## Highway Performance Monitoring System Field Manual Errata Sheet





Office of Highway Policy Information

November 2020

Version 1.3

## **Revision Tracker**

Version	Issue Date	Summary of Changes
1.0	February 2018	PM2 and Non-PM2 rule-related technical corrections (e.g., reporting requirement edits, data collection/reporting guidance clarifications, etc.)
1.1	November 2018	Non-PM2 rule-related technical corrections (e.g., data model revisions, data collection/reporting guidance clarifications, image updates, appendices revisions, etc.)
1.2	December 2019	Non-PM2 rule-related technical corrections (e.g., data collection/reporting guidance clarifications, appendices revisions, etc.)
1.3	November 2020	Non-PM2 rule-related technical corrections (e.g., data collection/reporting guidance clarifications, appendices revisions, etc.)

## Notes:

- 1. The FHWA intends to address these revisions via a future rulemaking action. This list of known revisions is provided solely for the information of HPMS Field Manual users and does not constitute official changes to the HPMS Field Manual at this time.
- 2. New and revised data collection requirements (see Errata key below) shall be implemented beginning in 2021. If this is not feasible, data collection shall be prioritized and performed promptly (beyond 2021) to align with these requirements.

## Errata Key:

Deletions shown in **bold red strikethrough**Additions shown in **bold blue**Rows shown *italicized and highlighted* denote November 2020 updates

Page	Discussion	Original Text	Revised Text
1-3	Table 1.1: Minimum Data Reporting for Selected HPMS Products - Footnotes	1/ Data for Lane-Miles on Rural Minor Collector, and Local roads are calculated using Summary miles times 2. Since the States are not required to report the number of through lanes on these systems, except for NHS sections, FHWA uses a multiplier of 2 for the number of lanes, to be consistent across all States.  2/ Data reported for Total VMT on Rural Minor Collector and Local roads are provided at a summary level of detail. States are not required to report section level AADT on these systems, except for NHS sections.	Total Daily VMT 3/ Total Daily Truck VMT 3/  1/ Data for Lane-Miles on Rural Minor Collector, and Local roads are calculated using Summary miles times 2. Since the States are not required to report the number of through lanes on these systems, except for NHS sections, FHWA uses a multiplier of 2 for the number of lanes, to be consistent across all States.  2/ Data reported for Total VMT on Rural Minor Collector and Local roads are provided at a summary level of detail. States are not required to report section level AADT on these systems, except for NHS sections.  3/ These "data products" are converted to annual VMT for end-product reporting purposes.

Page	Discussion	Original Text	Revised Text
1.5	'Section 1.5: Reporting Requirements - 1st paragraph	For example, Interstate pavement data and related data elements collected from January 1st 2016 through December 31st 2016 must be submitted (to FHWA) by April 15th 2017.	For example, Interstate pavement data and related data elements collected from January 1st 20162018 through December 31st 20162018 must be submitted (to FHWA) by April 15th 20172019.
1-6	Section 1.5: HPMS Submission Deadlines - 2nd paragraph	The tiered HPMS submission process is depicted in Figure 1.1. Submission deadlines begin with Interstate pavement and other related data items on April 15th (HPMS Submission 1), followed by the Certified Mileage on June 1st. Non-Interstate pavement, non-pavement, sample, and summary data are due to be submitted on June 15th (HPMS Submission 2).  Moreover, the following pavement condition-related data must be reported by April 15 of the year following the data inventory year: Sections data for Functional System (Data Item 1 in Section 4.2), Urban Code (Data Item 2 in Section 4.2), Facility Type (Data Item 3 in Section 4.2), Structure Type (Data Item 4 in Section 4.2), Through Lanes (Data Item 7 in	The tiered HPMS submission process is depicted in Figure 1.1. Submission deadlines begin with Interstate pavement and other related data items on April 15th (HPMS Submission 1), followed by the Certified Mileage on June 1st. Non-Interstate pavement, non-pavement, sample, and summary data are due to be submitted on June 15th (HPMS Submission 2).  Moreover, the following pavement condition-related data must be reported by April 15 of the year following the data inventory year: Sections data for Functional System (Data Item 1 in Section 4.2), Urban Code (Data Item 2 in Section 4.2), Facility Type (Data Item 3 in Section 4.2), Structure Type (Data Item 4 in Section 4.2), Through Lanes (Data Item 7 in Section 4.2), Surface Type (Data Item 15 in Section 4.2), Surface Type (Data Item 16 in Section 4.2), Surface Type (Data Item 17 in Section 4.2)

Page	Discussion	Original Text	Revised Text
		Section 4.2), IRI (Data Item 47 in Section 4.2), Surface Type (Data Item 49 in Section 4.2), Rutting (Data Item 50 in Section 4.2), Faulting (Data Item 51 in Section 4.2), Cracking Percent (Data Item 52 in Section 4.2), NHS (National Highway System) (Data Item 64 in Section 4.2) and a dualcarriageway, LRS-enabled, geospatial Routes dataset (Section 3.3). See Chapter 4, Sec. 4.3 and 4.4 for details on data itemspecific collection and reporting requirements.	49 in Section 4.2), Rutting (Data Item 50 in Section 4.2), Faulting (Data Item 51 in Section 4.2), Cracking Percent (Data Item 52 in Section 4.2), and NHS (National Highway System) (Data Item 64 in Section 4.2) and a dualcarriageway, LRS enabled, geospatial Routes dataset (Section 3.3). See Chapter 4, Sec. 4.3 and 4.4 for details on data item-specific collection and reporting requirements.
2-2	'Table 2.1: Data Items to be Reported - Data Item 1: Functional System	1   Functional System   FE + R	1   Functional System   FE + R*

Page	Discussion	Original Text	Revised Text
2-2	'Table 2.1: Data Items to be Reported - Data Item 3: Facility Type	3   Facility Type   FE + R	3   Facility Type   FE + R*
2-2	'Table 2.1: Data Items to be Reported - Data Item 14: Speed Limit	14 Speed SP	14 Speed FE*** SP*
2-2	'Table 2.1: Data Items to be Reported - Data Item 20: Alternate Route Name	Alternate 20 Route FE Name	20 Route FE* Name
2-3	'Table 2.1: Data Items to be Reported - Data Item 47: International Roughness Index (IRI)	47   International   Roughness   FE*   SP*   Index (IRI)	International Roughness FE*** SP* Index (IRI)
2-4	'Table 2.1: Data Items to be Reported - Data Item 68: Maintenance and Operations	Maintenance 68 and FE Operations	Maintenance 68 and FE** Operations

Page	Discussion	Origina	Original Text				Revis	ed T	ext			
2-4	Table 2.1: Data Items to be Reported - Data Item 63: County Code	63	County Code	FE				63	County Code	FE*		
2-4	Table 2.1: Data Items to be Reported - Footnotes	systems State ro FE* = Fo function Sec. 4.4 FE*** = I item is o Sec. 4.4 FE**** roadwa non-Sta FE**** NHS roo non-Sta FE**** for Intel State ai FE + R = located intercho SP = All defined SP* = So	Sample Par by HPMS) ome Sample ap. 4, Sec. 4	state a r some (see C etails) wherev (see Ch etails) for all g State s) Full E luding s) Full E luding includi le-sepa el Sect	thap. 4, er data ap. 4, NHS and extent for State an Extent ncluding ways) ing ram arated Sections (as	or nd g nps	function public State FE*= Feder 4.4 for FE*** Feder Feder FE*** Foads State FE*** Foads State FE*** Inters and n FE + R system within FE + R grade SP = A define system SP* = some	iona c road ral-a ral-a or mo e Full cable detc ex* = F ways road **# = ways road ex*# = fin gro ex*# = fin gro ex*, inc exe by ms Fed by Fed by Fed	Extent for eight Federal-ands (including id systems, ore details) Ill Extent for including id ways) Ill Extent for including id ways) Ill Extent for including rande-separate full Extent for including rande-separate full Extent including rande-separate	id system of State of all Period in terms in the control of the co	ems, or e and no unction hap. 4, all public sections deral-allections deral-allections deral-allections deral-allections deral-allections decated with the content for allections decated and allections decated allections decated and allec	on-

Page	Discussion	Original Text	Revised Text
2-5	Summary Data -	The following summaries are to be	The following summaries are to be
	Discussion	reported as five individual	reported as <del>five</del> four individual
		datasets, which will be stored as	datasets, which will be stored as
		tables within FHWA's database:	tables within FHWA's database:
		1 - Statewide Summaries	1 - Statewide Summaries
		2 - Vehicle Summaries	2 - Vehicle Summaries
		3 - Urban Summaries	3 - Urban Summaries
		4 - County Summaries	4 - County Summaries
		5 - NAAQS Summaries	5 NAAQS Summaries
2-6	NAAQS	This summary includes system	This summary includes system length
	Summaries -	length and travel data for rural	and travel data for rural minor
	Discussion	minor collectors and rural/urban	collectors and rural/urban locals
		locals summarized by non-	summarized by non-attainment and
		attainment and maintenance	maintenance areas, and pollutant
		areas, and pollutant type. HPMS	type. HPMS uses the Environmental
		uses the Environmental Protection	Protection Agency (EPA) defined non-
		Agency (EPA) defined non-	attainment or maintenance area for
		attainment or maintenance area	identification purposes.
		for identification purposes.	

Page	Discussion	Original Text	Revised Text
3-1	Overview -	This data model is organized	This data model is organized
	Discussion	conceptually into a group of six	conceptually into a group of sixfive
		catalogs. Each catalog groups the	catalogs. Each catalog groups the
		various datasets by type and/or	various datasets by type and/or
		function. The types of data can be	function. The types of data can be
		categorized as: (1) geospatial data,	categorized as: (1) geospatial data,
		representing various highway	representing various highway systems,
		systems, geographic boundaries	geographic boundaries etc., (2)
		etc., (2) roadway attribute data	roadway attribute data that can be
		that can be linked to a related GIS	linked to a related GIS dataset, which
		dataset, which allows the attribute	allows the attribute data to be
		data to be represented spatially	represented spatially via linear
		via linear referencing or (3)	referencing or (3) metadata, which
		metadata, which provides	provides additional global information about the data.
		additional global information about the data.	about the data.
		about the data.	Figure 3.1 illustrates the structure of
		Figure 3.1 illustrates the structure	the HPMS data model. The HPMS
		of the HPMS data model. The	attribute data that are submitted by
		HPMS attribute data that are	the States are grouped within the
		submitted by the States are	Sections Catalog. The Sections dataset
		grouped within the Sections	that is identified in this catalog stores
		Catalog. The Sections dataset that	all of the records for each data item as
		is identified in this catalog stores	they are reported by the States. The
		all of the records for each data	Sample Panel Identification dataset
		item as they are reported by the	stores the limits for each State's
		States. The Sample Panel	sample panel as identified by the
		Identification dataset stores the	States. The Data Item field in the
		limits for each State's sample	Sections dataset specifies the type of
		panel as identified by the States.	record (e.g. AADT, Lane Width, etc.),
		The Data Item field in the Sections	with the corresponding data stored in
		dataset specifies the type of	the Value (Numeric, Text, or Date)
		record (e.g. AADT, Lane Width,	fields. These records act
		etc.), with the corresponding data	independently of one another, as they
		stored in the Value (Numeric, Text,	indicate the properties of the attribute
		or Date) fields. These records act	they portray. Furthermore, the
		independently of one another, as	records in both the Sections and
		they indicate the properties of the	Sample Panel Identification datasets
		attribute they portray.	are linked to each State's geospatial
		Furthermore, the records in both	network (i.e. LRS network) via its
		the Sections and Sample Panel	attribute table, which is identified as
		Identification datasets are linked	the Routes dataset that is identified in
		to each State's geospatial network	the model's Shapes Catalog. Data
		(i.e. LRS network) via its attribute	associated with the lower functional
		table, which is identified as the	systems (i.e. minor collectors in rural
		Routes dataset that is identified in	areas and local roads in all areas) are

Page	Discussion	Original Text	Revised Text
		the model's Shapes Catalog. Data associated with the lower functional systems (i.e. minor collectors in rural areas and local roads in all areas) are summarized and reported in the datasets identified in the Summaries Catalog. The level of data for these functional systems is commensurate with the Federal need for analyzing and reporting these data. The Estimates Catalog contains a dataset of pavement attributes that will be used as input to FHWA's pavement models. The Metadata Catalog contains data that describe the methods and tools that are used for the collection and reporting of traffic, pavement, and ramp data. The References Catalog identifies the geospatial data which will ultimately be maintained by FHWA or other non-State entities. The data in these datasets are available for use by the States throughout the year for reference.	summarized and reported in the datasets identified in the Summaries Catalog. The level of data for these functional systems is commensurate with the Federal need for analyzing and reporting these data. The Estimates Catalog contains a dataset of pavement attributes that will be used as input to FHWA's pavement models. The Metadata Catalog contains data that describe the methods and tools that are used for the collection and reporting of traffic, pavement, and ramp data. The References Catalog identifies the geospatial data which will ultimately be maintained by FHWA or other non-State entities. The data in these datasets are available for use by the States throughout the year for reference.
3-2	Figure 3.1 HPMS Data Model Structure - Image	Shapes Catalog (Geopetal Date)    Uhar Ana   Dare Devoluties   Curry Doundaries   Christs Zate Boundaries	Removed the 'NAAQS Summaries' object from the 'NAAQS Area Boundaries', and 'Summaries Catalog' portions of the image; removed the 'References Catalog' from the image.

Page	Discussion	Original Text	Revised Text
3-3	Geospatial Component - Discussion	Furthermore, the geospatial component of the data model involves the use of a LRS, which links the HPMS attribute data to a series of shape files. Both the geospatial and attribute data contain three referencing elements that are used to perform the linkage for linear features: (1) A unique Route ID, (2) a beginning milepoint, and (3) an ending milepoint. Point features use a route milepoint in place of a beginning and ending milepoint for referencing purposes. Data Items are identified in the Point References datasets of the model's References Catalog and are linked to and spatially referenced in the same manner. For general guidance on the development of a State wide LRS, see the FHWA publication, All Public Roads	Furthermore, the geospatial component of the data model involves the use of a LRS, which links the HPMS attribute data to a series of shape files. Both the geospatial and attribute data contain three referencing elements that are used to perform the linkage for linear features: (1) A unique Route ID, (2) a beginning milepoint, and (3) an ending milepoint. Point features use a route milepoint in place of a beginning and ending milepoint for referencing purposes. Data Items are identified in the Point References datasets of the model's References Catalog and are linked to and spatially referenced in the same manner. For general guidance on the development of a State wide LRS, see the FHWA publication, All Public Roads Geospatial Representation Study.
3-5	Shapes Catalog - Image	Geospatial Representation Study.  N/A	Deleted [NAAQS Area Boundaries] Object from Shapes Catalog image
3-7	<b>Table 3.5 Routes</b> Footnotes	Extent – All public roads including Federal-aid highways, and ramps located within grade-separated interchanges (including NHS routes). This roadway network is termed 'All Roads Network' or ARNOLD.	Extent – All public roads including Federal-aid highways, and ramps located within grade-separated interchanges (including NHS routes). This roadway network is termed the 'All Roads Network of Linear Referenced Data' or ARNOLD.

Page	Discussion	Original Text	Revised Text
3-9	Table 3.7 NAAQS	Table 3.7 describes the polygon	Table 3.7 describes the polygon
	Area Boundaries	shapes dataset representing the	shapes dataset representing the EPA-
	- Discussion &	EPA-defined non-attainment and	<del>defined non-attainment and</del>
	Table	maintenance areas for each State.	maintenance areas for each State.
		This dataset will be maintained by	This dataset will be maintained by
		FHWA.	FHWA.
		The definition of a Maintenance	The definition of a Maintenance Area
		Area is any geographic region of	is any geographic region of the Unites
		the Unites States previously	States previously designated as non-
		designated as non-attainment	attainment pursuant to the Clean Air
		pursuant to the Clean Air Act (CAA)	Act (CAA) Amendments of 1990 and
		Amendments of 1990 and	subsequently re-designated to
		subsequently re-designated to	attainment subject to the
		attainment subject to the	requirement to develop a
		requirement to develop a	maintenance plan under Section 175A
		maintenance plan under Section	of the CAA, as amended. The national
		175A of the CAA, as amended. The	HPMS database is used for tracking
		national HPMS database is used	travel for air quality assurance
		for tracking travel for air quality	<del>purposes in non-attainment and</del>
		assurance purposes in non-	maintenance areas as required by
		attainment and maintenance areas	EPA under the 1990 CAA (Section 187)
		as required by EPA under the 1990	and the Transportation Conformity
		CAA (Section 187) and the	Rule, 40 CFR parts 51 and 93. More
		Transportation Conformity Rule,	specifically, the database is used
		40 CFR parts 51 and 93. More	primarily for establishing regional
		specifically, the database is used	transportation-related emissions for
		primarily for establishing regional	transportation conformity purposes.
		transportation-related emissions	Estimated travel based on these data
		for transportation conformity	is used for the calibration and
		purposes. Estimated travel based	validation of base year network
		on these data is used for the	travel models when required for non-
		calibration and validation of base-	attainment or maintenance areas.
		year network travel models when	
		required for non-attainment or	[NAAQS AREA BOUNDARIES TABLE]
		maintenance areas.	
		[NAAQS AREA BOUNDARIES	
		TABLE]	
3-11	Table 3.8	Table 3.8 describes the State	Table 3.8 describes the State reported
	Sections	reported HPMS Section dataset	HPMS Section dataset representing all
	Description	representing all Federal-aid	Federal-aid highways and other
	Description	highways and other applicable	applicable sections. in a few cases, all
		sections. The specific requirements	public roads. The specific
		for the information to be reported	requirements for the information to
		in the Data Item field are defined	be reported in the Data Item field are
		in detail in Chapter 4. See Table	defined in detail in Chapter 4. See
		in detail in Chapter 4. See Table	uenneu in detail in Chapter 4. See

Page Disc	cussion	Original Text	Revised Text
		4.2 for a full list of the required HPMS Data Items and related reporting requirements.	Table 4.2 for a full list of the required HPMS Data Items and related reporting requirements.
Sect Foo	ole 3.8 tions otnotes	Extent: All Federal-aid highways and ramps located within grade separated interchanges and applicable items on other sections where a toll facility exists; optional for other sections.	Extent: All Federal-aid highways and ramps located within grade separated interchanges and applicable items on other sections where a toll facility exists for most data items; all public roads for certain data items; optional for other sections.
	nmaries alog - Image	Summaries Catalog (Summary Data)  Sateroide Summaries  (Vehicle Summaries)  (Vehicle Summaries)  (Vehicle Summaries)  (Vehicle Summaries)	Removed the 'NAAQS Summaries' object from the 'Summaries Catalog' portion of the image.
Cata	nmaries alog - cussion	This catalog is comprised of the following five datasets:  • Statewide Summaries • Vehicle Summaries • Urban Area Summaries • County Summaries • NAAQS Summaries	This catalog is comprised of the following fivefour datasets:  • Statewide Summaries • Vehicle Summaries • Urban Area Summaries • County Summaries • NAAQS Summaries
Stat Sun	ole 3.10 tewide nmaries scription	Table 3.10 describes the dataset which contains demographic and system length estimates for all Urban and Rural public roads, functionally classified as minor collector in rural areas or local in any area, summarized by State. In addition, this dataset contains daily vehicle-miles traveled (VMT) estimates for all public roads located in Small Urban areas, functionally classified as minor collector or local. This includes NHS roads located on these functional systems.	Table 3.10 describes the dataset which contains demographic and system length estimates for all Urban and Rural-public roads, functionally classified as minor collector in rural areas or local in any area, summarized by State. In addition, this dataset contains daily vehicle-miles traveled (VMT) estimates for all public roads located in Small Urban areas, and roads functionally classified as rural minor collector or local. This includes NHS roadways located on these functional systems.
	ole 3.10 tewide	Rural Population (> 5,000)	Rural Population (≥ < 5,000)

Page	Discussion	Original Text	Revised Text
	Summaries – Table		
3-14	Table 3.10 Statewide Summaries Footnotes	Extent: All public roads functionally classified as Rural Minor Collector/Local and Small Urban Local. Any NHS routes or toll roads on these functional systems should be included.	Extent: All public roads functionally classified as Rural Minor Collector or Local and Small Urban Local. Any NHS routes or toll roads on these functional systems should be included.
3-18	Table 3.14 NAAQS Summaries - Discussion, Table, & Footnotes	Table 3.14 describes the dataset which contains system length and travel data for all roads functionally classified as minor collector in rural areas or local in any area summarized by EPA Non-Attainment or Maintenance Area, and the relative pollutant standard.  [NAAQS Summary Table]  Extent: All public roads functionally classified as minor collector in rural areas or local in any area. Any NHS routes or toll roads on these functional systems should be included.  Reporting cycle: Review annually; update as needed.  Collection requirements: Travel and system length data for each pollutant standard within the applicable NAAQS area within the	Table 3.14 describes the dataset which contains system length and travel data for all roads functionally classified as minor collector in rural areas or local in any area summarized by EPA Non-Attainment or Maintenance Area, and the relative pollutant standard.  [NAAQS Summary Table]  Extent: All public roads functionally classified as minor collector in rural areas or local in any area. Any NHS routes or toll roads on these functional systems should be included. Reporting cycle: Review annually; update as needed. Collection requirements: Travel and system length data for each pollutant standard within the applicable NAAQS area within the State.
3-19	References Catalog - Discussion	The References Catalog identifies the reference data that will be maintained by FHWA or other Non-State DOT entities at some point in the future. This catalog identifies the Point References dataset, which contains data for grade-separated interchanges that are located on the Federal-aid system, excluding roads functionally classified as minor collector in rural areas or local in any area.	The References Catalog identifies the reference data that will be maintained by FHWA or other Non-State DOT entities at some point in the future. This catalog identifies the Point References dataset, which contains data for grade separated interchanges that are located on the Federal-aid system, excluding roads functionally classified as minor collector in rural areas or local in any area.

Page	Discussion	Original Text	Revised Text
		[References Catalog Image]	[References Catalog Image]
3-20	Table 3.15 Point References - Discussion, & Table	Table 3.15 describes the dataset which contains data for grade-separated interchanges that are located on the Federal-aid system, excluding roads functionally classified as minor collector in rural areas or local in any area. Currently, this dataset only contains the location and type of grade-separated interchanges. This dataset will be populated by FHWA for the States that do not currently have these data.	Table 3.15 describes the dataset which contains data for grade-separated interchanges that are located on the Federal aid system, excluding roads functionally classified as minor collector in rural areas or local in any area. Currently, this dataset only contains the location and type of grade-separated interchanges. This dataset will be populated by FHWA for the States that do not currently have these data.  [Point References Table]
3-22	Table 3.16	[Point References Table] Table 3.16 describes the dataset	Table 3.16 describes the dataset which
	Estimates Discussion	which contains statewide estimates to be used as default inputs for FHWA's pavement deterioration models. Table 3.18 contains a list of the valid entries for the Estimate Type Field and their associated values.	contains statewide estimates to be used as default inputs for FHWA's pavement deterioration models.  Table 3.183.17 contains a list of the valid entries for the Estimate Type Field and their associated values.
3-22	<b>Table 3.18 Estimates</b> Estimate Type - Valid Values	A detailed list of the estimate types is provided in Table 3.18 below.	A detailed list of the estimate types is provided in Table 3.17 below.
3-22	Table 3.18 Estimates Value Numeric - Valid Values	Must be numeric as specified (in Table 3.18) under the Value Numeric descriptions.	Must be numeric as specified (in Table 3.18 3.17) under the Value Numeric descriptions.
3-26	Table 3.18 Metadata Discussion	Table 3.18 describes the dataset which contains data that captures and explains variability in the collection and reporting of traffic and pavement data in HPMS. Table 3.20 lists the valid entries for the	Table 3.18 describes the dataset which contains data that captures and explains variability in the collection and reporting of traffic and pavement data in HPMS. Table 3.203.19 lists the

Page	Discussion	Original Text	Revised Text
		Metadata Type Field and their associated values.	valid entries for the Metadata Type Field and their associated values.
3-26	Table 3.18 Metadata Metadata Type - Valid Values	A detailed list of the metadata types is provided in Table 3.20 below. Multiple metadata types are permitted per data item.	A detailed list of the metadata types is provided in Table 3.20 3.19 below.  Multiple metadata types are permitted per data item.
3-26	<b>Metadata</b> Value Numeric - Valid Values	Must be numeric as specified (in Table 3.20) under the Value Numeric descriptions.	Must be numeric as specified (in Table 3.20 3.19) under the Value Numeric descriptions.
3-27	Table 3.19 Metadata Types and Valid Values - AADT_24 / Description	Number of permanent and portable counter locations that were counted for a duration of 24 hours or more	Number of permanent and portable counter locations that were counted for a duration of 24 hours or more to 47 hours
3-27	Table 3.19 Metadata Types and Valid Values - Class_24 / Description	Number of permanent and portable classification count locations that were counted for a duration of 24 hours or more	Number of permanent and-portable classification count locations that were counted for a duration of 24 hours or more to 47 hours
3-27	Table 3.19 Metadata Types and Valid Values - Class_48 / Description	Number of permanent and portable classification count locations that were counted for a duration of 48 hours or more	Number of permanent and portable classification count locations that were counted for a duration of 48 hours or more
3-27	Table 3.19 Metadata Types and Valid Values - AADT_48 / Description	Number of permanent and portable counter locations that were counted for a duration of 24 hours or more	Number of permanent and portable counter locations that were counted for a duration of 24 hours or more

Page	Discussion	Original Text Revised Text
4-10	Table 4.2 Data Items, Related Submission Deadlines and Required Reporting Formats - Data Item 1: Functional System	1   Functional System   FE + R     April 15th#   I&NI
4-10	Table 4.2 Data Items, Related Submission Deadlines and Required Reporting Formats - Data Item 3: Facility Type	3   Facility Type   FE + R       3   Facility Type   FE + R*     April April 15th#   I&NI   15th#   I&NI
4-10	Table 4.2 Data Items, Related Submission Deadlines and Required Reporting Formats – Data Item 7: Through Lanes	7 Through Lanes FE + R April I or 18/18 I&NI* 7 Through Lanes FE + R April I or 18/18 I&NI*
4-10	Table 4.2: Data Items to be Reported - Data Item 14: Speed Limit	14 Speed Limit FE* SP 14 Speed Limit FE*** SP*

Page	Discussion	Original Text	Revised Text
4-10	Table 4.2: Data Items to be Reported - Data Item 20:	Alternate 20 Route FE Name	Alternative 20 Route FE* Name
	Alternate Route Name		
4-10	Table 4.2: Data Items to be Reported - Data Item 22: Single- Unit Truck and	Single Unit Truck and Bus AADT  Sp*	22 Single- Unit Truck and Bus AADT FE* SP*
4-12	Table 4.2: Data Items to be Reported - Data	63 County FE Code	63 County FE*
4-12	Item 63: County Code Table 4.2: Data Items to be Reported - Data	Maintenance 68 and FE Operations	Maintenance 68 and FE** Operations
4-12	Item 68: Maintenance and Operations  Table 4.2: Data	FE = Full Extent for all functional	FE = Full Extent for <b>either</b> all
	Items to be Reported - Footnotes	systems (including State and non-State roadways) FE* = Full Extent for some functional systems, (see Chap. 4, Sec. 4.4 for more details) FE** = Full Extent wherever data item is applicable, (see Chap. 4, Sec. 4.4 for more details) FE*** = Full Extent for all NHS roadways (including State and non-State roadways) FE***# = (Optional) Full Extent for NHS roadways (including State and non-State roadways) FE***# = (Optional) Full Extent for Interstate roadways (including State and non-State roadways) FE + R = Full Extent including ramps located within grade-separated interchanges SP = All Sample Panel Sections (as defined by HPMS)	functional Federal-aid systems, or all public roads (including State and non-State roadways)  FE* = Full Extent for some functional Federal-aid systems, (see Chap. 4, Sec. 4.4 for more details)  FE** = Full Extent for either all Federal-aid systems, or all public roads wherever data item is applicable, (see Chap. 4, Sec. 4.4 for more details)  FE*** = Full Extent for all NHS roadways (including State and non-State roadways)  FE***# = (Optional) Full Extent for NHS roadways (including State and non-State roadways)  FE***# = (Optional) Full Extent for Interstate roadways (including State and non-State roadways)  FE + R = Full Extent for all Federal-aid systems, including ramps located

Page	Discussion	Original Text	Revised Text
		SP* = Some Sample Panel Sections (see Chap. 4, Sec. 4.4 for more details)	within grade-separated interchanges FE + R* = Full Extent for all public roads, including ramps located within grade-separated interchanges SP = All-Sample Panel Sections (as defined by HPMS) on all Federal-aid systems SP* = Some-Sample Panel Sections on some Federal-aid systems (see Chap. 4, Sec. 4.4 for more details)  *NOTE: The extent requirement specifications in Sec. 4.4 will be updated, for the applicable data items, to reflect the revisions noted above.
4-16	Item 1: Functional System - Extent Grid	Grid/table indicates that this data item is required to be reported on a FE+R basis	Grid/table should indicate that this data item is required to be reported on a FE+R* basis
4-17	Item 2: Urban Code - Extent	All Public highways including ramps located within gradeseparated interchanges as identified in 23 U.S.C. 101.a(27).	All Public Federal-aid highways including ramps located within grade-separated interchanges-as identified in 23 U.S.C. 101.a(27).

Page	Discussion	Or	riginal Tex	ĸt			Revi	sed Text			
4-17	Item 2: Urban		FS	6 - MiC	7 - Local			FS	6 - MiC	7 - Local	
	Code - Extent		Rural	FE + R	FE + R			Rural	FE + R	FE + R	
	Grid		Urban	FE + R	FE + R			Urban	FE + R	FE + R	
4-18	Item 3: Facility		-		hat this dat					ate that thi	l I
	<b>Type</b> - Extent Grid	a I	FE+R basis	S	reported o	n	on a	FE+R* b	asis	be report	ed
4-28	Item 6: Ownership - Coding Options	31	.   State T	oll Road			31	State To	ll <del>Road</del> Aut	thority	
4-30	Item 7: Through Lanes - Guidance	ca bc wi wi ne pe	n be repoorth directi th divided nich dual otwork rep	orted inder ons of travid highway carriageway oresentations e in Chapt	Data Item Dendently fovel associat Sections, for Bay GIS On is requir Ser 3, Section	ed r ed	be red direct divided dual repre- guide	eported in the carriage esentations	ndepende travel asso vay section way GIS no on is requi		th h <del>ch</del>

Page	Discussion	Original Text	Revised Text
4-42	Figure 4.29: Multiple Turn Lanes (Code '2') Example - Image	Figure 4.29: Multiple Turn Lanes (Code '2') Example	Image removed.
4-44	Item 14: Speed Limit - Guidance	If the speed limit changes within the limits of a section, the State shall determine and report the predominant speed limit.  Baseline speed limit data for the National Highway System (NHS) will be provided by FHWA. The State shall validate or update this information annually as needed.	If the speed limit changes within the limits of a section, the State shall determine and report the predominant speed limit.  Baseline speed limit data for the National Highway System (NHS) will be provided by FHWA. The State shall validate or update this information annually as needed.  For sections where minimum and maximum posted speed limits (PSLs) are present, this data item shall be coded in accordance with the maximum PSLs.  For sections where dynamically controlled (e.g., gantry-controlled) speed limits are present, code the PSL. If the speed limit for these sections during the peak period is lower than the PSL, code the lower value (i.e., peak period speed limit).

Page	Discussion	Original	Text	Revised	l Text
<del>4-48</del>	Item 18: Route				
	<b>Signing</b> – Coding Requirements	Code	<b>Descriptio</b>	Code	Description
		6	County	<u>6</u>	County
		7	Township	7	Township
		8	Municipal	8	Municipal
		9	Parkway Marker or Forest Ro	9	Parkway Marker or Forest Route I
		<u> 10</u>	None of the Above	<u>10</u>	None of the Above Other
<del>4-49</del>	Item 19: Route_Qualifier				
	- Coding	Code	<b>Descriptio</b>	Code	Description
	Requirements	<u>6</u>	<u>Loop</u>	<u>6</u>	Loop
		7	<u>Proposed</u>	<mark>7</mark>	<u>Proposed</u>
		<u>8</u>	<u>Temporary</u>	<mark>8</mark>	Temporary
		<u>9</u>	Truck Route	<u>9</u>	Truck Route
		<u>10</u>	None of the Above	<u>10</u>	None of the Above Other
4-52	Item 21: AADT - Guidance	weekly, is calcul adjusted average is an ave	ge weekday, average or average monthly traffic ated or available, it shall be d to represent the annual daily traffic (AADT). AADT erage daily value that nts all days of the reporting	or avera or availa represe traffic (a daily va	ge weekday, average weekly, age monthly traffic is calculated able, it shall be adjusted to ent the annual average daily AADT). AADT is an average lue that represents all days of orting data/inventory year.

and Bus AADT.  This value shall be representative of all single-unit truck and bus activity based on vehicle classification count data from both the State's and other agency's traffic monitoring programs over all days of the week and all seasons of the year. Actual vehicle classification counts shall be adjusted to represent average conditions as recommended in the Traffic Monitoring Guide (TMG). Single-unit trucks and buses are defined as vehicle classes 4 through 7 (buses through four-ormore axle, single-unit trucks).  AADT values shall be updated annually to represent current year data.  Section specific measured values are requested based on traffic counts taken on a minimum threeyear cycle. If these data are not available, values derived from classification station data on the same route, or on a similar route	Page	Discussion	Original Text	Revised Text
in the same area can be used Specific guidance for the frequency and size of vehicle classification data collection programs, factor development, age of data,	_	Item 22: Single- Unit Truck and Bus AADT -	- For two-way facilities, provide the bidirectional Single-unit Truck and Bus AADT; for one-way roadways, and ramps, provide the directional Single-unit Truck and Bus AADT This value shall be representative of all single-unit truck and bus activity based on vehicle classification count data from both the State's and other agency's traffic monitoring programs over all days of the week and all seasons of the year. Actual vehicle classification counts shall be adjusted to represent average conditions as recommended in the <i>Traffic Monitoring Guide (TMG)</i> . Single-unit trucks and buses are defined as vehicle classes 4 through 7 (buses through four-ormore axle, single-unit trucks) AADT values shall be updated annually to represent current year data. Section specific measured values are requested based on traffic counts taken on a minimum three-year cycle. If these data are not available, values derived from classification station data on the same route, or on a similar route with similar traffic characteristics in the same area can be used Specific guidance for the frequency and size of vehicle classification data collection programs, factor development, age of data,	- For two-way facilities, provide the bidirectional combined Single-unit Truck and Bus AADT; for one-way roadways, and ramps, provide the directional combined Single-unit Truck and Bus AADT.  This value shall be representative of all combination truck activity based on vehicle classification data from traffic monitoring programs over all days of the week and all seasons of the year.  Actual Short-term vehicle classification counts shall be adjusted to represent average daily conditions as recommended in the Traffic Monitoring Guide (TMG). Single-unit trucks and buses are defined as vehicle classes 4 through 7 (buses through four-or-more axle, single-unit trucks).  - Historical AADT values shall be updated-adjusted annually (during non-collection years) to represent current year data.  - Sample Sectionsection-specific measured values are requested shall be based on traffic counts taken on a minimum three-year cycle and a duration minimum of 48 hours. If these data are not available, values derived from classification station data on the same route, or on a similar route with similar traffic characteristics in the same area can be used.  - Specific guidance for the frequency and size of vehicle classification data

Page	Discussion	Original Text	Revised Text
4-56	Item 24:	- For two-way facilities, provide	- For two-way facilities, provide the
& 57	Combination	the bidirectional Combination	bidirectional Combination Truck AADT;
	Truck AADT -	Truck AADT; for one-way	for one-way roadways, and ramps,
	Guidance	roadways, and ramps, provide the	provide the directional Combination
		directional Combination Truck	Truck AADT.
		AADT.	- This value shall be representative of
		- This value shall be representative	all combination truck activity based on
		of all combination truck activity	vehicle classification data from traffic
		based on vehicle classification data	monitoring programs over all days of
		from traffic monitoring programs	the week and all seasons of the year.
		over all days of the week and all	Actual Short-term vehicle
		seasons of the year. Actual vehicle	classification counts shall be adjusted
		classification counts shall be	to represent average daily conditions
		adjusted to represent average	as recommended in the <i>Traffic</i>
		conditions as recommended in the	Monitoring Guide (TMG).
		Traffic Monitoring Guide (TMG).	Combination trucks are defined as
		Combination trucks are defined as	vehicle classes 8 through 13 (four-or-
		vehicle classes 8 through 13 (four-	less axle, single-trailer trucks through
		or-less axle, single-trailer trucks	seven-or-more axle, multi-trailer
		through seven-or-more axle, multi-	trucks).
		trailer trucks).	- Historical AADT values shall be
		- AADT values shall be updated	updated adjusted annually (during
		annually to represent current year	non-collection years) to represent
		data.	current year data.
		- Section specific measured values	- Sample Section-section-specific
		are requested based on traffic	measured values are requested shall
		counts taken on a three-year cycle,	be based on traffic counts taken on a
		at a minimum. If these data are	three-year cycle, at a minimum and a
		not available, use values derived	duration minimum of 48 hours. If
		from classification station data on	these data are not available, use
		the same route or on a similar	values derived from classification
		route with similar traffic	station data on the same route or on a
		characteristics in the same area.	similar route with similar traffic characteristics in the same area.
		Specific guidance for the frequency and size of vehicle classification	
		data collection programs,	Specific guidance for the frequency and size of vehicle classification data
			collection programs, factor
		factor development, age of data, and other applications is contained	
		in the <i>Traffic Monitoring</i>	development, age of data, and other
		Guide.	applications is contained in the <i>Traffic</i>
		Guiue.	Monitoring Guide.

Page	Discussion	Original Text	Revised Text
4-64	Item 30: Percent	Additional Guidance:	Additional Guidance:
	Green Time -		
	Green Time - Guidance	Code this Data Item for all sections where right and left turn data (Data Items 12 and 13) are coded. For uncoordinated traffic actuated signals only, data can be collected when monitoring green time. Consider the surrounding environment and determine if the inventory direction of the signal would actually carry the peak flow for the intersection. Based on this approach, the value received may be an estimate depending upon the operation of the traffic signal during the peak hour. Furthermore, if the traffic signal is fully actuated, or the approach of interest is actuated, estimate the percent of green time based on the maximum green time available for that phase of operation versus the maximum cycle length. This would provide the "worst case" scenario since the volume on the actuated approach typically varies	Code this Data Item for all sections where right and left turn data (Data Items 12 and 13) are coded. For uncoordinated traffic actuated signals only, data can be collected when monitoring green time. Consider the surrounding environment and determine if the inventory direction of the signal would actually carry the peak flow for the intersection. Based on this approach, the value received may be an estimate depending upon the operation of the traffic signal during the peak hour. Furthermore, if the traffic signal is fully actuated, or the approach of interest is actuated, estimate the percent of green time based on the maximum green time available for that phase of operation versus the maximum cycle length. This would provide the "worst case" scenario since the volume on the actuated approach typically varies cycle by cycle.
		cycle by cycle.  Where peak capacity for a section is governed by a particular intersection that is on the section, this Data Item shall be coded based on the percent green time at that location; otherwise code this Data Item for the predominate intersection.  For traffic actuated traffic signals, use the results of a field check of several (three complete cycles) peak period light cycles to determine a "typical" green time. Ignore separate green-arrow time for turning movements.	Where peak capacity for a section is governed by a particular intersection that is on the section, this Data Item shall be coded based on the percent green time at that location; otherwise code this Data Item for the predominate intersection.  For traffic actuated traffic signals, use the results of a field check of several (three complete cycles) peak period light cycles to determine a "typical" green time. Ignore separate greenarrow time for turning movements.  If this data is not available for the signalized intersections associated with a given sample section, percent green time data from other signalized

Page	Discussion	Original Text	Revised Text
Page	Discussion	Original Text	intersections located on the same route, or on a similar route with similar traffic characteristics in the immediate vicinity can be used for reporting purposes.

Page	Discussion	Original Text	Revised Text
4-65	Item 31: Number of Signalized	Only signals which cycle through a complete sequence of signalization	Only signals which cycle through a complete sequence of signalization
	Intersections -	(i.e., red, yellow (amber), and	(i.e., red, yellow (amber), and green)
	Guidance	green) for all or a portion of the	for all or a portion of the day shall be
		day shall be counted as a signal.	counted as a signal.
		Access points to large traffic	Access points to large traffic
		generators (e.g., shopping centers,	generators (e.g., shopping centers,
		malls, large work sites, office parks, apartment complexes, etc.)	malls, large work sites, office parks, apartment complexes, etc.) shall be
		shall be counted as intersections if	counted as intersections if the access
		the access point is controlled by a traffic signal.	point is controlled by a traffic signal.
		trume signal.	Special treatment is required when a
		Special treatment is required when	Sample Panel section begins and/or
		a Sample Panel section begins	ends with a traffic control device (i.e.,
		and/or ends with a traffic control	Data Items 31, 32, and 33). This is
		device (i.e., Data Items 31, 32, and	accomplished by doing the following
		33). This is accomplished by doing the following as illustrated in	as illustrated in Figure 4.42:
		Figure 4.42:	Choose a statewide direction for
		and the second s	inventory purposes (e.g., South to
		Choose a statewide direction for	North, West to East, etc.);
		inventory purposes (e.g., South to	Choose a statewide rule to either
		North, West to East, etc.);	always count the beginning at-grade
		Choose a statewide rule to either  always sount the beginning of	intersection only or the ending at-
		always count the beginning atgrade intersection only or the	grade intersection only, but never both.
		ending at-grade intersection only,	South.
		but never both.	For divided roadways, continuous
			cross streets are to be counted as a
		For divided roadways, continuous	single intersection. If the cross street
		cross streets are to be counted as	is not continuous and is separated by
		a single intersection. If the cross street is not continuous and is	at least 50 feet, then it shall be counted as two intersections.
		separated by at least 50 feet, then	counted as two intersections.
		it shall be counted as two	Roundabouts (see Figure 4.20) shall be
		intersections.	coded under Data Item 33 (At-
			Grade/Other) intersections.
		Roundabouts (see Figure 4.20)	
		shall be coded under Data Item 33	The sum of Data Items 31, 32, and 33
		(At-Grade/Other) intersections.	shall be equal to the total number of intersections on the section.
		The sum of Data Items 31, 32, and	
		33 shall be equal to the total	At-grade crossings where pedestrian-
		number of intersections on the	activated signals are present shall not

Page	Discussion	Original Text	Revised Text
rage	Discussion	section.	be included in the count for this data item, unless a cross-street is present.

Page	Discussion	Original Text	Revised Text
4-67	Item 32: Number of Stop Sign- Controlled Intersections -	A continuously operating (i.e. all day), flashing red signal shall be counted as a stop sign.	A continuously operating (i.e. all day), flashing red signal shall be counted as a stop sign.
	Guidance	Stop signs on intersecting roads shall not be included in the total count.	Stop signs on intersecting roads shall not be included in the total count.
		Access points to large traffic generators (e.g., shopping centers, malls, large work sites, office parks, apartment complexes, etc.) shall be counted as intersections if the access point is controlled by a	Access points to large traffic generators (e.g., shopping centers, malls, large work sites, office parks, apartment complexes, etc.) shall be counted as intersections if the access point is controlled by a stop sign.
		stop sign.  Special treatment is required when a Sample Panel section begins and/or ends with a traffic control device (i.e., Data Items 31, 32, and	Special treatment is required when a Sample Panel section begins and/or ends with a traffic control device (i.e., Data Items 31, 32, and 33). This is accomplished by doing the following as illustrated in Figure 4.44:
		33). This is accomplished by doing the following as illustrated in Figure 4.44:	<ul> <li>Choose a statewide direction for inventory purposes (e.g., South to North, West to East, etc.).</li> </ul>
		<ul> <li>Choose a statewide direction for inventory purposes (e.g., South to North, West to East, etc.).</li> <li>Choose a statewide rule to either always count the beginning atgrade intersection only or the</li> </ul>	Choose a statewide rule to either always count the beginning at-grade intersection only or the ending atgrade intersection only, but never both.
		ending at-grade intersection only, but never both.	For divided roadways, continuous cross streets are to be counted as a single intersection. If the cross street
		For divided roadways, continuous cross streets are to be counted as a single intersection. If the cross street is not continuous and is	is not continuous and is separated by at least 50 feet, then it shall be counted as two intersections.
		separated by at least 50 feet, then it shall be counted as two intersections.	Roundabouts (see Figure 4.20) shall be coded under Data Item 33 (At-Grade/Other) intersections.
		Roundabouts (see Figure 4.20) shall be coded under Data Item 33 (At-Grade/Other) intersections.	The sum of Data Items 31, 32, and 33 shall be equal to the total number of intersections on the section.
		The sum of Data Items 31, 32, and	At-grade crossings where pedestrian-

Page	Discussion	Original Text	Revised Text
		33 shall be equal to the total	activated signals are present shall not
		number of intersections on the	be included in the count for this data
		section.	item, unless a cross-street is present.

Page	Discussion	Original Text	Revised Text
4-67	Figure 4.43 Title	Figure 4.43 Stop Sign Controlled Intersection	Figure 4.43 <b>Stop-Sign</b> Controlled Intersection

Page	Discussion	Original Text	Revised Text
<b>Page</b> 4-69	Item 33: Number of Intersections, Type - Other - Guidance	Intersections with either no traffic control devices, or specialized traffic control devices existing in the inventory direction, shall be included in the count for this data item.  Continuously operating (i.e. all day) flashing yellow signals and roundabouts (see Figure 4.20) shall be considered as an "atgrade/other" type of traffic control devices.  Access points to large traffic generators (e.g., shopping centers, malls, large work sites, office parks, apartment complexes, schools, etc.) shall be included in the evaluation for this Data Item.  Special treatment is required when a Sample Panel section begins and/or ends with a traffic control device (i.e., Data Items 31, 32, and 33). This is accomplished by doing the following as illustrated in Figure 4.46:  • Choose a statewide direction for inventory purposes (e.g., South to North, West to East, etc.);  • Choose a statewide rule to either always count the beginning curb only or the ending curb only, but never both.	Intersections with either no traffic control devices, or specialized traffic control devices existing in the inventory direction, shall be included in the count for this data item.  Continuously operating (i.e. all day) flashing yellow signals and roundabouts (see Figure 4.20) shall be considered as an "at-grade/other" type of traffic control devices.  Access points to large traffic generators (e.g., shopping centers, malls, large work sites, office parks, apartment complexes, schools, etc.) shall be included in the evaluation for this Data Item.  Special treatment is required when a Sample Panel section begins and/or ends with a traffic control device (i.e., Data Items 31, 32, and 33). This is accomplished by doing the following as illustrated in Figure 4.46:  • Choose a statewide direction for inventory purposes (e.g., South to North, West to East, etc.);  • Choose a statewide rule to either always count the beginning curb only or the ending curb only, but never both.  For divided roadways, continuous cross streets are to be counted as a single intersection. If the cross street
		only or the ending curb only, but	cross streets are to be counted as a
		it shall be counted as two intersections.  The sum of Data Items 31, 32, and	shall be equal to the total number of intersections on the section.  At-grade crossings where pedestrian-

Page	Discussion	Original Text	Revised Text
Page	Discussion	33 shall be equal to the total number of intersections on the section.	activated signals are present shall not be included in the count for this data item, unless a cross-street is present.
4-72	Item 35: Median Type - Coding Requirements for Fields 8, 9, and 10 Footnote	These definitions are summarized from AASHTO Policy on Geometric Design of Highways and Streets 2004.  * Codes 5, 6, and 7 are optional.	These definitions are summarized from AASHTO Policy on Geometric Design of Highways and Streets 2004.  * Codes 5, 6, and 7 are optional.

Page	Discussion	Original Text	Revised Text
4-77	Item 38: Right Shoulder Width - Coding Requirements for Fields 8, 9, and 10	Value_Numeric: Enter the width of the right shoulder to the nearest whole foot.	Value_Numeric: Enter the width of the right shoulder to the nearest whole foot. Zero (0) values shall only be reported for sections where shoulders do not exist.
4-80	Item 39: Left Shoulder Width - Coding Requirements for Fields 8, 9, and 10	Value_Numeric: Enter the width of the left shoulder to the nearest whole foot.	Value_Numeric: Enter the width of the left shoulder to the nearest whole foot. Zero (0) values shall only be reported for sections where shoulders do not exist.
4-84	Item 42: Widening Potential - Coding Requirements for Fields 8, 9, and 10	Value_Numeric: Code the number of lanes (0-9) for which it is feasible to widen the existing road, in both directions. Code a '9,' if it is possible to add nine or more lanes.	Value_Numeric: Code the number of lanes (0-9) for which it is feasible to widen the existing road, in both directions. Code a '9,' if it is possible to add nine or more lanes to the entire cross-section (i.e., sample section).
4-90	Item 46: Percent Passing Sight Distance - Guidance	This data item shall be reported for sample sections where passing is permitted in the inventory direction.  When there is a discernable directional difference in permitted passing per the roadway striping, code for the more restrictive direction (i.e., the direction that produces the lower value).	This data item shall be codedreported for sample sections where-based on the extent to which passing is permitted in the inventory direction.  When there is a discernable directional difference in permitted passing per the roadway striping, code for the more restrictive direction (i.e., the direction that produces the lower value).
4-90	Item 46: Percent Passing Sight Distance - Guidance	N/A	Inserted new image: "Figure 4.XX:  Passing Permitted (Northbound)"  Figure 4.XX: Passing Permitted (Northbound)  Figure 4.XX: Passing Permitted (Northbound)  Source: FHWA. Office of Policy  In Figure 4.XX (above), passing is permitted in the northbound (Inventory) direction for 75% of the sample's extent. Thus, Percent Passing Sight Distance (Data Item 46) for this sample shall be coded 75%.

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4-90	Item 46: Percent Passing Sight Distance - Guidance	N/A	Inserted new image: "Figure 4.XX:  Passing Permitted (Northbound)"  Figure 4.XX: Passing Permitted (Northbound)  Figure 4.XX: Passing Permitted (Northbound)  Source: FHWA, Office of Policy  In Figure 4.XX (above), passing is permitted in the northbound (inventory) direction for 100% of the sample's extent. Thus, Percent Passing Sight Distance (0ata item 46) for this sample shall be coded 100%.
4-90	Item 46: Percent Passing Sight Distance - Guidance	N/A	Inserted new image: "Figure 4.XX:  Passing Permitted (Southbound)"  Figure 4.XX: Passing Permitted (Southbound)  Figure 4.XX: Passing Permitted (Southbound)  Source: FHWA, Office of Policy  In Figure 4.XX (above), passing is permitted in the southbound (non-inventory) direction of the sample's extent, and prohibited in the northbound (inventory) direction of the sample's extent. Thus, Percent Passing Sight Distance (Data time 4-) for this sample shall be coded or the sample's extent.
4-90	Item 46: Percent Passing Sight Distance - Guidance	N/A	Inserted new image: "Figure 4.XX:  Passing Permitted (Both Directions)"  Figure 4.XX: Passing Prohibited (Both Directions)  Figure 4.XX: Passing Prohibited (Both Directions)  Figure 4.XX: Passing Prohibited (Both Directions)  Source: FHWA, Office of Policy  In Figure 4.XX (above), passing is prohibited in both the southbound (non-inventory) direction of the sample's extent, and prohibited in the northbound (inventory) direction of the sample's extent. Thus, Percent Passing Sight Distance (Data Item 46) for this sample shall be coded 0%.
4-90	Item 46: Percent Passing Sight Distance - Guidance	N/A	Inserted new image: "Figure 4.XX: Passing Prohibited (Both Directions)"

Page	Discussion	Original Text	Revised Text
			Figure 4.XX: Passing Permitted (Both Directions)
4-91	Item 47: IRI (International Roughness Index) - Coding Requirements for Fields 8, 9, and 10	Value_Text: No entry required if the Value_Numeric field has been populated with a newly measured value for a NHS section. If the Value_Numeric has not been populated with a newly measured value, then one of the following codes shall be provided:	Value_Text: No entry required This field should not be populated if the Value_Numeric field has been populated with a newly measured value for a NHS section. If the Value_Numeric field has not been populated with a newly measured value, then one of the following codes shall be provided, only when applicable, to indicate why a newly measured value could not be collected:
4-91	Item 47: IRI (International Roughness Index) - Coding Requirements for Fields 8, 9, and 10 - Value Text:	Code   Description A   Construction – Roadway was under construction B   Closure – Roadway was closed to traffic C   Disaster – Roadway was located in an area declared as a disaster zone D   Deterioration – Roadway is too deteriorated to measure and is already designated as "Poor"	Code   Description A   Construction – Roadway was under construction (i.e., not open to traffic due to capital improvement activities) B   Closure – Roadway was closed to traffic (i.e., not open to traffic, and not under construction, impassable due to earthquake damage, etc.) C   Disaster – Roadway was located in an area declared as a disaster zone (e.g., not open to traffic due to being flooded) D   Deterioration – Roadway iswas too deteriorated to measure and is already designated as "Poor" E   Other – Section added to NHS post-data collection

Page	Discussion	Original Text	Revised Text
4-91	Item 47: IRI (International Roughness Index) - Coding Requirements for Fields 8, 9, and 10	Value Date: Report the month and year in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown.	Value Date: Report the month and year (in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown. This field should not be populated when the Value Numeric Field has not been populated.
4-92	Item 47: IRI (International Roughness Index) - Guidance	- For the sections on the Interstate System, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable; the maximum length of a section shall not exceed 0.11 mile in length; and	- For the sections on the Interstate System, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and
4-92	Item 47: IRI (International Roughness Index) - Guidance	- For the sections on the non- Interstate System NHS, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable; the maximum length of a section shall not exceed 0.11 mile in length; and	- For the sections on the non- Interstate System NHS, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and

Page	Discussion	Original Text	Revised Text
4-93	Item 48: PSR (Present Serviceability Rating) - Extent	NHS, urban minor arterial, major collector, and minor collector Sample Panel sections and rural major collector Sample Panel sections where IRI is not reported.	NHS, and non-NHS urban minor arterial, major collector, and minor collector Sample Panel sections, and rural major collector Sample Panel sections where IRI is not reported (i.e., either IRI or PSR must be reported for sample sections).
4-93	Item 48: PSR (Present Serviceability Rating) - Coding Requirements for Fields 8, 9, and 10	Value Date: No entry required. Available for State use.	Value Date: Report the month and year (in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown.
4-94	Item 48: PSR - Guidance	For the non-NHS sections (i.e., Sample Panel sections located on non-Principal Arterial System (PAS) roadways), PSR can be reported in lieu of IRI. If reported, measured PSR values shall be:	For the non-NHS sections (i.e., Sample Panel sections located on non-Principal Arterial System (PAS) roadways where sample section reporting is required), PSR can be reported in lieu of IRI. If reported, measured PSR values shall be:
4-94	Item 48: PSR - Guidance	o reported for milepoint limits (i.e., sections) that are consistent with those reported for Data Item 47 (IRI); and	o reported for milepoint limits (i.e., sections) that are consistent with those reported for Data Item 47 (IRI); and
4-97	Item 49: Surface Type - Guidance	Code 1, Unpaved, on the NHS should be verified since they are very rare except in a couple of States.	Code 1, Unpaved, on the NHS should be verified since these sections are very rare except in a couple of States.  Roadway sections where subgrade/subbase of a pavement is exposed and roadway sections that are currently being rehabilitated/reconstructed shall not be coded as "Unpaved".
4-97	Item 49: Surface Type - Guidance	Additional information can be found in Section 5.4	Additional information can be found in Section 5.4

Page	Discussion	Original Text	Revised Text
4.99	Item 50: Rutting - Coding Requirements for Fields 8, 9, and 10 - Value Text:	Value_Text: No entry required if the Value_Numeric field has been populated with a newly measured value for a NHS section. If the Value_Numeric has not been populated with a newly measured value, then one of the following codes shall be provided:	Value_Text: No entry required This field should not be populated if the Value_Numeric field has been populated with a newly measured value for a NHS section. If the Value_Numeric field has not been populated with a newly measured value, then one of the following codes shall be provided, only when applicable, to indicate why a newly measured value could not be collected:
4-99	Item 50: Rutting - Coding Requirements for Fields 8, 9, and 10 - Value Text:	Code   Description A   Construction – Roadway was under construction B   Closure – Roadway was closed to traffic C   Disaster – Roadway was located in an area declared as a disaster zone D   Deterioration – Roadway is too deteriorated to measure and is already designated as "Poor"	Code   Description A   Construction – Roadway was under construction (i.e., not open to traffic due to capital improvement activities) B   Closure – Roadway was closed to traffic (i.e., not open to traffic, and not under construction, impassable due to earthquake damage, etc.) C   Disaster – Roadway was located in an area declared as a disaster zone (e.g., not open to traffic due to being flooded) D   Deterioration – Roadway iswas too deteriorated to measure and is already designated as "Poor" E   Other – Section added to NHS post-data collection
4-99	Item 50: Rutting - Coding Requirements for Fields 8, 9, and 10	Value Date: Report the month and year in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown.	Value Date: Report the month and year (in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown. This field should not be populated when the Value Numeric Field has not been populated.

Page	Discussion	Original Text	Revised Text
4-	Item 50: Rutting	- For the sections on the Interstate	- For the sections on the Interstate
100	- Guidance	System, measured IRI shall be:	System, measured IRI shall be:
		o continuously collected in a	o continuously collected in a
		manner that will allow for	manner that will allow for reporting in
		reporting in nominally uniform	nominally uniform section lengths of
		section lengths of 0.1 mile (528	0.1 mile (528 feet); shorter sections
		feet); shorter sections are	are permitted only at the beginning of
		permitted only at the beginning of	a route, end of a route, at bridges, or
		a route, end of a route, at bridges,	other locations where a section length
		or other locations where a section	of 0.1 mile is not achievable (e.g.,
		length of 0.1 mile is not	locations where a change in Surface
		achievable; the maximum length	Type occurs); the maximum length of
		of a section shall not exceed 0.11	a section shall not exceed 0.11 mile in
		mile in length; and	length; and
4-	Item 50: Rutting	- For the sections on the non-	- For the sections on the non-
100	- Guidance	Interstate System NHS, measured	Interstate System NHS, measured IRI
		IRI shall be:	shall be:
		o continuously collected in a	o continuously collected in a
		manner that will allow for	manner that will allow for reporting in
		reporting in nominally uniform	nominally uniform section lengths of
		section lengths of 0.1 mile (528	0.1 mile (528 feet); shorter sections
		feet); shorter sections are	are permitted only at the beginning of
		permitted only at the beginning of	a route, end of a route, at bridges, or
		a route, end of a route, at bridges,	other locations where a section length
		or other locations where a section	of 0.1 mile is not achievable (e.g.,
		length of 0.1 mile is not	locations where a change in Surface
		achievable; the maximum length	Type occurs); the maximum length of
		of a section shall not exceed 0.11	a section shall not exceed 0.11 mile in
		mile in length; and	length; and

Page	Discussion	Original Text	Revised Text
4- 101	Item 50: Rutting - Guidance	N/A	For the non-NHS sections (i.e., where sample section reporting is required), measured rutting values shall be:  -collected for the full extent of the mainline highway;  - in the rightmost through lane or one consistent lane for all data if the rightmost through lane carries traffic that is not representative of the remainder of the lanes or is not accessible due to closure, excessive congestion, or other events impacting access;  - continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and  - on a biennial frequency (note: data collection shall be performed during a given 2-year duration and must conclude by December 31st of that 2-
	Itana Ed. Earlaina	Faulking is defined as a continu	year duration for reporting purposes).
4- 102	Item 51: Faulting - Description	Faulting is defined as a vertical misalignment of pavement joints in Portland Cement Concrete Pavements (Jointed Concrete Pavement). Jointed Concrete Pavements is defined as pavements where the top-most surface is constructed of Portland cement concrete with joints (Item 49 codes '3', '4', '9', '10', and '11'). It may be constructed of either reinforced or unreinforced (plain) concrete.	Faulting is defined as a vertical misalignment of pavement joints in Portland Cement Concrete Pavements (Jointed Concrete Pavement). Jointed Concrete Pavements is defined as pavements where the top-most surface is constructed of Portland cement concrete with joints (Item 49 codes '3', '4', '9', and '10', and '11'). It may be constructed of either reinforced or unreinforced (plain) concrete.

Page	Discussion	Original Text	Revised Text
4- 103	Item 51: Faulting - Coding Requirements for Fields 8, 9, and 10 - Value Text:	Value_Text: No entry required if the Value_Numeric field has been populated with a newly measured value for a NHS section. If the Value_Numeric has not been populated with a newly measured value, then one of the following codes shall be provided:	Value_Text: No entry required This field should not be populated if the Value_Numeric field has been populated with a newly measured value for a NHS section. If the Value_Numeric field has not been populated with a newly measured value, then one of the following codes shall be provided, only when applicable, to indicate why a newly measured value could not be collected:
4- 103	Item 51: Faulting - Coding Requirements for Fields 8, 9, and 10 - Value Text:	Code   Description A   Construction – Roadway was under construction B   Closure – Roadway was closed to traffic C   Disaster – Roadway was located in an area declared as a disaster zone D   Deterioration – Roadway is too deteriorated to measure and is already designated as "Poor"	Code   Description A   Construction – Roadway was under construction (i.e., not open to traffic due to capital improvement activities) B   Closure – Roadway was closed to traffic (i.e., not open to traffic, and not under construction, impassable due to earthquake damage, etc.) C   Disaster – Roadway was located in an area declared as a disaster zone (e.g., not open to traffic due to being flooded) D   Deterioration – Roadway iswas too deteriorated to measure and is already designated as "Poor" E   Other – Section added to NHS post-data collection
4- 103	Item 51: Faulting - Coding Requirements for Fields 8, 9, and 10	Value Date: Report the month and year in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown.	Value Date: Report the month and year (in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown. This field should not be populated when the Value Numeric Field has not been populated.

Page	Discussion	Original Text	Revised Text
4- 104	Item 51: Faulting - Guidance	- For the sections on the Interstate System, measured IRI shall be: o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable; the maximum length of a section shall not exceed 0.11 mile in length; and	- For the sections on the Interstate System, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and
4- 104	Item 51: Faulting - Guidance	- For the sections on the non- Interstate System NHS, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable; the maximum length of a section shall not exceed 0.11 mile in length; and	- For the sections on the non- Interstate System NHS, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and

sample section reporting is required measured faulting values shall be: -collected for the full extent of the mainline highway; - in the rightmost through lane or or consistent lane for all data if the rightmost through lane carries traffit that is not representative of the remainder of the lanes or is not accessible due to closure, excessive congestion, or other events impactin access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths or 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purpose;  4-  Item 52: Cracking Percent - Description  Bercent - Description  For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent it the percent age of the total area exhibiting visible fatigue type cracking visible fatigue type cracking exhibiting visible f	Page	Discussion	Original Text	Revised Text
measured faulting values shall be: -collected for the full extent of the mainline highway; - in the rightmost through lane carries traffit that is not representative of the remainder of the lanes or is not accessible due to closure, excessive congestion, or other events impactir access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths o 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent - Description  Item 52: Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  Item 52: Cracking Percent - Description  Item 53: Arrive and the maintering tracking the price and the price ar			N/A	For the non-NHS sections (i.e., where
-collected for the full extent of the mainline highway; - in the rightmost through lane or or consistent lane for all data if the rightmost through lane carries traffit that is not representative of the remainder of the lanes or is not accessible due to closure, excessive congestion, or other events impacting access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths or 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a section length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purpose; For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  -collected for the full extent of relighbary: in the rightmost through lane or or consistent lane for all data if the rightmost through lane or or is not accessible due to closure, excessive congestion, or other leanes or is not accessible due to closure, excessive congestion, or other events impacting access; - continuously collected in a manner that will allow for reporting in nominally uniform section shall be performed during of a route, and bridges or other locations where a change in surface Type occurs); the maximum length of a section shall be performed during given 2-year duration shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purpose; For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking the percentage of the total area exhibiting visible fatigue type	104	- Guidance		
mainline highway; - in the rightmost through lane or or consistent lane for all data if the rightmost through lane carries traffit that is not representative of the remainder of the lanes or is not accessible due to closure, excessive congestion, or other events impacting access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths or 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposer For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  ### Description ### D				_
- in the rightmost through lane or or consistent lane for all data if the rightmost through lane carries traffit that is not representative of the remainder of the lanes or is not accessible due to closure, excessive congestion, or other events impacting access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths on 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes (2', '6', '7', and '8'), Cracking Percent in the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.				
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accessible due to closure, excessive congestion, or other events impacting access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes on the percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile in length; so or other locations where a section section shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes of 10 year duration for reporting purposes (15°, 17°, and 18°), Cracking Percent in the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				
congestion, or other events impacting access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths or 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  Ten Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				remainder of the lanes or is not
access; - continuously collected in a manner that will allow for reporting in nominally uniform section lengths or 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.    Item 52: Cracking   For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				accessible due to closure, excessive
- continuously collected in a manner that will allow for reporting in nominally uniform section lengths or 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes For Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				congestion, or other events impacting
that will allow for reporting in nominally uniform section lengths or 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes For Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				_
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0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and  - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.    Note the percent section of a route, at beginning of a route, end of a route, at bridges or other locations, where a section length of 0.1 mile is not achievable (e.g., locations where a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes or other locations where a section section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes or other locations where a section length of 0.1 mile in length of 0				
are permitted only at the beginning of a route, end of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes odes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  are permitted only at the beginning of a route, at bridges or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a section surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes (12', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type crackin (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				,
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or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes occurring purposes (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes occurs (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				
(e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes '2', '6', '7', and '8'), Cracking '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue exhibiting visible fatigue type cracking (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				
Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes codes '2', '6', '7', and '8'), Cracking Percent - Description  For Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking to the wheelpath in each section.  Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type crackin (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				length of 0.1 mile is not achievable
length of a section shall not exceed  0.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes  4- 106 Percent - Description  For Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  For Asphalt pavements (Item 49 '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				(e.g., locations where a change in
4- Item 52: Cracking Percent - Description  For Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  O.11 mile in length; and - on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes (Item 49 code '2', '6', '7', and '8'), Cracking Por Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type crackin (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				
- on a biennial frequency (note: data collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes  4-				_
collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes for Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  collection shall be performed during given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes for Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				_
d- 106 Percent - Description Description  Description  For Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  given 2-year duration and must conclude by December 31st of that 2 year duration for reporting purposes  For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				
4- 106 Percent - Description Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  Conclude by December 31st of that 2 year duration for reporting purposes.  For Asphalt pavements (Item 49 codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking)				•
4- Item 52: Cracking Percent - Description Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  year duration for reporting purposes For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				
4- 106 Percent - Description Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  For Asphalt pavements (Item 49 code '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue exhibiting visible fatigue type cracking (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking)				-
Description  codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  codes '2', '6', '7', and '8'), Cracking Percent is the percentage of the total area exhibiting visible fatigue type crackin (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking	4-	Item 52: Cracking	For Asphalt pavements (Item 49	For Asphalt pavements (Item 49 codes
total area exhibiting visible fatigue type cracking for all severity levels in the wheelpath in each section.  exhibiting visible fatigue type crackin  (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking	106	_		'2', '6', '7', and '8'), Cracking Percent is
type cracking for all severity levels in the wheelpath in each section.  (both longitudinal and/or pattern) for all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking		Description	Percent is the percentage of the	the percentage of the total area
in the wheelpath in each section.  all severity levels in the wheelpath in each section (see Figure 4.78 for an illustration of these cracking				exhibiting visible fatigue type cracking
each section (see Figure 4.78 for an illustration of these cracking			., -	(both longitudinal and/or pattern) for
illustration of these cracking			in the wheelpath in each section.	The state of the s
				_
Scenarios).				Section 103j.

Page	Discussion	Original Text	Revised Text
4- 106	Item 52: Cracking Percent - Description	For Jointed Concrete Pavements (Item 49 codes '3', '4', '9', '10', and '11'), Cracking Percent is the percentage of slabs within the section that exhibit transverse cracking. Partial slabs shall contribute to the section that contains the majority of the slab length.	For Jointed Concrete Pavements (Item 49 codes '3', '4', '9', and '10', and '11', Cracking Percent is the percentage of slabs within the section that exhibit transverse cracking. Partial slabs shall contribute to the section that contains the majority of the slab length.
4- 107	Item 52: Cracking Percent - Coding Requirements for Fields 8, 9, and 10	Value Numeric: Report the percent of total section area for asphalt pavement and CRCP and percent of slabs for Jointed Concrete Pavements to the nearest 1%. Zero (0) values shall only be reported for roadway sections where cracks are not present.	Value Numeric: Report the percent of total section area for asphalt pavement and Continuously Reinforced Concrete Pavement (CRCP), and percent slabs of Jointed Concrete Pavements to the nearest 1%. Zero (0) values shall be reported either for roadways sections where cracks are not present, or roadway sections where recorded values are less than 0.5%.
4-107	Item 52: Cracking Percent - Coding Requirements for Fields 8, 9, and 10 - Value Text:	Value_Text: No entry required if the Value_Numeric field has been populated with a newly measured value for a NHS section. If the Value_Numeric has not been populated with a newly measured value, then one of the following codes shall be provided:	Value_Text: No entry required This field should not be populated if the Value_Numeric field has been populated with a newly measured value for a NHS section. If the Value_Numeric field has not been populated with a newly measured value, then one of the following codes shall be provided, only when applicable, to indicate why a newly measured value could not be collected:
4- 107	Item 52: Cracking Percent - Coding Requirements for Fields 8, 9, and 10 - Value Text:	Code   Description A   Construction – Roadway was under construction B   Closure – Roadway was closed to traffic C   Disaster – Roadway was located in an area declared as a disaster zone D   Deterioration – Roadway is too deteriorated to measure and is already designated as "Poor"	Code   Description A   Construction – Roadway was under construction (i.e., not open to traffic due to capital improvement activities) B   Closure – Roadway was closed to traffic (i.e., not open to traffic, and not under construction, impassable due to earthquake damage, etc.) C   Disaster – Roadway was located in an area declared as a disaster zone (e.g., not open to traffic due to being flooded) D   Deterioration – Roadway iswas too

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			deteriorated to measure-and is already designated as "Poor"  E   Other – Section added to NHS post-data collection
4- 107	Item 52: Cracking Percent - Coding Requirements for Fields 8, 9, and 10	Value Date: Report the month and year in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown.	Value Date: Report the month and year (in MM/YYYY format, excluding leading zeroes) for when the data was collected. A default date may be used if the exact date of collection is unknown. This field should not be populated when the Value Numeric Field has not been populated.
4- 109	Item 52: Cracking Percent - Guidance	- For the sections on the Interstate System, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable; the maximum length of a section shall not exceed 0.11 mile in length; and	- For the sections on the Interstate System, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and
4- 109	Item 52: Cracking Percent - Guidance	- For the sections on the non-Interstate System NHS, measured IRI shall be: o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable; the maximum length	- For the sections on the non- Interstate System NHS, measured IRI shall be:     o continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of

Page	Discussion	Original Text	Revised Text
		of a section shall not exceed 0.11 mile in length; and	a section shall not exceed 0.11 mile in length; and
4- 109	Item 52: Cracking Percent - Guidance	N/A	For the non-NHS sections (i.e., where sample section reporting is required), measured cracking percent values shall be:  -collected for the full extent of the mainline highway;  - in the rightmost through lane or one consistent lane for all data if the rightmost through lane carries traffic that is not representative of the remainder of the lanes or is not accessible due to closure, excessive congestion, or other events impacting access;  - continuously collected in a manner that will allow for reporting in nominally uniform section lengths of 0.1 mile (528 feet); shorter sections are permitted only at the beginning of a route, end of a route, at bridges, or other locations where a section length of 0.1 mile is not achievable (e.g., locations where a change in Surface Type occurs); the maximum length of a section shall not exceed 0.11 mile in length; and  - on a biennial frequency (note: data collection shall be performed during a given 2-year duration and must conclude by December 31st of that 2-year duration for reporting purposes).

Page	Discussion	Original Text	Revised Text
4- 116	Item 54: Year of Improvement - Guidance	Reporting shall be consistent with IRI inventory direction and lane.  0.5 inch or more of compacted pavement material must be put in place for it to be considered a	Reporting shall be consistent with IRI inventory direction and lane.  0.5 inch or more of compacted pavement material must be put in place for it to be considered a surface
		surface improvement.  Completion date is the actual date the construction ended or the date when the project was opened to traffic.  Retain the coded improvement year until another improvement affecting the surface is completed.	improvement.  Completion date is the actual date the construction ended or the date when the project was opened to traffic.  Retain the coded improvement year until another improvement affecting the surface is completed.  This data item shall be coded for
4-	Item 55: Year of	If a new pavement surface were	resurfacing treatments of at least 0.5 inch that impact the wheelpath/traveled way.  For scenarios where only certain lanes have been resurfaced (e.g., 2 out of 3 lanes), this data item should be coded in cases where one of those lanes is the right-most outer lane (or lanes).  If a new pavement surface were
117	Last Construction - Guidance	placed without first removing the old pavement surface, the resulting pavement should be considered an overlay (surface improvement, not construction), even if the existing pavement was rubblized prior to placing the new pavement surface.	placed without first removing the old pavement surface, the resulting pavement should be considered an overlay (surface improvement, not construction), even if the existing pavement was rubblized prior to placing the new pavement surface.
4- 118	Item 55: Last Overlay Thickness - Guidance	An overlay is more than 0.5 inch.	An overlay is more than 0.5 inch. For HPMS purposes, an overlay must consist of at least 0.5 inch of compacted material.
4- 124	Item 63: County Code - Extent	All Public highways as Identified in 23 U.S.C 101.a(27).	All Public Federal-aid highways-as Identified in 23 U.S.C 101.a(27).

Page	Discussion	Original Text			Revi	sed Text				
4-	Item 63: County	FS	6 - MiC	7 - Local			FS	6 - MiC	7 - Local	
124	Code - Extent	Rural	FE	FE			Rural	FE	Æ	
	Grid	Urban	FE	FE			Urban	FE	Æ	
5-8 D	Vehicle Classification - Guidance  Appendix D - Toll Facility Listing	Data report represent d year. Prior y counts shal annual adju represent c accurately of and truck to	red in HPM ata for the year classif I be adjust astment fac- urrent yea develop pe	IS shall reporting cation ed with ctors to r data and	S	data year shall adju curre deve trave	reporte for the f Prior ye be adjust stment fa ent year elop perce el trends	d in HPMS ceporting ( car classificated with a actors to redata and tenters	shall repre- data/invent cation count annual epresent o accurately and truck	t <b>ory</b> ts
D-1	Appendix D - Toll Facility Listing	Alaska   10 Susitna   Alaska   10   Alaska   10 	09   Hover	· Craft Suna		† Alas	<del>ka   100</del> !	<del>9   Hover</del>	Vessel Susi Craft Suna ) Vessel Takı	<del>X  </del>
D-2	Appendix D - Toll Facility Listing	N/A				Mou Colo	ıntain Ex	press Land	astbound    *   *   lorth to 120	Oth

Page	Discussion	Original Text	Revised Text
D-3	Appendix D - Toll Facility Listing	Georgia   67   Georgia 400 Extension	Florida   361   Wekiva Parkway   * Florida   362   Orchard Pond   * Florida   363   Poinciana Parkway   *  Georgia   67   Georgia 400 Extension   +  Georgia   360   I-85 Express Lanes, I- 285 to Old Peachtree Rd   *
D-4	Appendix D - Toll Facility Listing	Illinois   69   Wabash Memorial Bridge   Illinois   304   St. Francisville Bridge – Old Wabash Cannonball Railroad Bridge   Indiana   68   New Harmony Bridge   Indiana   69   Wabash Memorial Bridge	Illinois   69   Wabash Memorial Bridge   Illinois   364   Elgin O'Hare Expressway   * Illinois   304   St. Francisville Bridge - Old Wabash Cannonball Railroad Bridge   Indiana   68   New Harmony Bridge   Indiana   69   Wabash Memorial Bridge   Kentucky   346   Lincoln & Kennedy Bridges - D'town Crossing   * Kentucky   347   Lewis and Clark Bridge   *
D-4	Appendix D - Toll Facility Listing	Iowa   71   Fort Madison Bridge   Iowa   80   Bellevue Bridge   Iowa   81   Decatur Bridge   Iowa   82   Plattsmouth Bridge	Iowa   71   Fort Madison Bridge   Iowa   80   Bellevue Bridge   Iowa   81   Decatur Bridge   Iowa   82   Plattsmouth Bridge
D-5	Appendix D - Toll Facility Listing	N/A	Louisiana   1127   Belle Chase Ferry   * Louisiana   1128   Pointe-a-LA-Hache Ferry   * Maine   1129   Captain E. Frank Thompson   *

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D-6	Appendix D - Toll	Minnesota   111   12th/15th	Minnesota   111   12th/15th Avenue,
	Facility Listing	Avenue, N Bridge	N-Bridge
		Minnesota   113   MNPass	Minnesota   113   MNPass
		Missouri   114   Lake of the Ozark	Missouri   114   Lake of the Ozark
		Com Bridge	Com Bridge
		Nebraska   80   Bellevue Bridge	Nebraska   80   Bellevue Bridge
		Nebraska   82   Plattsmouth	Nebraska   82   Plattsmouth Bridge
		Bridge	Nevada   115   Valley of Fire Road
		Nevada   115   Valley of Fire Road	New Hampshire   117   Blue Star
		New Hampshire   117   Blue Star	Turnpikes
		Turnpikes	New Hampshire   118   F. E. Everett
		New Hampshire   118   F. E.	Turnpike
		Everett Turnpike	Minnesota   112   International Falls
		Minnesota   112   International	Bridge
		Falls Bridge	Minnesota   113   MNPass
		Minnesota   113   MNPass	Missouri   114   Lake of the Ozark
		Missouri   114   Lake of the Ozark	Com Bridge
		Com Bridge	Nebraska   80   Bellevue Bridge  Nebraska   81   Decatur Bridge
		Nebraska   80   Bellevue Bridge Nebraska   81   Decatur Bridge	Nebraska   82   Plattsmouth Bridge
		Nebraska   82   Plattsmouth	Nevada   115   Valley of Fire Road
		Bridge	New Hampshire   116   Cheshire
		Nevada   115   Valley of Fire Road	Bridge
		New Hampshire   116   Cheshire	New Hampshire   117   Blue Star
		Bridge	Turnpikes
		New Hampshire   117   Blue Star	New Hampshire   118   F. E. Everett
		Turnpikes	Turnpike
		New Hampshire   118   F. E.	New Hampshire   119   Henry
		Everett Turnpike	Bourque Highway (Route 3)
		New Hampshire   119   Henry	Dour que mg.may (moute of
		Bourque Highway (Route 3)	
D-10	Appendix D - Toll		Pennsylvania   209   Pennsylvania
	Facility Listing	Turnpike Eastern Extension	Turnpike Eastern Extension
	,	Pennsylvania   211   Pennsylvania	Pennsylvania   211   Pennsylvania
		Turnpike Western Extension	Turnpike Western Extension
		Pennsylvania   213   Mosey Wood	Pennsylvania   213   Mosey Wood
		Toll Road	Toll Road
		Pennsylvania   1088	Pennsylvania   367   I-95 Extension
		Fredericktown	*
			Pennsylvania   1088   Fredericktown
			+

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D-10	Appendix D - Toll Facility Listing	Pennsylvania   215   Beaver Valley Expressway Pennsylvania   216   Monavalley Expressway	Pennsylvania   215   Beaver Valley Expressway Pennsylvania   216   Monavalley Expressway
		Pennsylvania   217  Mon-Fayette Expressway	Pennsylvania   217   Mon-Fayette Expressway
D-11	Appendix D - Toll Facility Listing	Rhode Island   333   Saknonnet River Bridge   Tennessee   1094   Helms   Texas   227   Brownsville & Matamoros Express Bridge&M Bridge   Texas   230   Weslaco-Progreso International Bridge   Texas   232   McAllen-Hidalgo- Reynosa International Bridge   Texas   235   Juarez-Lincoln International Bridge   Texas   236   Laredo International Bridge (Convent St.)   Texas   238   Laredo-Columbia Solidarity Bridge   Texas   242   Presidio Bridge	Rhode Island   333   Saknonnet River Bridge   Tennessee   1094   Helms   Texas   305   Lewisville Lake Bridge   * Texas   227   Brownsville & Matamoros Express Bridge&M-Bridge   Texas   230   Weslace-Progreso   International Bridge   Texas   232   McAllen-Hidalgo-Reynosa International Bridge   Texas   235   Juarez-Lincoln   International Bridge   Texas   236   Laredo International   Bridge (Convent St.) Gateway to the   Americas   Texas   238   Laredo-Columbia   Solidarity Bridge   Texas   242   Presidio Bridge

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D-12	Appendix D - Toll	Texas   246   Katy I-10 QuickRide	Texas   306   Donna International
	Facility Listing	and U.S. 290Managed Lanes	Bridge   *
		Texas   248   Sam Houston	Texas   246   Katy <del>I 10 QuickRide and</del>
		Tollway - East	U.S. 290 Managed Lanes
		Texas   249   Sam Houston	Texas   248   Sam Houston Tollway -
		Tollway - West	East
		Texas   250   Sam Houston	Texas   249   Sam Houston Tollway
		Tollway – SW Belt	<del>West  </del>
		Texas   251   Sam Houston	Texas   250   Sam Houston Tollway -
		Tollway – SE Belt	<del>SW Belt  </del>
		Texas   256   US 183-A	Texas   251   Sam Houston Tollway -
		Texas   257   Fort Bend Parkway	SE Belt
		Extension	Texas   256   <del>US</del> -183-A
		Texas   258   SH 45 N	Texas   257   Fort Bend Parkway
		Texas   261  Toll Loop 49	Extension
		Texas   264   Central Texas	Texas   258   SH 45 N
		Turnpike	Texas   261  Toll <del>Loop 4</del> 9
		Texas   266   Harris County	Texas   264   Central Texas Turnpike
		Beltway 8	+
		Texas   305   Lewisville Lake	Texas   266   Harris County Beltway 8
		Bridge	+
		Texas   306   Donna International	Texas   305   Lewisville Lake Bridge
		Bridge	Texas   306   Donna International
		Texas   307   I-635 LBJ Managed	Bridge
		Lanes, Dallas/Ft. Worth	Texas   307   <del>I 635</del> -LBJ Managed
		Texas   308   NTE – (I-820/SH-183	Lanes <del>, Dallas/Ft. Worth</del>
		Managed Lanes – Ft. Worth)North	Texas   308   NTE - (I-820/SH-183
		Tarrant Express	Managed Lanes – Ft. Worth)North
		Texas   319   Anzalduas	Tarrant Express
		International Bridge	Texas   319   Anzalduas International
		Texas   330   Tomillo-Guadalupe	Bridge
		International Bridge	Texas   330   Tomillo-Guadalupe
		Texas   322   Sam Houston	International Bridge
		Tollway - NE	Texas   322   Sam Houston Tollway
		Texas   324   SH99 (Grand	NE
		Parkway) – Segment I-2	Texas   324   SH99 (Grand Parkway) =
		Texas   325   SH99 (Grand	Segment I-2
		Parkway) – Segment E	Texas   325   SH99 (Grand Parkway) -
		Texas   326   SH99 (Grand	Segment E
		Parkway) – Segments F-1, F-2, and	Texas   326   SH99 (Grand Parkway) -
		G	Segments F-1, F-2, and G

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D-12	Appendix D - Toll	Texas 252 Hardy Toll Road	Texas   252   Hardy Toll Road (Harris
	Facility Listing	Texas   253   Westpark Tollway	County)
		Texas   254   President George Bush	Texas   253   Westpark Tollway (Harris
		Turnpike	County)
		Texas   255   Camino Colombia	Texas   374   Westpark Tollway (Fort
		Texas 256 US 183-A	Bend County)
		Texas 257 Fort Bend Parkway	Texas   254   President George Bush
		Extension	Turnpike
		Texas 258 SH 45	Texas   255   Camino Colombia
		Texas 259 SH 45 SE	Texas 256 183-A
		Texas 260 SH 130	Texas   257   Fort Bend Parkway (Harris
		Texas 261 Loop 49	County)
		Texas 262 Sam Rayburn Tollway	Texas   375   Fort Bend Parkway (Fort
		Texas   263   Loop 1	Bend County)
		Texas   264   Central Texas Turnpike	Texas 258 SH 45 N
		Texas 266 Harris County Beltway	Texas 259 SH 45 SE
		8	Texas 260 SH 130
		Texas   305   Lewisville Lake Bridge	Texas   261   Toll 49
		Texas   306   Donna International	Texas 262 Sam Rayburn Tollway
		Bridge	Texas 263 Loop 1
		Texas   307   I-635 LBJ Managed	Texas   264   Central Texas Turnpike
		Lanes, Dallas/Ft. Worth	Texas   266   Harris County Beltway 8
		Texas 308 NTE - (I-820/SH 183	Texas   305   Lewisville Lake Bridge
		Managed Lanes - Ft. Worth)	Texas   306   Donna International Bridge
		Texas   319   Anzalduas	Texas   307   LBJ TEXpress Lanes
		International	Texas   308   TEXpress Lanes
		Texas   320   Tornillo-Guadalupe	Texas   319   Anzalduas International
		Texas 321 Chisholm Trail Parkway	Bridge
		Texas   322   Sam Huston Tollway-	Texas   320   Tornillo-Guadalupe
		NE	International Bridge
		Texas   323   DFW Connector	Texas   321   Chisholm Trail Parkway
		Texas   324   SH99 (Grand Parkway)	Texas   323   DFW Connector
		- Segment I-2	Texas   324   SH99 (Grand Parkway)
		Texas   325   SH99 (Grand Parkway)	Texas 327 SH 130 Seg 5/6
		- Segment E	Texas 328 Loop 375 (Cesar Chavez
		Texas   326   SH99 (Grand Parkway)	Managed Lanes)
		- Segments F-1, F-2, and G	Texas 329 <del>Tom Landry Expressway</del> (I-
		Texas 327 SH 130 Seg 5/6	30) TEXpress Lanes
		Texas 328 Loop 375 (Cesar	Texas 330 I-169/SH 550
		Chavez Managed Lanes)	Texas 331 Manor Expressway
		Texas   329   Tom Landry	Texas 341 I-45 North (North Freeway
		Expressway (I-30)	HOV/HOT Lane)
		Texas 330 SH 550	Texas 342 I-45 South (Gulf Freeway )
		Texas   331   Manor Expressway -	HOV/HOT Lane
		Phase 1	Texas 343 I-69/US 59 (Southwest
		Texas   332   Manor Expressway -	Freeway) HOV/HOT lane

Page	Discussion	Original Text	Revised Text
		Phase 2 Texas 341 IH 45 North (North Freeway) HOV/HOT Lane Texas 342 IH 45 South (Gulf Freeway) HOV/HOT Lane Texas 343 US 59 (Southwest Freeway) HOV/HOT lane Texas 344 US 59 (Eastex Freeway) HOV/HOT lane Texas 345 US 290 (Northwest Freeway) HOV/HOT lane Texas 1095 Los Ebanos Ferry Utah 267 Express Lanes (Salt Lake City) Utah 268 Adams Avenue Parkway Utah 1096 Charles Hall Vermont 116 Cheshire Bridge Vermont 269 Equinox Sky Line Drive Vermont 270 Mt. Mansfield Toll Road Vermont 271 Burke Mountain Toll Road Virgin Islands 1116 Trans Services - St. John Virginia 91 Harry W. Nice Memorial Bridge	Texas 344 I-69/US 59 (Eastex Freeway) HOV/HOT lane Texas 345 US 290 (Northwest Freeway) HOV/HOT lane Texas 348 SH 249 Tomball Tollway Texas 349 SH 242 Direct Connector Texas 350 SH 249 Direct Connector Texas 351 IH-30 Tom Landry Freeway: Phase 1 opened 2016. Located in Grand Prarie in Dallas County. IH-30 from w SH 161. Texas  352   LBJ TEXpress Lanes Texas  353   SH 71 Eexpress. Opened Feb 28, 2017. Located in Austin along SH 71from Ross Rd. to Spirit of TX.Dr. Texas  354   35Express. Expected to open summer 2017. Dallas at I-635 along I-35E to Denton stoppping at US 380. Texas  355   Mopac Express Texas  369   SH 45 SW Texas  370   360 Tollway Texas  371   SH 114 TEXpress Lanes Texas  372   SH183 TEXpress Lanes Texas  373   Loop 12 TEXpress Lanes Utah   267   Express Lanes (Salt Lake City) Utah   268   Adams Avenue Parkway Vermont   270   Mt. Mansfield Toll Road Vermont   271   Burke Mountain Toll Road Virginia   91   Harry W. Nice Memorial Bridge

Page	Discussion	Original Text	Revised Text
D-13	Appendix D - Toll	Texas   331   Manor Expressway –	Texas   331   Manor Expressway-
	Facility Listing	Phase 1	Phase 1
		Texas   332   Manor Expressway –	Texas   332   Manor Expressway –
		Phase 2	Phase 2
		Texas   341   IH 45 North (North	Texas   341   IH 45 North (North
		Freeway) OV/HOT Lane (Gulf	Freeway) OV/HOT Lane (Gulf
		Freeway)   *	Freeway)   *
		Vermont   116   Cheshire Bridge	Texas   348   SH 249 Tomball Tollway   *
			Texas   349   SH 242 Direct Connector   *
			Texas   350   SH249 Direct Connector
			Texas   351   IH-30 Tom Landry
			Freeway: Phase 1   *
			Texas   352   LBJ East   *
			Texas   353   SH 71 Express   *
			Texas   354   35 Express   *
			Texas   355   Mopac Express   *
			Vermont   116   Cheshire Bridge
G-2	Field <b>Format</b>	Route_ID	Route_ID
	Specifications	Character(60)	Character <del>(60)</del> (120)
		Pct_Peak_Single	Pct_Peak_Single
		Numeric(2,0)	Numeric <del>(2,0)</del> (2,3)
		Pct_Peak_Combination	Pct_Peak_Combination
		Numeric(2,0)	Numeric <del>(2,0)</del> (2,3)
		Rutting	Rutting
		Numeric(3,1)	Numeric <del>(2,0)</del> (3,2)
		Faulting	Faulting
		Numeric(3,1)	Numeric <del>(3,1)</del> (3,2)
		Cracking_Percent	Cracking_Percent
		Numeric(3,1)	Numeric <del>(3,1)</del> (3)

Page	Discussion	Original Text	Revised Text
G-2	Appendix G		Deleted this appendix in its entirety.