

## **FTA report warns against Durham-Orange Light Rail delay. GoTriangle asks Duke to negotiate**

The Herald-Sun By Tammy Grubb and Dawn Baumgartner Vaughan March 5, 2019

DURHAM – A draft federal risk report sent to GoTriangle last week delivered some good news — and some bad news — for the 18-mile Durham-Orange light-rail project.

GoTriangle “has been diligent” about tracking risks to the light-rail project, the Federal Transit Administration report said. It advised taking steps to address several lingering concerns.

It also advised GoTriangle to set the project’s budget to at least \$2.5 billion to cover recent changes and rising construction costs. The cost estimate does not include up to \$900 million in anticipated interest payments on debt.

But the report also stressed the importance of the project staying on schedule, a growing concern after Duke announced last week it will oppose efforts to run the rail line outside its medical center on Erwin Road.

“Importantly, the cost, schedule, and risk analyses in this report assume that no major delays occur in FTA or other approvals for D-O LRT funding ... that would materially impact the construction progress,” the FTA draft report said. “Such scenarios are beyond the scope of the risk modeling in this report and would be cause for re-evaluation once these types of delays are quantifiable.”

There is no schedule for releasing a final report, FTA officials said in an email Monday.

GoTriangle received the draft report Feb. 26 — the day before Duke administrators told the transit agency they won’t sign critical agreements for the project.

The draft report does not address that development, which adds more risk to the project. Durham city officials have suggested using eminent domain to secure Duke’s land; it’s unclear whether there is enough time and money for a legal battle with Duke. GoTriangle’s Board of Trustees could talk about it next week.

### **INVITING DUKE BACK**

On Monday, GoTriangle CEO Jeff Mann and Durham County Commissioner Ellen Reckhow, the chair of the GoTriangle Board of Trustees, wrote Duke, asking the university to participate in mediation over the next four to six weeks to resolve Duke’s concerns.

GoTriangle also released Tuesday a copy of the memorandum of understanding that Duke Executive Vice President Tallman Trask signed in 2016, pledging to collaborate on the light-rail line’s planning, design and implementation.

Duke President Vincent Price appointed Trask as Duke’s lead representative in light-rail negotiations in November. A [GoTriangle report released last week](#) said Duke staff rarely attended planning meetings since 2016 and delayed providing important documents.

Duke’s latest decision — not to sign a cooperative agreement with GoTriangle — “creates significant challenges for the Light-Rail Project, effectively nullifying two decades of work.” GoTriangle CEO Jeff Mann and GoTriangle Board of Trustees Chair and Durham County Commissioner Ellen Reckhow wrote in the letter to Price.

The letter also notes that Duke did not raise concerns about vibrations, utilities, electromagnetic interference, liability and the planned route on Erwin Road during the project’s environmental studies, completed several years ago. That process analyzes potential issues and solutions before the rail corridor is set during the engineering phase.

That would have been the appropriate time for Duke to raise its concerns, they said. Nonetheless, GoTriangle is committed to finding solutions, meeting Duke’s construction standards and protecting patient safety, they said.

"We remain hopeful that we can resolve differences and address Duke's concerns in such a manner that will allow this important infrastructure to move forward," Mann and Reckhow said in the letter.

The issues with Duke are among [several hurdles that the light-rail project has faced](#) over the last several years.

## **RAILROAD CONCERNS**

Meanwhile, N.C. Railroad Company officials also told GoTriangle last week that they will not lease right of way in the existing rail corridor through downtown Durham until engineering and other details are final. The FTA's report noted that engineering plans were over 60 percent complete as of Dec. 31, and should be 90 percent complete by June.

The railroad agreements are one of the significant risks facing the light-rail line, the draft report said. Others include a higher rate of condemnations to secure land for the system, increasing third-party demands, and construction concerns, including unexpected soil contamination.

GoTriangle needs better construction contracts and "front-end documents," the draft report said. GoTriangle also should assign more people "to build and sustain a more effective working relationship" with its partners and secure land needed for the project, it noted.

The project is "well defined" with the exception of pending design updates and the downtown Durham corridor, it said.

Last week's letter from Duke noted concerns that remain unresolved after 20 years of meetings with GoTriangle officials, including the decision to build the light-rail line on Erwin Road, and how noise, vibrations and trains could disrupt emergency traffic and patient care. Duke President Vincent Price also [noted the concerns in a November letter](#).

[DPAC general manager Bob Klaus also has criticized how GoTriangle responded](#) to his concerns about a plan to close Blackwell Street to cars. Downtown Durham stakeholders criticized the plan, and it was replaced in December with another plan to build a tunnel under Pettigrew Street.

The tunnel and other recent changes to the light-rail project have added \$237 million to the cost, FTA officials said in the draft report.

## **FINAL SCORE PENDING**

The 18-mile light-rail line would connect UNC Hospitals in Chapel Hill with Duke, downtown Durham and N.C. Central universities in Durham, among 19 proposed stops.

The draft report did not include the FTA's final score for the project, which will be based on how complete the plans are, how much local money is dedicated to a project, and how it meets other criteria.

The project received an overall score of "medium" in July 2017, meeting the minimum score for a project to enter the engineering phase. Light-rail projects funded since 2010 have earned higher scores, including Charlotte's LYNX Blue Line and Blue Line Extension projects, which rose from "medium" to "medium high" before getting federal money.

FTA officials do not comment publicly about proposed projects. The draft report gives GoTriangle feedback that can help improve the project application before it is submitted to the federal government.

GoTriangle has been working for over a year with an FTA-appointed project management oversight contractor to complete the project's design, schedule and costs, and confirm that state and local funding is available.

The next step is submitting a \$1.23 billion grant application to the FTA by April 30, a state deadline for having all the project's local and state money in place.

GoTriangle needs to have the federal funding in place by Nov. 30 to meet a second deadline for receiving \$190 million in state money. The light-rail project cannot move forward without state and federal money, GoTriangle officials have said.

Durham and Orange counties — plus private and public donations — would cover the remainder of the light-rail costs using money from a half-cent sales tax, and car rental and registration fees. Durham is expected to pick up roughly \$796 million for its share of the rail line; Orange County has capped its share at \$149.5 million.

The counties also could be asked to cover a gap — at least temporarily — in private and public donations. GoTriangle's nonprofit GoTransit Partners is expected to raise the full \$102.5 million in land and cash donations over time; there's only \$15 million so far.

The cost-sharing agreement also allocates each county its responsibility for an estimated \$847 million to \$908 million in interest on short- and long-term debt.

## **\$130 million later, prospects look bad for Durham/Orange rail**

WRAL.com By Travis Fain, WRAL statehouse reporter March 1, 2019

How did Durham and Orange county taxpayers spend \$130 million on a light rail project that may never be built?

Planning. Engineering. Consultants. Federal rules.

GoTriangle has signed dozens of contracts and amendments with engineering firms, researchers and even one golf course designer since planning began for a 17.7-mile line connecting Durham and Chapel Hill. Things hit the skids last week when it became clear Duke University wouldn't give up a crucial piece of land.

It's unclear whether the project can recover. Even if Duke signs off, or is forced by the government to give up its land, there is an unknown gap between the money planners have and the money they need.

An agreement is also still needed with the N.C. Railroad Company. State and federal deadlines loom.

The \$130 million spent so far came from half-cent sales taxes that Durham and Orange county voters approved starting eight years ago. None of the money went to equipment or construction. The only land purchase was \$5.3 million for a rail operations and maintenance facility, and that is the subject of a lawsuit.

The rest of the money has gone largely toward design and engineering, which is not complete. Federal rules, to get the \$1.23 billion in federal funding project planners want, require local outlays up front for design work, Interim Project Director John Tallmadge said Friday. If approved, half that money can be reimbursed.

Design work in Seattle, for an 8.5 mile light rail extension, ran almost \$200 million, according to a project spokesman there. That's not a full apples-to-apples comparison, in part because some of that spending came after federal approvals the Durham/Orange line doesn't have.

The money spent so far falls largely into a number of categories:

- Design and engineering work
- Environmental studies
- Studies of where to put stations
- Traffic impact studies

- A "parking behavior study"
- Studies predicting cash flow
- Consultants helping to secure a hoped-for \$1.23 billion in federal funding
- A professional golf course designer brought in because the line would through a part of UNC's Finley Golf Course

The biggest contract: \$75 million, after multiple amendments, to HDR Engineering, which has been handling design work.

The second biggest: A \$39.4 million deal with AECOM, which was called URS when it first signed on in 2010, to provide "program management consulting services" and push forward planning, research, design, engineering, construction and other elements of the plan.

Spokespeople for HDR and AECOM didn't respond to WRAL News messages seeking comment Friday.

Very little about the project is set in stone. Duke's announcement last week was widely seen as a huge blow, but the project's director said Friday that his team is working as if construction will start as planned next year.

"Obviously, it is up to GoTriangle's Board of Trustees about how to proceed," Tallmadge said Friday.

The board meets this week, and Tallmadge said members will also consult elected leaders in Durham and Orange counties.

GoTriangle staff said they couldn't provide a total expected cost for the line Friday, saying they'd recently gotten new data from the Federal Transit Administration and were going through it. Among other things, a tunnel in downtown Durham has been added since a September estimate put design and construction at nearly \$2.5 billion, not including debt service or operating costs.

"We will be able to put a number on it," Tallmadge said Friday. "We're just working through the process right now."

That makes it difficult to ascertain how far the project is from full funding. GoTriangle spokesman Mike Charbonneau said last week that the Federal Transit Administration told the group to add \$237 million because of design changes, but he said Friday that doesn't capture the full cost changes staff are working to assess.

With low interest rates, it's possible some costs could come down. But the FTA also has a new rule requiring projects to potentially cover an extra 10 percent of total project costs. That's to avoid abandoning projects in the face of overruns after the federal money is put in.

The plan has been to use a combination of state, federal and local tax dollars to finance the bulk of construction and to raise about \$102.5 million from private or other sources. But that goal was set in December 2017, and a large hoped-for donation "really stalled" in recent months, delaying private fundraising, Tallmadge said Friday.

A finance team presentation from early January indicated the project had just \$15 million of private money in place, all from land donations along the line from UNC Hospitals and N.C. Central University.

The state legislature last year set an April 30, 2019, deadline to have the private money secured if state taxpayers are to kick in their promised \$190 million.

## **Duke won't back Durham-Orange light rail project. 'Major setback,' says GoTriangle**

The Herald-Sun By Tammy Grubb and Dawn Baumgartner Vaughan February 27, 2019

DURHAM -- Duke University will not sign a critical agreement needed for the \$3.3 billion Durham-Orange light-rail project, GoTriangle officials announced late Wednesday.

"GoTriangle and local elected officials have worked closely with the university to address concerns so Duke's action today is especially disappointing," GoTriangle officials said in the release.

"This is a major setback for the Durham and Orange county communities and the entire Triangle region," they said. "GoTriangle will work with the elected officials in Durham and Orange counties and the Federal Transit Administration to assess all available options and decide upon a course of action."

Duke notified GoTriangle of its decision Wednesday in a joint letter from Duke President Vincent Price, Duke Executive Vice President Tallman Trask III and Duke University Health System President and CEO A. Eugene Washington.

"Notwithstanding these many good-faith efforts, it has unfortunately not been possible to complete the extensive and detailed due diligence, by the deadlines imposed by the federal and state governments, that is required to satisfy Duke University's, legal, ethical and fiduciary responsibilities to ensure the safety of patients, the integrity of research, and continuity of our operations and activities," they said in the joint letter.

The letter cited concerns that the light-rail project has become more complicated and faced growing financial challenges, in particular a \$90 million elevated track that was proposed last year for the Erwin Road corridor. Raising the track was intended to address Duke's concerns about emergency vehicle access to its hospital and protection of a vital power line that runs under Erwin Road.

They also noted concerns for patient health and safety, saying the "acceptable tolerance for risk in these circumstances must be as close to zero as possible, and we have an obligation to our patients and the community to uphold that standard."

Several Duke concerns remain unresolved, they said, including electromagnetic interference with medical and research equipment, noise and vibrations, potential disruption of power and other utilities serving the medical center, and Duke's liability if something were to go wrong.

Duke had asked earlier this month for a \$2 billion insurance policy from GoTriangle and the state of North Carolina to protect it from possible damages.

"Over the past 20 years, the light rail has gone through many changes in its proposed route, the equipment that would be used, the total cost, the funding sources and many other aspects of the project," Michael Schoenfeld, Duke's vice president for public affairs and community relations, said in an email.

"During that time, Duke has been consistent in communicating about the significant risks to patient safety that are created by placing a rail line down Erwin Road immediately adjacent to a busy hospital and biomedical research center, and we have always acted in good faith in our interactions with GoTriangle and other agencies," he said.

The cooperative agreement between Duke and GoTriangle would have been the last one necessary for the 17.7-mile light-rail line between Chapel Hill and Durham.

The next step, elected officials said Wednesday, is talking with the FTA about how this will affect the project. FTA officials already were planning a higher contingency budget because of the Duke and NC Railroad delays, Orange County Commissioner and GoTriangle board member Mark Marcoplos said.

N.C. Railroad officials, who signed a memorandum of understanding with GoTriangle in November, said in a news release Wednesday they are willing to sign a lease once engineering plans and other details are final.

Marcoplos said they also asked for an “unbelievably high,” one-time payment next year as part of its negotiations. Half of the \$30 million payment would be for insurance, he said, and half would be for a performance guarantee.

GoTriangle’s engineering plans are only about 20 percent completed, according to N.C. Railroad officials. The lease would allow the light-rail trains to operate in and adjacent to the existing railroad through downtown Durham.

The plan has depended on Duke donating land for the light-rail corridor on Erwin Road. Without Duke’s participation, officials have said the light-rail project is unlikely to advance to a federal funding application.

GoTriangle had been spending roughly \$4.8 million a month since last year on the project. Estimates show over \$130 million has been spent so far, including on environmental studies.

Half of that money could be refunded if the Federal Transit Administration approves a \$1.23 billion grant that GoTriangle has been counting on to fund half the project’s construction cost. The FTA will consider Duke’s position in deciding on the grant, if GoTriangle now continues to seek the grant.

The grant application has an April 30 deadline. A federal decision would be needed by Nov. 30 to meet a deadline for getting \$190 million in state funding.

## **EMINENT DOMAIN**

Duke’s decision came just hours after a Durham City Council member suggested GoTriangle could use eminent domain to force Duke to sell its land in the proposed light-rail corridor.

“How can the very economic trajectory of our region be determined by one wealthy, private landowner?” City Council member Mark-Anthony Middleton told The News & Observer and The Herald-Sun.

“I don’t want to hear any more bellyaching from GoTriangle, nor prompting or cajoling from public officials about black folk going hat in hand to Duke begging for our economic future while not boldly and redemptively using the power that made us beggars in the first place,” said Middleton, who is African American. “We’ve heard the case; now show us how serious you really are. Welcome to the unsexy part of the actual work of racial equity.”

The grant application deadline is tight and makes it unclear if there is time to pursue taking of Duke land. Eminent domain would require a third-party appraisal and potentially could end up in court.

Orange County commissioners Marcoplos and Rich said they weren’t sure eminent domain would be pursued. Even if GoTriangle did get Duke’s land, Marcoplos said, they still would have to work with Duke officials on the project.

“The thing I can’t get out of my head is how did we come to a place where probably less than five guys sitting in their ivory tower have (power) over a regional system like this,” Marcoplos said. “They are responsible for wasting a lot of the taxpayers’ money by misrepresenting what happened and using that to justify fact they didn’t like (the light-rail plan).”

The Durham Coalition for Affordable Housing and Transit said in a statement Wednesday it is shocked and disappointed, calling it one of Duke’s worst decisions in history.

“If President Price and his administration had tried to work as partners to address and resolve any concerns, the light rail project would be moving forward successfully,” the coalition said in the statement sent by member and former state legislator and Durham Mayor Wib Gulley. “It is clear that the Duke administration never tried to work in good faith to support and advance this project,” the coalition wrote.

"The Duke administration's choice may well kill this project, and today's decision will rank alongside Duke calling in city police to gas and beat students 50 years ago as one of the two worst decisions in the university's history," the statement said.

"We urge our elected leaders and GoTriangle to consider and pursue any and all other avenues possible to advance the light rail project that is so important to our community's future," said the coalition, which supports affordable housing at light-rail stops.

In a phone interview, Orange County commissioners Chair Penny Rich said Duke's decision shows the university is "honestly out of touch with the people in Durham."

Duke "should be ashamed, because it could be responsible "for killing this project and everything that comes along with it," Rich added. The light-rail project was expected to generate public and private investment in affordable housing, jobs and other economic development, in addition to forming one leg of a regional transit system.

"Everybody needs to take a deep breath now, and we need to figure out what are our options," Rich said.

## **YEARS OF TALKS**

Duke's decision also follows a 20-page GoTriangle report released Monday that outlined six years of talks with Duke about the light-rail project and how it might affect Duke's medical and research facilities.

The report and documents submitted to the Federal Transit Administration during that time show Duke did not raise objections to the proposed light-rail route but did ask GoTriangle to move a station serving the Duke and Durham VA medical centers.

Project supporters and opponents have lobbied Duke in recent weeks.

After "an urgently considered vote," the Duke Faculty Union issued a news release Tuesday night urging Duke to back the project and help improve transportation "for the most marginalized members of society."

The Faculty Union represents instructors and lecturing fellows in Duke's Trinity College of Arts and Sciences, Graduate School and Center for Documentary Studies. Faculty with Duke's Nicholas School of the Environment sent a similar letter to Duke administrators Friday asking for them to reconsider their position on light rail.

Critics of the light-rail plan have petitioned Duke to continue opposing the project, which they have said is too expensive, connects too little of the Triangle and does nothing to ease congestion, pollution or increasing gentrification.

Middleton called on the Durham Committee on the Affairs of Black People, Durham CAN (Congregations, Associations and Neighborhoods), the People's Alliance, N.C. Central University, Coalition for Affordable Housing and Transit and the Durham Housing Authority to make their case not just to Duke, but to "ask those of us entrusted with immense power where our land grabbing, tunnel digging resolve has gone."

Middleton said when he and the rest of the [City Council approved the rail operations maintenance facility rezoning](#) in South Durham, parcels of that rezoned land were acquired through eminent domain.

"What makes Duke University so different?" Middleton asked.

Neighbors of the [rail yard have filed a lawsuit over the rezoning](#).

If the light-rail project falls apart, the agreement among Orange and Durham counties, GoTriangle and the Durham-Chapel Hill-Carrboro regional transportation planning group requires them to meet within 15 business days to consider other solutions, including a search for other money; delaying, suspending or reducing the project; or stopping the project.

If they stop the project, officials would meet within another 20 business days to draft a new transit plan. If they can't agree, it would go to mediation and then an arbitration hearing before three judges: one picked by each county and one picked jointly.

## **Duke president explains light-rail decision. Feds say cost now up another \$237M**

The Herald-Sun By Mark Schultz February 28, 2019

DURHAM -- Duke's president is defending the university's decision not to support the Durham-Orange light-rail project, even as Durham's mayor says backers may yet pursue eminent domain to make it happen.

In a letter to the Duke community on Thursday, President Vincent Price acknowledged many are now questioning Duke's support for Durham.

"In this particular case, Duke was asked to make financial, land and other commitments that would have required taking unacceptable risks to the safety of our patients and the public, and the continued viability of our research and health enterprises," Price said in the letter.

"To do so under the imposed deadline would have abdicated Duke's responsibility, and my personal responsibility as president, to act prudently in our institutional and public interest."

The letter reiterated concerns in a letter Price and other university leaders sent GoTriangle on Wednesday, in which they said the project had undergone many changes and faced growing financial challenges.

In particular, Price wrote, "Duke has been consistent about the significant challenges created by placing a rail line down Erwin Road adjacent to a hospital and biomedical research center."

Price said Duke remains committed to a regional transit network using all available transportation technologies.

But in public emails to media outlets and others, Durham Mayor Steve Schewel said GoTriangle remains committed to the light-rail project and doing what it must to obtain necessary rights of way..

"Duke's decision not to sign the cooperative agreement is a terrible blow to this project and our community," Schewel wrote one constituent Thursday. "The GoTriangle board of directors is looking at all of its options, including eminent domain, as I have informed President Price of Duke."

Duke chief spokesman Michael Schoenfeld responded to that possibility in an interview with Spectrum News.

"I expect that they will carefully consider the political and legal costs of making such a move," he said.

In an email exchange with the News & Observer and The Herald-Sun, Schoenfeld, vice president for public affairs and government relations, declined to comment further on a possible legal fight.

But he did say Duke made its concerns about light rail known in 1999 when then President Nan Keohane stated Duke's opposition to an elevated track outside the hospital on Erwin Road, according to an article he provided from the campus newspaper The Chronicle.

"Duke University has been supportive of light rail for more than 20 years," Schoenfeld wrote. "And it is also true that for more than 20 years we have raised concerns about a routing it down Erwin Road adjacent to a hospital and biomedical research center."

### **BUTTERFIELD, PRICE RESPOND**



Also Thursday the area's two congressmen weighed in, joining a host of local elected officials' criticism of the university's decision.

"Duke is jeopardizing the mobility options of thousands of its neighbors in Orange and Durham counties, especially those in our most marginalized communities," U.S. Rep. G.K. Butterfield said in a statement.

"This decision really brings into question Duke's commitment to be a true community partner," he continued, calling upon the university to reconsider. "Duke has historically been good for Durham and, most certainly, Durham has been good for Duke. This relationship now appears to be fractured which is very unfortunate."

U.S. Rep. David Price, who is chairman of the Transportation, Housing, and Urban Development Appropriations Subcommittee, noted that the light rail line has been part of a planned regional transportation network that also includes enhanced bus service, bus rapid transit, and Garner-Raleigh-Cary-RTP-Durham commuter rail.

He said GoTriangle has responded in good faith to "ever-escalating demands," particularly from Duke and the North Carolina Railroad.

As subcommittee chair, Price said: "I am committed to continuing to work with local partners in support of expanding public transit alternatives for our region. But make no mistake: this is a historic setback from which it will take years, if not decades, to recover."

### **NEW PROJECT COST ESTIMATE**

The 17.7 mile light-rail line would connect UNC Hospitals in Chapel Hill to N.C. Central University in Durham, with stops at Duke, downtown Durham and other planned stations along the way. The light-rail line has been projected to start operating in 2028.

On Thursday, a GoTriangle spokesman said the agency has received updated financial news from federal officials reviewing the plan.

Because of a new tunnel and other design changes in downtown Durham to address railroad safety concerns and unresolved agreements like with Duke, GoTriangle must now add \$237 million to project costs and contingency, GoTriangle spokesman Mike Charbonneau said in an email.

That raises the project's estimated construction costs from \$2.47 billion to nearly \$2.71 billion.

But the federal Department of Transportation also said projected borrowing costs have been too conservative and that there will likely be savings from lower, long-term interest rates. GoTriangle is evaluating how that will affect the financial plan, Charbonneau said.

The total cost of construction plus interest on the debt has previously been estimated at \$3.3 billion.

## **GoTriangle report: Duke put one hurdle after another in path of Durham-Orange light-rail**

The Herald-Sun By Tammy Grubb February 26, 2019

DURHAM -- A GoTriangle report released just days before a critical decision says meetings with Duke University to talk about the \$3.3 billion Durham-Orange light-rail project "began to reveal bizarre contradictions, complications, and a general dissatisfaction" after 15 years of collaboration.

The report also says Duke staff members rarely attended planning meetings after 2015, delayed critical information about their needs, and only in recent months raised concerns about how the light-rail system might affect sensitive medical and research equipment.

GoTriangle spokesman Mike Charbonneau provided the report, “D-O LRT and Duke: A Brief History,” in response to questions from The News & Observer and The Herald-Sun. Duke’s Board of Trustees is being asked to decide by Thursday whether it will support the light-rail route and donate land for it along Erwin Road.

Michael Schoenfeld, Duke’s vice president for public affairs and community relations, could not be reached about the report Tuesday.

In an email Friday he said Duke officials still are reviewing data about possible electromagnetic interference from the light-rail system. Talks with GoTriangle are continuing, he added.

Without Duke’s support, the 17.7-mile light-rail line connecting UNC-Chapel Hill, Duke, downtown Durham and N.C. Central University could die before it is submitted April 30 to the Federal Transit Administration for a \$1.23 billion grant. Campus and community members have rallied and written Duke leaders in recent weeks asking them to keep the project moving.

Meanwhile, GoTriangle officials have been considering a Duke request made in December for a \$1 billion insurance policy protecting its medical and research operations against direct or indirect light-rail damages, the report says. A Feb. 19 memo from GoTriangle light-rail project manager John Tallmadge said Duke is now asking for a \$2 billion insurance policy.

That is “unacceptable,” Tallmadge said. He noted that Durham and GoTriangle officials met with Duke President Vincent Price on Feb. 8 and asked if his mind was made up.

“He replied that it was unlikely that he could be made comfortable, but that the odds were not zero and that they would continue to work in good faith on the issues,” Tallmadge said.

The report also rebuts Price’s statement in a [November letter to GoTriangle and Durham officials](#) that Duke never agreed to a light-rail route in front of its medical center on Erwin Road.

Several years of documents submitted to the FTA show that Duke, unlike other community and university partners, only mentioned one concern: where a station that serves the Duke and Durham VA medical centers is located.

Duke officials “strongly prefer” a light-rail station between Trent and Flowers drives, “as it is more consistent with the university’s Master Plan,” Duke Executive Vice President Tallman Trask is quoted as saying in a 2015 letter.

Moving the Duke/VA station is one of several changes GoTriangle has made to meet [Duke’s expectations](#), the report says. GoTriangle also has studied noise and vibration concerns, it says, and elevated the planned light-rail track along Erwin Road at a cost of \$90 million to avoid conflicts with a critical hospital power line, traffic and emergency access to the hospital.

GoTriangle also studied an alternative to Erwin Road parallel to the Durham Freeway, which Trask suggested in September 2018, but it would affect two cemeteries and the historically African-American Crest Street neighborhood near the Durham VA Medical Center.

“These efforts to work with Duke have cost Durham residents millions of dollars in taxes and fees,” it says.

#### **ONLY ONE QUESTION**

The report notes that Trask, whom Price named Duke’s light-rail representative in November 2018, has been involved in the talks since 2000 when he and other members of a policy committee agreed to consider a rail line running along Erwin Road.

The project stalled until state lawmakers authorized Durham and Orange counties in 2009 to levy a half-cent sales tax for transit projects. Durham and Orange voters approved the tax, respectively, in 2011 and 2012.

The only question remaining about Erwin Road in 2013, the report says, was where to put the Duke-VA medical centers station. Duke and GoTriangle officials met roughly 10 times over the next two years to talk about Erwin Road, the station and Duke's concerns, it says.

Trask did not object to running the light rail on Duke land and was aware that right-of-way would need to be negotiated, GoTriangle reported in October 2014. The following January, the report says, he indicated Duke "would consider providing land."

That year was the first time GoTriangle heard Duke's concerns about the importance of preserving tree buffers at the Washington Duke Inn and Golf Club, the report says. The light-rail route runs between the golf course and U.S. 15-501 near Cameron Avenue.

In August 2015, GoTriangle released environmental studies of the proposed route for public comment before seeking FTA approval to continue planning.

The preferred alternative submitted to the FTA "was the culmination of more than a decade of discussion, which had always included Erwin Road as a key part of the transit corridor," the report says. "Well over 1,000 comments were received on the DEIS [draft environmental impact statement] during the 45-day public comment period. No comments were received from Duke University on the DEIS or any subsequent Supplemental Environmental Assessments."

GoTriangle continued to meet regularly throughout 2015 with university, hospital and community representatives, the report says. UNC and NCCU staff actively participated in those meetings, it says, but Duke staff members rarely attended.

### **ELEVATED TRACKS, ELECTRICAL ISSUES**

By late 2016, GoTriangle was preparing to submit the project for FTA approval to enter the engineering phase. At that point, the route would be set, and financial, construction and operations plans would be finalized.

GoTriangle notes that on July 22, 2016, staff met with a Duke official who appeared "more interested in arguing about whether the light-rail project was viable" than in working on its design.

Duke officials continued to emphasize protecting their vital power supply line and emergency access to the hospital. They also noted a potential conflict with the future Lenox Baker Pediatric Rehab Center that summer and agreed to provide project plans to GoTriangle, it says. GoTriangle still had not received those plans in January 2018, it says.

In November 2017, Duke and Durham VA officials got their first look at the elevated Erwin Road route, which a Duke electrical engineer had suggested. Officials with both medical centers and the university were concerned about building the light-rail tracks on the street, the report says, and also asked about taking another look at the possibility of a station in front of the medical centers.

The final plan leaves the Duke-Durham VA Station at Trent and Flowers drives.

### **TREE PROTECTION**

Once the elevated tracks were designed to preserve emergency access to the hospital, the report notes, Duke officials began citing tree protection as their primary concern. The light-rail route could be adjusted at that point, but not moved from the Erwin Road corridor without starting the entire federal process over again.

"Duke University requested that the light rail alignment remain off Duke University property from west of LaSalle Street heading east at a minimum, but possibly all the way down Erwin Road based on the impact to the Duke Forest protected trees," the report says.

That November 2017 meeting also was the first time Duke and GoTriangle officials had significant talks about the potential effects of noise, vibrations and electromagnetic interference, the report says. GoTriangle asked Duke to provide a list of sensitive buildings and equipment, the report says; Duke officials questioned the need for light-rail vibration studies and the Buchanan Boulevard Station.

Light-rail trains generate electromagnetic radiation because they get power from high-voltage overhead guidelines and return it to traction power substations through the rails. They also cause temporary changes in the earth's geomagnetic field as they travel. Some electromagnetic radiation is expected, but too much can cause problems for sensitive equipment, like MRI and diagnostic scanners.

Duke also wants to set a threshold for construction-related vibration that "is 40 times more stringent than the standard for especially sensitive operating rooms," Tallmadge said in the Feb. 19 memo.

GoTriangle has offered several ideas, including the creation of a website and app to monitor construction sites and Duke facilities, alerting contractors if work exceeds set levels and stopping the work. The agency also is looking at [electromagnetic interference reduction technology that the Maryland Transit Administration is installing](#) on its Purple Line light rail route.

### **SHIFTING DUKE CONCERNS**

Duke raised other concerns as engineering work advanced in 2018, including the possibility that the light-rail train might make Duke employees who still drive late for work.

Duke officials also questioned how the elevated tracks would affect the medical center's appearance and how a buffer would be maintained around the Global Health Research Building on Erwin Road.

Duke officials initially told GoTriangle that a 250-foot buffer was required, but that Duke had gotten permission for a 198-foot buffer, the report says. But when a GoTriangle consultant questioned the distance in June 2018 and asked about working with the building's security officer, the report says Monte Brown, Duke's vice president of administration, said he wouldn't "waste staff's time right now since the Board of Trustees will never approve the design because of tree impacts."

Brown, who also was responsible for getting the Lenox Baker plans to GoTriangle, produced the security requirements for the research building in November 2018. He also expressed concerns that using pre-emption technology, which gives emergency vehicles the right of way in traffic, to navigate the piers holding up elevated light-rail tracks might not work for hospital traffic from other counties.

In September 2018, the report says, Trask told GoTriangle officials that some Duke trustees would oppose elevated tracks regardless of their design. Trask and Tallmadge, the light-rail project manager, met Nov. 26 to talk about the project, and agreed to share information about the possible effect of vibrations, noise and electromagnetic interference on Duke buildings and equipment, it says.

Tallmadge also asked if Duke's trustees could consider a property donation agreement as a show of their commitment to the project, the report says. Trask said he would talk with Price and the trustees; GoTriangle sent him a copy of the donation agreement Nov. 29 as FTA officials arrived to conduct their final project review.

A revised version that addresses construction vibration and electromagnetic interference was sent to Duke on Feb. 15, Tallmadge said.