55	0	0	0	3	55	43	990	0	0	6	1033	0	65	106	0	0	171	0	0	0	0	0	0	1259
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
Grand Total	154	0	0	0	6	154	89	3246	0	0	9	3335	0	209	380	0	0	589	0	0	0	0	0	0	4078
Approach %	100.0	0.0	0.0	0.0	-	-	2.7	97.3	0.0	0.0	-	-	0.0	35.5	64.5	0.0	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	3.8	0.0	0.0	0.0	-	3.8	2.2	79.6	0.0	0.0	-	81.8	0.0	5.1	9.3	0.0	-	14.4	0.0	0.0	0.0	0.0	-	0.0	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	-	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0
Cars & Light Goods	141	0	0	0	-	141	83	2955	0	0	-	3038	0	192	354	0	-	546	0	0	0	0	-	0	3725
% Cars & Light Goods	91.6	-	-	-	-	91.6	93.3	91.0	-	-	-	91.1	-	91.9	93.2	-	-	92.7	-	-	-	-	-	-	91.3
Buses	7	0	0	0	-	7	3	94	0	0	-	97	0	13	10	0	-	23	0	0	0	0	-	0	127
% Buses	4.5	-	-	-	-	4.5	3.4	2.9	-	-	-	2.9	-	6.2	2.6	-	-	3.9	-	-	-	-	-	-	3.1
Single-Unit Trucks	4	0	0	0	-	4	3	153	0	0	-	156	0	4	12	0	-	16	0	0	0	0	-	0	176
% Single-Unit Trucks	2.6	-	-	-	-	2.6	3.4	4.7	-	-	-	4.7	-	1.9	3.2	-	-	2.7	-	-	-	-	-	-	4.3
Articulated Trucks	2	0	0	0	-	2	0	44	0	0	-	44	0	0	4	0	-	4	0	0	0	0	-	0	50
% Articulated Trucks	1.3	-	-	-	-	1.3	0.0	1.4	-	-	-	1.3	-	0.0	1.1	-	-	0.7	-	-	-	-	-	-	1.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	-	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	6	-	-	-	-	-	9	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

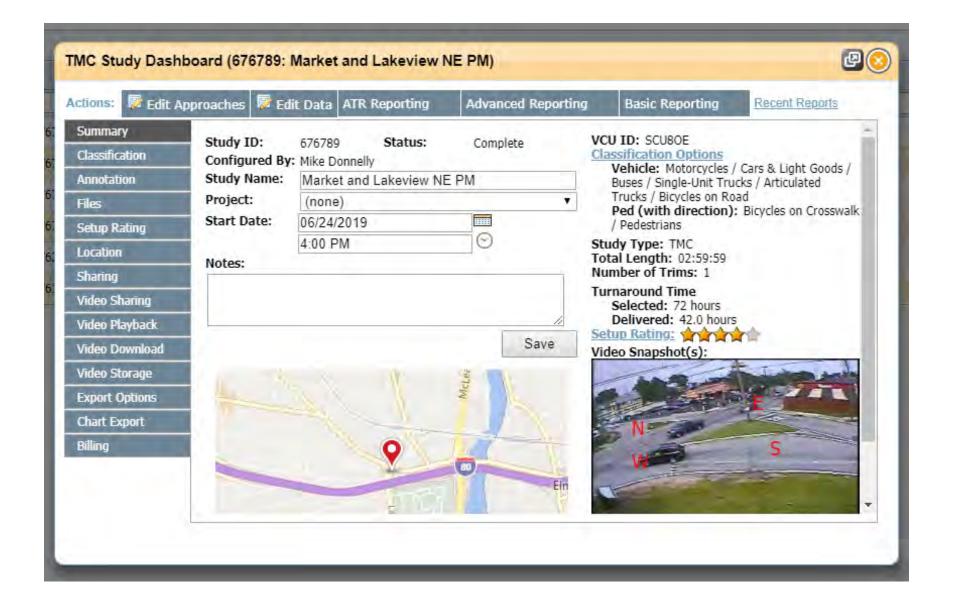
#### Turning Movement Data

#### Passaic County (NJ) 930 Riverview Dr. Suite 250 Totowa, New Jersey, United States 07512 9735694040 eward@passaiccountynj.org

Count Name: Market and Lakeview NE AM Site Code: Start Date: 06/25/2019 Page No: 3

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	Southbound St.								Westb	ound St.			Northbound St.						Eastbound St.							
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Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total	
7:30 AM	12	0	0	0	1	12	2	326	0	0	0	328	0	11	29	0	0	40	0	0	0	0	0	0	380	
7:45 AM	20	0	0	0	1	20	6	345	0	0	0	351	0	24	46	0	0	70	0	0	0	0	0	0	441	
8:00 AM	14	0	0	0	0	14	8	288	0	0	0	296	0	29	37	0	0	66	0	0	0	0	0	0	376	
8:15 AM	12	0	0	0	0	12	5	289	0	0	0	294	0	22	40	0	0	62	0	0	0	0	0	0	368	
Total	58	0	0	0	2	58	21	1248	0	0	0	1269	0	86	152	0	0	238	0	0	0	0	0	0	1565	
Approach %	100.0	0.0	0.0	0.0	-	-	1.7	98.3	0.0	0.0	-	-	0.0	36.1	63.9	0.0	-	-	0.0	0.0	0.0	0.0	-	-	-	
Total %	3.7	0.0	0.0	0.0	-	3.7	1.3	79.7	0.0	0.0	-	81.1	0.0	5.5	9.7	0.0	-	15.2	0.0	0.0	0.0	0.0	-	0.0	-	
PHF	0.725	0.000	0.000	0.000	-	0.725	0.656	0.904	0.000	0.000	-	0.904	0.000	0.741	0.826	0.000	-	0.850	0.000	0.000	0.000	0.000	-	0.000	0.887	
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	
% Motorcycles	0.0	-	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	
Cars & Light Goods	54	0	0	0	-	54	20	1151	0	0	-	1171	0	78	145	0	-	223	0	0	0	0	-	0	1448	
% Cars & Light Goods	93.1	-	-	-	-	93.1	95.2	92.2	-	-	-	92.3	-	90.7	95.4	-	-	93.7	-	-	-	-	-	-	92.5	
Buses	3	0	0	0	-	3	1	41	0	0	-	42	0	5	2	0	-	7	0	0	0	0	-	0	52	
% Buses	5.2	-	-	-	-	5.2	4.8	3.3	-	-	-	3.3	-	5.8	1.3	-	-	2.9	-	-	-	-	-	-	3.3	
Single-Unit Trucks	0	0	0	0	-	0	0	44	0	0	-	44	0	3	4	0	-	7	0	0	0	0	-	0	51	
% Single-Unit Trucks	0.0	-	-	-	-	0.0	0.0	3.5	-	-	-	3.5	-	3.5	2.6	-	-	2.9	-	-	-	-	-	-	3.3	
Articulated Trucks	1	0	0	0	-	1	0	12	0	0	-	12	0	0	1	0	-	1	0	0	0	0	-	0	14	
% Articulated Trucks	1.7	-	-	-	-	1.7	0.0	1.0	-	-	-	0.9	-	0.0	0.7	-	-	0.4	-	-	-	-	-	-	0.9	
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	
% Bicycles on Road	0.0	-	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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#### Turning Movement Peak Hour Data (7:30 AM)



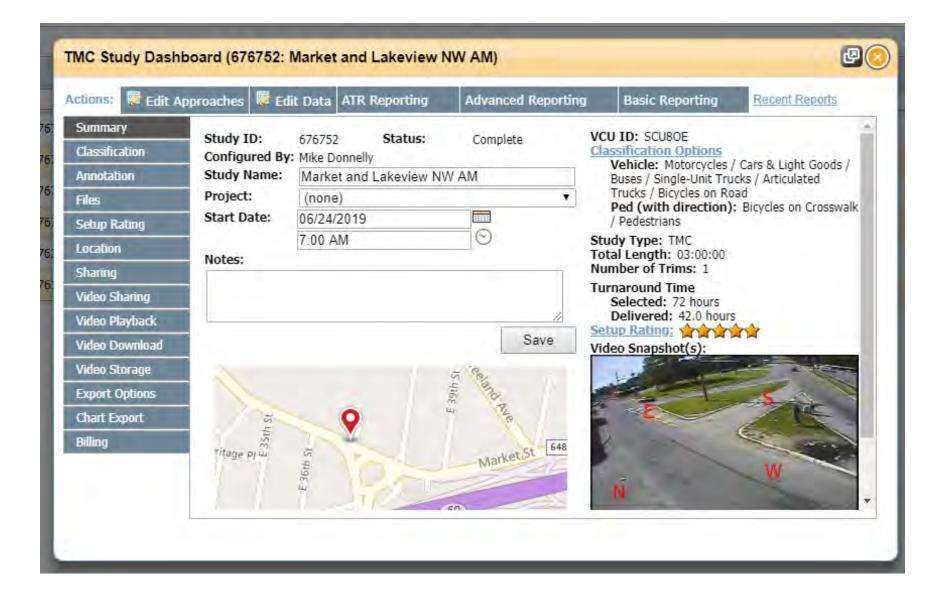
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4:00 PM	20	0	0	0	0	20	11	391	0	0	0	402	0	17	38	0	0	55	0	0	0	0	0	0	477
4:15 PM	19	0	0	0	0	19	14	444	0	0	0	458	0	20	36	0	0	56	0	0	0	0	0	0	533
4:30 PM	14	0	0	0	3	14	28	421	0	0	0	449	0	20	43	0	0	63	0	0	0	0	0	0	526
4:45 PM	15	0	0	0	1	15	21	431	0	0	4	452	0	25	52	0	2	77	0	0	0	0	0	0	544
Hourly Total	68	0	0	0	4	68	74	1687	0	0	4	1761	0	82	169	0	2	251	0	0	0	0	0	0	2080
5:00 PM	27	0	0	0	3	27	22	453	0	0	2	475	0	16	31	0	0	47	0	0	0	0	0	0	549
5:15 PM	21	0	0	0	1	21	21	434	0	0	1	455	0	32	44	0	0	76	0	0	0	0	0	0	552
5:30 PM	32	0	0	0	2	32	22	471	0	0	4	493	0	22	36	0	0	58	0	0	0	0	0	0	583
5:45 PM	21	0	0	0	2	21	21	432	0	0	4	453	0	25	36	0	0	61	0	0	0	0	0	0	535
Hourly Total	101	0	0	0	8	101	86	1790	0	0	11	1876	0	95	147	0	0	242	0	0	0	0	0	0	2219
6:00 PM	12	0	0	0	3	12	20	437	0	0	4	457	0	26	37	0	0	63	0	0	0	0	0	0	532
6:15 PM	16	0	0	0	1	16	16	466	0	0	0	482	0	19	41	0	0	60	0	0	0	0	0	0	558
6:30 PM	16	0	0	0	1	16	16	405	0	0	0	421	0	19	44	0	0	63	0	0	0	0	0	0	500
6:45 PM	17	0	0	0	2	17	16	361	0	0	2	377	0	30	48	0	0	78	0	0	0	0	0	0	472
Hourly Total	61	0	0	0	7	61	68	1669	0	0	6	1737	0	94	170	0	0	264	0	0	0	0	0	0	2062
Grand Total	230	0	0	0	19	230	228	5146	0	0	21	5374	0	271	486	0	2	757	0	0	0	0	0	0	6361
Approach %	100.0	0.0	0.0	0.0	-	-	4.2	95.8	0.0	0.0	-	-	0.0	35.8	64.2	0.0	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	3.6	0.0	0.0	0.0	-	3.6	3.6	80.9	0.0	0.0	-	84.5	0.0	4.3	7.6	0.0	-	11.9	0.0	0.0	0.0	0.0	-	0.0	-
Motorcycles	0	0	0	0	-	0	0	16	0	0	-	16	0	2	0	0	-	2	0	0	0	0	-	0	18
% Motorcycles	0.0	-	-	-	-	0.0	0.0	0.3	-	-	-	0.3	-	0.7	0.0	-	-	0.3	-	-	-	-	-	-	0.3
Cars & Light Goods	222	0	0	0	-	222	220	4939	0	0	-	5159	0	260	482	0	-	742	0	0	0	0	-	0	6123
% Cars & Light Goods	96.5	-	-	-	-	96.5	96.5	96.0	-	-	-	96.0	-	95.9	99.2	-	-	98.0	-	-	-	-	-	-	96.3
Buses	1	0	0	0	-	1	1	37	0	0	-	38	0	6	1	0	-	7	0	0	0	0	-	0	46
% Buses	0.4	-	-	-	-	0.4	0.4	0.7	-	-	-	0.7	-	2.2	0.2	-	-	0.9	-	-	-	-	-	-	0.7
Single-Unit Trucks	7	0	0	0	-	7	6	126	0	0	-	132	0	3	2	0	-	5	0	0	0	0	-	0	144
% Single-Unit Trucks	3.0	-	-	-	-	3.0	2.6	2.4	-	-	-	2.5	-	1.1	0.4	-	-	0.7	-	-	-	-	-	-	2.3
Articulated Trucks	0	0	0	0	-	0	1	28	0	0	-	29	0	0	1	0	-	1	0	0	0	0	-	0	30
% Articulated Trucks	0.0	-	-	-	-	0.0	0.4	0.5	-	-	-	0.5	-	0.0	0.2	-	-	0.1	-	-	-	-	-	-	0.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	-	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-		-
Pedestrians	-	-	-	-	19	-	-	-	-	-	21	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

## **Turning Movement Data**

Count Name: Market and Lakeview NE PM Site Code: Start Date: 06/24/2019 Page No: 3

								Turr	ning N	loven	nent F	Peak I	Hour	Data	(4:45	PM)									
			Southb	ound St.					Westbo	ound St.					Northb	ound St.					Eastbo	ound St.			
			South	nbound					West	bound					North	bound					East	bound			
Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:45 PM	15	0	0	0	1	15	21	431	0	0	4	452	0	25	52	0	2	77	0	0	0	0	0	0	544
5:00 PM	27	0	0	0	3	27	22	453	0	0	2	475	0	16	31	0	0	47	0	0	0	0	0	0	549
5:15 PM	21	0	0	0	1	21	21	434	0	0	1	455	0	32	44	0	0	76	0	0	0	0	0	0	552
5:30 PM	32	0	0	0	2	32	22	471	0	0	4	493	0	22	36	0	0	58	0	0	0	0	0	0	583
Total	95	0	0	0	7	95	86	1789	0	0	11	1875	0	95	163	0	2	258	0	0	0	0	0	0	2228
Approach %	100.0	0.0	0.0	0.0	-	-	4.6	95.4	0.0	0.0	-	-	0.0	36.8	63.2	0.0	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	4.3	0.0	0.0	0.0	-	4.3	3.9	80.3	0.0	0.0	-	84.2	0.0	4.3	7.3	0.0	-	11.6	0.0	0.0	0.0	0.0	-	0.0	-
PHF	0.742	0.000	0.000	0.000	-	0.742	0.977	0.950	0.000	0.000	-	0.951	0.000	0.742	0.784	0.000	-	0.838	0.000	0.000	0.000	0.000	-	0.000	0.955
Motorcycles	0	0	0	0	-	0	0	5	0	0	-	5	0	1	0	0	-	1	0	0	0	0	-	0	6
% Motorcycles	0.0	-	-	-	-	0.0	0.0	0.3	-	-	-	0.3	-	1.1	0.0	-	-	0.4	-	-	-		-	-	0.3
Cars & Light Goods	91	0	0	0	-	91	84	1730	0	0	-	1814	0	91	160	0	-	251	0	0	0	0	-	0	2156
% Cars & Light Goods	95.8	-	-	-	-	95.8	97.7	96.7	-	-	-	96.7	-	95.8	98.2	-	-	97.3	-	-	-	-	-	-	96.8
Buses	0	0	0	0	-	0	0	12	0	0	-	12	0	1	. 1	0	-	2	0	0	0	0	-	0	14
% Buses	0.0	-	-	-	-	0.0	0.0	0.7	-	-	-	0.6	-	1.1	0.6	-	-	0.8	-	-	-	-	-	-	0.6
Single-Unit Trucks	4	0	0	0	-	4	2	39	0	0	-	41	0	2	1	0	-	3	0	0	0	0	-	0	48
% Single-Unit Trucks	4.2	-	-	-	-	4.2	2.3	2.2	-	-	-	2.2	-	2.1	0.6	-	-	1.2	-	-	-	-	-	-	2.2
Articulated Trucks	0	0	0	0	-	0	0	3	0	0	-	3	0	0	1	0	-	1	0	0	0	0	-	0	4
% Articulated Trucks	0.0	-	-	-	-	0.0	0.0	0.2	-	-	-	0.2	-	0.0	0.6	-	-	0.4	-	-	-	-	-	-	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	-	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	11	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



Count Name: Market and Lakeview NW AM Site Code: Start Date: 06/24/2019 Page No: 1

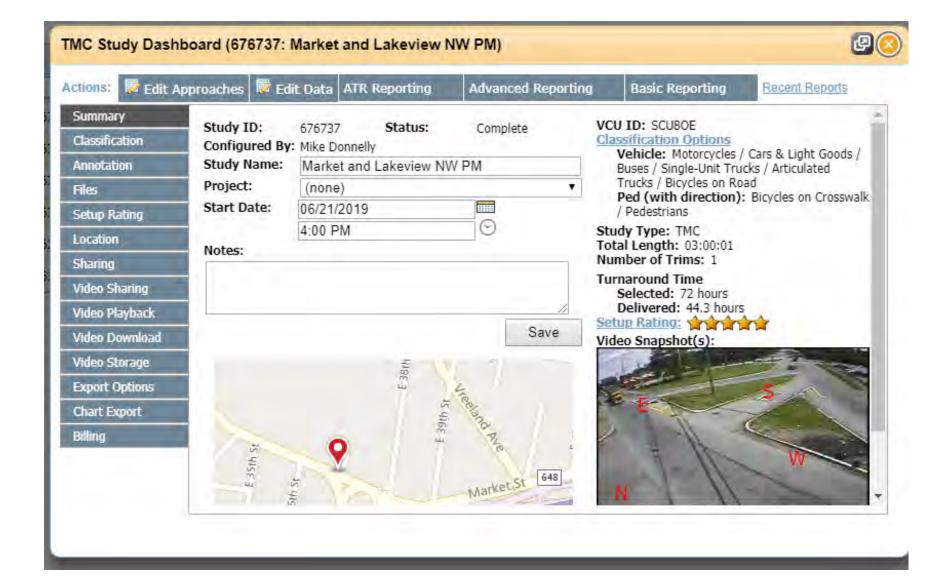
										Turr	ning iv	lover	nent L	Jata											
			Southb	ound St.					Westb	ound St.					Northbo	ound St.					Eastb	ound St.			
			South	nbound					West	tbound					North	bound					East	tbound			
Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
7:00 AM	0	0	0	0	2	0	2	123	100	0	0	225	0	0	0	0	0	0	123	0	0	0	0	123	348
7:15 AM	0	0	0	0	1	0	2	151	123	0	0	276	0	0	0	0	0	0	115	0	0	0	3	115	391
7:30 AM	0	0	0	0	1	0	3	145	116	0	0	264	0	0	0	0	0	0	139	0	0	0	1	139	403
7:45 AM	1	2	0	0	5	3	9	210	149	0	0	368	0	0	0	0	0	0	117	0	0	0	0	117	488
Hourly Total	1	2	0	0	9	3	16	629	488	0	0	1133	0	0	0	0	0	0	494	0	0	0	4	494	1630
8:00 AM	1	1	0	0	3	2	5	176	154	0	2	335	0	1	0	0	5	1	149	0	0	0	2	149	487
8:15 AM	0	0	0	0	2	0	3	189	144	0	2	336	0	0	1	0	0	1	138	0	0	0	0	138	475
8:30 AM	0	1	0	0	2	1	2	146	151	0	0	299	0	0	0	0	0	0	160	0	0	0	2	160	460
8:45 AM	0	1	0	0	1	1	0	141	151	0	1	292	0	0	0	0	1	0	147	0	0	0	1	147	440
Hourly Total	1	3	0	0	8	4	10	652	600	0	5	1262	0	1	1	0	6	2	594	0	0	0	5	594	1862
9:00 AM	0	0	0	0	3	0	1	138	144	0	2	283	0	0	0	0	2	0	123	0	0	0	0	123	406
9:15 AM	0	0	0	0	2	0	2	129	132	0	0	263	0	0	0	0	0	0	109	0	0	0	1	109	372
9:30 AM	1	2	0	0	0	3	1	102	139	0	0	242	0	0	0	0	0	0	127	0	0	0	0	127	372
9:45 AM	0	0	0	0	1	0	0	128	145	0	8	273	0	0	0	0	4	0	113	0	0	0	0	113	386
Hourly Total	1	2	0	0	6	3	4	497	560	0	10	1061	0	0	0	0	6	0	472	0	0	0	1	472	1536
10:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	0	0	2	3
Grand Total	3	7	0	0	23	10	30	1778	1649	0	15	3457	0	1	1	0	12	2	1562	0	0	0	10	1562	5031
Approach %	30.0	70.0	0.0	0.0	-	-	0.9	51.4	47.7	0.0	-	-	0.0	50.0	50.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	0.1	0.1	0.0	0.0	-	0.2	0.6	35.3	32.8	0.0	-	68.7	0.0	0.0	0.0	0.0	-	0.0	31.0	0.0	0.0	0.0	-	31.0	-
Motorcycles	0	0	0	0	-	0	0	2	1	0	-	3	0	0	1	0	-	1	1	0	0	0	-	1	5
% Motorcycles	0.0	0.0	-	-	-	0.0	0.0	0.1	0.1	-	-	0.1	-	0.0	100.0	-	-	50.0	0.1	-	-	-	-	0.1	0.1
Cars & Light Goods	3	7	0	0	-	10	28	1629	1482	0	-	3139	0	0	0	0	-	0	1449	0	0	0	-	1449	4598
% Cars & Light Goods	100.0	100.0	-	-	-	100.0	93.3	91.6	89.9	-	-	90.8	-	0.0	0.0	-	-	0.0	92.8	-	-	-	-	92.8	91.4
Buses	0	0	0	0	-	0	0	49	55	0	-	104	0	0	0	0	-	0	37	0	0	0	-	37	141
% Buses	0.0	0.0	-	-	-	0.0	0.0	2.8	3.3	-	-	3.0	-	0.0	0.0	-	-	0.0	2.4	-	-	-	-	2.4	2.8
Single-Unit Trucks	0	0	0	0	-	0	0	80	79	0	-	159	0	0	0	0	-	0	54	0	0	0	-	54	213
% Single-Unit Trucks	0.0	0.0	-	-	-	0.0	0.0	4.5	4.8	-	-	4.6	-	0.0	0.0	-	-	0.0	3.5	-	-	-	-	3.5	4.2
Articulated Trucks	0	0	0	0	-	0	1	18	32	0	-	51	0	0	0	0	-	0	21	0	0	0	-	21	72
% Articulated Trucks	0.0	0.0	-	-	-	0.0	3.3	1.0	1.9	-	-	1.5	-	0.0	0.0	-	-	0.0	1.3	-	-	-	-	1.3	1.4
Bicycles on Road	0	0	0	0	-	0	1	0	0	0	-	1	0	1	0	0	-	1	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	-	-	-	0.0	3.3	0.0	0.0	-	-	0.0	-	100.0	0.0	-	-	50.0	0.0	-	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	8.7	-	-	-	-	-	0.0	-	-	-	-		8.3	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	21	-	-	-	-	-	15	-	-	-	-	-	11	-	-	-	-	-	10	-	-
% Pedestrians	-	-	-	-	91.3	-	-	-	-	-	100.0	-	-	-	-	-	91.7	-	-	-	-	-	100.0	-	-
																									_

## **Turning Movement Data**

Count Name: Market and Lakeview NW AM Site Code: Start Date: 06/24/2019 Page No: 3

|       |  |   |   |   |   
   
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  | 1001  | - aid  | (7.45  | ,   |   |   | 1   |  
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|       |  | Southb  | ound St.  |   |   
   
   |   
   
  |  | Westb  | ound St.   
   |   
   |   
  |   |  | Northbo  | ound St.  |   |   |   |  
   | Eastbo  | ound St.   |   |   |   |
|       |  | South   | hbound  |   |   
   
   |   
   
  |  | West   | bound  
   |   
   |   
  |   |  | North  | bound   |   |   |   |  
   | East  | oound  |   |   |   |
| Right | Thru   | Left  | U-Turn  | Peds  | App.<br>Total   
   
   | Right   
   
  | Thru   | Left   | U-Turn   
   | Peds  
   | App.<br>Total   
  | Right   | Thru   | Left   | U-Turn  | Peds  | App.<br>Total   | Right   | Thru   
   | Left  | U-Turn   | Peds  | App.<br>Total   | Int. Total  |
| 1     | 2  | 0   | 0   | 5   | 3   
   
   | 9   
   
  | 210  | 149  | 0  
   | 0   
   | 368   
  | 0   | 0  | 0  | 0   | 0   | 0   | 117   | 0  
   | 0   | 0  | 0   | 117   | 488   |
| 1     | 1  | 0   | 0   | 3   | 2   
   
   | 5   
   
  | 176  | 154  | 0  
   | 2   
   | 335   
  | 0   | 1  | 0  | 0   | 5   | 1   | 149   | 0  
   | 0   | 0  | 2   | 149   | 487   |
| 0     | 0  | 0   | 0   | 2   | 0   
   
   | 3   
   
  | 189  | 144  | 0  
   | 2   
   | 336   
  | 0   | 0  | 1  | 0   | 0   | 1   | 138   | 0  
   | 0   | 0  | 0   | 138   | 475   |
| 0     | 1  | 0   | 0   | 2   | 1   
   
   | 2   
   
  | 146  | 151  | 0  
   | 0   
   | 299   
  | 0   | 0  | 0  | 0   | 0   | 0   | 160   | 0  
   | 0   | 0  | 2   | 160   | 460   |
| 2     | 4  | 0   | 0   | 12  | 6   
   
   | 19  
   
  | 721  | 598  | 0  
   | 4   
   | 1338  
  | 0   | 1  | 1  | 0   | 5   | 2   | 564   | 0  
   | 0   | 0  | 4   | 564   | 1910  |
| 33.3  | 66.7   | 0.0   | 0.0   | -   | -   
   
   | 1.4   
   
  | 53.9   | 44.7   | 0.0  
   | -   
   | -   
  | 0.0   | 50.0   | 50.0   | 0.0   | -   | -   | 100.0   | 0.0  
   | 0.0   | 0.0  | -   | -   | -   |
| 0.1   | 0.2  | 0.0   | 0.0   | -   | 0.3   
   
   | 1.0   
   
  | 37.7   | 31.3   | 0.0  
   | -   
   | 70.1  
  | 0.0   | 0.1  | 0.1  | 0.0   | -   | 0.1   | 29.5  | 0.0  
   | 0.0   | 0.0  | -   | 29.5  | -   |
| 0.500 | 0.500  | 0.000   | 0.000   | -   | 0.500   
   
   | 0.528   
   
  | 0.858  | 0.971  | 0.000  
   | -   
   | 0.909   
  | 0.000   | 0.250  | 0.250  | 0.000   | -   | 0.500   | 0.881   | 0.000  
   | 0.000   | 0.000  | -   | 0.881   | 0.978   |
| 0     | 0  | 0   | 0   | -   | 0   
   
   | 0   
   
  | 1  | 0  | 0  
   | -   
   | 1   
  | 0   | 0  | 1  | 0   | -   | 1   | 0   | 0  
   | 0   | 0  | -   | 0   | 2   |
| 0.0   | 0.0  | -   | -   | -   | 0.0   
   
   | 0.0   
   
  | 0.1  | 0.0  | -  
   | -   
   | 0.1   
  | -   | 0.0  | 100.0  | -   | -   | 50.0  | 0.0   | -  
   | -   | -  | -   | 0.0   | 0.1   |
| 2     | 4  | 0   | 0   | -   | 6   
   
   | 18  
   
  | 671  | 553  | 0  
   | -   
   | 1242  
  | 0   | 0  | 0  | 0   | -   | 0   | 520   | 0  
   | 0   | 0  | -   | 520   | 1768  |
| 100.0 | 100.0  | -   | -   | -   | 100.0   
   
   | 94.7  
   
  | 93.1   | 92.5   | -  
   | -   
   | 92.8  
  | -   | 0.0  | 0.0  | -   | -   | 0.0   | 92.2  | -  
   | -   | -  | -   | 92.2  | 92.6  |
| 0     | 0  | 0   | 0   | -   | 0   
   
   | 0   
   
  | 12   | 14   | 0  
   | -   
   | 26  
  | 0   | 0  | 0  | 0   | -   | 0   | 20  | 0  
   | 0   | 0  | -   | 20  | 46  |
| 0.0   | 0.0  | -   | -   | -   | 0.0   
   
   | 0.0   
   
  | 1.7  | 2.3  | -  
   | -   
   | 1.9   
  | -   | 0.0  | 0.0  | -   | -   | 0.0   | 3.5   | -  
   | -   | -  | -   | 3.5   | 2.4   |
| 0     | 0  | 0   | 0   | -   | 0   
   
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  | 29   | 26   | 0  
   | -   
   | 55  
  | 0   | 0  | 0  | 0   | -   | 0   | 16  | 0  
   | 0   | 0  | -   | 16  | 71  |
| 0.0   | 0.0  | -   | -   | -   | 0.0   
   
   | 0.0   
   
  | 4.0  | 4.3  | -  
   | -   
   | 4.1   
  | -   | 0.0  | 0.0  | -   | -   | 0.0   | 2.8   | -  
   | -   | -  | -   | 2.8   | 3.7   |
| 0     | 0  | 0   | 0   | -   | 0   
   
   | 1   
   
  | 8  | 5  | 0  
   | -   
   | 14  
  | 0   | 0  | 0  | 0   | -   | 0   | 8   | 0  
   | 0   | 0  | -   | 8   | 22  |
| 0.0   | 0.0  | -   | -   | -   | 0.0   
   
   | 5.3   
   
  | 1.1  | 0.8  | -  
   | -   
   | 1.0   
  | -   | 0.0  | 0.0  | -   | -   | 0.0   | 1.4   | -  
   | -   | -  | -   | 1.4   | 1.2   |
| 0     | 0  | 0   | 0   | -   | 0   
   
   | 0   
   
  | 0  | 0  | 0  
   | -   
   | 0   
  | 0   | 1  | 0  | 0   | -   | 1   | 0   | 0  
   | 0   | 0  | -   | 0   | 1   |
| 0.0   | 0.0  | -   | -   | -   | 0.0   
   
   | 0.0   
   
  | 0.0  | 0.0  | -  
   | -   
   | 0.0   
  | -   | 100.0  | 0.0  | -   | -   | 50.0  | 0.0   | -  
   | -   | -  | -   | 0.0   | 0.1   |
| -     |  | -   | -   | 0   | -   
   
   | -   
   
  | -  | -  | -  
   | 0   
   | -   
  | -   | -  | -  | -   | 1   | -   | -   | -  
   | -   | -  | 0   | -   | -   |
| -     | -  | -   | -   | 0.0   | -   
   
   | -   
   
  | -  | -  | -  
   | 0.0   
   | -   
  | -   | -  | -  | -   | 20.0  | -   | -   | -  
   | -   | -  | 0.0   | -   | -   |
| -     | -  | -   | -   | 12  | -   
   
   | -   
   
  | -  | -  | -  
   | 4   
   | -   
  | -   | -  | -  | -   | 4   | -   | -   | -  
   | -   | -  | 4   | -   | -   |
| -     | -  | -   | -   | 100.0   | -   
   
   | -   
   
  | -  | -  |  
   | 100.0   
   | -   
  | -   | -  | -  | -   | 80.0  | -   | -   | -  
   | -   |  | 100.0   | -   |   |
|       | 1           0           2           33.3           0.1           0.500           0           0.500           0           0.0           2           100.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           0           0.0           -           - | 1         2           1         1           0         0           2         4           33.3         66.7           0.1         0.2           0.500         0.500           0         0           0         0           0.500         0.500           0         0           0.0         0.0           2         4           100.0         100.0           0         0 | Right         Thru         Left           1         2         0           1         1         0           0         0         0           0         1         0           0         1         0           0         1         0           2         4         0           33.3         66.7         0.0           0.1         0.2         0.0           0.0         0.500         0.000           0         0         0           0.0         0.0         -           2         4         0           0.0         0.0         -           2         4         0           0.0         0.0         -           0         0         0           0.0         0.0         -           0         0         0           0.0         0.0         -           0         0         0           0.0         0.0         -           0         0         0           0.0         0.0         -           0.0         0.0         - | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | Southbound           Right         Thru         Left         U-Turn         Peds           1         2         0         0         5           1         1         0         0         3           0         0         0         0         2           0         1         0         0         2           0         1         0         0         2           0         1         0         0         2           2         4         0         0         12           33.3         66.7         0.0         0.0         -           0.1         0.2         0.0         0.0         -           0.1         0.2         0.0         0.0         -           0.0         0.00         0.0         -         -           0         0         0         0         -         -           0         0         0         0         -         -           0         0         0         0         -         -           0         0         0         0         -         -           0         0 <td>Southbound           Right         Thru         Left         U-Turn         Peds         App.<br/>Total           1         2         0         0         5         3           1         1         0         0         3         2           0         0         0         0         2         0           0         1         0         0         2         1           2         4         0         0         12         6           33.3         66.7         0.0         0.0         -         0.500           0         0         0         0         -         0.500           0.1         0.2         0.0         0.00         -         0.500           0.500         0.500         0.000         -         0.500           0         0         0         0         -         0.500           0.0         0.00         -         -         0.00         0           0.0         0.0         0         -         0         0           0.0         0         0         -         -         0.00           0         0         <td< td=""><td>Southbound         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right           1         2         0         0         5         3         9           1         1         0         0         3         2         5           0         0         0         2         0         3           0         1         0         0         2         1         2           2         4         0         0         12         6         19           33.3         66.7         0.0         0.0         -         0.3         1.0           0.500         0.500         0.000         0.00         -         0.3         1.0           0.500         0.500         0.000         0.00         -         0.3         1.0           0.500         0.500         0.00         0.0         -         0.3         1.0           0.500         0.500         0.00         0.0         -         0.0         0.528           0         0         0         -         -         0.0         0.0           10.0         10.0</td><td>Southbound         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru           1         2         0         0         5         3         9         210           1         1         0         0         3         2         5         176           0         0         0         0         2         0         3         189           0         1         0         0         2         1         2         146           2         4         0         0         12         6         19         721           33.3         66.7         0.0         0.00         -         0.3         1.0         37.7           0.500         0.500         0.000         0.00         -         0.3         1.0         37.7           0.500         0.500         0.00         -         0.3         1.0         37.7           0.500         0.500         0.00         -         0.0         0.528         0.858           0         0         0         -         -         0.0         0.1         12           10.0</td><td>Southbound         West           Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left           1         2         0         0         5         3         9         210         149           1         1         0         0         3         2         5         176         154           0         0         0         2         0         3         189         144           0         1         0         0         2         1         2         146         151           2         4         0         0         12         6         19         721         598           33.3         66.7         0.0         0.0         -         1.4         53.9         44.7           0.1         0.2         0.0         0.00         -         0.3         1.0         37.7         31.3           0.500         0.500         0.000         0         -         0.500         0.528         0.858         0.971           0         0         0         -         -         0.00         0.1         10</td><td>Southbound         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left         U-Turn           1         2         0         0         5         3         9         210         149         0           1         1         0         0         3         2         5         176         154         0           0         0         0         2         1         2         146         151         0           0         1         0         0         2         1         2         146         151         0           2         4         0         0         12         6         19         721         598         0           33.3         66.7         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0           0.1         0.2         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0           0.0         0.00         0.00         -         0.00         0.1         10.0         0         0         <td< td=""><td>Southbound         West         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds           1         2         0         0         5         3         9         210         149         0         0           1         1         0         0         3         25         176         154         0         2           0         1         0         0         2         1         2         146         151         0         0           2         4         0         0         12         6         19         721         598         0         4           33.3         66.7         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0         -           0.1         0.2         0.0         0.00         -         0.500         0.500         0.60         -         -         0.0         -         -         0.0         -         -         0.0         -         -         0.0         0.1         0.0         -         -         0.0         .</td><td>Southbound         Name         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total           1         2         0         0         5         3         9         210         149         0         0         3386           1         1         0         0         3         2         5         176         154         0         2         335           0         0         0         0         2         0         3         189         144         0         2         336           0         1         0         0         12         6         19         721         598         0         4         1338           33.3         66.7         0.0         0.0         -         1.4         53.9         44.7         0.0         -         70.1           0.500         0.000         0.00         -         0.3         1.0         37.7         31.3         0.0         -         1.0           0.10         0.0         0         0         0         1         0         0         1.1         0</td><td>Number         Southbund         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right           1         2         0         0         5         3         9         210         149         0         0         368         0           1         1         0         0         3         2         5         176         154         0         2         335         0           0         0         0         0         2         0         3         189         144         0         2         336         0           1         1         0         0         2         1         2         146         151         0         0         2         336         0           3         667         0.0         0.0         -         -         1.4         539         44.7         0.00         -         -         0.0           0.1         0.2         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0         -         0.0           0.10         0.0         0.0         -</td><td>Souther         Souther         Right         Thru         Left         U-Tun         Peds         App.<br/>Total         Right         Thru         Left         U-Tun         Peds         App.<br/>Total           1         2         0         0         5         3         9         210         149         0         0         368         0         0           1         1         0         0         3         2         5         176         154         0         2         335         0         1           0         0         0         0         2         1         2         146         151         0         2         335         0         1           2         4         0         0         1         2         146         151         0         2         338         0         1           333         667         0.0         0         1         2         144         539         44.7         0.0         -         0.0         0         1         0         0         1         0         0         1         0         0         1         0.0         0         1         0.0</td><td>Souther         Souther         Park         Park</td><td>Normal Solution         Normal Periods         Periods&lt;</td><td>Notational constraint of the constrai</td><td>Nerry         Left         U-Tur         Peds         Proph         Proph         Left         U-Tur         Peds         Proph         Proph         Left         U-Tur         Peds         Proph         Proph         Proph         Proph         Proph         Proph         Proph         Proph         Left         U-Tur         Peds         Proph           1         2         0         0         5         3         9         210         144         0         368         0         1         0         0         0         0         0         1         0         0         1         0         0         1         0         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         1         0         1         0</td><td>Nerry         Usery         Norm         Norm        &lt;</td><td>Nerror         U         Norm         Poil           0</td><td>Nerror         U         Varia         Paria         P</td><td>Nink         U         U         U         No         No         No         U         U         No         No<td>Neth         I-T         V-T         V-T         V-T         No         No        &lt;</td><td>New         Le         <thle< th="">         Le         Le         Le</thle<></td></td></td<></td></td<></td> | Southbound           Right         Thru         Left         U-Turn         Peds         App.<br>Total           1         2         0         0         5         3           1         1         0         0         3         2           0         0         0         0         2         0           0         1         0         0         2         1           2         4         0         0         12         6           33.3         66.7         0.0         0.0         -         0.500           0         0         0         0         -         0.500           0.1         0.2         0.0         0.00         -         0.500           0.500         0.500         0.000         -         0.500           0         0         0         0         -         0.500           0.0         0.00         -         -         0.00         0           0.0         0.0         0         -         0         0           0.0         0         0         -         -         0.00           0         0 <td< td=""><td>Southbound         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right           1         2         0         0         5         3         9           1         1         0         0         3         2         5           0         0         0         2         0         3           0         1         0         0         2         1         2           2         4         0         0         12         6         19           33.3         66.7         0.0         0.0         -         0.3         1.0           0.500         0.500         0.000         0.00         -         0.3         1.0           0.500         0.500         0.000         0.00         -         0.3         1.0           0.500         0.500         0.00         0.0         -         0.3         1.0           0.500         0.500         0.00         0.0         -         0.0         0.528           0         0         0         -         -         0.0         0.0           10.0         10.0</td><td>Southbound         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru           1         2         0         0         5         3         9         210           1         1         0         0         3         2         5         176           0         0         0         0         2         0         3         189           0         1         0         0         2         1         2         146           2         4         0         0         12         6         19         721           33.3         66.7         0.0         0.00         -         0.3         1.0         37.7           0.500         0.500         0.000         0.00         -         0.3         1.0         37.7           0.500         0.500         0.00         -         0.3         1.0         37.7           0.500         0.500         0.00         -         0.0         0.528         0.858           0         0         0         -         -         0.0         0.1         12           10.0</td><td>Southbound         West           Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left           1         2         0         0         5         3         9         210         149           1         1         0         0         3         2         5         176         154           0         0         0         2         0         3         189         144           0         1         0         0         2         1         2         146         151           2         4         0         0         12         6         19         721         598           33.3         66.7         0.0         0.0         -         1.4         53.9         44.7           0.1         0.2         0.0         0.00         -         0.3         1.0         37.7         31.3           0.500         0.500         0.000         0         -         0.500         0.528         0.858         0.971           0         0         0         -         -         0.00         0.1         10</td><td>Southbound         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left         U-Turn           1         2         0         0         5         3         9         210         149         0           1         1         0         0         3         2         5         176         154         0           0         0         0         2         1         2         146         151         0           0         1         0         0         2         1         2         146         151         0           2         4         0         0         12         6         19         721         598         0           33.3         66.7         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0           0.1         0.2         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0           0.0         0.00         0.00         -         0.00         0.1         10.0         0         0         <td< td=""><td>Southbound         West         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds           1         2         0         0         5         3         9         210         149         0         0           1         1         0         0         3         25         176         154         0         2           0         1         0         0         2         1         2         146         151         0         0           2         4         0         0         12         6         19         721         598         0         4           33.3         66.7         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0         -           0.1         0.2         0.0         0.00         -         0.500         0.500         0.60         -         -         0.0         -         -         0.0         -         -         0.0         -         -         0.0         0.1         0.0         -         -         0.0         .</td><td>Southbound         Name         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total           1         2         0         0         5         3         9         210         149         0         0         3386           1         1         0         0         3         2         5         176         154         0         2         335           0         0         0         0         2         0         3         189         144         0         2         336           0         1         0         0         12         6         19         721         598         0         4         1338           33.3         66.7         0.0         0.0         -         1.4         53.9         44.7         0.0         -         70.1           0.500         0.000         0.00         -         0.3         1.0         37.7         31.3         0.0         -         1.0           0.10         0.0         0         0         0         1         0         0         1.1         0</td><td>Number         Southbund         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right           1         2         0         0         5         3         9         210         149         0         0         368         0           1         1         0         0         3         2         5         176         154         0         2         335         0           0         0         0         0         2         0         3         189         144         0         2         336         0           1         1         0         0         2         1         2         146         151         0         0         2         336         0           3         667         0.0         0.0         -         -         1.4         539         44.7         0.00         -         -         0.0           0.1         0.2         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0         -         0.0           0.10         0.0         0.0         -</td><td>Souther         Souther         Right         Thru         Left         U-Tun         Peds         App.<br/>Total         Right         Thru         Left         U-Tun         Peds         App.<br/>Total           1         2         0         0         5         3         9         210         149         0         0         368         0         0           1         1         0         0         3         2         5         176         154         0         2         335         0         1           0         0         0         0         2         1         2         146         151         0         2         335         0         1           2         4         0         0         1         2         146         151         0         2         338         0         1           333         667         0.0         0         1         2         144         539         44.7         0.0         -         0.0         0         1         0         0         1         0         0         1         0         0         1         0.0         0         1         0.0</td><td>Souther         Souther         Park         Park</td><td>Normal Solution         Normal Periods         Periods&lt;</td><td>Notational constraint of the constrai</td><td>Nerry         Left         U-Tur         Peds         Proph         Proph         Left         U-Tur         Peds         Proph         Proph         Left         U-Tur         Peds         Proph         Proph         Proph         Proph         Proph         Proph         Proph         Proph         Left         U-Tur         Peds         Proph           1         2         0         0         5         3         9         210         144         0         368         0         1         0         0         0         0         0         1         0         0         1         0         0         1         0         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         1         0         1         0</td><td>Nerry         Usery         Norm         Norm        &lt;</td><td>Nerror         U         Norm         Poil           0</td><td>Nerror         U         Varia         Paria         P</td><td>Nink         U         U         U         No         No         No         U         U         No         No<td>Neth         I-T         V-T         V-T         V-T         No         No        &lt;</td><td>New         Le         <thle< th="">         Le         Le         Le</thle<></td></td></td<></td></td<> | Southbound         App.<br>Total         Right         Thru         Left         U-Turn         Peds         App.<br>Total         Right           1         2         0         0         5         3         9           1         1         0         0         3         2         5           0         0         0         2         0         3           0         1         0         0         2         1         2           2         4         0         0         12         6         19           33.3         66.7         0.0         0.0         -         0.3         1.0           0.500         0.500         0.000         0.00         -         0.3         1.0           0.500         0.500         0.000         0.00         -         0.3         1.0           0.500         0.500         0.00         0.0         -         0.3         1.0           0.500         0.500         0.00         0.0         -         0.0         0.528           0         0         0         -         -         0.0         0.0           10.0         10.0 | Southbound         Right         Thru         Left         U-Turn         Peds         App.<br>Total         Right         Thru           1         2         0         0         5         3         9         210           1         1         0         0         3         2         5         176           0         0         0         0         2         0         3         189           0         1         0         0         2         1         2         146           2         4         0         0         12         6         19         721           33.3         66.7         0.0         0.00         -         0.3         1.0         37.7           0.500         0.500         0.000         0.00         -         0.3         1.0         37.7           0.500         0.500         0.00         -         0.3         1.0         37.7           0.500         0.500         0.00         -         0.0         0.528         0.858           0         0         0         -         -         0.0         0.1         12           10.0 | Southbound         West           Right         Thru         Left         U-Turn         Peds         App.<br>Total         Right         Thru         Left           1         2         0         0         5         3         9         210         149           1         1         0         0         3         2         5         176         154           0         0         0         2         0         3         189         144           0         1         0         0         2         1         2         146         151           2         4         0         0         12         6         19         721         598           33.3         66.7         0.0         0.0         -         1.4         53.9         44.7           0.1         0.2         0.0         0.00         -         0.3         1.0         37.7         31.3           0.500         0.500         0.000         0         -         0.500         0.528         0.858         0.971           0         0         0         -         -         0.00         0.1         10 | Southbound         Peds         App.<br>Total         Right         Thru         Left         U-Turn         Peds         App.<br>Total         Right         Thru         Left         U-Turn           1         2         0         0         5         3         9         210         149         0           1         1         0         0         3         2         5         176         154         0           0         0         0         2         1         2         146         151         0           0         1         0         0         2         1         2         146         151         0           2         4         0         0         12         6         19         721         598         0           33.3         66.7         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0           0.1         0.2         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0           0.0         0.00         0.00         -         0.00         0.1         10.0         0         0 <td< td=""><td>Southbound         West         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds           1         2         0         0         5         3         9         210         149         0         0           1         1         0         0         3         25         176         154         0         2           0         1         0         0         2         1         2         146         151         0         0           2         4         0         0         12         6         19         721         598         0         4           33.3         66.7         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0         -           0.1         0.2         0.0         0.00         -         0.500         0.500         0.60         -         -         0.0         -         -         0.0         -         -         0.0         -         -         0.0         0.1         0.0         -         -         0.0         .</td><td>Southbound         Name         Left         U-Turn         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total           1         2         0         0         5         3         9         210         149         0         0         3386           1         1         0         0         3         2         5         176         154         0         2         335           0         0         0         0         2         0         3         189         144         0         2         336           0         1         0         0         12         6         19         721         598         0         4         1338           33.3         66.7         0.0         0.0         -         1.4         53.9         44.7         0.0         -         70.1           0.500         0.000         0.00         -         0.3         1.0         37.7         31.3         0.0         -         1.0           0.10         0.0         0         0         0         1         0         0         1.1         0</td><td>Number         Southbund         Peds         App.<br/>Total         Right         Thru         Left         U-Turn         Peds         App.<br/>Total         Right           1         2         0         0         5         3         9         210         149         0         0         368         0           1         1         0         0         3         2         5         176         154         0         2         335         0           0         0         0         0         2         0         3         189         144         0         2         336         0           1         1         0         0         2         1         2         146         151         0         0         2         336         0           3         667         0.0         0.0         -         -         1.4         539         44.7         0.00         -         -         0.0           0.1         0.2         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0         -         0.0           0.10         0.0         0.0         -</td><td>Souther         Souther         Right         Thru         Left         U-Tun         Peds         App.<br/>Total         Right         Thru         Left         U-Tun         Peds         App.<br/>Total           1         2         0         0         5         3         9         210         149         0         0         368         0         0           1         1         0         0         3         2         5         176         154         0         2         335         0         1           0         0         0         0         2         1         2         146         151         0         2         335         0         1           2         4         0         0         1         2         146         151         0         2         338         0         1           333         667         0.0         0         1         2         144         539         44.7         0.0         -         0.0         0         1         0         0         1         0         0         1         0         0         1         0.0         0         1         0.0</td><td>Souther         Souther         Park         Park</td><td>Normal Solution         Normal Periods         Periods&lt;</td><td>Notational constraint of the constrai</td><td>Nerry         Left         U-Tur         Peds         Proph         Proph         Left         U-Tur         Peds         Proph         Proph         Left         U-Tur         Peds         Proph         Proph         Proph         Proph         Proph         Proph         Proph         Proph         Left         U-Tur         Peds         Proph           1         2         0         0         5         3         9         210         144         0         368         0         1         0         0         0         0         0         1         0         0         1         0         0         1         0         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         1         0         1         0</td><td>Nerry         Usery         Norm         Norm        &lt;</td><td>Nerror         U         Norm         Poil           0</td><td>Nerror         U         Varia         Paria         P</td><td>Nink         U         U         U         No         No         No         U         U         No         No<td>Neth         I-T         V-T         V-T         V-T         No         No        &lt;</td><td>New         Le         <thle< th="">         Le         Le         Le</thle<></td></td></td<> | Southbound         West         App.<br>Total         Right         Thru         Left         U-Turn         Peds         App.<br>Total         Right         Thru         Left         U-Turn         Peds           1         2         0         0         5         3         9         210         149         0         0           1         1         0         0         3         25         176         154         0         2           0         1         0         0         2         1         2         146         151         0         0           2         4         0         0         12         6         19         721         598         0         4           33.3         66.7         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0         -           0.1         0.2         0.0         0.00         -         0.500         0.500         0.60         -         -         0.0         -         -         0.0         -         -         0.0         -         -         0.0         0.1         0.0         -         -         0.0         . | Southbound         Name         Left         U-Turn         Peds         App.<br>Total         Right         Thru         Left         U-Turn         Peds         App.<br>Total           1         2         0         0         5         3         9         210         149         0         0         3386           1         1         0         0         3         2         5         176         154         0         2         335           0         0         0         0         2         0         3         189         144         0         2         336           0         1         0         0         12         6         19         721         598         0         4         1338           33.3         66.7         0.0         0.0         -         1.4         53.9         44.7         0.0         -         70.1           0.500         0.000         0.00         -         0.3         1.0         37.7         31.3         0.0         -         1.0           0.10         0.0         0         0         0         1         0         0         1.1         0 | Number         Southbund         Peds         App.<br>Total         Right         Thru         Left         U-Turn         Peds         App.<br>Total         Right           1         2         0         0         5         3         9         210         149         0         0         368         0           1         1         0         0         3         2         5         176         154         0         2         335         0           0         0         0         0         2         0         3         189         144         0         2         336         0           1         1         0         0         2         1         2         146         151         0         0         2         336         0           3         667         0.0         0.0         -         -         1.4         539         44.7         0.00         -         -         0.0           0.1         0.2         0.0         0.0         -         0.3         1.0         37.7         31.3         0.0         -         0.0           0.10         0.0         0.0         - | Souther         Souther         Right         Thru         Left         U-Tun         Peds         App.<br>Total         Right         Thru         Left         U-Tun         Peds         App.<br>Total           1         2         0         0         5         3         9         210         149         0         0         368         0         0           1         1         0         0         3         2         5         176         154         0         2         335         0         1           0         0         0         0         2         1         2         146         151         0         2         335         0         1           2         4         0         0         1         2         146         151         0         2         338         0         1           333         667         0.0         0         1         2         144         539         44.7         0.0         -         0.0         0         1         0         0         1         0         0         1         0         0         1         0.0         0         1         0.0 | Souther         Souther         Park         Park | Normal Solution         Normal Periods         Periods< | Notational constraint of the constrai | Nerry         Left         U-Tur         Peds         Proph         Proph         Left         U-Tur         Peds         Proph         Proph         Left         U-Tur         Peds         Proph         Proph         Proph         Proph         Proph         Proph         Proph         Proph         Left         U-Tur         Peds         Proph           1         2         0         0         5         3         9         210         144         0         368         0         1         0         0         0         0         0         1         0         0         1         0         0         1         0         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         1         0         1         0 | Nerry         Usery         Norm         Norm        < | Nerror         U         Norm         Poil           0 | Nerror         U         Varia         Paria         P | Nink         U         U         U         No         No         No         U         U         No         No <td>Neth         I-T         V-T         V-T         V-T         No         No        &lt;</td> <td>New         Le         <thle< th="">         Le         Le         Le</thle<></td> | Neth         I-T         V-T         V-T         V-T         No         No        < | New         Le         Le <thle< th="">         Le         Le         Le</thle<> |

## Turning Movement Peak Hour Data (7:45 AM)



Count Name: Market and Lakeview NW PM Site Code: Start Date: 06/21/2019 Page No: 1

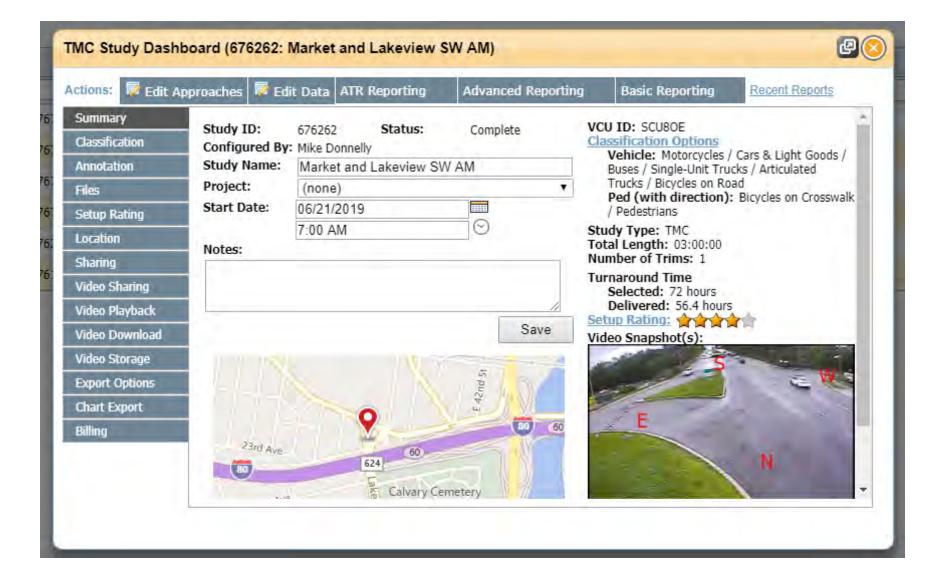
										i urr	nng n	/lover	nent L	Jata											
			Southb	ound St.					Westb	ound St.					Northb	ound St.					Eastbo	ound St.			
			South	nbound					West	tbound					North	bound					East	bound			
Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:00 PM	5	1	0	0	4	6	6	261	239	0	0	506	0	0	0	0	1	0	176	0	0	0	0	176	688
4:15 PM	7	2	0	0	0	9	4	257	263	0	2	524	0	0	0	0	1	0	155	0	0	0	0	155	688
4:30 PM	8	10	0	0	4	18	4	254	252	0	2	510	0	0	0	0	1	0	188	0	0	0	1	188	716
4:45 PM	2	1	0	0	3	3	1	251	343	0	1	595	0	0	0	0	0	0	179	0	0	0	2	179	777
Hourly Total	22	14	0	0	11	36	15	1023	1097	0	5	2135	0	0	0	0	3	0	698	0	0	0	3	698	2869
5:00 PM	0	0	0	0	2	0	0	248	315	0	0	563	1	0	0	0	1	1	196	0	0	0	0	196	760
5:15 PM	0	2	0	0	4	2	0	281	277	0	0	558	0	0	0	0	1	0	191	0	0	0	2	191	751
5:30 PM	0	0	0	0	4	0	1	295	276	0	1	572	0	0	0	0	0	0	186	0	0	0	4	186	758
5:45 PM	0	2	0	0	1	2	1	276	256	0	1	533	0	0	0	0	3	0	186	0	0	0	0	186	721
Hourly Total	0	4	0	0	11	4	2	1100	1124	0	2	2226	1	0	0	0	5	1	759	0	0	0	6	759	2990
6:00 PM	1	0	0	0	3	1	1	254	246	0	0	501	0	0	0	0	2	0	179	0	0	0	1	179	681
6:15 PM	1	1	0	0	1	2	3	235	288	0	0	526	0	0	0	0	2	0	163	0	0	0	0	163	691
6:30 PM	1	1	0	0	1	2	2	217	228	0	0	447	0	0	0	0	1	0	154	0	0	0	0	154	603
6:45 PM	1	1	0	0	0	2	2	218	241	0	0	461	0	0	0	0	2	0	159	0	0	0	0	159	622
Hourly Total	4	3	0	0	5	7	8	924	1003	0	0	1935	0	0	0	0	7	0	655	0	0	0	1	655	2597
7:00 PM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	0	0	1	3
Grand Total	26	21	0	0	27	47	25	3048	3225	0	7	6298	1	0	0	0	15	1	2113	0	0	0	10	2113	8459
Approach %	55.3	44.7	0.0	0.0	-	-	0.4	48.4	51.2	0.0	-	-	100.0	0.0	0.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	0.3	0.2	0.0	0.0	-	0.6	0.3	36.0	38.1	0.0	-	74.5	0.0	0.0	0.0	0.0	-	0.0	25.0	0.0	0.0	0.0	-	25.0	-
Motorcycles	0	0	0	0	-	0	0	5	4	0	-	9	0	0	0	0	-	0	4	0	0	0	-	4	13
% Motorcycles	0.0	0.0	-	-	-	0.0	0.0	0.2	0.1	-	-	0.1	0.0	-	-	-	-	0.0	0.2	-	-	-	-	0.2	0.2
Cars & Light Goods	24	19	0	0	-	43	23	2967	3084	0	-	6074	1	0	0	0	-	1	2066	0	0	0	-	2066	8184
% Cars & Light Goods	92.3	90.5	-	-	-	91.5	92.0	97.3	95.6	-	-	96.4	100.0	-	-	-	-	100.0	97.8	-	-	-	-	97.8	96.7
Buses	0	0	0	0	-	0	0	16	22	0	-	38	0	0	0	0	-	0	15	0	0	0	-	15	53
% Buses	0.0	0.0	-	-	-	0.0	0.0	0.5	0.7	-	-	0.6	0.0	-	-	-	-	0.0	0.7	-	-	-	-	0.7	0.6
Single-Unit Trucks	2	1	0	0	-	3	1	51	95	0	-	147	0	0	0	0	-	0	24	0	0	0	-	24	174
% Single-Unit Trucks	7.7	4.8	-	-	-	6.4	4.0	1.7	2.9	-	-	2.3	0.0	-	-	-	-	0.0	1.1	-	-	-	-	1.1	2.1
Articulated Trucks	0	0	0	0	-	0	0	8	20	0	-	28	0	0	0	0	-	0	4	0	0	0	-	4	32
% Articulated Trucks	0.0	0.0	-	-	-	0.0	0.0	0.3	0.6	-	-	0.4	0.0	-	-	-	-	0.0	0.2	-	-	-	-	0.2	0.4
Bicycles on Road	0	1	0	0	-	1	1	1	0	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	3
% Bicycles on Road	0.0	4.8	-	-	-	2.1	4.0	0.0	0.0	-	-	0.0	0.0	-	-	-	-	0.0	0.0	-	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	6.7	-	-	-	-	-	10.0	-	-
Pedestrians	-	-	-	-	27	-	-	-	-	-	7	-	-	-	-	-	14	-	-	-	-	-	9	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	93.3	-	-	-	-	-	90.0	-	-
						-	-	-	-			-	-	-	-		-			-		-	-	-	

## **Turning Movement Data**

Count Name: Market and Lakeview NW PM Site Code: Start Date: 06/21/2019 Page No: 3

179 196 191 186 752 - 24.7	Int. Total 7777 760 751 758 3046 - - 0.980 2 0.1
179 196 191 186 752 - 24.7 0.959 0 0.0	777 760 751 758 3046 - - 0.980 2 0.1
179 196 191 186 752 - 24.7 0.959 0 0.0	777 760 751 758 3046 - - 0.980 2 0.1
196           191           186           752           -           24.7           0.959           0           0.0	760 751 758 3046 - - 0.980 2 0.1
191 186 752 - 24.7 0.959 0 0.0	751 758 3046 - - 0.980 2 0.1
186           752           -           24.7           0.959           0           0.0	758 3046 - - 0.980 2 0.1
752 - 24.7 0.959 0 0.0	3046 - 0.980 2 0.1
- 24.7 0.959 0 0.0	- 0.980 2 0.1
24.7 0.959 0 0.0	- 0.980 2 0.1
0.959 0 0.0	0.980 2 0.1
0	2 0.1
0.0	0.1
-	
740	
-	2963
98.4	97.3
4	17
0.5	0.6
8	56
1.1	1.8
0	8
0.0	0.3
0	0
0.0	0.0
-	-
-	-
-	-
-	-
)	4 0.5 8 1.1 0 0.0 0 0.0 - - - -

## Turning Movement Peak Hour Data (4:45 PM)



Count Name: Market and Lakeview SW AM Site Code: Start Date: 06/21/2019 Page No: 1

				oound St. nbound						ound St.	ing N	lovei		Jala		ound St. nbound						ound St. bound			
Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
7:00 AM	0	224	4	0	0	228	0	0	0	0	0	0	35	0	0	0	1	35	3	0	0	0	1	3	266
7:15 AM	0	239	3	0	0	242	0	0	0	0	0	0	38	0	0	0	0	38	2	0	0	0	1	2	282
7:30 AM	2	254	6	0	0	262	0	0	0	0	0	0	37	0	0	0	0	37	5	0	0	0	0	5	304
7:45 AM	1	285	2	0	0	288	0	0	0	0	0	0	59	0	0	0	0	59	5	0	0	0	3	5	352
Hourly Total	3	1002	15	0	0	1020	0	0	0	0	0	0	169	0	0	0	1	169	15	0	0	0	5	15	1204
8:00 AM	1	225	4	0	0	230	0	0	0	0	0	0	34	0	0	0	0	34	5	0	0	0	2	5	269
8:15 AM	1	277	8	0	0	286	0	0	0	0	0	0	55	0	0	0	0	55	2	0	0	0	0	2	343
8:30 AM	1	278	4	0	0	283	0	0	0	0	0	0	43	0	0	0	0	43	4	0	0	0	1	4	330
8:45 AM	2	298	6	0	0	306	0	0	0	0	0	0	46	0	0	0	0	46	2	0	0	0	0	2	354
Hourly Total	5	1078	22	0	0	1105	0	0	0	0	0	0	178	0	0	0	0	178	13	0	0	0	3	13	1296
9:00 AM	0	255	7	0	0	262	0	0	0	0	0	0	41	0	0	0	0	41	8	0	0	0	0	8	311
9:15 AM	1	266	8	0	0	275	0	0	0	0	0	0	32	0	0	0	0	32	4	0	0	0	2	4	311
9:30 AM	0	256	6	0	0	262	0	0	0	0	0	0	24	0	0	0	1	24	3	0	0	0	2	3	289
9:45 AM	3	261	5	0	0	269	0	0	0	0	0	0	42	0	0	0	0	42	7	0	0	0	2	7	318
Hourly Total	4	1038	26	0	0	1068	0	0	0	0	0	0	139	0	0	0	1	139	22	0	0	0	6	22	1229
Grand Total	12	3118	63	0	0	3193	0	0	0	0	0	0	486	0	0	0	2	486	50	0	0	0	14	50	3729
Approach %	0.4	97.7	2.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	0.3	83.6	1.7	0.0	-	85.6	0.0	0.0	0.0	0.0	-	0.0	13.0	0.0	0.0	0.0	-	13.0	1.3	0.0	0.0	0.0	-	1.3	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	-	-	0.0	0.0
Cars & Light Goods	8	2823	61	0	-	2892	0	0	0	0	-	0	451	0	0	0	-	451	41	0	0	0	-	41	3384
% Cars & Light Goods	66.7	90.5	96.8	-	-	90.6	-	-	-	-	-	-	92.8	-	-	-	-	92.8	82.0	-	-	-	-	82.0	90.7
Buses	0	103	1	0	-	104	0	0	0	0	-	0	21	0	0	0	-	21	0	0	0	0	-	0	125
% Buses	0.0	3.3	1.6	-	-	3.3	-	-	-	-	-	-	4.3	-	-	-	-	4.3	0.0	-	-	-	-	0.0	3.4
Single-Unit Trucks	1	149	1	0	-	151	0	0	0	0	-	0	13	0	0	0	-	13	8	0	0	0	-	8	172
% Single-Unit Trucks	8.3	4.8	1.6	-	-	4.7	-	-	-	-	-	-	2.7	-	-	-	-	2.7	16.0	-	-	-	-	16.0	4.6
Articulated Trucks	3	43	0	0	-	46	0	0	0	0	-	0	1	0	0	0	-	1	1	0	0	0	-	1	48
% Articulated Trucks	25.0	1.4	0.0	-	-	1.4	-	-	-	-	-	-	0.2	-	-	-	-	0.2	2.0	-	-	-	-	2.0	1.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	7.1	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	13	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	92.9	-	-

## Turning Movement Data

Count Name: Market and Lakeview SW AM Site Code: Start Date: 06/21/2019 Page No: 3

Obert Time				ound St. nbound					Westb	ound St.					Northb	ound St. bound						ound St. bound			
Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
8:15 AM	1	277	8	0	0	286	0	0	0	0	0	0	55	0	0	0	0	55	2	0	0	0	0	2	343
8:30 AM	1	278	4	0	0	283	0	0	0	0	0	0	43	0	0	0	0	43	4	0	0	0	1	4	330
8:45 AM	2	298	6	0	0	306	0	0	0	0	0	0	46	0	0	0	0	46	2	0	0	0	0	2	354
9:00 AM	0	255	7	0	0	262	0	0	0	0	0	0	41	0	0	0	0	41	8	0	0	0	0	8	311
Total	4	1108	25	0	0	1137	0	0	0	0	0	0	185	0	0	0	0	185	16	0	0	0	1	16	1338
Approach %	0.4	97.4	2.2	0.0	-	-	0.0	0.0	0.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	0.3	82.8	1.9	0.0	-	85.0	0.0	0.0	0.0	0.0	-	0.0	13.8	0.0	0.0	0.0	-	13.8	1.2	0.0	0.0	0.0	-	1.2	-
PHF	0.500	0.930	0.781	0.000	-	0.929	0.000	0.000	0.000	0.000	-	0.000	0.841	0.000	0.000	0.000	-	0.841	0.500	0.000	0.000	0.000	-	0.500	0.945
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	-	-	0.0	0.0
Cars & Light Goods	2	1002	24	0	-	1028	0	0	0	0	-	0	177	0	0	0	-	177	14	0	0	0	-	14	1219
% Cars & Light Goods	50.0	90.4	96.0	-	-	90.4	-	-	-	-	-	-	95.7	-	-	-	-	95.7	87.5	-	-	-	-	87.5	91.1
Buses	0	39	0	0	-	39	0	0	0	0	-	0	5	0	0	0	-	5	0	0	0	0	-	0	44
% Buses	0.0	3.5	0.0	-	-	3.4	-	-	-	-	-	-	2.7	-	-	-	-	2.7	0.0	-	-	-	-	0.0	3.3
Single-Unit Trucks	0	55	1	0	-	56	0	0	0	0	-	0	3	0	0	0	-	3	2	0	0	0	-	2	61
% Single-Unit Trucks	0.0	5.0	4.0	-	-	4.9	-	-	-	-	-	-	1.6	-	-	-	-	1.6	12.5	-	-	-	-	12.5	4.6
Articulated Trucks	2	12	0	0	-	14	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	14
% Articulated Trucks	50.0	1.1	0.0	-	-	1.2	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	-	-	0.0	1.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

## Turning Movement Peak Hour Data (8:15 AM)

ctions: 🐺 Edit A	pproaches 🛛 🐺 Edi	it Data ATR Reporting	Advanced Reporting	Basic Reporting	Recent Reports
Summary Classification	Study ID: Configured By	676182 Status: Mike Donnelly	COMPIECE	/CU ID: SCU8OE Classification Options Vehicle: Motorcycles /	Cars & Light Goods /
Annotation	Study Name:	Market and Lakeview SV	V	Buses / Single-Unit Tru	cks / Articulated
Files	Project:	(none)	*	Trucks / Bicycles on Ro Ped (with direction):	
Setup Rating	Start Date:	06/20/2019		/ Pedestrians	2 - 12 14 - 12 17 17 17 19 19 19 19 19 19 19 19 19 19 19 19 19
Location	in the second	3:00 PM		Study Type: TMC Total Length: 03:59:57	
Sharing	Notes:			Number of Trims: 1	
Video Sharing			1	Selected: 72 hours	
Video Playback			1	Delivered: 60.3 hours	
Video Download			Savo	Setup Rating:	1官:
Video Storage	1 apresentation of				
Export Options	Trenton Ave		E 42hd 5t		
Chart Export	In Ave		E 42	E	-
Billing					
	23rd				3 - 5 - 5
	80	624			N.

Count Name: Market and Lakeview SW Site Code: Start Date: 06/20/2019 Page No: 1

0 <del>.</del> .				oound St. hbound						ound St. tbound	inig i			Julu		oound St. nbound						ound St. bound			
Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
3:00 PM	0	394	10	0	0	404	0	0	0	0	0	0	42	0	0	0	1	42	6	0	0	0	0	6	452
3:15 PM	0	404	9	0	0	413	0	0	0	0	0	0	48	0	0	0	0	48	5	0	0	0	2	5	466
3:30 PM	1	383	9	0	0	393	0	0	0	0	0	0	35	0	0	0	0	35	5	0	0	0	1	5	433
3:45 PM	1	381	9	0	0	391	0	0	0	0	0	0	50	0	0	0	0	50	12	0	0	0	1	12	453
Hourly Total	2	1562	37	0	0	1601	0	0	0	0	0	0	175	0	0	0	1	175	28	0	0	0	4	28	1804
4:00 PM	2	390	8	0	2	400	0	0	0	0	0	0	42	0	0	0	0	42	7	0	0	0	5	7	449
4:15 PM	2	362	9	0	0	373	0	0	0	0	0	0	48	0	0	0	0	48	8	0	0	0	4	8	429
4:30 PM	1	430	7	0	0	438	0	0	0	0	0	0	44	0	0	0	0	44	3	0	0	0	2	3	485
4:45 PM	2	382	9	0	0	393	0	0	0	0	0	0	50	0	0	0	0	50	4	0	0	0	3	4	447
Hourly Total	7	1564	33	0	2	1604	0	0	0	0	0	0	184	0	0	0	0	184	22	0	0	0	14	22	1810
5:00 PM	1	436	9	0	0	446	0	0	0	0	0	0	46	0	0	0	0	46	9	0	0	1	0	10	502
5:15 PM	0	406	11	0	0	417	0	0	0	0	0	0	48	0	0	0	0	48	5	0	0	0	3	5	470
5:30 PM	3	397	12	0	0	412	0	0	0	0	0	0	59	0	0	0	0	59	5	0	0	0	2	5	476
5:45 PM	3	373	9	0	0	385	0	0	0	0	0	0	57	0	0	0	1	57	5	0	0	0	1	5	447
Hourly Total	7	1612	41	0	0	1660	0	0	0	0	0	0	210	0	0	0	1	210	24	0	0	1	6	25	1895
6:00 PM	4	370	9	0	0	383	0	0	0	0	0	0	46	0	0	0	0	46	14	0	0	0	2	14	443
6:15 PM	3	378	13	0	0	394	0	0	0	0	0	0	59	0	0	0	0	59	6	0	0	0	5	6	459
6:30 PM	2	350	13	0	0	365	0	0	0	0	0	0	46	0	0	0	1	46	7	0	0	0	2	7	418
6:45 PM	0	346	10	0	0	356	0	0	0	0	0	0	59	0	0	0	0	59	3	0	0	0	1	3	418
Hourly Total	9	1444	45	0	0	1498	0	0	0	0	0	0	210	0	0	0	1	210	30	0	0	0	10	30	1738
Grand Total	25	6182	156	0	2	6363	0	0	0	0	0	0	779	0	0	0	3	779	104	0	0	1	34	105	7247
Approach %	0.4	97.2	2.5	0.0	-	-	0.0	0.0	0.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	99.0	0.0	0.0	1.0	-	-	-
Total %	0.3	85.3	2.2	0.0	-	87.8	0.0	0.0	0.0	0.0	-	0.0	10.7	0.0	0.0	0.0	-	10.7	1.4	0.0	0.0	0.0	-	1.4	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	0.0	-	0.0	0.0
Cars & Light Goods	25	5885	156	0	-	6066	0	0	0	0	-	0	758	0	0	0	-	758	98	0	0	1	-	99	6923
% Cars & Light Goods	100.0	95.2	100.0	-	-	95.3	-	-	-	-	-	-	97.3	-	-	-	-	97.3	94.2	-	-	100.0	-	94.3	95.5
Buses	0	89	0	0	-	89	0	0	0	0	-	0	10	0	0	0	-	10	2	0	0	0	-	2	101
% Buses	0.0	1.4	0.0	-	-	1.4	-	-	-	-	-	-	1.3	-	-	-	-	1.3	1.9	-	-	0.0	-	1.9	1.4
Single-Unit Trucks	0	175	0	0	-	175	0	0	0	0	-	0	9	0	0	0	-	9	1	0	0	0	-	1	185
% Single-Unit Trucks	0.0	2.8	0.0	-	-	2.8	-	-	-	-	-	-	1.2	-	-	-	-	1.2	1.0	-	-	0.0	-	1.0	2.6
Articulated Trucks	0	33	0	0	-	33	0	0	0	0	-	0	1	0	0	0	-	1	3	0	0	0	-	3	37
% Articulated Trucks	0.0	0.5	0.0	-	-	0.5	-	-	-	-	-	-	0.1	-	-	-	-	0.1	2.9	-	-	0.0	-	2.9	0.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.1	-	-	-	-	0.1	0.0	-	-	0.0	-	0.0	0.0

## **Turning Movement Data**

Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	2.9	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	33	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	97.1	-	-

Count Name: Market and Lakeview SW Site Code: Start Date: 06/20/2019 Page No: 4

				ound St. Ibound				run	Westbo	bund St.		oun		Dulu	Northb	ound St.						ound St. cound			
Start Time	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:30 PM	1	430	7	0	0	438	0	0	0	0	0	0	44	0	0	0	0	44	3	0	0	0	2	3	485
4:45 PM	2	382	9	0	0	393	0	0	0	0	0	0	50	0	0	0	0	50	4	0	0	0	3	4	447
5:00 PM	1	436	9	0	0	446	0	0	0	0	0	0	46	0	0	0	0	46	9	0	0	1	0	10	502
5:15 PM	0	406	11	0	0	417	0	0	0	0	0	0	48	0	0	0	0	48	5	0	0	0	3	5	470
Total	4	1654	36	0	0	1694	0	0	0	0	0	0	188	0	0	0	0	188	21	0	0	1	8	22	1904
Approach %	0.2	97.6	2.1	0.0	-	-	0.0	0.0	0.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	95.5	0.0	0.0	4.5	-	-	-
Total %	0.2	86.9	1.9	0.0	-	89.0	0.0	0.0	0.0	0.0	-	0.0	9.9	0.0	0.0	0.0	-	9.9	1.1	0.0	0.0	0.1	-	1.2	-
PHF	0.500	0.948	0.818	0.000	-	0.950	0.000	0.000	0.000	0.000	-	0.000	0.940	0.000	0.000	0.000	-	0.940	0.583	0.000	0.000	0.250	-	0.550	0.948
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	0.0	-	0.0	0.0
Cars & Light Goods	4	1601	36	0	-	1641	0	0	0	0	-	0	183	0	0	0	-	183	21	0	0	1	-	22	1846
% Cars & Light Goods	100.0	96.8	100.0	-	-	96.9	-	-	-	-	-	-	97.3	-	-	-	-	97.3	100.0	-	-	100.0	-	100.0	97.0
Buses	0	15	0	0	-	15	0	0	0	0	-	0	2	0	0	0	-	2	0	0	0	0	-	0	17
% Buses	0.0	0.9	0.0	-	-	0.9	-	-	-	-	-	-	1.1	-	-	-	-	1.1	0.0	-	-	0.0	-	0.0	0.9
Single-Unit Trucks	0	31	0	0	-	31	0	0	0	0	-	0	3	0	0	0	-	3	0	0	0	0	-	0	34
% Single-Unit Trucks	0.0	1.9	0.0	-	-	1.8	-	-	-	-	-	-	1.6	-	-	-	-	1.6	0.0	-	-	0.0	-	0.0	1.8
Articulated Trucks	0	7	0	0	-	7	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	7
% Articulated Trucks	0.0	0.4	0.0	-	-	0.4	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	0.0	0.0	-	-	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	8	-	-
% Pedestrians												-	_	-				-	_	-	-	-	100.0	_	

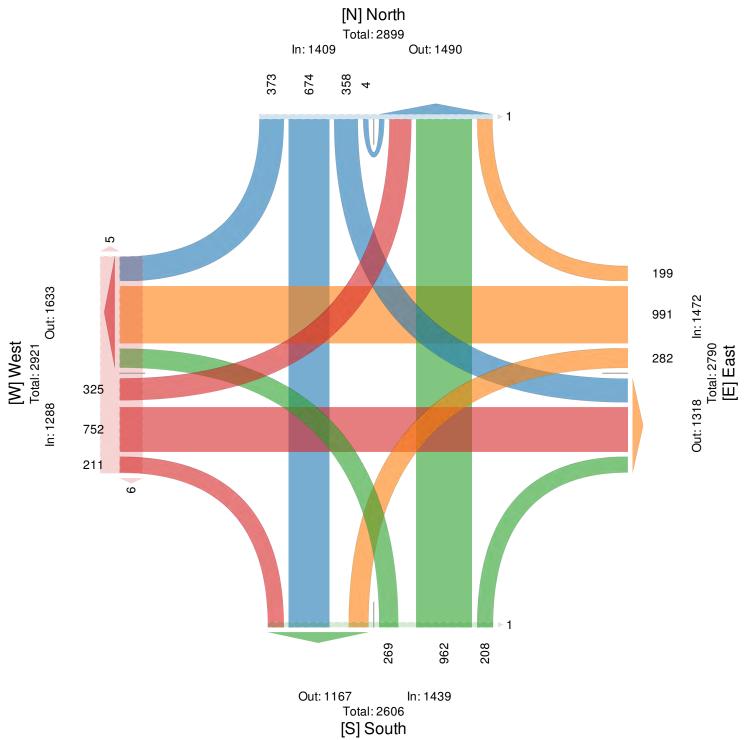
## Turning Movement Peak Hour Data (4:30 PM)

#### Lakeview-Crooks\_AM - TMC Thu May 23, 2019 Full Length (7 AM-10 AM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699711, Location: 40.892273, -74.13968

L 21 26 24 35 106 21 28 30 25 104 31 31 9 33 32 115 325 25.2% 0	21 26 24 35 106 21 28 30 25 104 31 19 33 32 115 325	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D D D D D D D D D D D D D D D D D D D	App 75 112 87 132 406 108 101 120 110 439 124 100 98 121 443 1288		d*         Int           0         3           0         4           0         4           0         5           0         17           4         5           0         4           7         20           2         3           0         4           17         3           0         4           171         56
21 26 24 35 106 21 28 30 25 104 31 19 33 32 115 325	21 26 24 35 106 21 28 30 25 104 31 19 33 32 115 325	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D D D D D D D D D D D D D D D D D D D	75 112 87 132 406 108 101 120 110 439 124 100 98 121 443		0     3       0     4       0     5       0     17       4     5       2     5       1     5       0     4       7     20       0     5       2     3       0     4       2     3       0     4       2     3       0     4       4     17
21 26 24 35 106 21 28 30 25 104 31 19 33 32 115 325	21 26 24 35 106 21 28 30 25 104 31 19 33 32 115 325	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D D D D D D D D D D D D D D D D D D D	75 112 87 132 406 108 101 120 110 439 124 100 98 121 443		0     3       0     4       0     5       0     17       4     5       2     5       1     5       0     4       7     20       0     5       2     3       0     4       2     3       0     4       2     3       0     4       4     17
26 24 35 106 21 28 30 25 104 31 19 33 32 115 325	26 24 35 106 21 28 30 25 104 31 19 33 32 115 325		D       D	112 87 132 406 108 101 120 110 439 124 100 98 121 443		0 4 0 5 0 17 4 5 2 5 1 5 0 4 7 20 0 5 2 4 2 3 0 4 4 17
24 35 106 21 28 30 25 104 31 19 33 32 115 325	24 35 106 21 28 30 25 104 31 19 33 32 115 325		D       D	87 132 406 108 101 120 110 439 124 100 98 121 443		0 4 0 5 0 17 4 5 2 5 1 5 0 4 7 20 0 5 2 4 2 3 0 4 4 17
35 106 21 28 30 25 104 31 19 33 32 115 325	35 106 21 28 30 25 104 31 19 33 32 115 325	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 00 00 00 00 00 00 00 00 00 00	132 406 108 101 120 110 439 124 100 98 121 443		0       55         0       17         4       55         2       55         1       55         0       4         7       20         0       55         2       4         2       33         0       4         4       17
106 21 28 30 25 104 31 19 33 32 115 325	106 21 28 30 25 104 31 19 33 32 115 325	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D D D D D D D D D D D D D D D D D D D	406 108 101 120 110 439 124 100 98 121 443		0       17         4       5         2       55         1       55         0       4         7       20         0       55         2       4         2       33         0       4         4       17
21 28 30 25 104 31 19 33 32 115 325	21 28 30 25 104 31 19 33 32 115 325	0 0 0 0 0 0 0 0 0 0 0	D D D D D D D D D D D D D D D D D D	108 101 120 110 439 124 100 98 121 443		4     5       2     5       1     5       0     4       7     20       0     5       2     4       2     3       0     4       4     17
28 30 25 104 31 19 33 32 115 325	28 30 25 104 31 19 33 32 115 325		D D D D D D D D D D D D D D D D	101 120 110 439 124 100 98 121 443		2 5 1 5 0 4 7 20 0 5 2 4 2 3 0 4 4 17
30 25 104 31 19 33 32 115 325	30 25 104 31 19 33 32 115 325	0 0 0 0 0 0 0	D D D D D D D D D D	120 110 439 124 100 98 121 443		1       5         0       4         7       20         0       5         2       4         2       3         0       4         17
25 104 31 19 33 32 115 325	25 104 31 19 33 32 115 325	0 0 0 0 0 0 0	D D D D D D D D	110 439 124 100 98 121 443	) )     	0     4       7     20       0     5       2     4       2     3       0     4       4     17
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31 19 33 32 115 325	31 19 33 32 115 325	0 0 0 0	D D D D D	124 100 98 121 443		0 5 2 4 2 3 0 4 4 17
19 33 32 115 325	19 33 32 115 325	000000000000000000000000000000000000000	D D D D	100 98 121 443		2 4 2 3 0 4 4 17
33 32 115 325	33 32 115 325	0 0 0	D D D	98 121 443		2 3 0 4 4 17
32 115 325	32 115 325	0	D D	121 443		0 <b>4</b> 4 <b>17</b>
115 325	115 325	0	0	443		4 17
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## Lakeview-Crooks\_AM - TMC

Thu May 23, 2019 Full Length (7 AM-10 AM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699711, Location: 40.892273, -74.13968



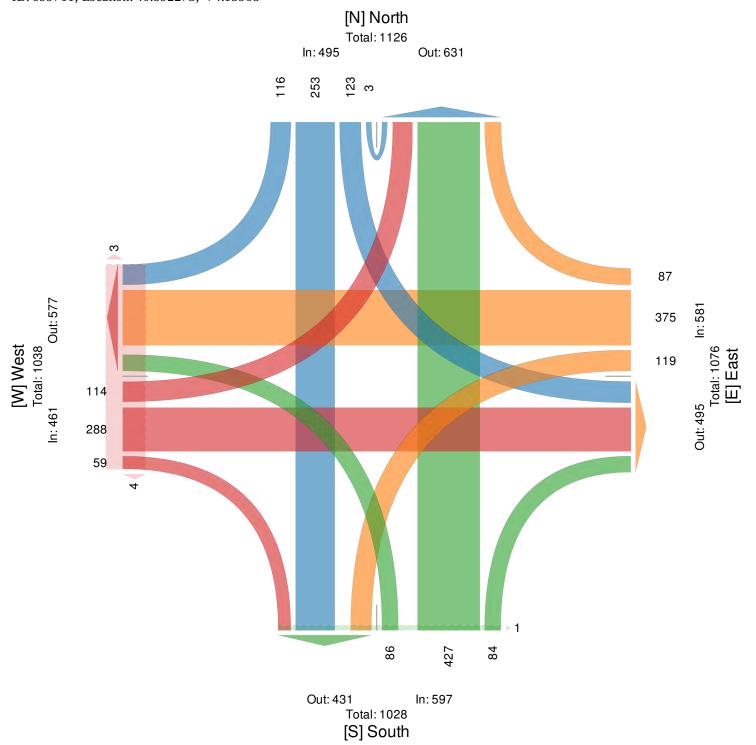
#### Lakeview-Crooks\_AM - TMC

Thu May 23, 2019 AM Peak (7:45 AM - 8:45 AM) - Overall Peak Hour All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699711, Location: 40.892273, -74.13968

Leg	North						East						South						West						
Dire ction	Southb	ound					Westbo	ınd					Northbo	und					Eastbou	und					
Time	R	Т	L	U	App I	₽ed*	R	Т	L	U	App P	ed*	R	Т	L	U	Арр	Ped*	R	Т	L	U	Арр	Ped*	Int
2019-05-23					446	0		105	2.4	0	450	0		0.5		0		0	10			0	40.0		- 40
7:45AM	29	54	31	2	116	0	23	105	24	0	152	0	22	97	24	0	143	0	16	81	35	0	132	0	543
8:00AM	28	51	29	0	108	0	21	91	27	0	139	0	28	123	20	0	171	0	16	71	21	0	108	4	526
8:15AM	27	72	29	1	129	0	27	93	40	0	160	0	17	116	20	0	153	1	11	62	28	0	101	2	543
8:30AM	32	76	34	0	142	0	16	86	28	0	130	0	17	91	22	0	130	0	16	74	30	0	120	1	522
Total	116	253	123	3	495	0	87	375	119	0	581	0	84	427	86	0	597	1	59	288	114	0	461	7	2134
% Approach	23.4%	51.1%	24.8%	0.6%	-	-	15.0% 6	64.5%	20.5% (	)%	-	-	14.1%	71.5%	14.4%	)%	-	-	12.8%	62.5%	24.7% (	)%	-	-	-
% Total	5.4%	11.9%	5.8%	0.1%	23.2%	-	4.1%	17.6%	5.6% (	)% 2	27.2%	-	3.9% 2	20.0%	4.0%	)% 2	28.0%	-	2.8%	13.5%	5.3% (	)%	21.6%	-	-
PHF	0.906	0.832	0.904	0.375	0.871	-	0.806	0.893	0.744	-	0.908	-	0.750	0.868	0.896	-	0.873	-	0.922	0.889	0.814	-	0.873	-	0.983
Motorcycles	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
%																									
Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%	0%	0% (		0%	-	0%	0%	0% (		0%	-	0%
Lights	104	233	122	3	462	-	84	362	118	0	564	-	80	415	81	0	576	-	52	271	103	0	426	-	2028
% Lights	89.7%	92.1%	99.2%	100%	93.3%	-	96.6% 9	96.5%	99.2% (	)% 9	97.1%	-	95.2% 9	97.2%	94.2%	)% 9	96.5%	-	88.1%	94.1%	90.4% (	)% 9	92.4%	-	95.0%
Single-Unit Trucks	5	6	0	0	11		2	10	0	0	12		2	5	2	0	9		4	14	8	0	26		58
% Single-Unit	5	0	0	0	11	-	2	10	0	0	12	-	2	Э	2	0	9	-	4	14	8	0	20	-	20
% Single-Onit Trucks	4.3%	2.4%	0%	0%	2.2%	-	2.3%	2.7%	0% (	)%	2.1%	-	2.4%	1.2%	2.3%	)%	1.5%	-	6.8%	4.9%	7.0% (	)%	5.6%	-	2.7%
Artic ula te d																									
T ruc ks	4	2	0	0	6	-	0	0	1	0	1	-	0	0	0	0	0	-	0	0	2	0	2	-	9
% Artic ulate d																									
T ruc ks	3.4%		0%	0%	1.2%	-	0%		0.8% (			-	0%	0%	0% (		0%	-	0%	0%				-	0.4%
Buses	3	12	1	0	16	-	1	3	0	0	4	-	2	7	-	0	12	-	3	3	-	0	7	-	39
% Buses	2.6%	4.7%	0.8%	0%	3.2%	-	1.1%	0.8%	0% (	)%	0.7%	-	2.4%	1.6%	3.5%	)%	2.0%	-	5.1%	1.0%	0.9% (	)%	1.5%	-	1.8%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles		-	-	-	-			-	-	-	-			-	-	-	-		-	-	-	-	-		-
on Road	0%	0%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%	0%	0% (	)%	0%	-	0%	0%	0% (	)%	0%	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	100%	-	-	-	-	- 1	00%	-

## Lakeview-Crooks\_AM - TMC

Thu May 23, 2019 AM Peak (7:45 AM - 8:45 AM) - Overall Peak Hour All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699711, Location: 40.892273, -74.13968

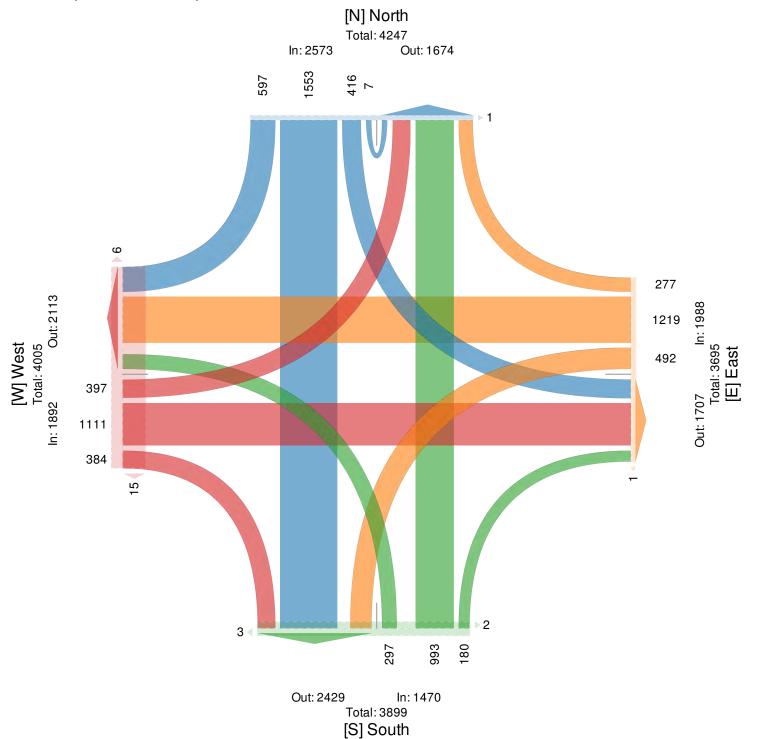


#### Lakeview-Crooks\_PM - TMC Wed May 22, 2019 Full Length (4 PM-7 PM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699414, Location: 40.892273, -74.13968

DirectorDirecto	Leg	North						East						South						West						
2019-522       71	Direction	Southbo	ound					Westbo	und					Northbo	ound					Eastbou	ınd					
44.10PM       41.1       102       44       1       188       0       20       0       106       0       17       0	Time	R	Т	L	U	Арр	Ped*	R	Т	L	U	Арр	Ped*	R	Т	L	U	Арр	Ped*	R	Т	L	U	Арр	Ped*	Int
4:310PM       54       120       30       0       210       100       90       83       30       0       122       0       35       98       29       0       145       2       633         4:35PM       40       118       32       1       191       0       20       95       31       0       145       14       78       19       0       175       0       635       34       0       126       0       43       143       2       788       0       131       45       32       0       632       2       227       55       55       60       133       415       32       0       220       18       0       160       1       10       120       34       0       166       0       98       31       0       10       157       173       55       163       140       0       132       0       33       95       35       0       163       26       98       33       0       150       173       55       163       34       0       125       385       125       163       36       98       35       0       160       160       <																										
4:43 PM       57       111       37       0       205       0       19       98       41       0       156       0       121       34       0       121       131       85       29       0       457       0       60         10ndy Tool       192       451       143       2       101       160       0       467       1       151       358       123       0       622       2       227         5:00 PM       60       133       41       0       245       12       0       12       09       133       13       93       146       2       755         5:15 PM       43       145       30       12       0       12       0       133       1       0       164       2       164       25       130       13       1       164       30       15       1       175       16       128       0       128       12       12       12       12       12       12       128       12       12       12       12       12       13       13       15       16       16       12       10       120       13       13       13 <t< td=""><td>4:00PM</td><td>41</td><td>102</td><td>44</td><td>1</td><td></td><td>0</td><td>33</td><td>98</td><td></td><td>0</td><td>166</td><td>0</td><td>17</td><td>69</td><td>23</td><td>0</td><td></td><td>0</td><td>49</td><td>82</td><td>37</td><td>0</td><td>168</td><td></td><td>631</td></t<>	4:00PM	41	102	44	1		0	33	98		0	166	0	17	69	23	0		0	49	82	37	0	168		631
4463PX       440       118       32       1       191       0       0       9       9       9       0       110       0       36       93       28       0       177       0       607         Honiy Totil       192       45       143       2       788       0       224       0       0       640       0       13       487       31       0       182       0       10       0       141       0       151       358       164       0       141       0       141       0       141       0       133       0       25       175       55       55       164       34       0       126       0       141       0       133       0       155       165       141       0       33       9       34       0       165       2       673       141       0       33       9       34       0       165       2       673       141       133       185       0       165       0       165       10       155       165       163       127       1       153       165       165       163       10       125       166       164       16	4:15PM	54	120	30	0	204	0	21	110	39	0	170	0	9	83	30	0	122	0	35	98	29	0	162	0	658
Hourly Total       192       451       143       2       788       0       93       401       146       0       640       1       49       312       106       0       467       1       115       358       123       0       632       2       2       2527         5:00PM       60       133       43       145       0       234       12       0       10       12       0       10       113       1       33       93       340       174       0       179       0       12       0       133       1       33       93       35       15       1       735       1       735       0       61       36       6       0       33       5       15       16       7       281       33       0       15       14       0       25       16       7       291       13       13       13       15       1       125       386       145       0       656       7       2811         6.00P       53       14       33       30       30       30       30       30       13       13       13       33       30       13       13	4:30PM	57	111	37	0	205	0	19	98	41	0	158	0	9	82	34	0	125	1	31	85	29	0	145	2	633
5:00 PM       60       133       41       0       24       0       26       12       48       0       16       0       12       9       9       9       0       121       0       34       89       41       0       164       0       163       13       41       0       167       0       12       85       16       0       133       10       159       16       0       133       10       159       16       0       181       0       164       0       166       163       16       0       184       0       164       0       159       1       33       9       33       0       159       1       26       67       261       28       83       0       124       0       35       12       0       133       1       150       150       141       36       35       12       0       133       0       133       1       150       133       128       130       130       130       130       130       130       130       130       130       130       130       130       130       130       130       130       130       130 <t< td=""><td>4:45PM</td><td>40</td><td>118</td><td>32</td><td>1</td><td>191</td><td>0</td><td>20</td><td>95</td><td>31</td><td>0</td><td>146</td><td>1</td><td>14</td><td>78</td><td>19</td><td>0</td><td>111</td><td>0</td><td>36</td><td>93</td><td>28</td><td>0</td><td>157</td><td></td><td>605</td></t<>	4:45PM	40	118	32	1	191	0	20	95	31	0	146	1	14	78	19	0	111	0	36	93	28	0	157		605
5:15PM       43       145       32       0       220       0       20       118       41       0       179       0       28       51       6       0       113       11       33       99       38       0       170       2       682         5:30PM       50       164       30       3       30       0       170       20       88       30       0       141       0       233       95       163       31       0       150       1       735         6:00PM       55       144       0       49       1       0       707       0       0       16       82       24       0       122       1       28       93       30       165       2       665       7       737       75       48       0       170       0       16       82       24       0       122       1       28       93       30       0       16       82       10       131       13       83       32       0       148       0       19       82       10       121       10       128       13       13       33       33       33       32       144 <td>Hourly Total</td> <td>192</td> <td>451</td> <td>143</td> <td>2</td> <td>788</td> <td>0</td> <td>93</td> <td>401</td> <td>146</td> <td>0</td> <td>640</td> <td>1</td> <td>49</td> <td>312</td> <td>106</td> <td>0</td> <td>467</td> <td>1</td> <td>151</td> <td>358</td> <td>123</td> <td>0</td> <td>632</td> <td>2</td> <td>2527</td>	Hourly Total	192	451	143	2	788	0	93	401	146	0	640	1	49	312	106	0	467	1	151	358	123	0	632	2	2527
5:30 PM       58       164       30       1       23       0       29       113       40       0       182       0       28       83       30       0       141       0       25       103       31       0       159       1       735         5:45 PM       59       142       49       1       96       433       174       0       703       125       88       31       0       128       0       33       95       35       0       165       2       7281         6:00PM       55       146       34       0       27       95       48       0       175       0       175       0       172       1       28       99       38       0       165       2       665       7       783       645       0       11       1       38       32       0       165       2       665       7       783       122       13       13       1       165       1       165       1       165       1       165       1       165       1       163       1       160       1       16       16       12       12       1       15       16	5:00PM	60	133	41	0	234	0	26	122	48	0	196	0	12	90	19	0	121	0	34	89	41	0	164	2	715
5:45PM       5:41       39       3       242       1       21       80       45       0       146       0       98       31       0       128       0       33       95       35       0       163       2       679         Hourly Total       220       583       142       4       99       31       0       125       0       220       0       75       0       235       0       220       10       175       0       20       0       220       0       175       0       23       0       126       0       160       7       679         6:15PM       37       108       37       0       128       0       128       0       128       0       128       0       128       0       128       0       128       0       128       0       128       0       138       32       0       148       2       655         66:30PM       0       0       0       0       0       0       0       0       0       0       0       0       0       148       2       655       650       33       102       61       61       9	5:15PM	43	145	32	0	220	0	20	118	41	0	179	0	12	85	16	0	113	1	33	99	38	0	170	2	682
Hourly Total       220       583       142       4       949       1       96       433       174       0       703       0       61       346       96       0       503       1       125       386       145       0       656       7       2811         6:00PM       55       146       34       0       235       1       208       0       175       0       20       83       24       0       127       1       30       99       31       0       160       7       693         630PM       54       108       33       10       148       0       152       0       127       0       43       0       108       32       0       11       33       32       0       108       32       0       108       32       0       108       32       0       108       32       0       108       0	5:30PM	58	164	30	1	253	0	29	113	40	0	182	0	28	83	30	0	141	0	25	103	31	0	159	1	735
6:00PM       55       146       34       0       235       0       22       102       51       0       175       0       20       83       24       0       127       1       30       99       31       0       160       7       697         6:15PM       37       155       35       1       208       0       157       16       62       24       0       122       1       28       99       38       0       165       2       655         6:30PM       54       108       33       0       195       0       18       99       31       148       0       19       82       20       1030       10       18       33       32       0       148       2       615         Hourly Total       153       416       7       2533       416       7       2533       416       7       2533       416       7       2533       416       7       2533       416       7       2533       416       7       2533       416       7       4237       4218       418       40       40       40       40       40       40       40       40	5:45PM	59	141	39	3	242	1	21	80	45	0	146	0	9	88	31	0	128	0	33	95	35	0	163	2	679
6:15PM       37       135       35       1       208       0       27       95       48       0       170       0       12       1       28       99       38       0       165       2       665         63:0PM       39       10       188       0       18       9       10       18       0       19       82       20       0       121       1       38       32       0       148       2       615       70       335       95       0       121       1       38       32       0       148       2       615       70       335       95       0	Hourly Total	220	583	142	4	949	1	96	433	174	0	703	0	61	346	96	0	503	1	125	386	145	0	656	7	2811
6:30 PM       54       108       33       0       195       0       12       89       42       0       152       0       15       88       27       0       130       0       17       86       28       0       131       1       668         6:45 PM       130       130       136       0       185       519       11       133       83       32       0       148       2       615         7:00 PM       0	6:00PM	55	146	34	0	235	0	22	102	51	0	175	0	20	83	24	0	127	1	30	99	31	0	160	7	697
6:45PM       39       130       29       0       188       9       31       0       148       0       19       82       20       0       121       1       33       83       32       0       148       22       615         Hourly Total       10       0<	6:15PM	37	135	35	1	208	0	27	95	48	0	170	0	16	82	24	0	122	1	28	99	38	0	165	2	665
Hourly Total       185       519       131       1       836       0       86       385       172       0       645       0       70       335       95       0       500       3       108       367       129       0       604       10       0<	6:30PM	54	108	33	0	195	0	21	89	42	0	152	0	15	88	27	0	130	0	17	86	28	0	131	1	608
7:00PM       0 <td>6:45PM</td> <td>39</td> <td>130</td> <td>29</td> <td>0</td> <td>198</td> <td>0</td> <td>18</td> <td>99</td> <td>31</td> <td>0</td> <td>148</td> <td>0</td> <td>19</td> <td>82</td> <td>20</td> <td>0</td> <td>121</td> <td>1</td> <td>33</td> <td>83</td> <td>32</td> <td>0</td> <td>148</td> <td>2</td> <td>615</td>	6:45PM	39	130	29	0	198	0	18	99	31	0	148	0	19	82	20	0	121	1	33	83	32	0	148	2	615
Hourly Total       0 </td <td>Hourly Total</td> <td>185</td> <td>519</td> <td>131</td> <td>1</td> <td>836</td> <td>0</td> <td>88</td> <td>385</td> <td>172</td> <td>0</td> <td>645</td> <td>0</td> <td>70</td> <td>335</td> <td>95</td> <td>0</td> <td>500</td> <td>3</td> <td>108</td> <td>367</td> <td>129</td> <td>0</td> <td>604</td> <td>12</td> <td>2585</td>	Hourly Total	185	519	131	1	836	0	88	385	172	0	645	0	70	335	95	0	500	3	108	367	129	0	604	12	2585
Total         597         1553         416         7         2573         1         277         12         492         0         180         933         297         0         1470         5         384         1111         397         0         1892         21         7923           % Approach         2.2.%         6.4.%         16.%         0.3.%         -         13.%         6.2.%         0.%         2.5.%         3.7.%         0.8         18.6%         0         2.0.%         5.8.%         2.0.%         0.88         1111         397         0         1892         2.0           % Approach         5.3.%         1.6.%         5.3.%         1.5.%         2.5.%         1.5.%         2.2.%         0.8         1.5.%         2.0.%         0.8         2.0.%         0.8         1.5.%         2.0.%         0.8         0.	7:00PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M Approach       23.2%       60.4%       16.2%       0.3%       -       13.9%       61.3%       24.7%       0%       -       12.2%       67.6%       20.2%       0%       18.6%       5.3%       21.0%       0       23.9%       0.1%       32.5%       3.5%       15.4%       6.2%       0%       25.1%       2.3%       12.5%       37.6%       0%       18.6%       -       48.8%       14.0%       5.0%       0%       23.9%       0       7         Motorcycles       0.2%       0.1%       0.9%       0.1%       0.1%       0.1%       0.1%       0.1%       0.1%       0.2%       0.0%       0.1%	Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Total       7.5%       19.6%       5.3%       0.1%       32.5%       15.4%       6.2%       92.5%       2.3%       12.5%       3.7%       18.6%       48.6%       4.8%       14.0%       5.0%       0.239,       0       7         Motorcycles       0 <t< td=""><td>Total</td><td>597</td><td>1553</td><td>416</td><td>7</td><td>2573</td><td>1</td><td>277</td><td>1219</td><td>492</td><td>0</td><td>1988</td><td>1</td><td>180</td><td>993</td><td>297</td><td>0</td><td>1470</td><td>5</td><td>384</td><td>1111</td><td>397</td><td>0</td><td>1892</td><td>21</td><td>7923</td></t<>	Total	597	1553	416	7	2573	1	277	1219	492	0	1988	1	180	993	297	0	1470	5	384	1111	397	0	1892	21	7923
Motorcycles       1       1       0       0       2       0       0       2       0       0       2       0       0       1       0 <th< td=""><td>% Approach</td><td>23.2%</td><td>60.4%</td><td>16.2%</td><td>0.3%</td><td>-</td><td>-</td><td>13.9%</td><td>61.3% 2</td><td>24.7%</td><td>)%</td><td>-</td><td>-</td><td>12.2%</td><td>67.6%</td><td>20.2%</td><td>0%</td><td>-</td><td>-</td><td>20.3%</td><td>58.7%</td><td>21.0% (</td><td>)%</td><td>-</td><td>-</td><td>-</td></th<>	% Approach	23.2%	60.4%	16.2%	0.3%	-	-	13.9%	61.3% 2	24.7%	)%	-	-	12.2%	67.6%	20.2%	0%	-	-	20.3%	58.7%	21.0% (	)%	-	-	-
$^{1}$ $^{1}$	% Total	7.5%	19.6%	5.3%	0.1%	32.5%	-	3.5%	15.4%	6.2%	)%	25.1%	-	2.3%	12.5%	3.7%	0%	18.6%	-	4.8%	14.0%	5.0% (	)% 2	23.9%	-	-
Motorcycles       0.2%       0.1%       0.9%       0.1% <td>Motorcycles</td> <td>1</td> <td>1</td> <td>0</td> <td>0</td> <td>2</td> <td>-</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>1</td> <td>-</td> <td>0</td> <td>2</td> <td>0</td> <td>0</td> <td>2</td> <td>-</td> <td>0</td> <td>1</td> <td>1</td> <td>0</td> <td>2</td> <td>-</td> <td>7</td>	Motorcycles	1	1	0	0	2	-	0	1	0	0	1	-	0	2	0	0	2	-	0	1	1	0	2	-	7
Lights       544       1517       409       7       2477       276       1183       487       0       1946       176       97.4       283       0       1433       -       365       1084       386       0       1835       -       7691         % Lights       91.1%       97.7%       98.3%       100%       96.3%       97.0%       99.0%       97.9%       97.9%       98.1%       97.5%       97.5%       95.1%       97.6%       97.2%       97.3%	%																									
We find       91.1%       97.7%       98.3%       100%       96.%       97.0% <th< td=""><td>Motorcycles</td><td>0.2%</td><td>0.1%</td><td>0%</td><td>0%</td><td>0.1%</td><td>-</td><td>0%</td><td>0.1%</td><td>0% (</td><td>)%</td><td>0.1%</td><td>-</td><td>0%</td><td>0.2%</td><td>0%</td><td>0%</td><td>0.1%</td><td>-</td><td>0%</td><td>0.1%</td><td>0.3% (</td><td>)%</td><td>0.1%</td><td>-</td><td>0.1%</td></th<>	Motorcycles	0.2%	0.1%	0%	0%	0.1%	-	0%	0.1%	0% (	)%	0.1%	-	0%	0.2%	0%	0%	0.1%	-	0%	0.1%	0.3% (	)%	0.1%	-	0.1%
Single-Unit       4       0       68       0       29       4       0       33       -       4       9       2       0       15       -       66       19       5       0       30       -       146         % Single-Unit       7.5%       1.2%       1.0%       0%       2.6%       -       0%       2.4%       0.8%       0%       1.7%       2.2%       0.9%       0.7%       0%       1.0%       1.3%       0%       3.6%       -       1.6%       1.7%       1.3%       0%       1.6%       1.4%         Articulated       7       0       2       0       9       -       0       4       0       0       4       -       00       0       0       0       0       1.0%       1.3%       0%       1.6%       1.4%       1	Lights	544	1517	409	7	2477	-	276	1183	487	0	1946	-	176	974	283	0	1433	-	365	1084	386	0	1835	-	7691
Truck       45       19       4       0       68       -       0       29       4       0       33       -       44       9       2       0       15       -       66       19       5       0       30        146         % Single-Uni Trucks       7.5%       1.2%       1.0%       0%       2.4%       0.8%       0%       1.7%       -       2.2%       0.9%       0.7%       0%       1.6%       1.7%       1.3%       0%       0%       1.6%       1.6%       1.7%       1.6%	% Lights	91.1%	97.7%	98.3% 1	100%	96.3%	-	99.6%	97.0% 9	99.0%	)% (	97.9%	-	97.8%	98.1%	95.3%	0% 9	97.5%	-	95.1%	97.6%	97.2% (	)% 9	97.0%	-	97.1%
W Single-Unit       7.5%       1.2%       1.0%       0.9%       2.6%       0       2.4%       0.8%       9       1.7%       0.9%       0.9%       0.7%       0.9%       1.0%       1.0%       1.3%       0.9%       1.6%       1.7%       1.3%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.7%       0.9%       0.9%       0.7%       0.9%       0.7%       0.9%       0.9%       0.7%       0.9%	Single -Unit																									
Truck       7.5%       1.2%       1.0%       0.9%       2.6%       0       0.4%       0.8%       0.7       0.9%       0.9%       0.7%       0       1.6%       1.7%       1.3%       0.9%       1.6%	T ruc ks	45	19	4	0	68	-	0	29	4	0	33	-	4	9	2	0	15	-	6	19	5	0	30	-	146
Articulated       7       0       2       0       9       0       4       0       0       4       0 <th< td=""><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	0																									
Trucks $7$ $0$ $2$ $0$ $9$ $0$ $4$ $0$ $4$ $0$ <	-	7.5%	1.2%	1.0%	0%	2.6%	-	0%	2.4%	0.8%	)%	1.7%	-	2.2%	0.9%	0.7%	)%	1.0%	-	1.6%	1.7%	1.3% (	)%	1.6%	-	1.8%
Articulated Trucks       1.2%       0%       0.5%       0%       0.3%       0%       0%       0.2%       0.2%       0%		7	0	2	0	0		0	4	0	0	4		0	0	0	0	0		, n	c	4	0	10		25
Truck       1.2%       0.%       0.5%       0.8       0.3%       0.6%       0.2%       0.2%       0.6%		/	0	2	0	9	-	0	4	0	0	4	-	0	0	0	0	U	-	2	0	4	0	12	-	25
Buses       0       16       1       0       17       -       1       2       1       0       4       -       0       8       12       0       20       -       11       1       1       1       1       1       1       0       13       0       14         % Buses       0%       1.0%       0.2%		1.2%	0%	0.5%	0%	0.3%	-	0%	0.3%	0% (	)%	0.2%	_	0%	0%	0%	0%	0%	-	0.5%	0.5%	1.0% (	)%	0.6%	_	0.3%
% Buses       0.9       1.09       0.29       0.9       0.79       0.28 <th0.28< th=""> <th0.28< th="">       0.28</th0.28<></th0.28<>							-						-						-						-	
Bicycles on Road         0			-	-	-		-	-			-		-				-	-	-			-	-	-	-	-
Road       0	-	0 / 0	1.0 /0	0.270	0.70	0.7 /0		0.470	0.270	0.270	570	0.2 /0		0.70	0.070	4.070	570	1.4 /0		2.370	0.170	0.570 (	570	0.7 /0		0.7 70
on Road         0% <t< td=""><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>-</td><td>0</td></t<>		0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
Pedestrians         -         -         -         -         -         -         -         -         -         21	% Bicycles																									
	on Road	0%	0%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%
% Pedestrians	Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	5	-	-	-	-	-	21	
	% Pedestrians	-	-	-	-	-	100%	-	-	-	-	- 1	00%	-	-	-	-	- 1	00%	-	-	-	-	- 1	00%	-

## Lakeview-Crooks\_PM - TMC

Wed May 22, 2019 Full Length (4 PM-7 PM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699414, Location: 40.892273, -74.13968



#### Lakeview-Crooks\_PM - TMC

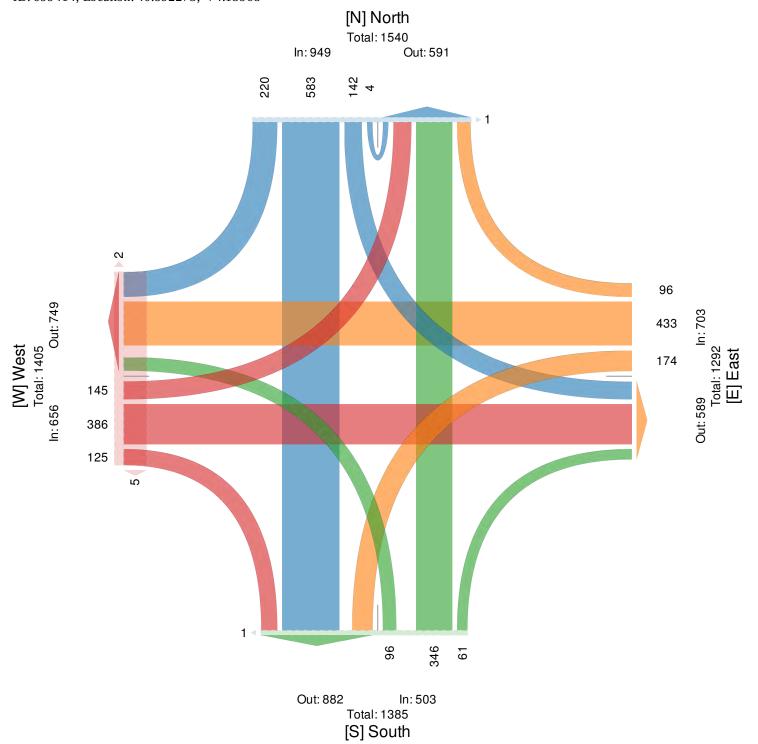
Wed May 22, 2019 PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699414, Location: 40.892273, -74.13968

8	North						East						South						West						
Dire ction	Southb	ound					Westbo	und					Northb	ound					Eastboı	ınd					
Time	R	Т	L	U	Арр	Ped*	R	Т	L	U	App P	e d *	R	Т	L	U	Арр	Ped*	R	Т	L	U	Арр	Ped*	Int
2019-05-22																									
5:00PM	60	133	41	0	234	0	26	122	48	0	196	0	12	90	19	0	121	0	34	89	41	0	164	2	715
5:15PM	43	145	32	0	220	0	20	118	41	0	179	0	12	85	16	0	113	1	33	99	38	0	170	2	682
5:30PM	58	164	30	1	253	0	29	113	40	0	182	0	28	83	30	0	14 1	0	25	103	31	0	159	1	735
5:45PM	59	141	39	3	242	1	21	80	45	0	146	0	9	88	31	0	128	0	33	95	35	0	163	2	679
Total	220	583	142	4	949	1	96	433	174	0	703	0	61	346	96	0	503	1	125	386	145	0	656	7	2811
% Approach	23.2%	61.4%	15.0%	0.4%	-	-	13.7%	61.6%	24.8%	0%	-	-	12.1%	68.8%	19.1% (	)%	-	-	19.1%	58.8%	22.1%	0%	-	-	-
% Total	7.8%	20.7%	5.1%	0.1%	33.8%	-	3.4%	15.4%	6.2%	0%	25.0%	-	2.2%	12.3%	3.4% (	)%	17.9%	-	4.4%	13.7%	5.2%	0% 2	23.3%	-	-
PHF	0.917	0.889	0.866	0.333	0.938	-	0.828	0.887	0.906	-	0.897	-	0.545	0.961	0.774	-	0.892	-	0.919	0.937	0.884	-	0.965	-	0.956
Motorc ycles	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	1	-	1
%																									
Motorc ycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0% 0	)%	0%	-	0%	0%	0.7%	0%	0.2%	-	0%
Lights	201	575	141	4	921	-	95	423	172	0	690	-	61	337	92	0	490	-	120	376	141	0	637	-	2738
% Lights	91.4%	98.6%	99.3%	100%	97.0%	-	99.0%	97.7%	98.9%	0% 9	98.2%	-	100%	97.4%	95.8% (	)% 9	97.4%	-	96.0%	97.4%	97.2%	0%	97.1%	-	97.4%
Single-Unit																									
T ruc ks	18	3	0	0	21	-	0	8	2	0	10	-	0	6	0	0	6	-	1	8	1	0	10	-	47
% Single-Unit																									
Trucks	8.2%	0.5%	0%	0%	2.2%	-	0%	1.8%	1.1%	0%	1.4 %	-	0%	1.7%	0% (	)%	1.2%	-	0.8%	2.1%	0.7%	0%	1.5%	-	1.7%
Articulated Trucks	1	0	1	0	2		0	1	0	0	1		0	0	0	0	0		0	2	Э	0	4		7
% Articulated	1	0	1	0	2	-	0	1	0	0	1	-	0	0	0	0	U		0	2	2	0		-	
Trucks	0.5%	0%	0.7%	0%	0.2%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0% (	)%	0%	-	0%	0.5%	1.4%	0%	0.6%	-	0.2%
Buses	0	5	0	0	5	-	1	1	0	0	2	-	0	3	4	0	7	-	4	0	0	0	4	-	18
% Buses	0%	0.9%	0%	0%	0.5%	-	1.0%	0.2%	0%	0%	0.3%	-	0%	0.9%	4.2% (	)%	1.4 %	-	3.2%	0%	0%	0%	0.6%	-	0.6%
Bicycles on			0	0							•			0	0										
Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	- 3	100%	-	-		-	-	-	-	-	-	-	-	100%	-	-	-	-	- 1	.00%	-

## Lakeview-Crooks\_PM - TMC

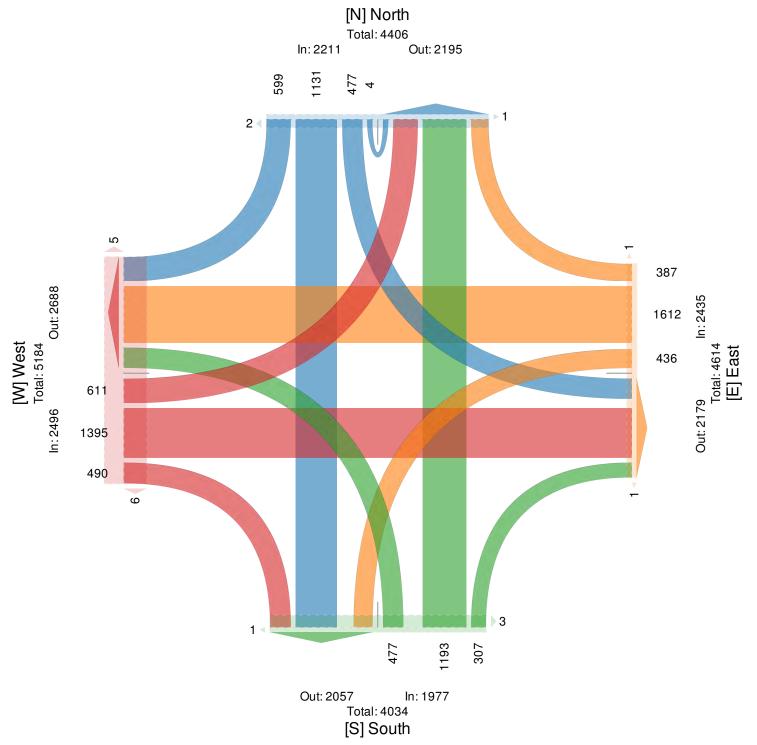
Wed May 22, 2019 PM Peak (5 PM - 6 PM) - Overall Peak Hour All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699414, Location: 40.892273, -74.13968



#### Lakeview-Crooks\_Sat - TMC Sat Jun 8, 2019 Full Length (10 AM-2 PM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699734, Location: 40.892273, -74.13968

Leg	North						East						South						West						
Dire ction	Southb	ound					Westbo	und					Northbo	ound					Eastbou	ınd					
Time	R	Т	L	U	Арр	Pe d*	R	Т	L	U	App	Ped*	R	Т	L	U	Арр	Ped*	R	Т	L	U	Арр	Pe d*	Int
2019-06-08 10:00AM	30	64	19	0	113	1	23	100	23	0	146	0	18	59	24	0	101	0	26	94	25	0	145	1	505
10:15AM	38	58	27	0	123	0	31	92	30	0	153	2	20	72	31	0	123	0	24	73	28	0	125	0	524
10:30AM	31	68	39	0	138	0	23	94	27	0	144	0	21	78	32	0	131	0	32	82	37	0	151	0	564
10:45AM	35	82	31	1	149	0	26	96	24	0	146	0	19	71	33	0	123	1	29	67	36	0	132	3	550
Hourly Total	134	272	116	1	523	1	103	382	104	0	589	2	78	280	120	0	478	1	111	316	126	0	553	4	2143
11:00AM	33	57	19	0	109	0	27	80	20	0	127	0	16	78	29	0	123	1	33	77	36	0	146	0	505
11:15AM	35	62	32	0	129	1	24	98	32	0	154	0	22	64	30	0	116	0	27	104	25	0	156	0	555
11:30AM	27	56	33	0	116	1	23	100	25	0	148	0	20	77	28	0	125	0	29	87	35	0	151	0	540
11:45AM	27	48	34	0	109	0	22	114	38	0	174	0	19	68	36	0	123	0	28	72	36	0	136	0	542
Hourly Total	122	223	118	0	463	2	96	392	115	0	603	0	77	287	123	0	487	1	117	340	132	0	589	0	2142
12:00PM	31	72	39	1	143	0	29	106	21	0	156	0	22	81	31	0	134	1	38	97	47	0	182	0	615
12:15PM	51	79	30	0	160	0	19	104	31	0	154	0	28	69	24	0	121	0	40	92	40	0	172	1	607
12:30PM	33	80	28	0	141	0	20	106	28	0	154	0	18	80	28	0	126	0	30	104	40	0	174	2	595
12:45PM	54	56	30	0	140	0	25	118	28	0	171	0	11	82	29	0	122	1	33	95	46	0	174	1	607
Hourly Total	169	287	127	1	584	0	93	434	108	0	635	0	79	312	112	0	503	2	141	388	173	0	702	4	2424
1:00PM	38	86	23	2	149	0	18	99	25	0	142	0	25	67	25	0	117	0	27	87	50	0	164	0	572
1:15PM	40	89	33	0	162	0	23	89	21	0	133	0	11	73	29	0	113	0	22	86	41	0	149	3	557
1:30PM	48	84	31	0	163	0	25	128	35	0	188	0	15	89	38	0	142	0	33	101	45	0	179	0	672
1:45PM	48	90	29	0	167	0	29	88	28	0	145	0	22	85	30	0	137	0	39	77	44	0	160	0	609
Hourly Total	174	349	116	2	641	0	95	404	109	0	608	0	73	314	122	0	509	0	121	351	180	0	652	3	2410
Total	599	1131	477	4	2211	3	387	1612	436	0	2435	2	307	1193	477	0	1977	4	490	1395	611	0	2496	11	9119
% Approach	27.1%	51.2%	21.6%	0.2%	-	-	15.9% (	66.2%	17.9% (	)%	-	-	15.5%	60.3%	24.1% (	0%	-	-	19.6%	55.9%	24.5% (	)%	-	-	-
% Total	6.6%	12.4%	5.2%	0%	24.2%	-	4.2%	17.7%	4.8% (	)% :	26.7%	-	3.4%	13.1%	5.2% (	0%	21.7%	-	5.4%	15.3%	6.7% (	)% 2	7.4%	-	-
Motorcycles	0	2	0	0	2	-	0	3	0	0	3	-	1	4	2	0	7	-	0	0	0	0	0	-	12
% Motorcycles	0%	0.2%	0%	0%	0.1%	-	0%	0.2%	0% (	)%	0.1%	-	0.3%	0.3%	0.4% (	0%	0.4%	_	0%	0%	0% (	)%	0%	-	0.1%
Lights	576	1108	471	4	2159	-	381	1588	433	0	2402	-	299	1171	464	0	1934	-	479	1380	599		2458	-	8953
% Lights			98.7% 1			-	98.4% 9					-	97.4%		-			-	97.8%					-	98.2%
Single -Unit																									
Trucks	18	13	6	0	37	-	6	18	2	0	26	-	6	14	3	0	23	-	2	12	5	0	19	-	105
% Single-Unit																									
Trucks	3.0%	1.1%	1.3%	0%	1.7%	-	1.6%	1.1%	0.5% (	)%	1.1%	-	2.0%	1.2%	0.6%	0%	1.2%	-	0.4%	0.9%	0.8% (	)%	0.8%	-	1.2%
Articulated Trucks	3	1	0	0	4	-	0	3	0	0	3	-	0	0	0	0	0	_	0	2	6	0	8	_	15
% Articulated		1	5	5	7			5	5	0	5			0	5	0	v			2	5	0	v	-	15
Trucks	0.5%	0.1%	0%	0%	0.2%	-	0%	0.2%	0% (	)%	0.1%	-	0%	0%	0% (	0%	0%	-	0%	0.1%	1.0% (	)%	0.3%	-	0.2%
Buses	2	6	0	0	8	-	0	0	1	0	1	-	1	3	8	0	12	-	9	1	1	0	11	-	32
% Buses	0.3%	0.5%	0%	0%	0.4 %	-	0%	0%	0.2% (	)%	0 %	-	0.3%	0.3%	1.7% (	0%	0.6%	-	1.8%	0.1%	0.2% (	)%	0.4%	-	0.4%
Bicycles on Bood		1	0	0	1		0	0	0	0	0		0	1	0	0	1		0	0	0	0	0		2
Road % Bicycles	0	1	0	0	1	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	2
on Road	0%	0.1%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%	0.1%	0% (	0%	0.1%	-	0%	0%	0% (	)%	0%	-	0%
Pedestrians	-	-				3				-	-	2		-	-	-	-	4	-	-	-	-	-	11	2.0
% Pedestrians	-		-	-	- 1	.00%	-		-	-	- 1	00%	-	-	-	-	- 1	.00%	-	-	-	-	- 1	00%	-
	1				-						-						-						-		

Sat Jun 8, 2019 Full Length (10 AM-2 PM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699734, Location: 40.892273, -74.13968



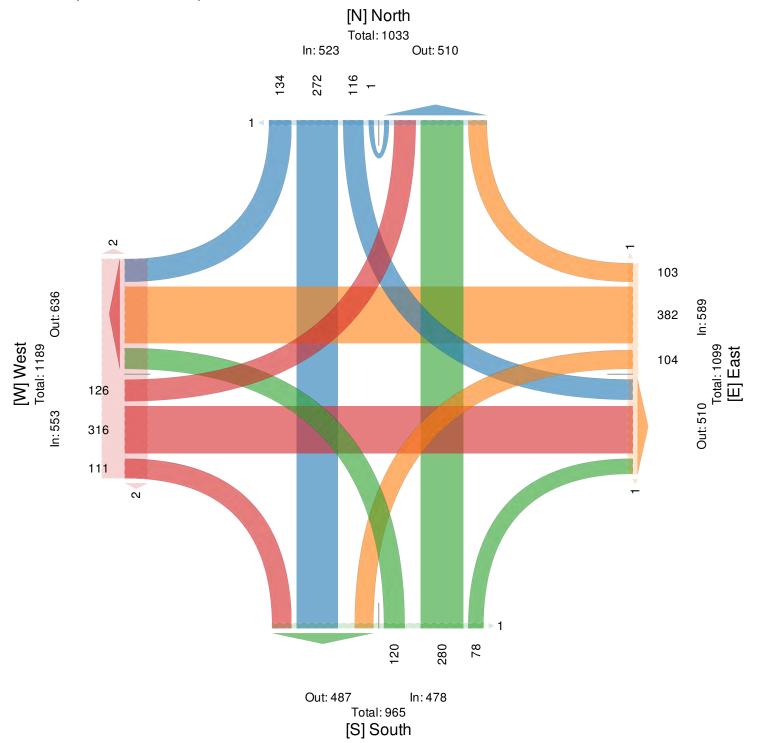
Sat Jun 8, 2019 AM Peak (WKND) (10 AM - 11 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements

ID: 699734, Location: 40.892273, -74.13968

Leg	North						East						South						West						
Dire ction	Southb	ound					Westbo	und					Northbo	ound					Eastbou	ınd					
Time	R	Т	L	U	Арр	Ped*	R	Т	L	U	App I	Ped*	R	Т	L	U	App I	e d*	R	Т	L	U	Арр	Ped*	Int
2019-06-08																									
10:00AM	30	64	19	0	113	1	23	100	23	0	146	0	18	59	24	0	101	0	26	94	25	0	145	1	505
10:15 AM	38	58	27	0	123	0	31	92	30	0	153	2	20	72	31	0	123	0	24	73	28	0	125	0	524
10:30AM	31	68	39	0	138	0	23	94	27	0	144	0	21	78	32	0	131	0	32	82	37	0	151	0	564
10:45AM	35	82	31	1	14 9	0	26	96	24	0	146	0	19	71	33	0	123	1	29	67	36	0	132	3	550
Total	134	272	116	1	523	1	103	382	104	0	589	2	78	280	120	0	478	1	111	316	126	0	553	4	2143
% Approach	25.6%	52.0%	22.2%	0.2%	-	-	17.5% 6	64.9%	17.7% (	)%	-	-	16.3%	58.6%	25.1%	0%	-	-	20.1%	57.1%	22.8% (	)%	-	-	-
% Total	6.3%	12.7%	5.4%	0%	24.4%	-	4.8%	17.8%	4.9% (	)% 2	27.5%	-	3.6%	13.1%	5.6%	0% 2	22.3%	-	5.2%	14.7%	5.9% (	)% 2	25.8%	-	-
PHF	0.882	0.829	0.744	0.250	0.878	-	0.831	0.955	0.867	-	0.962	-	0.929	0.897	0.909	-	0.912	-	0.867	0.840	0.851	-	0.916	-	0.950
Motorc ycles	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
%																									
Motorc ycles	0%	0%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%
Lights	129	264	112	1	506	-	101	377	103	0	581	-	77	276	116	0	469	-	107	311	125	0	543	-	2099
% Lights	96.3%	97.1%	96.6%	100%	96.7%	-	98.1% 9	8.7%	99.0% (	)% 9	98.6%	-	98.7%	98.6%	96.7%	0% 9	98.1%	-	96.4%	98.4%	99.2% (	)% 9	8.2%	-	97.9%
Single-Unit Trucks	3	7	4	0	14	_	2	4	1	0	7		1	3	2	0	6		1	5	0	0	6	-	33
% Single-Unit	-	,		0	14		-	-	1	0	,		1	5	-	0	0		1	5	0	0	0		55
Trucks		2.6%	3.4%	0%	2.7%	-	1.9%	1.0%	1.0% (	)%	1.2%	-	1.3%	1.1%	1.7%	0%	1.3%	-	0.9%	1.6%	0% (	)%	1.1%	-	1.5%
Artic ula te d																									
T ruc ks	2	0	0	0	2	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	1	0	1	-	4
% Artic ulate d																									
Trucks		0%	0%	0%	0.4%	-		0.3%	0% (		0.2%	-	0%	0%	0%		0%	-	0%		0.8% (			-	0.2%
Buses	0	1	0	0	1	-	0	0	0	0	0	-	0	1	2		3	-	3	0	0	0	3	-	7
% Buses	0%	0.4%	0%	0%	0.2%	-	0%	0%	0% (	)%	0%	-	0%	0.4%	1.7%	0%	0.6%	-	2.7%	0%	0% (	)%	0.5%	-	0.3%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bic yc le s																									
on Road	0%	0%	0%	0%	0 %	-	0%	0%	0% (	)%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0% (	)%	0%	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	- 10	00%	-	-	-	-	- 10	0%	-	-	-	-	- 1	.00%	-

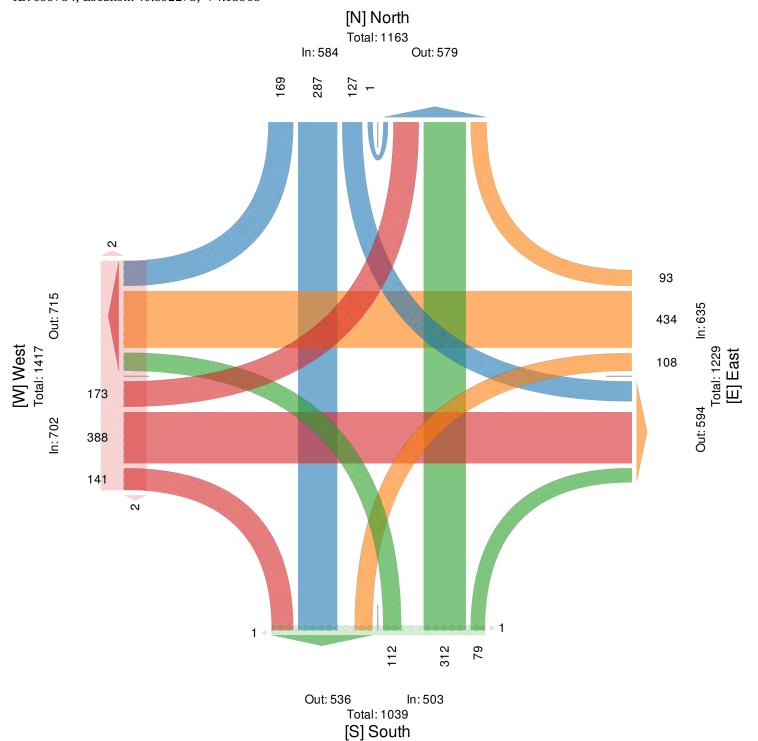
Sat Jun 8, 2019 AM Peak (WKND) (10 AM - 11 AM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699734, Location: 40.892273, -74.13968



Sat Jun 8, 2019 Midday Peak (WKND) (12 PM - 1 PM) - Overall Peak Hour All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699734, Location: 40.892273, -74.13968

Leg	North						East						South						West						
Dire ction	Southb	ound					Westbo	und					Northbo	ound					Eastbo	und					
Time	R	Т	L	U	App I	ed*	R	Т	L	U	App P	ed*	R	Т	L	U	Арр	Ped*	R	Т	L	U	Арр	Ped*	Int
2019-06-08																									
12:00PM	31	72	39	1	143	0	29	106	21	0	156	0	22	81	31	0	134	1	38	97	47	0	182	0	615
12:15PM	51	79	30	0	160	0	19	104	31	0	154	0	28	69	24	0	121	0	40	92	40	0	172	1	607
12:30PM	33	80	28	0	141	0	20	106	28	0	154	0	18	80	28	0	126	0	30	104	40	0	174	2	595
12:45PM	54	56	30	0	140	0	25	118	28	0	171	0	11	82	29	0	122	1	33	95	46	0	174	1	607
Total	169	287	127	1	584	0	93	434	108	0	635	0	79	312	112	0	503	2	141	388	173	0	702	4	2424
% Approach	28.9%	49.1%	21.7%	0.2%	-	-	14.6% 6	58.3%	17.0% (	)%	-	-	15.7%	62.0%	22.3%	0%	-	-	20.1%	55.3%	24.6%	0%	-	-	-
% Total	7.0%	11.8%	5.2%	0%	24.1%	-	3.8%	17.9%	4.5% (	)% 2	26.2%	-	3.3%	12.9%	4.6%	0%	20.8%	-	5.8%	16.0%	7.1%	0% 2	29.0%	-	-
PHF	0.782	0.897	0.814	0.250	0.913	-	0.802	0.919	0.871	-	0.928	-	0.705	0.951	0.903	-	0.938	-	0.881	0.933	0.920	-	0.964	-	0.985
Motorc ycles	0	0	0	0	0	-	0	1	0	0	1	-	0	1	0	0	1	-	0	0	0	0	0	-	2
%																									
Motorcycles	0%	0%	0%	0%	0%	-		0.2%	0% (	)%	0.2%	-	0%	0.3%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.1%
Lights	165	283	127	1	576	-	90	429	107	0	626	-	77	305	109	0	491	-	139	387	169	0	695	-	2388
% Lights	97.6%	98.6%	100%	100% 9	98.6%	-	96.8% 9	98.8%	99.1% (	)% 9	98.6%	-	97.5%	97.8%	97.3%	0% 9	97.6%	-	98.6%	99.7%	97.7%	0% 9	99.0%	-	98.5%
Single-Unit			0	0	-				0	0				-		0					2	0			
Trucks	4	1	0	0	5	-	3	3	0	0	6	-	2	5	1	0	8	-	0	1	2	0	3	-	22
% Single-Unit Trucks	2.4%	0.20/	0%	0%	0.9%		3.2%	0.7%	0%	104	0.9%		2.5%	1 6 %	0.9%	004	1.6%		0%	0.3%	1.2%	004	0 1 %		0.9%
Articulated	2.4 /0	0.370	0 /0	0 /0	0.3 /0	-	3.270	0.7 /0	0 /0 (	J /0	0.3 /0	-	2.370	1.0 /0	0.370	0 /0	1.0 /0		0 /0	0.570	1.2 /0	0 /0	0.4 /0		0.370
Trucks	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	2	0	2	-	3
% Artic ulate d																									
Trucks	0%	0%	0%	0%	0%	-	0%	0.2%	0% (	)%	0.2%	-	0%	0%	0%	0%	0%	-	0%	0%	1.2%	0%	0.3%	-	0.1%
Buses	0	3	0	0	3	-	0	0	1	0	1	-	0	1	2	0	3	-	2	0	0	0	2	-	9
% Buses	0%	1.0%	0%	0%	0.5%	-	0%	0%	0.9% (	)%	0.2%	-	0%	0.3%	1.8%	0%	0.6%	-	1.4%	0%	0%	0%	0.3%	-	0.4%
Bicycles on																									
Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles		0.07	0.07	0.07	0.07			0.07			0.07			0.07	0.04	~~/	0.07			0.07	0.07	o.o./	0.07		
on Road	0%	0%	0%	0%	0%	-	0%	0%	0% (		0%	-	0%	0%	0%		0%	-	0%	0%	0%		0%	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	.00%	-	-	-	-	-	100%	-

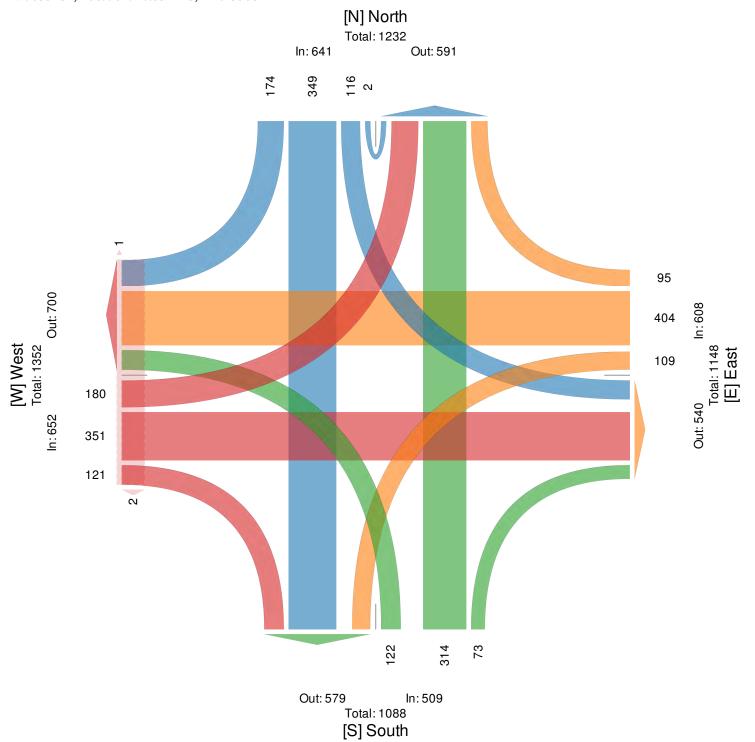
Sat Jun 8, 2019 Midday Peak (WKND) (12 PM - 1 PM) - Overall Peak Hour All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699734, Location: 40.892273, -74.13968



Sat Jun 8, 2019 PM Peak (WKND) (1 PM - 2 PM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699734, Location: 40.892273, -74.13968

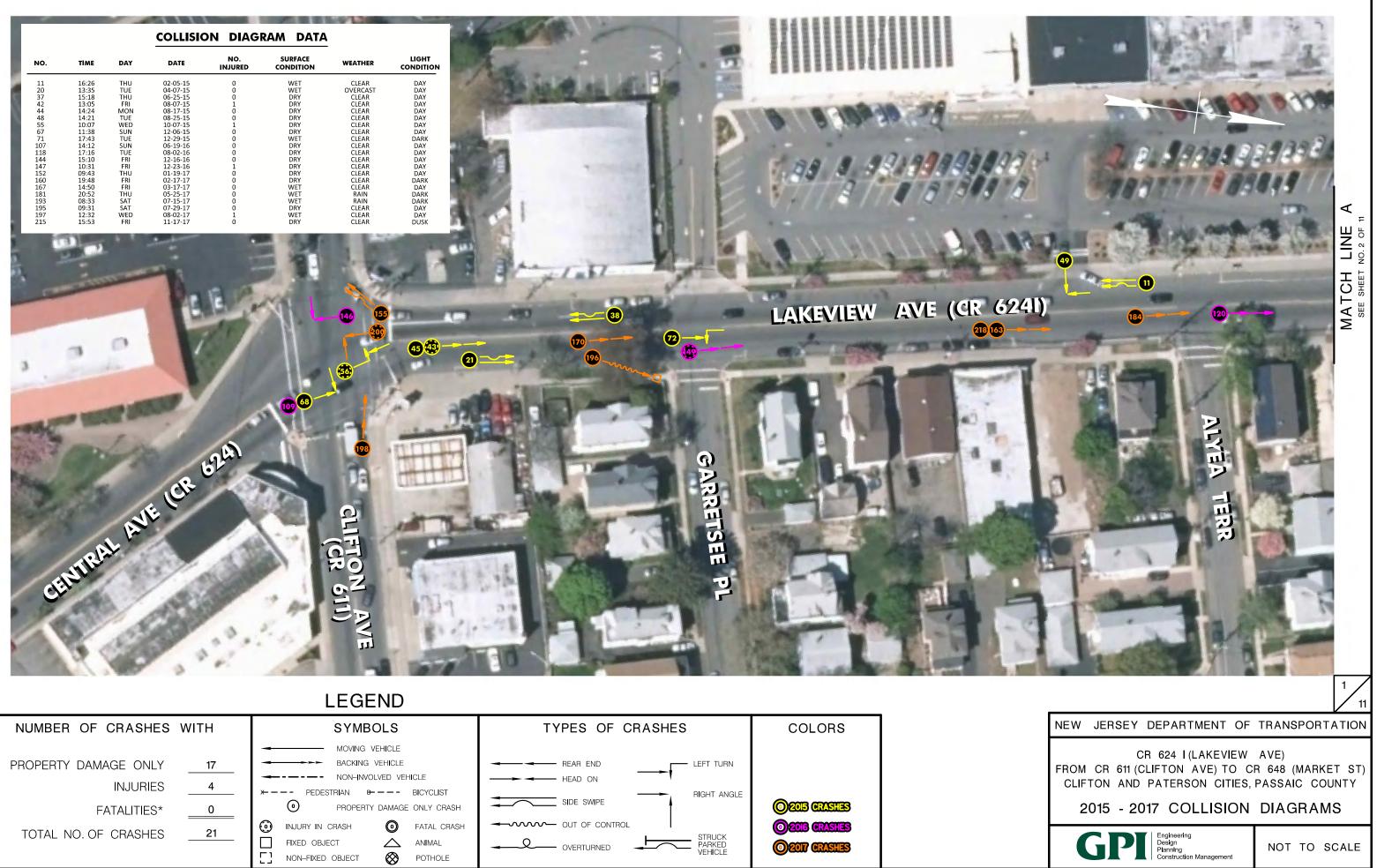
Leg	North						East						South						West						
Direction	Southb	ound					Westbo	und					Northbo	ound					Eastbou	und					
Time	R	Т	L	U	App P	ed*	R	Т	L	U	App I	Ped*	R	Т	L	U	App P	ed*	R	Т	L	U	Арр	Ped*	Int
2019-06-08																									
1:00PM	38	86	23	2	14 9	0	18	99	25	0	142	0	25	67	25	0	117	0	27	87	50	0	164	0	572
1:15PM	40	89	33	0	162	0	23	89	21	0	133	0	11	73	29	0	113	0	22	86	41	0	149	3	557
1:30PM	48	84	31	0	163	0	25	128	35	0	188	0	15	89	38	0	142	0	33	101	45	0	179	0	672
1:45PM	48	90	29	0	167	0	29	88	28	0	145	0	22	85	30	0	137	0	39	77	44	0	160	0	609
Total	174	349	116	2	641	0	95	404	109	0	608	0	73	314	122	0	509	0	121	351	180	0	652	3	2410
% Approach	27.1%	54.4%	18.1%	0.3%	-	-	15.6%	66.4%	17.9% (	)%	-	-	14.3%	61.7%	24.0% (	)%	-	-	18.6%	53.8%	27.6%	0%	-	-	-
% Total	7.2%	14.5%	4.8%	0.1%	26.6%	-	3.9%	16.8%	4.5% 0	)% 2	25.2%	-	3.0%	13.0%	5.1% (	)%	21.1%	-	5.0%	14.6%	7.5%	0%	27.1%	-	-
PHF	0.906	0.969	0.879	0.250	0.960	-	0.819	0.789	0.779	-	0.809	-	0.730	0.879	0.803	-	0.894	-	0.776	0.869	0.900	-	0.911	-	0.896
Motorcycles	0	2	0	0	2	-	0	2	0	0	2	-	1	1	0	0	2	-	0	0	0	0	0	-	6
%																									
Motorc yc le s	0%	0.6%	0%	0%	0.3%	-	0%	0.5%	0% (	)%	0.3%	-	1.4%	0.3%	0% (	)%	0.4%	-	0%	0%	0%	0%	0%	-	0.2%
Lights	169	342	115	2	628	-	94	394	109	0	597	-	69	310	119	0	498	-	119	350	179	0	648	-	2371
% Lights	97.1%	98.0%	99.1%	100%	98.0%	-	98.9%	97.5%	100% (	)% (	98.2%	-	94.5%	98.7%	97.5% (	)% (	97.8%	-	98.3%	99.7%	99.4%	0% 9	99.4%	-	98.4%
Single-Unit																									
Trucks	5	3	1	0	9	-	1	8	0	0	9	-	2	2	0	0	4	-	0	1	0	0	1	-	23
% Single-Unit																									
Trucks	2.9%	0.9%	0.9%	0%	1.4 %	-	1.1%	2.0%	0% (	)%	1.5 %	-	2.7%	0.6%	0% (	)%	0.8%	-	0%	0.3%	0%	0%	0.2%	-	1.0%
Artic ulate d Trucks	0	1	0	0	1		0	0	0	0	0		0	0	0	0	0		0	0	1	0	1		2
% Articulated	0	1	0	0	1	-	0	0	0	0	U	-	0	0	0	0	U	-	0	0	1	0	1	-	2
% Aruculated Trucks	0%	0.3%	0%	0%	0.2%	-	0%	0%	0% (	)%	0%	-	0%	0%	0% (	)%	0%	-	0%	0%	0.6%	0%	0.2%	-	0.1%
Buses	0	1	0	0	1	-	0	0	0	0	0	-	1	0	3	0	4	-	2	0	0	0	2	-	7
% Buses	0%	0.3%	0%	0%	0.2%	-	0%	0%	0% (		0%	-	1.4%	0%	2.5% (	-	0.8%	-	1.7%	0%	0%		0.3%	-	0.3%
Bicycles on											- , -														
Road	0	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	1
% Bicycles																									
on Road	0%	0%	0%	0%	0%	-	0%	0%	0% 0	)%	0%	-	0%	0.3%	0% (	)%	0.2%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	.00%	-

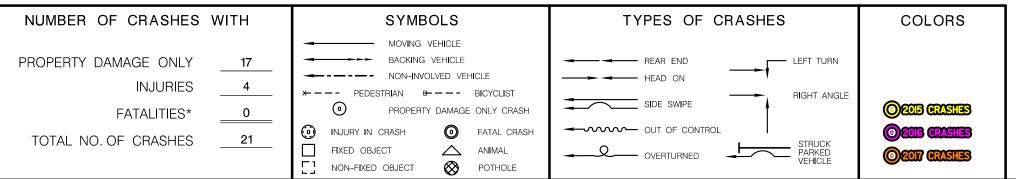
Sat Jun 8, 2019 PM Peak (WKND) (1 PM - 2 PM) All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road) All Movements ID: 699734, Location: 40.892273, -74.13968



## APPENDIX D

VEHICULAR CRASH DIAGRAMS





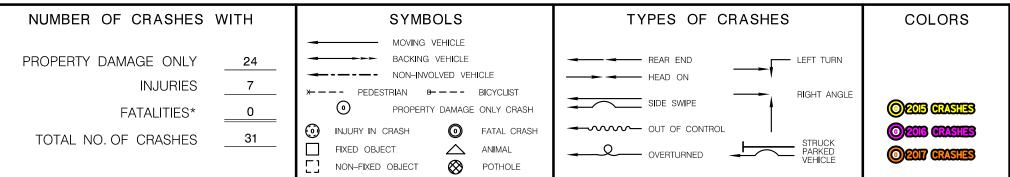
	and the second s	1		COLLISIO	ON DIAG	RAM DATA		0.010	
	NO.	TIME	DAY	DATE	NO. INJURED	SURFACE CONDITION	WEATHER		
	3 10 31 37 44	09:16 14:56 17:36 15:36 14:37	SAT THU SUN TUE MON FRI MON FRI	01-10-15 01-29-15 05-31-15 06-23-15 08-10-15	0 0 1 0	DRY DRY WET DRY DRY	CLEAR CLEAR RAIN CLEAR CLEAR	DAY DARK DAY DAY DAY	the state of the second of the
	3 10 31 37 44 48 64 92 94 99 103 108 108 125 126 147 161 175 193 194 213 220 223	09:16 14:56 17:36 15:36 14:37 12:51 08:28 10:27 12:42 04:21 17:08 23:01 15:43 13:08 15:16 07:05 18:47 14:46 08:40 16:22 11:52 11:43	TUE FRI MON FRI SAT	$\begin{array}{c} 01\mbox{-}10\mbox{-}15\mbox{-}29\mbox{-}15\mbox{-}05\mbox{-}31\mbox{-}15\mbox{-}08\mbox{-}25\mbox{-}15\mbox{-}08\mbox{-}25\mbox{-}15\mbox{-}08\mbox{-}25\mbox{-}15\mbox{-}08\mbox{-}25\mbox{-}15\mbox{-}08\mbox{-}21\mbox{-}16\mbox{-}12\mbox{-}16\mbox{-}12\mbox{-}16\mbox{-}17\mbox{-}12\mbox{-}12\mbox{-}17\mbox{-}12\mbox{-}12\mbox{-}17\mbox{-}12\mbox{-}12\mbox{-}17\mbox{-}12\mbox{-}12\mbox{-}17\mbox{-}17\mbox{-}12\mbox{-}12\mbox{-}17\mbox{-}17\mbox{-}12\mbox{-}11\mbox{-}17\mbox{-}12\mbox{-}11\mbox{-}17\mbox{-}11-$	1 1 0 0 0	DRY DRY DRY DRY DRY DRY DRY DRY	CLEAR RAIN CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR	DAY DARK DAY DAY DAY DAY DAY DAY DAY DARK DAY DAY DAY DAY DAY DAY DAY DAY DAY DAY	
	103 108 125 126 147	17:08 23:01 15:43 13:08 15:16	MON SAT SUN SUN FRI	05-09-16 06-18-16 08-21-16 08-28-16 12-16-16	0 0 0 2 0	DRY DRY WET DRY DRY	CLEAR CLEAR RAIN CLEAR CLEAR	DAY DARK DAY DAY DAY	
	161 175 193 194 213	07:05 18:47 14:46 08:40 16:22	SAT MON SAT SUN FRI THU THU FRI FRI FRI THU	02-16-17 04-06-17 07-13-17 07-14-17 10-27-17	0 0 1 0 0	WET DRY DRY WET DRY WET DRY DRY DRY	CLEAR CLEAR OVERCAST RAIN CLEAR	DAY DARK DAY DAY DAY	
	220 223	11:52 11:43	FRI THU	12-08-17 12-21-17	0	DRY DRY	CLEAR CLEAR	DAY DAY	
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	L'ardine					and the second			<sup>9</sup> LAKEVIEW AVE (CR 624I)
SEE SHEET MATCH				<b>8</b>		0	<u>_</u>	2 and	
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	100	-	T				-		
		4	-	The state		1		1-	
	17		5	-	18	3	1 and	73	

LEGEND

NUMBER OF CRASHES WITH	SYMBOLS	TYPES OF CRASHES	COLORS
PROPERTY DAMAGE ONLY <u>17</u> INJURIES 5	MOVING VEHICLE BACKING VEHICLE NON-INVOLVED VEHICLE	REAR END	
FATALITIES* <u>0</u>	← PEDESTRIAN	SIDE SWIPE RIGHT ANGLE	O 2015 CRASHES
TOTAL NO. OF CRASHES 22	INJURY IN CRASH     FATAL CRASH       FIXED OBJECT     ANIMAL       NON-FIXED OBJECT     OBJECT	OUT OF CONTROL	© 2013 GRASHES © 2017 GRASHES

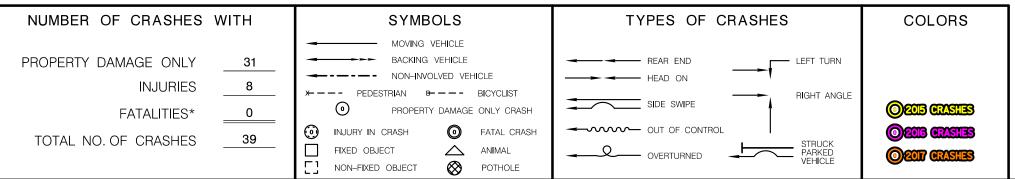




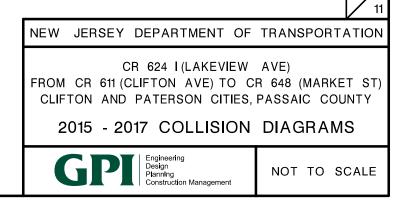




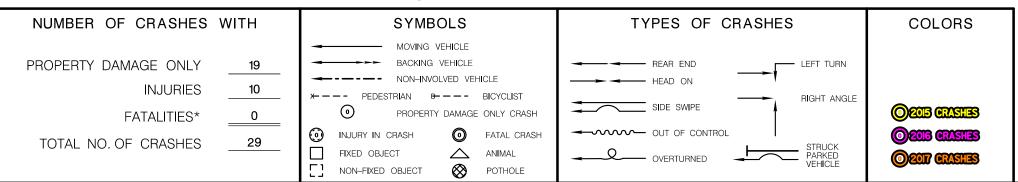


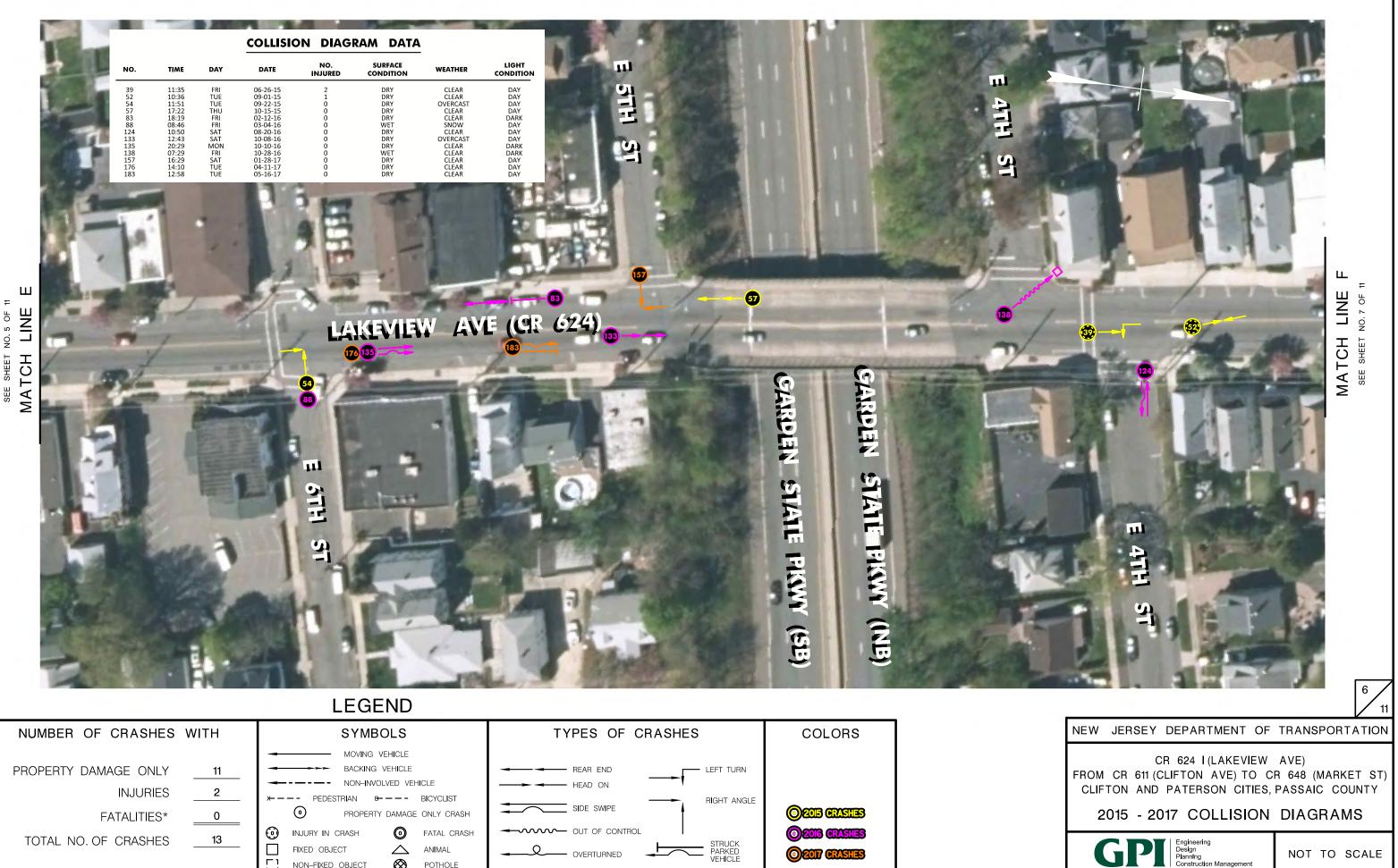


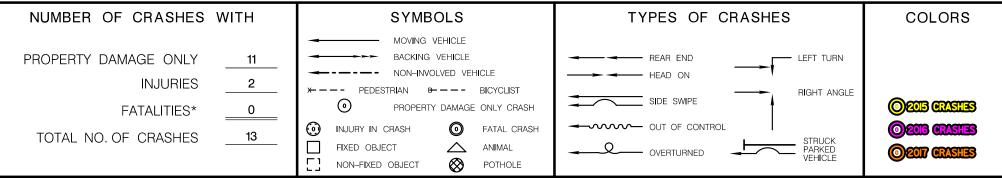
DATE	NO. INJURED	SURFACE CONDITION	WEATHER	
11-18-16	0	DRY	CLEAR	DARK
12-21-16	0	DRY	CLEAR	DARK
01-06-17	0	DRY	CLEAR	DAY
01-26-17	0	WET	RAIN	DAY
02-04-17	0	DRY	CLEAR	DAY
02-10-17	0	WET	CLEAR	DAY
02-16-17	0	DRY	CLEAR	DARK
03-23-17	0	DRY	CLEAR	DAY
03-24-17	0	WET	SNOW	DAY
04-04-17	0	WET	RAIN	DARK
04-27-17	0 2	WET	RAIN	DAY
05-15-17	2	DRY	CLEAR	DARK
06-10-17	1	DRY	CLEAR	DAY
06-23-17	0	DRY	CLEAR	DAY
06-27-17	0	DRY	CLEAR	DAY
07-14-17	0 5	WET	RAIN	DAY
07-29-17	5	DRY	CLEAR	DAY
10-30-17	1	WET	RAIN	DAY
12-19-17	0	DRY	CLEAR	DARK

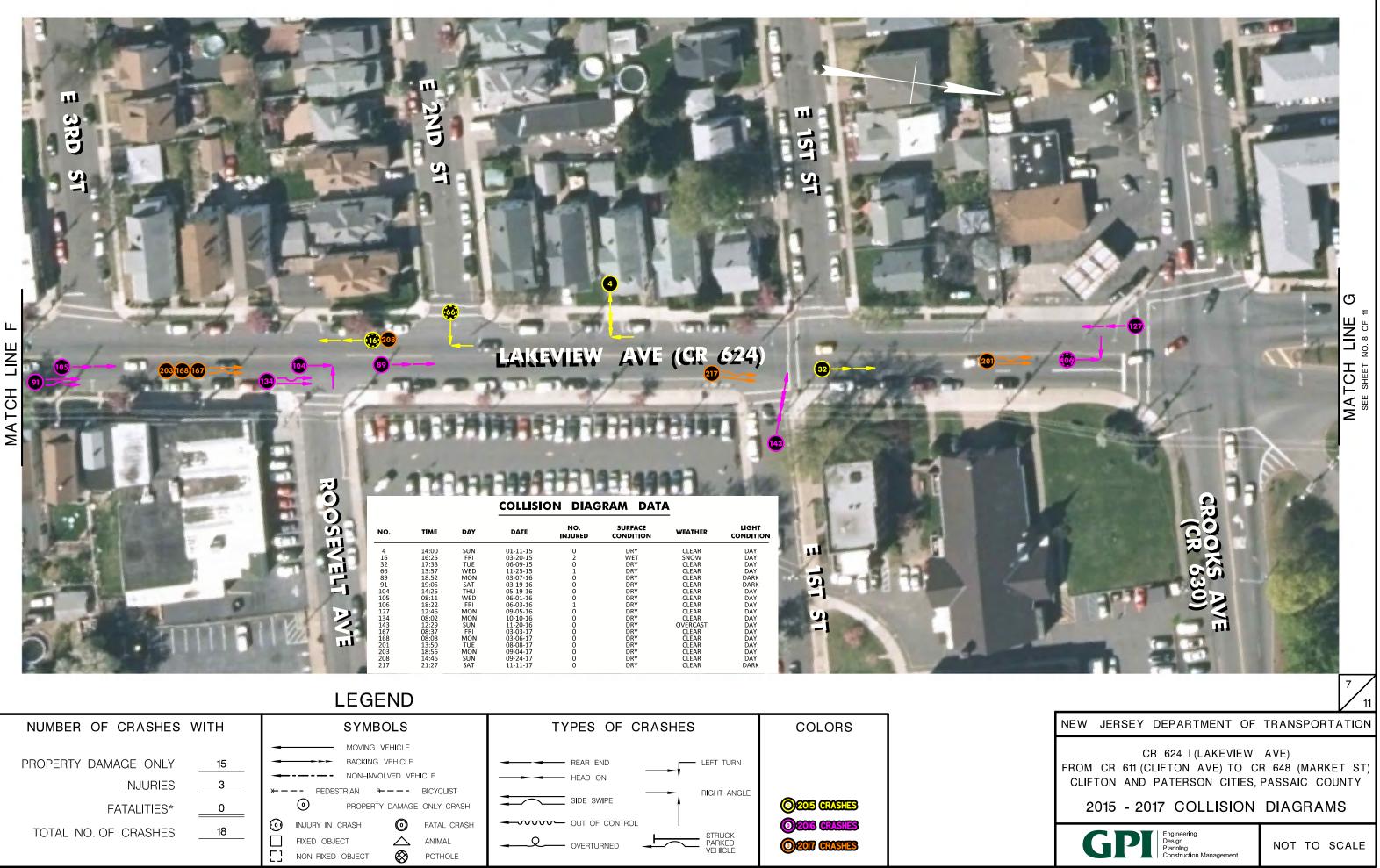


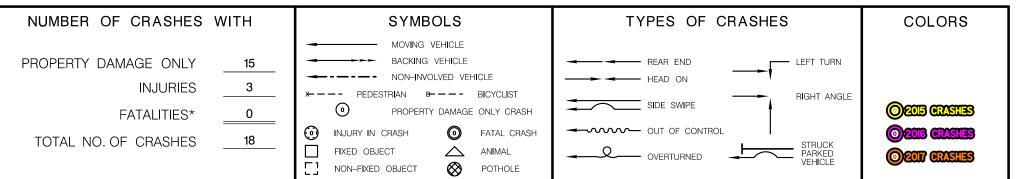






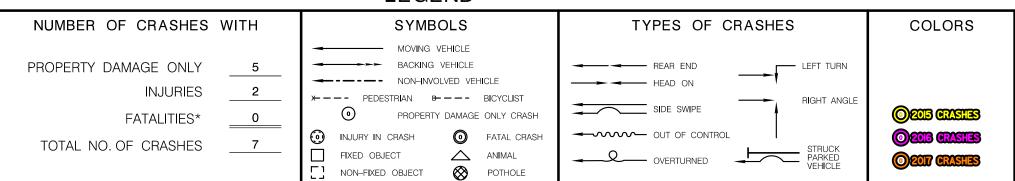




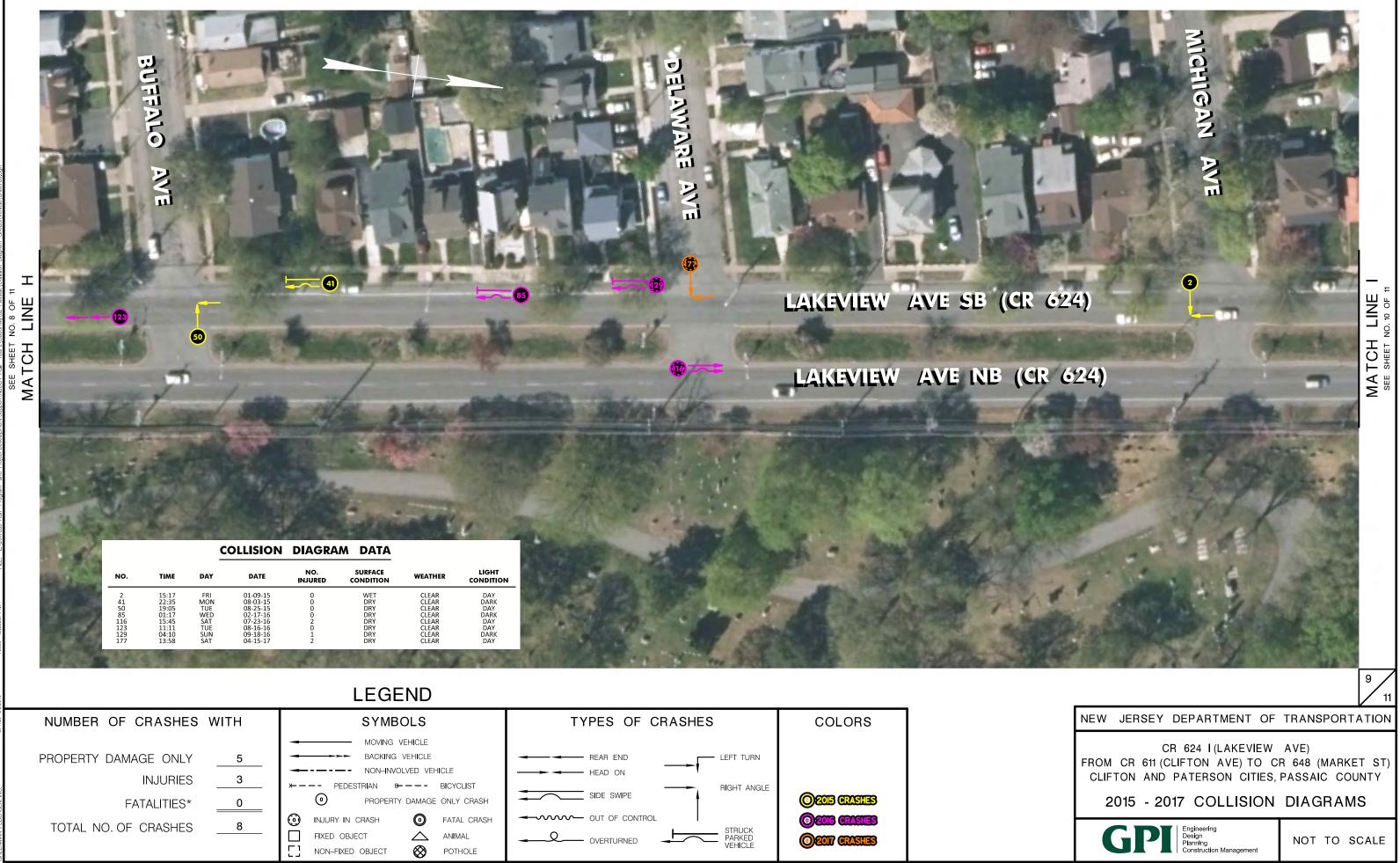


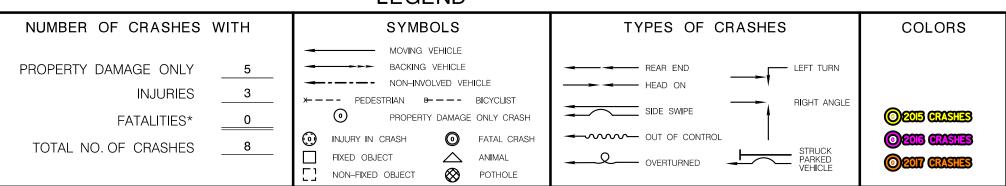


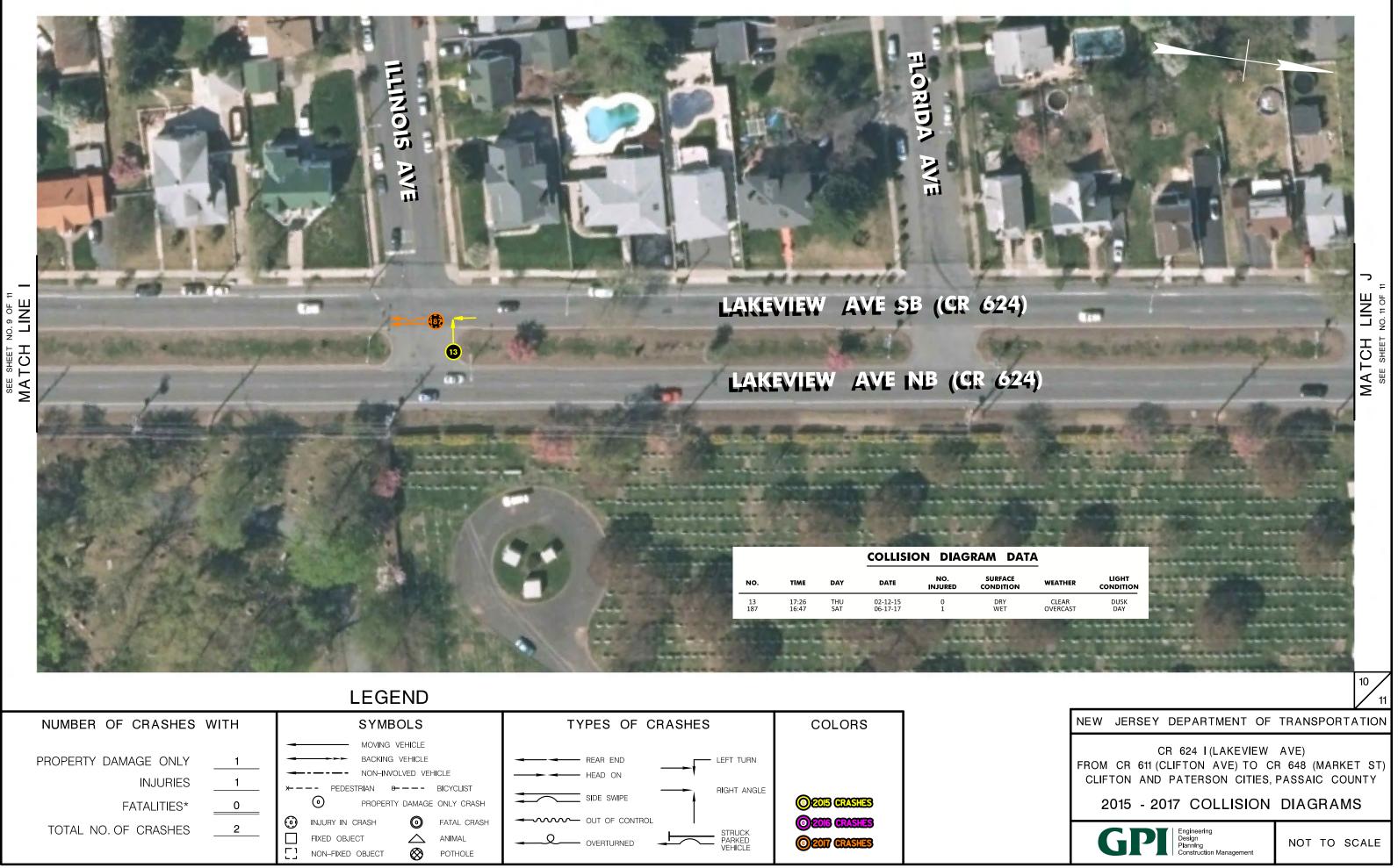




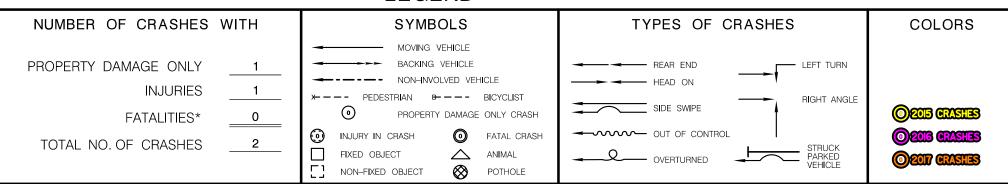
	BE SHEET NO.9 OF 11
NEW JERSEY DEPARTMENT OF TRANS	11
CR 624 I (LAKEVIEW AVE) FROM CR 611 (CLIFTON AVE) TO CR 648 (I CLIFTON AND PATERSON CITIES, PASSAIG 2015 - 2017 COLLISION DIAG	C COUNTY
GPPI Engineering Design PlannIng Construction Management NOT	TO SCALE

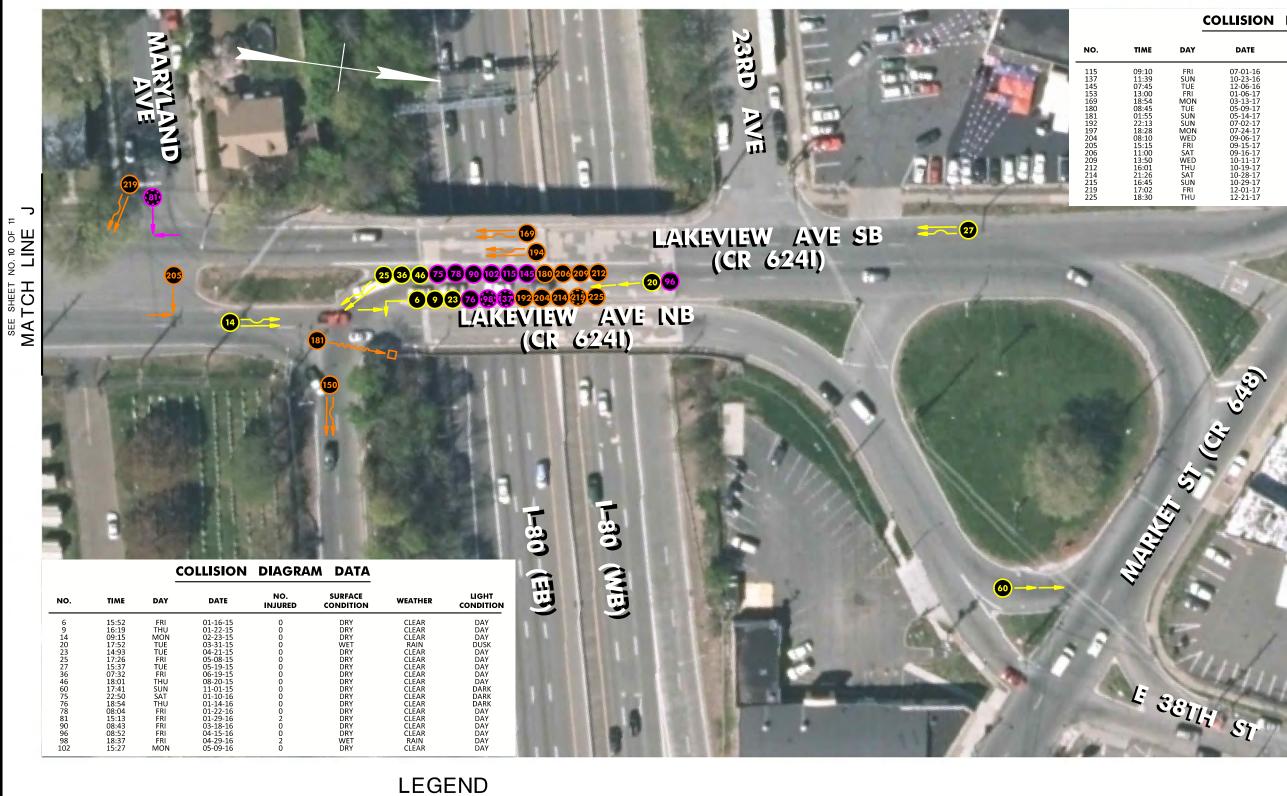


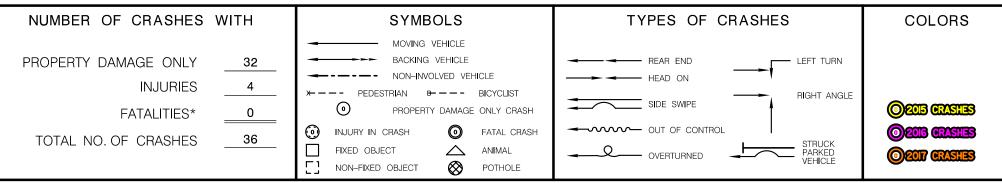






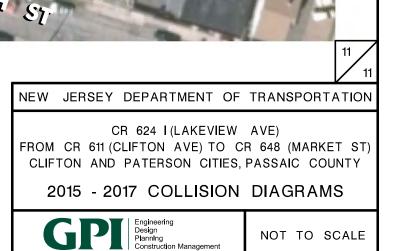






### **COLLISION DIAGRAM DATA**

DAY	DATE	NO. INJURED	SURFACE CONDITION	WEATHER	LIGHT CONDITION
FRI SUN	07-01-16 10-23-16	0 3	DRY DRY	CLEAR CLEAR	DAY DAY
TUE	12-06-16	õ	DRY	CLEAR	DAY
FRI	01-06-17	ō	WET	CLEAR	DAY
MON	03-13-17	0	DRY	CLEAR	DARK
TUE	05-09-17	0	DRY	CLEAR	DAY
SUN	05-14-17	0	WET	RAIN	DARK
SUN	07-02-17	0	DRY	CLEAR	DARK
MON	07-24-17	0	DRY	CLEAR	DAY
WED	09-06-17	0	WET	RAIN	DAY
FRI	09-15-17	0	DRY	CLEAR	DAY
SAT	09-16-17	0	DRY	CLEAR	DAY
WED	10-11-17	0	DRY	CLEAR	DAY
THU	10-19-17	0	DRY	CLEAR	DAY
SAT	10-28-17	0	DRY	CLEAR	DARK
SUN	10-29-17	2	WET	RAIN	DAY
FRI	12-01-17	0	DRY	CLEAR	DARK
THU	12-21-17	0	DRY	CLEAR	DARK

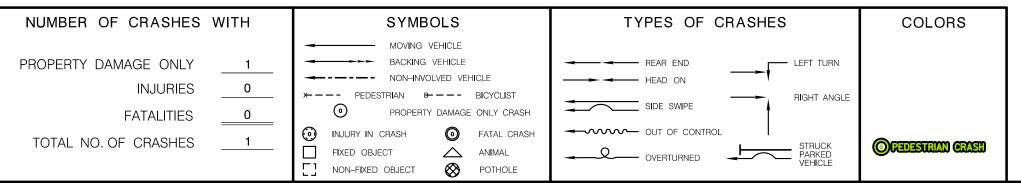


E 37TH ST

# APPENDIX E

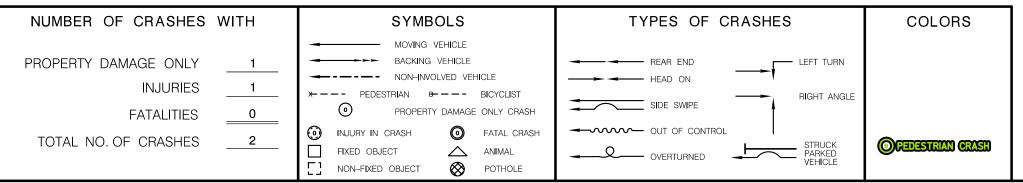
PEDESTRIAN CRASH DIAGRAMS









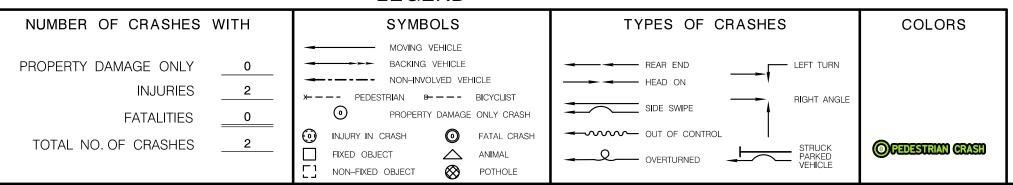




NOT TO SCALE



LEGEND







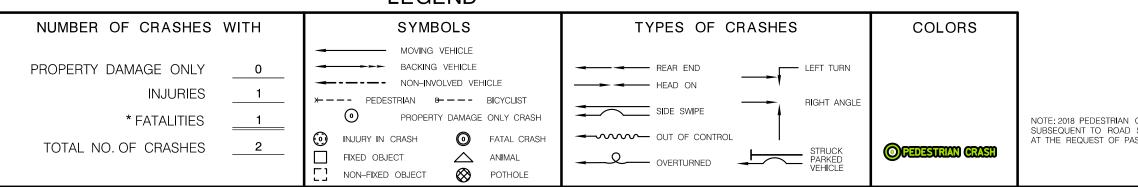
NUMBER OF CRASHES WITH	SYMBOLS	TYPES OF CRASHES	COLORS
PROPERTY DAMAGE ONLY 0 INJURIES 2 FATALITIES 0	MOVING VEHICLE BACKING VEHICLE BACKING VEHICLE MON-INVOLVED VEHICLE MON-INVOLVED VEHICLE MOVING VEHICLE PROPERTY DAMAGE ONLY CRASH	REAR END HEAD ON SIDE SWIPE	
TOTAL NO. OF CRASHES 2		OVERTURNED OVERTURNED OVERTURNED	OFEDESTRIAN GRASH



얻

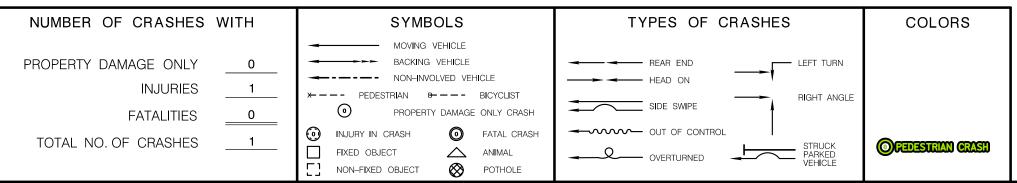
SHEET

SEE







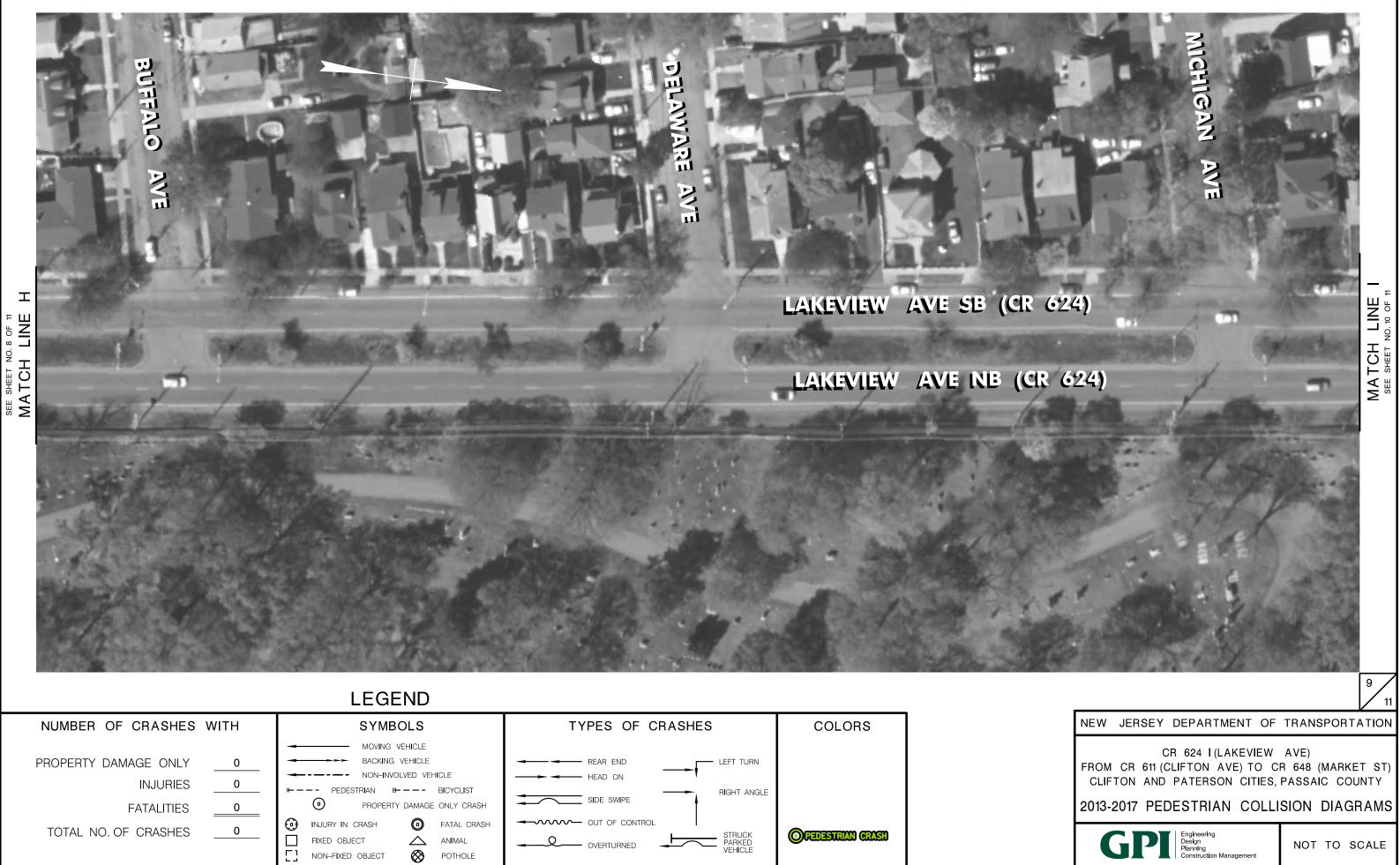




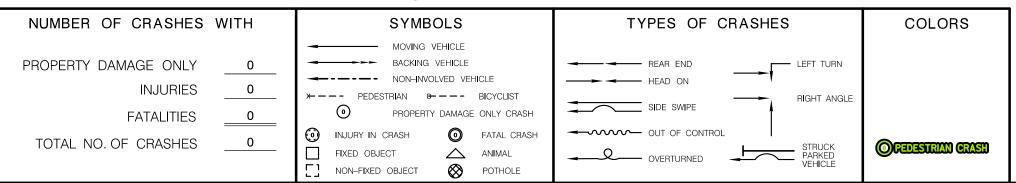
LEGEND

NUMBER OF CRASHES	WITH	SYMBOLS TYPES OF CRASHES CC	DLORS
		MOVING VEHICLE	
PROPERTY DAMAGE ONLY	0	BACKING VEHICLE REAR END	
INJURIES	0	Image: Non-Involved vehicle     Image: Head on	
FATALITIES	0	PROPERTY DAMAGE ONLY CRASH	
TOTAL NO. OF CRASHES	0	INJURY IN CRASH     Image: Fatal crash     Image: Crash	STRIAN CRASH
		VEHICLE VEHICLE	

シノー・フレーの一般の方に、「やの		MATCH LINE H SEE SHEET NO. 9 OF 11
	NEW JERSEY DEPARTMENT OF TRANSPORTA	8 11
	CR 624 I (LAKEVIEW AVE) FROM CR 611 (CLIFTON AVE) TO CR 648 (MARKET CLIFTON AND PATERSON CITIES, PASSAIC COUN 2013-2017 PEDESTRIAN COLLISION DIAGR	⁻ST) NTY
	GPI Engineering Design Planning Construction Management	ALE





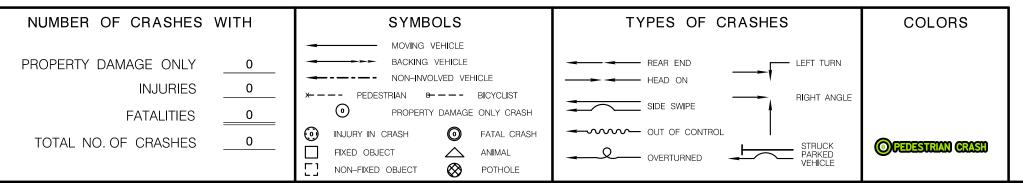






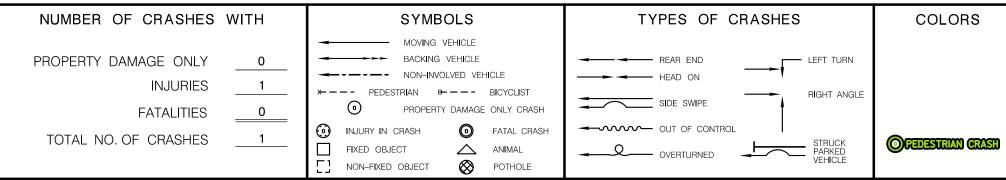
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	MATCH LINE J SEE SHEET NO.11 OF 11
NEW JERSEY DEPARTMENT OF TRANSPORT	10 11 A TION
CR 624 I (LAKEVIEW AVE) FROM CR 611 (CLIFTON AVE) TO CR 648 (MARK CLIFTON AND PATERSON CITIES, PASSAIC CO 2013-2017 PEDESTRIAN COLLISION DIAG	UNTY
GPI Engineering Design Planning Construction Management NOT TO S	





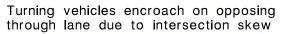
NEW JERSEY DEPARTMENT OF	11 11 TRANSPORTATION
CR 624 I (LAKEVIEW FROM CR 611 (CLIFTON AVE) TO C CLIFTON AND PATERSON CITIES, 2013-2017 PEDESTRIAN COLLI	R 648 (MARKET ST) PASSAIC COUNTY
GPPI Engineering Design Planning Construction Management	NOT TO SCALE

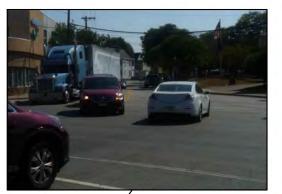
## APPENDIX F

SITE PHOTOGRAPHS

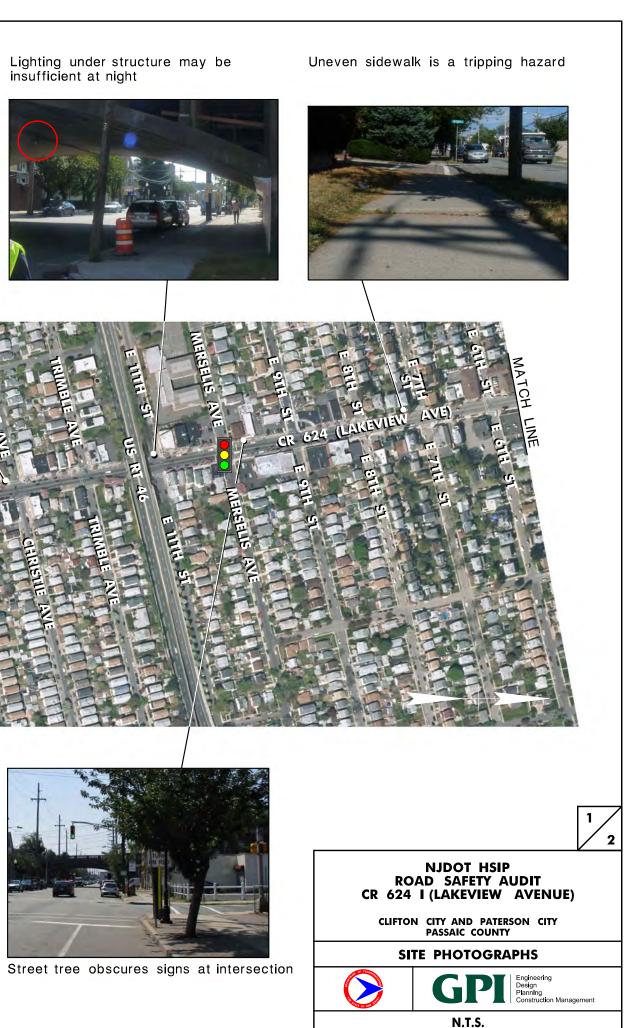
Large pavement area increases pedestrian crossing time and vehicle turning speeds

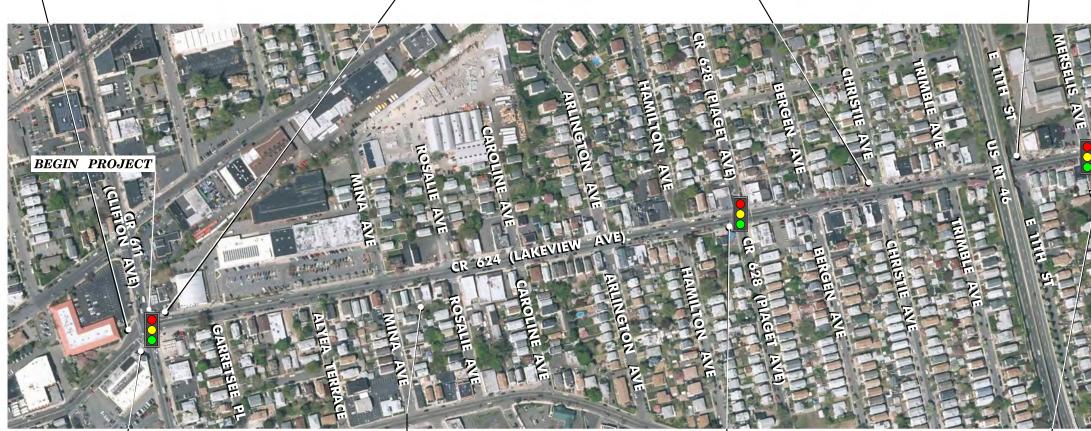






On-street parking reduces sight distance for turning vehicles and pedestrians







Small channelizing island may not provide sufficient pedestrian refuge



Parking lot eliminates need for on-street parking in this area; pavement can be repurposed



Antiquated pedestrian signal equipment



No lighting at pedestrian crossing Vicinity of 2018 pedestrian fatality

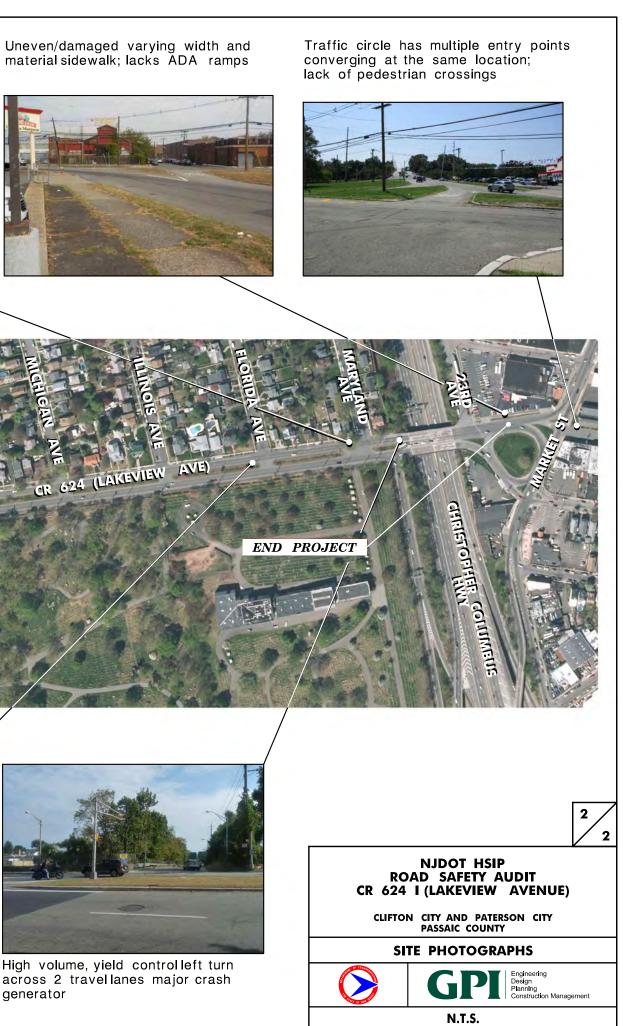
Pedestrian signal heads not on both sides of crossing at intersection

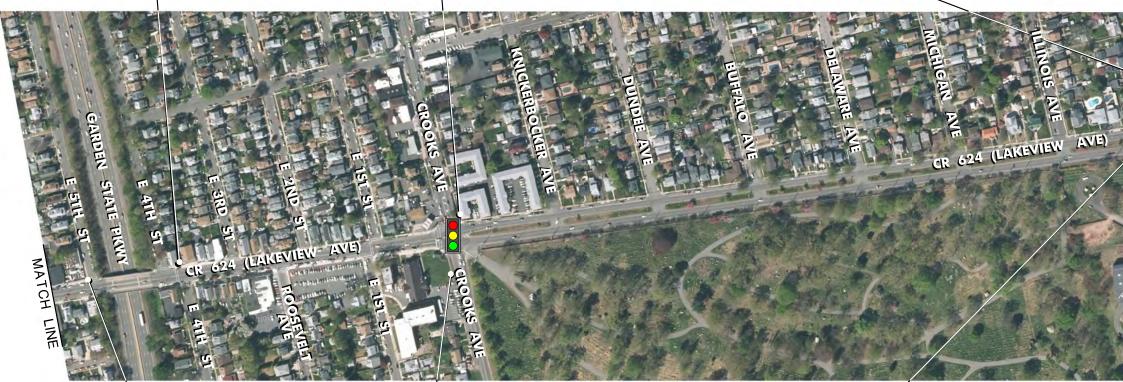
Median area lacks sufficient room to store left turning vehicles













Worn crosswalk striping; no marked crossing across Lakeview Ave



Large corner radius at cemetery entrance increases pedestrian crossing distance and right turn speeds

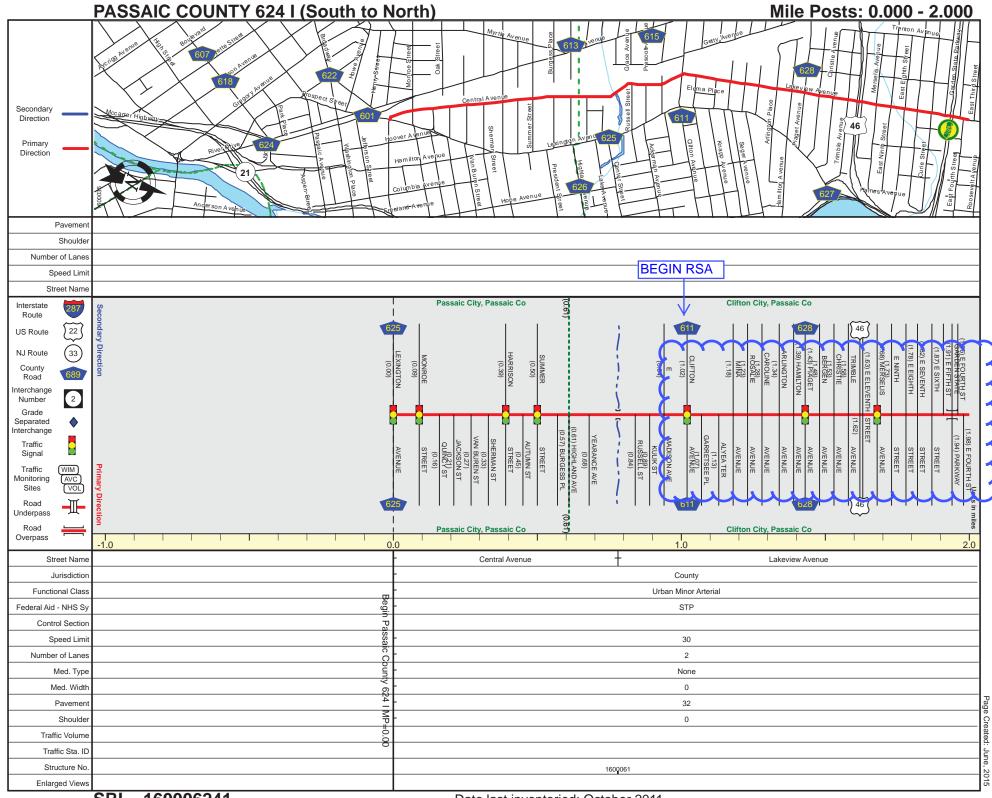


Bicyclists do not have dedicated facilities; posted 25 mph SB



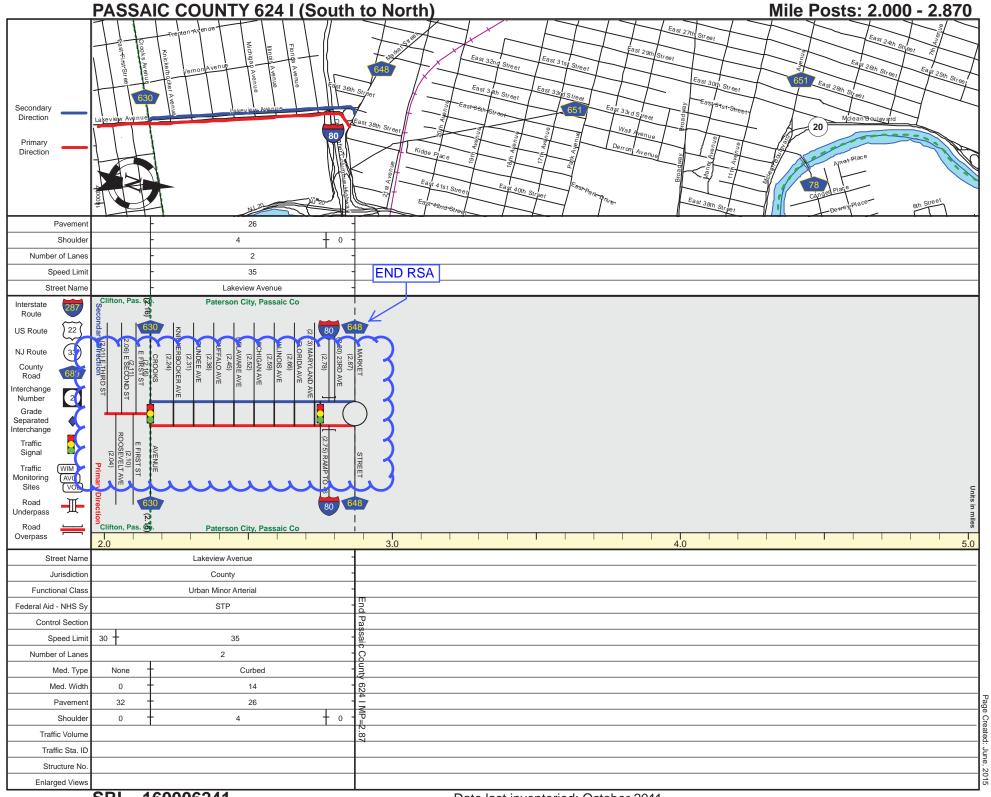
# APPENDIX G

STRAIGHT LINE DIAGRAMS



SRI = 160006241

Date last inventoried: October 2011



SRI = 160006241

Date last inventoried: October 2011

# APPENDIX H

PRE-AUDIT PRESENTATION



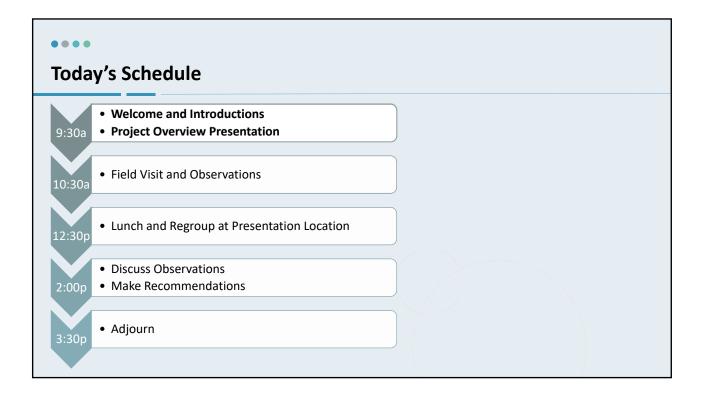
# **ROAD SAFETY AUDIT**

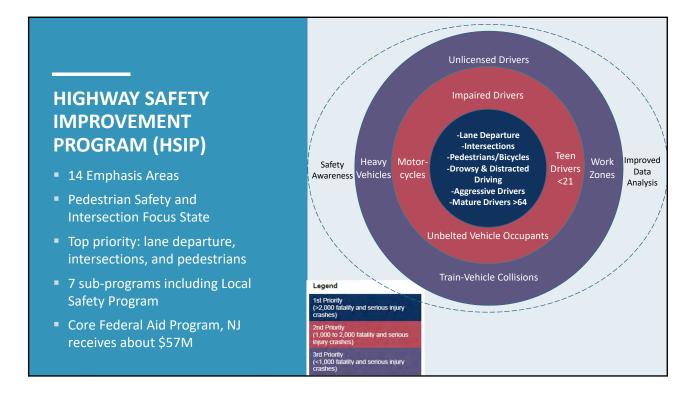
CR 624 I (LAKEVIEW AVENUE) BETWEEN CLIFTON AVENUE AND MARKET STREET

CLIFTON AND PATERSON CITIES PASSAIC COUNTY

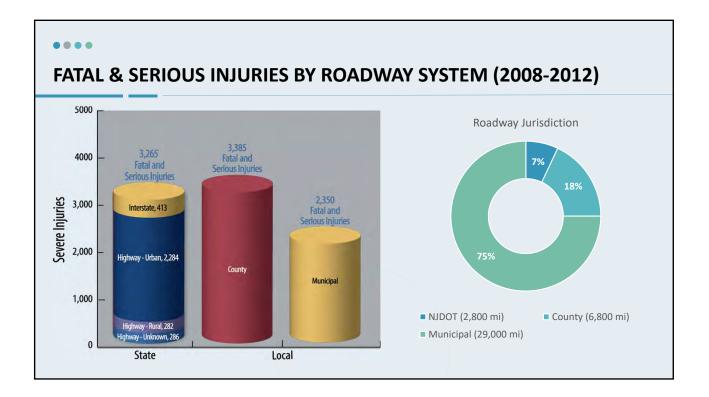
OCTOBER 2, 2019

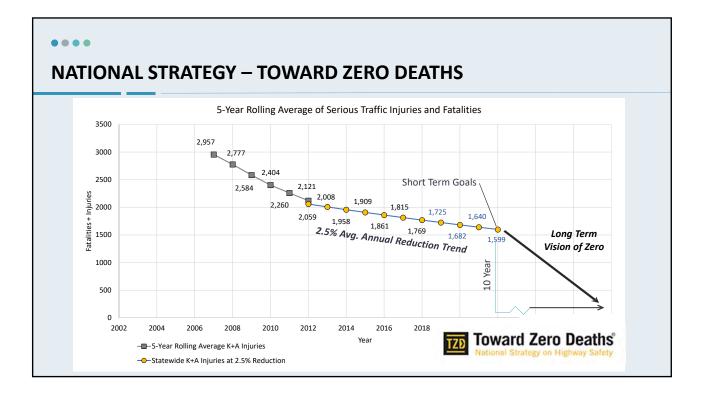


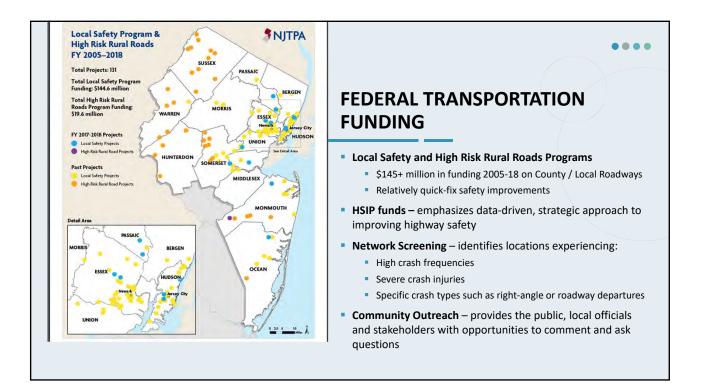


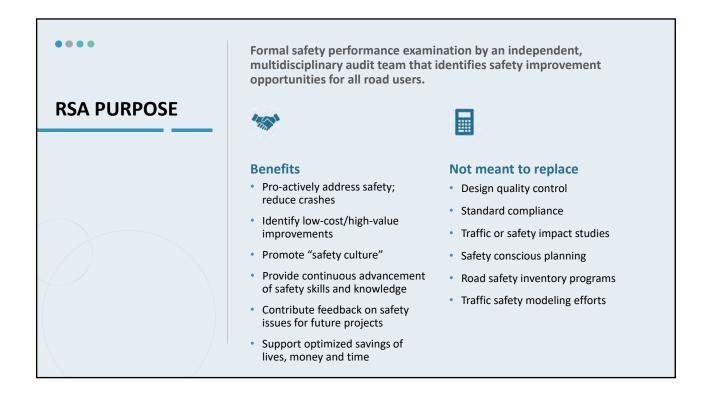


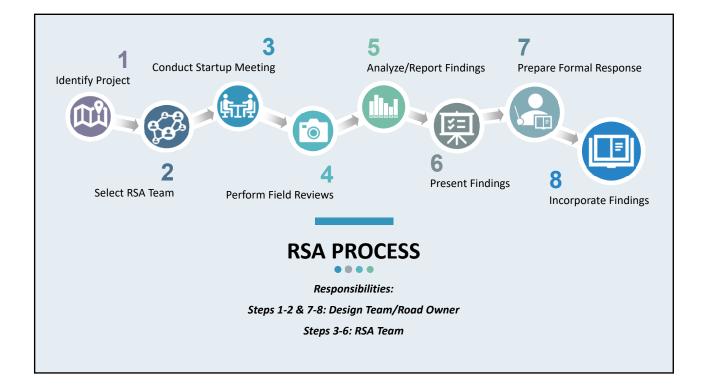
#### MAIN GOAL: Reduce serious injury and fatality (K+A) crashes on all of NJ's public roads HSIP/LOCAL SAFETY PROGRAM Local Safety Program (LSP) **Program Goals** • Toward zero deaths on all NJDOT support public roads Dedication of HSIP funds Technical assistance Performance-based goals consistent with SHSP Screening lists for MPOs **Road Safety Audits** • Data-driven, strategic approach to improving MPOs support highway safety Local Road Safety • High Risk Rural Roads CD/PE/FD Assistance Program











## FHWA PROVEN SAFETY COUNTERMEASURES

20 countermeasures

Descriptions provided in handouts



#### ....

## FHWA PROVEN SAFETY COUNTERMEASURES

- Clockwise from top:
  - Roundabout, Chesterfield Township, Burlington County
  - Backplates with Retroreflective Borders, Statewide
  - Road diet, Maplewood Township, Essex County
  - Pedestrian Hybrid Beacon (HAWK), Ocean City, Cape May County







## ADDITIONAL CONSIDERATIONS

Curb Extensions Hoboken City, Hudson County



Enhanced signing / pedestrian crossings Bellevue City, WA





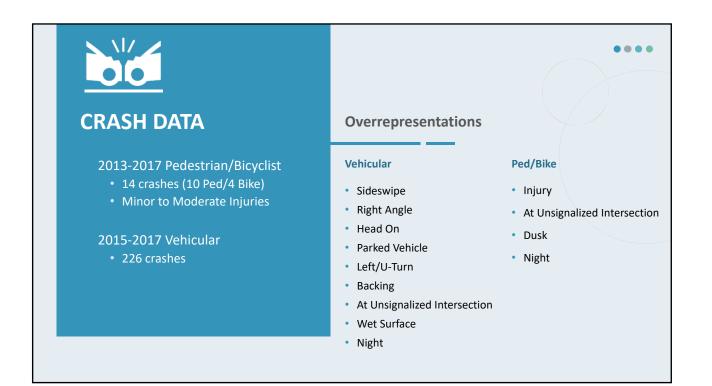
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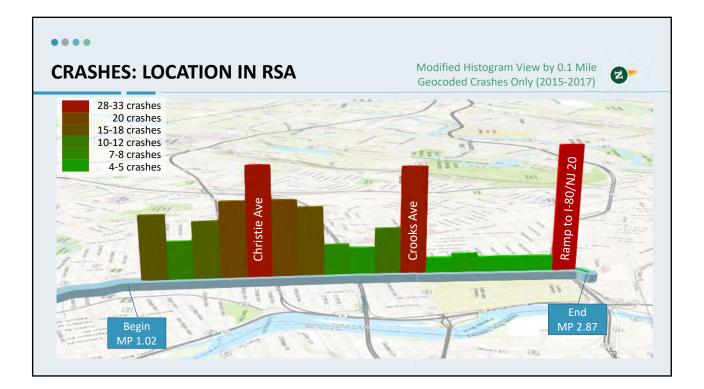
## **PROJECT AREA**

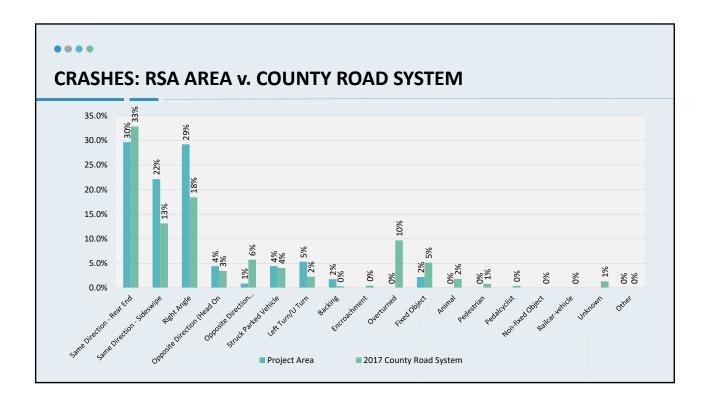
- Clockwise from top:
  - Ramp to I-80 & NJ 20, yield control dual left turn from Lakeview Ave SB
  - Several intersections designated as school crossings (Hamilton St shown)
  - Cemetery along Lakeview Ave NB from Crooks St to Ramp to I-80 & NJ 20

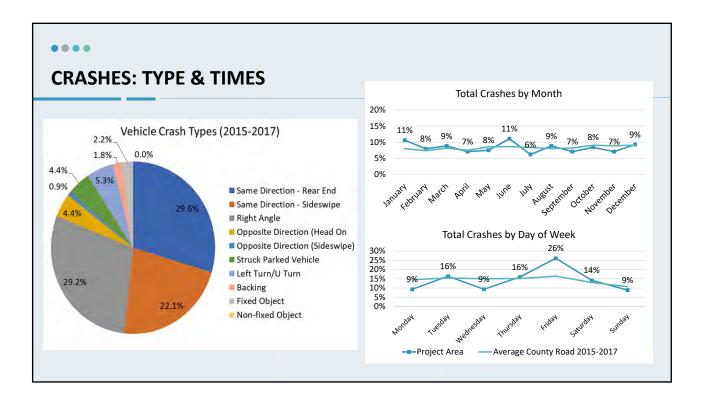


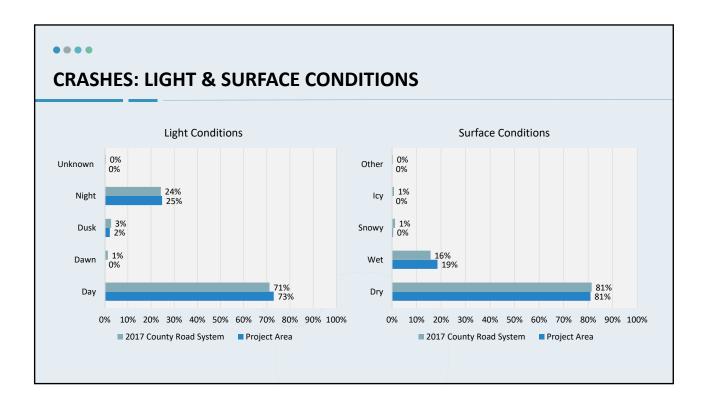
NJTPA County Ranking – 2012-2016 Data							
NETWORK SCREENING		Top 100 Corridors	Route CR 624 I	Regie #23:	onal MP 0.61-1.61	Pedestri #6: MP (	ian ).38-1.38
	①	Top 100 Intersections	Location Piaget Ave	2	All Crashes #21	Pedestrian #59	Bike/Ped #73

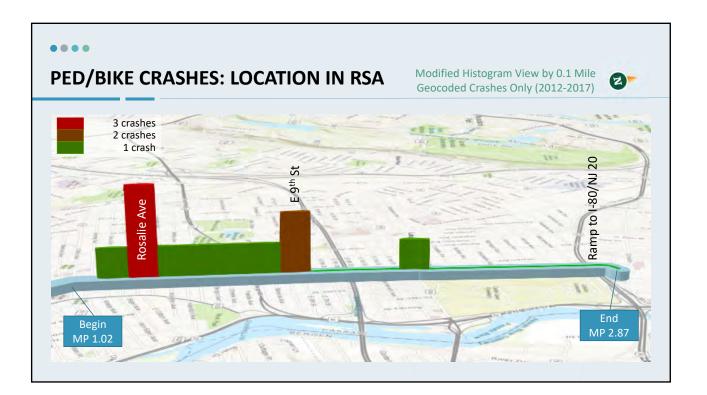


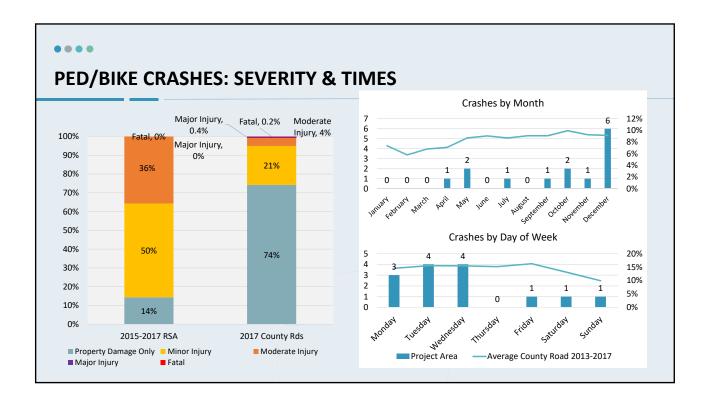


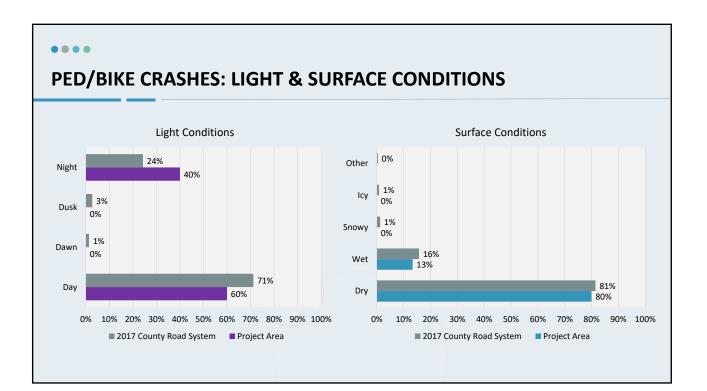


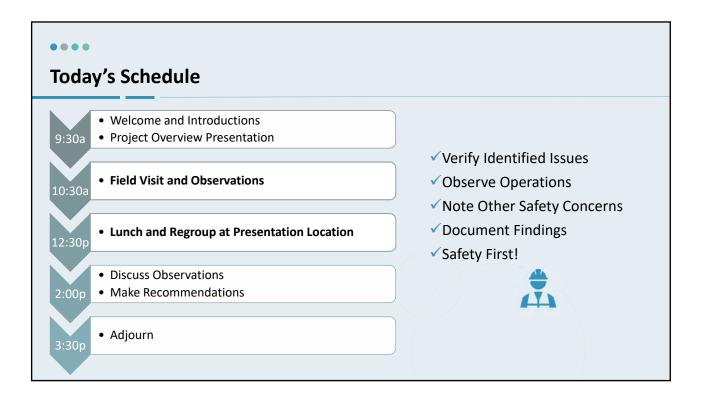




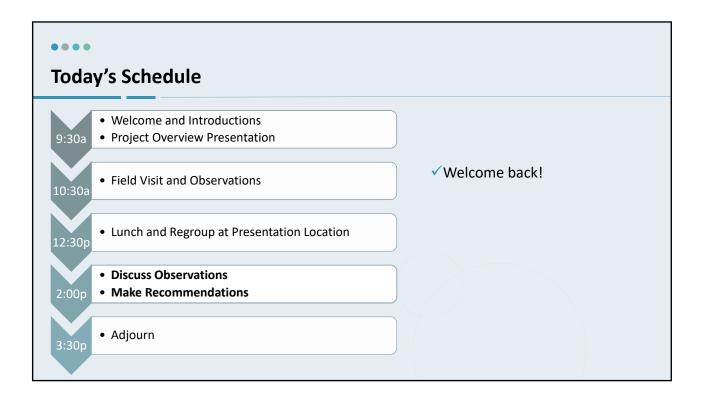


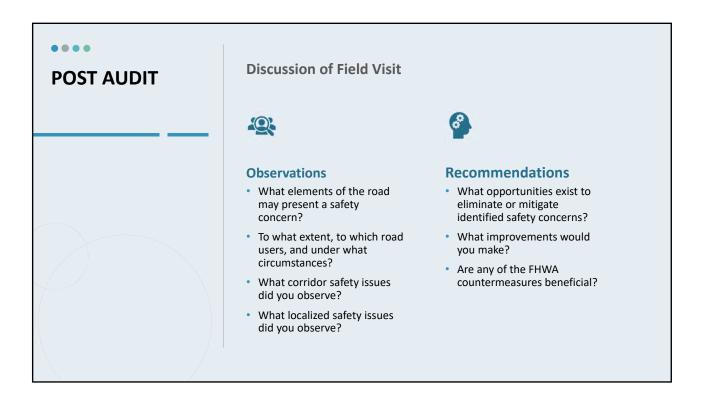






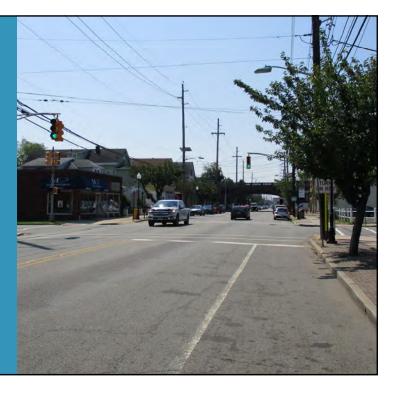






#### **NEXT STEPS**

- Preparation of RSA Report
- Review/comments from RSA Team
- Preparation of Preliminary Final Report
- Road Owner Response
- Preparation of Final Report
- Approximate timeframe: 12 weeks





# THANK YOU



# APPENDIX I

ADDITIONAL CRASHES ASSOCIATED WITH LAKEVIEW AVENUE

Crash Identifier	Year	County	Municipality	Case Number	Document Locator Number	Location Text	Cross Street Name	Newly ID'd
16-02-2016-2016029469	2016	PASSAIC	CLIFTON CITY	2016029469	16199770	LAKEVIEW AVE	CLIFTON AVE	(already in RSA report)
16-02-2016-2016011192	2016	PASSAIC	CLIFTON CITY	2016011192	16139452	LAKEVIEW AVE	E 2ND ST	(already in RSA report)
16-02-2016-2016010609	2016	PASSAIC	CLIFTON CITY	2016010609	16139423	LAKEVIEW AVE	E 6TH ST	(already in RSA report)
16-02-2016-2016013504	2016	PASSAIC	CLIFTON CITY	2016013504	16144893	LAKEVIEW AVE	ROSALIE AVE	(already in RSA report)
16-02-2015-2015045389	2015	PASSAIC	CLIFTON CITY	2015045389	15280475	PASSAIC COUNTY 624 I	EAST 11TH STREET	11th St
16-02-2015-2015031039	2015	PASSAIC	CLIFTON CITY	2015031039	15230974	EAST ELEVNTH STREET	CR 624	11th St
16-02-2016-2016011340	2016	PASSAIC	CLIFTON CITY	2016011340	16139460	FIRST ST	PASSAIC COUNTY 624 I	1st St
16-02-2015-15-25833	2015	PASSAIC	CLIFTON CITY	15-25833	15212393	FIRST ST	PASSAIC COUNTY624 I	1st St
16-02-2015-2015045926	2015	PASSAIC	CLIFTON CITY	2015045926	15280444	PASSAIC COUNTY 624 I	FIRST STREET	1st St
16-02-2017-2017027670	2017	PASSAIC	CLIFTON CITY	2017027670	17174943	PASSAIC COUNTY 624 I	SECOND STREET	2nd St
16-02-2016-2016033884	2016	PASSAIC	CLIFTON CITY	2016033884	16221370	PASSAIC COUNTY 624 I	7TH ST	7th St
16-02-2016-2016004169	2016	PASSAIC	CLIFTON CITY	2016004169	16125352	NINTH ST	PASSAIC COUNTY 624 I	9th Ave
16-02-2016-2016036330	2016	PASSAIC	CLIFTON CITY	2016036330	16235629	ARLINGTON AVE	CR 624	Arlington Ave
16-02-2016-2016023846	2016	PASSAIC	CLIFTON CITY	2016023846	16189642	PASSAIC COUNTY 624 I	BERGEN AVE	Bergen Ave
16-02-2016-2016058246	2016	PASSAIC	CLIFTON CITY	2016058246	16317500	BERGEN AVE	LAKEVIEW AVE	Bergen Ave
16-02-2016-2016059431	2016	PASSAIC	CLIFTON CITY	2016059431	16324550	CAROLINE AVE	LAKEVIEW AVE	Caroline Ave
16-02-2016-2016015049	2016	PASSAIC	CLIFTON CITY	2016015049	16150193	CHRISTIE AVE	CR 624	Christie Ave
16-02-2016-2016046823	2016	PASSAIC	CLIFTON CITY	2016046823	16265204	CHRISTIE AVE	CR 624	Christie Ave
16-02-2016-2016033375	2016	PASSAIC	CLIFTON CITY	2016033375	16221448	CHRISTIE AVE	LAKEVIEW AVE	Christie Ave
16-02-2016-2016034464	2016	PASSAIC	CLIFTON CITY	2016034464	16226900	CHRISTIE AVE	PASSAIC COUNTY 624 I	Christie Ave
16-02-2015-15-21980	2015	PASSAIC	CLIFTON CITY	15-21980	15199642	PASSAIC COUNTY 611	CR 624	Clifton Ave
16-02-2015-2015046722	2015	PASSAIC	CLIFTON CITY	2015046722	15280895	PASSAIC COUNTY 611	CR 624 / LAKEVIEW AVE	Clifton Ave
16-02-2016-2016053171	2016	PASSAIC	CLIFTON CITY	2016053171	16305458	PASSAIC COUNTY 611	LAKEVIEW AVE	Clifton Ave
16-02-2015-2015046512	2015	PASSAIC	CLIFTON CITY	2015046512	15280905	PASSAIC COUNTY 624 I	CR 611 / CLIFTON AVE	Clifton Ave
16-02-2017-2017041864	2017	PASSAIC	CLIFTON CITY	2017041864	17539643	PASSAIC COUNTY 624 I	CR 611 / CLIFTON AVE	Clifton Ave
16-02-2015-15-5090	2015	PASSAIC	CLIFTON CITY	15-5090	15155290	CENTRAL AVE	CR 611	Clifton Ave
16-02-2016-2016029332	2016	PASSAIC	CLIFTON CITY	2016029332	16199781	CENTRAL AVE	CLIFTON AVE	Clifton Ave
16-02-2016-2016062749	2016	PASSAIC	CLIFTON CITY	2016062749	16339763	CENTRAL AVE	CLIFTON AVE	Clifton Ave
16-02-2016-2016054208	2016	PASSAIC	CLIFTON CITY	2016054208	16360694	CENTRAL AVENUE	CLIFTON AVENUE	Clifton Ave
16-02-2016-2016050865	2016	PASSAIC	CLIFTON CITY	2016050865	16360631	CENTRAL AVE	CLIFTON AVE	Clifton Ave
16-02-2016-2016050863	2016	PASSAIC	CLIFTON CITY	2016050863	16301686	CENTRAL AVE	CLIFTON AVE	Clifton Ave
16-02-2015-15-6297	2015	PASSAIC	CLIFTON CITY	15-6297	15154215	PASSAIC COUNTY 611	CENTRAL AVE	Clifton Ave
16-02-2015-15-11143	2015	PASSAIC	CLIFTON CITY	15-11143	15155747	PASSAIC COUNTY 611	CENTRAL AVE	Clifton Ave
16-02-2016-2016017314	2016	PASSAIC	CLIFTON CITY	2016017314	16161137	PASSAIC COUNTY 611	CENTRAL AVE	Clifton Ave
16-02-2015-15-19280	2015	PASSAIC	CLIFTON CITY	15-19280	15196371	PASSAIC COUNTY 611	CENTRAL AVENUE	Clifton Ave
16-02-2016-2016022987	2016	PASSAIC	CLIFTON CITY	2016022987	16178855	CROOKS AVE	LAKEVIEW AVE	Crooks Ave
16-02-2015-15-32676	2015	PASSAIC	CLIFTON CITY	15-32676	15232030	PASSAIC COUNTY 624 I	CR 630 / CROOKS AVE	Crooks Ave
16-02-2016-2016020918	2016	PASSAIC	CLIFTON CITY	2016020918	16172609	PASSAIC COUNTY 630	LAKEVIEW AVE	Crooks Ave
16-02-2015-15-002577	2015	PASSAIC	CLIFTON CITY	15-002577	15149587	PASSAIC COUNTY 630	CR 624	Crooks Ave
16-02-2016-2016044174	2016	PASSAIC	CLIFTON CITY	2016044174	16257813	HAMILTON AVE	LAKEVIEW AVE	Hamilton Ave
16-02-2015-15-2867	2015	PASSAIC	CLIFTON CITY	15-2867	15149569	PASSAIC COUNTY 624 I	HAMILTON AVE	Hamilton Ave
16-02-2016-2016046788	2016	PASSAIC	CLIFTON CITY	2016046788	16265214	MERSELIS AVE	CR 624	Merselis Ave
16-02-2016-2016042763	2016	PASSAIC	CLIFTON CITY	2016042763	16253815	PASSAIC COUNTY 624 I	MERSELIS AVE	Merselis Ave
16-02-2016-2016050552	2016	PASSAIC	CLIFTON CITY	2016050552	16301711	MINA AVE	LAKEVIEW AVE	Mina Ave
16-02-2016-2016016971	2016	PASSAIC	CLIFTON CITY	2016016971	16161109	MINA AVE	LAKEVIEW AVE	Mina Ave
16-02-2015-15-33880	2015	PASSAIC	CLIFTON CITY	15-33880	15244590	PASSAIC COUNTY 624 I	CR 628 / PIAGET AVE	Piaget Ave

Crash Identifier	Year	County	Municipality	Case Number	Document Locator Number	Location Text	Cross Street Name	Newly ID'd
<u>16-02-2015-15-1737</u>	2015	PASSAIC	CLIFTON CITY	15-1737	15155092	PASSAIC COUNTY 624 I	CR 628 / PIAGET AVE	Piaget Ave
16-02-2016-2016011933	2016	PASSAIC	CLIFTON CITY	2016011933	16144976	PASSAIC COUNTY 628	LAKEVIEW AVE	Piaget Ave
16-02-2016-2016007514	2016	PASSAIC	CLIFTON CITY	2016007514	16125736	ROOSEVELT AVE	LAKEVIEW AVE	Roosevelt Ave
16-02-2016-2016059693	2016	PASSAIC	CLIFTON CITY	2016059693	16360795	ROOSEVELT AVE	LAKEVIEW AVE	Roosevelt Ave
16-02-2016-2016001034	2016	PASSAIC	CLIFTON CITY	2016001034	16360603	TRIMBLE AVE	LAKEVIEW AVE	Trimble Ave
16-02-2016-2016018613	2016	PASSAIC	CLIFTON CITY	2016018613	16165854	TRIMBLE AVE	LAKEVIEW AVE	Trimble Ave

Crash Identifier	Year County	Municipality	Case Number	Document Locator Number	Location Text	Cross Street Name	Newly ID'd crashes
16-08-2016-16-0238	2016 PASSAIC	PATERSON CITY	16-023840	16151016	LAKEVIEW	MARYLAND AVE	(already in RSA report)
16-08-2016-16-0048	2016 PASSAIC	PATERSON CITY	16-004830	16112444	LAKEVIEW	RT 80 RAMP	(already in RSA report)
16-08-2016-16-1024	2016 PASSAIC	PATERSON CITY	16-102417	16351677	LAKEVIEW AVE	KNICKERBOCKER AVE	(already in RSA report)
16-08-2015-15-1047	2015 PASSAIC	PATERSON CITY	15-104714	15288119	LAKEVIEW AVE	MARKET ST	(already in RSA report)
16-08-2015-15-04543	2015 PASSAIC	PATERSON CITY	15-045438	15180940	LAKEVIEW AVENUE	MARKET ST	(already in RSA report)
16-08-2017-17-0702	2017 PASSAIC	PATERSON CITY	17-070206		MARYLAND AVE	PASSAIC COUNTY 624 I	(already in RSA report)
16-08-2016-16-0622	2016 PASSAIC	PATERSON CITY	16-062243		PASSAIC COUNTY 648	E 37TH ST	37th St & Market
16-08-2017-17-2797	2017 PASSAIC	PATERSON CITY	17-27976		PASSAIC COUNTY 648	E 37TH ST	37th St & Market
16-08-2017-17-0823	2017 PASSAIC	PATERSON CITY	17-082384	17225964	PASSAIC COUNTY 648	EAST 37 TH	37th St & Market
16-08-2016-16-0804	2016 PASSAIC	PATERSON CITY	16-080498		E 38 TH ST	MARKET ST	38th St & Market
16-08-2016-16-0006	2016 PASSAIC	PATERSON CITY	16-000668		E 38 TH ST	MARKET ST	38th St & Market
16-08-2016-16-1099	2016 PASSAIC	PATERSON CITY	16-109963		EAST THIRTY-EIGTH STREET	CR 648	38th St & Market
16-08-2015-15-0652	2015 PASSAIC	PATERSON CITY	15-065210		PASSAIC COUNTY 648	E 38TH ST	38th St & Market
16-08-2016-16-3262	2016 PASSAIC	PATERSON CITY	16-32622		PASSAIC COUNTY 648	E 38TH ST	38th St & Market
16-08-2016-16-4575	2016 PASSAIC	PATERSON CITY	16-45751		PASSAIC COUNTY 648	E 38TH ST	38th St & Market
16-08-2016-16-0013	2016 PASSAIC	PATERSON CITY	16-001325		PASSAIC COUNTY 648	E 38TH STREET	38th St & Market
16-08-2015-2015-65	2015 PASSAIC	PATERSON CITY	2015-65658		PASSAIC COUNTY 648	EAST 38TH ST	38th St & Market
16-08-2015-2015-05	2016 PASSAIC	PATERSON CITY	16-079164		PASSAIC COUNTY 648	EAST 38TH ST	38th St & Market
16-08-2015-15-1138	2015 PASSAIC	PATERSON CITY	15-113827		PASSAIC COUNTY 648	EAST THIRTY-EIGHT STREET	38th St & Market
16-08-2015-15-1039	2015 PASSAIC	PATERSON CITY	15-103959		PASSAIC COUNTY 648	EAST THIRTY-EIGHTH STREET	38th St & Market
16-08-2015-15-1163	2015 PASSAIC	PATERSON CITY	15-116399		PASSAIC COUNTY 648	EAST THIRTY-EIGHTH STREET	38th St & Market
16-08-2015-15-1103 16-08-2015-15-1228	2015 PASSAIC	PATERSON CITY	15-122805		PASSAIC COUNTY 648		
16-08-2015-15-1228	2015 PASSAIC	PATERSON CITY	15-122805		PASSAIC COUNTY 630	CR 624 / LAKEVIEW AVE CR 624 / LAKEVIEW AVE	Lakeview/Market Circle Lakeview/Market Circle
16-08-2013-13-1227	2015 PASSAIC		16-049930		PASSAIC COUNTY 630		
	2016 PASSAIC 2015 PASSAIC				PASSAIC COUNTY 648	CR 624 / LAKEVIEW AVE	Lakeview/Market Circle
16-08-2015-15-3771	2015 PASSAIC 2016 PASSAIC	PATERSON CITY	15-37719			CR 624 / LAKEVIEW AVE	Lakeview/Market Circle
16-08-2016-16-0879	2016 PASSAIC	PATERSON CITY	16-087976		PASSAIC COUNTY 648 PASSAIC COUNTY 648	CR 624 / LAKEVIEW AVE	Lakeview/Market Circle
16-08-2016-16-0806		PATERSON CITY	16-080687			CR 624 / LAKEVIEW AVE	Lakeview/Market Circle
16-08-2016-16-0660	2016 PASSAIC 2016 PASSAIC	PATERSON CITY	16-066069		PASSAIC COUNTY 648	CR 624 / LAKEVIEW AVE	Lakeview/Market Circle
16-08-2016-16-0406			16-040688		PASSAIC COUNTY 648	CR 624 / LAKEVIEW AVE	Lakeview/Market Circle
<u>16-08-2016-16-7371</u>	2016 PASSAIC	PATERSON CITY	16-73710		PASSAIC COUNTY 648	CR 624 / LAKEVIEW AVE	Lakeview/Market Circle
<u>16-08-2016-16-9899</u>	2016 PASSAIC	PATERSON CITY	16-98995		PASSAIC COUNTY 648	CR 624 / LAKEVIEW AVE	Lakeview/Market Circle
16-08-2015-2015-02	2015 PASSAIC	PATERSON CITY	2015-021188		PASSAIC COUNTY 624 I	CR 630 / CROOKS AVE	Crooks Ave
16-08-2015-15-0225	2015 PASSAIC		15-022574		PASSAIC COUNTY 624 I	CR 630 / CROOKS AVE	Crooks Ave
16-08-2015-15-1162	2015 PASSAIC		15-116222		PASSAIC COUNTY 624 I	CR 630 / CROOKS AVE	Crooks Ave
<u>16-08-2016-16-0019</u>	2016 PASSAIC	PATERSON CITY	16-001929	16100119		CR 630 / CROOKS AVE	Crooks Ave
16-08-2016-16-0849	2016 PASSAIC	PATERSON CITY	16-084972		PASSAIC COUNTY 648	CROOKS AVE	Crooks Ave
<u>16-08-2016-16-0813</u>	2016 PASSAIC	PATERSON CITY	16-081381		PASSAIC COUNTY 624 I	DELAWARE AVE	Delaware Ave
16-08-2015-15-0462	2015 PASSAIC	PATERSON CITY	15-046247		PASSAIC COUNTY 624 I	DUNDEE AVE	Dundee Ave
<u>16-08-2016-16-9778</u>	2016 PASSAIC		16-97785		PASSAIC COUNTY 624 I	FLORIDA AVE	Florida Ave
<u>16-08-2016-16-9181</u>	2016 PASSAIC	PATERSON CITY	16-91815	16347777		ILLINOIS AVE	Illinois Ave
16-08-2015-15-0559	2015 PASSAIC	PATERSON CITY	15-055942		PASSAIC COUNTY 624 I	KNICKER BOCKER AVE	Knickerbocker Ave
<mark>16-08-2016-16-7233</mark>	2016 PASSAIC	PATERSON CITY	16-72333		PASSAIC COUNTY 624 I	KNICKERBOCKER AVE	Knickerbocker Ave
<u>16-08-2015-15-0261</u>	2015 PASSAIC	PATERSON CITY	15-026152		PASSAIC COUNTY 624 I	CR 648 / MARKET ST	Lakeview/Market Circle
16-08-2015-15-0677	2015 PASSAIC	PATERSON CITY	15-067769		PASSAIC COUNTY 624 I	CR 648 / MARKET ST	Lakeview/Market Circle
<u>16-08-2016-16-1001</u>	2016 PASSAIC	PATERSON CITY	16-100168	16352713	PASSAIC COUNTY 624 I	CR 648 / MARKET ST	Lakeview/Market Circle

Crash Identifier	Year	County	Municipality	Case Number	Document Locator Number	Location Text	Cross Street Name	Newly ID'd crashes
16-08-2016-16-0749	2016	PASSAIC	PATERSON CITY	16-07498	16280488	PASSAIC COUNTY 624 I	CR 648 / MARKET ST	Lakeview/Market Circle
16-08-2016-16-1112:	2016	PASSAIC	PATERSON CITY	16-111218	16351226	PASSAIC COUNTY 624 I	CR 648 / MARKET ST	Lakeview/Market Circle
16-08-2016-16-1001	2016	PASSAIC	PATERSON CITY	16-1001681	16320562	PASSAIC COUNTY 624 I	CR 648 / MARKET ST	Lakeview/Market Circle
16-08-2016-16-0733	2016	PASSAIC	PATERSON CITY	16-073393	16246819	MARYLAND	LAKEVIEW	Maryland Ave
16-08-2016-16-0272	2016	PASSAIC	PATERSON CITY	16-027279	16158027	MARYLAND	LAKEVIEW	Maryland Ave
16-08-2016-2016-11	2016	PASSAIC	PATERSON CITY	2016-115378	16347244	MARYLAND AVE	PASSAIC COUNTY 624	Maryland Ave
16-08-2015-2015-04	2015	PASSAIC	PATERSON CITY	2015-046442	15184233	MARYLAND AVE	PASSAIC COUNTY 624 I	Maryland Ave
16-08-2016-16-0572	2016	PASSAIC	PATERSON CITY	16-057203	16205977	MARYLAND AVE EXT	LAKEVIEW AVE	Maryland Ave
16-08-2015-15-8744	2015	PASSAIC	PATERSON CITY	15-87443	15261786	MARYLAND AVE EXT	LAKEVIEW AVE-CR624	Maryland Ave
16-08-2016-16-0900	2016	PASSAIC	PATERSON CITY	16-090036	16350834	PASSAIC COUNTY 624 I	MARYLAND	Maryland Ave
16-08-2015-15-8437	2015	PASSAIC	PATERSON CITY	15-84376	15259982	PASSAIC COUNTY 624 I	MARYLAND AVE	Maryland Ave
16-08-2015-15-0656	2015	PASSAIC	PATERSON CITY	15-065642	15217219	PASSAIC COUNTY 624 I	MARYLAND AVE	Maryland Ave
16-08-2015-2015-03	2015	PASSAIC	PATERSON CITY	2015-034638	15164597	PASSAIC COUNTY 624 I	MARYLAND AVE	Maryland Ave
16-08-2016-16-0346	2016	PASSAIC	PATERSON CITY	16-034601	16163845	PASSAIC COUNTY 624 I	MARYLAND AVE	Maryland Ave
16-08-2016-16-1156	2016	PASSAIC	PATERSON CITY	16-115669	16344536	PASSAIC COUNTY 624 I	MARYLAND AVE	Maryland Ave
16-08-2015-15-0154	2015	PASSAIC	PATERSON CITY	15-015431	15124997	PASSAIC COUNTY 624 I	MARYLAND AVE EXT	Maryland Ave
16-08-2016-16-0605	2016	PASSAIC	PATERSON CITY	16-060515	16220108	MICHIGAN AVE	LAKEVIEW AVE	Michigan Ave
16-08-2016-B060-20	2016	PASSAIC	PATERSON CITY	B060-2016-011134	16911385	PASSAIC COUNTY 624 I	MICHIGAN AVE	Michigan Ave

# APPENDIX J

EXCERPTS FROM MUNICIPAL PLANS/REPORTS



F

DOKING

# MASTER PLAN MARCH 2014

PREPARED BY: HEYER, GRUEL & ASSOCIATES

*Manor* – The Manor neighborhood is a small neighborhood north of Broadway on the east side of the City. Consisting of only a few dozen City blocks in total, this neighborhood has many different land uses within its confines despite its small geographic footprint. The neighborhood has single-family homes, as well as apartment towers, fast food restaurants, banks, schools, and religious structures. The parcels that have frontage along Route 20 are devoted mostly to commercial uses or apartment buildings, while the parcels along Broadway are schools or religious institutions. The interior properties are almost all singlefamily homes. Important spots in this neighborhood are:

- Temple Emanuel Synagogue
- Paterson Charter School for Science and Technology
- Historic homes

Near Eastside – As the name implies, Near Eastside is next to Eastside Park on the east side of the City, but nearer to Downtown. Near Eastside, like the other neighborhoods surrounding it, is made up mostly of residential properties, while its boundaries are commercial corridors that it shares with its neighbors. The southeastern end of the neighborhood which abuts the railroad is predominantly industrial and commercial properties, which include a supermarket and other strip retail centers, as well as several chemical supply companies. The north end of the neighborhood is Broadway, which is lined with a multitude of businesses and institutional uses as well as residences above many of the businesses. The rest of the neighborhood is mostly used for housing, with small retail stores or religious institutions mixed amongst the homes. The neighborhood can count the following uses amongst its residents:

- Barnert Medical Arts complex
- Christ Church United Methodist church
- Faith Chapel Reformed Church

- Friendship Baptist Church
- Public School Number 20

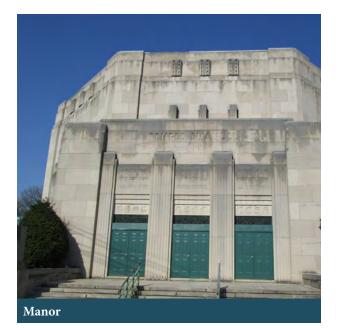
*Lakeview* – Lakeview is another primarily residential neighborhood in the City. One half of the entire neighborhood is used by Cedar Lawn Cemetery, while the rest of the neighborhood west of Lakeview Avenue is mostly single-family residential uses. The southern end of the neighborhood, Crooks Avenue, is lined with strip commercial retail uses, while there are also several retail shops on Trenton Avenue, which is the western edge of the neighborhood. There are a few prominent points of interest in the neighborhood:

- Cedar Lawn Cemetery
- Public School Number 25
- Ulu Cami Islamic Center

**Railway** – The Railway neighborhood possesses a mix of uses. The eastern end of the neighborhood along Railway Avenue and Getty Avenue is developed with a number of industrial properties such as factories and warehouses, many of which are used by the food service or building supply industries. Getty Avenue and Crooks Avenue both contain commercial uses, such as restaurants and personal service businesses. The eastern side of the neighborhood in between Wabash Avenue and Trenton Avenue is chiefly single-family residential homes. This neighborhood includes:

- Paterson Farmers Market
- Continental Can factory
- Cooke Locomotive
- Southside Firehouse

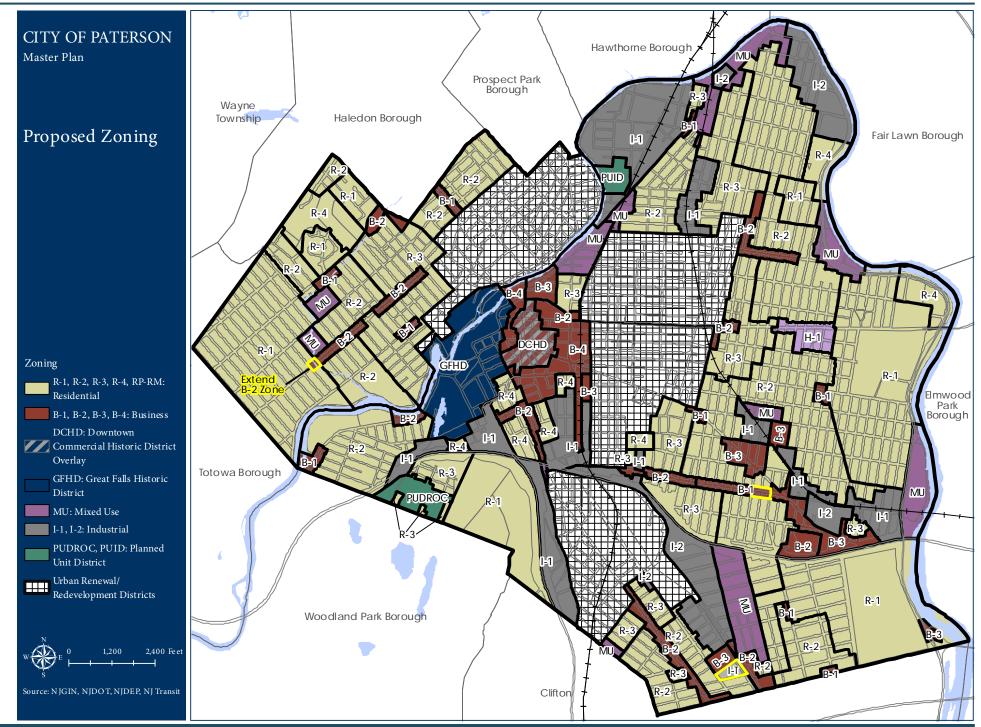
South Paterson – South Paterson is the southernmost neighborhood in the City, and is developed mostly with residential properties that branch out from two



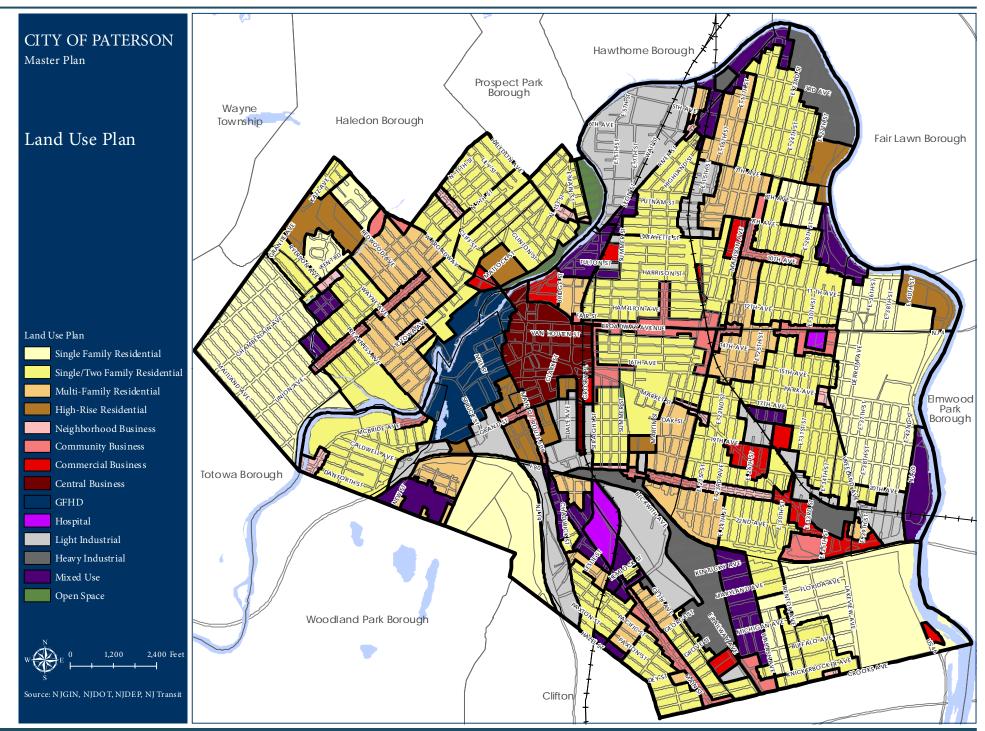


Paterson Farmers Market, Railway

#### LAND USE ELEMENT



#### LAND USE ELEMENT



listed above. The Study recommends marking roads as bicycle/vehicular shared lanes. Although bicycles are legally allowed the same use of roads that vehicles do, shared lane markings serve as a reminder to drivers that multiple users are given the same status within the rightof-way. Only Broadway east of 33rd Street is recommended to have designated bicycle only lanes. The following roads are recommended for bicycle improvements:

- Broadway (designated bicycle lanes east of 33rd)
- · West Broadway
- Union Avenue
- Madison Avenue
- Market Street
- Main Street

#### Passaic County Master Plan -Transportation Element

#### **COMPLETE STREETS**

The Transportation Element of the Passaic County Master Plan was updated in October of 2012, which addresses all County transportation infrastructure. A key focus of the County Transportation Plan is for many County roads within Paterson to be "complete streets" which means that they will be improved and designed to support multiple modes of transportation. These streets are intended to accommodate car, bus, bicycle, and pedestrian traffic safely and efficiently. While the implementation for each street will be different due to the needs of users and the capacity of the roadway, this will generally be achieved by installing designated bike lanes on the streets and traffic calming devices where necessary, as well as designated bus stop areas. Curb extensions and bump-outs are proposed at cross-walks to increase pedestrian safety as well as opportunities for landscaping and greening. County Roads proposed to be converted into Complete Streets include:

- Main Street
- Market Street
- McBride Avenue
- Getty Avenue/Straight Street
- Lafayette Street
- Madison Avenue
- 5th Avenue
- 18th Street
- Vreeland Avenue
- 10th Avenue
- Haledon Avenue



Complete Streets Diagram, Graphic from Passaic County Master Plan, Transportation Element

- Union Avenue
- Totowa Avenue
- Preakness Avenue
- West Broadway
- East Main Street
- Burhans Avenue
- Belmont Avenue
- Lakeview Avenue
- Crooks Avenue
- Hazel Street

#### **BUS RAPID TRANSIT**

The County Master Plan also identifies several proposed Bus Rapid Transit (BRT) routes that would stop in downtown Paterson. BRT can generally be described as an enhanced bus system that operates similar to a train, but without the inflexibility of tracks. BRT is intended to provide direct and efficient service between only a few select points on a route designed to maximize speed of travel. BRT can operate on existing roads, typically in lanes designated specifically for buses. There are five proposed BRT routes that would connect downtown Paterson with other areas in the region.

- Connecting Passaic County Community College with Montclair State University via Valley Road, potentially also linking with St. Joseph's Medical Center
- Connecting Paterson to William Paterson University in Wayne, via the Paterson-Hamburg Turnpike, stopping at the NJ Transit Broadway Bus Terminal
- Connecting Paterson, Passaic City, and Clifton through Main Street
- Connecting the Great Falls National Park with points

FIGURE	10.13
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Freight Corridors in Paterson identified by Passaic County Master Plan						
Through	Connector	Opportunity				
Interstate 80 Route 20 Broadway/ Route 4	Main Street Madison Avenue Union Avenue Memorial Drive West Broadway East Main Street Haledon Avenue Ward Street Route 19	Lakeview Avenue Getty Avenue/ Straight Street				

in Bergen County along Market Street

• Connecting points in Bergen County with downtown Paterson via Broadway, stopping at the Broadway Bus Terminal

These prospective BRT routes along with the existing rail service and bus service in the area would provide an extensive public transportation network in Paterson.

#### **BICYCLE INFRASTRUCTURE**

Passaic County is also proposing a 'bike loop' of designated bicycle lanes and shared lanes to run through downtown Paterson and create connections via bicycle to many destination points in the City. These areas can be seen in the Bicycle Improvements Map. The County Master Plan identifies several roads within Paterson as "Priority Bicycle and Pedestrian Corridors" These corridors are intended to provide a County-wide network of bicycle and pedestrian paths and trails to connect downtown business districts, parks, riverfronts, and other destinations throughout the County through a 'complete streets' approach. These corridors are intended to link with existing trails, such as the Morris Canal Greenway. The priority bicycle and pedestrian corridors within the City of Paterson identified by the County Plan are many of the same roads recommended for bicycle improvements by the City-Wide Transportation Needs Assessment noted above, however the County identifies several more potential bicycle paths:

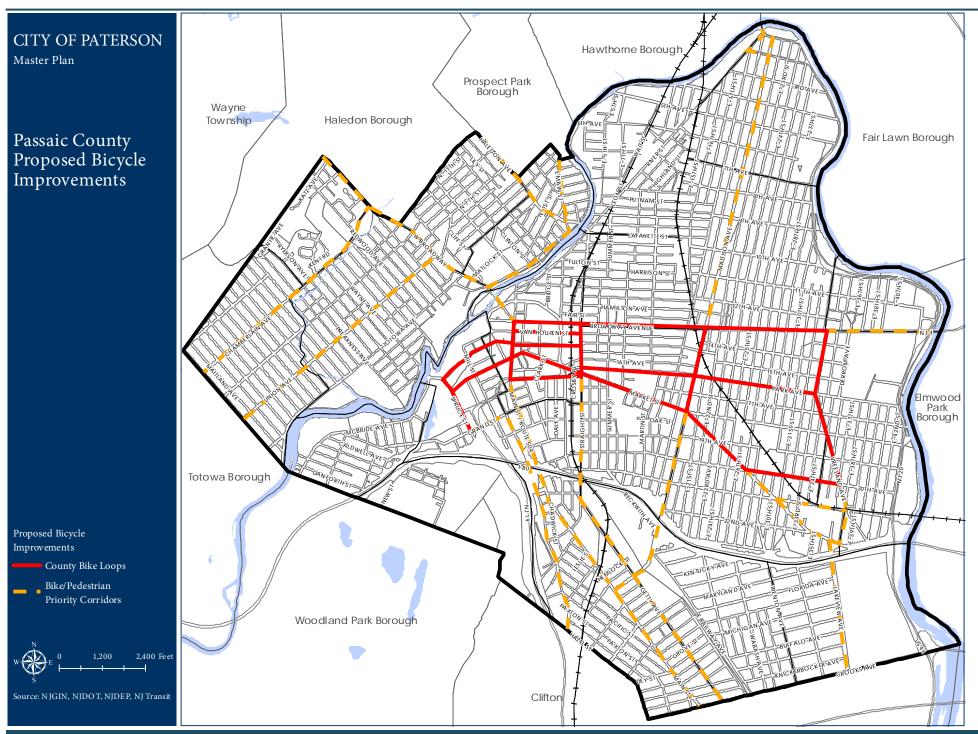
- Market Street
- Lakeview Avenue
- Getty Avenue
- Main Street
- Straight Street
- Grand Street
- Madison Avenue
- Union Avenue
- Haledon Avenue
- Broadway
- McBride Avenue

#### FREIGHT TRANSPORTATION

The County Plan also recognizes several roads as being existing or potential freight corridors, to be utilized for the transportation of goods on large trucks. The movement of goods along freight corridors is acknowledged in the Plan as being another important consideration when implementing "Complete Streets" on County roads. Freight corridors in the County are each classified in one of four categories.

- Through Roadways These are the corridors that deliver freight through the County and to and from regional or national destinations.
- Connector Roadways These are the roadways that generally serve to connect the larger through roadways and their destination or points of origin. A purpose of connector roadways as freight corridors

#### CITY OF PATERSON MASTER PLAN



MARCH 2014

as well as any other highly congested streets, such as in the Downtown or near the existing highway interchanges.

An updated centralized system will be more expensive than the separate corridors. However, significant progress has been made in the last decade in developing low-maintenance systems that can be installed. These systems need information technology (IT) maintenance and operations support to update/ revise the signal timing plans. The most advanced systems now use adaptive traffic signal technology. These systems are demand responsive and constantly update the traffic signal timing based on current traffic flow. An adaptive signal system requires traffic sensors to use that information to gauge traffic flow. This type of system eliminates the need for the traditional method of gathering traffic data followed by capacity analysis to produce or update a fixed time of day timing plan.

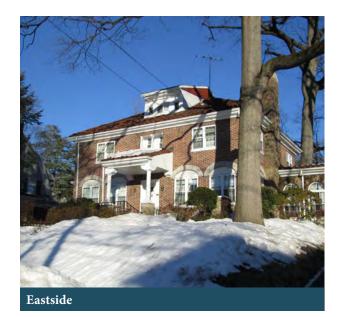
Either alternative will require communications by one of the following options:

- Overhead wires (cable or telephone)
- Underground interconnections
- Wireless
- All three options have maintenance issues and differ in cost. Also, the installation of vehicle actuation via traffic cameras at each intersection is recommended for either alternative. This would allow each traffic signal to operate optimally as wasted time would be reduced during each signal cycle. It is recommended to perform a study to evaluate the future traffic signal system from a cost/benefit perspective.

- 22. Transfer City Ownership of Traffic Signals on County Roads - As previously mentioned, all of the traffic signals within the City are maintained by the City, with only few exceptions. The City should attempt to transfer maintenance responsibility of signals to the County or State where the signal is located on a County or State owned road. This divestiture would facilitate the reallocation of City resources to infrastructure on City streets. Also, a basic maintenance plan should be implemented to routinely inspect the traffic signals. It is recommended that these inspections be done by an outside contractor, while the day-to-day maintenance is performed by the City's staff.
- 23. Consider additional traffic signals at congested intersections – In addition to coordinating and maintaining existing traffic signals, some intersections in the City may warrant signalization in order to better alleviate traffic congestion and organize traffic flows. Further investigation is needed to determine the feasibility and potential benefits of traffic signalization. A few areas that warrant further study include:
  - a. Route 20 at 19th Avenue (Lowe's shopping plaza)
  - b. Interstate 80 at Glover Street (exit 56)
- 24. **Coordinate Freight Transportation** Coordinate with Passaic County and NJDOT, on improving freight and rail access to industrial areas of the City. The Passaic County Transportation Element specifically identifies Lakeview Avenue as a potential freight corridor. While Lakeview Avenue is a County road that provides access to Interstate 80, and is the only four lane road in the area, it is also located in a residential area. Lakeview Avenue was specifically mentioned during public hearings by residents who feel that trucks using this road make it unsafe for their children. The City should work with the County to find an alternative route to direct truck and freight traffic. East Railway Avenue, while it does not have the same width as Lakeview, does offer access

to Interstate 80 and is a primarily industrial and commercial area rather than residential.

If truck traffic cannot be diverted from Lakeview Avenue, then the road should be considered for other improvements to increase pedestrian safety such as curb extensions and safety bollards at crossings.





10th Avenue

small scale residences fronting on long urban blocks. Historic factories can also be found throughout the neighborhood, reflecting on its industrial past.

**10th** Avenue – Bound by 7th Avenue to the north, East 33rd Street to the east, Broadway to the south, and the NYSW railroad to the west, this neighborhood is focused around the commercial corridors of Madison Avenue and 10th Avenue in the northeast of the City. One of the largest neighborhoods in the City, this neighborhood is also one of the more densely populated neighborhoods in the City. There are many multi-family apartment buildings and duplex homes throughout the neighborhood.

*Eastside* – Also known as Eastside Park due to the prominence of the park in the neighborhood, Eastside is a residential community on the eastern end of the City. The neighborhood's general boundaries are the Passaic River to the east, Broadway to the north, East 35th Street to the west, and the railroad to the south. Eastside is home to some of the most historic residences in the City, with large homes representing many different architectural styles. Tudor, Italianate, Greek Revival, and Georgian homes among other styles can be found in the Eastside neighborhood. Much of the neighborhood is within the nationally designated Eastside Park Historic District.

*Manor* – Just north of Eastside is the Manor neighborhood, which is similar in character to Eastside, but located across Broadway, creating a separation between the two. The Manor is bound by Broadway to the south, the Passaic River to the east and north, and East 33rd Street to the west. The Manor neighborhood unlike much of the City, has several prominent streets like Manor Drive which differ from the traditional street grid of the City. Several of the streets in this neighborhood actually curve and wind through the neighborhood. Homes in this neighborhood tend to be on larger lots with spacious yards and mature trees lining the streets. *Near Eastside* – As the name implies, Near Eastside is adjacent to the Eastside neighborhood. Located south of Broadway, north and east of the railroad, and west of East 35th Street, this is one of the larger neighborhoods in the City. Characterized by the many larger row homes on more compact lots, this neighborhood presents a consistent streetscape with the majority of the homes and buildings being situated near the front of the property along the traditional street grid pattern. Many of the homes also have small porches or stoops, lining the streets with small spaces for public interaction.

Lakeview – Lakeview is located along Lakeview Avenue in the south of the City. The neighborhood borders the Passaic River to the east, Interstate 80 to the north, Crooks Avenue and the City of Clifton to the South, and is bound on the west by Trenton Avenue. One of the few neighborhoods in the City south of the Interstate, Lakeview is essentially split with two distinct areas. East of Lakeview Avenue is Cedar Lawn Cemetery, and west of Lakeview Ave is a residential community of modest homes with small front lawns and larger back yards.

**Railway** – The Railway neighborhood is a very diverse area of Paterson centered along the Railway Avenue corridor in the southern portions of the City. Situated between Interstate 80, Crooks Avenue, Trenton Avenue, and Getty Avenue, this neighborhood is made up of a broad range of streets and buildings. One end of the neighborhood is primarily large industrial warehouses and industrial buildings while the other end of the neighborhood is made up of small scale residential blocks and modest homes similar to Lakeview. Along Railway Avenue is the Paterson Farmers Market, one of the more unique experiences in the City with its open air displays of local produce and other goods for sale.

# City of Clifton



# 2008 MASTER PLAN RE-EXAMANATION REPORT

Adopted by the City of Clifton Planning Board on 3-27-08

#### The Specific Changes Recommended for the Master Plan or Development Regulations, if any, including Underlying Objectives, Policies and Standards or whether New Plan or Regulations should be prepared.

Locate new medium density senior citizen residential zoning near commercial centers such as Clifton Avenue, Main Avenue and Botany Village to promote nearby retail, office and related uses.

Encourage pedestrian friendly accessibility near major highways and mass transit facilities.

Permit mixed office uses along Route 3 from Bloomfield Avenue to Passaic Avenue.

Permit mixed office and commercial uses at the Corrados/Bright Star properties.

Incorporate the new Redevelopment Areas (Athenia Steel/Main Avenue A & B/Hoffman LaRoche) into the City Zoning Ordinance.

Redefine a new Central Business District Zone for the Main Avenue Overlay to be consistent with the present underlying zone, the overlay zone and the approved redevelopment areas A and B.

Target Botany Village for potential redevelopment area for new commercial and residential development potential.

Recognizing the need for more localized separation and open space between residences, the existing Bulk and Area Schedule of the city should be revised as shown in the table below:

		Min. Lot	Permitted Max.	Proposed
District	Permitted Uses	Area	Lot	Max. Lot
		(sq. ft.)	Coverage	Coverage
R-A1	One Family	9,375	30%	27%
R-A2	One Family	6,600	30%	27%
R-A3	One Family	5,000	27%	25%
R-B1	One Family	5,000	27%	25%
R-B1	Two Family	7,500	25%	22%
R-B2	Garden Apts.	60,000	25% main bldg.	No change
R-B2	Townhouse	60,000	25% main bldg.	20%
R-B3	Multi-Fam. Apts.	10,000	25%	No change
R-HR	High Rise Apts.	4 acres	15% main bldg.	No change

Further, improvements to the visual separation between residences is the proposed new definition for building height. The recommends that the definition of building height be revised as follows: "The vertical distance from the average finished grade to the top of the highest roof beams on a flat or shed roof, to the deck level on a mansard roof and the ridge level for a gable, hip and gambled roofs."

Preserve the existing farmlands through their rezoning to agricultural land use that permits farming, green houses, nurseries, retail businesses associated with permitted farm uses and large lot single family residential development (proposed R District). Further, it is the City's intention to make its farmlands an open space priority in accordance with the Passaic County Open Space and Recreation Master Plan. Rezoning options, as noted above and the use of the Passaic County Open Space and Farmland Preservation Trust Fund for land acquisition are two

of the tools contemplated to ensure the retention and preservation of the City's remaining farmlands.

Create a new public park zone in which all existing public parks and conservation lands will be located.

Create a new ordinance that regulates newsracks by requiring the use of only modular newsrack box assemblies (MNBA), where more than one newsrack box is situated. This will help eliminate the haphazard and poorly maintained newsracks located throughout the City.

Preserve environmentally sensitive lands, specifically wetlands, through restrictive zoning, and/or the purchase of such lands for open space preservation.

Within the adopted redevelopment plan areas, planned development zones, and all other zone districts, that have not received approval or been constructed, look to reduce the overall residential density to 8 units per acre and require a minimum of 25% open space to include both active and passive recreational components to the plans.

The Aquackonack Gardens neighborhood, located north of Van Houten Avenue and east of Valley Road, is an old established neighborhood with narrow winding roads without sidewalks. This old Defense worker neighborhood has deep history within the City. Preservation of its road system and existing development pattern, including the pattern of lots, maintains the integrity of this neighborhood. Revisions to the City Zoning Ordinance should provide regulations and incentives to encourage the existing neighborhood remain intact. In addition, it is recommended that the City explore the option of designating this unique neighborhood as a Historic District. Such designation would allow the City to strictly manage renovations/rehabilitation of homes, changes to existing open spaces and circulation patterns, as well as complete redevelopment of individual lots or groups of lots.

Encourage a revision to the zoning code of the City of Clifton to enact a change to allow building line extensions for non-conforming setbacks in residential zones only. This will help eliminate applications that appear before the Zoning Board of Adjustment therefore providing efficient and timely enhancements to our housing stock.

Explore the feasibility of establishing an Architectural Review Committee for the City with a focus on Botany Village and Aquackonack Gardens.

Institute a site plan requirement for all single family new and existing dwelling construction projects. This will include minor subdivisions and additions to existing dwelling units. This will help establish storm water and grading issues are formally addressed during the approval process. This may be included in a new and separate checklist for residential development of this type as not to be a burden to the applicant.

A Circulation Plan Element should be prepared for the City showing the location and types of a facilities for all modes of transportation required for the efficient movement of people and goods into, about and through Clifton, taking into account the functional highway classification of the Federal Highway Administration and the type, locations, conditions and availability of existing and proposed transportation facilities, including air, water, road and rail.

Explore the feasibility of participating in the New Jersey Highlands Water Protection Act utilizing the Transfer of Development Rights program offered through the New Jersey Highlands Council

and the associated legislation. Utilizing the transfer of development rights grant program, the City must create the necessary elements such as a build out plan, Real Estate Market analysis, wastewater and water capacity, and identify potential receiving areas only if the feasibility plans identify more capacity for Highlands transfer of development rights units.

Reduce the overall congestion on the main arterial and major collector roads in and around our major highways. This will include most county roads within and around the city. Take an active approach to development in other communities adjacent to our City of Clifton and suggest alternatives to reducing traffic and congestion on roads that are at a level of Service "C" or worse.

Review Industrial areas that have changed use over the years to non-industrial uses for a zone change to better fit the uses that exist. This review shall include a review of industrial areas for uses that are compatible with the adjacent zones and consider rezoning to accomplish better suited uses for those areas. This shall include the uses as stated in our ordinance being updated to a more current uses typically found in a modern industrial zone.

Review Current industrial zones permitted uses and update those uses to be consistent with current manufacturing standards and products. Also review areas and uses that accessory uses can be added with no impact that conform to today's commercial and industrial trends

Review large lot areas within the residential zones located throughout the city to protect the character of the neighborhood, scenic value of those areas and prepare guidelines for a new large lot zone that will protect those areas from additional development. Specifically, the existing RA-1 District, generally located along the east and west sides of Grove Street from Van Houten Avenue and East Gate, should be rezoned to encourage the retention of these established residences on large lots. See the Appendix A for the specific location/lots associated with the proposed Grove Street R District and the corresponding bulk and area requirements.

Encourage the institution of an open space tax at \$0.75 per 1000 dollars of assessed value to assist the city in preserving open space and rehabilitating the cities recreation facilities for the city's residents.

Encourage mixed-use projects to efficiently utilize land within the City in order to provide for a new urbanism approach to development within the City. This will lead to the utilization of mass-transit facilities and be more environmentally friendly development patterns.

Encourage a requirement for development of an environmental impact study be added to the City of Clifton development checklist to encourage environmentally friendly development and utilize the environmental committee during those processes.

Encourage the location of public/private schools and Board of Education buildings and facilities within compatible zones not in industrial zones where there may be conflicts with the health, safety and welfare of those occupants of the public facility. A Planning Board sub-committee should be established to review the City's Zoning Ordinance with a focus on establishing the appropriate zones, within the City, that can adequately and suitably accommodate future school construction. As part of the committee's review, specific development/design conditions should be incorporated into those zones that permit school construction in order to ensure the proper development of any school. Retaining the public/private schools and the Board of Education as

permitted "conditional uses" affords the City greater control of their location, even in zones that have been established as appropriate for such uses.

Encourage the creation of an ordinance that would limit the hours of operation for businesses in the City of Clifton. This limitation would increase the quality of life in and around the business area where residential uses and zones exist. Limiting the hours of operation would help ensure that residents and businesses could co-exist without creating unpleasant relationships between property owners.

Review the required buffer between industrial uses and residential uses and districts. Currently the buffer is 40 feet. This requirement has been used for residential districts and a review should take place to increase that to all residential uses and/or districts that border industrial uses and districts.

Encourage Montclair University to limit the Quinn Road access to the college as an entrance only. This would ensure that the safety of the residents, students and pedestrians are not subject to a hazardous road intersection if the Quinn Road access becomes two-way. Currently Valley Road is at near capacity for traffic and the steep grade of Quinn Road causes it to be closed during bad weather. For this reason Quinn Road should never become a two-way access from Valley Road. The University should look at the alternative ways out of the university without adversely impacting the surrounding Municipalities. The University should consider the Clove Road overpass as proposed by the NJDOT as the solution to the traffic issues that plague the college. The university should also consider the changing of the class schedules to lessen the impact the traffic that the university generates on the surrounding Municipalities and surrounding streets. The university should also consider that it may be at capacity as a college in terms of land use and the strategy should be to look for satellite campuses to reduce the impact of the one central school.

Review areas within the Main Street corridor for additional parking opportunities. Parking on Main Street has become an issue and the businesses that rely on pedestrian and vehicular traffic need additional parking for customers and business associates. The City of Clifton should consider creating a parking program that will add a certain amount of parking per year to the main street corridor. Coordination with local business groups to provide timely information regarding properties suitable for parking is to be encouraged.

Review the landscape requirement of our ordinance to encourage the caliper and size to be of a quality that would ensure the proper growth and screening that the landscape would create. For this requirement the base caliper for trees included in the landscape ordinance shall be 4  $\frac{1}{2}$ " to 5  $\frac{1}{2}$ " caliper.

# APPENDIX K

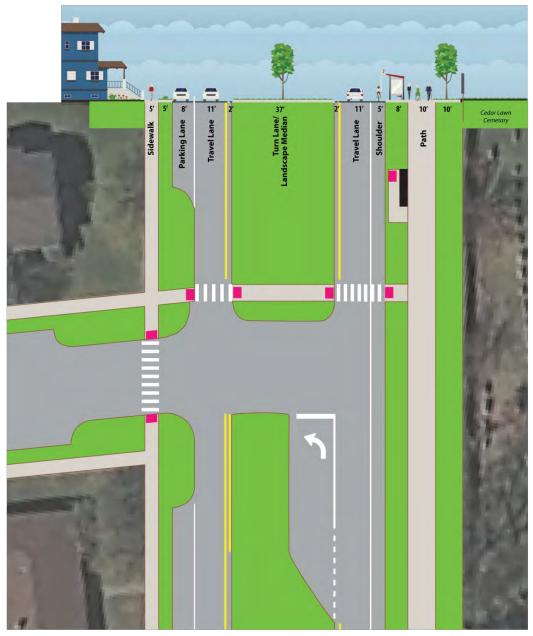
EXCERPTS FROM COUNTY PLANS/ REPORTS

## Preliminary Concept (April 2019)

- 114' ROW
- 5 sw / 5 buf / 8 pl / 11 tl / 2 s / 37 med / 2 s / 11 tl / 5 s / 8 buf / 10 sw / 10 landscaping



# **Cross Section & Plan View**



# PASSAIC COUNTY

NEW JERSEY

**RICH HISTORY • BRIGHT FUTURE** 



# **MOVING PASSAIC COUNTY**

# TRANSPORTATION ELEMENT OF THE PASSAIC COUNTY MASTER PLAN

# **FINAL PLAN** OCTOBER 2012

Prepared By: Passaic County Department of Planning and Economic Development with assistance from Parsons Brinckerhoff







Established in 1993, New Jersey's Scenic Byways Program's mission is to "create unique travel experiences and enhance the local quality of life through efforts to preserve, protect, interpret and promote the intrinsic qualities of New Jersey's treasured places." To date, the program has seven state designated byways, two of which have also received federal designation. The byways are located throughout New Jersey and include the Pine Barrens, Millstone Valley, Warren Heritage, Upper Freehold, Delaware River, Bayshore Heritage, and the Palisades. A Passaic County byway would complement this group.

To be eligible for designation, a road must provide "visual or physical access to extraordinary scenic, historic, cultural, recreational, natural or archeological features." It is not necessary to have all of these features. Unique resources in one category can be enough to qualify. More details on specific eligibility requirements are provided in the New Jersey Scenic Byways Program Manual.

A two-stage process is involved for designation. The first step is preparation of an application for review by the NJDOT Scenic Byways Coordinator and the State Scenic Byways Advisory Committee. This application should be vetted by the appropriate boards and committees at the County level before being submitted for consideration. If the Advisory Committee accepts the nomination, the byway receives provisional designation from the NJDOT Commissioner and the byway sponsor (potentially Passaic County) has five years to complete a Corridor Management Plan. The Plan would specify strategies and actions to be undertaken to maintain and enhance the byway's qualities, as well as to interpret and promote the byway to visitors. Once a Corridor Management Plan is prepared and accepted by the Advisory

Committee, consideration can also be given to application for federal scenic byway designation.

#### Scenic and Historic Byway Reference Guide

Table 8.1 provides a reference guide of Scenic and Historic Byways throughout Passaic County. The first two columns provide the byway number and name used in Maps 8.1, 8.2 and 8.3, at the end of this section, as well as descriptions on the subsequent pages. The municipality listing in the third column may be used to identify the extents of each byway. The last column lists the corresponding page of descriptions and photos, which highlight the relevance and landmark sites along each byway.



Historic markers can help elevate awareness of scenic and historic assets throughout the County. This protoype illustrates an example of a marker to be developed as part of a Heritage Tourism Element of the Passaic County Master Plan.

# 8. Scenic and Historic Byways

Table 8.1 - Scenic and Historic Byway Reference Guide

	Corridor Number/Name	Municipality	Page #
1.	Passaic River	Clifton, Little Falls, Hawthorne, Passaic,	-86-
		Paterson, Prospect Park, Totowa, Wayne,	
		Woodland Park	
2.	Morris Canal Greenway	Clifton, Little Falls, Paterson, Pompton Lakes,	-87-
		Totowa, Wayne, Woodland Park	
3.	Acquackanonk Byway	Clifton, Passaic	-88-
4.	Allwood Byway	Clifton	-88-
5.	Market Street (Passaic)	Passaic	-89-
6.	New York Susquehanna & Western Railway	Bloomingdale, Hawthorne, Pompton Lakes,	-89-
		Paterson, West Milford	
7.	New Jersey Transit-Bergen Main Line	Clifton, Hawthorne, Passaic, Paterson	-90-
8.	Montclair Rail Line	Little Falls, Wayne	-90-
9.	Market Street (Paterson)	Paterson	-91-
10.	Broadway	Paterson	-91-
11.	Main Street	Paterson	-92-
12.	Lakeview Avenue	Clifton, Paterson	-92-
13.	River Street	Paterson	-93-
14.	Silk Road Trail	Haledon, Paterson	-93-
15.	Totowa Road Revolutionary War Trail	Paterson, Totowa, Wayne	-94-
16.	McBride Avenue	Little Falls, Paterson, Woodland Park	-94-
17.	Garret Mountain and Rifle Camp Park	Clifton, Paterson, Woodland Park	-95-
18.	Goffle Road	Hawthorne	-95-
19.	Paterson-Hamburg Turnpike	Bloomingdale, Haledon, Pompton Lakes,	-96-
		Wayne, West Milford	
20.	Farms View	Wayne	-96-
21.	Wanaque Avenue	Pompton Lakes	-97-
22.	Greenwood Lake Railroad/Ringwood Avenue	Pompton Lakes, Wanaque, Ringwood	-97-
23.	Greenwood Lake/Long Pond Ironworks	Ringwood, West Milford	-98-
24.	Lake Land Byways	Bloomingdale, Ringwood, Wanaque,	-98-
		West Milford	
25.	Newark-Pompton Turnpike	Wayne	-99-
26.	High Mountain Byway	Haledon, North Haledon, Wayne	-99-

#### PASSAIC COUNTY TRANSPORTATION ELEMENT

11. Main Street: Main Street has played a critical role in the economic and demographic development of the City of Paterson. The types of industry that supported the birth of Paterson through the creation of the Society for Establishing Useful Manufactures (S.U.M.) around the Great Falls in the early 19th century have given way to more service-based commerce anchored by the ongoing

expansion of the current St. Joseph's Medical Center. Throughout this transformation, the historic downtown has been a constant in the everyday life of Paterson residents in what can be considered one of the best preserved groups of architecturally significant buildings anywhere in the state of New Jersey.



A view of the historic Main Street commercial corridor.

12. Lakeview Avenue: The Lakeview Avenue Byway draws its name from the lake that was originally constructed but has long since been drained. Its prominent feature is the Cedar Lawn Cemetery, which dates from 1867 and is the final resting spot for a number of prominent New Jerseyans, including Garret Hobart, former Vice President of the United States, and John Ryle, the man considered to be the father of the silk industry in America. The northern end of the byway

Paterson's colorful Main Street has lona been its commercial core.



historic churches.

is defined by a broad, tree-lined boulevard which was a rail link to downtown Paterson. This has become a crucial transportation connection to Route 80. The neighborhoods in this area are marked by the work of famous Italian sculptor Gaetano Federici. The southern end of the byway is home to a number of traditional commercial and residential areas in the City of Clifton with connections to the Garden State Parkway and N.J. 46.



The tree-lined boulevard of upper The Victorian-era Cedar Lawn Cemetary. Lakeview Avenue.

Lower Lakeview Avenue in Clifton, where the trolley line formerly ran. In the distance, Route 46 passes overhead.

## SCENIC AND Map 8.2 Scenic and Historic Byways HISTORIC **Southern Passaic County BYWAYS** 6) Ò NORTH 19) $\binom{2}{3}$ 19 18 THORN - 101 26 WAYNE RIS ΝΤΥ 25 HALEDON PROSPEC 14 ~ See Detail Map 8.3 AVE (CR 6511 Uner Case PASSAIC CO (10) १ (15) 2 тотоwa $\begin{pmatrix} \\ \\ \\ \end{pmatrix}$ دى ً LITTLE FALLS 12 AVE (CR 611) 0400T AVE (CR 615) J 161 7 NORTH

# Legend Municipal Boundary Scenic County Boundary Parks \ Open Space Watershed Properties Water Bodies Roadways Major Highways County Local

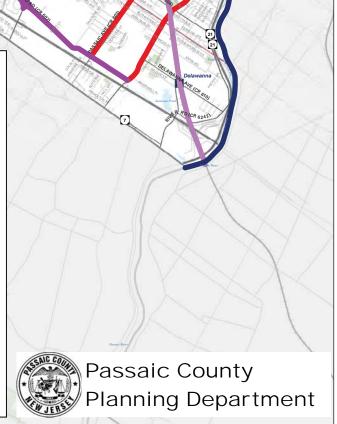
0

- Park N Ride / Bus Station
- 🛅 🛛 Bus Depot
- Passenger Rail Station
- ++++++ Existing Passenger Rail Road
- - Appalachian Trail
- NYNJ Trails Conference Trails \*
- Scenic and Historic Byways 14. Silk Road Trail 1. Passaic River 15. Totowa Road Revolutionary War Trail 2. Morris Canal Greenway 16. McBride Avenue 3. Acquackanonk Byway 17. Garret Mountain / Rifle Camp Park 4. Allwood Byway 18. Goffle Road 5. Market St (Passaic) 19. Paterson-Hamburg Turnpike 6. NYS&W 20. Farms View 7. Bergen/Main Rail Line 21. Wanaque Avenue 8. Montclair Rail Line 22. Greenwood Lake Railroad / Ringwood Avenue 9. Market Street (Paterson) 23. Greenwood Lake / Long Pond Ironworks 10. Broadway 24. Lakeland Byways 11. Main Street 25. Newark-Pompton Turnpike 12. Lakeview Avenue 26. High Mountain Byway 13. River Street

2

Miles

SSEX



\* Source: NY/NJ Trails Conference

# APPENDIX L

ROAD OWNER RESPONSE



#### OFFICE OF THE COUNTY ENGINEER ROOM 524

Jonathan C. Pera, P.E. County Engineer

October 9, 2020

TEL: (973) 881-4456 FAX: (973) 742-3936 TDD: (973) 279-9786

Julia Steponanko, PE 100 Corporate Drive, Suite 301 Lebanon, NJ 08833

Re: Road Safety Audit CR 624 (Lakeview Avenue) Between Clifton Avenue and Market Street Clifton and Paterson Cities Passaic County

Dear Ms. Steponanko:

The County of Passaic thanks the Road Safety Audit team for their participation and assistance in this significant effort to improve traffic, pedestrian, and bicycle safety along Lakeview Avenue in the Cities of Paterson and Clifton. The issues that were identified, supplementary crash data that was developed, along with the recommendations will be critical in making this corridor safer for all users and a more resilient element of the County infrastructure in the future.

The County has reviewed the recommendations in the Draft Road Safety Audit (RSA), dated March 2020. Although the County cannot commit to specific improvements without more information and engineering, the recommendations and visualization of the RSA capture the vision for the corridor that was developed through a public planning process and dovetail with the County's Complete Street Policy and Green Streets goals.

The following are the County's comments on the specific recommendations:

- 1. Corridor-wide recommendations:
  - All recommendations are in-line with County goals.
  - One recommendation that may be highlighted is to provide consistent and corridor-wide bicycle access and facilities.
  - Phase implementation of the corridor north and south of Crooks Avenue.
  - Analyze any site distance issues and possible conflicts with parking at intersections.
- 2. Site-specific recommendations:
  - 4-Lane Divided Section (Market to Crooks):
    - o Provide consistent and highly visible bicycle facilities. If possible separate from vehicular traffic.
    - o Examine creating dedicated turn lanes at intersection openings between medians.

- Investigate drainage infrastructure to determine most efficient and appropriate applications of green infrastructure.
- o Investigate modified access to the two cemeteries.
- Crooks Avenue:
  - o Evaluate modified (entrance-only) entrance into the cemetery at the intersection.
- 2-Lane Undivided Section (Crooks to Clifton):
  - Analyze any site distance issues and possible conflicts with parking at intersections.

Based on the recommendations of the RSA Team, the County has applied to the North Jersey Transportation Planning Authority (NJTPA) Local Safety Program for improvements to the first phase of the corridor, from Market Street to Crooks Avenue, including a traffic circle. The County will utilize all the recommendations to continue local coordination and future phased improvements.

If you have any questions, or comments, please feel free to contact our office.

Very truly yours,

Nordan Murphy, PE Assistant County Engineer

cc: Jonathan Pera, County Engineer
 Michael Lysicatos, County Planner
 Charles Silverstein, County Traffic Engineer
 Sal Presti, County Planning Dept.
 Aimee Jefferson, NJTPA
 Sascha Frimpong, NJTPA