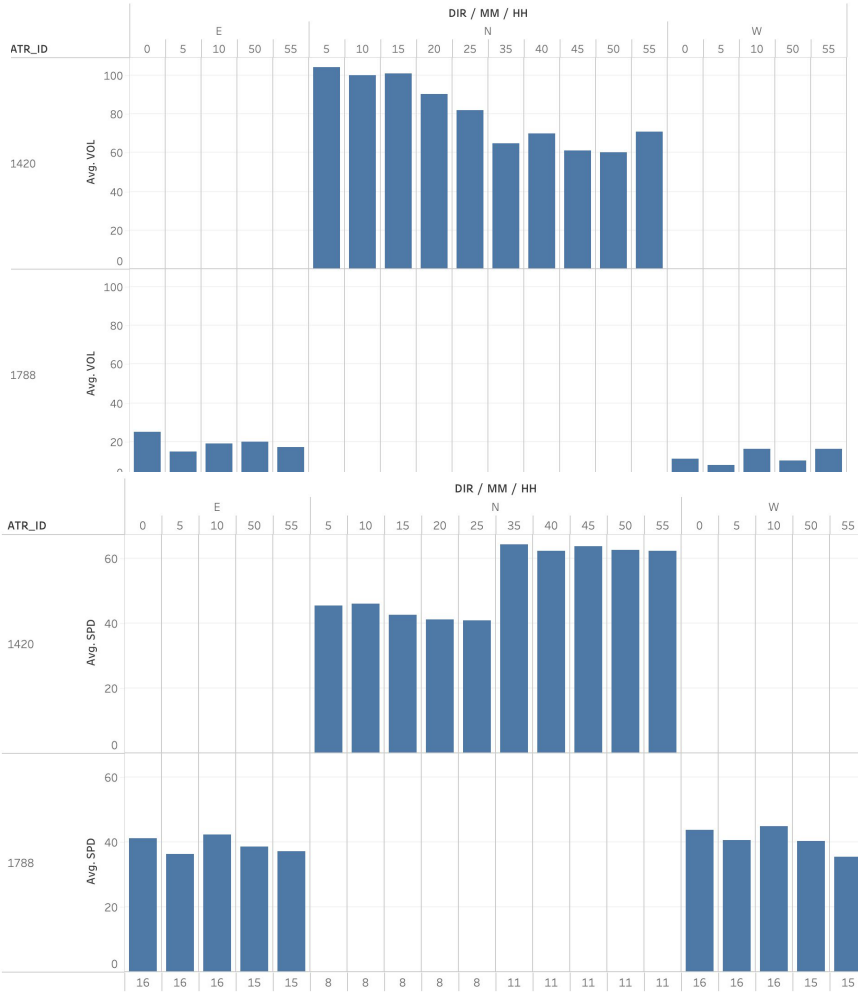


A Strategic Traffic Improvement Plan

Department of Transportation

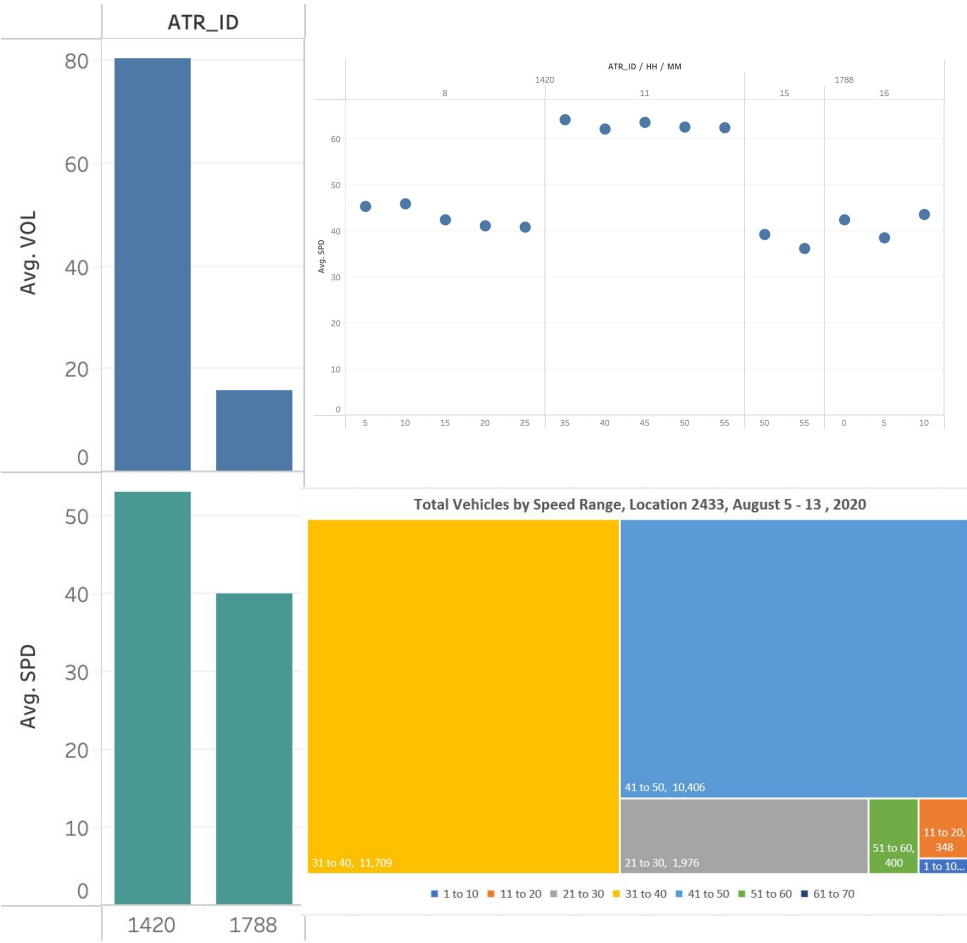
Presented by Zhiwen Lu, Neeraja Menon, Xingru Qian, Yancheng Xiang and Chen Zhong

1420 vs 1788



Key points	Recommendations
1.1420 is a one-way street and has more traffic than 1788.	Changing one-way street to two-ways street will reduce traffic.
2.The average speed is similar and is around 40 to 50.	Changing one-way street to two-ways street will not influence the speed limit.

Volume vs Speed



Key points

1. There is no evident correlation between volume and speed.

2. There are other factors influences the speed.
Expressway?...

3. For 1420, 1788 and 2433, the speed all lies between 40 to 50

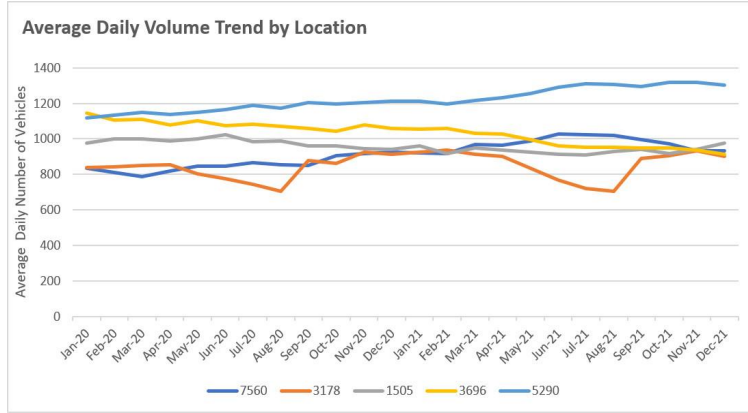
Recommendations

Need more data to determine the relationship between volume and speed.

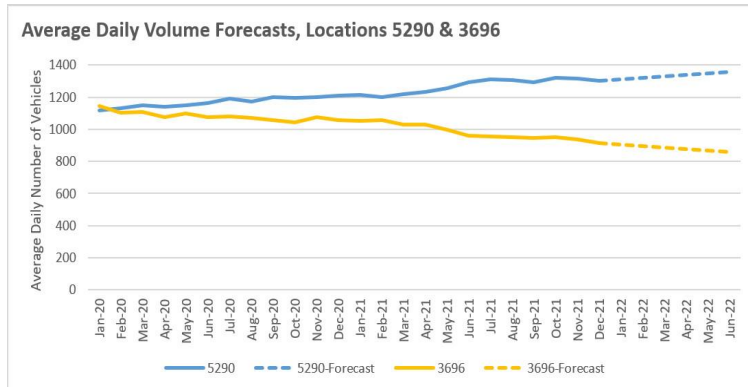
Take other factors into considerations.
The transportation, infrastructure construction...

Help us find common grounds between three locations.

Traffic Volume by Locations

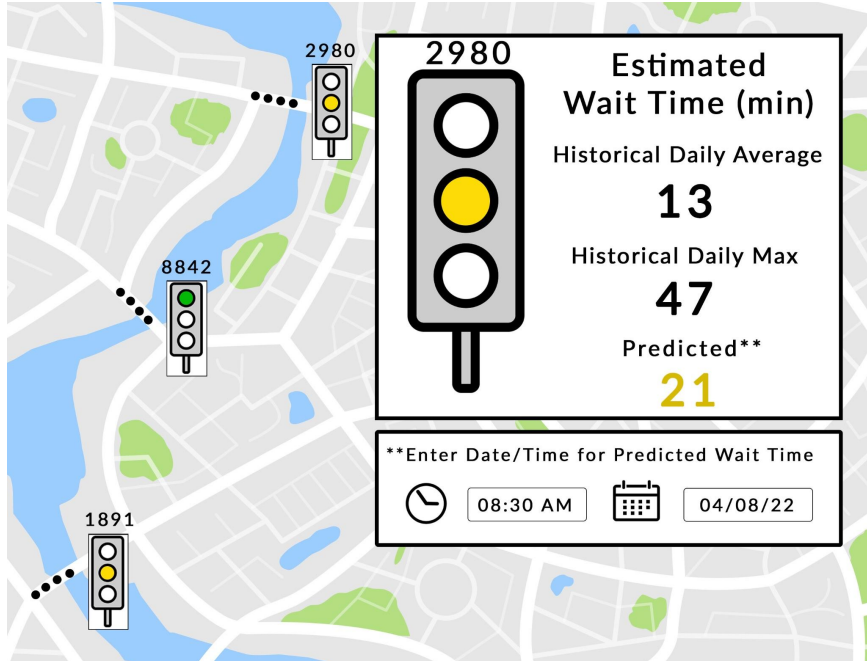


- Average number of vehicles in 1505, 7560 have held steady throughout the time.
- There is a large fluctuation in the volume change of 3178, while the overall trend is constant.
- No recommendation for those three regions.



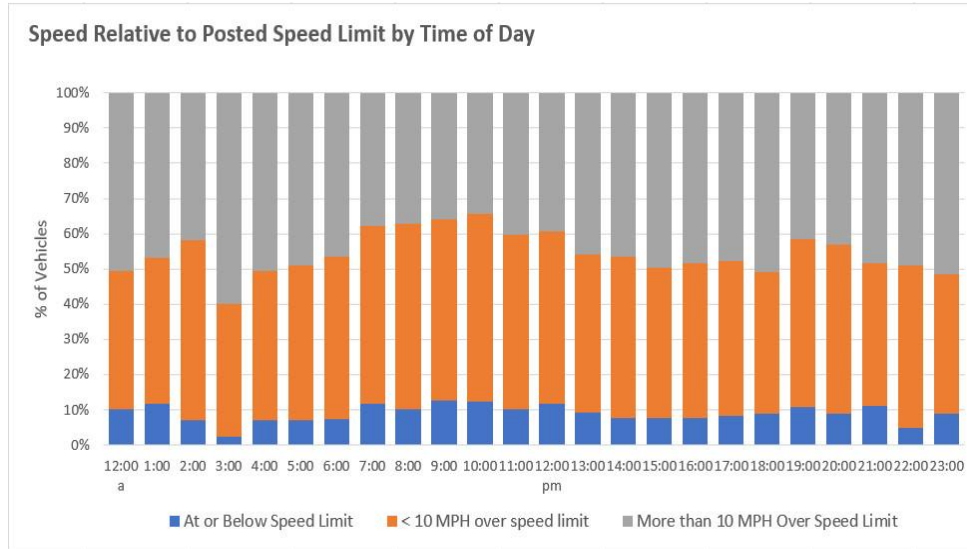
- This figure is almost symmetrical about the x-axis: daily volume of vehicles in 5290 is increasing while that for 3696 is decreasing.
- Recommendation for change is required: build an intersection in region 3696 to hold cars from 5290; build a mall in 3696 to attract more customers.

Estimated Wait Time at A Traffic Light



Key Points	Recommendation
<ul style="list-style-type: none">1) Wait time is too long.2) Traffic jam is common.	<ul style="list-style-type: none">1) Build more bridges2) Widen the bridge3) Limit the car volume, eg. place an odd-even car ban

Speed vs Speed Limit by Time of Day



Conclusion

- Data set Analytics:

Daily traffic conditions at different times of the day and on different roads, more detailed traffic improvement decisions

- Visualization Analytics:

Help to discover hidden and periodic insights and make longer-term and significant decisions

- Limitation & Additional Data:

Lack of detailed road attributes, vehicle data, weather data and local policy data

With some improved methods, STIP can be implemented using this data product

Thanks for listening !