Julie White, Deputy Secretary May 3, 2019

Good morning. I am excited to be here today to talk about our state's future and the role that mobility and multimodal transportation play in building that future.

North Carolina is at a crossroads. While we are still a largely rural state, population centers across the state are booming. Since 2010, North Carolina has gained about 850,000 people, the equivalent of a city the size of Charlotte¹. By 2037, our total population is expected to reach 12.68 million, and much of that growth will be fueled by those under 18 and those over 65. Those groups, who are more likely to desire transportation options beyond driving, will make up almost half of North Carolina's population.²

And while our highways will remain a mainstay of our transportation network it is important that we envision a future in North Carolina where seamless mobility serves as a key driver of our economic health, our quality of life, and our connections to one another and the world.

The communities of the future – and the economies of the future – will feature connected transportation systems and transportation options. Investing in that vision will spread growth and economic opportunity across our state, connecting people in all size communities to job centers, to education, to health care and to other services. Investing in mobility will help communities of all sizes attract new investment, grow new jobs, and attract a high-quality workforce.

So, let's envision that future. Our statewide rail network is extensive but focusing on a few key corridors would connect population and economic hubs. By purchasing these corridors – like the S Line that runs from Raleigh to the Virginia border, the SA line that connects Norlina to Roanoke Rapids, the P&N line that connects Gastonia to Charlotte, the Durham spur that runs from Apex to Durham and the W&W Line extending service from Goldsboro to Wilmington – we start to create a web that truly crisscrosses the state and connects the major hubs. These are just a couple of the examples of how we can use the State's rail network to strengthen our rural and urban centers- moving goods and people between the two. The current owners of these corridors, the Class I railroads, are changing their business models and shedding assets such as these. Without state leadership, the corridors may be lost forever and with that the opportunity gone.

These lines are also prime examples of the impact multimodal investments can have in shaping our communities and the lives of our citizens. This rail service is the way we connect our urban and rural communities, allowing workers to choose a more suburban or rural lifestyle – and the accompanying more affordable housing- while still accessing jobs in urban centers. It also frees those workers from the costs of owning and upkeeping vehicles and reclaims time lost in commuting. These train lines would run at up to 79 miles per hour and some over 100 miles per hour. That means that a commute from Roanoke Rapids to downtown Raleigh would take just under an hour, replacing a drive that can easily stretch from 90 minutes to two hours during rush hour. Freight and passenger rail are complimentary in this scenario as we can run the passenger rail at rush hour times and then run freight in between, allowing us to connect manufacturing sites to the population centers.

At the same time, purchasing those corridors creates the opportunity to impact development through public/private partnerships that support transit-oriented development. The public/private partnership would then provide ongoing revenue to support train operations. Transit-oriented development focuses on creating dense, walkable, transit-supported neighborhoods with a mix of residential, office and retail developments.

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Charlotte implemented transit-oriented development along the LYNX Blue Line, transforming neighborhoods like South End from an industrial area with textile mills and warehouse space to one of the hottest residential markets in the country with apartments, shops, restaurants, breweries and offices. Between 2006 and 2018, development along the Blue Line South Corridor attracted more than \$2 billion in investment and another \$500 million was invested in developments around the Blue Line Extension by 2018.³ We can bring that kind of investment to other parts of North Carolina as well.

Now let's move from the statewide view of connecting communities to how we move around seamlessly within communities. Microtransit is already here and growing in popularity. In 2018, more than twice as many trips—84 million—were taken on shared micromobility – like bikes and scooters – in the U.S. than the year before⁴. Protected bike lanes and walkable streets allow citizens to move around their communities easily, while reducing congestion on roadways and limiting carbon emissions. These tools provide last-mile solutions when people exit transit or rail.

We have a vision where the state has a fleet of AV transit vehicles that come on demand in rural communities to take seniors to doctor appointments or to the grocery store. Where those same vehicles bring families to revitalized downtown centers, supporting arts, entertainment and dining. In fact, we will have 2 Ollis, autonomous transit vehicles, ready to deploy in November. On demand transit allows seniors to age in place, in the communities they have lived in and where they want to stay.

In our vision, we commit to transitioning our buses statewide to an all-electric fleet, which cost less to upkeep and harness the latest technology to reduce carbon emissions. We envision robust electric bus systems in mid-size communities and bustling frequent headway buses and bus rapid transit routes in our urban centers. We envision a future where our transportation network helps build communities — on a human scale — with a sense of place. And we can do this in communities of all sizes. Where we don't see competing modes, but complimentary modes.

And imagine that vision is fueled by technology that makes your trip easy and hassle-free. A single app offers you a way from point A to B where you hop off a train, grab a bus, and then finish with a sidewalk.

Why stop there? Our aviation division is already at the forefront of drone operations and delivery. What if we continue that leadership and grow our ability to move not only products but also people through the air? Not far in the future we will be able to hail an unmanned helicopter to shuttle us between cities through the air, freeing roadways and utilizing the capacity of air space. It seems a little like the Jetsons, but Boeing has already completed the first flight of its autonomous air taxi, and Uber is planning to launch shared air mobility in 2023. To be at the cutting edge of air mobility, we need more revenue and long-term investments.

Air travel on a larger scale is also becoming more important than ever, to connect our people and our cities to the global economy. Even for smaller communities, airports are central to our economic success. North Carolina's 72 publicly-owned airports need more than \$7 billion over the next seven years to accommodate growth and remain competitive. Airports are the front doors to our communities, and we must continue to invest in their improvement and growth in order to continue to compete on the global stage.

And least I forget our ferries, which are our marine highways. Imagine a system of high-speed passenger ferries moving tourists and residents alike between our coastal communities such that we become a

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multimodal destination where you can leave your car behind and travel by ferry, bus, golf cart, and sidewalk for your entire vacation.

But how do we get started? How do we get to that future? We need to start by partnering with local communities and piloting these ideas. We need to put NCDOT at the forefront by trying these innovative ideas and when we find success then we can build programs around them. We need to secure the S line and the P&N and start connecting our urban and rural communities. We need to continue as leaders in First in Flight both manned and unmanned. We need to build out our fleet of AV transit vehicles and test all microtransit available today and in the future. And we need to modernize our fleet of ferries to reduce our carbon footprint and be good stewards of our coast.

We need dedicated innovation funding so we can become a test bed of seamless mobility and seize the opportunities for growing our economy that come along with that.

All of this will require a mind shift and more funding. Continuing to make the same level of investment in the same way will yield the same results. But with new funding and a commitment to a multimodal future we can make the vision I have laid out today a reality tomorrow.

¹ https://www.greensboro.com/news/local_news/n-c-population-gains-on-track-for-extra-seat-in/article a80bb2a1-729f-5058-8f95-a4ba4719cd8a.html

² https://files.nc.gov/ncosbm/demog/statesingleage 2030 2038.html

³ https://railvolution.org/wp-content/uploads/2018/11/Alan-Goodwin-Charlotte TOD RVPGH.pdf

⁴ https://nacto.org/shared-micromobility-2018/