The News&Observer

JOHNSTON COUNTY

Closing the gap: Can the Neuse River Trail be extended from Clayton to Smithfield?

BY RICHARD STRADLING

UPDATED MARCH 22, 2022 1:22 PM

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A study is underway to look at building a greenway trail in a 15-mile corridor along the Neuse River between Clayton and Smithfield in Johnston County. The map shows three potential routes -- two along roads and one along the river. JOHNSTON COUNTY PARKS AND OPEN SPACE PROGRAM Cyclists and walkers can follow the <u>Neuse River Greenway Trail</u> from Falls Lake all the way to Clayton, <u>where a spur called Sam's Branch will take them up into town</u>.

From there, though, the trail goes cold. Continuing on to Smithfield requires sharing narrow country roads with cars going 55 mph or more.

Now there's an effort to change that, by charting an off-road route into the heart of Johnston County. The county parks department, the N.C. Department of Transportation and several other groups are doing a feasibility study to determine how the Neuse River Trail might be extended and who would use it and how.

The goal is to find a potential route that separates cyclists and hikers from cars, said Adrian O'Neal, the county's parks, greenways and open space coordinator.

"We want to get them so that they're safe and so that people feel comfortable using it," O'Neal said. "And so that it can be used as an alternate form of transportation when feasible."

As part of the feasibility study, NCDOT and the county have created an online survey to find out how people would use the trail and where they'd like to see it go. The survey can be found at <u>publicinput.com/NeuseRiverTrail-</u> <u>ClaytontoSmithfield#1</u> through April 8.

In addition to connecting Clayton with the <u>Buffalo Creek Greenway in Smithfield</u>, the greenway would be part of two longer trails — the statewide Mountains-to-Sea Trail and the East Coast Greenway, <u>a planned 3,000-mile path from Florida to</u> <u>Maine</u>.

About <u>700 miles of the 1,175-mile Mountains-to-Sea Trail are completed</u> off road, with big gaps like the one in Johnston County. The trail crosses the Triangle from near Hillsborough east to Clayton, and extending it to Smithfield would create the longest uninterrupted stretch outside of the mountains, said Brent Laurenz, executive director of Friends of Mountains-to-Sea Trail.

Laurenz said said the survey is an important step.

"The majority of users of the MST are day hikers, not the folks that are actually walking from the mountains to the ocean," he said. "So really having that community input and feedback will be important to see what the community would like to see in a trail there."

O'Neal said the survey and feasibility study are also meant to let landowners along the route know about the possibility of allowing the trail over their property. The development of the trail will depend on landowners who are willing to sell easements, he said.

"You're working in conjunction with those landowners to get the best laid trail you can get, and you have to be very flexible," O'Neal said. "You have to be very respectful of their ideas and what they'd like to see happen through there."

O'Neal said as much as possible the county would like to see the trail follow the Neuse River, as it does between Clayton and the Wake County line. Alternately, parts of the trail could veer away from the river or follow roads, with proper separation from traffic.

Johnston was the state's fastest growing county over the last decade, and many of those new residents will be looking for parks and trails nearby, O'Neal said.

And all those new subdivisions create both challenges and opportunities for trail builders. They may close off some potential routes while opening up others, as developers decide access to a public trail is a selling point for future residents.

"We're kind of racing with development," O'Neal said. "But we're also looking at opportunities when development comes through, to let them be a part of building the Mountains-to-Sea Trail and the East Coast Greenway. So that's what this study is all about."

For more information about the Neuse River Trail extension feasibility study, go to <u>bit.ly/3JoayDr</u>.

This story was originally published March 21, 2022 5:30 AM.

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MONDAY, MARCH 14, 2022 Transportation Planning

Contributor(s): Ely Portillo (/aboutus/contributors/ely-portillo)

Charlotte is planning to ask voters this year to approve more than \$100 million worth of new transportation bonds — an amount that would allow the city to make progress on goals like building more sidewalks but still fall short of covering many crucial needs.

Municipal bonds aren't quite as sexy as a multibillion-dollar new light rail line or as captivating as a pitched political battle over a new sales tax, but they play a key role in the city's growth. Voters typically approve bond packages every two years, allowing Charlotte to borrow money for major projects and ongoing programs such as subsidizing new affordable housing construction (in 2020, Charlotte's three bond referenda won with more than 77% of the vote).

A draft proposal shows Charlotte is planning to ask voters to approve \$198 million in general obligation bonds this year, about \$118 million of which are for transportation projects. The city could choose to increase the total amount by up to \$37 million, based on estimates of how much more Charlotte could afford to borrow.

City staff detailed their plans, and the size of the need, at a pair of meetings over the last week. The amount of available funding vs. the cost of needed projects reveals how far Charlotte still has to go in many areas.

Referring to a proposed sidewalk funding increase, City Council at-large member Dimple Ajmera put it bluntly: "This \$50 million investment is just a drop in the ocean, similar to what we're doing with affordable housing."

Or, as council member Ed Driggs said: "The numbers are big...We're facing some tough choices here."

Here's a breakdown of the city's planned 2022 bond spending on transportation in several key areas:

More sidewalks

Charlotte is planning to more than triple the amount it spends on sidewalks and pedestrian safety in the 2022 bond cycle, to \$50 million. That's up from \$15 million in the last bond cycle. It's reminiscent of the city's affordable housing trust fund bonds, which Charlotte increased from \$15 million to \$50 million in 2018.

Charlotte Department of Transportation Director Liz Babson told council members that the city is running into higher costs on everything from real estate acquisition to labor and materials as it builds out its network of sidewalks. New projects are running between \$4 million and \$8 million per mile.

"We've been able to complete some of the lower-cost, less impact projects," said Babson. "We're continuing to see those increases in cost because we're starting to construct some of the more complicated projects."

"We're coming into areas that are much more suburban...A sidewalk project in those areas is starting to cost in the range of almost a street construction project," she said.

Charlotte currently has 11 miles of sidewalk projects underway. The increased bond funding will allow the city to finish those and move forward with its next five miles of prioritized projects, as well as bring some of the seven miles of projects currently being evaluated closer to reality.

But there are still 245 miles of thoroughfares identified in Charlotte that don't have sidewalks (some don't have any, while some have sidewalks on only one side of the street). Most of those are in the city's newer, more sprawling and suburban areas, along roads and neighborhoods built up in the 1970s, 1980s and early 1990s, before Charlotte's sidewalk requirements went into effect. Relatively few are in Charlotte's wealthier southeast "wedge." MPO Board 4/13/2022 Item 20 Charlotte will ask voters for millions to fund transportation upgrades, but bonds won't cover all needs | UNC Charlotte Urban Insti...



"This is kind of the reason why it's a tale of two cities," said council member Renee Johnson. "We talk about bridging the wealth gap and looking at things from a racial equity perspective. I think this is an area where we could make a really big impact...Areas are being left behind."

Closing those gaps will be pricey: At the low end of the city's cost estimate, building 245 miles of sidewalks would hypothetically cost almost \$1 billion.

"We have a huge need, and our progress towards meeting that need is slow at this point," said Driggs.

Charlotte's bonds aren't the only source of sidewalk funding. Developers also build sidewalks when they're doing other projects, and the state builds some along roads it controls as well. The proposed \$13.5 billion Charlotte Moves transit plan could also provide funding for sidewalks, if it moves forward (the plan relies on a 1-cent sales tax for Mecklenburg that currently has no clear path forward in the legislature).

Charlotte is also hoping to make it safer for people to cross the street. The city has installed 60 enhanced pedestrian crossings, with flashing beacons and other safety features. Another 35 are funded, and the additional sidewalk and pedestrian safety bond money will allow another 15 priority crossings.

There are an additional 47 identified locations that need enhanced pedestrian crossings in the city which aren't funded.

Vision Zero

Charlotte's falling behind on its goal of ending traffic deaths by 2030 — in fact, it's moving in the opposite direction. With traffic deaths rising, the city is looking to double its funding for the "Vision Zero" initiative — from \$2 million to \$4 million.

That money would go towards initiatives like neighborhood traffic calming projects, technology, (think those automated signs that tell you when you're driving too fast) and improved street lighting. The money won't go that far, however: Adding street lights costs roughly between \$200,000 and \$300,000 per mile, and Charlotte has 141 miles of thoroughfares without street lighting.

Currently, the city has 19 miles of street lights funded. The upcoming bonds would allow for building roughly another 15 miles.

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As with sidewalks, however, city bonds aren't the only way to add street lights. Charlotte recently received a \$1 million grant from the Charlotte Regional Transportation Planning Organization to install street lights on an eight-mile stretch of W.T. Harris Boulevard, from Mt. Holly Huntersville Road to I-85.

Street resurfacing

It's one of the most mundane municipal government functions: Fixing the potholes. But street resurfacing has actually become a big challenge in Charlotte, because the city's street network is expanding while funding goes down.

"That's an element we've struggled with over the years, the growth," said CDOT official Charlie Jones. The city maintains about 5,424 lane-miles of streets (one mile of two-lane road = two lanemiles), though the state maintains many major thoroughfares like W.T. Harris Boulevard and Providence Road.

Each year, the city adds about 30 lane-miles to its road network. At the same time, because of cuts in state funding allocations, the amount Charlotte has available for resurfacing shrank from \$26 million in 2020 to \$19.2 million last year.



Very Good

Good

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The 2022 bonds include \$8 million for street resurfacing (the same as last bond cycle), but wouldn't make up for the shortfall from the state. As a result, Charlotte's street resurfacing cycle is about 35 years — even though the average lifespan of pavement is around 18 to 20 years.

As of now, about 62% of Charlotte streets are rated "good" or "very good," Jones said. But if funding doesn't keep up with rising needs, you could see a lot more potholes around Charlotte in the coming years.

Other projects

The city's proposed transportation bond package so far also includes:

- \$8 million for more bicycle infrastructure
- \$12.7 million for improvements at the Eastway/Shamrock Drive intersection
- \$5 million for bridge repair and replacement throughout the city
- \$10 million for various smaller "congestion mitigation" projects

Council member Greg Phipps said the big needs and limited resources show the need for prioritization.

"At some point, we have to be realistic and come to the realization that I don't know if we will be able to fund all of these projects in our lifetime," he said, "or maybe in somebody else's lifetime."

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The News&Observer

LOCAL

Two big highway projects in the Triangle will take longer than expected to finish. Why?

BY RICHARD STRADLING

UPDATED MARCH 26, 2022 2:56 PM

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NCDOT has begun work to widen the Interstate 440 Raleigh Beltline between Wade Avenue and Cary. The changes will include new configurations for interchanges along the four-mile stretch of highway. BY KEVIN KEISTER By now, many drivers have gotten used to the construction zones on Interstates 40 and 440 around Raleigh, which is good because the work is going to take longer than expected.

The overhaul of a four-mile section of the I-440/Raleigh Beltline <u>was scheduled to</u> <u>take four years</u> and be finished in June 2023. Now it's not expected to be completed until October 2024.

Meanwhile, the widening of an 11-mile stretch of I-40 between Raleigh and the Cleveland community in Johnston County will take two years longer than expected to complete. <u>Work began in late 2018</u> and is now not scheduled to be finished until August 2024.

Several factors have contributed to the delays, according to the N.C. Department of Transportation and the contractors doing the work.

In some places, it has taken longer than expected to acquire right-of-way and move gas, power and other utility lines, said NCDOT spokesman Marty Homan. On top of that, contractors are having trouble finding enough workers and getting materials on time because of global supply chain issues, Homan said.

Those problems are worse in the Triangle where three big highway projects are taking place at once: the widening of I-40 and I-440 and the construction of an 18-mile stretch of the Triangle Expressway across southern Wake County.

"Having those big projects is sort of squeezing the workforce," Homan said. "And it's stressing our utility partners, too. They're dealing with the same sort of shortages that we are."

Part of the I-40 widening project should be completed next year, Homan said. The contractor, S.T. Wooten Corp., expects to finish adding two lanes to each side of I-40 from the Raleigh Beltline to where U.S. 70 splits off at Exit 309 by sometime next year.

But the section from there down to the N.C. 42 interchange will take another year or so to finish. The work at the interchange is complex, with N.C. 42 being

<u>converted into a diverging diamond pattern</u> and new exit and entrance ramps being added at nearby Cleveland Road.

Another complex project that's taking longer than expected is the <u>construction of</u> <u>an underpass to carry Blue Ridge Road under Hillsborough Street and the N.C.</u> <u>Railroad tracks</u> near the N.C. State Fairgrounds.

NCDOT awarded Lane Construction Corp. a single contract to build the underpass and widen the Beltline at the same time because of their proximity. Work on the underpass was scheduled to begin in 2020, then delayed until just after the State Fair in 2021.

Because the underpass is expected to take 22 months to build, NCDOT wants to time the work to begin just after the State Fair so traffic is affected during only one fair and not two.

The project entails building temporary railroad tracks that freight and passenger trains can use while a permanent bridge over Blue Ridge is constructed. Lane and NCDOT had not worked everything out with the N.C. Railroad and the utility companies to allow construction to get started when the fair closed last fall, Homan said.

"There were just too many outstanding issues to be able to stay on that schedule," he said.

Now the Blue Ridge underpass work is scheduled to begin when the 2022 State Fair closes this fall and be finished in time for the 2024 fair. That schedule, of course, is subject to change.

This story was originally published March 25, 2022 12:28 PM.

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The News&Observer

DURHAM COUNTY

Changes coming to Durham Station, thanks to federal grant. What bus riders can expect

BY PENELOPE BLACKWELL

UPDATED MARCH 16, 2022 1:17 PM

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Durham will upgrade its main bus terminal and operations with \$10.8 million from the Federal Transit Administration *THE HERALD-SUN*



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The city of Durham will upgrade its downtown bus terminal and operations with <u>\$10.8 million from the Federal Transit Administration</u> announced Tuesday.

"GoDurham provides 20,000 daily riders with an affordable and reliable transportation option," said city Transportation Director Sean Egan. "Many of our riders are essential workers, seniors, students and low-wealth individuals with limited transportation options."

About 80% of GoDurham riders are people of color, Egan noted during a news conference. Nearly three-quarters of riders report household incomes under \$25,000, and two-thirds live in households without a car.

Riders want better shade and weather protection, restrooms and more seating added to platforms, and a security kiosk at the main bus bay.



In addition to the bus island, the improvements will move the kiss-and-ride location, repair broken pavement and increase the number of bus bays from 20 to 28, allowing for increased transit service.

The Durham Station, on West Pettigrew Street, serves 19 GoDurham routes and five GoTriangle routes, as well as Greyhound, Megabus and Flixbus.

With federal funding to cover 80% of the \$13.5 million project, Durham County will provide \$2.7 million for construction and design costs. The estimates were presented to residents this year during a <u>Durham County Transit Plan</u> update, but additional community engagement is needed to inform the final design.

Durham Station will continue to operate while construction is done in phases beginning in the summer of 2023 and lasting about one year.

Durham will upgrade its main bus terminal and operations with \$10.8 million from the Federal Transit Administration *THE HERALD-SUN*

"The City of Durham is most grateful to U.S. Rep. David Price for his letter of support for this project," Mayor Elaine O'Neal said in a news release.

"With this federal funding, we can improve safety and customer comfort for the thousands of riders who use Durham Station every day while also expanding capacity to run more buses, including larger articulated buses used for Bus Rapid Transit," she said.

THE DURHAM REPORT

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This story was originally published March 16, 2022 7:30 AM.

PENELOPE BLACKWELL

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The News & Observer

DURHAM COUNTY

'What happened to the \$167M?' Durham wants Light Rail transparency before Commuter Rail.

BY PENELOPE BLACKWELL

UPDATED MARCH 11, 2022 8:20 AM

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The commuter rail corridor would start in Garner on existing rail lines, travel through downtown Raleigh, and ultimately extend to Durham, covering a total of 37 miles.

City, county and regional transportation leaders gave the Durham City Council an update on the planned Triangle Commuter Rail project Thursday.

But as planning moves forward to connect the region's largest cities with Research Triangle Park, the mayor and council members first want to know what happened to the millions of dollars invested in the failed Durham-Orange Light Rail Transit Project.

"What happened to the \$167 million in light rail?" asked Mayor Elaine O'Neal, who compared the failed project to the nation's broken promise of "40 acres and a mule" to Black people at the end of the Civil War.

"Transportation for African Americans is a particularly thorny issue, " she said.

"Throughout our history, our plight has been the slaves and [their] descendants to this day have never ever realized the promises of stability in housing and transportation," O'Neal explained. "And we continue to see that evolve even now as we watch a number of brown and Black people being displaced in the housing arena and now with transportation.

"And what has generally happened is when those shifts occur, Black people have usually been the labor force and others have benefited," she said.

In 2011, Durham and Orange counties began collecting half-cent sales taxes to help pay for the planned 17-mile light rail line between Durham and Chapel Hill.

But the effort failed, in part, because Duke had concerns about construction and light rail cars running outside its hospitals.

Former Durham Mayor Steve Schewel called the failure to launch the Durham-Orange Light Rail Transit Project a "tremendous disappointment."

on Thursday council members echoed O'Neal, who in addition to seeking a full accounting of money spent, wants to make sure people who rely on mass transit like buses are involved in future planning. "I am getting so many questions about what happened to light rail, and now we're talking about commuter rail ... we have to make this make sense to our constituents," said council member Leonardo Williams.

"I really, really, really am looking forward to commuter[rail] coming to the area, but I want us to be wholesome in the information that we are sharing," he said.



Elaine O'Neal

UP TO \$2 BILLION TO BUILD

In 2020, the Durham County commissioners authorized a memorandum of understanding to begin defining the roles, responsibilities and cost sharing for commuter rail.

The project involves GoTriangle, the Durham Chapel Hill-Carrboro Metropolitan Planning Organization (MPO), Capital Area MPO, Wake County, Johnston County, N.C. Department of Transportation and the N.C. Railroad Co. According to previous reporting from The News & Observer, the <u>commuter rail</u> <u>project is expected to cost</u> between \$1.4 billion to \$2.1 billion to design and build. Durham and Wake both have half-cent sales taxes dedicated to transit on this project as well.

Commuter Rail Cost-Share

Project Capital Cost	\$1.95B
Annual Operating Cost	\$41M starting mid-2030

Increasing Durham County's cost-share from 20 to 33% of the non-federal share would result in an increase from \$387.8M to \$649M, and a cut to ~50% of the new services and projects in the Durham Transit Plan.

Recommendation:

- Durham Transit Plan remain at \$387.8M (20% of the non-federal share)
- Do not support Wake upfront advance scenarios

Increasing Durham County's contribution to a planned commuter rail line would require cuts in other transportation projects.

All parties have agreed to continue to study the feasibility of the project to ensure that commuter rail can be achieved. If all goes as planned, construction would begin in 2025, with trains running in 2030.

According to <u>planning documents</u>, next steps include documenting existing railroad agreements that will need to be modified and new agreements that will be needed.

"We need both excellent bus and regional transportation," said council member Javiera Caballero. "I don't have any financial solution. But we are Durham and we are [part] of a region, and this is a region that is going to grow very quickly."

"And we have to come up with a solution to move folks because we can't keep widening I-40 and hoping that we're going to solve our transit issues," she said.



"Many, if not most, of our jobs are going to be in Wake County or to the east."

THE DURHAM REPORT

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This story was originally published March 11, 2022 8:11 AM.

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OPINION

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LOCAL

Durham, Orange chart new transportation path away from more and bigger highways

BY RICHARD STRADLING

UPDATED FEBRUARY 24, 2022 4:03 PM





In this file photo from 2016, westbound traffic on Interstate 40 is backed up just east of the N.C. 86 interchange. The N.C Department of Transportation plans to widen this section of I-40 to six lanes. HARRY LYNCH *HLYNCH@NEWSOBSERVER.COM*



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DURHAM

The organization that does transportation planning for Durham and much of Orange County wants the state to spend less on building new freeways and widening existing ones.

<u>The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization or MPO</u> recently approved a 30-year plan that eliminates some long-anticipated projects, such as widening the Durham Freeway near Research Triangle Park and converting sections of U.S. 70 and U.S. 15-501 into expressways.

In their place, the plan calls for spending more on transit, including increased bus service and new bus rapid transit lines. It also places more emphasis on bike lanes, crosswalks and sidewalks used by cyclists and pedestrians.

The plan is meant to support goals pushed by the public and adopted by the MPO's board that include eliminating fatal crashes, reducing carbon emissions to zero and ensuring that everyone has access to affordable transportation.

First drafts of the plan included traditional highway expansion projects that seemed to undermine those goals, said Jenn Weaver, the mayor of Hillsborough who heads the MPO board. So the board asked the staff to try again.

"It's a long-range plan, and we saw that in the out years we were going to have more congestion and more emissions and that this was not in alignment with our goals and values as an MPO or as a region," Weaver said.

NEW APPROACH TO TRANSPORTATION PLANNING

The plan, approved earlier this month, is "transformational" because it reflects a new approach to transportation by an MPO, said Kym Hunter, an attorney for the <u>Southern Environmental Law Center in Chapel Hill</u>. Hunter said her organization hopes to use the Durham-Orange plan as a model for other MPOs, which do transportation planning in urban areas throughout the state.

"I think previously there's been a very constrained thinking about long-range planning that is tied into what's possible today, and it's just a very business-asusual approach," she said. "And what they did here was say, 'Wait, we have all these goals for climate and equity and safety and this plan is not helping us to get there."

The revised plan sets up potential conflicts with the N.C. Department of Transportation, which owns the highways the MPO says it no longer wants expanded.

NCDOT had someone in the room throughout the development of the plan, so it understands the MPO's thinking, said Brandon Jones, the department's regional engineer. Jones said there's always some give-and-take between an MPO and NCDOT when it comes to deciding what to do along a particular road or on a specific project.

"We're kind of bound by each other's plans; they need to match in the short term," Jones said. "So that kind of brings us to the table to work out differences to make sure that improvements move forward."

Lisa Mathis, <u>a state Board of Transportation member</u> who sits on the Durham-Chapel Hill-Carrboro board, called the MPO forward thinking and courageous for crafting a different vision of transportation that "might cause a stir."

But she said the plan represents an ideal that will be modified, as long-range plans usually are, when individual roads and projects are evaluated.

"So will this plan be unchanged? No," she said. "There will be things that are shifted in it. But we're going to try to help them see as much of their vision as we can."

NO MAJOR HIGHWAY PROJECTS AFTER 2040

MPOs were created by Congress and are required to publish a new 30-year plan every four or five years for projects to receive federal transportation funding. The <u>DCHC's 2050 Metropolitan Transportation Plan was published</u> together with a plan for Wake County and other eastern Triangle communities crafted by the <u>Capital</u> <u>Area Metropolitan Planning Organization or CAMPO</u>.

The two plans have similar goals but with key differences. For example, where CAMPO wants to "increase the safety of travelers and residents," DCHC aims for

"zero deaths and serious injuries on our transportation system."

And where CAMPO includes new "major roadway projects" through 2050, DCHC has no new ones starting after 2040.

Not all highway projects in Durham and Orange counties would be eliminated under the DCHC plan. Most notably, <u>the widening of Interstates 40 and 85 in</u> <u>Orange County from four to six lanes</u> will proceed as previously planned.

But several widening or expressway projects conceived years ago and included in previous versions of the long-range plan have been nixed.

"Every few years, when we had been updating our plans, we had been moving those projects along," said Andy Henry, the DCHC planner who put together the plan. "This time, they didn't make the cut."

PREVIOUS DECISIONS BASED ON TRAFFIC MODELS

That decision runs counter to the way transportation planning is typically done in North Carolina. NCDOT and MPOs usually look at computer traffic models that predict future demand for highways, then decide how to increase capacity to try to meet that demand, Jones said.

Critics of that approach say building new roads or adding lanes only attracts more drivers that soon clog things up again. This "induced" demand means NCDOT can't build enough to relieve congestion in growing places such as the Triangle.

John Tallmadge, executive director of the <u>advocacy group Bike Durham</u>, said transit and bicycle and pedestrian projects have been afterthoughts even as the impact of ever more highway spending has gone unquestioned.

"We have not been addressing that fundamental assumption that leads to more vehicle miles traveled which leads to more pollution and that leads to higher speeds which leads to more deaths and serious injuries," Tallmadge said. "And it leads to a system that works if you have a car and traps people in poverty if they don't have a car."

Instead of expanding highways, the DCHC plan now calls for "modernizing," a vague term that can mean something different on each road, Henry said. In some

cases, it may mean building a median or new turn lanes or adding bike lanes or sidewalks. On a freeway, it may mean fortifying the shoulder for use by buses.

FROM U.S. FREEWAY TO WHAT?

One stretch of road now pegged for modernization is U.S. 70 from Lynn Road east to the Wake County line.

Previous long-range plans have called for <u>converting that four-lane highway into a</u> <u>six-lane freeway</u>, with an interchange at South Miami Boulevard and Sherron Road. NCDOT had planned the conversion as part of a broader plan to <u>make U.S.</u> <u>70 a freeway from I-540 in Raleigh to I-85 in Durham</u>.

Now NCDOT and the MPO will have to work out what modernizing the road would entail, if not a freeway. And NCDOT will need to determine how that Durham section fits with the freeways on either end, including <u>a one-mile section at Brier</u> <u>Creek in Raleigh slated to be built later this decade</u>.

The previous plans for U.S. 70 affected people beyond Durham by creating a parallel expressway alternative to I-40. NCDOT will need to determine how to meet the region's transportation needs while adhering as much as possible to the DCHC's vision, said Jones, the regional engineer.

"The key is making sure that we're correctly identifying all the needs for the corridor," he said. "And then seeing how we can meet all of those."

The DCHC plan also eliminated the idea of widening the Durham Freeway from four to eight lanes between the merge with the East End Connector and I-40 near RTP. That four-lane section of highway is a major commuter route and will likely get busier when the East End Connector opens this spring.

Addressing that congestion will take more creativity than simply adding lanes, said Mathis, the state Board of Transportation member.

"So maybe instead of widening four lanes, we widen and add an HOV lane," she said. "I mean, there's a myriad of solutions to this."

Forgoing large freeway projects should free up money for other types of transportation projects; widening that 4.5-mile stretch of the Durham Freeway

was estimated to cost \$251 million.

But a combination of state laws and longstanding policies limit how and how much money can be spent on transit and bicycle and pedestrian projects. The DCHC plan assumes changes in those laws and policies to give urban areas more flexibility in spending transportation money in the future.

Even with all the caveats and work ahead, supporters of the DCHC plan say it expresses the public's desire for a transportation system that is safe, equitable and environmentally sustainable.

"Even if they don't get all the way there," Tallmadge said, "it becomes a document that can be used in public discussion, both with residents and with NCDOT and legislators, about what it's going to take — the changes in funding, the types of projects that we're going to be able to do and not going to be able to do — in order to reach those goals."

This story was originally published February 24, 2022 5:45 AM.

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RICHARD STRADLING

Richard Stradling covers transportation for The News & Observer. Planes, trains and automobiles, plus ferries, bicycles, scooters and just plain walking. Also, hospitals during the coronavirus outbreak. He's been a reporter or editor for 34 years, including the last 22 at The N&O. 919-829-4739, rstradling@newsobserver.com.

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How the cost of widening a Matthews road increased 10x



Tony Mecia Mar 24

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You're reading Transit Time, a weekly newsletter for Charlotte people who leave the house. Cars, buses, light rail, bikes, scooters ... if you use it to get around the city, we write about it. Transit Time is produced in partnership among <u>The Charlotte Ledger</u>, <u>WFAE</u> and the <u>UNC Charlotte Urban Institute</u>.

North Carolina has a \$12 billion funding shortfall for roads. The saga of widening N.C. 51 in Matthews illustrates why.



The widening of N.C. 51 at John Street/Monroe Road in Matthews is one of dozens of local transportation projects facing delays because of a huge state funding shortfall.

by Tony Mecia

Like a lot of roads in the Charlotte region, Matthews Township Parkway (N.C. 51) is becoming more congested.

Apartments, office buildings and shopping centers are cropping up nearby. Downtown Matthews is becoming a hotspot. The nearby Novant Health hospital is expanding. Matthews Township Parkway is one of the major east-west streets in Mecklenburg County, connecting Independence Boulevard to the Arboretum area.

Local leaders foresee that traffic on N.C. 51 is only going to get worse, and they want to do something about it. But here's the problem: Even though plans to improve a mile-long section of N.C. 51 have been in the works for at least eight years, construction could still be another seven years away — or more. The North Carolina Department of Transportation simply doesn't have the money to make it happen.

The push to reduce traffic congestion on Matthews Township Parkway illustrates the larger challenges facing road projects throughout the Charlotte region and the whole state: Costs of labor, materials and land are escalating. Revenues from gas taxes have fallen. Last year, NCDOT <u>said its shortfall on funding for transportation projects ballooned to \$12 billion</u> — nearly double the gap reported less than a year earlier.

Since last summer, the state has revised more than 1,000 separate estimates for right-of-way, utility and construction costs in more than 450 transportation projects. As a result, the state is pushing back dozens of road projects in the Charlotte area. Local transportation planners are expected to get specifics on which ones later this year.

Although the Matthews project is one of many across the state being delayed, it is distinctive in one regard: It has the largest cost increase of any state road project in the Charlotte region, at 966% — more than a 10-fold increase. Its original cost was about \$4 million. It is now on the books as \$42.5 million.



To understand how that happens, you need to understand a little bit about the process of building roads. The NCDOT is responsible for many of the biggest roads in Charlotte, including Matthews Township Parkway. Municipalities like Charlotte largely handle smaller roads, like neighborhood streets.

Making improvements to a state road is a long and complex process that involves individual cities and towns, regional transportation planners and the NCDOT. Between the years it takes from an idea to go to construction, there are countless studies and meetings to determine a project's feasibility, design and cost — and whether it can be placed on the state list of projects that are funded.

In the case of N.C. 51, local transportation planners say they believe the project was first identified by the town of Matthews around 2013. Matthews suggested it to the Charlotte

Regional Transportation Planning Organization, which submitted it to the state for consideration in 2014. A planning document from that time shows that the state gave it the fourth-highest priority out of 44 projects. It was listed as "widen from 4 lanes to 6 lanes, with median and multi-use path," at a cost of just over \$3.9 million.

The state then cleared the project to be funded in its 2016-2025 planning document.

The cost estimate of nearly \$4 million was based on the typical cost of adding lanes statewide. But as planners started digging into details of widening N.C. 51, they realized that their early estimates were way too low.

"When this project was initially funded, they had an automated tool developing the cost based on the real estate prices and what it would cost throughout the state to widen a road," said Neil Burke, deputy director of the Charlotte Regional Transportation Planning Organization. "That process was flawed, because it was done at a very high level. There are unique things about every project throughout the state. Things don't cost the exact same in Matthews as they would in Murphy."

For instance, the cost of acquiring land in Matthews could be much higher than state averages.

In addition, as state traffic engineers started digging into the specifics, it became clear that more would have to be done than adding a couple lanes. The stretch of road already handles more than 33,000 vehicles a day, according to a 2020 study, and traffic was expected to increase so much that the project needed to expand in scope.

"Once we dug into it and started looking at 2040 volumes and did a traffic analysis, we went, 'It's not going to be that simple," said Sean Epperson, a division project development engineer with NCDOT. "We can't add a lane in each direction and address the congestion issue."

State documents from 2018 and 2019 show that engineers considered various alternatives, in addition to more lanes — with a particular area of focus on improving the intersection of N.C. 51 and Monroe Road/John Street. For instance, they examined the feasibility of having turn lanes go behind businesses on the corners of that intersection, like this:

How the cost of widening a Matthews road increased 10x



Ultimately, they settled on constructing what is known as a partial continuous-flow intersection, or CFI. At the intersection, there would be left turn lanes that have already crossed over the lanes with traffic coming the opposite direction. That makes green lights more efficient, engineers say, because oncoming traffic going straight doesn't have to wait for traffic turning left. (If you want to geek out on how these intersections work, <u>check out this two-minute video with officials from Florida explaining it</u>.)

In Matthews, the intersection would look like this:



That design would greatly expand the size of the intersection, which requires the purchase of more land and moving underground utilities — which increases costs.

"It leads to a much more expensive project, unfortunately," Epperson said.

Construction was initially expected to start by 2023, Epperson said, but in 2019, it was put on hold as budgets got tighter. It was still considered "funded," but engineers have more design work to do. Once the project resumes, Epperson says it still needs about one year of design work, plus about two more years to acquire land.

As of right now, the N.C. 51 project is considered funded but on hold, with construction tentatively scheduled for 2029. The dates could change as the state re-evaluates hundreds of construction projects — many of which have had costs rise, though few as dramatically.

Engineers say they are confident that the new projected cost — 42.5 million — is much more accurate that those early estimates.

Project Cost Increase Sample in Division 10

			Latest Verified		
PROJECT	DESCRIPTION	Initial Cost	Cost	% Increase	Status
U-5763	NC 51 (MATTHEWS TOWNSHIP PARKWAY) FROM SR 3356 (SARDIS ROAD) TO SR 1010 (EAST JOHN STREET/MONROE ROAD) WIDEN EXISTING ROADWAY	\$3,986,000.00	\$42,500,000.00	966.20%	Committed
U-3467	SR 1316 (REA ROAD EXTENSION) FROM NC 16 TO SR 1008 (WAXHAW - INDIAN TRAIL ROAD) IN WESLEY CHAPEL.	\$35, 100, 000. 00	\$117,900,000.00	235.90%	Committed
U-5767	US 21 (STATESVILLE ROAD) FROM NORTHCROSS CENTER COURT TO SR2147 (WESTMORELAND ROAD). WIDEN TO MULTILANES.	\$23,200,000.00	\$67,400,000.00	190%	Committed
U-5807	SR 2136 (GILEAD ROAD) FROM US 21 (STATESVILLE ROAD) TO NC 115. WIDEN TO MULTI-LANES.	\$15, 310, 000. 00	\$44,440,000.00	190%	Committed
R-5798	US 74 (ANDREW JACKSON HIGHWAY FROM GRAHAM STREET TO SR 1749(ALLEN POND ROAD)	\$17,370,000.00	\$41,000,000.00	136%	Committed
U-6170	SR 1004 (LAWYERS ROAD) FROM I-485 TO SR 1524 (STEVENS MILL ROAD). WIDEN ROADWAY TO FOR LANES.	\$5,900,000.00	\$13,200,000.00	123.70%	Non-Committed
U-5957	NC 27 (FREEDOM DRIVE) FROM SR 1644 (TODDVILLE ROAD) TO SR 1600 (MOORES CHAPEL ROAD). WIDEN TO 4 LANES.	\$17, 125, 000. 00	\$32,750,000.00	91.20%	Committed
R-5706B	NC 73 (DAVIDSON HIGHWAY) FROM SR 1394(POPLAR TENT ROAD) TO US 29. WIDEN TO MULTI-LANES.	\$97,251,000.00	\$182,370,000.00	87.50%	Committed
U-6030	SR 4979 (BALLAN TYNE COMMONS PKWY), FROM ANNALEXA LANE TO SR5722 (REA ROAD). WIDEN TO FOUR-LANES.	\$30, 700, 000. 00	\$51,600,000.00	68.10%	Non-Committed
U-6028	SR 2472 (MALLARD CREEK RD), FROM SR 2833 (MALLARD CREEK CHURCH ROAD) TO BREEZEWOOD DRIVE. WIDEN TO 4-LANES.	\$20, 100, 000.00	\$32,100,000.00	59.70%	Committed

At a recent meeting of Charlotte-area transportation planners, an NCDOT representative shared examples of some of the surging cost estimates of local road projects, which rose between 59.7% (Mallard Creek Road) and 966.2% (Matthews Township Parkway).

Transportation officials say the delayed projects across North Carolina point to the need for new sources of road funding, which now come mostly from gas taxes. As Charlotte and other urban areas grow, so do the needs for traffic improvements — and the money isn't keeping pace, they say.

Matthews leaders say completing the project remains toward the top of their wish list.

"Widening Matthews Township Parkway from Sardis (Road) to John Street remains a very important project for Matthews," Mayor John Higdon said. "It is a well utilized corridor that becomes particularly congested during rush hour."

Tony Mecia is editor of The Charlotte Ledger.

Related Transit Time article:

• "<u>A huge funding shortfall looms over North Carolina's roads</u>" (Nov. 11, 2021)

In brief...

- Transit sales tax considered for ballot ... in Wilmington: Leaders in New Hanover County are looking to place a quarter-cent sales tax on the ballot in November. The tax would fund transportation infrastructure and improved bus service in Wilmington, the county's largest municipality. Commissioners are expected to vote to hold a public hearing on the matter and could later vote to place the issue on the Nov. 8 ballot. New Hanover County would join Mecklenburg, Durham, Orange and Wake as counties that levy an additional sales tax to help fund transit. (Spectrum News)
- New bus stop benches: A group of transit enthusiasts is installing benches at bus stops in Charlotte. The group, called Charlotte Urbanists, installed the first bench on South Tryon Street near West Arrowood Road. "What we're trying to go for here is we see a small problem that we can fix," organizer John Holmes said. The benches cost about \$80 to make. The group has set up a <u>GoFundMe page</u> to help pay for more. (WCNC)
- Bus feedback sought: The Charlotte Area Transit System is collecting public comments until the end of March on the bus system, including at a few public events in the next few days. (WCNC)



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THE FUTURE OF WHAT'S NEXT

Searching for Ways to Limit Induced Demand in a Car-Loving Society

Reducing congestion and its problems of pollution and carbon emissions won't be easy or cheap. But transportation experts continue to search for answers.

March 7, 2022 • Jake Blumgart



A high occupancy vehicle (HOV) lane near Seattle. (oksana.perkins/Shutterstock)

Editor's note: This is the second in a two-part series about induced demand. Read the first article here.

American transportation planning is all about getting people to travel more and

ensuring that experience is as frictionless as possible. Congestion mitigation is the name of the game.

For much of the post-World War II period that meant building roads, and not much else. In the wake of the 1956 Federal Aid Highway Act, the federal government began pouring \$20 billion to \$25 billion a year into expanding and maintaining the highway system. All that extra capacity, however, did not make driving a pleasure — especially during peak hours.

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As the well-documented concept of "induced demand" or "induced travel" demonstrates, building more highways does not ease congestion. Instead it attracts more drivers, creating more deadly air pollution and more carbon emissions that contribute to climate change.

"For a long time, transportation policy's goal was to get people to travel more, haul goods, go drive those interstates," says Amy Lee, researcher at the University of California, Davis. "That was before we understood a lot of the air pollution and greenhouse gas externalities of driving. We're trying to think differently in an age of climate change, but it's a hard ship to turn around."

In the last few decades, the concept of induced travel has become widely accepted in academic and planning circles. But its implications have not often been acted on. Partially that's because of divisions within state departments of transportation, and because politicians are incentivized to endorse what seems like an easy answer: Surely traffic would ease if we widened this highway a little?

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In recent years, transportation departments in California, Colorado and other states have incorporated the concept more thoroughly into their policy and

planning. The U.S. Department of Transportation under Pete Buttigieg has acknowledged the concept, and in theory has more ability to influence state and local decisions due to the discretionary funds in 2021's infrastructure law.

But in a society where mass car ownership has been the norm for at least threequarters of a century, how do you solve a problem like traffic congestion?

Public Transit Alone Is Not the Answer

In urban centers where traffic congestion is especially bad, and mass transit is available, it is often argued that more train or bus service will make driving easier. If you get more people out of their cars, the vehicles that remain will have a better time of it. This idea has been used to sell mass transit initiatives to the public from Nashville to Los Angeles.

But evidence suggests that building more public transportation alone doesn't solve congestion. New transit lines may initially succeed in luring drivers off the road and easing traffic. But in the medium-to-long term, the effect would presumably be similar to building another lane of highway (although without the same environmental harms). As driving becomes easier, people will notice and take advantage of that fact.

"To the extent that transit draws drivers away, it may induce other people to start driving more," says Jamey Volker, researcher at the National Center for Sustainable Transportation. "It might not be a net increase in induced travel: You may just have the people who left to take transit replaced by people who still drive, but are driving more."

The research on this question isn't as strong as the studies on the induced demand effects of new highways, but what there is suggests outcomes would be similar. One of the more influential studies that quantitatively calculated induced travel demand found that transit wasn't a great boon for easing congestion on its own.

"If you divert a trip from a car to a bus, then you're just creating highway space that someone else will fill up just as if you create a new highway," says Matthew Turner, professor of economics at Brown University.

In 2009, he published a study with Gilles Duranton that showed a close to perfect correlation between lane miles constructed and vehicle miles driven. But less well known is that their report found little evidence that new public transit service would ease traffic.

"The empirical evidence for that claim is not as strong as for the claim that adding one percent of lane miles causes a one percent increase in vehicle miles traveled," says Turner. "But it's suggestive that transit doesn't lead to a decrease in miles traveled in a city."

Turner says there is some evidence that if you build a subway line next to a particular length of highway, that specific road will see less traffic. But it still doesn't reduce vehicle miles traveled in the city overall.

What May Be Most Effective Is Also Least Popular

For economists who study induced travel and link it to basic questions of supply and demand, the solution to traffic is to appropriately price driving during peak hours. People are incentivized to drive because there are no upfront costs to getting behind the wheel, alone, during rush hour.

Many policy experts herald the concept of congestion pricing, which can either operate as a cordon — where those who enter a particularly busy area are charged — or as fees on particular roadways at set times.

"If you want to manage congestion, you want to think about pricing roads," says Turner. "People are resistant because they don't like paying for things that they're used to having for free."

Fees and tolls are easy political targets, especially in the context of the United States where New York City is the only jurisdiction that's approved a cordon-type approach. (Even in that case, the policy's implementation has been delayed time and again.) There are roads where such charges are utilized in Minnesota, Northern Virginia and California, where the state DOT has experimented with high occupancy vehicle (HOV) and high occupancy toll (HOT) lanes.

Turner believes that more American regions will move in this direction eventually, because congestion is a big problem and this is the only available policy fix. But he admits that it may be hard to sell, especially in today's easily weaponized political environment.

"This is a market-based solution, it should be what the Republicans are all about," says Turner. "This is not government handouts of infrastructure. I would think that if anybody objected to it, it would be Democrats. But that's not what's happening. Democrats all live in cities where they have to deal with congestion. They have to actually solve this problem."

Road pricing isn't only controversial in the United States. Efforts to institute congestion pricing in the British cities of Manchester and Edinburgh were defeated by popular vote. Stockholm, Sweden, did approve congestion pricing by popular vote, but only after first experiencing its benefits.

Once and Future Congestion

There is plenty of research that suggests tolling roads more heavily and cordonstyle fee systems both ease congestion. But it is not without complexities and there is some evidence that absent truly radical action, congestion is just a price we pay for a car-centric society.

In California, the Department of Transportation incorporated induced travel into their policymaking in recent years and is trying to change their roadways to ease congestion. But a 2021 study of HOV and HOT lanes, which create incentives for carpooling, did not change the basic logic of induced travel. Traffic flows, on net, actually increased.

The basic logic of induced travel still holds, it turns out, even if the lanes added are HOV or HOT. Toll lanes make it easier to drive for those who can afford it, which increases driving. General-purpose lanes will then see an ease in congestion, making them easier to navigate and resulting in an eventual return to earlier levels of traffic flow. Even adding high occupancy lanes increases the total amount of traffic, vehicle miles driven and emissions generated.

"We reach a new equilibrium, where the total traffic flows increase: You add the new flows on the toll lane to the flows on the general purpose lanes that have returned to the same pre-expansion level," writes Volker in an email message.

There are also limits to the cordon policy, Volker points out. London's famous congestion pricing scheme resulted in short-term reductions in congestion, but long-term journey times returned to previous levels. A 2018 paper by David Metz reported this finding: "While it is difficult to mitigate congestion by means of congestion charging, it is possible to raise revenue."

Metz's findings can also be read this way: It's not that cordon-style congestion pricing doesn't work at all, but that continual adjustments are needed to reflect macro transportation shifts like the rise of ride-hailing, economic trends like inflation or micro changes in driver behavior to evade the policies. In Singapore, for example, prices are adjusted every three months in response to changes in driver speeds: If congestion is picking up again, the fee is increased.

Maybe that's part of why Metz only found congestion pricing continually successful in Singapore, where car ownership is also made extremely expensive. But policy solutions that revolve around making driving very expensive are unlikely to be adopted in the U.S. Similarly radical solutions like Jakarta, Indonesia,'s conversion of all general-purpose lanes on two major roads to HOV lanes during peak hours are not being considered here. (The Jakarta law successfully eased travel times substantially, but when the policy was suddenly eliminated, congestion came roaring back.)

Are we just doomed to live with traffic congestion? The answer in high personal car-ownership societies seems to be a qualified yes. In the long term, electric cars could ease the harms brought on by air pollution and the climate harms of greenhouse gas emissions. Adding public transit and facilities for walking or biking are good in their own right, especially if paired with urban design that enable a happy life without a personal car. Reducing road capacity and parking options in places where there are alternatives to car transport is an option as well.

But in locales where development patterns are auto-centric and require people to drive to do anything, congestion will always be a problem.

"A lot of people who've been in the field longer than I have come to the conclusion that it's an inevitable part of urban life," says Calvin Thigpen, director of policy research with Lime, the micromobility company. "If your goal is to alleviate congestion, it will be hard to achieve. If your goal is environmentally responsible accessibility, endlessly expanding highways is a losing proposition and the alternatives are much more attractive."

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Jake Blumgart is a senior writer for Governing and covers transportation and infrastructure. He lives in Philadelphia. Follow him on Twitter at @jblumgart.

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A 30-year regional transportation plan is usually a dense document of interest only to government officials, road builders and real estate speculators looking for where the next highway will go.

But a new plan for the Durham-Chapel Hill-Carrboro metropolitan area defies that low expectation by making a surprising proposal. It sees a future in which the region asks the state not to spend hundreds of millions of dollars on highway expansion and construction. Instead it calls for more spending on mass transit and making it safer and easier for people to get around on foot and by bike.

The plan may be only a dream given the influence of the road construction industry and state lawmakers' preference for highways over other transportation options.

Or it may be the sign that local governments could lead the way in breaking the fixation with ever more and wider highways in favor of alternatives that are safer, cheaper and friendlier toward the planet.

Looking back, North Carolina's major urban areas that have seen new highways quickly become congested may wish that years ago they had taken the path laid out by this new plan.

News & Observer reporter Richard Stradling <u>recently reported on the unusual 30-year plan</u> approved by the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (MPO). It is striking for what it rejects as much as for what it encourages.

For example, the long-range plan eliminates the expected widening of the Durham Freeway near Research Triangle Park, a project estimated to cost \$251 million. The plan also does not support converting sections of U.S. Highways 70 and 15-501 into expressways.

Early drafts were more traditional, but the planning group's board smartly asked for a different vision of transportation in the region 30 years from now. Hillsborough Mayor Jenn Weaver, who heads the MPO, told Stradling, "It's a longrange plan, and we saw that in the out years we were going to have more congestion and more emissions and that this was not in alignment with our goals and values as an MPO or as a region."

Kym Hunter, an attorney for the Southern Environmental Law Center (SELC) in Chapel Hill, said her group will encourage other MPOs to follow this lead.

"I think previously there's been a very constrained thinking about long-range planning that is tied into what's possible today, and it's just a very business-asusual approach," she said. "And what they did here was say, 'Wait, we have all these goals for climate and equity and safety and this plan is not helping us to get there.' "

Hunter knows better than most how hard it will be to get state and local governments to redirect highway money to support transit and pedestrians. She was part of the unsuccessful effort to <u>block the \$2.2 billion extension of the 540</u> <u>Outer Loop</u> through southern Wake County, although the group did force changes that will <u>reduce the environmental impact</u> of the project. Still, the new thinking has already prompted changes in the long-range planning of neighboring Wake County. Sig Hutchinson, a Wake County commissioner and chairman of the Capital Area Metropolitan Planning Organization, said it made changes in its 30-year plan after seeing the thinking on the western side of the Triangle.

"We redirected funds toward rail and pedestrians.," Hutchinson said. "It was a direct result of hearing what Durham did."

But Hutchinson rightly added a note of reality. Better planning isn't only about breaking the long pattern of responding to growth with more and wider highways. It also requires investing in the options. Durham has yet to say how much it will commit to paying the \$1 billion local share of a \$2 billion, 37-mile commuter rail that could serve the Triangle as early as 2030.

The test of this new and laudable regional transportation vision will be not only what organizations plan, but what they plan to pay.

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LOCAL

Wake Stone seeks to overturn state's decision to block proposed RDU quarry near Umstead

BY RICHARD STRADLING

UPDATED MARCH 17, 2022 7:46 PM





Raleigh-Durham Airport Authority's decision to lease airport property to Wake Stone for a quarry has stirred ongoing controversy. Here's a closer look. BY KEVIN KEISTER



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Wake Stone Corp. is fighting the state's decision to deny a permit for a quarry on property <u>Raleigh-Durham International Airport</u> owns next to Umstead State Park.

The company this week asked the <u>state Office of Administrative Hearings</u> to direct the state to reverse course and issue the permit. In a three-page appeal, the company says the Department of Environmental Quality erred and exceeded its authority when it concluded the proposed quarry would have a "significantly adverse effect" on the park.

The company says it provided DEQ's Division of Energy, Mining and Land Resources detailed plans for how it would operate the quarry in the coming decades without harming the adjacent park. The quarry would be an expansion of the Triangle Quarry, which the company has run between the park and Interstate 40 since the early 1980s.

The state agency renewed the mining permit for the Triangle Quarry in 1991, 2001 and 2011, the company says, "and no denial criteria or other issues arose during those renewals."

The proposed quarry would be across Crabtree Creek from the existing one, on 105 acres Wake Stone has leased from RDU known as the Odd Fellows property. Stone from the 400-foot-deep open pit mine would be trucked across the creek to Triangle Quarry off North Harrison Avenue, where it would be crushed and washed and shipped by truck to customers.

The RDU Airport Authority <u>approved the mining lease in March 2019</u>. In return for allowing the company to mine for up to 35 years, RDU expected to received \$24 million, mostly in royalty payments as stone is removed and sold.

The quarry has been vigorously opposed by people who worry about its impact on Umstead and Old Reedy Creek Road, which is used by hikers and cyclists and is <u>part of the East Coast Greenway trail</u>. They'd like to see the property remain forested and added to Umstead.

Opponents, led by the Umstead Coalition, went to court to <u>contest RDU's authority</u> <u>to lease the property</u> without consulting the four local governments that own the airport. That strategy failed, as the <u>courts ruled the mining lease was legal</u>. Opponents also urged the state to deny the mining permit, which Wake Stone requested in April 2020. DEQ held virtual public hearings and requested additional information from the company seven times, extending the review process for nearly two years.

<u>It denied the permit last month</u>, citing increased noise, "continued loss of natural buffer" and other potential impacts on the park. An administrative law judge will now hear the company's appeal.

The process was different in 1980 when state regulators denied a mining permit for the original Wake Stone quarry, citing its potential impacts on Umstead State Park.

That decision was overturned by the state Mining Commission, and the permit for the Triangle Quarry was issued in 1981.

22, 1:40 PM	Wake Stone appeals denial of mining permit for RDU quarry Raleigh News & Observer
DKT	01 - 2022.03.15 - Petition for a Contested C \mathcal{P}
	Filed Mar 15, 2022 8:00 AM Office of Administrative Hearin
	PLEASE PRINT CLEARLY OR TYPE STATE OF NORTH CAROLINA
	COUNTY OF (1) Wake
	(2) Wake Stone Corporation)
	(your name) PETITIONER.
	(your name) PETITIONER,) v.)
	(3) North Carolina Department of Environmental Quality
	Division of Energy, Mineral, and Land Resources
	(The State agency or board about which you are complaining)
4	I hereby ask for a contested case hearing as provided for by North Carolina General Statute § 150

This story was originally published March 17, 2022 1:02 PM.

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THE FUTURE OF WHAT'S HAPPENING NOW

Why the Concept of Induced Demand Is a Hard Sell

Both the public and policymakers have trouble understanding why building more roads and highways does not reduce congestion.

Feb. 28, 2022 • Jake Blumgart



(Shutterstock)

Gary Toth worked for the New Jersey Department of Transportation for almost 34 years, watching as roadway and highway development spread across the state and congestion grew worse.

The New Jersey he remembers from his youth was a state with a population clustered around rail lines and waterways, marbled with walkable towns and

cities connected by train service. As highways were constructed throughout the state, however, they quickly filled with cars. New Jersey became a byword for sprawl and congestion. The answer, throughout his time in the state transportation bureaucracy, was to add more road capacity to make driving easier.

But that fix, while popular, never lasted. The new roads, the new lanes, soon filled with traffic too. There were, it seemed, always more cars.

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"There were people, even inside transportation agencies, who didn't understand that this was going on," says Toth. "They didn't make the connection between [more roadways attracting more drivers]. So how can we expect the public to make that connection?"

Toth is referring to the concept known as induced demand: New roads will attract more drivers, because giving something away for free means more people will use it. That means adding lanes to a highway will perhaps ease congestion in the short term, but those gains will eventually vanish as the road fills with more drivers.

Induced demand has been theorized for almost 100 years, formally studied beginning in the 1960s, and quantitatively measured in the 1990s and the early 21st century. This basic concept is key to understanding congestion relief, which is arguably the central policy goal of American transportation planning.

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But it is not an intuitive idea. In fact, a series of new studies, the latest published this February, has shown that it is one of the least understood concepts in transportation policy.

"Most people don't know what induced demand is," says Calvin Thigpen, who is director of policy research with the micromobility company Lime. "There's a reason if you're going to become an engineer, if you're going to become a transportation planner, it's in the coursework. You need to learn it because it's not intuitive."

Every year the United States spends billions of dollars expanding roadways in the name of congestion relief. Its easy to understand why. Sitting in traffic is a soul-deadening experience and all the more so if it happens regularly. It also incurs macro-consequences, harming the health of drivers, those who live near major roadways, and driving climate change. Like cigarette smoking, there is never good news about traffic congestion's health outcomes. Transportation, meanwhile, is the largest contributor to America's greenhouse gas emissions.

Nonetheless, spending on highways is set to be turbocharged in the coming months and years, as 2021's infrastructure act routes even more federal funds to state departments of transportation. The politically popular move will be to use that money to build new highways and expand existing ones. Here's why most transportation experts say state and federal officials should resist that understandable temptation. The New Jersey Turnpike near Newark. Every year the United States spends billions of dollars expanding roadways in the name of congestion relief. Spending on highway is set to be turbo charged in the coming months and years, as 2021's infrastructure act routes even more federal funds to state departments of transportation.

(Andrew F. Kazmierski/Shutterstock)

How Induced Demand Works

Everyone has had the experience of being stuck on the highway, encased in bumper-to-bumper traffic, cursing the short-sighted engineers who didn't build the damn road wide enough. But transportation experts say this idea violates the basic principle of supply and demand. If you reduce the cost of something, people will consume that product with greater gusto. That happens with driving too. If the speed of traffic in a given network increases, that prompts people to drive more.

"People think of traffic like a liquid and if you widen the pipe, it won't clog anymore," says Amy E. Lee, of the University of California, Davis, and one of the researchers behind a new induced demand calculator. "But there is not a static or set amount of fluid in this analogy," says Lee. "There could always be more liquid. Because we are talking about humans who are dynamic and responsive to things like a change in the perceived ease with which they can get places."

When highway options expand, people take trips at peak hours that they may have delayed until a different time. They shift away from public transit or go to a restaurant that's an additional five miles away. They head out on the highway when they otherwise may have stayed home or walked to a neighborhood bar.

Induced demand has been found in societies across the world, like Japan and Western Europe. But its logic is especially obvious in the United States where the overwhelming majority of households own cars. There are always more people who could decide to be on the road.

In 2009, Matthew Turner and Gilles Duranton published research from data for all metropolitan areas in the U.S. between 1980 and 2000. They found an almost perfect correlation between lane mile construction and vehicle miles driven.

Critics argued that their research shows transportation engineers are building roads where people want to drive, but Turner argues the causality is reversed. Building more roads caused people to drive more. (It's worth noting that their research did not find that expanding public transit is an answer to induced demand, because those who switched to rail would make the highways momentarily less crowded — tempting more drivers to head out.)

Turner has a different analogy than the water pipe. He compares America's road building to how the Soviet Union distributed bread. If bakeries are free, when they open their doors people start queuing. As a consequence, there are always lines for bread and some people who really need it don't get it.

"We build a bunch of capacity on our highways, which people can get on for free, so they do," says Turner. "If you make more bread and give it away, you won't necessarily get to the back of that queue because people will take more and more."

Why Induced Demand Is Hard to Understand

Despite the almost universally accepted concept of induced demand, corresponding changes to American transportation policy have been limited. Even the failure of congestion mitigation in cities like Los Angeles and Houston, where highway-centric policy has failed most visibly, has not lessened the thirst for more highway dollars. In fact, spending on roads is one of the few policy ideas that most Americans agree on.

Recent research of public comprehension of transportation policy ideas bear this out.

A Feb. 6 study in the journal *Transportation* released the results of a quiz of almost 600 American adults and found that 64 percent of Americans believed that widening roadways had a long-term effect on congestion relief. Reading an explainer refuting the concept only changed their minds in the short term; within six months they were back to embracing their original incorrect understanding.

A companion study published last year found only 24 percent of self-identified conservatives and 45 percent of their liberal counterparts knew that building our way out of congestion is not an option. This trend isn't new or specific to the U.S. In recent years studies have found similar beliefs among similar proportions of Americans, French, Finns and Swedes.

"I've talked to a lot of people in my life, friends and loved ones, about this topic," says Thigpen. "There's almost a resistance to acknowledge that it's a phenomenon that happens time and time again. It's attractive to think we can just build our way out of these problems. But, in fact, we can't."

Thigpen and his colleagues' research showed that those who understood induced demand were much less likely to support expanding highways to reduce congestion. The question is whether it makes sense to target laypeople and convince them about the realities of induced demand or to educate policymakers (elected and bureaucrats alike). When Toth was with NJDOT, his team developed videos to distribute to local television stations, explaining why widening highways wouldn't address their congestion concerns. The idea was to create a mass education campaign about the negative health and environmental effects of ever-increasing amounts of driving, delivered through one of the most popular forms of local media.

"We were going to do something on transportation and land use, and this whole idea of induced demand," recalls Toth, about a period in the mid-2000s. "Tonight at six, why the area you live in may be slowly killing you or affecting your health.' We were going to start developing little PR videos. Then the governor changed, and we lost all the steam."

Thigpen says that targeting policymakers with an education campaign would be more effective.

The challenges, however, are immense. An entire industry has been built up around endless road expansion and advocacy organizations like the American Society of Civil Engineers are skilled lobbyists for continuing current practices. Aerial image of the I10 Katy Tollway Houston Texas. At one point, the highway is 26 lanes wide, making it the world's widest road. (Felix Mizioznikov - stock.adobe)

Engineering schools do not often touch on the topic. In a forthcoming paper, Thigpen and his colleagues surveyed students of planning and engineering schools about the concept and found the latter were much less likely to have knowledge of induced demand. Toth agrees that understanding induced demand was not broadly shared across NJDOT. The planning department, where he worked, was convinced. But the design and engineering departments were not.

"These agencies are so diverse, and there's competing divisions inside the agency," says Toth. "It hasn't yet transformed the approach of all agencies across the board. Then there's certain states, more rural states, where they still have so much open land and they still connect freeway access with economic growth."

Politicians present their own challenges. Transportation experts say that the way to defeat induced demand, and actually ease traffic, would be to price roadways through tolls and congestion fees. But such alternatives are not popular. It's hard

to imagine running a political campaign on such a promise, as opposed to pledging an answer that looks free and easy.

Politicians frequently promise voters congestion relief, and they may even deliver it in the short term. But once the roads begin to get congested again, the elected official who stood proudly behind the ribbon cutting might be long gone.

In short, highway expansion is too easy an answer and may be one America just can't quit.

"Highway expansion is an attractive project regardless of your political orientation or what the state of the economy is," says Thigpen. "There's always a good argument for why we should be expanding highways. We need more jobs, or we need to unlock economic opportunity. There's always a good political argument in favor of that."

This is the first article in a two-part series. The second article looks at how the idea of induced demand could change policymaking within state DOTs and alternative ideas that elected officials could pursue.

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Business group urges NC gas tax holiday. Will it work? Would it provide much relief?

BY RICHARD STRADLING

UPDATED MARCH 16, 2022 4:27 PM

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Customers refuel vehicles at Sheetz on New Bern Avenue in Raleigh on March 9, 2022. Gasoline prices in North Carolina have stabilized since rising sharply over the last month. TRAVIS LONG *TLONG@NEWSOBSERVER.COM*



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RALEIGH

This winter's spike in gas prices has politicians and some interest groups calling for governments to temporarily stop collecting fuel taxes.

Lawmakers in Georgia, for example, <u>are poised to suspend their state's gas tax</u> through May 31, while Florida's legislature <u>approved a one-month reprieve</u> from its pump tax in October, a low point for tourism.

This week, the <u>National Federation of Independent Business</u> called on Gov. Roy Cooper and leaders of the General Assembly to suspend North Carolina's gas tax of 38.5 cents per gallon.

Russia's invasion of Ukraine has driven gas prices to historic levels. The average price of regular unleaded in the state was \$4.16 a gallon Wednesday, up about \$1 since Feb. 1, according to AAA.

Knocking off the state gas tax for a while would be a big help to all North Carolinians but particularly the 7,000 small businesses that belong to NFIB, said Gregg Thompson, the group's state director.

"Gas prices are soaring in North Carolina," Thompson said. "That's bad, because the cost of fuel affects the cost of everything, from raw materials to inventory to pickups and deliveries."

Thompson noted that 20 states are looking at gas tax relief, by either delaying tax increases, suspending collection or providing some sort of rebate.

"We're not the only ones who are encouraging politicians to look at this," he said.

A Cooper spokesman acknowledged that high gas prices have been difficult for North Carolinians and said his administration would "carefully review" the question of suspending the gas tax. But in a written statement, Jordan Monaghan also noted two reasons for hesitating.

"The state gas tax provides critical revenue for building and maintaining roads and bridges," Monaghan wrote. "And with any tax cut, we would need to make sure the savings were actually passed on to consumers at the pump and not just added to the bottom line of the oil and gas companies." House Speaker Tim Moore says he's "open to all options that save consumers money on fuel costs, including reducing taxes." But, Moore added, the best strategy would be to encourage more domestic oil and gas production in hopes that would "make us energy independent and not subject to price hikes thanks to foreign bad actors."

Meanwhile, a spokeswoman for Senate leader Phil Berger said state lawmakers haven't considered the issue.

"There have been no discussions about suspending the gas tax," Lauren Horsch said in an email. "The General Assembly is not in session and is therefore unable to even consider waiving the gas tax."

Including the 18.3-cent federal gas tax, North Carolina drivers pay 56.8 cents in taxes on each gallon of gas (the federal tax on diesel is 23.4 cents a gallon). <u>That's more than every state</u> but California, Washington, Pennsylvania and Illinois and the same as in Ohio.

The N.C. Department of Transportation estimates the average North Carolina driver travels 12,000 miles a year in a vehicle that burns one gallon of fuel every 22 miles. That average driver would pay \$4.04 a week in gas taxes.

The gas tax accounts for half of the state revenue for NCDOT; most of the rest comes from DMV fees and a tax on vehicle title transfers.

In the most recent fiscal year, the gas tax generated \$2.1 billion for NCDOT, or about \$175 million a month.

"A gas tax suspension would result in construction and maintenance project delays," said NCDOT spokesman Jamie Kritzer. "Grass mowing, litter pickup, pothole patching and other operations that are less essential or not directly related to safety would also be impacted in ways similar to what we saw when COVID-19 impacted the motor fuel tax due to lower traffic volumes in 2020."

But Thompson said his group doesn't want to deprive NCDOT of any money. It wants the General Assembly to cover the missing gas tax revenue from the budget surplus or the state's rainy day fund.

NORTH CAROLINA FUEL PRICES

The statewide average cost for a gallon of diesel and regular unleaded gas.



Chart: Richard Stradling • Source: AAA • Get the data

This story was originally published March 16, 2022 12:10 PM.





Richard Stradling covers transportation for The News & Observer. Planes, trains and automobiles, plus ferries, bicycles, scooters and just plain walking. Also, hospitals during the coronavirus outbreak. He's been a reporter or editor for 34 years, including the last 22 at The N&O. 919-829-4739, rstradling@newsobserver.com.

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