

# **Report to Mayor and Charlotte City Council On Implementation of Managed Lanes in Charlotte**

Presented to the Transportation and Planning Committee

**January 4, 2016**

## **Background**

On August 19, 2015 the Charlotte Regional Transportation Planning Organization (CRTPO) voted to adopt the FY 2016-2025 Transportation Improvement Program (TIP). The TIP includes funding for projects that would create a network of High-Occupancy Toll (HOT) Lanes in and around Charlotte. Specifically, funds were programmed to build, operate and maintain HOT lanes on I-77 North, US 74 (Independence), and I-485 South, as well as to undertake Design and Environmental Assessment for HOT lanes on I-77 South.

Based on concerns expressed particularly about the I-77 North project, in a letter dated September 1, 2015, former Mayor Dan Clodfelter asked City Council's Transportation and Planning Committee to discuss how managed lanes will function in Charlotte. A copy of that letter is included as Attachment 1.

Mayor Clodfelter directly asked for information about the following topics:

- 1) how design, operations, and funding decisions are made;
- 2) how these types of projects complement and support land use and transportation goals;
- 3) the roles of the City, NCDOT, and CRTPO in the decision making and planning process;  
and,
- 4) any policy or procedural matters for full Council consideration.

In response to Mayor Clodfelter's request, staff presented information to Council's Transportation and Planning Committee at their meetings held on September 14, September 24 and November 9.

## **Purpose:**

The purpose of this report is to provide a summary of the responses to the questions posed by Mayor Clodfelter and to present key recommendations for City Council to consider in regard to implementing a HOT lanes strategy in Charlotte and the region.

### **Definition and Purpose of Managed Lanes:**

High-Occupancy Toll (HOT) Lanes are one category of special lanes referred to as managed lanes. Managed lanes are built and operated, usually on Interstates or freeways, for these specific purposes:

1. Provide reliable travel times during rush hours for specific types of travelers
2. Encourage transit and ridesharing
3. Preserve future operating capacity
4. Use technology and pricing to allow flexible and efficient use of roadway capacity

Categories of managed lanes include HOV lanes, HOT lanes, toll lanes and express lanes. HOV lanes are intended to provide priority treatment for persons traveling in buses, vanpools and carpools.

HOT lanes are intended to achieve the same purpose as HOV lanes, but also to allow motorists willing to pay tolls to use the excess capacity that may be available. These are the types of lanes recommended to be built and operated in Charlotte. HOT lanes would be new lanes added to the freeways or interstates, and would provide the option of preferential service to bus riders, persons sharing rides, and motorists willing to pay the variable tolls in order to travel at 45 MPH (or faster) during peak hours.

### **History of Managed Lanes in Charlotte:**

The City of Charlotte's development strategy for approximately the past 20 years has depended on providing a variety of neighborhood densities and mixtures of land uses, linked with a variety of transportation choices. That combination of a growth framework (Centers, Corridors and Wedges), together with a comprehensive, multimodal network is intended to serve the future demand for transportation and preserve or enhance livability in our city.

As part of this multimodal strategy, in 2008 the Charlotte Department of Transportation, together with partners from NCDOT, SCDOT and the four metropolitan planning organizations in our bi-state region initiated the regional Managed Lanes Study.

In 2010, the Managed Lanes Study concluded with recommendations for HOT lanes to be implemented along I-77 (north and south), I-485 (south) and US74 (Independence). Those recommendations were then incorporated by CRTPO into their 2040 Metropolitan Transportation Plan, which was adopted in April 2014.

In 2011, 2012 and 2013 the metropolitan planning organization for Mecklenburg, Union and Iredell Counties voted to endorse and program funds for 3 variations of a HOT lanes project along I-77 north. Those nearly unanimous votes by the CRTPO were intended to convert the existing HOV lanes into HOT lanes in order to increase the use of the managed lanes and provide more effective options to avoid congestion.

While funds have been programmed to build and operate HOT lanes on I-77 North, US 74 (Independence) and I-485, the method selected by NCDOT to design, build, operate and maintain the HOT lanes on I-77 North is different from the other corridors. In order to accelerate

construction along a 26-mile section of I-77 and I-277, NCDOT decided to implement those HOT lanes using a public-private-partnership (P3). After reviewing the bids received, NCDOT selected a company for this project and entered into a 50-year operation and management agreement with that company.

**Discussions by the Transportation and Planning Committee:**

CDOT staff presented a variety of information to the Transportation and Planning Committee in response to Mayor Clodfelter's letter, briefly summarized below:

**1. How are design, operations, and funding decisions made?**

The federally-designated metropolitan planning organization – in this case, the Charlotte Regional Transportation Planning Organization (CRTPO) – makes the decisions as to which projects should be funded and when. The sponsors of projects – in this case, NCDOT – select the method of designing, building or operating each project. However, since HOT lanes projects will be actively managed for years to come, other agencies including the Charlotte Department of Transportation (CDOT), are expected to participate in making adjustments to current or anticipated operational conditions.

**2. How do these types of projects complement and support the City's land use and transportation goals?**

Charlotte is projected to continue to be one of the fastest-growing cities in the nation. The city's population is expected to grow by 400,000 people in the next 20-25 years. Providing capacity for the approximately 1.5 million additional daily trips in vehicles that will be made by the City's additional residents will need to be done differently in the future. There will not be new freeways built on new alignments, and the rights-of-way for several existing freeways are constrained. For those reasons, any new lanes added to the roadway network will need to maintain their capacity for many years into the future.

Expanding freeways by adding general purpose lanes has repeatedly failed to provide uncongested or reliable travel times in Charlotte and other fast-growing metropolitan areas in the US. The addition of managed lanes supports Charlotte's adopted growth strategy (Centers, Corridors, and Wedges) and adopted area plans (i.e. Independence Area Plan) by expanding travel options, providing priority lanes for BRT/Express bus routes, and effectively managing peak periods of congestion along major corridors.

**3. The roles of the City, NCDOT, and CRTPO in the decision making and planning process.**

The Charlotte Regional Transportation Planning Organization (CRTPO) – makes the decisions as to which projects should be funded and when. The sponsor of project, in the case of I-77 North, NCDOT, selects the method of designing, building or operating each project. So far, CDOT and CRTPO staffs have worked with NCDOT through relatively informal arrangements to make design decisions (as to where vehicles can enter or exit from managed lanes, for example). Those arrangements have typically been applied to the planning, design and environmental assessment of projects built by NCDOT.

**4. Any policy or procedural matters for full Council consideration:**

Going forward, issues specific to HOT lanes projects will involve making ongoing decisions about who will be eligible to travel in the HOT lanes, who will or will not have to pay the tolls, what will be the correlation between the tolls charged and the congestion levels in the HOT lanes and the adjacent general purpose lanes, and what should be the hours of operation of the HOT lanes. For these reasons, a more formal agreement outlining how future decisions are made should be developed once key decisions are made about the HOT lanes strategy. The agreement would include:

- Design
- Operations
- Eligibility of Use
- Enforcement
- Customer Service

Governor McCrory has asked that the CRTPO either reaffirm the current strategy (to implement managed or HOT lanes) or reverse that decision (and delete the managed lanes projects from the adopted funding program). A copy of the Governor's letter is included in Attachment 2. After the CRTPO votes on January 20, 2016 to respond to the Governor, City staff intends to work with staff from the NCDOT, CRTPO and other affected jurisdictions to recommend a more formal arrangement for making decisions about managed lanes.

**Conclusions/Staff Recommendation:** Adding general purpose (GP) lanes will not allow the region to keep up with the rapid growth we have experienced in the past, are experiencing now, and will continue to experience in the foreseeable future. Adding 1 or 2 GP lanes in each direction in Charlotte will provide only temporary relief. The physical space necessary to keep widening freeways is either no longer available in Charlotte or would be extraordinarily costly to purchase and disruptive to surrounding businesses and residents. For these reasons, any additional capacity added to the freeways needs to be sustainable and effective for far longer than 5-15 years.

We need to encourage more express bus service and ridership, as well as more ridesharing trips. The Red Line and Silver Line transit projects will not be operating for many years near either I-77 or US 74, respectively. We also need to use I-485 as a guideway for express buses and vanpools, because no rapid transit line is proposed for that corridor.

Based on 20 years of actual experience in other cities in the US, HOT lanes will achieve these purposes:

1. Provide reliable travel times based on maintaining operating speeds of at least 45MPH
2. Allow free access to CATS buses and CATS-sponsored vanpools, and carpools carrying 3 or more persons
3. Allow free access to emergency responders (police, fire, ambulances)
4. Allow free access to motorcycles (as required by federal law)
5. Allow access based on congestion pricing to carpools carrying 2 persons, persons traveling alone, or single-axle trucks.

### **Guiding Principles:**

- Charlotte supports providing increased capacity on I-77, US 74 (Independence), and I-485 (South) done in a manner that mitigates congestion for priority modes - buses, vanpools, carpools, and emergency vehicles;
- Charlotte supports making the excess, additional capacity available through tolls for non-priority vehicles; but Charlotte does not support tolls for buses, vanpools, carpools, and emergency vehicles;
- Charlotte supports congestion pricing for non-priority vehicles;
- Charlotte does not support adding general purpose lanes that would not be sustainable and quickly return to a congested situation;
- Charlotte encourages NCDOT to fully address the questions that have been raised about the I-77 P3 project and to fully explain the consequences of cancelling the contract with I-77 Mobility Partners; and
- Charlotte does not support the elimination or delay of construction of additional capacity for priority vehicles on I-77 North.

### **Next Steps**

- After today's meeting, this summary report will be presented to full Council on January 11.
- On January 11, Council is scheduled to vote to direct the vote of the City's CRTPO representative.



## MEMO

September 1, 2015

**TO:** Vi Lyles, Council Member and Chair, Transportation and Planning Committee  
David Howard, Council Member and Vice Chair, Transportation and Planning Committee  
Pasty Kinsey, Council Member and Transportation and Planning Committee  
Gregg Phipps, Council Member and Transportation and Planning Committee  
Kenny Smith, Council Member and Transportation and Planning Committee

**FROM:** Dan Clodfelter, Mayor

**RE:** Referral of HOT Lanes to Transportation and Planning Committee

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On August 19, the Charlotte Regional Transportation Planning Organization (CRTPO) voted to adopt the FY2016-2025 Transportation Improvement Program (TIP). The TIP includes funding for projects to build and operate High-Occupancy Toll (HOT) Lanes on I-77 North, US 74 (Independence), and I-485, as well as to undertake Design and Environmental Assessment for I-77 South.

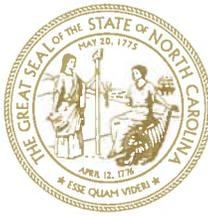
Although the discussion of the I-77 project received a great deal of attention from the media, the other two projects in Charlotte's sphere of influence - US 74 (Independence) and I-485 - are equally important and warrant further discussion and clarification about how they will operate. As such, I am referring High Occupancy Toll Lanes to the Transportation and Planning Committee for further discussion.

Specifically I am asking the Transportation and Planning Committee to discuss how HOT lanes will function in Charlotte. This would include a discussion of how design, operations, and funding decisions are made, how these types of projects complement and support land use and transportation goals, the roles of City, NCDOT, and CRTPO in the decision making and planning process, and lastly any policy or procedural matters for full Council consideration.

I understand the next meeting of Council's Transportation and Planning Committee is scheduled for September 14. I am requesting the chair add this referral to the next meeting agenda. My expectation is that the Committee will provide a detailed report back to full Council sometime in November, 2015.

Thanks.

CC: Michael Barnes, Mayor Pro Tem  
Al Austin, Council Member  
LaWanna Mayfield, Council Member  
John Autry, Council Member  
Ed Driggs, Council Member  
Claire Fallon, Council Member  
Ron Carlee, City Manager  
Debra Campbell, Assistant City Manager  
Danny Pleasant, Director, CDOT



**STATE OF NORTH CAROLINA  
OFFICE OF THE GOVERNOR**

PAT McCRORY  
GOVERNOR

December 14, 2015

The Honorable James P. Taylor, Mayor  
Town of Matthews  
232 Matthews Station Street  
Matthews, NC 28105

The Honorable Michael Johnson, Mayor Pro Tempore  
Town of Statesville  
PO Box 1111  
Statesville, NC 28687-1111

Dear Chairman Taylor, Vice Chair Johnson, and Members of the Charlotte Regional Transportation Planning Organization,

Thank you for your important work creating a long-term infrastructure strategy for your region to promote safety, mitigate congestion, and foster continued economic growth.

As you know, there have been recent statements and media attention focused on a single project. Most people are not aware that there are multiple projects included in the 10-year regional transportation plan approved by local elected officials through your organization.

**I am writing to ensure that everyone fully and clearly understands the issue at hand and ask that the Charlotte Regional Transportation Planning Organization either reaffirm the current strategy for the Charlotte metropolitan region at your next meeting *or* reverse your previous decision and set in motion the necessary steps to create a new regional transportation plan.**

Stopping any project that has already started has significant ramifications that must be understood and accounted for. If the strategy of using optional toll lanes is no longer supported by your regional transportation planning organization, a new regional transportation plan would have to be created because there are four projects in the current plan that would be affected.

As background, the current plan that the state is executing is based on a long-term strategy for your region that was approved by your metropolitan planning organization, which has representatives of all the local elected bodies. This strategy was created with public input and the goal of achieving the best long-term strategy to mitigate congestion for the region. This strategy took seven years to move from concept to project implementation, starting long before the current administration.

As you are well aware, the primary discussion around the Charlotte metropolitan regional strategy has been the I-77 project for optional toll lanes. These optional lanes, for which no current general purpose lanes will be converted to toll lanes, are part of a regional plan that was approved by the region's elected officials serving on the regional transportation planning organization with public input. In addition, the current plan also includes optional toll lanes for US-74/Independence Blvd., a segment of I-485, and I-77 south of Charlotte. These optional toll lanes are just one component of a regional strategy that took years of careful analysis by local elected officials who served on the regional transportation planning organization before gaining state and federal approval.

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The following are the primary ramifications of reversing the current course:

*The creation of a new regional strategy and project plan would be required:* Any changes to the plan must go through several layers of approval and public involvement. You would need to come up with a new plan that meets Federal Highway Administration standards and can be approved by the North Carolina Board of Transportation. This process would necessitate identifying the projects in your current long-term plan you want to include in the next 10 years. This set of projects would have to be analyzed for air quality conformity and then individual projects will have to be scored through the prioritization process.

*Funding availability for the Charlotte metropolitan region would be reduced:* The funds expended already on the I-77 optional toll lanes project would obviously not be available for programming for future projects. In addition, breaking the contract would entail reimbursing the contractor for costs incurred, including both self-performed work and damages for sub-contracts into which they entered.

If there is a “market value” component to the ultimate cost for cancelling the contract, which can only be determined after such an action was taken, those funds would also not be available for programming on transportation projects. Also, the \$145 million in bonus funds allocated to the region because of the additional toll lanes project would be redirected to projects across the state (divided among statewide, regional, and division level allocation) and most of that money would likely not be returned to the Charlotte metropolitan region.

In addition, it is unclear what effect reversing the current strategy and terminating the contract would have on actual funding available to the region and this would need to be brought before the General Assembly. Voluntarily incurring such a cost does not have a precedent and we would have to work through funding and other implications with the General Assembly. If the current strategy is reversed, we anticipate the legislature could ask for the locality to absorb the costs in some manner.

This administration has worked hard ensure that future investments are made based on local initiative, transparent decision making, and diversified revenue streams – not based on mandates from Raleigh. Our top priority is to create a strong strategy to improve safety, mitigate congestion and prepare the entire state for economic growth.

In closing, while the current plan for the Charlotte metropolitan area was created through intense study and planning, the state will follow the lead of the local elected officials who serve on the regional transportation planning organization. The local planning organization must decide whether the Charlotte metropolitan region will reaffirm or reverse the current approved regional strategy. We strongly encourage you to make this decision at your next meeting. Please reach out to NC DOT if you have any additional questions or need help as you go through this process.

Sincerely,

  
Governor Pat McCrory

cc: CRTPO Members  
Secretary Nick Tennyson, NC Department of Transportation  
Mr. Fred Steen