

Bike Activity in Hampton Roads

Presented by Uros Jovanovic
To Active Transportation Subcommittee
April 26, 2019

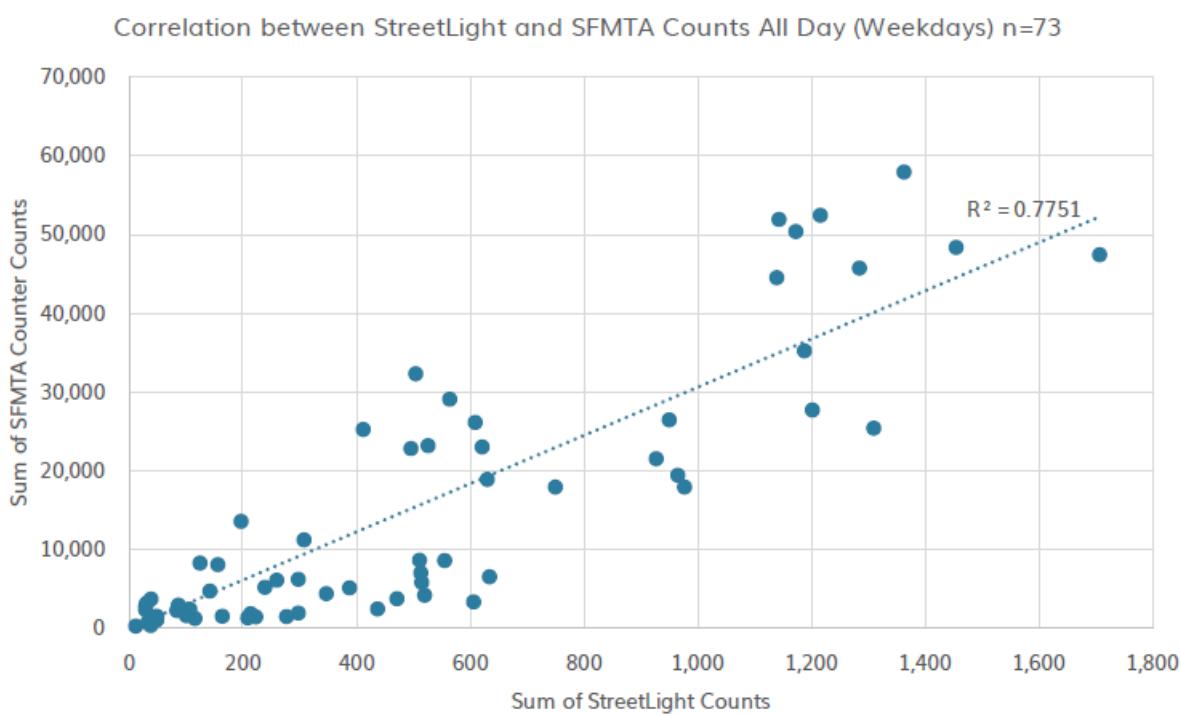


Data source

- StreetLight Data
 - Cell phone apps that record location
 - New ability to identify bike mode
 - “We experimented with over 30 features including **time, distance, speed, acceleration, jerk, circuitry and angular velocity** for each ping as well as for its preceding and subsequent pings, day of week, hour of day, etc.”
 - “Some of the **training data** came from **surveys that had volunteers wear a GPS** device and record various trips and tag them with the travel mode as they went about their daily activities.”
 - “To validate data at a “micro” level we **compared bike volume counts** for May 2017 and June 2018 at specific roads to permanent bike counters across [San Francisco].”



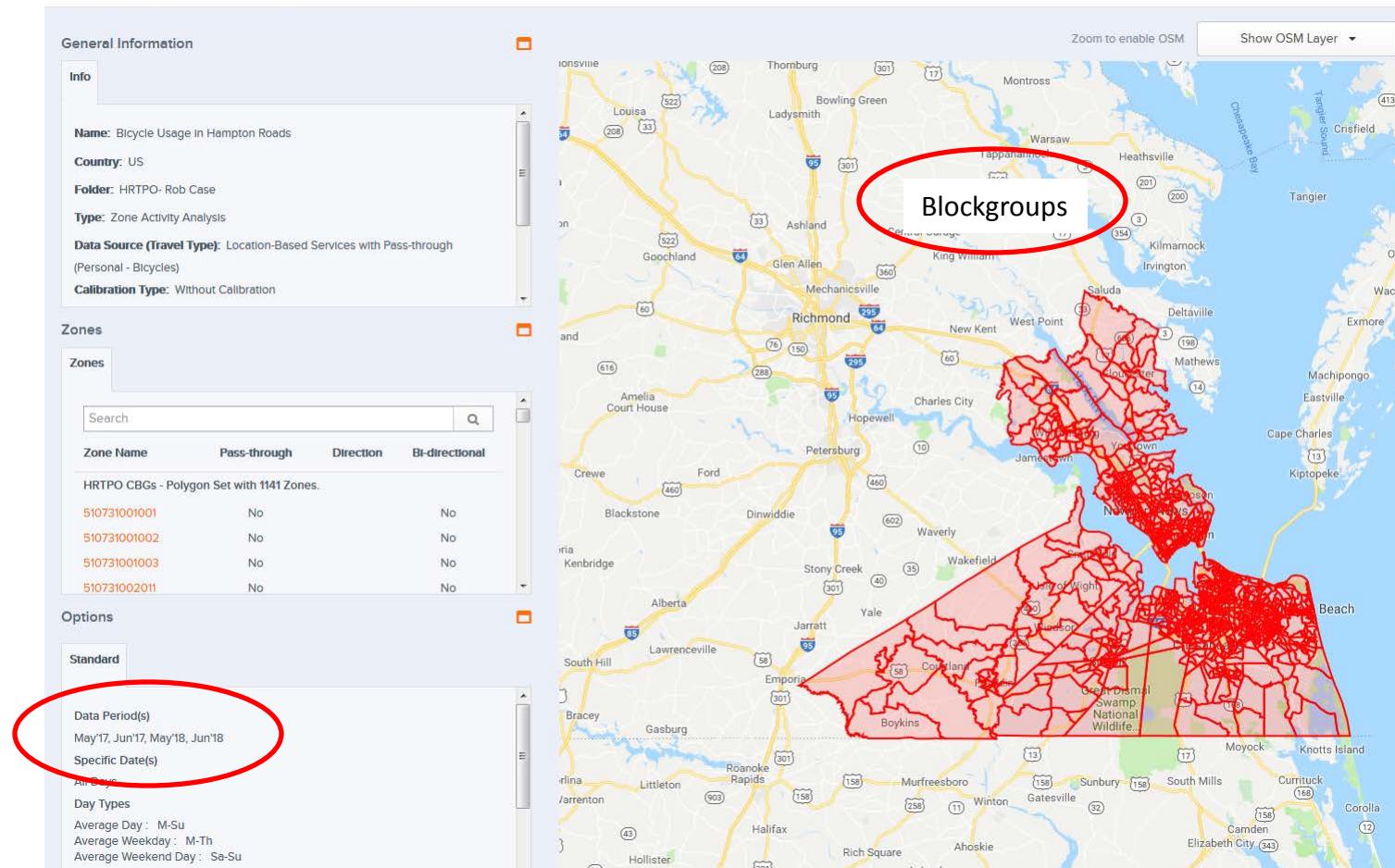
Data source



For 73 permanent bike counters in San Francisco, there is a **high correlation** between StreetLight's estimate of bike trips and the counter counts.

StreetLight Inputs

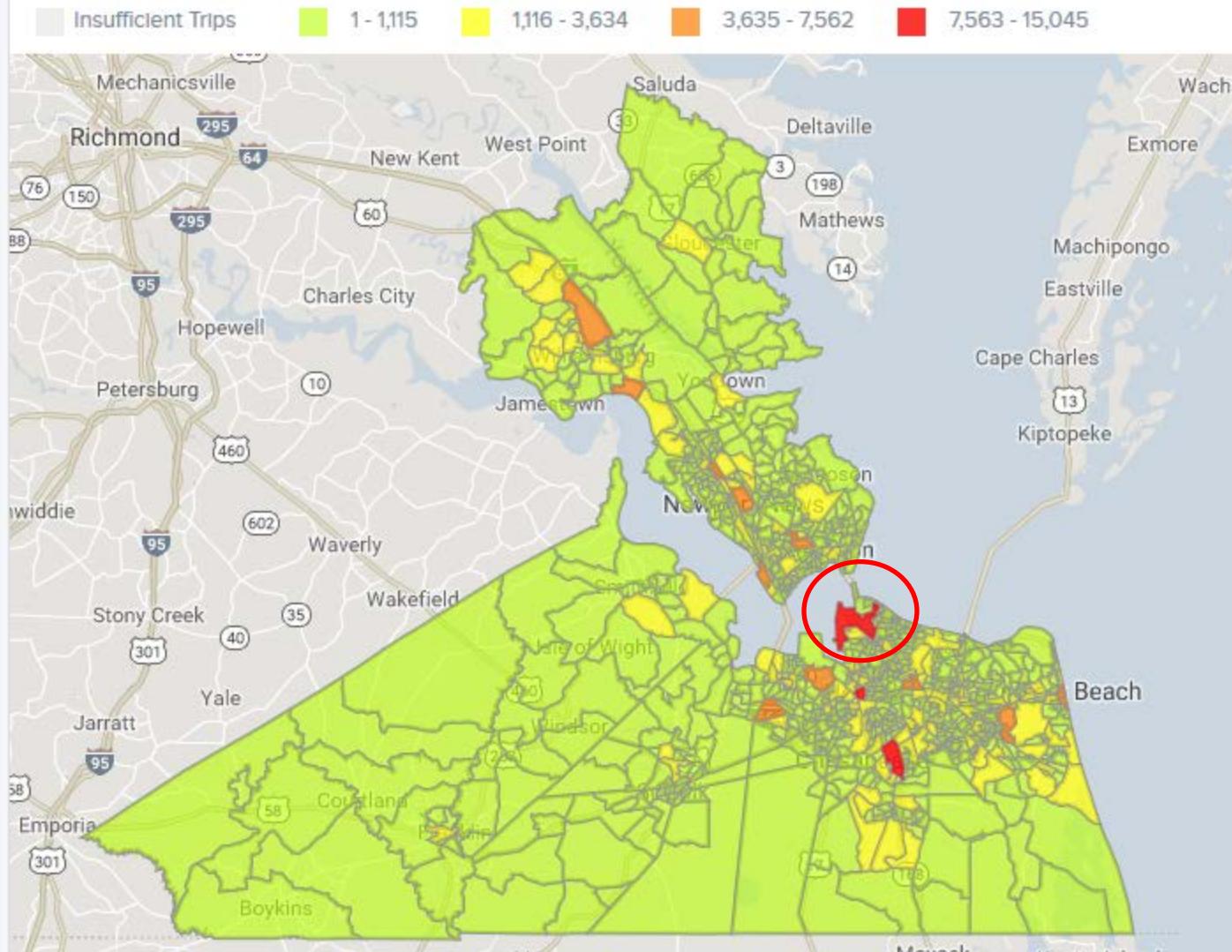
Project: Bicycle Usage in Hampton Roads | Type: Zone Activity Analysis



Bicycle Usage in Hampton ... | Zone Activity Analysis

Average Day (M-Su) | All Day (12am-12am) | All Devices | Zone Activity StreetLight Trip Index

Colors Indicate the StreetLight Trip Index to and from each Zone during the selected time period.

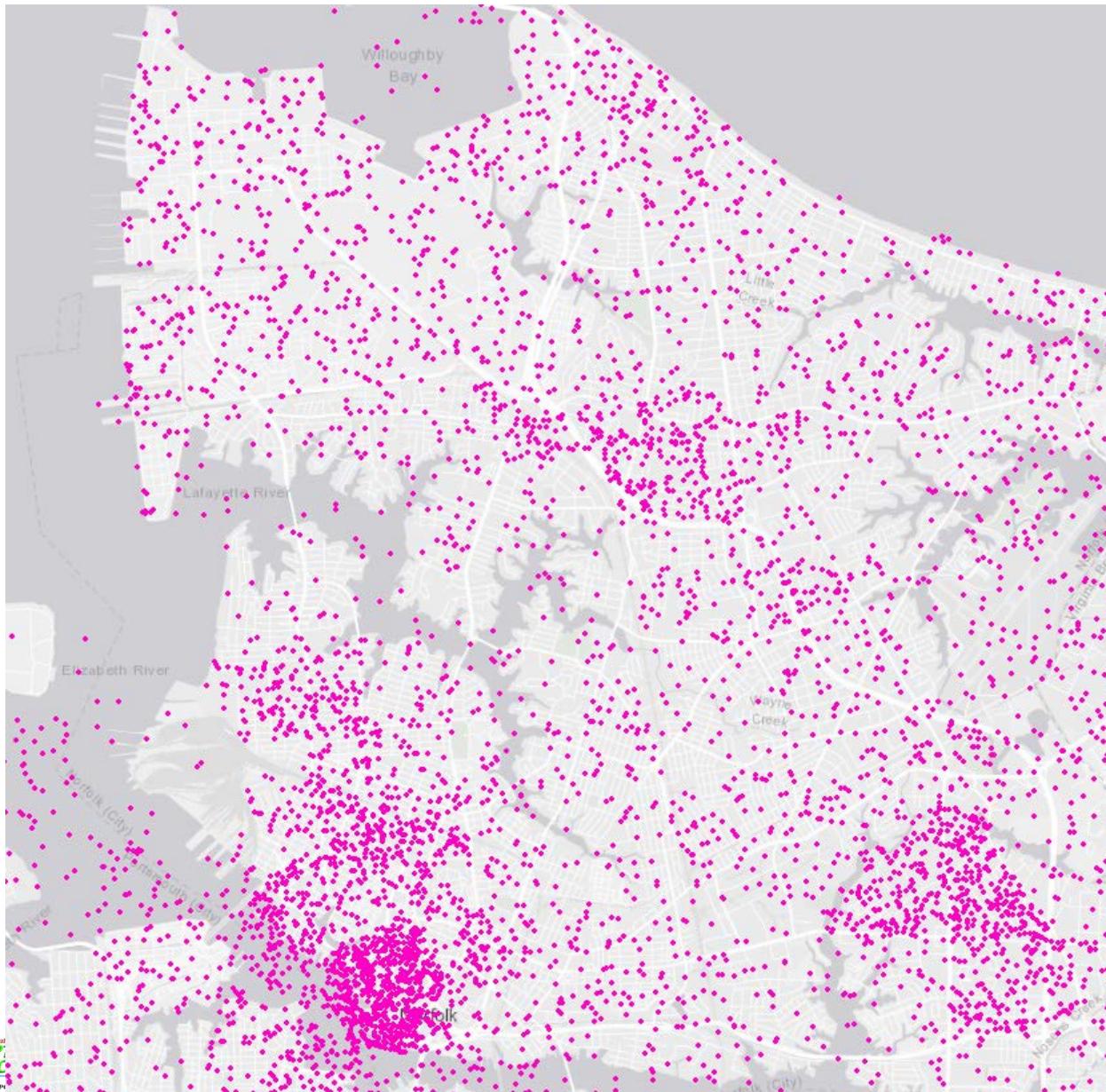


Note:
StreetLight's visualization tool creates maps based on **number of trips**—not trip density.

Is Naval Base a site of **intense bike usage**, or simply a **big zone**?

Use GIS to find out.

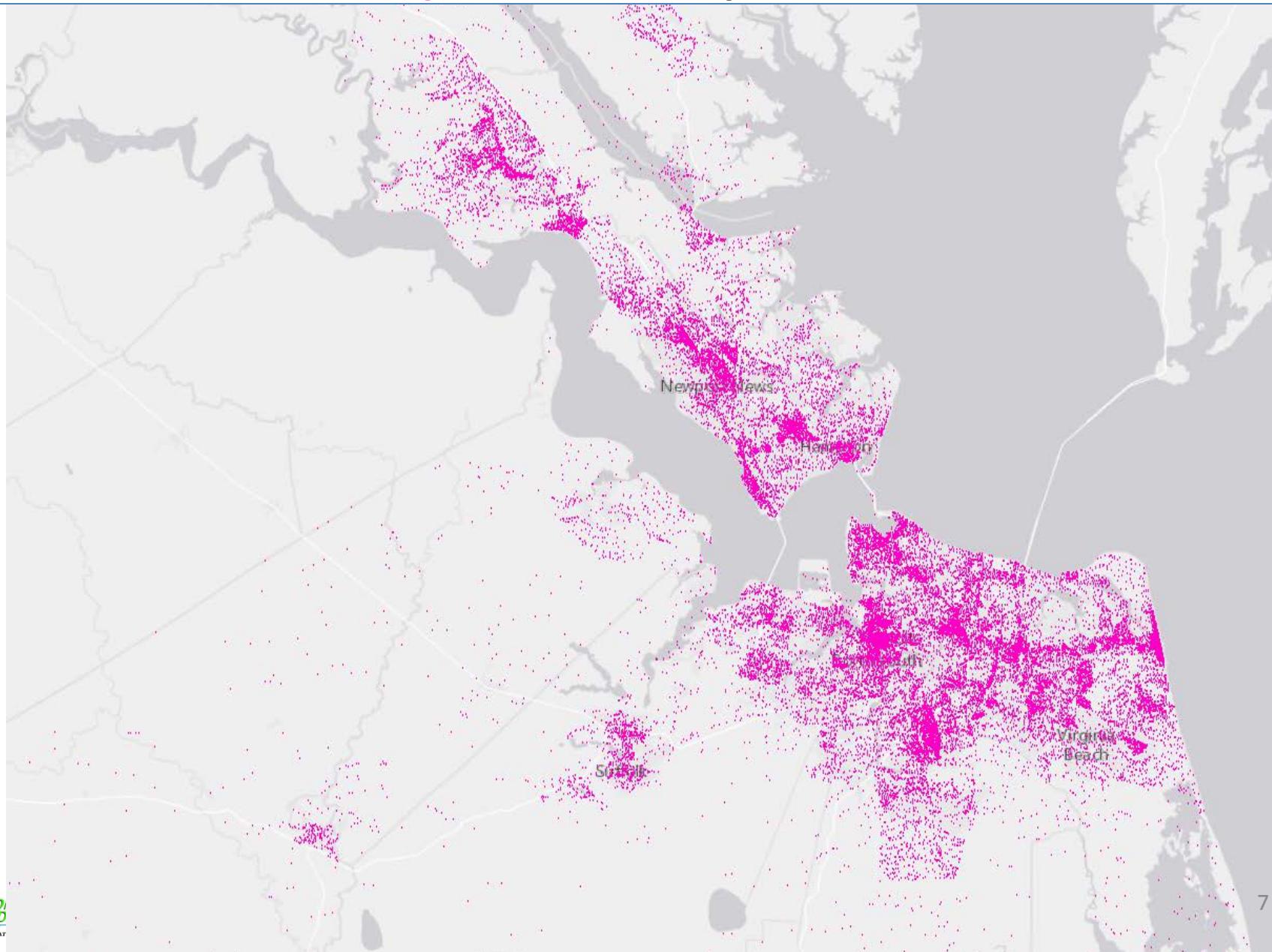
Bike Trips - Naval Base vs. Downtown



Naval Base is
NOT a site of
intense bike
usage; it's
simply a big
zone.

Therefore, use
**GIS to map
StreetLight
activity data.**

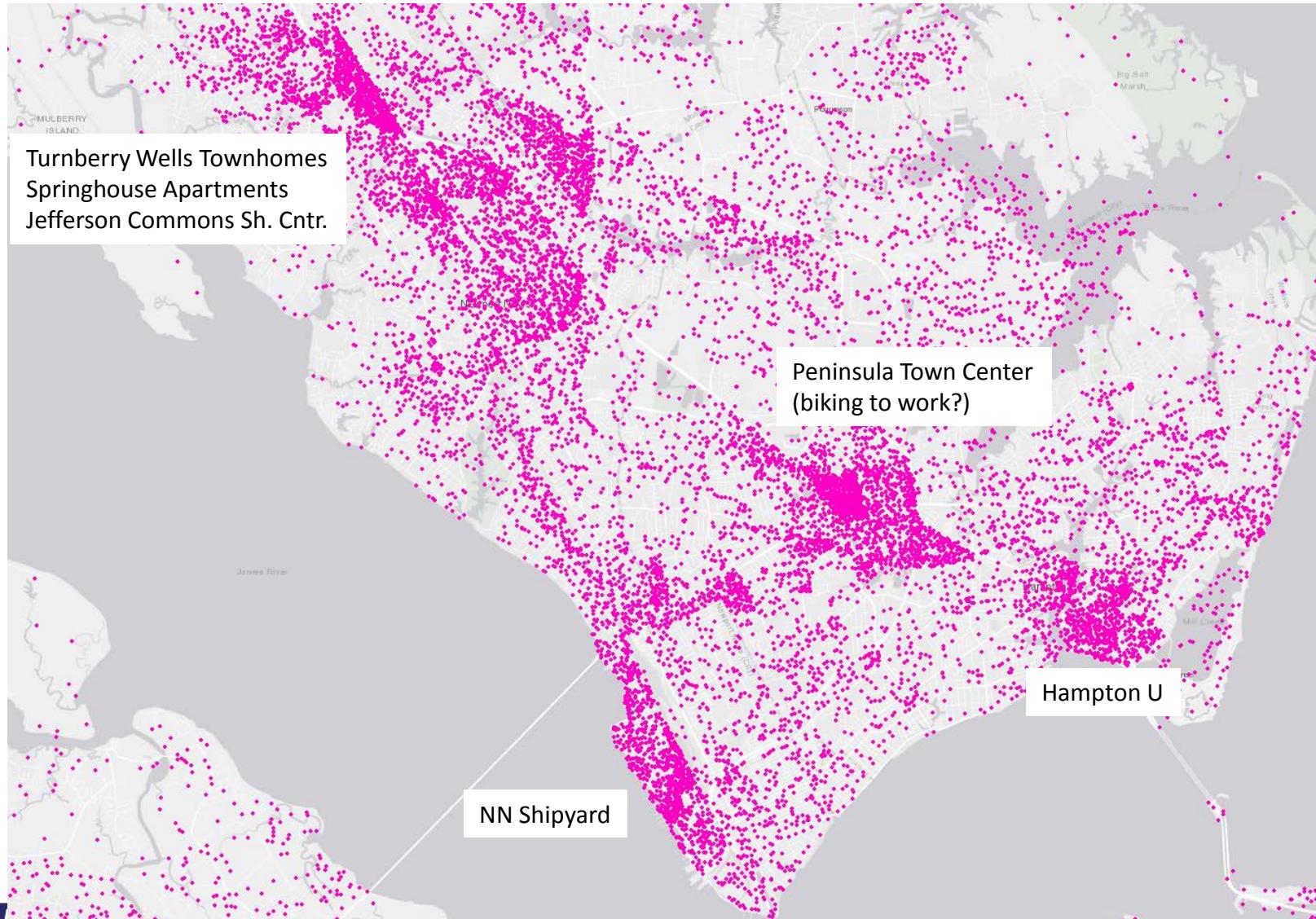
Bike Trips – Hampton Roads



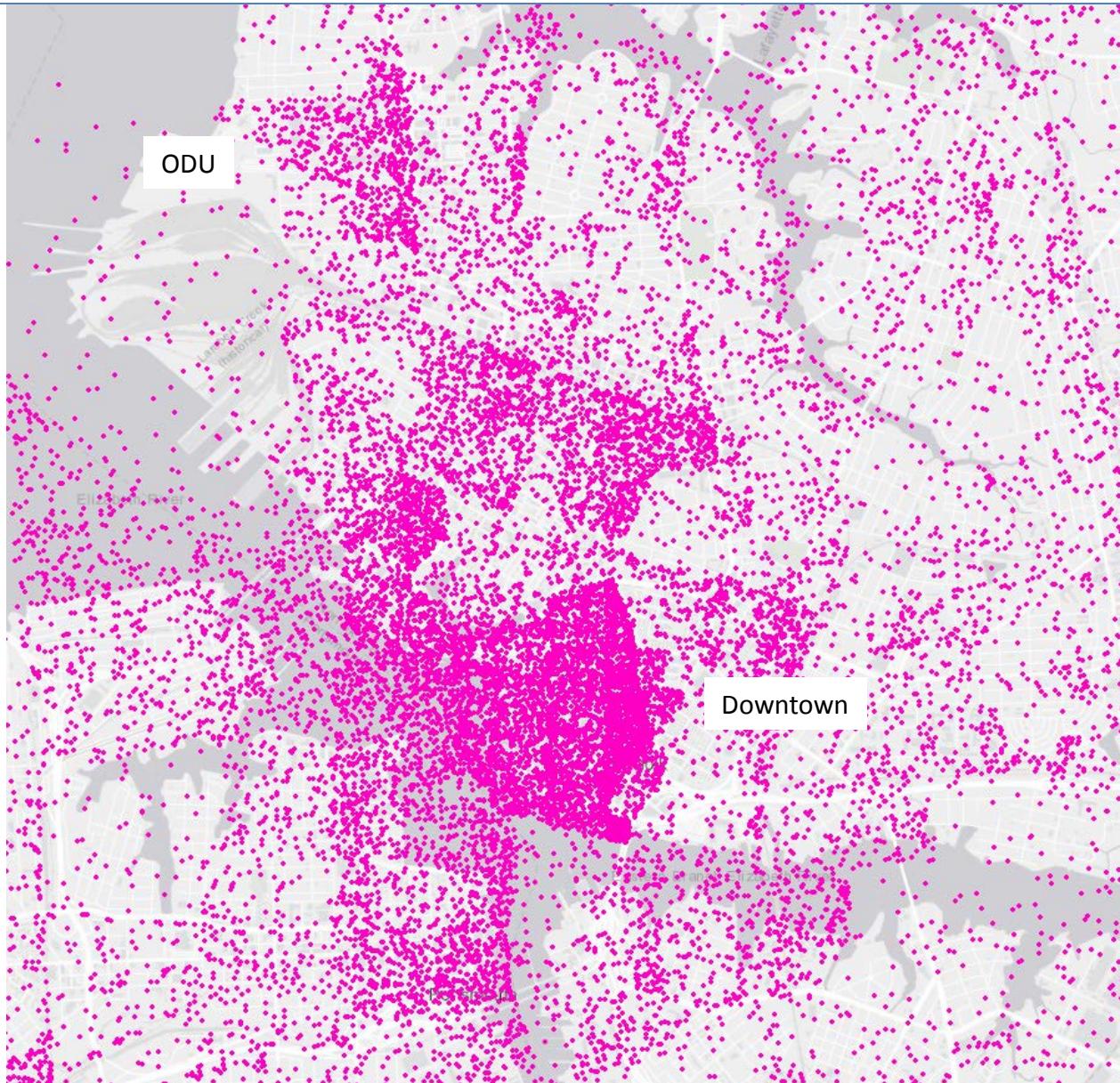
Bike Trips - Oceanfront



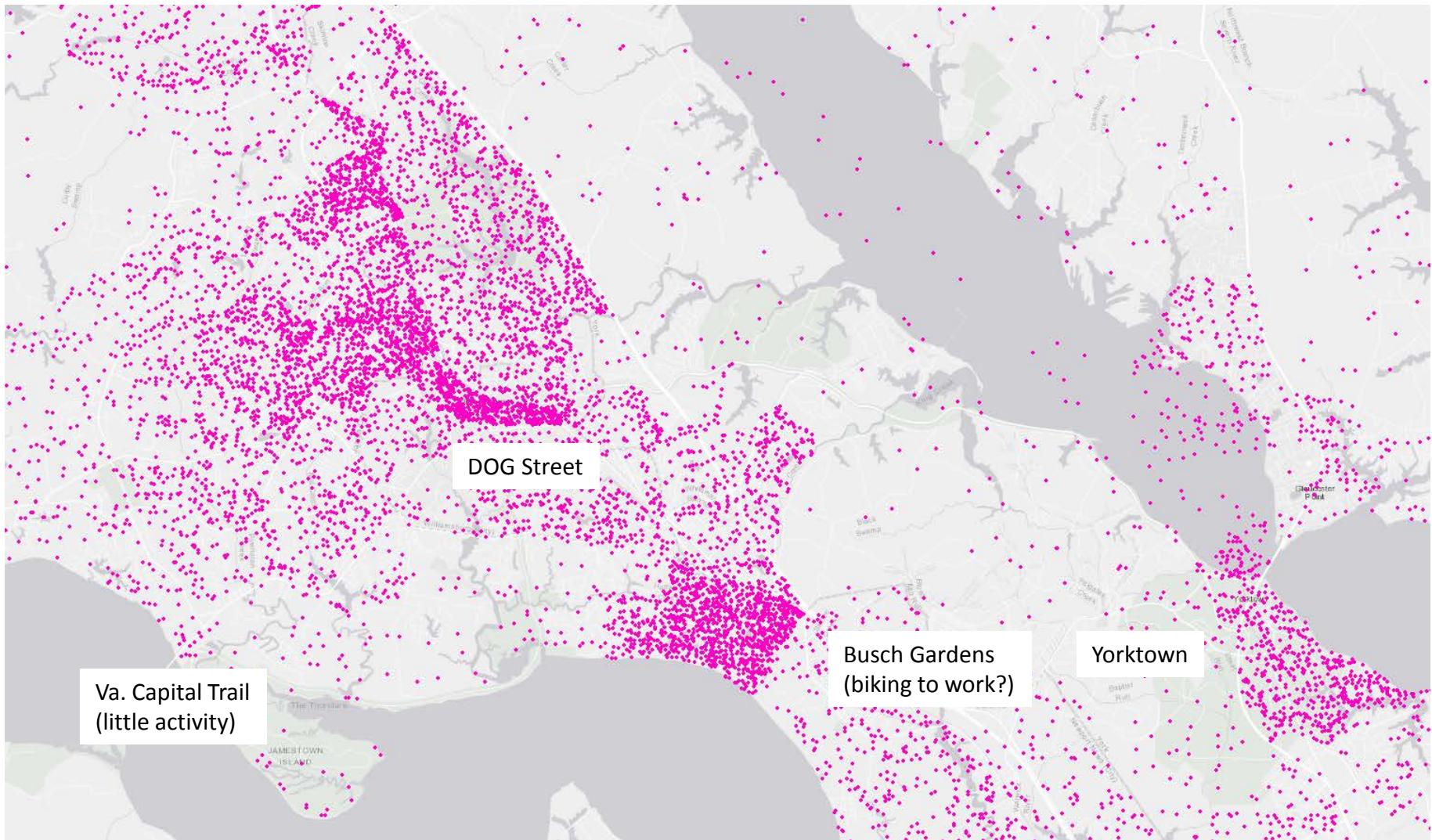
Bike Trips - Lower Peninsula



Bike Trips - Downtowns



Bike Trips - Upper Peninsula



Data

- For copy of data, contact Rob Case:
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