



Left Turn Restrictions Study

September 29, 2021



Presented to:



Presented by:

**Sam
Schwartz**

Project Overview

Project Goal

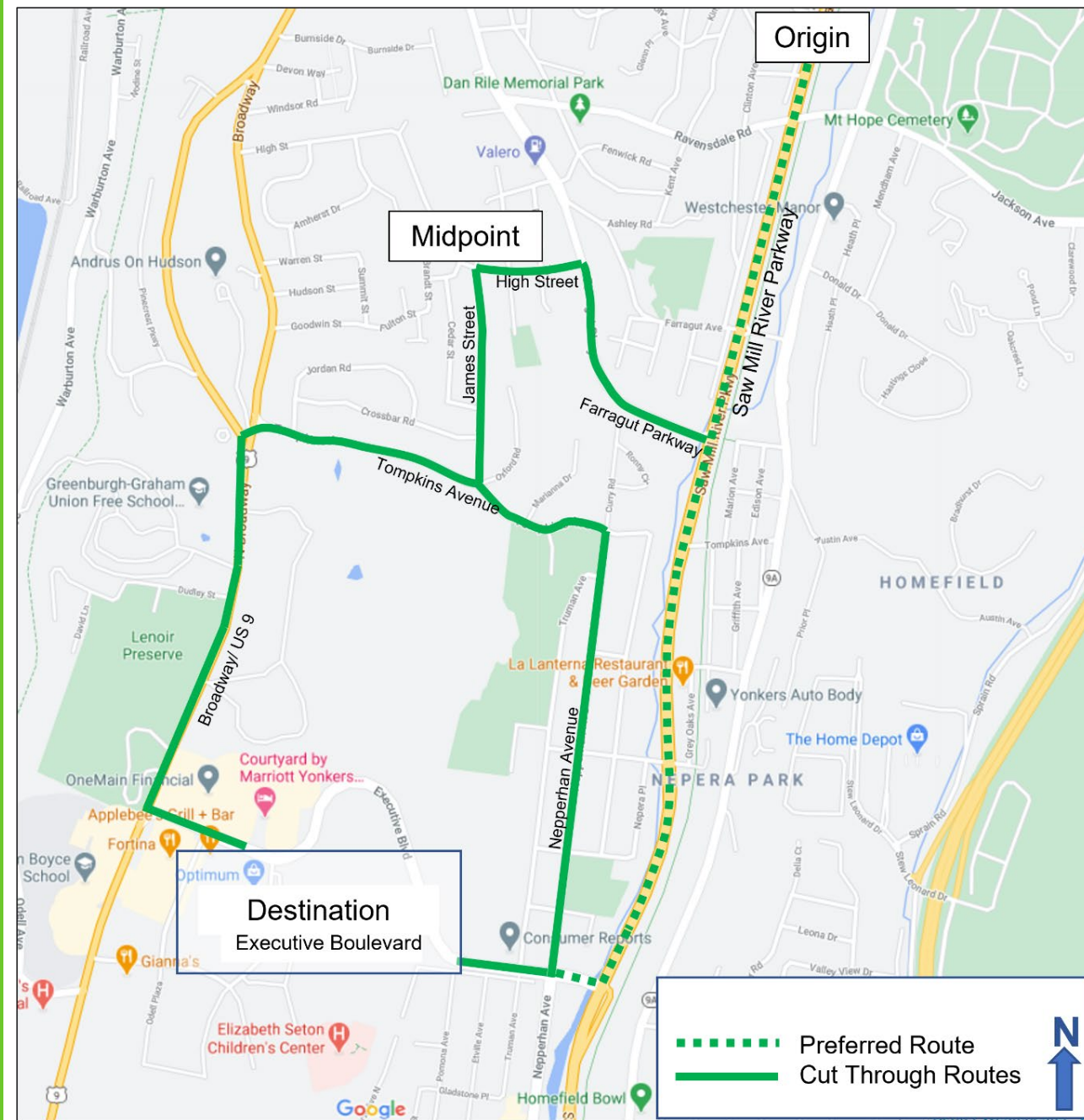
Implement options to reduce the number of cut-through trips and identify the effectiveness of those treatments.

Study Timeline:

- I. Pre-Pandemic – March 2019 to February 2020
- II. Left Turn Restrictions – March 2020 to October 2020
- III. Left Turn Restrictions with Stop Signs – November 2020 to February 2021
- IV. U-Turn restrictions – March 2021 to April 2021

Study Area

The Cut Through routes are used to bypass the traffic on Executive Boulevard at the Saw Mill River Parkway

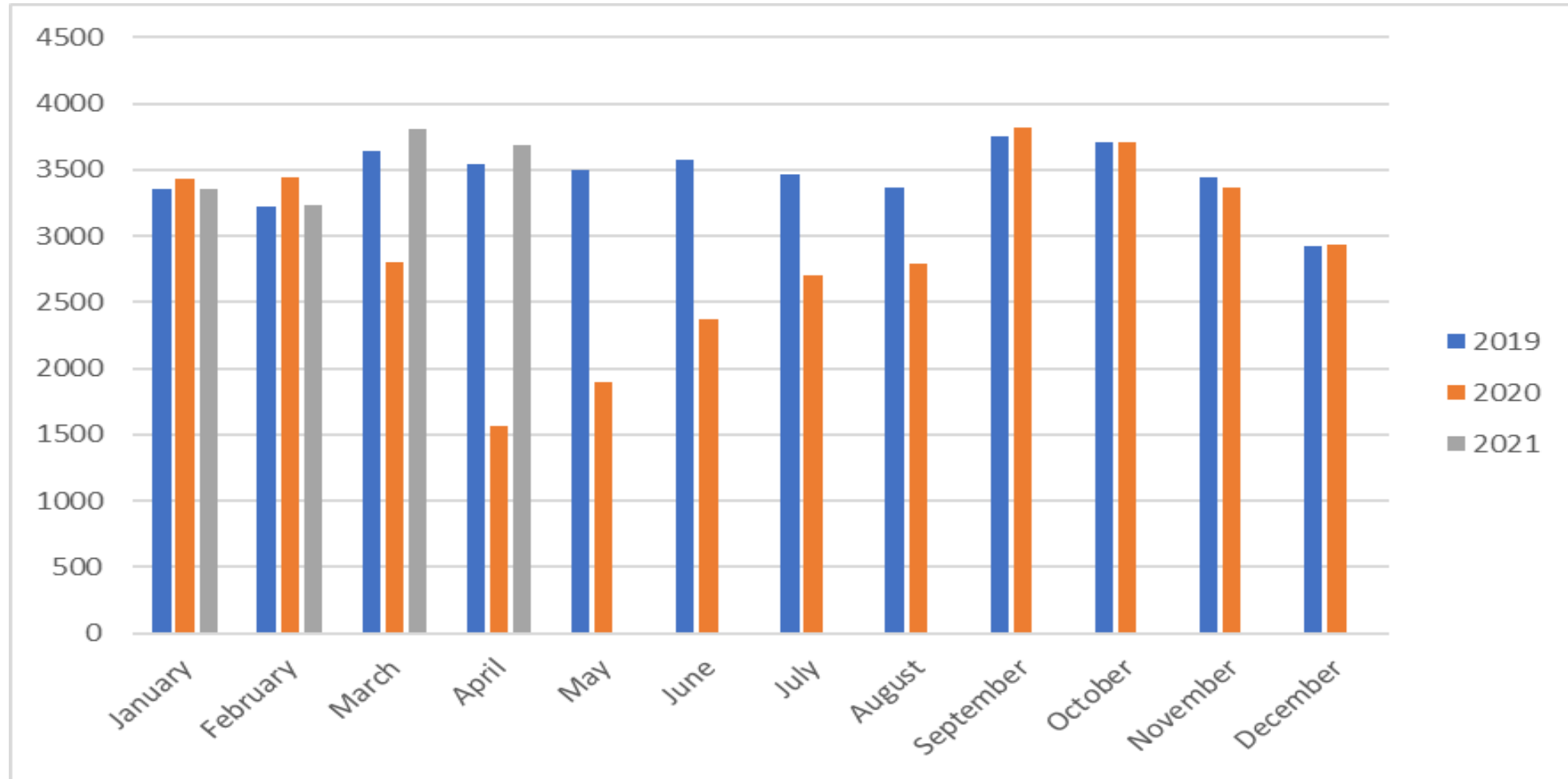


StreetLight Data

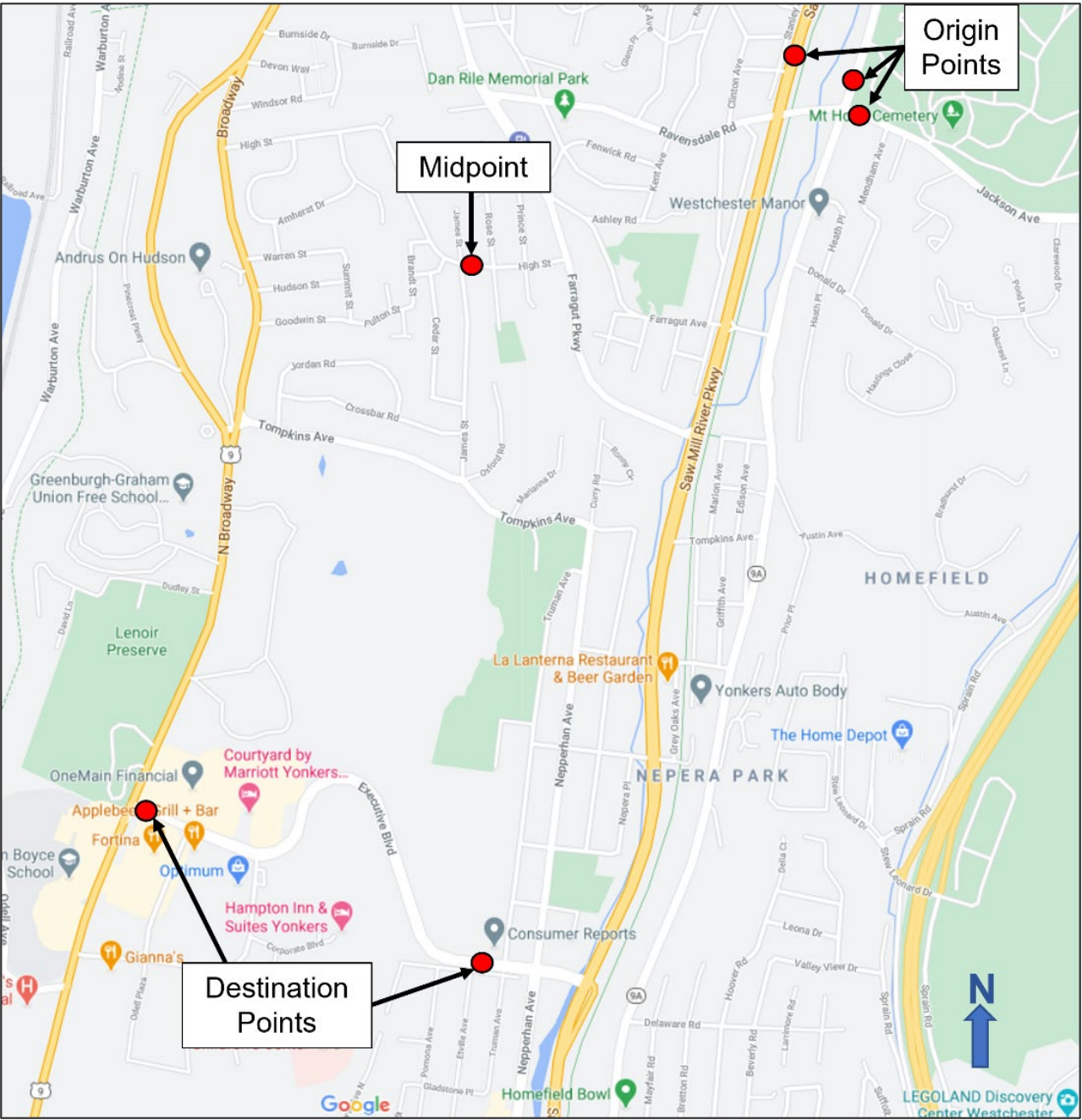
Streetlight's data is based on Location-Based Services (LBS) information obtained through smartphone apps which utilize their users' location in the physical world.



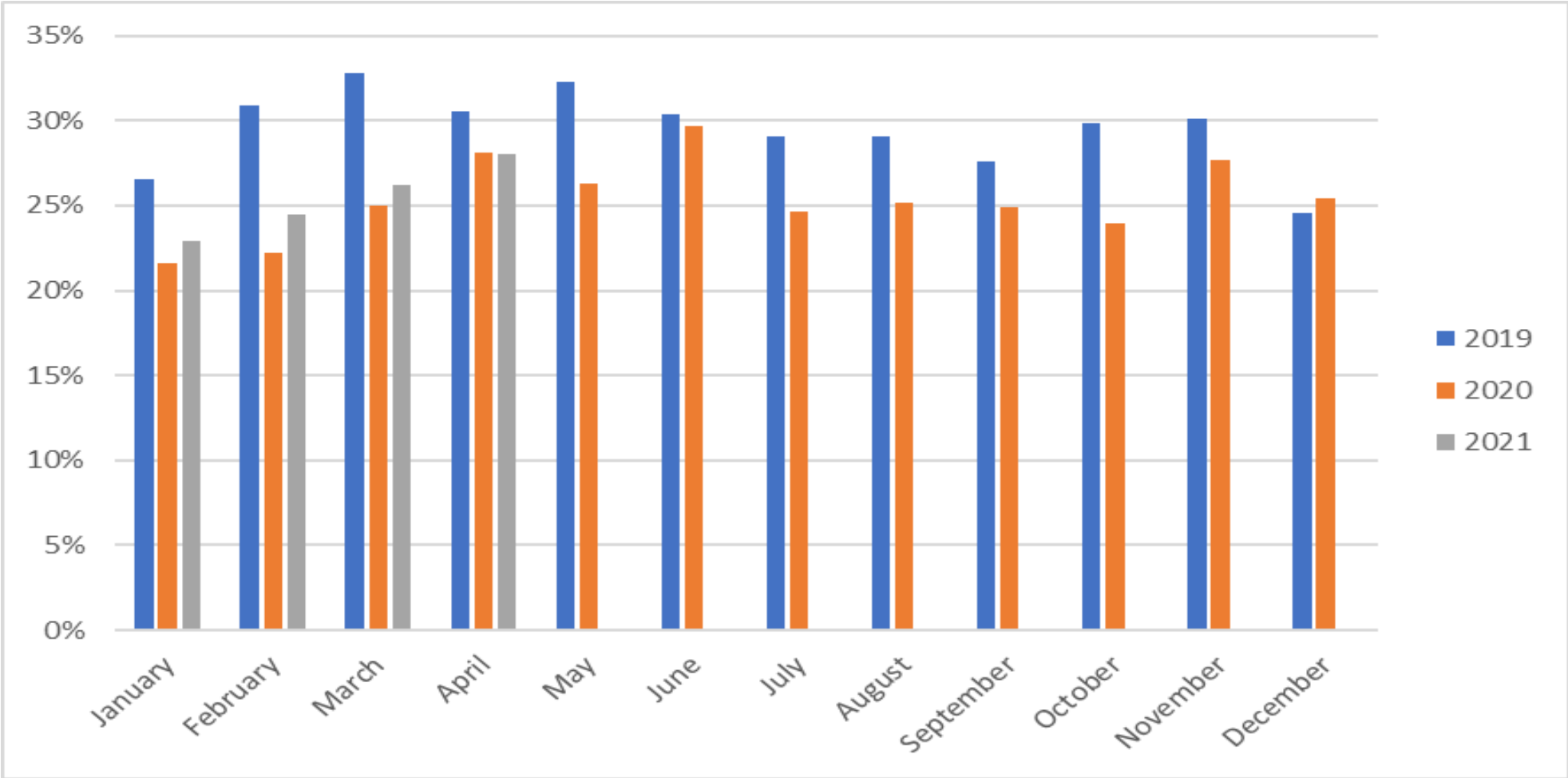
COVID Impacts on Regional Traffic Volumes



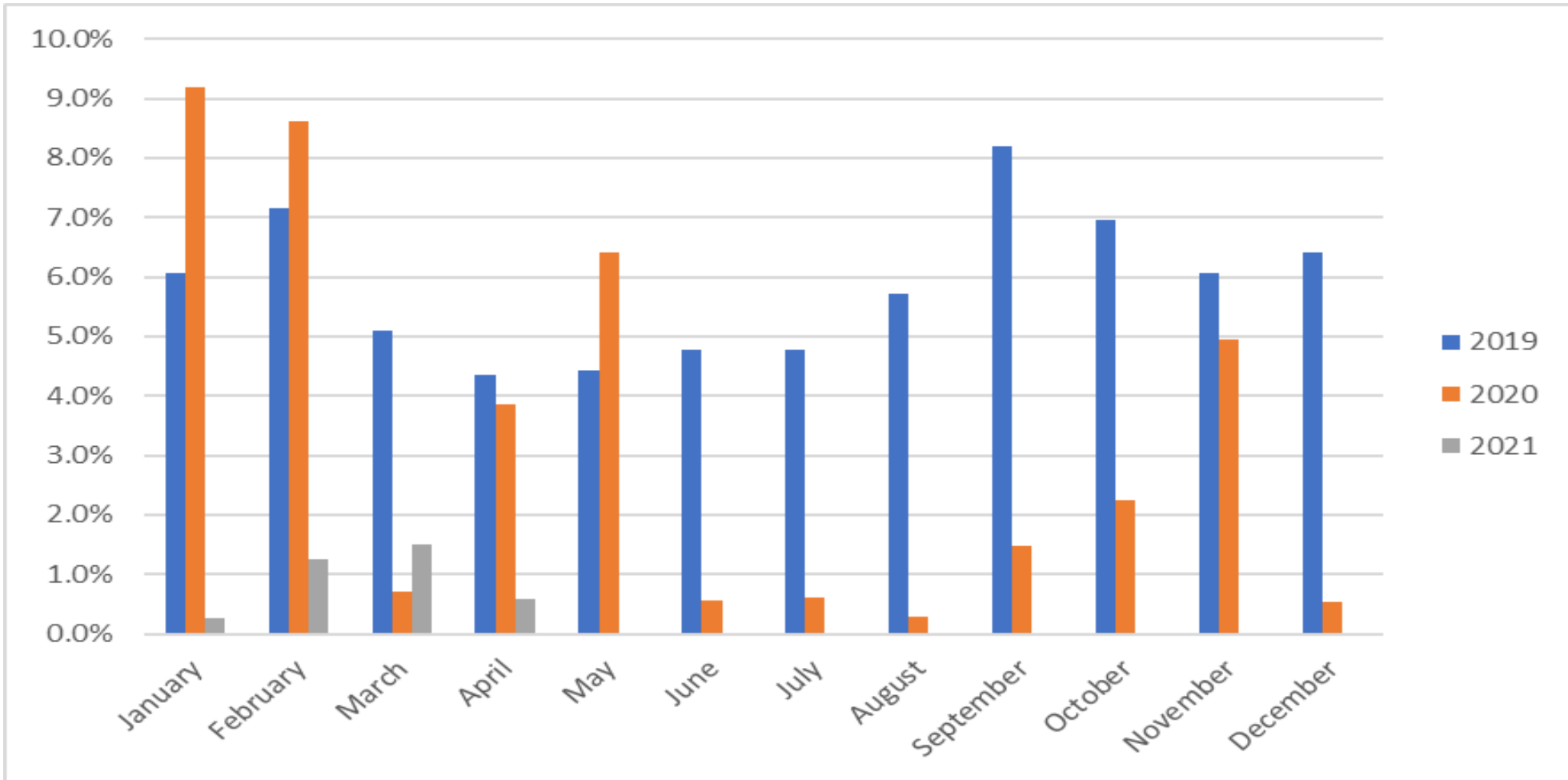
Origination and Destination Points



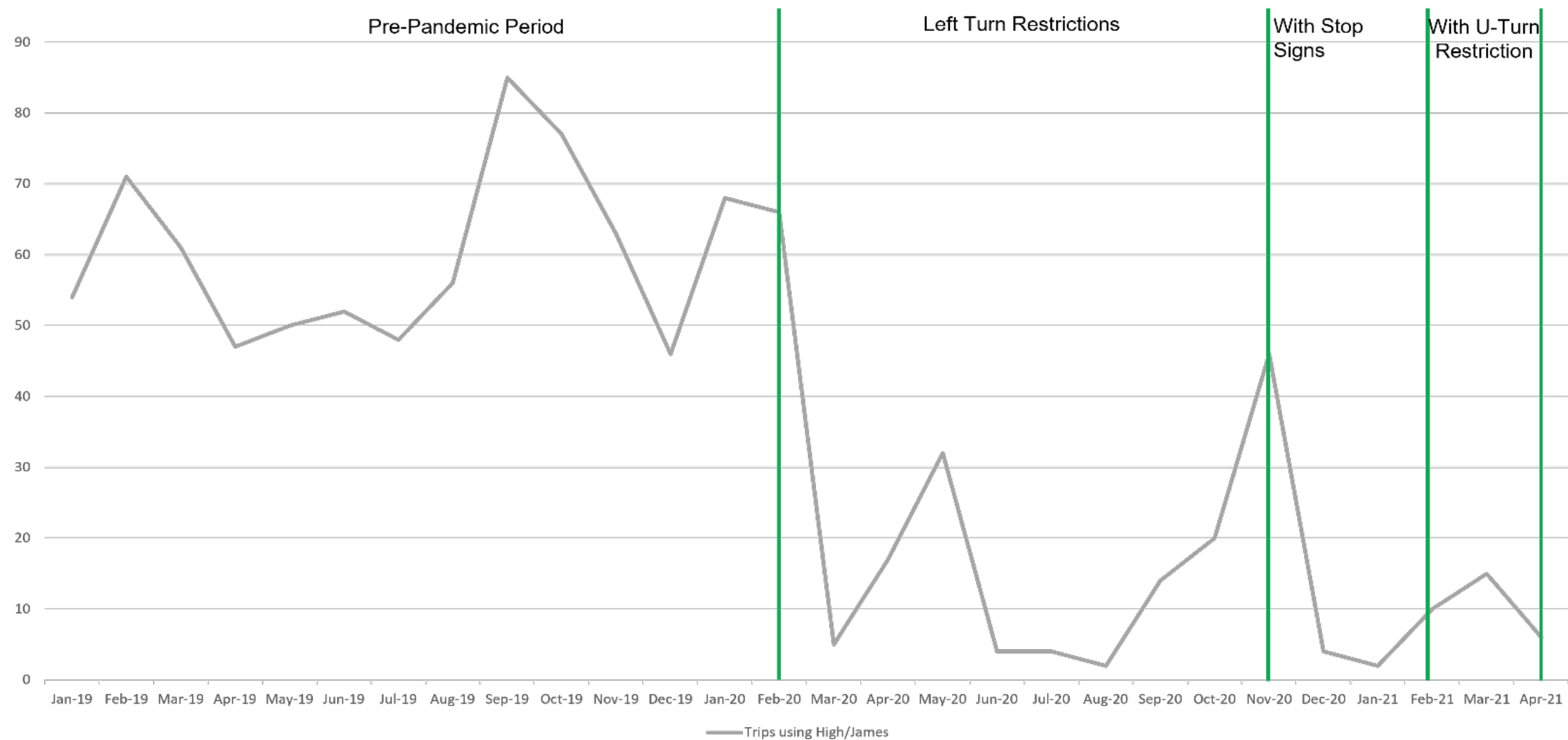
Percentage of Origin-Destination Trips compared to the SB Volumes on the Saw Mill River Parkway



Percentage of O-D Trips Utilizing the intersection of High Street and James Street



Cut Through Trips, from January 2019 through April 2021

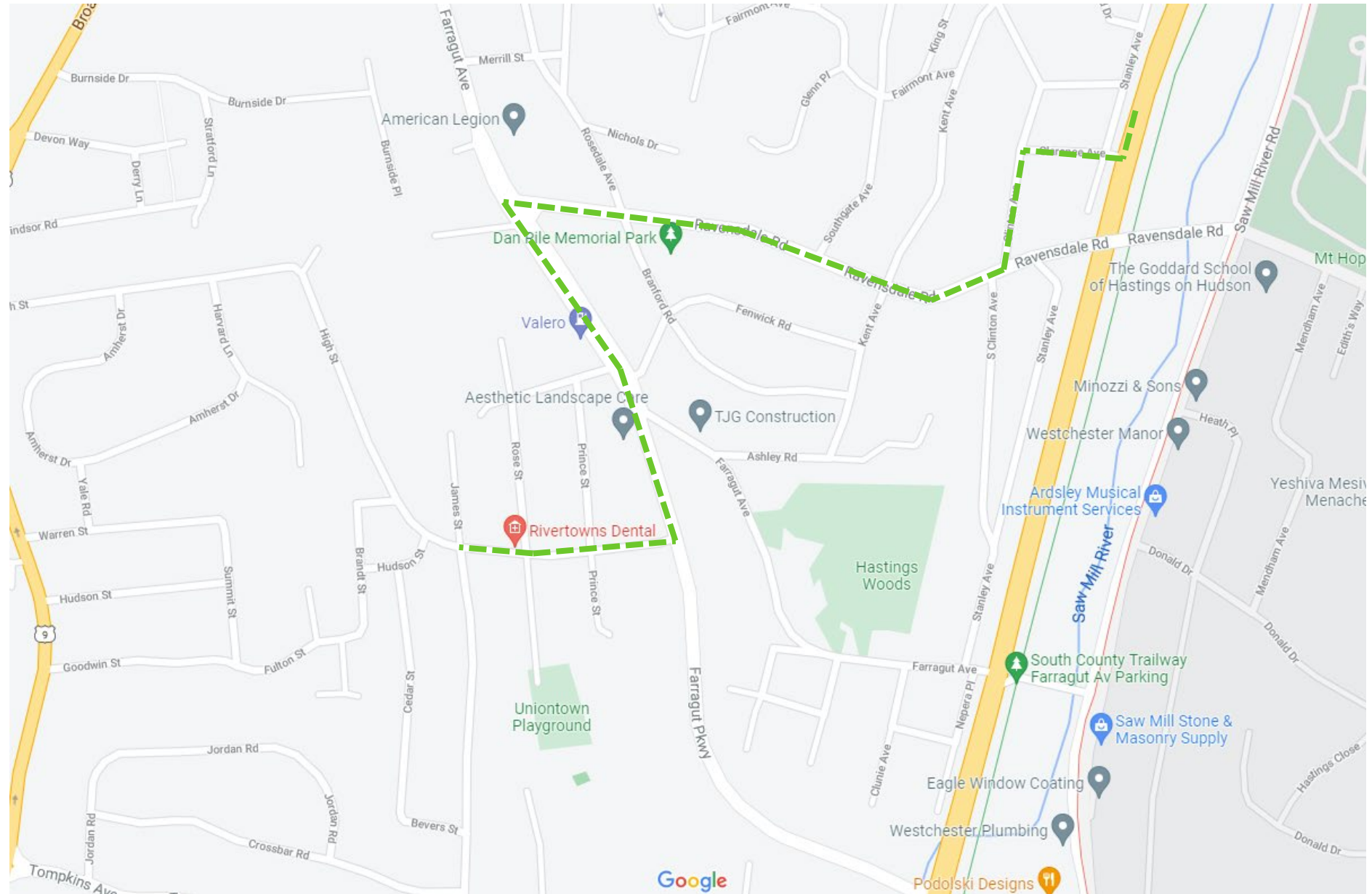


Summary of Results

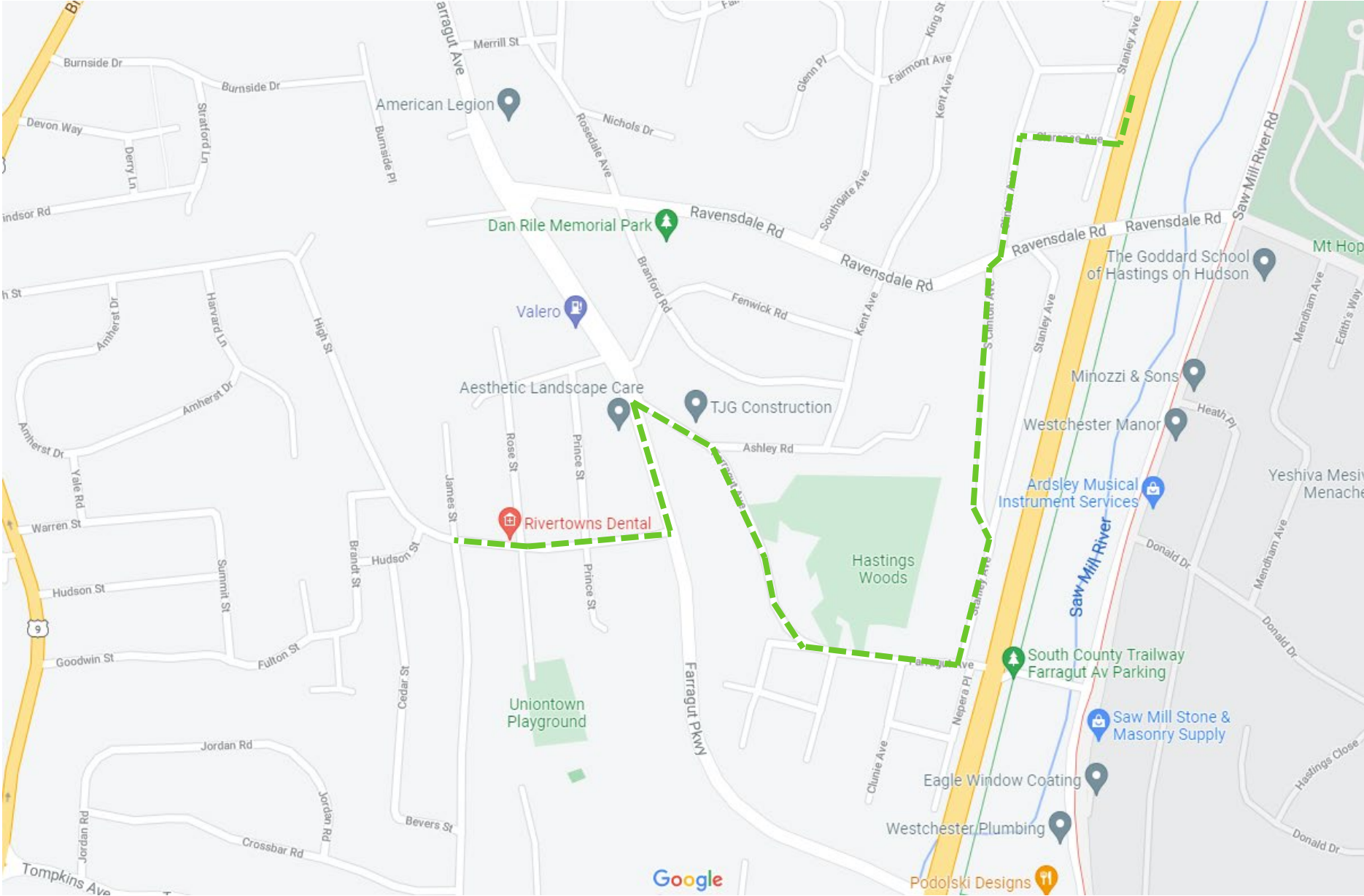
Analysis Period	Total O-D Trips	Cut-Through Trips	% Reduction from Base Condition	% Cut-Through Trips
Pre-Pandemic	862 veh	62 veh	-	7.2%
Left turn Restrictions	890 veh	11 veh	82%	1.2%
Left Turn Restrictions with Stop Signs	1050 veh	9 veh	85%	0.9%
U-Turn Restrictions	951 veh	5 veh	92%	0.5%

Weekday Cut Through Trips, between 7:00 AM and 9:00 AM

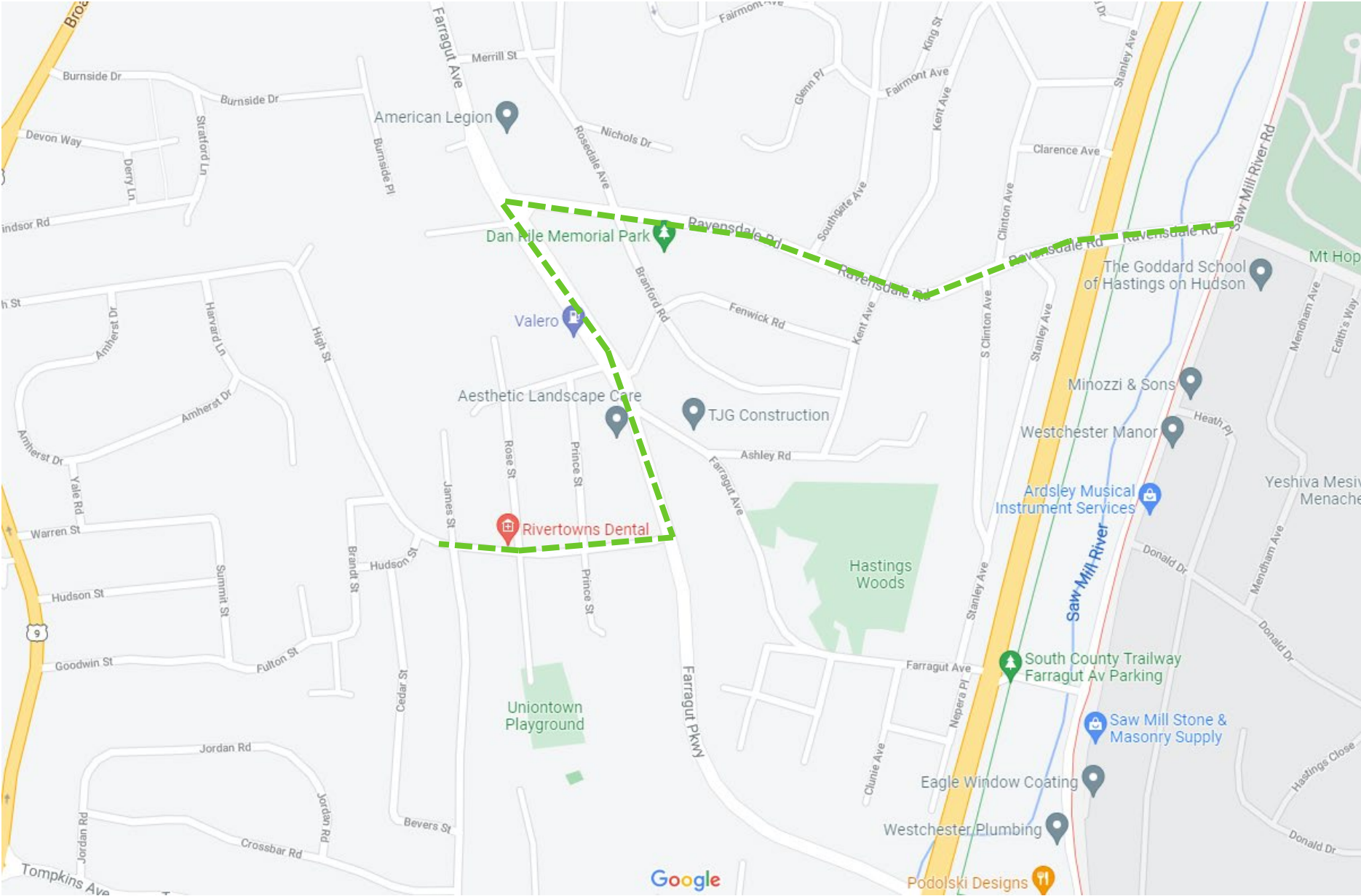
Path A



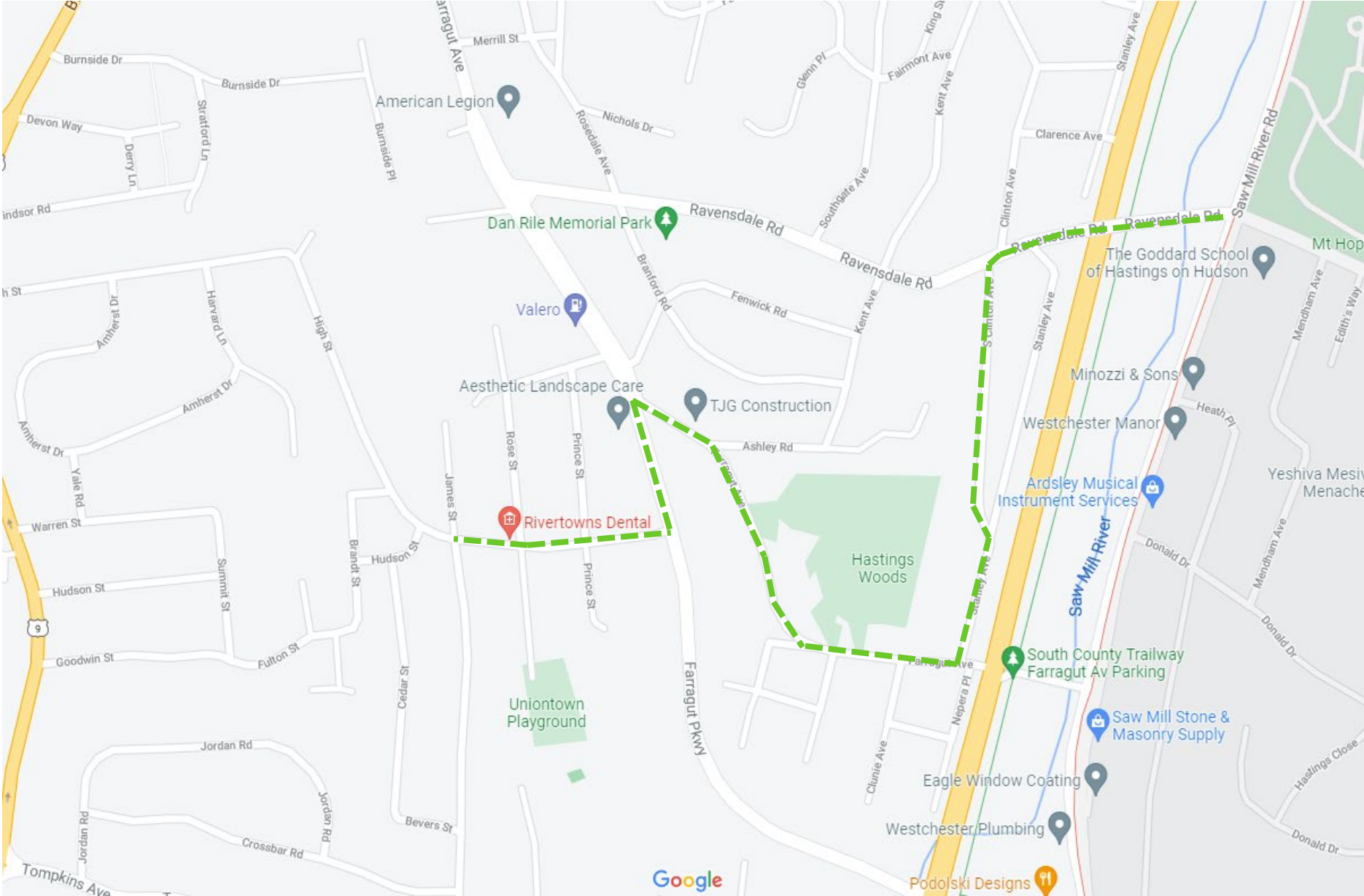
Path B



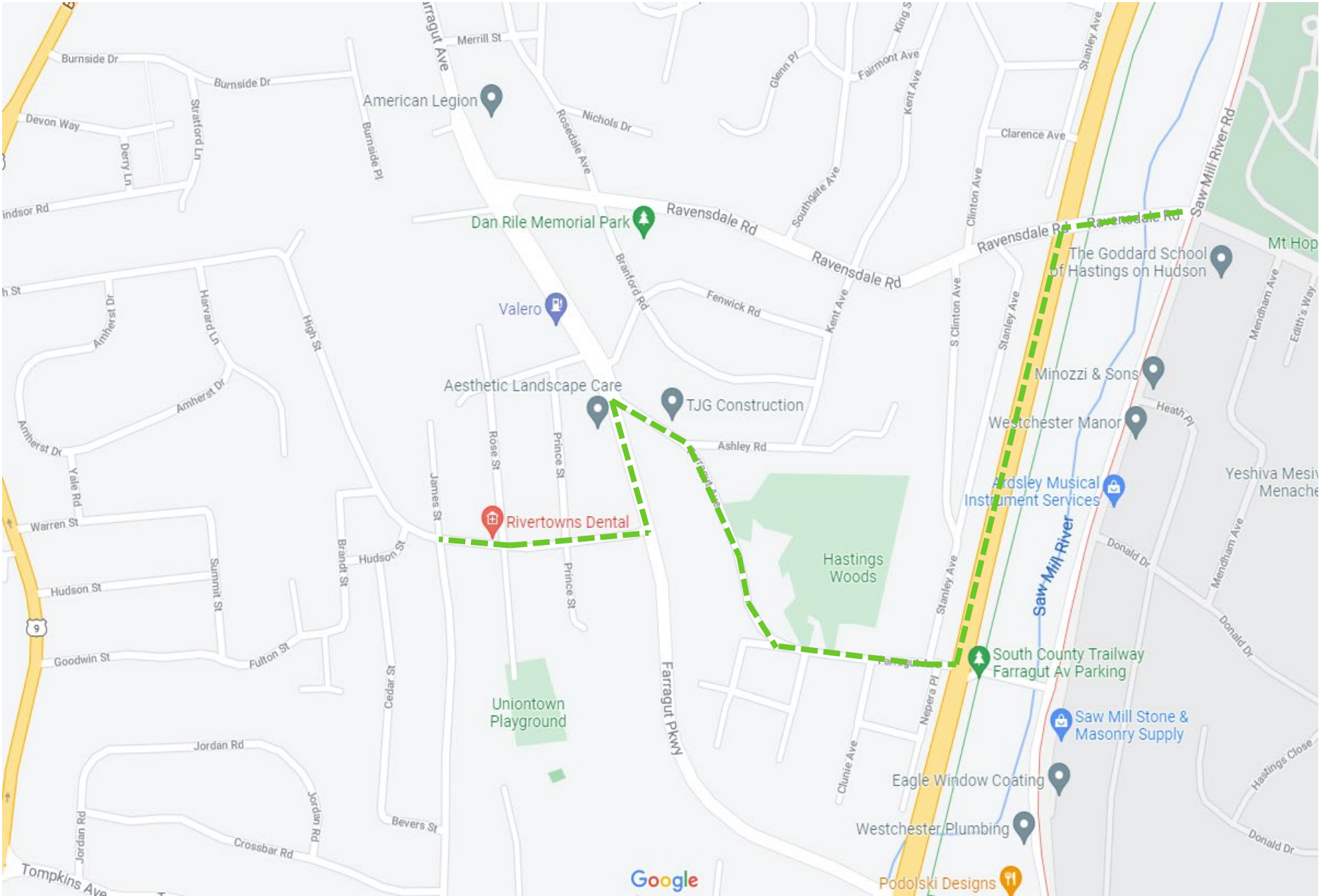
Path C



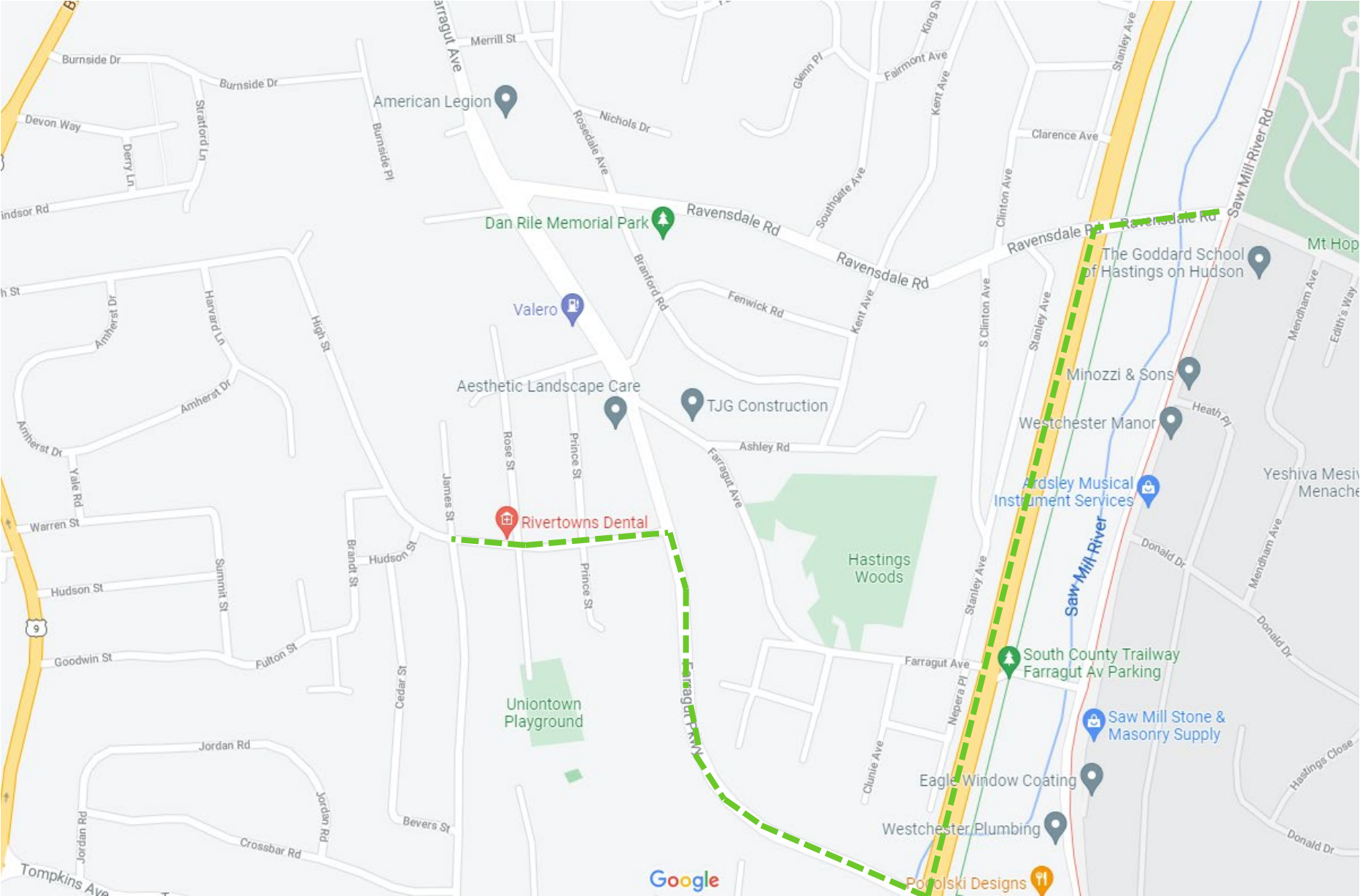
Path D



Path E



Path F



Analysis Period	Path A	Path B	Path C	Path D	Path E	Path F
Pre-Pandemic	2%	2%	34%	0%	13%	49%
Left turn Restrictions	2%	1%	51%	1%	9%	37%
Left Turn Restrictions with Stop Signs	0%	0%	55%	1%	8%	37%
U-Turn Restrictions	0%	0%	46%	4%	12%	38%

Trip Distribution From
the Origin Points to
High St. and James St.

Analysis Period	Path A	Path B	Path C	Path D	Path E	Path F	Total Trips
Pre-Pandemic	1	1	21	0	8	31	62
Left turn Restrictions	0	0	6	0	1	4	11
Left Turn Restrictions with Stop Signs	0	0	5	0	1	3	9
U-Turn Restrictions	0	0	2	0	1	2	5

From the intersection of High St. and James St., 95% of the vehicles use Broadway/US 9 south to Executive Boulevard

Analysis Period	Path 3	Path 4
Pre-Pandemic	1%	2%
Left turn Restrictions	6%	25%
Left Turn Restrictions with Stop Signs	14%	0%
U-Turn Restrictions	0%	9%

