

PEDESTRIAN SAFETY AND TRAFFIC CALMING

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- ▶ Demand at an all-time high
 - ▶ Working from home
 - ▶ Transit
 - ▶ People need recreation
- ▶ Capital Trail usage up 60%
- ▶ Fall Line Trail – in development
- ▶ North Gayton Trail
 - ▶ Best New Bike Road 2019

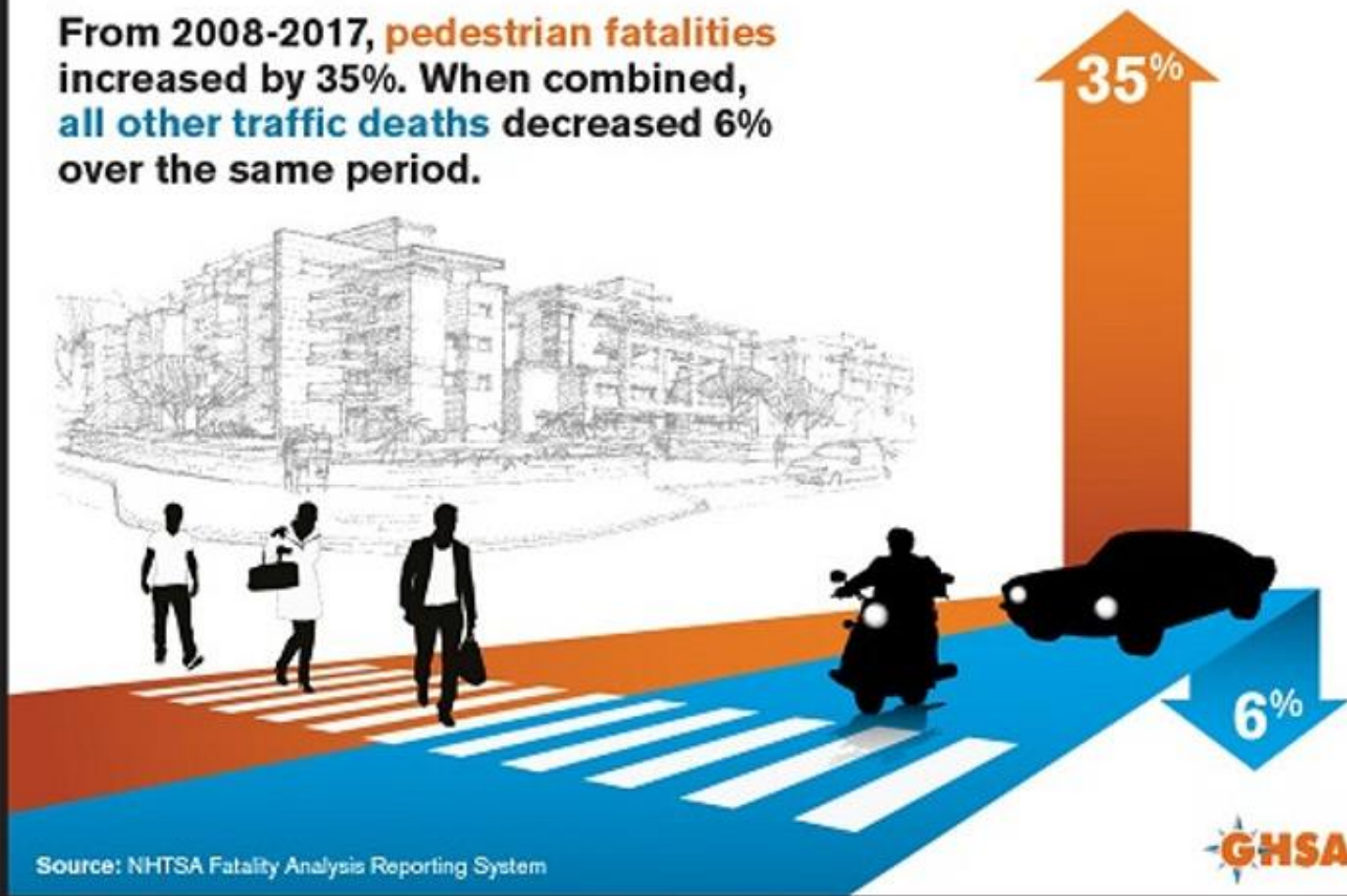
PEDESTRIAN AND BIKE INFRASTRUCTURE



- ▶ Current
 - ▶ Sidewalk - 263 Miles
 - ▶ Trails - 39 miles
 - ▶ Bike Lanes - 9 miles
- ▶ Programmed
 - ▶ Sidewalk - 23 miles
 - ▶ Trails - 5 miles
 - ▶ Fall Line – 7.5 miles

PEDESTRIAN AND BIKE INFRASTRUCTURE

From 2008-2017, **pedestrian fatalities** increased by 35%. When combined, **all other traffic deaths** decreased 6% over the same period.



SAFETY OVERVIEW

- ▶ 5-year history
- ▶ Fatal Crashes – 140
 - ▶ Pedestrians – 41
 - ▶ Bikes - 6
- ▶ Injury Crashes – 15,785
 - ▶ Pedestrians – 503
 - ▶ Bikes – 193
- ▶ Pedestrian and Bike Crash Trend
 - ▶ State - 12%
 - ▶ Henrico - 33%



PEDESTRIAN SAFETY

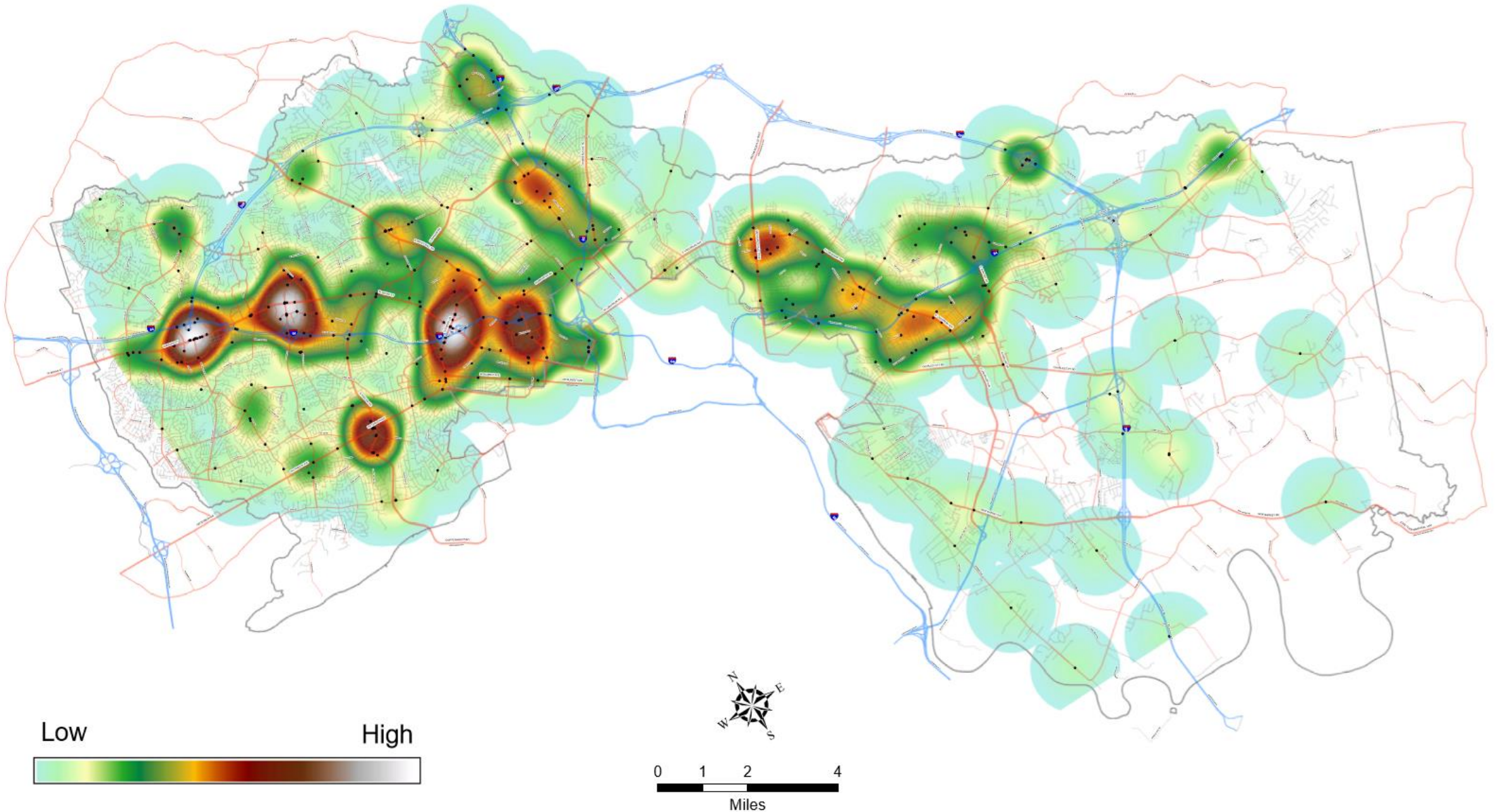
Top Causes

1. Mid Block Crossing
2. Crossing at intersection (no signal)
3. Walking in roadway (no sidewalk available)
4. Crossing at intersection (signal)
5. Standing in roadway
6. On the side of the roadway

PEDESTRIAN CRASHES

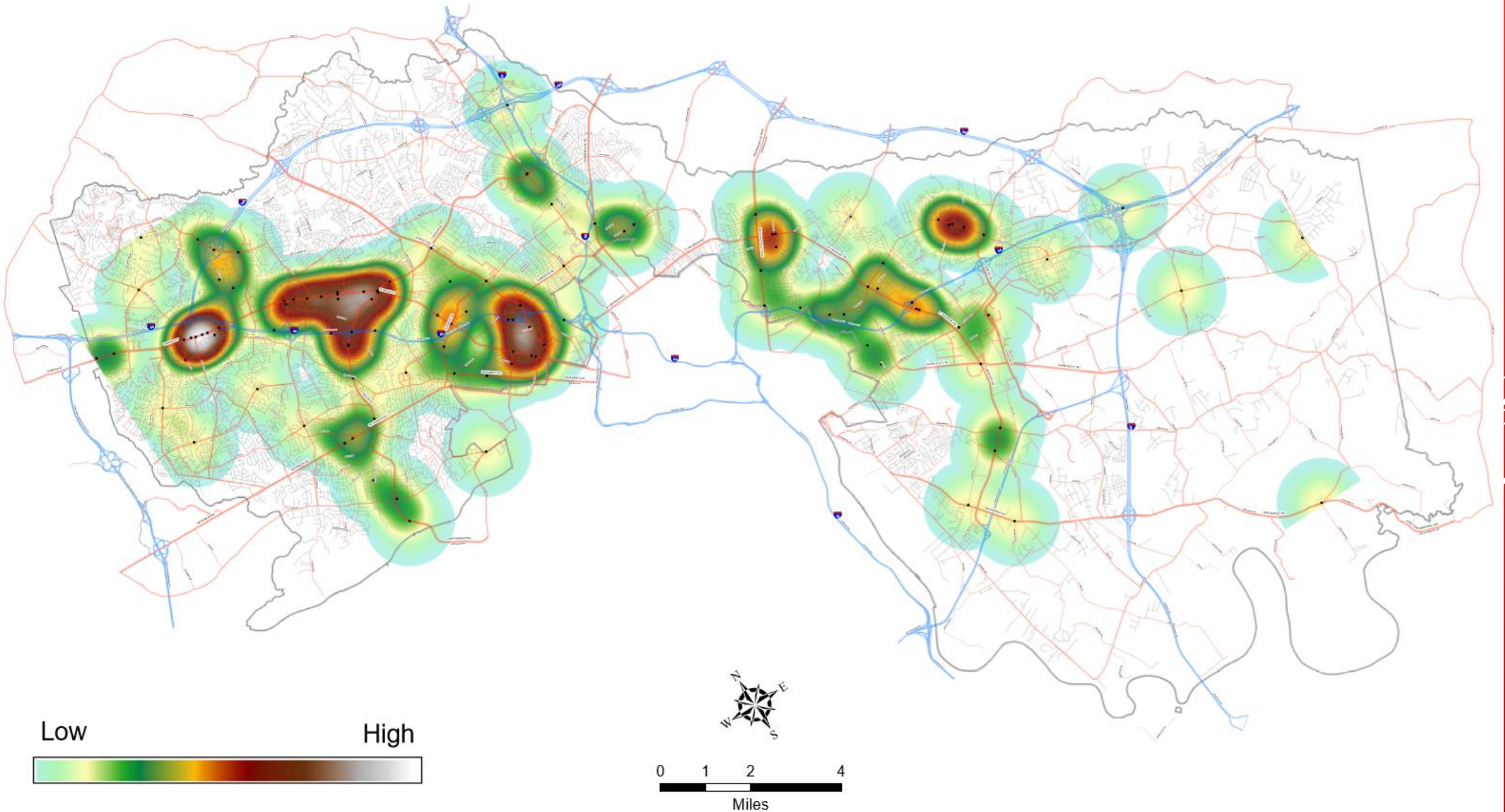
All Pedestrian Crashes

January 2015 - August 2020



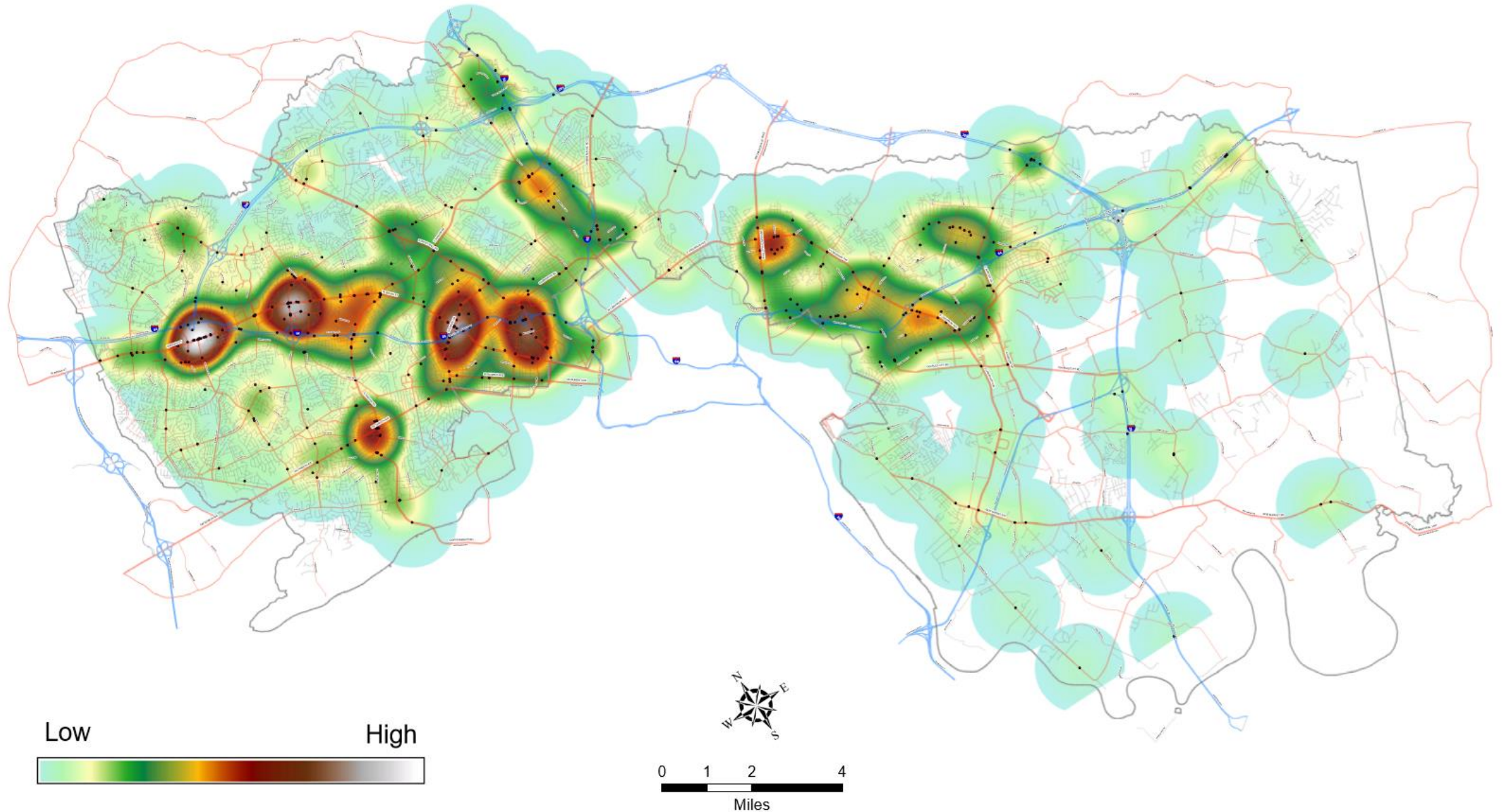
All Bicycle Crashes

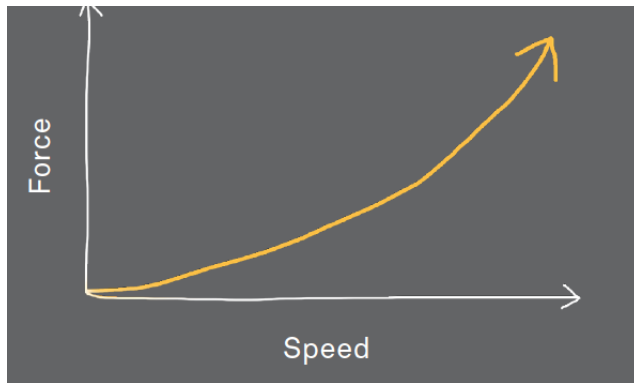
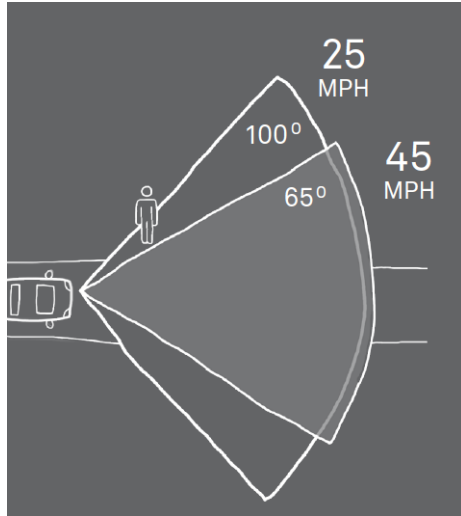
January 2015 - August 2020



All Pedestrian and Bicycle Crashes

January 2015 - August 2020



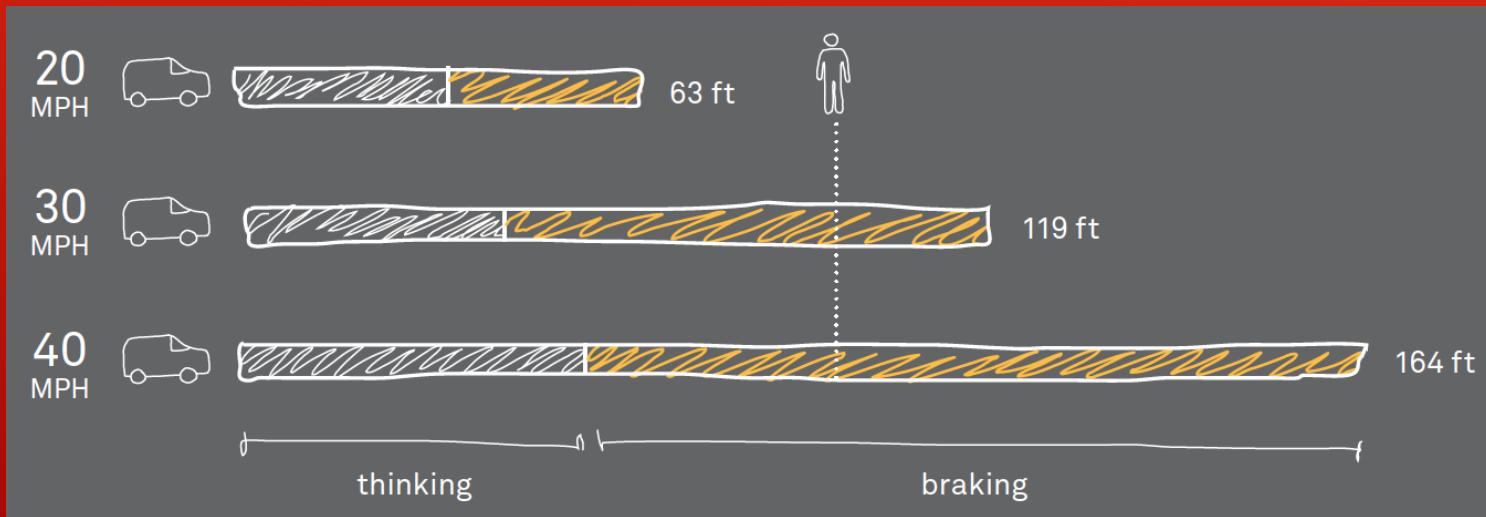


- ▶ Higher speed = less peripheral vision
- ▶ Higher speed = greater impact force

VEHICLE SPEED

- ▶ Higher speed = longer reaction distance
- ▶ Higher speed = longer braking distance

VEHICLE SPEED



76% OF PEDESTRIAN FATALITIES OCCUR IN DARK CONDITIONS

Drivers need to be alert for pedestrians at night.
Pedestrians should wear reflective materials or use a light at night to increase visibility.



Source: <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812850>
For more information: <https://www.nhtsa.gov/road-safety/pedestrian-safety>

- ▶ Pedestrian Crashes – 544
 - ▶ Daytime Crashes – 303
 - ▶ Nighttime Crashes - 241
- ▶ Pedestrian Fatal Crashes – 41
 - ▶ Daytime Crashes – 10
 - ▶ Nighttime Crashes – 31
 - ▶ Henrico – 76%

NIGHT CRASHES ARE WORSE

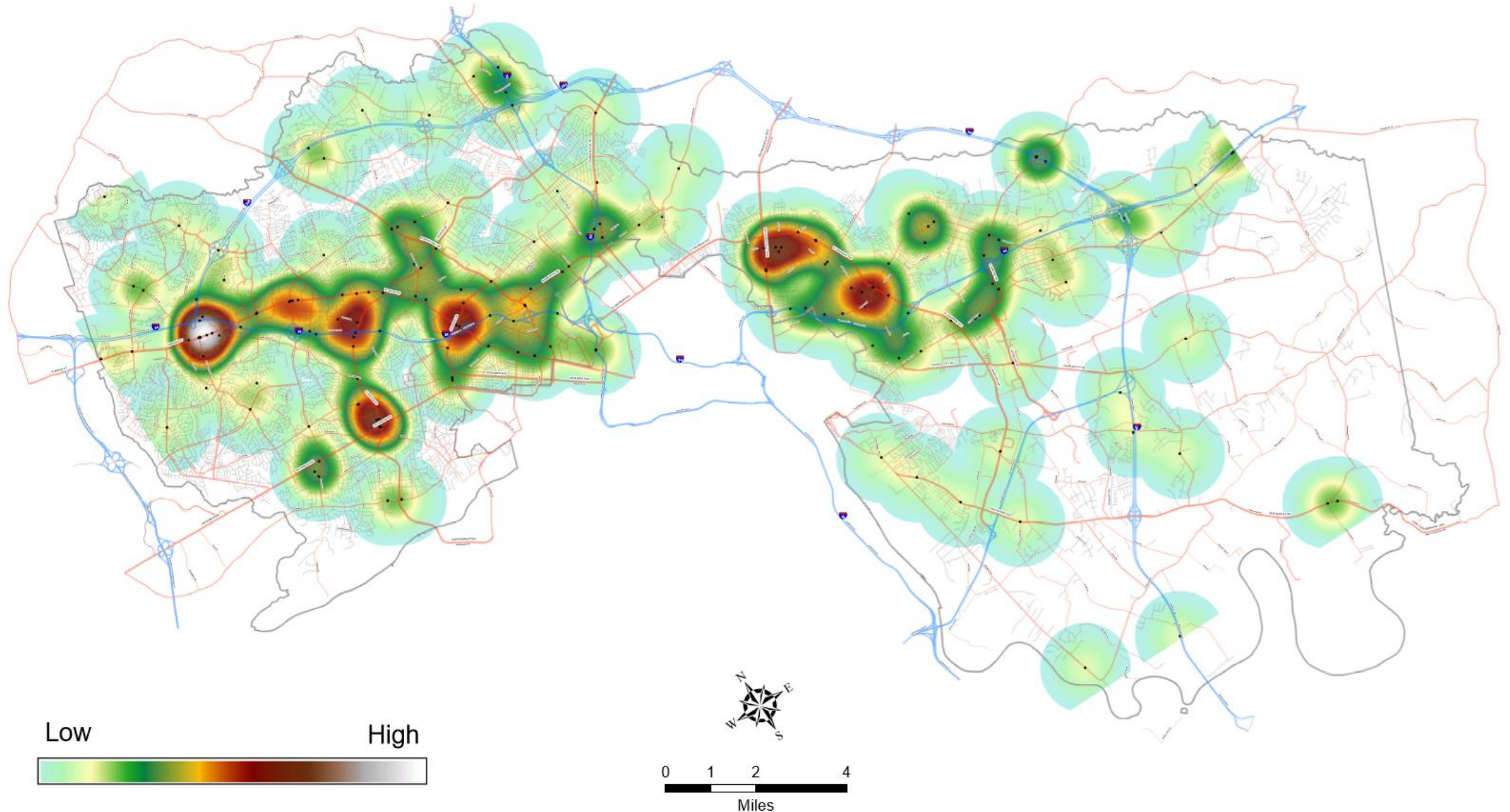


- ▶ Bike Crashes – 199
 - ▶ Daytime Crashes – 123
 - ▶ Nighttime Crashes - 76
- ▶ Bike Fatal Crashes – 6
 - ▶ Daytime Crashes – 2
 - ▶ Nighttime Crashes - 4

BIKE CRASHES DAY
VS. NIGHT

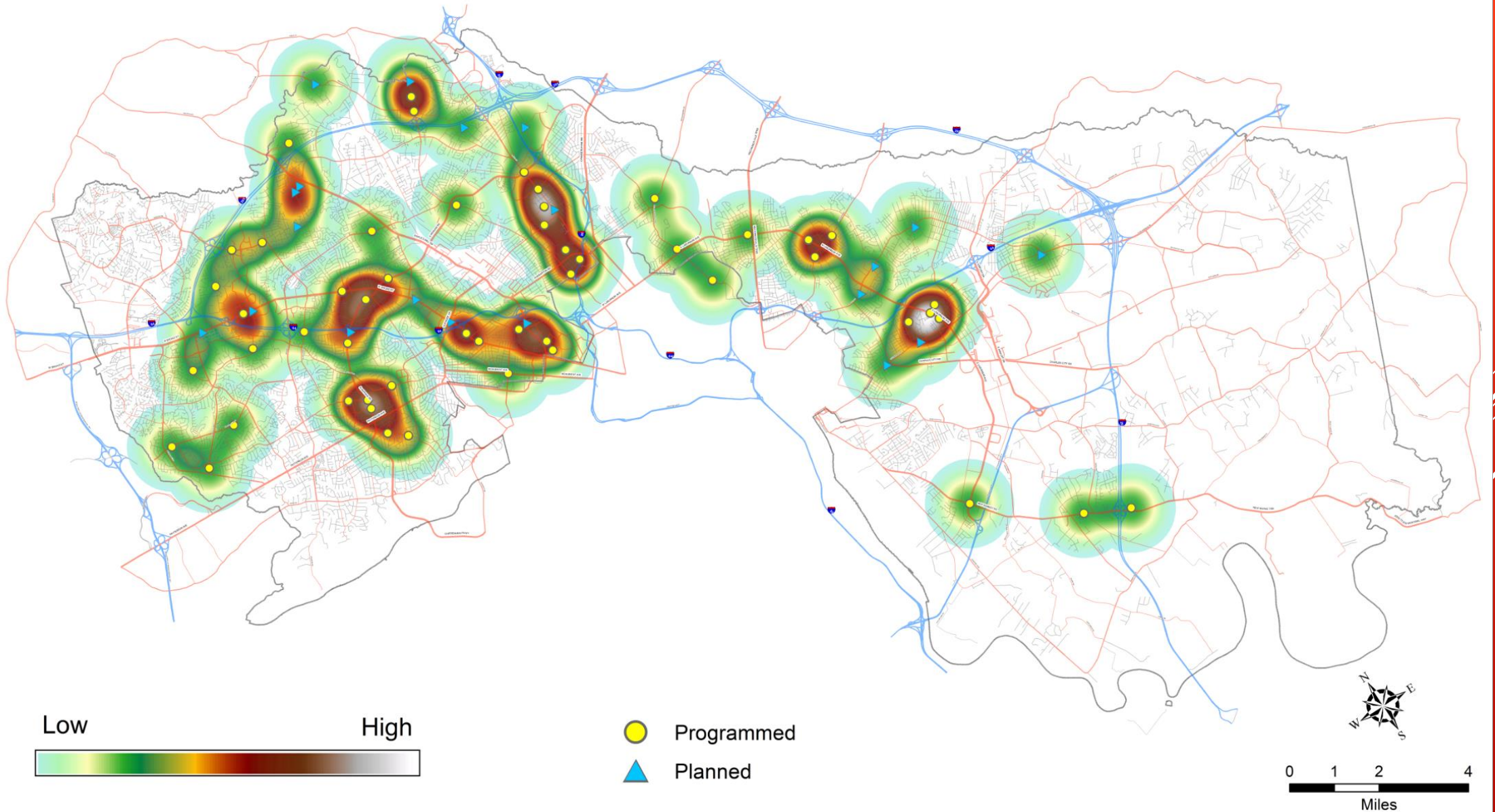
All Pedestrian and Bicycle Night Crashes

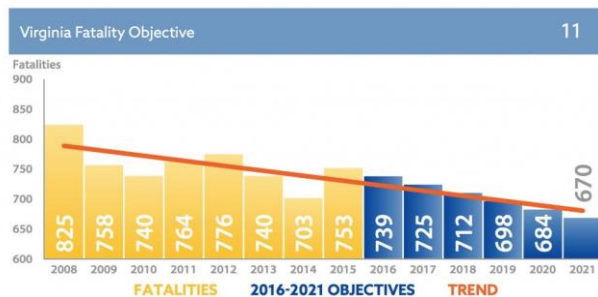
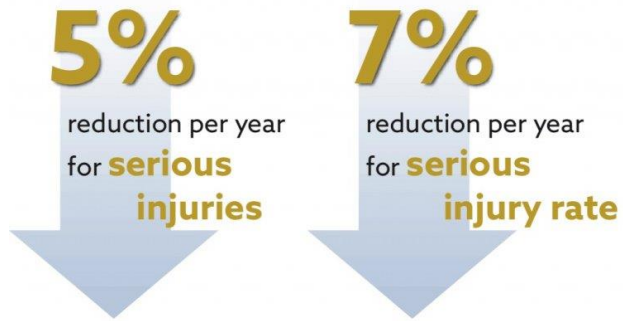
January 2015 - August 2020



Future Projects

Programmed or Planned





Develop a strategic safety plan

- ▶ Goal - Zero Deaths
 - ▶ Henrico Team – DPW, Police, Fire, Health
 - ▶ Regional Effort - PlanRVA
- ▶ Bike/Ped in Comprehensive Plan Update
- ▶ Changes to infrastructure to protect vulnerable road users
- ▶ Focus on nighttime crashes
 - ▶ Nighttime accommodations
 - ▶ Public outreach

SAFETY TAKEAWAYS



Many requests

► Two Phases

- Phase 1 – Speed Study / Enforcement
- Phase 1 – “\$200 Additional Fine”
- Phase 2 – Speed Study / Enforcement
- Phase 2 – Physical Devices

Each involves Board, DPW and Police

TRAFFIC CALMING



Traffic calming requests come in two forms

- ▶ Reduce speeding
- ▶ Reduce cut-thru traffic
- ▶ Communities want new solutions
- ▶ More pedestrians and bikes require new tools

TRAFFIC CALMING



Cut-thru traffic - slow them down and increase resistance to speed

- ▶ Reduce lane widths
- ▶ Structurally calm traffic with small infrastructure improvements
- ▶ We can test them
- ▶ Big-data sources can identify cut-thru traffic

TRAFFIC CALMING



TRAFFIC CALMING



- ▶ Expand traffic calming program
- ▶ Use pilot projects with “before and after” studies

TRAFFIC CALMING