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# Citizen Action Project

Creating safer pedestrian  
travel through the  
use of crosswalks

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//2022  
[www.slidesgo.es](http://www.slidesgo.es)  
Muse & Hicks DE/AP Gov

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# ABOUT CAP

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Monticello High School requires all seniors enrolled in a government class to complete a Citizen Action Project, which hands-on teaches us about engaging in our community and making change.

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# PREFACE

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ACTION



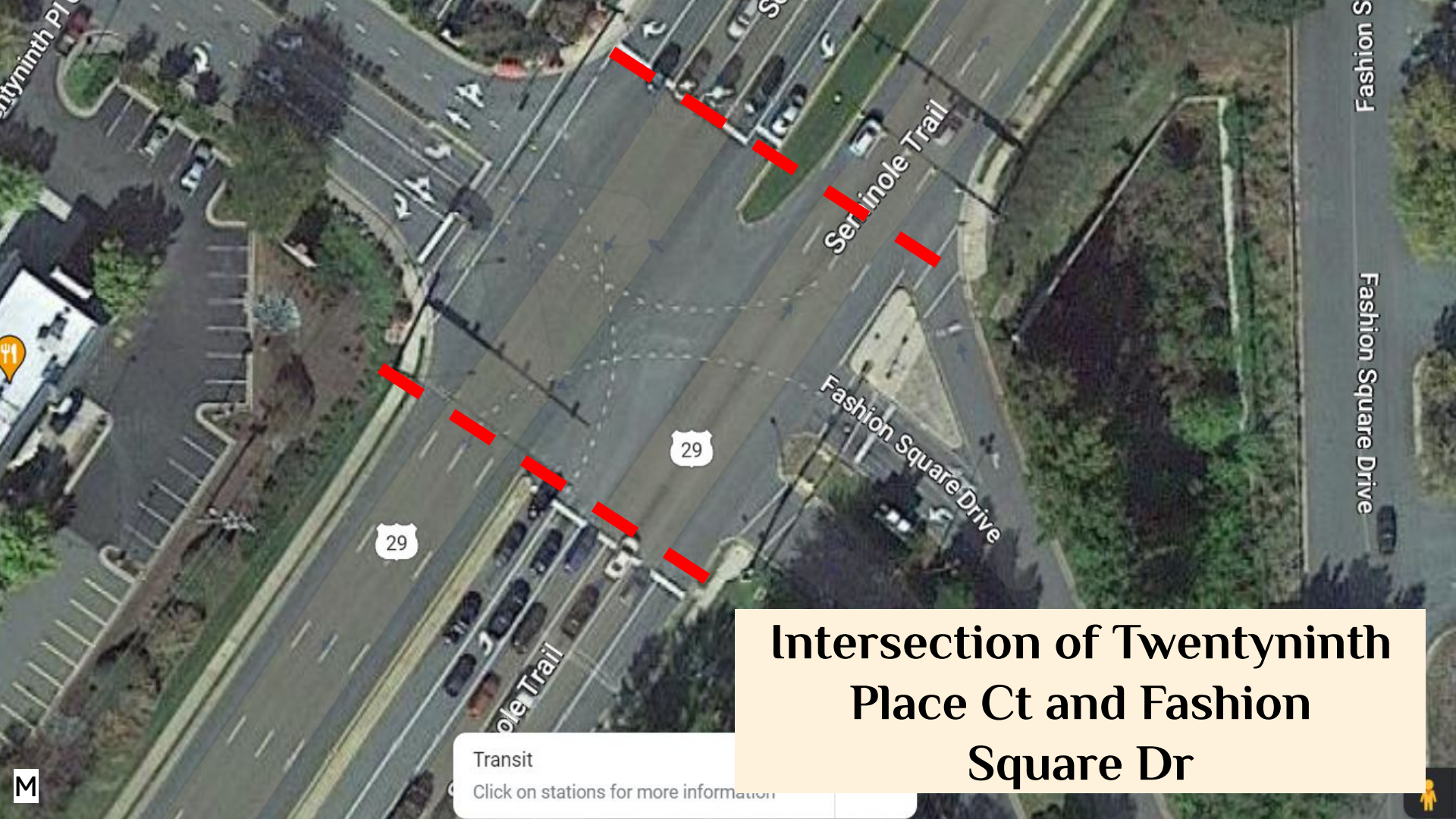
PLAN

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# ABOUT THE PROJECT

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Our project is centered around trying to make Albemarle County more pedestrian friendly by adding signalized crosswalks at the intersection of Twenty-Ninth Place Ct., Seminole Trail (Route 29), and Fashion Square Dr.



# Intersection of Twentyninth Place Ct and Fashion Square Dr

Transit  
Click on stations for more information



Twentyninth Pl

Fashion Square Drive

Fashion Square Drive

Seminole Trail

Fashion Square Drive

29

29

Seminole Trail

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**How would implementing  
crosswalks at the intersection of  
Fashion Square Dr, Seminole Trail,  
and Twentyninth Place Ct increase  
the safety of pedestrians?**

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# Research-

Rationalizing our topic

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# Michael Barnes: Culpeper/Albemarle area Assistant District Planner for VDOT

How does the county go about getting a crosswalk? How does this effect up/down road? What stop time is given to the surrounding main/side roads?

Made aware of:

- SmartScale Process (which led us to our assessment)
- The county occasionally funding projects (see Hersh-Ballering)
- Current projects
- Place 29 committees
- Committees- SmartScale- VDOT



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# Jessica Hersh-Ballering

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## 0 THE ROADS

1 The roads in Albemarle are owned by the state of Virginia. This means it is difficult to get crosswalks on 29, as the state doesn't see the point

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## 0 GETTING THE GRANT

3 Albemarle county was unsuccessful in the first round of applying for the grant (which means no crosswalks) but it sets a precedent for change and they will continue to apply.

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## 0 RECONNECTING COMMUNITIES GRANT

2 The Reconnecting Communities grant is a federal government plan to help communities become more pedestrian friendly

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## 0 COMPREHENSIVE PLAN

4 The Comprehensive plan is rewritten every 5 years, and it is a plan for the future of Albemarle (20-25 horizon). The public can get involved by telling the board what they want for the future of the county.

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# Transportation Funding

Transportation Leveraging Program: how Albemarle gets \$ from the state.

- ❖ Covers the most pressing transportation needs to increase safety.
- ❖ 2023-2027 will likely see \$1.9 million implemented into this program.
- ❖ A capital fund supplies The Facilities Planning and Construction Division (which transportation projects falls under).

Revenue Sharing Project: Program sponsored by VDOT that allows local government to apply for state funding for transportation projects that a local contribution must match.

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# Research

- Streets with >3,000 AADT volumes, speeds >20mph, and >2 lanes of traffic should have common crosswalks.
- Lighting, signing, and pavement markings help with visibility for both pedestrian and vehicle.
  - Lighting and thermoplastic tape creates contrast against road.
- Land usage, present and future demand, pedestrian compliance, speed, safety, and crash history determine the importance.
- Raised crosswalk:
  - A crosswalk costs between \$7,110 and \$30,880 each.
  - The average cost of a crosswalk is \$8,170.

AADT = Average  
Annual Daily  
Traffic

Sources:

National  
Association of City  
Transportation

Department of  
Transportation:  
Highways

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# Land Usage

- FDOT estimates construction could take up to 2 years.
  - Including design, painting, and installation of overhead walk/wait signs and warning signs.
  - Average: 6 months
- It is unclear in FL if the paint would dry faster or slower due to heat and humid temperatures.
  - However, on the East Coast, it'll take no more than 3 days for asphalt to dry, and no longer than a year for it to cure.
- Thermoplastic paint would dry much sooner and could be done in shorter strips than asphalt is
  - Resulting in less road being used for shorter amounts construction at a time

Source:

Best Foot  
Forward-FDOT

\*Routed in Florida

East Coast Paving  
Services

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# Land Usage, Present & Future Demand, and Pedestrian Compliance

**The Abbington  
Crossing Apartments**

**Woodbrook  
Neighborhood**

**The Rio Hill  
Apartments**

**The Old Brook Rd  
Neighborhoods**

**The Mallside Forest  
Apartments**

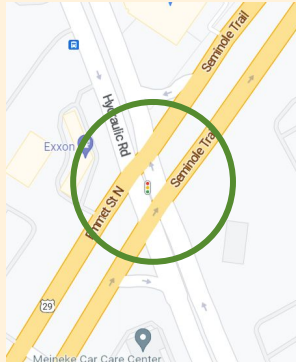
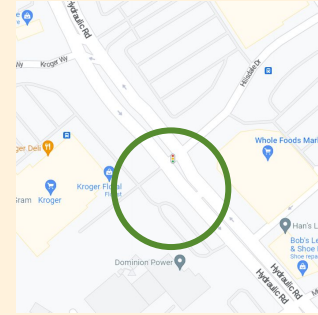
**The Carrsbrook Rd  
Neighborhoods**

- Since 2014: Crosswalks at Angus Rd (since removed) and Hollymead Dr.
- Locations of Interest: Woodbrook Dr, Hilton Heights Rd, Hydraulic Intersection.
  - Many denied by SmartScale or VDOT.
- Zan Rd Bridge

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# Present & Future Demand- Traffic Projects in Area

In the current plans for traffic, VDOT will be putting in a signalized pedestrian crossing at the intersection of Hydraulic and Route 29 and will be reconfiguring the traffic lights.



VDOT will also be putting in a traffic circle at the intersection of Hillsdale Dr. and Hydraulic.

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# Speed & Safety

**For every 10 feet, there must be 3 seconds of walking time.**

Crossing a total of 9, 10 ft lanes would take almost half a minute.

## Waiting at the Median

The time could be cut in half because of the median.

This would be unsafe because people would be close to cars on both sides, and it currently isn't paved for flat walking area.

## Underpass

The underpass slightly Northward on 29 sped up traffic by about a minute, so adding a crosswalk would result in cancelling out some of that time.

## Safety

Any traffic change takes time to get used to, and people run red lights terribly in this town, so adding this, that would slow traffic by half a minute would possibly create vehicle dangers.

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# Safety & Crash History

- Since January 2013 to current 2023, there were at least 13 pedestrians struck on Route 29.
  - 8 of which were within 1 mile of our location.
  - Between Hydraulic and the 250 Bypass, another 5.
- Slowed down with COVID
- November 2019 saw an increase in deaths compared to the prior year.
  - There were 3 more fatalities in 2019's first 10 months than 2018 (100 to 97).
  - There was a 92% increase (2019 compared to 2018) in those hit over the age of 51.
- By June 2022, ACPD had reported 8 fatal crashes.
- Pedestrian crashes increase during October, November, and December: linked to daylight saving time.



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# Alternative Plan



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# Pedestrians Warning Signs

Adding “Watch for Pedestrian” signs in the area will give drivers the extra alert needed to become more aware of their surroundings.

- Significant cost difference.
- Options:
  - Diamond
  - Rectangle (vertical or horizontal)
- Size, materials, and shape reflect cost.
- Recommended “YIELD Here to Pedestrians“ or ”STOP Here for Pedestrians“ signs are used 20-50 feet in advance. (DOTH)
- Diamond (sizes vary)
  - \$38.95- \$177.45
- Rectangle (sizes vary)
  - \$20.95- \$52.75

# Locations



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# Questions?

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**Thank you for your time!**

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