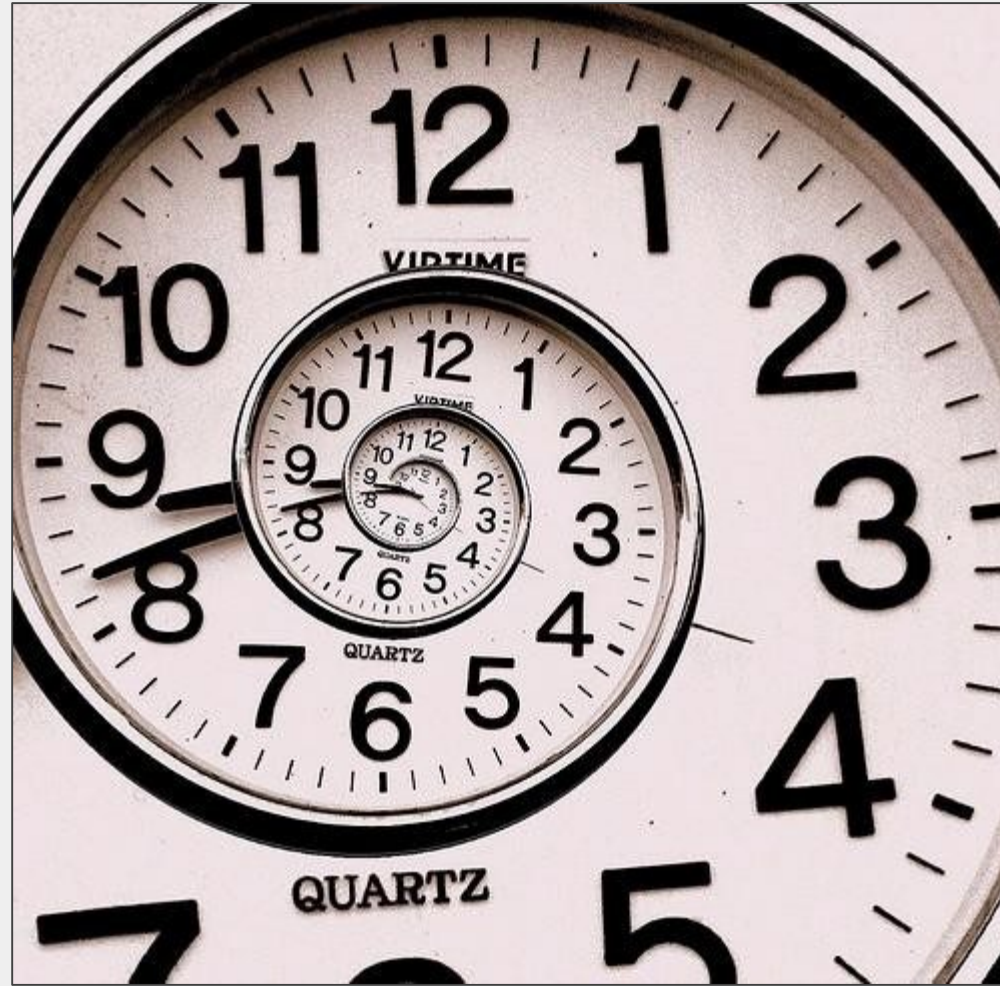


Big Data “Triage” Before Modeling

Laura Schewel
StreetLight Data

laura.schewel@streetlightdata.com

Modeling is Time and Money-Consuming



Big Data Can Help You Improve the Process

Video shows a subset of Oct 8, 2017 in San Bernardino



NOVA Demonstrated How to Only Model the Highest Impact Locations for TDM

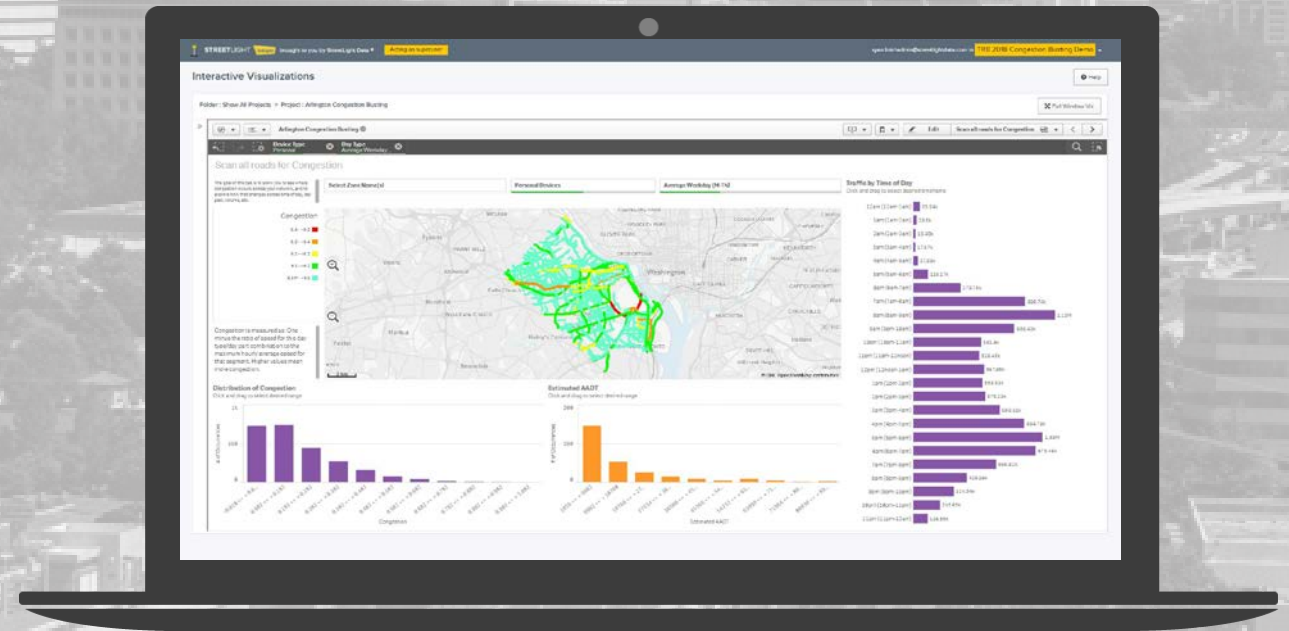
TDM /
Congestion
Mitigation

TDM Priorities in Northern Virginia

Need: Where are the big “bang for our buck” opportunities for bike, ped, and transit investments?

Why: Only spend time modeling great options

Time to Run: 15 min



Use Big Data to Identify the Highest Modeling Priorities

Scan Roads for Transportation Strategies

Select Zone Name(s)

Personal Travel

Average Weekday (M-Th)

Select Day Part(s)

Select which Solution Score to view on the map below. For details on scores and methodologies [click here](#).

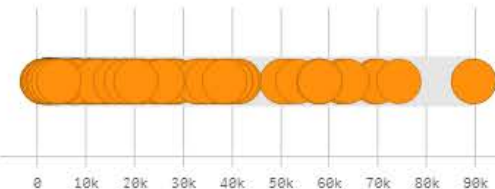
Walkable Share Map Layer

Walkable Share



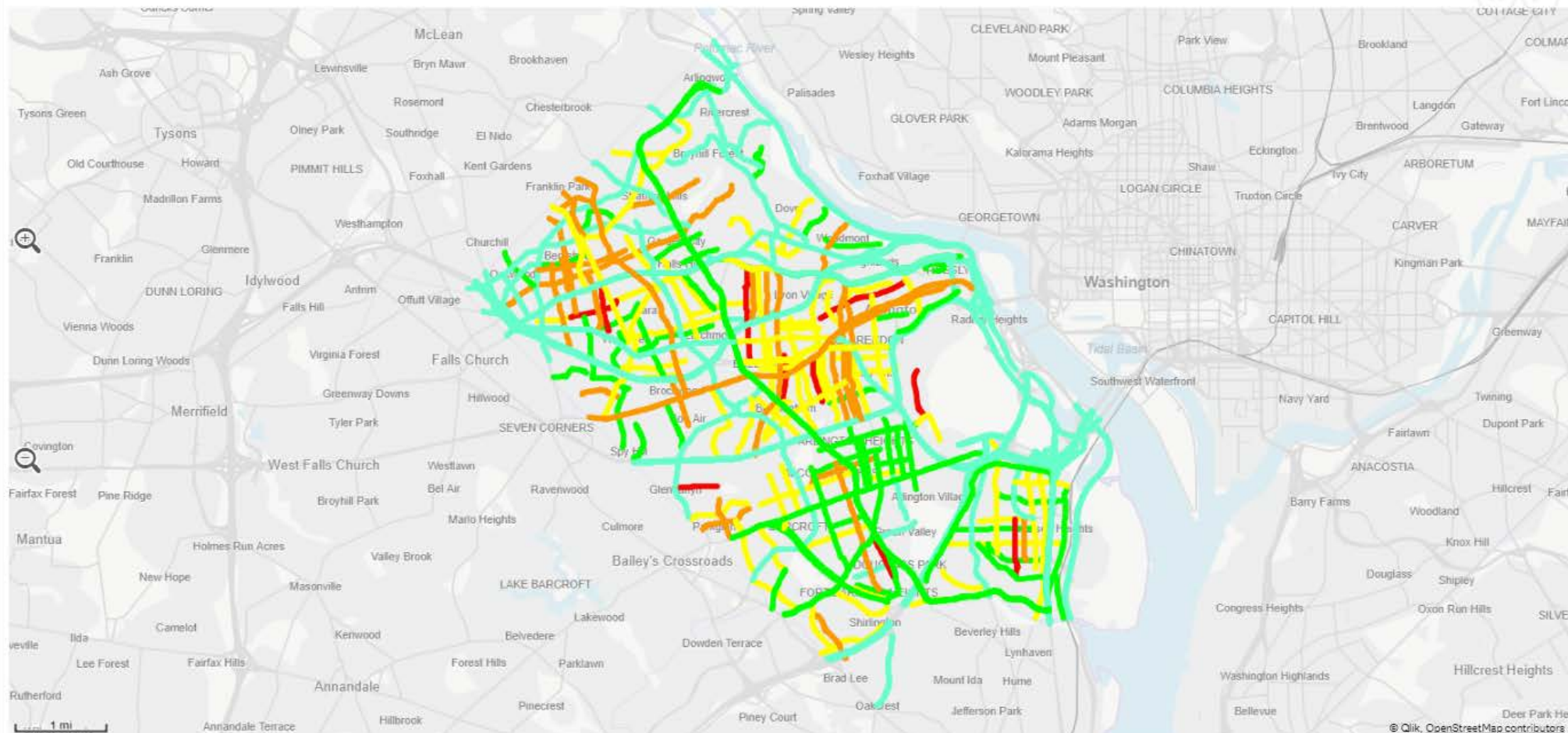
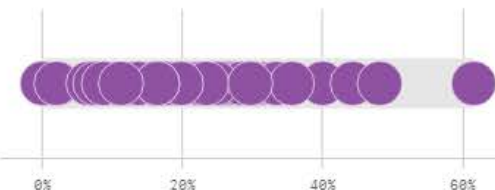
Select AADT Range

Use the axes to select specific ranges



Select Congestion Range

Use the axes to select specific ranges



© Olik, [OpenStreetMap contributors](#)

This map shows where different solutions to congestion and demand management techniques are most strongly indicated, based on existing driving conditions. You can highlight solutions by share of total car trips on the road, or by total potential affected

Drill Down on Causes of (And Solutions to) Congestion on Specific Roadways

Identify Travel Profiles for Select Roads

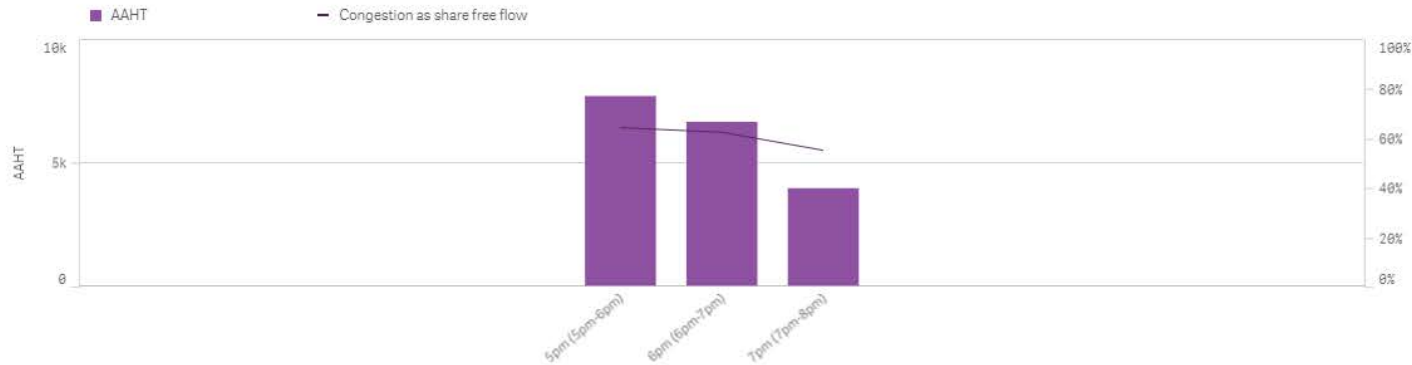
The goal of this tab is to explore conditions on one (or a handful) of segments at a time. Start by picking a Zone Name to the right.

Zone: Washington Blvd- 1106087...

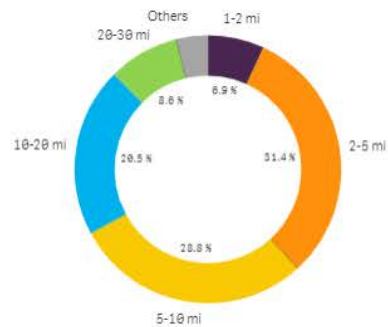
Personal Travel

Average Weekday (M-Th)

Congestion Measures Throughout Day



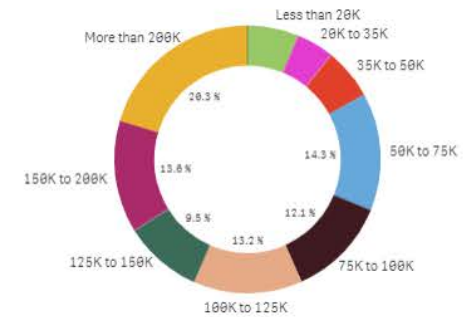
Distribution of Traffic by Trip Length



Distribution of Traffic by Trip Purpose



Distribution of Traffic by Income



Combine Big Data Analytics to Identify High Potential Project Opportunities

Explore Transportation Solutions for Select Roads

The goal of this tab is to dive into which solutions are most indicated to conditions on one road at a time. For details on the scores and methods [click here](#).

Zone: Washington Blvd- 1106087923479

Personal Travel

Average Weekday (M-Th)

3 Day Parts

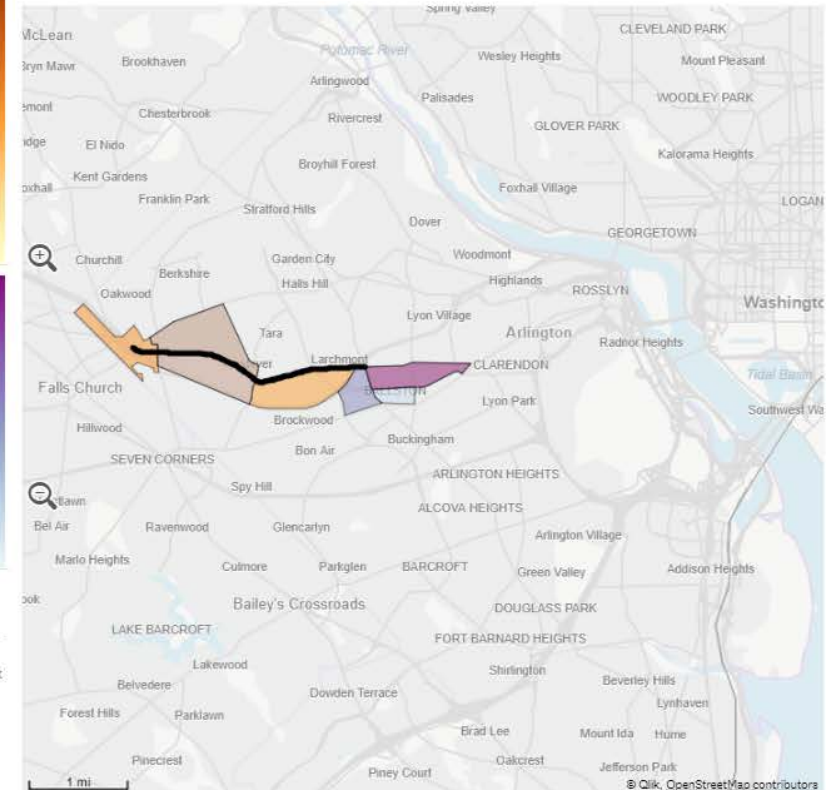
Select Layer(s)



Traffic From Origin

Traffic to Destination

Top Origin and Destination TAZs



These TAZs may be your best bet for transit, shuttles, and employee programs. For all ODs see the next tab.

Traffic is measured in StreetLight Index (see streetlightdata.com/support for more).

Now You Have Empirical Data to Help You Decide Which Models to Build First



Thank You Q&A

Laura Schewel
StreetLight Data

laura.schewel@streetlightdata.com