CHAPTER 5

RCI PROCEDURES

FDOT

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CHAPTER 5. RCI PROCEDURES

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This chapter is intended to focus on the management of a roadway ID and the many aspects of data collection procedures. The intent is to give guidance to the Districts to assist in unique road sectioning situations. It describes examples of the actions that are required to be performed to ensure Roadway Characteristics Inventory (RCI) and Linear Referencing System (LRS) data is maintained consistently to reflect field conditions. These procedures have been developed based on historical issues throughout and may not cover all situations. Roadway ID and Roadway Section are used interchangeably in this chapter.

This chapter provides guidance to the Districts to assist in the following data collection situations—adding a new road, editing a road, and retiring a road. Each of these situations are covered in detail including specific unique scenarios.

5.1 Adding New Roadways

When adding a new road in RCI, it needs to meet one of the following criteria:

- A planned or completed road construction project.
- A local road is programmed with a Financial Management (FM) project.
- A transferred road from a local entity (as outlined in Section 5.1.3 of this handbook).
- A roadway re-sectioning.

5.1.1 New Construction

When a new roadway project is in the planning stage, a roadway ID is assigned in RCI as pending and used by the Financial Management Office and all other Florida Department of Transportation (FDOT) offices to track the project phases from planning to completion of the roadway. Project types requiring a new roadway ID are new construction or realignments. The District RCI Coordinator or the designated staff is responsible for coordinating, assigning, and monitoring roadway ID numbers assigned to their respective managing District. The assignment process of the roadway ID is established in Chapter 3. The roadway section alignment must be coordinated with FDOT Transportation Data and Analytics (TDA) Office to create logical and consistent section alignments in RCI and the LRS. The District RCI Coordinator or the designated staff is required to perform the necessary paperwork to create an RCI/LRS package and provide supporting documentation to create and add the new roadway ID. The District RCI Coordinator will ensure their District stakeholders are coordinated and aware of additions, updates, or modifications to RCI and LRS roadway sections including Planning, Maintenance, Traffic and Engineering Operations, Safety, Modal Offices, Design, Construction and the Office of Work Program and Budget. These stakeholders are important users which use the RCI business data to support the planning, operations, and programming of Florida's multimodal transportation system and assets. The Districts are critical for not only prioritizing and delivering construction projects but also to ensure the RCI business data represents the roadway section field conditions accurately and in a timely manner for state accountability purposes.

Active on the State Highway System (SHS)

For new construction to be added as an Active On the SHS roadway, a complete field inventory must be done, update RCI data, and SHS mileage addition paperwork must be completed with the District Secretary's signature at the completion of construction or when the roadway is open to traffic. All documents must be submitted to the TDA Office in an RCI/LRS package which will need to be reviewed by the TDA coordinators responsible for maintaining the RCI and LRS reconciliation process. The SHS mileage paperwork will be reviewed by the Multimodal Data System Coordinator for the new mainline roadway ID, and the RCI database will be updated. For specific requirements for adding SHS mileage, please see the Transportation System Jurisdiction and Numbering Procedure, Topic No. 525-020-010. SHS mileage paperwork does not have to be submitted for the addition of Active Off the SHS or Active Exclusive roadways, since their mileage is excluded from the SHS mileage.

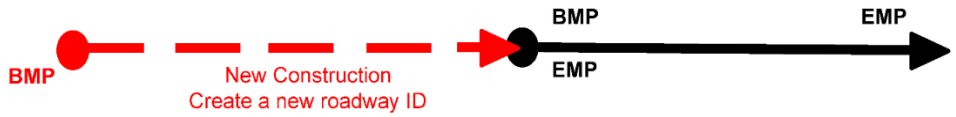
New Construction at Beginning (Zero Milepoint) of an existing Roadway ID Alignment

If a new roadway construction occurs before the zero milepoint of an established roadway, follow the process as indicated below:

- Active On the SHS: a new roadway ID must be assigned for the new section of construction. Follow the Roadway ID assignment process. See Figure 5.1.

- Active Off the SHS: Districts have the option to keep the adjoining roadway ID, establish a new beginning milepoint (BMP) including the new construction and re-inventory the roadway adjusting all features and characteristics of the combined roadways. All Highway Performance Monitoring System (HPMS) Samples that exist need to be reviewed by the TDA HPMS Coordinator as part of this process.

FIGURE 5.1 | CONSTRUCTION AT THE BEGINNING OF A ROADWAY ID



New Construction at Ending of Roadway ID Alignment

If the new roadway construction is at the end of the ending milepoint (EMP), then the roadway ID can be lengthened. An RCI/LRS package must be submitted to lengthen the EMP and the new construction must be inventoried, adding all features and characteristics to RCI. See Figure 5.2.

FIGURE 5.2 | CONSTRUCTION AT THE END OF A ROADWAY ID

Ramps

If a ramp is new construction, the District RCI Coordinator must assign a roadway ID following the RCI/LRS package instructions. If the ramp is being reconstructed and still serves the same purpose for flow of traffic, the same roadway ID can be used, even if the location of the zero milepoint for the ramp has been changed or moved.

5.1.2 Pending Roadways

Pending Status for New Roadways, Realigned Segments or Future Road Transfers

When a new roadway, realignment or an anticipated roadway transfer is planned, a new roadway ID number must be created with an overall status of Pending for the following types of roadways: Active On the SHS, Active Off the SHS, and Active Exclusive as outlined in the roadway ID numbering process outlined in Chapter 3. Pending roadways or future roadway projects require roadway ID numbers with an estimated length in RCI as identified in Chapter 19 of the Work Program Instructions. Pending roadways are not included in the TDA Office's LRS data; only existing roadways that are open to traffic are displayed on official FDOT maps. HPMS Samples on roadways with realignments need to be reviewed by the TDA HPMS Coordinator.

Although the segments are pending, an effort to populate all of the feature data is needed for HPMS reporting purposes of the National Highway System (NHS). Even if only partial data is available, it should be coded in RCI.

Roadway ID Governance

For anticipated roadway jurisdiction transfers or additions to the SHS, a roadway ID number must be created using the roadway ID numbering system process outlined in Chapter 3. An RCI/LRS package must be submitted to create the new roadway ID number in RCI with a Pending status. Districts must perform the road jurisdiction transfer process as listed in the Transportation System Jurisdiction and Numbering Handbook. The District must coordinate with Central Office to ensure all approvals and signatures have been completed on all roadway transfers as well as to ensure the RCI and the LRS data represent the associated documents and the road jurisdiction transfer process requirements are met. Once the roadway jurisdiction transfer negotiation documents are signed and become effective, the District must follow the processes to coordinate and finalize the transfer listed in the Transportation System Jurisdiction and Numbering Handbook. The Districts will submit an RCI/LRS package along with the transfer agreement package to the TDA Office for processing.

The section length of the Pending roadway may be estimated from conceptual plans or construction plans. The estimated EMP may be rounded to the nearest whole mile, e.g., if the conceptual plans end at approximately 4.650 then the EMP can be rounded to 5.000. All administrative feature data required for pending roadways listed in the Pending Roadway matrix located in the Appendix A of this handbook should be coded once information is established.

Populating RCI Data for New Roadways

After construction is completed for a new road, final contract acceptance notifications are provided by the Notification of Contract Status Report System which are reviewed by the Districts and the TDA office. The TDA Office receives these notifications and provides the District with a list of projects that received a Final Acceptance status. The District will update and track the roadway record in Roadway Inventory Tracking Application (RITA). When the road is open to traffic, the roadway must be field inventoried to obtain the driven section length for the roadway ID BMP and EMP, and all the appropriate information and characteristics need to be updated in RCI. The District will submit an RCI/LRS package to update the V/U/D screen to change the overall status to active and the correct field measured EMP.

All countywide roadway IDs' must be retained permanently in RCI, they are used as a place holder for the county key sheet in the SLO application. Examples of countywide roadway IDs are CC000000 for District counties and CC479999 for Turnpike counties where "CC" stands for county code.

Pending Roadway Management

Pending roadways in RCI are to be reviewed annually by the District. If a roadway project or a transfer has been canceled, the pending roadway should be removed from the RCI database. Districts are required to submit an RCI/LRS package by the biannual cutoff deadline of June 15th and December 15th. To request an exclusion for the District Quality Evaluation (DQE) grading period, Districts must submit a request to exclude pending roadways on the TDA Office's SharePoint site by the appropriate deadline.

5.1.3 Road Jurisdiction Transfers (RJT)

Road jurisdiction transfers are governed by Florida Statute § 335.0415 and the Transportation System Jurisdiction and Numbering Procedure, Topic No. 525-020-010 as outlined in the Transportation System Jurisdiction and Numbering Handbook on the process of transferring the ownership of roadways to or from the city, county or other entity. Only the aspects of transfers that directly affect RCI are discussed in this section.

Active Off the SHS to Become Active On the SHS

When an Active Off the SHS roadway is transferred onto the SHS, it will keep the original roadway ID. The District must submit an RCI/LRS package to FDOT TDA Office for the following:

- Create a new state road number.
- Request V/U/D screen updates:
  - Change overall status to Active On the SHS.
  - Update overall description with the newly assigned State Road Number.

When the package is complete, the District will update all necessary Features and Characteristics in the RCI database that apply to the transfer. The overall status and roadway ID or state road number of the roadway will not be changed in RCI until the transfer agreement becomes effective, i.e., either the date the FDOT Secretary signs the transfer agreement or a later date as specified in the transfer agreement.

The District must **update required administrative features within 15 calendar days** of the establishment of, or change to, the actual value. Reference the General Interest Roadway Data (GIRD) Procedure, Topic No. 52-020-310, for the timeliness standard and list of required features.

If the roadway was not previously in RCI, then a new roadway ID should be assigned an overall status of Pending since it is anticipated to be added to the SHS. The Pending roadway should be populated with all known or anticipated administrative features. The District should coordinate with the TDA Transportation Monitoring Program division so a traffic site can be assigned, and counts can be scheduled for the year the transfer will be effective. The District should also coordinate with the Office of Maintenance so the appropriate funds can be encumbered for the year the transfer will be effective.

Once the transfer agreement becomes effective, follow the guidelines outlined in the Transportation System Jurisdiction and Numbering Handbook. District has to coordinate with TDA Office to ensure that the overall status, governmental jurisdiction, overall description, system, or any other pertinent fields on the V/U/D Roadway ID screen and other secured RCI features are updated to reflect the transfer agreement. Feature 140 OSDATE should be coded with the transfer effective date to reflect when the mileage is officially added to the SHS.

The District will update RCI, produce and distribute Straight Line Diagrams (SLDs) and corresponding county section number key sheets as prescribed by the GIRD Procedure, Topic No. 525-020-310. Since the update is due to Road Jurisdiction Transfers (RJT), the District must **update the required RCI features within 90 calendar days and produce SLDs and county section number key sheets within 120 calendar days** of the transfer effective date. A new RITA record is automatically generated for the Districts to record the new roadway information.

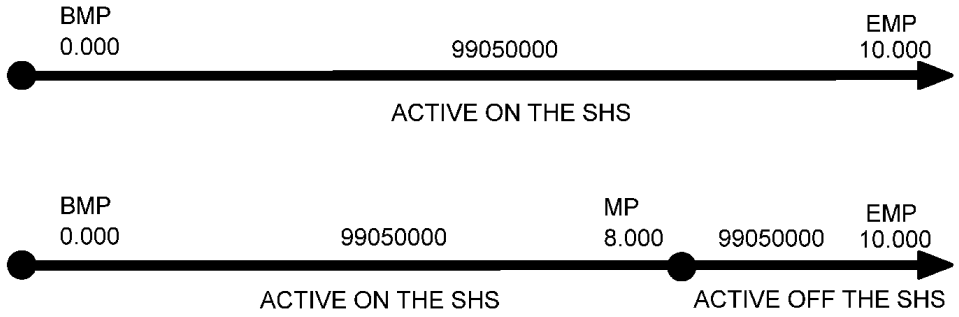
New Construction or Removal of a State Road

When the Department constructs a new state road, or realigns an existing state road, or physically removes a state road, the District Secretary must approve the addition or deletion of the segments. The data collection requirements as indicated in Chapter 4 would apply, triggered by the date of the District Secretary's approval.

Transferring a Segment of a Roadway ID

- When a segment of a Roadway ID is transferred to a local agency or another District or the Turnpike, the original roadway ID is retained and the District must submit an RCI/LRS package for the following:
  - Request V/U/D screen updates:
    - Change overall status to Active with Combination.
    - Change overall description to address any name modification. When the package is complete, the District will update all necessary Features and Characteristics in the RCI database that apply to the transfer.
- Utilize the same beginning and ending points of the roadway ID divided in Feature 140 as follows:
  - Portion of the roadway ID transferred to the local agency—Code as Active Off the SHS.
  - Portion of the roadway ID maintained by FDOT—Code as Active On the SHS.

FIGURE 5.3 | TRANSFERRING A SEGMENT OF A ROADWAY ID



Scenario: Roadway ID 99050000 is 10.000 miles long, a segment from MP 8.000 to 10.000 was transferred to a city. The original roadway ID should be retained, utilizing the same beginning and ending points with the roadway segment divided in Feature 140 as follows: Milepoints 0.000 to 8.000 shall be coded as Active On the SHS, and milepoints 8.000 to 10.000 shall be coded as Active Off the SHS.

HPMS Samples on Active On and Active Off roadways

The Federal Highway Administration (FHWA) requires FDOT to conduct data collection for the HPMS. Statistically based samples are required by Functional Classification, Urban Area, Urban Size, and Traffic Volume Ranges, for short this is referred to as a "Strata." HPMS sample criteria does not bifurcate based on roadway status; the samples are selected for both on and off the SHS. Additionally, the sample length is determined by feature changes on the roadway that impact the data used in the Table of Potential Samples (TOPS). The TOPS is the strata and the through lanes. These data items must be homogeneous within the sample.

Every year the sample panel is reviewed to eliminate over or under sampling for each strata. This is accomplished by adding or deleting samples randomly to maintain a statistically representative sample panel. The TDA HPMS Coordinator runs a sample adequacy report annually to determine what strata are over- or under-sampled. Based on this report, the TDA HPMS Coordinator randomly selects the samples to be added to the under-sampled strata. For deleting any samples from the over-sampled strata, the TDA HPMS Coordinator provides a sample reduction plan to FHWA for approval. Samples can also be deleted when a roadway is completely realigned or when its functional classification is changed to a local road. The TDA HPMS Coordinator corresponds by email with the Districts to schedule inventory for the additional new samples and deletion of old samples from Feature 118 in RCI.

5.1.4 Realignment of a State Road Involving a Road Jurisdiction Transfer Resulting from New Construction

This example illustrates a realignment and road jurisdiction transfer of a state facility.

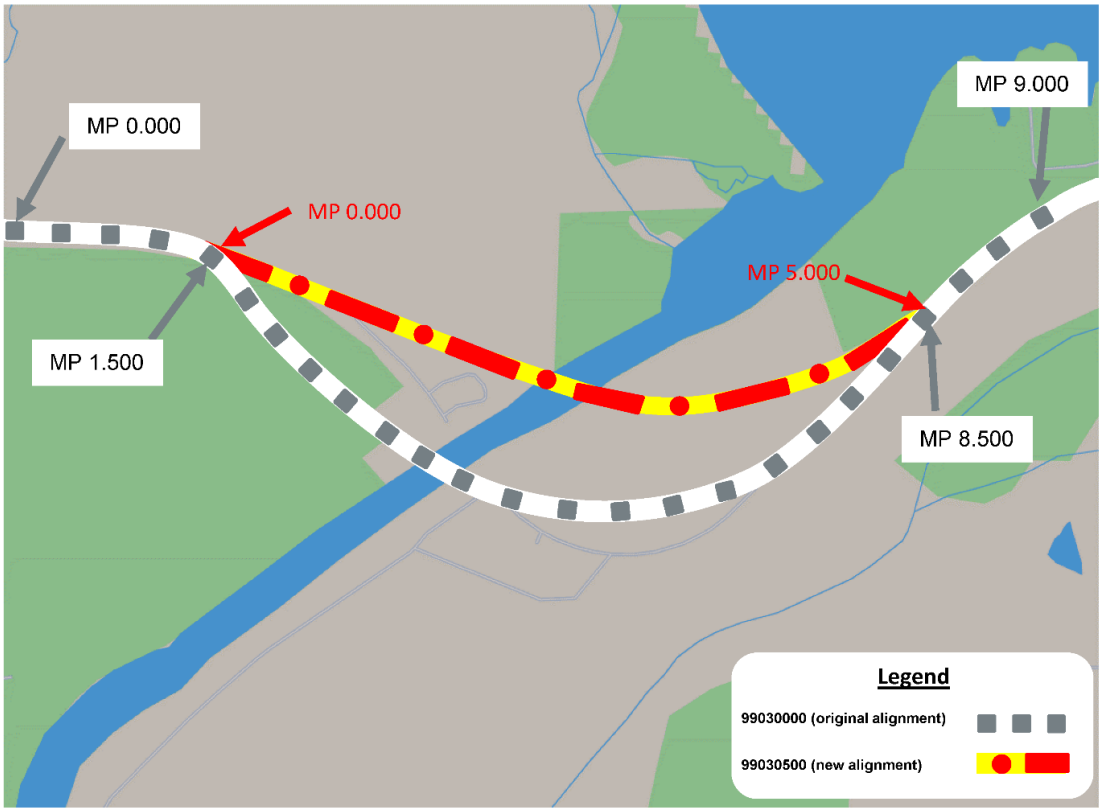
A new SHS bridge alignment was built replacing an old bridge alignment. The old bridge was transferred off the SHS.

- Roadway ID 99030000 from MP 1.500 to MP 8.500 was the original bridge that was realigned.
- Roadway ID 99030500 from MP 0.000 to MP 5.000 is a new roadway ID assigned to the new bridge alignment. A subsection number of the original roadway ID is used. Note: the new bridge of 5.000 miles is shorter than the old bridge of 7.000 miles.
- The state road number is transferred to the new bridge alignment. The old alignment is removed from the SHS.

Appropriate RCI administrative features should be updated according to the requirements and timeliness standards of the Transportation System Jurisdiction and Numbering Procedure, Topic No. 525-020-010 and GIRD Procedure, Topic No. 525-020-310. The FDOT Secretary's signature/approval determines the date the timeliness requirements start for the transferred bridge, and the timeliness for the new bridge data.

- Districts must update RCI physical features and characteristics, SLDs, and county section number key sheets according to the requirements and timeliness standards of the GIRD Procedure, Topic No. 525-020-310. District offices responsible for coordinating the roadway ID section changes must review all Planning Features and Characteristics, coordinate with Office of Maintenance and Traffic Engineering and Operations Office, and notify other District stakeholders. Running validation edits is a highly suggested practice to perform which provides a list of data that needs to be collected on the appropriate sections.

FIGURE 5.4 | REALIGNMENT OF A STATE ROAD INVOLVING A ROAD JURISDICTION TRANSFER RESULTING FROM NEW CONSTRUCTION



Roadway ID 99030000 (Original Bridge Alignment)

Feature 111—State Road System

- All state-owned roads should have a State Road number. Coordinate with the TDA Multimodal Data System Coordinator for additional guidance. Code new multiple milepoint breaks for each state road number designation.
  - Code MP 0.000 to MP 1.500, as the original "SR" state road number.
  - Code MP 1.500 to MP 8.500, to "OS" old state road number since the roadway was transferred from the SHS.
  - Code MP 8.500 to MP 9.000, as the original "SR" state road number.
- Refer to Chapter 7 for the coding requirements of Feature 111.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99030000	00	00	TEST	0.000	9.000	9.000	ACTIVE WITH COMBINATION
Description: EXAMPLE 3 ROAD						VideoLog	Enterprise GIS

Feature 111 - STATE ROAD SYSTEM						**LENGTH/NON-INTERLOCKING**
Beg.MP	**End.MP**	**Characteristic**	**Value**	**Unit**	**Side**	**Char. Updated**
0.000	0.000	STATE ROAD NUMBER	SR 12	ID	C	KNRSHTL 05/29/2007
1.500	8.500	STATE ROAD NUMBER	CR 12	ID	C	KNRSHTL 05/29/2007
8.500	9.500	STATE ROAD NUMBER	SR 12	ID	C	KNRSHTL 05/29/2007

Feature 138—Roadway Realignment

- Feature 138 is coded on the old roadway alignment. Feature 138 is an interlocking feature that populates Feature 139 (on new roadway alignment) if all the characteristics are coded using the same BMP and EMP. Refer to Chapter 7 for the coding requirements of Feature 138.
  - Code BMP 1.500 to EMP 8.500 for all the characteristics of Feature 138, which is the limit of the old bridge alignment.
  - Code NALIGNDT, which is the date the realignment was officially deleted off the SHS as date signed/approved by the District Secretary.
  - Code 99030500 for NALIGNID, which is the new alignment roadway ID.
  - Code MP 0.000 for NALNBGPT, which is the new alignment BMP.
  - Code MP 5.000 for NALNENPT, which is the new alignment EMP.

Feature 140—Section Status Exception

- Code multiple milepoint breaks for each section status.
  - Code 02 (Active On the SHS) from MP 0.000 to MP 1.500, limits of the old alignment that was not realigned nor transferred.
  - Code 09 (Active Off the SHS) from MP 1.500 to MP 8.500, limits of the new roadway alignment.
    - Code OSDATE, date when the old roadway alignment mileage was officially deleted from the SHS when signed/approved by the State Secretary.
    - All other original features or characteristics data coded on the transferred portion should NOT be deleted nor removed from RCI.
    - The data should be retained because the roadway still exists as Active Off the SHS.
  - Code 02 (Active On the SHS) from MP 8.500 to MP 9.000, limits of the old alignment that was not realigned nor transferred.
- Refer to Chapter 7 for the coding requirements of Feature 140.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99030000	00	00	TEST	0.000	9.000	9.000	ACTIVE WITH COMBINATION
Description: EXAMPLE 3 ROAD						VideoLog	Enterprise GIS

Feature 140 - SECTION STATUS EXCEPTION						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.000	1.500	ON OR OFF-SYSTEM DATE	4/15/1963	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	02 - ACTIVE ON THE SHS	CD	C	KNRSHTL 05/25/2007
1.500	8.500	ON OR OFF-SYSTEM DATE	5/1/2007	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	09 - ACTIVE OFF THE SHS	CD	C	KNRSHTL 05/29/2007
8.500	9.000	ON OR OFF-SYSTEM DATE	4/15/1963	DA	C	KNRSHTL 05/29/2007
		SECTION STATUS EXCEPTION	02 - ACTIVE ON THE SHS	CD	C	KNRSHTL 05/29/2007

View/Update/Delete (V/U/D) Screen

Since the roadway has multiple section statuses, the overall status is changed to "Active with Combination" for the roadway ID.

- Any changes to the V/U/D screen require a submittal of an RCI/LRS package to TDA Office.
- Overall Descriptions may be submitted via an email request. Multiple items should be submitted as a spreadsheet attachment.
- Refer to Chapter 6 for the RCI/LRS package process and requirements.

Roadway ID 99030500 (New Bridge Alignment)

All Planning physical features and characteristics must be collected and coded for the new roadway alignment. Coordinate with the other offices to have their RCI features collected and coded for the new roadway alignment.

Feature 111—State Road System

- MP 0.000 to MP 0.500 should be coded with state road number designation of the old alignment, since the state road number designation was transferred to the new bridge alignment.
- Refer to Chapter 7 for coding requirements of Feature 111.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99030500	00	00	TEST	0.000	0.500	0.500	ACTIVE WITH COMBINATION
Description: EXAMPLE 3 NEW ALIGHMENT						VideoLog	Enterprise GIS

Feature 111 - STATE ROAD SYSTEM						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.000	0.500	STATE ROAD NUMBER	SR 12	ID	C	KNRSHTL 05/29/2007

Feature 138—Roadway Realignment

No coding required.

- Feature 138 is coded under old alignment and will automatically generate Feature 139 on the new roadway alignment.

Feature 139—New Roadway Alignment

No coding required.

- Automatically generated on the new roadway alignment roadway ID 99030500.

- Automatically generated if Feature 138 is correctly coded on the old roadway alignment roadway ID 99030000.

- The information will be a mirror of Feature 138 of the old roadway alignment roadway ID 99030000.

Feature 140—Section Status Exception

- Code OSDATE—the date the new alignment mileage was officially added to the SHS system as signed/approved by the District Secretary.

- Code 09 (Active Off the SHS) from MP 0.000 to MP 0.500, the limits of the new roadway alignment.

- Refer to Chapter 7 for the coding requirements of Feature 140.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99030500	00	00	TEST	0.000	0.500	0.500	ACTIVE WITH COMBINATION
Description: EXAMPLE 3 NEW ALIGHMENT						VideoLog	Enterprise GIS

Feature 140 - SECTION STATUS EXCEPTION						**LENGTH/NON-INTERLOCKING**
Beg.MP	**End.MP**	**Characteristic**	**Value**	**Unit**	**Side**	**Char. Updated**
0.000	1.500	ON OR OFF-SYSTEM DATE	05/01/2007	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	09 - ACTIVE OFF THE SHS	CD	C	KNRSHTL 05/25/2007

5.1.5 Managed Lanes

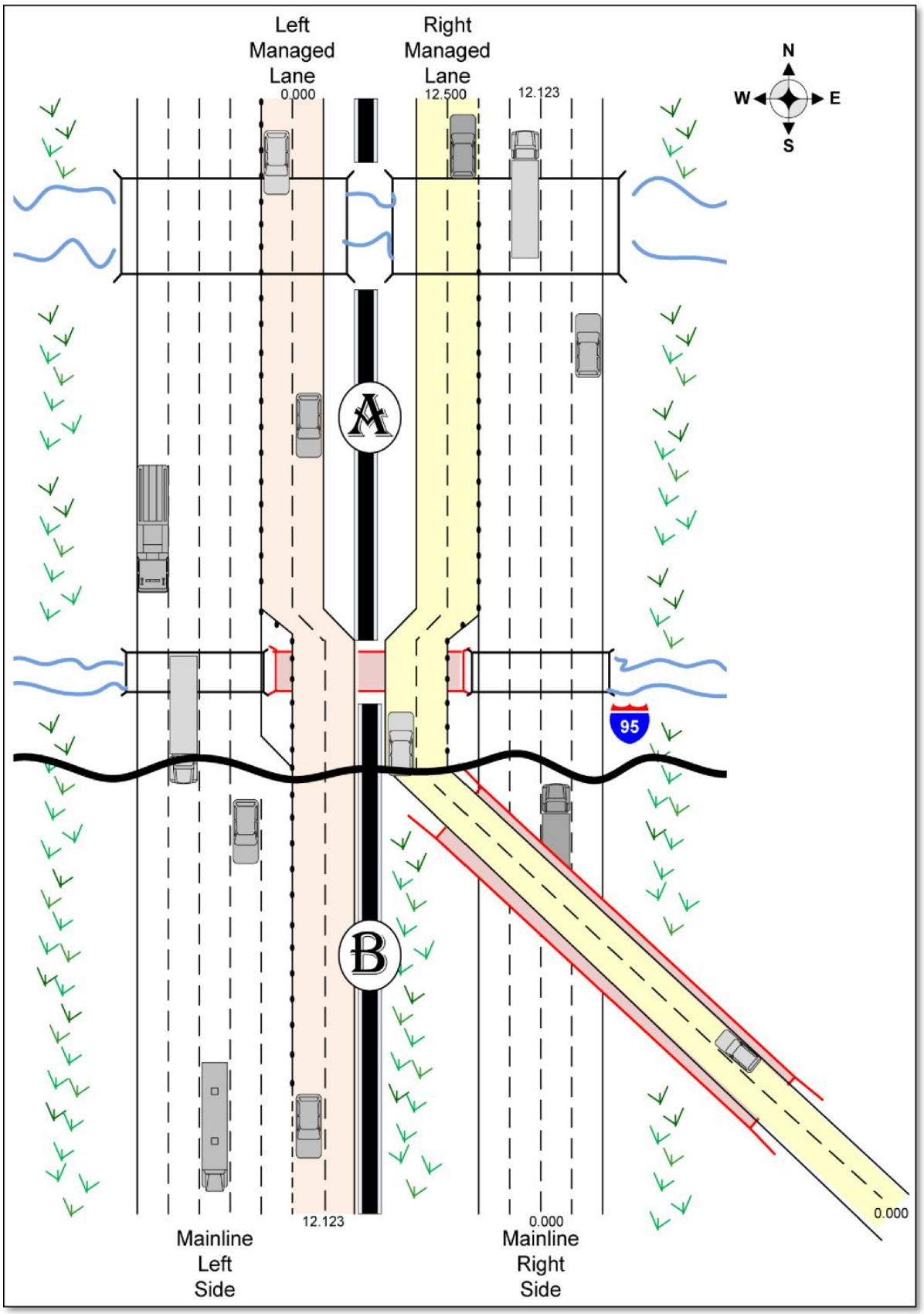
Managed lanes refer to toll lanes that are in conjunction with mainline facilities that allow for variable situations depending on traffic volume and roadway conditions. An example is the 95 Express. Another name for managed lanes is high occupancy toll (HOT) lanes.

Each direction of travel of the managed lanes will be assigned a roadway ID. The roadway ID number of the managed lane will match the associated mainline section number and the sub-section number will be in the 900 series. The managed lanes will be coded as Active Exclusive under the inventory type and as managed lanes under the road type. For inventory requirements, reference the Managed Lanes RCI Inventory sheet in the Appendix A of this handbook.

Managed lanes will not add centerline miles to the SHS, but they will add lane miles and vehicle miles traveled (VMT). The lane mileage will provide for proper funding to the Office of Maintenance. Managed lanes also have LRS alignments.

SLDs are required for managed lanes. Display Section Q in the SLD Diagrammer—Managed Lanes on the mainline SLD to display the limits of the associated managed lanes.

FIGURE 5.5 | MANAGED LANES



Coding Managed Lanes in RCI (Effective April 2013)

- Assign a roadway ID to each travel way.
- Inventory each roadway ID in the direction it travels, i.e., the ascending managed lanes are inventoried from south to north, and the descending managed lanes are inventoried from north to south.
- The two roadway IDs for the managed lanes can be of unequal length.
- The managed lanes will not add any mileage to the interstate system or SHS.
- The VMT for the managed lanes will increase the interstate total VMT.
- The lanes for the managed lanes will be added to the mainline total number of lanes for reporting purposes.
- Code Feature 142—Managed Lanes. Characteristics a-i are coded for the mainline roadway. Characteristics j-l are coded for each of the managed lane roadways.
    a. RMLRDWY—Right Managed Lane Roadway ID
    b. RMLBMP—Right Managed Lane Begin Milepoint
    c. RMLEMP—Right Managed Lane End Milepoint
    d. LMLRDWY—Left Managed Lane Roadway ID
    e. LMLBMP—Left Managed Lane Begin Milepoint
    f. LMLEMP—Left Managed Lane End Milepoint
    g. CMLRDWY—Composite Managed Lane Roadway ID
    h. CMLBMP—Composite Managed Lane Begin Milepoint
    i. CMLEMP—Composite Managed Lane End Milepoint
    j. MAINRDWY—Roadway ID for the associated mainline highway
    k. MAINBMP—Begin Milepoint of the associated mainline highway
    l. MAINEMP—End Milepoint of the associated mainline highway

- MLTRFSEP Managed Lane Separator, is coded under Feature 214—Outside Shoulders. It is only coded for managed lane roadways. The MLTRFSEP codes are:
  - **0:** None
  - **1:** Flexible Posts
  - **2:** Guardrail
  - **3:** Barrier Wall
  - **4:** Lawn
- Where characteristics under Feature 119 and Feature 212 break in relationship to the beginning/ending location of a managed lane, ensure that the milepoint limits for these characteristics exactly match the BMP/EMP of the managed lane coded under Feature 142.

CASE A

Locations where the managed lanes run adjacent to the Interstate lanes.

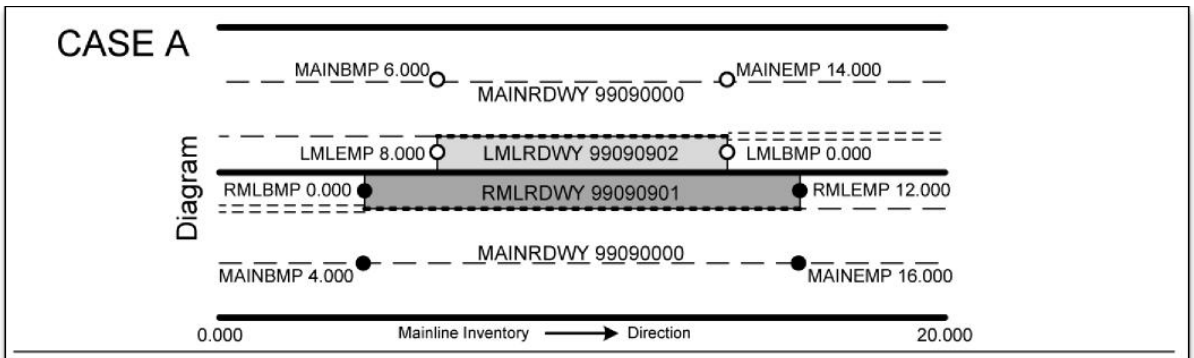
Mainline

- There is no median or inside shoulder between the mainline and the managed lane of the same direction. Therefore, code Feature 215—Medians—RDMEDIAN as code 50—Non-counted Managed Lane.
  - Do not code Feature 219—Inside Shoulder.

Managed Lanes

- The delineator (MLTRFSEP) is between the free and tolled lanes. MLTRFSEP will only be coded once, and it will be assigned to the managed lanes' roadway ID.
- The type and width of the inside shoulders will be coded.
- Half of the median width will be coded for each managed lane roadway.
- In locations where the managed lane shares a bridge with the mainline, the bridge number is also coded on the managed lane's roadway ID.
- In locations where the NB and SB managed lanes share a bridge, code the bridge number on each of the managed lanes roadway IDs.
- Code any tolling data that applies in Feature 122—Facility Classification and in Feature 119—HPMS Universe.
- Code lanes and surface width under Feature 212—Through Lanes. Do not include managed lanes in the count for NOLNES on the mainline roadway ID.

FIGURE 5.6 | MANAGED LANES—CASE A



Field Data

Mainline 99090000	Right Managed Lane 99090901	Left Managed Lane 99090902
LMLBMP = 0.000	MAINBMP = 4.000	MAINBMP = 6.000
LMLEMP = 8.000	MAINEMP = 16.000	MAINEMP = 14.000
LMLRDWY = 99090902	MAINRDWY = 99090000	MAINRDWY = 99090000
RMLBMP = 0.000		
RMLEMP = 12.000		
RMLRDWY = 99090901		

RCI Coding Example for Case A

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99090000	99	99	TEST	0.000	20.000	20.000	ACTIVE ON THE SHS
Description: MANAGED LANE CASE A MAINLINE						VideoLog	Enterprise GIS

Feature 142 - MANAGED LANES — LENGTH/NON-INTERLOCKING

Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
6.000	14.000	LEFT MANAGED LANE ROADWAY ID	99090902	EA	C		USERID 01/01/2013
6.000	14.000	LEFT MANAGED LANE BEGIN MP	0.000	MI	C		USERID 01/01/2013
6.000	14.000	LEFT MANAGED LANE END MP	8.000	MI	C		USERID 01/01/2013
4.000	16.000	RIGHT MANAGED LANE ROADWAY ID	99090901	EA	C		USERID 01/01/2013
4.000	16.000	RIGHT MANAGED LANE BEGIN MP	0.000	MI	C		USERID 01/01/2013
4.000	16.000	RIGHT MANAGED LANE END MP	12.000	MI	C		USERID 01/01/2013

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99090901	99	99	TEST	0.000	12.000	12.000	ACTIVE EXCLUSIVE
Description: MANAGED LANE CASE A RIGHT MANAGED LANE						VideoLog	Enterprise GIS

Feature 142 - MANAGED LANES — LENGTH/NON-INTERLOCKING

Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
0.000	12.000	MAINLINE ROADWAY ID	99090000	EA	C		USERID 01/01/2013
0.000	12.000	MAINLINE BEGIN MP	4.000	MI	C		USERID 01/01/2013
0.000	12.000	MAINLINE END MP	16.000	MI	C		USERID 01/01/2013

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99090902	99	99	TEST	0.000	8.000	8.000	ACTIVE EXCLUSIVE
Description: MANAGED LANE CASE A LEFT MANAGED LANE						VideoLog	Enterprise GIS

Feature 142 - MANAGED LANES — LENGTH/NON-INTERLOCKING

Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
0.000	8.000	MAINLINE ROADWAY ID	99090000	EA	C		USERID 01/01/2013
0.000	8.000	MAINLINE BEGIN MP	6.000	MI	C		USERID 01/01/2013
0.000	8.000	MAINLINE END MP	14.000	MI	C		USERID 01/01/2013

CASE B

Locations where one managed lane occupies a new alignment.

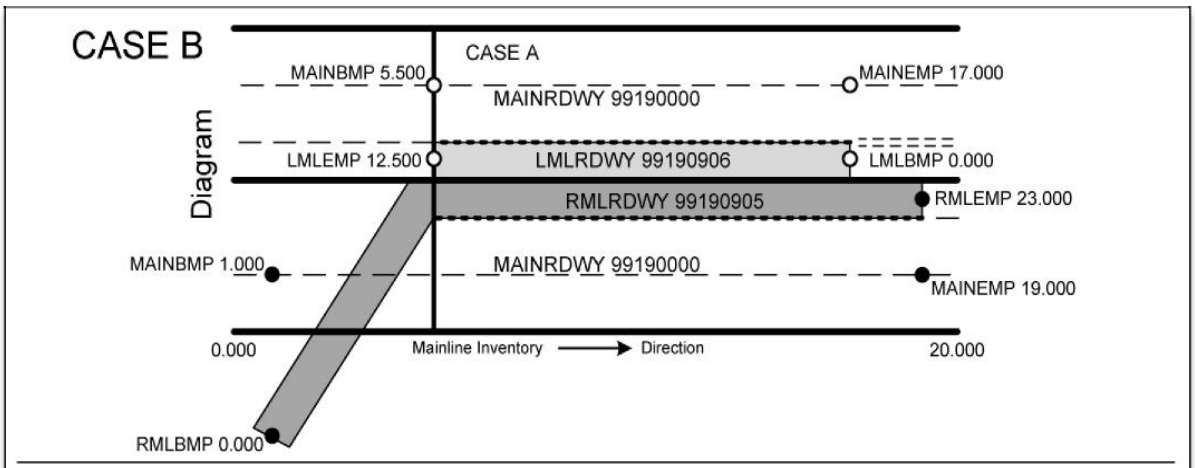
Mainline

- There is no median or inside shoulder between the mainline and the managed lane of the same direction. However, if there is **not** a managed lane between the through lanes and the inside shoulder/median, then code the inside shoulder and $^1/_2$ the width of the median.
- There will be no other changes made to the mainline data.

Managed Lane

- Separate alignment—The managed lane data will be recorded the same way as any other roadway.
- Same alignment—Refer to CASE A above.

FIGURE 5.7 | MANAGED LANES—CASE B



Field Data

Mainline 99190000	Right Managed Lane 99190905	Left Managed Lane 99190906
LMLBMP = 0.000	MAINBMP = 1.000	MAINBMP = 5.500
LMLEMP = 12.500	MAINEMP = 19.000	MAINEMP = 17.000
LMLRDWY = 99190906	MAINRDWY = 99190000	MAINRDWY = 99190000
RMLBMP = 0.000		
RMLEMP = 23.000		
RMLRDWY = 99190905		

RCI Coding Example for Case B

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99190000	99	99	TEST	0.000	20.000	20.000	ACTIVE ON THE SHS
Description: MANAGED LANE CASE B MAINLINE						VideoLog	Enterprise GIS

Feature 142 - MANAGED LANES — LENGTH/NON-INTERLOCKING

Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
5.500	17.000	LEFT MANAGED LANE ROADWAY ID	99190906	EA	C		USERID 01/01/2013
5.500	17.000	LEFT MANAGED LANE BEGIN MP	0.000	MI	C		USERID 01/01/2013
5.500	17.000	LEFT MANAGED LANE END MP	12.500	MI	C		USERID 01/01/2013
1.000	19.000	RIGHT MANAGED LANE ROADWAY ID	99190905	EA	C		USERID 01/01/2013
1.000	19.000	RIGHT MANAGED LANE BEGIN MP	0.000	MI	C		USERID 01/01/2013
1.000	19.000	RIGHT MANAGED LANE END MP	23.000	MI	C		USERID 01/01/2013

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99190905	99	99	TEST	0.000	23.000	23.000	ACTIVE EXCLUSIVE
Description: MANAGED LANE CASE B RIGHT MANAGED LANE						VideoLog	Enterprise GIS

Feature 142 - MANAGED LANES — LENGTH/NON-INTERLOCKING

Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
0.000	23.000	MAINLINE ROADWAY ID	99190000	EA	C		USERID 01/01/2013
0.000	23.000	MAINLINE BEGIN MP	1.000	MI	C		USERID 01/01/2013
0.000	23.000	MAINLINE END MP	19.000	MI	C		USERID 01/01/2013

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99190906	99	99	TEST	0.000	12.000	12.000	ACTIVE EXCLUSIVE
Description: MANAGED LANE CASE B LEFT MANAGED LANE						VideoLog	Enterprise GIS

Feature 142 - MANAGED LANES — LENGTH/NON-INTERLOCKING

Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
0.000	12.500	MAINLINE ROADWAY ID	99190000	EA	C		USERID 01/01/2013
0.000	12.500	MAINLINE BEGIN MP	5.500	MI	C		USERID 01/01/2013
0.000	12.500	MAINLINE END MP	17.000	MI	C		USERID 01/01/2013

CASE C

Locations where the managed lanes run in between the Interstate lanes as a potential one-way or reversible facility (Effective April 2014).

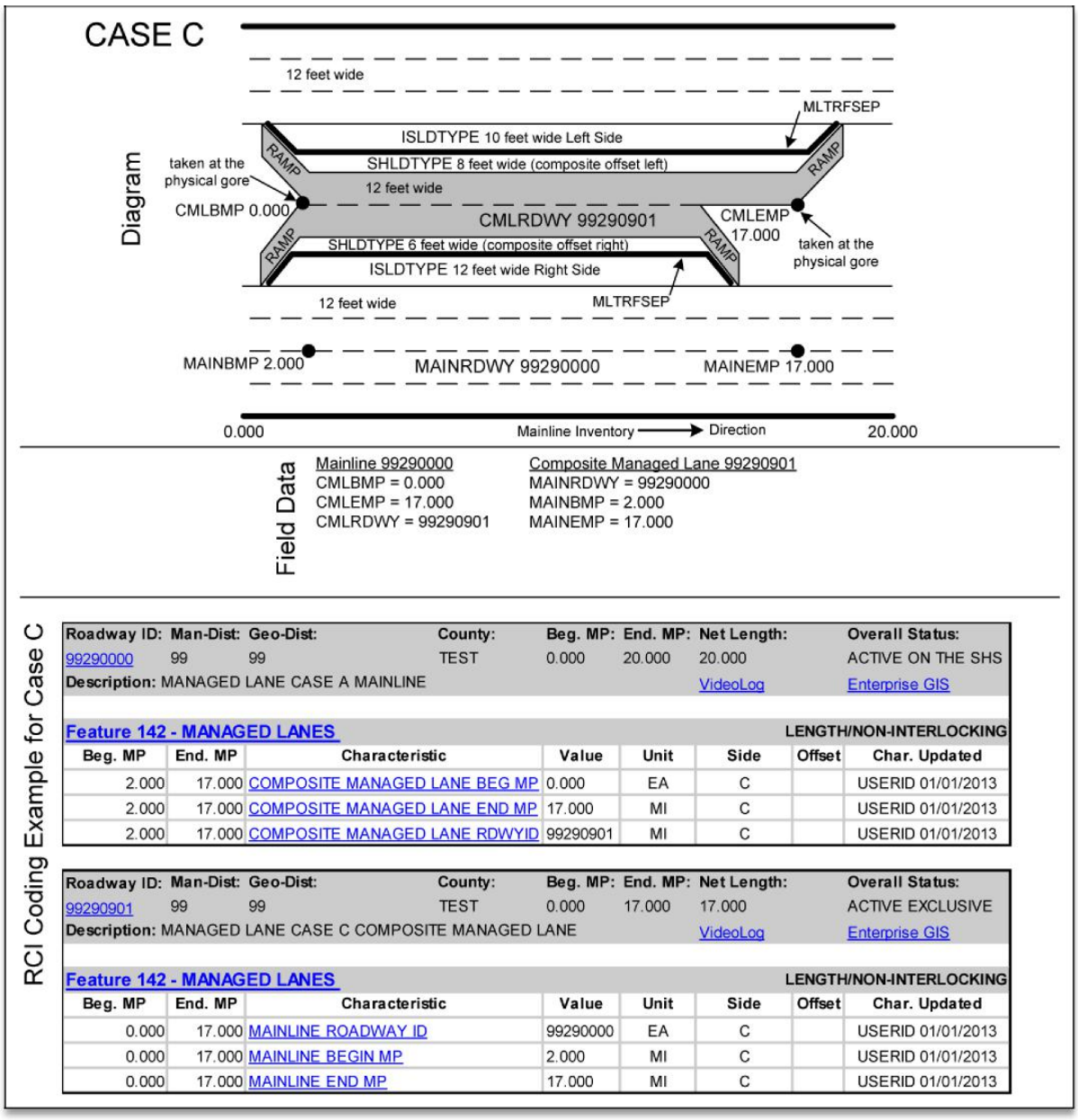
Mainline

- Code all associated features as usual.
- Code Feature 215 RDMEDIAN as code 50.

Managed Lane

- Separate alignment—Refer to CASE A above.
- Same alignment—The managed lane data will be recorded in the same manner as a one-way roadway. Code Feature 214 SHLDTYPE from the outside edge of the lane striping to the MLTRFSEP.

FIGURE 5.8 | MANAGED LANES—CASE C



RCI Coding Example for Case C

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99290000	99	99	TEST	0.000	20.000	20.000	ACTIVE ON THE SHS
Description: MANAGED LANE CASE A MAINLINE						VideoLog	Enterprise GIS

Feature 142 - MANAGED LANES — LENGTH/NON-INTERLOCKING

Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
2.000	17.000	COMPOSITE MANAGED LANE BEG MP	0.000	EA	C		USERID 01/01/2013
2.000	17.000	COMPOSITE MANAGED LANE END MP	17.000	MI	C		USERID 01/01/2013
2.000	17.000	COMPOSITE MANAGED LANE RDWYID	99290901	MI	C		USERID 01/01/2013

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99290901	99	99	TEST	0.000	17.000	17.000	ACTIVE EXCLUSIVE
Description: MANAGED LANE CASE C COMPOSITE MANAGED LANE						VideoLog	Enterprise GIS

Feature 142 - MANAGED LANES — LENGTH/NON-INTERLOCKING

Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
0.000	17.000	MAINLINE ROADWAY ID	99290000	EA	C		USERID 01/01/2013
0.000	17.000	MAINLINE BEGIN MP	2.000	MI	C		USERID 01/01/2013
0.000	17.000	MAINLINE END MP	17.000	MI	C		USERID 01/01/2013

5.1.6 Reversible Lanes

Reversible lanes refer to lanes in which traffic may travel in either direction, depending on the traffic peak demands and the operational hours of the roadway. Reversible lanes reduce congestion by handling traffic demands such as morning and evening commutes and may be reactive to other possible usage such as emergency events like hurricane evacuation or other local events. The directional flow of the reversible lanes is determined by operational hours at specified times and is adjusted by changeable message signs and barricades. Reversible lanes work through their ability to increase the lane capacity for peak lanes at the appropriate hours.

Reversible lanes are treated similar to new construction of a new roadway. As such, reversible lanes will add centerline miles to the SHS.

Coding Requirements for Reversible Lanes

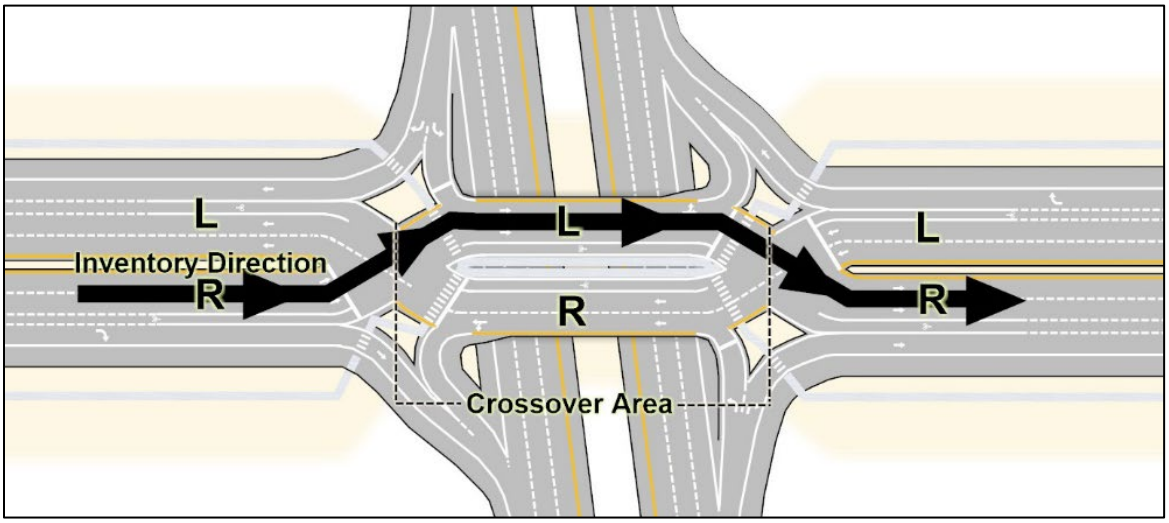
- Assign an appropriate state roadway ID number for the reversible lane that is associated with the mainline with the next available suffix. Coordinate with the TDA Multimodal Data System Coordinator for proper numbering.
- SHS additional mileage paperwork will be required.
- RCI/LRS package will be submitted to add the reversible lanes to the LRS.
- The RCI V/U/D screen information will have the following codes:
  - The overall status of the reversible lane will be coded as “Active On the SHS.”
  - The road type will be coded as “Mainline.”
  - The mode type will be coded as “Roadway.”
  - The system will be coded as “State Highways.”
  - The state highway system will be coded as “Interstate” or “Primary.”
  - The compass direction will be the same as the associated mainline’s compass direction.
  - All ramps on the reversible lane will have the same compass direction as the associated mainline.
- The reversible lane will be inventoried as a one-way roadway.
- Generate SLDs and key sheets for the reversible lane.

5.1.7 Diverging Diamond Interchanges

A crossover area is the roadway segment between two crossover intersections on a non-limited access facility that crosses over or under a limited access facility at a diverging diamond interchange (DDI).

Features and characteristics within the crossover area will be coded along the existing roadway ID and LRS centerline. For divided roads and dual carriageways, features and characteristics within the crossover area will be coded along the existing roadway ID and inventory direction. This means that characteristics that occur along the inventory direction will be coded as Side = L within the crossover area and as Side = R outside of the crossover area. Features and characteristics that change or start/stop at the crossover intersections must be broken at those intersections and tied to them.

FIGURE 5.9 | CROSSOVER AREA AT A DIVERGING DIAMOND INTERCHANGE



General guidance for coding within a crossover area is provided below. For coding requirements of individual features and characteristics, refer to Chapter 7 of this handbook.

Coding Requirements for Crossover Areas

- Inventory the crossover area by driving the established inventory direction along the roadway on which it appears.
- Code the milepoints for intersections under INTSDIRx under Feature 251—Intersection. Input "DDI XOVER" in the value field for the two crossover intersections.
- Code DDIXOVR under Feature 120—Type of Road. This feature defines the limits of the crossover area:

  - Code the BMP at the center of the first crossover intersection that is encountered along the inventory direction.

  - Code the EMP at the center of the second crossover intersection that is encountered along the inventory direction.

  - Code the name of the interchange in the value field. If the interchange does not have a name, input the names of the intersecting roadways at the interchange.

- Code side and offset for features and characteristics as they appear with respect to the inventory direction, noting that inventory occurs on the left side within the crossover area.

  - If a characteristic was coded continuously through the interchange area prior to construction of the DDI and its side or offset changes at the crossover intersections, break that characteristic at the crossover intersections, and tie the BMP and EMP to the two crossover intersections.

- SLDs and county section number key sheets must be updated according to the requirements and timeliness standards of the GIRD Procedure, Topic No. 525-020-310.

5.1.8 Stationing Exceptions

Feature 141—Stationing Exception, along with Feature 143—Associated Station Exception, provides a method of coding RCI roadway IDs with stationing exceptions. A stationing exception (a.k.a. an exception) occurs when two or more active roadway IDs overlap the same road-bed. To avoid duplication, the data is only reported under one roadway ID.

Usually, the roadway ID carrying the data will have a lower section or subsection number than the roadway ID with the exception. This concept allows a portion of two roadways to coincide on a single roadway with data reflected under only one roadway ID. Existing stationing exceptions maintain important information in the RCI system, however; they create an element of complexity when recalling data for a given roadway ID. When possible, solutions such as re-sectioning or subdividing new roadway IDs should be considered before creating additional stationing exceptions in the system. Refer to Chapter 7 of this handbook for specific coding requirements for Feature 141–Stationing Exception.

Beginning and Ending Milepoints

The beginning point of the exception is the centerline of the intersecting roadways where the two converge and the ending point is the centerline of the intersecting roadways where the two roadway IDs diverge.

Coding Stationing Exceptions

No data is coded for the specific roadway segment within the Feature 141 limits, because it points to the roadway that carries the exception information. If an exception begins or ends at either terminus of a roadway ID, then the terminus point will be recorded within the feature data. If an exception begins at the beginning of a roadway ID (0.000 MP), code the beginning roadway name located at that 0.000 MP. Conversely, if the exception ends at the ending point of the roadway ID, then the ending roadway name/MP of the exception will be coded.

Roadway ID Assignment Hierarchy

To determine which roadway ID will have Feature 141 Stationing Exception coded, determine which roadway ID has the higher hierarchical value. The roadway ID with the higher hierarchical value will reflect the roadway data. The roadway ID with the lower hierarchical value will have Feature 141 coded referencing the higher hierarchical roadway ID.

The hierarchy order (from greatest significance to least significance):

- Existing work program assignment.
- NHS.
- Old federal-aid system.
- Strategic Intermodal System (SIS).
- Functional classification.
- Lowest Active On the SHS roadway ID.
- Lowest Active Off the SHS roadway ID.

The roadway ID with Feature 141 coded will show a gap on the SLD with a reference note to another roadway ID.

Completing the Stationing Exception Process

All changes to lengths and statuses of roadway IDs require an RCI/LRS package to be sent to TDA Office requesting the change, addition, and/or deletion. Packages include changes to the federal-aid systems. Follow the process as listed in the Chapter 6 for the RCI/LRS package requirements.

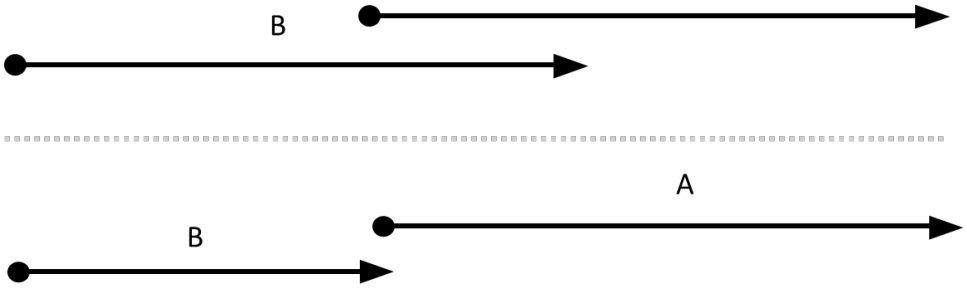
How to Avoid Overlapping

Following two options are available for Districts to avoid overlapping, depending on the situation encountered.

Two Overlapping Active Off the SHS Roads—Option A

In Figure 5.19, Roadway ID A has a lower roadway ID number than Roadway ID B. Roadway ID B is shortened to remove the exception. Data is only being recorded on one roadway ID. Feature 141 Stationing Exception does not have to be coded. Feature 141 only has to be coded for overlap of multiple active roadways.

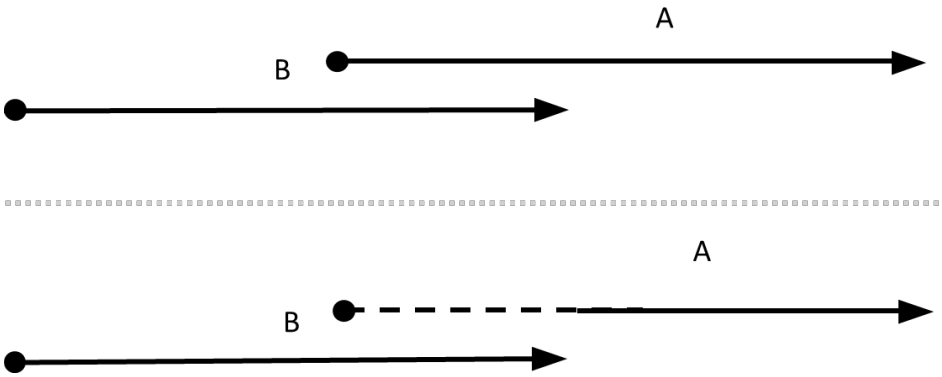
FIGURE 5.10 | TWO OVERLAPPING ACTIVE OFF THE SHS ROADS—OPTION A



Two Overlapping Active Off the SHS Roads—Option B

In Figure 5.11, Roadway ID B has a lower roadway ID number than Roadway ID A. Roadway ID A is inactivated where the two roadways overlap. However, it was not shortened because history must be maintained.

FIGURE 5.11 | TWO OVERLAPPING ACTIVE OFF THE SHS ROADS—OPTION B



Examples

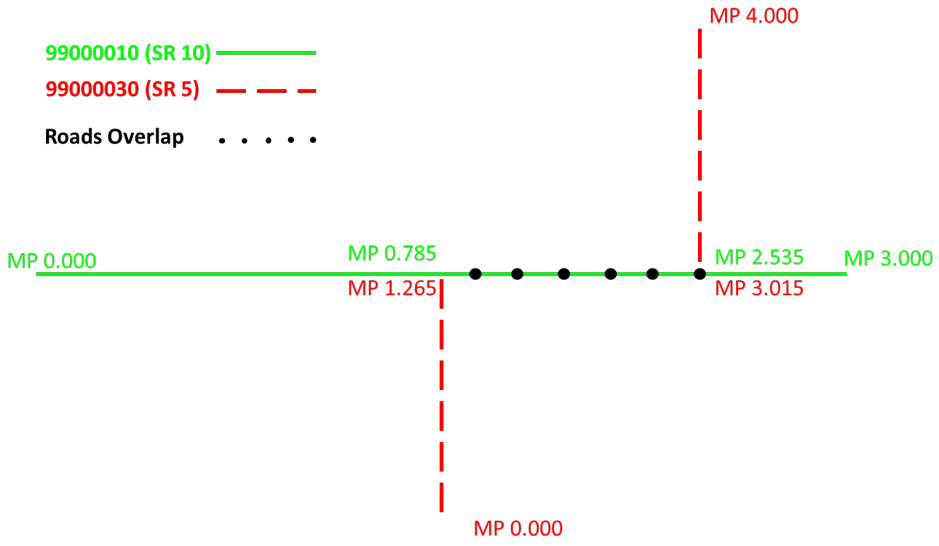
Figure 5.11 illustrates when, why, and how to code Feature 141—Stationing Exceptions and Feature 143—Associated Station Exception (automatically populated). Stationing exceptions must be coded when two active roadway ID alignments overlap on top of one another over the same road-bed or travel way.

In order to avoid reporting and coding the highway data twice for the overlapped alignments, a stationing exception is coded on one of the roadways and the data is coded on the other roadway. Stationing exceptions coded on a roadway ID creates a gap of data on that roadway. Since the data is coded only on one of the roadway IDs and a gap of data is shown on the other roadway ID, the highway data is only collected, coded, and reported once on one roadway ID.

The SLD for the roadway ID with Feature 141 coded will display a gap on the SLD to reflect the stationing exceptions and a reference to the corresponding roadway ID with the data. The SLD for the roadway ID that is reflecting the data will display continuous data on the SLD, without any gap.

Feature 141 is an interlocking feature. If the same BMP and EMP are coded for all the characteristics in Feature 141, this will interlock the characteristics and display the feature as blocks of data. Feature 143 is automatically generated when Feature 141 is coded. All other appropriate Planning features and characteristics will have to be reviewed and updated accordingly. See the RCI coding images on the following pages.

FIGURE 5.12 | EXAMPLE ILLUSTRATING CODING OF STATIONING EXCEPTIONS



Roadway ID 99000010 (Higher Roadway ID with the Stationing Exceptions)

Feature 141—Stationing Exception—Coding Requirements

- No data can be coded within the Feature 141 BMP or EMP milepoint range.
- The other features would have to be shortened or updated before Feature 141 can be coded so that no features are coded within Feature 141 milepoint range.
- Another important aspect of Feature 141 is that it cannot be edited nor updated once the feature is created. In order to make any changes to Feature 141, the feature must first be deleted and then re-entered with the new information.
- Code the BMP and EMP, MP 1.265 to MP 3.015, which are the limits of the stationing exceptions of the higher Roadway ID 99000030 that will not carry the data.
  - To determine which roadway ID to code Feature 141 under, the rule is to use the higher Roadway ID 99000030.
  - The lower Roadway ID 99000010 number will carry the data, since the lower Roadway ID 99000010 was usually created before the higher Roadway ID 99000030, if established practice of assigning roadway ID was used.
- Code BEGSECPT, MP 0.785, which is the milepoint along the overlapped roadway (Roadway ID 99000010) where the overlap begins.
- Code ENDSECPT, MP 2.535, which is the milepoint along the overlapped roadway (Roadway ID 99000010) where the overlap ends.
- Code RDWYID, the Roadway ID 99000010, which is the lower roadway ID that will carry the data.

- Refer to Chapter 7 for the coding requirements of Feature 141.

Feature 143—Associated Station Exception

No coding required.

- Automatically generated on the lower Roadway ID 99000010.
- Automatically generated if Feature 141 is correctly coded on the overlapped alignment higher Roadway ID 99000030.
- The information will be a mirror of Feature 141 on the lower Roadway ID 99000010 that carries the data on the overlap.
- All appropriate Planning features and characteristics will have to be reviewed and coded accordingly for Roadway ID 99000010, including data for the overlapped portion on Roadway ID 99000030.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99000010	00	00	TEST	0.000	3.000	3.000	ACTIVE ON THE SHS
Description: EXAMPLE 4 SR 10						VideoLog	Enterprise GIS

Feature 143 - ASSOCIATE STATION EXCEPTION						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.785	2.535	BEG SECT PT OF EXCEPTION FIELD	1.265	MI	C	KNRSHTL 05/29/2007
		END SECT PT OF EXCEPTION FIELD	3.015	MI	C	KNRSHTL 05/29/2007
		COUNTY. SECT. SUB-SECTION	99000030	ID	C	KNRSHTL 05/29/2007

Roadway ID 99000030 (Higher Roadway ID with the Stationing Exceptions)

Feature 141—Stationing Exception

No coding required.

- Feature 141 was coded on the higher Roadway ID 99000030.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99000030	00	00	TEST	0.000	4.000	2.250	ACTIVE ON THE SHS
Description: EXAMPLE 4 SR 5						VideoLog	Enterprise GIS

Feature 141 – STATIONING EXCEPTION						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
1.265	3.015	BEG SECT PT OF EXCEPTION FIELD	0.785	MI	C	KNRSHTL 05/29/2007
		END SECT PT OF EXCEPTION FIELD	2.535	MI	C	KNRSHTL 05/29/2007
		COUNTY. SECT. SUB-SECTION	99000010	ID	C	KNRSHTL 05/29/2007

Feature 143—Associated Station Exception

No coding required.

- Automatically generated on the lower Roadway ID 99000010.
- Automatically generated if Feature 141 is correctly coded on the overlapped alignment higher Roadway ID 99000030.
- The information will be a mirror of Feature 141 on the lower Roadway ID 99000010 that carries the data on the overlap.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99000010	00	00	TEST	0.000	3.000	3.000	ACTIVE ON THE SHS
Description: EXAMPLE 4 SR 10						VideoLog	Enterprise GIS

Feature 143 - ASSOCIATE STATION EXCEPTION						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.785	2.535	BEG SECT PT OF EXCEPTION FIELD	1.265	MI	C	KNRSHTL 05/29/2007
		END SECT PT OF EXCEPTION FIELD	3.015	MI	C	KNRSHTL 05/29/2007
		COUNTY. SECT. SUB-SECTION	99000030	ID	C	KNRSHTL 05/29/2007

5.2 Editing Roadways

A roadway ID and its associated data may need to be edited based on several situations outlined in this section. Roadway ID edits may be performed based on construction or improvements, realignments, road jurisdiction transfers, inventory, or through interim revisions to improve the quality of information. The District RCI Coordinator will coordinate with District stakeholders and the TDA Office to update RCI and the LRS, create a new SLD, create a new Key Sheet if necessary and create a RITA record documenting changes. The sections below go into more detail of possible changes that may occur.

5.2.1 Realignments

The primary purpose of a roadway realignment is to improve transportation service through site-specific roadway improvements. A roadway is considered to be realigned if an existing alignment is replaced/changed or is physically removed and rebuilt on a different configuration. Realignments typically occur with construction of a new bridge, a safety project to straighten or reduce curves, or with safety improvements at an intersection.

Roadway construction where the alignment has not been altered from the existing travel path is not a realignment. Roadway reconstruction and widening are not considered realignments when they are constructed on the same alignment or existing roadway.

Realignment Length

The length of a realignment may be more or less than the length of the original alignment. All additions and deletions to the SHS mileages require appropriate District Secretary signature/approval; except minor realignments (0.100 mile or less) do not require a new roadway ID or SHS addition/deletion paperwork. For more details, refer to the Transportation System Jurisdiction and Numbering Procedure, Topic No. 525-020-010.

Roadway ID Retention

When a roadway is realigned, the original alignment retains the existing roadway ID and milepoints, and the new alignment is assigned a new sub-section number. The District is responsible for assigning the new sub-section number. The new number should maintain the original two-digit county and three-digit section numbers, with the next available sub-section number associated with the original alignment roadway ID as described in Chapter 3 of this handbook.

Beginning and Ending Milepoints

The BMP of the realigned sub-section starts at the centerline of where the old roadway diverges and ends at the centerline of the original roadway where it rejoins. For field inventory purposes, the BMP and EMP of the realignment should be tied to a nearby physical point that may easily be identified/located such as bridge joints, intersections, cross drains, or other non-movable physical characteristics. The milepoints should be compared and verified in the field with the construction plans stationing.

Realignment Coding

Feature 138—Roadway Realignment and Feature 139—New Roadway Alignment are used strictly for roadway realignments. These two features cross-reference the realigned roadway IDs. Feature 138 is coded with the information for the new roadway ID. The old roadway alignment retains data for historical purposes and the updated data is entered on the new roadway ID. No feature data should be deleted from the old roadway alignment roadway ID.

Coding Feature 138 Roadway Realignment

On the old roadway alignment, code Feature 138 with the information for the new Active On the SHS roadway ID. The old roadway alignment retains data for historical purposes and the updated data is input on the new roadway ID. The data from the old roadway alignment should be retained for one year after the roadway has been physically deleted. After the one-year anniversary date of the physical deletion, the data may be removed from RCI. Feature 140 must be changed to Deleted (if physically removed) or Inactive (not in use). Feature 138 is not required to be coded for Active Off the SHS and should not be coded for Active Exclusive roadways.

Refer to Chapter 7 for data collection and coding details.

Coding Feature 139—New Roadway Alignment (No Coding Necessary)

Feature 139 is automatically generated for a roadway realignment when Feature 138 is coded on the original roadway alignment.

Coding Feature 140—Section Status Exception

If any portion of the roadway is physically removed along the roadway, then Feature 140 must be coded for the deleted portion. The same applies for any portion made Inactive.

For a new Active On the SHS alignment, Feature 140 (OSDATE) must be coded to reflect the date the mileage was officially added to the SHS. OSDATE is the date the District Secretary signed the SHS mileage paperwork. An RCI/LRS package must be submitted to create the new roadway ID with an Active On the SHS status.

V/U/D Screen Overall Status

Overall status on the V/U/D screen is either Active On the SHS or Active Off the SHS depending on ownership for a mainline roadway. Feature 140 must be coded to match the overall status. When it is necessary to have more than one status on a roadway, then the overall status must be changed to Active with Combination and an RCI/LRS package submitted to TDA Office.

HPMS Samples

Any part of an HPMS Sample that exists in an area where the realignment occurs must be review by the TDA HPMS Coordinator. HPMS Samples need to be reviewed for recommendations, as every situation is different. Sometimes samples are shortened or moved to the a new roadway ID while sometimes they are deleted.

Active Off the SHS Realignments

When an Active Off the SHS roadway requires a realignment, as determined by construction notification, local decision making, an office review or field visit, the Districts can use one of the following processes:

- Current realignment process:

- Submit an RCI/LRS package to create a new roadway alignment, change the status of the old roadway ID to Inactive or Deleted and the District must code Feature 138 on the old roadway alignment.

- Alternate Active Off the SHS realignment process:
  - Re-inventory the Active Off the SHS alignment.
  - Submit an RCI/LRS package to adjust the data to match the re-inventory.
  - Email all stakeholders on the District notification list, including the following offices:
    - Safety Office.
    - District and Central Office (CO) Traffic Data Sections.
    - Adjacent Districts, if the alignment begins or ends at a District boundary.
    - TDA Multimodal Data System Coordinator.
    - TDA Highway HPMS Coordinator.*
    - CO Strategic Intermodal System (SIS) Coordinator.*
    - Other District stakeholders.

**If either HPMS or SIS is affected.*

Changes to RCI and the LRS will be submitted to TDA Office in an RCI/LRS package. Aerials and/or GPS data will be submitted as appropriate. Once the changes in the package have been completed, the District will contact the applicable stakeholders regarding the change.

If the TDA Spatial Data & Analytics division determines that an Active Off the SHS roadway needs a realignment, the District is given 90 days from the notification email date to make all of the appropriate changes to RCI and the LRS. Completion of these changes will be tracked using the monthly RCI/LRS discrepancy report.

The following Active Off the SHS candidates for the alternate Active Off the SHS realignment process will be approved on a case-by-case basis:

- Any portion of the roadway with a NHS designation; coordinate with the TDA Multimodal Data System Coordinator.
- Any portion of the roadway with a federal-aid or old federal-aid designation; coordinate with the TDA Multimodal Data System Coordinator.
- Any portion with SIS designation or SIS connectors; coordinate with the State SIS Coordinator.
- Any portion with any railroads; coordinate with the Freight and Multimodal Operations Office.
- Any portion with any structures; coordinate with the Office of Maintenance.

However, some Active Off the SHS realignments will not apply to this alternate Active Off the SHS realignment process, i.e., when significant history needs to be retained or if the Active Off the SHS roadway interfaces with the SHS network. See the exclusion list below.

Exclusions to the alternate Active Off the SHS realignment process:

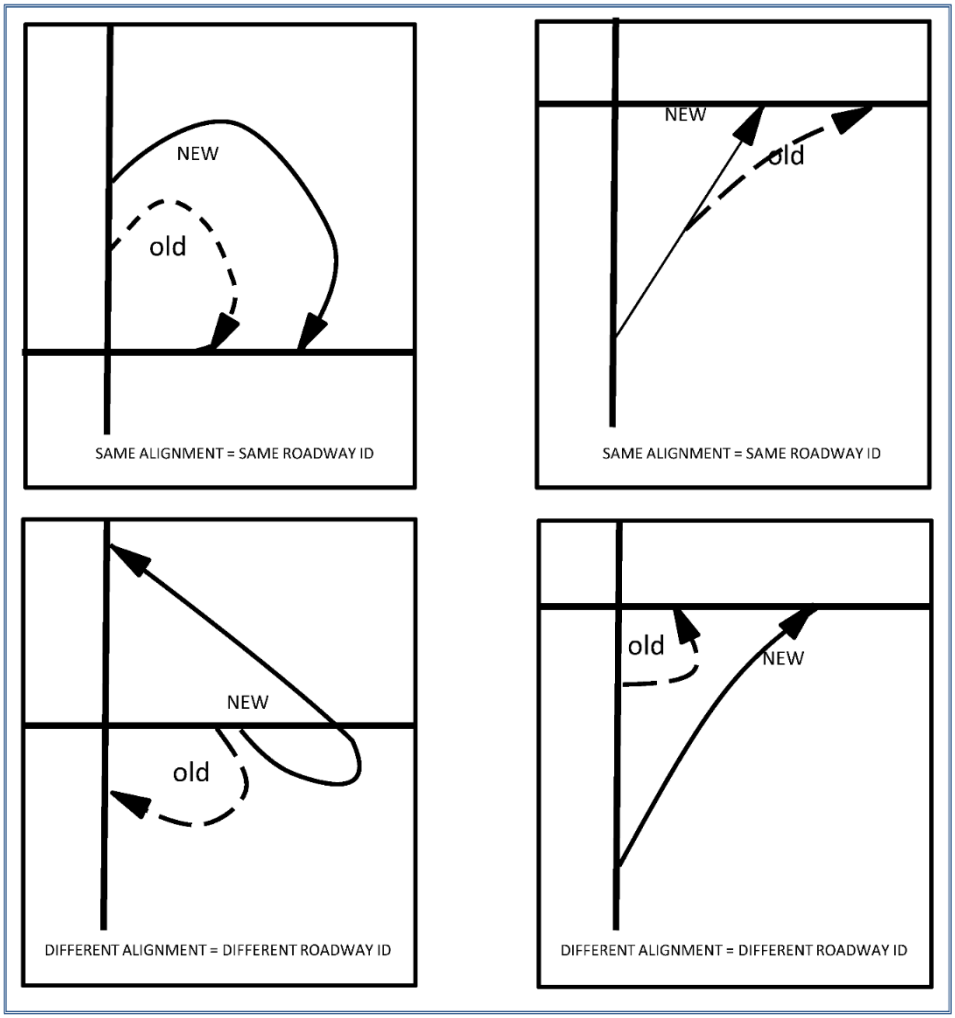
- One or more segments of the Active Off the SHS alignment include an Active On the SHS portion, i.e., an Active with Combination.
- Any portion with a functional classification that interfaces with a nearby Active On the SHS roadway.
- Any portion with a documented road jurisdiction transfer.
- Any portion with an overall status of Local Roads with FM Projects.

The intent of the alternate Active Off the SHS realignment process is to eliminate the need for any District work that does not add value to the processes for maintaining the roadway network. This will reduce the amount of work the Districts are required to do related to processing Active Off the SHS roadway realignments. Early coordination must be made with TDA Office, prior to an RCI/LRS package submittal, to determine which process would be more appropriate. It is imperative that whichever process the District uses, either the current Active Off the SHS realignment or alternate Active Off the SHS realignment process; the District must commit to it for the duration of the transaction and not switch processes midstream.

Active Exclusive Realignments

Any ramp realignment will retain the same roadway ID number if the realigned ramp still connects from and to the same roadways and essentially follows the same alignment. If the realignment is different from the old alignment, then a different roadway ID number will be assigned.

FIGURE 5.13 | ACTIVE EXCLUSIVE REALIGNMENTS



Special Ramps to Rest Areas/Weigh Stations/Agricultural Stations

When a ramp to rest areas/weigh stations/agricultural stations is realigned and the location of the facility remains the same, the existing roadway ID will be retained. The ramp alignment will be adjusted in the LRS to the new alignment and Distance Measuring Instrument (DMI) field measured length.

However, if the location of the facility changes, and results in a realignment of the ramp, then a new roadway ID will be assigned and the original roadway ID is made Inactive.

Only ramps to agricultural stations maintained by the Department are required to have roadway IDs and a 5-year inventory cycle.

Realignment of a State Road with Retention of Old Roadway Alignment

If the original roadway alignment was not physically deleted, a portion of the old roadway bed was retained and provides access to adjacent properties or connects to other roadways and still functions as a roadway, then a new state road number must be designated to the old alignment. The original state road number can be re-designated or transferred to the new roadway alignment.

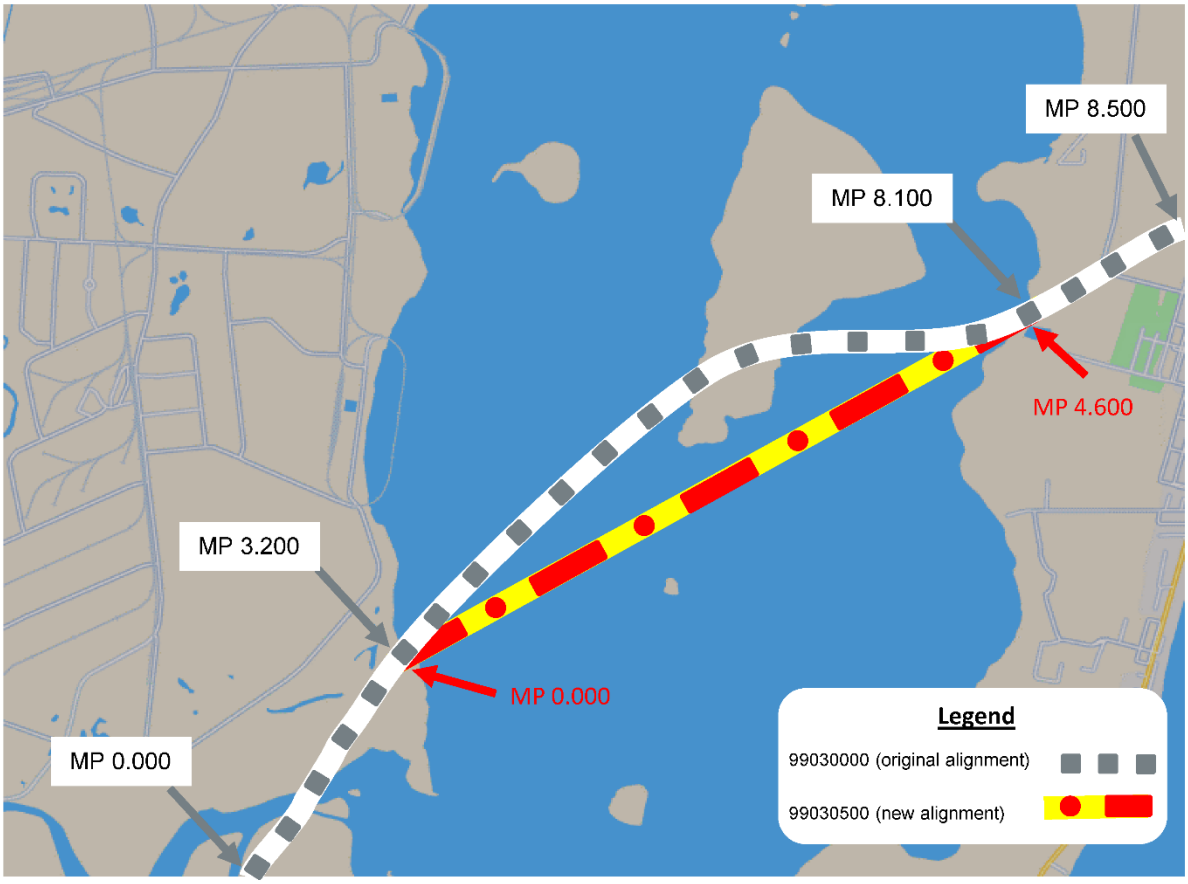
Any changes to the V/U/D screen require an RCI/LRS package to be submitted. Refer to Chapter 6 regarding the package/process.

Realignment of a State Road with Retention of Old Roadway Alignment Resulting from New Construction Example

Figure 5.134 illustrates a realignment of a state road resulting from new construction, where the old roadway alignment became Inactive. Examples are used as illustrations only, not intended to represent any specific roadway.

- Roadway ID 99020000 from MP 3.200 to MP 8.100, the original bridge was realigned but old structure physically remained and converted to a pedestrian trail/fishing pier.
- Roadway ID 99020500 from MP 0.000 to MP 4.600, was the new roadway ID assigned to the new bridge alignment. A sub-section number of the original roadway ID was used.
- The new bridge of 4.600 miles was slightly shorter than the old bridge of 4.900 miles.
- The state road number was transferred to the new bridge alignment, because the old alignment no longer functioned as a roadway.
- The District Secretary must approve/sign the changes to the SHS mileage and re-designation of the state road number.
- The District must prepare and submit the appropriate approved SHS addition/deletion paperwork to the TDA Office via RCI/LRS package as outlined in the Transportation System Jurisdiction and Numbering Handbook**.**
- Appropriate RCI administrative features must be updated according to the requirements and timeliness standards of the Transportation System Jurisdiction and Numbering Procedure, Topic No. 525-020-010 and GIRD Procedure, Topic No. 525-020-310.
- Appropriate RCI physical features and characteristics, SLDs, and county section number key sheet must be updated according to the requirements and timeliness standards of the GIRD Procedure, Topic No. 525-020-310.
- All other appropriate Planning features and characteristics must be reviewed and updated accordingly.

FIGURE 5.14 | REALIGNMENT EXAMPLE



Roadway ID 99020000 (Original Bridge Alignment)

Feature 111—State Road System

- Code new milepoint breaks for the multiple State Road number designations.
  - Code MP 0.000 to MP 3.200 as the original "SR" State Road number.
  - Code MP 3.200 to MP 8.100 as "OS" Old State Road Number since the roadway was transferred from the SHS.
  - Code MP 8.100 to MP 8.500 as the original "SR" State Road number.
- Refer to Chapter 7 for coding requirements of Feature 111.

Feature 138—Roadway Realignment

- Feature 138 was coded on the old alignment. Feature 138 is an interlocking feature that automatically codes Feature 139 if all the characteristics are coded using the same BMP and EMP.

- Code BMP 3.200 to EMP 8.100 for all the characteristics of Feature 138, which was the limit of the old bridge alignment.
- Code NALIGNDT, which was the date of the realignment. Use the date when the deletion of roadway mileage was officially deleted off the SHS as approved/signed by the District Secretary.
- Code 99020500 for NALIGNID, the new alignment roadway ID.
- Code MP 0.000 for NALNBGPT, the new alignment BMP.
- Code MP 4.600 for NALNENPT, the new alignment EMP.

- Refer to Chapter 7 for coding requirements of Feature 138.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99020000	00	00	TEST	0.000	8.500	3.600	ACTIVE WITH COMBINATION
Description: EXAMPLE 2 ROAD						VideoLog	Enterprise GIS

Feature 138 - ROADWAY REALIGNMENT						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
3.200	8.100	NEW ALIGNMENT DATE	05/01/2007	DA	C	KNRSHTL 05/25/2007
		SECT/SUBSECT OF NEW AUGMENT	99020500	ID	C	KNRSHTL 05/25/2007
		NEW ALIGNMENT BEG. PT.	0.000	MI	C	KNRSHTL 05/25/2007
		NEW ALIGNMENT END. PT.	4.600	MI	C	KNRSHTL 05/25/2007

Feature 140—Section Status Exception

- Code multiple milepoint breaks for the multiple section statuses.
  - Code 02—Active On the SHS from MP 0.000 to MP 2.000 for the section status of the limits of the old alignment that was not realigned.
  - Code 04—Inactive from MP 3.200 to MP 8.100 for the limits of the old bridge that was converted to a pedestrian trail/fishing pier.
    - Code OSDATE, the date when the old alignment mileage was officially deleted from the SHS System as approved/signed by the District Secretary.
    - All other original features or characteristics data coded should NOT be deleted nor removed from RCI.
    - It should be retained for history on the physically deleted old alignment.
    - Feature 140 Inactive code reflects the inactive status of the roadway. Any feature data coded within the Inactive milepoint range will not be reported, therefore there is no need to delete nor remove any of the data.
  - Code 02—Active On the SHS from MP 8.100 to MP 8.500 for the section status of the limits of the old alignment that was not realigned.

- Refer to Chapter 7 for coding requirements of Feature 140.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99020000	00	00	TEST	0.000	8.500	3.600	ACTIVE WITH COMBINATION
Description: EXAMPLE 2 ROAD						VideoLog	Enterprise GIS

Feature 140 - SECTION STATUS EXCEPTION						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.000	3.200	ON OR OFF-SYSTEM DATE	04/15/1963	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	02 - ACTIVE ON THE SHS	CD	C	KNRSHTL 05/25/2007
3.200	8.100	ON OR OFF-SYSTEM DATE	05/01/2007	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	04 - INACTIVE	CD	C	KNRSHTL 05/25/2007
8.100	8.500	ON OR OFF-SYSTEM DATE	04/15/1963	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	02 - ACTIVE ON THE SHS	CD	C	KNRSHTL 05/25/2007

V/U/D Screen

Since the roadway has multiple section statuses, the overall status for the roadway ID should be changed to Active with Combination.

- Any changes to the V/U/D screen require a submittal of an RCI/LRS package to TDA Office.
- Overall Descriptions may be submitted via email requests. Multiple items should be submitted as a spreadsheet attachment
- Refer to the RCI/LRS Reconciliation Package process and requirements provided in Chapter 6.

Roadway ID 99020500 (New Bridge Alignment)

All Planning physical features and characteristics should be collected and coded for the new roadway alignment. Coordinate with the other offices to have their RCI features collected and coded for the new roadway alignment.

Feature 111—State Road System

- MP 0.000 to MP 4.600 should be coded with the state road number designation of the original alignment, since the state road number designation was transferred to the new bridge alignment.
- Refer to Chapter 7 for the coding requirements of Feature 111.

Feature 138—Road Realignment

No coding required.

- Feature 138 was coded under original alignment Roadway ID 99020000.

Feature 139—New Roadway Alignment

No coding required.

- Automatically generated on the new alignment Roadway ID 99020500.

- Automatically generated if Feature 138 was correctly coded on the original alignment Roadway ID 99020000.

- The information will be a mirror of Feature 138 on the alignment Roadway ID 99020000.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99020500	00	00	TEST	0.000	4.600	4.600	ACTIVE ON THE SHS
Description: EXAMPLE 2 NEW ALIGHMENT						VideoLog	Enterprise GIS

Feature 139 - NEW ALIGNMENT						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.000	4.600	SECT./SUBSECT.OF OLD ALIGNMENT	99020000	ID	C	KNRSHTL 05/25/2007
		OLD ALIGNMENT BEG. PT.	3.200	MI	C	KNRSHTL 05/25/2007
		OLD ALIGNMENT END. PT.	8.100	MI	C	KNRSHTL 05/25/2007

Feature 140—Section Status Exception

- Code OSDATE, the date when the new alignment mileage was officially added to the SHS system as approved/signed by the District Secretary.

- Code 02—Active On the SHS from MP 0.000 to MP 8.500 for the section status of the limits of the new alignment.

- Refer to Chapter 7 for the coding requirements of Feature 140.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99020500	00	00	TEST	0.000	4.600	4.600	ACTIVE ON THE SHS
Description: EXAMPLE 2 NEW ALIGHMENT						VideoLog	Enterprise GIS

Feature 140 - SECTION STATUS EXCEPTION						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.000	4.600	ON OR OFF-SYSTEM DATE	05/01/2007	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	02 - ACTIVE ON THE SHS	CD	C	KNRSHTL 05/25/2007

Realignment of a State Road with Physical Deletion Resulting from New Construction Example

This example illustrates a realignment of a state road resulting from new construction, where the original alignment was physically deleted. The original roadway was realigned from a sharp right angle turn to a smooth curve, to enhance traffic movement and increase safety. The asphalt of the old roadway was removed and a new roadway bed was built in a different configuration. (See Figure 5.135)

- Roadway ID 99010000 from MP 2.000 to MP 3.000, the original alignment was realigned and physically deleted. The data for the physically deleted portion should NOT be removed from RCI. Feature 140 should be coded Deleted to reflect the physically deleted portion of the roadway.

- Roadway ID 99010001 from MP 0.000 to MP 0.800 was a new roadway ID assigned to the new alignment. A subsection number of the original roadway ID was used.

- The new alignment of 0.800 mile was shorter than the old alignment of 1.000 mile.

- The state road number has been transferred to the new alignment because the old alignment no longer exists.

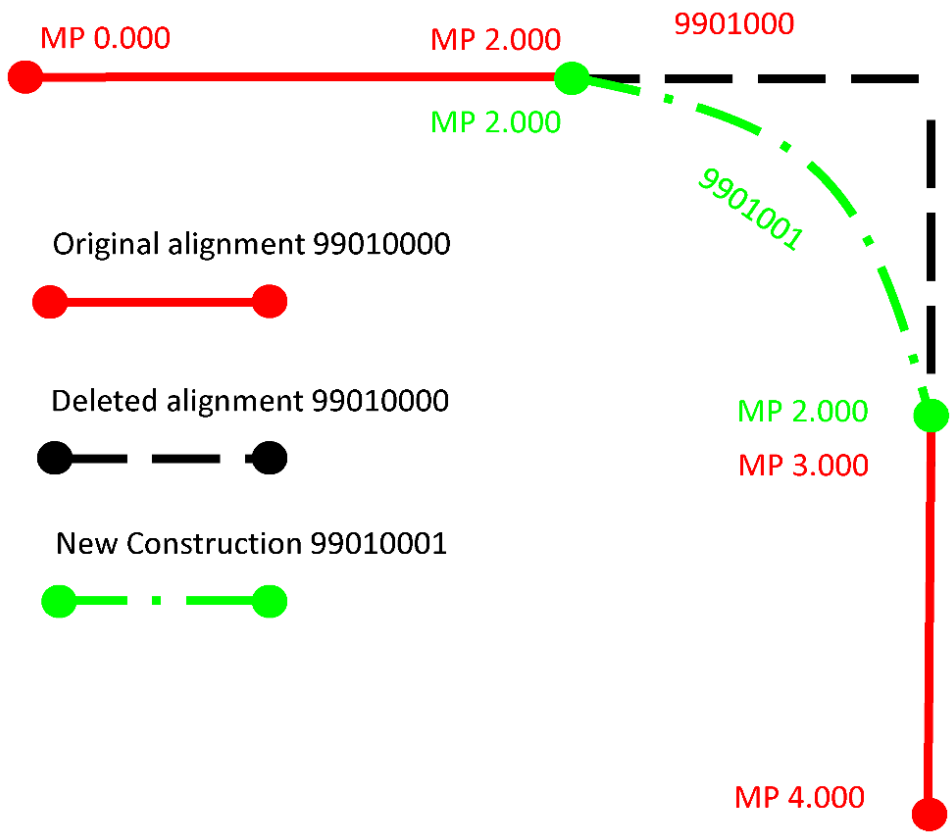
- The District Secretary must approve the changes to the SHS mileage and the re-designation of the state road number.

- The District must prepare and submit the appropriate approved SHS addition/deletion paperwork to TDA Office, according to the Transportation System Jurisdiction and Numbering Handbook.

- Appropriate RCI administrative features should be updated according to the requirements and timeliness standards of the Transportation System Jurisdiction and Numbering Procedure, Topic No. 525-020-010 and GIRD Procedure, Topic No. 525-020-310.

- Appropriate RCI physical features and characteristics, SLD, and county section number key sheet should also be updated according to the requirements and timeliness standards of the GIRD Procedure, Topic No. 525-020-310. Also, all other appropriate Planning features and characteristics will have to be reviewed and updated accordingly.

FIGURE 5.15 | REALIGNMENT EXAMPLE



Roadway ID 99010000 (Original Alignment)

Feature 111—Section Status Exception

No coding required.

- The state road number of the original alignment should retain the original milepoint coding for the original state road number designation.

- The data should be retained for history on the original alignment of the state road number designation.

Feature 138—Road Realignment

- Feature 138 was coded on the original alignment. Feature 138 is an interlocking feature if all the characteristics are coded using the same BMP and EMP.
  - Code BMP 2.000 to EMP 3.000 for all the characteristics of Feature 138 for the limits of the physical deletion of the original alignment.
  - Code NALIGNDT, the date of the realignment. Use the date when the deletion of roadway mileage was officially deleted off the SHS as approved by the District Secretary.
  - Code 99010001 for NALIGNID, the new alignment roadway ID.
  - Code MP 0.000 for NALNBGPT, the new alignment BMP.
  - Code MP 0.800 for NALNENPT, the new alignment EMP.
- Refer to Chapter 7 for the coding requirements of Feature 138.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99010000	00	00	TEST	0.000	4.000	3.000	ACTIVE WITH COMBINATION
Description: EXAMPLE 1 ROAD						VideoLog	Enterprise GIS

Feature 138 - ROADWAY REALIGNMENT						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
2.000	3.000	NEW ALIGNMENT DATE	05/01/2007	DA	C	KNRSHTL 05/25/2007
		SECT/SUBSECT OF NEW AUGMENT	99010001	ID	C	KNRSHTL 05/25/2007
		NEW ALIGNMENT BEG. PT.	0.000	MI	C	KNRSHTL 05/25/2007
		NEW ALIGNMENT END. PT.	0.800	MI	C	KNRSHTL 05/25/2007

Feature 140—Section Status Exception

- Code multiple milepoint breaks for the multiple section statuses.
  - Code 02—Active On the SHS from MP 0.000 to MP 2.000 for the section status of the original alignment that was not realigned.
  - Code 05—Deleted from MP 2.000 to MP 3.000 for the section status of the original alignment that was physically deleted and removed.
  - Code OSDATE, the date when the original alignment mileage was officially deleted from the SHS system as approved/signed by the District Secretary.
- All other original features and characteristics data coded on the physically deleted portion should NOT be deleted nor removed from RCI.
- The data should be retained for history on the physically deleted original alignment.
- Feature 140 Deleted code will reflect the physically deleted roadway. Any feature data coded within the Deleted milepoint range will not be reported, therefore there is no need to delete nor remove any of the data.

- Code 02—Active On the SHS from MP 3.000 to MP 4.000, should be coded for the section status of the original alignment that was not realigned.

- Refer to Chapter 7 for the coding requirements of Feature 140.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99010000	00	00	TEST	0.000	4.000	3.000	ACTIVE WITH COMBINATION
Description: EXAMPLE 1 ROAD						VideoLog	Enterprise GIS

Feature 140 - SECTION STATUS EXCEPTION — LENGTH/NON-INTERLOCKING

Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.000	2.000	ON OR OFF-SYSTEM DATE	04/15/1963	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	02 - ACTIVE ON THE SHS	CD	C	KNRSHTL 05/25/2007
2.000	3.000	ON OR OFF-SYSTEM DATE	05/01/2007	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	05 - DELETED	CD	C	KNRSHTL 05/25/2007
3.000	4.000	ON OR OFF-SYSTEM DATE	04/15/1963	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	02 - ACTIVE ON THE SHS	CD	C	KNRSHTL 05/25/2007

V/U/D Screen

Since the roadway has multiple section statuses, the overall status for the roadway ID should be Active with Combination.

- Any changes to the V/U/D screen require a submittal of an RCI/LRS package to the TDA Office.

- Refer to Chapter 6 of this handbook for the RCI/LRS Package Process and requirements.

Roadway ID 99010001 (New Alignment)

All Planning physical features and characteristics should be collected and coded for the new roadway alignment. Coordinate with the other offices to have their RCI features collected and coded for the new roadway alignment.

Feature 111—State Road System

- MP 0.000 to MP 0.800, state road number designation of the original alignment.

- Refer to Chapter 7 for the coding requirements of Feature 111.

Feature 138—Roadway Realignment

No coding required.

- Feature 138 was coded under original alignment Roadway ID 99010000.

- Feature 139 will automatically generate on the new alignment Roadway ID 99010001.

Feature 139—New Roadway Alignment

No coding required.

- Automatically generated on the new alignment Roadway ID 99010001.

- Automatically generated if Feature 138 was correctly coded on the original alignment Roadway ID 99010000.

- The information will be a mirror of Feature 138 on the original alignment Roadway ID 99010000.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99010001	00	00	TEST	0.000	0.800	0.800	ACTIVE ON THE SHS
Description: EXAMPLE 1 NEW ALIGHMENT						VideoLog	Enterprise GIS

Feature 139 - NEW ALIGNMENT						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.000	0.800	SECT/SUBSECT OF OLD ALIGNMENT	99010000	ID	C	KNRSHTL 05/25/2007
		OLD ALIGNMENT BEG. PT.	2.000	MI	C	KNRSHTL 05/25/2007
		OLD ALIGNMENT END. PT.	3.000	MI	C	KNRSHTL 05/25/2007

Feature 140—Section Status Exception

- Code OSDATE, the date when the new alignment mileage was officially added to the SHS system as approved/signed by the District Secretary.

- Code 02—Active On the SHS from MP 0.000 to MP 0.800, the limits of the new alignment.

- Refer to Chapter 7 for coding requirements of Feature 140.

Roadway ID:	Man-Dist:	Geo-Dist:	Country:	Beg. MP:	End. MP:	Net Length:	Overall Status:
99010001	00	00	TEST	0.000	0.800	0.800	ACTIVE ON THE SHS
Description: EXAMPLE 1 NEW ALIGHMENT						VideoLog	Enterprise GIS

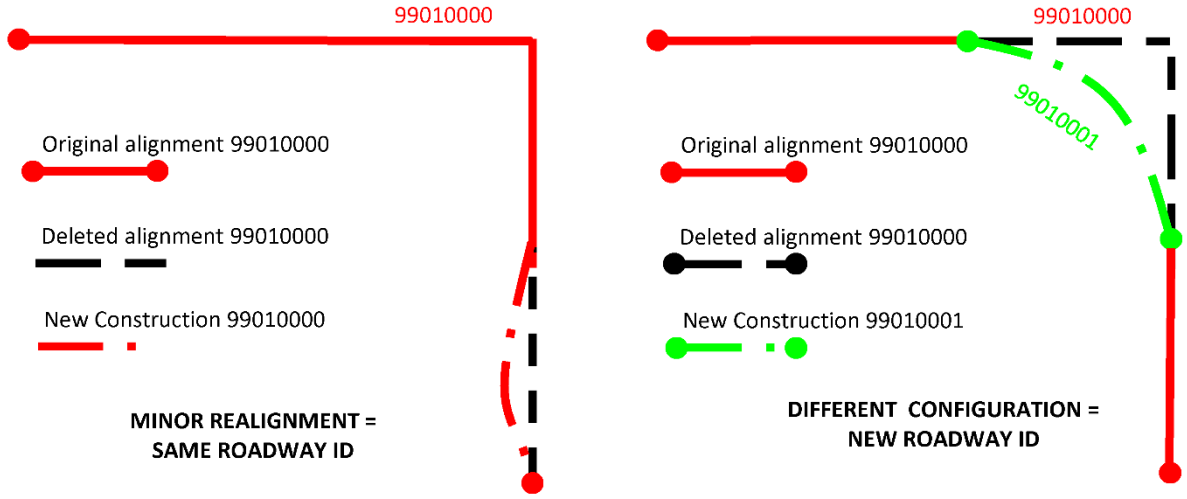
Feature 140 - SECTION STATUS EXCEPTION						LENGTH/NON-INTERLOCKING
Beg.MP	End.MP	Characteristic	Value	Unit	Side	Char. Updated
0.000	0.800	ON OR OFF-SYSTEM DATE	05/01/2007	DA	C	KNRSHTL 05/25/2007
		SECTION STATUS EXCEPTION	02 - ACTIVE ON THE SHS	CD	C	KNRSHTL 05/25/2007

Minor Realignment of a Mainline

Mainline realignments will retain the same roadway ID number if the realigned segment essentially follows the same configuration, still connects to the same points along the mainline or the adjacent roadway and does not require right-of-way acquisition. Inventory must be conducted to update RCI features and characteristics on the realigned segment.

A realignment that results in a shortening or lengthening greater than 0.1 miles is not considered a minor realignment.

FIGURE 5.16 | REALIGNMENT EXAMPLE



Example

This example illustrates a realignment of a state facility resulting from new construction, where a new roadway ID was not established.

79110000 (I-4/SR-400) was realigned through the interchange at I-95 outside of Daytona Beach. This is a dual carriageway where changes were made to the alignments of both the eastbound and westbound lanes, 79110000 and 79110800, respectively. The realignment occurred along with a new ramp configuration at this interchange.

- Roadway ID 79110000 was reconstructed from MP 27.233 to MP 28.020.
- 28.020 was the ending milepoint of 79110000 before realignment.
- The old roadbed was physically removed.
- The new alignment of 79110000 is 0.003 miles longer than the original alignment.
- The new alignments were constructed within the existing right-of-way.
- The LRS routes for 79110000 and 79110800 were adjusted to fit the new alignments. New roadway IDs were not created.
- SHS addition/deletion paperwork is not required.
- Appropriate RCI administrative features should be updated according to the requirements and timeliness standards of the Transportation System Jurisdiction and Numbering Procedure, Topic No. 525-020-010 and GIRD Procedure, Topic No. 525-020-310.
- The new alignment should be inventoried and appropriate RCI physical features and characteristics, SLDs, and county section number key sheet should be updated according to the requirements and timeliness standards of the GIRD Procedure, Topic No. 525-020-310.
- All other appropriate Planning features and characteristics should be reviewed and updated accordingly.

FIGURE 5.17 | REALIGNMENT EXAMPLE

5.2.2 Shortening and Lengthening

Roadway section lengths and the associated data may need to be adjusted to accurately reflect field conditions or the Department's business decisions. These adjustments include shortening or lengthening section lengths which require special attention and coordination with Districts and TDA Office to update data and information appropriately. Common occurrences that require these types of revisions include adjusting lengths based on field inventory after construction is complete and adjusting lengths for accuracy and quality purposes to ensure sections are accurately assigned to the state or the local entity, Roadway sections must not have gaps or overlaps to adjacent roadway sections.

Roadway ID Shortening

Roadway sections are typically shortened when pending roadway lengths are field verified, when revisions are performed, or realignments to roadways occur. An existing roadway section may be shortened only if the shortening occurs at the end of the roadway ID alignment. A roadway may be shortened if an error occurred when a roadway was initially entered into RCI without field verification. Shortening roadway section lengths will affect the length of features or characteristics related to those sections which must be edited for consistency prior to shortening or this change will cause errors.

An existing roadway section may be shortened if the length of a roadway in RCI does not match the field measurement, if the original length was from a quarter quad map when the roadway ID was created, or if the roadway was originally measured at a painted gore and is now being measured at a physical gore.

The constructed and field-measured lengths may be different if the EMP was estimated for a Pending roadway. This situation may require a shortening in RCI after a field inventory of the completed roadway.

Roadway ID Lengthening

An existing roadway ID may be lengthened if the extension is at the end of a roadway. However, the District should ensure that the change will not cause overlaps or gaps with other roadway IDs. A roadway ID may be lengthened due to errors in RCI when it was initially entered without field verification or for new construction. In addition, if two or more roadways are combined, the roadway ID at the beginning of the segment will be lengthened, and it will carry the data for the roadway.

5.2.3 Combining

Coincident Roadway IDs

Coincident roadway IDs may be present within the system. When entering new roadway IDs, overlapping roadways will not be accepted. When two or more roadway IDs are assigned to the same alignment, the greatest hierarchal roadway ID with the greater hierarchal value must be chosen to represent the alignment (see section 5.1.7 Stationing Exceptions for Roadway ID Assignment Hierarchy). The overlapped roadway ID on the SHS shall be placed in Inactive status on the V/U/D screen. For Active Off the SHS roadways, the District may choose, to either delete the overlapped roadway ID number or place the roadway ID in an Inactive status.

Combining Roadway IDs

When there are multiple contiguous Active Off the SHS alignments, these roadway IDs can be combined into one. This requires that all the information found in the adjoining roadway IDs be transferred to the roadway ID with the furthest South or West beginning milepoint. An inventory of the merged roadway ID shall be necessary to obtain accurate milepoints. The District must request any changes to the merged roadway ID alignment and request that the remaining ID(s) be deleted from the RCI database by submitting an RCI/LRS package. Districts must work with TDA Office before combining any roadway IDs. (GIRD Procedure, Topic No. 525-020-310).

Combining Roadway IDs Example

Active Off the SHS Roadway IDs 98000010, 98000011, and 98000012 are consecutive roadway segments. They can be combined into one roadway ID number. Roadway IDs 98000011 and 98000012 may be combined with Roadway ID 98000010. This would be accomplished by transferring the data from Roadway IDs 98000011 and 98000012 to 98000010, and then deleting Roadway IDs 98000011 and 98000012. This process of combining roadway IDs into one number allows easier re-inventory and streamlines both the RCI database and the RCI/LRS. (See Figures 5.18 and 5.19)

FIGURE 5.18 | ORIGINAL ROADWAY ID NUMBERING

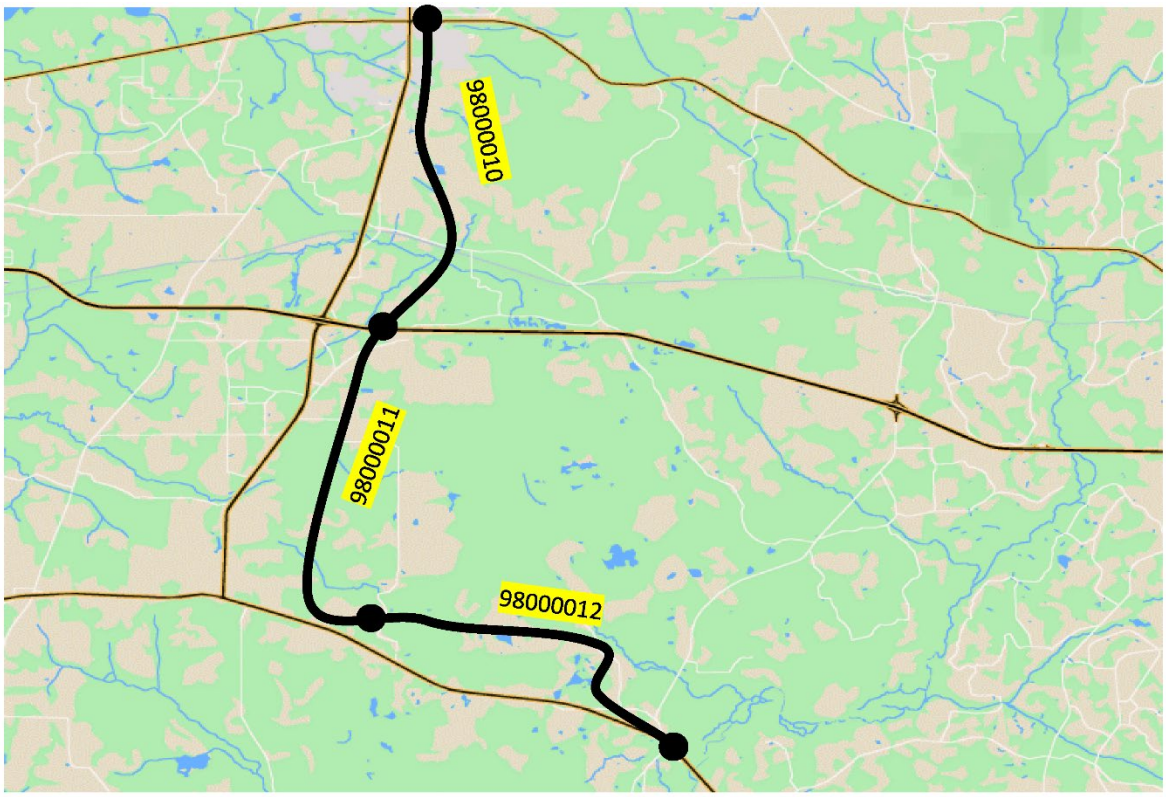
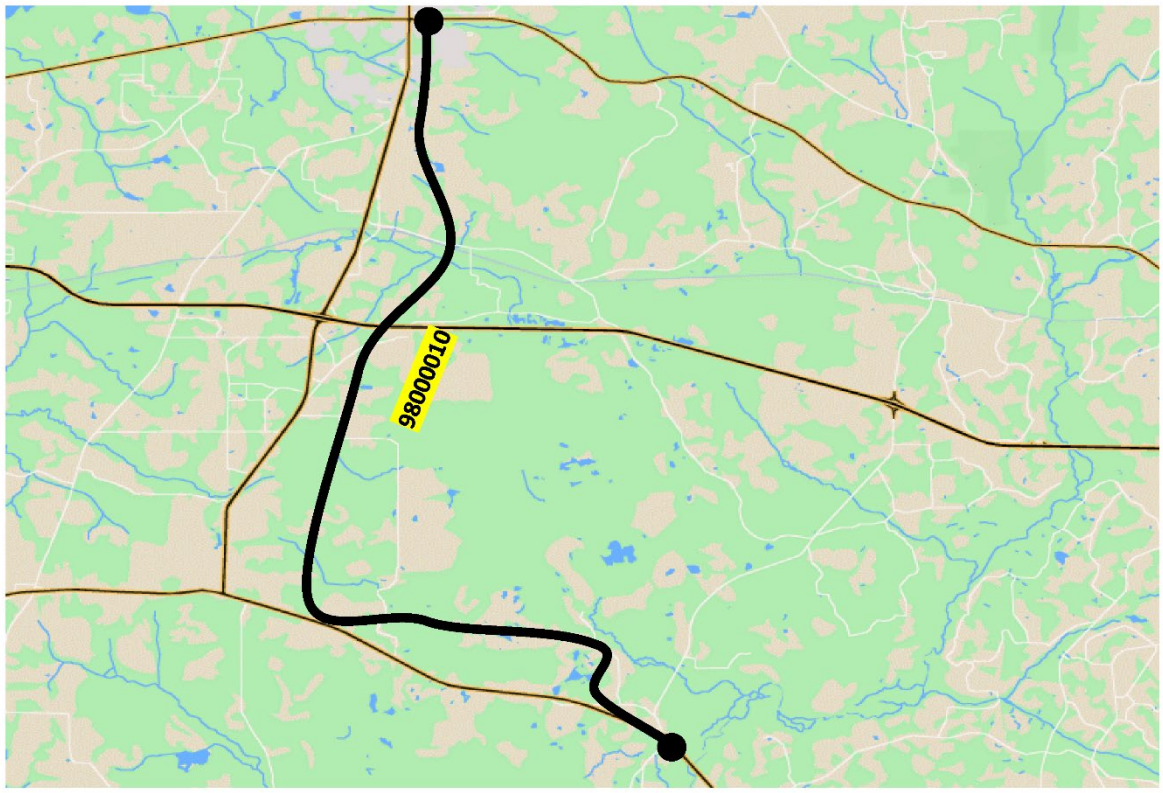


FIGURE 5.19 | REVISED ROADWAY ID NUMBERING



5.3 Retiring Roadways

5.3.1 Physically Removed

If any segment of the roadway is physically removed, whether at the beginning, the ending, or anywhere along the roadway, then Feature 140 must be coded to reflect the deleted segments. The BMP and/or EMP should not be changed nor moved for a physical deletion for Active On the SHS roadways.

V/U/D Screen Overall Status

If any segment of a mainline roadway is coded Deleted and Feature 140 has more than one status coded then it is necessary to submit an RCI/LRS package to TDA Office to change the overall status on the V/U/D screen to Active with Combination.

Coding Feature 140—Section Status Exception for Road Segments

If any segment of the roadway is physically removed elsewhere along the roadway, then Feature 140 must be coded for the deleted segments. Submit an RCI/LRS package to change the overall status on the V/U/D screen to Active with Combination.

Coding Feature 140—Section Status Exception for Entire Roadway

If the entire roadway is physically removed, then Feature 140 should NOT be updated. Submit an RCI/LRS package to TDA Office to change the overall status on the V/U/D screen to Deleted. The data must be retained in RCI for a minimum of 5 years.

After 5 years, the District may elect to delete all the data in RCI and submit an RCI/LRS package to have the roadway ID deleted from RCI. There is no mandate to delete the data after the minimum 5-year retention.

SHS Paperwork

SHS mileage deletion paperwork must be submitted with the RCI/LRS package for physical removal of any roadbed on the SHS.

NOTE: SHS mileage paperwork does not have to be submitted for deletion of Active Off the SHS and Active Exclusive roadways, since their mileage are excluded from the SHS mileage.

Physically Removed Beginning of Roadway ID Alignment

If any segment of an Active Off the SHS or Active Exclusive roadway is physically removed at the beginning, then the BMP can be changed to a non-zero milepoint. All data must be updated to start from the new BMP. Submit an RCI/LRS package to TDA Office to change the BMP.

Physically Removed Ending of Roadway ID Alignment Ramps

If any segment of any roadway is physically removed at the ending, then the roadway ID can be shortened to the new EMP.

All data must be shortened to the new EMP. Submit an RCI/LRS package to TDA Office to shorten the EMP.

If any segment of the ramp or frontage road is physically removed elsewhere along the roadway, submit an RCI/LRS package to have the roadway ID number made Inactive and replaced with a new roadway ID.

5.3.2 Deletion of a Roadway

Inactivating a Roadway

SHS roadway IDs cannot be deleted, even if they are being combined into a single number. Data must be retained for historical purposes. Roadway ID status on the V/U/D screen should be revised to Inactive. Do not delete any data for this roadway in RCI.

Active Off the SHS roadway IDs should NOT be deleted if they have:

- Construction/reconstruction records in the FM System.
- Roadways with structures and/or railroad crossings.
- On or proposed for the NHS.
- On or proposed for the SIS or SIS connector.
- Old secondary system.

Reassignment

Roadway ID reassignment is done to combine and eliminate multiple roadway IDs. The District can elect to replace the existing roadway ID with a new one by assigning a new roadway ID. The original roadway ID will be made Inactive. An RCI/LRS package will need to be submitted to have the overall status on the V/U/D screen of the original roadway ID(s) changed to Inactive and create a new roadway ID. Any roadway ID reassignments must be approved by the TDA Office prior to any data changes. All stakeholders should be coordinated with to ensure all data is transferred to the new roadway ID.

5.3.3 Inactive

An inactive status is a characteristic value that indicates a roadway ID and its associated data will no longer be considered as an operational number. (Operational numbers are used to store current RCI data.) RCI data coded under this number must be retained for an indefinite period. This road may or may not be of any interest later.

Active On the SHS

If any segment of an Active On the SHS roadway is made Inactive, whether at the beginning, the ending, or anywhere along the roadway, then Feature 140 must be coded to reflect the Inactive segments. If Feature 140 has more than one code, an RCI/LRS package will need to be submitted to have the overall status in the V/U/D screen changed to Active with Combination. (See Figure 5.20)

Active Off the SHS Beginning of Roadway ID Alignment

If any segment of an Active Off the SHS roadway is made Inactive at the beginning, then the BMP can be changed to a non-zero milepoint. All data will start from the new BMP. An RCI/LRS package will need to be submitted to change the BMP.

Old Secondary System Roadway

Old secondary system will be treated as Active Off the SHS roads.

Ending of Roadway ID Alignment

If any segment of an Active Off the SHS roadway is made Inactive at the end, then the roadway ID can be shortened to the new EMP. All data will be shortened to the new EMP. An RCI/LRS package will need to be submitted to shorten the EMP.

If any segment of an Active Off the SHS roadway is made Inactive elsewhere along the roadway, then Feature 140 must be coded to reflect the Inactive segments. An RCI/LRS package will need to be submitted to have the overall status in the V/U/D screen changed to Active with Combination. (See Figure 5.20)

Active Exclusive

If any segment of the ramp or frontage road is made Inactive elsewhere along the roadway, then an RCI/LRS package will need to be submitted to have the roadway ID number made Inactive and replaced with a new roadway ID.

Entire Roadway

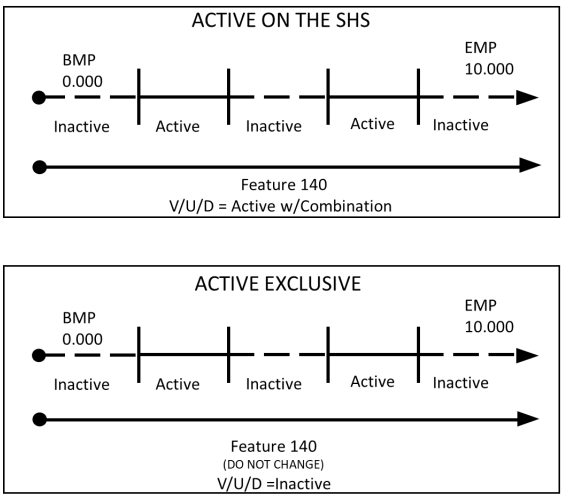
If the entire roadway is made Inactive, Feature 140 should NOT be changed. An RCI/LRS package will need to be submitted to have the overall status in the V/U/D screen changed to Inactive.

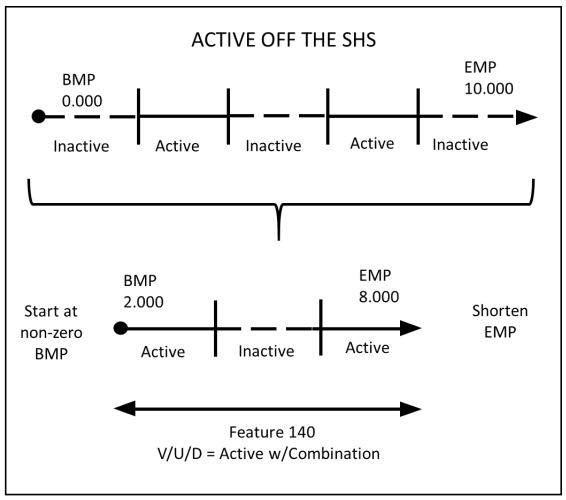
SHS Paperwork

SHS mileage deletion paperwork must be submitted with the RCI/LRS package for any physical removal of any roadbed, since inactivating any segments of the roadway subtracts from the mainline mileage and affects the SHS mileage report. Reference the Transportation System Jurisdiction and Numbering Handbook regarding the SHS mileage paperwork.

SHS mileage paperwork does not have to be submitted for deletion of Active Off the SHS and Active Exclusive roadways, since their mileage is excluded from the SHS mileage.

FIGURE 5.20 | EXAMPLE FOR INACTIVE STATUS





An HPMS sample cannot be removed without prior approval of the TDA HPMS Coordinator since every HPMS Sample is tracked by FHWA.

5.4 Route Sequencing

5.4.1 District Responsibilities

To facilitate route sequencing in RCI and to allow GIS and other mapping sequencing, it is necessary to code Feature 111—State Road System and Feature 113—AASHTO on Active Exclusive roadways. This includes recording state, U.S., and interstate route numbers that are assigned to the mainline for Active Exclusive roadways. For this step, match the same section number (3rd, 4th, and 5th digits) of the roadway ID number with the mainline. For example, ramp 55320049 located at U.S.-27/SR-63 (55010000) and I-10/SR-8 (55320000) would receive Feature 111 coding of SR-8 and Feature 113 coding of I-10.

The same coding methodology applies to Active Exclusive roadways located at the interchange of two interstates such as I-10 and I-75. The feature coding for the Active Exclusive ramps would reflect the roadway number from the mainline that has the identical section number (3rd, 4th, and 5th digits) of the eight-digit roadway ID number. An example of this would be that for ramp 29180067, the Feature 111 and Feature 113 will utilize I-75/SR-93 from the mainline I-75/SR-93 (29180000) and not I-10/SR-8 from the mainline 29170000.

5.4.2 TDA Responsibilities

To complete the route sequence, code the associated route numbers in the proper route segment order as it appears geographically along the mainline. This route sequence design puts frontage roads, ramps, and other similar roadways in parallel with the associated mainline. It allows for one-way subsections to be placed parallel with the other appropriate one-way portions of the mainline. The entire sequencing process is automated with the use of the milepoint linkages from data based on RCI features. The only manual sequencing required is to arrange the mainline counties in the proper order. This step is critical for roadways entering a county more than once, such as I-10 through Washington and Holmes Counties. This method also provides for ramps intersecting ramps, as is the case with many of the major directional (non-loop) interchanges. Note that there are many ramps to frontage roads that have ramps to the local highway system. This design also provides for the automated designation of reversal sections.