BALTIMORE CITY DEPARTMENT OF TRANSPORTATION

CURRENT AND FUTURE CRASH DATA APPLICATIONS

AGENDA

I. Current Project Prioritization
II. SS4A Projects
    a) Overview
    b) Developing the High Injury Roadway Network
    c) Public health evaluation
III. Conclusion and Questions

CURRENT PRIORITIZATION PROCESSES

Brandon M. Scott
Mayor

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DEPARTMENT OF TRANSPORTATION
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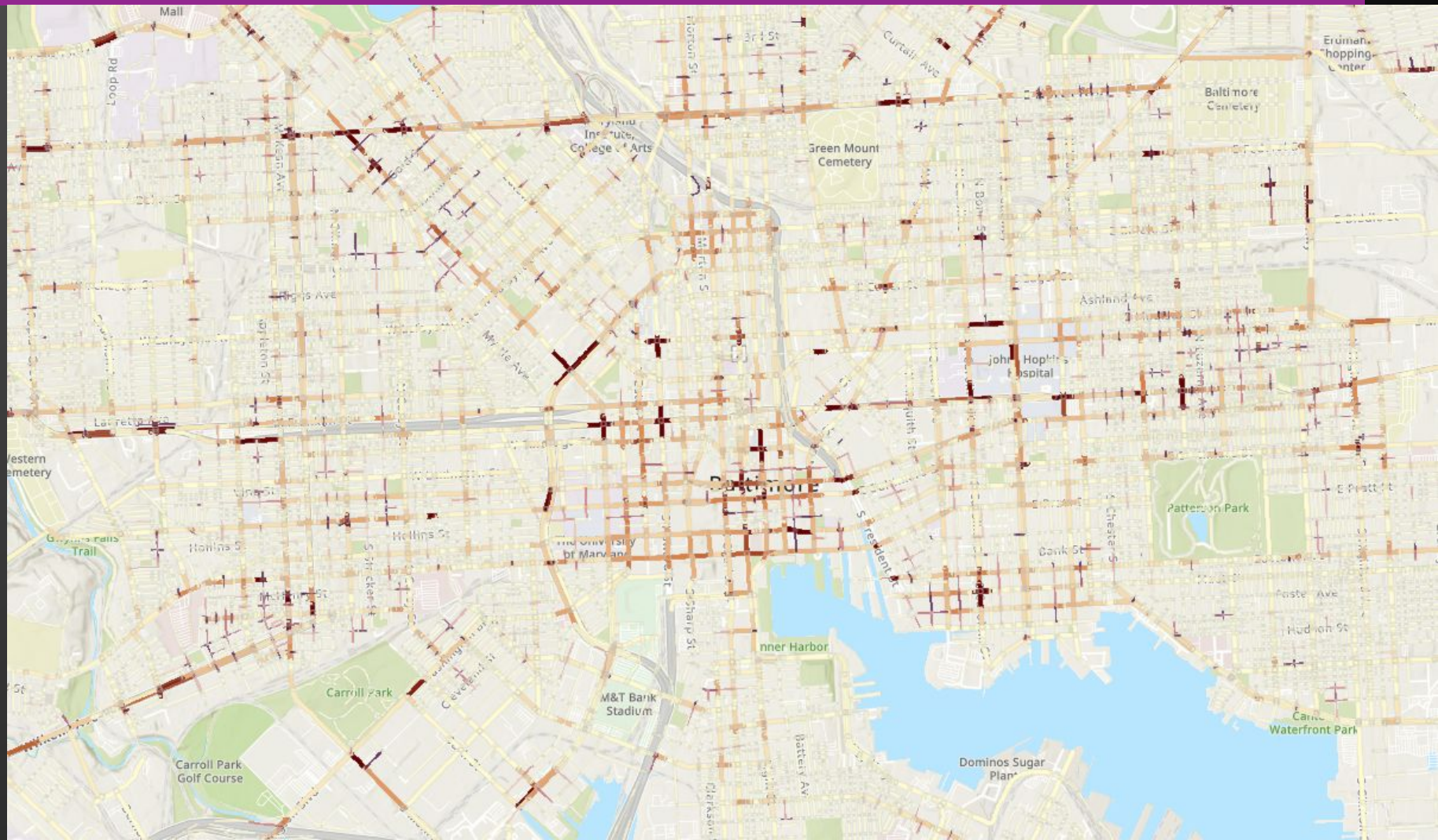
DRAFT HIGH INJURY ROADWAY NETWORK, 2022

- Crash data 2019 – 2021
- Road segments available in non-uniform intervals
- Only uses major roads
- Traffic Injury Index Score
  - Crash frequency, severity level, pedestrian, bicycle

Segment score = Total crashes + Fatal crashes × 10 + Non-serious injury crashes × 2 + Serious injury crashes × 8 + Pedestrian crashes × 6 + Bicycle crashes × 3

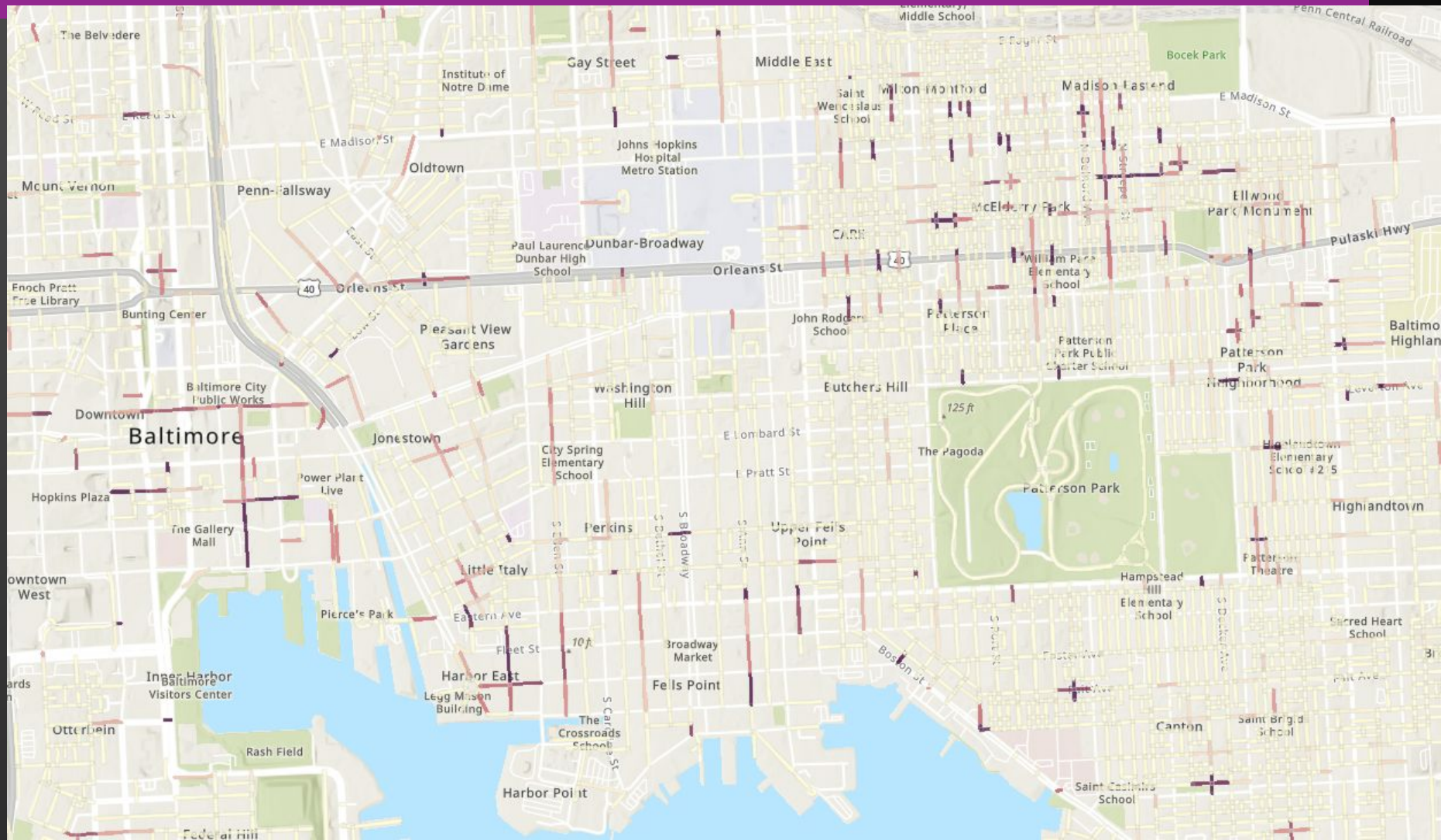
$$\frac{\text{Segment crashes}}{\text{Segment length}}$$

Avg segment crashes / segment length



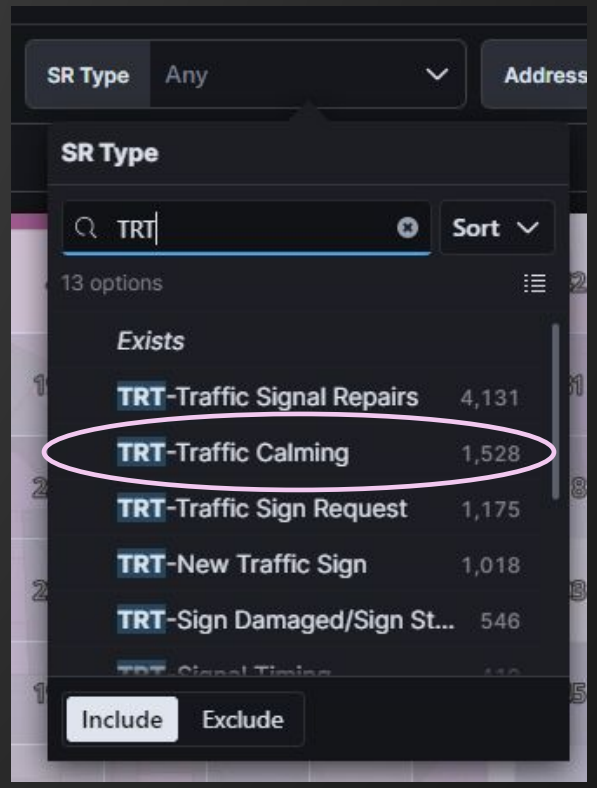
DRAFT HIGH INJURY LOCAL ROADWAY NETWORK, 2022

- Crash data 2019 – 2021
- Using the same methodology as the Traffic Injury Index Score, but on local neighborhood streets only
- Different scale and color code



DRAFT HIGH INJURY ROADWAY NETWORK, 2022

- Applications:
  - Selecting corridor and intersection projects
  - Neighborhood traffic calming needs analysis
  - Prioritizing 311 requests – applying the Traffic Injury Index Score at the neighborhood level



SS4A PROJECTS

Brandon M. Scott
Mayor

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OVERVIEW OF SS4A

BCDOT won $1.005M from the USDOT Safe Streets for All program to create a Safety Action Plan in early 2023!

Problems:

- Existing safety plans are mostly philosophical
- Crash data is the only safety metric
- Measurement and evaluation of infrastructure
- Lack of partnerships on safety

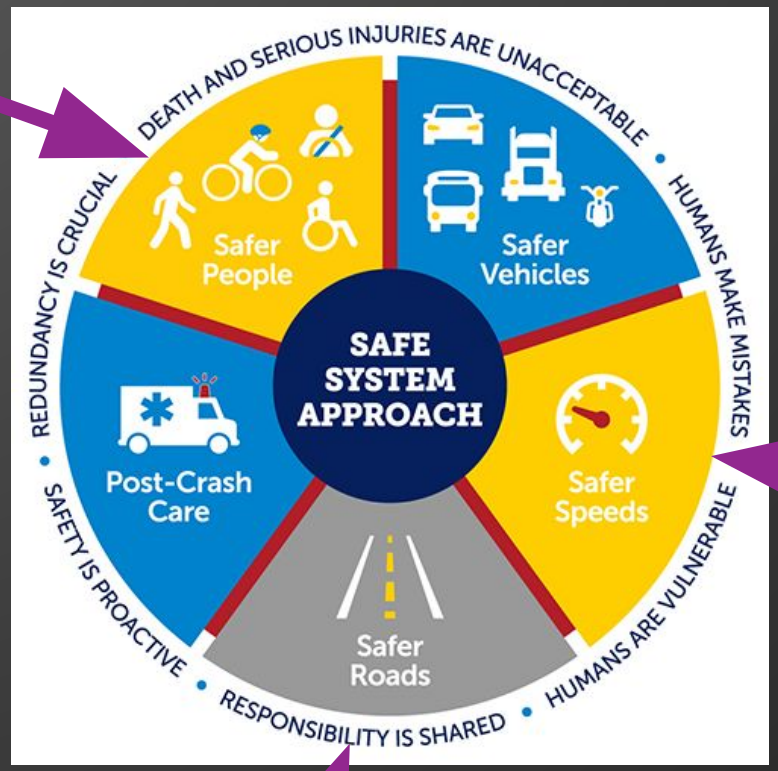
OVERVIEW OF SS4A

Problems:

- Existing safety plans are mostly philosophical
- Crash data is the only safety metric
- Measurement and evaluation of infrastructure
- Lack of partnerships on safety

- Let's make a prioritized list of specific projects
- Let's collect more safety data and come up with ways of using it to identify and evaluate projects
- Let's collect infrastructure data so we can perform safety analyses
- Let's explicitly link transportation safety issues to public health issues to bring more people to the table

OVERVIEW OF SS4A



Safer People
(Communications Campaign + Programs)

Safer Roads
(HIN)

Safer Speeds

$1.3M plan, with $1M from SS4A

DEVELOPING THE NEW HIGH INJURY ROADWAY NETWORK

DEVELOPING THE HIGH INJURY ROADWAY NETWORK (CONT'D)

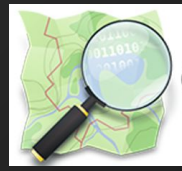
Safety and Infrastructure Data

- Partnering with the University of Maryland
- Collecting new citywide safety and short trip data
- Examine and clean existing public data sources

RITIS

Street Smart by cyclomedia

Internet Traffic Monitoring System (ITMS)



CATT LABORATORY

CITY OF BALTIMORE

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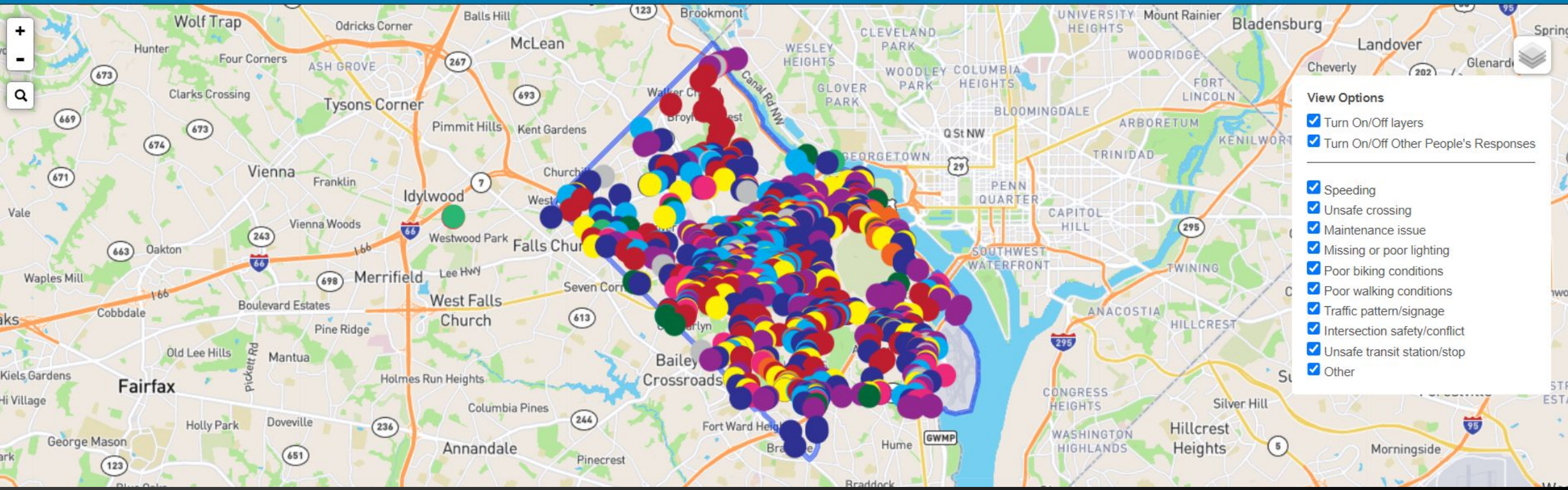
VISION ZERO

ARLINGTON COUNTY

Activity Instructions

1) ***Locate your transportation safety issue***: Click and drag your cursor to pan the map, and use the scroll (+/-) button to the left to zoom in and out.
2) ***Select your feedback type***: Click "Add to the Map!" in the blue bar and choose a category from the options provided.
3) ***Add it to the map***: Click once to drop a point on the map. If you want, you can tell us more in a comment.
4) ***Click 'Submit'.***
5) ***You can also click on comments that others have made***, *and indicate whether you agree or disagree.*

Arlington Vision Zero About & Help Add to the Map!



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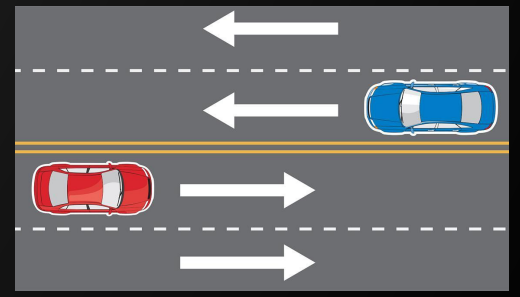
DEVELOPING THE HIGH INJURY ROADWAY NETWORK (CONT'D)

- Partnering with Morgan State University
- Crash frequency predictive models
- Evaluating safety benefits of existing infrastructure

Risk Modeling of Roadway Safety → High Injury Network



Source: AARP

PUBLIC HEALTH EVALUATION

- The order in which the HIN is implemented, and the types of treatments used, will be based on equity need pertaining to health.
- BCDOT is partnering with Johns Hopkins University to conduct Health Impact Assessments of the City's HIN.
- This will result in a recommended order for treatment implementation and guidance on interventions to meet the needs of adjacent populations.
- Example metrics:
  - Vulnerable populations' (children, elderly, ill) exposure to risk
  - Access to health-supportive resources and jobs
  - Chronic disease
  - Noise pollution
  - Air pollution
  - Stress
  - Physical activity

THANK YOU AND QUESTIONS

Brandon M. Scott
Mayor

Contact:
Shayna.rose@baltimorecity.gov