

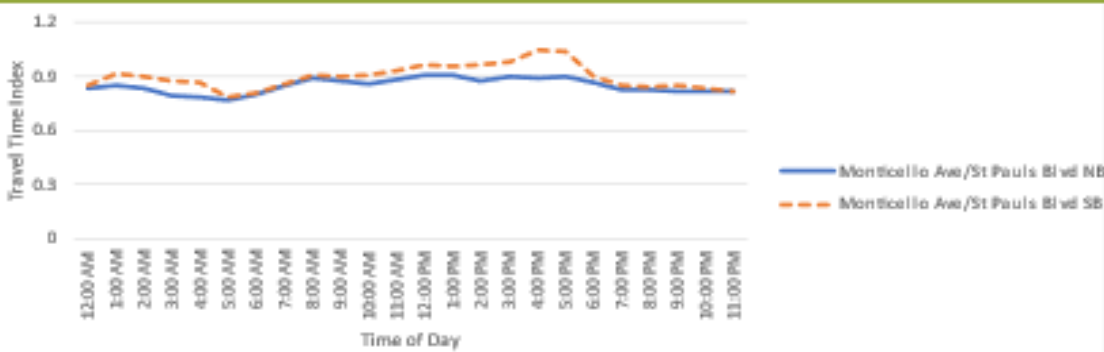
Phase 1 Executive Summary



Operational and Safety Needs

- Congestion during train events due to traffic diversion from at-grade crossings
- Generally lacking turn lanes on Monticello Ave north of 21st Street
- St Paul's Boulevard operates >10 mph below speed limit during PM peak hour
- Significant southbound congestion propagating from I-264 ramps in PM peak hour
- 392 total crashes occurred from 2018 to 2022 with very high concentration of angle crashes and high concentration of rear-end crashes
- Monticello Ave listed on VDOT Pedestrian Safety Action Plan (Rank 2 – Top 1% of corridors)
- Seven pedestrian crashes occurred from 2018 to 2022 with two pedestrian fatalities (three total fatalities)

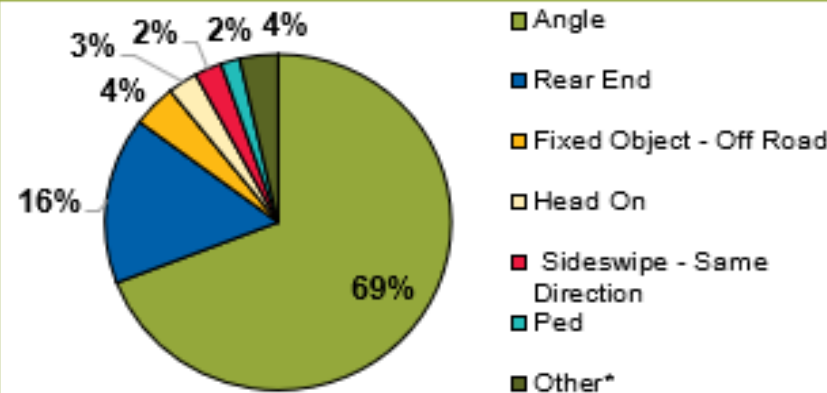
Travel Time Index



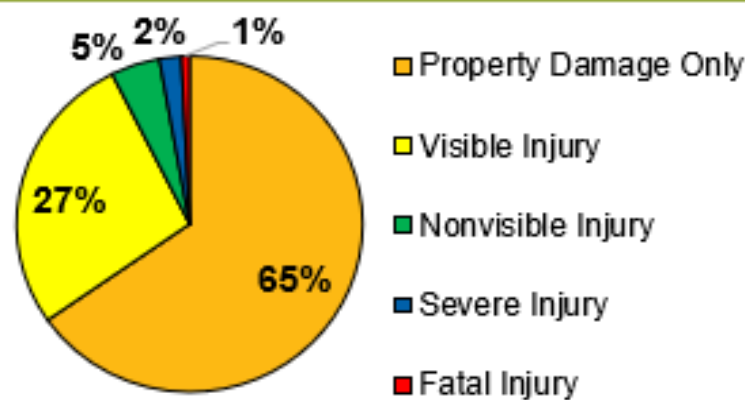
Crash Data Heat Map



Crash Type



Crash Severity



Identified High/Very High VTrans Needs

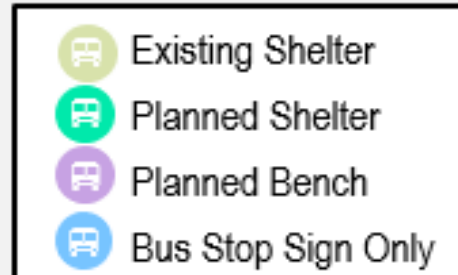
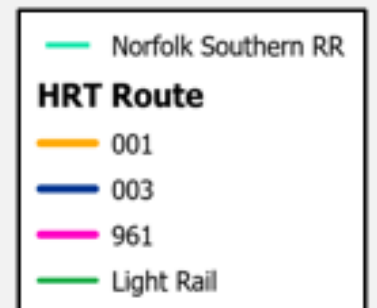
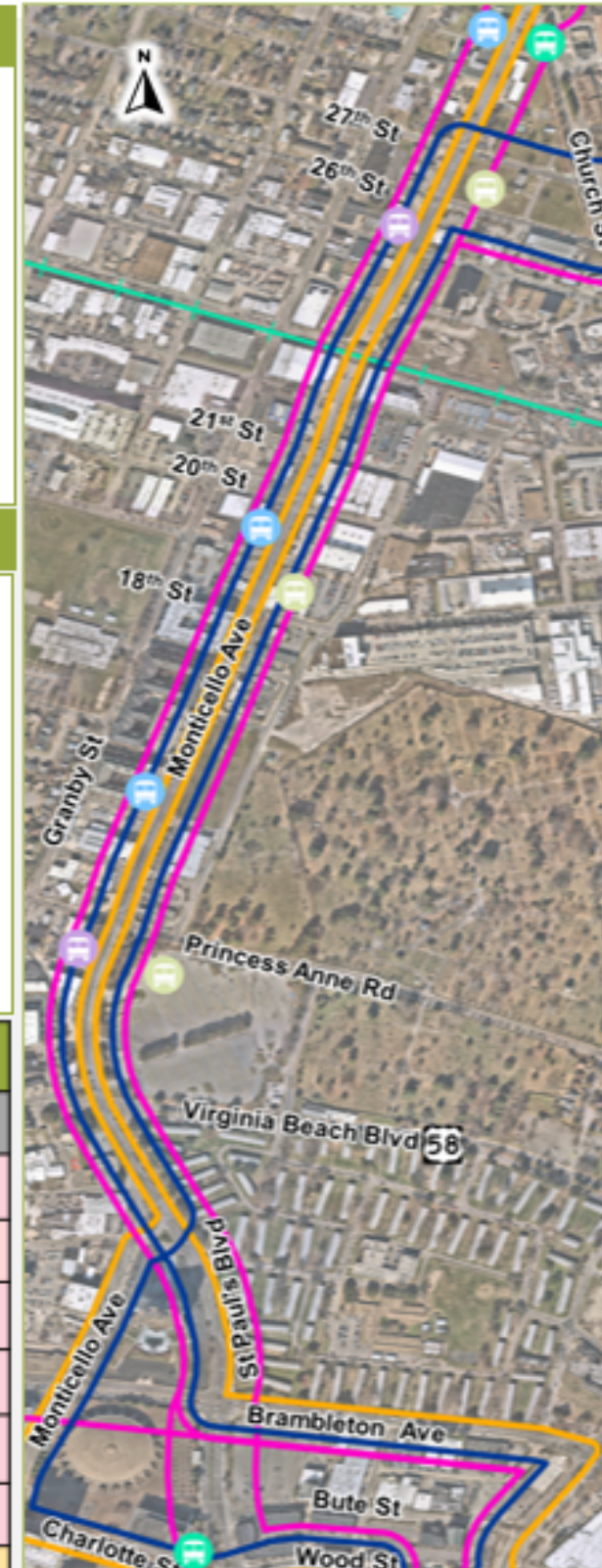
NEED	PRIORITY
Safety Improvement	Very High
Transportation Demand Management	Very High
Bicycle Access	Very High
Transit Access	Very High
Pedestrian Access	Very High
Congestion Mitigation	Very High
Pedestrian Safety Improvement	High

Bike and Pedestrian Access Needs

- Sidewalks are present on both sides of corridor but do not meet ADA standards
- Some intersections are missing curb ramps, crosswalks, and pedestrian signal heads
- High density of access driveways
- Bike routes are available on parallel and crossing corridors

Transit and TDM Needs

- Relatively high density of bus stops
- No ROW for shelters at some of the bus stops with significant activity
- There are a number of non-ADA accessible bus stops within the corridor



Phase 1 Executive Summary (Continued)



Proposed Solutions to Evaluate in Phase 2

Operations Improvements

- ① Construct northbound right-turn lane at 26th Street
- ② Widen northbound Brambleton Avenue approach to provide 3 left-turn lanes
- ③ Realign intersection of St. Paul's Boulevard and Monticello Avenue to consolidate movements at Olney Road
- ④ Install detection to enable modified signal timing plans during train events
- ⑤ Install advance warning signs for active trains along Church Street

Pedestrian and Bicycle Improvements:

- Install ADA-compliant curb ramps
- Bring existing sidewalks up to ADA compliance
- Refresh existing crosswalk markings and consistently use high-visibility crosswalks
- Install pedestrian signal heads and push buttons for all crossings at signalized intersections
- Install new sidewalk and marked crosswalks to complete gaps
- Implement access management

Safety Improvements

- ① Modify eastbound and westbound left-turn phases to protected only at Brambleton Avenue
- ② Modify northbound left-turn phase to protected only and prohibit southbound left-turn at Charlotte/Wood Street
- ③ Extend median at 25th Street to prohibit eastbound and westbound left-turn and through movements
 - Modify all 5-section signal heads to flashing yellow arrow (FYA)
 - Install stop bars on all stop-controlled approaches
 - Install backplates on all signal heads

Transit Improvements

- ① Provide additional bus stop with shelter on northbound St. Paul's Boulevard between Brambleton Avenue and Virginia Beach Boulevard to serve Young Terrace
 - Install ADA loading pads at bus stops
 - Evaluate long-term opportunities to provide bus shelters

• Denotes corridor-wide improvement