

02-09-2022 Town Council Meeting Responses to Council Questions

ITEM #9: Bicycle and Pedestrian Safety Update

Council Question:

While I'm thankful for the generous donation that is helping to pay for the RFRBs along Estes Drive in front of the schools, I'm concerned that it sets a bad precedent and allows neighbors to pay to jump the line and get facilities at their neighborhood schools. How do we make sure that neighborhoods with greater financial resources are not first in line for safety improvements?

Staff Response:

This was an unusual situation, and we recognize the concern it raises about equity in Town improvements. In this case, the RFRBs were going to be installed as part of the Estes Connectivity Project, but not until probably mid-to-late 2023. The cost to install the RFRBs now would have equaled close to the entire Estes project contingency, and when a business offered to provide funding for them, we jumped at the opportunity. The crosswalks and RFRBs on Estes were already designed and installing them earlier provided a benefit to the community.

Council Question:

Do we have funding to install safety measures similar to the new Estes safety measures at all other schools? In particular, I'm thinking of Ephesus Elementary, which fronts Ephesus Church Road, a wide street on which cars often exceed the speed limit, and which could use similar types of safety improvements. It would be unfortunate if we waited to make improvements in front of Ephesus Elementary until there was a serious accident or until a generous donor provided funding.

Staff Response:

There are not funds budgeted specifically for pedestrian safety measures. Pedestrian safety improvements are generally paid for with the traffic engineering operational budget when those funds are available and not allocated for other purposes. There currently is a Rectangular Rapid Flashing Beacon (RRFB) at the intersection of Ephesus Church Rd. and Churchill Dr., which is the closest crosswalk to the school. Many of the other schools have RFRBs at the crosswalks that serve them. One of the transportation intern projects this summer will be to do an inventory of all of our school zones to identify what safety improvements can be made.

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Council Question:

On the topic of access to schools, many families walk from Glen Lennox to Glenwood Elementary across Raleigh Road even though it's so unsafe that the school system will not place Glen Lennox families in the Glenwood walk zone. But students and parents do so, especially when students are in aftercare. What can we do to improve that intersection?

Staff Response:

The Hamilton/NC54 intersection has often been identified as an intersection that is not pedestrian-friendly. The intersection is maintained by NCDOT and carries an average of 50,000 cars a day, making it an unlikely candidate for a travel lane reduction which would narrow the crossing width. There is a NCDOT highway project on the horizon (maybe in the early 2030s) that is intended to reduce vehicular congestion. Staff was involved in preliminary design work several years ago where we stressed the need for improved bike and pedestrian safety along and across the corridor. In addition, Glen Lennox plans to make intersection improvements as part of the major modification to their development agreement. These will include crossing improvements. The developer has indicated that they will consult with the firm Copenhagenize to emphasize pedestrian and cyclist access across 54. Work is expected to begin on NC 54 in early 2023, and intersection improvements will come in the following years.

Council Question:

We often are told (for example, during last week's discussion about the West Franklin bike lanes) that certain safety measures which staff thinks are good ideas and which are implemented in many other communities can't be installed because NCDOT won't allow them or doesn't like them. Could you share written documentation of the NCDOT policies that prohibit, for example as was discussed last week, vertical delineators to protect bicyclists? (Especially since vertical delineators have been installed along Jones Ferry Road in Carrboro.)

Staff Response:

While we are not aware of a policy that directly prohibits flexible bollards, NCDOT and the Manual on Uniform Traffic Control Devices (MUTCD) provide deference to the engineer's best judgement. NCDOT's Standard Specifications for Roads and Structures provide guidance for flexible bollards, but do not mention bicycle facilities, which leaves room for interpretation. Staff's experience asking for safety measures that are not typical on NCDOT roads has been unsuccessful. These policy questions may be better answered if/when a NCDOT representative attends a future Council meeting.

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Council Question:

Will an NCDOT representative be present at Wednesday's meeting?

Staff Response:

No.

Council Question:

Could we have someone from NCDOT who is involved with setting their policies—which may be someone other than their district engineers—join us at a future Council meeting to discuss how we can better collaborate to adopt street designs that many other communities have implemented or include requirements that other communities don't have (such as, for example, that bike lanes leave the curb and join travel lanes at intersections)? We keep butting our heads against the NCDOT wall without any explanation other than staff's statement "that's NCDOT policy," even for ideas we all agree are good ones and that our peer communities are using.

Staff Response:

If the Council would like to have this discussion, we can work on arranging for an NCDOT representative to attend a meeting.

Council Question:

Why do we announce traffic enforcement events ahead of time? Is there evidence that this is a more effective approach than unannounced? Do we have data to show that our enforcement and/or education activities are having an impact on road safety? What is considered best practice in behavior change efforts focused on driving safety?

Staff Response:

We agree that most of our crashes are best addressed and mitigated through improved road engineering. We publish information about our enforcement efforts because we hope that our messaging will modify driving behaviors without an enforcement encounter. Nationwide, the literature on high visibility enforcement operations seems to be mixed, with some studies showing improvement and others not showing much at all. And, while we do not have conclusive data that announcing them ahead of time has improved crash rates, we do find that our traffic-related social media posts are regularly quoted or forwarded across social media platforms, expanding the reach of our message.

In our posts, we generally notify that an operation is planned but we do not usually provide the locations of speed and pedestrian safety enforcement. The thought is that this promotes safe driving town-wide. All our advanced notice about upcoming operations comes with the reminder that traffic safety is part of our normal patrols and is not limited to particular time frames. In our recent posts, the pedestrian safety operations about which we have provided

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advanced notice are those scheduled through our grant partnership with the North Carolina Governor's Highway Safety Program. For example, we have given advanced notice of seven operations scheduled for February, but the Police Department has already conducted 21 operations since Friday, Feb 4th alone, resulting in two citations (one failure to yield to a pedestrian and one speeding).

Council Question:

I would like staff to discuss the effectiveness of engineering solutions to traffic safety (for example, physical barriers between bicycles and cars, pedestrian crossing cycles that prohibit unsafe car movements, and so forth) versus education or enforcement programs. My understanding is that these education programs have limited success, especially given the rise in distracted driving, and that engineering solutions are the only effective measure. (For example, the reduction in crashes on West Franklin Street following the lane reduction.)

Staff Response:

You're correct. Engineering solutions are generally more effective than education and enforcement. Engineering solutions provide an intuitive signal to road users about the expected behavior of the street and how others will act. Education campaigns and enforcement efforts are much easier to implement, both in terms of funding and staff resources. There are limitations to the funding that we do have for pedestrian safety – the Governor's Highway Safety Program requires us to have the crosswalk enforcement element and does not allow us to spend money on infrastructure. The only other funding available to us is federal, which is difficult to get and has so many bureaucratic obligations that it is only worthwhile for high dollar projects (i.e. Estes Drive Connectivity, Homestead multiuse paths/bike lanes, Fordham Sidepath).

Council Question:

I understand that a Leading Pedestrian Interval is being considered for the Estes/MLK intersection. How long do LPIs last? I'm concerned it's inadequate to protect a slower walker who is traveling north to south across Estes; southbound cars turning left will be authorized to turn before the person is in the lane those cars will be entering. As may have happened during last month's accident, the driver may not notice the pedestrian walking north to south because they are focused on oncoming traffic going south to north. Can we consider forbidding left turns in those situations until the walk sign has expired?

Staff Response:

LPIs usually provide a 3-7 second head start for pedestrians, which gives them a chance to get out into the crosswalk and be more visible before vehicles begin turning. We have requested that NCDOT evaluate the use of flashing yellow arrows; NCDOT officials stated that they "have records showing improvements in traffic safety for flashing yellow arrows. The flashing arrow

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provides alternatives that traditional signal displays do not". Town staff will continue to pursue the issue, including through a potential collaboration with the Highway Safety Research Center.

Council Question:

Often, sidewalks are closed by utility providers or building construction without appropriate detours. This happens with some frequency and causes serious problems for people walking along our roads. Is there additional education, other actions, or new policies that can be adopted to prevent this from happening?

Staff Response:

Prior to beginning construction, new development projects must submit a construction management plan that shows a reasonable pedestrian detour and must place signage to lead pedestrians to the detour. Staff reviews the plans and must sign off before construction can begin. We will look into the requirements for utility providers and send that information at a later date.

Council Question:

Is our two-person transportation planning staff and current funding devoted to safety adequate to meet our Vision Zero goals? How does the size of our transportation planning staff compare to other communities of our size with similarly ambitious bike, pedestrian, and transit mode share targets?

Staff Response:

We can always do more with additional staffing and budget. The Governors Highway Safety Program grant allowed us to hire a part-time fully grant-funded Complete Streets Specialist, bringing our Transportation Planning team to 2.5 FTE. We also generally have two interns who do a good amount of research and other project support. The amount of proactive bike and pedestrian safety work staff have been able to do after hiring the Complete Streets Specialist in December 2020 has increased significantly. Our goal, depending on the budget, is to have a full-time Complete Streets Specialist by FY24. The two full-time transportation planning staff are mostly busy doing day-to-day work and often do not have time to work on bigger picture planning and projects.

We can look into peer communities' transportation planning staffing levels and share that information at a later date.