TRAFFIC SAFETY IMPROVEMENT STUDY FOR HOWARD BOULEVARD

PUBLIC INFORMATION CENTER



PRESENTED TO:

Morris County, Roxbury Township and Township of Mt. Arlington





Introduction / Overview

Public Information Center for the Traffic Safety Improvement Study along Howard Boulevard (CR 615) from Seasons Drive to I-80 EB off-ramp.

- Project Overview
- Traffic Data
- Speed Data
- Crash Data
- Review Poll Questions
- Discussion / Q&A



Project Overview

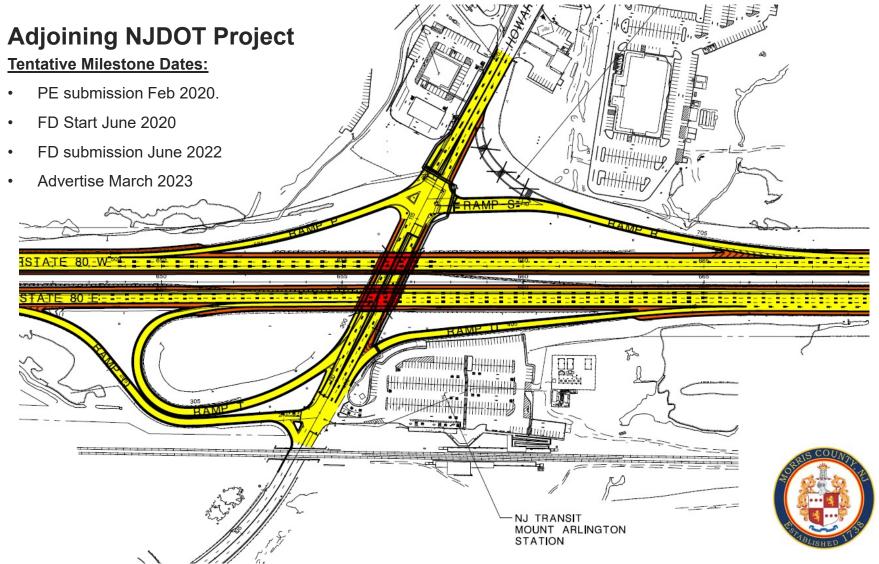
The primary objective of this study is developing a series of alternatives and selecting a PPA to address corridor safety.

The County has established the primary purpose of this project as addressing vehicular and pedestrian safety.

Scope of Work Includes:

- Traffic Data Collection & Analysis
- Existing Conditions Inventory
- Road Safety Assessment
- Crash Analysis

- Speed Study (US Limits 2)
- Corridor Progression/Timing Analysis
- Recommendations & Final Report
- Conceptual Design of a PPA



Data Collection Established Peak Hours

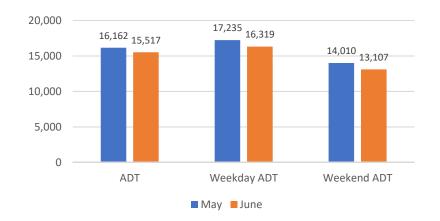
Intersection	AM Peak	Mid-Day Peak	PM Peak
Howard Boulevard and Mt. Arlington Train Station	8:00AM – 9:00AM	12:30PM – 1:30PM	5:00PM - 6:00PM
Howard Boulevard and I-80 EB on Ramps	7:00AM – 8:00AM	12:30PM – 1:30PM	5:00PM - 6:00PM
Howard Boulevard and I-80 WB on/off Ramps	7:00AM – 8:00AM	1:30PM - 2:30PM	4:30PM – 5:30PM
Howard Boulevard and Quick Check South Exit	7:30AM – 8:30AM	12:15PM – 1:15PM	4:30PM – 5:30PM
Howard Boulevard and Quick Check North Entrance/Exit	7:30AM – 8:30AM	12:15PM – 1:15PM	4:45PM – 5:45PM
Howard Boulevard and Bank of America Exit	7:45AM – 8:45AM	12:00PM - 1:00PM	5:00PM - 6:00PM
Howard Boulevard and Davy's Hot Dogs Driveway	7:30AM – 8:30AM	12:00PM – 1:00PM	4:45PM – 5:45PM
Howard Boulevard and Seasons Drive	7:30AM – 8:30AM	12:00PM - 1:00PM	5:00PM - 6:00PM

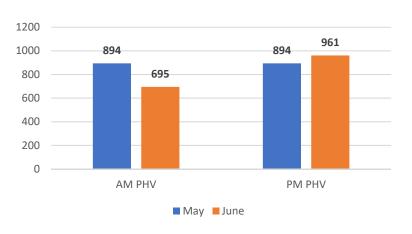
ATR Traffic Volumes

May 2019

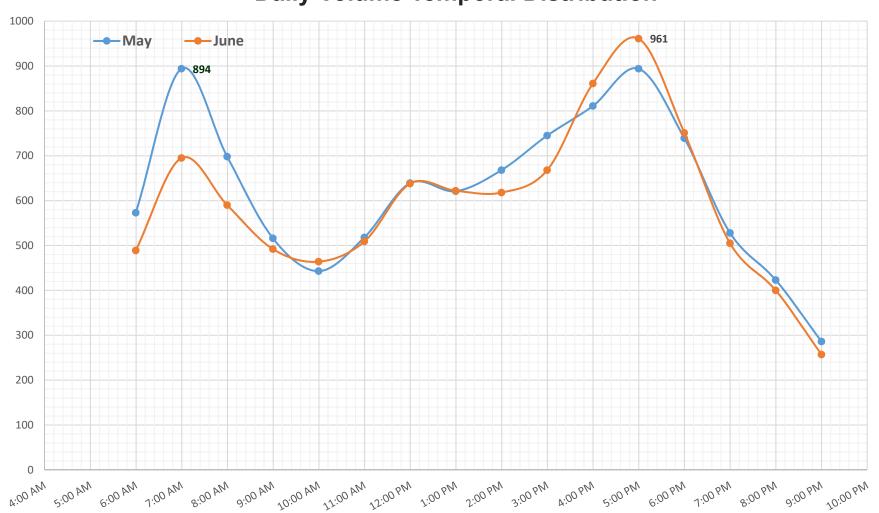
Volume	May	July*
ADT	16,162	15,517
Weekday ADT	17,235	16,319
Weekend ADT	14,010	13,107
AM PHV	894	695
PM PHV	894	961

^{*}Seasonal/Summer Traffic Volumes were impacted by Lake Hopatcong Algae Bloom





Daily Volume Temporal Distribution



Road Diet Feasibility Assessment

JMT reviewed both typical and seasonal traffic volumes along Howard Boulevard to assess the impacts of a road diet.

- The FHWA recommended maximum AADT to sustain a road-diet is 20,000 vehicle per day.
- The FHWA desirable one-way directional volume to sustain a road-diet is 750 vehicle per hour.

Direction of Howard Boulevard	May (AADT)	July (AADT)	Road Diet Feasibility	
Northbound	8,508	8,555	-	
Southbound	7,654	6,962	-	
Total	16,162	15,517	May Be Good	

Road Diet Feasibility Assessment

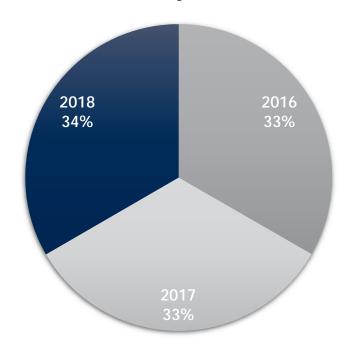
Hour	2019 Existing Condition (May) Weekday Average			Maximum Directional	FHWA Peak Hr Volume	Road Diet	
	NB	SB	Total	PHV (vphpd)	Guidance	Feasibility	
6:00AM	251	573	824	573	750	Probably Feasible	
7:00AM	370	894	1264	894	750	Consider Cautiously	
8:00AM	370	698	1068	698	750	Probably Feasible	
9:00AM	405	516	921	516	750	Probably Feasible	
10:00AM	443	430	873	443	750	Probably Feasible	
11:00AM	518	426	944	518	750	Probably Feasible	
12:00PM	639	455	1094	639	750	Probably Feasible	
1:00PM	621	444	1065	621	750	Probably Feasible	
2:00PM	668	433	1101	668	750	Probably Feasible	
3:00PM	745	496	1241	745	750	Probably Feasible	
4:00PM	811	446	1257	811	750	Consider Cautiously	
5:00PM	894	465	1359	894	750	Consider Cautiously	
6:00PM	739	423	1162	739	750	Probably Feasible	
7:00PM	528	346	874	528	750	Probably Feasible	
8:00PM	423	231	654	423	750	Probably Feasible	
9:00 PM	286	163	449	286	750	Probably Feasible	

Speed Study & Data Analysis

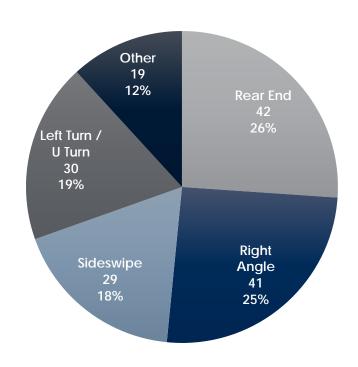
Spot Speed Study was performed using ITE Standards and the FHWA US Limits 2 Safety Countermeasure Tool.

Statistic	Northbound	Southbound	Two-Way
AADT	8,370 vpd	7,551 vpd	15,921 vpd
Posted Speed Limit	40 mph	40 mph	40 mph
Mean Speed	44 mph	32 mph	-
Median Speed	42 mph	33 mph	43 mph
85 th Percentile	47 mph	38 mph	38 mph
Pace Speed	37mph – 47 mph	28 – 38 mph	-
US Limits 2 Recommended Speed	45 mph	40 mph	40 mph

Crash Data Analysis



Year	Crash Frequency	No.	%
	2016	50	31%
2016 –	2017	57	35%
2018	2018	54	34%
	Total	161	100%



Year	Crash Type	No.	%
	Same Direction(Rear End)	42	26%
2018	Right Angle	41	25%
Same Direction(Sideswipe)		29	18%
2016 -	Left Turn / U Turn	30	19%
20.	Other	19	12%
	Total	161	100%

Using the following scale:

1 – Poor | 2 – Fair | 3 – Average | 4 – Good |

5 - Excellent

How pedestrian friendly would you rate Howard Boulevard within the project limits?

Using 1-2 words, describe the existing traffic and safety conditions along Howard Boulevard within the project limits.

What mode of transportation would you like the Borough & County to prioritize along Howard Boulevard?

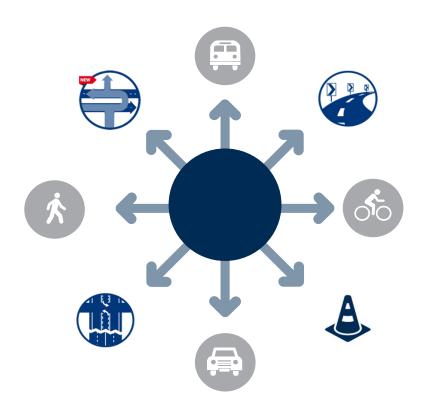
(i.e. Pedestrian, Vehicular, Bicycle, Transit, Multimodal, etc.)

What existing traffic safety or operational issue would you like the Borough & County to prioritize along Howard Boulevard?

(i.e. Congestion, Speeding, Crashes, Bike/Ped Accessibility, etc.)

What roadway improvement would you propose to improve traffic and safety conditions along Howard Boulevard within the project limits?

Question & Answer



Thank You!

Please provide your feedback about tonight's meeting and the project by taking our survey:

https://www.surveymonkey.com/r/HFSQ9XL