#### **TRANSPORTATION**

### Preliminary Traffic Calming Design & Public Comment







# How do we approach the traffic calming design?

- Consistent treatment placement along entire street
  - 400′ 700′ spacing of treatments
  - Close spacing is used for streets with a higher speed compliance issue
  - Target pedestrian heavy amenities to increase safety, such as St. David's School, Rothgeb park, and the Crabtree Creek greenway trail
- Targeted placement to fix a speed related crash issue
  - If a pattern of speed related crashes is identified, targeted treatment placement can eliminate that crash pattern
  - If no pattern is identified locationally, but multiple speed related crashes have occurred, consistent treatment spacing can help eliminate crashes along an entire street

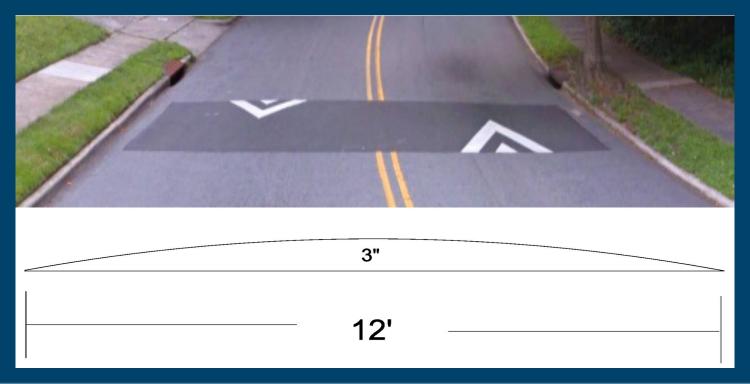


### **Treatment Limitations**

- Your street's width will determine what types of treatments can be placed
  - White Oak Rd is approximately 36' wide
  - Based on this street width and road network, vertical traffic calming elements are appropriate and are being proposed as part of this project



# Speed Humps (vertical)





# Speed Humps (vertical)

#### **Pros**

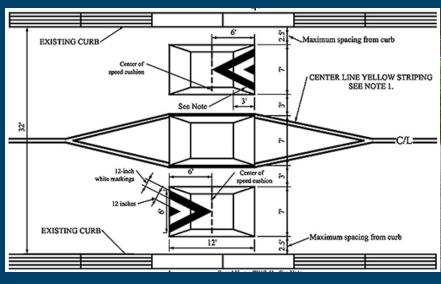
- Can be the most effective
- Fast installation time/Less impact during construction
- Versatile placement options based on compact footprint

#### <u>Cons</u>

- Does not contrast as much with existing roadway
- Impact to driving comfort
- Creates slight delay in emergency service's response times



# Speed Cushions (vertical)





\*Speed Cushion dimensions vary based on roadway dimensions



# Speed Cushions (vertical)

#### Pros

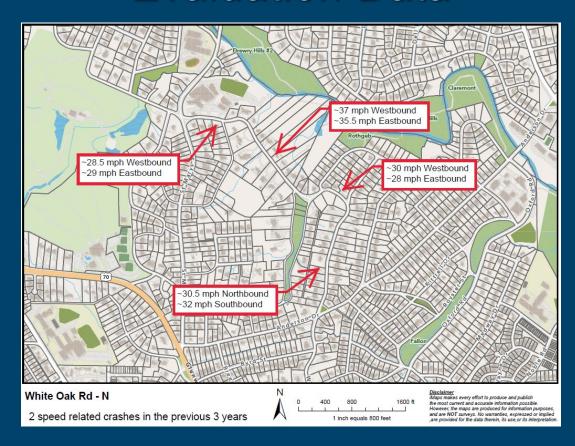
- Can be as effective as speed humps
- Relatively low impact installation timeline, but slightly slower than a standard hump as more labor is required
- Versatile placement options based on compact footprint
- Slightly faster emergency service's response times due to tire slits for larger vehicles

#### <u>Cons</u>

- Does not contrast as much with existing roadway
- Reduced driving comfort
- There is still some level of delay to emergency service's response times when compared with no treatment



### **Evaluation Data**





### Design Process

- Based on the speed progression White Oak Rd, we are proposing treatment spacing of approximately 500' intervals
- Speed related crashes have been identified along the entirety of this section of White Oak Rd but concentrated in the areas of the road with large curves. Focusing strategic treatment placement at the entrance/exit of curves will help eliminate future speed related crashes from occurring while also addressing speed compliance concerns



### **Project Goal**

- The project will be deemed effective if 85% of drivers are going at or below the 25 mph speed limit and top driver speed is capped at around 5-7 mph over the speed limit
  - Based on your location, Alleghany Dr and Granville Drare the closest completed traffic calming project to you with this style of completed project. We encourage you to go drive these streets yourself to experience the final project.
- Once the project has been completed for approximately 6 months, an after-study will be performed to measure project effectiveness



### **Public Comment**

- What are your thoughts on the proposed design?
  - Should we place more or less treatments along the street?
- Have we adequately addressed problem areas you see?
  - Should we place another traffic calming treatment in a targeted location?
- What are your thoughts on the mix of treatments being proposed?
- What other questions, comments, suggestions do you have?

Please direct all comments and questions to staff using the PublicInput portal for White Oak Rd -N. Staff will respond and we can have a neighborhood wide conversation.

Raleigh