

NCDOT Transit Asset Management Plan

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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 | 2023 Target |
|---|---------------------------------------|-------------|
| REVENUE VEHICLES | | |
| 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 | 20% |
| | TB - Trolleybus | N/A |
| | VN - Van | 20% |
| Custom 1 | N/A | |
| Custom 2 | N/A | |
| Custom 3 | N/A | |
| EQUIPMENT | | |
| Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB) | Non Revenue/Service Automobile | 20% |
| | Steel Wheel Vehicles | N/A |
| | Trucks and other Rubber Tire Vehicles | N/A |
| | Computer Software | 20% |
| | Office Equipment | 20% |
| | Maintenance Equipment | 20% |
| | Vehicle Technology | 20% |
| FACILITIES | | |
| 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 |
|--|--------------|-------------|---------------|-----------------------|
| Revenue Vehicles | 1718 | 4.9 | 95,090 | \$82,457.44 |
| <i>AB - Articulated Bus</i> | 0 | - | - | - |
| <i>AO - Automobile</i> | 3 | 4.0 | 75,758 | \$21,391.33 |
| <i>BR - Over-the-road Bus</i> | 0 | - | - | - |
| <i>BU - Bus</i> | 87 | 9.4 | 284,285 | \$480,821.70 |
| <i>CU - Cutaway Bus</i> | 888 | 4.3 | 83,630 | \$67,383.60 |
| <i>DB - Double Decked Bus</i> | 0 | - | - | - |
| <i>FB - Ferryboat</i> | 1 | 2.0 | N/A | \$804,224.00 |
| <i>MB - Mini-bus</i> | 3 | 5.0 | 55,589 | \$63,500.00 |
| <i>MV - Mini-van</i> | 107 | 5.5 | 61,055 | \$31,908.89 |
| <i>RT - Rubber-tire Vintage Trolley</i> | 0 | - | - | - |
| <i>SB - School Bus</i> | 0 | - | - | - |
| <i>SV - Sport Utility Vehicle</i> | 1 | 3.0 | 3,247 | \$20,917.00 |
| <i>TB - Trolleybus</i> | 0 | - | - | - |
| <i>VN - Van</i> | 622 | 4.9 | 92,163 | \$56,777.69 |
| <i>Custom 1</i> | 0 | - | - | - |
| <i>Custom 2</i> | 0 | - | - | - |
| <i>Custom 3</i> | 0 | - | - | - |
| Equipment | 77 | 9.4 | 88,789 | \$52,146.88 |
| <i>Non Revenue/Service Automobile</i> | 52 | 10.1 | 88,789 | \$27,357.43 |
| <i>Steel Wheel Vehicles</i> | 0 | - | - | - |
| <i>Trucks and other Rubber Tire Vehicles</i> | 0 | - | - | - |
| <i>Computer Software</i> | 1 | 5.0 | N/A | \$93,770.00 |
| <i>Office Equipment</i> | 3 | 8.3 | N/A | \$89,612.00 |
| <i>Maintenance Equipment</i> | 3 | 12.3 | N/A | \$100,727.83 |
| <i>Vehicle Technology</i> | 18 | 7.2 | N/A | \$107,107.44 |
| Facilities | 173 | 16.8 | N/A | \$1,378,685.54 |
| <i>Administration</i> | 90 | 18.8 | N/A | \$993,068.32 |
| <i>Maintenance</i> | 34 | 22.2 | N/A | \$1,660,536.79 |
| <i>Parking Structures</i> | 2 | 4.5 | N/A | \$616,760.00 |
| <i>Passenger Facilities</i> | 19 | 8.7 | N/A | \$4,671,601.07 |
| <i>Shelter</i> | 24 | 9.0 | N/A | \$8,240.75 |
| <i>Storage</i> | 2 | 9.5 | 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 |
|---|--------------|-------------|---------------|--------------------|-----------------------|------------------|
| Revenue Vehicles | 1718 | 4.9 | 95,090 | N/A | \$82,457.44 | 9% |
| <i>AB - Articulated Bus</i> | 0 | - | - | N/A | - | - |
| <i>AO - Automobile</i> | 3 | 4.0 | 75,758 | N/A | \$21,391.33 | 0% |
| <i>BR - Over-the-road Bus</i> | 0 | - | - | N/A | - | - |
| <i>BU - Bus</i> | 87 | 9.4 | 284,285 | N/A | \$480,821.70 | 26% |
| <i>CU - Cutaway Bus</i> | 888 | 4.3 | 83,630 | N/A | \$67,383.60 | 4% |
| <i>DB - Double Decked Bus</i> | 0 | - | - | N/A | - | - |
| <i>FB - Ferryboat</i> | 1 | 2.0 | N/A | N/A | \$804,224.00 | 0% |
| <i>MB - Mini-bus</i> | 3 | 5.0 | 55,589 | N/A | \$63,500.00 | 0% |
| <i>MV - Mini-van</i> | 107 | 5.5 | 61,055 | N/A | \$31,908.89 | 22% |
| <i>RT - Rubber-tire Vintage Trolley</i> | 0 | - | - | N/A | - | - |
| <i>SB - School Bus</i> | 0 | - | - | N/A | - | - |
| <i>SV - Sport Utility Vehicle</i> | 1 | 3.0 | 3,247 | N/A | \$20,917.00 | 0% |
| <i>TB - Trolleybus</i> | 0 | - | - | N/A | - | - |
| <i>VN - Van</i> | 622 | 4.9 | 92,163 | N/A | \$56,777.69 | 13% |
| <i>Custom 1</i> | 0 | - | - | N/A | - | - |
| <i>Custom 2</i> | 0 | - | - | N/A | - | - |
| <i>Custom 3</i> | 0 | - | - | N/A | - | - |
| Equipment | 77 | 9.4 | 88,789 | N/A | \$52,146.88 | 52% |
| <i>Non Revenue/Service Automobile</i> | 52 | 10.1 | 88,789 | N/A | \$27,357.43 | 63% |
| <i>Steel Wheel Vehicles</i> | 0 | - | - | N/A | - | - |
| <i>Computer Software</i> | 1 | 5.0 | N/A | N/A | \$93,770.00 | 0% |
| <i>Office Equipment</i> | 3 | 8.3 | N/A | N/A | \$89,612.00 | 33% |
| <i>Maintenance Equipment</i> | 3 | 12.3 | N/A | N/A | \$100,727.83 | 0% |
| <i>Vehicle Technology</i> | 18 | 7.2 | N/A | N/A | \$107,107.44 | 33% |
| Facilities | 173 | 16.8 | N/A | 3.9 | \$1,346,808.41 | N/A |
| <i>Administration</i> | 90 | 18.8 | N/A | 3.8 | \$993,068.32 | N/A |
| <i>Maintenance</i> | 34 | 22.2 | N/A | 3.8 | \$1,660,536.79 | N/A |
| <i>Parking Structures</i> | 2 | 4.5 | N/A | 5.0 | \$616,760.00 | N/A |
| <i>Passenger Facilities</i> | 19 | 8.7 | N/A | 4.1 | \$3,688,106.11 | N/A |
| <i>Shelter</i> | 24 | 9.0 | N/A | 4.5 | \$8,240.75 | N/A |
| <i>Storage</i> | 2 | 9.5 | 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

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|-----------------------------|--|
| Appendix A | Asset Register |
| Appendix B1 | Revenue Vehicle (Rolling Stock) Condition Data |
| Appendix B2 | Equipment Condition Data |
| Appendix B3 | Facilities Condition Data |
| Appendix C | Proposed Investment Project List |
| Appendix D | Fleet Replacement Module Output |

Group Plan Contributors:

| Agency Name | Accountable Executive |
|---|--|
| Alamance County Transportation Authority | Peter Murphy |
| Albemarle Regional Health Services | Herb Mullen |
| Alleghany County | Tiffany Boyer |
| Anson County | Tanya B Byrd |
| 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 | Nathan Pennington |
| BURLINGTON | John Andoh |
| Cabarrus County | Robert Bushey |
| Carteret County | Randy Cantor |
| Craven County | Kelly Walker |
| CARY | 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 | Radcliff Hester |
| Davidson County | Richard M. Jones, Jr. |
| Duplin County | Angel Venecia |
| Gaston County | Twanna Littlejohn |
| GASTONIA | Vincent Wong |
| Gates County | Patrice Taylor-Lassiter |
| Goldsboro-Wayne Transportation Authority | Don Willis |
| Graham County | Juanita Colvard |
| Greene County | Misty Chase |
| GREENVILLE | Ryan Mayers |
| 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 | Daniel Metcalf |
| Martin County | Angela Ellis |
| McDowell County Transportation Planning Bd Inc. | Jason Hollifield |
| 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 Tram | Sara Brown Teaster |
| 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. | Jeff Roper |
| Wilkes Transportation Authority | Michael Johnson |
| Wilson City | Gronna Jones |
| Wilson County | James Digss |
| 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 | |
| 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 |