THE FUTURE OF COMMUNITY DESIGN

Booming Research Triangle Looks Again to Passenger Rail

The metro area in North Carolina faces unprecedented population growth and traffic congestion, which has triggered a study of possible commuter rail service. But the legacy of a failed light rail project casts a shadow on the plan.

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Over the next 25 years, the Triangle region of North Carolina, encompassing Raleigh, Durham and Chapel Hill, is anticipating an unprecedented population boom, with more than a million new people and 800,000 new jobs expected by 2050. So local leaders are asking themselves some tough questions: Where's

everybody going to live, and how are they going to get around?

One potential answer to the mobility question — one with lots of unknowns and provisos — is new commuter rail service connecting the densest urban areas in the region. Earlier this month, GoTriangle, the regional transit authority, published a feasibility study for a potential commuter rail line on around 40 miles of existing track running from West Durham to Clayton, in Johnston County.

With high costs and a challenging path to federal funding, not to mention a lot of raw feelings over the demise of a long-planned light rail project in 2019, the project's completion is far from a sure thing. But supporters say the rail project and other improvements are a critical part of accommodating the region's growth without becoming choked by traffic congestion.

"We want to make sure that we have these investments in place before it gets

really bad, and not fix the problem later," says Charles Lattuca, GoTriangle's president and CEO. "There is no way that you can add a million people to a region and not need a lot more transit service."

A New Plan for Commuter Rail

A plan to run commuter rail through the heart of the Triangle region has been on the books for decades, but has been subject to renewed focus only for the last few years since the cancellation of the Durham-Orange light rail project. There's already track and right of way carrying freight and intercity passenger trains through the area. The existing infrastructure is well-positioned to "serve as a backbone" for regional transit improvements, Lattuca says.

"We're really fortunate here to have this corridor in which to study the feasibility of putting a commuter passenger service," he says. "The corridor transects the region. It's in all the right places and it has been active since the 1850s."

But making improvements to the track to support more frequent commuter rail service, including adding double tracking in highly trafficked sections, would still be a heavy lift. According to the feasibility study, the cost for the full project would be around $3 billion and take around 12 years to develop. And because the challenges are "not distributed equally across the region," as the study says, GoTriangle has broken it down into three sections for a potential phased approach to the project.

The most expensive and difficult section is around Durham on the western portion of the line, which would cost around $1.6 billion and bring in an anticipated 3,000 daily riders by 2040, the authority estimates. The eastern section is considered the least complex, costing $600 million-$700 million over eight years, and the central portion would cost an estimated $800 million to $1 billion over a decade. The central and eastern portions would each see about 4,000 riders a day by 2040, according to the study.

ot Competitive for Federal Funding — Yet

In addition to the logistical challenges of adding new daily service on the corridor, the commuter rail project currently faces tough odds in getting funding from the Federal Transit Administration's (FTA) Capital Investment Grants Program, a critical source of support for many large-scale rail projects around the country.

One reason is the geographic pattern of the region, with several nodes of density rather than a single, linked high-density corridor like many other metro areas have, says Doug Plachcinski, executive director of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization. While regional planners are pushing for denser residential development in areas close to the rail corridor, those changes will take time to implement.

The FTA evaluates applications based on a variety of factors, from population densities to congestion relief and cost-effectiveness. The commuter rail project is on the cusp of qualifying, says Katharine Eggleston, GoTriangle's chief development officer.

"There's a scale that the project has to meet: You put your numbers in and you see where you fall on the scale," Eggleston says. "This project has always been kind of right on the line of what it would need to be able to qualify, and based on updated ridership and cost estimates that we've developed during this phase [of the feasibility study], we're really right on the lower side of that line. So we're kind of just out of range to qualify based on today's snapshot."

That means the project would need to be developed largely with local funds. Voters in Durham, Orange and Wake counties have created a half-cent sales tax to support transit projects. Priorities in the counties' transit plans include regional connections like the commuter rail project would provide. But there are other demands on local transit funding as well, including needed improvements to bus service frequency.

The state isn't currently funding the project. But it does support improvements for intercity service operated by Amtrak, Lattuca says, and some of those improvements would also benefit the commuter rail service. One option for GoTriangle is to move ahead with one phase of the project with local funds, and then pursue federal and state infrastructure grants for smaller projects, like

eliminating grade crossings, that would lower the overall cost of the project in the long term. In combination with population growth, that could make the project more competitive for FTA funds.

“If we do a phase and that phase takes eight or 10 years, the population will grow to such a point, perhaps, where our eligibility will become better and we’ll be in a better position in our projected ridership,” Lattuca says.

Construction of a 40-mile, commuter rail corridor in the Research Triangle region of North Carolina calls for a phased implementation plan spread over 12 years and costing $3 billion, according to a feasibility study. (Go Forward)

Treading Carefully

With the feasibility study published, GoTriangle is currently soliciting public feedback on the plan. It will then present several options to its board, which could recommend moving ahead with the whole project or a phase of the project, or vote to drop it altogether. If the board wants to pursue a commuter rail

project, it would then need the approval of the counties and area metropolitan planning organizations.

There are good reasons to move quickly, like locking in certain costs ahead of inflation, Lattuca says. But there are good reasons to move slowly too, and to avoid committing to a project that doesn't have solid regional support. In Durham, the legacy of the failed light rail project, which ate up nearly $160 million of public money before it was killed, still looms large.

"People are disappointed that we spent a lot of money on the light rail and we don't have a project to show for it," says Ellen Beckmann, the transportation manager for Durham County. "I think we are more cautious of making promises … We want more certainty that we would be able to accomplish these projects."

For Durham, where the challenges of building out commuter rail are greatest, the half-cent sales tax might technically raise enough money to cover the cost of the western section. But it could come at the cost of other priorities in the county transit plan.

"We want to improve the bus service today — that's a high priority of our residents," Beckmann says. "We want to be able to implement some projects sooner and not wait 10 years for this project to be done."

Any potential progress on the commuter rail project would involve funding from multiple counties. Wake County is by far the largest of the Triangle counties and home to the capital city of Raleigh. And despite not being party to the Durham-Orange light rail project, planners there have taken some tough lessons from that project's failure.

That includes the development of a concurrence process for large-scale projects, which is designed to bring all the necessary parties together early in the planning process in order to avoid wasting time and money, says Anna Stokes, the Wake transit program manager for the Capital Area Metropolitan Planning Organization.

Decision-makers all over the Triangle agree the region needs some kind of high-capacity transport service that provides an alternative to highways, Stokes says. But it's still too soon to say whether the GoTriangle commuter rail is that project.

“I would not guess which way it’s going to shake out,” Stokes says.

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Where ‘Vision Zero’ Is Working

A dramatic reduction in traffic deaths in US cities is possible, despite huge headwinds. In some places, progress is starting to become visible.

A pedestrian crosses Washington Street in Hoboken, New Jersey, one of a handful of US cities where traffic safety has been improving dramatically. *Photographer: Jeenah Moon/Bloomberg*

By Angie Schmitt
November 25, 2022 at 1:03 PM EST

When I was a reporter at the transportation advocacy publication *Streetsblog*, we used to do a little data exercise looking at places that had declared themselves “Vision Zero cities.” Vision Zero is an international safety campaign that aims to completely eliminate traffic fatalities and injuries. Like other journalists, we tried to determine if these civic pledges made any detectable difference in the number of roadway deaths.

At the time, in 2018 and 2019, it was very hard to tell. The data was noisy, especially at the city level. A lot of cities treated Vision Zero more as a declaration than the kind of radical change in policy it demands. Some traffic safety advocates were skeptical of Vision Zero’s prospects for success. And as US traffic fatalities continued to grow during the Covid-19 pandemic, many have remained so.

But some solid evidence is now emerging that it is working, or can work.

A recent chart and report from the International Transport Forum is what gives me hope. In the report, “Monitoring Progress in Urban Road Safety,” the authors compare the decrease in road traffic deaths across 22 major cities that participated in a pledge to reduce traffic deaths. New York City is the only US city included, and one of just four where the city significantly outperformed national-level safety figures.

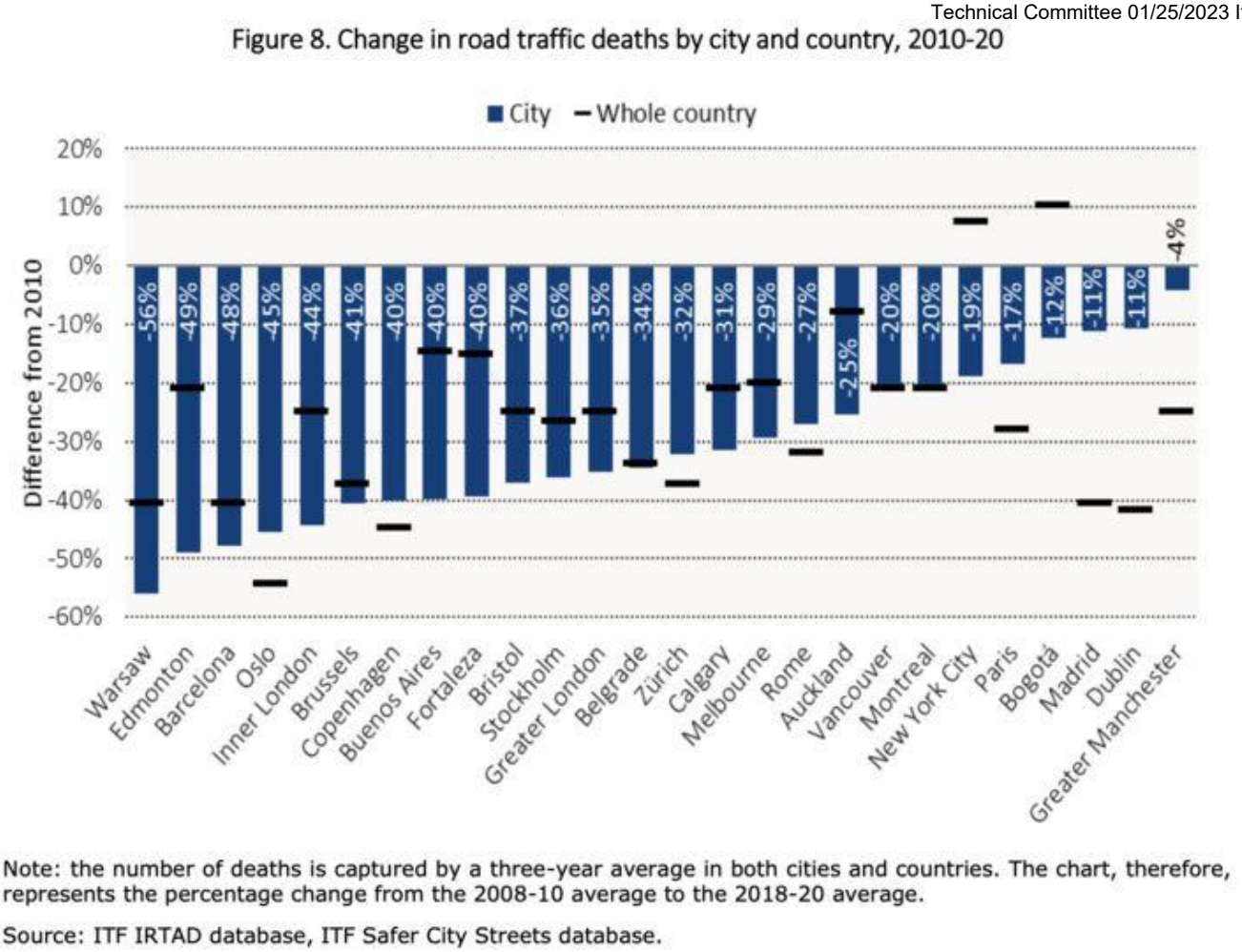

Chart courtesy of International Transport Forum

Between 2010 and 2020, NYC's traffic deaths fell 19%, while the US death rate rose 8% – an improvement that translates into a significant number of saved lives. And there is reason to believe that the city can do better now that the framework and the constituency for safety reforms is in place.

It's important to remember that, in the US, Vision Zero cities operate in a national environment of increased traffic deaths – *especially* for pedestrians, who are overrepresented in urban crashes. Nationally, thanks to a combination of factors – most importantly growth in SUVs and extra-large pickups – deaths of pedestrians have grown 62% nationally since 2009, according to the nonprofit advocacy organization Smart Growth America.

Now, New York City is a bit of a special case. With 9 million people, it's almost like a city-state, and its traffic department is more sophisticated and well-resourced than any other US municipality. Mayor Eric Adams recently committed $3 billion to Vision Zero efforts. Other major cities like Phoenix and Houston – where traffic deaths have been soaring – devote fewer resources to the problem of traffic deaths.

New York City also benefits from the fact that it has a relatively walkable and transit-friendly built environment. Only about 50% of city households even own a car, which makes it especially fertile ground for pedestrian safety advocacy groups. Those organizations have fought for lower speed limits and recently won a state-level law change that will allow speed enforcement cameras to operate in many locations throughout the city 24 hours a day.

Reducing traffic deaths the way New York City did is a labor-intensive process that requires a lot of institutional capacity.

And New York City's comparative success has been tempered. The pandemic years have seen rising roadway death rates, as in so many other US cities. And also like many cities, it must deal with a state department of transportation whose programs are not always well aligned with Vision Zero objectives: Victims of traffic violence have to make regular pilgrimages to Albany to win safety measures like the ability to use speed cameras in school zones or lower speed limits.

Federal policy, too, is often not been well aligned with advocates' proposals. Even though Secretary of Transportation Pete Buttigieg made a verbal commitment to the Vision Zero framework and announced a national roadway traffic safety strategy in January 2022, most federal transportation money flows to states, with few strings attached. States use that money to build the kind of arterial roads that are responsible for 63% of pedestrian deaths. These same state DOTs may then resist and overrule local efforts to improve safety.

So cities that adopt Vision Zero policies are battling not only national headwinds like larger and more dangerous passenger vehicles and cultural issues related to the pandemic that have contributed to reckless driving. They also are trying to create an entirely new framework for addressing a problem oftentimes against the systems in place at the more powerful and better resourced agencies handing down programs and policies.

Other success stories are starting to emerge. Hoboken, a small, densely populated city of 60,000 just outside NYC's borders, has achieved dramatic improvements in pedestrian safety thanks to a potentially widely replicable formula that has relied a lot on inexpensive intersection designs, particularly a practice called "daylighting" that improves visibility. Hoboken hasn't had a traffic death in four years.

Nearby Jersey City has not had a single traffic fatality so far this year on non-state roads, and only five deaths on state roads. Advocacy group Safe Streets JC credits the city's progress with aggressive action on road diets, bike lanes and smaller scale interventions like curb bump-outs. By comparison, similarly sized Cincinnati has had 30 deaths so far this year.

That being said, I'm not suggesting anyone start taking a victory lap. Vision Zero cities like Washington, DC, Seattle and Portland, Oregon, are still seeing traffic deaths rise. Last year Portland had its highest total since 1990. In cities like Nashville and Columbus, Ohio, which have just started their Vision Zero journeys, the impact remains unclear.

Reducing traffic deaths the way New York City did is a labor-intensive process that requires a lot of institutional capacity. Cities need staff that can identify problem areas and then develop and implement cost-effective solutions – often against the background of a fair amount of controversy. There is also whole data management project associated with tracking progress and fine-tuning the approach.

The work is not necessarily any more complex, I suppose, than what goes into building a highway. But right now, it's still the exception rather than the rule; it has not yet been widely formalized into city government in a sustainable way.

Still, I think it should come as some comfort and inspiration to city workers, advocates and political leaders struggling to do this very difficult, but worthwhile thing. There is evidence that well-funded sustained investments in reducing traffic deaths can work, not just abroad but in the US. But until state and federal policies and funding align with this goal, city-led efforts to save lives will continue to be held back.

– *Angie Schmitt is a writer and planning consultant and author of* Right of Way: Race, Class and the Silent Epidemic of Pedestrian Deaths in America .