

TRANSPORTATION

Preliminary Traffic Calming Design & Public Comment





How do we approach the traffic calming design?

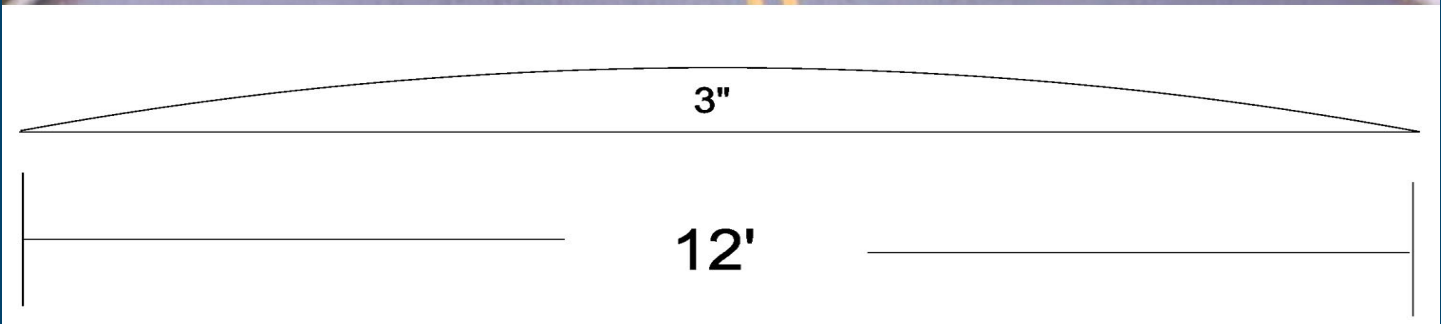
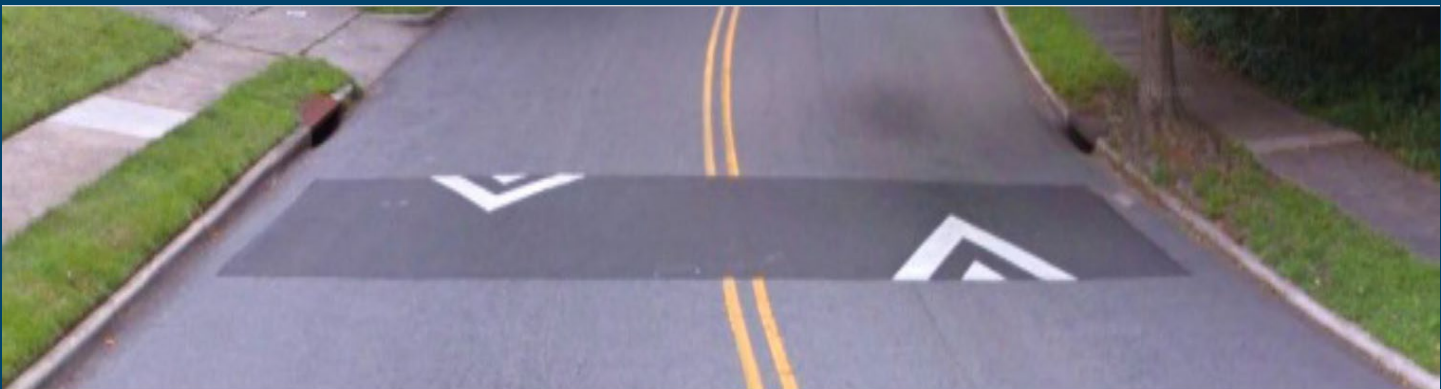
- Consistent treatment placement along entire street
 - 400' – 700' spacing of treatments
 - Close spacing is used for streets with a higher speed compliance issue
 - Target pedestrian heavy amenities to increase safety, such as neighborhood park and the adjacent Neuse River greenway trail
- Targeted 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
 - Mackinac Island Ln is approximately 36' wide
 - Based on this street width, horizontal and vertical traffic calming elements are appropriate and are being proposed as part of this project

Speed Humps (vertical)





Speed Humps (vertical)

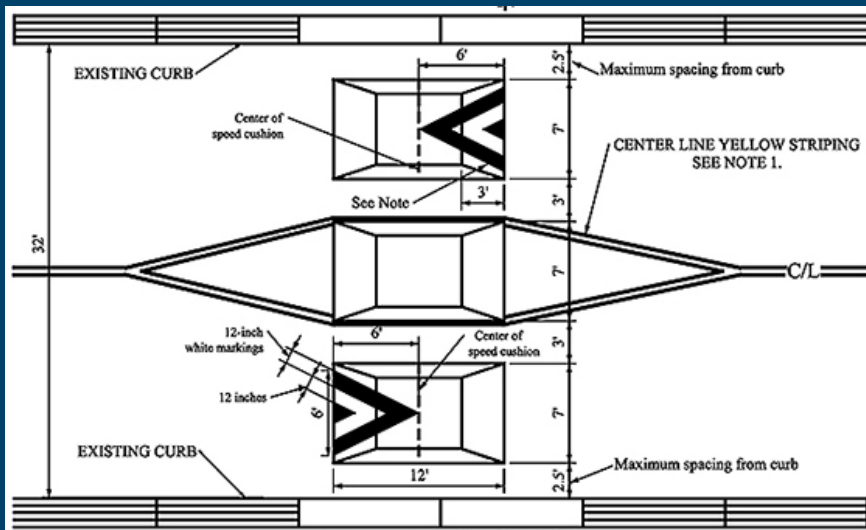
Pros

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

Cons

- 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)

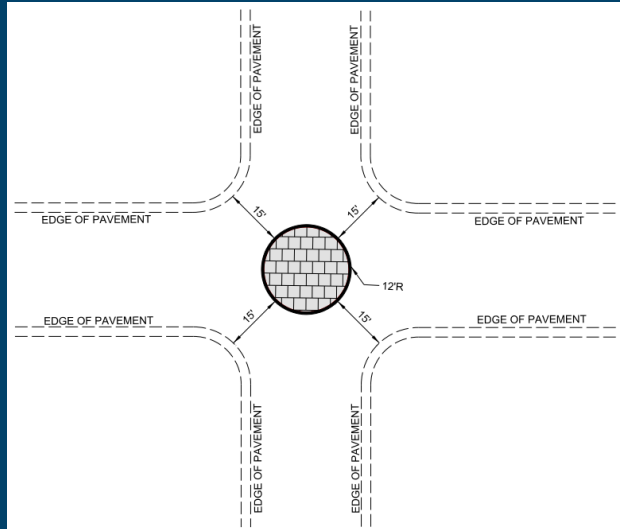
Pros

- 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

Cons

- 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

Neighborhood Traffic Circle (horizontal)



*Neighborhood Traffic Circle to be placed within existing curb lines – no impacts outside of existing roadway



Neighborhood Traffic Circle (horizontal)

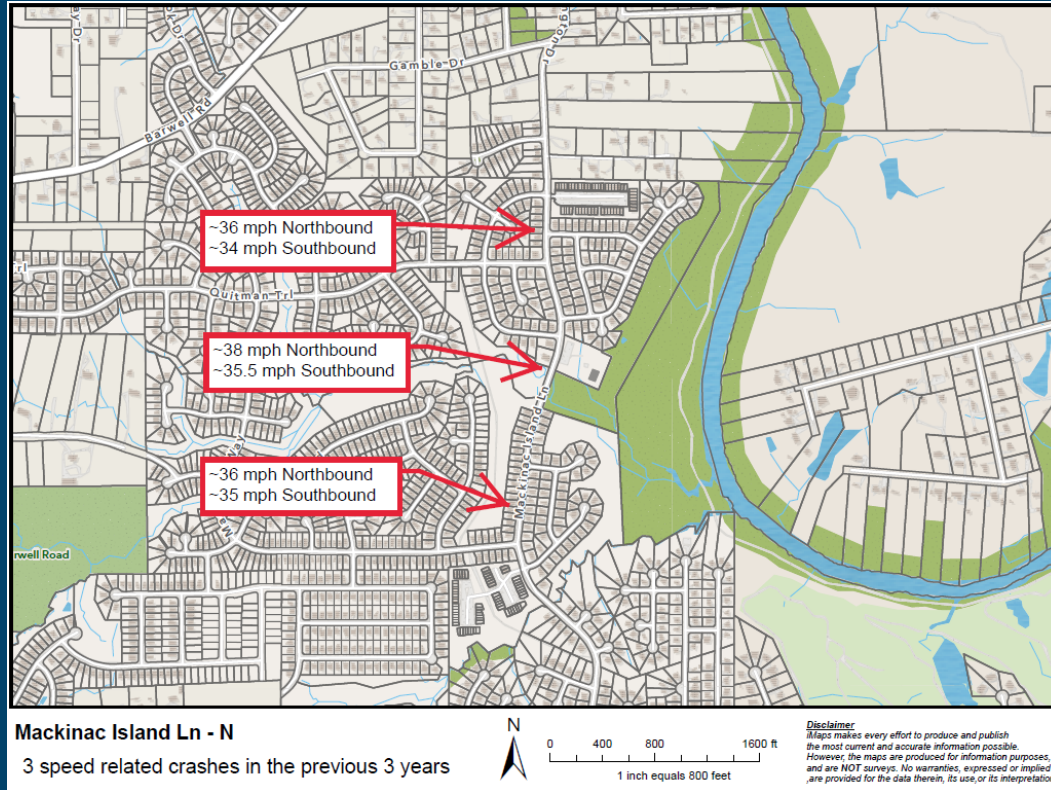
Pros

- Helps decrease speed of vehicles as they enter/drive through the intersection
- Helps to reduce the frequency and severity of collisions
- Increases safety for pedestrians and cyclists at the intersection
- Minimal impact to emergency service's response times

Cons

- Not all intersections meet the minimum dimensions for installation
- Slightly longer installation time, typical for treatments made of concrete

Evaluation Data





Raleigh

Design Process

- Based on the speed progression along Mackinac Island Ln, we are proposing treatment spacing of approximately 400' – 500' intervals
- Speed related crashes are relatively evenly spread along this stretch of Mackinac Island Ln. Focusing on speed reduction will work to achieve speed compliance and also help eliminate the speed related crashes that have occurred



Raleigh

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, Southgate Dr and Dandridge Dr are 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?
 - Please review our video about Neighborhood Traffic Circles that may answer some immediate questions.
- What other questions, comments, suggestions do you have?

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

