

Approved:



Department of Transportation

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Office: Transportation Data and
Analytics
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GENERAL INTEREST ROADWAY DATA

PURPOSE:

This procedure establishes Districts and Transportation Data and Analytics Office (TDA) responsibilities, requirements, and standards for data collection, verification and management, quality assurance and control, and basic reporting of general interest roadway data in the Roadway Characteristics Inventory (RCI) database.

AUTHORITY:

Sections 20.23(3)(a) and 334.048(3), Florida Statutes (F.S.)

SCOPE:

This procedure primarily affects District Offices responsible for the collection, verification, storage, reporting, and management of general interest roadway data used by the Department and the Federal Highway Administration (FHWA). The RCI data provides information to offices throughout the Department for various reporting needs and supports decision-making, federally mandated reports, and the reporting requirements and information needs of Central Office. In this procedure, TDA is responsible for coordinating the collection of general interest roadway data, storage, and reporting activities throughout the Department. In this document, the District office is responsible for data covered by this procedure. Additionally, other data elements are required from the State Materials Office, State Traffic Engineering & Operations Office, Systems Planning Office, and State Maintenance Office.

REFERENCES:

RCI Planning Data Handbook, RCI Features & Characteristics Handbook, Straight-Line Diagram Handbook (collectively, the “***Handbooks***”), and ***Roadway Inventory Tracking Application User Manual***. These handbooks and manual are published by TDA and available on the Florida Department of Transportation websites at:

<http://www.dot.state.fl.us/statistics/rci/>

<http://www.dot.state.fl.us/statistics/rci/sldhandbook.pdf>

<http://www.dot.state.fl.us/mapsandpublications/manuals/puboffice.shtm/>

Highway Performance Monitoring System Field Manual: This manual is published by the

FHWA and is available on its website at:

<http://www.fhwa.dot.gov/policyinformation/hpms/fieldmanual/>

1. REQUIREMENTS

TDA is responsible for the planning data elements identified as general interest roadway data. TDA develops accuracy and timeliness standards, along with other standards, to meet the Department's requirements for the planning data elements. TDA and the Districts are responsible for the timely collection of relevant data and accurate maintenance of the planning data elements in the RCI database application. The primary linear referencing system for general interest roadway data is the RCI database milepoint system. Data collected using other location technology or processes must be converted to a corresponding milepoint to be included in the RCI database application. Location accuracy standards for physical characteristics, dimensional, and length measurements are defined in the *Handbooks*.

2. TDA'S RESPONSIBILITIES

2.1 HANDBOOKS

TDA develops standards and guidelines to assist in promoting consistent statewide processes and practices related to collection of planning data elements; verification, storage, entry, editing, and reporting of roadway data; and facilitation of straight-line diagram (SLD), key sheet, and related map product production. These standards and guidelines are documented in the *Handbooks*. Additionally, TDA provides assistance and training in the following areas:

- 1) RCI data collection, data entry, and editing.
- 2) Highway Performance Monitoring System (HPMS) data collection, data entry, and editing.
- 3) Applications for SLDs, key sheets, and inventory management.
- 4) RCI data and Geographic Information System (GIS) basemap alignment reconciliation.

2.2 QUALITY ASSURANCE

The TDA Quality Assurance Review (QAR) team will assess the Districts' staff in accordance with current performance management principles and practices. Quality Assurance (QA) requirements are as follows:

- 1) Maintain an annual QA monitoring plan that describes the critical requirements, processes, and accuracy for each program area and the monitoring activities used to evaluate compliance.
- 2) Schedule and conduct biennial QARs in all Districts to monitor activities for

compliance with approved statewide procedures, directives, guidelines, standards, and policies.

- 3) Determine the effectiveness of Districts' data collection processes and Districts' QA monitoring plans and determine if compliance indicators satisfactorily addressed.
- 4) Evaluate Districts' QA monitoring plans in order to identify areas performing unsatisfactorily, needing improvement, and not meeting compliance.
- 5) Discuss recommendations for improvements and assist Districts with development of improvement strategies.

2.3 HPMS DATA

2.3.1 HPMS SAMPLES LIST

By July 31 – The TDA State HPMS Coordinator will provide Districts with result of calculations for the HPMS submittal from the previous year, including:

- 1) A list of deleted HPMS samples.
- 2) A list of added HPMS samples, including beginning and ending milepoints with descriptive location points for each sample.

2.3.2 HPMS DATA EXTRACTION

By December 31 – The TDA State HPMS Coordinator will extract the HPMS data from the RCI database for annual reports.

3. DISTRICTS' RESPONSIBILITIES

3.1 REQUIREMENTS

Data collection is the responsibility of the Districts. Data must be collected, verified, and entered into the RCI database application in accordance with the **Handbooks**. The Districts will maintain the accuracy of the RCI database, regeneration and timely distribution of SLDs and key sheets from the RCI database, update the Roadway Inventory Tracking Application (RITA), and notify TDA and affected users when completed.

At a minimum, the Districts will perform updates for the following events:

- 1) Any roadway jurisdictional transfers or new construction resulting in changes, such as addition or deletion, to the State Highway System (SHS) mileage on the highway network.

- 2) Any construction projects resulting in changes to the characteristics of the required roadway inventory features.
- 3) Any changes to the status of the roadways resulting in federal funding changes according to the provisions of Moving Ahead for Progress in the 21st Century Act (MAP-21), Strategic Intermodal System (SIS), or National Highway System (NHS) designations, Federal Aid eligibility, or other federal requirements.
- 4) Any discrepancies noted and brought to the attention of the responsible Districts' staff.
- 5) Any roadways re-inventoried according to the re-inventory cycles for RCI or HPMS requirements.

3.1.1 SHS MILEAGE CHANGES

From the effective date of any SHS mileage changes, the Districts will perform inventory, update the RCI database, regenerate and timely distribute SLDs and key sheets from the RCI database, and update RITA. The Districts will notify TDA and affected users of any changes to the SHS mileages when completed.

Within 15 calendar days of any SHS mileage changes – the Districts will update the following administrative features in the RCI database.

	Feature	Description
1)	V/U/D Screen	Roadway ID Information
2)	Feature 111	STROADNO, STRDNUM2 State Road Number(s)
3)	Feature 112	FAHWYSYS Federal-Aid Highway System Code
4)	Feature 113	USROUTE, USROUTE2, U.S. Route Number(s)
5)	Feature 114	LOCALNAM Local Name(s)
6)	Feature 121	FUNCLASS Functional Classification
7)	Feature 122	RDACCESS Access Control Type
8)	Feature 124	HWYLOCAL Current Highway Location Code
9)	Feature 124	PLACECD Current Place Code
10)	Feature 124	URBAREA Urban Area Number
11)	Feature 140	STATEXPT Segment/Section Status Exception

Within 90 Calendar Days of any SHS mileage changes – the Districts will perform inventory and update all other RCI required data in the RCI database. The Districts will review the GIS basemap alignment and ensure both the GIS basemap alignment and RCI data are consistent and accurately reflect the roadway network.

Within 120 Calendar Days of any SHS mileage changes – the Districts will regenerate and timely distribute the SLDs and key sheets from the RCI database to TDA and affected users reflecting the status of all roadways on the roadway network.

3.1.2 ROAD CONSTRUCTION

From the date of notification of project completion, the Districts will perform inventory, update the RCI database, regenerate and distribute SLDs and key sheets from the RCI database, update RITA, and notify TDA and affected users of any changes when completed.

Within 90 Calendar Days of Notification of Project Completion – the Districts will perform inventory and update all other RCI required data in the RCI database. The Districts will review the GIS basemap alignment and ensure both the GIS basemap alignment and RCI data are consistent and accurately reflect the roadway network.

Within 120 Calendar Days of Notification of Project Completion – the Districts will regenerate and distribute the SLDs and key sheets from the RCI database to TDA and affected users reflecting the status of all roadways on the roadway network.

3.1.3 Moving Ahead for Progress in the 21st Century Act (MAP-21) / Strategic Intermodal System (SIS) / National Highway System (NHS) DATA

Within 120 Calendar Days from any MAP-21, SIS, or NHS Designation Changes – the Districts will regenerate from the RCI database and distribute SLDs and key sheets for all affected roadways.

3.1.4 INTERIM UPDATES / DISCREPANCIES

Within 30 Calendar Days from the date of notification for events other than listed in **Section 3.1**, the Districts will take appropriate actions to update the data in the RCI database, regenerate and distribute any affected SLDs and key sheets from the RCI database, update RITA, and notify TDA and affected users when completed.

3.1.5 RE-INVENTORY CYCLES

HPMS 3-Year Re-Inventory Cycle – the Districts will conduct a re-inventory every 3 years on all HPMS standard samples in accordance with the HPMS data requirements as outlined in the **Handbooks**. The Districts will retain all Districts' inventory documentation or additional information consistent with state records retention requirements, or for a longer period at their discretion.

RCI 5-Year Re-inventory Cycle – the Districts will conduct a re-inventory every 5 years on all roadways in accordance with the RCI data requirements as outlined in the **Handbooks**. The Districts will perform inventory and update all required RCI data in the RCI database. The Districts will regenerate and distribute the SLDs and key sheets from the RCI database to reflect the status of the roadway network. The Districts will review the GIS basemap alignment and ensure both the GIS basemap alignment and RCI data are concurrent and accurately reflect the

roadway network. The Districts will retain all Districts inventory documentation or additional information consistent with state records retention requirements, or for a longer period at their discretion.

Annually – the Districts will review, regenerate from the RCI database, and distribute SLDS and key sheets every year to accurately reflect any MAP-21, SIS, NHS, and SHS designations changes. The Districts will update RITA and notify TDA and affected users when completed.

5-Year Cycle – the Districts will review, regenerate from the RCI database, and distribute a complete set of all District SLDs and key sheets every 5 years to reflect the current statuses of MAP-21, SIS, NHS, and SHS designations. The Districts will update RITA and notify TDA and affected users when completed.

3.2 INVENTORY MANAGEMENT – RITA

The Districts will record and maintain appropriate inventory schedules to ensure all required data is timely and accurately collected, as outlined in the QA Monitoring Plan using RITA, or other approved inventory management tools. The Districts will update the data in RITA, including construction projects, updates to the RCI database, SLDs, and key sheets. The Districts will notify TDA and affected users when completed.

3.3 Daily Vehicle Miles Traveled (DVMT) DATA DUE DATE

By March 1 – the Districts will obtain forecasted DVMT data for urbanized areas from metropolitan planning organizations (MPOs) in their area and submit this data to TDA State HPMS Coordinator.

3.4 QUALITY CONTROL

By June 1 – the Districts will submit to the TDA State QAR Coordinator an annual QA Random Sampling Report of their Districts' data and will retain their Districts' QC documentation consistent with state records retention requirements.

This report demonstrates the Districts are conducting their own QC programs to monitor their Districts' performance to ensure they meet program requirements as identified in the statewide QA Monitoring Plan. The Districts may develop their own District QC monitoring plans, subject to TDA approval.

3.5 ERROR FREE DATABASE

To ensure the accuracy of the RCI database application, TDA will restrict use of the application during defined periods.

On June 30 – the Districts will have the RCI database free of errors and will not access the

RCI database application until notified by TDA.

On December 20 through December 31 – the Districts will have the RCI database free of errors and will not access the RCI database application until notified by TDA.

3.6 NEW HPMS SAMPLES

By November 30 – the Districts will complete the inventory and data entry into the RCI database of any HPMS samples for the new reporting year.

3.7 QUALITY ASSURANCE REVIEWS

The Districts will assist TDA in conducting QARs in accordance with the *Quality Assurance and Quality Control Policy (Topic No. 001-260-001)*.

4. OTHER AFFECTED OFFICES' RESPONSIBILITIES

4.1 PAVEMENT ROUGHNESS INDEX DATA

By April 15 – the State Materials Office shall annually provide in the RCI database Feature 125 Pavement Roughness Index data for the SHS, HPMS samples, and other road segments required for HPMS as identified by TDA.

4.2 SIS DATA

By June 30 and December 21 – the State Systems Planning Office shall maintain in the RCI database all Feature 147 SIS data and semiannually ensure that the SIS data are accurate and complete.

4.3 SPEED LIMIT DATA

By June 30 and December 21 – the State Traffic Engineering & Operations Office shall maintain in the RCI database the maximum speed limit data in Feature 311 Speed Zones for the SHS and semiannually ensure the data are accurate and complete.

5. TRAINING

District personnel will be trained in both RCI and HPMS data collection techniques, data entry methodologies, and practices. TDA will provide training materials for District staff and their consultants for the general interest data elements, primarily focusing on collection of planning data elements in the following areas:

- 1) RCI data collection, data input, and editing

- 2) HPMS data collection, data input, and editing
- 3) TDA applications, such as the RCI database application, SLD application, Key Sheet application, RITA, etc.

The Districts will advise TDA of training needs to assist TDA in the development of training plans and improvement of documentation.

The Districts will also provide training to their staff and consultants if TDA does not provide training.

6. FORMS

The *Handbooks*, *RITA User Manual*, and *HPMS Field Manual* are provided in conjunction with this procedure. Inventory matrices, checklists, and diagrams are available in the accompanying *Handbooks*, *Manuals*, and training materials.