



NC FIRST COMMISSION MEETING MINUTES

DATE: February 28, 2020 **TIME:** 8:45 a.m. **LOCATION:** Transportation Board Room, Room 150

MEETING CALLED BY	Ward Nye, Co-Chair
COMMISSION ATTENDEES	<p>Attending:</p> <ul style="list-style-type: none"> • The Honorable Nancy McFarlane, Co-Chair • Ward Nye, Co-Chair • Aaron Chatterji, Ph.D. (by phone) • Jesse Cureton (by phone) • Stephen De May (Mike Reynolds by phone as delegate) • The Honorable Julie Eiselt (by phone) • The Honorable William Lapsley • The Honorable Brenda Lyerly • Sallie Shuping-Russell • Kim Saunders • Michael Walden, Ph.D. • Patrick Woodie • James Trogdon (Advisory Member) • Anthony Lathrop (Advisory Member) <p>Absent:</p> <ul style="list-style-type: none"> • The Honorable Janet Cowell • Peter Hans <p>Guests:</p> <ul style="list-style-type: none"> • Mike Fox (by phone) • Eric Boyette • Amna Cameron • Jaime Rall • Burt Tasaico • Perry Safran

AGENDA TOPICS

1. CALL TO ORDER AND OPENING REMARKS - WARD NYE, CO-CHAIR	
DISCUSSION SUMMARY	<p>The meeting was called to order by Co-Chair Ward Nye at 8:50 a.m. Advisory member Secretary Trogdon spoke about the importance of the NC F1RST Commission. He stated that there is no set path to solve this problem, so it's up to states like North Carolina to be a leader in national and global economies. There are many different ideas about how aggressively we should move, and how swiftly things will evolve.</p> <p>Co-Chair Nye introduced the NCDOT's new Secretary, Eric Boyette. Eric Boyette spoke briefly about taking on his new role, his pride in having worked with Secretary Trogon and how the next two years and the NC F1RST Commission are critical for North Carolina.</p> <p>Co-Chair Nye then called everyone's attention to the new CRAFTS (Creating Revenue And Finding Transportation Solutions) logo at everyone's seat.</p>



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2. NC Moves Financial Model - Alpesh Patel, Senior Associate / Office Director, Integrated Planning and Policy, Cambridge Systematics and David Jackson, Principal, Cambridge Systematics

DISCUSSION SUMMARY	<p>Alpesh Patel presented the NC Moves Financial Model alone, for efficiency. Mr. Patel noted some key things about the NC Moves Financial Model:</p> <p>The 2050 Needs Assessment is driven by alternative futures using trend forecast. It is representative of incremental change & growth. It is based on historical data. 2018 was used as a base year for all the work. The Multimodal Needs Trend has a larger backlog increase in the 2030 Trend, but it levels off in the 2050 Trend. This is due to some influencing assumptions such as:</p> <ul style="list-style-type: none"> • In 2030 - more people and more jobs in North Carolina equaling more freight which equal more travel demand. There may be a 15% increase in vehicle miles travelled (VMT). • In 2050 - increasingly more people and more jobs equaling more freight which equal more travel demand, more development, more technology. Note that travel costs are uncertain in 2050. <p>The forces and assumptions behind our analysis show that some technology leaps can move us farther along on some of these futures than we expected. These four futures (Innovative, Globally Connected, Renewed, Unstable) are not isolated. They may develop together. As we move into our Next Steps, we will act on these five themes:</p> <ul style="list-style-type: none"> • A Resilient, High-Quality System • A Multimodal, Inclusive and Connected System • A Technology Ready and Enabled System • A Safe and Secure System for All Users • A System that Works for NC's Economy <p>Discussion and questions that came from this presentation included:</p> <ul style="list-style-type: none"> • A question on the difference in levels that were presented in the Innovative and Globally Connected Needs Forecasts (slides 8 and 9). Mr. Patel advised that there may be differences in the levels due to more VMT due to deliveries without drivers, plus more freight. There may be assets that deteriorate faster due to higher levels of use. • The potential impact of older drivers moving to the mountains or coast, which was demonstrated in the Renewed Needs Forecasts (slide 10) • A query on whether the funding and future scenarios can be run with two cost disruptors together, i.e., can the model combine two or more disruptors or two or more of the four futures. Mr. Patel responded that while the model is not set up to combine futures, we can pull apart some of the portions and add them together. Secretary Trogon added that he would like to see the futures blended for North Carolina-specific areas. • The statement that sensors will be a huge factor in transportation. Have we built the sensors factor into these forecasts? Mr. Patel advised that these futures do assume there will be a series of sensors, cameras, wireless and smart technology on the roads (see Innovative Needs Forecasts slide 8). However, it is difficult to estimate the costs.
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3. Highway Tolling

- A. Tolling Models around the World - Bob Poole, Director of Transportation Policy, Reason Foundation
- B. Tolling in North Carolina - JJ Eden, Executive Director, NC Turnpike Authority



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DISCUSSION SUMMARY

A. Tolling Models around the World. Bob Poole presented *Tolling's Potential in a Changing World*. Mr. Poole opened with statistics on tolling in America today and went on to share statistics on tolling models from around the world. Some key points were:

- Mr. Poole's vision of the future does not include coins or vehicles in a line. Electronic tolling is faster and is the key to cost-effective tolling. It includes variable rates for specific lanes.
- Tolling is a long-term, permanent funding source. It should not be promoted as temporary until a bond is paid off.
- Tolling plays a limited role today but is well-suited to mega-projects.
- Toll rates can be tailored to the cost of a project (such as a bridge, including construction and maintenance). This is the same as long-term financing the cost of a house through a mortgage.
- Fuel tax revenues are trending downward and there is a funding crunch ahead.
- There is a lack of understanding from consumers on what they are paying for with the fuel tax. More Americans think that tolls are the better alternative for paying for highway and bridge projects.
- The greatest challenge in the U.S. is our aging Interstates. However, the TRB report proposal of a huge federal fuel tax increase is not viable. The solution is multi-faceted (see "The Case for Toll-Financed Interstate Replacement" slides).
- Customer-friendly tolling could *replace* fuel taxes for mega-projects, such as rebuilding/modernizing Interstates. If tolls pay for mega-projects, the decreasing fuel tax will be more available for other projects and maintenance.

Discussion and questions that came from the presentation included:

- A query on how to charge toll *instead* of the fuel tax. Mr. Poole advised it is being modeled right now in New York by Best Pass Co. This company offers a toll rebate as their service. It costs a little per transaction, but toll receipts are rebated. It is a sub-routine on their system file which is created automatically. Also, the automatic tolling provides information on the number of miles travelled on toll roads.
- The idea that different rates would be charge for different types of vehicles, for instance large trucks vs. cars. Secretary Trogon noted that, this week, Congress proposed charging trucks only, and this caused high controversy.
- Discussion on Construction and Public / Private Partnerships (P3). North Carolina can use both methods for the long term (40 - 50 years). P3 is more suited for mega-projects of \$500 million and higher. P3 is not the only way to do a mega-project (e.g. \$800 million and higher) as the state can put down a down payment. However, with P3, the risk to the state is reduced. The states that are using P3 the most are CA, TX, FL, VA and IN.

B. Tolling in North Carolina. J.J. Eden was represented by David Roy, Director of Finance and Budget, NC Turnpike Authority. Mr. Roy was given five minutes for his presentation, *NC Turnpike Authority*. Key points included:

- Projects that Turnpike has completed and is currently working on
 - Operational Projects
 - Monroe Expressway - Charlotte area
 - I-77 Express Lanes Project (P3 with Concessionaire)
- Other Projects throughout the state
 - In Raleigh area: Triangle Expressway, Phase 1 of Complete 540 (Phase 2 of Complete 540 is on STIP for 2029)
 - In Charlotte area: Monroe Expressway, I-77 Express Lanes, I-485 Express Lanes (U.S. 74 and I-77 S Express Lanes under development)
 - Bridge project in Outer Banks (in STIP for 2021)
- Legislative Mandate
 - Powers of the Authority & DOT



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	<ul style="list-style-type: none"> ▪ Enacted to develop / operate 11 toll projects ○ Uses of Revenue: a key for the Authority is that the use of revenues on Turnpike projects require a contiguous toll facility. (Revenues that are being used on a project are required to develop that project.) This means that we will develop a Charlotte and a Raleigh-wide project toll, but it will not state-wide. • Mileage-based User Fee Study: The Authority and the DOT are participating with the I-95 Corridor Coalition on a mileage-based user fee study throughout 2020. We are enlisting 200 guinea pigs to participate in this study. Participants receive a device that plugs into OBD2 port in their vehicle to track mileage so we can see what it would be like to receive a mileage-based user fee. They will receive a bill (which they don't have to pay). If you would like to know more or participate, please reach out to him or Mr. Eden or Secretaries Trogdon or Boyette. <p>Discussion and questions that came from the presentation included:</p> <ul style="list-style-type: none"> • A question on where policy, practice, needs and statutes line up. Example, the I-95 Corridor: if we wanted to toll the portion in North Carolina, can we do it? Mr. Roy advised that it is doable. A mileage-based user fee or toll can be used; the <i>technology</i> is there. However, the <i>methodology</i> is a challenge. • Burt Tasaico noted that many truckers who do interstate commerce fuel up in Virginia, travel through North Carolina then refuel in South Carolina. There is currently a program that electronically calculates road miles travelled on interstates, so we can know how many miles they travelled in NC.
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<p>4. Energy Taxes</p> <p>A. Carbon Tax - Billy Pizer, Ph.D., Professor, Sanford School of Public Policy and Fellow, Nicholas Institute for Environmental Policy Solutions, Duke University</p> <p>B. Electricity/Electric Vehicle Taxes - Amna Cameron, Commission Staff</p>	
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<p>DISCUSSION SUMMARY</p>	<p>A. Carbon Tax</p> <p>Billy Pizer provided four hard-copy handouts of his presentation, each one page. The handouts were:</p> <ol style="list-style-type: none"> 1. Table 1-1: North Carolina GHG Emissions Inventory by Source Sector (MMT CO₂e) <ul style="list-style-type: none"> • In order to choose what sort of tax we want, we should think about what our revenue needs are, and what the environmental mode demands. 2. Who would have the obligation to pay a carbon tax? (based on CA and BC design) <ul style="list-style-type: none"> • Some countries around the world charge a carbon tax, and some have a tradeable permit system. 3. NC Carbon Tax Revenue 2025-2030, Annual Estimate (rough) <ul style="list-style-type: none"> • Note that this does not show how these sectors may respond by reducing their emissions 4. Effects on prices (rough calculation) <p>Discussion and questions that came from the presentation included:</p> <ul style="list-style-type: none"> • Two arguments for a carbon tax: cost effectiveness (create a common price that everyone can see), and tax efficiency (tax things that are bad and need to be discouraged such as pollution). • A question on taxing at the user level, not the producer level: who would have the obligation to pay? Mr. Pizer referenced handout #2 (see above) and noted that the Industrial facilities and Fuel distributors would pay, then pass the cost on to the end users. The Electric generators are a bit more complicated because we would be taxing <i>emissions</i> in North Carolina whereas the electricity <i>consumed</i> in NC may be purchased from sources inside or outside the state. • Discussion on a refundable tax: taxes, tradeable permit systems and, for those who generate revenue, perhaps give it back to households. This is not done more often for two reasons: 1. Environmentalists
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	<p>have been lukewarm to the idea of taxing carbons, and 2. You are not only paying for emission reduction, you are paying a tax, and you are unable to give it back to the losers.</p> <p>B. Electricity/Electric Vehicle Taxes Amna Cameron presented on <i>Energy-Based Taxes</i>. Key points included some revenue-based options:</p> <ul style="list-style-type: none"> • Electricity tax revenue options • Electric/Hybrid vehicle statistics and comparisons on fees and taxes in the 50 states • Tax on Charging Stations (Note that Iowa has enacted this tax which will go into effect in 2023.)
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<p>5. Real and Personal Property Taxes</p> <p>A. County Assessments - Michael Connolly, Assistant Director of Local Government Division, North Carolina Department of Revenue</p> <p>B. Potential State Applications - Amna Cameron, Commission Staff</p>	
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<p>DISCUSSION SUMMARY</p>	<p>A. County Assessments. Michael Connolly spoke on how property taxes are applied at the local level. Some key points, discussion and questions included:</p> <ul style="list-style-type: none"> • In NC, all property tax is appraised, assessed and collected at the county level. The one exception is Public Service companies, which are appraised by the Department of Revenue, but the values are sent to the counties who collect the tax. • Real property is revalued on a regular cycle; up to an eight year cycle. Motor vehicles and personal property are reappraised annually, and the vehicles are taxed at various rates, by county. (see <i>Property Tax Rates</i> slide) • Property taxes are the main revenue sources for local governments. • A correction on the <i>Motor Vehicles in NC</i> slide, which should show \$92 billion, not million. • Definition of IRP: International Registration Plate. An example of an IRP vehicle would be a commercial tractor-trailer. <p>B. Potential State Applications. Amna Cameron’s presentation was a companion piece to Michael Connolly’s, focusing on the national side and the revenue applications. Some key points, discussion and questions included:</p> <ul style="list-style-type: none"> • A note that property tax is the MOST unpopular tax in the U.S.A. • North Carolina does not currently have a state property tax; this presentation is looking at the potential revenues of applying a state property tax on real property as well as vehicles. • NC does not have county roads: we have municipal roads and state roads. • Revenue Potentials from real property taxes and taxes on vehicles: <ul style="list-style-type: none"> ○ NC has \$1.1 trillion in assessed real property valuation. If a \$0.05/\$100 valuation tax is applied, that gives us a net revenue potential of \$560 million (after the counties collect their taxes). ○ NCDOT currently collects a highway use tax when you buy and title your vehicle, and through an annual registration fee. Local governments currently collect tax on the value of the vehicle, plus some have an annual flat municipal vehicle tax of which the majority goes to transportation. • The \$0.05/\$100 valuation tax was a random number, selected because it was an easy number to modify. • A comment that there is precedent for a NC state property tax. • A statement that it can be argued that if there is a transportation tax, the tax should go towards transportation.
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<p>6. Value Capture Options - Sasha Page, Principal at IMG Rebel</p>



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DISCUSSION SUMMARY	<p>Sasha Page presented <i>Value Capture and Funding Transportation</i>. Discussion and questions that came from the presentation included:</p> <ul style="list-style-type: none"> • The fact that traditional funding sources, revenues and interest for the past decades do not meet needs of surface transportation. There is a need for additional funding sources, and there are many new needs. • A definition of value capture: the recovery of a portion of increased property value created as a result of public infrastructure; this can generate significant revenues for highway and transit capital and operating funding. • Value capture techniques are a <i>complement to</i> and not a <i>substitute for</i> traditional funding sources. • Examples of how other states paid for their projects. Six major categories of value capture techniques: <ul style="list-style-type: none"> ○ Developer contributions (Osceola County, FL) ○ Transportation Utility Fees (Tualatin County, OR) ○ Special Taxes and Fees (Seattle South Lake Union Streetcar, WA) ○ Tax Increment Financing (Hays County Transportation Reinvestment Zone, TX) ○ Joint Development (Capitol Crossing Development, D. C.) ○ Advertising & Naming Rights (Branded Safety Patrol Vehicle, OH) • Bigger case studies: <ul style="list-style-type: none"> ○ Impact Fees, Vehicle Registration Fees, Joint Development (E-470 Highway) ○ Special Assessment Funding (VA 28 and Dulles Metrorail) ○ Tax Increment Finance (Atlanta Beltline) • It is critical to include and involve stakeholders and foster public involvement. • A question on whether there was any analysis on [collection of highway expansion fees on] the 1.5 miles of the E-470 Highway or was it arbitrary when that legislation was created; 1.5 miles seems a little broad since .5 mile is the standard. Mr. Page was unsure of the exact history of that; they were limited by the communities along that route, so it was probably related to those communities. With scooters or Uber, the longer distances can be not that much. • A request that Mr. Page would speak on where we are in NC in value capture, and where we're headed. Mr. Page advised that we used value capture on various transportation projects such as the Durham-Orange light rail project. We have not used it on any other project; the legislative authority expired a few years and would have to be re-authorized. There are major new projects and locations that need to be that could benefit from this. Virginia call this the "Air Rights Joint Development," which is building or reconnect neighborhoods and communities over an existing transportation facility, with builders and developers jointly to help fund it. • "Air Rights" retrofitting is being done in many places. It is more expensive; it tends to add 20% more to the cost, so it should be done in an urban area. • Most of what we're talking about is on the revenue side and is statewide; it is project-specific. You can have recommendations for new legislation for value capture when you get to the recommendation phase. It is often done for a certain project, or a certain number of projects or for projects within a particular scope, to be approved later. Much can be done with limited-scope legislation. • Impact fees are slowly getting legislative approval. • Cooperation among local governments (who will be giving up potential revenue) and developers and private landowners is essential.
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7. Weight-Based Taxes - Jaime Rall, Commission Staff	
DISCUSSION SUMMARY	<p>Jaime Rall presented <i>Paying for Vibrant Transportation Systems</i>. Ms. Rall addressed the notion that heavier weight vehicles take their toll on our roads and therefore should require higher taxes. Key points, discussion and questions that came from the presentation included:</p>



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	<ul style="list-style-type: none"> • Justifications from results of the NC F1RST Commission survey from July 2019: 18% of respondents suggested a Vehicle Weight Fee should be considered. • State examples: existing weight-based state revenue sources take vehicle weight into account (heavy trucks vs. passenger vehicles). Federal revenues also include a weight-based tax on heavy trucks. • Details to consider: <ul style="list-style-type: none"> ○ Tax base (which vehicles would be subject to the tax or fee) ○ Design & rate structure ○ Assessment and payment methods • A question on the difference between the damage from vehicle weight on a road vs. a bridge was unable to be answered because all the information that Ms. Rall had was based on pavement. However, Burt Tasaico and Amna Cameron will find an answer and report back. (Note, this question was answered by Secretary Trogdon during the closing remarks from Co-Chair Nye.)
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8. Occupancy Tax - Amna Cameron, Commission Staff	
DISCUSSION SUMMARY	<p>Amna Cameron presented Occupancy Taxes. Key points, discussion and questions that came from the presentation included:</p> <ul style="list-style-type: none"> • Discussion on a State Occupancy Tax, which is levied on temporary lodging. • North Carolina charges Sales Tax only. If we charged Occupancy Tax, the revenue potential would be \$43.6 million on a 1% county tax and \$12.2 million from a 1% municipal tax. • An unrelated request from Ms. Cameron was that the Commissioners would please look through the handouts at their seats on NC CRAFTS. This is the homework: to advise what additional items you want on this list, what taxes should we look at, what revenue sources.

9. Commission Discussion - Ward Nye, Co-Chair	
DISCUSSION SUMMARY	<p>Co-Chair Ward Nye closed the discussion by reiterating that there has been a lot of data presented and we need to begin to pull this information together to give it serious consideration. Some discussion and questions included:</p> <ul style="list-style-type: none"> • Secretary Trogdon was able to address the earlier question about damage from vehicle weight on a road vs. a bridge. He advised that we typically design the thickness of our roads for trucks and weight, and the width of our roads for cars and volume. Bridges are slightly different: they are not designed to be overloaded and they fail rapidly after they are overloaded once; they are also expensive to repair. Roads can handle occasional overweight vehicles much better and can actually “heal” after some damage. We have a very restrictive bridge formula especially on the Interstates, and a significantly restrictive bridge formula on the U.S. primaries because we can’t afford those to ever get overloaded. The takeaway is that thicknesses are determined by weight and width is determined by volume; cars add a lot on volume and negligible amounts on weight. • There was a question about the possibility of seeing all the taxes that each state is assessing, in an overlay. There are so many different taxes that we have discussed today; are there any states that are doing all of these? How many tools are they using across the country? Amna Cameron agreed that this was a good idea. Co-Chair Nye agreed, since there are some states that are using none of these tools; California for instance, is a high-tax state and is not using either method. • Various of the phone attendees mentioned how helpful the information from today has been, and how they appreciated how the presenters made it easy to follow along.



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Meeting Adjourned: 12:03 p.m.

Next Meeting date is Friday, April 24, 2020 in Greensboro, and will include public comment.

NC FIRST Commission meeting minutes submitted by Becky Boone, Governance Office