

Fairfax County Spot Improvement Screening Framework

MWCOG SAFETY SUBCOMMITTEE AUGUST 3, 2021

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Background

- •The Fairfax County Department of Transportation (FCDOT) and Board offices receive a high volume of citizen requests for new transportation projects, particularly intersection improvements and pedestrian projects
- •Traditionally few opportunities to fund new projects outside our Transportation Priorities Plan (TPP) process
 - Projects typically focus primarily on operations and congestion
- •The framework is the first of 3 steps in building a Spot Improvement Screening Program

Need: Transportation Safety Trends

•2020 Early Estimates – Motor Vehicle Fatalities Nationwide

• Number of fatalities is up an estimated 7.2% compared to 2019

•Vehicle miles traveled (VMT) decreased by about 13.2%

- <u>The projected fatality rate for 2020 would be the highest</u> <u>since 2007</u>
- •Pedestrian fatalities projected to remain unchanged compared to 2019



Projected cyclist fatalities increased from 2019 to 2020 by 5 percent

Sources: U.S. Department of Transportation, National Highway Traffic Safety Administration, Traffic Safety Facts, Early Estimate of Motor Vehicle Traffic Fatalities in 2020, May 2021

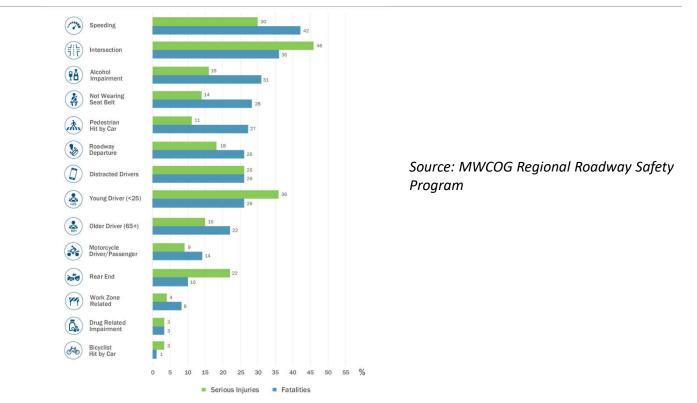
U.S. Department of Transportation, National Highway Traffic Safety Administration, Traffic Safety Facts, Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2020, June 2021

Pedestrian Crash Severity by Jurisdiction

| - | | | |
|--|------------|------------------|----------------------|
| Jurisdiction | Fatalities | Serious Injuries | Total Crashes |
| District of Columbia | 50 | 399 | 5,431 |
| Charles County, MD | 16 | 49 | 208 |
| Frederick County, MD | 7 | 36 | 284 |
| Montgomery County, MD | 56 | 318 | 2,297 |
| Prince George's County, MD | 108 | 269 | 2,156 |
| Arlington County, VA | 6 | 74 | 693 |
| Fairfax County, VA | 55 | 331 | 1,024 |
| Fauquier County, VA (urbanized area) | 1 | 7 | 24 |
| Loudoun County, VA | 14 | 57 | 235 |
| Prince William County, VA | 20 | 96 | 299 |
| Alexandria. VA | 7 | 58 | 338 |
| Fairfax City, VA | 1 | 21 | 54 |
| Falls Church, VA | 0 | 13 | 30 |
| Manassas, VA | 1 | 39 | 74 |
| Manassas Park, VA | 0 | 0 | 7 |
| Urban Core | 63 | 531 | 6,462 |
| Inner Suburbs | 220 | 952 | 5,561 |
| Outer Suburbs | 59 | 284 | 1,131 |
| National Capital Region Total | 342 | 1,767 | 13,154 |
| Sources MINICOC Regional Readings Cafety R | | | |

Source: MWCOG Regional Roadway Safety Program

Serious Injuries and Fatalities by Contributing Circumstance – Northern Virginia



Spot Improvement Process Steps

- 1. Framework (current): Defines a safety and equity-based methodology for developing a priority list of multimodal "spot improvement" locations for future projects
- 2. Screening (future): Will be used to screen and prioritize County intersections and midblock locations, and create a database of priority locations
- 3. **Projects (future)**: Allow County to focus resources on highest priorities when new funding is available and prioritize the hundreds of currently unfunded requests. Inform the project selection process for future Transportation Priorities Plans (TPPs)

Framework Input

- •Fairfax County Department of Transportation (FCDOT)
- •Fairfax County Police Department (FCPD)
- •Virginia Department of Transportation (VDOT)
- Fairfax County Chief Equity Officer
- •Other jurisdictions:
 - Loudoun County
 - District of Columbia
 - La Quinta, California





Lessons Learned from Stakeholders

- Identify high-risk roadway characteristics, rather than focus on high crash site analysis
- •Focus on all modes
- Incorporating equity metrics, beyond simple geographic distribution of projects, is an evolving practice

Screening Process

Data/Criteria

<u>Safety</u>

- Bike/Ped Crashes
- Vehicle Crashes
- Severity (Injury/Fatal)

<u>Equity</u>

- Vulnerability Index
- Equity Emphasis Areas

Bicycle/Pedestrian

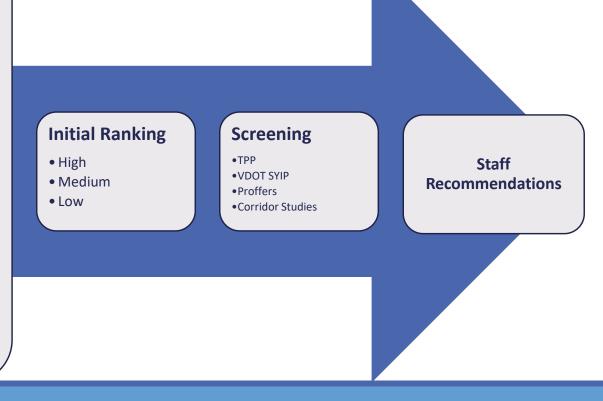
• Intersections Without Crosswalk or Sidewalk/Ramp

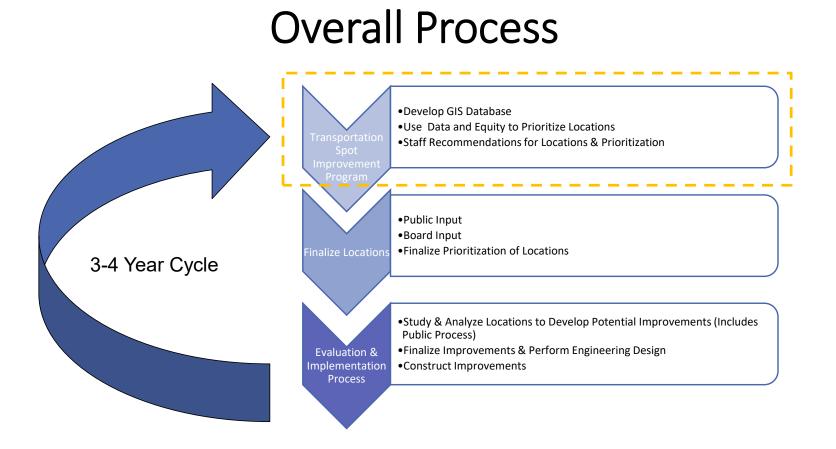
<u>Transit</u>

- Missing/Substandard Facilities
- Proximity to Transit Service

Other Factors

- Proximity to Activity Center
- Proximity to Nearby Projects

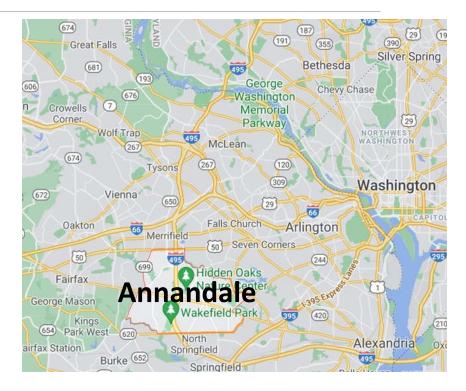




Next Steps

1. Framework (current step): Finalize Framework

- a. Pilot project to screen
 sample subarea:
 Annandale
 - Chosen because location is an Equity Emphasis Area, and has high fatal/severe injury crash rate



Next Steps

- 2. Screening (future step): Develop database with screening results Countywide priority locations
 - a. Could be done in phases
- **3. Projects (future step)**: Use results of Countywide screen to prioritize citizen requests, and to inform future TPP project selection process

Comments/Questions?

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