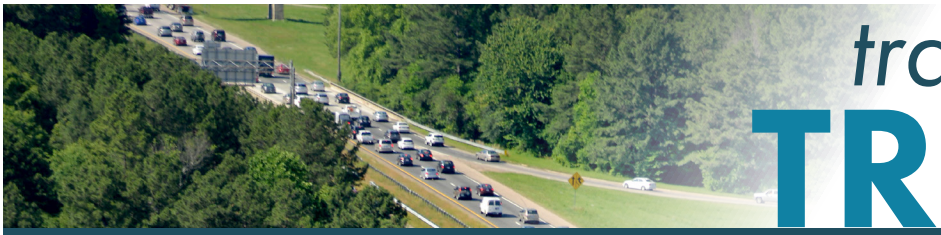

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North Carolina Local Technical Assistance Program (LTAP) Newsletter **Summer 2021**

Emergency Round-A-Bout Usage

Living in North Carolina, we are no strangers to hurricanes. The official start of the season is June 1, ending November 30. While mostly affecting our coastal communities, a hurricane, no matter how sever, can affect the entire state with rain, wind and of course, power outages. As we continue into our 2021 hurricane season we want to send a reminder of our 2019 Build a Better Mousetrap national winner from the coastal city of Wilmington. In the aftermath of Hurricane Florence in September of 2018, Officer Eric Lippert of the Wilmington Police Department was faced with directing traffic at signalized intersections that had lost power. However, Officer Lippert came up with a better idea, to transform the intersection into a working Roundabout. Below is the entry form explaining how this was accomplished and how a major problem was solved with a simple, already widely used, solution. Of course, this solution may not be applicable to all scenarios, but it could be applied and used successfully in certain situations to keep traffic moving and officers out of the way of traffic.

If you've come up with a similar solution to a problem, check out the Build a Better Mousetrap page and consider submitting an entry next year.

2019 Build a Better Mousetrap Competition Entry Form

Agency: Wilmington Police Department
Contact Person: Eric Lippert
Entry Title: Temporary Roundabouts

1. Describe the problem that prompted you to pursue this project/idea.

In the aftermath of Hurricane Florence in September of 2018 police departments in the area affected were over burdened with how to handle traffic control at major intersections where traffic lights were not operational due to wide spread, long term power outages.

2. Describe how your project/idea provided a solution.

Traffic cones were used to form temporary roundabouts at these major intersections. This aided in the constant flow of traffic instead of the mandatory 4-way stop, dramatically decrease the likelihood of traffic crashes, and was critically important with manpower, instead of 4 officers it only required 1.

3. What labor, equipment, and materials did you use?

Approximately 300 traffic cones, 4 'Roundabout' signs, 4 chevron signs, and 4 yield signs. 4-6 people to set them up and a police vehicle in the middle with emergency lights activated. Once set up very little maintenance is required.

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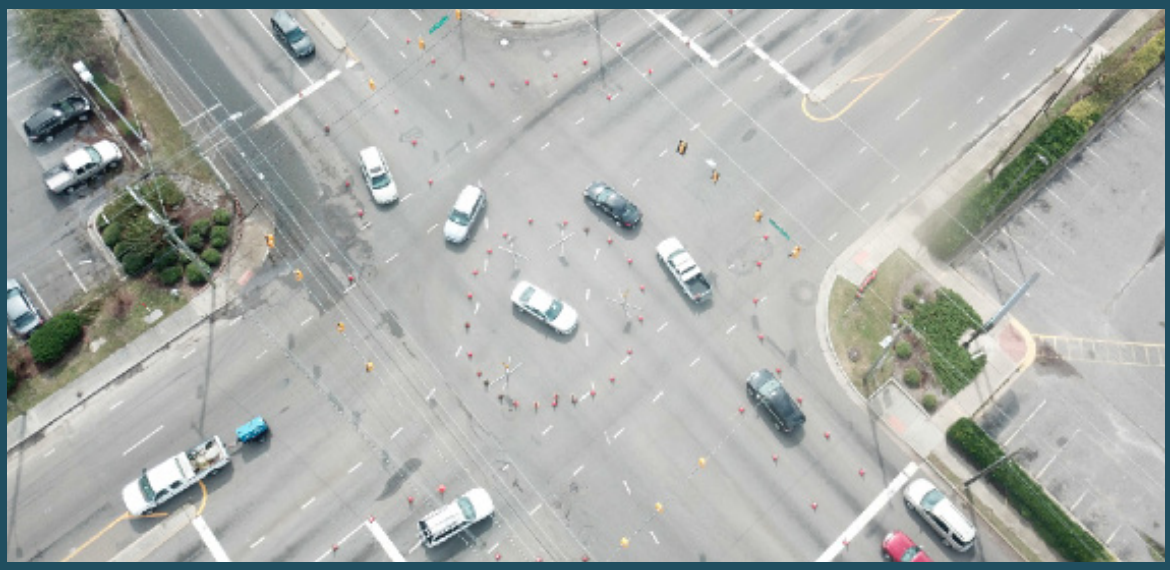
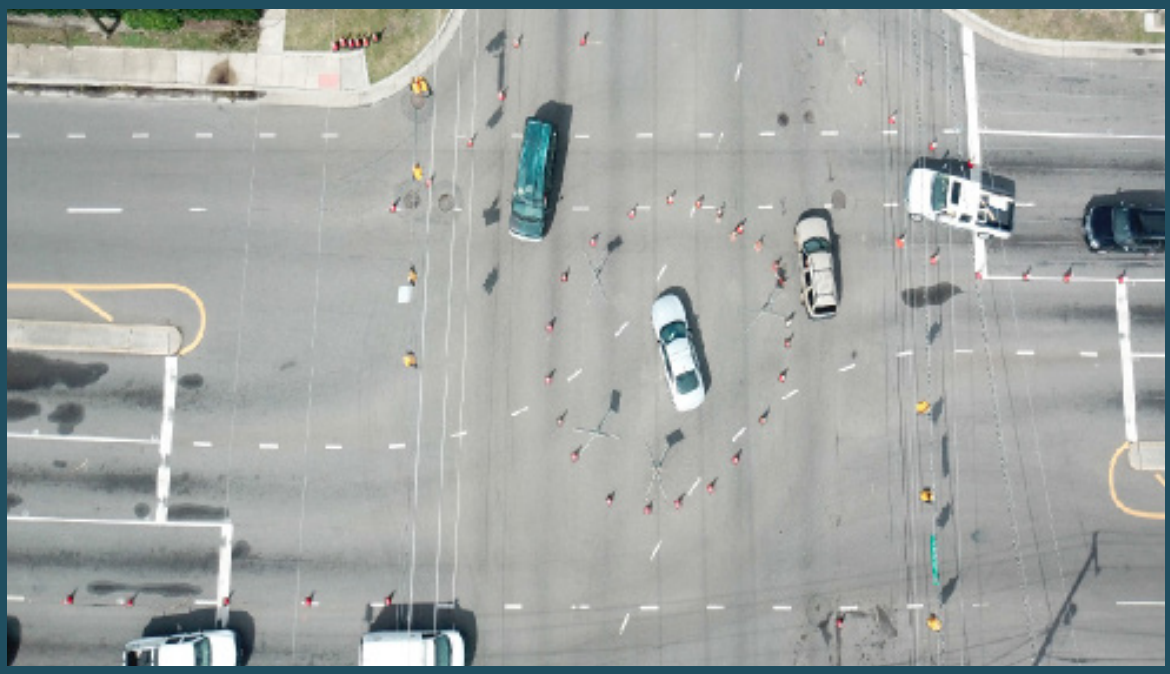
4. What was the cost?

Traffic cones were used from the PD's traffic Unit for DWI checkpoints, City Traffic Engineering provided the remainder as well as the reusable street signs. Cost was limited to the fuel of the police vehicle and that officer's hourly pay.

5. Describe the savings and/or benefits to the community.

This freed up scores of Police Officers who would have been tasked with traffic control throughout the city at major intersections to be available to answer calls for service. This was implemented at 4 major intersections for 3 to 4 days during with time no traffic crashes occurred at these main thoroughfares.





Coordinator's Corner - Meaning of the Stripes

by Bill Woods

"Road Closed". Oh NO! Everyone has seen it. This sign is probably one of the most unpopular road signs we encounter as we navigate our roadways. It is usually affixed to a Type III Barricade. Ones of those big ones they use to close part or all of a roadway. The ones that have those familiar orange and white stripes slanted at 45 degrees.

I actually encountered one just the other day and of course I always wonder, why is the road closed? Water? Sinkhole? Construction? It really doesn't matter, regardless of the reason, one thing we know is that we are going to have to find a different route. But where? How? Which way? Well, our first clue is the direction of the stripes on the barricade right in front of us. Yes, the stripes tell us which way we are to navigate around the barricade by looking at the direction they are sloping. Now depending on the situation, when I use the word 'navigate' it could be a full turn or it could be to simply pass to the left or right of the barricade. They can also even tell us to turn around, make a U-Turn. Did you know this? We would love to know!

To be completely honest, I did not know this until I came to NC-LTAP back in 2007 when Tim Baughman, our former instructor for many great years, revealed to me the Meaning of the Stripes (Thank You Tim!) AND as we are seeing more and more at every work zone class we conduct, I am not alone. This was never told to me in any driver's ed class, nor was it in my 16 year old driver's ed class, and most likely not in any of your drivers ed classes. I do, however, know of several court cases where this was discussed and used to determine liability. That's all I'll say about that but, for our promise of technical assistance from the North Carolina Local Technical Assistance Program, here you go!

So, to begin, let us reference our textbook, the MUTCD, specifically Section 6F.68 - Type 1, 2, or 3 Barricades, note 03 that reads, "Stripes on barricade rails shall be alternating orange and white retroreflective strips sloping downward at an angle of 45 degrees in the direction road users are to pass..."

In Example A the stripes are slanted down to the right, which means the driver is to turn or navigate to the Right.

In Example B the stripes are slanted down to the Left, which means the driver is to turn or navigate to the Left.

In Example C we see two barricades with the stripes pointing down to the Left AND Right. This, of course, means that the driver must turn either Left or Right; or depending on the situation, navigate to the left or right.

Easy enough, so now let us look at Example D. Hmmm... Well they are slanting down towards the center. This indicates that the driver must make a U-Turn. Since there is no Left turn OR Right turn the driver needs to turn around, make a U-Turn.

So as I mentioned earlier, this is something that we have realized lot of us, including our transportation professionals, are not aware of. So consider yourself informed! Now it is up to you, as we say here at NC-LTAP, lets spread the good word!

What's Wrong With This Picture

By Scott Tison

Here's the situation. paving work is being done on a Two Lane Roadway. Needing to shut down part of One Lane, the operation becomes the equivalent of a One Lane, Two Way Road. Traffic will need to be alternated by a Flagger on each end. So, what's wrong with this picture?

If you've been through our Flagger Training, I am hoping that you remember to stand on the shoulder of the road. Your safety, the safety of the crew and that of the motoring public are more important than the job being performed. In this scenario, there is a usable shoulder area, beyond the curb and gutter section.

You will also remember that it is crucial to establish an escape route for possible dangerous situations. The Manual on Uniform Traffic Control Devices (MUTCD) states in Section 6E-08 Flagger Stations, Note 3, "The Flagger should identify an escape route that can be used to avoid being struck by an errant vehicle." In this scenario, the Flagger is standing next to a curb and gutter section. If an errant vehicle fails to stop or loses control of the vehicle, how does the flagger escape? How does the flagger avoid tripping while safely getting out of the way of an errant vehicle? Additionally, NCDOT does not allow the coning off of a flagger station. Finally stand alone in a highly visible location, not in the shade.

If you haven't been through our training, we would like to see you. Again, it is more than legal liability. It is about giving our workers tools for doing their tasks as safely as possible. It is also about keeping your family and my family safe as they traverse our work zones. If you have any questions about worker's safety or work zone traffic control, give me a call at (919) 515-6949, or you can email me at sitison@ncsu.edu.

Classes are returning to campus! NCLTAP classes will be held in Raleigh on the NC State campus again this fall. Everyone will be required to follow the Community Standards to attend. Read about them here.

Exciting new class coming to NCLTAP!

Dr. Ron Eck already teaches great classes for NC LTAP, but we're particularly excited for this new 2 hour Curb Ramp Inspection class that will be held October 25 online. Register here

Tailgate Talk: Insects

Provided by NLTAPA

Information You Can Use to Prevent Accidents & Injuries

With a summer in full swing across North Carolina you've probably noticed that bees are especially active these days. It's their favorite season! And when they disappear as fall approaches, it will be time to be on alert for wasps and hornets. Last year in August I was actually stung by a wasp myself!

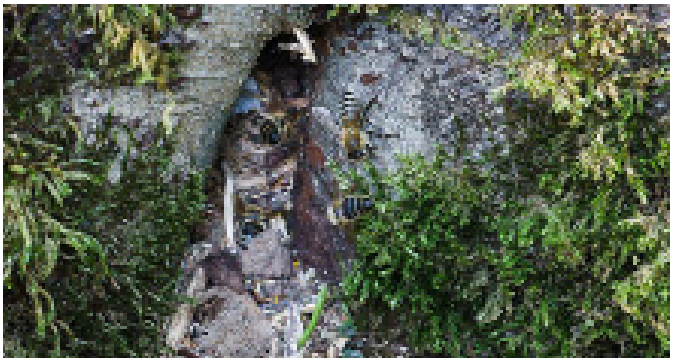
Bees sting - leaving a stinger in your skin. Wasps don't leave a stinger, but their stings tend to cause worse reactions. In general, most stings only cause temporary pain, swelling and skin redness.

In more severe cases however, stings can have life-threatening effects, depending on where the sting occurs and what allergies you may have. Being stung in the throat for example, may cause fluid to build up and cause swelling in the tissues around the throat, making in difficult to breathe.

Although rare, the most severe allergic reaction to a sting is anaphylaxis (also called anaphylactic shock). Of those people who die from a severe allergic reaction to a sting, half die within 30 minutes and three-quarters within 45 minutes. This reaction can occur the first time you are stung or with a subsequent sting.

Watch for these symptoms, which tend to appear immediately or up to 30 minutes later:

- Hives, itching and swelling in areas other than the sting site
- Swollen eyes and eyelids
- Wheezing
- Tightness in the chest and difficulty breathing
- Hoarse voice or swelling of the tongue
- Dizziness or sharp drop in blood pressure Shock
- Unconsciousness or cardiac arrest



What precautions can you take?

Stay away. The best way to avoid getting stung is to avoid insects and be alert for hives or nests, or where insects are gathered, entering and exiting an opening. Stinging insects are also attracted to certain foods and may be found near garbage cans, dumpsters, and fallen fruit beneath fruit trees, pet food, and other sources of food residue.

Avoid provoking the insects. Do not swat at them or make sudden movements. Let them fly away, slowly walk away, or gently "blow" away the insect. If you have disturbed a nest and hear wild buzzing, act quickly - protect your face with your hands and run from the area.

Power equipment such as mowers, weed eaters and chainsaws sometimes stir up the insects. If you are startled or stung while you are working with these power tools or machinery, you could end up getting injured with much more than a sting!

Let your supervisors know if you have allergies to insect stings, especially if you work outdoors. Co-workers should be trained in emergency first aid, be aware of the signs of a severe reaction, and know how to use the bee sting kit (self-injectable epinephrine). When working outside, carry a cellular phone in case you need emergency medical help.

Don't be a bug magnet. Reduce your chance of being stung by wearing light- colored clothes such as khaki, beige, or blue, and long sleeved shirts and long pants. Wear footwear to protect against bees and wasps attacking your bare or sandaled feet.

Avoid wearing scented, perfumed products, and make sure the insects can't hide or get tangled in your hair, or in the folds of clothing and towels. Be aware that insect repellent ("bug spray") does not affect these stinging insects.

If you must be near bees or wasps, wear a hat with netting to cover your head, neck and shoulders and tape your pant legs to your boots and socks, and your sleeves to your gloves.

In the event of a sting, try removing the sting right away (the venom can still be injected for up to a minute afterwards) by scraping sideways with your fingernail or a credit card, at the narrow end of the sting.

You might have to use tweezers if the venom sac breaks off, leaving the sting in the skin. An application of ice (wrapped in a towel to prevent freezing the skin), anti-itch cream and/or an antihistamine pill can help reduce the effects of the sting.

Do not scratch a stung area. Scratching may cause a break in the skin, which could lead to an infection.

If you or a co-worker is stung in the eyes, nose or throat, or exhibit any sign of a reaction to a sting, call emergency medical services right away, even if you're not sure.

If you have experienced a severe allergic reaction to an insect sting in the past, expect a similar or worse reaction the next time. Ask your doctor to prescribe a bee sting kit and carry it with you at all times.

If you are hypersensitive to stings, you should also wear a medical alert bracelet. If you are ever stung multiple times, talk to your doctor; it might be wise to monitor you health over the next few days or weeks.

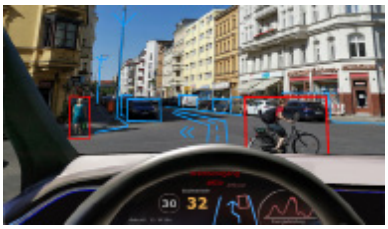
Users of this tailgate talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations.

FHWA Webinar: Reducing Roadside Obstacles

https://connectdot.connectsolutions.com/p8kvtn58jh3o/

How will Self Driving Cars make it through a work zone? They're still working on it.

Read all about it here



New Assistant Director Hired

This past spring we said goodbye to Linda Collier, long time Assistant Director of NC LTAP. We all know that no one can replace her, her long history and institutional knowledge of our program, and her wonderful attitude. But we still need an Assistant Director! I'm happy to formally announce that I (Kate Davison, former Program Manager) was hired to do my best following in her shoes.

I've been with the program since April 2018 and learned a lot during the past three years. My appreciation for the public works staff, all of the nuances of your jobs that touch every single person that lives in your community (me certainly included), only continues to grow. I talk about the importance of your work and your safety to everyone I know, and now my mother likes to call and tell me about the work zones she drives through.

This is the passion that I will bring to the position of Assistant Director. I think this program provides an incredible service to public works staff in North Carolina, and I'm continually impressed by how seriously all of our students take the classes. The importance of safety for our workers cannot be overstated, and I hope our classes provide not only safety information, but also educational opportunities that will allow you to advance in your jobs. From just 3 years I have dozens of stories about little moments with students, and I'm looking forward to collecting many, many more stories.

Hickory 2018, Kate's first time on heavy equipment

LTAP Links on the Web

Transportation Information at your fingertips!

NC LTAP	https://itre.ncsu.edu/focus/ltap/
National LTAP/TTAP	http://www.nltapa.org/
NC Department of Transportation (NCDOT)	https://www.ncdot.gov/
Rural Road Safety Center	https://ruralsafetycenter.org/
Federal Highway Administration (FHWA)	https://www.fhwa.dot.gov/
US Department of Transportation (USDOT)	https://www.transportation.gov/
UNC School of Government	https://www.sog.unc.edu/
Institute of Transportation Engineers	http://www.ite.org/
NC Section of ITE (NCSITE)	http://ncsite.org/
APWA - NC Chapter	http://northcarolina.apwa.net/
NLTAPA Tailgate Talks	https://nltapa.org/information-exchange/nltapa-tailgate-talks/

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