CHAPTER 8

RCI AND DART REPORTS

TABLE OF CONTENTS

Chapter 8. RCI and DART Reports 8-1

8.1 Introduction 8-2
8.2 RCI Reports 8-2
8.2.1 Reports Tab, Standard Sub-tab, Standard Reports Menu 8-2
8.2.2 Historical Sub-tab 8-4
8.3 DART Reports 8-4
8.3.1 RCI Reports 8-4
8.3.2 HPMS Reports 8-5
8.3.3 Pavement Reports 8-5
8.3.4 QA Reports 8-6
8.3.5 RCI Top 30 8-8
8.3.6 Outdoor Advertising 8-8
8.4 Official State Mileage and Performance Reports 8-9
8.4.1 City/County Mileage Report 8-9
8.4.2 Public Road Mileage and Travel (DVMT) Report 8-9
8.4.3 State Highway System Mileage and Travel (DVMT) Report—(NHS, SHS, SIS, FIHS) 8-9
8.4.4 Florida Federal Aid Systems 8-10
8.4.5 Florida Interchange Report 8-10
8.4.6 Florida Mobility Performance Measures Program 8-10

CHAPTER 8. RCI AND DART REPORTS

8

This chapter provides information and user instructions for generating the official roadway mileage and performance reports for the Florida Department of Transportation (FDOT) and quality management and data validation reports available through the Roadway Characteristics Inventory (RCI) application and the Transportation Data & Analytics (TDA) Office's Data Analysis and Reporting for Transportation Systems (DART) web application. The official state roadway mileage and performance data reports are available through the TDA Office's Highway Mileage Report website: https://www.fdot.gov/statistics/mileage-rpts/default.shtm. For customized or special report formats not found in this chapter, ad hoc reports can be provided by contacting TDA Office at CO-TDI@dot.state.fl.us.

8.1 Introduction

The RCI system supports the development of the official state mileage and performance reports for FDOT annual performance reporting to the Florida Transportation Commission, state legislature, FDOT, Federal Highway Administration (FHWA), other Government offices, universities, the general public, and the cities and counties. The RCI provides the routes and measures for centerline mileage and vehicle miles traveled reports of the State Highway System (SHS). Public road mileage reported to TDA Office through the FORM TM application is integrated with the RCI mileage data to develop the state certified public mileage report required by FHWA. The TDA Office utilizes RCI and the DART application to perform canned or ad-hoc reports of transportation data for external and internal business data stakeholders. This chapter will outline the available reports distributed on the FDOT website and reports generated through TDA Office applications.

8.2 RCI Reports

The RCI application has numerous reports that provide users an expeditious process to generate current and historical roadway information. Users can select from several types of reports to quickly view and analyze roadway data information available within the RCI database. Refer to the RCI User Manual on the TDA Office's Documents & Publications website for further information.

8.2.1 Reports Tab, Standard Sub-tab, Standard Reports Menu

The Reports tab in the RCI application provides sub-tabs that allow for the preparation of several types of reports. The user does not need to be logged in to RCI to use the Reports tab. If the user is not logged in to RCI, the reports are generated from a general user account. If the user is logged in to RCI, the generated reports are associated with the user's account.

The Reports tab in the RCI application has a Standard Sub-tab that provides a straightforward user interface with a list of predefined reports. The following reports are available on the Standard Reports Menu:

- Feature/Characteristic Summary.
- FM Projects by Roadway ID.
- Feature Change.
- Features Tied to an Anchor.
- Feature/Characteristic Sort.
- Roadway ID.
- Route ID.
- Route Detail.
- Propose New Roadway Section Boundaries.
- Edits Performed.
- RCI Statistics.
- RCI Breaks.

Feature/Characteristic Summary

Purpose

To sum feature or characteristic information for a county, district, or statewide.

FM Projects by Roadway ID

Purpose

To list the Financial Management (FM) projects for a roadway section, including minimal projection information.

Feature Change

Purpose

To list feature changes made for the last seven days, including the day the report was run.

Features Tied to an Anchor

Purpose

To list the anchor(s) and all tied feature and characteristic data for a given roadway ID.

Feature/Characteristic Sort

Purpose

To sort features and characteristics for a roadway ID.

Roadway ID

Purpose

To produce a list of roadway IDs with the option to sort by roadway ID, Overall Status, Overall Description or Type.

Route ID

Purpose

To provide a list of all routes by geographic area or route type. This report does not include details such as roadway segment or milepoints.

Route Detail

Purpose

To arrange lists of roadway segments and supporting information for a given route within a county, district, or statewide.

Propose New Roadway Section Boundaries

Purpose

To prepare a list of features and characteristics that will be affected if a roadway is shortened or lengthened.

Edits Performed

Purpose

To administer a list of edits that are being checked programmatically within the system.

RCI Statistics

Purpose

To present counts and statistics of objects currently available in RCI. The RCI Statistics Report is only available to view within RCI and is not available to download in other file formats.

RCI Breaks

Purpose

To furnish a way to search for specific characteristics by roadway ID, district, or county. The RCI Breaks Report can have limitations with length records in RCI.

8.2.2 Historical Sub-tab

For historical data needs, the Reports tab has a Historical Sub-tab with the following report available on the Historical Reports Menu:

- RCI Breaks History.

RCI Breaks History

Purpose

To present a way to search for specific historical characteristics by roadway ID, district, or county. The RCI Breaks History Report can have limitations with length records in RCI.

8.3 DART Reports

The DART web application provides data validation and reporting for the RCI. Multiple roadway data reports are easily accessed by users through a common interface that also provides feedback to the user on the status of their report processing.

The DART home page can be accessed from the Main tab of the RCI application under “Other Application Links” or directly using the following URL (inside of the FDOT firewall only):

https://tdaappsprod.dot.state.fl.us/prv/DART/hub.aspx

8.3.1 RCI Reports

From the DART home page, use the Reports menu and choose the RCI Reports sub-menu options page. On the District menu, select the required two-digit district number. On the County menu, select the optional county from a list of counties that belong to the selected district. On the Reports menu, select one or more of the available reports.

There are three active RCI Reports:

- RCR04—Off-System Roadway Listing.
- RCR05—Federal Aid Mileage Report.
- RCR06—State Highway System Listing.

RCR04—Off-System Roadway Listing

Purpose

To provide a list of roadway segments and supporting information for roadway IDs that are not owned or maintained by FDOT.

RCR05—Federal Aid Mileage Report

Purpose

To provide mile-by-mile data by roadway ID on federal aid status, county, district, functional classification, federal system, Interstate or U.S. route number, state or county road number, local name, and the mile point and description of the cross road at each end of each listed segment.

RCR06—State Highway System Listing

Purpose

To provide a list of roadway segments and supporting information for roadway IDs that are owned and maintained by FDOT.

8.3.2 HPMS Reports

From the DART home page, use the Reports menu and choose the HPMS Reports sub-menu options page. On the District menu, select the required two-digit district number. On the County menu, select the optional county from a list of counties that belong to the selected district. On the Reports menu, select one or more of the available reports.

There is one active HPMS Report:

- HPR04—HPMS Sample Listing.

HPR04—HPMS Sample Listing

Purpose

To provide a list of roadway IDs and supporting information with HPMS Samples and includes urban classification data, functional classification data, and traffic data.

8.3.3 Pavement Reports

From the DART home page, use the Reports menu and choose the Pavement Reports sub-menu options page. On the District menu, select the required two-digit district number. On the County menu, select the optional county from a list of counties that belong to the selected district. On the Reports menu, select one or more of the available reports.

There are five active Pavement Reports:

- PAV01—Off System SIS Roads.
- PAV02—SHS HPMS Samples.
- PAV03—SHS Non-HPMS Samples.
- PAV04—Off System HPMS Samples.
- PAV05—SHS Roads with Breaks (Kang Report).

PAV01—Off System SIS Roads

Purpose

To provide a list of roadway segments and supporting information for roadway IDs that are a part of the Strategic Intermodal System (SIS).

PAV02—SHS HPMS Samples

Purpose

To provide a list of roadway segments and supporting information such as functional classification data, federal system data, and pavement roughness index.

PAV03—SHS Non-HPMS Samples

Purpose

To provide a list of roadway segments and supporting information for designated roadways on the National Highway System (NHS).

PAV04—Off System HPMS Samples

Purpose

To provide a list of HPMS Samples that are not on roadways owned and maintained by FDOT and their supporting information such as functional classification data, federal system data, and pavement roughness index.

PAV05—SHS Roads with Breaks (Kang Report)

Purpose

To provide a list of roadway segments and supporting information for roadway IDs that are owned and maintained by FDOT with their associated traffic flow breaks.

8.3.4 QA Reports

From the DART home page, use the Reports menu and choose the QA Reports sub-menu options page. On the District menu, select the required two-digit district number. On the QAR menu, select the Begin Date and the End Date. On the RCI menu, select Edit to enter the roadway segment's roadway ID, BMP, and EMP. On the HPMS menu, select Edit to enter the sample's HPMS ID. On the Reports menu, select one or more of the available reports.

There are six active QA Reports:

- QAR01—RCI/HPMS Segment and Field Review List.
- QAR02—QA Field.

- QAR03—QA Office.
- QAR04—QA HPMS.
- QAR05—QA Points.
- QAR06—QA Bike/Ped.

QAR01—RCI/HPMS Segment and Field Review List

Purpose

To provide a list of the features and characteristics of selected roadway segments and HPMS samples for the field assessment portion observed by TDA Office for a Quality Assurance Review (QAR), and to assist districts in preparing a list of RCI and HPMS field data to review for internal quality assurance reviews/checks.

QAR02—QA Field

Purpose

To provide a list of field collected features and characteristics for roadway segments and HPMS samples selected by TDA Office for a QAR to observe district field data collection practices, and to support a district's internal quality assurance review of a selected portion of RCI field collected data.

QAR03—QA Office

Purpose

To provide a list of office collected features and characteristics for roadway segments and HPMS samples selected by TDA Office for a QAR to observe district office collection practices, and to facilitate a district's internal quality assurance review of a selected segment of RCI office collected data.

QAR04—QA HPMS

Purpose

To provide a list of HPMS features and characteristics for HPMS samples selected by TDA Office for a QAR to observe district HPMS sample data collection practices, and to assist a district in internal quality assurance reviews of selected milepoint segments of HPMS sample data available in RCI.

QAR05—QA Points

Purpose

To provide a list of the point features within the roadway segments and HPMS samples selected by TDA Office for a QAR used to observe district data collection practices, and to produce a list of RCI point features for a district internal quality assurance review of selected roadway segment and HPMS sample data.

QAR06—QA Bike/Ped

Purpose

To provide a list of bicycle and pedestrian features and characteristics for roadway segments and HPMS samples selected by TDA Office for a QAR to observe district data collection practices of RCI Feature 216, and to aid a district's internal quality assurance review of selected milepoint roadway segments containing bicycle and pedestrian features and characteristics (RCI Feature 216).

8.3.5 RCI Top 30

The TDA Office has created a query for the most requested information from RCI called the RCI Top 30. The RCI Top 30 directly reads the RCI database to obtain the most up to date view of all the roadway sections. From the DART home page, use the Reports menu and choose the Top 30 RCI Reports sub-menu options page. On the District menu, select the required two-digit district number. On the Reports menu, select the available report.

- TOP01—RCI Top 30.
- TOP02—Top 30 Traffic.

TOP01—RCI Top 30

Purpose

To provide a list of the 30 most used RCI features and characteristics for roadways with the option to sort by roadway ID, Overall Status, Overall Description or Type.

TOP02—Top 30 Traffic

Purpose

To provide a list of the 30 most used RCI features and characteristics for Interstates and U.S. Routes with the option to sort by roadway ID, Overall Status, Overall Description or Type, and AADT.

8.3.6 Outdoor Advertising

From the DART home page, use the Reports menu and choose the Outdoor Advertising (Outdoor Ad.) Reports sub-menu options page. On the District menu, select the required two-digit district number. On the County menu, select the optional county from a list of counties that belong to the selected district. On the Reports menu, select the available report.

There are two active Outdoor Advertising Reports:

- ODA01—Limited Access Report.
- ODA02—Interstate Report.

ODA01—Limited Access Report

Purpose

To provide a list of limited access roadway segments (excluding interstates) with information for state route number, local name, functional classification, interchange type, exit number, section status exception, access control, urban size, traffic count (AADT), and expressway owning authority.

ODA02—Interstate Report

Purpose

To provide a list of interstate roadway segments (excluding interstates) with information for section status exception, interstate route number, urban size, exit number, traffic count (AADT), and functional classification.

8.4 Official State Mileage and Performance Reports

FDOT is required by FHWA to report data information for the SHS. Through this process, FDOT has created several reports that are useful to many agencies and individuals and are located on the FDOT website.

8.4.1 City/County Mileage Report

The City/County Mileage Report contains the centerline miles of roads under the jurisdiction of each city and county in Florida. This number is also broken down into paved and unpaved mileage. The report is produced in the Spring of each year, with data as of September 30 of the previous year. This mileage data is part of a comprehensive report of mileage, traffic, pavement, and other information that FDOT sends to the FHWA each year. The data are used to compile national data, including the need for federal highway funding. They are also used to help determine the share of the national highway funding that Florida will receive.

https://www.fdot.gov/statistics/mileage-rpts/default.shtm

8.4.2 Public Road Mileage and Travel (DVMT) Report

A certified letter is created each year from the State Transportation Secretary to the FHWA. The certification letter/report shows how the public road mileage is divided between the SHS, the County Road System, the City Street System, and various federal agencies. An all public roads mileage and daily vehicle miles traveled (DVMT) report sorts the mileage and DVMT by county, functional classification, and urban size.

https://www.fdot.gov/statistics/mileage-rpts/default.shtm

8.4.3 State Highway System Mileage and Travel (DVMT) Report—(NHS, SHS, SIS, FIHS)

FDOT reports on SHS Mileage have traditionally been issued as of June 30 and December 31 of each year, with the most current data available on those dates. Since annual average daily traffic (AADT) for a calendar year is not available until several months after December 31, the daily vehicle miles traveled (DVMT) calculation for both the June and the December report uses AADT from the previous calendar year in combination with the Centerline Miles (CLM) as of the current date. This hybrid DVMT is therefore completely correct for neither the current nor the previous calendar year. The new State Highway System Annual Reports are issued once a year, in the Spring after the previous year's AADT data are available. Thus, the DVMT data are consistent and correct for the year being reported.

https://www.fdot.gov/statistics/mileage-rpts/default.shtm

These reports are produced in both annual and semi-annual versions for the entire SHS, NHS and SIS. The annual reports (first produced in 2006) include DVMT that are calculated from CLM as of the end of the year of the report and AADT as of the same calendar year of the report. The resulting DVMT are thus calculated consistently, and the annual reports should be used whenever possible. The semi-annual reports are done as of June 30 and December 31 and include DVMT calculated from CLM as of the date of the report and AADT as of the previous calendar year. Because of this mix of dates, the semi-annual report with DVMT that most closely matches the DVMT in the annual report is the one for June of the following year. In other words, to generate a relatively

consistent time series of DVMT data from 2005 to 2008, it would be best to use the semi-annual report for June 30, 2006 (to get essentially 2005 DVMT) and then the annual reports for 2006 and thereafter.

8.4.4 Florida Federal Aid Systems

Federal Aid Roads are those on the NHS or functionally classified as Urban Collector / Rural Major Collector, or higher. They are eligible for federal aid from the FHWA for disaster recovery and other purposes. TDA Office updates reports and maps on Federal Aid Roads monthly, using data in the Department's RCI. The Federal Aid Road Report includes mile-by-mile data on federal aid status, county, district, functional classification, federal system (such as NHS), Interstate or U.S. route number, state or county road number, local name, and the mile point and description of the cross road at each end of each listed segment. The report does not include roads that are planned but unbuilt, physically removed, or recorded under a different roadway identifier.

https://www.fdot.gov/statistics/fedaid/default.shtm

8.4.5 Florida Interchange Report

This report shows all the interchange numbers and milepost locations for Interstates and most expressways in the state of Florida.

8.4.6 Florida Mobility Performance Measures Program

The MPM program is designed to develop and report on multimodal mobility performance measures. Mobility is the ease with which people and goods move throughout their community, state, and world. Mobility is valuable because it provides access to jobs, services, and markets. Transportation's most essential function is to provide mobility for people and goods. By measuring the performance of mobility, FDOT can better understand how to improve it.

https://www.fdot.gov/planning/fto/mobility/default.shtm