

Draft Regional High Injury Network Update and Methodology Review

RRTPO Technical Advisory Committee

Purpose

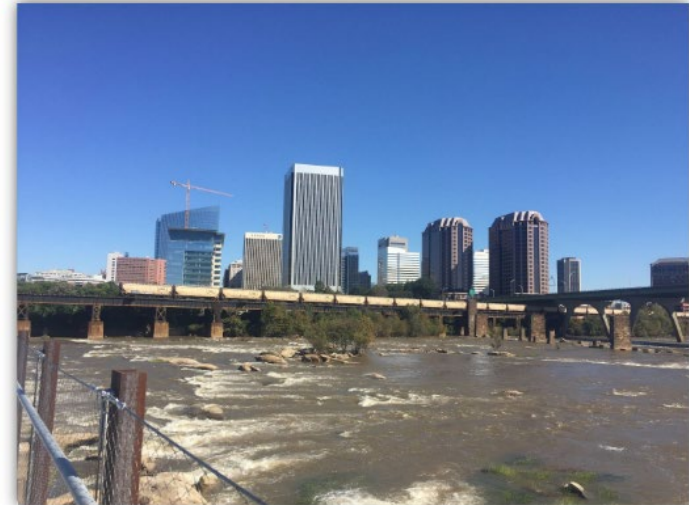
- Present updated regional HIN as part of Safety Plan update
- Explain revised methodology
- Discuss alignment with local HINs, priority areas, RSAs
- Gather TAC input on methodology and next steps

HIN in Context

- HIN is a key element of the Safety Plan update
- Identifies corridors with highest concentrations of fatal and serious injury (KA) crashes
- Builds on local safety efforts to create consistent regional framework
- Informs future corridor studies, RSAs, and investment priorities

Richmond Regional Transportation Safety Plan

February 2022



Prepared for:



Prepared by:



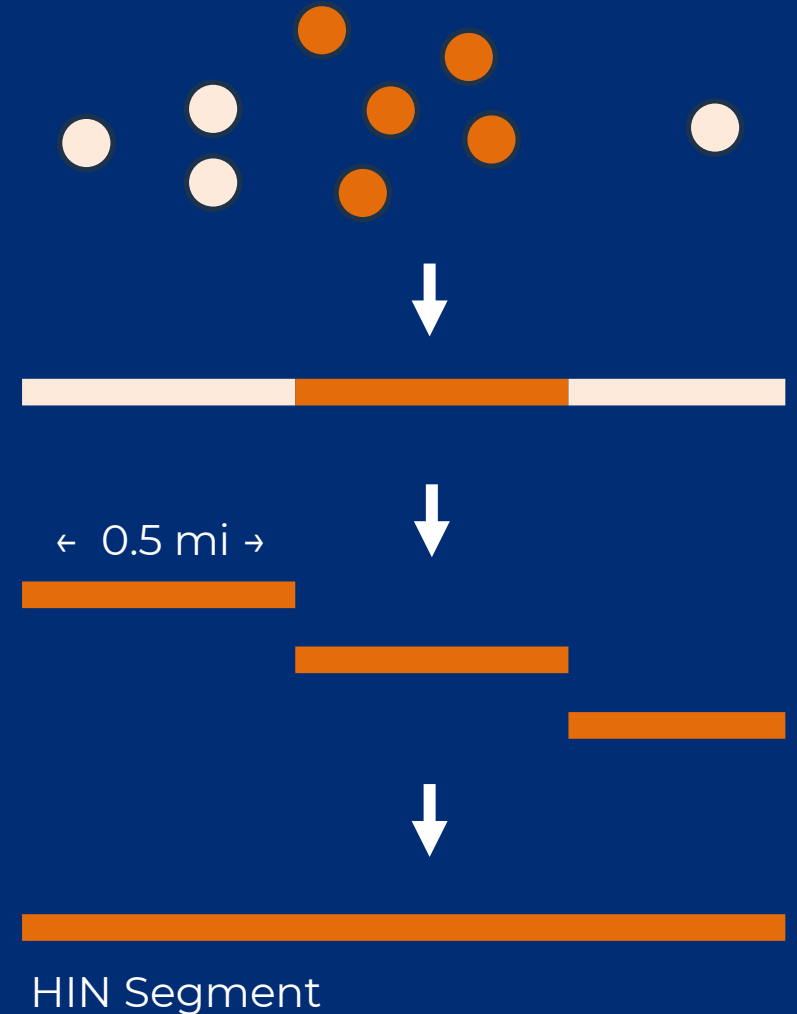
HIN Goals

- Identify the corridors where most KA crashes occur
- Focus limited resources on the small share of roads where the majority of harm happens
- Provide a foundation for Road Safety Assessments, corridor studies, and implementation grants



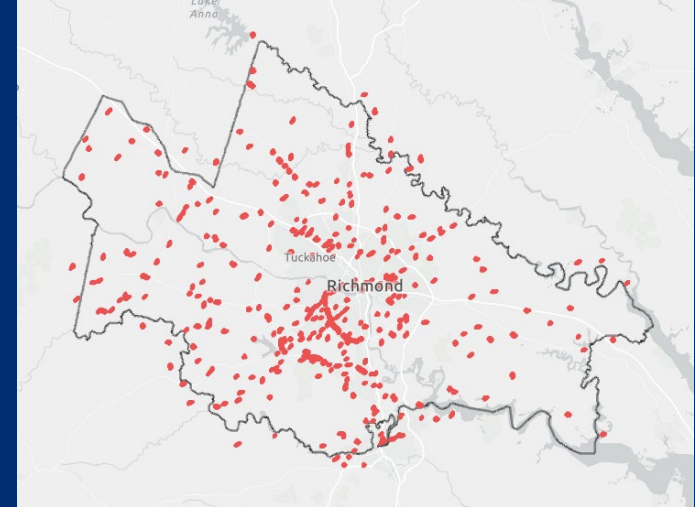
Methodology

1. Define road network
2. Prepare data
3. Link crashes to road centerlines
4. Break roads into 0.5 mi segments
5. Assign severity score to each crash
6. Normalize by length
7. Use sliding 0.5 mi window
8. Rank windows and find the 70%
9. Bridge and connect segments
10. Clean data

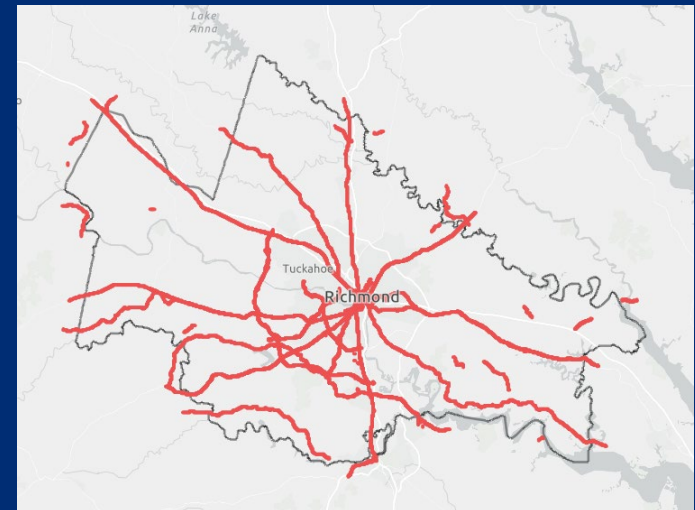


Draft High Injury Network

- Shows where the highest concentrations of KA crashes occur across the region
- Uses a continuously updated data-driven methodology
- Highlights corridors by ranking 1/2-mile windows by severity
- Bridges short gaps to form continuous, relatable corridors
- Serves as the starting point for RSAs



HIN Segments



HIN Routes

Regional Takeaways

- Majority of fatal and severe-injury crashes occur on a small subset of corridors
- Many HIN corridors cross jurisdictional boundaries
- Data moving toward being consistent and replicable for future updates and funding analyses
- Foundation for safety corridors, RSAs



Next Steps

- Incorporate TAC feedback on segmentation, weighting, and visualization
- Finalize methodology and HIN map
- Integrate into Safety Plan update
- Share interactive map and dashboards during public review
- RSA development

Discussion

1. Does the draft network match what you see on the ground in your locality?
2. Are the corridor connections shown in the map appropriate, or should any be adjusted?
3. Which corridors feel like the strongest priorities for upcoming RSAs?