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Department of Transportation

GENERAL INTEREST ROADWAY DATA (GIRD)

AUTHORITY

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

REFERENCES

Section 402(c) of Title 23, United States Code (U.S.C.)

Section 218.322 Florida Statue (F.S.)

For additional related procedures, see the Forms Management website at https://fms.fdot.gov/ to find the authoritative procedures listed below:

- Transportation System Jurisdiction and Numbering Procedure (Topic No. 525-020-010)
- Urban Boundaries and Functional Classification of Roadways (Topic No. 525-020-311)
- Roadway Characteristics Inventory Traffic Operations Data (Topic No. 750-000-001)
- Transportation Data Collection, Storage and Reporting (Topic No. 850-000-001)
- Traffic Monitoring (Topic No. 525-030-150)
- Quality Assurance Reporting Procedure (Topic No. 260-030-005)
- Data Governance (Topic No. 001-325-064)

The following transportation data handbooks and manuals are referenced throughout the procedure:

- RCI Planning Data Handbook
- RCI Features & Characteristics Handbook
- RCI User Manual
- Roadway Inventory Tracking Application (RITA) User Manual

- Straight-Line-Diagram (SLD) Handbook
- Quality Assurance Review (QAR) Handbook
- District Quality Evaluation (DQE) Handbook
- Transportation Data and Analytics Geographical Information Systems (GIS) Handbook
- Transportation System Jurisdiction and Numbering Handbook
- Urban Boundary and Functional Classification of Roadways Handbook
- Federal Highway Administration Highway (FHWA) Performance Monitoring System (HPMS) Field Manual. This manual is published by the FHWA and is available on its website at: http://www.fhwa.dot.gov/policyinformation/hpms/fieldmanual/

TDA is responsible for publishing the above handbooks and manuals on the FDOT website at: https://www.fdot.gov/statistics/rci/

PURPOSE

This procedure establishes the Florida Department of Transportation (FDOT) Central Office, Transportation Data and Analytics Office (TDA), District Offices and Florida Turnpike Enterprise (Districts) responsibilities, requirements, standards for data collection, validation and management, quality assurance and control, and basic reporting of general interest roadway data (GIRD) in the Roadway Characteristics Inventory (RCI) database.

SCOPE

This procedure affects the Districts, and Central Office who are responsible for the collection, verification, storage, reporting, and management of transportation data requirements by FDOT and FHWA. Transportation data provides information about FDOT infrastructure assets of state interest. RCI stores transportation data as features and characteristics. The data is organized to support transportation asset management functions that require information on location, ownership, status, classification, extent, quantity, condition, and performance. The data supports FDOT analyses for decision-making, project programming, development of the state and federally mandated reports, and transportation asset reporting requirements.

Additionally, this procedure details how TDA integrates transportation data collected by offices such as:

- Office of Maintenance
- State Traffic Engineering and Operations Office

- State Materials Office
- Systems Implementation Office
- Forecasting and Trends Office
- Office of Freight, Logistics, and Passenger Operations
- District Right of Way Office

1. REQUIREMENTS

TDA is responsible for developing the accuracy and timeliness standards to meet the Department's requirements for transportation data stored in the RCI database. The Linear Referencing System (LRS) for data in RCI uses a milepoint-based system. Data collected using location technologies or other processes must be converted to a corresponding milepoint to be included in the database. The handbooks define the locational accuracy standards for physical characteristics, dimensional, and length measurements.

Districts are responsible for data collection. Data must be collected, verified, and entered into the RCI database application per the latest handbooks published by TDA. Districts will maintain the accuracy of the RCI database, regenerate and distribute SLDs and key sheets promptly, update RITA, run edits via the Data Analysis and Reporting for Transportation Systems (DART) application, and notify TDA and affected users when complete.

The following requirements establish the transportation data governance responsibilities of the Districts and Central Office:

- Developing, researching, and implementing transportation data collection methods and best practices
- Maintaining roadway inventory cycles according to RCI and HPMS requirements
- Identifying and providing solutions for RCI data visualization, analysis, and reporting
- Managing Department transportation asset data and related asset data management systems
- Performing quality management functions and processes
- Coordinating roadway jurisdictional transfers, new construction, and additions/deletions to the State Highway System (SHS), Strategic Intermodal System (SIS), National Highway System (NHS), or other federal systems

2. TDA'S RESPONSIBILITIES

2.1 **Program Coordination**

TDA will perform coordination activities with the Districts and Central Office stakeholders by facilitating meetings, webinars, and workshops to discuss statewide GIRD collection requirements for reliable, organized, and accurate data sharing. These coordination activities will provide opportunities for statewide discussion to determine the business requirements for GIRD and coordinate methods and techniques that support safe, efficient, innovative data collection and data management. These activities will establish data governance, identifying all stakeholder data business requirements, and developing a consensus of office sponsorship.

2.2 **RCI Data Collection**

TDA is responsible for ensuring that the Districts are performing consistent RCI data collection on roadways and travel ways of state interest to provide reliable, organized, and accurate data sharing methods. These methods will be established and outlined in the transportation data handbooks and manuals.

TDA is also responsible for coordinating approvals for RCI designation data of roadways or travel ways received from the Districts with Central Office legal, American Association of State Highway and Transportation Officials (AASHTO), and FHWA. TDA is responsible for assuring the information and RCI data is accurate for proper accountability for the following event situations:

- Road Jurisdiction Transfers (RJT)
- Road Number Assignments
- U.S. Route Designations
- State Designations such as Functional Classification and SIS
- Federal Designations such as NHS and Strategic Highway Network
- Toll Road Designations

Additional details and other situations are identified in the Transportation System Jurisdiction and Numbering Procedure (Topic No. 525-020-010) and Handbook. TDA will perform the tracking of these approvals for Department staff.

2.3 **HPMS Data Collection**

TDA is responsible for coordinating the annual HPMS data submittal with the required transportation data collected by the Districts and Central Office. The data requirements are outlined in the HPMS Field Manual and coordinated by the TDA HPMS Coordinator.

TDA will annually submit the transportation data into the FHWA HPMS web application and develop documentation for HPMS processing.

2.3.1 **HPMS Samples List**

By July 31st – The TDA HPMS Coordinator will provide the Districts with the following:

- A list of deleted HPMS samples
- A list of added HPMS samples, including beginning and ending mile points with descriptive location points for each sample

2.3.2 **HPMS Data Extraction**

By December 31st – The TDA HPMS Coordinator ensures that the HPMS data is extracted from the RCI database for annual reports.

2.4 **Data Provision and Reporting**

TDA is responsible for developing routine mileage reports to support state and federal reporting purposes. The routine mileage reports include:

- Florida Certified Public Road Mileage Report
- Vehicle Miles Traveled Report
- Daily Vehicle Miles Traveled Report
- Federal Aid Mileage Report

2.4.1 **Form Total Mileage**

Under 218.322, F.S., the Department has the authority to gather city and county mileage data through the Form Total Mileage process. TDA is responsible for coordinating with local transportation partners in the state to collect mileage data from outside entities.

2.4.2 **Certified Public Road Mileage Report**

By June 1st – Under 23 U.S.C. § 402(c), TDA responsibilities include the collection, coordination, and documentation required to provide the centerline miles for the State of Florida through the Certified Public Road Mileage Report. The TDA HPMS Coordinator will submit the report to FHWA only after approval from Department management.

2.5 **RCI/HPMS Development and Maintenance**

TDA is responsible for maintaining the business processes for RCI and HPMS data for visualization, analysis, and reporting. TDA will coordinate with the Districts and Central Office to gather business and technical needs and requirements for data system improvements. TDA will provide technical support and maintenance of system

components to assist District business processes and functions. TDA will coordinate with the Districts to identify needs and perform system unit testing to improve data collection, visualization, analysis, management, and reporting of transportation data.

2.6 **RCI/LRS Development and Maintenance**

TDA is responsible for developing and maintaining the Linear Referencing System of RCI data and the All Roads Network of Linear Referenced Data (ARNOLD). TDA is responsible for performing coordination activities with the Districts and Central Office to support the RCI data and the LRS reconciliation process that maintains the single source of truth for Department data users.

2.7 **Handbooks and Manuals**

TDA establishes RCI data collection standards through handbooks and manuals that facilitate consistent statewide processes and practices related to data collection, validation, storage, entry, editing, analysis, and required state/federal reporting of transportation data. The standards also facilitate the statewide production of SLDs, key sheets, and GIS products.

2.8 **Training**

TDA will develop a training program in coordination with the Districts that will support District data collectors and data users. TDA will provide training workshops, webinars, computer-based training, and other materials for District staff and their consultants for the following GIRD elements:

- RCI data collection, data input, and editing
- HPMS data collection, data input, and editing
- TDA applications
- RCI data and LRS reconciliation packages

2.9 **Quality Management**

The TDA Quality Management (QM) team will perform quality assurance and quality control of District RCI and HPMS data collection activities under the Quality Assurance Reporting Procedure (Topic No. 260-030-005). The TDA QM team will identify and utilize quality assurance measures and processes to confirm and validate data collection activities are performed with a high confidence for state and federal reporting. TDA will document the effectiveness of Districts' data collection processes and determine if compliance indicators listed under the Quality Assurance Monitoring Plan (QAMP) are satisfactorily addressed. TDA maintains handbooks that identify the quality assurance and quality control processes. TDA and the Districts will work towards data collection and program improvements to meet the needs of the Department.

2.9.1 **Quality Assurance Monitoring Plan (QAMP)**

TDA will establish and maintain a quality assurance monitoring plan that describes the critical requirements, processes, accuracy, and monitoring activities for each TDA program area. This comprehensive plan will also identify TDA and the District responsibilities, identify critical functions, promote data governance, and establish quality assurance monitoring processes and measures for Quality Assurance Review and District Quality Evaluation processes. The QAMP will be reviewed every two years.

2.9.2 **Quality Assurance Review (QAR)**

TDA will perform Quality Assurance Reviews in the Districts to ensure RCI data collection methods meet the requirements listed in the QAMP. TDA will work with the Districts to coordinate schedules, expectations, and results of findings outlined in the QAR Handbook. TDA will evaluate the District's data quality control plans to identify District practices and identify areas of non-compliance.

2.9.3 **District Quality Evaluation (DQE)**

TDA will perform biannual District Quality Evaluations during the following periods to ensure Districts comply with approved statewide procedures, guidelines, standards, and policies:

- Period 1 (P1): January 1st - June 30th
- Period 2 (P2): July 1st - December 31st

3. DISTRICT RESPONSIBILITIES

3.1 **Program Coordination**

Districts will work with TDA to establish and maintain data governance of the RCI data for reliable, organized, and accurate data sharing. Districts are encouraged to identify best practices and coordinate with TDA to develop innovative solutions. Districts are responsible for coordinating transportation data requirements with their District Office stakeholders. District staff must assign responsible staff and identify personnel changes to TDA to support the transportation data collection requirements.

3.2 Inventory Management

Districts will record and maintain appropriate inventory schedules to ensure all required data is timely and accurately collected, as outlined in the QAMP using RITA. Districts will update the required information in RITA for the following items: construction projects, RCI 5-year inventory, any interim updates to the RCI database, HPMS 3-year inventory, and SLDs.

3.2.1 **HPMS 3-Year Inventory Cycle**

Districts will conduct an inventory of all roadway samples within a 3-year cycle per the HPMS data requirements outlined in the FHWA HPMS Field Manual. Districts will retain all inventory documentation or additional information consistent with state records retention requirements.

3.2.2 **RCI 5-Year Inventory Cycle**

Districts will conduct an inventory of all roadways within a 5-year cycle per the RCI data requirements outlined in the RCI Handbooks. Districts will update all necessary RCI data, and regenerate and distribute SLDs and key sheets to reflect the current status of the roadway network. Districts will review the LRS alignment to ensure both the LRS alignment and RCI data are concurrent and accurately reflect the roadway network. Districts will retain all inventory documentation or additional information consistent with state records retention requirements.

3.3 **RCI Data Collection**

RCI data collection is the responsibility of the Districts. Data must be collected, verified, and entered into the RCI database application per the latest handbooks published by TDA outlined in the “References” section of this Procedure.

Districts will be responsible for:

- Maintaining the accuracy of the RCI data in the RCI database
- The generation/regeneration and timely distribution of SLDs and key sheets from the RCI database
- Updating the RITA
- Utilizing the DART application to ensure that data is error-free, clean, usable, and reliable
- Notifying TDA and affected users when updates are completed

3.3.1 **Roadway Jurisdiction Transfers (RJTs)**

Districts will coordinate approved transfers with other District Offices to ensure the proper signage reflects the information in the RCI database. See Transportation System Jurisdiction and Numbering Procedure (Topic No. 525-020-010) and Handbook for further explanation.

3.3.2 **Transportation System Designations**

Districts will coordinate with TDA to receive approval for designation changes before modification to SHS, State Road Numbers, SIS, NHS, U.S. Routes, or Functional

Classification (FUNCLASS). The Districts will perform the following task within the specified timeframe:

Within 120 calendar days from any SHS, SIS, NHS, or FUNCLASS designation changes – Districts will generate SLDs from the RCI database and distribute for all affected roadways.

3.3.3 **SHS Mileage Changes**

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

The Districts will perform the following task within the specified timeframe:

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

Feature	Characteristic(s)	
111 State Road System	STROADNO	State Road Number
	STRDNUM2	Secondary State Road Number
112 Federal System	FAHWYSYS	Federal Highway System Code
113 AASHTO	USROUTE	US Route Number
	USROUTE2	Secondary US Route Number
114 Local System	LOCALNAM	Local Name of Facility
121 Functional Classification	FUNCLASS	Functional Classification
122 Facility Classification	RDACCESS	Access Control Type
124 Urban Classification	HWYLOCAL	Highway Location Code
	PLACECD	Census Place (City) Code
	URBAREA	Urban Area Number
138 Roadway Realignment	NALIGNDT	New Alignment Date
	NALIGNID	Section/Sub-section of New Alignment
	NALNBGPT	New Alignment Begin MP

		NALNENPT	New Alignment End MP
140	Section Status Exception	STATEXPT	Segment Status
141	Stationing Exceptions	BEGSECPT	Begin Section MP of Exception Field
		ENDSECPT	End Section MP of Exception Field
		RDWYID	County, Section, Sub-Section

Within 90 calendar days of any SHS mileage changes – Districts will inventory and update all other required data in the RCI database. Districts will review the LRS alignment and ensure both the LRS alignment and RCI data are consistent and accurately reflect the roadway network.

Within 120 calendar days of any SHS mileage changes – Districts will regenerate and distribute SLDs and key sheets from the RCI database that reflect the current status of all roadways on the network, update RITA, and notify TDA and affected users when completed.

3.3.4 **Road Construction**

Districts will coordinate with their District Construction Office and TDA to determine when construction projects are completed and open to traffic. Upon notification of project completion, the Districts will perform the following tasks within the specified timeframe:

Within 90 calendar days of notification of project completion – Districts will inventory and update all required data in the RCI database. Districts will review the LRS alignment and ensure both the LRS alignment and RCI data are consistent and accurately reflect the roadway network and update RITA.

Within 120 calendar days of notification of project completion – Districts will regenerate and distribute SLDs and key sheets from the RCI database to TDA and affected users reflecting the current status of all roadways on the network and update RITA.

3.3.5 **Discrepancies/Updates**

Within 60 days from the date of notification for a Quality Assurance Review or District Quality Evaluation - Districts will take appropriate actions to update the data in the RCI database, regenerate and distribute any affected SLDs and key sheets, update RITA, and notify TDA and affected users when completed.

Within 30 calendar days from the date of notification for any other event – Districts will take appropriate actions to update the data in the RCI database, regenerate and distribute any affected SLDs and key sheets, update RITA, and notify TDA and affected users when completed.

3.4 **HPMS Data**

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

3.5 **Data Provision and Reporting**

Districts are responsible for the development and maintenance of SLDs that reflect RCI data per the SLD Handbook.

3.6 **Year End Reporting Restriction**

For the reporting of error-free RCI data, TDA will restrict the use of the RCI application during the dates listed below.

From June 30th until notified – Districts must not access RCI database application until notified by TDA unless to make corrections.

From December 20th until notified – Districts must not access the RCI database application until notified by TDA unless to make corrections.

3.7 **RCI/HPMS Development and Maintenance**

Districts are encouraged to research and identify innovative data collection technology improvements that support the Districts' critical business activities that rely on RCI and HPMS data. In order to maintain the Department's investment in data and develop a safe, efficient, and value-added data collection process, the Districts are required to support TDA by identifying needs, performing system unit testing to improve data collection, visualization, analysis, management, and reporting of transportation data.

3.8 **RCI/LRS Development and Maintenance**

Districts will be responsible for performing the RCI data and the LRS reconciliation process that maintains the single source of truth for Department data users.

3.9 **Handbooks and Manuals**

Districts may develop handbooks and manuals that expand on the handbooks developed by TDA; however, these will not contradict RCI data collection standards established in the TDA handbooks.

3.10 **Training**

Districts will advise TDA of training needs and requirements to support RCI data collection standards. Districts will support the development of TDA training programs and must coordinate improvements of documentation to TDA. Districts will be responsible for providing supplemental training to their staff and consultants as necessary.

3.11 **Quality Management**

Districts will perform quality management activities to maintain a high level of confidence and integrity of RCI data. As noted under TDA responsibilities to Quality Management, the Districts will assist TDA in conducting QARs per the Quality Assurance Reporting Procedure (Topic No. 260-030-005).

Districts will be responsible for developing and maintaining RCI and HPMS data quality control plans that support RCI and HPMS data collection activities. These quality control plans will be required to outline:

- RCI and HPMS data collection accuracy
- SLD Maintenance
- RITA Inventory Schedules
- District Coordination for Roadway Data Changes and Needs
- District Coordination activities for Road Transfers, Functional Classifications, and Designations
- Activities Performed to Perform Quality Control and Validation of Data
- Key Sheet Maintenance
- District Training Plans

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

This report demonstrates that the Districts are conducting their own QC programs to monitor their performance to ensure they meet program requirements as identified in the QAMP.

3.11.1 **Quality Assurance Monitoring Plan (QAMP)**

Districts will review and support QAMP development and maintenance with TDA. Districts will be responsible for coordinating with the District offices and staff that support activities outlined in the QAMP. Districts will provide their Quality Control plans for review at QARs.

3.11.2 **Quality Assurance Review (QAR)**

Districts will assist TDA in conducting QARs per the Quality Assurance Reporting Procedure (Topic No. 260-030-005). Additional details are provided in the QAR Handbook.

3.11.3 **District Quality Evaluation (DQE)**

Districts will assist TDA in conducting DQEs biannually during the following periods:

- Period 1 (P1): January 1st - June 30th
- Period 2 (P2): July 1st - December 31st

3.11.4 **Roadway Segment Exclusion Requests**

Districts may request exclusions for roadway segments from a QAR or DQE for data records that cannot be completed/updated for the following reasons (at a minimum):

- Roadway is under construction at the time request is being made
- Roadway construction has been recently completed within 90 days of the request being made
- Roadway is adversely affected by a natural disaster (i.e., hurricane)

Exclusions should identify Roadway ID, beginning mile point, and ending mile point for each roadway segment.

Exclusion requests will be made by the time frames below:

For a QAR – Districts will submit exclusions for roadways to the TDA Office 30 days prior to a scheduled QAR.

For a DQE – Districts will submit exclusions for roadways to the TDA Office by the following dates:

- Period 1 (P1): June 15th
- Period 2 (P2): December 15th

4. OTHER AFFECTED OFFICES' RESPONSIBILITIES

The following transportation data are required to be submitted to TDA by the listed office to support state and federal reporting requirements.

Department offices listed below that require batch changes to the RCI database will coordinate with the TDA office personnel responsible in making changes to RCI and

provide email notification of the required changes in order to provide timely and accurate customer service.

4.1 **Forecasting and Trends Office**

By March 1st – If the statewide model has been updated from the previous year, the Forecasting and Trends Office will provide current and projected Annual Average Daily Traffic (AADT). The base year for the statewide model will not be older than 5 years.

By May 1st – The Forecasting and Trends Office will provide the annual population estimates to the TDA HPMS Coordinator.

By May 15th – The Forecasting and Trends Office will provide the calculated performance values from National Performance Measures Research Dataset (NPMRDS) to the TDA HPMS Coordinator.

4.2 **State Materials Office**

By March 1st – The State Materials Office will provide pavement distress data for the Interstate System to the TDA HPMS Coordinator.

By April 15th – The State Materials Office will provide pavement distress data for the SHS, HPMS samples, and all other road segments required for HPMS as identified by TDA, to the HPMS Coordinator.

4.3 **State Systems Implementation Office**

By June 30th and December 21st – The State Systems Implementation Office will provide Feature 147 (Strategic Intermodal System) in the RCI database and ensure that the data is accurate and complete.

4.4 **State Traffic Engineering and Operations Office**

By June 30th and December 21st – The State Traffic Engineering and Operations Office will provide Feature 311 (Speed Zones) for the SHS and ensure that the data is accurate and complete.