



# Metropolitan Transit Commission



July 26, 2023



# METROPOLITAN TRANSIT COMMISSION

Wednesday, July 26, 2023

5:30pm

Charlotte-Mecklenburg Government Center

Conference Room 267 - WebEx

## AGENDA

- I. Call to Order ..... Mayor Vi Lyles
  - Attendance (Roll Call)
- II. Approval of the May 24, 2023 Summary (p.5-23) ..... Mayor Vi Lyles
- III. Public Comments
- IV. Transit Work Group Update (p.25-76) ..... Mayor Melinda Bales and Mayor John Higdon
- V. Interim Chief Executive Officer’s Report (p.78-106) ..... Brent Cagle
  - Communications to MTC Board Members (p.78-93)
  - FTA Grant and Event Update
- VI. Informational Items
  - Service Planning Update (p.108-121) ..... Jason Lawrence
- VII. Action Items
  - Changes to the Service and Travel Market Policies (p.123-141) ..... Jason Lawrence
  - Independence Busway Update (p.143-148) ..... Kelly Goforth
- VIII. Report from the Chair of the Transit Service Advisory Committee (TSAC) .... Krissy Oechslin
- IX. Report from the Chair of the Citizens Transit Advisory Group (CTAG) ..... No Meeting
- X. Adjourn





**METROPOLITAN TRANSIT COMMISSION**  
**MEETING SUMMARY**  
**May 24, 2023**  
**(Approved on July 26, 2023)**

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**Presiding:** Mayor Vi Lyles, City of Charlotte

**Present:**

County Commissioner Leigh Altman (BOCC)	Brian Welch (Town Manager, Mint Hill)
City Councilman Edmund Driggs (Charlotte)	Mayor Jack Edwards (Town of Pineville)
Andrew Grant (Town Manager, Cornelius)	Tony Lathrop, Esq. (NCDOT)
Mayor Rusty Knox (Town of Davidson)	Bill Thunberg (Town of Mooresville)
Mayor Melinda Bales (Town of Huntersville)	Mayor Walker Reid III (City of Gastonia)
Anthony Roberts (Town Manager, Huntersville)	Randi Gates (GCLMPO-Gastonia)
Mayor John Higdon (Town of Matthews)	Mayor Marion Holloway (City of Monroe)

**Interim CATS Chief Executive Officer:** Brent Cagle

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**I. Call to Order**

The hybrid regular meeting of Metropolitan Transit Commission was called to order at 5:30pm by MTC Chairwoman Mayor Vi Lyles, City of Charlotte.

**II. Review of Meeting Summary**

The meeting summary of April 26, 2023 was approved.

**III. Public Comments**

**Chris Wallace:** After last month's updates to the micro transit rollout, I would like to take the time today to discuss another potential rollout that could improve the transit utility and traffic flow, both in North Meck and regionally.

First, the upcoming Park&Ride should have a satellite bus facility incorporated in it to service and garage the metro rapid and village rider routes and buses that go through there. As well as a pair of east-west rapid lines implemented, one running from Concord C ride to the Park&Ride and one from N.C. 16-173 interchange in Denver to the same point. They should operate on a commuter schedule using I-85 and 16 to access I-485 each with about a 25-minute drive time. This potential rollout would help to alleviate significant roadblocks to transit access and mobility improvements throughout North Meck, for CATS providing services to the north towns is distance from the Clanton Road facility.

For example, the 99 Village Rider has to make a 23-mile trip to begin its daily trips, which to put in perspective is 5 miles longer than the blue line and blue line extension combined. The same issue still applies to rapid routes even though they are meant for longer trips in the first place. The Hambright facility, 15 miles closer to Clanton, would bridge that gap and increase service capacity.

The East-West lines, I suggested would help put a dent in another exit obstacle to mobility and traffic that I'm sure the North Town Mayors here, no one despise Sanford Road, section of 115 running from Catawba avenue to old Statesville Road. Highway 73 is meant to be a highway from Concord through Huntersville and Denver into Lincolnton and there's a lot of local development on that particular cluster. There's a regional local traffic conflict. Those lines would help put a dent in that by providing a way to go that distance without necessarily

stopping at that section. While the D.O.T. has a plan to widen those lanes that will only postpone the problem until the next wave of traffic demand hits it. The regional benefits of these lines would be very promising.

On the Concord side, the CK Rider Station has bus lines extending throughout the Concord-Kannapolis area including the Amtrak station, and on the Denver side, there's ample regional highway access for customer to arrive at the stop or perhaps carpool to it and be on the east-west connections, there's also opportunity with commuter access to Charlotte via a Park&Ride metro rapid line.

Whether it's through micro transit or my preference, fixed route service, the implementation of these this facility and these routes would go a very long way toward increasing transit utility and mobility throughout the area. Thank you for your time and again, I happily discuss this further with anybody after the meeting.

**Discussion:**

**MAYOR LYLES (City of Charlotte):** Thank you very much for your continued presence and recommendations and suggestions for the system to work better for those using it. Thank you very much.

**IV. Interim Chief Executive Officer's Report – Based on pages 44-60 in the MTC Agenda Packet for May 24<sup>th</sup>, 2023**

**Discussion:**

**INTERIM CATS CEO CAGLE:** Mr. Cagle: Good evening, everyone. A couple of things to report this evening. I will start with an update on the working group. The first thing I will report is that in the future, we will add the working group as its own agenda item ahead of the Chief Executive Officer's report. But for this meeting, I'll start providing that report-out and if Mayor Bales who was in attendance of the working group, that would be welcomed.

First thing I would say is all of the members should have printed documents, should have received them by email today, but also printed in case you had a chance to check your emails. The printed documents are the post-meeting report, which we'll be preparing for each meeting and then as working group work plan that Mr. Driggs had provided to the workgroup and discussed during the workgroup. As a note, we will also by incorporating this into the agenda as its own standing item, these materials will be included as part of the packet in the future. They'll be all one and they'll come together.

The second document that you have is what we call the progress report. The progress report was developed by staff based on the six items plus a seventh, which is other. The six items that Mr. Driggs initially identified of concern or for us to monitor progress on, he identified these in a memo to the community as the work was being created. We will continue to monitor these items. These items, this list may change as we resolve issues, or it may be expanded as other things arise or the working group would like to include in that.

In general, the working group met last week on Wednesday, a week ago today. Very good discussion. We walked through not only did we walk through the progress report, but we also talked about a second item that the workgroup would like CATS to perform, which is a risk analysis. We agree, a risk analysis will be a good idea for us to perform. A risk analysis, the basic idea around it is to go through the department, identify any risks that we see. Once identifying those risks in all areas, risks to interruption of, you know, service or to the operation in general terms to CATS, once we identify those risks, we progress on through creating mitigating

measures for those risks, and that helps us as we go through in the future to and hopefully, it helps the MTC, too as we set budgets and define priorities for moving forward.

Again, another good discussion and more to come on the risk analysis and the process to develop and identify all of the risks. Related to the progress report, there is much discussion on the progress report. I will say there's quite a bit of discussion related to the derailment or the truck overhaul maintenance.

As part of my report, I would like to share that CATS, NCDOT and Siemens continues to work through an expedited schedule for conducting the truck overhaul maintenance. We have not executed a contract or amendment to the contract yet. We have authorization from council to do that when we are prepared.

In summary, we are encouraged, as well as NCDOT by the proposal that Siemens has provided us. Without going into the entire proposal, I will say the proposal focuses on conducting the truck overhaul maintenance in phases and the discussion focused on Phase 1, which would take approximately 12 months based on the work beginning, the contract being executed, take about 12 months.

Phase 1 focuses on two things. One is, as we worked with Siemens to understand how to complete the truck overhaul maintenance, they identified the bearings and wheels as the primary safety critical items that are involved in truck overhauls. And they identified those as the primary items involved that currently are not monitored by active systems onboard the vehicle. There are other elements to truck overhauls that need to be and it's the primary element that as part of the vehicle has an active monitoring system that provides for safety if there is an issue with the propulsion system onboard, and that safety system will stop the vehicle from operating again, similar to that of a monitoring and safety features on vehicles, passenger vehicles and the bearings on our vehicles do not have those systems. They identify the bearings as a primary safety item to focus on. They believe with an expedited schedule on the oldest vehicles, the highest mileage vehicles which is approximately, he can do what we call a bearing swap or bearing replacement on half the fleet in about the next 12 months. Excuse me and then progress through with the rest of the fleet after that again, half of the fleet that we're focusing on are the first seven vehicles that the city purchased as part of the original blue line and they represent the highest mileage vehicles. Those vehicles that are at or well above 600,000 miles.

The second component of Phase 1, which I am very excited about is to add to all of the vehicles over the next 12 months an active monitoring system for the bearings, and that system, what it does, and we add it to the vehicle, and it listens for disturbances in the bearing, right? A bearing operating normally should be smooth. It has a sound to it. This session testimony is attached to the vehicle, and it listens to the bearing, and it detects if the sounds change. It's much superior than checking the heat of the axles. The heat of the axels will determine if a bearing is failing but they determine that at the end or as it's already well-degraded. This will detect it on the front end.

This system is not deployed in North America. We will be the first major deployment in North America. However, the system is deployed worldwide in Asia and Europe and has proven very, very successful for operators across the world.

Again, we think that this is a great system to do. It improves our safety awareness on the vehicles and the system sends signals real-time to a cloud-based sever. That sever then downloads to us so that we can see bearing health, literally in real-time. We're excited about that. That system will take about 12 months to install across all of the fleet.

**MAYOR BALES (Town of Huntersville):** I want to say there was a lot of good dialogue at this working group, at this first joint meeting. I was appreciative of staff actively looking at these other monitoring systems because that heat strip as was addressed by Mr. Cagle, you actually have to look at those, right? The degradation of that bearing, it's already happened.

The fact that we're going to add this active monitoring system to the fleet, the whole fleet in the next 12 months is a huge value-added. Not only for perception, right, because there's a level of perception, but the fact that it will address maintenance opportunities for us. I think that is the critical piece. Adding this level of technology, it may be a little expensive, but adding that level of technology is going to help us prolong that fleet, too, and be a little bit more responsive.

One of the other pieces that I asked Mr. Cagle, I said, are there other monitoring systems across Europe and Asia that maybe we need to take a look at as well? I believe the answer to that is yes. That there are a few other things that maybe we could take a look at that we don't currently use here.

**INTERIM CATS CEO CAGLE:** Yes, Ma'am. We are focused on the matter of hand, the truck overhaul. But we are already having discussions with Siemens related to other active monitoring systems. Just like vehicles have progressed, technology has progressed and there are a lot of wonderful improvements to actively monitor and inform you of the status of your vehicle, that is true for light rail vehicles as well and we are-- we are having those discussions because we do think that there is potential for additional systems that will help us improve our awareness on the health of the vehicle.

**MAYOR KNOX (Town of Davidson):** I want to commend you on the work you have done before. I have a statement that I would like to read and this goes hand in hand with the workgroup.

"Since we have taken part in countless discussions with the quality means of transportation. I was in attendance as a citizen in 2007 when the first leg of the LYNX Blue Line was opened. I was in attendance as the mayor of Davidson in 2018 when the LYNX Blue Line Extension was dedicated. I was in attendance in 2021 when the LYNX Gold Line was dedicated. The latter two dedications were important to me. Not only as a citizen but also in my capacity as Mayor of Davidson. As Mayor, I have a seat at table as a voting member of the MTC. Myself, along with the mayors of Charlotte, Cornelius, Huntersville, Matthews, Mint hill and Pineville and representatives of Mecklenburg County all have a seat at the table as voting members of the MTC.

The MTC was created out of the need to provide public transportation services for our citizens with platforms from buses, STS, light rail, and commuter rail. Funding was specifically for the one-half cent sales tax, sales and use tax created in 1999 for public transportation. The transit governance interlocal agreement was put into effect in 1999 as well. This interlocal agreement made with and approved by Mecklenburg County and the seven Mecklenburg County municipalities, provide for equal representation for each of its members and assures that town interests are represented. This was true until it wasn't.

Collectively, we as a Board, have fulfilled the duties outlined by the interlocal agreement. In my six years on the Board, rarely has there been an issue, occurrence or motion at one of our meetings that hasn't been met with anything other than I unanimous vote. Including the desire of the Board to retain an independent third party to explore both the derailment that occurred in May of 2022 and the fallout for what has been described as a less-



than-perfect environment for employees and management. This request was voted on unanimously.

Yet it was dismissed by city officials with a message to the voting members that the request was not within our purview because CATS is a city department and the MTC did not have the ability to spend city dollars on this request.

This was the first time in my tenure on this Board that I, along with other Board members questioned what our true role was and what actual authority we had. We, as a voting Board, found out about the derail of the CATS light rail car from a reporter.

We as a voting board heard grievances from a terminated employee and the former CEO from news agencies and just yesterday, as I was getting ready for my town Board meeting, I found out via a news reporting app on the phone that the Chief of Rail Operations had been placed on administrative leave.

I do understand that CATS employees are City of Charlotte employees. I have no desire, now or in the future to delve into an employee's personnel file. I do expect as a voting member of this board is to be kept abreast of the operational duties and fulfillment of those duties by employees and safety concerns of our public transportation platforms and not have to find out via the 6:00 news.

My vision of my role on this voting Board is clouded and it shouldn't be. I'm proud to be on this Board representing the 15,000 residents of Davidson and all who either choose or rely on public transportation. We've had conversations with this Board as well as CRTPO and Connect Beyond about the formation of a regional transit authority.

In order to continue expanding the footprint of public transit across county lines, folding in municipalities defining the role and authority has to be Crystal clear. This can't be a funding mechanism for Charlotte. It has to be a true authority that has equal weigh-in from all stakeholders, potentially inclusive of state representation as well as DOT.

The current interlocal agreement is outdated and does not allow for, in my opinion, the best interests of the voting members to be met. If we're to be partners in public transit, then we should be treated as such. This interlocal agreement has a sunset of June 30th, 2024. Tonight, I ask that we immediately move to take steps to restructure the existing interlocal agreement knowing that until we can get our own house in order, the potential for asking others to join us regionally could be less than fruitful. Thank you."

**MAYOR LYLES (City of Charlotte):** Thank you, Mayor Knox. I want to make sure that the request is specific. I guess what we will do at some point, I think, have a motion that this is the-- will and support from the voting members to do that, I think it's absolutely essential. Because we do have a deadline and it's a very real deadline.

I'm sure, again, there will be a unanimous vote to go that way. I think that we'll have to probably make sure that we figure out a process and a way to put this on the table, how is it done? What are the milestones to be met? What are the legal requirements that we have to have?

I think it is, of course, an important document for us to move forward with and agree with the idea that at some point, I hope we will always be able-- I have always said that structure develops process. If we don't have the right structure, we will not have the right process. If we don't have the right process, we won't be able to serve the people.

**COMMISSIONER ALTMAN (Mecklenburg County):** I appreciate the comments from the Mayor of Davidson. I think he's identified the essential concern and necessary next steps. I thank you for that. I would like to pivot and address some of what Mr. Cagle has raised initially.

First of all, I appreciate you getting into the details regarding a lot of what you raised because it is the kind of information I'm looking to hear. Obviously, I appreciate all work done, but just so you have a sense going forward, there wasn't a lot of detail in this post-meeting report. That's fine. I want you to know that what you reported which was not contained in the post-meeting report, where you really delve into some of technical findings and processes, that's the kind of level of information I am looking to hear.

I'm glad that will be a part of your written briefing that's in the agenda. Not just verbal, but also in preparation in advance in writing. Thank you for that.

Some specific questions I have. Well, first of all, I'm glad if you've identified something to figure out if the bearings are going to fail before they are literally melting down. Do you have a sense of how much it's going to cost?

**INTERIM CATS CEO CAGLE:** We're still working on final pricing. At this point, it's estimated at approximately \$3 million for the equipment. The monitoring, because we are an early adopter, Siemens has offered us five years of free monitoring because, again, as it reports on time, literally real-time, Siemens, we think this say great product. They have offered us five years of monitoring. The monitoring beyond that is what I will call a deminimus cost but it does have a cost. We can provide you details.

Right now, the estimate is approximately \$3 million, as we finalize estimates with Siemens, we're happy to bring back and inform MTC and City Council of final costs.

**COMMISSIONER ALTMAN (Mecklenburg County):** Thank you. I think it's been since early February that we got notice of this. And of course, it was almost a year prior to that that all this happened. When do you think the remediation of the defects will actually begin?

**INTERIM CATS CEO CAGLE:** Siemens is currently working on trucks. Two sets have been sent out, have been returned. There were some quality issues--not quality issues. The normal process for these, because they are very specific materials, on the first two sets, we expect them to have adjustments that need to be made after testing. Two sets have been sent out, returned and they are currently working to accept-- we are currently working to accept those with Siemens and additional sets have been sent out. I think we mentioned in the past that we were buying additional dollies. Those Dollies have been received. I'm not sure, that all eight are, but a significant portion, I think six have been received. As we're receiving those dollies, we are sending out additional trucks.

What hasn't been executed-- that contract, base contract was in place. The new contract will extend it to the entire fleet, and it will work to expedite the process, and then it will include or either this contract or a secondary contract will include the new monitoring system. The work is underway and continues. What has not happened yet is final agreement on the change order, if you will, to the existing contract to help us start the expedited process.

**COMMISSIONER ALTMAN (Mecklenburg County):** Thank you. Have you had any heat strips indicate a problem?

**INTERIM CATS CEO CAGLE:** I will need to check. We report that weekly to NCDOT. There are times when heat strips do exceed our internal 130-degree threshold. When that happens, we do further analysis on the vehicle and if it's determined that the bearing is at failure point, you know, that it is an issue, that vehicle is removed from service and prepared for going to Siemens.

**COMMISSIONER ALTMAN (Mecklenburg County):** Will you follow up and let us know if that occurred?

**INTERIM CATS CEO CAGLE:** Yes.

**COMMISSIONER ALTMAN (Mecklenburg County):** Have you received any letters from NCDOT in the last 30 days that reach the level of-- I guess my concern is that I don't know the questions to ask if I don't know what the problem is. I want to be clear that it's certainly my expectation, and I think all of us, but there's like an affirmative duty for you to volunteer if you've received a material, a letter that raises real alarms. It's hard for me to describe it more specifically since I don't know what could be out there.

**INTERIM CATS CEO CAGLE:** I understand your question and I'm happy to answer it. I do have additional items in the report. I will answer it and it was one of the additional items. I will answer it now. We received a May 15th and May 16th. Let me check the date just to make sure I'm saying that correctly. I apologize. I have a lot of paper here in front of you. I believe it's on May 15th and May 16th we received—here it is, on May 15th and May 16th, we received two different letters each day. One letter each day. What I would say is, we did not immediately notify the MTC nor city council. We did make it available for the working group. The May 15th heat letter was related to hours of service, or HOS violations, in the rail operations control center.

There are requirements for how many hours a day and how many hours a week a rail operations comptroller can work. They have hours of service requirements. There's also a requirement for how many consecutive days they can work. NCDOT conducted an unannounced inspection after we had complied with going to two comptrollers minimum in the ROCC, and they found a few, several hours-of-service violations.

Again, these were all as we started to transition, as we made the transition into two comptrollers minimum in the ROCC, and we are continuing to monitor that we can reduce future hours of service violations.

I will say, I view these as serious, that we need to address, but more in the administrative realm. For example, three of the violations related to how our employees clock in. Their shift starts at the beginning of an hour, and it ends at the beginning of an hour. But what we realize now, they clock in and then walk to the ROCC. One of its requirements is no more than 12 hours a day working in the ROCC.

There are three violations where an employee or employees had worked 12 hours and 14 minutes. The 14 minutes is attributed to 7 minutes after clocking in and starting the shift being there just a little early and finishing the shift but taking 7 minutes to get to the time clock. I am not excusing it, but I do view it as administrative and again, we are now reporting to NCDOT.

If you'll recall last month, I introduced Victoria Johnson, and she is assisting to help us to eliminate these violations. That is the first one, hours of service violations. The second was related to work orders in our rail car maintenance area.

Again, administrative, but rules are rules. In the rail car area when a work order is completed, under our internal rules, it needs to be closed out by a supervisor within 24 hours. What they found was 90% of work orders were being completed accurately and on time. Within a reasonable amount of time that work order being submit but only 60% of work orders were being closed by a supervisor within 24 hours.

Again, those are the rules and I understand that but again, it's administrative in nature and we will address that to make sure that the rules are followed.

**COMMISSIONER ALTMAN (Mecklenburg County):** Okay. Thank you. Assume we'll get a copy of that, the NCDOT letters and I do want to ask as an affirmative duty for CATS to share any significant NCDOT communications that you receive on a contemporaneous basis assume you will be briefing us in your further remarks on the Chief of Rail Operations and if so, I will wait until then.

**INTERIM CATS CEO CAGLE:** Let me start by saying to Mayor Knox and to the MTC. I apologize where, no, we did not inform you as these HR actions were being taken. That is not the norm, but I also understand that these are different times, and I will be better on that.

Related to Mr. Harris, who is the rail operations general manager, he has been placed, as of Monday morning, on administrative leave. Because this is an active Human Resources matter, that is as much as I can share with the board related to his status and the matters at hand related to Mr. Harris. What I will also say is Mr. Harris as the rail operations general manager has oversight over all of the different rail divisions, rail operations, the ROCC, rail car maintenance, maintenance of way, which is they fix the tracks, MOWs is what we call it, and parts and labor, other things.

Those functions are now being overseen on an interim basis by a gentleman named Gary Lee. Gary Lee has over 20 years of experience in transit. He has been with Charlotte CATS for most of those years, if not all of them. Mr. Lee oversees rail car maintenance, but he has also served as the rail operations general manager for several years on an interim basis before Mr. Harris was hired. Mr. Lee has stepped in.

Our intention as this HR matter moves forward is if this becomes a permanent vacancy, we will conduct a national search-- prioritize a national search for a new rail operations general manager.

Again, I'll reiterate, our organization structure for rail, myself, CEO, Victoria Johnson, special assistant, basically overseeing rail and all of its functions, and then on an interim basis, Gary Lee as the rail operations manager. General manager.

Moving to the next item, since our last meeting, approximately two weeks ago, but two and a half weeks ago, there was a rail derailment. There was a derailment that derailment occurred in the yard at a very low speed, the train was traveling at approximately five miles an hour, which is the speed limit in the yard. The vehicle had no passengers on board.

The vehicle had undergone routine maintenance and had been sent out on a test run, which is routine. Returning from that test run, returning into the yard, the vehicle left the main tracks and then entered the yard and as it was going through a curve in the yard, a curved section of track, the vehicle derailed, the second vehicle in the train. The rear vehicle and the rear truck derailed, rear vehicle, rear truck. We are still conducting root cause analysis on that and obviously, NCDOT was immediately informed.

They were on-site actually even before the vehicle had been rerailed. They were on-site as we conducted the initial investigation. Root cause analysis is still ongoing. What I can tell you based on initial evaluation of the vehicle, the question that everybody asks, including myself was, was this a bearing failure? Initial would indicate that it was not. The reason for that is when rail car maintenance lifted the vehicle, they were then able to determine that the axle, the rear axle was spinning freely. The Hallmark of a bearing failure is the exact opposite. The bearing seizes the axel. It does not spin freely. This vehicle, the bearing spun freely upon visual inspection of the bearing. They saw no notable deficiencies with the bearing.



They are examining some possible factors, but again, they have not determined the actual cause and as soon as that is or definitively determined, the cause or contributing factors, but as soon as those are available, we will share those with MTC and city council and others. The bus incident last from last week, I'm sure you are aware on a CATS bus there was an incident between a passenger and an operator. The incident was there an exchange of gun fire between the passenger and operator. There is video for this incident as all of our vehicles have video. There is video. The video is right now under review by the TSA. If they determined that the video can be released and we do believe that they will, we will then be able to release the video.

We have prepared and members, you should have received today a narrative of the video, of what happened, that you at least have some awareness as to the chain of events. In general terms, what happened was the operator was approached by the passenger. Onboard, there were four people, the operator, the passenger who was involved in the altercation and two additional passengers. Generally speaking, what happened was the operator was approached by the passenger. The passenger came up to the front of the bus and asked the operator to be let out. They pointed, let me out here. The operator refused which is standard practice. It is not our practice to allow passengers to exit the vehicle unless it's at a stop, and that is for safety reasons, right. This is an extreme vehicle, but you wouldn't want to let somebody out if the bus was on I-77, even if they want to get off on I-77, it's not safe for them. The passenger asked to be let out.

The operator refused that request and that led to a verbal altercation which escalated over a series of several minutes. The passenger then produced a handgun, a weapon. The altercation, the verbal altercation continued to escalate and at some point, through this, a few minutes in, the driver started to stop the bus and the driver produced his own handgun and the driver and the passenger exchanged gun fire there at the front of the bus. The passenger then proceeded to go down the middle lane of the vehicle, the center aisle to the back door of the vehicle. The driver fired several more times as the passenger was still on the vehicle but at the back of the vehicle. The driver stood up, fired several more times. The passenger in the altercation hit the exit button, the door open button, and exited the vehicle at the rear door. The driver exited the vehicle at the front door. Shots were, again, fired and then the altercation was basically completed, the video, that's what you will see or what you would see in the narrative.

A couple things to note here. The other passengers were not injured. The operator and the passenger involved in the altercation were both shot. Both were transported by MEDIC, reporting life-threatening injuries. Both are stable at this point and their condition is stable and I think it's been downgraded from that status.

First, CATS is not immune to what I'm going to call the senseless violence that goes on in the community and across the country. This is certainly an instance of that. There is never any justification for any passenger to assault or threaten an operator ever. It's not acceptable. I will also say, though, the operator works for RATP Dev. It's a violation of their rules for operator to possess weapons of any kind while operating the vehicle or while on property. The driver is in violation of that, of their rules. RATP Dev is evaluating and will take the appropriate action that they deem for their employee.

Secondly, I will say that the vehicle, in this instance, while it is not policy to let a passenger out mid-route, it absolutely, the operators are trained that safety is top priority. Their safety, other passengers' safety, it would have been very reasonable for the driver to have acquiesced to have allowed the passenger to exit the vehicle. Regardless of whether there was a stop or not. Also, I'm not sure if people know this next fact? Frankly, I didn't know this. All of our

buses have different safety features to them. Clearly, the operator always has a Radio that they can contact the bus operations control center. We talked about the ROCC and now we get to talk about the BOCC, bus operations control center, they have a Radio they can contact. We realize that it may not be in the interest of the driver while this-- these kinds of events are going on, may not be possible for them to get the radio.

There are two silent alarm systems that have triggers that are not in sight of the passengers that are available to the drivers. The first silent alarm system opens a channel to the BOCC. BOCC can hear in real-time what is going on and he sends a flag to them that something is going on. It's been triggered. They hear the events unfolding and they can request CMPD or security backup for the vehicle, and the second silent alarm or safety feature is, again, through a discreet switch. They can press a button and the message boards on the outside of the bus will change from whatever they read to call 911, police help needed.

None of these systems were activated during this event. Again, I understand the operators' need to protect themselves, but there are avenues available and systems available in place to help protect the operators beyond gun fire on our vehicles, and I will say-- I was asked this. Do I think it's appropriate for our operators to be armed? I do not. I do not think it's appropriate for our passengers to be armed or for our operators to be armed. I think what's appropriate is for people to be unarmed with no weapons on our vehicles and for us to continue to look at other ways to resolve these conflicts.

What I will say is regardless of this incident, we do see some of these fairly minor disagreements escalate. We are committed. We have provided our operators with de-escalation training. We clearly need enhanced de-escalation training and customer service training.

In another announcement -- we have hired Ms. Elizabeth Presutti. Elizabeth was formerly with CATS about 15 years ago. She moved back to Charlotte but before that, she was the CEO of Des Moines Area Regional Transit Authority, Des Moines, Iowa. When life's circumstances brought her back to Charlotte, we were excited about hiring her. She is our Chief Administrative Officer (CAO). She is helping us with bus operations right now while we do not have a Chief Operating Officer. I have asked her to as quickly as possible creating a new, enhanced de-escalation training program. That will provide additional training, will also provide recurring training to the operators, not just when they're hired but recurring, and provide them role playing exercises, etc. Not just a video that you watch or reading something, but letting them experience these things, role playing, so that they can learn techniques for deescalating these situations and then having that training recurring so that it helps to reinforce that.

**EDWARD TILLMAN (CTAG Co-Chairman-City of Charlotte):** How many years had been this operator been driving for CATS?

**INTERIM CATS CEO CAGLE:** I will get you an exact answer. I believe it was 20 or so. This is what I view as a long-term employee. I don't know if we have an answer?

**KRISSY OECHSLIN (TSAC Chairwoman):** Will you be able to report back what the discipline I hate to be in opposition to the needs of drivers. They are usually in alignment. I didn't get that. I don't think Mr. Tillman did either. I didn't know they were shooting back into the bus. That's extremely disturbing. It's a miracle that another passenger wasn't hit. I'd like to hear if we're able to in future what happens to the driver.

**INTERIM CATS CEO CAGLE:** As of this morning, this matter was still under investigation. I am told, Mr. Hunter we are confident. We are told that RATP Dev separated with the driver. The driver is no longer an employee of RATP Dev.

**COMMISSIONER ALTMAN (Mecklenburg County):** The systems were not activated, like the alerts that he could have pushed. Were they functional and he didn't access them?

**INTERIM CATS CEO CAGLE:** To the systems are part of the routine maintenance. We do test them routinely. We evaluated the systems or tested the systems after the incident. They did appear to be functioning and they were not activated.

**COMMISSIONER ALTMAN (Mecklenburg County):** I'm sure it's very scary for all of our municipal workers who interact with the public whether you're with one of the towns or the county or the city, I just want to acknowledge that these kinds of random acts when engaging with the public is very scary and I do deeply appreciate all of our public servants who try to serve the public or firefighters who are serving the public every day. I'm assuming you are coming to the close of your report. I just want to ask before we totally move on to another agenda item.

In your CEO report, performance measures, safety performance measures, reliability performance measures, normally I would just rely, but I guess I feel the need to ask, is there anything significant represented by these numbers that you haven't discussed with us today?

**INTERIM CATS CEO CAGLE:** No, ma'am. As you pointed out, the basic information that we provide each meeting, no Ma'am. Nothing that stood out to me as something to report on from the monthly statistics.

**COMMISSIONER ALTMAN (Mecklenburg County):** Thank you so much. May I say one more thing, I'm sorry. When you go forward with the progress report, I see the first thing is derailment, but there's been like four or five derailments. I might offer a request that you provide updates for all of the derailments because I don't know which university, you're referring to here on this form.

**INTERIM CATS CEO CAGLE:** Sure. We are referring to the May 21st. Again, it links back to Mr. Driggs' letter. We're happy to provide that. I will say like the most recent derailment, this derailment standing out as separate, derailments what traditionally, and with CATS, this one being different, May 21<sup>st</sup> being different, derailments frequently occur at the yard at very low speed when the vehicle is not occupied by passengers, it is not in revenue service.

They do frequently occur when an operator is – what we call switching tracks, changing from one track to another, it can occur. Because that is more complicated procedure. The vehicles, they can derail, and really, a derailment in industry terms, think about a derailment is when the wheel leaves its natural position on the track. That is a derailment. It has left its natural position on the track, so these do occur, we're happy to provide you information when they occur, but again, like the last one, the vast majority of these May 21st, 22 being different, occur at low speed, and while we don't think the latest derailment was a switching, it does not appear to be a switching, it does – it is similar to the others in that it occurred at very low speed in the yard.

We're happy to provide that information when they do occur. We report all of that to NCDOT.

**TONY LATHROP (NCDOT Representative):** Brent, I want to commend you and your team for all that you're doing. In operating CATS and dealing with all of these kinds of issues. I know this is on the security and safety thing, not unique to Charlotte at all. On any given day, there's all kinds of things going on and confident that you will -- are doing everything the right way, in handling these specific things that we hear about, but also, you know, other things that happen from day-to-day that we don't hear about. I just want to say that that's so important from obviously the substance of safety of people, that use it, but also from the perception of the community that uses, you know, the light rail, our bus system, the gold line, etc., and once that gets created, it can be hard to turn it around and again that's not unique to Charlotte. I just want to emphasize that.

**MAYOR KNOX (Town of Davidson):** And Krissy, I sympathize with your position on ridership, but last night at our board of commissioners meeting, we accepted our first responder program in David Son.

We asked our police officers to deescalate, but we ask them to be psychiatrists and psychologists besides being sworn officers and I think it's disingenuous to ask a guy that drives a bus to figure out how to deescalate on his own, a situation where in our society, today, because he can't stop where this guy wants to stop, you have shootout at the OK Corral on a bus, that's unacceptable on both sides of the table, it done matter. I think asking the drivers, even situational awareness and situational ethics that you put them through with de-escalation, I think you're putting too much onus on that driver being able to deescalate something that may be beyond his ability to deescalate, and we -- and the answer is not to put more law enforcement on the buses, we already have law enforcement both our security as well as CMPD on the rail.

I don't know if the answer is to put it on how many buses we run a day, too, but I just think that asking the drivers to not only run their routes on time, but be psychologists, to deescalate a potential deadly and fatal occurrence, is asking a lot. I don't know where we go with that.

I commend you for taking that workload on. It's troublesome for me to know that that's where we're at right now.

**INTERIM CATS CEO CAGLE:** I think that the de-escalation training is valuable. To provide them tools to help deescalate, will it work in a 100% of scenarios, I would like to think it would as well, but I'm a realist, I think it provides another tool in the toolbox, on top of security personnel.

I think that it is not feasible to think that we will be able to have a security officer armed or unarmed on every bus at every day every minute. I'm not even sure if that would be a desirable thing. to some degree. we need to have multiple layers.

One thing I learned in the airport, and I think it's true at CATS, is security isn't a thing, it's many things. it's multiple layers, being able to have those tools and properly trained in de-escalation may help. but it is one tool in the toolbox.

I understand -- I don't want this to be perceived the wrong way, but I will also say the vast majority of our trips across our system are conducted with no incident. We have drivers who can go their entire career with no incident. Our drivers are passionate about what they do. They have a hard job. They're passionate about what they do, and they care about the customers. It is the reality that sometimes they're faced, just like all of us out in the community,



with people who may have other underlying issues. I do want to commend the operators for all of their hard work.

Just make it clear that while these are the exception, they are never acceptable, and we have to find solutions to move away from this -- these small incidents turning into a situation like this.

**V. Informational Items**

**A. Proposed Changes to the Service & Travel Market Policies**

**Jason Lawrence**

**Jason Lawrence** – CATS Planning Director – shared a presentation on Proposed Changes to the Service & Travel Market Policies; based on pages 62-86 in the MTC Agenda Packet for May 24<sup>th</sup>, 2023 meeting.

**Discussion:**

**KRISSY OECHSLIN (TSAC Chairwoman):** I want to make sure that I understand that passengers per revenue hour are what is going to drive this scoring. I guess my concern is, and I'm going to mention in my comments at the end of this meeting. A lot of routes have reduced service, that was approved last August, and so when you're running less service, you're going to have less passengers per revenue hour, not just because you run less service but because it's less attractive for riders to use, they're going to give up if it comes once an hour, they'll find another way to get around. Unfortunately, those are the stops that most need the benches and the shelters.

It's kind of like a vicious, downward spiral when there's less service, you actually need more benches, but you're going to have less passengers per revenue hour because the service is poor.

**JASON LAWRENCE:** Frequency drives often, so it's a very valid point. I think that as we implement microtransit, I think that will help that, because we can then have additional resources to put back on fixed route, which would help bring up the frequency. I think that you bring up a very valid point and we can certainly talk about it in more detail at TSAC.

**B. Bus Stop Improvement Plan and Strategy**

**Jason Lawrence**

**Jason Lawrence** – CATS Planning Director – shared a presentation on Bus Stop Improvement Plan and Strategy; based on pages 88-96 in the MTC Agenda Packet for May 24<sup>th</sup>, 2023 meeting.

**Discussion:**

**MAYOR KNOX (Town of Davidson):** Where is the funding coming from for the public art.

**JASON LAWRENCE:** the budget for the bus I think it's 1% of the total cost.

**MAYOR HIGDON (Town of Matthews):** The depth of the shelter looked incredibly narrow, is that narrower than our standard shelter?

**JASON LAWRENCE:** Yeah. On the slide it's kind of hard to see on the one that has kind of the fret-looking design, that's a wider shelter.

The one on the right-hand side, that's our sprinter model, that's out on Wilkinson Boulevard, it's narrow, 18 inches there. The other is probably about twice that. This shelter is very customizable.

I think if we have areas that have a lot of boardings, we can look at the wider glass but many or of our places will go with the narrower concept, the angle of what you're looking at there is kind of like a fisheye lens, distorting that somewhat, but that is a more narrow than our current model out in the field.

**MR. THUNBERG (Town of Mooresville Representative):** Has there been any consideration to one, having CATS have video surveillance there? Or is there any consideration to allowing the authorities to have video there and if, yes, is there a policy regarding privacy, disclosures and how things like that would be handled within the organizations?

**JASON LAWRENCE:** Mr. Thunberg, are you requesting video surveillance at our bus stops?

**MR. THUNBERG (Town of Mooresville Representative):** No. I'm asking if you're making a provision for that. If so, how is that going to affect privacy concerns with regards to the people that are utilizing those bus stops?

If you were going to have video, would there be a mechanism in place that would allow you to share that information with the authorities but have the approval of the -- to respect the privacy of the individuals at -- that were videoed?

**JASON LAWRENCE:** We through this, we are not recommending or proposing individual yes to be a part of -- video to be -- cameras to be a part of the amenity package for bus stop and I imagine if that were the case, similar to the policies for in our vehicles for bus and rail.

**KRISSY OECHSLIN (TSAC Chairwoman):** First of all, thank you for this.

I think TSAC has been itching to see a list of bus stops that are going to get amenities for quite a while, so i'm thrilled to see actual list.

I did have a couple of thoughts, I wanted to put out there on this.

Funding scenario - I know Columbus, OH has an adopt a stop, not in the maintenance sense, like here -- maybe I should call it a sponsor a stop, where people can pay, it's like \$1500 for a semi seat at a stop.

Maybe you could like to identify the next rung of 30 stops on the list, and put them up. Basically, be like advertising; but \$1500 for a semi seat is a pretty good deal.

One of the reasons that I asked for TSAC and the Bike Advisory which is to have a joint meeting in December. I know bike racks are a part of some the different bus stops. I know this is a small thing in the grand scheme of things, but I would really encourage working with Dave Campbell at CDOT about this because I get around mostly by bike and transit. There's no way on this planet I would leave my bike at a bike rack next to a bus stop. Because anyone walking by knows the owner is gone, so it's like, steal me. It just seems like, they aren't going be used, don't spend the money. I certainly support bike parking, but not in a way that they're going to get stolen.

Did I see on one of the slides that about the solar lights, E-paper displays for schedules.

**JASON LAWRENCE:** That was another proposal from the company, working through the solar. We haven't made it for with that conversation. Given the cost of the demonstration for that, we're going to focus on the silver light for now. Through the adoption of the UDO, and the City of Charlotte, we'll have probably a lot more opportunities to work with private development, if they choose to purchase a shelter, purchase amenity as a part of their traffic

impact analysis. That's something that we need to figure out what that means for us, so we could be an opportunity to receive funding from private partners to do things like that. Often, we do have people approach us to say, well, what if I pay for it?

We have to work through some of the mechanics, how we receive that money and do that, and then as far as the bike racks go, I think that is the case-by-case basis. We do have the rack and ride; people do tend to take their bikes with them. We've actually had requests for people to have wider slats because people's tires are much larger now when we first put the racks on. A lot of conversations around that.

**COMMISSIONER ALTMAN (Mecklenburg County):** I have a question about bus improvements but also on the previous item regarding streamlining certain routes, I'm pretty new to CRTPO. Only been on that board three or four months but it seems like they have a geographic ranking process. That is used to try to address the issue of geographic equity, and obviously, the City of Charlotte is much larger, it should have more amenities. Still, there does need to be, a rough equity. What is the process for decision making around bus stops, bus stop amenities?

It looks like well, you said I think 25 of the stops are the City of Charlotte getting improvements and just 5 in all of the towns will be getting -- only be five in the towns, that are getting upgrades. I have a global question about how -- what is the process to sort of address that sort of geographic equity in a fair way?

**JASON LAWRENCE:** I think it probably comes in two steps. One - making sure that we've got stops in the right locations, and as we think about, as we deploy microtransit, in Huntersville, Cornelius and Davidson, we have many stops on the -- really underutilized and in places that are very difficult for us to even put amenities in place.

I think that as we looked at locations that we feel fairly certain will remain in place, once microtransit is deployed like the Jenningsen Son or Catawba and Cornelius, locations that we ensured that were part of this first batch and really the first batch, we have another 16 right behind that. Then, it will as we go through, and improving the stops, it will be probably easier of our time as a whole to improve the town stops because they're not as many.

For example, in the town of Huntersville has 73 stops. If we go in and reduce a significant number of those to microtransit, and approve 5, 10, 20, almost all of the stops improved within a single jurisdiction. We go through that; I think that will balance out over time.

The Charlotte stops are 90, just over 90% of our total stops. 3,000 are within the city. We purposely put in that geographic piece because if we went solely on ridership, and densities, then it would be difficult. They would be focused on very small segments of the Charlotte area. We are cognizant of the need to do that geographically.

**COMMISSIONER ALTMAN (Mecklenburg County):** Yeah. I hear from residents who live outside of the center of the county, and they say they cannot access public transit like straight up. I appreciate you continuing to keep your eye on that.

## **VI. Action Items**

### **A. Silver Line – Amity Garden Station LPA Recommendation**

**Andy Mock**

**Andy Mock – CATS Senior Transit Planner** presented for action the Silver Line – Amity Garden Station LPA Recommendation; based on pages 98-110 in the MTC Agenda Packet for May 24<sup>th</sup>, 2023 meeting.

**Resolution:** A motion for adoption of the LYNX Silver Line Staff Recommendation of Removal of the Amity Gardens Station was made by **Mayor Melinda Bales (Town of Huntersville)**; seconded by **Mayor Rusty Knox (Town of Davidson)**. Motion carried unanimously.

**B. Title VI – Fare Capping Analysis**

**Terrence Watson**

**Terrence Watson – CATS Civil Rights Compliance Officer** – presented for action the Title VI – Fare Capping Analysis; based on pages 112-134 in the MTC Agenda Packet for May 24<sup>th</sup>, 2023 meeting.

**Discussion:**

**MAYOR HIGDON (Town of Matthews):** I don't have any issue at all, think it sounds like a great program, but I was curious how does CATS determine what the race or income is of their passengers, how do they know?

**TERRENCE WATSON:** We actually have survey data and as well, we do analysis of our system wide footprint to actually quantify where are our patrons may live and as well who those riders are. We have data on both.

**Resolution:** A motion for adoption of the Title VI – Fare Capping Analysis was made by **Mayor Rusty Knox (Town of Davidson)**; seconded by **Commissioner Leigh Altman (Mecklenburg County)**. Motion carried unanimously.

**C. MTC-02 Fare Policy Update**

**Kelly Goforth**

**Kelly Goforth – CATS Director of Development** – presented for action the MTC-02 Fare Policy Update; based on pages 136-149 in the MTC Agenda Packet for May 24<sup>th</sup>, 2023 meeting.

**Discussion:**

**MAYOR LYLES (City of Charlotte):** I want to commend this effort being expanded, I believe that this is one way that we can keep our young people safe as they decide to travel and solo and south end and all of no other places of entertainment and fun, but by also believe it helps us towards our goal to reduce the amount of vehicle traffic between the schools and the various locations that they want to go. Because this will be a way to, I think, help them reduce their exposure in so many ways. Thank you very much, and it has been a very big success at UNC-Charlotte.

**KRISSY OECHSLIN (TSAC Chairwoman):** I think that especially for the City of Charlotte, with the mode share goal of getting to 50%, I would love to see -- and I mentioned this to Kelly at the last TSAC meeting where she presented this, this would be a great opportunity for Center City Partners or the Charlotte City Business Alliance to work with major uptown employers to do a program like this, there's already like a 10% discount that CATS offers, which is minimal, but one where say a large bank, were to buy transit passes for all of their employees, in the uptown area, would really move the needle on how people get to work, get people to try transit and reduce our reliance on single occupancy vehicle travel.

**MAYOR LYLES (City of Charlotte):** I agree with you, a lot of it as well, not just the employers but we've talked about this for apartment complexes that you can come in and get a



pass that if you work in -- whatever part of town, if you can get there on a bus, faster, better, we want to try to do that. Hopefully this grows and continues to grow.

**COMMISSIONER ALTMAN (Mecklenburg County):** I just wanted to underscore what Ms. Oechslin just said. I think it's really wonderful and I'm glad it's considered for apartment complexes as well because we are trying to go for culture change.

Obviously, people love their cars, and that's fine. But as we have more and more people come here, to the extent we can expose people and encourage them to try mass transit, it's just a great win. I love this suggestion that both of you made. I hope we really can do that.

## **VII. Transit Services Advisory Committee (TSAC)'s Comments**

**Krissy Oechslin (Chairwoman):** At our TSAC meeting, we heard a lot of the same presentations tonight with the fare capping analysis, and the fare policy update as well as bus stop, we haven't seen the list of actual stops, that was exciting to see. I did just want to make sure to touch on again, the bus service cuts that TSAC and MTC approved last August as a result of the bus operator shortage. Those cuts are about to become permanent once they will have been in place for a year.

TSAC members approved those cuts on the understanding that service would be restored incrementally as more operators were hired. It seems there's still a labor shortage, I don't know if the labor contract that was approved wasn't enough to get more operators or if there's some other reason that the shortage is still going on. I feel like it's important as an advocate for riders to make sure that everyone here at this dais understands the impact of those cuts.

For example, if you take the number 16 bus down South Tryon, it used to run every 15 minutes and now it's every 30, so that's literally half as many buses. There's story like that across many popular routes. I don't feel like it comes up often enough considering the impact it has on daily riders.

I'm just concerned that this is becoming the new normal, the level of service we had before wasn't enough and now it's even less. The hole getting bigger to dig out of. The bus fixed route service is the backbone of CATS system.

I don't want the excitement over microtransit, which has its uses, but it sometimes may overshadow the importance of restoring the bus service that we used to have and need even more of. I just want to make sure that stays on everyone's minds.

I'm glad that we have someone from NCDOT here tonight. The MTC website says that NCDOT holds a voting seat on the MTC.

On Monday night, I spent my whole evening reviewing the minutes back through every MTC meeting back through 2019 and NCDOT hasn't attended a single meeting until now.

In January of 2020, the then MTC Chair and former Mecklenburg County Commissioner, Susan Harden, asked why NCDOT had not been attending, that's the only time it's been mentioned in four years, I was wondering whose responsibility it is to make sure that the voting members actually attend?

### **Discussion:**

**MAYOR LYLES (City of Charlotte):** We begin to look at this. I had to call Mr. Lathrop and he did not know he was a member that was under the other administration that he did not know. I said, did you know? He was like, well, we're in other committees together, and he said, he wasn't informed. That rests with us, not him. Thank You for this.

**TONY LATHROP (NCDOT Representative):** I've been a member of the board of transportation for six years and I chair the finance committee. During that six-year period of 12 meetings a year, I've missed two. I'm a representative by virtue of my membership on the board of transportation on the CRTPO board. I don't have an exact count, but I think I've missed less than five meetings over that time.

I'm also up until a couple of months ago, was the chair of the Citizens Advisory Committee for the unified development ordinance in Charlotte. I could count on one hand the number of meetings I've missed for that over the last six years.

The point of me saying that is to make clear that when I know that I'm on a commission, a board, I show up. I honestly did not know that I was on this commission, and in fact, I was even asked to come and speak one time, back when John still worked for CATS and I came and did that and nobody indicated to me that I was actually a member of this.

**KRISSY OECHSLIN (TSAC Chairwoman):** I didn't mean that as a personal affront, because I didn't know that there was a representative, just there wasn't somebody representing that seat and so that's why I was wondering who oversees this, it was not the personal insult to you.

**TONY LATHROP (NCDOT Representative):** I didn't think you meant it that way, but I wanted to make sure that people who are not here didn't take it that way.

**COMMISSIONER ALTMAN (Mecklenburg County):** Mr. Cagle, could you address Ms. Oechslin could you address what she was raising about temporary cuts appearing to become permanent. I think Ms. Oechslin's question is an important one about the temporary reductions in service that now appear to be coming permanent and I do think that needs to be carefully addressed, if you feel prepared this evening or if not, could it be on the next agenda?

**INTERIM CATS CEO CAGLE:** We're happy to put it on the next agenda, these will become permanent at the one-year mark. We are anticipating that. We clearly by making the changes, it has increased the reliability. The operator situation, while it is getting better, in some regards, is not sufficiently -- we still have vacancies and not able to support returning the service levels to where they were before a year ago. It is our intention as we are able to accommodate that with additional operators to start to bring back service, but we have not been able to do that.

We're focused on the reliability. That we don't get back into is a situation like we were about a year ago where we had somewhere between 8 and 10% missed trips monthly.

#### **VIII. Citizens Transit Advisory Group (CTAG) Chairman's Comments**

**Jeffrey Parker (Co-Chairman – Mecklenburg County):** At the CTAG meeting on 16 May 2023, we discussed outside the minutes and approval of the budget for the last meeting, we discussed many of the things that Mr. Mock discussed this evening, including the vehicle maintenance facility, as well as the Amity Garden Station Proposal: the cost savings, the access problems and the time savings associated with that.

We also got into a little bit of a discussion about why we couldn't just straighten out that little notch, what some people in the racing world might call a chicane, in the route, itself, to just essentially parallel US 74 there. Mr. Mock gave the reasons for that.

#### **IX. Other Business – None**

X. **Adjourn**

The meeting was adjourned at 7:46 p.m. by Mayor Vi Lyles, City of Charlotte – MTC Chairwoman.

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NEXT MTC MEETING: WEDNESDAY, JULY 26<sup>TH</sup>, 2023; STARTS AT 5:30 P.M.



# Post-Meeting Report

## Charlotte City Council | Metropolitan Transit Working Group

Tuesday, July 11, 2023 | 2:00 p.m. – 3:30 p.m. | CMGC 266 | Virtual Option Provided

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### Attendance

Working Group Members: Councilmember Ed Driggs, Chair **(Attended in person)**  
Mayor Pro-Tem Winston Braxton **(Unable to attend)**  
Councilmember Dante Anderson **(Unable to attend)**  
Councilmember Tariq Bokhari **(Attended virtually 2:32p-2:58p)**  
Huntersville Mayor Melinda Bates **(Attended in person)**  
Matthews Mayor David Higdon **(Attended in person)**

City of Charlotte: Marcus Jones, City Manager **(Attended in person)**  
Liz Babson, Assistant City Manager **(Attended in person)**  
Brent Cagle, Interim CEO, CATS **(Attended in person)**  
Elizabeth Presutti, Chief Administrative Officer, CATS **(Attended in person)**  
Catherine Kummer, Sustainability Officer, CATS **(Attended in person)**  
Emily Kunze, Administrative Officer Manager, CATS **(Attended in person)**

Management Partners/  
Baker Tilly: Sam Lieberman, Senior Manager **(Attended virtually)**  
Andrea Miller, External Consultant **(Attended virtually)**  
Vicki Sun, Senior Consultant **(Attended virtually)**

### Call To Order

Councilmember Driggs, Chairperson, called the second City Council/ MTC Working Group meeting to order at 2:05 p.m.

### Updates

Brent Cagle, Interim CEO, provided an update to the Working Group. There were no major issues of noncompliance were identified.

Catherine Kummer, Sustainability Officer, shared that CATS was awarded \$30M through the FTA to replace 31 diesel buses with low or no emission buses, advance its EV infrastructure and workforce development. CATS was awarded roughly 100% of what was requested with the award being the 11th largest granted out of 400 plus applicants. CATS local contribution to this grant will result in a \$57M investment back into our system.

### Progress Report

Mr. Cagle presented the July Progress Report.

### Management Partners/ Baker Tilley Review

Representatives from Management Partners/ Baker Tilley presented "The CATS Management Road Map – Priority Areas of Focus" based upon their findings from the review they performed in 2022. The purpose of the review was to provide a high-level roadmap with priority areas of focus to improve the efficiency and effectiveness of CATS management. (The presentation was previously provided to MTC members in December 2022).

# Post-Meeting Report

## Charlotte City Council | Metropolitan Transit Working Group

Tuesday, July 11, 2023 | 2:00 p.m. – 3:30 p.m. | CMGC 266 | Virtual Option Provided

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The presentation covered the following major topics:

- Roles and Responsibilities
- Service Provisions and Reliability
- Leadership, Management, and Organizational Culture
- Communication
- Contract Management
- Budgeting and Finance
- Governance

As a result of the review, Management Partners recommended the following next steps, many of which are underway:

- Leadership development and management teambuilding
- Targeted plan to fill vacancies more quickly
- Organization structure analysis
- Contract and performance management
- Transit management services RFP in accordance with best practices
- Clear Communication Protocols
- Reinvented governance structure that reflects community-wide services

Following the presentation, working group members discussed the presentation and asked questions of Management Partners and CATS staff about the information presented.

### Next Steps

- Wednesday, July 26: MTC Meeting, Report Out by Mayor Bales and Mayor Higdon
- Monday, August 7: TPD Committee Meeting, report out by CM Driggs

### Adjournment

- The meeting was adjourned at 4:07 p.m.

### Next City Council/ MTC Working Group Meeting

Tuesday, August 8, 2023 at 2:00 p.m. at the Charlotte-Mecklenburg Government Center, Room 266

**Charlotte City Council | Metropolitan Transit Working Group**  
**Tuesday, July 11, 2023**  
**Meeting Packet**

## Charlotte City Council | Metropolitan Transit Commission Working Group

Tuesday, July 11, 2023 | 2:00-3:30 | CMGC Conference Room 266 | Virtual Option Provided

Working Group Members: Councilmember Ed Driggs, Chair  
Mayor Pro Tem Braxton Wintson  
Councilmember Dante Anderson  
Councilmember Tarik Bokhari  
Huntersville Mayor Melinda Bales  
Matthews Mayor John Higdon

City of Charlotte: Marcus Jones, City Manager | City of Charlotte  
Brent Cagle, Interim CEO | Charlotte Area Transit System | CATS  
Elizabeth Persutti, CAO | CATS  
Catherine Kummer, Sustainability Officer | CATS

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**2:00 – 2:15:** Updates - Councilmember Ed Driggs/Interim CATS CEO Brent Cagle

- New NCDOT SSO Letter, re. Unannounced inspection, no violations/operations compliance
- New FTA Letters, re. Notification of joint financial management oversight full scope system review and specialized maintenance review & N. Davidson parking deck closure acknowledgement
- FTA Grant Award
- July Progress Report

**2:15 – 3:15:** Management Partners/Baker Tilley

**3:15 – 3:30:** Close out, next steps

- Wednesday, July 26<sup>th</sup>: MTC Meeting, report out by Mayor Bales
- Monday, August 7<sup>th</sup>: TPD Meeting, report out by CM Driggs

**Next Working Group Meeting: Tuesday, August 8, 2023**





STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

June 8, 2023

Mr. David Moskowitz  
General Manager, Safety and Security  
Charlotte Area Transit System  
3145 South Tryon St.  
Charlotte, NC 28217

**Subject: NCDOT Unannounced Inspection of CATS LYNX Blue Line Light Rail Operations - Compliance with NCDOT Directive for Speed Restriction**

Mr. Moskowitz:

On June 6, 2023, the North Carolina Department of Transportation (NCDOT) State Safety Oversight (SSO) personnel conducted an unannounced inspection of the Charlotte Area Transit System (CATS) LYNX Blue Line light rail operations.

The purpose of this inspection was to verify CATS's compliance with NCDOT's system-wide speed restriction directive-not to exceed 35 mph, issued on February 17, 2023. The scope of the inspection was specific to Blue Line light rail vehicle (LRV) operations between I-485 station and Bland Street station. The following four (4) LYNX Blue Line LRV consists in revenue service were observed between 10:20am and 12:12pm:

- LRV113/LRV109, Operating from cab 113A
- LRV312/LRV317, Operating from cab 312B
- LRV307/LRV314, Operating from cab 307B
- LRV320/LRV302, Operating from cab 320A

The results of the inspection determined no findings of noncompliance and no recommendations. The Speedometer Simple App® was used to observe the LRV speeds. NCDOT's summary of its unannounced inspection observation is listed below.

- 1) All LRV operators were observed adhering to the current maximum speed restriction of 35 mph.

NCDOT greatly appreciates the response of CATS' senior leadership to promptly implement the speed restriction, with an abundance of caution, as CATS continues to address its current deferred maintenance situation.

If you have any questions, please contact me at 919-707-4149.

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
RAIL DIVISION  
1556 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1556


*Telephone:* (919) 707-4100  
*Fax:* (919) 707-4154  
*Customer Service:* 1-877-368-4968

*Website:* [www.ncdot.gov](http://www.ncdot.gov)  
[www.ncbytrain.org](http://www.ncbytrain.org)

*Location:*  
862 CAPITAL BLVD  
RALEIGH, NC 27603

David Moskowitz, CATS  
June 8, 2023  
Page 2

Regards,



Timothy P. Abbott  
Safety Enforcement and Oversight Manager  
SSO Program Manager  
Rail Division  
North Carolina Department of Transportation

Cc: Chad Hagans, CATS  
Jahmal Pullen, NCDOT  
Jason Sergent, NCDOT Contractor  
Don Pike, NCDOT Contractor  
Jerrad Jones, NCDOT Contractor



U.S. Department  
of Transportation  
**Federal Transit  
Administration**

REGION IV  
Alabama, Florida, Georgia,  
Kentucky, Mississippi,  
North Carolina, Puerto  
Rico, South Carolina,  
Tennessee, Virgin Islands

230 Peachtree St., N.W.,  
Suite 1400  
Atlanta, GA 30303  
404-865-5600  
404-865-5605 (fax)

June 13, 2023

Mr. Brent Cagle  
Interim Chief Executive Officer  
Charlotte Area Transit System  
City of Charlotte  
600 East Fourth Street  
Charlotte, NC 28202

Mr. Jason Orthner  
Director of Rail Division  
North Carolina Department of Transportation (NCDOT)  
1 South Wilmington Street  
Raleigh, NC 27601

Re: Notification of Joint Financial Management Oversight Full Scope System Review and  
Specialized Maintenance Review

Dear Mr. Cagle/Mr. Orthner:

The Federal Transit Administration (FTA) prioritizes the safety of our nation's public transportation systems and responsible stewardship of the taxpayer dollars that fund those systems. In light of recent concerns over safety and practices for managing federal funds at the Charlotte Area Transit System (CATS), FTA will be conducting financial management and specialized maintenance reviews of CATS. These reviews will help strengthen the system's safety for workers and riders and support the appropriate use of federal grants.

Specifically, FTA will be conducting a Financial Management Oversight (FMO) Full Scope System Review in conjunction with a Specialized Maintenance Review. FTA will conduct these reviews through a combination of virtual interviews and data collection, plus an on-site portion for verification of CATS' policies and practices.

The FMO program reviews recipient performance and adherence to current FTA requirements and policies to ensure adequate financial and internal controls to manage FTA grants are in place. FTA identified CATS for this review as a result of the significant number (23) of deficiencies in CATS' FY2022 Triennial Review. The review will provide an in-depth analysis of accounting and financial system controls; how payments move through the system; when and how payments are made and approved; the timeliness of payments; the cost of project changes; and the adequacy of CATS' tracking system through all phases of the projects. The review will also include an evaluation of CATS' overall organization charged with financial management

Notification: CATS FMO FSSR & Specialized Maintenance Reviews

responsibility. We want to emphasize that the FMO program is not an audit but a review of internal controls and accounting systems in place for financial management of FTA grants.

The Specialized Maintenance Review will assist FTA in determining whether CATS is meeting FTA's preventive maintenance requirements for its bus fleet, rail fleet and rail infrastructure. FTA is conducting this review in response to safety concerns including recent light rail derailments, at-grade intersection signal failures, and bus and rail fleet maintenance issues. FTA staff from the Office of Transit Safety and Oversight and FTA Region IV will join the Specialized Maintenance Review Team for the on-site portion of the review. The Specialized Maintenance Review will review the CATS bus fleet preventive maintenance program as well as its Light Rail Vehicle (LRV) maintenance programs and records to determine compliance with FTA requirements and CATS' maintenance program. The use of grant funding to cover the costs to perform routine maintenance will also be reviewed. In addition, the LRV maintenance activities will be examined based on the maintenance program plan, the manufacturer's requirements, and a sample set of the LRV records to assess if CATS has met all its identified maintenance activities based on mileage of operations.

Mr. David Powell of FTA Region IV is available to assist if you have any questions. He can be reached by phone at (404) 865-5628 or by email at [david.powell@dot.gov](mailto:david.powell@dot.gov)

Sincerely,

YVETTE G TAYLOR  
Digitally signed by  
YVETTE G TAYLOR  
Date: 2023.06.13  
15:46:17 -04'00'



Yvette G. Taylor, Ph.D.  
FTA Region IV Administrator

Joe DeLorenzo  
FTA Chief Safety Officer & Associate Administrator,  
Office of Transit Safety & Oversight

cc: Thurman "Chad" Howell, Deputy Director & CFO, CATS  
Jahmal Pullen, P.E., Engineering Coordination & Safety Manager Rail Division, NCDOT  
Timothy Abbott, State Safety Oversight Program Manager, NCDOT  
Dr. Melonie Barrington, Director of Safety Review, FTA TSO  
Hope Jensen, Director of Program Oversight, FTA TSO  
Dudley Whyte, Deputy Regional Administrator, FTA Region IV  
David Powell, P.E. General Engineer, FTA Region IV





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REGION IV  
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230 Peachtree St., N.W.,  
Suite 1400  
Atlanta, GA 30303  
404-865-5600  
404-865-5605 (fax)

6/14/2023

Mr. Brent Cagle  
Interim Chief Executive Officer  
Assistant City Manager  
City of Charlotte  
600 East Fourth Street,  
Charlotte, NC 28202

Re: Charlotte Area Transit System – North Davidson Parking Deck

Dear Mr. Cagle:

The Federal Transit Administration (FTA) received your letter dated May 3, 2023 regarding Charlotte Area Transit System's (CATS) decision to close the elevated levels of North Davidson Parking Facility (the "Deck") as a safety precaution. FTA understands that the Deck was funded with FTA financial assistance and placed into service in November 2011. The Deck was closed in June 2017 due to safety concerns and reopened in March 2019.

Please be reminded, according to FTA Circular 5010.1E, the minimum useful life of FTA funded asset refers to the period that the asset is in transit service. The periods of extended removal from transit service do not count towards its useful life.

If you have any questions, please feel free to contact Guanying Lei of my staff at (404) 865-5615.

Sincerely,

Margarita Sandberg  
Director, Office of Program Management and Project Oversight



**7-11-23 Progress Report - Identified Actions from the CATS Oversight and Remediation Report**

	Action Item	Steps
Issue 1: Derailment(s)	1.1: Report to NCDOT State Safety Oversight (SSO)	May 21, 2022 Derailment (event took place while in service): - CATS followed all NCDOT State Safety Oversight (SSO) notification and reporting requirements. - Investigation and documentation on cause of incident performed and provided to MTC on 4/24/23. <b>May 10, 2023 Derailment (event took place while not in service):</b> <b>- CATS followed all NCDOT State Safety Oversight (SSO) notification and reporting requirements.</b> <b>- Investigation is complete, inspection indicates this was not a bearing issue.</b>
	1.2: Identify Cause	May 21, 2022 Derailment (event took place while in service): - As part of the root cause analysis CATS worked with Siemens (Light Rail Vehicle [LRV] manufacturer) to conduct the analysis. - Upon completion of the analysis CATS provided the results to SSO. <b>May 10, 2023 Derailment (event took place while not in service):</b> <b>- Investigation is complete, inspection indicates this was not a bearing issue.</b>
	1.3: Corrective Actions	May 21, 2022 Derailment (event took place while in service): - SSO accepted CATS' Corrective Action Plan(s) (CAPs) on 3/2/23 (letter included as part of the background material). <b>May 10, 2023 Derailment (event took place while not in service):</b> <b>- Investigation is complete, inspections indicates this was not a bearing issue.</b>
	1.4: Next Steps	May 21, 2022 Derailment (event took place while in service): - CATS will continue to work with Siemens to expedite necessary repairs on LRV trucks in order to closeout CAPs and begin to remove operating restrictions associated with CAPs.  <b>May 10, 2023 Derailment (event took place while not in service):</b> <b>- Investigation is complete, inspection indicates this was not a bearing issue.</b>
Issue 2: LYNX Blue Line Maintenance	2.1: Identify Maintenance Need	During investigation of Issue 1, it was determined that CATS failed to timely complete truck overhauls of LRV wheel assemblies.
	2.2: Accelerate Maintenance Program	CATS is working with Siemens to develop a final overhaul schedule. - Negotiations with Siemens is ongoing and should be complete within the next 15-30 days. <b>UPDATE: Negotiations have concluded with Siemens and contract updates are underway.</b>
	2.3: Next Steps	Finalize amendment to current service agreement with Siemens to include all LRVs and accelerate maintenance schedule. Request for Council Action for purchase of six sets of dollies - approved.



### 7-11-23 Progress Report - Identified Actions from the CATS Oversight and Remediation Report

<p>Issue 3: Bridge and Parking Deck Inspections</p>	<p>3.1: Identify Missed Inspections</p>	<p>Interim CATS CEO informed of required inspections of bridges and parking garages not performed in 2021.</p>
	<p>3.2: Corrective Actions</p>	<p>Interim CATS CEO reported status to SSO and instructed staff to immediately secure a contractor for the inspections.</p>
	<p>3.3: Inspections</p>	<p>Bridges:            - Inspection contractor began inspections on 3/20/23.            - 32 of 38 bridge inspections completed. All retaining wall inspections completed.            - No critical issues have been identified to date.  <b>- The remaining six bridge inspections are pending right of entry approvals from the railroads. Anticipated completion of field work is currently Q3 2023.</b></p> <p>Parking Decks:            - Inspection field work is complete for all parking decks.            - On 4/25/23, CATS closed all elevated portions of the employee-only parking deck at N. Davidson due to cracking noted during the inspection. Engineers are working to determine necessary repairs.            - No critical issues found at the other decks.</p>
	<p>3.4: Next Steps</p>	<p>- CATS provides monthly reports to SSO.            - CATS will publish final inspection report when completed (estimated within six months of completion of the inspections).</p>
<p>Issue 4: Communication</p>	<p>4.1: Communication Failures</p>	<p>City Council and MTC were not informed of above issues until March 2023.            - Working Group created, work plan in progress.</p>
	<p>4.2: Leadership Changes</p>	<p>- Brent Cagle is serving as interim CEO.            - Chad Howell has been hired as CFO and Elizabeth Presutti has been hired as CAO.            - Victoria Johnson is supporting overall employee engagement and rail management as a Special Assistant to the CEO.            - Craig Fox is supporting facilities and asset management in an interim capacity.  <b>- Deltrín Harris is no longer with CATS.</b></p>
	<p>4.3: Corrective Actions</p>	<p>Interim CATS CEO has conducted extensive staff interviews to understand culture that led to poor performance at CATS and lack of communication with elected officials and the public. These interviews and other steps taken have led to discovery of these previously unreported issues.</p>
	<p>4.4: Next Steps</p>	<p>Formalize notification and communication procedures, promote the existing City hotline, share interview summaries with City Council and the public, implement Manager's strategy.            - Website development in progress anticipate 3-6 months.</p>
<p>Issue 5: NCDOT Conflicts</p>	<p>5.1: Critical Correspondence from NCDOT</p>	<p>SSO correspondence criticizes CATS and reflects a conflict between the two organizations, however since that time CATS and SSO have come to concurrence on CAPS to address Issue 1 and have renewed intention to work together as partners.</p>
	<p>5.2: Corrective Actions</p>	<p>CATS has increased engagement with SSO.            - New CATS leadership is working to resolve controversy with SSO.  <b>Ongoing engagement with SSO.</b></p>
	<p>5.3: Next Steps</p>	<p>Disclose documents from SSO that are critical of CATS - disclosed publicly during MTC Meeting on 4/24/23.</p>





**7-11-23 Progress Report - Identified Actions from the CATS Oversight and Remediation Report**

Issue 6: Financial Condition	6.1: Financial Demand from Above Issues	Conducting the necessary maintenance and repairs to CATS trains, as well as the urgent need to modernize the bus fleet, will place financial demands on CATS - however, CATS' <b>adopted</b> FY2024 budget <b>and FY 2024 to FY 2028 capital budgets includes the</b> resources needed to meet <b>these</b> requirements.
	6.2: Financial Requirements	All financial requirements are met.
	6.3: Revenue Projections	Revenue projections are sufficient to meet <b>operating and capital</b> expenditures.
	6.4: Currently Available Revenue	Available cash and annual revenues sufficient to meet <b>operating and</b> capital expenditures.
	6.5: Budget	Presented for approval to MTC and CC - approved. <b>Budget adopted by CC on June 12, 2023.</b>
	6.2: Corrective Actions	No known issues. - Debt rating remains AA. - Sufficient financial capacity for repairs and bus fleet renewal.
	6.3: Next Steps	Continue to monitor financial health of the organization and work with City Finance to develop 5-10 year plan of finance for operating and capital needs.
Issue 7: Other	7.1: Rail Operations Control Center (ROCC) Staffing	NCDOT found ROCC staffing levels to be noncompliant with state staffing recommendations/requirements <b>and sent CATS two letters in May documenting this noncompliance.</b> - CATS immediately implemented staffing policy changes for the ROCC and has implemented mandatory overtime in the ROCC until CATS can reduce the vacancy rate in the ROCC. - <b>Update: CATS staffing is stable at this time. NCDOT letters have been made available to the working group and MTC.</b>
	7.2: Bus Replacements	Roughly 60% of CATS bus fleet will be 12 years of age or over 500,000 miles by end of calendar year; Interim CATS CEO has instructed staff to expediate purchase of new battery electric and hybrid electric buses ASAP. - 15 BEBs and 12 Hybrid buses are on order in the current fiscal year. - FY24 budget will support additional buses with potential IJJA grant funding pending award notifications in June.
	7.3: Asset Management	Asset Manager position created and posted for hire.
	7.4: Employee Engagement and Updates	- DiJulius Group has been hired and will begin developing an employee engagement program for CATS. - <b>Employee pay and retention opportunities are being discussed across the agency, CATS has taken aggressive measures to increase pay across its field units in order to create better recruitment and retention.</b>
	7.5: Bus Incident	<b>In May, there was a shooting between a bus operator and passenger.</b> - Both operator and passenger sustained injuries. - The bus operator is no longer employed by RATP-Dev, the passenger is facing charges. - CATS is increasing de-escalation and customer service training and addressing violence, increasing budget roughly two-fold with two new security contracts.



# City of Charlotte Charlotte Area Transit System (CATS) Management Roadmap

## Priority Areas of Focus

December 12, 2022



Andy Belknap, Managing Director  
Sam Lieberman, Senior Manager  
Mahdi Aluzri, External Consultant  
Andrea Miller, External Consultant  
Vicki Sun, Senior Consultant



# Presentation Overview – Areas of Focus



Roles and Responsibilities



Service Provisions and Reliability



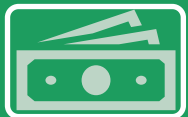
Leadership, Management, and Organizational Culture



Communication



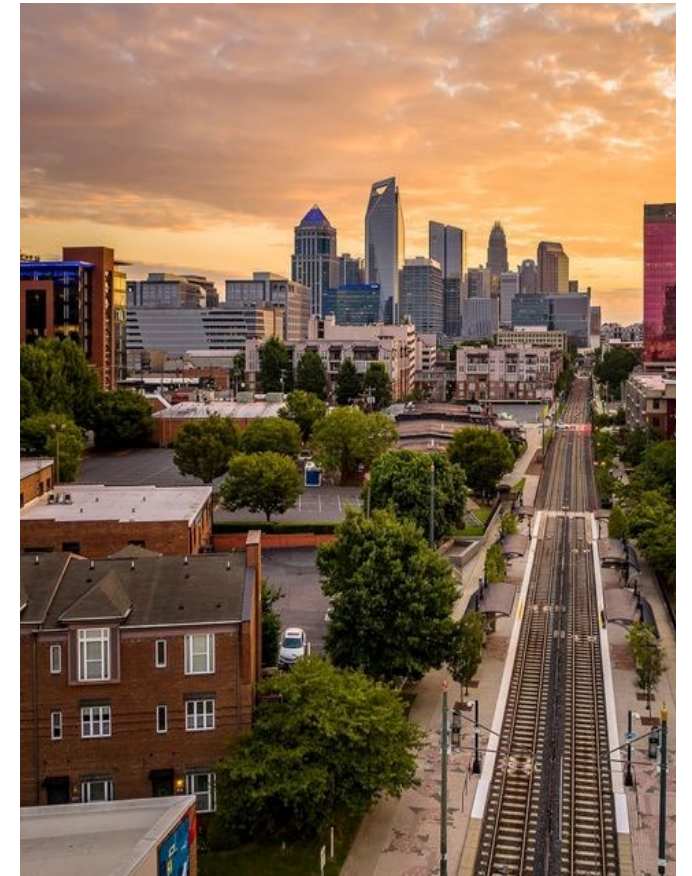
Contract Management



Budgeting and Finance



Governance

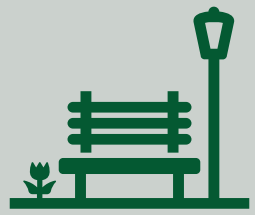




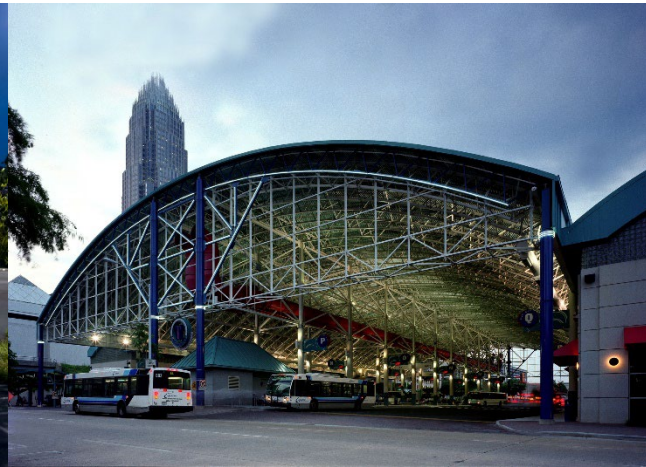


# Overview

# Engagement Objective



Provide a **high-level roadmap** with **priority areas of focus** to **improve the efficiency and effectiveness** of CATS management





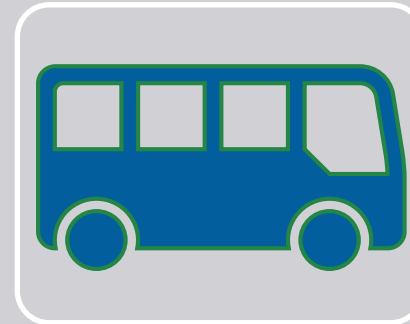
# To Inform Our Observations and Strategic Focus



Conducted 19 interviews with 21 individuals from RATP Dev/TMOC, CATS and other City departments



Reviewed documents, including budgets, ACFRs, audits, and customer surveys for the last 3 to 5 years



Reviewed other transit systems

- CapMetro (Austin, TX)
- CAT (Savannah, GA)
- IndyGo (Indianapolis, IN)
- LBT (Long Beach, CA)
- MATA (Memphis, TN)



Surveyed City of Charlotte CATS employees<sup>1</sup>

<sup>1</sup>Did not include RATP Dev/TMOC employees

# Important Documents that Guide CATS

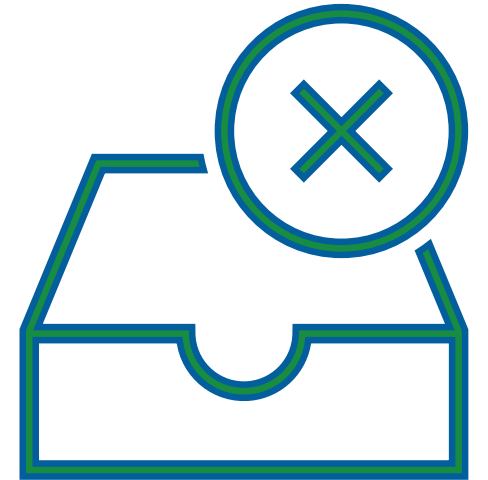
**For context, we reviewed:**

- **2030 Transit Corridor System Plan**
- **CONNECT Beyond Regional Mobility Plan**
- **Interlocal Agreement** with the Metropolitan Transit Commission
- Charlotte Regional Transportation Planning Organization (CRTPO) **Memorandum of Understanding**
- CRTPO **Bylaws**
- City of Charlotte **Municipal Code**
- **State and Federal Transit Regulations**



# Outside Our Scope

- **Organizational assessment** of the department
- **Workload analysis**
- Review of **service delivery operations**
- Review of **division roles and responsibilities**
- **Interviews with City Council** or other **elected or appointed officials outside the City** organization (e.g., MTC Board)
- **Discussions** at the **regional level**
- **RATP Dev/TMOC** employee survey



# What We Learned From Employees

## Roles and Responsibilities

- There is confusion and concern around procurement policies and procedures

## Service Provision and Reliability

- There are varying opinions on how to improve bus operations, but no consensus
- There is strong interest from staff in steps being taken to address safety concerns, absenteeism, and hiring challenges

## Leadership, Management and Organizational Culture

- Mid-management staff are relatively new and would benefit from training and professional development
- There is a strong belief that the executive leadership team's working relationships need to improve

## Communication

- CATS is siloed internally in the department and externally across other City departments, with some exceptions
- There are good working relationships across divisions except for Finance
- There is a need for better coordination between CATS and City communication and marketing

## Budgeting and Finance

- Within CATS, a lack of engagement and transparency about the budget has been frustrating to staff

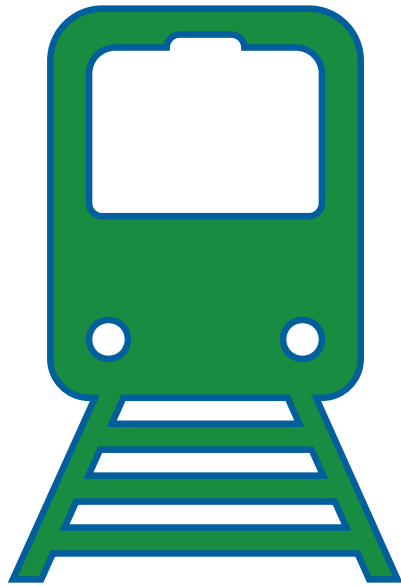
## Governance

- There is interest in CATS transitioning to a regional, independent entity
- The current governance and reporting structure needs real change





# Major Operational Issues Did Not Surface



Opportunities for operational improvements exist but need a strategic focus.

- Interviewees **like what they do** and want to perform
- More than 75% of survey respondents **are motivated to do a good job**
- Operational service delivery platform (inhouse and contract services) is typical but must **rely on contract management best practices** and **adequate staffing**
- Strong interest by Rail Division interviewees for improved **resource acquisition practices**
- **Lean organization**; inability to fill vacancies is having a real impact
- **BOD operational issues** are complex
  - Existing contract terms and conditions
  - Contract management practices
  - Declining ridership
  - Safety

# What's Needed: A Shared Mission and a Collaborative Team to Accomplish It

## Goals

- ✓ Ensure executive leaders and managers understand it **takes a team to deliver this community-wide service**
- ✓ Clarify **roles and responsibilities**
- ✓ Strengthen **contract management**



## Key Objectives

- Establish **clear expectations for performance** and how the department will **work together**
  - Conduct facilitated **teambuilding session(s)** with the executive team, followed by sessions with department leadership/management team
  - Develop and implement a plan to **improve the organizational culture** of the department
- Establish **clear roles and responsibilities** with respect to **managing a bus operations contract**

# What's Needed: A Shared Mission and a Collaborative Team to Accomplish It *(continued)*

## Goals

- ✓ Ensure executive leaders and managers understand it **takes a team to deliver this community-wide service**
- ✓ Clarify **roles and responsibilities**
- ✓ Strengthen **contract management**



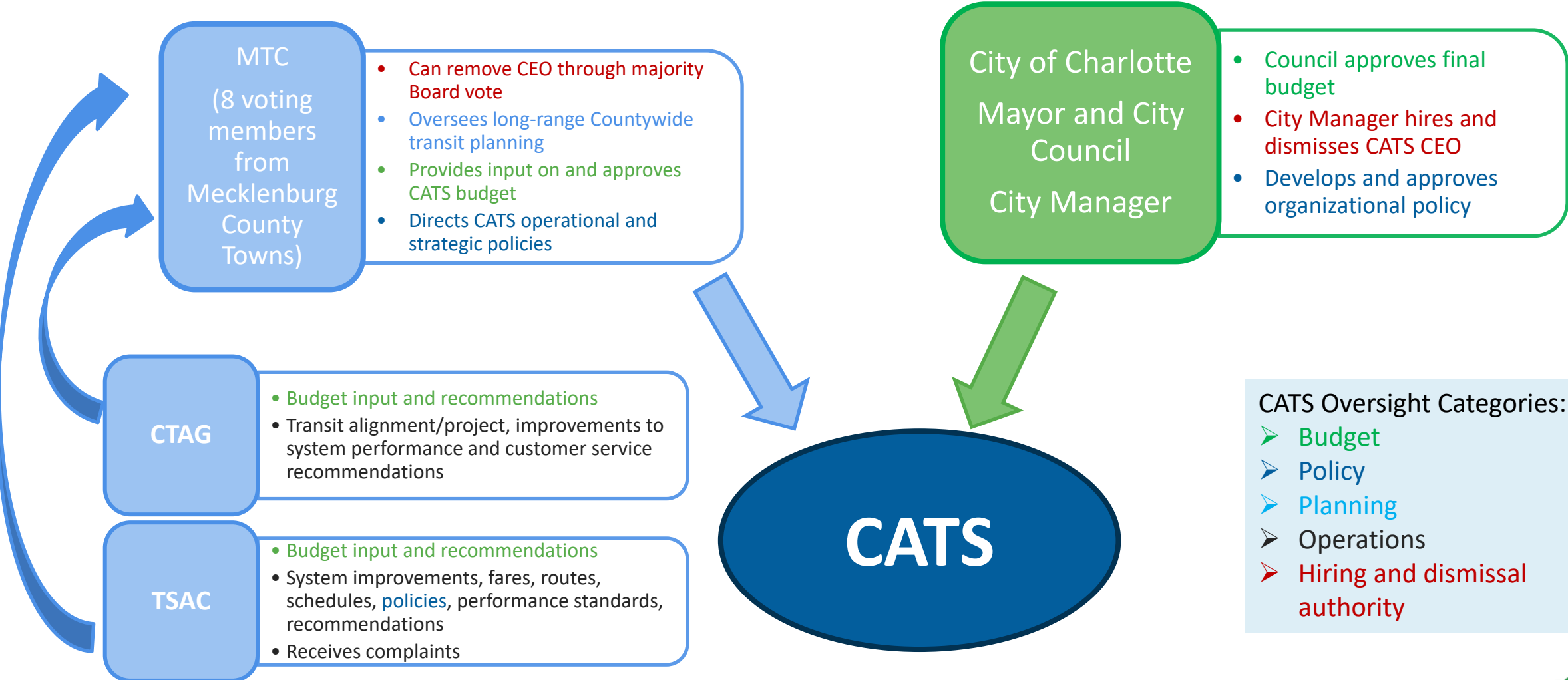
## Key Objectives

- Conduct an **analysis of the organizational structure** to position executive leaders and managers for the demands of a regional transit service and effective operational delivery
- Develop an **RFP for a new bus operations contract** in accordance **with best practices**
- Focus on what will be required to **improve the public's perception** about bus services
- Develop a **policy process** to **assess the CATS governance structure** to ensure it is reflective of an agency that delivers regional transit services



# Roles and Responsibilities

# Existing Governance and Reporting Structure





# A City Department Providing A Regional Service

- **CATS is a City department**, but serves as a community-wide transit agency
- Having two major policy bodies (MTC and City Council) and a CEO who reports to the City Manager can lead to confusion about **decision making authority**
- **Community engagement is confusing**; public goes to both the City Council and the MTC
- **Contract bus drivers** who walk and talk **like City employees** is an unusual arrangement
- **BOD represents the majority** of what CATS does; needs to be held **accountable** through **appropriate contract management practices**
- Lack of consensus by staff about **when to follow City policy and procedures**

**Role clarification will be important for future federal funding in support of the 2030 Transit Corridor System Plan.**

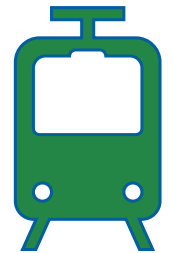




# Service Provision and Reliability

# CATS Service is Rebounding

- 80% of the Charlotte community believe **CATS provides value to their community.**
- CATS **ridership increased by 20% this year** and is 49% of pre-pandemic levels, compared to 54% nationally.
- **Rail ridership increased by 87%**, or 57% of pre-pandemic levels similar to national light rail ridership.
- Fixed route ridership has declined by 10% since the beginning of the year and is 43% of pre-pandemic levels, **lagging behind national bus ridership recovery of 60%.**
- **Vehicle operator availability declined** by 15% in the past year.
- In Q4 2022, on-time performance declined by 2% for fixed route service. Rail and paratransit on-time performance improved over the last quarter by 2% and 7%, respectively.
- Customers with access to 15-minute or better **service has improved by 74%** since last quarter and by 59% over the last year.

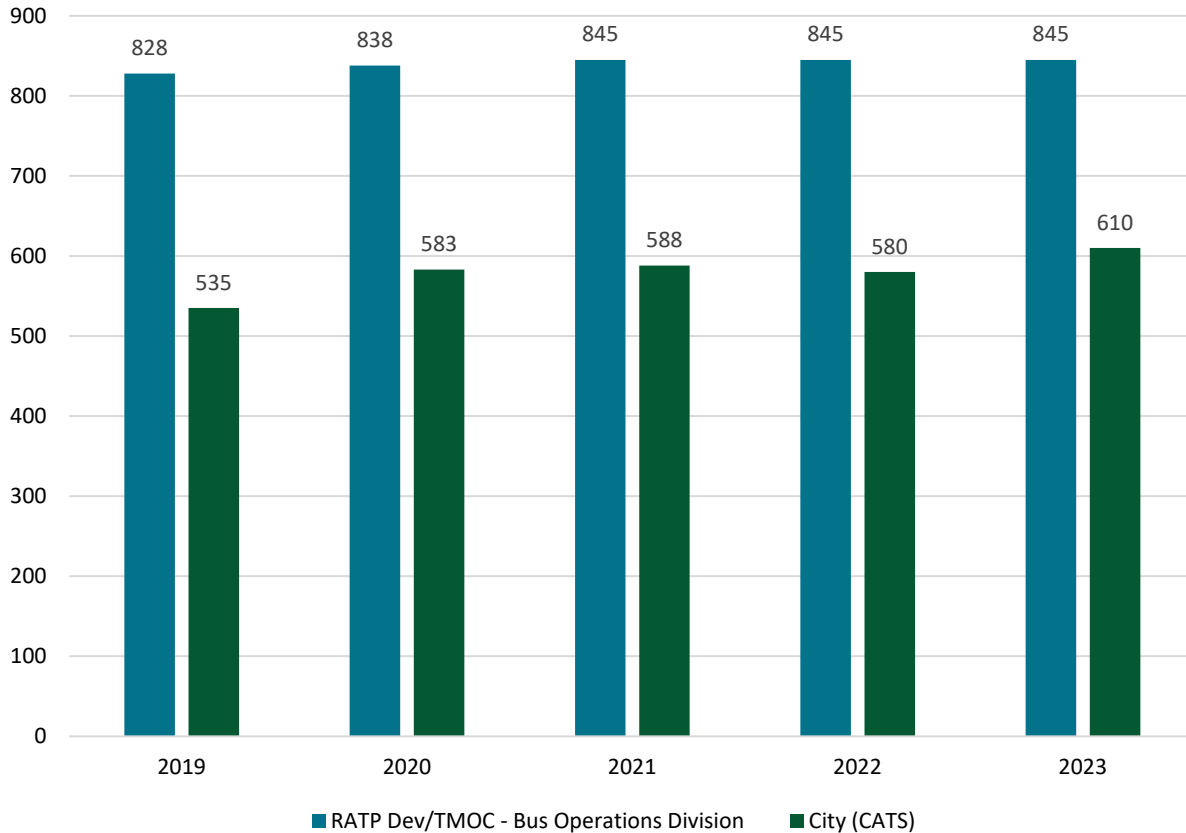


Source: CATS TRAX Q4 FY 2022 Results, September 28, 2022



# Staffing Vacancies Have Real Impacts

## Authorized Staffing from FY 2019 to FY 2023



Source: CATS staffing information as of September 2022, received from CATS HR

- CATS authorized staffing has grown 7% since 2019 but bus staffing has only grown 2%
- CATS **department wide vacancy rate** is **17%**
- Current **vacancy rates** among **CATS' three main service divisions**:
  - Bus Operations: **15%**
  - Special Transportation Service (paratransit): **19%**
  - Light Rail (LYNX): **27%**
- In a survey of 71 transit agencies across North Carolina, there was an **average 20% transit operator vacancy rate in August 2021**.<sup>1</sup>
  - Eight of the surveyed agencies reported vacancies of **50% or higher**
- A **focused class and compensation analysis** will be required to address City transit positions

<sup>1</sup>Source: North Carolina Department of Transportation's "Compensation Survey of North Carolina Transit Systems, Final Report" (Issued December 2021).



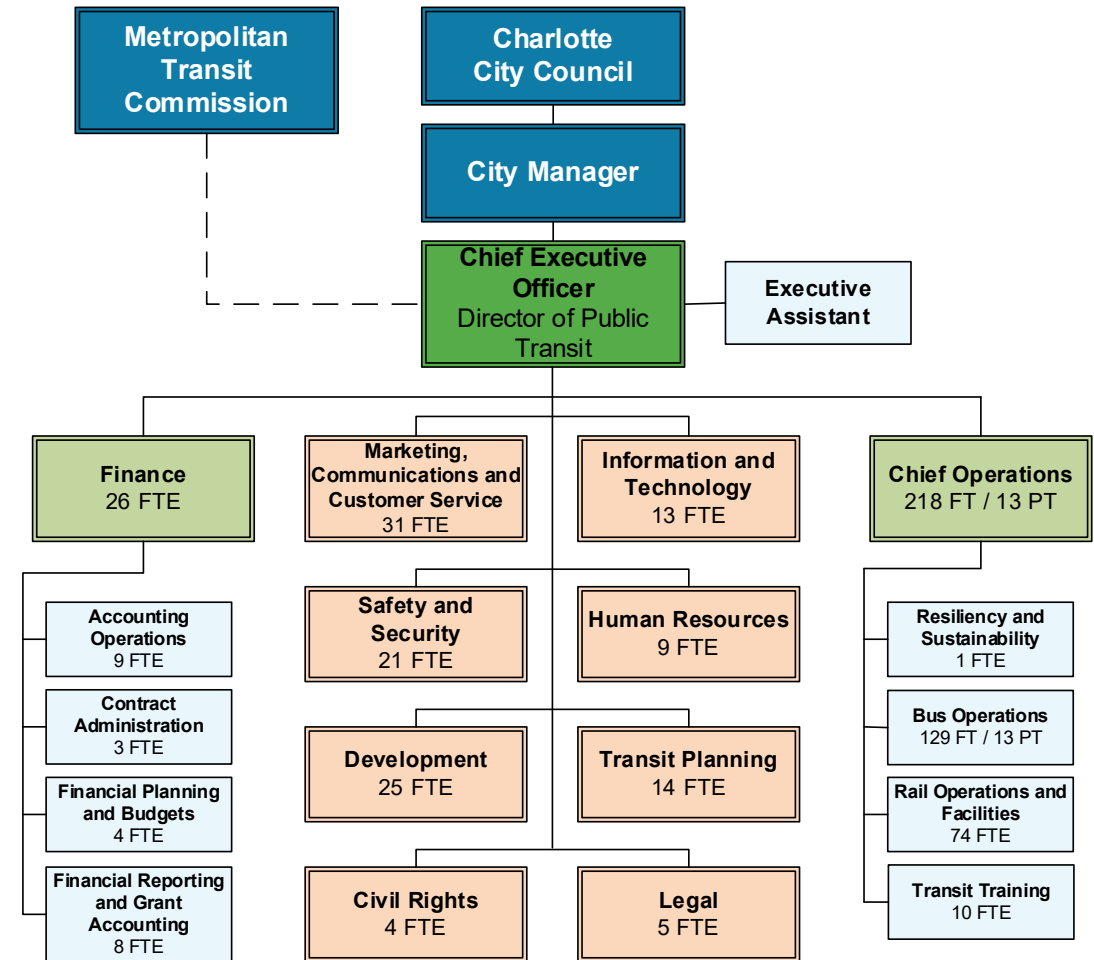
# Leadership, Management, and Organizational Culture

# Position the Leadership and Management Team for Success – Organization Structure

CATS CEO oversees **11 direct reports**

- Too broad a span of control for such a major enterprise
- Impacts the CEO's ability to focus strategically and proactively and address the issues that are important but not urgent
- Challenging for division leaders to communicate effectively and seek direction
- Pending changes in executive leadership provide an opportunity to position the CATS organization structure for the future

*Alternative options around organization structure will need more analysis*



Source: Management Partners' rendition of CATS organization structure based on CATS organization chart.

# Leadership and Organizational Culture Are Key to Operational Success

Requires *clear expectations* about how staff in the department is expected *to work together*

Relies on *department leaders* to make *changes and improvements to build trust*

Requires an organizational culture that encourages *a commitment to its mission through collaboration and shared values*







# Communication

# Perceptions of Leadership and Organizational Culture Issues



**Employee Survey Response Rate**  
**335** out of **477** CATS staff  
responded (**70% response rate**)

## Employee survey and interviews indicated

- **Lack of communication and cooperation** at the executive level
  - Communication issues lead to divisions **being siloed**
  - Only 42% of respondents agreed or strongly agreed communication between their section/division and others is good
- **Lack of transparency from senior staff**
  - Lack of transparency from executive team during budget development and high-level finance decisions **hampers staff's ability to manage and understand their budgets**
- **Low employee morale**
  - Belief that executive team does not foster a positive work environment
  - Only 41% of respondents agreed or strongly agreed morale in their section/division is good

# Consistent and Clear Communication

- Bus operators do not always hear a **consistent message** from RATP Dev/TMOC and CATS management
- Survey results indicate **communication** in the organization **needs improvement**. **Only about half of respondents** agreed or strongly agreed with the following:
  - **58%** → Communication **between staff in their section/division** is good
  - **53%** → Communication **from their section division/manager to staff** is good
  - **42%** → Communication **between their section/division and others** is good
- Need to understand why employees feel **communication isn't good** and **identify improvements**
- **Clear communication** in an organization with complex, interrelated functions is critical for collaboration and effective service delivery
- **Breaking down silos** increases transparency and trust and can increase efficiency
- Building **cross-functional teams** to tackle complex issues always improves the result



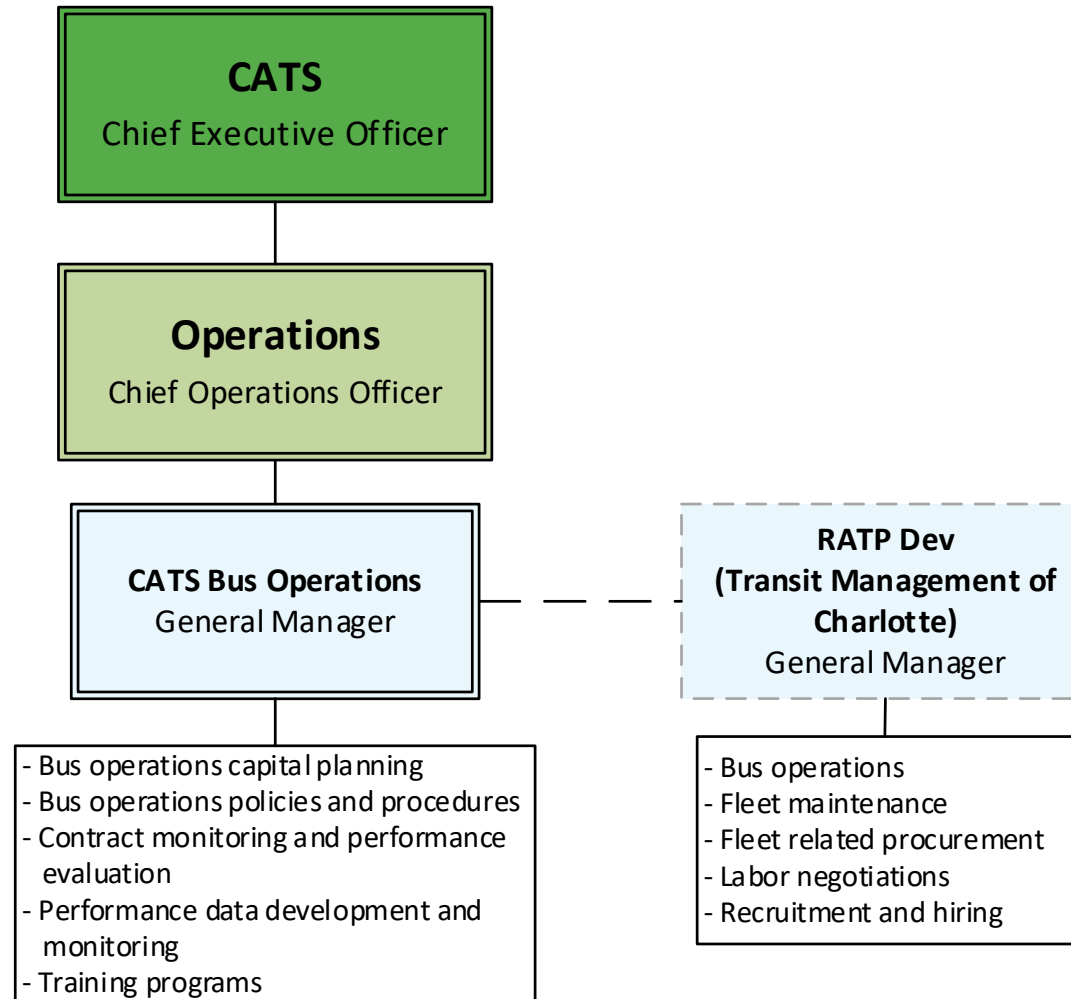




# Contract Management



# City Role is to Ensure Bus Contract Performance



*Note: Dotted lines indicate contract services.*

# Contract Management Is Not Supervision Or Operational Direction

## Contract Management Principles That Support Good Contract Management



# Current BOD Contract Constrains Bus Operations

To clarify roles and responsibilities and *reduce liability exposure*, a bus operations contract should indicate:

- It is the **contractor's responsibility** (not the City's) **to manage and operate bus services, including supervision, labor and employee relations** (no City uniforms or email)
- The City's role is to **monitor contract performance**, rather than provide operational direction
- **Specific service expectations** (i.e., specific routes, policies)
- The **contractor is responsible** for **training** in compliance with federal requirements
- What **City property and equipment** will be used by the contractor, along with **standards and expectations** related to its **use, maintenance, and replacement**
- The City's obligations are **contingent on receipt of federal and state transit funds**

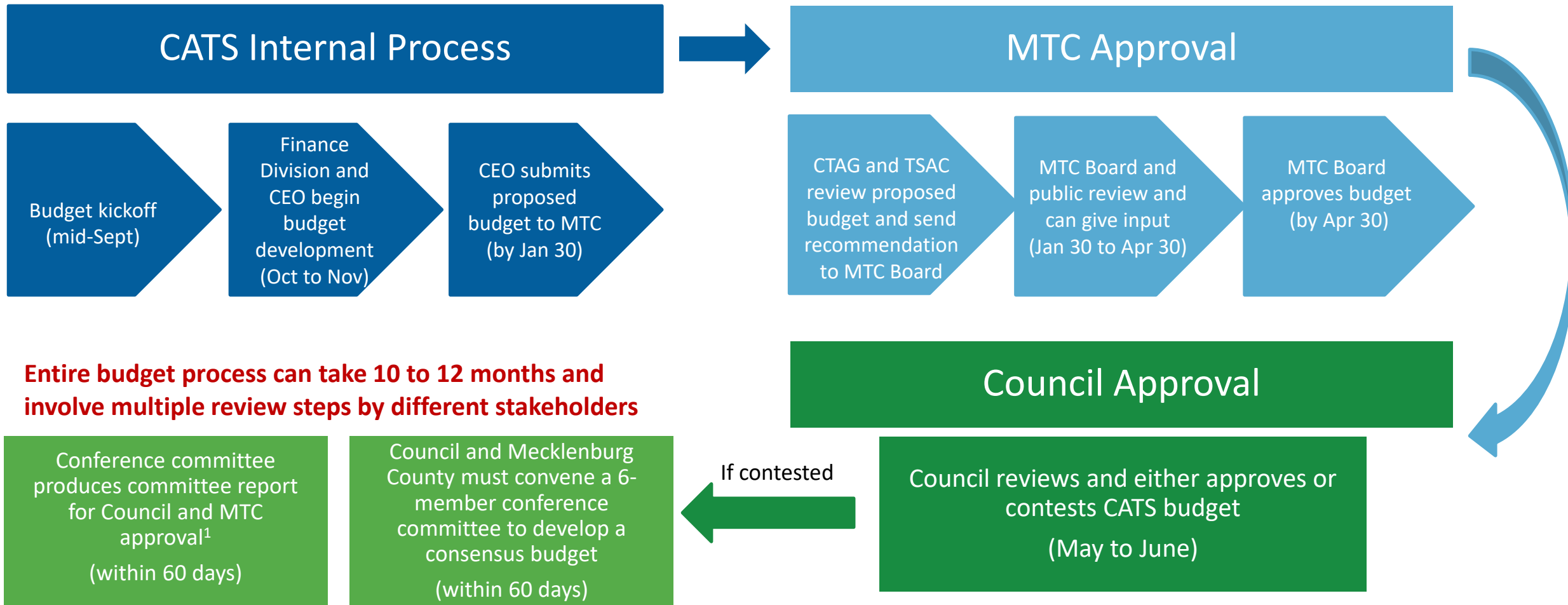




# Budget and Finance



# Who Sets CATS' Strategic and Budget Priorities?



**Entire budget process can take 10 to 12 months and involve multiple review steps by different stakeholders**

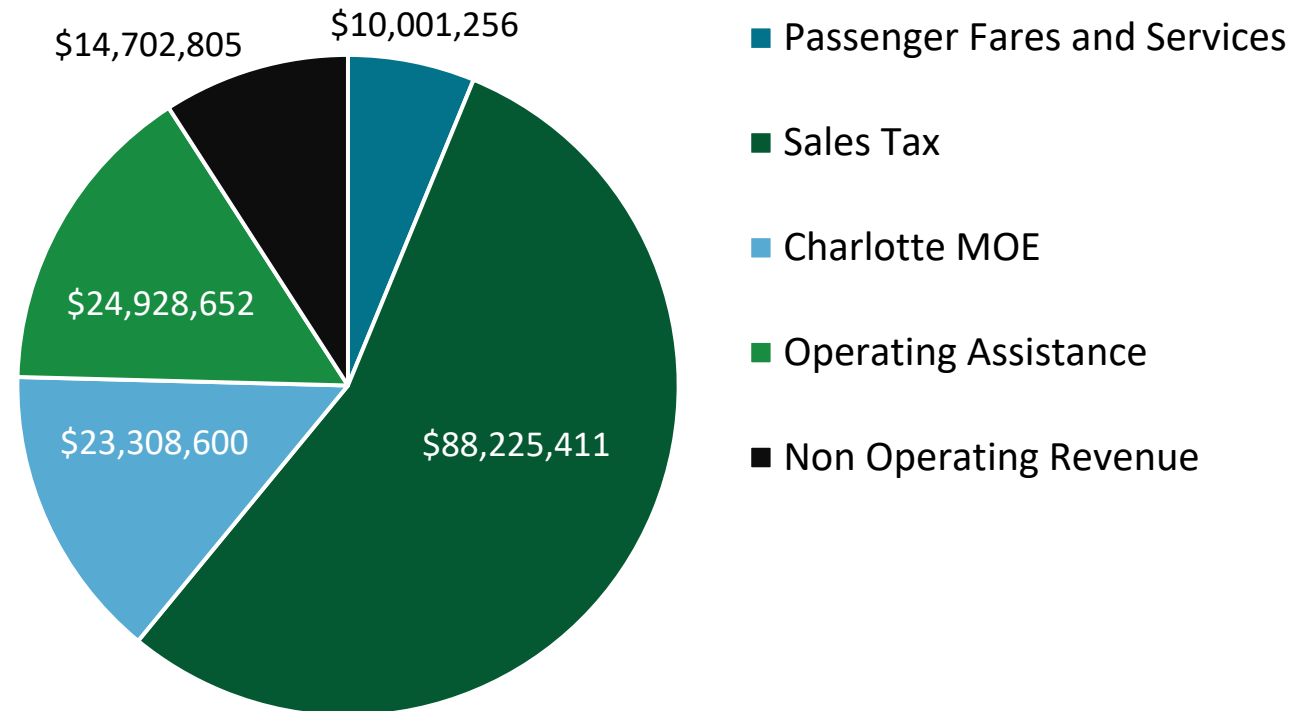
<sup>1</sup>Any MTC member town dissatisfied with the recommendation of the MTC or with the capital and operating programs approved by the Charlotte City Council may withdraw from MTC membership.

# Sales Tax Is the Critical Revenue Source

## Major revenue sources

- Half-cent sales tax - **55%**
- Operating assistance - **15%**
- Maintenance of effort (MOE) - **14%**

CATS Revenue Sources for FY 2021



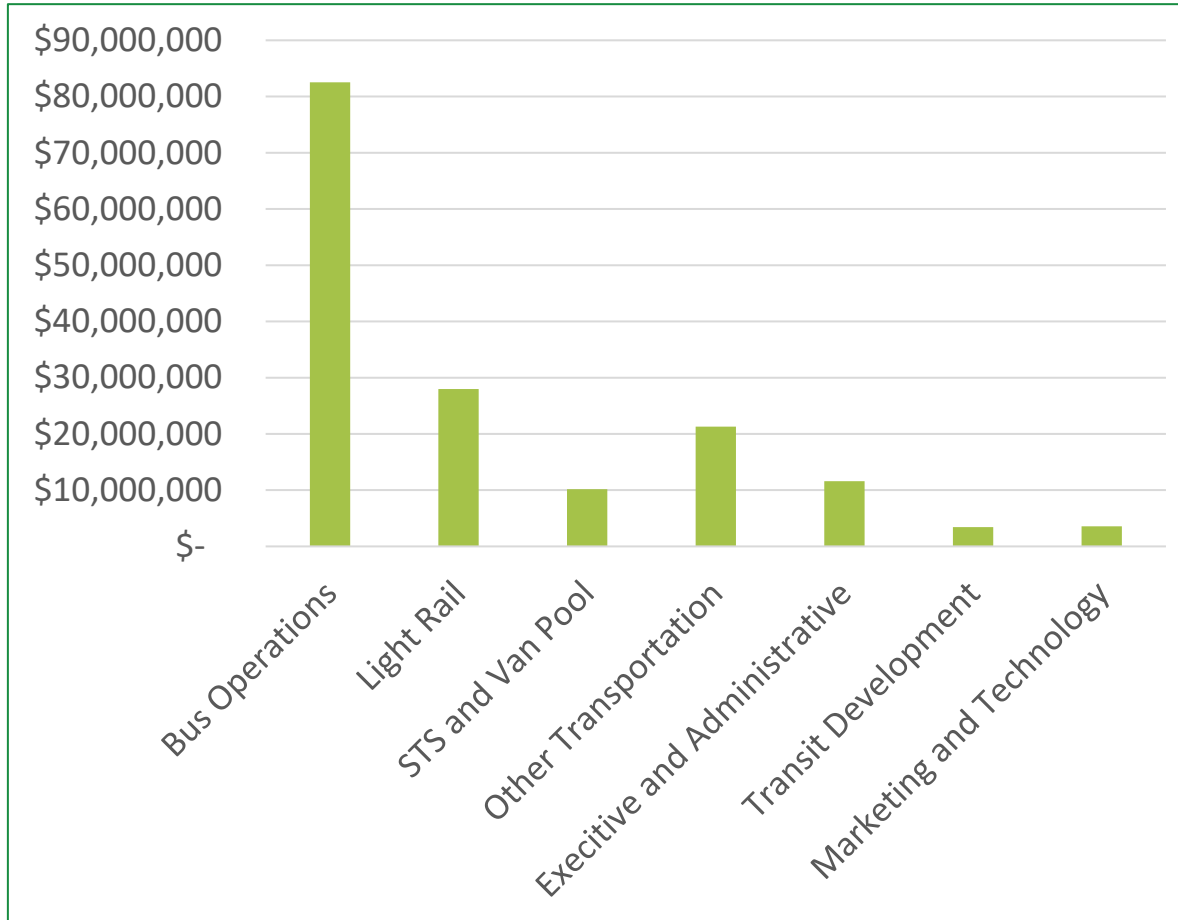
*Note: The Interlocal Agreement that formed the MTC requires each town to annually transfer to Charlotte a maintenance of effort (MOE) amount equal to its agreed upon local expenditure for transit services.*

*Operating assistance is comprised of federal grants, including CARES and ARPA funding.*

*Non-operating revenue is comprised of federal grants and state funds.*

# Bus Operations Remains A Large Share of What CATS Does

## CATS Operating Expenditures in FY 2021



Source: City websites, budget documents, and ACFRs for FY 2021 and FY 2022

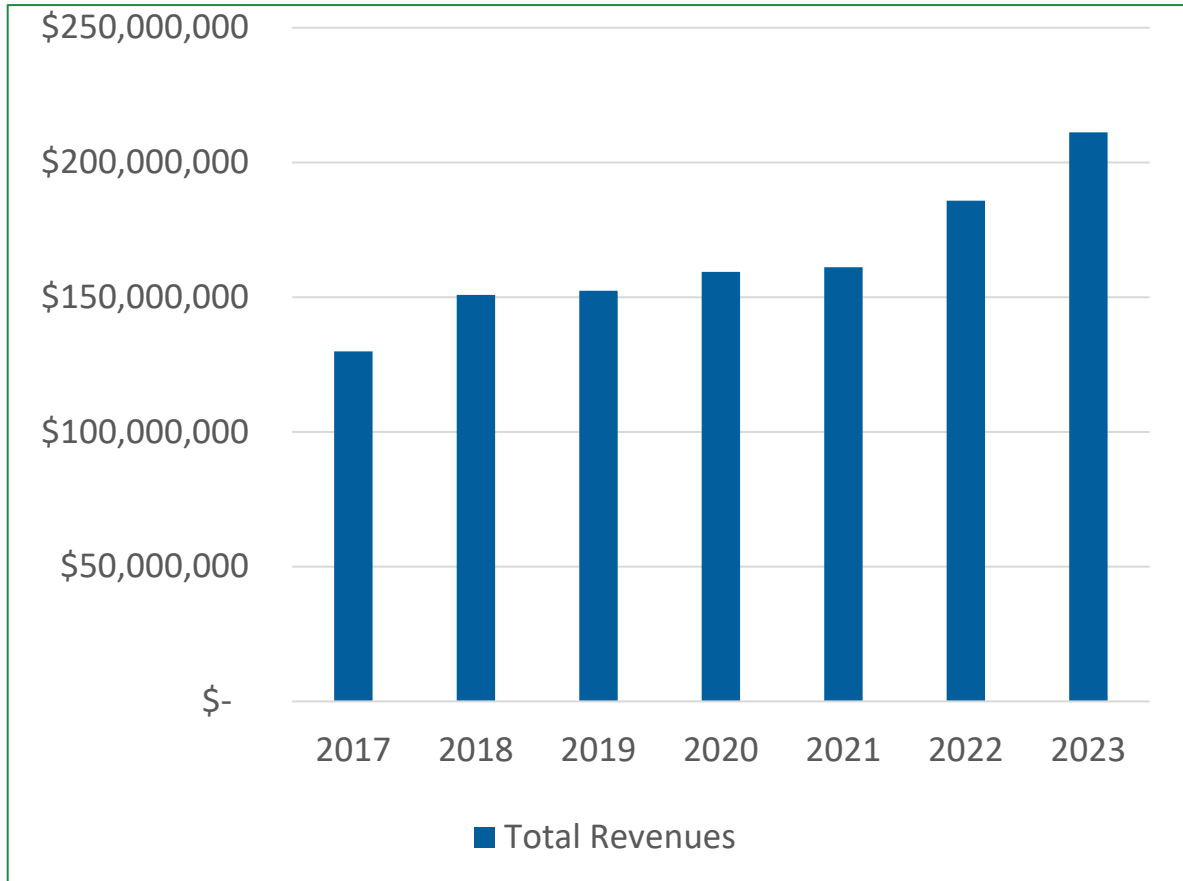
## Bus Operations

- Comprise majority of CATS services in terms of ridership (60% in FY 2021)
- Have been significantly **impacted by pandemic**; hard to draw trends
- Made up over **51% of CATS' total operating budget** in FY 2021
- Are hampered by **vacancies** and **fleet maintenance issues**
- Are the **focus of public perception from more than just bus riders**



# Transit Expansion Will Require Additional Funding

## CATS Revenues from FY 2017 to 2023



Source: City website, budget documents, and ACFRs for FY 2021 and FY 2022

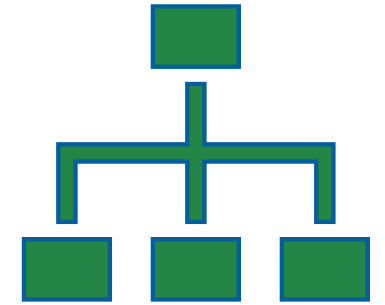
- **Operational budget appears to be in good shape** for current operations; also building reserves
- Revenues and expenditures **continue to increase** but perceptions about service (especially buses) is growing worse
- **Major components** that will impact budget
  - Daily operations
  - 2030 Transit Corridor System Plan
  - CONNECT Beyond Regional Mobility Plan
  - Availability of federal funding



# Governance

# An Opportune Time to Review the Governance Model

- Transit services and operations have **expanded significantly** over the last 24 years since the establishment of the MTC and the regional transportation system operated by CATS in 1999. (Transit Governance Interlocal Agreement dated, February 16, 1999, amended in 2005).
- Countywide one-half percent local sales tax has **helped to expand service and financial investment countywide**.
- Continue the critical partnership with the Centralina Regional Council **to advance the CONNECT Beyond Study Recommendations of exploring regional partnership structures, including governance**.
- Alternative governance and operational models in similar regions provide **high quality, effective and responsive service** (see slides that follow for details).



# Alternative Governance Models

Agency	Service Population	Service Area (Square Miles)	Annual Ridership	Operating Budget (FY 2022)	Capital Budget (FY 2022)
Capital Metropolitan Transportation Authority (CapMetro)	1,400,000 (2021)	542	16,900,000	\$318,600,000	\$303,800,000
Charlotte Area Transit System (CATS)	1,302,649 (2021)	675	6,500,000	\$247,960,000	\$62,130,000
Chatham Area Transit (CAT)	265,000 (2022)	438	2,900,000	\$30,330,000	\$38,460,000
IndyGo (Indianapolis Public Transportation Corporation)	964,582 (2020)	402	5,000,000	\$123,300,000	\$111,700,000
Long Beach Transit (LBT)	848,449 (2019)	107	18,300,000	\$114,100,000	\$71,900,000
Memphis Area Transit Agency (MATA)	706,976 (2020)	280	5,000,000	\$78,500,000	\$25,100,000

# Alternative Governance Models *(continued)*

Agency	Governing Body	Number of Members	Role of the Governing Body <sup>1</sup>
Capital Metropolitan Transportation Authority (CapMetro)	<b>Board</b> - (8 members) 3 members represent the metropolitan planning area, 1 represent smaller service area cities, 1 each from Travis and Williamson Counties, 2 members from the City of Austin	8	<b>Manage and operate</b> the system; establish <b>rules, rates, fares, tolls, routes, schedules; adopt annual budget</b>
Charlotte Area Transit System (CATS)	<b>Charlotte City Council</b> (12 elected members) <b>Metropolitan Transit Commission</b> (8 voting members)	20	<b>Direct policy</b> ; provide input on service and operations issues; recommend and <b>approve annual budget</b> and <b>long-range transportation plans</b>
Chatham Area Transit (CAT)	<b>Board</b> - represents Chatham Co., unincorporated Co. area, disabled residents, Savannah City	9	Address <b>policy issues</b> related to transit system operation; <b>set fares, service levels</b> ; allocate resources; <b>adopt annual budget</b>
IndyGo (Indianapolis Public Transportation Corporation)	<b>Board</b> - Three appointed by Mayor; four by Council	7	Possess <b>executive and legislative power</b> ; assess local income tax subject to the City Council's appropriation authority; <b>determine rates, routes, hours, service standards</b>
Long Beach Transit (LBT)	<b>Board</b> - Seven appointed by Mayor and confirmed by Council; two City Manager non-voting representatives	7	<b>Manage system; establish rules, rates, fares, tolls, routes, schedules; adopt annual budget</b>
Memphis Area Transit Agency (MATA)	<b>Board</b> - nominated by Mayor and approved by City Council	9	<b>Supervise operations; establish rules, rates, fares, tolls, routes, schedule; prepare an annual budget</b> and submit to Mayor and Council for approval

<sup>1</sup>To address complexities related to financing and construction, some agencies have established joint powers authorities or other agencies to oversee construction of capital improvements projects.



# Alternative Governance Models *(continued)*

Agency	Management	Agency Formation
Capital Metropolitan Transportation Authority (CapMetro)	CEO is <b>Board-appointed</b> - Prepares proposed operating and capital budgets; assists Board in developing policy; implements policy	1985 Voter referendum
Charlotte Area Transit System (CATS)	CEO is <b>appointed by the City Manager with concurrence of Mecklenburg County Manager</b> and a board member appointed by the MTC who is not a Charlotte or Mecklenburg County representative; City Manager authority to remove CEO or through majority vote of the MTC Board - CEO/CATS prepares proposed annual budget with direction from City, requiring MTC and final City approval. CATS staff are City of Charlotte employees or contract personnel.	2000 Enterprise department
Chatham Area Transit (CAT)	CEO is <b>Board-appointed</b> - Manages CAT operations and employees; administers contracts; advises Board; implements Board policy	1987 Pursuant to state legislation and local ordinance
IndyGo (Indianapolis Public Transportation Corporation)	CEO is <b>Board-appointed</b> - Manages IndyGo employees; administers contracts; advises Board; provides policy recommendations	1975 Consolidated City of Indianapolis-Marion County ordinance as an independent municipal corporation
Long Beach Transit (LBT)	CEO is <b>Board-appointed</b> - Responsible for day-to-day management of the organization; prepares proposed budget for Board approval; assists Board in developing policy; implements policy	1963 Non-profit corporation; City is sole shareholder
Memphis Area Transit Agency (MATA)	CEO is <b>Board-appointed</b> - CEO and staff are Mid-South Transportation Management, Inc. (MTM) employees; MATA is operated by Mid-South Transportation Management, Inc.	1975 City ordinance as a component unit (authority) of the City

# Management Roadmap Objectives

A collaborative team that actively commits to the shared mission and values

An organizational culture that encourages transparency and staff retention

A governance structure  
**accountable and transparent** to the community it serves

Clear expectations about how the department will work together and accountability for doing so

Clarified roles and responsibilities with respect to contracted services



# Next Steps

Leadership development and management teambuilding

Targeted plan to fill vacancies more quickly

Organization structure analysis

Contract and performance management

Transit management services RFP in accordance with best practices

Clear communication protocols

Reinvented governance structure that reflects community-wide service



# Thank You

Andy Belknap | [andy.belknap@bakertilly.com](mailto:andy.belknap@bakertilly.com)

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**From:** [Hunter, Brandon](#)  
**To:** [Cagle, Brent](#)  
**Subject:** CATS Follow-up/Update  
**Date:** Friday, May 26, 2023 2:47:12 PM

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Members of the MTC.

At our May 24, 2023 meeting Commissioner Altman requested a report on heat tab readings on the light rail vehicles (LRV)

As a reminder, Siemens has identified 150 degrees (all temperatures are expressed using the Fahrenheit scale) as an unacceptable heat level, and CATS, in an abundance of caution, uses the following procedure;

1. If a heat tab registers 130 degrees, the truck is manually inspected to determine if any signs of bearing degradation exist, if not the heat tabs are replaced and the vehicle/truck can be returned to service
2. If a heat tab registers at 140 degrees or greater, the vehicle/truck is removed from service.

Since April 25, 2023, CATS Rail Car Maintenance (RCM) have detected two heat tabs reading at 130 degrees.

RCM identified the two heat tabs reading at 130 degrees on Axle 3R and Axle 5R of LRV308 on May 2, 2023. RCM conducted further manual inspection of the LRV and detected no signs of degradation and RCM replaced the heat tabs. The LRV was then returned to service. Since the May 2, 2023 inspection, LRV 308 has been inspected three additional times and all heat tabs read at 120 degrees or below.

Additionally, all other heat tabs on LRVs in-service read at or below 120 degrees.

Also, to keep the MTC updated, effective today Deltrin Harris has been terminated from the City of Charlotte.

Please feel free to contact us, if you have additional questions.

Happy Memorial Day weekend,

Brandon

**Brandon T. Hunter**  
*Director of Marketing, Communication and Customer Service*  
**Charlotte Area Transit System - City of Charlotte**  
Cell [\(704\) 621-8343](tel:7046218343) Media Line [\(980\) 722-0311](tel:9807220311)

*Sent from my iPad*

**From:** [Hunter, Brandon](#)  
**To:** [Cagle, Brent](#)  
**Subject:** CATS NCDOT SSO Letters  
**Date:** Thursday, May 25, 2023 11:24:00 AM  
**Attachments:** [image001.png](#)  
[NCDOT SSO Ltr - Unannounced Inspection ROCC 5-15-23 Final.pdf](#)  
[NCDOT SSO Ltr-Inspection-CATS RCM 05-02-23 Final.pdf](#)

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Good morning MTC voting members,

I wanted to send you all a copy of the two NCDOT letters Mr. Cagle discussed in last night's meeting.

Please let us know if there are any questions.

Thanks,

Brandon

Brandon T. Hunter  
Director of Marketing and Communication  
Charlotte Area Transit System - City of Charlotte  
Cell (704) 621-8343 Media Line (980) 722-0311







STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

May 15, 2023

Mr. Brent Cagle  
Interim Chief Executive Officer, Charlotte Area Transit System  
Assistant City Manager, City of Charlotte  
600 E. 4th Street, CMGC - 7<sup>th</sup> Floor  
Charlotte, NC 28202

**Subject: NCDOT Unannounced Inspection of CATS' Rail Operations Control Center for Recordkeeping and Hours of Service Compliance**

Mr. Cagle:

On March 31, 2023, the North Carolina Department of Transportation (NCDOT) State Safety Oversight (SSO) personnel conducted an unannounced inspection of the Charlotte Area Transit System (CATS) Rail Operations Control Center (ROCC). This inspection was conducted as part of NCDOT's ongoing investigation, initiated on March 27, 2023, for reported allegations of unsafe working conditions within CATS' ROCC.

As a result of the March 31, 2023, inspection, NCDOT identified two (2) findings for routinely low staffing levels in the ROCC and an excessive 3<sup>rd</sup> shift workload. This inspection also resulted in NCDOT's Directive to staff the ROCC with a minimum of two (2) qualified Rail Controllers per shift. In response to the April 1, 2023, inspection letter, CATS' senior leadership committed to addressing these findings and to adhere to the Directive without violating the State Safety Oversight Program Standard (SSOPS) for Hours of Service (HOS) requirements; as well as CATS' Agency Safety Plan (ASP) for the same.

On May 1-2, 2023, NCDOT SSO personnel conducted an additional unannounced inspection of the ROCC's documented daily activities, employee training practices, and HOS compliance. As a result of this inspection, NCDOT noted the following:

Documentation:

CATS' ROCC personnel utilize assigned daily forms to document various activities associated with managing and controlling movement of trains on the mainline and yards. NCDOT reviewed daily records for the period of February 15 through March 15, 2023. NCDOT noted that the daily Rail Controller (RC) forms are adequate for the documentation of train movements and operational activities associated with the ROCC. NCDOT also noted that the assigned daily forms are not being completed consistently. NCDOT found that some of the forms are missing required ROCC personnel information and at least (2) daily forms did not include a document number or revision number/date. This is not consistent with CATS' policy and procedures as outlined in the Quality

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[www.ncbytrain.org](http://www.ncbytrain.org)

*Location:*  
862 CAPITAL BLVD  
RALEIGH, NC 27603



Assurance Department's Standard Operating Procedure (SOP): QA02- Control and Distribution of Plans, Manuals, Policies, and Procedures. The assigned daily documents in use are not consistent with referenced documents in the ROCC Procedures Manual. For example, the ROCC Procedures Manual references RODF041 Controller Report. According to CATS personnel, this form was created or brought from a different transit system and has never been used at CATS.

**Finding # 1:** CATS is noncompliant with its QA02 policy and procedures and must establish a policy or training plan to ensure that Departmental documents and forms comply with agency quality assurance requirements.

Employee Training:

As part of its overall employee training program for ROCC personnel, CATS requires an initial sixteen (16) week training program to qualify as a controller. Additionally, ROCC personnel must complete requalification training every two years. Per CATS' Operations Training Guide, this includes sixteen (16) weeks of initial classroom, practical training, and On-Job Training (OJT). All ROCC personnel training activities are closely monitored and reviewed weekly by the senior Chief Rail Controller and the Rail Operations Training Manager. Following a discussion with the Training Manager and review of various training documents, NCDOT noted that the ROCC personnel training programs are thorough, well documented, and consistent with the policies of CATS. NCDOT also noted that training records indicate effective initial and requalification training for all active ROCC employees.

There are no findings for this audit area.

Staffing:

To determine CATS' level of compliance with NCDOT's Directive dated April 1, 2023, NCDOT reviewed payroll records for active Rail Controllers and Chief Rail Controllers for the period of April 1, 2023, through April 30, 2023. As such, NCDOT noted that CATS is maintaining compliance with the Directive for a minimum of two (2) RCs on each shift.

There are no findings for this audit area.

Hours of Service (HOS):

To determine CATS' level of compliance with NCDOT's Directive dated April 1, 2023, NCDOT reviewed payroll records for active Rail Controllers and Chief Rail Controllers for the period of April 1, 2023, through April 30, 2023. NCDOT noted that during the month of April 2023, CATS violated HOS requirements for ROCC personnel on six (6) occasions as follows:

- (1) Employee # 96478 worked 63.5 hours within a seven (7) day period (4/1 thru 4/8)
- (2) Employee # 99393 worked 12.25 hours (4/13)
- (3) Employee # 96255 worked 12.25 hours (4/18)
- (4) Employee # 99393 worked 12.25 hours (4/22)
- (5) Employee # 99393 worked 12.5 hours (4/28)
- (6) Employee # 96255 worked thirteen (13) consecutive days (4/10 thru 4/22). Of note: day (7) of (13) was an unplanned work period of 1.5 hours to complete a required administrative duty, per the employee's "on-call" status for the employee's scheduled day-off.

These occurrences indicate noncompliance with NCDOT's SSOPS, Sections 10.0 and 10.1 as stated below:

*10.0 - NCDOT requires RTAs within its jurisdiction to establish a policy defining its hours of service (HOS) policy guidelines and requirements.*

*10.1 - Maximum on-duty time - the RTA shall not schedule an employee or contractor to be on-duty for an overall elapsed time from start to finish greater than 16 hours, with no more than 12 hours of work in the aggregate.*

*Maximum period of consecutive workdays - the RTA shall not allow employees or contractors to work seven or more consecutive days.*

*Verification of compliance - the RTA shall develop a process that verifies compliance with HOS requirements*

These occurrences also indicate noncompliance with CATS' ASP, Section 4.6.4.2, as stated below:

Rail Operations Employees

- No more than 16 hours per day for unanticipated events with no more than 12 hours of work in the aggregate.*
- No more than 60 hours per week.*

Work Week

- Other Rail Operations employees are not allowed to work more than seven days in a row without a full day off (24 hours)*

**Finding # 2:** CATS is noncompliant with NCDOT's and CATS' HOS policies and must enforce HOS requirements to include training for ROCC personnel, as well as training for management personnel responsible for assigning work hours.

**Finding # 3:** CATS is noncompliant with NCDOT's reporting requirement to notify NCDOT of all HOS violations and must establish a process to effectively monitor hours of service, via payroll, and proactively eliminate HOS violations not withstanding emergency response situations.

**Finding # 4:** CATS is noncompliant with the NCDOT-approved safety risk mitigations which were implemented by CATS following NCDOT's Finding of Noncompliance Closure letter dated June 27, 2022. The associated closed Corrective Action Plans (CAPs) are as follows:

**CAP ID # FNC-2022-06-13-01:** *CATS will provide formal training to CATS personnel who are responsible for creating safety-sensitive rail employee work schedules and those responsible for reporting HOS violations. Training content will be added to Rail Administration Training Guide. CATS submitted employee training records and a copy of the training PowerPoint presentation to NCDOT on 11/15/22.*

**CAP ID # FNC-2022-06-13-02:** *Operations schedules completed for the following week will be reviewed for any scheduled HOS violations. Any individual scheduled to exceed HOS who cannot have their schedule changed to comply with the requirements will have their schedule approved by the respective manager. The manager will send a memo describing the violation and the reason for the violation to the GM of Rail Operations and Facilities for review and approval. Once the GM approves the HOS violation, the memo will be submitted to the Rail Safety Manager by the end of the respective work week. This will be in addition to the current procedure where HOS violations noted on weekly timesheets will be reported to the Rail Safety Manager. CATS submitted records of email correspondence, between HOS employee monitors and staff, to NCDOT on 7/22/22.*

CATS must establish a written policy and procedures, meeting CATS' QA02 policy and submit documentation of these items, along with employee and staff training records to NCDOT for review and verification of implementation for this safety risk mitigation.

**Finding # 5:** CATS has failed to meet its commitment to ensure that hours of service are closely monitored, avoiding HOS violations, and reporting occurrences to NCDOT in a timely manner. As recently as April 3, 2023, a senior CATS official communicated to NCDOT personnel that "No employee will violate hours of service".

In accordance with the requirements of NCDOT's SSOPS and 49 CFR Part 674, please be advised that NCDOT hereby directs CATS to develop a CAP, for each of the findings included herein, and submit both to NCDOT for review and approval **within ten (10) calendar days** from the date of this letter. The CAPs shall include proposed actions to expeditiously address ROCC employee staffing issues and work assignments to address the current level of associated safety risk, a timeframe for CAP implementation, and the assignment of responsible staff or personnel.

Additionally, NCDOT requests that CATS provide more information for the following two (2) items:

- 1) During this audit, NCDOT requested and received payroll records for "all Rail Controllers and Chief Rail Controllers for the month of April 2023. Included in CATS' records submittal were payroll records for Employee ID # 101416. This employee is not included in CATS' ROCC training records, as a qualified controller nor as a trainee. NCDOT requests additional information to explain why this employee has been assigned as a Chief Rail Controller within CATS' payroll system.
- 2) Following its analysis of payroll records vs. weekly employee work schedules, NCDOT identified a Rail Controller, Employee ID # 95544, who worked five (5) days during the week of April 1 thru April 5 and again during the week of April 8 thru April 12. These workdays are included in the payroll records; however, the employee was not scheduled to work on the weekly work schedules submitted by CATS. NCDOT requests additional information to explain the employee's actual hours worked in the ROCC vs. no planned work hours/days for these time periods.

NCDOT greatly appreciates your continued cooperation and support of the SSO Program. If you have any questions, please contact me at 919-707-4149.

Regards,



Timothy P. Abbott  
Safety Enforcement and Oversight Manager  
SSO Program Manager  
Rail Division  
North Carolina Department of Transportation

Cc: Chad Hagans, CATS  
David Moskowitz, CATS  
Jahmal Pullen, NCDOT  
Jason Sergent, NCDOT Contractor  
Don Pike, NCDOT Contractor  
Jerrad Jones, NCDOT Contractor



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

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SECRETARY

May 16, 2023

Mr. David Moskowitz  
General Manager, Safety and Security  
Charlotte Area Transit System  
3145 South Tryon St.  
Charlotte, NC 28217

**Subject: NCDOT Announced Inspection of CATS's Rail Car Maintenance Program and LRV Truck Overhaul Acceptance, Inspection, Installation, and Safety Testing**

Mr. Moskowitz:

On May 2, 2023, the North Carolina Department of Transportation (NCDOT) State Safety Oversight (SSO) personnel conducted an announced inspection of the Charlotte Area Transit System (CATS) Rail Car Maintenance (RCM) program and Light Rail Vehicle (LRV) truck overhaul acceptance, inspection, installation, and safety testing.

The purpose of this inspection was to verify CATS's overall LRV maintenance performance and CATS ROD515: CATS LRV Truck Overhaul Procedure.

The scope of the inspection was specific to the preventative and deferred LRV maintenance and the 600,000-mile LRV truck overhauls.

The results of the inspection determined two (2) findings of noncompliance and includes NCDOT's observations and recommendations as follows:

Maintenance Performance:

- RCM management uses their Shift Turnover Report to communicate the continuous progress of LRV maintenance between each work shift. All three shifts complete the document and pass to the next shift.
- Each RCM supervisor checks the Preventative Maintenance Inspection (PMI) Due Report in SPEAR, at the beginning of their respective shift, and RCM is above 90% for on-time PMIs.
- The SPEAR reporting system showed open work orders needing to be performed on the day of the inspection. Most of these work orders have been completed and are awaiting a supervisor to review, approve or amend, and close them out in the SPEAR system.

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[www.ncbytrain.org](http://www.ncbytrain.org)

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- RCM puts LRVs out of service if any safety critical maintenance items are needed to be performed.
- Currently, RCM supervisors review the SPEAR system for a specific LRV when either a part arrives for the LRV, or it is pulled in for its 5,000-mile PMI.

**Finding# 1:** CATS has not established a written policy or procedure to specify how open work orders are to be assigned status level codes, by supervisors or managers, within the SPEAR system. The status level codes dictates whether or not affected rail vehicles are allowed to operate in revenue service pending the closure of an open work order. CATS must establish a policy or procedure, and provide employee training, for addressing open work order status levels and establishing a list of safety-critical rail vehicle components for daily fleet monitoring by RCM supervisors and managers.

**Recommendation:** NCDOT recommends that CATS analyze and audit the SPEAR reporting system on a monthly basis to identify actions needed to close-out active work orders and submit this information to NCDOT, CATS' S&S and CATS' Executive Management for review.

**Finding# 2:** CATS is noncompliant with its Rail Car Maintenance Handbook, Section 3.7 which requires RCM supervisors to close-out daily work orders in the SPEAR system. At the time of this inspection, CATS' RCM Department reported that 64% of open work orders in SPEAR represent completed work (e.g., repairs made, or part replaced), but these work orders remain "open", due to required supervisor review, approval, and close-out within the SPEAR system. CATS must establish a policy or procedure to include a mandatory daily block of time, per shift, for RCM supervisors to address open work orders awaiting supervisory review and approval for subsequent work order closure.

**ROD515: CATS Truck Overhaul Procedures:**

Below is NCDOT's understanding of CATS ROD515 and LRV truck overhaul acceptance, inspection, installation, and safety testing process:

- RODF515B- Incoming Truck Inspection Checklist
- RODF515D- Trucking and Installation Checklist
- Dynamic System Functional Verification Test
  - If any part of this test is failed, the test is discarded. Necessary repairs and/or adjustments are made, and a new test starts from the beginning.
- Mainline round trips (no written procedure, documented on RODF515B)
  - Currently written, five (5) round trips on the mainline @ 55 mph
  - Proposed revision, seven (7) round trips on the mainline @ 35 mph
- Wheel check (no written procedure and currently not documented)
- Under car inspection (no written procedure and currently not documented)

All forms, for each LRV, have a document binder with all the documents above, then the binders are sent to Quality Assurance (QA) for final approval prior to revenue service.

- QA must sign off on the Dynamic System Functional Verification Test and RODF515B



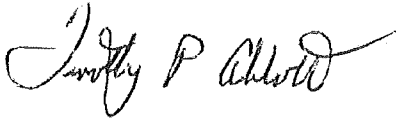
David Moskowitz, CATS  
May 16, 2023  
Page 2

Recommendation: NCDOT recommends that CATS include all inspection activities on RODF515 checklist forms to document the processes listed above.

Recommendation: Currently, CATS disposes of Dynamic System Functional Verification Test records when a failure occurs and then repeats the test. NCDOT recommends that CATS maintain those failure records, in the LRVs maintenance file (binder), to show the true history of testing activities.

NCDOT greatly appreciates your continued cooperation and support of the SSO Program. If you have any questions, please contact me at 919-707-4149.

Regards,



Timothy P. Abbott  
Safety Enforcement and Oversight Manager  
SSO Program Manager  
Rail Division  
North Carolina Department of Transportation

Cc: Chad Hagans, CATS  
Jahmal Pullen, NCDOT  
Jason Sergent, NCDOT Contractor  
Don Pike, NCDOT Contractor  
Jerrad Jones, NCDOT Contractor

**From:** [Hunter, Brandon](#)  
**To:** [Cagle, Brent](#)  
**Subject:** RE: Shooting involving CATS bus  
**Date:** Friday, May 26, 2023 4:17:00 PM  
**Attachments:** [image001.png](#)

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Hello, MTC voting meetings,

Below you will find a link to the video released this afternoon to the media from the May 18, 2023 incident.

We release videos by giving the requestor a CD with the video player. I was able to screen-recorded that video for you all. Please do not post the below link on any public sites, as too many views can break the link.

[https://www.dropbox.com/s/2oty82mn0p726h/CATS%20Incident%2005\\_18\\_2023.mp4?dl=0](https://www.dropbox.com/s/2oty82mn0p726h/CATS%20Incident%2005_18_2023.mp4?dl=0)

If you all have any questions, please do not hesitate to reach out.

Thank you all.

Brandon

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**From:** Hunter, Brandon  
**Sent:** Friday, May 26, 2023 9:38 AM  
**To:** Cagle, Brent <Brent.Cagle@charlottenc.gov>  
**Subject:** RE: Shooting involving CATS bus  
**Importance:** High

Good morning MTC voting member,

The **Transportation Safety Administration (TSA) has cleared the video of this incident** to be shared publicly and CATS will provide the video to media that have requested it later today. We anticipate it will be get significant coverage once it is released. Below is information shared with media and please see below email chain for a detailed recap of the incident as well as key facts/findings that was previously shared.

CATS bus video is different than law enforcement body-worn camera and is not subject to the same release criteria. CATS has previously released video requested by the media and cleared by the TSA directly to the media. Media will receive a CD of the video. CATS will not be posting the video publicly to its YouTube page.

CATS interim CEO Brent Cagle held a press conference Wednesday before the MTC meeting to address the incident and discuss CATS steps to increase security. Video from that press conference can be found here:

<https://www.dropbox.com/s/9v9xzsv0rrjyyq1/CATS%20Media%20Briefing%20052423.mp4?dl=0>

### Incident Summary

- On Thursday, May 18, 2023, at approximately 11:15 a.m. an altercation started when a passenger asked Mr. Fullard to get off between stops near the Steele Creek Premium Outlet Mall. After an approximately two-minute exchange, the passenger pulled a firearm and pointed it at Mr. Fullard, who in turn did the same.
- Each individual shot the other and both were transported to the hospital with injuries. Two other adult passengers were on the bus but were not physically injured. CMPD Steele Creek officers responded quickly and confiscated both firearms, securing the scene. CMPD's investigation is still ongoing.

### Safety Measures

- While all operators already receive de-escalation training to appropriately handle contentious situations with passengers, CATS will offer enhanced customer service and de-escalation training to provide more tools for all CATS and RATP Dev/TMOC transit workers.
- All buses have three methods for operators to communicate during emergencies: first via radio and by two different alarm systems. All CATS operators are trained on when and how to use these levers. Ninety-nine percent of CATS transit happens without any operator needing to engage emergency protocols. In this case, the operator did not leverage any.

### Operator Employment Status

- RATP Dev is the employer of all bus operators. Section 14 Employee Work Rules of the RATP Dev's Standards of Excellence states, "possession of a firearm or other weapon prohibited by the company's workplace violence policy while on duty or on company property is subject to discharge for the first violation."
- It is CATS' understanding that RATP Dev has concluded the termination process for Mr. Fuller.

### CEO Statement

"We want to acknowledge that this incident is a tragic expression of the gun violence in our community," said Brent Cagle, interim CEO of CATS. "We will not be able to solve this problem on our own. However, CATS is committed to doing what we can to address this with our partners at CMPD, and our partners at RATP Dev who employ and manage our bus operators. It's important to remember that the majority of transit operators make good decisions and follow policies, do the right thing every day. They don't make headlines when they go out of their way to help a passenger struggling with a stroller or help a rider having a mental health emergency, but they are the rule and not the exception."

Brandon T. Hunter

Director of Marketing and Communication

Charlotte Area Transit System - City of Charlotte

Cell (704) 621-8343 Media Line (980) 722-0311



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**From:** Hunter, Brandon <[Brandon.Hunter@charlottenc.gov](mailto:Brandon.Hunter@charlottenc.gov)>

**Sent:** Wednesday, May 24, 2023 5:16 PM

**To:** Cagle, Brent <[Brent.Cagle@charlottenc.gov](mailto:Brent.Cagle@charlottenc.gov)>

**Subject:** Re: Shooting involving CATS bus

We wanted to send you all an update of the incident, we will be talking about this tonight in the MTC meeting.

On May 18, 2023, at approximately 11:15 am, there was a shooting involving an RATP Dev/Transit Management of Charlotte bus operator David Fuller and a passenger, Omarri Shariff Tobias on CATS Route 56 near the Charlotte Premium outlets. The altercation between Mr. Fuller and the passenger started when the passenger asked to get off the bus between stops. An argument ensued, and they pulled firearms at one another and fired. Though both individuals sustained life-threatening injuries, they are now stable and expected to recover.

CATS has prepared a timeline of the incident following a thorough review of the incident audio and video. This information is compiled by CATS staff, and is not an official CMPD recap of the incident. We are sharing this to help you fully understand the incident. At this time, the video of this incident has not been cleared for release by CATS federal partners. We will continue to keep you updated as CMPD continues to investigate.

#### **Key Facts & Findings:**

1. There were two bystander passengers onboard not directly involved in this incident. They were not injured in the confrontation and were not transported by Medic the day of the incident.
2. The bus operator is an employee of RATP Dev/Transit Management of Charlotte.
3. RATP Dev/Transit Management of Charlotte does not allow employees to have weapons while working and their policies deem possessing weapons while on-duty as grounds for immediate dismissal. Section 14 of the RATP Dev employee work rules lists, "possession of a firearm or other weapon prohibited by the company's workplace violence policy while on duty or on company property," as a dismissal violation.
  1. As of today, it is our understanding that RATP Dev has not concluded the termination process for Mr. Fuller.
4. CATS has requested the service provider, RATP Dev, for a detailed update on the status of the employee including what immediate actions were taken, crisis communication plans and the bus operators' employment status.
5. CATS has also determined that the operator did not follow standard operating procedures (SOP) for safety protocols including, de-escalation when presented with a threatening situation. The situation started as a verbal exchange and lasted for two minutes, between the operator and the suspect/passenger, then escalated to the mutual drawing of firearms.
6. In this case, the passenger/suspect asked to be let off the bus and it would have been reasonable for the operator to attempt to de-escalate the situation by allowing the suspect/passenger to exit the bus before arriving at the next bus stop and contact the BOCC.
7. CATS is already doing operator-focused de-escalation training. We will have enhanced customer service and de-escalation training to provide more tools for all transit workers.
8. All buses have three methods for operators to communicate during emergencies, radio and two alarms. The operator did not engage the covert/silent alarm on the bus which would have notified the Bus Operations Control Center (BOCC) that the operator needed an immediate

response from security/law enforcement personnel.

1. We know that all of these systems function properly, and are regularly tested to ensure that they work when operators need them to. Operators are trained to use them, and do when they need to.
2. 99 percent of transit happens without any operator ever needing to engage any emergency protocols.
9. Though both individuals sustained life-threatening injuries, they are now stable and expected to recover.
10. The passenger has been charged with Assault with a Deadly Weapon Inflicting Serious Injuries, Communicating Threats and Carrying a Concealed Firearm, but Charlotte-Mecklenburg Police Department (CMPD) has not yet announced whether charges will be brought against Mr. Fuller.

### **Recap of the incident:**

- There were three passengers and the operator on the bus at the time of the altercation. The passengers on the bus do not appear to have known each other.
- The suspect/passenger involved in the altercation left his seat while the bus was in motion, the suspect/passenger approached the front of the bus while holding his cellphone. Upon reaching the front of the bus, the suspect/passenger points and asks the bus operator to be let off the bus in a location that is not an approved bus stop.
- The bus operator responded to the suspect/passenger he would need to exit the bus at the next stop. The verbal exchange between the operator and the suspect/passenger continued for two minutes and escalated into a conflict.
- The suspect/passenger pulled a firearm from their jacket pocket and proceeded to move towards the front door of the bus then turns to face the operator.
- The bus operator appears to see the suspect/passenger's firearm and proceeds to pull a firearm from the right side of his body. Both the operator and the passenger exchanged fire in rapid succession and both were struck with bullets. The suspect/passenger and the bus operator exchange gun fire. At this time CATS is not certain whether the passenger or operator fires the first shot, however, both the operator and the passenger exchange gun fire in rapid succession and both are struck with bullets. The bus operator was struck in the arm and the suspect/passenger is struck in the abdomen.
- The two bystander passengers quickly moved to the rear of the bus when shots ensued.
- After the initial exchange of shots, the bus operator brought the bus to a stop, partially parked the bus, and exited the operator seat. While this was occurring the suspect/passenger made his way to the rear of the bus near the rear door of the vehicle.
- The operator, who was standing in the bus aisle toward the front of the vehicle, then fired a second series of shots at the suspect/passenger, who was at the rear of the vehicle near the rear door.
- The suspect/passenger and one of the bystander passengers were able to open the rear door of the bus and the suspect/passenger exits the bus.
- At the same time one of the bystander passengers exited the rear door of the bus and fell to the ground while the second bystander passenger moved to the far rear of the bus.
- The bus operator exited the bus from the front door following the suspect/passenger and fired his gun again.
- Charlotte-Mecklenburg Police Department (CMPD) Steele Creek officers responded and secured the scene and recovered both weapons.

At this time, the video of this incident has not been cleared for release by our partners. CATS will continue to keep you apprised as CMPD continues to investigate.

### **Bus Operator Assault Data:**

We also wanted to add the current bus driver assault data. While these numbers are low, we strongly believe that every operator, CATS employee or contract should be able to come to work and

service the community without any incident

CATS Bus Operator Assaults		
Month	2022	2023
January	-	-
February	2	-
March	-	-
April	2	2
May	1	3
June	-	
July	-	
August	2	
September	1	
October	2	
November	-	
December	-	

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**From:** Hunter, Brandon  
**Sent:** Thursday, May 18, 2023 12:22 PM  
**To:** Cagle, Brent <[Brent.Cagle@charlottenc.gov](mailto:Brent.Cagle@charlottenc.gov)>  
**Subject:** Shooting involving CATS bus

Good afternoon MTC members,

Earlier this morning there was a shooting involving a CATS bus operator/RATP Dev employee and a bus passenger. Below is preliminary information from CMPD. This is still under investigation and CMPD will release additional information as it conducts its investigation. We will share that update with you.

Brandon T. Hunter  
Director of Marketing and Communication  
Charlotte Area Transit System - City of Charlotte  
Cell (704) 621-8343 Media Line (980) 722-0311





**From:** [Hunter, Brandon](#)  
**To:** [Cagle, Brent](#)  
**Subject:** CATS Update  
**Date:** Monday, June 5, 2023 4:42:00 PM  
**Attachments:** [image001.png](#)

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Good afternoon MTC voting members:

We wanted provide a response to a recent article that was published on Wednesday, May 31, by WFAE. The article is titled [How CATS used 'really suspect' ridership projections to guide Silver Line route decision](#).

In this article, CATS staff members are accused of analysis misrepresentation and fabricated data. This article attempts to undermine staff's credibility with this public attack and damages their professional reputation. The Silver Line team is made up of members of the agency that have years of experience and have built successful transit projects before, including the LYNX Blue Line and Blue Line Extension. Staff have engaged in good faith with the media several time over the last couple months and was blindsided by the inappropriate attack-oriented nature of this article.

CATS did not misinterpret the project analysis or make up data. There were two minor errors:

- One was a transposing error on the ridership table
- The other was on the walkshed analysis where the map graphic was incorrect, but the data in the table was correct.

Neither would have materially changed the outcome of the analysis. Any differences with the projections between June and January is attributable to improved design definition and understanding of the alternatives. This is customary and expected at this conceptual stage of the project. This refinement process was described at the June Transportation, Planning and Development (TDP) committee meeting.

The alignment was presented at the meetings below:

- TPD meeting June 13, 2022
- MTC meeting June 22, 2022
- MTC meeting October 26, 2022
- Full virtual public meetings November 1 & 2, 2022
- TPD meeting November 7, 2022
- TSAC meeting November 10, 2022
- Planning Committee November 14, 2022
- CTAG meeting November 15, 2022
- TPD meeting November 5, 2022
- TPD meeting from January 3, 2023
- Full Council meeting from January 3, 2023
- MTC meeting January 31, 2023

It is essential to note that many elements go into planning any transit system. Ridership, access,

economic development and development impacts are just a few things that are a part of the planning and development of the system. CATS has transit-oriented development goals to ensure that we create mixed-use communities near transit where people have easy access to jobs and services.

The impacts that transit has on our region are very important, and CATS will continue to be open and transparent throughout the development of the Silver Line and all other projects. We know that the alignment of the Silver Line is important, and we continue to work with the community to hear and understand their needs. We know that the alignment creates both opportunities and potential impacts for the community, affecting businesses and community members. CATS takes all of this information into account when it comes to all projects and has full confidence in the staff members within the Development Division.

Our teams collaborate with each other along with our regional and federal partners to ensure we are planning for the future of Charlotte. Ultimately Charlotte City Council (through the unanimous vote at the January TDP meeting) determined that the selected alternative (LPA) best served the City's priority travel markets and the MTC agreed. To say that staff manufactured data to present to the community is false and there is no basis. If you would like more information about the specific points raised in the article or there are any questions, we are happy to answer them.

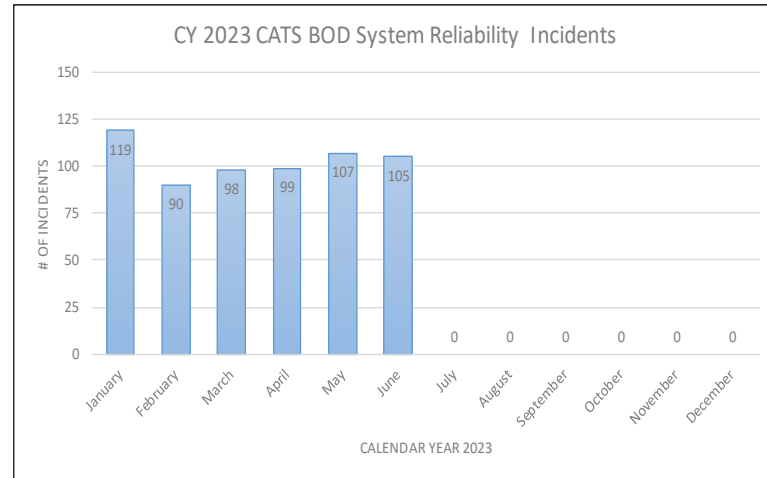
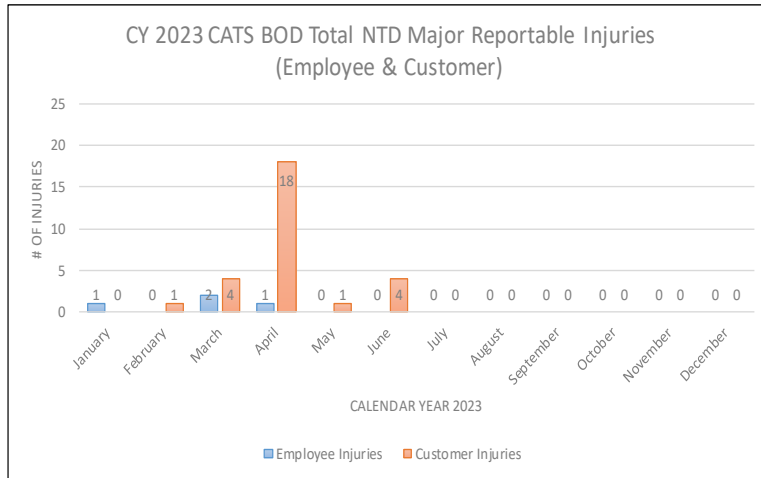
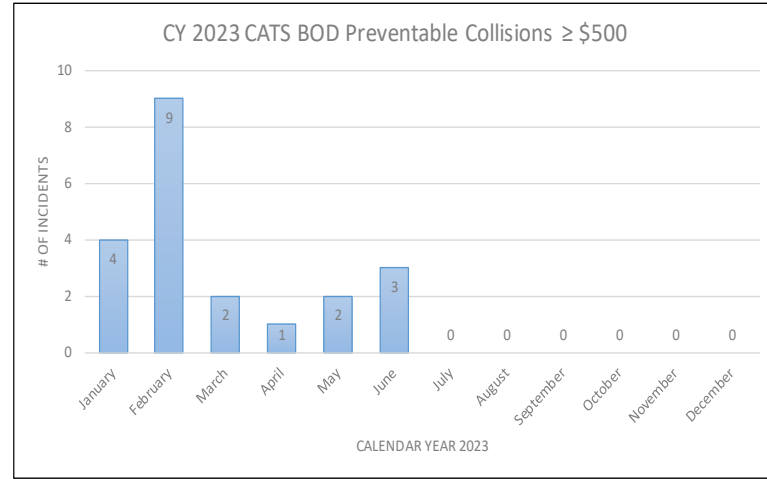
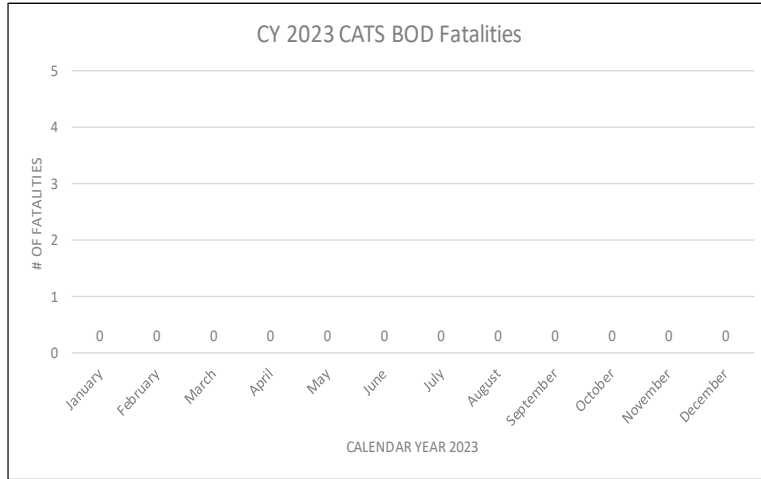
If you have any questions please let us know.

Brandon T. Hunter  
Director of Marketing and Communication  
Charlotte Area Transit System - City of Charlotte  
Cell (704) 621-8343 Media Line (980) 722-0311

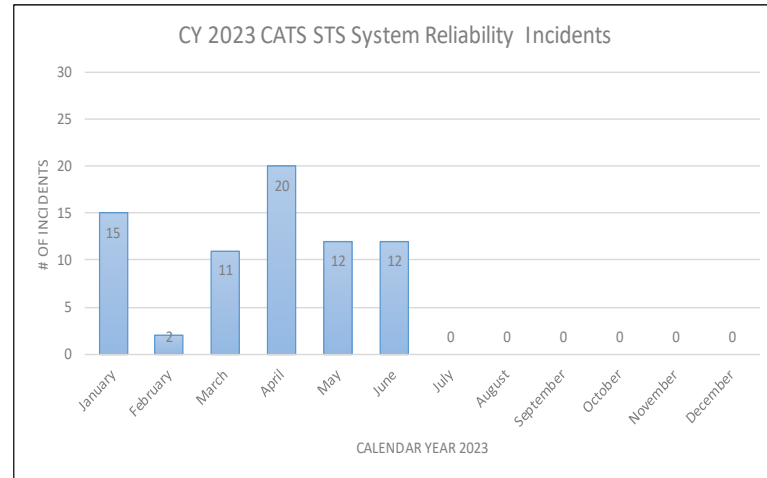
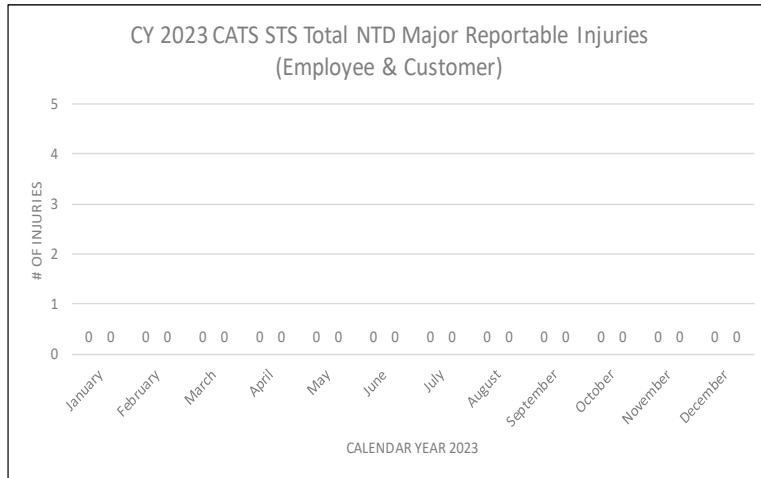
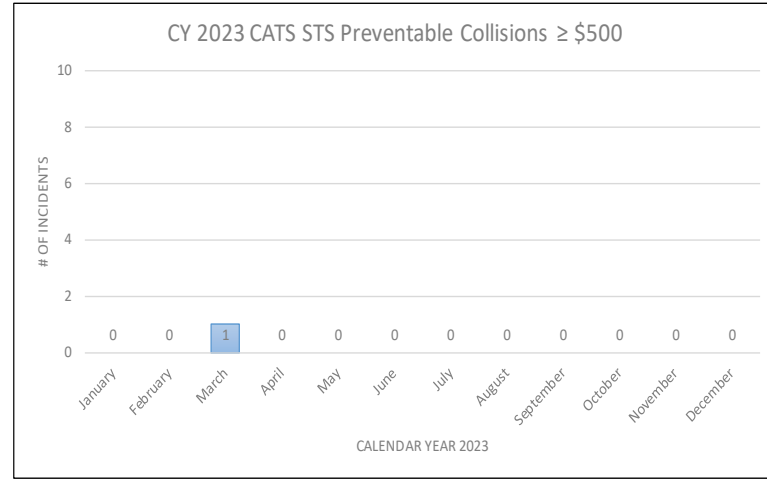
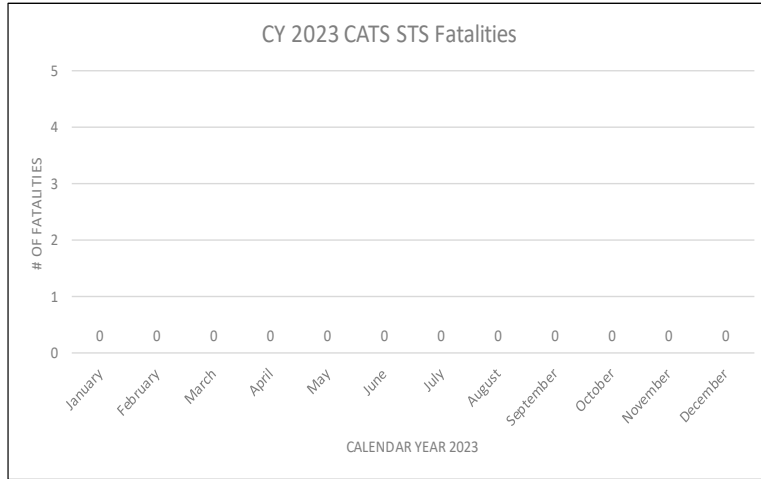




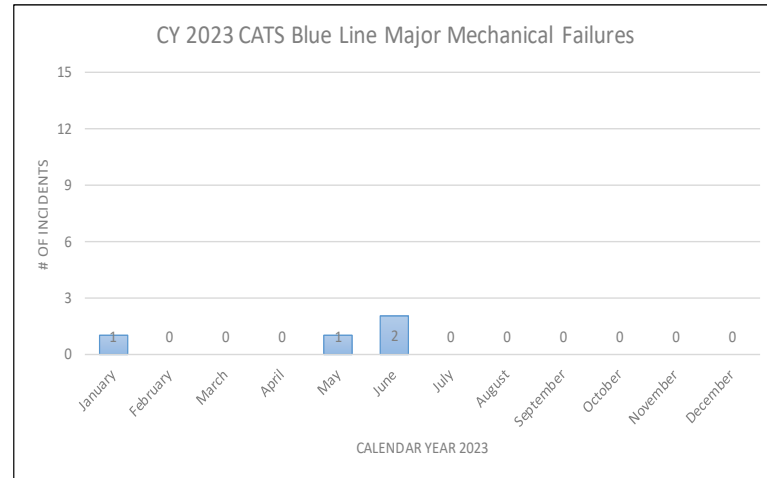
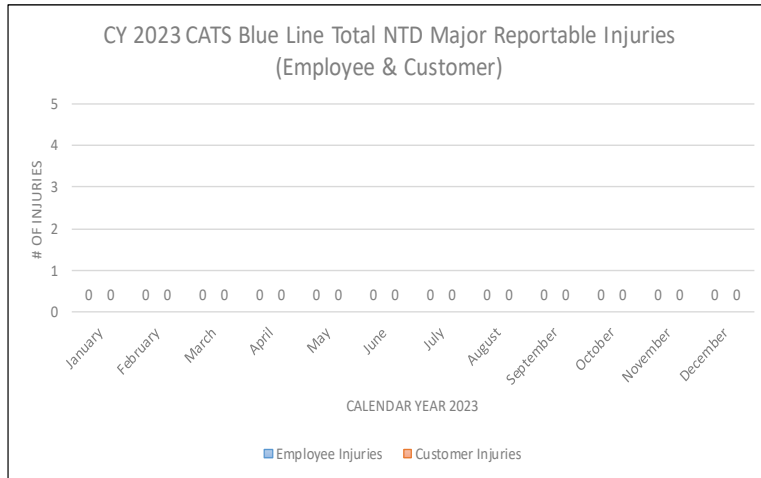
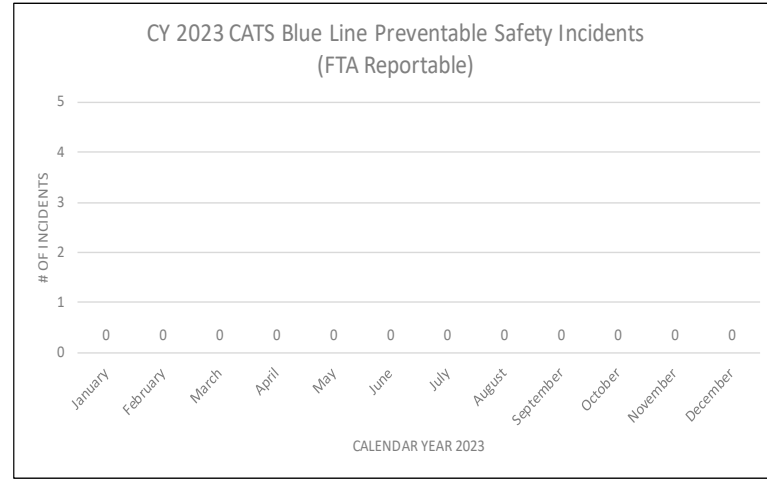
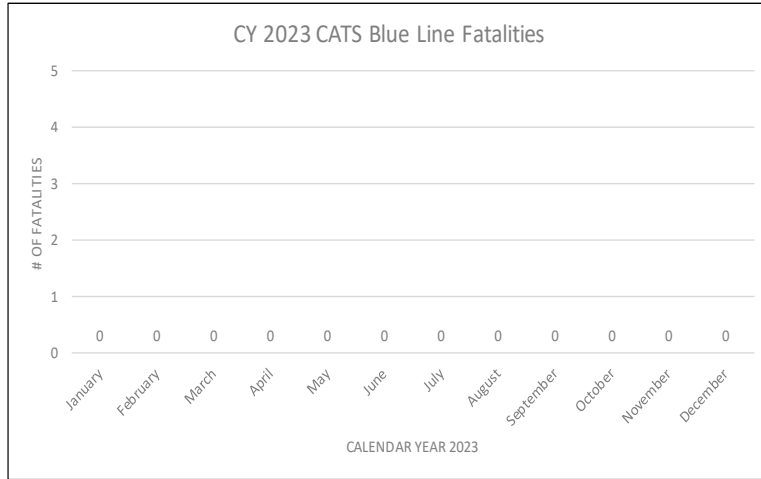
### Bus Operations Division Safety Performance Measures



### Special Transportation Service Safety Performance Measures

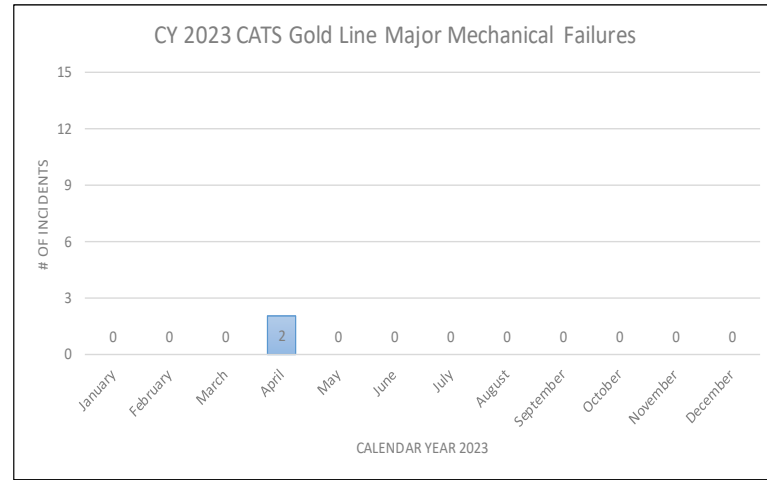
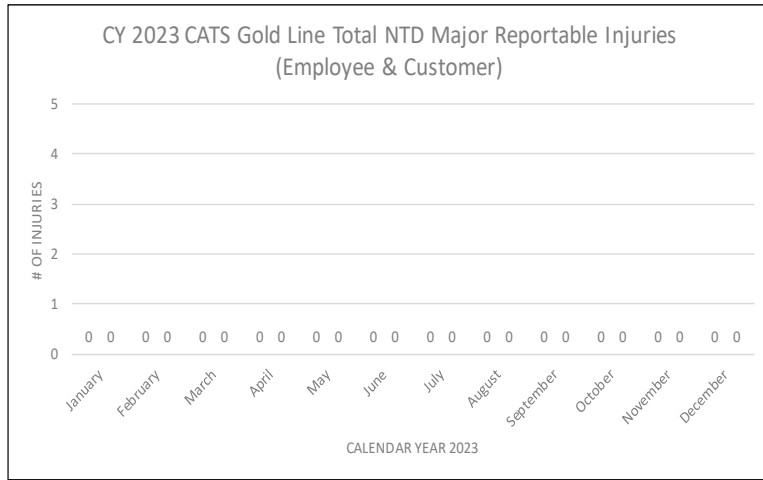
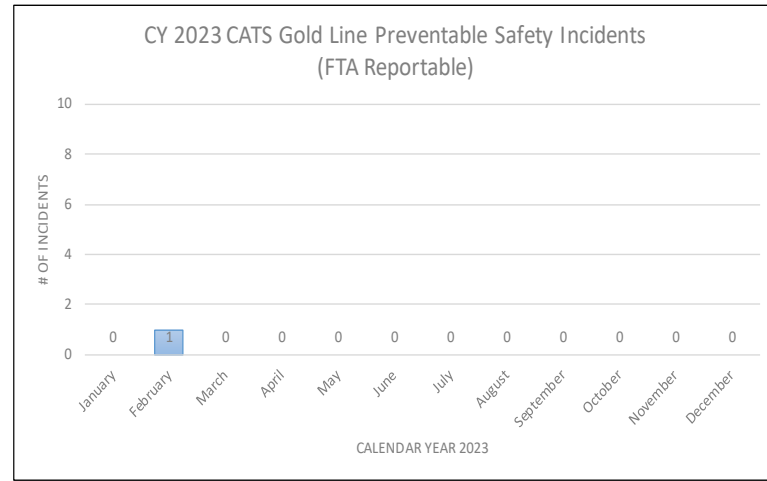
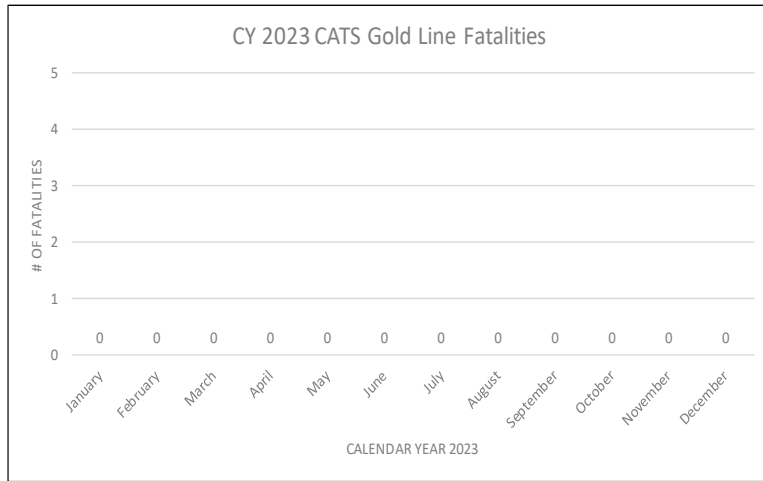


### Rail Operations Blue Line Safety Performance Measures





### Rail Operations Gold Line Safety Performance Measures





Metropolitan Transit Commission  
Charlotte Area Transit System Ridership Report  
Jun-23

Source:

Fixed Route Bus - Automatic Passenger Counts

Rail - Automatic Passenger Counts

Mode / Service	Average Daily Ridership					
	Jun-23	Jun-22	Percent Increase / Decrease	Weekday	Saturday	Sunday
<b>Local</b>						
BOD Local	670,442	618,690	8.4%	24,090	17,258	12,037
<b>Subtotal</b>	<b>670,442</b>	<b>618,690</b>	<b>8.4%</b>	<b>24,090</b>	<b>17,258</b>	<b>12,037</b>
<b>Local Express</b>						
Arboretum Express	1,204	-	-	52	-	-
Harrisburg Road Express	1,280	1,230	4.1%	56	-	-
Northcross Express	3,729	2,924	27.5%	162	-	-
Idlewild Express	1,508	1,057	42.6%	66	-	-
Independence Blvd Express	2,286	2,595	-11.9%	99	-	-
Lawyers Road Express	1,492	1,353	10.3%	65	-	-
Steele Creek Express	522	-	-	23	-	-
Northlake Express	2,595	2,327	11.5%	113	-	-
North Mecklenburg Express	5,759	4,747	21.3%	250	-	-
Huntersville Express	3,811	3,749	1.6%	166	-	-
Rea Road Express	2,823	1,565	80.4%	123	-	-
Mountain Island Express	380	-	-	17	-	-
Huntersville Greenhouse	160	172	-7.0%	7	-	-
<b>Subtotal</b>	<b>27,549</b>	<b>21,719</b>	<b>26.8%</b>	<b>1,198</b>	<b>-</b>	<b>-</b>
<b>Regional Express</b>						
Gastonia Express	1,181	1,436	-17.8%	51	-	-
Rock Hill Express	1,011	1,177	-14.0%	44	-	-
Union County Express	965	1,133	-14.8%	42	-	-
<b>Subtotal</b>	<b>3,158</b>	<b>3,746</b>	<b>-15.7%</b>	<b>137</b>	<b>-</b>	<b>-</b>

<b>Community Circulator</b>						
Neighborhood Shuttles	21,315	18,764	<b>13.6%</b>	780	622	218
Eastland Neighborhood Shuttle	11,521	10,202	<b>12.9%</b>	386	409	249
Pineville-Matthews Road	2,267	2,155	<b>5.2%</b>	84	83	-
Village Rider	6,531	7,058	<b>-7.5%</b>	219	207	164
<b>Subtotal</b>	<b>41,634</b>	<b>38,180</b>	<b>9.0%</b>	<b>1,470</b>	<b>1,173</b>	<b>631</b>
<b>Human Services Transportation</b>						
Special Transportation Services	15,389	14,375	<b>7.1%</b>	612	265	219
DSS	1,846	236	<b>682.2%</b>	76	-	-
<b>Subtotal</b>	<b>17,235</b>	<b>14,611</b>	<b>18.0%</b>	<b>688</b>	<b>265</b>	<b>219</b>
<b>Rideshare Services</b>						
Vanpool	3,617	3,649	<b>-0.9%</b>	148	44	40
<b>Subtotal</b>	<b>3,617</b>	<b>3,649</b>	<b>-0.9%</b>	<b>148</b>	<b>44</b>	<b>40</b>
<b>Rail</b>						
LYNX Blue Line	471,133	395,059	<b>19.3%</b>	16,538	17,352	9,474
CityLynx Gold Line	53,655	39,521	<b>35.8%</b>	1,932	1,821	968
<b>Subtotal</b>	<b>524,788</b>	<b>434,580</b>	<b>20.8%</b>	<b>18,470</b>	<b>19,173</b>	<b>10,442</b>
<b>Total</b>	<b>1,288,422</b>	<b>1,135,174</b>	<b>13.5%</b>	<b>46,201</b>	<b>37,913</b>	<b>23,369</b>

Metropolitan Transit Commission  
Charlotte Area Transit System Ridership Report  
Jun-23

Source:

Fixed Route Bus - Farebox (GFI)

Rail - Automatic Passenger Counts

Mode / Service	Jun-23	Jun-22*	Percent Increase/Decrease	YTD FY 2023	YTD FY 2022	Percent Increase/Decrease	Avg Daily Ridership per Month		
							WeekDay	Saturday	Sunday
<b>Local</b>									
BOD Local	550,303	380,972		5,710,731	5,371,621	6.31%	20,085	14,409	12,710
<b>Subtotal</b>	<b>550,303</b>	<b>380,972</b>		<b>5,710,731</b>	<b>5,371,621</b>	<b>6.31%</b>	<b>20,085</b>	<b>14,409</b>	<b>12,710</b>
<b>Local Express</b>									
Arboretum Express	1,012	-		4,851	-	n/a	46	-	-
Harrisburg Road Express	958	827		10,926	7,458	46.5%	44	-	-
Northcross Express	2,472	2,155		28,573	11,963	138.84%	112	-	-
Idlewild Road Express	923	572		9,196	6,780	35.63%	42	-	-
Independence Blvd Express	1,456	1,569		19,823	11,470	72.82%	66	-	-
Lawyers Road Express	1,100	840		10,109	6,803	48.6%	50	-	-
Mountain Island Express	187	-		894	-	n/a	9	-	-
Northlake Express	1,667	1,721		18,782	9,359	100.68%	76	-	-
North Mecklenburg Express	3,484	3,744		39,340	21,563	82.44%	158	-	-
Huntersville Express	3,064	2,767		32,730	18,006	81.77%	139	-	-
Rea Road Express	1,066	993		12,817	8,676	47.73%	48	-	-
Steele Creek Express	273	-		1,685	-	n/a	12	-	-
Huntersville Greenhouse Express	119	70		1,202	1,586	-24.21%	5	-	-
<b>Subtotal</b>	<b>17,781</b>	<b>15,258</b>		<b>190,928</b>	<b>103,664</b>	<b>84.18%</b>	<b>807</b>	<b>-</b>	<b>-</b>
<b>Regional Express</b>									
Gastonia Express	841	989		8,469	9,064	-6.56%	38	-	-
Rock Hill Express	669	782		7,722	6,588	17.21%	30	-	-
Union County Express	685	692		8,064	5,231	54.16%	31	-	-
<b>Subtotal</b>	<b>2,195</b>	<b>2,463</b>		<b>24,255</b>	<b>20,883</b>	<b>16.15%</b>	<b>99</b>	<b>-</b>	<b>-</b>
<b>Metropolitan Transit Commission Charlotte Area Transit System Ridership Report Jun-23</b>									
<b>Community Circulator</b>									
Neighborhood Shuttles	16,708	11,952		178,790	149,297	19.75%	662	369	169
Eastland Neighborhood Shuttle	9,109	6,830		101,866	86,738	17.44%	312	342	217
Pineville-Matthews Road	1,627	1,217		19,985	15,024	33.02%	64	56	1
Village Rider	3,844	3,227		45,952	38,966	17.93%	142	103	79
<b>Subtotal</b>	<b>31,288</b>	<b>23,226</b>		<b>346,593</b>	<b>290,025</b>	<b>19.5%</b>	<b>1,180</b>	<b>870</b>	<b>466</b>
<b>Human Services Transportation</b>									
Special Transportation Services	15,389	14,375	7.05%	186,930	161,786	15.54%	612	265	219

DSS	1,846	236	<b>682.2%</b>	12,837	20,333	<b>-36.87%</b>	76	42	1
<b>Subtotal</b>	<b>17,235</b>	<b>14,611</b>	<b>17.96%</b>	<b>199,767</b>	<b>182,119</b>	<b>9.69%</b>	<b>688</b>	<b>307</b>	<b>220</b>
<b>Rideshare Services</b>									
Vanpool	3,617	3,649	<b>-0.88%</b>	45,787	39,116	<b>17.05%</b>	148	44	47
<b>Subtotal</b>	<b>3,617</b>	<b>3,649</b>	<b>-0.88%</b>	<b>45,787</b>	<b>39,116</b>	<b>17.05%</b>	<b>148</b>	<b>44</b>	<b>47</b>
<b>Rail</b>									
LYNX Blue Line	471,133	395,059	<b>19.26%</b>	5,132,075	3,880,725	<b>32.25%</b>	16,538	17,352	9,474
CityLynx Gold Line	53,655	39,521	<b>35.76%</b>	604,270	341,584	<b>76.9%</b>	1,932	1,821	968
<b>Subtotal</b>	<b>524,788</b>	<b>434,580</b>	<b>20.76%</b>	<b>5,736,345</b>	<b>4,222,309</b>	<b>35.86%</b>	<b>18,470</b>	<b>19,173</b>	<b>10,442</b>
<b>Total</b>	<b>1,147,207</b>	<b>874,759</b>	<b>31.15%</b>	<b>12,254,406</b>	<b>10,229,737</b>	<b>19.79%</b>	<b>41,477</b>	<b>34,803</b>	<b>23,885</b>

\* significant farebox data issues resulted in under-reported ridership from June 2022 - August 2022





# MAY CATS Sales Tax Report FY2023

## February Receipts

### Sales Tax Collections and Distribution – February 2023

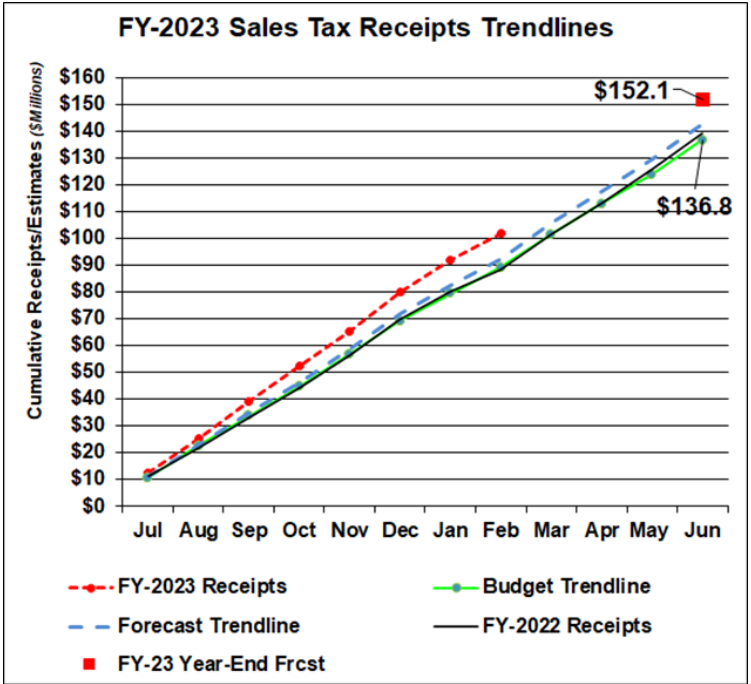
- The February 2023 receipts of \$9,995,757 were \$189,284 (1.9%) above budget target for the month
- The February 2023 receipts were -\$394,356 (-3.8%) below forecast for the month
- The February 2023 receipts were \$1,680,649 (20.2%) above February 2022

### Sales Tax Budget Data

- FY2023 sales tax budget is \$136,807,021
- The FY23 model forecasts year-end receipts of \$152,059,338 which is \$15,252,317 (11.15%) above the FY23 budget target of \$136,807,021
- FY2022 actual sales tax was \$139,225,568

### Local Government Sales and Use Tax Distribution

- Source: North Carolina Department of Revenue Sales & Use Distribution Report for the month February 28, 2023
- Published by NC Secretary of Revenue on 05/10/2023 with actual receipts through February 2023.
- CATS sales tax report only includes Mecklenburg County Article 43 sales tax



## FY2023 Budget Sales Tax Receipts (Actuals and Forecasts)

Jurisdiction	Population	% of Total	Jul 22 Actuals	Aug 22 Actuals	Sep 22 Actuals	Oct 22 Actuals	Nov 22 Actuals	Dec 22 Actuals	Jan 23 Actuals	Feb 23 Actuals	Mar 23 Forecasts	April 23 Forecasts	May 23 Forecasts	Jun 23 Forecasts	Total
Charlotte	878,778	40.4%	\$ 5,125,892	\$ 5,204,877	\$ 5,465,688	\$ 5,366,667	\$ 5,313,561	\$ 5,916,721	\$ 4,808,991	\$ 4,038,520	\$ 5,288,458	\$ 4,809,052	\$ 4,717,794	\$ 5,379,312	\$ 61,435,533
Cornelius	31,442	1.4%	\$ 183,400	\$ 186,227	\$ 195,558	\$ 192,015	\$ 190,115	\$ 211,696	\$ 172,062	\$ 144,495	\$ 189,217	\$ 172,064	\$ 168,799	\$ 192,468	\$ 2,198,116
Davidson	14,907	0.7%	\$ 86,952	\$ 88,292	\$ 92,716	\$ 91,037	\$ 90,136	\$ 100,367	\$ 81,577	\$ 68,507	\$ 89,710	\$ 81,578	\$ 80,029	\$ 91,251	\$ 1,042,151
Huntersville	61,840	2.8%	\$ 360,711	\$ 366,270	\$ 384,623	\$ 377,655	\$ 373,918	\$ 416,362	\$ 338,411	\$ 284,192	\$ 372,151	\$ 338,415	\$ 331,993	\$ 378,545	\$ 4,323,246
Matthews	29,502	1.4%	\$ 172,084	\$ 174,736	\$ 183,492	\$ 180,168	\$ 178,385	\$ 198,634	\$ 161,446	\$ 135,580	\$ 177,542	\$ 161,448	\$ 158,384	\$ 180,592	\$ 2,062,490
Mint Hill	26,465	1.2%	\$ 154,370	\$ 156,748	\$ 164,603	\$ 161,621	\$ 160,022	\$ 178,186	\$ 144,826	\$ 121,623	\$ 159,266	\$ 144,828	\$ 142,080	\$ 162,002	\$ 1,850,173
Pineville	10,651	0.5%	\$ 62,127	\$ 63,084	\$ 66,245	\$ 65,045	\$ 64,402	\$ 71,712	\$ 58,286	\$ 48,948	\$ 64,097	\$ 58,287	\$ 57,181	\$ 65,199	\$ 744,613
Meck. County	1,121,482	51.6%	\$ 6,541,578	\$ 6,642,379	\$ 6,975,221	\$ 6,848,852	\$ 6,781,079	\$ 7,550,822	\$ 6,137,155	\$ 5,153,893	\$ 6,749,042	\$ 6,137,232	\$ 6,020,771	\$ 6,864,990	\$ 78,403,015
<b>Total</b>	<b>2,175,067</b>	<b>100.0%</b>	<b>\$ 12,687,115</b>	<b>\$ 12,882,613</b>	<b>\$ 13,528,146</b>	<b>\$ 13,283,060</b>	<b>\$ 13,151,617</b>	<b>\$ 14,644,501</b>	<b>\$ 11,902,754</b>	<b>\$ 9,995,757</b>	<b>\$ 13,089,483</b>	<b>\$ 11,902,903</b>	<b>\$ 11,677,031</b>	<b>\$ 13,314,358</b>	<b>\$ 152,059,338</b>
															YTD Budget \$ 89,291,788
															Variance (YTD) \$ 12,783,775

## FY2023 Budget Sales Tax Comparison Year over Year

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	YTD Total
Year-over-Year Comparison (FY23-FY22)	12.3%	20.9%	22.2%	17.1%	8.6%	8.5%	16.4%	20.2%	-2.0%	4.7%	-9.7%	2.1%	9.2%
FY23 Budget Target	\$ 10,837,385	\$ 11,730,084	\$ 11,265,334	\$ 11,050,554	\$ 11,990,897	\$ 12,399,931	\$ 10,211,129	\$ 9,806,473	\$ 12,405,318	\$ 11,428,653	\$ 10,914,935	\$ 12,766,327	\$ 136,807,021
% of FY23 Budget Achieved	9.3%	18.7%	28.6%	38.3%	47.9%	58.6%	67.3%	74.6%	84.2%	92.9%	101.4%	111.1%	111.1%

## FY2023 Budget Tax Receipts: FY2019 - FY2022

Fiscal Year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Total
FY2022	\$ 11,298,388	\$ 10,659,682	\$ 11,073,183	\$ 11,342,634	\$ 12,115,265	\$ 13,501,568	\$ 10,221,788	\$ 8,315,108	\$ 13,351,825	\$ 11,369,039	\$ 12,932,254	\$ 13,044,834	\$ 139,225,568
FY2021	\$ 8,921,474	\$ 9,466,946	\$ 9,245,058	\$ 9,317,741	\$ 9,964,913	\$ 11,402,907	\$ 9,134,772	\$ 6,785,996	\$ 11,253,531	\$ 10,287,447	\$ 8,942,957	\$ 11,945,450	\$ 116,669,192
FY2020	\$ 9,683,570	\$ 9,787,973	\$ 8,671,558	\$ 9,890,136	\$ 9,858,570	\$ 9,800,116	\$ 8,278,036	\$ 8,606,547	\$ 8,735,473	\$ 7,635,380	\$ 6,997,727	\$ 9,833,896	\$ 107,778,982
FY2019	\$ 7,708,503	\$ 9,621,386	\$ 9,103,726	\$ 8,067,019	\$ 9,425,129	\$ 8,906,774	\$ 8,195,787	\$ 7,918,012	\$ 10,155,891	\$ 9,880,419	\$ 9,435,500	\$ 9,117,052	\$ 107,535,197

# JUNE CATS Sales Tax Report FY2023

## March Receipts

### Sales Tax Collections and Distribution – March 2023

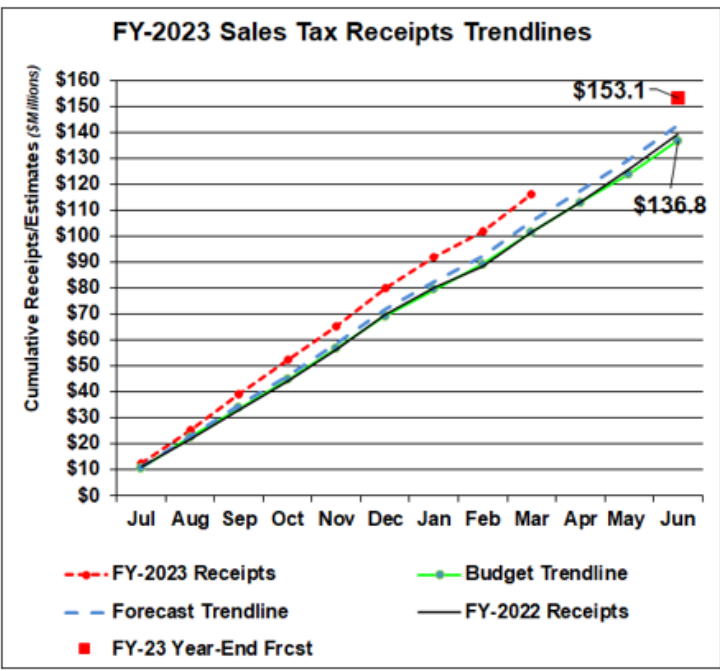
- The March 2023 receipts of \$14,159,184 were \$1,753,865 (14.1%) above budget target for the month
- The March 2023 receipts were \$1,069,700 (8.2%) above forecast for the month
- The March 2023 receipts were \$807,359 (6.0%) above March 2022

### Sales Tax Budget Data

- FY2023 sales tax budget is \$136,807,021
- The FY23 model forecasts year-end receipts of \$153,129,039 which is \$16,322,018 (11.93%) above the FY23 budget target of \$136,807,021
- FY2022 actual sales tax was \$139,225,568

### Local Government Sales and Use Tax Distribution

- Source: North Carolina Department of Revenue Sales & Use Distribution Report for the month March 31, 2023
- Published by NC Secretary of Revenue on 05/10/2023 with actual receipts through March 2023.
- CATS sales tax report only includes Mecklenburg County Article 43 sales tax



## FY2023 Budget Sales Tax Receipts (Actuals and Forecasts)

Jurisdiction	Population	% of Total	Jul 22 Actuals	Aug 22 Actuals	Sep 22 Actuals	Oct 22 Actuals	Nov 22 Actuals	Dec 22 Actuals	Jan 23 Actuals	Feb 23 Actuals	Mar 23 Actuals	April 23 Forecasts	May 23 Forecasts	Jun 23 Forecasts	Total
Charlotte	878,778	40.4%	\$ 5,125,892	\$ 5,204,877	\$ 5,465,688	\$ 5,366,667	\$ 5,313,561	\$ 5,916,721	\$ 4,808,991	\$ 4,038,520	\$ 5,720,642	\$ 4,809,052	\$ 4,717,794	\$ 5,379,312	\$ 61,867,717
Cornelius	31,442	1.4%	\$ 183,400	\$ 186,227	\$ 195,558	\$ 192,015	190,115	211,696	172,062	144,495	\$ 204,680	172,064	168,799	192,468	2,213,579
Davidson	14,907	0.7%	\$ 86,952	\$ 88,292	\$ 92,716	\$ 91,037	90,136	100,367	81,577	68,507	\$ 97,041	81,578	80,029	91,251	1,049,482
Huntersville	61,840	2.8%	\$ 360,711	\$ 366,270	\$ 384,623	\$ 377,655	373,918	416,362	338,411	284,192	\$ 402,564	338,415	331,993	378,545	4,353,659
Matthews	29,502	1.4%	\$ 172,084	\$ 174,736	\$ 183,492	\$ 180,168	178,385	198,634	161,446	135,580	\$ 192,051	161,448	158,384	180,592	2,076,999
Mint Hill	26,465	1.2%	\$ 154,370	\$ 156,748	\$ 164,603	\$ 161,621	160,022	178,186	144,826	121,623	\$ 172,281	144,828	142,080	162,002	1,863,189
Pineville	10,651	0.5%	\$ 62,127	\$ 63,084	\$ 66,245	\$ 65,045	64,402	71,712	58,286	48,948	\$ 69,336	58,287	57,181	65,199	749,852
Meck. County	1,121,482	51.6%	\$ 6,541,578	\$ 6,642,379	\$ 6,975,221	\$ 6,848,852	6,781,079	7,550,822	6,137,155	5,153,893	\$ 7,300,589	6,137,232	6,020,771	6,864,990	78,954,561
<b>Total</b>	<b>2,175,067</b>	<b>100.0%</b>	<b>\$ 12,687,115</b>	<b>\$ 12,882,613</b>	<b>\$ 13,528,146</b>	<b>\$ 13,283,060</b>	<b>\$ 13,151,617</b>	<b>\$ 14,644,501</b>	<b>\$ 11,902,754</b>	<b>\$ 9,995,757</b>	<b>\$ 14,159,184</b>	<b>\$ 11,902,903</b>	<b>\$ 11,677,031</b>	<b>\$ 13,314,358</b>	<b>\$ 153,129,039</b>
															YTD Budget \$ 101,697,106
															Variance (YTD) \$ 14,537,641

## FY2023 Budget Sales Tax Comparison Year over Year

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	YTD Total
Year-over-Year Comparison (FY23-FY22)	12.3%	20.9%	22.2%	17.1%	8.6%	8.5%	16.4%	20.2%	6.0%	4.7%	-9.7%	2.1%	10.0%
FY23 Budget Target	\$ 10,837,385	\$ 11,730,084	\$ 11,265,334	\$ 11,050,554	\$ 11,990,897	\$ 12,399,931	\$ 10,211,129	\$ 9,806,473	\$ 12,405,318	\$ 11,428,653	\$ 10,914,935	\$ 12,766,327	\$ 136,807,021
% of FY23 Budget Achieved	9.3%	18.7%	28.6%	38.3%	47.9%	58.6%	67.3%	74.6%	85.0%	93.7%	102.2%	111.9%	111.9%

## FY2023 Budget Tax Receipts: FY2019 - FY2022

Fiscal Year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Total
FY2022	\$ 11,298,388	\$ 10,659,682	\$ 11,073,183	\$ 11,342,634	\$ 12,115,265	\$ 13,501,568	\$ 10,221,788	\$ 8,315,108	\$ 13,351,825	\$ 11,369,039	\$ 12,932,254	\$ 13,044,834	\$ 139,225,568
FY2021	\$ 8,921,474	\$ 9,466,946	\$ 9,245,058	\$ 9,317,741	\$ 9,964,913	\$ 11,402,907	\$ 9,134,772	\$ 6,785,996	\$ 11,253,531	\$ 10,287,447	\$ 8,942,957	\$ 11,945,450	\$ 116,669,192
FY2020	\$ 9,683,570	\$ 9,787,973	\$ 8,671,558	\$ 9,890,136	\$ 9,858,570	\$ 9,800,116	\$ 8,278,036	\$ 8,606,547	\$ 8,735,473	\$ 7,635,380	\$ 6,997,727	\$ 9,833,896	\$ 107,778,982
FY2019	\$ 7,708,503	\$ 9,621,386	\$ 9,103,726	\$ 8,067,019	\$ 9,425,129	\$ 8,906,774	\$ 8,195,787	\$ 7,918,012	\$ 10,155,891	\$ 9,880,419	\$ 9,435,500	\$ 9,117,052	\$ 107,535,197



**METROPOLITAN TRANSIT COMMISSION  
INFORMATION ITEM  
STAFF SUMMARY**

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**SUBJECT: Service Planning Update**

**DATE: July 26, 2023**

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**1.0 PURPOSE/SCOPE:** Staff will provide update on current service performance, ridership, and Route 74x Union County Express.

**BACKGROUND/JUSTIFICATION:** On August 15, 2022, CATS implemented service changes to Rail and Bus schedules to improve reliability. The recommendation was based upon ridership levels and operator availability. CATS staff has continued to monitor both variables as well route performance levels to inform future service level recommendations.

On April 19, 2023, Union County requested that CATS begin the process to discontinue the 74X Union County Express bus service. On June 13, 2023, Indian Trail Town Council voted to contribute funding for the 74X route to Uptown Charlotte. In partnership with Union County and Indian Trail, CATS will continue to provide the Route 74x service. At current funding levels, the route will cease operations to the City of Monroe on October 2, 2023

**2.0 PROCUREMENT BACKGROUND:** N/A

**3.0 POLICY IMPACT:** N/A

**4.0 ECONOMIC IMPACT:** N/A

**5.0 ALTERNATIVES:** N/A

**6.0 RECOMMENDATION:** N/A

**7.0 ATTACHMENT(S):** N/A

**SUBMITTED AND RECOMMENDED BY:**



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**Brent Cagle  
Interim Chief Executive Officer, Charlotte Area Transit System  
Assistant City Manager, City of Charlotte**

# Service Planning Update

Metropolitan Transit Commission  
July 26, 2023



1

## Presentation Topics

- ▶ August 2022 Service Reductions
- ▶ Service Performance
- ▶ Ridership Update
- ▶ Route 74x Union County Express



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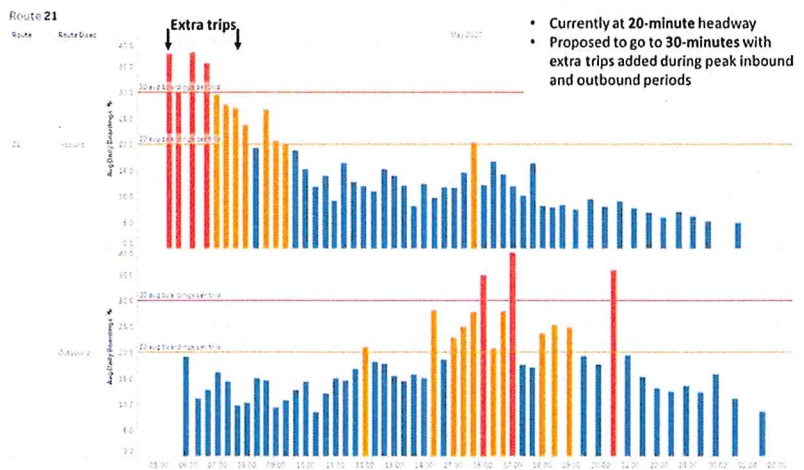
# August 2022 Service Reductions



3

## Service Analysis Approach

- ▶ Evaluated trip passenger load for all routes.
- ▶ Analyzed time of day and identified trips with 30 or more passengers.
- ▶ Prioritized routes that currently have higher frequency levels for reductions (i.e. shifting 15-minute routes to 20-minutes)



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## Public Outreach

- ▶ Tuesday, August 2: Cornelius and Davidson Park and Rides  
**6 am – 8 am**
- ▶ Wednesday, August 3: Charlotte Transportation Center  
**4 pm – 6 pm**
- ▶ Thursday, August 4: Northcross and Huntersville-Gateway  
Park and Rides  
**6 am – 8 am**
- ▶ Thursday, August 4: Virtual Public Meetings  
**12pm and 6pm**



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## August 15, 2022 Service Modifications

	Frequency 6am-7pm		Additional Trips	Service Modification Detail
	Before 8/22	After 8/22		
LYNX Blue Line	15	20		20-minutes from 5:00am-8:30pm, then 30-minutes until 2:00am
9-Central	10	15	5	10-minute service outbound from Uptown: 3:30pm-5:30pm; 1 early morning trip
Sprinter Airport	15	30	2	20-minute service from 1:30pm-3:00pm
7 - Beatties Ford	15	20	2	15 minute outbound from Uptown : 1:30pm-3:30pm
16 - S. Tryon	15	30	2	20-minute service outbound from Uptown: 3:30pm-5:30pm
27 - Monroe	15	30	3	20-minute service outbound from Uptown: 3:30pm-6:00pm
6 - Kings Dr	20	30		
8 - Tuckaseegee	20	30		
10 - West Blvd	20	30		
11 - North Tryon	20	30		
21 - Statesville Ave	20	30	2	20-minute service outbound from Uptown: 3:00pm-5:00pm
34 - Freedom Drive	20	30		



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# August 15, 2022 Service Modifications

- ▶ Routes 48x, 63x, and 77x reduced by 3 trips each day, and shifted trip times to account for the adjustment
- ▶ Based on ridership levels 2 morning trips, and one afternoon trip were consolidated
- ▶ Adjusted remaining trip times to better cover the service span.
- ▶ Maintained 20 – minute frequency during main peak periods
  - 6:30am - 8:30am
  - 4:00pm - 5:30pm

	Number of AM/PM Trips	
	Current	Modified
77x - North Mecklenburg Express	17	14
48x - Northcross Express	17	14
63x - Huntersville Express	17	14
53x - Northlake Express	8	8
85x - Gastonia Express	6	6
82x - Rock Hill Express	6	6
74x - Union County Express	6	6
64x - Independence Blvd Express	9	9
52x - Idlewild Road Express	6	6
46x - Harrisburg Road Express	6	6
40x - Lawyers Road Express	6	6
62x - Rea Road Express	6	6
47x - Huntersville Greenhouse Express	2	2



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# Service Performance



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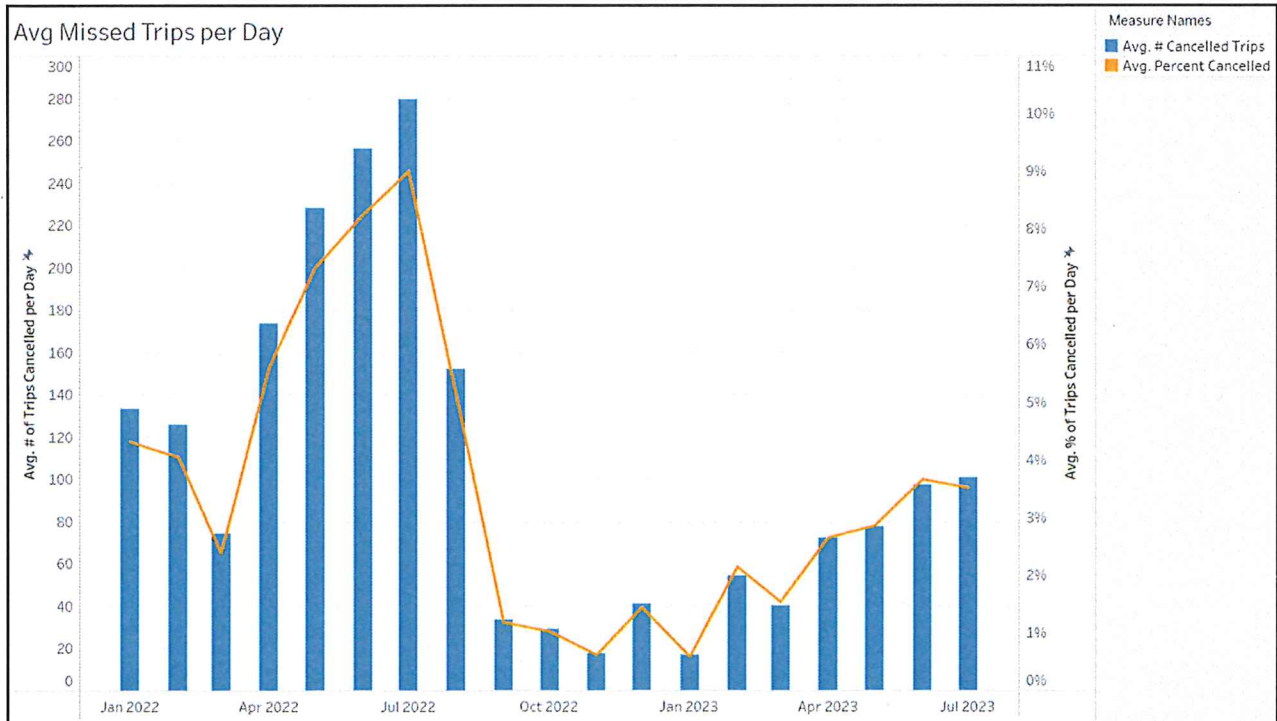


# Missed Trips

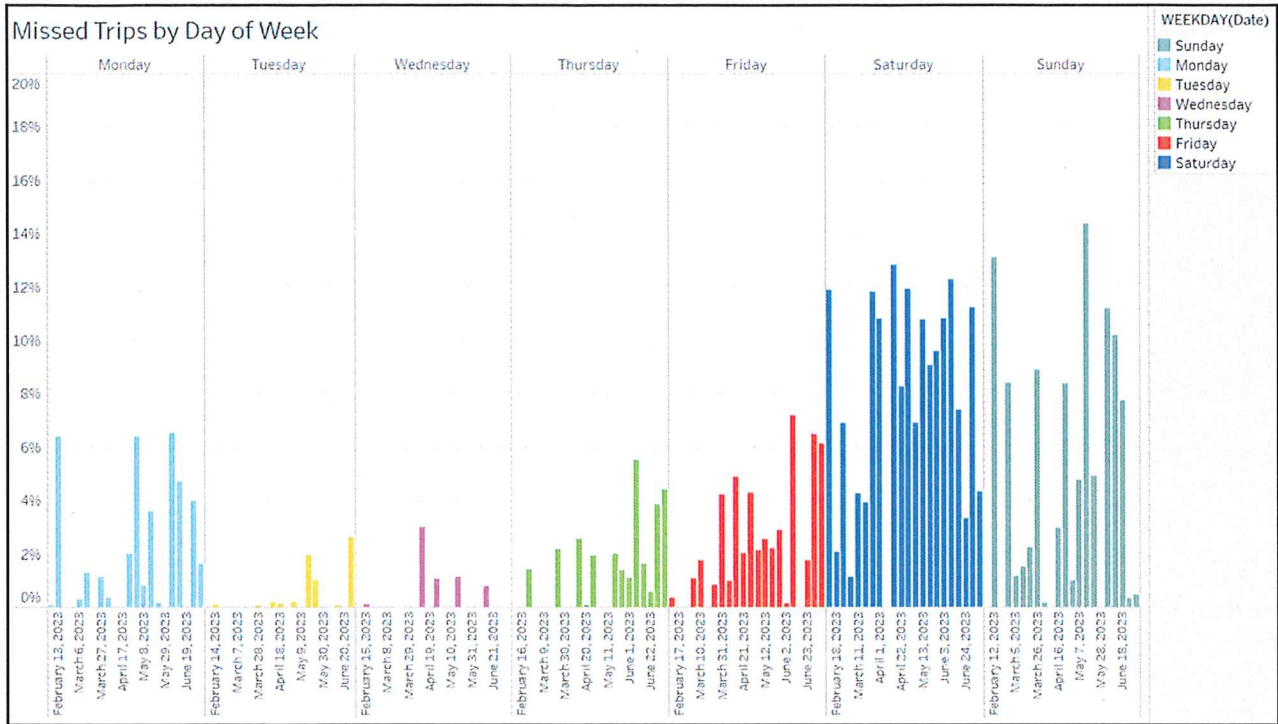
- ▶ Service delivery focused on reliability
- ▶ Seasonal and day of week variances
- ▶ Workforce is moving towards stabilization
- ▶ Monitoring missed trips daily



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## Service Levels

- ▶ Retain August 2022 adjustment to ensure improved service reliability.
- ▶ Continue evaluating ridership and operator levels to improve reliability and efficiency.
- ▶ Explore options to increase services strategically
- ▶ Conducting express route survey
- ▶ Title VI evaluation



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# Ridership Update



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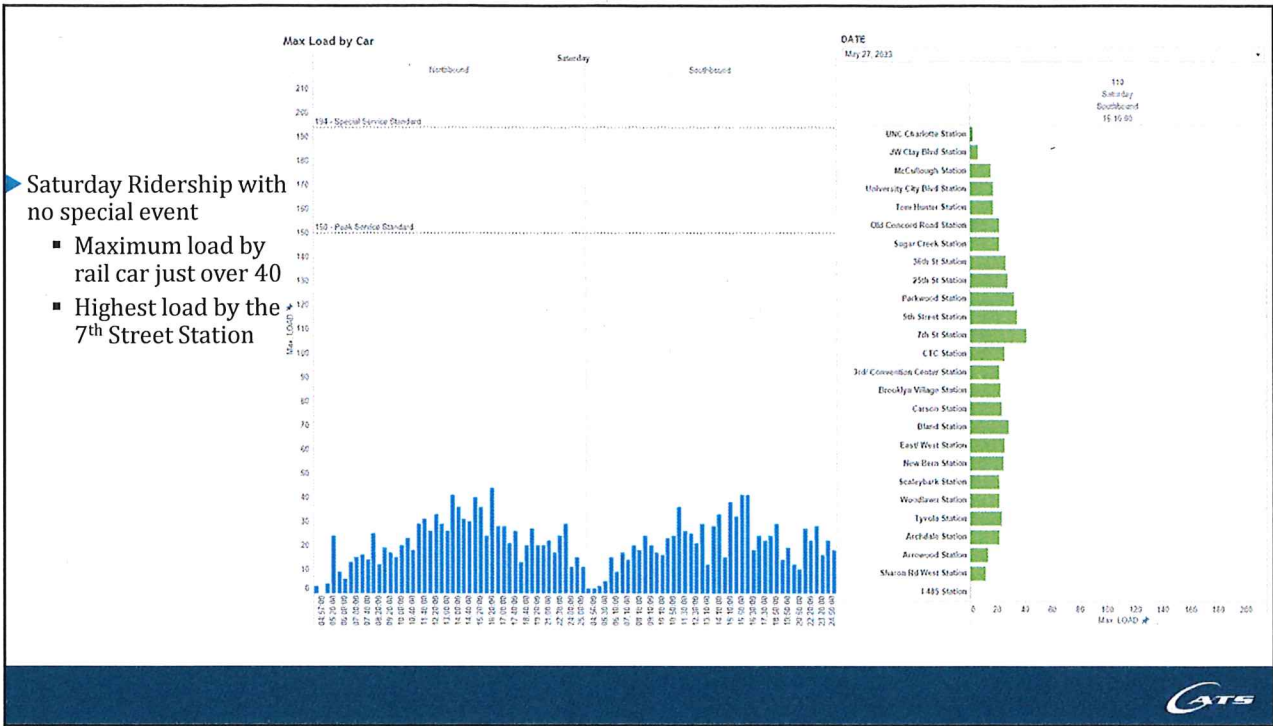
## Ridership Performance

- ▶ Systemwide, Bus APC ridership is up 8.9% compared to June of last year
  - Local bus ridership increased 8.3%
  - Express ridership increased 20%
  - Route 9 ridership increased 6.5%
- ▶ Compared to January 2022, Bus APC ridership in June 2023 was up 22%
  - Local bus ridership increased 18.4%
  - Express ridership more than doubled
  - Route 9 ridership increased 29.1%
- ▶ LYNX Blue Line June 2023 ridership compared to June of last year increased by 19% and compared to last January average weekday ridership has increased over 90%
- ▶ Emerging Ridership Patterns
  - Hybrid work schedule
  - Special Events

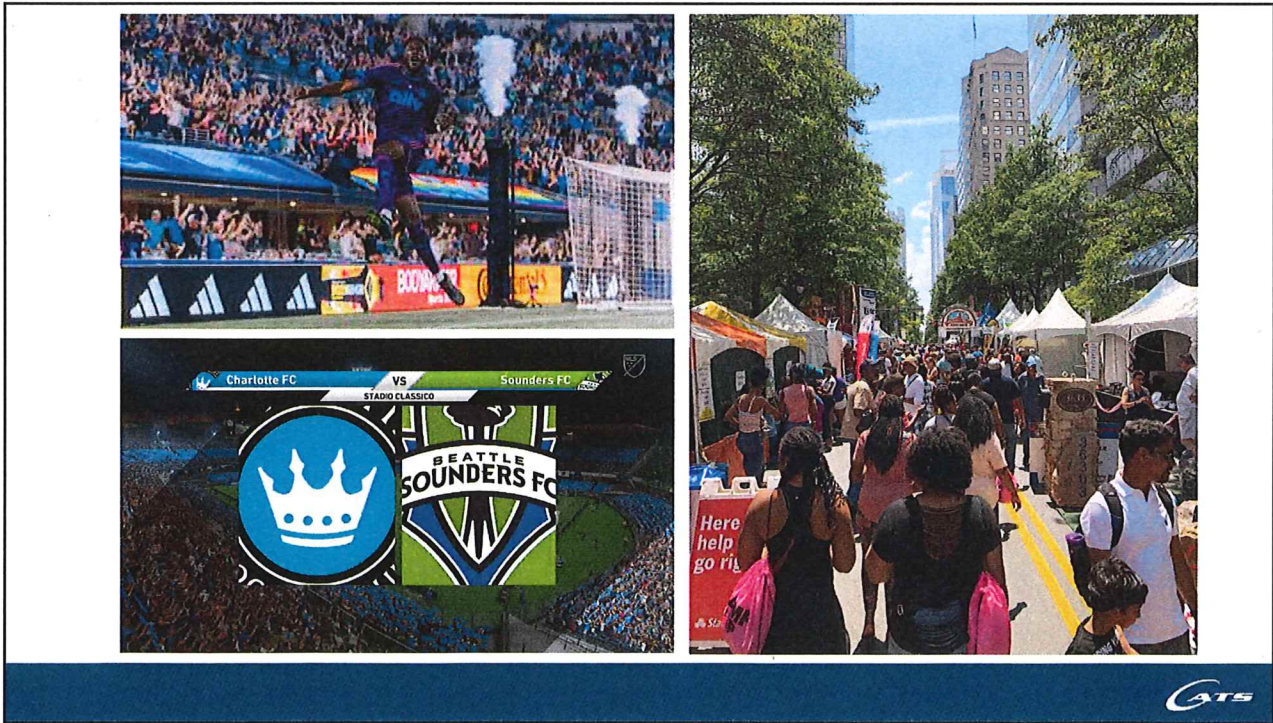


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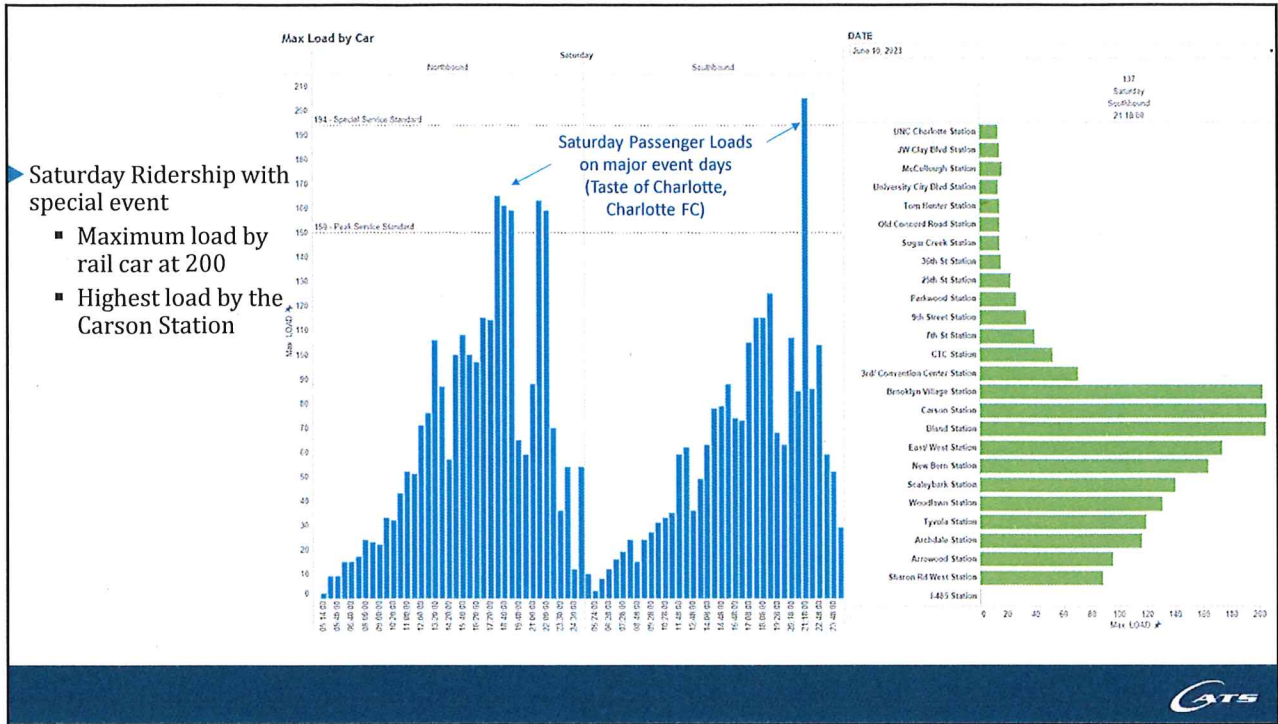




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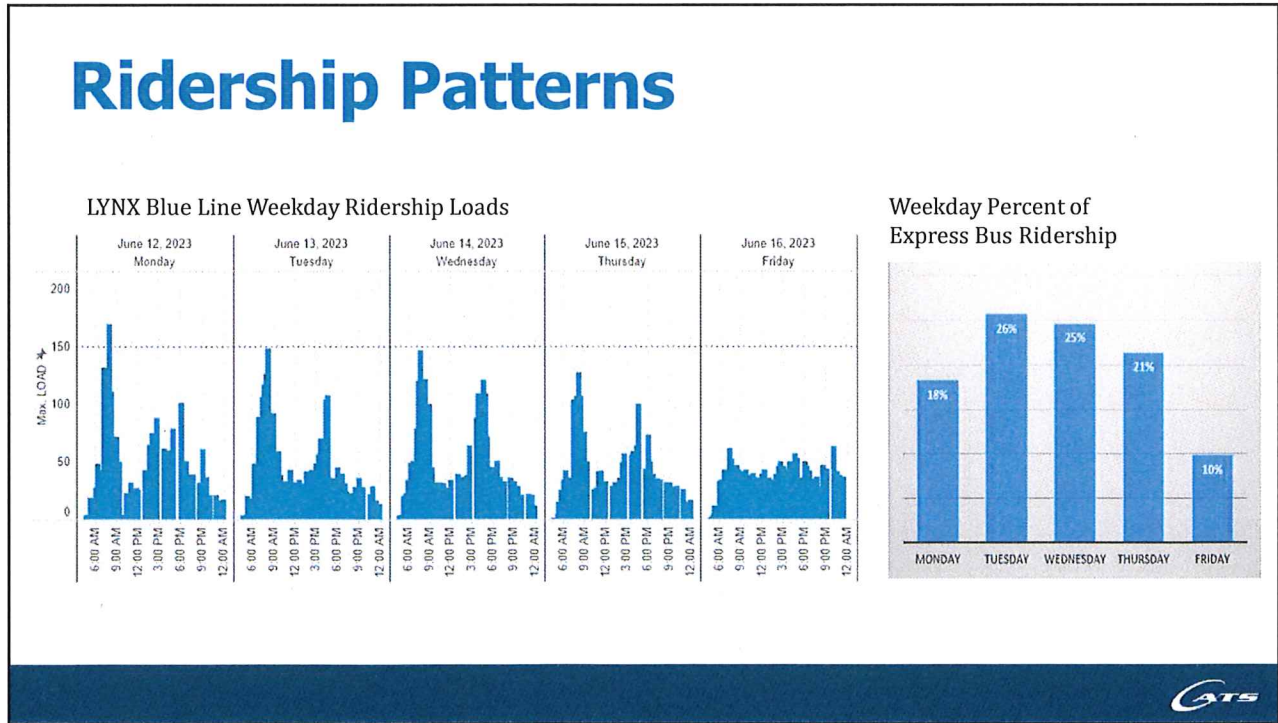


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- ▶ Saturday Ridership with special event
- Maximum load by rail car at 200
  - Highest load by the Carson Station

17



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## Service Planning Initiatives

- ▶ Moving forward with Microtransit procurement for Early 2024 rollout
- ▶ Service Planning Study through FTA awarded grant.
  - Begins Fall 2023
  - Builds upon adopted Envision My Ride plan
  - Will recommend strategies to close the Digital Divide
  - Strive to make services more intuitive and approachable
  - Focused on improving Customer Experience
  - Support Microtransit implementation



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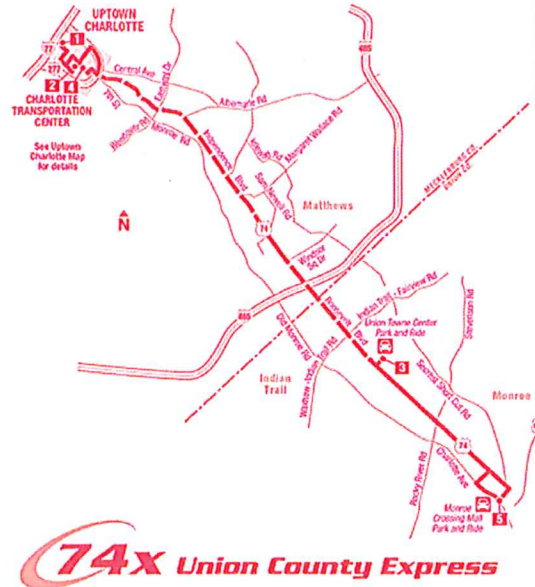
## Route 74x Union County Express



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## 74x Union County Express

- ▶ Per MTC Policy, Union County and CATS jointly fund the 74x
- ▶ Current service is two morning and two evening trips
- ▶ Park and Rides
  - ▶ Monroe Crossing Mall Park and Ride
  - ▶ Union Towne Center Park and Ride



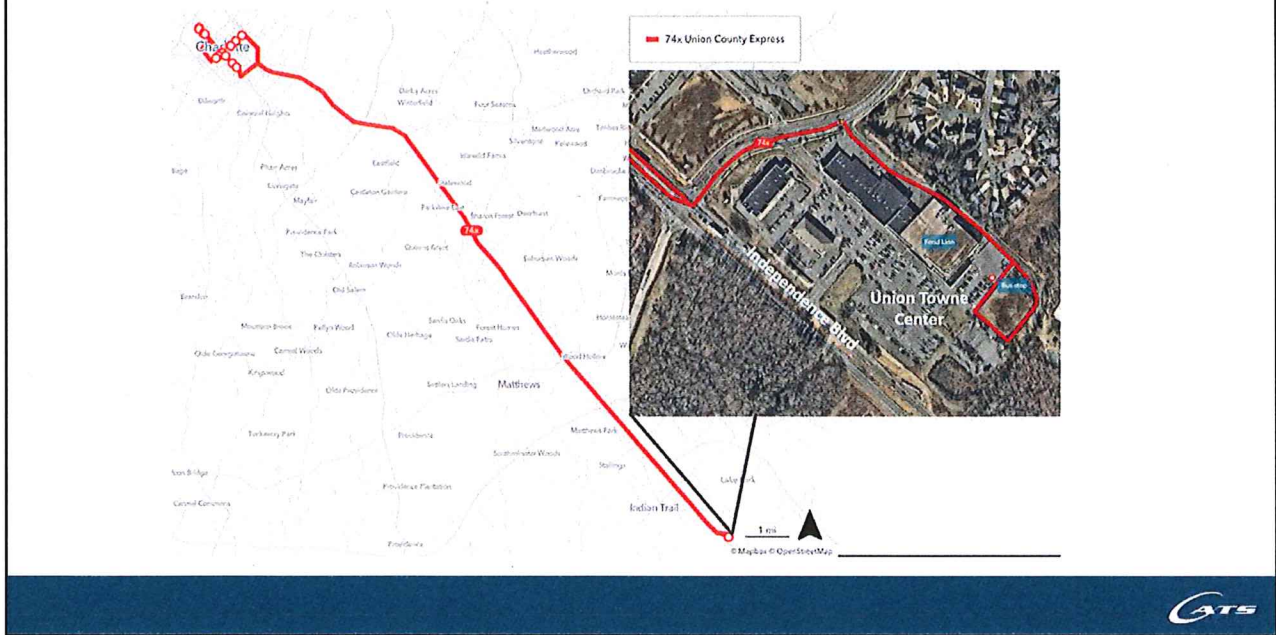
21

## 74x Union County Express

- ▶ On April 17, 2023, the Union County Board of Commissioners voted to no longer fund their portion of the 74X bus service.
- ▶ On April 19, 2023, Union County requested that CATS begin the process to discontinue the 74X Union County Express bus service.
- ▶ On June 13, 2023, Indian Trail Town Council voted to contribute funding for the 74X route to Uptown Charlotte.
- ▶ On Monday, June 19, 2023, the Union County Board of Commissioners voted to continue funding the 74X Union County Express bus service to the Town of Indian Trail. The 74X and will no longer serve the City of Monroe after September 29, 2023.

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# 74x Union County Express – Indian Trail



23

## 74x Union County Express

- ▶ At current partner funding levels, the last day of 74x service to the City of Monroe will be September 29, 2023
- ▶ Customer engagement will continue
- ▶ CATS is working closely with Indian Trail and Union County Staff to develop an outreach and marketing plan.

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Questions?







**METROPOLITAN TRANSIT COMMISSION  
ACTION ITEM  
STAFF SUMMARY**

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**SUBJECT: Proposed changes to CATS Travel Market and Transit Service Guidelines Polices**

**July 26, 2023**

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- 1.0 PURPOSE/SCOPE:** The purpose of this action item is a CATS staff recommendation for the MTC to adopt proposed policy changes to MTC-05 and MTC-06.
- 2.0 BACKGROUND/JUSTIFICATION:** With the adoption of the Envision My Ride study by MTC in May 2022 a number of policy changes are recommended to the following MTC policies:
- MTC-05 Travel Markets
    - Provides guidance for travel markets where transit is most competitive
  - MTC-06 Transit Service Guidelines
    - Provides guidance on service development and changes as well as design standards and performance measures
- 3.0 PROCUREMENT BACKGROUND:** N/A
- 4.0 POLICY IMPACT:** Retaining these guidelines as is would maintain existing policies
- 5.0 ECONOMIC IMPACT:** N/A
- 6.0 ALTERNATIVES:** N/A
- 7.0 RECOMMENDATION:** CATS Staff recommends the MTC adopt the proposed policy changes to MTC-05 and MTC-06
- 8.0 ATTACHMENTS:**
- MTC-05 Travel Markets
  - MTC-06 Transit Service Guidelines

**SUBMITTED AND RECOMMENDED BY:**



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**Brent Cagle  
Interim Chief Executive Officer, Charlotte Area Transit System  
Assistant City Manager, City of Charlotte**

Public Transportation cannot realistically serve all person types of trips made within a metropolitan area. The flexibility of the automobile combined with existing land use patterns and cost considerations make it impossible for transit to compete for all trips. However, transit can compete effectively for market share in many situations.

To guide decisions on resource allocation and to provide a basis for measuring performance over time, CATS has identified those markets where it will seek to be competitive. The selected local travel markets are consistent with the CATS Mission and will support the attainment of the CATS Vision and the goals of the 2025 Transit/Land Use Plan as amended and updated by the 2030 Transit Corridor System Plan Metropolitan Transit Commission (MTC).

The local travel markets for public transit have been organized into two categories to help delineate their priority and to define “transit competitive trips” ~~as utilized in the CATS Vision statement~~. The two categories are defined as follows:

### **PRIMARY MARKETS**

These markets must be well served to achieve the goals of the land use plans and growth strategies adopted by local governments served by CATS. ~~Centers, Corridors and Wedges Growth Framework as adopted by the City of Charlotte, and the goals of the individual town growth plans~~. These markets must also be well served to achieve the goals of the 2025 Transit/Land Use Plan as amended and updated by the 2030 Transit Corridor System Plan for CATS to achieve its Mission and Vision MTC. ***The primary markets for CATS listed in priority order are:***

1. All trips/all purposes Travel by those individuals who do not have access to or cannot utilize private transportation and require public transit for mobility.
2. Travel by eExisting customers from existing service areas.
3. All trips/all purposes Travel to, from and within one of the five original corridors and major employment and activity centers and the connections between them.
- 3-4. Travel in adopted high-frequency corridors.
- 4-5. All trips/all purposes Travel to/from Activity Centers and Transit Oriented Developments (TOD) in the “wedges” between outside of the original five corridors.
- 5-6. Commuter trips-travel in congested travel corridors outside the original five corridors within the “wedges.”
- 6-7. Commuter trips-travel to/from surrounding counties in one of the original five corridors.

### **SECONDARY MARKETS**

Lesser (or secondary) priority markets are those that will only be served when it is cost-effective to do so and when it will not detract from CATS’ ability to serve its Primary Markets. Examples of Secondary Markets are:

- Trips to/from non-TOD developments and areas regardless of location.
- Local trips totally outside Mecklenburg County.
- Inter-county trips outside of the original five corridors.

The Primary Markets delineated above are the markets where CATS will strive to achieve an increasing share of the trips made each day. Therefore, these are the markets where transit will compete and thereby define what is meant by “transit competitive trips”.

#### Summary of Changes

Entire Document: Revised to specify that the selected local travel markets are consistent with the CATS Mission and will support attainment of the CATS Vision and the goals of the 2025 Transit/Land Use Plan as amended and updated by the 2030 Transit Corridor System Plan.

Primary Markets: Revised to specify that these markets must be well served to achieve the goals of the Centers, Corridors and Wedges Growth Framework as adopted by the City of Charlotte and the goals of the individual town growth plans. Item 4: Added reference to Activity Centers.

Previous Revision: September 25, 2013

## 1.0 PURPOSE

The Transit Service Guidelines outline principles designed to provide services that are comfortable, convenient and easy to use for customers, and to ensure that services are designed to be reliable, timely, safe and efficient. The guidelines define the conditions that require action when standards are not met, but allow flexibility to respond to varied customer needs and community expectations in an accountable, equitable and efficient manner. Due to the sustaining and projected growth in the Charlotte region, markets and customer expectations are ever changing and growing. Thus, CATS must be responsive to these changes ~~to in order to~~ retain current customers and achieve and sustain ridership growth.

## 2.0 CATS SERVICE GUIDELINES

The adopted service guidelines are in the following areas:

- Travel Markets
- Transit Coverage
- Transit Infrastructure Requirements
- Service Modes
- Bus Stop Design Standards
- Bus Stop Location and Spacing
- Bus Stop Amenities
- Service Monitoring System
- New Transit Services
- Load Standards
- On-time Performance
- Duplication of Service
- Route Directness
- Route Patterns
- Service Frequency and Span
- Vehicle Assignment

- ~~Travel Markets~~
- ~~Transit Coverage~~
- ~~Transit Access~~
- ~~Bus Stop Spacing and Amenities~~
- ~~Bus Route Monitoring System~~
- ~~New Transit Services~~
- ~~Load Standards~~
- ~~On-time Performance~~
- ~~Duplication of Service~~
- ~~Route Directness~~
- ~~Route Patterns~~
- ~~Service Frequency and Span~~
- ~~Vehicle Assignment~~

The service guidelines are intended to be applied to two primary areas of focus: the evaluation of existing services and the evaluation of proposals for new service. As an example, the service guidelines can be applied in the following situations: restructuring service to eliminate lower-productivity segments or branches or adjusting service frequency to better reflect the demand for service. Routes that do not meet standards are not automatically eliminated. These guidelines call for the elimination of unproductive routes only as a last resort when it has been determined that no cost-effective actions are available to improve the productivity of the service.

The guidelines for evaluation of existing routes are not intended to preclude changes to routes that meet these minimum standards. In many cases, it may be possible to improve the productivity of routes that meet the minimum standards by making changes to



headways or trip times. These guidelines should not be used to prevent changes to improve the efficiency of existing routes, as long as the changes meet the route design standards.

The evaluation of new service proposals will take place as proposals are received or needs identified. New service proposals will be evaluated based on the most recent information available regarding system standards. Decisions regarding implementation of new routes will be made through the service planning process and by the Service Development Review Committee, in consultation with the Transit Services Advisory Committee.

## **2.1 Travel Markets**

Public Transportation cannot reasonably serve all person trips within a region. However, transit can compete effectively for market share in many situations.

To guide decisions on resource allocation and to provide a basis for measuring performance over time, CATS has identified those markets where it will seek to be competitive. The selected local travel markets are consistent with the CATS Mission and will support attainment of the CATS Vision and the goals of the 2025 Transit/Land Use Plan as amended and updated by the [Metropolitan Transit Commission \(MTC-2030 Transit Corridor System Plan\)](#).

- **Travel Markets:** CATS will identify and consider the Metropolitan Transit Commission Travel Markets Policy when service changes or reductions are proposed.

## **2.2 Transit Coverage**

The purpose of these guidelines is to provide convenient access to transit service in all areas exceeding a minimum density. It is very difficult to provide effective transit services in low-density areas. This guideline supports the land-use goal of encouraging higher densities in coordination with transit services. Census block group and Traffic Analysis Zone (TAZ) data will be used to measure residential and employment density. The coverage area will be one-half mile (about a 10-minute walk) around the bus route.

**Residential and Employment Density:** In order for an area within Mecklenburg County to be considered for CATS fixed route services, the area must meet a residential density of at least three dwelling units per acre and/or an employment density of three employees per acre. For areas that do not meet this threshold, CATS will explore the feasibility of alternative modes of transit such as microtransit and additional first mile / last mile solutions.

~~**Residential and Employment Density:** In order for an area within Mecklenburg County to be considered for CATS fixed route services, the area must meet a residential density of at least three persons per acre and/or an employment density of three employees per acre.~~

- ~~• **Suburban Areas:** In outlying suburban areas served primarily by express bus routes, park and ride lots will be sited in areas likely to attract good ridership and in locations where they can effectively intercept potential riders.~~





### **2.3 Transit ~~Access~~ Infrastructure Requirements**

Buses can do substantial damage to parking lots and roadways that are not built to accommodate the weight of a bus. This needs to be considered ~~taken into account~~ in the planning for bus services.

All bus routes should be planned to operate over streets that meet the following minimum standards:

- Intersections with minimum turning radius of 30 ft;
  - Pavement composition sufficient to support the axle loads of a bus
  - Minimum lane width of 11 ft;
  - Overhead clearance of 13 feet; and,
  - With the exception of traffic calming humps, buses shall avoid curb to curb speed bumps unless traveling in low-speed environments (such as shopping centers)
- ~~**Road Condition:** Transit service will only be provided on paved roadways that have sufficient strength to accommodate repetitive bus axle loads. The roadways must be in good condition and buses must safely be able to maneuver.~~

### **2.4 Service Modes**

CATS provides multiple service types consisting of light rail, fixed route bus service, streetcar, paratransit service, and vanpool.

The current light rail network consists of the LYNX Blue line which operates along an 18.9 mile fixed guideway. The Blue line currently serves 26 stations, including 11 park-and-ride locations.

The fixed route bus network includes specifically numbered bus routes that pick up and drop off passengers at regularly scheduled stops and intervals along a defined route. Bus routes are broken down into four categories based on service type and frequency:

- High Frequency Bus Routes – Frequent bus routes that have a minimum headway of 15-minutes or better
- Common / Local Routes – Bus routes that provide all day service on weekdays and weekends
- Neighborhood / Connector Routes – Feeder routes that provide neighborhood connections to other fixed routes within the CATS network
- Express Routes – Peak hour, weekday only commuter routes that typically provide limited stop service between two key destinations

The current streetcar network consists of the CityLYNX Gold Line which operates along a four-mile alignment and serves 17 stations.

The Special Transportation Services (STS) provides complementary fixed-route paratransit services to individuals who cannot access fixed route bus services or rail stations. The STS service area includes areas up to ¾ of a mile on either side of the following fixed route bus service types:



- High Frequency Bus Routes
- Common / Local Routes
- Neighborhood / Connector Routes

CATS vanpool consists of a shared CATS vehicle intended for carpool services. Vanpool service is typically supplied to a group of 5 to 15 commuters who share similar commuting patterns.

## **2.5 Bus Stop Design Standards**

The bus stop is the first point of contact with the transit system for customers, therefore it is important to incorporate designs that improve the overall customer experience while waiting for services provided through CATS. Bus stop designs shall include, at minimum, an accessible boarding pad that meets requirements established by the 2010 American with Disabilities Act (ADA). Design types for bus stops are broken down as follows:

**Standard Stop** – Functions as the default stop systemwide and can be applied at many intermediate points along bus routes. Standard stops may have varying levels of amenities including benches and shelters.

**Mobility Hubs** – Functions as enhanced bus stops that help connect passengers to various modes of mobility including other bus routes, bicycle & scooter services, rideshare programs, and on-demand services, among others. Mobility hubs are located primarily along High Frequency bus routes and at other major transfer destinations within the CATS service area.

More information on each bus stop design and recommended amenity type can be found in the CATS Bus Stop Guidelines document, as established through the Envision My Ride plan, and the Charlotte Land Development Standards Manual.

### **New Bus Stops**

The necessary infrastructure (such as sidewalks) must be in place or constructed/planned by other agencies to consider a new bus stop installation. The integration of the necessary infrastructure and amenities in newly developed or redeveloped areas should be coordinated with the development. New stop installations and necessary infrastructure requirements shall be determined through the City of Charlotte's Unified Development Ordinance (UDO) and other land development policies as established by local jurisdictions within the CATS service area. CATS shall work with private landowners and developers, to the extent practicable, to leverage the construction or the monies to offset the construction costs of necessary infrastructure and bus stop amenities.

### **Accessibility Requirements**

When establishing new bus stops, CATS will select locations that are accessible to all customers, including customers who use mobility devices. CATS will work with the jurisdiction that is responsible for the street and/or sidewalk (if applicable) to include accessibility improvements to the stop within the jurisdiction's ADA transition plan. When installing amenities at existing bus stops, the amenities will be accessible to individuals with disabilities in accordance with the 2010 ADA Standards for Accessible Design as



amended.

Design standards for bus stops, including accessibility requirements, can be found in the Charlotte Land Development Standards Manual.

**2.42.6 Bus Stop Location and Spacing and Amenities**

Bus stops provide critical connection points between the multimodal network and bus routes, and proper location is critical to ensure safe and efficient connections.

**Bus Stop Location**

In general, bus stops should be located at either the near-side or far-side of an intersection (as opposed to mid-block locations). Advantages of a far-side stop include reduced delay from a bus idling at a red signal after serving a stop, better visibility of pedestrians for other drivers, and minimizing conflicts with right-turning vehicles. However, far side stops can also create the potential for vehicles to queue behind a stopped bus into the intersection. Bus stops should be placed to minimize operational difficulties such as lane changes and weaving maneuvers of approaching vehicle

Locations for bus stops along a route should also consider the following:

- Provide stops at major generators (For example: employment centers, residential areas with 500+ units, retail centers, public education centers, major medical facilities).
- Provide bus stops at transfer locations.
- To the extent possible, provide bus stops at signalized intersections where there are designated crossings.
- Provide intermediate stops based on the density and fixed route type that serves the area:

**Bus Stop Spacing**

Stop spacing should be thoroughly considered when creating new routes, modifying existing routes, or when evaluating performance issues along a route. Adequately spaced bus stops across the transit system enhance accessibility in general. Recommended spacing standards for fixed route bus routes are as follows:

<b><u>Service Type</u></b>	<b><u>Spacing Guidelines</u></b>
<u>High Frequency</u>	<u>4 stops per mile (every 1,320 feet)</u>
<u>Common / Local</u>	<u>4-6 stops per mile (every 850-1,320 feet)</u>
<u>Neighborhood / Connector</u>	<u>4-6 stops per mile (every 850-1,320 feet)</u>
<u>Express</u>	<u>Limited stops at key destinations</u>

More information on stop location and spacing recommendations can be found in the Envision My Ride: Bus Stop Guidelines document.



### Relocation and Removal of Stops, Benches, and Shelters

CATS aims to be responsive to requests for bus stop adjustments where passenger safety, comfort, and convenience are not compromised. When a request is made to remove or relocate a bus stop, cooperation with requesting residents or owners of residences or

businesses that are adjacent to bus stops is appropriate when ridership levels and the availability of a reasonable alternative location affords reasonable accommodation of CATS riders. CATS will review each request with the internal Bus Stop Committee to explore the feasibility of each request.

Where stops are located at intervals that do not meet the targeted spacing thresholds as identified above, requests to remove or relocate stops may be accomplished through consolidation of adjacent stops at an appropriate location. Consolidation of stops may have the positive result of improving travel time and resolving adjacency issues.

It is CATS' policy to not remove or relocate bus stops, bus benches or bus shelters when such action would negatively impact passenger convenience, safety or comfort. CATS policy prohibits bus stop removal or relocation where such requests have the appearance of being motivated by bias based on the ethnicity, income level or social status of passengers using the bus stop location.

~~It is recognized that bus stops and amenities help customers access CATS services and make their riding experience more comfortable, safe and friendly. Amenities include bus shelters, benches, trash cans, and static/electronic travel information signs.~~

- ~~• **Bus Stop Spacing:** Factors that should be considered in determining bus stop locations/spacing are as follows:~~

- ~~1. Provide stops at major generators (For example: employment centers, residential areas with 500+ units, retail centers, public education centers, major medical facilities).~~
- ~~2. Provide bus stops at transfer locations.~~
- ~~3. To the extent possible, provide bus stops at signalized intersections where there are designated crossings.~~
- ~~4. Provide intermediate stops based on the density of the area:
  - ~~– Central Business Districts or Major Commercial District: Minimum 500 feet~~
  - ~~– High to medium density areas: 750 to 900 feet~~
  - ~~– Medium to low density areas: 900 to 1,300 feet~~
  - ~~– Low density to rural areas and areas served by micro transit: as needed~~~~

- ~~• **Amenities:** Placement of amenities should be based upon factors that consider equity in distribution throughout the service area, and factors that consider the benefit to the user and site-related constraints. Greater consideration should be given to stops on key bus routes due to a generally higher level of demand. Stop locations that have boardings greater than 25 people per day will be given priority.~~

~~Other factors that should be considered in determining the priority for amenities at~~



~~stops are:~~

- ~~— Lengthy wait times between buses (beyond 30 minutes),~~
- ~~— High percentage of transfer passengers (more than 25 percent), and~~
- ~~— High percentage of seniors or individuals with disabilities using the stop (more than 25 percent).~~

~~The necessary infrastructure (such as sidewalks) must be in place in order to consider an installation. The integration of the necessary infrastructure and amenities in newly developed or redeveloped areas should be coordinated with the development. CATS should work with private land owners and developers, to the extent practicable, to leverage the construction or the monies to offset the construction costs of necessary infrastructure and bus stop amenities.~~

- ~~• **Accessibility:** When establishing new bus stops, CATS strives to select locations that are accessible to all customers, including customers who use mobility devices. CATS will work with the jurisdiction that is responsible for the street and/or sidewalk (if applicable) to include accessibility improvements to the stop within the jurisdiction's Americans with Disabilities Act (ADA) transition plan. When installing amenities at existing bus stops, the amenities will be accessible to individuals with disabilities in accordance with the ADA of 1990 as amended.~~

**2.7 Bus Stop Amenities**

The bus stop is the first point of contact with the transit system for customers. A bus stop with inadequate amenities could hinder and deter passengers from accessing the transit network. The following section establishes amenity guidelines for facilities based upon various metrics including ridership, land use, equity, and accessibility.

Placement of amenities should be based upon factors that consider equity in distribution throughout the service area and factors that consider the benefit to the user and site-related constraints. Greater consideration should be given to stops on high frequency bus routes due to a generally higher level of demand. Bus stop amenities will be rolled out based on a scoring system that determines the appropriate stop level design, as defined in Section 5: Bus Stop Design Types. Minimum scoring criteria for each stop design are as follows:

	<b>Mobility Hubs</b>					
	<b>Type A</b>	<b>Type B</b>	<b>Type C</b>	<b>Enhanced Stop Pair</b>	<b>Mobility Plaza</b>	<b>Mobility Center</b>
<b>Minimum Score</b>	<u>---</u>	<u>15</u>	<u>25</u>	<u>50</u>	<u>55</u>	<u>65</u>

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Scoring criteria for amenities are based on multiple factors including ridership, frequency of service, employment and population density, equity, and other measures. The table below shows the evaluation criteria for each metric:

<b>Category</b>	<b>Criteria</b>	<b>Scoring</b>
<b>Ridership</b>	Boardings Bus Priority Corridor	1 point per average weekday daily boarding 50 points if on a Bus Priority Corridor and has at least 15 daily



		<u>boardings</u>
<u>Wait Time</u>	<u>Transfers</u> <u>Frequencies</u>	<u>5 points if stop is a transfer location between two Bus Priority Corridors or LYNX Light Rail</u>
<u>Rider Profile</u>	<u>Equity Populations</u> <u>Reliant Populations</u>	<u>10 points if stop is in predominantly minority and/or low-income area (as defined by CATS)</u> <u>10 points if stop is in area with higher than average elderly or persons with disability</u>
	<u>Human Service Facility</u>	<u>10 points if one or more of the following existing or planned facilities, are within 1,320 feet of the stop: Medical facility, hospital, dialysis clinic, social security office, or County service center</u>
<u>Activity Generator</u>	<u>Activity Destinations</u>	<u>5 points if one or more of the following existing or planned facilities, are within 1,320 feet of the stop: Public library, public school, recreation center, senior center, or supermarket/pharmacy</u>
	<u>Major Employer</u>	<u>5 points if within 1,320 feet of the stop: is an existing or planned job center with more than 50 jobs</u>
	<u>Operator Relief</u>	<u>5 points if the stop is assigned as an official relief/layover point</u>

More information on the bus stop and amenity scoring system can be found in the CATS Bus Stop Guidelines document.

### **3.0 ServiceBus Route Monitoring System**

CATS will regularly calculate Passengers per Revenue Hour for all bus routes and identify targeted thresholds based on service type. CATS will monitor routes that fall below targeted thresholds and make changes to the service as needed. Routes falling between targeted thresholds should be subject to a more detailed analysis that examines performance by route segment and time of day and makes appropriate recommendations. Routes consistently falling below targeted thresholds will be considered for conversion to microtransit as detailed below.

**Micro Transit Conversion:** When a route fails to carry targeted passengers per hour for two or more consecutive quarters, that route, where feasible, will be a candidate for conversion to micro-transit service. Where two or more adjacent routes both fail to meet targeted passengers per hour, conversion to micro-transit operation becomes more feasible and potentially cost-effective. Should the conversion result in overall savings to CATS, then saved hours should be reinvested in improved bus service in other parts of the bus system network.

**New Route Candidates:** Any micro-transit zone performing above targeted passengers per hour thresholds for more than three consecutive quarters will be a candidate for conversion to a fixed route. Candidate zones will be analyzed for trip origins and destinations to determine any potential route patterns. If there is sufficient clustering of the zone trips, the candidate zone may be viable for route conversion and a new service will be considered at the next practical programmed service change.

CATS will utilize a Route Monitoring System that uses a performance index based upon





~~Passengers per Revenue Hour and Subsidy per Passenger. An index score is calculated by taking the ratio of a given route's performance on a specific measure to the average of all routes in the service category. A score of 1.0 represents average performance within the given service category. A score above 1.0 is better than average, and for scores above 1.0, the score itself indicates how much better the route is performing above the average (1.5 is 50 percent above average, 2.0 is 100 percent, and so forth). A score below 1.0 represents below average performance. A route with a score of 0.5 is at only 50 percent of the category.~~

- ~~• **Bus Monitoring System:** CATS will monitor routes with an overall index score between 0.75 and 0.99, and make changes to the service as needed. Routes falling between 0.50 and 0.74 should be subject to a more detailed analysis that examines performance by route segment and time of day and makes appropriate recommendations. Routes falling below 0.50 need immediate analysis and action.~~

### 2.53.1 **New Transit Services**

Proposals for new service come from a variety of sources including: ~~the 2025 Transit/Land Use Plan as amended and updated by the MTC~~the 5-Year Transit Service Plan, customers, employees, and reviews of system performance. New service proposals are reviewed during the service change process and are implemented based upon customer need and resource availability.

- **Performance Evaluation:** All new services will be subject to performance evaluations and will be expected to meet the performance standards for their service type within two years of implementation.

~~New services will be expected to meet a performance monitoring score of 0.5 or better after one year. If this does not occur, CATS will review the service and look for ways to improve its performance. If the service performance slips to below 0.5 after two years, the route will be a candidate for discontinuation.~~

- **New Employment Shuttles:** New shuttle services in employment areas may require a financial contribution from business community stakeholders of up to 1004 percent of the ~~annual~~marginal operating cost.
- **Bus Services Outside of Mecklenburg County:** CATS will follow the Metropolitan Transit Commission Financial Policies (MTC-01) regarding financial contribution for bus services outside of Mecklenburg County.

### 2.63.2 **Load Standards**

The objective of load standards is to balance passenger comfort and safety with operating cost.

- **Load Standards:** CATS standard load factors for its bus services in regular service are:
  - 115% of seated capacity for ~~express services~~all bus service modes



~~—130% of seated capacity for local and shuttle services~~

~~CATS has a goal to not exceed its standard load factors on a regular basis per trip on a given route. If a service is consistently above the seated capacity, CATS will make adjustments that may include adding additional service at the next scheduled service change, if funding is available. If the standing load compromises safety in any way, CATS will implement additional service to meet the demand.~~

~~CATS will not exceed its standard load factors for more than 20 minutes on a regular basis per trip on a given route. If a service is consistently above the seated capacity, CATS will make adjustments that may include adding additional service at the next scheduled service change, if funding is available. If the standing load compromises safety in any way, CATS will implement additional service to meet the demand.~~

### Rail Vehicle Loading Standards

Vehicle Load Standard	Load Factor*	Passengers Per Vehicle	Acceptable Application
Service Standard	221%	150	Peak Hour Service
Maximum	285%	194	Special Events

\* Load factor as percent of seated capacity

### CityLYNX Gold Line Vehicle Loading Standards

Vehicle Load Standard	Load Factor*	Passengers Per Vehicle	Acceptable Application
Service Standard	242%	131	Peak Hour Service
Maximum	317%	171	Special Events

\* Load factor as percent of seated capacity

- **Wheelchair Boardings:** CATS will analyze wheelchair boardings annually, and make necessary schedule adjustments. Trippers will be utilized if particular trips continually are not able to provide service to all wheelchair boardings on a given fixedroute services.

### 2-73.3 On-Time Performance

To ensure that transit riders have confidence that the service will perform reliably in accordance with the public timetables prepared and distributed by CATS, on-time performance standards have been established. A vehicle is considered “late” when it arrives five minutes or more after the scheduled time. A vehicle is considered “early” if it departs one minute or more prior to the scheduled time. All other trips are considered “on time”.

- **On-Time Performance:** CATS bus routes that achieve an on-time performance score of 80 percent or less over a course of two service changes will be reviewed and



remedial action to improve performance will be put in place at the next service change.

CATS will monitor ~~the Light-Rail services~~ for on-time performance. Any trips that are consistently early or late will be identified and schedule adjustments will be made at the next service change.

#### **2-83.4 Duplication of Service**

Service duplication occurs when two or more bus routes serve the same roadway. Duplication of service can sometimes be needed or unavoidable due to the presence of activity centers or the lack of alternate routing options. When services share the same street segment CATS will do the following:

- **Duplication of Service:** If two services use the same street, schedules should be adjusted to maximize frequency on the shared alignment.

#### **2-93.5 Route Directness**

CATS will design bus routes to operate as directly as possible to and from major destinations ~~in order~~ to minimize passenger travel time. Routes shall operate on major arterial streets as much as possible. When a deviation exists or is being considered, the gain in convenience to those passengers who are boarding or alighting during the deviation must be balanced against the additional travel time for the passengers traveling through.

- **Directness:**
  1. To the extent possible, bi-directional service shall be provided on the same street.
  2. Express service shall be routed in the most direct manner possible.
  3. Deviations from the basic route alignment to serve activity centers will be made only when they have the potential to attract new riders equal to or exceeding the route performance evaluation standard for the corresponding route category.
  4. Additional time to operate route deviations should not exceed five minutes (one-way) or 10 percent of the one-way run time, whichever is less.
  5. No mid-route loops shall be operated.
  6. Terminal loops shall not exceed 25 percent of a route's total length for routes that exceed 30 minutes in one-way travel time.

**2-103.6** Route Patterns It is sometimes more efficient to provide service to a certain area with one route having several branches than to operate several different routes. In addition, some bus trips on a route may not go to the end of the line due to very low ridership in that area at a particular time of day, also known as a turnback. These service designs can result in a route network that is difficult for current and potential customers to understand and utilize. Therefore, to provide a user-friendly service and to encourage maximum use of the system by all current and potential riders, standards for branches and turnback's shall be set.



- **Route Patterns:**
  - No route shall have more than two distinct branches.
  - No route shall have more than one turn around on a given branch.

When two routes are interlined, each route shall be treated as a separate route for the application of this standard.

### **2.113.7 Service Frequency and Span**

Service frequency is established to provide a sufficient number of vehicles to accommodate passenger volume at the most crowded location(s), during a given time period. On high ridership routes, the frequency of service provided is a function of demand and peak period loads. Frequency of service provided is also a function of Operator and vehicle availability. Service span refers to the hours that service is provided and defines the minimum period of time that service will operate at any point in the system.

- ~~**Headways/ Frequency: As resources become available, CATS will strive to provide at least 15-minute peak service on high frequency routes and at least 30-minute service on Common/local routes and Neighborhood / Connector routes. Express and Regional Express services will have a minimum of three trips in each peak direction. The policy headway for CATS local and neighborhood shuttle bus routes will be 60 minutes or better. In peak periods, CATS will strive to provide at least 15-minute service on core routes and at least 30-minute service on common local routes. Express and Regional Express services will have a minimum of three trips in each peak direction.**~~

- ~~For light rail services, CATS will strive operate at a frequency of 7.5 minutes or better during the peak periods and at least 30 minutes during the off-peak periods. Streetcar service will operate a frequency of 15 minutes or better during peak periods and at least 30 minutes during off-peak periods. CATS light rail services will operate at a frequency of 10 minutes or better during the peak periods and at least 30 minutes during the off-peak periods.~~

- ~~**Service Span:** CATS Fixed Route Bus, Special Transportation Services and Light Rail services will operate between 5:00 a.m. and 1:30 a.m.~~

Exceptions will be based on ridership and productivity.

### **2.123.8 Vehicle Assignment**

CATS vehicles shall be assigned to specific service types according to the following guidelines. Exceptions to this may take place based upon operational and scheduling practices to maintain optimal efficiency.

- **Vehicle Assignment:** Fleet types should be assigned based on the service type it is intended to serve when feasible.
  - High Frequency Routes = 40-foot low floor or larger
  - Common / Local Routes = 40-foot low floor



- Connector Routes = 30-foot low floor or smaller
- Microtransit = Cutaway style vehicles, vans, or other small vehicle types
- Express Service = 40-foot suburban and coach buses
- ~~Express Service = 40-foot suburban and MCI coach buses~~
- ~~Local Service = 40-foot low floor~~
- ~~Neighborhood Shuttle Service = 30-foot low floor~~

**Definition of Density**

- ~~Low Density — Three to 10 residents or employees per acre~~
- ~~Medium Density — 10 to 20 residents or employees per acre~~
- ~~High Density — More than 20 residents or employees per acre~~



### Summary of Changes

- Added in/modified titles for five sections (as highlighted below):
  - Travel Markets
  - Transit Coverage
  - Transit Infrastructure Requirements
  - Service Modes
  - Bus Stop Design Standards
  - Bus Stop Location and Spacing
  - Bus Stop Amenities
  - Route Monitoring System
  - New Transit Services
  - Load Standards
  - On-time Performance
  - Duplication of Service
  - Route Directness
  - Route Patterns
  - Service Frequency and Span
  - Vehicle Assignment

#### 2.1 Travel Markets

- Referenced MTC-05 policy to provide further definition
- Updated language to reflect the 2022 MTC Adopted Envision My Ride plan

#### 2.2 Transit Coverage

- Provides further definition for density
- Introduces microtransit as a service mode for areas that do not meet targeted employment and population density goals

#### 2.3 Transit Infrastructure Requirements

- New section that details ideal operational conditions for standard 40' or larger vehicles including lane width, turning radius, overhead clearance, and roadway design

#### 2.4 Service Modes

- New section that details current and future service modes
- Breaks down bus routes based on frequency classes as identified in Envision My Ride as follows:
  - High Frequency Bus Routes
  - Common/Local Routes
  - Neighborhood/Connector Routes
  - Express Routes

#### 2.5 Bus Stop Design Standards

- New section that details new bus stop design standards as identified in the Envision My Ride plan





- Bus stops broken down as follows:
  - Standard stop – Default stop that features, at minimum, an ADA boarding pad
  - Mobility hubs – Enhanced bus stops located primarily along high-frequency bus routes and major activity centers
  
- Provides reference to the Envision My Ride Bus Stop Guidelines document for more detail on stop level design types
- Provides guidance on ideal conditions for the installation of new bus stops
  - References to the Charlotte Unified Development Ordinance (UDO) and other land development policies
- References the 2010 American with Disabilities Act (ADA) Standards for Accessible Design
- References the Charlotte Land Development Standards Manual for the location of the revised 2022 CATS Details

**2.6 Bus Stop Location and Spacing**

- New section that notes the ideal location for the placement of bus stops
- Updates bus stop spacing guidelines for bus route types as follows:

<b>Service Type</b>	<b>Spacing Guidelines</b>
High Frequency	4 stops per mile (every 1,320 feet)
Common / Local	4-6 stops per mile (every 850-1,320 feet)
Neighborhood / Connector	4-6 stops per mile (every 850-1,320 feet)
Express	Limited stops at key destinations

- New section that details the process for requests to remove or relocate a bus stop
- Details the role of the CATS Bus Stop Committee to review feasibility of requests
  - Includes language that CATS policy prohibits bus stop removal or relocation where such requests have the appearance of being motivated by bias on the basis of the ethnicity, income level or social status of passengers using the bus stop location.

**2.7 Bus Stop Amenities**

- New section that details new amenity rollout strategy as identified in the adopted Envision My Ride plan
- Details new scoring metric to identify ideal amenity types for bus stop locations

**3.0 Bus Route Monitoring System**

- Updates route monitoring strategy with language that notes CATS will monitor routes falling below 15 passengers per hour and adjust as needed
- Includes language for the potential conversion to microtransit should a route have 10 or



less passengers per hour

- Includes language for the potential conversion of a microtransit route to a fixed route service should an area continuously average 10 or more passengers per hour

### **3.1 New Transit Services**

- Notes the Envision My Ride plan
- Updates Employment Shuttle financial contribution for businesses and stakeholders to up to 100 percent of the annual operating cost

### **3.2 Load Standards**

- Notes that CATS has a goal not to exceed load factors on a regular basis per trip on a given route

### **3.7 Service Frequency and Span**

- Updated to include frequency thresholds as identified in the adopted Envision My Ride plan

### **3.8 Vehicle Assignment**

- Updates vehicle sizes for service types as identified in the adopted Envision My Ride plan

Previous Revision: November 28, 2018



**METROPOLITAN TRANSIT COMMISSION  
ACTION ITEM  
STAFF SUMMARY**

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**SUBJECT: Independence Busway Restoration**

**DATE: July 26, 2023**

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- 1.0 PURPOSE/SCOPE:** The purpose of this item is to request approval of a budget increase for the restoration of the Independence Blvd busway.
- 2.0 BACKGROUND/JUSTIFICATION:** The Independence Boulevard busway was closed in 2017 during construction of the Hawthorne Lane bridge for the CityLYNX Gold Line Phase 2 streetcar project. It was anticipated to remain closed while NCDOT converted the busway to express lanes as part of the Independence Blvd widening. NCDOT funding shortfalls delayed the NCDOT project and conversion of the busway to the toll facility.
- In 2022, CATS recommended restoration of busway operation in the interim period. Five CATS express routes would operate in the busway: 40X, 46X, 51X, 64X, and 74X. The project requires the modification of the entrance and exit of the busway near the Hawthorne Lane bridge. A Municipal Agreement was signed with NCDOT for NCDOT to manage and execute the work. The original estimated cost for the project was \$750,000. NCDOT completed final design for the project in June 2022 and provided a revised cost estimate of \$1.3 million.
- An update on the project was presented to TSAC on July 12, 2023.
- 3.0 PROCUREMENT BACKGROUND:** Municipal Agreement executed November 2022.
- 4.0 POLICY IMPACT:** N/A
- 5.0 ECONOMIC IMPACT:** The Busway restoration project is estimated to provide significant travel time savings for current riders, as well as reduce bus operating costs by approximately \$106,000 per year. To support this project, CATS is requesting to amend the FY2024 Capital Investment Plan (CIP) to increase the project budget by \$550,000 to a total of \$1.3 million.
- 6.0 ALTERNATIVES:** N/A
- 7.0 RECOMMENDATION:** Approval to amend the FY2024 Capital Investment Plan (CIP) to add \$550,000 to the Independence Blvd Busway Restoration Project, based on the current cost estimate.

8.0 **ATTACHMENT(S)**: N/A

**SUBMITTED AND RECOMMENDED BY:**

A handwritten signature in cursive script that reads "Brent Cagle".

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**Brent Cagle**  
Interim Chief Executive Officer, Charlotte Area Transit System  
Assistant City Manager, City of Charlotte

# Independence Busway Restoration

Metropolitan Transit Commission  
July 26, 2023



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## Presentation Outline

- ▶ Busway Restoration Project Background
- ▶ Current Status
- ▶ Project Benefits
- ▶ Schedule



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# Independence Blvd. Busway Restoration

- ▶ Busway was closed in 2017 during construction of the Hawthorne Lane bridge for the Gold Line 2 streetcar project
- ▶ Was anticipated to remain closed while NCDOT converted the busway to a toll facility as part of the Independence Blvd widening
- ▶ NCDOT funding shortfalls delayed the busway conversion to toll facility
- ▶ In 2022, CATS requested funding to restore busway operation in interim period
- ▶ Project would modify entrance and exit of busway near Hawthorne Lane Bridge
- ▶ NCDOT to manage and execute the work
- ▶ NCDOT Municipal Agreement
  - Approved in 2022
  - Original Estimated Cost \$750,000



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# Current Status

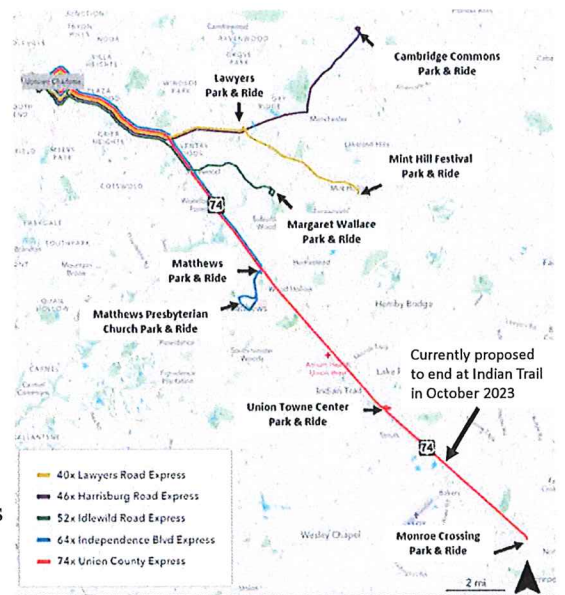
- ▶ NCDOT completed Final Design June 2023
- ▶ Revised Cost Estimate \$1.3 million
  - Design \$0.25 million
  - Engineer's Estimate \$1.05 million
  - Cost Increase due to higher unit prices and contractor shortages
- ▶ NCDOT Expressway Project currently scheduled to begin in 2028
- ▶ Busway Use  $\approx$  4 years (minimum)



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## Busway Benefits

- ▶ Independence Blvd Busway will be used by 5 CATS bus routes
  - Routes 40X, 46X, 51X, 64X and 74X
- ▶ Ridership declined during the pandemic, but since return to work last Spring average daily riders have increased
  - January 2022 - 85 to May 2023 – 259 (205% increase)
- ▶ Faster travel time (up to 15 minutes faster)
- ▶ Consistent travel time / improved reliability
- ▶ Increased transit ridership
- ▶ Highly visible / promotes benefits of transit investment
- ▶ Improves operational efficiency and reduces operating costs
  - Estimated Annual Savings: \$106K



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## Proposed Schedule

Construction ITB	July 19, 2023
MTC Approval	July 26, 2023
Bid Opening	August 16, 2023
Council Approval	August 28, 2023
Division Contract Award	August 29, 2023
Construction NTP	September 2023
Construction Complete	December 2023
Busway Reopens	Early 2024



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## MTC Action

- ▶ Staff is recommending approval of a budget amendment to add \$550,000 to the the project budget, based on the current cost estimate, which will increase the current budget of \$750,000 to a new total budget of \$1.3 million.



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# Questions?



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