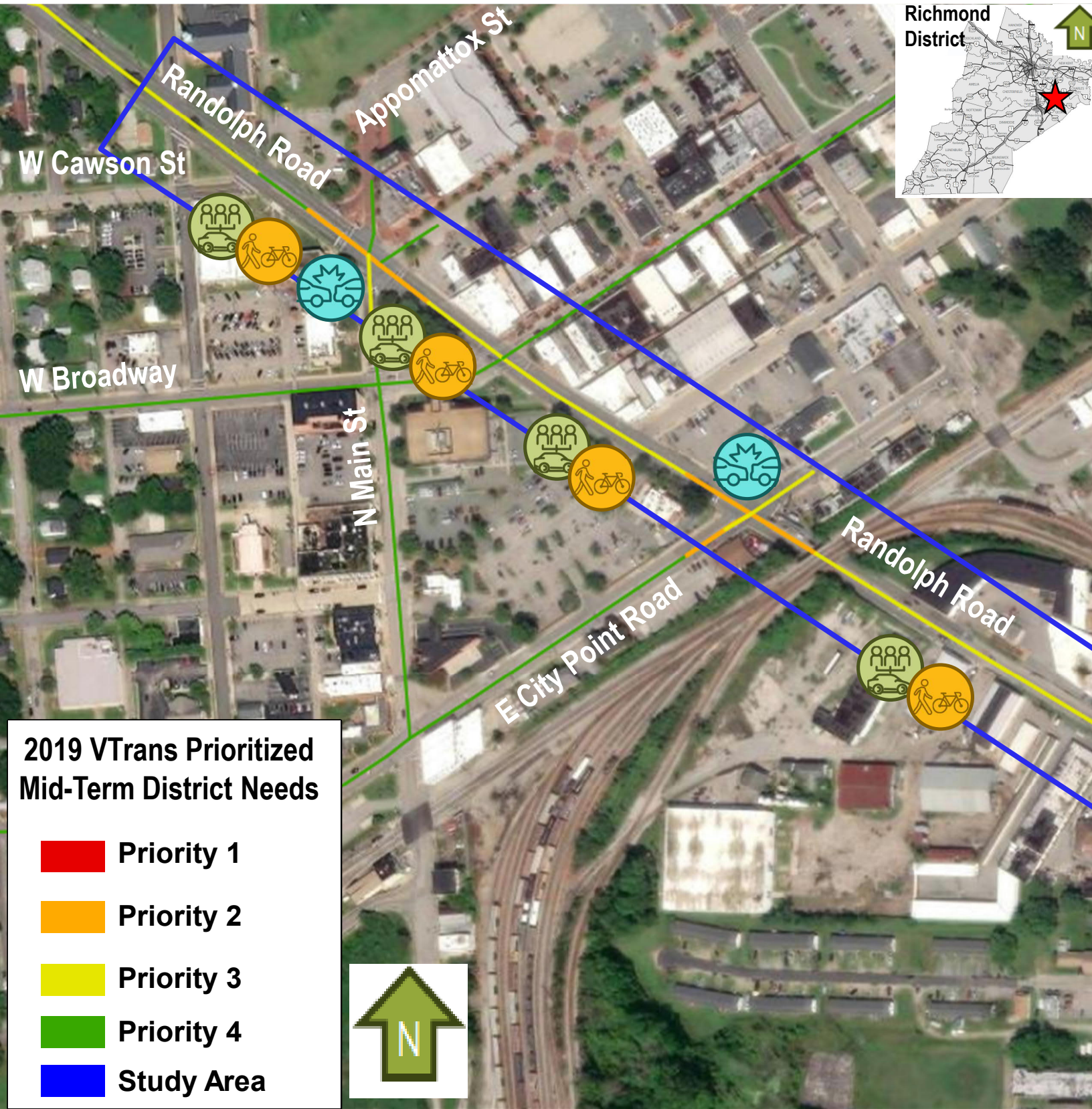


Project Overview | RI-23-10

VA-10 (Randolph Road) Corridor, 0.4 Mile

Study Corridor Includes:

- Randolph Road from W. Cawson Street to N. Terminal Street

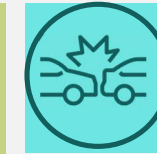


Project Purpose, Goals, & Objectives

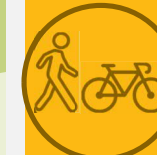
Analyze the operational and safety issues identified along the Randolph Road corridor, with a focus on providing enhanced bicycle, pedestrian, and transit access.

Identify cost-effective preferred improvement alternatives that address the deficient conditions and prioritize safety for vulnerable users.

Identified Issues in the Study Area



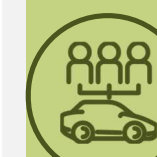
Significant angle crash trend related to intersections. 12% truck crashes, which is in line with truck volume percentage.



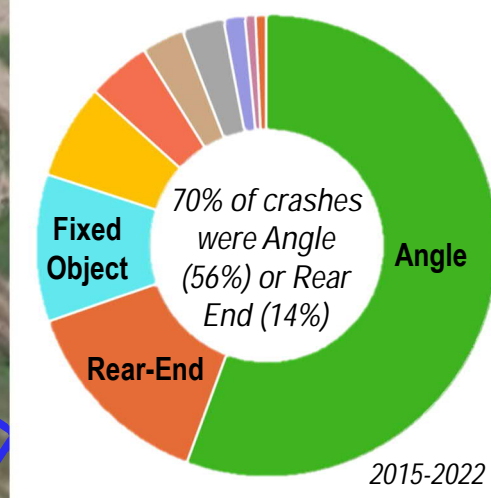
No bike lanes or shared-use paths exist along Randolph Road. Existing bike lanes are located along Appomattox Street. Existing sidewalks along the corridor are not ADA compliant and crosswalks are only present at two intersections.



No identified VTRANS Congestion Mitigation or Capacity Preservation Needs; however, VA-10 is a designated truck route.



There are no existing bus stops along the corridor, but two PAT bus stops are adjacently located nearby. There are no existing park and ride facilities in the area.

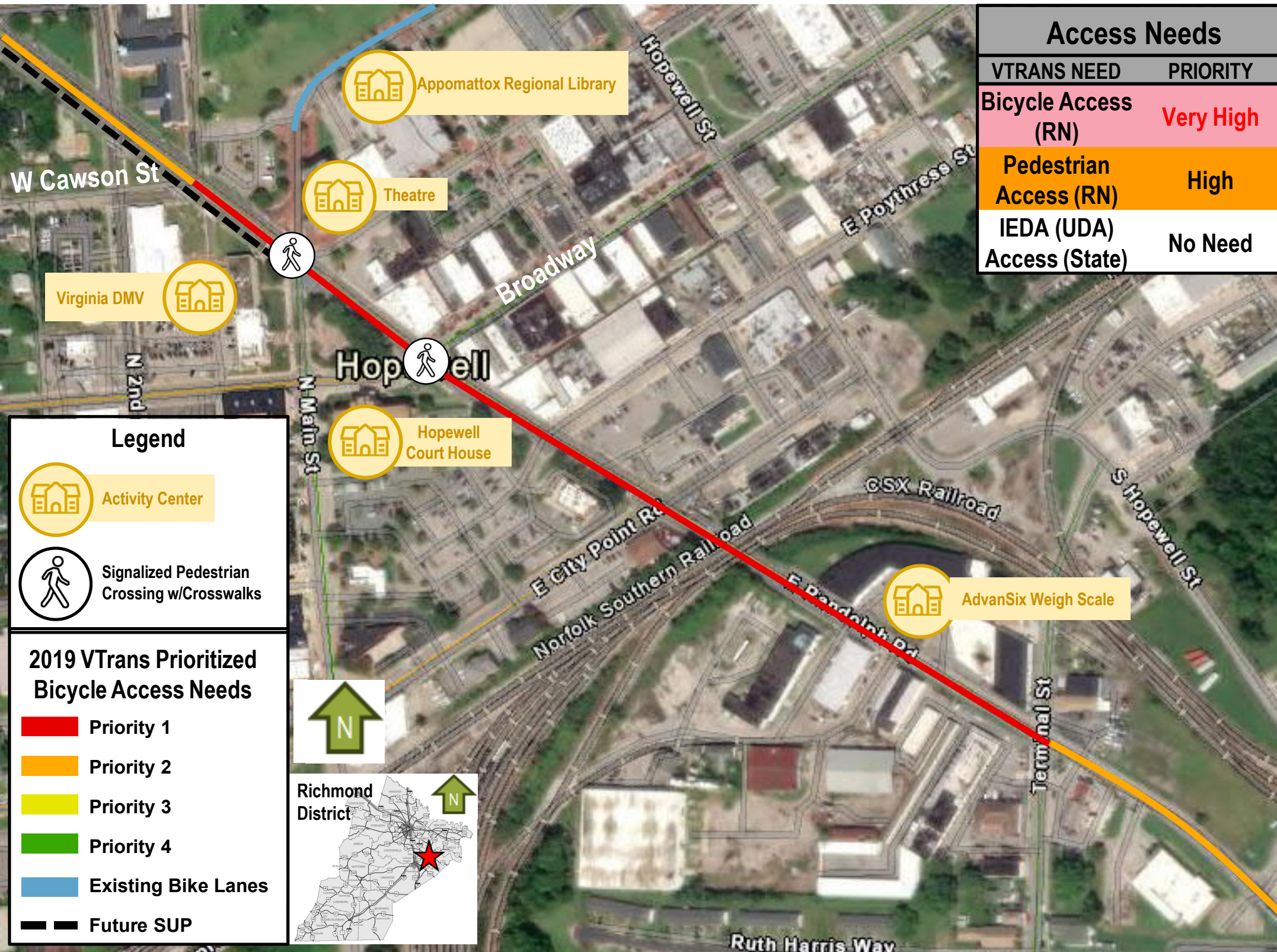


Project Fact Sheet

VDOT District	Richmond
Locality	City of Hopewell
# of Study Intersections	6
Transit Routes	PAT Hopewell Circulator <i>Petersburg Area Transit (PAT)</i>
Intermodal Connections	None
Nearby Bikeways	Appomattox River Trail
Functional Classification	Other Principal Arterial
Speed Limit	35 mph

Operations / Access Needs

Bicycle/Pedestrian Access Needs Identification Summary



Access Needs	
VTRANS NEED	PRIORITY
Bicycle Access (RN)	Very High
Pedestrian Access (RN)	High
IEDA (UDA) Access (State)	No Need

Bicycle Accessibility Summary

- No existing bike lanes or shared-use paths along VA-10,
- Existing (new) bike lanes along Appomattox Street as part of the Appomattox River Trail,
- Planned West Randolph Road Shared Use Path (Funded),
- No crashes involving a bicyclist between 2015-2022.
- The **Bicycle Access** VTrans Need is Very High based on "Applicable roadway segments within biking distance (seven miles) of VTrans Activity Centers, fixed-guideway transit stations, or BRT lines."¹

Pedestrian Accessibility Summary

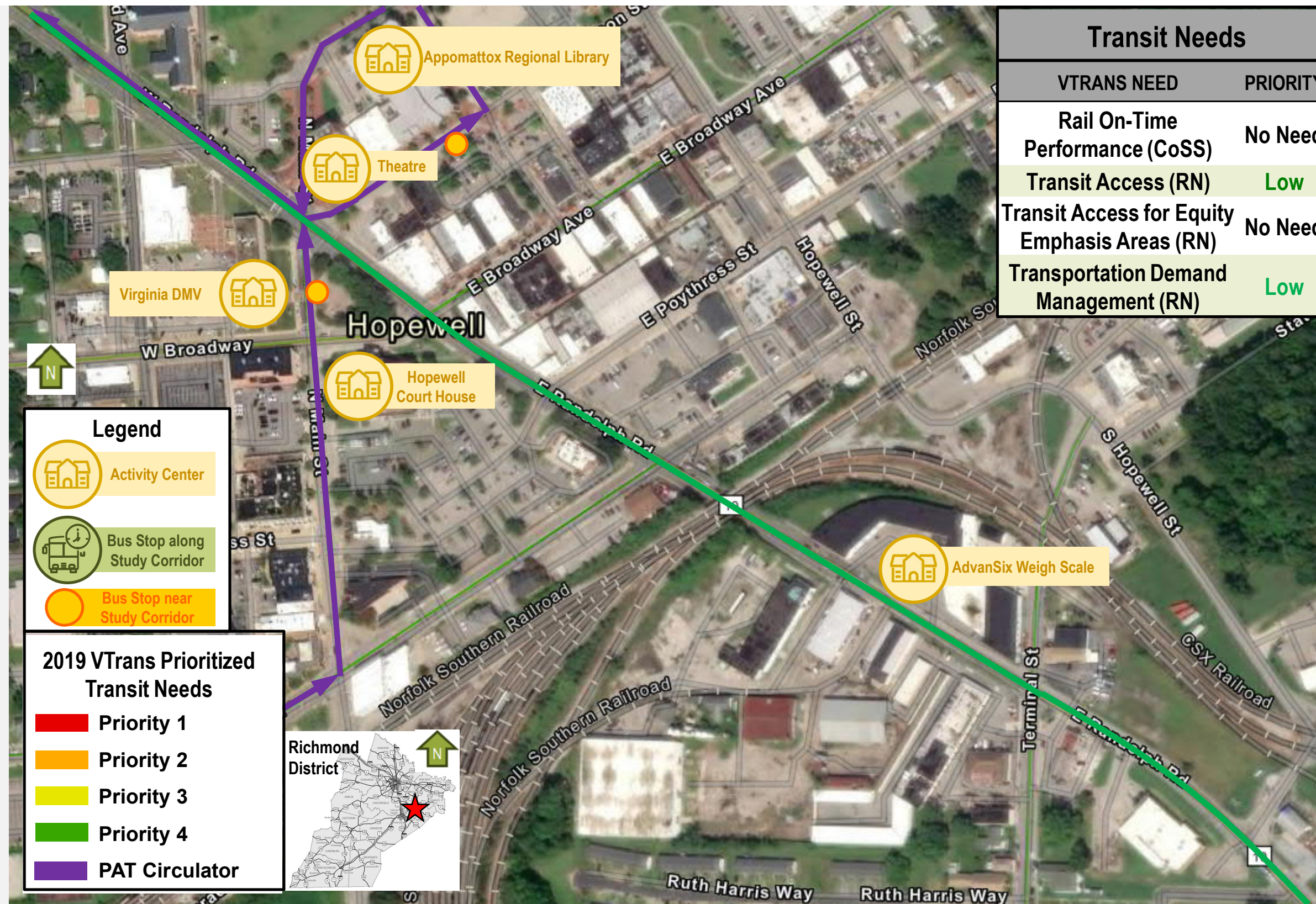
- Existing sidewalks along both sides of Randolph Road from W. Cawson Street to just east of the Railroad Overpass.
- Crosswalks only present at two intersections (signalized with pedestrian push buttons):
 - VA-10 (Randolph Rd) & N. Main Street
 - VA-10 (Randolph Rd) & Broadway
- No crashes involving pedestrians between 2015-2022.
- The **Pedestrian Access** VTrans Need is High based on "Applicable roadway segments within walking distance (one mile) of VTrans Activity Centers, fixed-guideway transit stations, or BRT lines."¹

1. Technical Guide for the Identification and Prioritization of the VTRANS Mid-Term Needs, Office of Intermodal Planning and Investment (OIP), November 2021.

ACCESS MANAGEMENT SUMMARY	ACCESS POINTS/MILE
Corridor-Wide	26.3
Randolph Road Eastbound	22.5
Randolph Road Westbound	30.0

Operations / Access Needs

Transit Access Needs Identification Summary



Transit Needs	
VTRANS NEED	PRIORITY
Rail On-Time Performance (CoSS)	No Need
Transit Access (RN)	Low
Transit Access for Equity Emphasis Areas (RN)	No Need
Transportation Demand Management (RN)	Low

Transportation Demand Management (TDM) Summary

- No existing park and ride or other intermodal facilities exist along or near the study area.
- The TDM VTrans Need is Low based on "Roadway segments where TDM strategies such as new or expanded public transportation services/facilities, new or expanded bicycle and pedestrian facilities, or coordination of commuter assistance programs can be beneficial to reduce vehicle miles traveled."¹

Transit Accessibility Summary

- Petersburg Area Transit (PAT) Hopewell Circulator runs in one direction along the north end of the Randolph Road corridor.
- No bus stops are located directly along the corridor; however, there are two stops nearby. Each stop has sidewalks, but no shelters.
 - 1 Stop along N Main Street (no benches).
 - 1 Stop along E Cawson Street with a bench.
- The **Transit Access** VTrans Need is Low based on "The number of workers that can access a given VTrans Activity Center via public transit within 45 minutes versus a private automobile. Any transit deficit greater than zero constitutes a need."¹

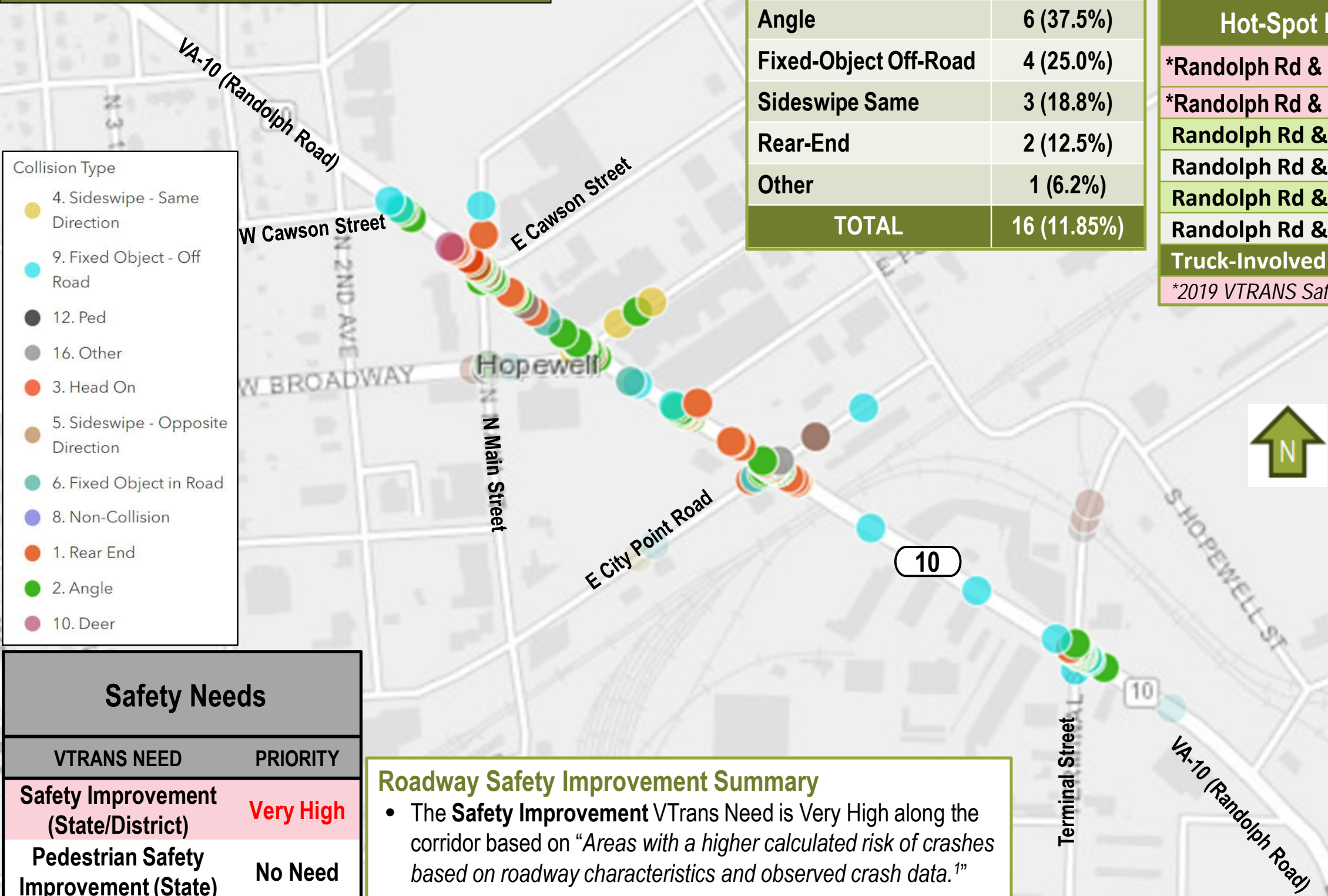
1. Technical Guide for the Identification and Prioritization of the VTRANS Mid-Term Needs, Office of Intermodal Planning and Investment (OIPI), November 2021.

Safety Needs

Safety Improvement Needs Identification Summary



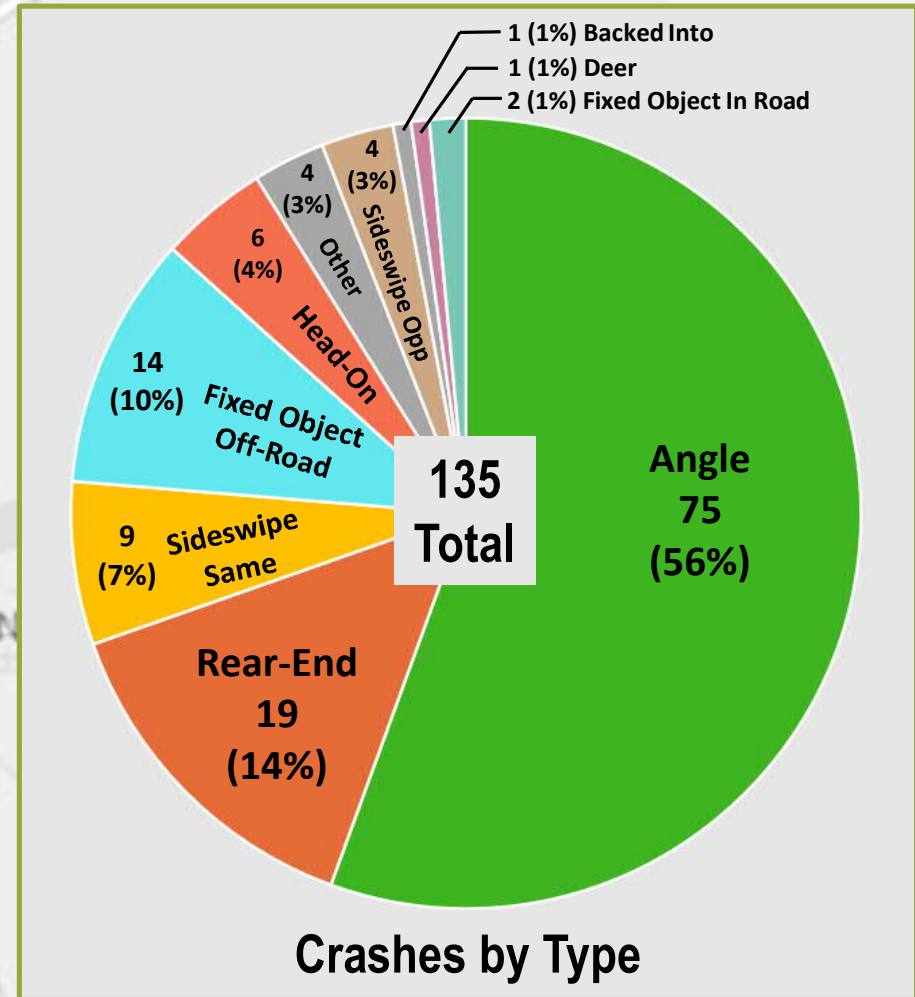
Study Area Crashes (2015-2022 Data)



TRUCK-INVOLVED COLLISIONS	
Angle	6 (37.5%)
Fixed-Object Off-Road	4 (25.0%)
Sideswipe Same	3 (18.8%)
Rear-End	2 (12.5%)
Other	1 (6.2%)
TOTAL	16 (11.85%)

VDOT 2015-2022 Crash Data		Crashes by Severity				
Hot-Spot Intersections	K	A	B	C	O	Total
*Randolph Rd & E City Point Road	0	3	8	19	8	38
*Randolph Rd & N Main St	0	1	7	17	7	32
Randolph Rd & Broadway	0	0	9	9	4	22
Randolph Rd & N Terminal St	0	0	7	6	9	22
Randolph Rd & E Poythress St	0	1	3	5	3	12
Randolph Rd & W Cawson St	0	0	4	1	0	5
Truck-Involved Collisions	0	0	4	5	7	16

*2019 VTRANS Safety Improvement Nodes



Safety Needs	
VTRANS NEED	PRIORITY
Safety Improvement (State/District)	Very High
Pedestrian Safety Improvement (State)	No Need

Roadway Safety Improvement Summary

- The **Safety Improvement** VTrans Need is Very High along the corridor based on "Areas with a higher calculated risk of crashes based on roadway characteristics and observed crash data."¹

Safety Needs

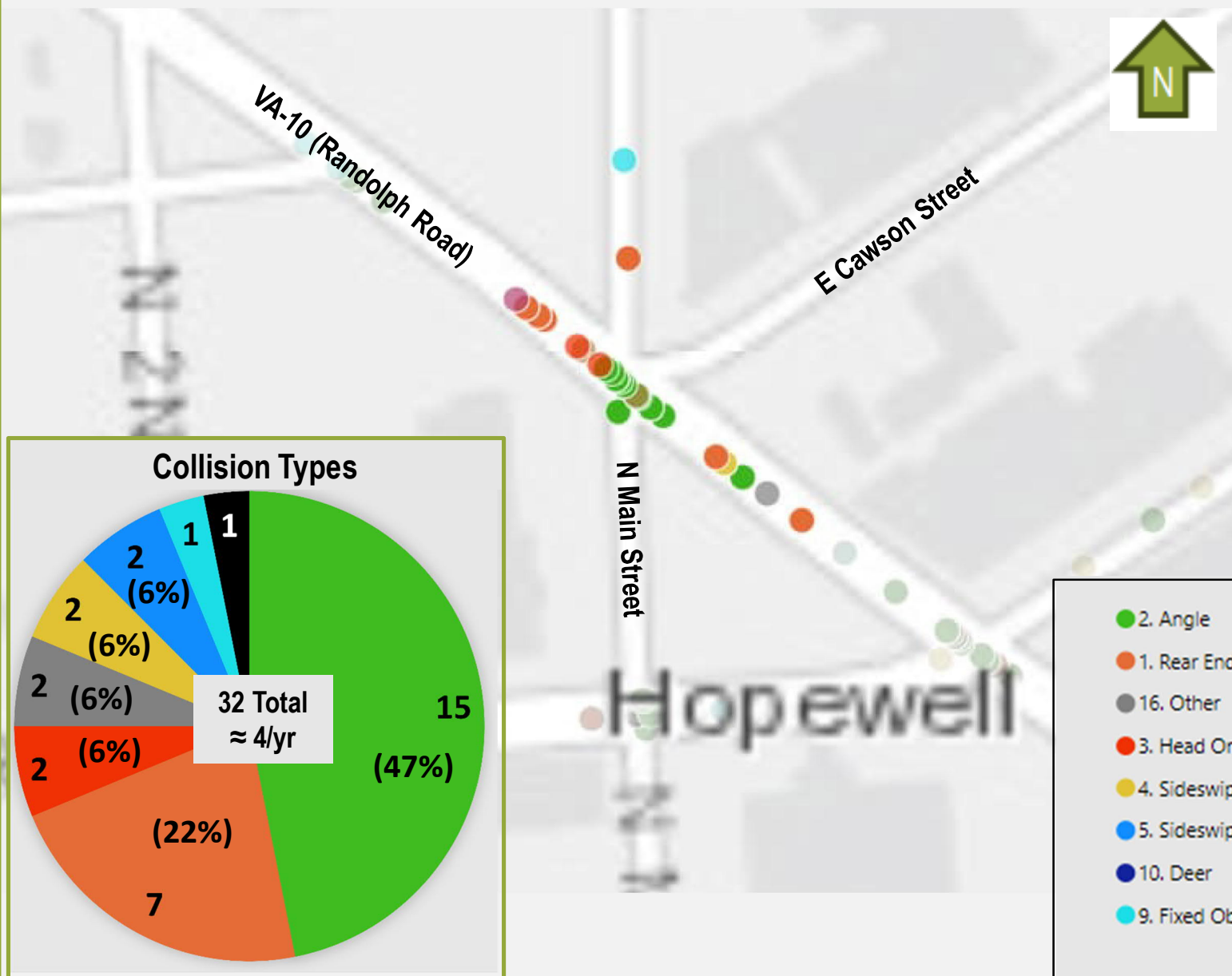
Detailed Intersection Crash Analysis (2015 – 2022 Data)



VA-10 (Randolph Road) & N Main Street

Control: Signalized

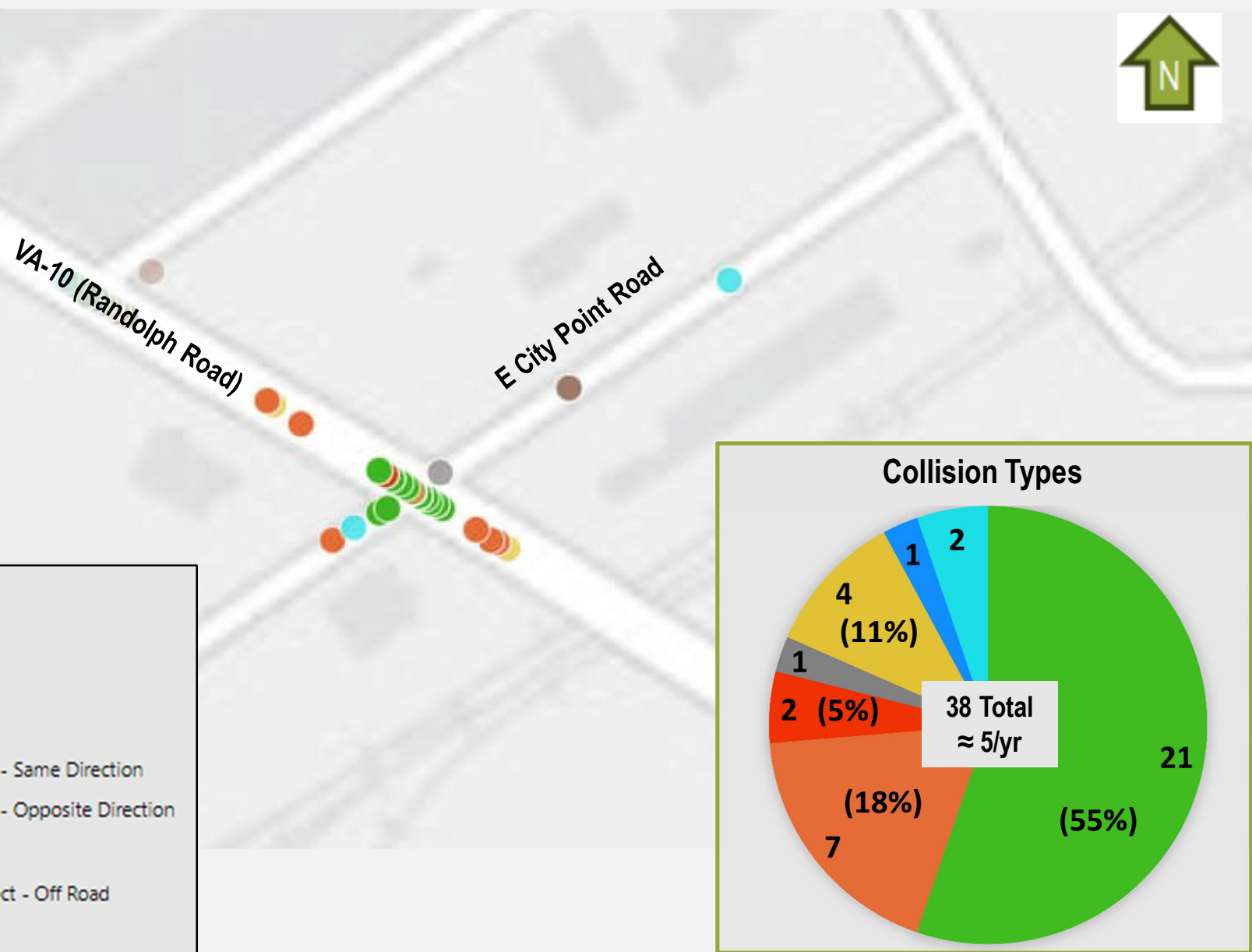
VTrans Need for Safety Improvement Node



VA-10 (Randolph Road) & E City Point Road

Control: Signalized

VTrans Need for Safety Improvement Node



- 47% of crashes were angle collisions, 22% of crashes were rear-end collisions.
- Skewed and 5-legged geometric layout could be a major factor for the angle crashes.
- 53% of crashes were non-visible injury crashes.
- Other Trends: 94% No Adverse Conditions, 16% Night-time, 6% Speeding.

- 55% of crashes were angle collisions, 18% of crashes were rear-end collisions.
- Visibility due to vertical curvature and railroad overpass may be a factor in angle collisions.
- 50% of crashes were non-visible injury crashes.
- Other Trends: 97% No Adverse Conditions, 21% Night-time, 8% Speeding.

Phase 1 Scoping-Level Improvement Concepts

VA-10 (Randolph Road) from W. Cawson Street to N. Terminal Street



Legend: VTRANS Needs Addressed



Pedestrian Access



Bicycle Access





Transit/TDM



Safety Improvement

Corridor Wide Pedestrian and Bicycle Improvements

- New and upgraded ped crossings, ADA review 
- Leading pedestrian intervals
- Pedestrian warning and regulatory signing
- Remove/Relocate Utility Poles from Middle of Sidewalks
- New VA-10 Cross-Section to Include Bike Lanes 
- Relocate VA-10 Truck Route

Transit and TDM Improvements

- Modify Hopewell Circulator route, add/relocate stops
- Improve existing bus stop amenities (shelters, benches)
- RideFinders Ride-Share Options

* Denotes an innovative intersection concept. More information on innovative intersections and real-world examples can be found at

<https://www.virginiadot.org/innovativeintersections/>

Safety and Operations Improvements

- ① Signal phasing modifications
- ② Roundabout*
- ③ Turn movement restrictions
- ④ Traffic barrier

Corridor Wide Operations and Safety Improvements

The improvements proposed along this corridor include:

- Road diet / complete streets
- Access management review
- Lighting upgrades
- Signing and marking upgrades
- Signal timing/phasing optimization

