

AGENDA

RICHMOND REGIONAL TRANSPORTATION PLANNING ORGANIZATION VISION ZERO WORK GROUP

**Thursday, July 29, 2021
10:30 a.m.**

Zoom Meeting

Members of the public may observe the meeting via YouTube Live Streaming at www.youtube.com/c/PlanRVA. Opportunities for sharing comments are described in the [Public Participation](#) guide on the www.PlanRVA.org website.

WELCOME AND INTRODUCTIONS

(Clarke)

STATEMENT REGARDING VIRTUAL MEETINGS

(Clarke) page 1

ATTENDANCE BY ROLL CALL & CERTIFICATION OF A QUORUM

(Mueller)

1. Consideration of Amendments to the Agenda

(Clarke).....

2. Approval of the May 13, 2021 Vision Zero Work Group Meeting Summary

(Clarke)..... page 2

Action Requested

3. Open Public Comment Period

(Clarke/5 minutes).....

4. Vision Zero Work Group Chair's Report

(Clarke/5 minutes).....

5. Regional Action Plan

(VDOT/VHB/45 minutes).....page 5

- a. RRTPO Vision Zero Emphasis Areas
- b. Emphasis Area Contributing Factors
- c. Pedestrian Safety Action Plan Corridor Analysis
- d. Next Steps

6. **Vision Zero Work Group Member Comments**
(Clarke)
7. **Next Vision Zero Work Group Meeting: TBD**
(Clarke)
8. **Adjournment**
(Clarke)

Opening Statement for Electronic Meetings

Due to the 2020 COVID-19 virus, meetings of the Richmond Regional Transportation Planning Organization were transitioned to a virtual format in accordance with provisions of Virginia Code § 2.2-3708.2 and related legislation approved by the General Assembly of Virginia during the period of the Governor's State of Emergency Declaration for COVID. The opportunity for public bodies to continue functioning in a virtual format has been extended and meetings of the Richmond Regional Planning District Commissions will continue to be held in a virtual format as authorized by Va. Code § 15.2-1413 from June 30, 2021 to December 31, 2021. This meeting will be held through electronic communication means pursuant to and in compliance with Ordinance No. 2020-093, adopted April 9, 2020, as most recently amended by Ordinance No. 2021-181, adopted June 28, 2021 (Richmond City Council Action).

While we meet in a remote/virtual format, we remain committed to public accessibility and opportunity to participate. Staff provided notice of this meeting to members and the public, including instructions for accessing the meeting and materials, through electronic posting on the PlanRVA website and email distribution of notice to members, alternates, and known interested parties, including the media.

This meeting will be recorded. Audio and visual recordings of the meeting and materials will be posted and be accessible on the PlanRVA website.

Any member of the public participating as an observer during the meeting today may submit comments or questions at any time prior to or during the meeting via email at rrtpoinput@PlanRVA.org. All comments and questions submitted at this time will be reviewed following the meeting and to the extent practical, responses will be provided or posted on the PlanRVA website.

We ask that members identify themselves first when speaking so we can more accurately record the activities of the meeting. All lines should be muted to minimize additional noise and feedback. You may unmute your line at any time to request acknowledgement from the Chair.

Please let us know if you have any questions regarding the process for assuring effective facilitation of this meeting or for how members of the public may participate.

By providing this statement, staff certifies that we have followed the approved procedures for appropriate notice of this meeting and the means by which we are convening.

Please indicate your presence by saying "HERE" when your name is called during a roll call. Anyone who wishes to identify themselves following the roll call of members will be invited to do so.

**RICHMOND REGIONAL TRANSPORTATION PLANNING ORGANIZATION
VISION ZERO WORK GROUP**

MEETING SUMMARY

Zoom Meeting

May 13, 2021

3:00 p.m.

MEMBERS PRESENT:

Town of Ashland		Chesterfield County		Goochland County	
Nora D. Amos		Kathryn Benedict	x	Thomas M. Coleman	x
Henrico County		City of Richmond		VDOT	
Sharon Smidler Vice Chair	x	Dironna Moore Clarke Chair	x	Jacob Herrman (A)	x

Others present:

Dan Motta..... PlanRVA
Nicole Mueller PlanRVA
Chet Parsons PlanRVA
Mike Sawyer..... City of Richmond
Stephen Read..... VDOT
Chuck Conran..... VHB
Chris Daily VHB
Ian Hamilton..... VHB

The RRTPO Vision Zero Work Group meeting was held by electronic communication means as set forth by the April 22, 2020 actions of the General Assembly in response to the continued spread of novel coronavirus, or COVID-19. The technology used for this meeting was a web-hosted service created by Zoom and YouTube Live Streaming and was open and accessible for participation by members of the public. A recording of this meeting is available on our [Plan RVA YouTube Channel](#).

CALL TO ORDER

Dironna Moore Clarke, Richmond Regional Transportation Planning Organization (RRTPO) Vision Zero Work Group Chair, presided and called the May 13, 2021 RRTPO Vision Zero Work Group meeting to order at 3:01 p.m.

ATTENDANCE ROLL CALL & CERTIFICATION OF MEETING QUORUM

Nicole Mueller, Program Coordinator, took attendance by roll call and certified that a quorum was present.

1. Consideration of Amendments to the Agenda

There were no requested changes to the meeting agenda. Seeing and hearing no objections, the agenda was approved by acclamation as presented.

2. Approval of the January 14, 2021 Vision Zero Work Group Meeting Summary

There were no comments or corrections to the January 14, 2021 meeting summary. The RRTPO Vision Zero Work Group unanimously approved by acclamation the meeting summary as presented.

3. Open Public Comment Period

There were no requests to address the work group.

4. Vision Zero Work Group Chair's Report

Chair Clarke thanked Mr. Parsons, Director of Transportation with PlanRVA, for sharing the efforts of this work group with the Technical Advisory Committee at the May 11th meeting. She was excited to be able to share a tool that can be used across the region for safety.

5. Regional Action Plan

VDOT's on-call consultant VHB supports the work group in its mission to create a regional action plan. Today's high-level findings included mapping of the high injury network of KA crashes, an equity analysis, pedestrian crashes, and a look at crash emphasis areas. VHB joined this effort to track deaths and serious injuries and develop a high injury network for the region. The consultant outlined the following proposal with a focus on data analysis:

The data discussion for the RRTPO Regional Safety effort focused on four elements to guide the discussion.

1) Identifying High Injury Network (HIN)

- The HIN represents a large share of high injury crashes on a small percentage of the locality's roads. HIN Calculations show which roads in each locality are being considered for the High Injury Network. In the 4 higher populated localities (Chesterfield, Hanover, Henrico, Richmond) there are sufficient KA crashes (K=fatal, A=serious injury crashes) to analyze. In the 5 lower populated localities (Ashland, Charles City, Goochland, New Kent, Powhatan), B crashes (B=minor injury crashes) were included in the analysis to account for insufficient numbers of KA crashes for analysis.

2) Equity Considerations Using the Health Opportunity Index

- The Virginia Department of Health (VDH) developed the HOI to determine factors that determine health, including social, economic, educational, demographic, and environmental factors. The locality HOI summary shows the percentage of KA crashes that are located in each of the five Virginia Health Opportunity Index census tract levels (Very Low, Low, Average, High, Very High) with the purpose of identifying linkages between those locations with poor health and socioeconomic indicators with crashes.
- HOI Maps show where the KA crashes map against the HOI levels.

3) Pedestrian Considerations using PSAP Version 2.0

- [VDOT's Pedestrian Safety Action Plan \(PSAP\)](#) is a statewide plan that analyzed pedestrian crashes for hot spots and identified critical corridors for targeted pedestrian safety improvements. An overlay of regional pedestrian crashes with the PSAP data indicates that pedestrian crashes are mostly occurring in the urban core localities.

4) Initial Emphasis Areas Crash Data Summaries

- Virginia's Strategic Highway Safety Plan (SHSP) outlines a series of crash emphasis areas based on historical data. KA overrepresentation shows crash

factors that represent a higher proportion of KA crashes in each of the four higher populated localities compared to the RRTPO average. The Regional average was also compared to the State average. KAB overrepresentation shows crashes for each of the nine localities compared to the regional average. Each jurisdiction in each area of the TPO is different and has its own unique safety issues.

- A Sample crash tree shows how we can break down crashes within an identified emphasis area to help determine strategies and actions.
- A Sample Venn Diagram shows how we can identify priority locations because multiple factors are present in crashes.

Next Steps:

- Refine the proposed HIN based on feedback from the work group;
- Rerun PSAP analysis within RRTPO boundaries to make it specific to our region;
- Develop safety needs prioritization lists;
- Develop a tool and a report that is digestible by all stakeholders.

A recording of the VHB presentation can be viewed [here](#).

6. Vision Zero Work Group Member Comments

The group was encouraged to share today's presentation with each locality's staff and involved elected officials. Comments (thoughts on HIN, HOI, and Overrepresentation) on the maps presented can be submitted to staff until early June.

7. Next Vision Zero Work Group Meeting: July 8, 2021 (tentative)

8. Adjournment

The meeting was adjourned at 4:00 p.m. on May 13, 2021.

CAP/nm

Fatal and Serious Injury Crashes in RRPTO area by Virginia SHSP Emphasis Area (2016-2020)

	Impaired Driving	Speed	Occupant Protection	Roadway Departure	Intersections	Young Drivers	Bicycles	Pedestrians	TOTAL
Impaired Driving		163	206	297	186	69	10	129	646
Speed	163		201	273	218	131	8	30	607
Occupant Protection	206	201		353	257	125	2	21	702
Roadway Departure	297	273	353		99	153	6	0	1060
Intersections	186	218	257	99		256	56	151	1441
Young Drivers	69	131	125	153	256		18	62	537
Bicycles	10	8	2	6	56	18		1	88
Pedestrians	129	30	21	0	151	62	1		399
TOTAL FOR EMPHASIS AREA	646	607	702	1060	1441	537	88	399	3224

	Impaired Driving	Speed	Occupant Protection	Roadway Departure	Intersections	Young Drivers	Bicycles	Pedestrians
Impaired Driving		27%	29%	28%	13%	13%	11%	32%
Speed	25%		29%	26%	15%	24%	9%	8%
Occupant Protection	32%	33%		33%	18%	23%	2%	5%
Roadway Departure	46%	45%	50%		7%	28%	7%	0%
Intersections	29%	36%	37%	9%		48%	64%	38%
Young Drivers	11%	22%	18%	14%	18%		20%	16%
Bicycles	2%	1%	0%	1%	4%	3%		0%
Pedestrians	20%	5%	3%	0%	10%	12%	1%	

color scale is read vertically

percentages are in relation to the column

Fatal and Serious Injury Crashes in RRPTO area by Road System Type (2016-2020)

	Impaired Driving	Speed	Occupant Protection	Roadway Departure	Intersections	Young Drivers	Bicycles	Pedestrians
Primary	218	194	210	299	480	180	20	129
Secondary	212	265	261	456	268	204	8	45
Other	216	148	231	305	693	153	60	225
TOTAL FOR EMPHASIS AREA	646	607	702	1060	1441	537	88	399

	Impaired Driving	Speed	Occupant Protection	Roadway Departure	Intersections	Young Drivers	Bicycles	Pedestrians
Primary	34%	32%	30%	28%	33%	34%	23%	32%
Secondary	33%	44%	37%	43%	19%	38%	9%	11%
Other	33%	24%	33%	29%	48%	28%	68%	56%

percentages are in relation to the column

RICHMOND REGIONAL TRANSPORTATION SAFETY PLAN (RTSP)

Working Group Meeting

Eric Tang, PE, RSP1, RSP2B, VHB

Chris Daily, PE, VHB

Chuck Conran, PE, VHB

Ian Hamilton, AICP, VHB

July 29, 2021

Agenda

- **Introductions and expectations for the meeting**
- **Progress to Date**
 - **Crash Emphasis Areas**
 - **Pedestrian and Bicyclist Considerations**
 - **Crash Tree Tools**
- **Next steps**
- **Discussion/Q&A**

PROGRESS UPDATE

Refining Emphasis Areas

- **Cross Tab Analysis to show relationship between Emphasis Areas**

	Impaired Driving	Speed	Occupant Protection	Roadway Departure	Intersections	Young Drivers	Bicycles	Pedestrians
Impaired Driving		27%	29%	28%	13%	13%	11%	32%
Speed	25%		29%	26%	15%	24%	9%	8%
Occupant Protection	32%	33%		33%	18%	23%	2%	5%
Roadway Departure	46%	45%	50%		7%	28%	7%	0%
Intersections	29%	36%	37%	9%		48%	64%	38%
Young Drivers	11%	22%	18%	14%	18%		20%	16%
Bicycles	2%	1%	0%	1%	4%	3%		0%
Pedestrians	20%	5%	3%	0%	10%	12%	1%	
color scale is read vertically								
percentages are in relation to the column								

- **Data excludes Interstates and divided, controlled-access roadways**

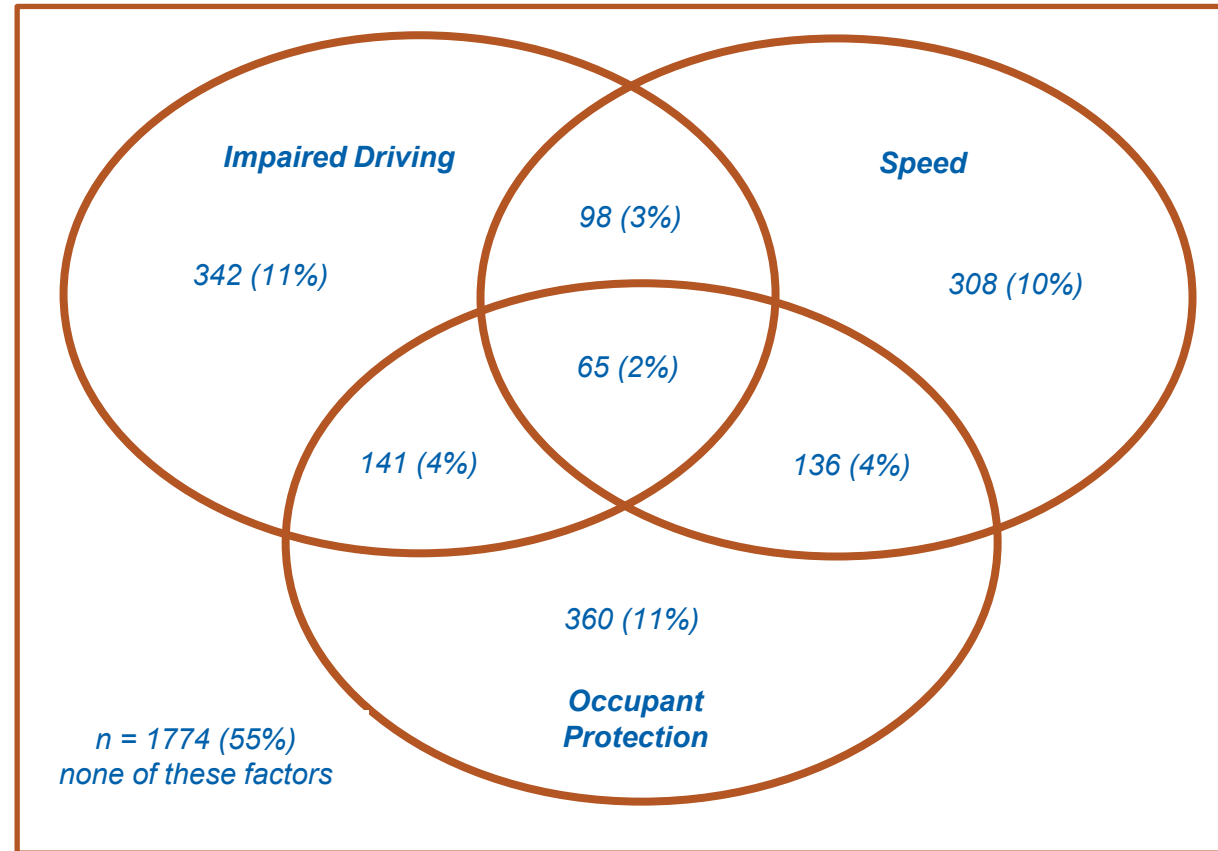
Refining Emphasis Areas

- **Cross Tab Analysis to show crashes by Road System**

	Impaired Driving	Speed	Occupant Protection	Roadway Departure	Intersections	Young Drivers	Bicycles	Pedestrians
Primary	34%	32%	30%	28%	33%	34%	23%	32%
Secondary	33%	44%	37%	43%	19%	38%	9%	11%
Other	33%	24%	33%	29%	48%	28%	68%	56%

Refining Emphasis Areas

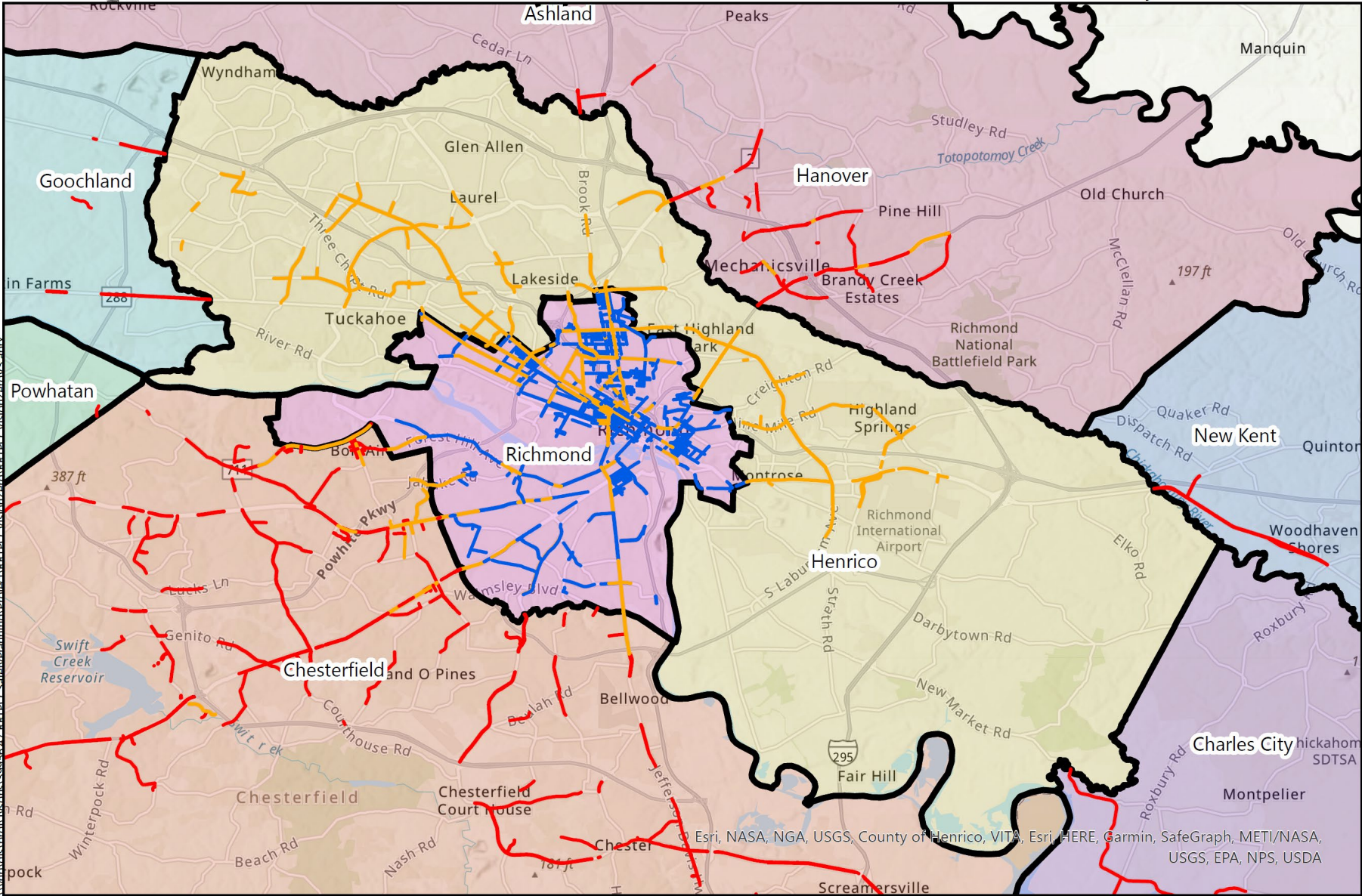
- Venn Diagram analysis that shows multiple factors in a crash



Pedestrian Considerations using Pedestrian Safety Action Plan (PSAP)

- **Statewide plan that analyzed pedestrian crashes for hot spots and identified critical corridors for targeted pedestrian safety improvements**
- **Overlay of regional pedestrian crashes with the PSAP data indicates that pedestrian crashes are mostly occurring in the urban core localities**

PSAP Representative Sample



0 0.75 1.5 3 Miles

Legend

- Jurisdiction Priority
- RRTPO & Jurisdiction Priority
- RRTPO Priority

RRTPO Vision Zero Safety Analysis | Richmond Metro Area, Virginia

Henrico
PSAP Corridor Screening
PSAP 3.0 Scoring

Crash Trees

- FHWA Crash Tree Tool
- Under Systemic Tools at <https://safety.fhwa.dot.gov/LRSPDIY/safety-data.cfm>

Input Worksheet

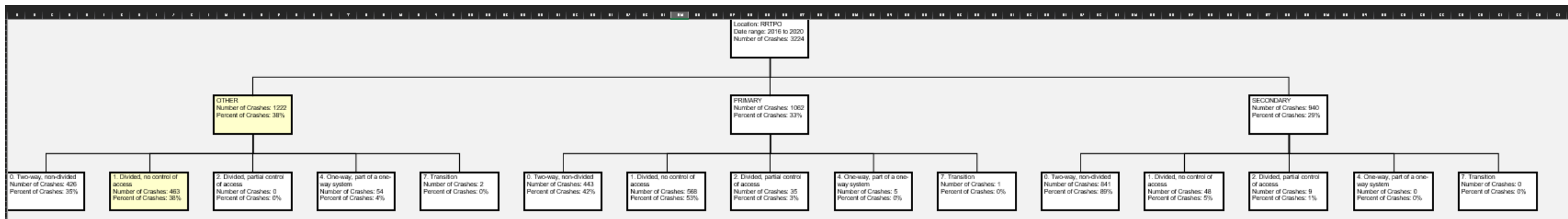
Study area	RRTPO
Start year	2016
End year	2020
Filter 1	Road Classification
Filter 2	Facility Type
Filter 3	
Filter 4	
Filter 5	

Generate Crash Tree

Configuration Sheet

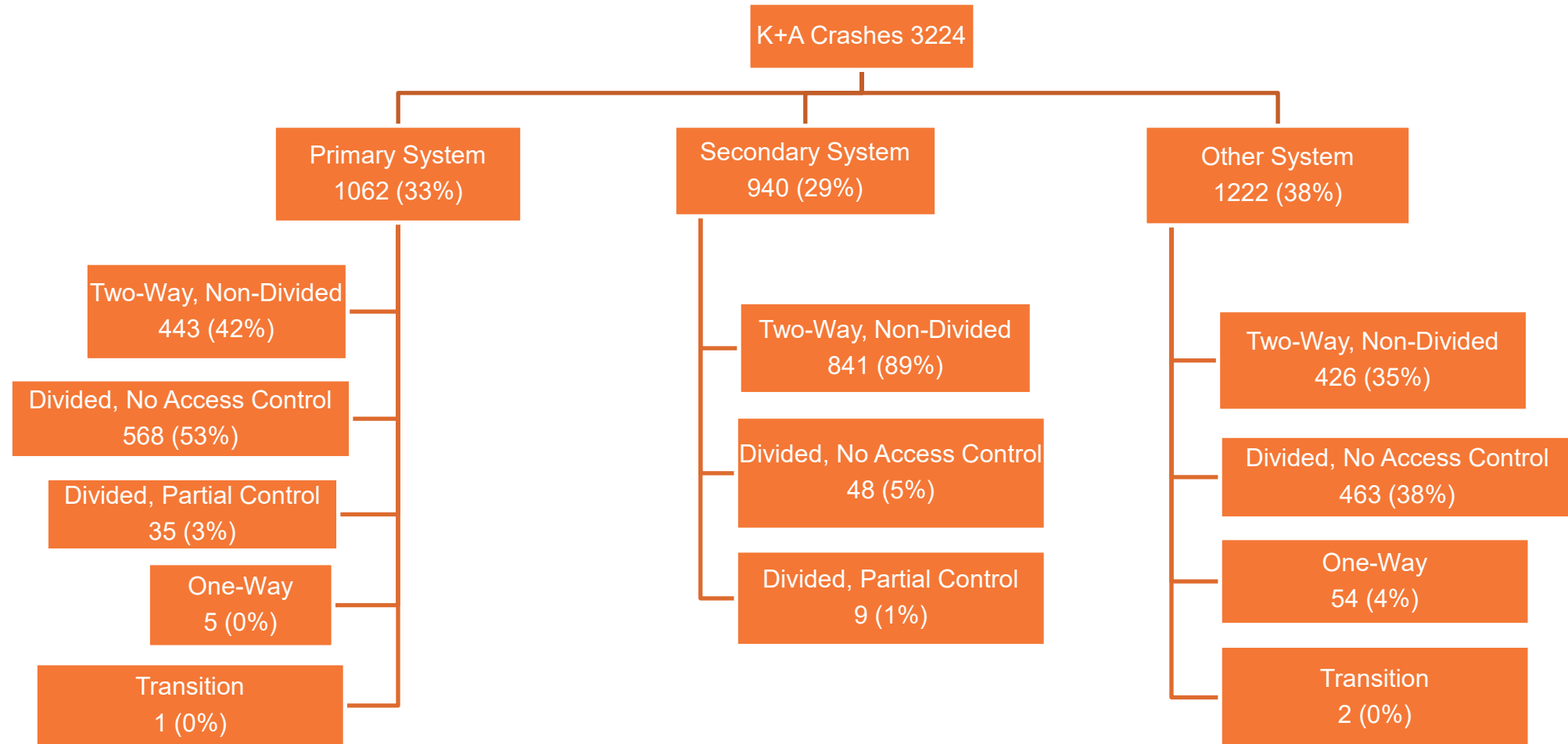
Data Type	User specified	Change data type
Study Area	RRTPO	
Crash Date	CRASH_DT	Configure tool
Maximum Number of Nodes	6	
Highlight color		

Filters	Variable Name
Crash Type	COLLISION_TYPE
Weather	WEATHER_CONDITION
Light	LIGHT_CONDITION
Roadway Departure?	RD_TYPE
Roadway Surface	ROADWAY_SURFACE_COND
Roadway Alignment	CURVE_NOT_CURVE
Traffic Control	TRAFFIC_CONTROL_TYPE
Intersection # Approaches	INTERSECTION_TYPE
Roadway Description	ROADWAY_DESCRIPTION
Work Zone?	WORK_ZONE_RELATED
Seat Belt?	BELTED_UNBELTED
Bike	BIKE_NONBIKE
Distracted	DISTRACTED_NOTDISTRACTED
Pedestrian	PED_NONPED
Speeding	SPEED_NOTSPEED
Senior Driver	SENIOR_NOTSENIOR
Young Driver	YOUNG_NOTYOUNG
Facility Type	FAC
Road Classification	SYSTEM
Intersection Crash?	INTERSECTION_ANALYSIS
Impaired Crash	Impaired
Urban/Rural?	AREA_TYPE
Crash Severity	CRASH_SEVERITY



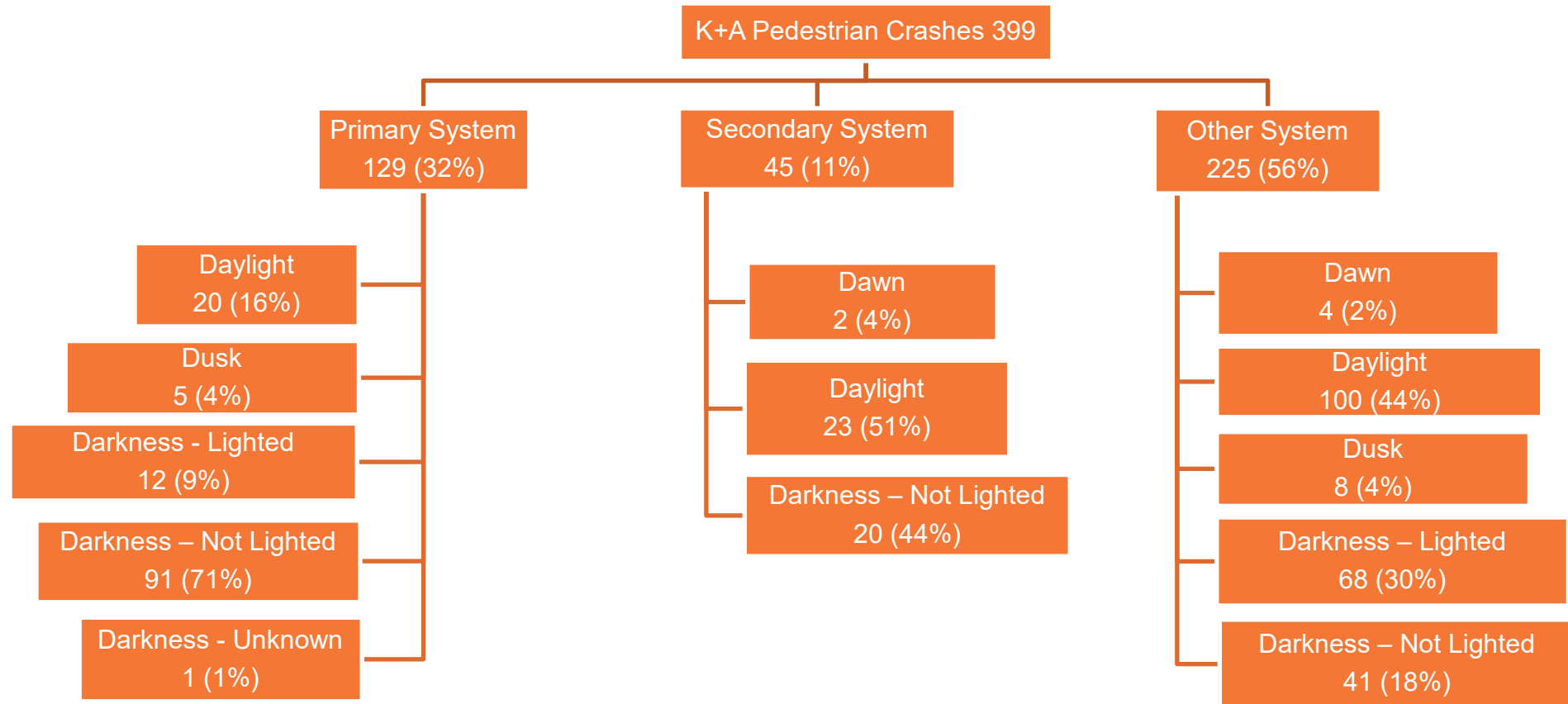
Crash Tree Example

Road System



Crash Tree Example

Pedestrian



Next Steps

- **Provide Crash Tree Tool for each locality**
- **Documentation into Final Report**
 - **Include High Injury Networks**
 - **Include Health Opportunity Index results**
 - **Regional Crash Trees**
 - **Highlights of predominant crash factors in each locality**
 - **Provide linkages to VDOT tools and resources**
 - **End of August 2021**

Questions and Discussion

Thank you!

Eric Tang
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