Bike Activity in Hampton Roads

Presented by Uros Jovanovic
To Active Transportation Subcommittee
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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, circuity 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 validated 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].”

Source: “StreetLight Active Mode Methodology, Data Sources and Validation”, Dec. 2018
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
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

Marketplace at Hilltop
Chesterfield Station Apts

Oceanfront

Atlantic Ocean
Bike Trips - Lower Peninsula

Turnberry Wells Townhomes
Springhouse Apartments
Jefferson Commons Sh. Cntr.

Peninsula Town Center (biking to work?)

NN Shipyards
Hampton U
Bike Trips - Downtowns
Bike Trips - Upper Peninsula

- Busch Gardens (biking to work?)
- Yorktown
- DOG Street
- Va. Capital Trail (little activity)
Data

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