# Durham-Chapel Hill Boulevard temporary pavement markings weren't 'obvious'

THE HERALD-SUN BY LAUREN HORSCH OCTOBER 10, 2015

DURHAM — A "road diet" or reconfiguration approved by the City Council early this summer is back in the headlines after temporary pavement markings have caused issues on U.S. 15-501-Business.

In June the council approved the reconfiguration after weeks of discussion and lobby from residents and business owners along the roadway also known as Durham-Chapel Hill Boulevard.

Since the unanimously passed the reconfiguration, residents have been confused by barely visible pavement markings.

The reconfiguration of the road between University Drive and Chapel Hill Road brought the five-lane road down to three lanes — one in each direction and a center turn lane. There was also space for bike lanes and spaces for onstreet parking.

At the end of September — while Durham was in the throes of constant rainfall — residents began writing to the city council with concerns about the pavement markings.

One resident went as far to say that the reconfiguration was "something of a disaster."

On Thursday Mark Ahrendsen, director of the city's transportation department, said the pavement markings on the boulevard were temporary, and the N.C. Department of Transportation was working on finalizing the markings.

The resurfacing of the roadway was mostly completed a few weeks ago, but "typically as part of their resurfacing they apply temporary pavement markings until all the resurfacing work is done," Ahrendsen said.

Because not all the resurfacing is done, the final markings have yet to be laid.

"The temporary pavement markings (in this case) were not very obvious, particularly at night and during the rain," he said. "And this was a change in the traffic patterns."

The city has been working with the NCDOT to speed the process along.

Ahrendsen said there are two phases to the pavement markings — "long lines" and "detail markings."

The long lines are the markings that separate travel lanes, center turn lanes and the bike lanes. Ahrendsen said those were just applied — which has helped alleviate some of the concerns.

The detail markings are the "cross hatching" that will exist between the travel lanes and the bike lanes, as a "buffer area." There will also be buffer areas between bike lanes and the on-street parking.

Other details will be added to the pavement. On Thursday, the city's transportation department added more signs to help with the traffic flow change.

# Public input sought on changes to Durham comprehensive plan involving light rail stops

THE HERALD-SUN BY LAUREN HORSCH OCTOBER 18, 2015

DURHAM — As Durham continues to await decisions on the status of the Durham-Orange Light Rail Transit system, city and county planners are preparing to make adjustments to the future land use map to help speed the process of station development.

The 17-mile light rail system is planned to connect East Durham to UNC Hospitals, and over those 17 miles, 11 light rail stations are proposed within in Durham's borders.

Back in 2005 when the Durham comprehensive plan was created, a "suburban transit area" tier was created to help the later phases of the light rail system. Now, though, those South Square, Patterson Place, Leigh Village, Erwin Road and Alston Avenue areas are being re-designated as "compact neighborhoods."

"Compact neighborhoods were adopted to provide areas for higher density," said Hannah Jacobson of the city-county planning department.

Compact neighborhoods also offer a chance for mixed-use developments including retail, residential and office space. The hope is compact neighborhoods will also offer multiple transportation options and be able to host affordable housing around the transit stops.

The changes to the land use map around are being made to prepare for development along the proposed transit line and station stops.

The Ninth Street area of downtown Durham is already a compact neighborhood.

Jacobson recently brought an update concerning compact neighborhoods to the joint city-county planning commission, weeks before a second round of community meetings is held to get public feedback and answer questions about the changes.

"What we're doing at all these stops is creating mini-cities, is what the future of these areas are all gonna be, and most of them are 70 percent at least impervious surface," County Commissioner Wendy Jacobs said.

She was concerned about how these compact neighborhoods would impact the environment around them — specifically the Jordan Lake watershed.

Jacobs wanted to know if there are ways to ensure some environmental and growth protection through the design process of the compact neighborhoods.

City-County Planning Director Steve Medlin said the department is a few years away from the design phase of the neighborhoods, and that the current meetings are intended to help define appropriate boundaries for the compact neighborhoods.

Planners for the city and county said work is being done to evaluate how to "transition" the compact neighborhoods as they flow closer to residential, non-compact areas — such as varying heights of buildings to better suit each area.

The department is looking to fine tune those buffers and transitional areas. The department also wants to hear from the public to help determine how the designs of the compact neighborhoods should be done.

Each of the areas in question has its own issues — and members of the planning commission were quick to point those out — including aging multi-family complexes.

Durham City Mayor Pro Tem Cora Cole-McFadden was on the defensive for neighborhoods around Erwin Road — which in previous years had been hard hit by construction of the Durham Freeway.

Cole-McFadden said the Crest Street neighborhood was "totally traumatized" by that construction.

"I hope nothing that we do will cause them any more trauma," she said. "I'm very sensitive to that one."

Jacobson said the planning department has held multiple community meetings with Crest Street residents to hear their frustrations.

Over the next few weeks the planning department will be holding meetings with residents around the proposed compact neighborhoods.

The first will take place on Tuesday at Githens Middle School and will focus on the amendments at Leigh Village, Patterson Place and South Square. That meeting will be from 6:30 to 8 p.m.

The second meeting will take place from 6:30 to 8 p.m. Oct. 27 at the Durham County Commissioners' Chambers at 200 E. Main Street. That meeting will focus on changes to the areas around Erwin Road and Alston Avenue.

# Does the light-rail line have a math problem?

Indy Week By Jeffrey C. Billman October 14, 2015



GoTriangle's response was precisely what Robert Healy and Eric Ghysels didn't want.

For starters, it was too much—a Google Drive link to 31 documents totaling more than a thousand pages, much of it dense, hyper-technical information. More problematic, though, was when it arrived: Thursday, Oct. 8, more than a month after their initial records request but just five days before the end of the public comment period for the proposed Durham-Orange County light-rail line's Draft Environmental Impact Study.

Had those records come earlier, the two academics could have crunched the data and incorporated their findings into their comments, which GoTriangle would then have to answer. Had they come later, after the deadline, they could have filed a public-records complaint with the state. As it was, they were stuck.

"I just got this dump of info from GoTriangle ... at the last minute ... what I feared," Ghysels, the Edward Bernstein Distinguished Professor of Economics at UNC-Chapel Hill, wrote in an email to the INDY.

"Such a mound of material," echoed Healy, professor emeritus of environmental sciences and policy at Duke.

Neither of them is particularly keen on GoTriangle's 17-mile, \$1.6 billion light-rail system, which, if all goes to plan, is scheduled to open around 2025. It's not that they oppose public transportation. Quite the contrary. Their beef, they say, is with local leaders' insistence on light rail at the expense of what they consider less sexy but more beneficial and cost-effective solutions such as bus rapid transit.

"Even if one accepts Go Triangle's ridership estimates," Healy testified at a public hearing Oct. 1, "LRT will reduce traffic on 15-501 by less than 5 percent. The project does not serve N.C. Central, nor Durham Tech, nor any of our continuing care communities, nor even downtown Chapel Hill. It serves only a tiny fraction of the large low-income population in northeast and southeast Durham. Not the low-income area of Chapel Hill. Not the large low-income population in rural Orange County."

The first part of that statement is key: if the ridership estimates are correct.

By 2035, GoTriangle projects that it will have more than 23,000 boardings per day. (A few years ago, the first projections pegged that number at about 12,000. GoTriangle made the revision after accounting for existing transit riders who do not pay to use public transportation, either because their employers purchase bus passes or they ride free circulators.)

Healy and Ghysels aren't so sure about that. Charlotte's light rail, they point out, has a daily ridership of about 16,000, and it serves a much larger population.

"Frankly," Healy testified, "I think it quite likely that the ridership estimates are exaggerated by optimistic and hidden assumptions."

If he's right, the rail line won't generate enough revenue at the fare box, and taxpayers may find themselves on the hook. But Healy admits he can't be sure. Until Thursday, he lacked the documents he needs to make such a determination.

For the last two years, Healy and Ghysels have tried to learn more about the assumptions GoTriangle's consultants made about who will use the rail. The transit agency, they say, told them that information would be included in the DEIS. When that study was released by the U.S. Environmental Protection Agency on Aug. 28, however, it wasn't there.

On Sept. 2, Healy sent GoTriangle an email requesting, among other things, the "discrete choice models described in Appendix K2 [of the DEIS]" and a spreadsheet "with acronyms and values for input/exogenous variables for [the] 2040 prediction sample." On Sept. 11, GoTriangle acknowledged receipt and promised a response within a week. On Sept. 19, Healy and Ghysels attended a public information hearing, where they say GoTriangle planning director Patrick McDonough told them that the records could not be provided "for civil rights reasons," Healy later recalled in an email to GoTriangle.

(McDonough told the INDY that the National Environmental Policy Act mandates that everyone have equal access to these types of records; McDonough determined that Healy and Ghysels wanted the agency to create a new document, which he feared would run afoul of federal law. In any event, the software that generates those estimates runs upward of a million lines of code, far more than Excel can handle.)

So Healy revised his request. On Sept. 23, he asked for all consultant reports pertaining to ridership estimates. And then he waited for 15 days. Now, he's working his way through the deluge.

For his part, McDonough says GoTriangle feels "reasonably good" about its projections. Some light-rail opponents, he says, misunderstand some of the data. For example, they have claimed that GoTriangle is assuming 40 percent of area residents will be carless by 2035. Not so, he says. Instead, the agency estimates that 40 percent of light-rail riders will be carless, which makes more sense.

More important, the Federal Transit Administration has so far green-lighted the project, which wouldn't have happened if the feds deemed the projections wonky. In fact, the FTA told GoTriangle to have a third party double-

check its projections. That report, which the agency received within the last couple of months, "dovetails with what we expected," McDonough says.

While the comment period for the EIS is over, Healy and Ghysels will have plenty of opportunities to make their case should they find anything interesting in the data trove. The light-rail project is still several steps removed from securing federal funding, and after the General Assembly capped state contributions to light rail at \$500,000 in this year's budget, the state's \$138 million commitment remains in doubt. Before the session adjourned, the House repealed that cap. The Senate will take it up next year—an election year, so who knows what will happen. Without state buy-in, it's unlikely the feds will cut a check.

"What the Senate does will have a great impact on what comes next," McDonough says.

http://www.indyweek.com/indyweek/does-the-light-rail-line-have-a-math-problem/Content?oid=4812199





Francois Birgand, assistant professor with N.C. State, rides his bicycle on Clark Avenue over a "sharrow" or shared-right-of-way marker, which is designed to help vehicle drivers be aware of bicycle traffic. Takaaki Iwabu 2012 News & Observer file photo

N.C. State researchers checked cyclists' and drivers' understanding of street rules

'Bicycles May Use Full Lane' signs helped explain cyclists' rights

THE NEWS & OBSERVER BY BRUCE SICELOFF SEPTEMBER 11, 2015

RALEIGH -- "Share the Road" signs are supposed to promote harmony among car drivers and bicycle riders, but a new N.C. State University study suggests that our streets might be safer if we switched to signs that say: "Bicycles May Use Full Lane."

Bicycles are lumped together with automobiles for most purposes under North Carolina traffic laws. Bike riders often travel near the right side of the traffic lane, but they don't have to. The law allows bikes to use the center of the lane.

Researchers wanted to see whether drivers and cyclists understood the law. People who took their survey were shown streets with no signs – or with "Share the Road" signs, with shared-lane "sharrow" markings on the pavement, or with "Bicycles May Use Full Lane" signs.

After they saw those signs, they were asked questions about whether it would be legal, and whether it would be safe, for cyclists to ride in the center of the lane.

The "full lane" sign sent the strongest message – especially for beginner cyclists and for commuters who drive their cars to work. After seeing this sign, survey respondents agreed that cyclists are allowed in the center of the lane and do not have to move right to let motorists pass, and that motorists should wait for a break in traffic to pass.

"It's just a clearer explanation of how motorists and bicyclists should interact," said George R. Hess, a professor of natural resources at NCSU. "In North Carolina, this has been the law for a long time."

"Share the Road" did not make much of an impact.

"In our study, we found that the way people said they would behave was the same with or without the 'Share the Road' sign," Hess said. "It wasn't adding anything."

Delaware stopped posting "Share the Road" signs a few years ago. The city of Wilmington recently began experimenting with "Bicycles May Use Full Lane" signs.

Sharrows also helped some survey respondents ge the message, but they were less effective than the "full lane" sign. Hess and Associate Professor Nils Peterson, who ride their bikes to work, published their study in the journal PLOS ONE, online at bit.ly/1g7rxeC.

Raleigh and other cities have been painting sharrows on their streets in recent years to help cyclists decide whether it's better to ride in the center of the lane – especially on narrow streets, where there isn't enough room for cars to pass bikes safely.

Eric Lamb, Raleigh's transportation planning manager, said he'll be interested to read the study.

"Regarding cyclists and taking the full lane, anything that better communicates this to cyclists and drivers is a good thing," Lamb said.

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## PASS WITH CARE

From the North Carolina Driver's Handbook: A bicyclist staying to the right in their lane is accommodating following drivers by making it easier to see when it is safe to pass, and easier to execute the pass. Drivers wishing to pass a bicyclist may do so only when there is abundant clearance and no oncoming traffic is in the opposing lane. When passing a bicyclist, always remember the bicyclist is entitled to use of the full lane.

N.C. Division of Motor Vehicles

# Committee votes to put Wake County rail projects on the back burner

Triangle Business Journal By Jeff Jeffrey Friday, October 23, 2015

Wake County residents shouldn't expect to see officials break ground on a new rail system any time soon.

An advisory committee made up of Wake County community members and elected officials voted Thursday to focus on improving the county's bus system. Those improvements are likely to include adding high-capacity buses and increasing bus frequency.

While rail remains highly popular among members of the transit advisory committee, Wake County Commissioner Sig Hutchinson says many community members thought it made more sense to invest in the bus system now and the rail system later.

"With the way the county is growing, we need to improve our transit now. The best way to realize more of an impact more quickly is to focus on the bus system," says Hutchinson, who chairs the commission's Transit Committee.

Hutchinson says the best way to ensure a rail system is successful is to make it regional in scope. That means waiting to pour millions into a rail system until the long-awaited Durham-Orange line is ready to move forward.

"The vote elevates the conversation about the need for a regional approach to rail," Hutchinson says. "We don't want to get into a situation where we invest in an expensive rail project, but because it doesn't go into Durham, no one wants to ride it and since we already spent the money we can't invest it elsewhere."

That said, the proposed Durham-Orange line is itself in limbo thanks to a provision in the state budget that capped state spending on light-rail projects at \$500,000 – a far cry from the \$1.6 billion estimated cost of the project. The cap effectively derailed the project until at least next year when lawmakers reconvene for the short session.

Another complicating factor for Wake County rail is that a proposal to use existing freight rail tracks in the area as part of the passenger system was met with resistance from Norfolk Southern, which leases the tracks from the North Carolina Railroad.

Hutchinson says studies have shown it is possible for both passenger and freight trains to use the tracks, even if it would require additional infrastructure to ensure both systems continue to operate on time. But that's an expensive proposition, he says.

Now that the Wake County advisory committee has weighed in, a technical committee will develop plans for improving the county's bus system. Those plans will be sent back to the Transit Advisory Committee, which will then present recommendations to various transit boards and the County Commission.

The commission is expected to put a half-cent sales tax to cover additional transit investments on the ballot for next year's election.

# Durham, Orange residents weigh in on environmental impact of proposed lightrail project

Triangle Business Journal By Jeff Jeffrey Thursday, October 29, 2015, 8:32am EDT



Rendering of Durham light rail station.

Triangle residents appear to have plenty to say about the proposed \$1.6 billion Durham-Orange light-rail line.

After calling for the public to weigh in on the project, GoTriangle received more than 1,300 comments in response to a draft environmental impact study the agency is preparing in conjunction with the Federal Transit Administration. About half of the comments came from unique commenters, says GoTriangle spokesman Brad Schulz. The public comment period ran from Aug. 28 to Oct. 13.

The study is a key step in the process of getting the project approved for federal funding. It covers everything form where the trains will go, where they will stop, what the economic impacts may be, how safety measures will be installed and which properties may be affected along the way.

The comments will be reviewed by GoTriangle, the FTA and AECom, a consulting firm hired to work on the project. The FTA will advise GoTriangle on which comments require a substantive response in the final report, which is expected to be delivered in February.

How the Durham-Orange line will be funded is of critical concern because the state is not going to be much help, as it stands now. A provision in the state budget passed by the General Assembly limits state funding for light-rail projects to \$500,000. That's down from the \$138 million the state had been expected to contribute over the next 10 years.

Read: Durham, Chapel Hill mayors: Light-rail project not dead yet

GoTriangle is working to get state lawmakers to overturn that provision. But the earliest that could happen is April, when the General Assembly reconvenes for the short legislative session.

"We're continuing to work with state policymakers to emphasize that the \$138 million contribution was based on datadriven analysis," Schulz says. "We're hoping they will look past whatever their other concerns are and focus on the data." Durham and Orange county residents have already approved sales tax increases to cover transit improvements. Local officials hope to convince the federal government to cover about half the project's cost.

Meanwhile, transit officials in Wake County are waiting on the Durham-Orange line to come together before moving ahead with their own proposed rail line. An advisory committee made up of Wake County community members and elected officials voted last week to focus on improving the county's bus system rather than moving ahead on a rail project.

# Road Worrier: Wake turning away from rail transit

Wake transit planners want to quadruple bus service over the next 10 years

Local trains seen as too difficult and expensive for now

Rush-hour trains to Durham an option for the future

THE NEWS AND OBSERVER BY BRUCE SICELOFF NOVEMBER 2, 2015

RALEIGH -- The need for good bus service in Wake County is overwhelming, so we should quadruple it over the next decade.

The obstacles to rail transit here may be insurmountable, so we shouldn't count on catching a train to work in the near future.

That's the current thinking from planners, business types, politicos and a big ad hoc citizen committee helping county commissioners plan for a referendum – expected in November 2016 – to authorize a half-cent sales tax for transit investments.

Keep in mind that these are just the latest ideas. Over the past 20 years, Wake and Triangle leaders have cycled through a mind-numbing series of plans for local and regional transit service.

Wake is playing catch-up with Orange and Durham, where voters approved the transit sales tax three and four years ago. Leaders in Wake have dithered over whether they should help plan for the entire region or worry only about its biggest county.

Wake's 72-member Transit Advisory Committee made its big push for buses in late October. The group dropped a "rail rapid transit" option it had considered earlier for Wake County, but it introduced the prospect of joining with Durham County – probably in a distant future – to operate rush-hour trains for commuters.

## **Building bus ridership**

There was an endorsement for extending a wider web of bus routes across the Wake County map, to cover rural neighborhoods and outlying towns that have no transit now. But the group said the county should invest 60 to 70 percent of the sales tax funds in high-traffic corridors, with more frequent bus service to build heavy ridership.

"One of the reasons so few people take the bus now is that we just don't have enough bus capacity – both coverage and frequency," Sig Hutchinson, a county commissioner, said Monday. "You don't have a system that's functional. You spend all day on the bus trying to get from point A to point B. It's important to get started so we can build a viable transit system that people want to take."

The recommendation includes about 20 miles of bus rapid transit, which rolls on rubber tires but enjoys some of the benefits of light rail – including, in some cities, an exclusive roadway where cars can't get in the way.

"ONE OF THE REASONS SO FEW PEOPLE TAKE THE BUS NOW IS THAT WE JUST DON'T HAVE ENOUGH BUS CAPACITY – BOTH COVERAGE AND FREQUENCY. YOU DON'T HAVE A SYSTEM THAT'S FUNCTIONAL. YOU SPEND ALL DAY ON THE BUS TRYING TO GET FROM POINT A TO POINT B".

Sig Hutchison, Wake County commissioner

Electric-powered light-rail trains were knocked out of the running in Wake early this year, replaced for consideration by a rail rapid transit line using self-propelled rail cars called DMUs (diesel multiple units). Now the commissioners have been advised to forget about rail rapid transit altogether.

That's because Norfolk Southern, the region's dominant freight railroad, has sounded warnings about the safety, expense and complicated logistics involved in the trains and tracks that would be needed to provide rail transit service every 15 to 30 minutes.

"If these operations ... were contemplated in a joint freight-passenger operation, the passenger operations would essentially crowd out the freight service," John V. Edwards, who oversees passenger policy for Norfolk Southern, said in a June 16 letter to County Manager Jim Hartmann.

"If the contemplated passenger operation was envisioned on separate, dedicated tracks..., the footprint of the passenger infrastructure required to support such an operation would be significant."

North Carolina Railroad, which leases its tracks to Norfolk Southern, will have a better handle on this in 2017 when it finishes a study about track layouts and long-term railroad needs in the Triangle.

Given these doubts as they face a 2016 referendum, Wake leaders don't want to make promises about trains they might not be able to keep.

#### **Durham-Wake commuter trains**

"We could not deliver a DMU option that was financially viable in a time frame that worked for all of us," Hutchinson said.

But he says there may still be trains in our distant future. Hutchinson approves of a new wrinkle in the advisory committee's recommendation: Wake should plan and make investments in a multi-county commuter-train line, probably the one proposed for N.C. Railroad tracks from Durham through Research Triangle Park and Raleigh, ending in Garner or beyond.

"For the plan to be viable, it needs to go from Clayton, I believe, to Durham," Hutchinson said. "We all agreed we're not going to wait for Durham. We're going to move forward with our plan."

That's a funny way to put it. Wake not waiting for Durham?

Durham stopped waiting for Wake County years ago.

Voters in Durham County were eager in 2011 to team up with Wake on a new regional commuter rail line. They approved a half-cent sales tax to pay for big bus and rail transit investments. Their first priority was to get trains running back and forth at rush hour from Durham through Research Triangle Park and Raleigh to Garner.

But when Wake balked at even considering a transit plan, Durham shrugged and turned to its other Triangle neighbor.

Now, along with bus improvements, a light-rail line from Chapel Hill to Durham is the priority for planning efforts and transit investments in Orange County – which approved the transit sales tax in 2012 – and Durham County. The rush-hour trains have been shelved.

"Unfortunately, because Wake had delayed, we had to move forward," Durham Mayor Bill Bell said Monday. "We couldn't afford to wait. Our focus right now has been the plans we've put together for light rail."

"TO JUST IGNORE THE OTHER COUNTIES WOULD BE ILL-ADVISED. WE NEED TO CONNECT. ... I WOULD HOPE IF WAKE IS SERIOUS ABOUT IT, THAT WE'LL FIND A WAY TO MAKE THAT HAPPEN."

Bill Bell, Durham mayor

But Bell has always held out hope for a rail line through RTP, and he welcomes the new glimmer of a Triangle-wide perspective in Wake County.

"To just ignore the other counties would be ill-advised," Bell said. "We need to connect. ... I would hope if Wake is serious about it, that we'll find a way to make that happen. It's just that important."

### **BUS RAPID TRANSIT CORRIDORS**

Wake planners will look at four corridors – pointing north, east, south and west from downtown Raleigh – for likely investment in bus rapid transit:

- Capital Boulevard, heading north toward I-540.
- New Bern Avenue to WakeMed.
- Wilmington and Saunders streets, south toward Garner.
- Western Boulevard and N.C. 54 west toward Cary.