



TOWN OF CARRBORO  
NORTH CAROLINA

**TRANSMITTAL**

**PLANNING DEPARTMENT**

**DELIVERED VIA:**  *HAND*  *MAIL*  *FAX*  *EMAIL*

**To:** David Andrews, Town Manager  
Mayor and Town Council

**From:** Zachary Hallock, Transportation Planner

**Date:** April 2, 2021

**Subject:** Downtown Slow Zone Update

**Background**

The slow zone concept was first discussed by the Town's Transportation Advisory Board (TAB) in 2012. Over the next two years, additional information was developed and subsequently presented to the Board of Aldermen in 2014 both by the TAB and the Town's Transportation Planner, Jeff Brubaker. These agenda items can be found below:

TAB Presentation: [Town of Carrboro - File #: 14-0056](#)

Staff Presentation: [Town of Carrboro - File #: 14-0155](#)

Continued discussion of the Slow Zone concept, along with pedestrian safety interests continued in 2014. Then in 2015, the TAB conducted outreach related to these ideas and compiled community input. Transportation Planner Bergen Watterson made a presentation to the Board of Aldermen in 2016. ([Town of Carrboro - File #: 16-015](#) )

In 2017, Planning Administrator Tina Moon presented additional information to the Board of Aldermen about potential pedestrian safety improvements (as based on the TAB's previous work) for consideration. ([Town of Carrboro - File #: 17-088](#) )

In 2019, Transportation Planner Zachary Hallock worked internally with planning and public works staff to develop a list of potential bike-ped safety projects. A prioritization process was developed to identify top projects using cost estimates, bike/ped counts, crash data, vehicle counts, and input from the Transportation Advisory Board. The results of this prioritization was shared with the Town Council as part of a transportation update in February 2020. ([Town of Carrboro - File #: 19-382](#))

In 2020, interest in the Slow Zone was renewed, especially as it relates to previous feedback received from NCDOT that they had significant reservations about setting speed limits below 25 MPH. These reservation stemmed from issues relating to compliance, that lowering speed limits without significant enforcement would exacerbate issues with speed limit compliance beyond those that already exist.

Local residents provided examples of locations in North Carolina with a 20 MPH speed limit were referenced in response to this feedback from NCDOT. Research by Town Staff indicated that those locations had those speed limits in place for a significant amount of time (nearly 50 years) and also possessed unique geometric features (such as on-street parking or the presence of a roundabout) that allowed those lower posted speeds. NCDOT indicated that they had concerns related to enforcement and compliance with the posted speed, in particular if the Town wanted to reduce speed limits. Town staff responded and requested a meeting with NCDOT, which would be scheduled for March 19<sup>th</sup> 2021. On March 5<sup>th</sup>, Town Staff met internally (Planning, Police, Public Works) to discuss the Slow Zone concept and related concerns about vehicle speeds.

### **Discussion with NCDOT**

Staff met with NCDOT Staff on March 19th, to further discuss the Town's interest in a Slow Zone and other pedestrian safety interests. A draft overview of the discussion that occurred during that meeting is below:

- 20 MPH is the lowest allowable speed limit as set by the North Carolina General Assembly.
- If speed limits are reduced but drivers are not compliant, it can create dangerous conditions for people who are trying to cross the street.
- NCDOT is in the process exploring modifications to statewide guidance regarding speed limit setting.
- 25 MPH is a practical minimum from both perspectives of enforcement and compliance, as many drivers can use a cruise control at 25 MPH (but it typically won't engage below that).
- The Town can set its own speed limits for roads that are off of the state system
- It can be difficult to ticket people in transition areas (where speed limit drops)
- Strict enforcement overall can be challenging for two reasons:
  - Some areas may require two officers
  - Ticketing at 5 MPH over will generally be considered frivolous and dismissed (Police Dept. is working with the District Attorney on this issue)
- Signage would be needed to inform of the slow zone, but would not be expected to have a significant impact on speeds. Town would be responsible for installation and maintenance.
- Solutions to consider:
  - Traffic Signal changes like Coordination Speed, LPI, and No RTOR
  - Road Diets, like what is currently proposed for E Main St

- Modifications to create self-enforcing streets (that is, streets that are design such that people drive the speed limit), such as lane width reductions or on-street parking (if applicable)
- If the Town is to develop a Slow Zone policy, it needs to be structured to maximize consistency with NCDOT policy
  - State system roads can be considered for 20 MPH, but it is not expected that wide areas would support this.
  - Need clear communication and identification of the slow zone.
  - Signs are not the solution, but the capital and maintenance would need to be handled by the Town.
  - More enforcement in downtown areas is difficult due geometry, and automated enforcement is not currently enabled by the North Carolina General Assembly (and is not expected to be).
- Town-collected speed data (shown in the table below) was also displayed and discussed at the meeting with NCDOT. Additional information (maps of speed data, speed limit compliance, posted speed limits, and street maintenance can be found as attachments to this agenda item).

#### Town of Carrboro Collected Speed Data

These counts have been collected over the past two and a half years, beginning in November 2018. These counts cover a period of 48-hours and were generally collected on a non-holiday, non-summer, Tuesday-Wednesday or Wednesday-Thursday. COVID-19 precautions have been in place since March 2020, thus the Average Daily Traffic reported for those counts are lower than what might be anticipated under previous conditions. Speed data however, is a statistical analysis that requires a sufficient sample size in order to ensure validity. All of the locations collected are reporting at least 3600 vehicles over a 48-hour period, which is an effective sample size that accurately represents the overall population of drivers crossing that point on the road. There may be some variations caused by COVID-19 restrictions, however determining those exact impacts are outside the scope of this analysis.

Location	Count Date	Posted Speed	Average Speed	Speed Limit Compliance	85th Percentile Speed	Average Daily Traffic
S Greensboro south of Old Pittsboro (north)*	2/3/2021	20	31.1	1.1%	36	7800
N Greensboro north of Shelton St*	2/12/2019	20	31.1	2.2%	34	13500
W Main St west of Hillsborough Rd*	1/30/2019	25	32.2	15.0%	38	4100
Smith Level Rd north of Willow Oak Ln	3/10/2021	35	38.5	16.0%	51	13500
Estes Drive north of N Greensboro St	2/24/2021	35	37.8	31.0%	44	7900
Hillsborough northwest of Parkview Ave	2/12/2019	35	38.6	33.1%	44	4600
Estes Drive north of Estes Park Apts	2/24/2021	35	37.0	38.0%	45	8000
Jones Ferry Rd east of Davie Rd	11/11/2020	35	37.3	40.0%	45	5300
Hillsborough northwest of McDougle School	3/10/2021	35	35.9	50.0%	40	3050
Jones Ferry Rd east of NC 54 EB Ramps	11/4/2020	35	34.9	51.5%	42	8900
Hillsborough northwest of Bel Arbor Dr	3/3/2021	35	35.2	53.0%	41	1800
N Greensboro east of Cheek St	9/17/2019	35	35.4	58.0%	41	6500
N Greensboro northwest of Thomas Ln	9/17/2019	35	34.5	58.0%	40	7800
S Greensboro north of Two Hills Dr	2/3/2021	35	33.2	65.0%	39	7800
JFR east of Alabama Ave	11/11/2020	35	35.5	66.7%	42	6600
Hillsborough southeast of High St	3/3/2021	35	32.5	68.0%	39	2300
N Greensboro west of Robert Hunt	11/7/2018	35	34.9	72.0%	38	6700
Hillsborough northwest of N Greensboro St	11/7/2018	35	30.6	84.0%	36	7200

\*These locations are at the transition from a higher speed limit to a lower speed limit