

# NCDOT Transit Asset Management Plan

## Ryan Brumfield, Accountable Executive

Last modified by Jonah Freedman on 11 Feb 21 at 17:00

### Introduction

The North Carolina Department of Transportation (NCDOT) has prepared the following Group TAM plan on behalf of all eligible transit agencies in the state. This plan reflects the data submitted by participating transit agencies serving all counties in the state of North Carolina. Transit agencies may serve multiple counties and some agencies may serve a portion of a county, often in a collaborative effort with another agency(s).

### Performance Targets & Measures

Asset Category - Performance Measure	Asset Class	2021 Target
<b>REVENUE VEHICLES</b>		
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	AB - Articulated Bus	N/A
	AO - Automobile	20%
	BR - Over-the-road Bus	N/A
	BU - Bus	20%
	CU - Cutaway Bus	20%
	DB - Double Decked Bus	N/A
	FB - Ferryboat	20%
	MB - Mini-bus	20%
	MV - Mini-van	20%
	RT - Rubber-tire Vintage Trolley	N/A
	SB - School Bus	N/A
	SV - Sport Utility Vehicle	N/A
	TB - Trolleybus	N/A
	VN - Van	20%
EV - Electric Vehicle	20%	
Custom 2	N/A	
Custom 3	N/A	
<b>EQUIPMENT</b>		
Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Non Revenue/Service Automobile	20%
	Steel Wheel Vehicles	N/A
	Vehicle Technology	20%
	Maintenance Equipment	20%
	Computer Software	20%
	Office Equipment	20%
<b>FACILITIES</b>		
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration	20%
	Maintenance	20%
	Parking Structures	20%
	Passenger Facilities	20%
	Shelter	20%
	Storage	20%
	Custom 3	N/A

## Capital Asset Inventory

Please see Appendix A (Asset Register) for the asset inventory listing.

### Asset Inventory Summary

Asset Category	Total Number	Avg Age	Avg Mileage	Avg Value
<b>Revenue Vehicles</b>	<b>1744</b>	<b>4.7</b>	<b>91,891</b>	<b>\$96,154.36</b>
<i>AB - Articulated Bus</i>	0	-	-	-
<i>AO - Automobile</i>	2	5.5	149,769	\$23,920.00
<i>BR - Over-the-road Bus</i>	0	-	-	-
<i>BU - Bus</i>	144	5.7	269,347	\$488,413.11
<i>CU - Cutaway Bus</i>	882	4.3	82,865	\$67,561.36
<i>DB - Double Decked Bus</i>	0	-	-	-
<i>FB - Ferryboat</i>	1	1.0	N/A	\$804,224.00
<i>MB - Mini-bus</i>	3	4.0	39,936	\$63,500.00
<i>MV - Mini-van</i>	124	5.4	67,030	\$30,915.23
<i>RT - Rubber-tire Vintage Trolley</i>	0	-	-	-
<i>SB - School Bus</i>	0	-	-	-
<i>SV - Sport Utility Vehicle</i>	0	-	-	-
<i>TB - Trolleybus</i>	0	-	-	-
<i>VN - Van</i>	569	4.8	80,056	\$56,577.47
<i>EV - Electric Vehicle</i>	6	3.0	N/A	\$30,660.00
<i>Custom 2</i>	0	-	-	-
<i>Custom 3</i>	0	-	-	-
<b>Equipment</b>	<b>56</b>	<b>10.0</b>	<b>108,548</b>	<b>\$48,622.43</b>
<i>Non Revenue/Service Automobile</i>	36	10.9	108,548	\$22,853.04
<i>Steel Wheel Vehicles</i>	0	-	-	-
<i>Vehicle Technology</i>	13	8.4	N/A	\$95,027.46
<i>Maintenance Equipment</i>	3	11.3	N/A	\$100,727.83
<i>Computer Software</i>	1	4.0	N/A	\$93,770.00
<i>Office Equipment</i>	3	7.3	N/A	\$89,612.00
<b>Facilities</b>	<b>166</b>	<b>16.5</b>	<b>N/A</b>	<b>\$1,058,791.79</b>
<i>Administration</i>	89	19.0	N/A	\$1,071,635.49
<i>Maintenance</i>	34	21.5	N/A	\$1,716,944.76
<i>Parking Structures</i>	3	3.3	N/A	\$412,373.33
<i>Passenger Facilities</i>	13	7.8	N/A	\$965,770.46
<i>Shelter</i>	24	8.0	N/A	\$8,240.75
<i>Storage</i>	2	8.5	N/A	\$8,921.00
<i>Custom 3</i>	0	-	N/A	-

## Condition Assessment

Please see Appendix B (Asset Condition Data) for individual asset condition listing.

### Asset Condition Summary

Asset Category	Total Number	Avg Age	Avg Mileage	Avg TERM Condition	Avg Value	% At or Past ULB
<b>Revenue Vehicles</b>	<b>1744</b>	<b>4.7</b>	<b>74,751</b>	<b>N/A</b>	<b>\$96,154.36</b>	<b>10%</b>
<i>AB - Articulated Bus</i>	0	-	-	N/A	-	-
<i>AO - Automobile</i>	2	5.5	149,769	N/A	\$23,920.00	50%
<i>BR - Over-the-road Bus</i>	0	-	-	N/A	-	-
<i>BU - Bus</i>	144	5.7	158,989	N/A	\$488,413.11	13%
<i>CU - Cutaway Bus</i>	882	4.3	66,706	N/A	\$67,561.36	5%
<i>DB - Double Decked Bus</i>	0	-	-	N/A	-	-
<i>FB - Ferryboat</i>	1	1.0	N/A	N/A	\$804,224.00	0%
<i>MB - Mini-bus</i>	3	4.0	39,936	N/A	\$63,500.00	0%
<i>MV - Mini-van</i>	124	5.4	55,137	N/A	\$30,915.23	20%
<i>RT - Rubber-tire Vintage Trolley</i>	0	-	-	N/A	-	-
<i>SB - School Bus</i>	0	-	-	N/A	-	-
<i>SV - Sport Utility Vehicle</i>	0	-	-	N/A	-	-
<i>TB - Trolleybus</i>	0	-	-	N/A	-	-
<i>VN - Van</i>	569	4.8	70,207	N/A	\$56,577.47	14%
<i>EV - Electric Vehicle</i>	6	3.0	N/A	N/A	\$30,660.00	0%
<i>Custom 2</i>	0	-	-	N/A	-	-
<i>Custom 3</i>	0	-	-	N/A	-	-
<b>Equipment</b>	<b>56</b>	<b>10.0</b>	<b>108,548</b>	<b>N/A</b>	<b>\$48,622.43</b>	<b>55%</b>
<i>Non Revenue/Service Automobile</i>	36	10.9	108,548	N/A	\$22,853.04	75%
<i>Steel Wheel Vehicles</i>	0	-	-	N/A	-	-
<i>Vehicle Technology</i>	13	8.4	N/A	N/A	\$95,027.46	31%
<i>Maintenance Equipment</i>	3	11.3	N/A	N/A	\$100,727.83	0%
<i>Computer Software</i>	1	4.0	N/A	N/A	\$93,770.00	0%
<i>Office Equipment</i>	3	7.3	N/A	N/A	\$89,612.00	0%
<b>Facilities</b>	<b>166</b>	<b>16.5</b>	<b>N/A</b>	<b>3.9</b>	<b>\$1,058,791.79</b>	<b>N/A</b>
<i>Administration</i>	89	19.0	N/A	3.8	\$1,071,635.49	N/A
<i>Maintenance</i>	34	21.5	N/A	3.9	\$1,716,944.76	N/A
<i>Parking Structures</i>	3	3.3	N/A	4.3	\$412,373.33	N/A
<i>Passenger Facilities</i>	13	7.8	N/A	4.1	\$965,770.46	N/A
<i>Shelter</i>	24	8.0	N/A	4.5	\$8,240.75	N/A
<i>Storage</i>	2	8.5	N/A	4.5	\$8,921.00	N/A
<i>Custom 3</i>	0	-	N/A	-	-	N/A

## Decision Support

### Investment Prioritization

Vehicle investment prioritization is administered using the Vehicle Replacement Schedule. This plan shows each agency's NCDOT funded vehicles and calculates based on the spare ratio, the number of vehicles that agency is eligible to replace each year. The tool also calculates the number of vehicles that an MPO will be responsible for funding in the upcoming fiscal year. The Capital Replacement Plan is then created based on each system's vehicle replacement schedule and every vehicle for every system is given a projected replacement year.

### Decision Support Tools

The following tools are used in making investment decisions:

Process/Tool	Brief Description
STI	Used for Facility Prioritization
Vehicle Replacement Schedule	Used to project vehicle replacement and useful life based on the spare ratio of the agency.
NCDOT_Vehicle_Inventory	Database of NCDOT titled vehicles used to track replacement eligibility and vehicles pending replacement
TERM Scale Condition Worksheet	Worksheet created as an appendix to the TAM Inventory used to assess the TERM Scale Condition of all facilities used in the provision of transit within the NCDOT Group TAM Plan.
TAM Inventory	Excel-based inventory tool used to collect all of the asset data necessary to complete this template including some information that was not necessary in that process.
EAM Asset Management Software (AssetWorks)	Web-based asset maintenance software used to track vehicle mileages and preventative maintenance services. Data from this software was used to populate the vehicle mileages in the TAM Inventory and the TAM Template.

## Investment Prioritization

The list of prioritized investment projects is provided in Appendix C.

### Appendices

<a href="#">Appendix A</a>	Asset Register
<a href="#">Appendix B1</a>	Revenue Vehicle (Rolling Stock) Condition Data
<a href="#">Appendix B2</a>	Equipment Condition Data
<a href="#">Appendix B3</a>	Facilities Condition Data
<a href="#">Appendix C</a>	Proposed Investment Project List

### Group Plan Contributors:

Agency Name	Accountable Executive
Alamance County Transportation Authority	Ralph E. Gilliam
Albemarle Regional Health Services	Herb Mullen
Alleghany County	Tiffany Boyer
Anson County	Scott Rowell
AppalCART	Craig Hughes
Ashe County Transportation Authority, Inc.	Amanda Roten
Avery County Transportation Authority	Deborah Smith
Beaufort County Developmental Center Inc.	Elena G. Cameron
Bladen County	Kent Porter
Brunswick Transit System, Inc.	Yvonne Hatcher
Buncombe County	Matthew Cable
BURLINGTON	Mike Nunn
Cabarrus County	Robert Bushey
Carteret County	Randy Cantor
Craven County	Kelly Walker
GOCARY	Kelly A. Blazey, Transit Administrator
Caswell County	Melissa Williamson
Chatham Transit Network	Anna Testerman
Cherokee County	Jennifer West
Choanoke Public Transportation Authority	Pamela Perry
City of Rocky Mount	Todd Gardner
Clay County	Marie Gunther
Transportation Administration of Cleveland County	Stephanie Costner
Columbus County	Joy Jacobs
CONCORD/KANNAPOLIS	L.J. Weslowski
Cumberland County	Ifetayo Farrakhan
Dare County	Sharon Flatt
Davidson County	Richard M. Jones, Jr.
Duplin County	Angel Venecia
Gaston County	Michael Coone
GASTONIA	Vincent Wong
Gates County	Patrice Taylor-Lassiter
Goldsboro-Wayne Transportation Authority	Don Willis
Graham County	Juanita Colvard
Greene County	Misty Chase
GREENVILLE	Kevin Mulligan
Guilford County	Irma Zimmerman
Harnett County	Larry Smith
Hoke County	Nancy Thornton
Hyde/Tyrrell	Beverly Paul
Iredell County	Bradley Johnson
Jackson County	Norma L. Taylor
JACKSONVILLE	Anthony Prinz

Johnston County Council on Aging, Inc.	Neal Davis
Kerr Area Transportation Authority	Irene Johnson
Lee County	Debbie Davidson
Lenoir County	Angela Greene
Lincoln County	Kristal Ford
Macon County	Kim Angel
Madison County Transportation Authority	Amy Barcomb
Martin County	Charmaine Hardison
McDowell Transit	Randall Dean Conley Jr
Mecklenburg County	Masie Jones
Mitchell County Transportation Authority	Sheila Blalock
Moore County	Sonia J. Biggs
Mountain Projects Inc.	Si Simmons
Ocracoke Passenger Ferry	Catherine Peele
Ocracoke Island Tram	Kris Cahoon Noble
Orange County	Theo Letman
Onslow United Transit System, Inc.	Carol H Long
Pender Adult Services Inc.	James R. Longenbach
Person County	Kurt Neufang
Pitt County/Pitt Area Transit System	Charles Cameron Coburn
Polk County Transportation Authority	Joshua Kennedy
Randolph County Senior Adults Assoc. Inc.	Tawanna M. Williams
Richmond Interagency Transportation, Inc.	James Neel Peacock
Robeson County	SHARON ROBINSON
Rockingham County Council on Aging Inc.	Meggan Odll
Rowan County	Valerie S. Steele
Rutherford County	Kerry Giles
SALISBURY	Rodney L. Harrison
Sampson County	Rosemarie Oates
Scotland County	April Snead
Stanly County	Randy H. Shank
Swain County Focal Point on Aging Inc.	Marlene Vinson
Transylvania County	April L Alm
Union County	Theresa Torres
Wake County	Anita Davis
Washington County	Lynn Swett
Western Carolina Community Action Inc.	Bill Crisp
Wilkes Transportation Authority	Michael Johnson
Wilson City	Gronna Jones
Wilson County	James Diggs
WPRTA	Jeff Blalock
Yancey County Transportation Authority	Michael Harris
Yadkin Valley Economic Development District Inc.	Jeff Cockerham
Eligible Group TAM Plan Agencies Opting Out	
If you are a Group TAM Plan Sponsor, please list your	
Agency Name	Respondent
Asheville (ART)	Kimille N. Miller
Greensboro	Gray Johnston
High Point	Angela Wynes
GoRaleigh	Cyrstal Odum
WAVE Transit	Megan Matheny
Fayetteville	Tyffany L. Neal
Durham City	Pierre Osei-Owusu
Chapel Hill Transit	In-eligible (>100 vehicles)
Charlotte	In-eligible (>100 vehicles)
GoTriangle	In-eligible (>100 vehicles)
Piedmont Regional Transit Authority	In-eligible (>100 vehicles)
Winston-Salem Transportation Authority	Tomeka Cockerham