



# PUBLIC SCHOOLS OF NORTH CAROLINA

DEPARTMENT OF PUBLIC INSTRUCTION | Mark Johnson, Superintendent of Public Instruction

WWW.NCPUBLICSCHOOLS.ORG

June 7, 2017

Ms. Ann Clark, Superintendent  
Mecklenburg County Schools  
701 E. 2<sup>nd</sup> St.  
Charlotte, NC 28202

Dear Ms. Clark

I visited your county for 21 days in April and May to conduct the annual review of your school bus maintenance program. Attached to this letter you will find a detailed report of the findings of this review. This review is conducted as a service by DPI Transportation Services to provide you with feedback on the status of your school bus fleet. Please note that the physical inspection of each bus includes a review of safety and operational conditions (usually the responsibility of school bus drivers and supervisors) as well as key maintenance items.

School Bus Inspections. In order to ensure the safety of the students being transported, G.S. 115C-248(a) requires all school buses to be inspected every 30 calendar days. This inspection is done by LEA transportation staff and is a key component of the state's preventive maintenance program. The results of the recent NCDPI inspection of school buses and activity buses follows in the attached report.

School Bus Inspectors. State Board of Education policy #TCS-H-011 requires all school bus inspections to be performed by individuals that have completed the training and certification requirements administered by the Department of Public Instruction. Details on the program along with the list of certified inspectors can be found at [www.ncbussafety.org/bicert](http://www.ncbussafety.org/bicert). Renewal of the initial bus inspector certifications from 2011 has begun. All bus inspectors must have **20** hours of in-service training since their initial certification in order to be eligible for renewal testing and re-certification. The Transportation Director is responsible for assuring bus inspectors meet the in-service training requirement. A file must be kept containing class rosters or certificates of all bus inspection related courses attended by bus inspectors.

School Bus Maintenance Records. In addition to the physical inspection of school buses and activity buses, I conducted a review of some basic maintenance records. To verify processes required in SBE policy #TCS-H-011, I reviewed items such as completed/overdue work orders, physical parts inventory accuracy and state reimbursements. My results are also included in the following report.

Summary. Thank you for the opportunity to provide this report. I appreciate the cooperation of your transportation staff and I encourage you to discuss this report with them. If you have any questions regarding this report or any other transportation issues, please call me at (980-505-2537) or email me at [danny.reed@dpi.nc.gov](mailto:danny.reed@dpi.nc.gov)

Sincerely,

Transportation Consultant

cc: Kevin Harrison, Section Chief, DPI Transportation Services  
Janet Thomas, Transportation Director

Attachments: Transportation Consultant's Report, Bus Defect Report, Office Audit Worksheet

## SAFE AND HEALTHY SCHOOLS SUPPORT DIVISION

Benjamin J. Matthews, Ph.D., Deputy Chief Financial Officer for Operations | [ben.matthews@dpi.nc.gov](mailto:ben.matthews@dpi.nc.gov)  
6319 Mail Service Center, Raleigh, North Carolina 27699-6319 | (919) 807-3501 | Fax (919) 807-3502

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

North Carolina Department of Public Instruction  
Transportation Services

Annual Transportation Consultant Report  
June 7, 2017

Bus Inspection Results

During my review, I randomly inspected **104** school buses, which represents about 10% of your school bus fleet. This inspection was done in accordance with criteria and procedures outlined in NC Bus Fleet – the fleet maintenance manual adopted by the state Board of Education in June,2015.

The 2016-2017 inspection score for Mecklenburg County Schools is **77.73**. This score is provided for your benefit as a means to track improvement from one year to the next. The *lower* the score indicates *fewer* defects found during the inspection. The inspection score from last year was **38.91**.

A number of defects were identified as needing repair. However, some were more serious such that the bus must not be operated until repairs are made. In general, when a school bus inspector identifies a defect meeting the required out-of-service criteria, some can be corrected right away, while others require a more detailed repair requiring the use of a spare bus. During my inspection, **49** buses were taken **out of service until repaired**. Details of this inspection are located within the attached defect document

Activity Bus Inspections

The safety of students riding activity buses is equally as important as the safety of those on yellow buses. This year DPI Transportation Services is also inspecting activity buses across the state. I inspected **7** activity buses during my visit resulting in a score of **52.14**. **2** activity buses were taken **out of service until repaired**. Details of this inspection are located within the attached defect document. Activity buses are required to be maintained to the same standard as school buses.

Bus Inspector Observations

The N.C. School Bus Inspector Certification Program requires a certified inspector to be subject to an inspection observation. DPI randomly selected 7 of your certified inspectors for such an observation. The observation consisted of adherence to the N.C. bus inspection manual as well as measurement of braking system slack adjusters

<b>Name of inspector</b>	<b>Observation notes/comments</b>
Daniel Willover	Satisfactory
Norman White	Satisfactory
Scott Aycock	Satisfactory
Nick Helms	Satisfactory
Steve Edwards	Satisfactory
Chad Francis	Satisfactory
David Hadad	Satisfactory

Other Reviews

In addition to the physical inspection of school buses, I also selectively reviewed compliance with the schedules for preventive maintenance (PM) and monthly bus inspections (MI) as well as accounting, inventory control and other data entry in BSIP. Required hard copy files were randomly audited for compliance per NC FLEET MANUAL School buses are required to be inspected every 30 calendar days and preventive maintenance is to be performed on most vehicles according to intervals designated in the manual. BSIP schedules these activities well in advance so that transportation staff can make plans to maintain this schedule. The worksheet used to check the office procedures is attached for your information. I encourage you to discuss this with your transportation director to be familiar with the kinds of processes which were examined. Although my inspection was not detailed for each accounting operation, some spot checks were performed to measure the level of compliance.

- |                                |                                |
|--------------------------------|--------------------------------|
| 1. Open Orders                 | (BSIP) Needs Improvement       |
| 2. Orders Completed            | (BSIP) Satisfactory            |
| 3. Warranty Repair Orders BSIP | Satisfactory                   |
| 4. Mechanic Labor              | Needs Improvement              |
| 5. Bus Inventory               | Satisfactory                   |
| 6. New Vehicle Service         | Satisfactory                   |
| 7. Monthly Inspections         | Needs Improvement              |
| 8. Prev. Maintenance           | Needs Improvement              |
| 9. TD-18 Repair Orders (paper) | Satisfactory                   |
| 10. Oil Analysis Records       | Satisfactory                   |
| 11. Fueling Records            | Satisfactory                   |
| 12. Bus Driver Sign In         | Satisfactory                   |
| 13. Service Call Log           | Satisfactory                   |
| 14. State Refund Reports       | Satisfactory                   |
| 15. Technician Certification   | Satisfactory                   |
| 16. Inventory Received (TD-21) | Satisfactory                   |
| 17. Physical Inventory         | Satisfactory 18/20 (See Below) |

Physical inventory reporting

A sampling of twenty stocked school bus repair parts was performed in the inventory storage areas. Items were randomly selected, counted, and compared against BSIP reporting data.

An inventory loss is noted - 1 of the items were over and 1 of the items were under the expected counts (see details below)

Item Description	Item Value	Physical Count	BSIP Stock Level	Overage	Shortage	Shortage Value
Starter	\$179.99	4	2	2		\$359.98
Battery	\$70.12	54	65		11	\$771.30
The estimated total value of shortage based on the state reporting system (BSIP)						<b>\$1,131.30</b>

Total parts room inventory value (excluding fuel)	Date Checked-4/26/17	\$798,283.34
---	----------------------	--------------

Note that shortages of school bus parts purchased with state funds will need to be repaid at the end of the fiscal year

## RECOMMENDATIONS

I would like to recommend the following:

- 1) Be sure that your technicians are attending any training seminars that are relevant for their job. The NCPTA conference is scheduled to be held in Sunset Beach during June 2017. Hopefully you will be able to send several of your employees.
- 2) Mechanics should review the School Bus Inspection section of NC Bus Fleet regularly and apply these guidelines in their monthly inspections.
- 3) No open orders should be found over 45 days old unless bus repair is still active. Open orders should be checked weekly via BSIP screen IW38, variant "IW38 open orders"
- 4) Routine Maintenance should be performed on time and all issues addressed as soon as possible. Routine maintenance is essential to keep the vehicles in long term good condition, increase reliability and decrease road calls. Road calls reflect poorly on the fleet and come at a relatively large cost to technician time and the ability of technicians to accomplish their required work.
- 5) Improve technician accountability by logging time accurately in BSIP. Labor hours must be entered into BSIP to account for 140-190 hours a month. Periodically check BSIP screen IW47, variant DPI-PLANT, in order to verify correct entry of labor hours.
- 6) Maintaining a large fleet of vehicles to meet requirements of the Federal/States regulations is a huge responsibility. A review of operations and procedures should be performed to locate weak areas. Correcting these areas will increase efficiency. Along with this as a priority continue to fill each technician position as they become vacant.
- 7) Bus Drivers must perform daily pre-trip and post trip inspections to correct standards. Any deficiency found must be reported to the Transportation Department and addressed in a timely matter.
- 8) Remind your school bus and activity bus drivers to always drive defensively. Encouraging safe driving practices saves lives, time and money,