



GoTriangle
Board of Trustees
December 16, 2020
12:00 pm-2:30 pm Eastern Time

Based on NC safer at home executive orders in response to COVID-19, the GoTriangle Board of Trustees will meet remotely on Wednesday, December 16, 2020, at 12:00 pm.

*Click here to: Join Webex Meeting
Meeting number / Access code: 178 748 2518#
Password: 1234
Or dial: +1 415-655-0003*

I. Call to Order and Adoption of Agenda

(1 minute Michael Parker)

ACTION REQUESTED: Adopt agenda with any changes requested.

II. Recognition

A. Oath of Office

B. Employee Service Awards

(5 minutes Charles Lattuca)

III. Public Comment

(Michael Parker)

The public comment period is held to give citizens an opportunity to speak on any item. The session is no more than thirty minutes long and speakers are limited to no more than three minutes each. Speakers are required to sign up in advance with the Clerk to the Board.

IV. Consent Agenda

(1 minute Michael Parker)

Items listed on the consent agenda are considered as a single motion. At the request of any Board member, or member of the public, items may be removed from the consent agenda and acted on by a separate motion. Items pulled from the consent agenda will be placed at the beginning of the general business agenda for discussion and action. Any Board member wishing to remove an item from the consent agenda should advise staff in advance.

ACTION REQUESTED: Approve consent agenda.

A. Minutes - November 18, 2020

B. Proposed Service Changes for Spring 2021

O&F RECOMMENDATION: Authorize the proposed service expansion to Route 305 in FY21, contingent on approval of the Q2 FY21 Wake Transit Work Plan Amendments which would provide funding for this service change.

C. Public Transportation Agency Safety Plan

O&F RECOMMENDATION: Adopt a resolution approving GoTriangle's Public Transit Agency Safety Plan.

GoTriangle Agency Safety Plan

Resolution 2020 0001

D. Wake Transit FY21 Q1 Amendment

O&F RECOMMENDATION: Reallocate \$1,100,000 from the Wake Transit Adopted Plan reserves to reimburse the federal interest in five (5) parcels located along the planned Greater Triangle Commuter Rail (GTCR) corridor in Wake County.

V. General Business Agenda

Items listed on the general business agenda are for discussion and possible action. Such designation means that the Board intends to discuss the general subject area of that agenda item before making any motion concerning that item.

A. Items Removed from the Consent Agenda

(1 minute Michael Parker)

ACTION REQUESTED: Discuss and take action on any items removed from the consent agenda.

B. Operations & Finance Committee Report

(5 minutes Vivian Jones)

C. Planning & Legislative Committee Report

(5 minutes Will Allen III)

VI. Other Business

A. President & CEO's Report

(5 minutes Charles Lattuca)

Contracts

New Hires & Promotions

1. Operations Update

(5 minutes Patrick Stephens)

2. Capital Projects Status Report

Presentation - CRT Update

(10 minutes Katharine Eggleston)

B. Chair's Report

(5 minutes Michael Parker)

C. Board Member Reports

1. **CAMPO Executive Board Representative**
(5 minutes Will Allen III)
2. **DCHC MPO Board Representative**
(5 minutes Michael Parker)
3. **Regional Transportation Alliance (RTA) Rep.**
(5 minutes Will Allen III)

VII. Adjournment
(Michael Parker)

GoTriangle Board of Trustees
Meeting Minutes
November 18, 2020
Held Remotely via WebEx

Board Members Present Remotely:

Will Allen III

Corey Branch

Michael Fox (arr. 12:09 pm)

Sig Hutchinson

Wendy Jacobs

Vivian Jones

Valerie Jordan (arr. 12:08 pm)

Mark Marcoplos

Michael Parker, Chair

Jennifer Robinson (arr. 12:03 pm)

Stelfanie Williams (arr. 12:07 pm)

Board Members Absent:

Steve Schewel (excused)

Chair Michael Parker officially called the meeting to order at 12:01 p.m.

I. Adoption of Agenda

Action: On motion by Allen and second by Hutchinson the agenda was adopted. The motion was carried unanimously.

II. Public Comment

No comments.

III. Consent Agenda

Action: On motion by Allen and second by Branch the consent agenda was approved. The motion was carried unanimously.

The following consent agenda items were approved:

- October 28, 2020 – Regular Session Minutes;
- October 28, 2020 – Closed Session Minutes; and
- Authorized Interlocal agreement with the City of Durham for reimbursement of actual costs incurred to perform time-critical tasks in support of the Greater Triangle Commuter Rail Study, up to an amount not to exceed \$75,000.

IV. General Business Agenda

A. Items Removed from Consent Agenda

None.

B. Operations & Finance Committee Report**1. Regional Fleet and Facilities Study Contract**

Committee Chair Jones presented a recommendation to authorize the President/CEO to execute an agreement with CPL for the regional fleet and facilities study. The study will include an assessment of GoTriangle's and GoDurham's fleet and maintenance facilities' needs and conceptual designs as well as planning for potential regional electric bus charging infrastructure and other potential shared operations and maintenance resources. The maximum cost is \$987,500, shared by GoDurham, the three county transit plans and GoTriangle.

Action: On motion by Jones and second by Allen the board authorized the President/CEO to negotiate and execute an agreement with CPL for the Regional Fleet and Facilities Study at a cost not to exceed \$987,500. The motion was carried unanimously.

2. Durham Station Improvements Preliminary Design Contract

Committee Chair Jones then recommended that the board authorize the President/CEO to execute an agreement with Perkins and Will for the preliminary design of improvements to Durham station at an amount not to exceed \$300,000.

Action: On motion by Jones and second by Branch the board authorized the President/CEO to negotiate and execute an agreement with Perkins and Will for the Durham Station Improvements Preliminary Design at a cost not to exceed \$300,000. The motion was carried unanimously.

3. Task Order for Design of GoDurham FY21 Bus Stops

Committee Chair Jones also presented a recommendation to authorize the President/CEO to execute a task order for bus stop improvements to 50 bus stops in Durham with Ramey Kemp at a cost not to exceed \$500,000.

Action: On motion by Jones and second by Allen the board authorized the President/CEO to execute a task order for bus stop design services under the Master Agreement between Ramey Kemp and Associates and GoTriangle for On-Call Architectural and Engineering Consultant Services for an amount not to exceed \$500,000. The motion was carried unanimously.

C. Transit Operations Vehicle Purchase Authorization – Paratransit Vehicles

Brian McLean requested authorization to execute a contract for the purchase for two light transit vehicles and three BraunAbility Dodge Caravans for paratransit service for a maximum price of \$348,569. McLean stated that these vehicles will be replacing existing vehicles that have exceed their useful lives of 100,000 miles/4

years according to FTA. A federal grant will cover \$278,855 of the total cost, with GoTriangle contributing \$69,714 (a portion of which is from insurance proceeds from the total loss of 2 vehicles).

Action: On motion by Allen and second by Hutchinson the board authorized the President/CEO to execute a contract for the purchase of two (2) light transit vehicles and three (3) BraunAbility Dodge Caravans from Creative Bus Sales for demand response service with a maximum dollar amount of \$348,569. The motion was carried unanimously.

V. Other Business

A. President and CEO's Report

A list of contracts approved by the President and CEO is attached and hereby made a part of these minutes.

Lattuca highlighted the following items:

- The position of Chief Operating Officer will not be filled, but Patrick Stephens has been named Chief of Operations. A Chief of Staff position will be created which will be more useful to me and the organization at this time. If commuter rail advances, the COO position may be reinstated at that time.
- Participated in the launch of NCDOT's NC Transit Cares initiative today, for the purpose of identifying strategies and innovations to help NC transit systems effectively respond to COVID-19. Several transit providers shared their responses through technology, microtransit networks and air circulation systems.
- My statement to the NCBOT multi modal committee on COVID-related impacts was previously shared with the board and is attached and hereby made a part of these minutes.

1. Operations Update

Patrick Stephens stated that operations is working on an agency security plan for board approval.

2. Capital Projects Status Report

Katharine Eggleston's update on the commuter rail project is attached and hereby made a part of these minutes.

Scott Thomas spoke about the survey in the first round of public engagement.

Lattuca stated that the main issues with Norfolk Southern are indemnification and track capacity. She also stated that a standalone website is begin developed for the commuter rail project to elevate it and make it more visible.

B. Chair's Report

Chair Parker stated that committees for 2021 would remain the same unless someone requests a change. He noted that this is Mark Marcoplos' last meeting on the GoTriangle board and he would be formally recognized at a future meeting. His position, and the Durham representative, on the commuter rail task group need to be replaced. Parker also mentioned the virtual RTA annual meeting tomorrow and the joint DCHC CAMPO meeting on December 1.

C. Board Member Reports

1. CAMPO Executive Board Representative

Will Allen III stated that CAMPO would meet later today. He noted that the consent agenda includes approving the LPA for the Wake BRT western corridor and the buyout of FTA's interest in several properties within the commuter rail transit corridor.

2. DCHC MPO Board Representative

Michael Parker reported that the board has asked staff to continue work on the 15-501 corridor study to better align it with MPO goals and ongoing efforts to move away from being car-centric.

3. Regional Transportation Alliance (RTA) Representative

No report.

VI. Adjournment

Action: Chair Parker adjourned the meeting at 12:54 p.m.

Michael Parker, Chair

Attest:

Michelle C. Dawson, CMC
Clerk to the Board

*Connecting all points of the Triangle*

MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Planning and Capital Development
DATE: November 23, 2020
SUBJECT: Proposed Service Changes for Spring 2021

Strategic Objective Supported

1.2 Pursue service improvements and expansion opportunities

Action Requested

Staff requests that the Operations and Finance Committee recommend that the Board of Trustees authorize the proposed service expansion to Route 305 in FY21, contingent on approval of the Q2 FY21 Wake Transit Work Plan Amendments by the CAMPO Executive Board and GoTriangle Board of Trustees which would provide funding for this service change.

Background and Purpose

GoTriangle Route 305 currently provides weekday peak commuter service between Holly Springs, Apex, and Raleigh. The FY21 Wake Transit Work Plan includes a service expansion project to add peak trips to Holly Springs and provide 60 minute service at mid-day, night and weekend in the Apex-Raleigh section. Public outreach on the proposed service expansion was conducted as part of the FY 2021 Draft Wake Transit Work Plan effort in January-February 2020.

Funding for this Route 305 service expansion project is currently in unbudgeted reserve status in the FY21 Wake Transit Work Plan, but is under consideration for funding restoration in the FY21 Wake Transit Q2 Amendments. At the beginning of the fiscal year, a large group of projects scheduled for implementation in FY21 were placed into unbudgeted reserve status due to uncertainty surrounding the impacts of the COVID-19 pandemic on the collection of revenues that fund the Wake Transit Plan. It has since been determined that revenue collection is sufficient to restore funding to a group of 35 projects, including this one, via the Wake Transit Work Plan amendment process.

To prepare for the potential restoration of funding for this service change, GoTriangle staff has initiated the service change planning process so the expansion may be implemented in April 2021 if funding becomes available.

The proposed changes to Route 305 are a component of the GoTriangle Short Range Transit Plan that was adopted by the GoTriangle Board of Trustees on November 28, 2018.

The GoTriangle Short Range Transit Plan identified three goals:

- Make service faster and more time-competitive
- Provide more frequent service
- Provide more all-day service

The proposed service changes support these goals while maintaining service to current customers and improving reliability to meet performance expectations for service delivery.

GoTriangle staff is also continuing to evaluate ridership, productivity, and other metrics on routes throughout the pandemic, and will consider implementing additional temporary COVID-related service changes in April. GoTriangle staff is also evaluating the potential to restore service on routes that are currently suspended due to COVID-19.

Financial Impact

This service expansion for Route 305 would be funded 100% by Wake Transit.

The pending Q2 Amendments to the FY21 Wake Transit Work Plan include \$681,593 allocated to the Route 305 expansion project, which would be sufficient to fund the service expansion beginning in April.

If the additional Wake Transit funds are not released in the Q2 Amendments, this service change will not be implemented this fiscal year.

Attachments

- None

Staff Contact

- Andrea Neri, 919-485-7592, aneri@gotriangle.org



MEMORANDUM

TO: GoTriangle Board of Trustees Operations & Finance Committee
FROM: Transit Operations
DATE: November 23, 2020
SUBJECT: **Public Transportation Agency Safety Plan (PTASP)**

Strategic Objective or Initiative Supported

2.1 Promote a culture of safety

Approach: Providing the skills, staffing, systems and technology needed to meet our objectives:
Initiatives:

- Transition to a Safety Management System approach to safety, per Moving Ahead for Progress in the 21st Century ACT (MAP-21) Federal Highway Administration

Action Requested

Staff requests that the Operations & Finance Committee recommend that the Board of Trustees adopt a resolution approving GoTriangle's Public Transit Agency Safety Plan.

Background and Purpose

This item provides information on the Federal Transit Administration (FTA) required Public Transportation Agency Safety Plan (PTASP). This new rule requires PTASP plans be completed and certified to the FTA by December 31, 2020. Under this rule, state DOT's are required to prepare plans on behalf of bus operators with fewer than 100 peak-hour buses, unless a bus operator volunteers to prepare their own plan. GoTriangle qualifies for the State DOT plan. However, after careful consideration GoTriangle has elected to prepare its own plan especially in light of our planned expansion with a rail component and additional bus service in the future.

The FTA published the PTASP Final Rule on July 19, 2018. This rule requires certain operators of public transportation systems who receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS).

The final rule outlining PTASP requirements states that the PTASP must follow a "Safety Management Systems" (SMS) approach. Each safety plan must be signed by the highest executive in the agency, an operator's Accountable Executive, like the accountability to the OSHA's Injury and Illness Prevention Plan and be approved by the Board of Trustees. The rule requires each

operator to certify compliance with these requirements through its annual review. FTA will use its existing Certifications and Assurances process for this effort. FTA intends to use its triennial oversight review programs to assess compliance with the requirements of the rule. Failure to comply with a requirement of the rule subjects a grantee to a range of FTA enforcement options depending upon the circumstances, including a transit operator being ineligible to receive FTA grant funds until the operator satisfies the requirements of the rule.

The required components of the SMS approach incorporated into GoTriangle's Agency Safety Plan are listed below:

- 1) Safety Management Policy (Plan)
Establishes agency's objectives while identifying the roles and responsibilities of agency personnel.
 - a) A written policy statement establishing:
 1. Organizational accountabilities
 2. Safety responsibilities
 3. Confidential employee reporting program
 4. Designation of the Accountable Executive and SMS Executive
 - b) Agency's Safety Objectives
- 2) Safety Risk Management (Process)
Delineates the protocols used to adhere to the PTASP.
 - a) Safety Risk Management
 - b) Safety Hazard Identification
 - c) Safety Risk Assessment
 - d) Safety Risk Mitigation
 - e) Minimize Exposure to Hazards/Unsafe Conditions
 - f) Annual Review/Update of PTASP
- 3) Safety Assurance (Culture)
Based on the safety performance criteria standards set out in the National Public Transportation Safety Plan.
 - a) Safety Performance Monitoring/Measurement
 - b) Performance Targets
- 4) Safety Promotion (Foundation)
 - a) Assignment of Chief Safety Officer or SMS Executive
 - b) Safety communications
 - c) Safety Training Program Implementation
 - d) Supporting Documentation



Safety Training & Communication

The PTAS Plan rule requires Safety Promotion, specifically a staff training program. A comprehensive safety program for all agency employees and contractors who are directly responsible for safety must be implemented by the transit agency. The agency must also communicate safety information throughout the agency's organization that:

1. Conveys information on hazards and safety risks, and
2. Informs employees of safety actions taken in response to reports submitted through an employee safety program.

Attachments

- GoTriangle Agency Safety Plan
- Resolution adopting safety plan

Staff Contact

- Patrick Stephens, Chief of Operations, (919) 485-7456, pstephens@gotriangle.org





GOTRIANGLE AGENCY SAFETY PLAN



TABLE OF CONTENTS

1) TRANSIT AGENCY INFORMATION.....	1
2) PLAN DEVELOPMENT, APPROVAL AND UPDATES	2
3) SAFETY PERFORMANCE TARGETS (SPT).....	4
4) SAFETY MANAGEMENT POLICY	6
4.1 GOTRIANGLE SAFETY MANAGEMENT POLICY STATEMENT	6
4.2 RESPONSIBILITIES AND ACCOUNTABILITIES FOR SAFETY.....	6
4.3 SAFETY OBJECTIVES	7
4.4 SAFETY MANAGEMENT.....	7
4.5 AUTHORITIES, ACCOUNTABILITIES AND RESPONSIBILITIES.....	8
KEY STAFF AND ACTIVITIES	11
AGENCY SAFETY COMMITTEES.....	12
4.6 EMPLOYEE SAFETY REPORTING PROGRAM (ESRP).....	15
5) SAFETY RISK MANAGEMENT	18
5.1 SAFETY RISK MANAGEMENT PROCESS	18
5.1.1 SAFETY HAZARD AND CONSEQUENCE IDENTIFICATION	20
5.1.2 SAFETY RISK ASSESSMENT	21
5.1.3 SAFETY RISK MITIGATIONS	26
6) SAFETY ASSURANCE.....	28
6.1 SAFETY PERFORMANCE MONITORING AND MEASUREMENT.....	28
7) SAFETY PROMOTION.....	35
7.1 COMPETENCIES AND TRAINING	35
7.2 SAFETY COMMUNICATION	36
8) ADDITIONAL INFORMATION	38
FIGURES	
FIGURE 1: ANNUAL ASP REVIEW	3
FIGURE 2: SAFETY RISK MANAGEMENT PROCESS	19
TABLES	
TABLE 1: SEVERITY CATEGORIES	23
TABLE 2: LIKELIHOOD LEVELS	24
TABLE 3: RISK ASSESSMENT MATRIX	24
TABLE 4: CRITERIA BY INDEX.....	25
ACRONYMS	41
APPENDIX A	42
APPENDIX B	43

1) TRANSIT AGENCY INFORMATION

Transit Agency Name	GoTriangle Transit Authority		
Transit Agency Address	4600 Emperor Boulevard, Suite 100, Durham, NC, 27709		
Name and Title of Accountable Executive	Charles E. Lattuca, President and Chief Executive Officer		
Name of Chief Safety Officer or Safety Management System Executive	Jimmy L. Price, Chief Safety Officer and Manager of Safety, Security and Training		
Mode(s) of Service Covered by This Plan	Fixed Route Bus; Paratransit; and Vanpool	List All FTA Funding Types	5307, 5339
Mode(s) of Service Provided by the Transit Agency (Directly operated or contracted service)	Bus, directly operated (DO), and contractor operated, under GoTriangle, Contract Number GoTriangle 08-050 and GoTriangle18-054; Paratransit Service, Directly Operated (DO); and Vanpool contractor operated, under GoTriangle, Contract Number GoTriangle 17-066.		
Does the agency provide transit services on behalf of another transit agency or entity?	Not applicable		
Name and Address of Transit Agency(ies) or Entity(ies) for Which Service Is Provided	Not applicable		

GoTriangle addresses all applicable requirement and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Plan

2) PLAN DEVELOPMENT, APPROVAL AND UPDATES

Name of Person Who Drafted This Plan	Jimmy Price, Chief Safety Officer and Manager of Safety, Security, and Training	
Signature by the Accountable Executive	Signature of Accountable Executive	Date of Signature
	Chief Executive Officer	
	GoTriangle Transit Board of Trustees	Date of Approval
Approval by the Board of Directors or an Equivalent Authority	Resolution # _____	
	Relevant Documentation (title and location)	
	A copy of Resolution # _____, approving the Agency Safety Plan, is maintained on file by the Chief Safety Officer.	

Version Number and Updates			
Version Number	Section/Pages Affected	Reason for Change	Date Issued
1		New Document	

Annual Review and Update of the ASP

The Accountable Executive holds GoTriangle's management and committees accountable for compliance with the processes and procedures detailed in the Agency Safety Plan (ASP) to ensure adequate safety performance and fulfill requirements of the Public Transportation Agency Safety Plan (PTASP), Regulation (49 CFR Part 673). The Chief Safety Officer will coordinate the annual review of the ASP that reflects changes in the bus system, equipment, facilities or the organization. GoTriangle departments will be notified by June 1 each calendar year (CY) that they must review ASP sections applicable to their department function to ensure that the ASP aligns with their processes. GoTriangle departments must evaluate proposed changes, and if warranted, submit comments to the Chief Safety Officer by July 1 of each year.

The Chief Safety Officer will incorporate departmental comments in the ASP and then conduct a final review and update with the Director of Transit Operations by September 1 each year. The Accountable Executive will sign any changes, then forward the ASP to the Board of Trustees for approval by December 1 of each year. By February 1 the following year, GoTriangle's safety performance targets (SPT) are made available

to local Metropolitan Planning Organizations (MPOs). This information is intended to aid in the planning process and, to the maximum extent practicable, coordinate with the State and Metropolitan Planning Organization to select relative safety performance targets. GoTriangle will make the agency's SPTs available to North Carolina Department of Transportation (NCDOT) and the MPOs via this safety plan by February 1 of each year.

Figure 1: Annual ASP Review



June 1 — CSO notifies departments that they must review ASP sections applicable to their function

July 1 — Departments submit comments to the CSO

September 1 — CSO incorporates departmental comments then conducts a final review and update with Director of Transit Operations

December 1 — Accountable Executive signs and approves changes, then forwards the ASP to the Board of Trustees for approval

February 1 — GoTriangle's safety performance targets are made available to local Metropolitan Planning Organizations (MPOs) and North Carolina Department of Transportation (NCDOT)

GoTriangle may need to modify this ASP outside of this annual review cycle. Within (30) calendar days of a modification request, the Chief Safety Officer and Employee Safety Committee will review the modifications; then the Chief Safety Officer will present the modification request to the Safety Management System Committee (SMSC), then to the Accountable Executive will receive the modified plan for review and signature. The Accountable Executive will then forward the modified plan to the Board of Trustees for approval.

3) **SAFETY PERFORMANCE TARGETS (SPT)**

The objectives of the ASP are the means to achieving GoTriangle's safety performance target goals. They also provide a method of evaluating the effectiveness of GoTriangle's safety efforts. GoTriangle has established safety performance targets that are realistic, measurable, and data-driven to meet our safety objectives. GoTriangle will proactively manage safety hazards and their associated safety risks, with the intent to eliminate unacceptable safety risks or try to mitigate hazards as low as reasonably practical. Safety performance targets are based on the safety National Public Transportation Safety Plan's safety performance measures, January 2017. The safety performance measures selected by FTA are intended to provide "state of the industry" high-level measures and help GoTriangle focus on the development of specific performance indicators and measurable targets relevant to the operations. See Appendix B for annual performance targets and results.

Performance Target Goals

Fixed Route

3.1 Fatalities: Total number of reportable **fatalities** and rate per total vehicle revenue miles (VRM) by mode.

- GoTriangle strives to maintain 0 total fatalities.
- GoTriangle target is to maintain a 0.0 rate of fatalities per 100,000 total vehicle revenue miles.

3.2 Injuries: Total number of reportable **injuries** and rate per total vehicle revenue miles (VRM) by mode.

- GoTriangle strives not to exceed 3 total reportable injuries.
- GoTriangle target is to maintain its reportable injuries rate per 100,000 total vehicle revenue miles.

3.3 Safety Events: Total number of reportable **events** and rate per total VRM by mode.

- GoTriangle strives not to exceed 3 total reportable events.
- GoTriangle target is to maintain its reportable events rate per 100,000 total vehicle revenue miles.

3.4 System Reliability: **Mean distance** between mechanical failures by mode.

- GoTriangle strives to maintain 25,577 mean distance miles between major mechanical failures.
- GoTriangle target is to increase its mean distance miles between major mechanical failures by five percent.

Non-Fixed Route

3.5 Fatalities: Total number of reportable **fatalities** and rate per total vehicle revenue miles (VRM) by mode.

- GoTriangle strives to maintain 0 total fatalities
- GoTriangle target is to maintain a 0.0 rate of fatalities per 100,000 total vehicle revenue miles.

3.6 Injuries: Total number of reportable **injuries** and rate per total vehicle revenue miles (VRM) by mode.

- GoTriangle strives not to exceed 3 total reportable injuries.
- GoTriangle target is to maintain its reportable injuries rate per 100,000 total vehicle revenue miles.

3.7 Safety Events: Total number of reportable **events** and rate per total VRM by mode.

- GoTriangle strives not to exceed 3 total reportable events.
- GoTriangle target is to maintain its reportable events rate per 100,000 total vehicle revenue miles.

3.8 System Reliability: **Mean distance** between mechanical failures by mode.

- GoTriangle strives to maintain 99,902 mean distance miles between major mechanical failures.
- GoTriangle target is to increase its mean distance miles between major mechanical failures by five percent.

GoTriangle's goal is to improve its safety performance targets listed above throughout CY2021 ending on December 31, 2021.

Safety Performance Target Coordination		
GoTriangle's Accountable Executive shares its ASP, including safety performance targets with MPO's annually, after its formal adoption by the GoTriangle Board of Trustees to coordinate of efforts to aid in the planning process for both local and state levels. GoTriangle's Accountable Executive also provides a copy of our formally adopted plan to the North Carolina Department of Transportation.		
Targets Transmitted to the State	State Entity Name	Date Targets Transmitted
	NC Department of Transportation	
Targets Transmitted to the MPO	MPO Name	Date Targets Transmitted
	Capital Area Metropolitan Planning Organization (CAMPO)	
	Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC)	

4) SAFETY MANAGEMENT POLICY

4.1 GoTriangle Safety Management Policy Statement

Commitment: Ultimate responsibility for the safety at GoTriangle rests with the President and Chief Executive Officer (CEO). The responsibility for making operations safer lies with everyone – from executive management to frontline employees. As documented in our ASP, we commit to developing, implementing, maintaining, and continuously improving processes to ensure the safety of our system, employees, and the public we serve. Each manager is responsible for implementing the Safety Management System (SMS) in their area of responsibility. They are held accountable for taking an active role in communicating the Safety Management Policy, following the Safety Risk Management Process, ensuring that Safety Assurance (monitoring and measuring) activities are adequately supported, and achieving Safety Promotion through communication and training employees and contractors. We maintain an active Safety Management System (SMS) that encourages the open sharing of information on all safety issues throughout our organization.

Core Value: Safety is more than a priority, it is an embodied core value of GoTriangle, and we are committed to developing, implementing, and maintaining the Safety Management System (SMS) as one of our critical business functions, and will use the safety risk management process as a management tool for the continuous improvement of safety for our system, employees, and the public we serve. In balance with achieving the highest safety performance level, no employee will be asked to compromise safety for “on-time performance or getting the job done”. GoTriangle will clearly define authorities, accountabilities, and responsibilities to deliver its safety performance and an effective Safety Management System.

Safety Culture: GoTriangle commits to developing its culture built upon safety, starting with one employee at a time. The Accountable Executive expects the senior management team to take the lead in developing a strong culture of safety as a way of thinking in all our safety activities and acknowledge that safety is paramount.

4.2 Responsibilities and Accountabilities for Safety

To remain consistent with the top-down, organization-wide nature of SMS, our Executive Management and Board of Trustees will ensure that organizational resources are prioritized and allocated to further this commitment and achieve the highest transit safety performance level. Management must have access to the information necessary to strategically deploy resources based on identified safety concerns, establish and support accountability for safety decision-making, and address unacceptable safety risk to a level as low as reasonably practical.

Our overall safety objective is to proactively manage safety hazards and their associated safety risks, with the intent to eliminate unacceptable safety risks in our transit operations. To that end, we will continuously examine our operations for hazards. As required by the Federal Transit Administration, we have set annual safety performance targets to measure our transit service’s safety. To address our overall safety objective, we have established mandatory and voluntary employee safety reporting programs. We will conduct training sessions with all frontline, supervisory, and management personnel during this calendar year.

4.3 Safety Objectives

GoTriangle has established a set of safety objectives to assess our safety performance and the effectiveness of our SMS. Our objectives include the following:

- Promoting a robust culture in safety;
- Ensuring that employees charged with implementing the agency's SMS processes, methods, and activities are adequately trained and only assigned tasks commensurate with their skills and experience;
- Continuously examining our operations for hazards through active employee reporting and review analysis of data;
- Investigating all accidents, incidents, near misses, and identifying hazards and documenting the root causes to implement corrective action to prevent a recurrence; and
- Providing GoTriangle employees and contractors with formal and ongoing SMS communications.

Quarterly Progress Report

Each quarter, the Chief Safety Officer will report to our entire agency how well we are meeting our safety objectives. We will review and update these objectives as needed each year.

Signatures

As required by 49 CFR Part 673 and Section 4 of this document, GoTriangle's ASP, which describes our agency's commitment to continuously monitoring, measuring, and improving safety performance, has been approved by the Board of Trustees and endorsed by the Chief Executive Officer.

Charles E. Luttuca, President and Chief Executive Officer, and Accountable Executive	
Chair, Board of Trustees	

4.4 Safety Management

GoTriangle has established accountabilities and responsibilities for its SMS, and our Accountable Executive has issued a written Safety Management Policy (SMP) statement that includes GoTriangle's safety objectives.

The Chief Safety Officer, who leads GoTriangle's SMS activities, ensures the SMP statement is distributed via electronic or hard copy to all employees and contractors. GoTriangle conducts an annual Agency Safety Plan review meeting to discuss safety issues and timeline to submit considerations for modification to the plan. We begin this annual activity by reviewing the SMP statement and management's commitment to our system's safety.

The Chief Safety Officer also ensures the SMP statement is readily available to all executives, directors, managers, supervisors, administrative, and frontline employees for additional posting and mail-outs. The Chief Safety Officer prepares and disseminates quarterly reports documenting how GoTriangle meets

the safety objectives outlined in the SMP statement. The results of these reports are written in GoTriangle's newsletter. GoTriangle also posts copies of the SMP statement and quarterly reports on electronic communication boards, information bulletin boards at GoTriangle's headquarters building, and all operations and maintenance break areas at each of the operating divisions. The SMP statement and quarterly reports are also distributed during new hire training and orientation.

Should the SMP statement be updated during the year, the Chief Safety Officer will redistribute it throughout the agency following the same protocols to ensure it is provided to all employees and contractors. GoTriangle also communicates organizational accountabilities and responsibilities described in the section below. The Safety Promotion section of this ASP outlines additional mechanisms and processes available to support GoTriangle's SMP statement of communicating information to employees.

4.5 Authorities, Accountabilities and Responsibilities

Accountable Executive (AE)

GoTriangle's President & Chief Executive Officer (CEO) is designated as the Accountable Executive (AE). The AE will work with the Chief Safety Officer (CSO) and the executive management team to adjust the ASP as needed based on, but not limited to, the strategic plan initiatives, safety performance targets, employee feedback, accident-incident trends, and data analysis. The AE is vested with the primary responsibility for the GoTriangle's safety activities and overall safety performance.

The Accountable Executive has the following authorities, accountabilities, and responsibilities under this plan:

- Signs this ASP as the Accountable Executive and is ultimately responsible for carrying out GoTriangle's ASP and SMS;
- Delegates an adequately trained Chief Safety Officer who is a direct report with the responsibility and authority for the day-to-day implementation of the ASP;
- Sets the agenda and facilitates the Safety Management System (SMS) into the cooperative decision-making processes of the senior management team;
- Controls and directs the human and capital resources necessary to achieve ASP goals and objectives by exercising the approval authority for system modifications as warranted;
- Ensures that GoTriangle's SMS is effectively implemented throughout the system;
- Provides employees with the tools and training needed to be successful and safe in their roles;
- Monitors GoTriangle's safety performance;
- Accepts safety risk associated with hazards or mitigates unacceptable safety risk to a level as low as reasonably practical;
- Ensures that SMS is effectively implemented, and action is taken, as necessary, to address any degradation in safety performance at GoTriangle; and
- Issues the annual SMP statement and safety objectives.

Chief Safety Officer (CSO)

While the AE is ultimately accountable for the safety performance of GoTriangle, the authority and responsibility for managing the day-to-day implementation and operation of GoTriangle's SMS is delegated to the CSO. The CSO holds a direct line of reporting to the AE to enforce strategy, policy, and goals for maintaining safety for employees, passengers, contractors, and the general public. All departments have been notified of the CSO's role and the established reporting requirements relating to safety-related matters.

The Chief Safety Officer has the following authorities, accountabilities, and responsibilities under this plan:

- Develops GoTriangle's ASP and SMS policies and procedures;
- Adequately trained to facilitate full implementation of the SMS across the agency and oversees GoTriangle's day-to-day operation to identify hazards and mitigate risk through evaluation, feedback, and analysis;
- Ensures GoTriangle's policies are consistent with its safety goals and objectives;
- Develops and maintains SMS documentation;
- Monitors the safety performance of GoTriangle's operations and activities through formal safety management data collection and analysis;
- Manages GoTriangle's Employee Safety Reporting Program;
- Ensures personnel that submitted voluntary reports are notified and informed about the disposition of the report;
- Chairs the GoTriangle Safety Management System Committee, Employee Safety Committee, Accident and Incident Review Committee, and coordinates the following activities of the committee:
 - Coordinates the activities of the committee with other members;
 - Develops agendas and sets topics for discussion; and
 - Maintains and distributes minutes of committee meetings.
- Develops and distributes a quarterly report on GoTriangle's process in its safety objectives specified in the SMP statement;
- Advises the Accountable Executive and senior management on safety matters and SMS implementation progress;
- Identifies substandard performance in GoTriangle's SMS and develops action plans for review and approval by the Accountable Executive;
- Manages and updates SMS processes based on experiences and lessons learned throughout the year;
- Provides additional guidance material (as required) to strengthen further and clarify the SMS processes;
- Supports GoTriangle departments in managing safety risk by providing Safety Risk Management (SRM) expertise and conducting and overseeing Safety Assurance activities;
- Facilitates coordination of SRM, evaluations, investigations, and controls with particular attention to cross-organizational impacts;
- Tracks all safety-critical issues to a conclusion using the safety risk register; and
- Oversees and assists all departments in establishing and maintaining clear and unambiguous lines of authority and responsibility for ensuring safety measures and procedures are in place for meeting safety performance targets.

Along with CSO responsibilities, the CSO is also the Manager of Safety, Security, and Training.

The Manager of Safety, Security, and Training supports the Chief Safety Officer and serves as the SMS Manager for Transit Operations Department. Overseeing the management of the Transit Operation's safety risks is a core responsibility. The Manager of Safety, Security, and Training has the following authorities, accountabilities, and responsibilities under this plan:

- Development and implementation of the SMS processes for Transit Operations in accordance with GoTriangle's SMS and PTASP requirements;
- Delivery of SMS Training to Transit Operations personnel;
- Development and implementation of SMS Worksheets and tools in accordance with GoTriangle's SMS;
- Ensuring Job Hazard Analyses are performed for "high/medium risk" tasks;
- Reviewing identified safety risks to verify the risks are adequately prioritized using the established Risk Matrices;
- Collection and management of Safety Risk Data;
- Ensuring Transit Operations director is informed of Safety Risks categorized to be outside GoTriangle's Risk Tolerance;
- Ensuring the Director and Chief Safety Officer are notified of all unacceptable risks that require additional resources to sufficiently reduce the risk to as low as reasonably possible (ALARP);
- Fostering a positive safety culture by leading with integrity in the SMS;
- Establishing and Managing methods to collect and analyze safety risk data; and
- Co-Chair Safety Committee meetings.

Agency Leadership and Executive Management

GoTriangle Agency Leadership and Executive Management have authorities and responsibilities for the day-to-day implementation and operation of GoTriangle SMS as it applies to their respective business units. Also, they support system-wide SMS implementation as requested by the Chief Safety Officer and Safety Committee.

Executive Management include staff who reports directly to the Accountable Executive:

Executive Management

- Chief Financial Officer,
- Chief Operating Officer,
- Chief Talent Officer,
- Chief Development Officer,
- Chief Communications Officer, and
- Director of Equal Employment Opportunity and manager of the Disadvantage Business Enterprise

GoTriangle's Executive Management staff have the following authorities, accountabilities, and responsibilities in this plan:

- Supports the AE in fulfilling the Agency's overall responsibilities for SMS;
- Participates in the decision-making on managing safety risk and allocating safety resources and coordinate with department heads to identify safety resources needed to accomplish safety objectives identified in the SMP statement and address substandard performance in the SMS;
- Monitors SMS safety performance against established safety performance targets;

- Participates in Senior Management meetings to discuss resource allocation and safety risk tolerability;
- Completes training on SMS Executives and GoTriangle's ASP elements;
- Oversee day-to-day SMS operations in their departments;
- Modifies safety policies in departments to make consistent with the implementation of the SMS and other safety regulations; and
- Supports the AE commitment to safety by setting an example for employees.

Agency Leadership

- Director of Transit Operations,
- Director of Regional Partnerships,
- Director of Capital Development, and
- Director of Facilities and Real Estate

GoTriangle Agency Leadership personnel have the following authorities, accountabilities, and responsibilities in this plan:

- Oversee day-to-day SMS operations in their departments;
- Coordinating with the Safety Department on the implementation of SMS in their respective departments and providing subject matter expertise as requested;
- Upholding and promoting safety policies, safety risk management, safety assurance, and safety training and communication protocols;
- Facilitating safety performance measures and targets;
- Fostering a strong safety culture within their department;
- Identifying the necessary funds to meet the safety performance requirements and incorporate them into budgeting plans, prioritizing and allocating expenditures according to safety risk;
- Safety performance within their functional areas;
- Ensuring procedures are consistent with the SMS;
- Determining and implementing countermeasures required to counteract safety risks and manage issues that negatively impact GoTriangle safety performance;
- Ensuring that all employees are trained in SMS;
- Supporting and requiring employees within their department to participate in safety training activities;
- Integrating SRM into existing processes;
- Requiring that all relevant safety information is communicated and used in decision-making;
- Ensuring that all system changes are coordinated, documented, and go through the SRM & SA process; and
- Cooperating with and providing support for evaluations and audits conducted.

Key Staff and Activities

GoTriangle's Key Staff includes those positions that directly oversee GoTriangle's Operating Divisions, Dispatch Office, Maintenance, Facilities, as well as Training and Procurement Departments. Key staff directly operates and ensure actions are taken to reduce risk, and the whole system is continuously monitored to ensure actions are effective and appropriate. GoTriangle's key staff will be involved with updates, modifications, and implementation of the ASP. Each staff member brings a valued perspective to the development of policies and procedures they will be expected to implement. Every opportunity

will be given for employees and riders to provide input to increasing safety at GoTriangle. Those opportunities include monthly safety meetings, employee meetings and training, department meetings, customer and employee surveys, and an open-door policy with access to all management staff.

Key Staff Positions

- Operations Manager,
- Paratransit Manager,
- Manager of Fleet Maintenance,
- Manager of Safety, Security, and Training,
- Facilities Manager,
- Human Resources Manager,
- Procurement Manager,
- Quality Assurance Manager, and
- Construction Manager

Specific authorities, responsibilities, and accountabilities for Key Staff under this plan include, but are not limited to, the following:

- Reports safety concerns of departments to senior management staff that takes strategic directions from the Accountable Executive;
- Complete training on SMS and GoTriangle's ASP elements.
- Oversee day-to-day operations of the SMS in their departments.
- Provide subject matter expertise to support SMS implementation requested by the Accountable Executive and Chief Safety Officer, including SRM activities, investigation of safety events, development of safety risk mitigations, and monitoring mitigation effectiveness.
- Complying with SMS programs and processes;
- Supporting development, implementation, and operation of GoTriangle's SMS;
- Maintaining documents that support SMS implementation;
- Reviewing and investigating employee reports, in coordination with the Chief Safety Officer and SMSC, and documenting results in GoTriangle's safety reporting system; and
- Verifying compliance with safety requirements and reporting deviations to the Safety Department.

Agency Safety Committees

The SMS is represented on various committees to facilitate the identification of hazards, the proper resolution of safety issues, and the distribution of safety information. These include:

- Safety Management System Committee (SMSC) (management level);
- Employee Safety and Committee (ESC) (frontline level); and
- Accident and Incident Review Committee.

Each of these committees are briefly described below.

Committee Members

Each committee has a Chairperson, assigned by the Accountable Executive. The Chairperson is responsible and accountable for conducting meetings, establishing an agenda and selecting the meeting's time and place. The Chairperson sends out meeting notices monthly and is responsible and accountable for producing and retaining all committee documentation. This includes documenting meetings and creating meeting minutes, maintaining files, and posting minutes. All committee documentation is retained electronically for a minimum of three years.

Each committee includes a member of the Safety Department. This person is responsible for bringing injury documentation to the monthly meetings and leading safety inspections. Safety Committees also include management and employees. Committee membership is an option for any staff member. All members of the Safety Committees are trained in hazard identification and fundamental safety risk management principles.

Meetings are held at least quarterly and may include program reviews, injury reviews, and reviews of employee concerns. All decisions involving change are voted on by the committee members. The committee may elect to raise issues to the attention of the management-level (Safety Management System Committee).

Facility inspections may be conducted instead of a regular committee meeting. All members of the Safety Committee can be part of the inspection team.

Employees may, verbally or in writing, share a safety/security concern with a Safety Committee member who will bring the concern to the committee's attention. Any Safety Committee member can bring employee concerns to the Safety Committee. If the Committee members believe that an employee concern has identified a hazard that might result in immediate injury to any employee, he/she may contact their Supervisor or a member of the Safety Department. All other committee members are responsible for reporting employee concerns and hazards, providing recommendations to mitigate hazards, and participating in facility inspections.

Safety Management System Committee

The SMSC is GoTriangle's highest-level safety committee and is chaired by the GoTriangle's Chief Safety Officer. The Chief Operating Officer alternately chairs the committee. The SMSC is comprised of GoTriangle executives and senior leadership team, key staff, employees, and meets quarterly, or as needed, to review reports on safety, accident trends, major accidents, urgent/safety critical concerns or hazards, internal/external audit findings, certification recommendations, items referred from the Employee Safety Committee (ESC), and other items of concern to the SMSC for comment, direction, resolution, and execution. Minutes are maintained and disseminated to members of the committee. The final results of these meetings are communicated within GoTriangle as a whole through SMS monthly or quarterly publications.

GoTriangle has established a SMSC to support and oversee the implementation of our SMS and to promote interagency coordination, transparency, and action. Members of this committee are subject matter experts (SME) appointed by the Accountable Executive and include the following:

- Chairman – Chief Safety Officer
- Member – Chief Operating Officer
- Member – Director of Transit Operations
- Member – Transit Service Supervisor
- Member – Operations and Paratransit Managers
- Member – Bus Operator III

- Member – Manager of Fleet Maintenance
- Member – Facilities Manager
- Member – Mechanic Level III
- Member – Bus Training Coordinator
- Member – Quality Assurance Manager
- Member – Training and Development Manager
- Member – Human Resources Manager
- Member – Procurement Manager

The SMSC meets quarterly (or as needed) and has the following responsibilities:

- Reviews the timely collection of information related to hazards, potential consequences, and safety events;
- Reviews reported hazards and support the analysis of hazards;
- Monitors and analyzes trends in hazards and safety events;
- Monitors and evaluates the effectiveness of mitigations implemented to address assessed safety risk and reports findings to the Accountable Executive;
- Monitors and evaluates the effectiveness of corrective actions implemented to address non-conformances and to prevent the recurrence of safety events, and reports findings to the Accountable Executive;
- Monitors industry data and reports from FTA, NCDOT, and oversight authorities, industry associations, and manufacturers and other vendors;
- Determines the adequacy of the training provided to the individuals responsible for maintenance, operations, and other personnel who are assigned duties related to the SMS; and
- Supports day-to-day implementation and operation of GoTriangle's SMS.

Employee Safety Committee (ESC)

Employee Safety Committee (frontline level) – The purpose of this committee is to bring management and Department employees together to discuss the SRM process, review trends, and analysis, and discuss safety concerns (at a minimum) to achieve and maintain a safe, healthful workplace environment. All safety hazards reported are jointly evaluated by the ESC are reviewed by the Chief Safety Officer during monthly meetings. This committee is composed of management, and department employee representatives whose duties include monitoring, developing, and reviewing safety issues and practices for all employees. Committee members investigate and assist in the resolution of safety issues. Meetings are held monthly, and members are selected annually.

The ESC meets monthly and has the following responsibilities:

- Chairman–Chief Safety Officer
- Member–Customer Service
- Member–Maintenance
- Member–Paratransit
- Member–Operations
- Member–Facilities
- Member–Safety
- Member–Administrative
- Non-employee Members–Departments

Accident and Incident Review Committee

In compliance with GoTriangle's Accident Investigation Procedures, GoTriangle's Accident and Incident Review Committee reviews the results of GoTriangle accident and incident investigations and makes final determinations regarding preventability, causal factors, and discipline. GoTriangle's Accident and Incident Review Committee consists of seven members that represent Management, Employees, Operations, and Maintenance. The Chief Safety Officer chairs the committee.

All committee documentation is stored on the shared (S) Drive\ASP\SMS folder\documents\safety committee

4.6 Employee Safety Reporting Program (ESRP)

The purpose is to establish an Employee Safety Reporting Program (ESRP) is a fundamental source for employees reporting safety concerns and hazard identification. As stated in the Safety Management Policy Statement, GoTriangle is determined to provide a safe working environment for its employees, passengers, and the general public. To ensure success, GoTriangle has developed an ESRP to enable employees to report any safety risk or perceived risk to a safety committee member, supervisor, CSO, or a member of senior management staff. This commitment provides appropriate senior management involvement with the necessary resources to establish an effective employee safety reporting program as a viable tool for employees to voice their safety concerns to the highest level of the organization; and will ensure no disciplinary action are being taken against any employee who communicates a safety concern through the ESRP unless such disclosure indicates, beyond any reasonable doubt the following:

- An illegal act;
- Gross misconduct and/or negligence; and
- A deliberate or willful disregard of GoTriangle's rules and procedures.

GoTriangle's frontline personnel are our best source of information on safety hazards throughout our system. Nobody knows more about the transit system's actual safety performance than the employees who deliver the service.

The ESRP allows each employee to report detailed information and observations whether they are drivers in service, maintenance staff, or other on-duty employees. This program dovetails with other methods currently in place to proactively identify hazards. Those methods include but are not limited to, the following:

- Pre/Post Trip Inspections
- Preventive Maintenance Inspections
- Employee Evaluations
- Facility Maintenance Inspections
- Service Planning and Employee Committee (SPEC)
- Training Ride-Alongs
- Rider and Public Complaint/Compliment Process
- Safety and Employee Meetings
- Incident/Accident Trends Analysis
- Safety Committee

To collect information critical to the safety of our operations, GoTriangle uses two types of employee reporting:

- **Mandatory:** As specified in GoTriangle's Bus Operations, Paratransit and Maintenance Work Rules and Procedures Manual, GoTriangle's Safety Policy, and Near-Hit Reporting Program, employees must report certain information related to the occurrence of safety events and non-compliance with safety rules.
- **Voluntary:** For all other situations, GoTriangle encourages its employees to report any safety condition, safety concern, or safety issue in good faith to their supervisor or senior management without fear of discipline, reprisal, or penalty. GoTriangle offers employees several different methods for reporting, and reports can be made anonymously.

Mandatory Safety Reporting

GoTriangle requires its employees to report the occurrence of safety events meeting the thresholds specified in section 617 of GoTriangle's Bus, Maintenance, and Paratransit Operations Departmental Work Rules and Procedural Manual, 2019, and the Accident Investigation Program. This includes safety events as defined in the Accident Investigation Program and FTA's PTASP regulation, §673.5.

GoTriangle requires employees to immediately report these events via radio, when possible, to the Dispatch Office or the first available supervisor if radio contact is not an option. All employees must fill out GoTriangle's Employee Accident-Incident Form as soon as possible and provide information to support GoTriangle's event investigation process, as necessary.

GoTriangle employees also must report non-compliance with safety rules identified in the Work Rules and Procedures Manual and the Accident Investigation Program. If an employee fails to report or reports false information regarding non-compliance with these safety rules, GoTriangle may take disciplinary action. Reports must be made to the employee's supervisor immediately following the event or by no later than the end of shift.

In cases of an employee self-reporting non-compliance with safety rules identified in the Accident Investigation Program, GoTriangle may consider a non-punitive response. Any discipline will be determined on a case-by-case basis by the department heads with the assistance of the Safety and Training Department, in coordination with the Accident and Incident Review Committee.

Voluntary Employee Safety Reporting Program

To maximize available safety information and ensure that safety concerns are reported freely and without prejudice, GoTriangle has established a process through which employees and contractors can report safety conditions, unsafe acts/practices, and/or near-miss incidents without fear of discipline, reprisal or penalty. Examples of the types of information reported include:

- Safety hazards in the operating environment (for example, bus route, facilities or city road conditions)
- Policies and procedures that are not working as intended (for example, insufficient time to complete pre-trip inspection)
- Events that senior managers might not otherwise know about (for example, near misses in a bus garage or bus lot)
- Information about why a safety event occurred (for example, radio communication challenges between dispatchers and operators)

Acceptable means of reporting safety conditions include:

- Emailing report to GoTriangle's Safety Department at safetyreporting@GoTriangle.org (anonymous or voluntarily)
- Completing the Near-Miss Report Form and placing the form in the safety collection box at the employees' work facility or emailing the form to GoTriangle's Safety Department at safetyreporting@GoTriangle.org.
- Submitting Operator Comment on Post Trip Inspection Form (mechanical issues, damage, defects).
- Submitting Facility Maintenance concerns on the Facility Maintenance Repair Form (building, bus lot, restrooms, heating, and air-conditioning).
- Notifying Operations Bus/Paratransit Dispatch on bus route or service area safety concerns (environmental, road hazards, vehicle safety hazards).
- Providing verbal or email notification to the Chief Safety Officer, managers, supervisors, or senior management.

GoTriangle's Accountable Executive is responsible for ensuring protections for employees who report safety conditions to senior management. GoTriangle provides employees who voluntarily report safety conditions in good faith with protections from any form of discipline, retribution, or penalty, consistent with State and Federal guidelines and regulations.

When requested, employees providing information related to safety conditions will be kept anonymous and protected from discipline, retribution, or penalty to the extent permissible by law.

While GoTriangle places a very high value on employees reporting important safety information, in cases where the reporting employee engaged in an illegal act, committed gross negligence, or deliberately or willfully disregarded regulations or procedures, GoTriangle reserves the right to pursue disciplinary action in accordance with current GoTriangle policy.

Under the Chief Safety Officer's direction, the Safety Department leads the collection, analysis, resolution, and monitoring of safety conditions and feedback through the voluntary ESRP. The Safety Department ensures employee reports are entered into the safety information system worksheet and reviews these reports with the SMSC during quarterly meetings or as needed. The Safety Department also maintains documentation of the policies and specific protocols related to the ESRP. Safety reports are stored electronically, for a minimum of three years, and in hard copy format for future review, trending, and analysis.

Voluntary ESRP Process

The following steps outline GoTriangle's voluntary ESRP process. More information is available in GoTriangle's Voluntary Employee Safety Reporting Procedures:

- Employee or contractor submits a safety report.
- The Safety Department personnel formally records the report on the safety incident reporting worksheet as soon as possible. The safety personnel acknowledges its receipt to the reporter, if possible (i.e., the reporter is not anonymous).
- The Safety Department initially reviews the report to determine if:
 - Further immediate action must be taken to prevent harm;
 - The report is complete, or further information is needed; or
 - The safety concern or issue requires further investigation.

- When additional information is needed, and the report is not anonymous, the Safety Department follows up with the reporter. For anonymous reports, the Safety Department may follow up with supervisors or GoTriangle's subject matter experts.
 - Further investigation may lead to identifying hazards and potential consequences and the determination that the reported safety condition must go through GoTriangle's SRM process.
 - Employee reports focused on reported deficiencies and non-compliance with rules or procedures will be forwarded to appropriate management personnel for resolution through the Safety Assurance process and tracking through the safety incident reporting worksheet.
- For employees providing their contact information:
 - Safety Department staff will provide specific verbal or written feedback on employee reports through the GoTriangle's SRM process and employee reports where monitoring was implemented, or no further action was taken.
 - CSO or management personnel will report back to employees regarding actions taken through the Safety Assurance process will take place to address reported deficiencies and non-compliance with rules or procedures.
 - Records of communication with reporting employees will be documented on GoTriangle's safety incident reporting worksheet.
- The Safety Department prepares a monthly report for the Employee Safety Committee to review the voluntary ESRP reports and actions taken to address them. The ESC also supports the investigation and resolution of reports.
- The SMSC prepares and delivers a quarterly report for the Accountable Executive summarizing the results of the voluntary ESRP (including resolutions and the status of reports) and offering recommendations, as appropriate from reports placed on the safety risk register.

GoTriangle's contracted services contractors that receive 5307 funds are required per FTA 673 to have a formal ESRP. GoTriangle's Chief Safety Officer will perform an on-site visit and review the contractor's ESRP communication, monitoring of the contractor's ESRP methods for effectiveness to ensure that it meets program requirements established by GoTriangle's ASP. GoTriangle's Chief Safety Officer, in coordination with GoTriangle's Director of Regional Partnerships will review contractor's documentation of employees' safety concerns and mitigation results in a formal report submitted quarterly or as needed to GoTriangle's Safety Department.

5) **SAFETY RISK MANAGEMENT**

5.1 **Safety Risk Management Process**

Safety Risk Management (SRM) is a formalized, proactive approach for driving GoTriangle's continuous safety efforts. SRM provides the structural elements and guides program development necessary to ensure hazardous conditions are identified, assessed for risk level and safety risk is mitigated to an acceptable level, throughout GoTriangle's operations.

GoTriangle uses the SRM process, which describes Safety Hazard Identification, Safety Risk Assessment, and Safety Mitigation, to address system changes to ensure the safety of our operations, passengers, employees, contractors, vehicles, and facilities. The SRM process identifies hazards and their potential consequences are identified, assessed for potential safety risks, and resolved As Low As Reasonably Practicable (ALARP) and acceptable to GoTriangle's executive decision-making team responsible for allocating resources. This does not mean the elimination of all safety risks. The SRM process provides GoTriangle with a tool to determine what can harm the system and we have to taken the necessary precautions to minimize harm and assess if future mitigations are needed. GoTriangle's SRM process

results are documented in our Safety Risk Register in GoTriangle's safety information system and are maintained for a minimum of three (3) years.

GoTriangle's Accountable Executive has appointed the Chief Safety Officer to lead the SRM process and will work closely with the Safety Committees to identify hazards and consequences, assess potential consequences of the hazard, and mitigate the risk if necessary.

GoTriangle's Chief Safety Officer leads GoTriangle's SRM process, with support from GoTriangle's Safety Department and ensures that trained safety personnel work with GoTriangle's subject matter experts to identify hazards and consequences, assess the safety risk the consequences of hazards, and mitigate safety risk, as necessary. In carrying out its SRM process, GoTriangle uses the Department of Defense, Standard Practice, and System Safety MIL-STD-882E.

GoTriangle provides training to all personnel to identify hazards while also providing tools to enable personnel to report these risks. Once the risk has been identified, GoTriangle conducts an assessment of the risk to determine the necessary response and response time. The response may include further investigation or monitoring, action(s) to mitigate the hazard, and follow-up assessment to ensure appropriate and effective action taken.

GoTriangle takes a proactive approach to manage safety risks to appropriately allocate resources to those areas of highest safety risk and unacceptable safety risks. GoTriangle's SRM process applies to:

- Existing GoTriangle operations and maintenance procedures
- Changes to GoTriangle's public transportation systems
- Design of new GoTriangle public transportation service, vehicles, equipment, and capital projects

Key terms used in our SMS process include:

- **Event:** Any accident, incident, or occurrence
- **Hazard:** Any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure belonging to GoTriangle or damage to the environment.
- **Risk:** Composite of predicted severity and likelihood of the potential effect of a hazard
- **Risk mitigation:** Method(s) to eliminate or reduce the effects of hazards
- **Consequence:** An effect of a hazard involving injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment

Figure 2: Safety Risk Management Process



Safety Hazard Identification- Identify as many credible hazards that may result in harm or damage to the operating system under study. These hazards may come from observation, incidents, new systems, or changes to existing systems.

Safety Risk Mitigation - Implement the safety risk control/mitigation measures and document/track the process.

5.1.1. Safety Hazard and Consequence Identification

The first step in the SRM process is to identify the hazards within the system. Safety hazard identification is a continuous process that involves establishing methods or processes to identify hazards and their consequences. It must be used by, is applicable to all levels of the organization in efforts to address them before they escalate into incidents or accidents. Hazards and potential consequences are identified, analyzed for potential impacts and severity on the transit system, and resolved in a manner acceptable to management. While identifying every hazard is virtually impossible, implementing an active employee reporting program can greatly increase GoTriangle's ability to identify and eliminate or control hazards to acceptable levels of risk. Through the implementation of GoTriangle's SRM, it has established a formal process for hazard identification. Additionally, GoTriangle communicates with peers across the state, FTA, and NCDOT to identify common hazards impacting multiple systems.

GoTriangle identifies hazards and potential consequences from a variety of sources, including the following:

- Voluntary ESRP and mandatory safety reporting program;
- Results from the review of Apollo camera technology video from our vehicles, including scored Supervisor Observation events (driver-specific or aggregated trends of at-risk behaviors);
- Meetings and workshops with employees to discuss safety concerns;
- Results of employee surveys and outreach;
- Monthly safety committee meetings with members from each department;
- Monthly shop talk meetings;
- Quarterly Supervisor's group meetings;
- Results of reports documenting GoTriangle's Safety Assurance activities, highlighting safety concerns and changes, including the following:
 - Pre-trip and post-trip vehicle inspection reports that identify bus safety concerns to the manager of fleet maintenance and transit operations leadership;
 - Results of routine observations of the workplace by management personnel;
 - Results of regular ride checks, a driver proficiency assessment, and rule compliance assessments;
 - Information collected from reports and investigations of safety events; and
 - Information collected from other Safety Assurance activities, including maintenance reports, vehicle inspection reports, system inspection reports, quality inspections and reports, and special studies or reviews.
- Results of condition assessments undertaken for the Transit Asset Management plan;
- Results of inspections, audits, and observations performed by Safety Department personnel;
- Review of the drawings and specifications for new or modified equipment or facilities;
- Findings or recommendations made as a result of audits, reviews, studies, or assessments from internal or external departments or agencies;
- Information from customer reports and reports of unsafe behavior from the public and law enforcement;
- Information from industry associations, manufacturers and other vendors, and oversight authorities, such as the North Carolina Department of Transportation, as well as state and local transportation agencies; and

- Information from FTA, including safety directives, bulletins, alerts, technical assistance, and regulations and recommended practices.

GoTriangle's Safety Department, SMSC, Employee Safety Committee, and subject matter experts identify hazards and consequences from these sources. For sources not managed by the Safety Department, GoTriangle departments provide reports and hazard information to the Safety Department using forms and notification protocols established by the SMSC. GoTriangle departments also provide subject matter experts to support the identification of hazards and consequences from available reports and information sources.

For all sources, the Safety Department's SRM Lead reviews information collected to identify specific hazards and consequences and determine the potential impact on transit operations and employees' health and safety. The SRM Lead, working with GoTriangle departments, ensures that all hazards reported to or identified by the Safety Department is documented in the safety information system.

GoTriangle's contracted services contractor that receive 5307 funds is required to have a formal SRM process and to identify hazards and consequences. GoTriangle requires quarterly (or as needed) summary reports regarding hazards and consequences identified by the contractor and their sources. GoTriangle's Chief Safety Officer, in coordination with GoTriangle's Director of Regional Partnerships, also performs on-site visits and SRM documents review of the contractor's SRM process to ensure that it meets program requirements established by GoTriangle.

5.1.2 Safety Risk Assessment

GoTriangle assesses safety risk associated with identified safety hazards and their consequences using its safety risk assessment process, specified in GoTriangle's SMS Safety Risk Assessment Procedures. This process includes assessing of the likelihood and severity of the consequences of hazards, including existing mitigations, and prioritizing hazards based on safety risk to focus available resources on the most serious hazards requiring resolution.

As described in the GoTriangle SMS Safety Risk Assessment Procedure, the SRM Lead, with support from Safety Department staff, manages GoTriangle's safety risk assessment activities. In some instances, safety risk assessment may be performed by other GoTriangle departments, with the results reported to the GoTriangle Safety Department or SRM Lead for incorporation into the Safety Risk Register in GoTriangle's safety information system.

To conduct the assessment, the SRM Lead may assemble a small team of subject matter experts based on their knowledge of the factors and potential consequences of a hazard and its potential consequence(s) under assessment. Additionally, GoTriangle may use outside resources with specialized expertise in the safety risk assessment process or a transit technical discipline.

As specified in the GoTriangle SMS Safety Risk Assessment Procedures, GoTriangle's safety risk assessment process has five steps:

- Step 1: Collecting Information;
- Step 2: Assessing Severity;
- Step 3: Assessing Likelihood;
- Step 4: Determining the Safety Risk Index; and
- Step 5: Documenting Results. Each step is summarized below.

Step 1: Collecting Information

GoTriangle's SRM Lead collects information on identified hazards and its potential consequence(s). For each identified hazard, the SRM Lead adds a line item in the Safety Risk Register of GoTriangle's safety information system worksheet to provide background and support assessment. Typical information collection activities include:

- Reviewing GoTriangle's safety information system worksheets and records to identify information relevant to the hazard and its potential consequence(s);
- Interviewing employees and contractors that work in the area or discipline where the hazard and potential consequence(s) have been identified;
- Conducting a walkthrough of the affected area or system, generating visual documentation (photographs and/or video), and taking any measurements deemed necessary;
- Conducting interviews with subject matter experts to gather potentially relevant information on the hazard and potential consequence(s);
- Reviewing any documentation associated with the hazard (records, reports, procedures, inspections, technical documents, etc.);
- Contacting other departments or agencies that may have association with or technical knowledge relevant to the hazard or its potential consequence(s);
- Reviewing any past reported hazards of a similar nature;
- Reviewing information provided by FTA or an oversight authority; and
- Evaluating tasks and/or processes associated with the hazard and its potential consequence(s)

Step 2: Assessing Severity

The SRM Lead, working with a small team, if one is assigned, will assess the severity of the impact of the worst credible potential consequence(s) of the hazard if it/they occurred, taking into account existing mitigations. This includes the impact to people, systems, equipment, and the environment. The assessment must be credible and follow the criteria in the Safety Risk Severity table based on MIL-STD 882E. This matrix uses four severity levels:

1. Catastrophic
2. Critical
3. Marginal
4. Negligible

The categorization of hazards is consistent with risk-based criteria for severity; it reflects the principle that not all hazards pose an equal amount of risk to personal or system safety.

Hazard severity is a subjective determination. With historical data, an objective determination applicable specifically to GoTriangle can be derived. The determination reflects a credible event that could be anticipated to result from human error, procedural deficiencies, design inadequacies, component failure, or malfunction.

Table 1: Severity Categories

Severity Categories		
Severity	Category	Criteria
Catastrophic	1	May cause death, system loss, or severe disruption of service system wide.
Critical	2	May cause severe injury, severe occupational illness, major system damage, or major system-wide disruption of service.
Marginal	3	May cause minor injury, minor occupational illness, minor system damage, or minor system disruption of service.
Negligible	4	Less than minor injury, occupational illness, system damage, or less than minor system disruption of service.

Step 3: Assessing Likelihood

The SRM Lead, working with a small team, if one is assigned, will assess the likelihood of the worst credible potential consequence(s) of the hazard, taking into account existing mitigations. GoTriangle follows the criteria in the Safety Risk Likelihood table adapted from MIL-STD 882E. The table includes six likelihood levels:

- A. Frequent
- B. Probable
- C. Occasional
- D. Remote
- E. Improbable
- F. Eliminated

Likelihood measures how often you think something will happen over a specific period of time or sample. Calendar days, weeks, months, years or decades are often used as time periods to support assessments of likelihood. Choose the likelihood level that best fits the frequency of the risk based on either the individual item description or the system or vehicle fleet description.

Table 2: Likelihood Levels

Likelihood Levels			
Likelihood	Level	Individual Item	System or Vehicle Fleet
Frequent	A	Likely to occur to an individual.	Continuously experienced in the system
Probable	B	May occur several times in the life of an item.	May occur frequently in the system
Occasional	C	Likely to occur sometime in the life of the item.	May occur several times in the system
Remote	D	Unlikely, but possible to occur in the life of an item.	Unlikely, but can be expected to occur at some time in the system
Improbable	E	So unlikely, it can be assumed occurrences may not be experienced in the life of an item.	Unlikely, but possible to occur in the system
Eliminated	F	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.

Step 4: Determining the Safety Risk Index (Severity and Likelihood of Consequences)

GoTriangle has adopted a system for assessing the level of risk from MIL-STD 882E that assigns an alphanumeric rating for each potential consequence to prioritize safety risk. This risk assessment system is used for each identified hazard to determine what action(s) must be taken to correct or document the hazard risk. The SRM Lead, working with a small team, if one is assigned, will combine the assessed severity and likelihood into a safety risk index.

Table 3: Risk Assessment Matrix

Risk Assessment Matrix				
Likelihood/Severity	Catastrophic (1)	Critical (2)	Marginal (3)	Negligible (4)
Frequent (A)	High	High	Serious	Medium
Probable (B)	High	High	Serious	Medium
Occasional (C)	High	Serious	Medium	Low
Remote (D)	Serious	Medium	Medium	Low
Improbable (E)	Medium	Medium	Medium	Low
Eliminated (F)	Eliminated			

After identifying the severity level and likelihood category, the Risk Assessment Matrix will identify the Safety Risk Category. This will provide guidance for addressing the hazards based on the risk category.

This risk assessment system has been incorporated into the formal safety analysis process which enables GoTriangle decision-makers to understand the amount of risk involved in accepting the hazard in relation to (schedule, cost, operations) to reduce the hazard to an as low as reasonable practical (ALARP) level.

This step assists GoTriangle's SRM lead in rating the tolerability of the safety risk as:

- **Low (Acceptable without Review)** – GoTriangle determines that existing mitigations adequately address safety risk, and management review is not necessary.
- **Medium (Acceptable with Existing Mitigations and Management Review)** – GoTriangle determines that mitigations currently in place adequately address safety risk with management review, as specified in *GoTriangle Safety Risk Assessment Procedures*. Evaluations of existing mitigations include observation and analysis by subject matter experts and the review of any historical data related to the hazard and consequence under assessment. When necessary, evaluation of the effectiveness of mitigations may include reaching out to external transit experts and discussions with peer transit agencies facing similar concerns.
- **Serious (Acceptable with Monitoring and Management Review)** – GoTriangle requires management review, as specified in *GoTriangle Safety Risk Assessment Procedures*, and ongoing monitoring activities to determine if the safety risk mitigation is ineffective, inappropriate, or not implemented as intended.
- **High (Unacceptable; Management Approval required)** – GoTriangle requires action to mitigate safety risk. GoTriangle will suspend service or activities related to hazards with a high safety risk index until the safety risk has been mitigated to an acceptable level. As specified in *GoTriangle Safety Risk Assessment Procedures*, management approval is required before resuming suspended activities.

Risk Tolerability Non-Consensus Procedures

In situations where there is non-consensus on Hazard Risk Assessment rating, the Subject Matter Expert will take the lead in providing information to the Manager of Safety, Security, and Training and Operations Manager to promote a resolution for consensus. If consensus is not reached, the CSO will make the final decision.

Table 4: Criteria by Index

Safety Risk Index	Criteria By Index
HIGH	Unacceptable—Management Approval Required
SERIOUS	Acceptable with Monitoring and Management Review
MEDIUM	Acceptable with Existing Mitigations and Management Review
LOW	Acceptable without Review

Step 5: Documenting Results

The SRM Lead will open the Safety Risk Register of GoTriangle's safety information system folder, and enter required information, including the hazard, hazard type, identification source and date, and the hazard's consequences, including the worst credible potential consequence(s), and the existing mitigations (hard and soft) that address the worst credible potential consequence(s), assessments regarding severity and likelihood of the worst credible potential consequence(s), and any related or supporting documentation. Required management reviews and approvals will also be documented in the system.

Policies and Procedures

The Safety Department maintains the policies, procedures, checklists, and forms that support safety risk assessment activities. The SRM Lead records the results of the safety risk assessment process in the Safety Risk Register. Completed safety risk assessments and supporting attachments, documented in the Safety Risk Register module of the safety information system worksheet, will be periodically reviewed by the SMSC.

GoTriangle's contracted services contractor that receives 5307 funds is required per FTA 673 to have a safety risk assessment process. GoTriangle's Chief Safety Officer, in coordination with GoTriangle's Director of Regional Partnerships, will review the safety risk documentation submitted by the contractor, including the contractor's Safety Risk Register. After the post-review, the contractor must submit to GoTriangle's Safety Department a quarterly or as needed an action plan to mitigate any deficiencies.

5.1.3 Safety Risk Mitigations

To create a consistent matrix throughout GoTriangle, the following describes each portion of the risk matrix to classify a hazard. Once the hazard is classified as risk, the color chart details the next steps for the mitigation process. The Risk Analysis Form documents the decision-making process outlined below. All information from this form is documented in the GoTriangle Risk Register spreadsheet in the SMS Documentation folder on the GoTriangle shared drive.

GoTriangle has created the following matrix to select the severity of a risk. Each category defines the severity from the following:

- Death
- Injury
- Illness
- Damage to the facilities, equipment, rolling stock, or infrastructure
- Loss of the facilities, equipment, rolling stock or infrastructure
- Damage to the environment
- Economic loss
- Preventable Accident economic loss

Based on the safety risk assessment results, the safety risk associated with the worst credible potential consequences of identified hazards will be resolved through the development and implementation of mitigations. Mitigations may:

- Eliminate the safety risk of a hazard;
- Reduce the likelihood of the potential consequences of a hazard; and/or
- Reduce the severity of the potential consequences of a hazard.

The goal of GoTriangle's safety risk mitigation process is to eliminate the hazard if possible. When a hazard cannot be eliminated, GoTriangle will reduce the associated risk to the lowest acceptable level within the constraints of cost, schedule, and performance by applying the design order of precedence specified in MIL-STD 882E:

- Eliminate hazards through design selection;
- Reduce risk through design alteration;
- Incorporate engineered features or devices;
- Provide warning devices; and
- Incorporate signage, procedures, training, and personal protective equipment.

The supervisor or project manager with oversight of the organizational entity will develop mitigations, supported by the SRM Lead, the SMSC, and GoTriangle's subject matter experts. The department head or manager of the impacted department will approve the safety risk mitigation. Depending on the nature of the safety risk or mitigation, additional approvals may be required from Agency Leadership and Executive Management and/or the Accountable Executive.

Safety risk mitigations must include milestones, schedule, budget, and the individual(s) responsible for implementation. As specified in the Safety Risk Mitigation, GoTriangle will monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended. This activity may include the use of mitigation monitoring plans.

The supervisor or project manager that developed the mitigation will be responsible for providing the mitigation information to the SMS Lead to put in the safety risk register in the safety information system. The SMSC will review the status of actions to implement mitigations and report any findings or concerns to the Accountable Executive. The Safety Department will include information on the development and implementation of safety risk mitigations in quarterly reports shared throughout the agency, as specified in GoTriangle's SMP statement.

GoTriangle's Chief Safety Officer monitors the contracted service contractor's safety risk mitigation process through quarterly on-site records reviews and mitigation documentation submitted by the contractor.

Mitigation Decision and Tracking

Based on the decision(s) from the Risk Assessment Matrix and during the SMS implementation, a mitigation strategy is created to track findings and timeframes within the GoTriangle's Safety Risk Register. All actions taken to mitigate risk will be the CSO's responsibility to document and linked to the initial deficiency or hazard identification step.

Mitigations that have been implemented are tracked on Safety Management logs by the Department/Division and at a minimum, the Safety Risk Register. The person assigned the mitigation will be responsible for tracking and reporting on the mitigation status through closure.

Safety Data Acquisition and Analysis

The Safety Department monitors the safety performance of the various GoTriangle operations. Accident, incident, injury and other safety data are collected throughout the organization and analyzed to determine the organization's trends. The safety data collected is analyzed to determine if safety performance meets established safety objectives. The accident and incident data helps identify service areas that generate a higher percentage of accidents or potential for higher accident rates.

The safety data collected includes injuries to passengers, GoTriangle personnel and the public; hazardous equipment failures; unacceptable hazardous conditions; and rules and procedures violations. The Safety Department analyzes safety-related data for the purpose of implementing corrective action to assist in the prevention or reoccurrence of hazards

6 **SAFETY ASSURANCE**

Safety Assurance involves processes within GoTriangle's Safety Management System that function to ensure the implementation and effectiveness of safety risk mitigation to meet or exceed safety objectives.

6.1 Safety Performance Monitoring and Measurement

GoTriangle uses Safety Performance Monitoring and Measurement to evaluate our compliance with operations and maintenance procedures. Also, to determine whether our existing rules and procedures are sufficient to control our safety risk; and identify new hazards to determine the need to make changes to improve policies, employee training and service delivery. The CSO will monitor operations and maintenance procedures through observation, data analysis, communication, and safety updates to identify mitigation strategies that may be ineffective. If mitigation actions are ineffective, additional strategies will be developed through key and impacted staff feedback.

Safety Performance Monitoring and Measurement activities serve as a check on GoTriangle's SRM process. The monitoring activities are designed to ensure that safety risk mitigations are effective and implemented as intended; to collect safety performance data that will help GoTriangle anticipate future safety events and mitigate or prevent them, and analyze the safety risk of any new practices or procedures the Agency adopts.

Safety Performance Monitoring and Measurement activities also include investigating safety events to identify causal factors and analyzing the information from safety reporting, including data about safety failures, defects, and conditions.

Compliance with and Sufficiency of Operations and Maintenance Procedures

GoTriangle operations are governed by bulletins, rules, notices, and standard operating procedures (SOPs). Bulletins are universal and provide direction to all employees; rules govern bus system's daily operations, and SOPs provide detailed information and instructions for performing specific tasks. Bulletins, rules, and procedures are reviewed and approved by the department heads and management staff.

GoTriangle bus maintenance is governed by maintenance manuals, instructions, bulletins, and vendor information. Maintenance procedures are established by the Manager of Fleet Maintenance and modified by the Transit Operations Director when needed.

To ensure compliance with and sufficiency of operations and maintenance procedures, GoTriangle carries out the following activities:

- **Ride-Along Evaluations:** A ride-along provides an opportunity for one-on-one interaction between GoTriangle Operators and GoTriangle Transit Service Supervisors and Behind-the-Wheel trainers. During these evaluations, GoTriangle supervisors and trainers perform firsthand observations of the Operator's driving habits and provide immediate verbal and written feedback. A ride-along is designed to uncover and point out unsafe practices, and give positive reinforcement for safe driving practices. A ride-along can occur as a reactive measure (post-event rides or rides initiated in response to customer complaints or documented violations of safety rules) or proactively, such as

when the Operator is learning a new bus route or receiving other types of Operator refresher instruction. The results of a ride-along are documented in Operator's employee and training folders.

- **Verification of Transit Training Compliance:** Bus Operator Training staff are responsible for ensuring bus operators comply with training requirements. Accordingly, Bus Training personnel are responsible for notifying Operators of available classes scheduled throughout the year so that they can complete the required refresher training annually or as needed.
- **Random Observations:** Transit Service Supervisors and Trainers may conduct observations of Bus Operators for compliance with traffic laws, GoTriangle operating rules, and procedures. Any observed rule violations will be documented and submitted to the Transit Operations Division Manager or Manager of Safety, Security and Training.
- **Behavior-Based Safety Observations:** Managers or safety personnel observe employees performing their assigned tasks and evaluate their actions based on GoTriangle's safety policies and procedures and task-specific processes or procedures, if applicable. After each session, the manager or safety personnel discusses what they observed with the employee and discuss any unsafe or potentially unsafe actions they may have observed. Sessions focus on constructively and positively reinforcing safe actions, gaining employee commitment to identify and avoid unsafe actions, and encouraging two-way communication about safety-related concerns. The manager or safety personnel performing the observations immediately addresses and acts on any observed life-threatening and unsafe behaviors. Any GoTriangle employee can stop an unsafe act.
- **Vehicle and Facility Inspections and Records Reviews:** Trained personnel from the maintenance and facility department conduct and document monthly safety inspections at the maintenance and operations facilities for vehicles and infrastructure. These personnel also perform records reviews and trend analyses regarding vehicle and facility inspection results to focus follow-up activities. Results are documented on standard GoTriangle departmental forms.
- **Video Monitoring:** GoTriangle's onboard monitoring system allows management staff the opportunity to review video footage on buses. When an event on a bus takes place, the supervisor, safety personnel, and trainers can request video footage download once the vehicle returns to the main base through the recording system. Operations and Safety staff review video events as needed to ensure timely coaching, retraining, or discipline for unsafe acts.
- **Supervisor Observation:** Supervisors conduct monthly Supervisor Video Observations to identify unsafe operator driving behavior before having an event. Coachable events are addressed one-on-one with operators by supervisors and training personnel. Coachable events are electronically documented in the Safety Department's folders. Additionally, supervisors review recordings when operators self-report non-compliance with safety rules or as a result of other employee reports. Operations staff also notify the Manager of Fleet Maintenance of any events that related to the Maintenance Department for coaching, retraining, and/or discipline.

Managers of GoTriangle's Operations and Maintenance Departments report on these activities monthly (or as needed) to the Chief Safety Officer. Each report documents, for the previous month, the results of:

- Rules compliance activities in the department, including coaching, retraining, or discipline for unsafe acts,
- Inspections of the department's equipment and infrastructure elements,
- Quality control and quality assurance assessments and reviews in the department, and
- Supervisor observations of activities performed in the department.

Data and information are analyzed to identify trends and allow monthly and annual comparisons.

Based on these reports, the Chief Safety Officer works with the managers in each department to review and investigate findings with implications for agency-wide compliance with and sufficiency of operations and maintenance procedures, and determine the root cause and contributing factors for any issues.

The Chief Safety Officer presents the results of the reviews and investigations to the SMSC quarterly. The SMSC determines what action is required and directs pertinent department personnel to document and track actions taken in the agency's safety information system.

Monitoring Safety Risk Mitigations

GoTriangle monitors safety risk mitigations to determine if they may be ineffective, inappropriate, or not implemented as intended. GoTriangle supervisors, managers and subject matter experts, working with the GoTriangle Safety Department, develop mitigation monitoring plans for mitigations implemented through GoTriangle's SRM process. The SMSC approves mitigation monitoring plans and tracks them through the Safety Risk Register worksheet of GoTriangle's safety information system.

Mitigations found to be ineffective, inappropriate, or not implemented as intended must go through the SRM process. The Safety Department oversees and tracks the assignment of responsibilities and timelines for implementing new mitigations and eliminating mitigations that are no longer necessary or effective.

To measure the effectiveness of existing safety risk mitigations, which may not have been assessed yet through GoTriangle's SRM process, GoTriangle's Safety Department and SMSC also:

- Review results from safety event investigations;
- Monitor employee safety reporting;
- Monitor the service delivery and operational environment;
- Monitor operational functions to verify that operations activities are carried out in accordance with standard operating procedures (SOPs);
- Monitor maintenance functions to verify that maintenance activities are carried out in accordance with SOPs;
- Review results of internal safety audits and inspections;
- Review results of safety inspections by external entities; and
- Analyze operational and safety data to identify emerging safety concerns.

During SMSC meetings, a standing agenda item focuses on the results of these reviews and monitoring activity. Based on its assessment of the situation, the SMSC and the Chief Safety Officer will determine whether the additional investigation and/or monitoring is required or if the specific issue or condition needs to be addressed through GoTriangle's SRM process.

GoTriangle's purchased transportation services contractor that receives 5307 funds is required per FTA 673 to have a safety risk mitigation monitoring process. GoTriangle's Chief Safety Officer, in coordination with GoTriangle's Director of Regional Partnerships, will review the safety risk mitigation monitoring process through quarterly records reviews and documentation submitted by the contractor. After the post-records review, GoTriangle's provides to the contractor any identified deficiencies in the monitoring process for corrective action.

The Safety Department ensures that GoTriangle carries out and documents all monitoring activities. The Safety Department reports the Accountable Executive and/or executive management results as directed by the Accountable Executive or SMSC. Specific procedures on how to carry out safety risk mitigation monitoring activities and forms to document those activities are on the shared drive: (S:\Agency Safety Plan\Safety Management System\Documents.

Safety Event Investigations to Identify Causal Factors

GoTriangle maintains documented procedures for conducting investigations of safety events (accidents, incidents, and occurrences, as defined in 49 CFR Part 673) to find causal and contributing factors and review the existing mitigations in place at the time of the safety event. *GoTriangle's Accident Supervisor Investigation Standard Operating Procedures Manual* contains specific procedures for conducting safety investigations.

Operations and maintenance management are responsible for immediately notifying the Safety Department of any safety event that meets GoTriangle's notification level thresholds. The Safety Department notifies the Accountable Executive (or designated personnel) of any events that resulted in a fatality, serious injury, or property damage to GoTriangle's vehicles or private vehicles that may exceed \$25,000. The Safety Department ensures that all safety events are recorded and tracked on a Safety Event Log worksheet in the Safety Department folder.

The Safety Department also ensures compliance with reporting thresholds, requirements, and processes defined in *FTA's NTD Safety and Security Policy Manual*.

GoTriangle's general safety investigation process consists of five basic phases.

- **Secure the scene:** a trained Accident Investigation Supervisor secures the accident-incident scene with a priority to protect life, identify injuries, and then property.
- **Fact gathering:** Record facts pertinent to understanding the circumstances leading to the safety event.
- **Create a sequence of events:** Outline a timeline with the sequence of events.
- **Data analysis:** Analyze the information obtained through fact gathering and sequence of events to assess the safety risk and determine the root cause.
- **Establish conclusions:** Draw conclusions from the collected and analyzed information based on:
 - Pre-Event, Event and Post-Event Matrix
 - Findings that point out additional hazards that have the potential to introduce safety risk but did not play a direct role in the event.
 - Other findings that have the potential to improve the safety of the transit system.

General Investigation Process

Safety Event Investigation Procedures

GoTriangle's safety event investigation procedures follow these steps:

- Bus Operators or Transit Service Supervisors notify Dispatch of the safety event. The Operator of the affected transit vehicle follows seven basic emergency steps outlined in the *Bus Operations and Paratransit Work Rules Procedural Manual, 2019*:
 - Stay calm.
 - Assess the situation.
 - Obtain help.
 - Protect people, then property.
 - Reassure and assist the passengers.
 - Secure the scene.
 - Gather information.

- Dispatch immediately notifies Operations Management and the designated Safety Department representative listed on the notification roster.
- The accident investigation supervisor is activated and sent to the scene of the safety event.
- The accident investigation supervisor arrives at the scene as soon as possible with tools to conduct the investigation. (The Accident Investigation Supervisor Standard Operating Procedures (SOP) provides a list of these tools.)
- The Accident Investigation Supervisor secures the scene and collects facts about what occurred, including interviewing the Operator involved, if possible.
- The Accident Investigation Supervisor begins the investigation process and formulating the sequence of events, which includes but is not limited to the following:
 - Noting the environmental factors surrounding the safety event, such as lighting and visibility, road surface conditions, climate, and weather conditions.
 - Collecting vehicle and roadway evidence, including vehicle condition and position for all vehicles involved in the incident.
 - Observing debris and vehicle fluids.
 - Making exterior damage assessments.
 - Photographing the scene.
 - Sketching the field.
 - Interviewing other drivers; witnesses; passengers; fire, emergency medical services, and police personnel at the scene.
 - Interviewing maintenance personnel, if necessary, at a later date.
 - Making a drug-and-alcohol testing decision.
 - Finalizing the vehicle event and incident report form.

Identifying Causal and Contributing Factors

GoTriangle is committed to examining all safety events to determine causal and latent organizational factors contributing to the safety event. This includes examining:

- Process;
- People/human factors;
- Management decision-making and resource support;
- Equipment, tools, and materials;
- Operating environment;
- Environmental issues;
- Existing relevant mitigations; and
- Other causes and contributing factors, as appropriate.

The Accident Investigation Supervisors prepare an event timeline and make recommendations based on this causal analysis and send the supervisor report to the Safety Department for immediate action (if necessary) and integration into their analysis of the event.

Accident and Incident Review Committee

GoTriangle's Accident and Incident Review Committee reviews information on all catastrophic accidents-incidents and major mechanical failures defined in the Accident Supervisor Investigation SOP that occur on GoTriangle property or involving GoTriangle vehicles, equipment or employees. The Accident and Incident Review Committee does not review minor accidents or occurrences defined in the Accident

Supervisor Investigation SOP. All minor accidents and occurrences are reviewed by the Employee Safety Committee and Safety Department personnel.

GoTriangle's Accident and Incident Review Committee consists of members that represent management, operations, maintenance, and other subject matter experts as needed. The Chief Safety Officer chairs the committee. The review committee determines whether:

- The accident or incident was preventable or non-preventable;
- Personnel require discipline or retraining;
- The causal factor(s) indicate(s) an unexpected or previously unconsidered operating condition or situation or existing mitigation that may be ineffective, inappropriate, or not implemented as intended; or
- The accident or incident appears to involve underlying organizational causal factors beyond just individual employee behavior.

GoTriangle's Accident and Incident Review Committee refers its findings to the Safety Department for further analysis and potential examination through GoTriangle's SRM process. Information on causal factors identified or confirmed by GoTriangle's Accident and Incident Review Committee is filed in the CSO's office.

GoTriangle's purchased transportation services contractor must immediately notify GoTriangle's Chief Safety Officer of any safety event that meets defined minimum thresholds. GoTriangle also monitors the purchased transportation services contractor's safety investigation processes by reviewing investigation reports, causal analysis activities, and the contractor's response to investigation reports and causal analysis findings. The contractor is required to submit documentation on safety investigation activities to GoTriangle.

The Safety Department maintains all documentation of GoTriangle's investigation policies, processes, forms, checklists, activities, and results.

Safety Compliance Assessment and Inspection

Drug and Alcohol Compliance

GoTriangle Management administers the GoTriangle Substance Abuse program, which complies with 49 CFR Parts 40 and 655, the Drug Free Workplace Act, and GoTriangle's Substance Abuse Policy. GoTriangle employees are required to submit to drug and alcohol tests as a condition of employment under GoTriangle's policy. All GoTriangle employees receive at least 60 minutes of training on the effects and consequences of prohibited drug use on personal health, safety, and the work environment, and on the signs and symptoms that may indicate prohibited drug use.

Supervisors and/or other GoTriangle officials authorized to make reasonable suspicion determinations receive at least 60 minutes of training on the physical, behavioral, and performance indicators of probable drug use and at least 60 minutes of training on the physical, behavioral, speech, and performance indicators of probable alcohol abuse. Mandatory personnel re-training in substance abuse is not required, however, GoTriangle Safety personnel periodically update the prohibited substances literature, which is posted in common areas throughout GoTriangle facilities.

Contractors are made aware of the GoTriangle Drug and Alcohol program requirements in the language set forth in the Contractor's Entry Safety Briefing. A statement in the document advises all Contractor employees that they are strictly prohibited from engaging in the non-prescriptive use, sale, distribution, dispensation, manufacture, or transfer of controlled substances. Contractors or their employees must not

possess alcohol or non-prescription drugs on GoTriangle property or other worksites, on or off duty. Employees of contractors must not report to duty or remain on duty if impaired by alcohol or drugs.

Safety Sensitive Employees, as defined by GoTriangle, include those who:

- Operate revenue vehicles.
- Maintain revenue vehicles.
- Control the movement of revenue vehicles.

Internal Safety Reporting Programs

The Chief Safety Officer and Employee Safety Committee routinely review safety data and information captured in employee safety reports, safety meeting minutes, customer complaints, and other safety communication channels. When necessary, the Chief Safety Officer and Employee Safety Committee ensure that the issues and concerns are investigated or analyzed through GoTriangle's SRM process and elevated to the SMSC if further decision-making actions are needed.

The Chief Safety Officer and Employee Safety Committee also review internal and external reviews, including audits and assessments, compliance with operations and maintenance procedures, and safety risk mitigations' effectiveness. The Chief Safety Officer discusses relevant safety issues and concerns with the Accountable Executive and executive management.

Internal Safety Audits and Annual Review

An internal safety audit program, overseen by the Safety Department, measures the effectiveness of the ASP in achieving the overall objectives of the plan and compliance with its requirements. GoTriangle's internal safety audit program is designed to:

- Ensure safety observations are conducted by supervisory or safety staff during system maintenance, operations, and modification.
- Verify compliance with management's safety objectives, as stated in Section 4 of the ASP.
- Ensure compliance with operating rules, regulations, standards, codes, and procedures.

Internal Safety Reviews

It is the objective of the Internal Safety Review Program to verify on an on-going basis that safety processes have been developed and implemented in accordance with the GoTriangle PTASP throughout GoTriangle's operations and services. It is also the objective of GoTriangle's Internal Safety Review Program to assess the effectiveness of the safety processes; to identify process deficiencies, potential hazards, and system risks; and to recommend SMS improvements.

The internal safety audits will be focused on the content of the PTASP to include the four (4) components of GoTriangle's SMS. The Safety Department is responsible for scheduling the internal safety audits on an annual basis. Safety Assurance internal review processes include:

- Safety Data Acquisition and Analysis – includes evaluating the processes used to collect and analyze safety-related data and the processes used to determine trends related to safety performance monitoring.
- Accident/Incident Reporting and Investigation – includes evaluation of GoTriangle's processes for notifying outside agencies, including FTA, NCDOT, and OSHA, as well as processes for identifying accident/incident causes.

- Internal Safety Reviews – entails a review of the internal safety review process to ensure all GoTriangle PTASP components are reviewed through an established review cycle. The review includes evaluating practices used to develop checklists and perform internal safety reviews, document, and track review findings, and assign responsible parties and schedules for addressing review findings.
- Rules/Procedures Reviews – includes a review of GoTriangle’s processes for reviewing operating and maintenance rules and procedures affecting safety to ensure they remain applicable and correct.
- Facility and Equipment Inspections – includes identification of facilities and equipment subject to regular safety-related inspections and testing, processes reporting, documenting and tracking deficiencies, hazards, and corrective actions.
- Maintenance Audits/Inspections – includes identification of systems and facilities subject to a maintenance program, along with established maintenance cycles and required documentation of maintenance performed on these systems and facilities. This also includes inspection and audit of procedures and work practices to identify deficiencies, trends, and signs of sabotage, and the methods used to document and track deficiencies, hazards, and corrective actions.
- Additionally, the revised Internal Safety Audits will be designed to help GoTriangle monitor operations and identify any safety risk mitigations that may be ineffective, inappropriate, or not implemented as intended.

7) SAFETY PROMOTION

7.1 Competencies and Training

Safety promotion ensures that GoTriangle employees and contractors are aware of policies and procedures related to agency operations’s safety, and specifically as related to their areas of work. GoTriangle’s comprehensive safety training program applies to all GoTriangle employees directly responsible for safety, including:

- Bus vehicle operators
- Dispatchers
- Maintenance technicians
- Managers and supervisors
- Agency Leadership and Executive Management
- Chief Safety Officer
- Safety and Training Department personnel
- Accountable Executive

Training has been developed for each designated position throughout the agency, appropriate to the position’s safety-related job responsibilities and role in the SMS. This training includes instruction and testing to verify individuals in positions are adequately trained, and refresher training and recertification requirements to ensure employees remain current on the agency’s policies and procedures. Basic training requirements for GoTriangle employees, including frequencies and refresher training, are documented in the GoTriangle’s Safety Training Matrix on the shared drive: (P:\Agency Safety Plan\Safety Management System\Safety Training Matrix and the Employee’s Training folder.

Operations safety-related skill training includes the following:

- New hire bus operator classroom and hands-on skill training;

- Bus operator refresher training;
- Bus operator retraining (recertification or return to work);
- Skill training for bus maintenance service attendants;
- Classroom and on-the-job training for transit service supervisors at the time of external hire or internal promotion; and
- Safety event investigation training, including the Transportation Safety Institute (TSI) Fundamentals of Bus Collision Investigation and on-the-job training.

Vehicle maintenance safety-related skill training includes the following:

- Ongoing vehicle maintenance technician skill training;
- Ongoing skill training for vehicle maintenance supervisors;
- Safety event investigation training for vehicle maintenance supervisors;
- Ongoing hazardous material training for vehicle maintenance technicians and supervisors, parts room assistants; and
- Training provided by vendors.

Facility maintenance safety-related skill training includes the following:

- Ongoing facility maintenance technician skill training;
- Ongoing skill training for facility maintenance manager;
- Ongoing hazardous material training for facility maintenance technicians and manager; and
- Ongoing fire prevention training for facility maintenance technicians and manager

GoTriangle participates in the Voluntary Bus Safety Training Program outlined in FTA's Public Transportation Safety Certification Training Program regulation, 49 CFR Part 672. GoTriangle's designated Safety Department personnel will complete the following curricula, in accordance with the Program's specifications:

- SMS Awareness (e-Learning)
- Safety Assurance (virtual instructor-led)
- SMS Principles for Transit (classroom)
- Transit Safety and Security Program managed by TSI
 - Effectively Managing Transit Emergencies
 - Transit Bus System Safety
 - Fundamentals of Bus Collision Investigation

Following the conclusion of this training, designated personnel will complete refresher training that includes, at a minimum, one hour of safety oversight training.

GoTriangle also conducts SMS initial and refresher training on basic SMS principles and the mandatory and voluntary ESRP for frontline and supervisory operations and maintenance employees.

7.2 Safety Communication

In accordance with GoTriangle's SMP statement, GoTriangle actively encourages the open sharing of information on all safety issues throughout our organization. To ensure effective communication throughout the agency, GoTriangle has established formal processes and approaches, including:

- **Dissemination of safety and safety performance information throughout GoTriangle's organization.** The communication of safety performance information follows the top-down, agency-wide model of the agency's SMS. The Chief Safety Officer is responsible for reporting on the agency's safety performance to the Accountable Executive. These reports may include, but not limited to, performance relative to the agency's safety performance targets, updates related to mitigation monitoring plans, and unusual events

According to guidance distributed by the Chief Safety Officer, leadership throughout the agency (including senior executives, directors, managers, and supervisors) is responsible for communicating safety performance information with their teams.

The Safety Department is responsible for using the safety hazards log and safety risk register to develop regular status reports on safety risk mitigations for dissemination to the SMSC for discussion.

The Safety Department also issues quarterly reports to the SMSC on GoTriangle's safety performance and progress in meeting the safety objectives outlined in the SMP statement throughout the agency.

- **Communication of information on hazards and safety risk relevant to employees' roles and responsibilities throughout the agency.** As part of new-hire training, GoTriangle distributes safety policies and procedures, included in the Work Rules and Procedures Manual, to all employees. GoTriangle provides training on these policies and procedures and discusses them during safety talks between supervisors and bus operators and vehicle maintenance technicians. For newly emerging safety issues or safety events at the agency, GoTriangle's Chief Safety Officer issues bulletins or messages to employees that are reinforced by supervisors in one-on-one or group discussions with employees. GoTriangle's Training Department also develops materials and courses to explain the rationale behind changes to policies, procedures, and work instruction that address hazards and safety risks relevant to employees' roles and responsibilities.

The Safety Department works with GoTriangle's executive, CSO, and management teams (representing all appropriate functions) to define specific, safety-related information that GoTriangle needs to communicate to different employee groups. GoTriangle also uses multiple approaches to communicate pertinent safety information to the Board of Trustees, management, and individual employees across all GoTriangle functions, as appropriate.

- **Explaining actions taken in response to employee reporting.** GoTriangle provides targeted communications to inform employees of safety actions taken in response to reports submitted through the ESRP, such as newsletters, handouts and flyers, safety talks, updates to bulletin boards, one-on-one discussions between employees and supervisors.

The Safety Department works with each operating function to ensure that all SMS and safety communication-related activities take place as scheduled. The Safety Department also maintains documentation of communication processes and procedures and records of safety communications.

GoTriangle's contracted services contractor must have safety communication methods in place to communicate GoTriangle's safety policy statement and safety objectives to employees. GoTriangle's Chief Safety Officer, in coordination with GoTriangle's Director of Regional Partnerships, regularly monitors contractor safety communication activities to ensure the contractor is supporting GoTriangle's safety and SMS mission and complying with GoTriangle's requirements. GoTriangle's Chief Safety Officer documents these monitoring activities and results in formal reports and audits.

Documentation of ASP and SMS Implementation Activities

GoTriangle's Chief Safety Officer is responsible for maintaining the Agency's documents, which set forth its PTASP, including those documents related to the implementation of its SMS, and results from SMS processes and activities. The ASP and SMS documents include in whole, or by reference, the programs, policies, and procedures that GoTriangle uses to carry out its ASP. All ASP and SMS documents are maintained for a minimum of three years after they are created.

For reviews, investigations, audits, or other purposes, any ASP or SMS related documents will be made available upon request by FTA, NCDOT, and other Federal and State entities having jurisdiction.

8) ADDITIONAL INFORMATION

GoTriangle and its contractors will maintain documentation related to the implementation of its SMS; the programs, policies, and procedures used to carry out this ASP; and the results from its SMS processes and activities for three (3) years after creation. This documentation will be available to the Federal Transit Administration or other Federal or oversight entity upon request, and maintained on the shared drive, Agency Safety Plan: P:\Agency Safety Plan\SMS\Documentation.

Part 673 Definitions of Terms Used in the Plan

Accident: FTA defines an accident as an event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. For purposes of GoTriangle Bus Operations an accident will include but not be limited to events arising out of the operations of the bus, such as vehicle collisions when contact is made with another vehicle, equipment (forklift, sweeper, tug), person, bike, gate arm, or other object, and customer bumps, trips and falls while boarding, on board or exiting the bus.

Accountable Executive: A single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan in accordance with 49 U.S.C. 5326.

Chief Safety Officer: An adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer.

Equivalent Authority: An entity that carries out duties similar to that of a Board of Directors, for a recipient or sub-recipient of FTA funds under 49 U.S.C. Chapter 53, including sufficient authority to review and approve a recipient or sub-recipient's Public Transportation Agency Safety Plan.

Event: Any Accident, Incident, or Occurrence.

FTA: Federal Transit Administration. An agency within the U.S. Department of Transportation.

Hazard: Any real or potential condition that can cause injury, illness, or death to personnel; damage to or loss of system service, equipment or property; or damage to the environment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

Hazard Risk The composite of predicted severity and likelihood of the potential effect of a hazard.

Hazard Risk Mitigation: A method or methods to eliminate or reduce the effects of hazards.

Incident: (FTA SMS definition) An event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

Investigation: The process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.

National Public Transportation Safety Plan: The plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.

NCDOT: The North Carolina Department of Transportation. The designated State Safety Oversight Agency (SSOA) for the State of North Carolina.

Occurrence: An Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.

Passenger: A person who is on board, boarding, or alighting from a bus transit vehicle for the purpose of travel.

Performance Measure: An expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.

Performance target: A quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).

Public Transportation Agency Safety Plan: The documented comprehensive agency safety plan for a transit agency that is required by 49CFR673.

Responsible Accident: The employee or operator had a reasonable opportunity to avoid the accident but failed to do so.

Risk: The composite of predicted severity and likelihood of the potential effect of a hazard.

Risk Register: an information management tool used to document Safety Risk Management and Safety Assurance activities. It records the hazards identified by the transit agency, the potential consequences associated with the hazards, initial safety risk ratings, new mitigations implemented to eliminate or minimize the risk associated with the hazard, revised safety risk rating, and mitigation monitoring measures and activities to ensure the implementation and effectiveness of mitigations.

Risk Mitigation: A method or methods used to eliminate or reduce the effects of hazards.

Safety: Freedom from harm resulting from unintentional acts or circumstances.

Safety Assurance: Processes within a transit agency's Safety Management System that functions to ensure the implementation and effectiveness of safety risk mitigation.

Safety audit: A review or analysis of system elements for compliance with the Safety requirements. Audit methods may include interviews, document and record reviews, firsthand observations of operations and maintenance activities, spot checks, inspections, and visual examinations and measurements.

Safety Events: Total number of reportable events and rate per total vehicle revenue miles by mode. The safety events measure captures all reported safety events that occur during transit operations and the performance of regular supervisory or maintenance activities. A reduction in safety events will support efforts to reduce fatalities and injuries, as well as damages to transit assets. Measuring the number of safety events

by mode over vehicle revenue miles provides a safety event rate from which future performance can be compared.

Safety Management System (SMS): A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies, and procedures. SMS defines the activities by which safety management is undertaken by an organization in order to achieve acceptable levels of safety. SMS also defines the method of identifying hazards and controlling risks in a work and operational environment and continually monitors these methods for effectiveness.

Safety Risk Management: A process within a Bus Transit Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.

Safety Risk Management Log: An information management tool for tracking identified hazards, rating the hazards, any mitigation and how the hazard is resolved. Unacceptable and Undesirable Hazardous Conditions must be captured in the Risk Register.

Safety Management Policy: A transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.

Safety Management System (SMS): The formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.

Safety Promotion: A combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.

Safety Risk Management: A process within a transit agency's Public Transportation Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.

Serious Injury (FTA SMS definition): Any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses); (3) Causes severe hemorrhages, nerve, muscle, or tendon damage; (4) Involves any internal organ; or (5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

State of Good Repair: The condition in which a capital asset is able to operate at a full level of performance.

State Safety Oversight Agency (SSOA): An agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth.

System Reliability: The mean distance between major mechanical failures by mode. The System Reliability measure expresses the relationship between safety and asset condition. The rate of vehicle failures in service, defined as mean distance between major mechanical failures, is measured as revenue miles operated divided by the number of major mechanical failures. This is a measure of how well a fleet of transit vehicles is maintained and operated. The Federal Transit Administration (FTA) recognizes the diversity of the transit industry and that agencies have varied equipment types with varied rates of performance. Therefore, this measure allows agencies to develop safety performance targets that are specific to their own fleet type, age, operating characteristics, and mode of operation.

System Safety: The application of engineering and management principles, criteria, and techniques to achieve acceptable risk, within the constraints of operational effectiveness throughout the system and throughout the life cycle of the system.

Transit Asset Management Plan: The strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation.

Unacceptable Hazardous Condition: A hazardous condition determined to be an unacceptable risk according to an established evaluation matrix which evaluates the severity and probability of the risk.

ACRONYMS

Acronym	Definitions
AE	Accountable Executive
ALARP	As Low as Reasonably Practicable
ASP	Agency Safety Plan (also referred to as a PTASP in Part 673)
CAMPO	Capital Area Metropolitan Planning Organization
CDL	Commercial Driver's License
CFR	Code of Federal Regulations
CSO	Chief Safety Officer
DCHC	Durham-Chapel Hill-Carrboro Metropolitan Planning Organization
EDR	Electronic Data Recorder
ESRP	Employee Safety Reporting Program
FTA	Federal Transit Administration
MPO	Metropolitan Planning Organization
MTBE	Mean Time Between Events
NCDOT	North Carolina Department of Transportation
NPTSP/NSP	National Public Transportation Safety Plan
NTD	National Transit Database
Part 673	49 CFR Part 673 (Public Transportation Agency Safety Plan)
SA	Safety Assurance
SGR	State of Good Repair
SME	Subject Matter Expert
SMP	Safety Management Policy
SMS	Safety Management System
SOP	Standard Operating Procedure
SP	Safety Promotion
SPI	Safety Performance Indicator
SPT	Safety Performance Target
SRM	Safety Risk Management
SSOA	State Safety Oversight Agency
TAM	Transit Asset Management
U.S.C.	United States Code
VRM	Vehicle Revenue Miles

Appendix A: Potential Sources of Hazard Information

Job Hazard Analyses (JHA)

Conducting inspections and audits includes conducting site surveys and personnel interviews to evaluate employee work practices and work environments. The inspection portion of this method is used daily by all personnel during the performance of their normal job duties and requires little more than an attentive eye or the use of safety checklists.

Daily Operating Logs

The Safety Department maintains a safety events log of all activities on each shift, including hazards, adverse events and unusual events affecting the system.

Operator observations

It is the responsibility of all employees to identify and report hazards and unsafe conditions. Provided necessary mechanisms for reporting unsafe conditions as required per the Safety Risk Management Process. Inspection or observation portions of this method is used daily by all personnel during the performance of their normal job duties and requires little more than an attentive eye or the use of safety checklists.

Maintenance reports

The primary means by which a department will be informed of a hazard is through self-identification. This is done either through employees or through management techniques such as inspections and audits or reviews of daily operating reports to identify trends. Establish and implement procedures to assure that the vehicle fleet is properly maintained and available in a safe operating condition. Ensure that any safety and quality audits findings of the day-to-day maintenance operations are properly addressed and their appropriate corrective actions are implemented in a timely manner.

Inspection Results

An essential element of the GoTriangle System Safety Program is regular inspection of all system facilities and equipment to ensure safe and effective operation. Safety and Training personnel work closely with Maintenance and Facilities Operations to ensure that appropriate checklists and procedures are in place for fire/life safety, industrial and occupational safety requirements are met. Establish and implement a pre-trip and post-trip inspection program. Maintain proper maintenance documentation in support of maintenance inspection activities.

Internal Safety Investigations

Safety assurance activities are required to ensure a proactive approach to identifying hazards before they become accidents or incidents, and to verify that safety and security programs have been developed and implemented. Conducting inspections and audits includes conducting site surveys and personnel interviews to evaluate employee work practices and work environments.

Accident and incident Reports

Conducting comprehensive investigations of events to determine their underlying causes often leads to the identification of hazards not readily identifiable during daily operations or through inspections, audits, or through employee, customer, or contractor reports. Once identified, the hazards are eliminated or controlled. Ensure that any safety accident investigations or incidents are properly addressed and their appropriate corrective actions are implemented.

Committee Reviews

The Safety Committees work to develop acceptable corrective actions, however, the Director of Transit Operations is ultimately responsible for the safety of GoTriangle's operations and services, and ensuring a proactive approach in assisting GoTriangle management to identify and control hazards.

Industry Data and Governmental Sources (FTA, State Safety Oversight Agency)

It is critical for safety assurance at GoTriangle that safety-related data is acquired from various sources. Furthermore, analysis and distribution of that data to GoTriangle management and staff is also critical to ensuring safe operation and performance. In some instances, the acquired data is used to meet external reporting requirements for FTA and/or the SSOA. Trend analysis is performed on the acquired data as a means of identifying trends in accidents and occupational injuries in order to develop and implement corrective action to predict and prevent further occurrences.

Appendix B: GoTriangle 2018 Annual Performance

GoTriangle's Safety Performance Targets CY 2020 (based on the safety performance measures established under the National Public Transportation Safety Plan)							
Mode of Service	Fatalities (total)	Fatalities (per 100k VRM)	Injuries (total)	Injuries (per 100k VRM)	Safety Event (total)	Safety Events (per 100k VRM)	System Reliability (failures/VRM)
Fixed Route Bus (DO)	0	0.000	3	0.125	3	0.125	25,577
Fixed Route Bus (PT)	0	0.000	0	0	0	0.000	22,530
Paratransit (DO)	0	0.000	0	0	0	0.000	99,902
Vanpool (PT)	0	0.000	0	0	0	0.000	99,902

2020 0001

**RESOLUTION OF THE GOTRIANGLE BOARD OF TRUSTEES APPROVING THE
GOTRIANGLE AGENCY SAFETY PLAN**

WHEREAS, on July 19, 2018, the Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule, which requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and

WHEREAS, the PTASP Rule is designed to change the safety culture of a transportation agency by making safety everyone's responsibility, empowering employees to play a role in safety, and encouraging employees and contractors to report safety concerns to management; and

WHEREAS, the rule applies to all operators of public transportation systems that are recipients and sub-recipients of federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307); and

WHEREAS, the plan must include safety performance targets and transit operators also must certify they have a safety plan in place meeting the requirements by December 31, 2020; and

WHEREAS, the plan must be updated and certified by the transit agency annually.

NOW, THEREFORE, BE IT RESOLVED, by the GoTriangle Board of Trustees that the GoTriangle Agency Safety Plan as presented to the Board of Trustees on December 18, 2020, is adopted effective immediately.

ADOPTED THIS 18TH DAY OF DECEMBER 2020.

Michael Parker, Board of Trustees Chair

ATTEST:

Michelle C. Dawson, CMC
Clerk to the Board of Trustees

MEMORANDUM

TO: Operations and Finance Committee
FROM: Finance & Administrative Services
DATE: December 3, 2020
SUBJECT: Wake Transit FY 2021 Q1 Proposed Amendment

Strategic Objective or Initiative Supported

Implement the Wake Transit Plan with Transit Planning Advisory Committee

Action Requested

Staff requests that the GoTriangle Operations & Finance Committee recommend to the GoTriangle Board of Trustees funding of \$1,100,000 currently allocated to reserve in the Wake Transit Adopted Plan to reimburse the federal interest in five (5) parcels located along the planned Greater Triangle Commuter Rail (GTCR) corridor in Wake County categorized by the FTA as Group 2 parcels. In order to retain the federal interest in these parcels, the GTCR had to be in project development by the end of 2019. When the decision was made not to move into project development in 2019, the FTA directed GoTriangle to reimburse the federal interest in the Group 2 parcels. Included in the scope of the amendment is the appraised value of the Group 2 parcels located in Wake County, demolition of a small, vacant structure located at 201 Morris St. in Morrisville, and contingency for additional potential expenses. FTA reviewed the appraisals and issued concurrence.

Background and Purpose

One major amendment listed below has been submitted for approval:

1. CRT Related – Wake County Property
 - a. Allocate previously adopted funding from Reserve to GoTriangle.
 - b. No financial impact.

As a part of the packet presented with this memorandum, the committee will find:

- Detailed Individual Project Amendment Request

At the time of the Operations and Finance Committee receiving this item, TPAC will have already reviewed and recommended this amendment to both the CAMPO Executive Board and the GoTriangle Board of Trustees. The CAMPO Executive Board approved this item during the November 18th Executive Board Meeting.



Connecting all points of the Triangle

Financial Impact

The proposed amendments, if recommended by this committee and approved by the Board of Trustees, will have no financial increase to the FY21 Wake Transit Work Plan.

Staff Contact(s)

- Steven Schlossberg, Budget and Finance Manager, sschlossberg@gotriangle.org, (919) 485-7590
- Sandra Freeman, CFO/Director of Finance and Administrative Services, sfreeman@gotriangle.org, (919) 485-7415



PO Box 13787
Research Triangle Park, NC 27709
P: 919.485.7510 | F: 919.485.7547

www.gotriangle.org



NC Capital Area Metropolitan Planning Organization

Staff Report

One City Plaza
421 Fayetteville Street
Suite 203
Raleigh, NC 27601

Agenda Date: 11/18/2020

Agenda Item: 5.3

To: Executive B

FY 2021 Wake Transit Work Plan - 1st Quarter Amendment Request

Bret Martin, MPO Staff

One (1) FY21 Wake Transit Work Plan amendment request was submitted by GoTriangle for the 1st quarter of the fiscal year. Documentation for the amendment request, including more information on the nature of the request as provided to the Wake County Transit Planning Advisory Committee (TPAC), is included in **Attachment A**. Per the adopted Wake Transit Work Plan Amendment Policy, the amendment request falls into the 'Major Amendment' category.

The requested amendment, if approved, would allocate \$1.1 million from Project TC004-A (Project Development for Commuter Rail from Garner to Western Durham - Wake Share) to GoTriangle to reimburse the Federal Transit Administration (FTA) for its financial interest in five (5) parcels along the planned commuter rail corridor in Wake County. Also included in the scope of the request is the demolition of a structure on one of the parcels and a small contingency for additional potential expenses. The parcels were previously purchased by GoTriangle with FTA funds in support of a rail project under development in prior years. The FTA's ownership share in the parcels is 55.7 percent. This reimbursement would give GoTriangle a 100 percent ownership interest in the subject parcels. GoTriangle plans to retain the parcels for project-related uses, such as station facilities and laydown areas for construction and contractor access, should construction of a commuter rail project proceed.

The amendment request was released for public comment between August 7, 2020, and September 6, 2020. No public comments were received in response to the amendment request. The TPAC recommended approval of the request at its October 14th regular meeting with a finding that the scope for the requested project is appropriate for the continued implementation of commuter rail as envisioned in the Wake County Transit Plan and that funding the request does not involve an unwarranted re-appropriation of funds.

Requested Action: Consider approval of the FY 2021 Wake Transit Work Plan 1st quarter amendment request and authorization for the Executive Director to sign the applicable project-level agreement to the Executive Board

ATTACHMENT A

WAKE COUNTY TRANSIT PLAN: IMPLEMENTATION

From: Bret Martin, Wake Transit Program Manager, Capital Area MPO

To: Wake County Transit Planning Advisory Committee (TPAC)

Date: 10/5/2020

Re: Summary of Requested FY 2021, 1st Quarter Work Plan Amendment

One (1) amendment request that impacts the Fiscal Years (FY) 2020 and 2021 Wake Transit Work Plans was submitted for consideration of approval in the 1st quarter of FY 2021. The amendment request was reviewed by CAMPO staff to determine the appropriate amendment type classification (major versus minor) as outlined in the Wake Transit Work Plan Amendment Policy. The amendment request is categorized as a 'Major Amendment' for the following reasons:

- 1) The requested amendment requires a change in budgeted reserves to allocate the requested funding to a specific project sponsor; and
- 2) The requested amendment involves the creation of a new project with a scope that goes beyond the scope of the original reserve allocation.

The amendment request was released for public comment from August 7, 2020, through September 6, 2020. No public comments were received.

The requested amendment, if approved, would allocate \$1.1 million from Project TC004-A (Project Development for Commuter Rail from Garner to Western Durham – Wake Share) to GoTriangle to reimburse the Federal Transit Administration (FTA) for its financial interest in five (5) parcels along the planned commuter rail corridor in Wake County. Also included in the scope of the request is the demolition of a structure on one of the parcels and a small contingency for additional potential expenses. The request originally submitted by GoTriangle was for \$1.4 million but was subsequently reduced to an updated requested amount of \$1.1 million. The parcels were previously purchased by GoTriangle with FTA funds in support of a rail project under development in prior years. The FTA's ownership share in the parcels is 55.7 percent. This reimbursement would give GoTriangle a 100 percent ownership interest in the subject parcels. GoTriangle plans to maintain the parcels for project-related uses, such as station facilities and laydown areas for construction and contractor access, should construction of a commuter rail project proceed.

Attached to this memorandum are the following:

- Proposed FY 2021 Q1 Amendment List (released for public comment)
- Completed Amendment Request Form (released for public comment)
- Joint Budget & Finance/Planning & Prioritization Subcommittee Disposition Memo and Voting Record
- Maps Identifying the Subject Parcels and Relevance to the Commuter Rail Corridor

A scope and financial disposition for the amendment request was developed by the Planning & Prioritization and Budget & Finance Subcommittees and recommended to the TPAC at a joint meeting held on August 25th. The amendment request was first considered for recommendation of approval to the Wake Transit governing boards by the TPAC at its September 9th regular meeting, but the TPAC took action to table the request and cited the need to receive further supporting information identifying the locations of the subject parcels for evaluation of their relevance to the commuter rail corridor. Subsequent to the TPAC's September 9th meeting, GoTriangle provided this

ATTACHMENT A**WAKE COUNTY TRANSIT PLAN: IMPLEMENTATION**

information and additional background information on the history of the subject parcels. Following is the additional information GoTriangle provided on the history of the subject parcels:

'GoTriangle has worked closely with the FTA on the utilization and disposition of properties acquired with New Starts funding in 2003 and 2004 for a regional rail project that did not advance to a full funding grant agreement. The FTA classified the parcels into four groups and issued written guidance in 2015 providing disposition instructions and conditions to be met in order to retain certain properties. GoTriangle provided a disposition and utilization plan to the FTA in 2016 and continues to provide regular updates. FTA agreed to allow GoTriangle to retain parcels on Lane Street for transit amenity storage as well as the parcels needed for the Raleigh Union Station Bus Facility (RUS Bus).

In order to retain the properties needed for the Greater Triangle Commuter Rail (GTCR) project, GoTriangle had to be in project development by the end of 2019. When the project did not advance to PD, the FTA directed GoTriangle to reimburse the federal interest in five parcels located in Wake County in a manner consistent with FTA C 5010.1E. Accordingly, GoTriangle may either sell the properties and return 55.7% of the proceeds to the FTA or retain the properties and reimburse the FTA 55.7% of the fair market value. These are the only remaining properties in Wake County owned by GoTriangle with a federal interest in them. GoTriangle strongly recommends retaining the parcels as they are needed for the GTCR.

The alternative to paying back the federal share would be to sell the properties, but then we run the risk of needing to buy them back in the future at a higher price or not being able to repurchase them at all.

We feel that these properties are important for the commuter rail project and potentially other Wake Transit projects. We request that the governing boards authorize the Wake Transit Plan to pay \$1.1 million dollars to buy out the federal shares of these five parcels.'

FY 2021, Quarter 1, Requested Wake Transit Work Plan Amendment

REQUESTED MAJOR AMENDMENT

Project ID #	Agency	Project Title	FY20 Original Funding Allocation	FY 21 Original Funding Allocation	FY21 Requested Funding Allocation	FY 21 Funding Impact	Reason for Major Amendment Status
Capital Budget Amendment Request							
TC004-A	GoTriangle	Commuter Rail from Garner to Western Durham (Wake County Share)	\$ 39,360,371.00	\$ -	\$ 1,100,000.00	\$ -	The original \$39,360,371 allocation for project TC004-A was placed in reserves in the Adopted/Amended FY 2020 Wake Transit Work Plan. This amendment request requires a change in budgeted reserves to allocate the requested funding to a specific project sponsor for a new but related project with an expanded scope beyond the scope of the original allocation.

Distributed for Public Comment on 8/7/2020

Public Comments Accepted Through 9/6/2020

Submit all comments to Bret Martin, Wake Transit Program Manager - Bret.Martin@campo-nc.us or 919-996-4410

Wake Transit Project ID #
TC004A2

FY 2021
Wake Transit Work Plan
Project Amendment Request Form
Operating and/or Capital

FY START DATE
7/1/2020

Type of Amendment Minor ☐ Major ☒

Minor amendment – Required when there is:

A transfer of funds between budget ordinance appropriations but requires less than a 20% change to a project appropriation for projects equal to or greater than \$500,000

A transfer of funds between budget ordinance appropriations but requires less than a \$100,000 change to a project appropriation for projects less than \$500,000

Any change that does not meet any criteria of a major amendment

Major amendment - Required when there is:

A project requested to be added to the Work Plan

A project requested to be removed from the Work Plan

Significant changes in scope of funded project

A transfer between budget ordinance appropriations that requires equal to or greater than a 20% change to a project appropriation for projects greater than \$500,000

A transfer between budget ordinance appropriations that requires equal to or greater than a \$100,000 change to a project appropriation for projects less than \$500,000

Any change that requires a change in budgeted reserves or fund balance

New/Amended Project Name	Requesting Agency	Project Contact	Estimated Operating Cost	
CRT Related - Wake County Property	GoTriangle	Gary Tober - Director of Real Estate	Base Year	\$ -
		919-485-7577	Recurring	\$ -
Estimated Start Date	Estimated Completion	Notes	Estimated Capital Cost	
11/01/20	TBD	Wake Transit Plan - Adopted Funding Cost Neutral	Base Year	\$ -
			Cumulative	\$ -
Project Description	Enter below a summary of the project amendment and impact on approved plan.			
<p>Appraisals for five (5) parcels have been ordered that are instrumental in connection with the Commuter Rail Project. The Federal interest of these parcels are due by the end of calendar year 2020 to retain their availability in the overall Commuter Rail project. Representatives from Wake County have indicated that they wish to retain the parcels for future use. GoTriangle desires to utilize previously approved Wake Transit funding associated with the Commuter Rail (currently in reserve) to reimburse the federal portion of the parcels. The cost neutral amendment will guarantee that the parcels will be available for future use. The parcels are within Wake County adjacent to the proposed commuter rail corridor, and would be used for project-related purposes including construction of station facilities and/or for contractor access and laydown areas during construction. The FY21 Durham Transit Work Plan includes funding for repayment of the federal share of similar parcels along the commuter rail corridor in Durham County.</p>				
1. Enter Wake Transit Project ID(s) to Increase				

Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
TC004A2	Wake County - CRT Related Properties	CRT - GoTriangle	\$ 1,100,000	\$ -	Reallocate funds currently in reserve to GoTriangle. This amendment is cost neutral.
TOTAL			\$ 1,100,000	\$ -	

2. Wake Transit Project ID(s) to Reduce					
Project ID	Project	Appropriation Category	Amount	Recurring Amount	Notes
TC004A	Commuter Rail from Garner to Western Durham	CRT - Reserve	\$ 1,100,000.00	\$ -	Reallocate funds currently in reserve to GoTriangle. This amendment is cost neutral.
TOTAL			\$ 1,100,000	\$ -	

3. Impact on Transit Plan Project Costs			
From above, indicate whether amounts impact operating or capital budgets in Wake Transit Plan.		Estimated Operating Cost	Current Year
			Recurring
		Estimated Capital Cost	Base Year
			Cumulative
			\$ -
			\$ -
			\$ -
			\$ -

Project Justification / Business Case Provide responses to EACH of the questions below. Answer the questions as fully as possible. Enter Non-Applicable (N/A) as appropriate.

4. Is this New/Amended project Operating, Capital or Both? Operating ☐ Capital ☒ Both ☐

5. What is the timeframe for the request? Are you requesting a full year of funds or a partial year to be annualized in future fiscal years?

The amendment has zero financial impact to the Wake Transit Plan. The requested amount (from reserve) will impact FY21 Q2 as the payment is anticipated to be disbursed to the FTA (Federal Transit Administration) during the quarter.

6. What is the expected outcome(s) if this request is funded? What is the alternative if the request is not funded?

Possession of many key parcels that are needed for the CRT project will be surrendered. GoTriangle anticipates the price to reacquire the parcels will increase substantially if needed for a future project.

7. List below the Key Performance Indicators (deliverables) while this project is in progress. These performance measures will be reported quarterly. Are these the same measures as currently being reported?

a)	Appraisals Completed
b)	Payment Submitted to FTA
c)	Payment Accepted by FTA

8. List any other relevant information not addressed.

9. Please enter estimated appropriations to support expenses identified above. Enter FY 2021 and the estimated annualized cost in FY 2022 using the 2.5% growth factor, if applicable. The spreadsheet will calculate 2023 and beyond by 2.5%. If your project is not expected to have recurring costs in FY 2023 and/or beyond, delete the calculation(s) in columns E-H.

Cost Break Down of Project Request							
OPERATING COSTS	FY21	FY22	FY23	FY24	FY25	FY26	FY27
Growth Factors		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Salary & Fringes			-	-	-	-	-
Contracts			-	-	-	-	-
Bus Operations:							
Estimated Hours			-	-	-	-	-
Cost per Hour			-	-	-	-	-
Estimated Operating Cost	-	-	-	-	-	-	-
Bus Leases			-	-	-	-	-
Park & Ride Lease			-	-	-	-	-
Other			-	-	-	-	-
Other			-	-	-	-	-
Subtotal: Bus Operations	-	-	-	-	-	-	-
Other: Administrative							
Other: Database Hosting			-	-	-	-	-
Other: Supplies and Materials			-	-	-	-	-
TOTAL OPERATING COSTS	-	-	-	-	-	-	-

10. Please enter estimated appropriations to support contractual commitments and other expenses related to proposed capital projects identified above.

CAPITAL COSTS	FY21	FY22	FY23	FY24	FY25	FY26	FY27
Design/NEPA	\$ -	-	-	-	-	-	-
Equipment	-	-	-	-	-	-	-
Land - Right of Way	-	-	-	-	-	-	-
TOTAL CAPITAL COSTS	-	-	-	-	-	-	-

Assumptions for Costs and Revenues Above:

11. Please state any assumption(s) used to calculate the capital and operating dollars and revenues shown above.

\$1.1M is anticipated to be the amount needed. The amendment is cost neutral as GoTriangle desires the utilization of approved previous year CRT funding that is currently in reserve. Financial assumption is based on discussions with the FTA and preliminary results from the appraisals performed on the parcels.

WAKE COUNTY TRANSIT PLAN: IMPLEMENTATION

Joint Disposition and Voting Record

Joint Meeting of the Planning & Prioritization and Budget & Finance Subcommittees

August 25, 2020 – 1:30pm-2:00pm

Per the Wake Transit Plan Amendment Policy, the TPAC Budget & Finance and Planning & Prioritization Subcommittees are tasked with jointly reviewing the quarterly Work Plan draft amendment list and amendment request forms when Major Amendment requests are submitted. The subcommittees consider appropriateness of changes in scope and, if applicable, financial choices and tradeoffs associated with the proposed amendments and create a disposition for TPAC consideration. Upon review of the disposition and related amendment requests, the TPAC will make recommendations to the GoTriangle Board of Trustees and CAMPO Executive Board for approval or disapproval of requested amendments to the Work Plan. Following is the voting record and disposition from the joint meeting of the Budget & Finance and Planning & Prioritization Subcommittees held on August 25th, where the requested amendment was reviewed.

Voting Members for Budget & Finance

CAMPO, Bret Martin
Wake County, Chris Dillon
City of Raleigh, Shavon Tucker
Town of Cary, Christine Sondej
GoTriangle, Steven Schlossberg
Town of Apex, Jenna Shouse
Town of Garner, Gaby Lawlor
Town of Fuquay-Varina, Allyssa Stafford

Voting Members for Planning & Prioritization

CAMPO, Bret Martin
Wake County, Chris Dillon
Town of Cary, Christine Sondej
City of Raleigh, David Walker
GoTriangle, Sharon Chavis
Town of Apex, Jenna Shouse
Town of Garner, Gaby Lawlor
Town of Fuquay-Varina, Allyssa Stafford

Other Attendees

CAMPO (TPAC), Stephanie Plancich
CAMPO, Evan Koff
Town of Cary, Tony Wambui
TJCOG, John Hodges-Copple

Amendment Request Description: The requested amendment, if approved, would allocate \$1.4 million [later changed to \$1.1 million] from Project TC004-A (Project Development for Commuter Rail from Garner to Western Durham – Wake Share) to GoTriangle to reimburse the Federal Transit Administration (FTA) for its financial interest in five (5) parcels along the planned commuter rail corridor in Wake County. GoTriangle has asserted that reimbursement of FTA's interest in these parcels is due by the end of calendar year 2020 to retain the parcels' availability to use for the planned commuter rail project. The parcels were previously purchased by GoTriangle with FTA funds in support of a rail project under development in prior years. The FTA's ownership share in the parcels is 55.7 percent. This reimbursement would give GoTriangle a 100 percent ownership interest in the subject parcels. GoTriangle plans to maintain the parcels for project-related uses, such as station facilities and laydown areas for construction and contractor access, should construction of a commuter rail project proceed.

WAKE COUNTY TRANSIT PLAN: IMPLEMENTATION

Joint Disposition and Voting Record

Joint Meeting of the Planning & Prioritization and Budget & Finance Subcommittees

August 25, 2020 – 1:30pm-2:00pm

Subcommittees' Disposition: The Planning & Prioritization and Budget & Finance Subcommittees found that the scope for the project requested to be funded is appropriate for the continued implementation of commuter rail as envisioned in the Wake County Transit Plan and that funding the request does not involve an unwarranted re-appropriation of funds. The allocation of funding to the requested project would come from a reserve allocation set aside for commuter rail project development (Project TC004-A) in the FY 2020 Wake Transit Work Plan. While the scope of the project requested to be funded does not fall within the original scope of Project TC004 -A, moving funds from the original allocation in reserve was found to be an appropriate use of that funding as GoTriangle continues to plan for implementation of commuter rail.

Discussion: In the subcommittees' discussion of the amendment request, it was further discussed that this amendment request would remove FTA's financial interest in all properties in Wake County for which it had previously established an interest. It was also noted that the reimbursement to FTA of its financial interest in both Wake and Durham Counties should be tracked and accounted for when discussions on cost share for a commuter rail project occur between the two counties. In the subcommittees' discussion on the item, GoTriangle noted that it would reimburse Wake Transit as revenue to the Wake Capital Fund should a commuter rail project not proceed and that this particular provision will be detailed in GoTriangle's agreement with the tax district. CAMPO mentioned that GoTriangle will need to provide identifying information for the five (5) parcels, such as addresses, to attach to the scope to be included for the requested project in an amended Work Plan. Many subcommittee members requested that the TPAC and its subcommittees take a closer look at establishing rules and expectations for Wake Transit's involvement in real estate interests, including rules for disposal of real property assets, if necessary.

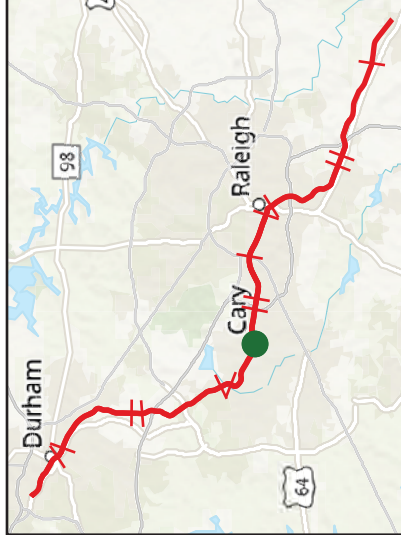
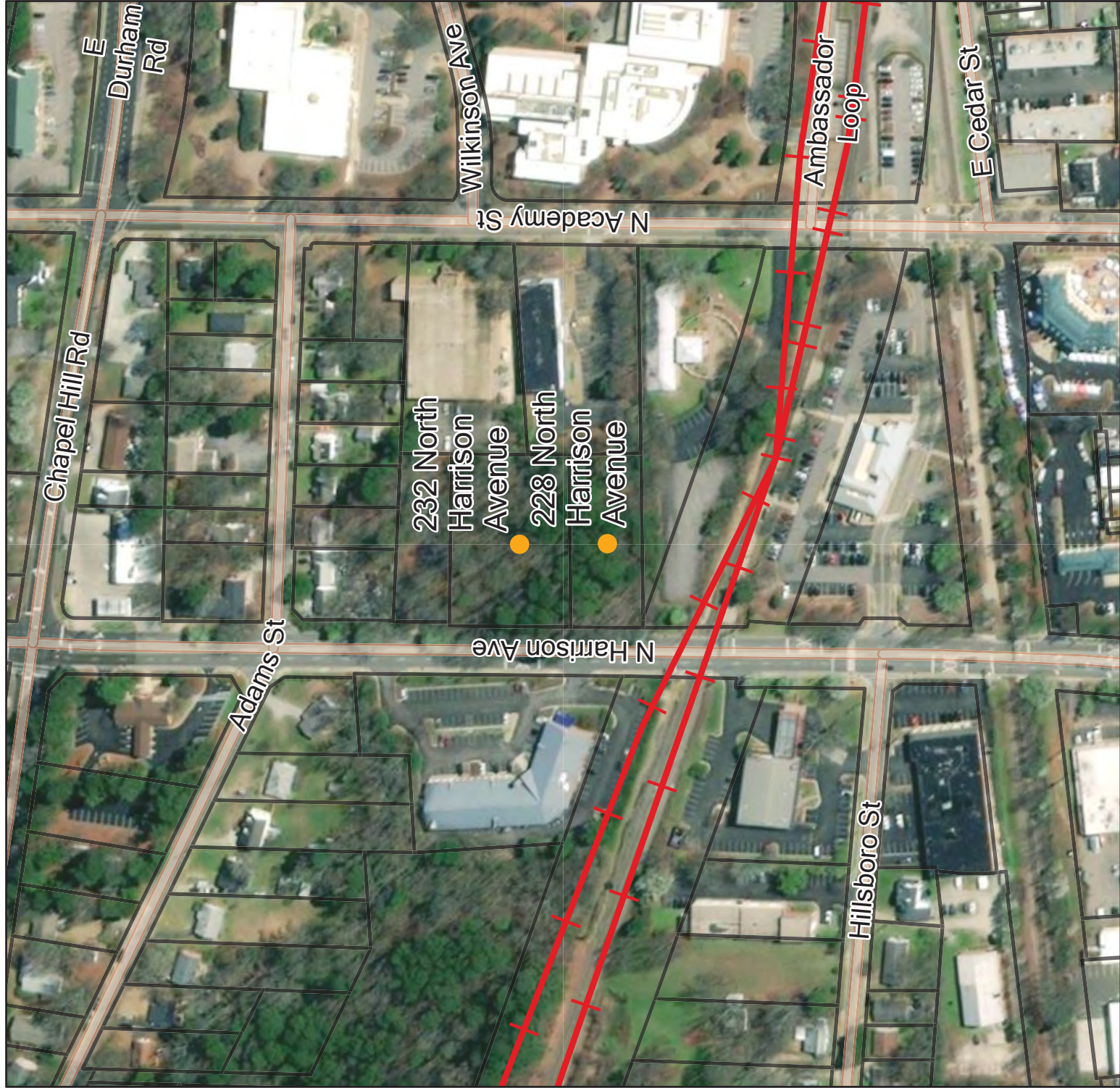
Vote: A motion was made by David Walker (City of Raleigh) and seconded by Bret Martin (CAMPO) to forward this disposition to the TPAC. The subsequent vote was unanimous.

FTA-assisted Parcels (Cary)

Anticipated commuter rail use:
construction laydown, park and ride

Potential other transit uses:
additional parking to support proposed Downtown Cary multi-modal facility including park and ride for BRT and other bus services and potential longer-term joint development

Potential other non-transit uses:
affordable housing, mixed-use development, public facility, parkland, municipal parking



- Streets
- Parcels
- NCR Corridor

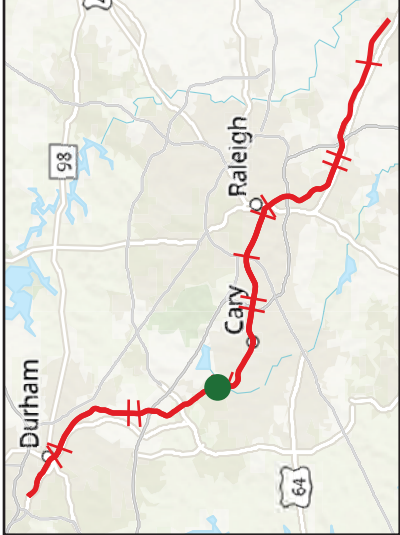


1" = 200'

FTA-assisted Parcels (Morrisville)

Anticipated commuter rail use:
construction access, possible street
access to adjoining parcel

Potential other non-transit uses:
parkland, open space



Streets

Parcels

NCRR Corridor

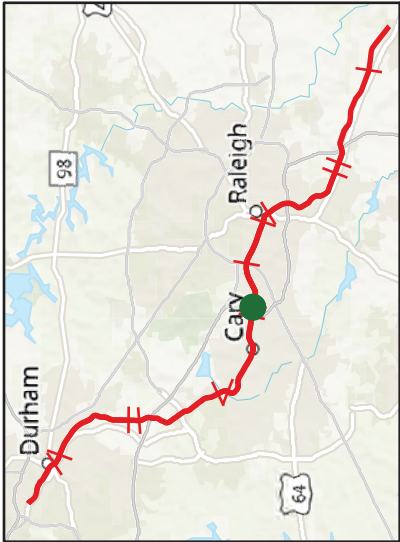
1" = 200'



FTA-assisted Parcels (Raleigh)

Anticipated commuter rail use:
station access, park and ride,
possible construction laydown/access

Potential other non-transit uses:
light industrial development



- Streets
 - Parcels
 - NCRR Corridor
- 1" = 200'

GoTriangle Board of Trustees
Operations & Finance Committee Meeting Minutes
December 3, 2020
Held Remotely via WebEx

Committee Members Present:

Corey Branch

Vivian Jones, Committee Chair

Michael Parker

Jennifer Robinson

Steve Schewel

Stelfanie Williams

Committee Members Absent:

Valerie Jordan

Other Board Members Present:

Will Allen III

Committee Chair Vivian Jones called the meeting to order at 8:30 a.m. with a roll call. A quorum was present.

I. Adoption of Agenda

Action: A motion was made by Parker and seconded by Williams to adopt the agenda.

II. Approval of Minutes

Action: A motion was made by Parker and seconded by Robinson to approve the minutes of the November 5, 2020, meeting.

Action: Upon vote by roll call, the two prior motions were carried unanimously.

III. Proposed Service Changes for Spring 2021

Andrea Neri's presentation is attached and hereby made a part of these minutes. The recommended service change is an expansion of route 305, as defined in the 2018 Short Range Transit Plan (SRTP) and in the adopted Wake Transit Plan, to add peak service to Holly Springs and provide service every 60 minutes mid-days, nights and weekends in the Apex-Raleigh section. This project was placed in unbudgeted reserve status due to the uncertainties surrounding the COVID-19 pandemic earlier this year. The Wake Transit governing board will vote on the restoration of funding in January and GoTriangle staff is preparing for implemented in April 2021 if approved. Public comment was almost all enthusiastic about the recommended change.

Action: A motion was made by Parker and seconded by Robinson to recommend that the Board authorize the proposed service expansion to Route 305 in FY21,

contingent on approval of funding in the Q2 FY21 Wake Transit Work Plan amendments by the CAMPO Executive Board and GoTriangle's Board of Trustees.

IV. Public Transportation Agency Safety Plan

Patrick Stephens requested a recommendation for approval of the Public Transportation Agency Safety Plan (PTASP). He introduced Jimmy Price, manager of safety, security & training, whose presentation is attached and hereby made a part of these minutes.

Action: A motion was made by Robinson and seconded by Branch to recommend that the Board adopt a resolution approving GoTriangle's Public Transit Agency Safety Plan.

V. Wake Transit FY21 Q1 Amendment

Steven Schlossberg's presentation on the FY21 Q1 Wake Transit work plan amendment is attached and hereby made a part of these minutes. He stated that the amendment was recommended by TPAC and approved by the CAMPO Executive Board last month, which allocates \$1.1 million to GoTriangle for reimbursement of the federal share in five Wake County parcels. No comments were submitted on this amendment during the public comment period. The parcels are located in Cary, Morrisville and Raleigh, and funding includes a possible demolition on the site in Morrisville.

Action: A motion was made by Parker and seconded by Robinson to recommend that the Board reallocate \$1,100,000 from the Wake Transit Adopted Plan reserves to reimburse the federal interest in five (5) parcels located along the planned Greater Triangle Commuter Rail (GTCR) corridor in Wake County.

Action: Upon vote by roll call, the three previous motions were carried unanimously.

VI. GoForward Regional Technology Strategy

A presentation by Steven Schlossberg and Brian Fahey is attached and hereby made a part of these minutes. Schlossberg discussed various intelligent transportation systems and the focus of the regional partners to maximize alignment and achieve economies of scale. The priorities include for computer aided dispatch/automatic vehicle location (CAD/AVL), video security collision avoidance, Transit signal priority, Automatic Fare Collection Systems and fare payment.

Fahey discussed the implementation of mobile ticketing, which is expected to fully launch in February and will include fare capping.

GoTriangle Operations & Finance Committee
December 3, 2020
Meeting Minutes

VII. FY20 Comprehensive Annual Financial Report

Ren Wiles' presentation on the FY20 comprehensive annual financial report (CAFR) is attached and hereby made a part of these minutes. He reported that GoTriangle ended the year with a net position of \$479 million, an increase of \$90 million over the past year. He attribute the majority of that increase to the reduction of spending in Durham and Orange counties following the end of the light rail transit project and the net of revenues over spending in Wake County of almost \$71 million.

Wiles shared detailed charts on the various taxes that fund GoTriangle and the impact the pandemic played on those revenues. Both vehicle registration and vehicle rental taxes were down in FY20 from FY19; however, first quarter registration taxes in FY20 were up from the same time in FY19.

Parker commented that vehicle registration tax revenues have not increased at the same rate that traffic appears to have in the region. Freeman stated that a reconciliation of registered vehicles matches to revenues received. Robinson shared that SAS had worked with Wake County and other partners to determine why vehicle registration taxes are so low. What was revealed was a change in policy by NCDMV to pay the registration tax with license plate renewals and a desire to not burden an overwhelmed court system with expired tag cases.

Wiles added that sales tax revenues, after refunds, were down slightly in Durham County, but up in Orange and Wake for FY20.

Regarding the audit, Wiles said that there were no findings, no adjustments and not questionable costs noted by the auditors. He stated that an electronic version of the CAFR would be made available.

Freeman noted that the audit firm will present their report to the board in January. She congratulated Wiles and the team for an excellent report and audit.

VIII. Adjournment

Action: The meeting was adjourned at 9:53 a.m.

Vivian Jones, Committee Chair

Attest:

Michelle C. Dawson, CMC
Clerk to the Board of Trustees

GoTriangle Board of Trustees
Planning & Legislative Committee Meeting Minutes
November 18, 2020
Held Remotely via Webex

Committee Members Present:

Will Allen III, Chair
Sig Hutchinson

Wendy Jacobs (left 2:40 pm)
Mark Marcoplos

Committee Members Absent:

Michael Fox

Other Board Members Present:

Michael Parker

Steve Schewel

Committee Chair Will Allen III called the meeting to order at 1:00 p.m.

I. Adoption of Agenda

Action: On motion by Jacobs and second by Marcoplos the agenda was adopted. The motion was carried unanimously.

II. Approval of Minutes

Action: On motion by Hutchinson and second by Jacobs the minutes of the October 28, 2020, meeting were approved. The motion was carried unanimously.

III. Update on Current and Future Potential Bus Rapid Transit Projects

Katharine Eggleston introduced the presentation on current BRT projects underway and an overview of future high capacity transit corridors identified in anticipation of updates to the three county transit plans. Jay Heikes' presentation is attached and hereby made a part of these minutes. He shared general information on five current BRT projects: the North-South BRT in Chapel Hill and four in Raleigh: New Bern BRT, Southern BRT, Western BRT and Northern BRT. He also reviewed four high capacity transit corridors from the 2045 metropolitan transportation plans: Morrisville - Clayton, Chapel Hill - Durham, Durham - RTP and Carrboro - RTP.

The committee discussed various issues and planning related to BRT, including bicycle and pedestrian facilities, electric vehicles; Transit Advisory Committee input; potential development along corridors; design standards to ensure operational flexibilities, facilities that can accommodate various size vehicles and a seamless passenger experience; process of addressing redundancy of service; and dedicated lanes.

Heikes presented a list of potential elements of high capacity transit projects grouped into three categories: priority lanes, intersection treatments and stop enhancements.

Jacobs left.

IV. Adjournment

Action: Chair Allen adjourned the meeting was adjourned at 2:47 p.m.

Will Allen III, Committee Chair

Attest:

Michelle C. Dawson, CMC
Clerk to the Board of Trustees

CONTRACT WORK ORDERS – NOV 2020 (< \$100K)

Contract #	Contractor (or subject if no contractor listed)	Contract Amount	Subject	Comments	General Counsel (Shelley Curran) Date Executed	President & CEO (Charles Lattuca) Date Executed
20-051	CAMPO	\$0.00	General Operating Agreement	This Agreement provides for a General Operating Agreement with CAMPO. The budget is outlined in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	10/30/20	11/2/20
20-047	CAMPO	\$0.00	General Operating Agreement for Transit Plan Administration	This Agreement provides for General Operating Agreement for Transit Plan Administration with CAMPO. The budget is outlined in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	11/2/20	11/3/20
20-046	CAMPO/Town of Apex	\$0.00	General Operating Agreement for Bus Operations	This Agreement provides for General Operating Agreement for Bus Operations with CAMPO, Town of Apex and GoTriangle. The budget is outlined in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	11/2/20	11/3/20
20-041	CAMPO	\$0.00	General Operating Agreement for Bus Operations	This Agreement provides for General Operating Agreement for Bus Operations with CAMPO. The budget is outlined in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	11/2/20	11/3/20
19-025	CAMPO/Town of Apex	\$0.00	Amendment One to Special Operating Agreement Community Funding Area-Planning	The Original Agreement is amended to June 30, 2021 for Project TO002AB. Except as modified herein, Original Agreement shall continue in full force and effect.	11/2/20	11/3/20
20-039	CAMPO/GoCary	\$0.00	General Operating Agreement for Bus Operations	This Agreement provides for General Operating Agreement for Bus Operations with CAMPO, Town of Cary and GoTriangle. The budget is outlined in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	11/2/20	11/3/20
20-050	CAMPO	\$0.00	General Operating Agreement for Transit Plan Administration	This Agreement provides for General Operating Agreement for Transit Plan Administration with CAMPO. The budget is outlined in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	11/2/20	11/3/20
20-044	Wake County	\$0.00	General Operating Agreement for Bus Operations	This Agreement provides for General Operating Agreement for Bus Operations with Wake County. Budget is outlined in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	11/8/20	11/13/20
19-083	City of Durham	\$0.00	Amendment One GoPass Agreement	This Amendment One with the City of Durham provides for an extension of the GoPass Agreement to June 30, 2021.	11/12/20	11/16/20

CONTRACT WORK ORDERS – NOV 2020 (< \$100K)

Contract #	Contractor (or subject if no contractor listed)	Contract Amount	Subject	Comments	General Counsel (Shelley Curran) Date Executed	President & CEO (Charles Lattuca) Date Executed
20-008	Hoffman and Associates	\$0.00	Amendment Two to Memorandum of Understanding of (MOU)	This Amendment Two to Memorandum of Understanding (MOU) provides for an extension to March 31, 2021 with Hoffman and Associates.	11/17/20	11/17/20
20-049	City of Raleigh	\$0.00	General Operating Agreement for Transit Plan Administration	This Agreement provides for General Operating Agreement for Transit Plan Administration with the City of Raleigh. Budget is outline in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	11/17/20	11/18/20
20-071	Town of Holly Springs	\$0.00	The Town of Holly Springs General Capital Bus Infrastructure Agreement	This Agreement provides for General Capital Bus Infrastructure Agreement with the Town of Holly Springs. Budget is outline in Exhibit A. The term of this Agreement shall remain effective until September 30, 2022.	11/19/20	11/19/20
20-011	City of Raleigh	\$0.00	License Agreement 324 W Lane Street	This License Agreement is for the usage of a portion of the property at 324 W Lane Street with the City of Raleigh. The Licensee (City of Raleigh) shall pay Licensor (GoTriangle) a fee of \$24,999 (\$8,333 per fiscal year) for the grant of this License. The term of this License begins November 1, 2020 through October 31, 2023.	11/21/20	11/22/20
20-053	CAMPO/City of Raleigh	\$0.00	Special Capital Funding Agreement for Bus Rapid Transit	This Agreement provides for Special Capital Funding Agreement for Bus Rapid Transit with CAMPO, City of Raleigh, and GoTriangle. Budget is outline in Exhibit A. The term of this Agreement shall remain effective until September 30, 2023.	11/30/20	11/30/20
20-040	CAMPO/City of Raleigh	\$0.00	General Operating Agreement for Bus Operations	This Agreement provides for General Operating Agreement for Bus Operations with CAMPO, City of Raleigh and GoTriangle. Budget is outline in Exhibit A. The term of this Agreement shall be from the Effective Date until September 30, 2021.	11/30/20	11/30/20

HR Board Report - December 2020

NEW HIRES

- Wondwossen Endshaw – Bus Operator I
- Dora Francher – Service Attendant
- Terri Stozier – Bus Operator I
- Shantel Parham – Customer Information Specialist I
- Lauren Yates – Customer Information Specialist I

PROMOTIONS

None

SERVICE AWARDS

Sam Whitney, 15 Years

Larry Villines, 15 Years

RECRUITING

- IT Project Manager
- Public Involvement Associate
- Bus Operator I
- Customer Information Specialist

MEMORANDUM

TO: GoTriangle Board of Trustees
FROM: Planning and Capital Development
DATE: December 2, 2020
SUBJECT: Capital Projects Status Report

Strategic Objective or Initiative Supported

2.4 Ensure an attractive and accessible transit environment

Action Requested

None

Background and Purpose

The Wake, Durham, and Orange transit plans and the GoTriangle Capital Improvement Program include funds to support planning, development, and delivery of transit capital infrastructure projects ranging from bus stop amenities to commuter rail infrastructure. This report includes a brief snapshot of the status, upcoming activities, and notable risks to on-time/on-budget delivery for active capital projects. The report is organized into the following sections:

- Bus Passenger Facilities
- Bus Operations and Maintenance Facilities
- Rail Transit Infrastructure Development

This report is updated monthly. New/updated information from the previous month's report is shown in underlined green text.

Financial Impact

None

Attachments

- None

Staff Contact

- Katharine Eggleston, 919-485-7564, keggleston@gotriangle.org

Bus Passenger Facilities

Projects Under Construction

GoDurham Bus Stop Improvements FY19 (18DCI CD4)

Description – This project includes site selection, design, and construction of passenger amenities at 21 bus stops in the GoDurham system.

Status – Construction at 20 stops is substantially complete. The Glenn View Station stop (pictured) went into service on September 7, and a ribbon-cutting ceremony took place on September 8.

Upcoming Activities – Landscaping and pavement painting at Glenn View Station and right-of-way acquisition are scheduled for [early December](#). Preparation for construction procurement for the remaining stop is scheduled to be completed in the coming months.

GoDurham Bus Stop Improvements FY20 (20GOT CD2)

Description – This project includes site selection, design, and construction of passenger amenities at 50 bus stops in the GoDurham system for which design began in FY20.

Status – The City of Durham has approved construction drawings for 35 stops, with an additional 14 stops under review. Shelters, benches, and trash receptacles were delivered the week of October 5. [Construction for the first group of 16 stops is underway](#). Construction preparation is underway for a subsequent group of 17 stops, and GoTriangle has begun real estate acquisition activities for a further subsequent group of stops.

Upcoming Activities – Completion of design, plan, approval, right-of-way acquisition, and construction procurement for the remaining groups of stops is planned to continue through the remainder of the fiscal year.

Projects in Design

Patterson Place Improvements (18GOT CD4)

Description – Nearly 200 riders per day board buses at the existing transfer point and park-and-ride at Patterson Place, which is served by GoTriangle route 400 and GoDurham routes 10 and 10A. This project includes new/additional concrete shelter pads and shelters on Witherspoon Boulevard and McFarland Drive in Patterson Place, landscaping improvements, and a curb-radius improvement to allow buses to turn right from southbound Witherspoon Boulevard onto westbound McFarland Drive to reduce bus travel time and serve additional future park-and-ride spaces.

Status – Owner reviewed and provided feedback on the pocket park concept plan. Construction drawings are being finalized for submittal to the City for approval.

Upcoming Activities – Pending construction drawing approval, GoTriangle will schedule necessary right-of-way acquisition activities.

Hillsborough Park-and-Ride (18GOT CD8)

Description – This project includes site selection, real estate acquisition, design, and construction of a permanent park-and-ride for GoTriangle route ODX in Hillsborough. Park-and-ride utilization at the current leased lot for the ODX in Hillsborough is approximately 15 spaces per day. The original plan for the new lot included 35-50 spaces across two parcels of land; right-of-way for the full facility was acquired, however due to increased construction cost estimates, the scope was reduced to 31 spaces to allow for some growth in utilization while deferring full build-out to a future phase.

Status – The design is currently advancing through the plan approval process with Orange County, and the design consultant is coordinating resolution of utility conflicts. Staff and outside counsel have identified the need for additional real estate agreements related to use of property that had previously been identified as an existing undeveloped right-of-way within the site, and are currently coordinating with Orange county staff to evaluate the procedural steps and time required to resolve.



Upcoming Activities – Plan approval is expected within 60 days following resolution of the real estate issue. Orange County will schedule a Neighborhood Information Meeting when final plans are available, to inform neighbors of the upcoming construction project.

Schedule Risks – As noted above, a need for additional real estate agreements was identified during site plan review. Coordination with Orange County and NCDOT staff to resolve this is ongoing. The schedule for plan approval and turnover of the project to Orange County for construction is dependent on resolution of the real estate issue.

GoTriangle Bus Stop Improvements in Orange County (18GOT CD12)

Description – This project includes site selection, design, and construction of passenger amenities at up to 10 bus stops in the GoTriangle system within Orange County.

Status – Designs for four stops is complete and have been turned over to Orange County for permitting and construction; NCDOT approval for those stops is complete. Design procurement for an additional six stops is underway.

Upcoming Activities – GoTriangle expects to complete design for six stops in the coming months.

GoTriangle Bus Stop Improvements In Wake County (TC002-L/M/Y)

Description – The Wake Transit Plan includes funding for improvements at existing and new GoTriangle bus stops throughout Wake County.

Status – A task order for design of 23 stops was issued in early May, and design and NCDOT permitting is nearly complete.

Upcoming Activities – [Construction procurement will begin this winter for an initial group of stops not requiring right-of-way acquisition.](#)

GoTriangle Bus Stop Improvements in Durham County (18GOT CD7)

Description – This project includes site selection, design, and construction of passenger amenities at up to 10 bus stops in the GoTriangle system within Durham County.

Status – Removal and replacement of the two existing bus shelters along the eastbound side of NC 54 opposite the Boxyard project is complete; coordination with RTP regarding stop improvements at the future HUB site is underway. Planning activities for additional GoTriangle bus stop improvements in Durham County [are complete](#), including coordination with the Durham VA Medical Center and Duke University regarding stops on Erwin Road and on campus. Design procurement for [these eight](#) additional stops is underway.

Upcoming Activities – GoTriangle will continue to coordinate with RTP regarding the westbound stop at the Boxyard and stops at HUB RTP, and will initiate design of additional stops [in the coming months.](#)

Raleigh Union Station Bus Facility (TC002-A)

Description – This project includes publicly-funded design and construction of an eight-bay off-street bus facility and related transit access improvements adjacent to Raleigh Union Station in downtown Raleigh, in conjunction with privately-funded mixed-use air rights development above the bus facility. The project was awarded a \$20 million BUILD grant from the US Department of Transportation (USDOT).

Status – The 30 percent design of the Transit Facility has made a lot of progress and we are getting near to having the development team start creating an up-to-date cost estimate for the facility. The Joint Development Agreement is progressing and is anticipated to be completed early next year. Coordination with FTA, City of Raleigh, SHPO, NCDOT and other stakeholders is ongoing to confirm third-party requirements affecting the project definition. Monthly federal oversight meetings have begun and a PMOC has been assigned to the project.

Upcoming Activities – Coordination activities, design progress meetings, and agreement negotiations will continue on the project. The 30 percent design phase of the transit facility is still on track for completion by the end of this calendar year.



Schedule Risks – The structure of the delivery approach for the project is complex, and will require coordination and partnership with FTA region IV and headquarters staff to ensure grant requirements are appropriately met and documented as the contracting process with the development partner progresses. Development and execution of the Joint Development Agreement is critical.

Cost Risks – Continued design advancement is critical to begin advancing design to obtain a more detailed basis to refine cost estimates and obtain a clear cost risk profile for the project. Key cost risk areas include unknown geotechnical conditions, uncertain historic preservation requirements, final rezoning commitments, and design details.

I-540 Bus On Shoulder (TC002-BC)

Description – This project will design, purchase, and install signage along the northwest leg of I-540 to facilitate Bus on Shoulder implementation. GoTriangle's NRX route would benefit by the ability to use the shoulder during times of heavy traffic.

Status – NCDOT has completed sign designs, cost estimates, and plans. Development of an agreement with NCDOT is underway.

Upcoming Activities – GoTriangle staff is preparing for procurement of sign fabrication and installation.

Durham Station Improvements Preliminary Design (21GOT_CD03)

Description – This project will develop a preliminary design package for improvements to the passenger experience and functional operations of Durham Station. Upon completion of the preliminary design, the project will be handed off to the City of Durham for design development and construction.

Status – At its November meeting, the GoTriangle Board of Trustees authorized GoTriangle to enter into negotiations with the selected consultant. GoTriangle staff is finalizing scope, schedule, and cost and negotiating the contract with the selected consultant targeting contract award by the end of calendar December 2020.

Upcoming Activities – Kickoff activities are scheduled for early 2021.

Projects in the Planning Phase

Park-and-Ride Improvements in Wake County (Short-Term) (TC002-K)

Description – The Wake Transit Plan includes funding for short-term improvements to existing park-and-ride locations, in anticipation of more substantive investments that may be identified through the park-and-ride feasibility study. One such improvement is currently in the planning phase; this project includes signs, markings, and passenger amenities at a new/replacement leased park-and-ride for GoTriangle route WRX at a new location to be determined.

Status – GoTriangle signed a lease agreement with the Town of Wake Forest to lease the SunTrust lot until June 30, 2021. A bus stop has been added at this location.

Schedule Risks – Ongoing coordination with GoRaleigh and Wake County to identify a new location off US 1 halted because of COVID 19.

Regional Transit Center Feasibility Study (TC002-N)

Description – The Regional Transit Center (RTC) is the primary hub for GoTriangle regional bus services connecting Wake, Durham, and Orange Counties. The current location of the RTC on Slater Road in Durham creates overlapping routes leading to inefficiency. This feasibility study is evaluating location options that improve route efficiency and improve passenger amenities.

Status – Initial public engagement, including a web and social media presence and a survey was completed in June as a part of GoTriangle's virtual engagement initiative. Identification of site operational requirements is complete. The consulting team has identified and screened initial alternative sites that meet those criteria and prepared preliminary evaluation criteria for each of those sites in coordination with GoTriangle. Four virtual workshops with stakeholder groups have been conducted to date. The site selection evaluation is complete, yielding two final alternative partnership-based



relocation sites and stakeholder engagement is ongoing. A third site will be carried forward for continued consideration resulting from stakeholder engagement. [Site visits and virtual design coordination workshops are scheduled with property owners in early to mid-December.](#)

Upcoming Activities – Remaining tasks include further evaluation of three final alternative sites and property owner coordination, selection of a preferred site and development of conceptual site layouts for the preferred site.

Schedule Risks – The primary risk to continued progress is potential postponement of community/rider and stakeholder engagement related to COVID-19.

Wake Transit Long-Term Park-and-Ride Feasibility Study (TC002-O)

Description – This feasibility study will assess potential locations for park-and-ride facilities throughout Wake County. Many municipalities within the county have expressed a desire for a park and ride facility to meet the long-term needs of residents. While many communities currently lease space in existing lots, mainly within commercial developments, their locations lack amenities and proximity to major thoroughfares. This study will determine the best location for park-and-ride lots in the county.

Status – Initial public engagement, including a web and social media presence and a survey was completed in June as a part of GoTriangle’s virtual engagement initiative. Search criteria for new park and rides in Northern Wake and West Raleigh, identified in the Wake Bus Plan, have been finalized. The consulting team has identified and screened initial alternative sites for the two new park and rides that meet those criteria and prepared preliminary evaluation criteria for each of those sites in coordination with GoTriangle. Review of the site selection evaluation is complete and stakeholder engagement is ongoing. [A single viable site was identified for the West Raleigh Park and Ride and an initial design concept has been produced and is being reviewed by GoTriangle staff. Recommendations for improvements, and in some cases relocation/expansion of, existing park and ride lots have been produced and will support the design and construction of FY22 and future year improvements to existing park and ride lots.](#)

Upcoming Activities – Remaining tasks for a new park and ride lot in Northern Wake, selection of a preferred site, and development of a conceptual design for the preferred site. [The need for additional coordination with Wake County and NCDOT regarding land use regulation and site access prior to selecting a preferred site has been identified. Projected budget at completion of this study is less than originally budgeted; remaining funds will be used to conduct feasibility, site selection, and conceptual design for two additional park and ride lots included in the Wake Transit Plan – Gorman Street and Wake Forest.](#)

Schedule Risks – The primary risk to continued progress is potential postponement of community/rider engagement related to COVID-19.



Bus Operations and Maintenance Facilities

Projects in the Design Phase

Paratransit Office Space Upfit (TC002-J)

Description – This project will upfit office space and the parking lot at the Plaza building to facilitate moving Paratransit operations from the Nelson Road Facility.

Status – The consultant has completed design development drawings, and is working with GoTriangle to complete construction documentation and prepare for permitting and contractor procurement. GoTriangle staff is working to confirm approach for information technology and furniture installation, as well as coordinating personnel and equipment for the transition as well as other considerations for the full-project implementation.

Upcoming Activities – GoTriangle and the consultant will finalize construction documentation and obtain construction permits and site plan approvals. In early calendar 2021, GoTriangle will prepare for procurement of a contractor to perform the construction. Grant funding reporting is ongoing for the project.

Projects in the Planning Phase

Regional Fleet and Facilities Study (CD-21-19 A)

Description – This study includes three components: (1) assessing fleet and maintenance facility needs for GoDurham and developing a conceptual design for these needs, (2) assessing fleet and maintenance facility needs for GoTriangle and developing a conceptual design for these needs, and (3) planning for potential regional electric bus charging infrastructure and other potential shared operations and maintenance resources for GoTriangle and partners in the region. The scope of services includes planning, conceptual design, and cost estimating to assess needs for expansion of existing maintenance facility sites and evaluate up to four alternative sites for new facilities for GoDurham and GoTriangle. The Study will identify potential expansions and alternatives to current utilization of existing facilities that will improve cost-efficiency and provide responsive services.

Status – At its November meeting, the GoTriangle Board of Trustees authorized GoTriangle to enter into negotiations with the selected consultant. GoTriangle staff is finalizing scope, schedule, and cost and negotiating the contract with the selected consultant targeting contract award by the end of calendar December 2020.

Upcoming Activities – Kickoff activities are scheduled for early 2021.



Rail Transit Infrastructure Development

Greater Triangle Commuter Rail Study (19GOT CO2/20GOT CD1/TC004-A)

Description – The current phase of study is evaluating the potential for new commuter rail service in the North Carolina Railroad Company (NCRR) corridor in Durham, Wake, and Johnston counties, and will refine the project definition; engage community members, municipalities, and institutional stakeholders; and better understand critical project success factors. In coordination with project partners, GoTriangle will conduct preliminary engineering analysis in areas of concern along the corridor, model rail traffic on the corridor with the inclusion of commuter rail to better define infrastructure needs, and better refine cost and ridership estimates.

Status and Upcoming Activities – As of April 6, all parties to the Memorandum of Understanding in Support of Continued Development of the GTCR Project, including Johnston county, had voted to proceed with further study. Authorizations for additional consultant support were approved by the GoTriangle Board in May. Study activities across a range of tasks were initiated in June and were ongoing through the summer. Priority early activities in this phase of work are as follows:

- Railroad Coordination – [In November, GoTriangle and NCRR awaited a response to comments on the draft modeling agreement provided to Norfolk Southern in late October. GoTriangle also has initiated engagement with specialty railroad counsel to prepare for negotiating term sheets with railroad partners.](#)
- Engagement with “resource partners” including local governments, institutions, and other regional partners – GoTriangle [is continuing meetings with municipalities individually and as a group with institutional partners on a monthly basis as needed.](#) Kickoff meetings for the Cary and Durham downtown engineering studies were held in August and September, respectively. Direct engagement with economic development practitioners and the real estate development community specific to the economic development component of the study began in September [and was completed in November.](#)
- Community Engagement – [GoTriangle is processing input received from 2,700 participants during the first community engagement period for the study, and initiating planning for the second round of engagement planned for early 2021.](#)
- Schedule Management – The initial baseline schedule is complete; GoTriangle and the consultant are meeting monthly to formally assess progress and manage interfaces between dependent tasks.

Schedule Risks – To date, it appears that primary risks to timely completion of the next steps are related to coordination with entities that are not party to the MOU (e.g. railroads, municipalities, affected major institutions), identification and resolution of competing/conflicting stakeholder goals, and satisfactory engagement with the public under COVID restrictions. These are key priorities with the next steps defined in the MOU. Without mitigation, continued delay in initiating the railroad capacity modeling will result in delay to study completion.

Cost Risks – To date, it appears that primary risks to setting a budget within the range of \$1.4B to \$1.8B identified during the earlier phase of study for the Durham-Garner project concept are related to the infrastructure requirements resulting from rail network modeling and related negotiation, design for engineering solutions to engineering constraints in downtown Durham and downtown Cary, and quantification of necessary levels of contingency required to address FTA risk management guidelines. These are key priorities with the next steps defined in the MOU.

