



# CREATING PEDESTRIAN SAFETY SYNERGY: INTEGRATING & IMPLEMENTING THE E OF ENGINEERING IN PRINCE GEORGE'S COUNTY



**APRIL 2021** 



### WHY VISION ZERO?

- There are 6 E's supports a synergistic approach to tackle the problem that is getting worse, not better
- The County has three distinct typographies: Urban, Suburban and Rural
- The pedestrian safety challenges compound when meshing a suburban section (large arterials) with emerging Transit Oriented
   Developments/Activity Centers
- Prince George's County
- Most populous
- Roadway network 2,000 miles
- Highest number of people killed who were walking in MD



# EXPANDED TOOL BOX TO SUPPORT VISION ZERO & REDESIGNING ARTERIAL ROADWAYS

- Existing/Traditional Approach
  - Rumble Strips/Psycho Perceptive Markings
  - Designated School Zones
  - Lane Narrowing (Bike/Parking Lanes)
  - Additional Enforcement
  - Speed Trailer
  - Oversized/Improved Signage
  - Speed Humps (NTMP)

- Proposed Additional Measures
  - Curb extensions
  - Medians
  - Protected Intersections
  - Urban/Small Traffic Circles
  - Road Diet
  - RRFB
  - Yard Signs



# **PROCESS**



\*Engineering judgement will always be imperative in the final decision.

# RRFB INSTALLATION FLOW CHART



#### CONSIDERATIONS

- Roadway classification
- Controlled vs uncontrolled
- Prevailing speed
- Existing traffic controls
- Pedestrian volumes
- Proximity of nearest signal
- Presence of existing crossing

- Mid-block vs at intersection
- Pedestrian crashes
- Adjacent land uses
- Visibility
- # of gaps for crossing
- Crossing distance
- Median presence

# TEST CASE: LOTTSFORD ROAD AT APOLLO DRIVE

Arterial 🗹

Uncontrolled V

Meets minimum ped volume (assumption) 

✓

Nearest signalized intersection > 500' 

✓

At intersection

Traffic signal warranted?

If yes, consider traffic signal

If no, is HAWK signal warranted?

If yes, consider HAWK signal



If no, perform PRSA (Pedestrian Road Safety Audit) of location

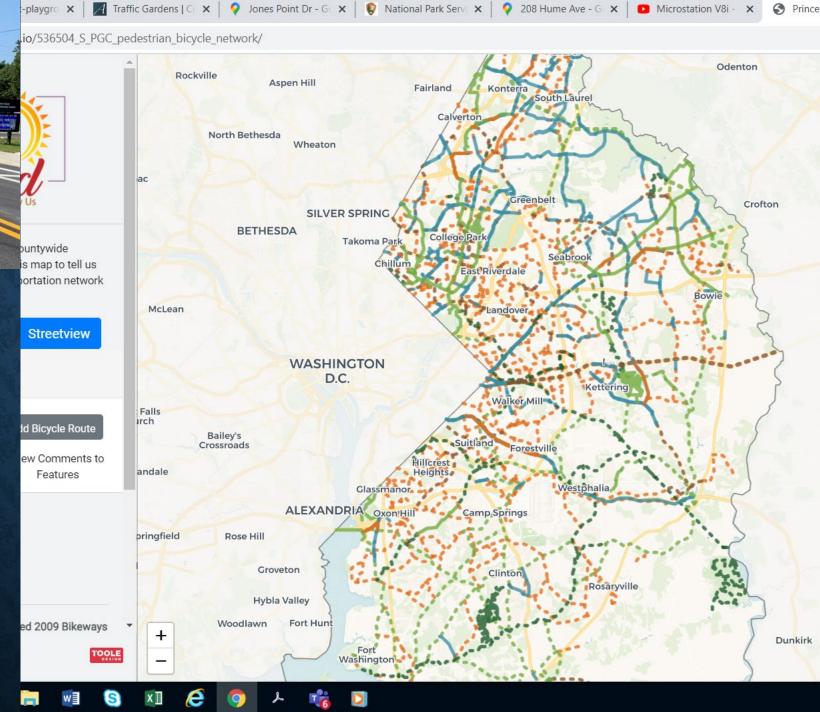
# REPURPOSING LANE CONFIGURATION TO REDUCE SPEED AND FACILITATE BIKE MOVEMENTS

- Bike Lanes
- Green Paint at Crossings
- Shoulder Stripes
- Reduction of the Number of Lanes
- Urban Traffic Circles

# 5-YEAR BIKE AND PEDESTRIAN NETWORK PLAN

- We received ~1200 comments

  (as of February 22, 2021)
- The recommended networks will be vetted through the <u>Project</u> <u>Prioritization Matrix</u>
- Factors Included under the Matrix
- Completed by June 2021





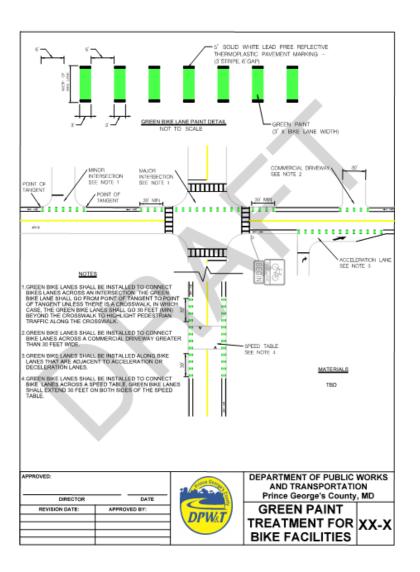
# VISIONZERO prince george's



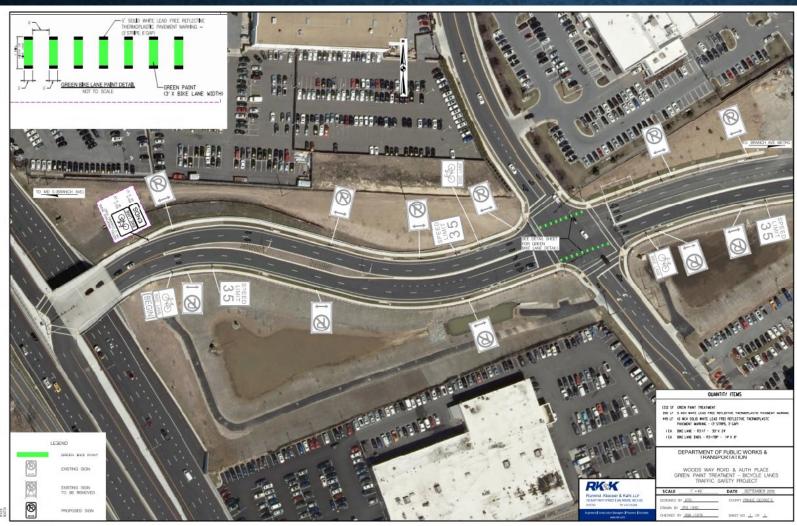
#### GOAL:

To bring awareness and highlight higher areas of conflict for bicyclists and vehicles along existing bicycle facilities and in the planning of future bicycle facilities, through the use of green paint.





# **AUTH PLACE AT WOODS WAY**



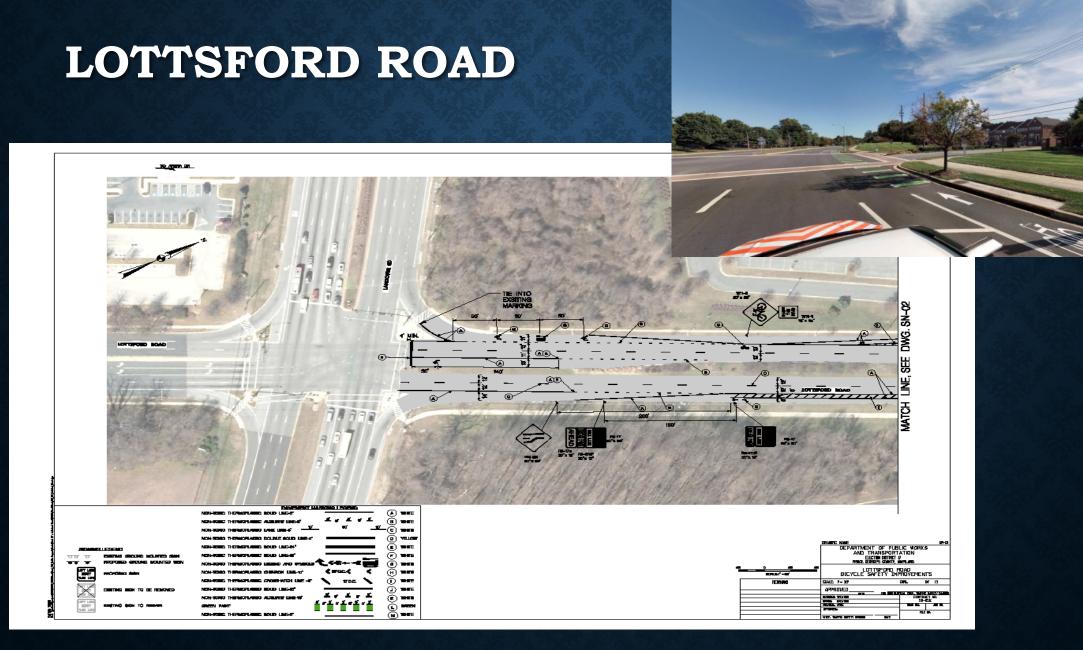


# ARDWICK ARDMORE ROAD AT ST. JOSEPHS DRIVE

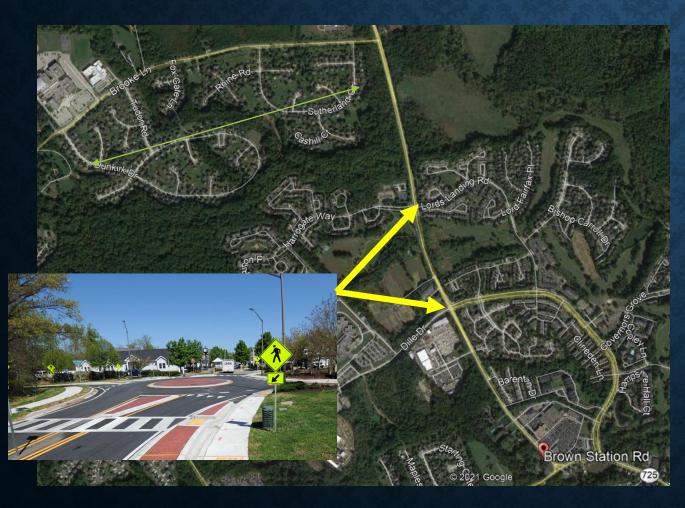


# FORBES BOULEVARD AT FOLLY BRANCH TRAIL



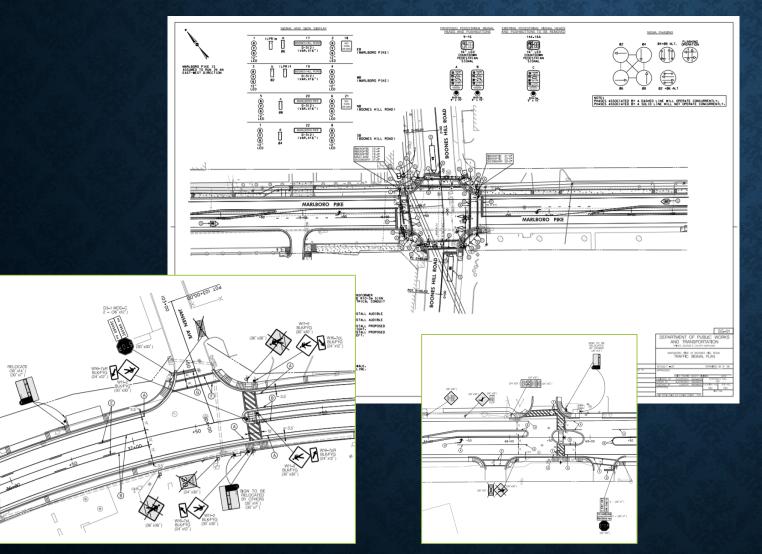


# BROWN STATION ROAD, BROOK LANE AND JOHN RODGERS BOULEVARD PHASE 1



- Provide approximately three (3)
  miles of new centerline bicycle
  lanes to connect the residential
  community with Henry A Wise Jr. HS,
  M-NCPPC Kings Grant Park, Kings
  Grant Community Park and
  Marlboro Village Center.
- New urban roundabout intersection improvements to reduce number and severity of crashes and provide safer crossing conditions for pedestrians.
- Lower prevailing vehicular travel speeds.

### MARLBORO PIKE SAFETY IMPROVEMENTS



- New Traffic Signals.
- · New medians.
- More visible crosswalks with medians.
- Wider sidewalks.
- Shoulder area for greater separation between vehicles and pedestrians.

# TRAFFIC SIGNAL MODERNIZATION

Ager Road at Hamilton Street traffic signal





- Traffic Signal Structural
   Assessment report to replace aging signals.
- Three (3) signals were in "Extreme" conditions and are in the process of re-build.
- Working on additional funding

# TUCKER ROAD & PALMER ROAD

https://vimeo.com/530260100











Q & A

# THANK YOU FOR ATTENDING

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TE&SD/OEPM