

## **Improvements and Known Issues for Road Characteristic Data Layer First Quarter 2010 Release**

The Road Characteristic Layer (RD\_CHAR\_MLPST) First Quarter 2010 Release is primarily based on imported information from the July 2009 snapshot of the NCDOT's mainframe Universe File. The following improvements have been made since the last quarter release

1. NHS was imported from the source files and added to the Road Characteristics layer.
2. STRAHNET was imported from the source files and added to the Road Characteristics layer.
3. Number of Lanes are improved on both inventory and non-inventory direction.
4. Access control is improved for Interstate and US routes.
5. Gap records were removed from the Road Characteristics layer.

The following known issues are reflective of spatial referencing differences between the NCDOT LRS and the Universe File, data errors in both the LRS and Universe File, and issues that developed as part of the import process.

1. The Universe File and the LRS do not have an exact match of routes. The main reason for the difference is that data entry in the Universe for petitions and municipal agreements was cut off in January, 2009 and the LRS is current through March 2010 for petitions and municipal agreements.

There are 614 route segments (identified by a combination of the county number and the 8 digit route number) that are in the Universe File but not in the current LRS. Information on these route segments was not imported.

2. The Universe File milepost and the LRS milepost values do not always match due to the differences in data entry approaches, tools, and data models. The Universe File captures information predominantly on the inventory direction, while LRS captures information on many divided roads. For this reason, the information on the non-inventory direction should be used with caution before we further verify the data, even the non-inventory direction milepost values are much improved for this release.

There are 78 route segments (identified by combination of county number and the 8 digit route number) that have significant differences in milepost values and segment length between the Universe File and LRS. Information about these route segments needs to be verified.

3. There are some routes that do not have correct milepost values and should not be used for dynamic segmentation using the route/milepost linear referencing method. The following routes have known mileposting issues that should be corrected in the future releases:

US-1 Bus Southbound in Lee  
US-19 Bus Southbound in Cherokee  
US-70 Bus Westbound in Wayne  
US-501 Bus Southbound in Durham  
NC-16 Bus Southbound in Catawba

4. Small gaps on Non-inventory direction are mostly fixed. The remaining gaps will be fixed when we further verifying the data.
5. There still some sections of routes that are missing characteristic data or with incorrect milepost values, even this release fixed lots of the cases. These holes or incorrect milepost values were created during the data import process and when datasets were merged. These issues can be explained by differences between the Universe and LRS data. For example, differences in the location of gaps within routes, and differences in what is considered the dominant route.