

- Lesson 1
 - Sections and Sample Panel Identification File Structure

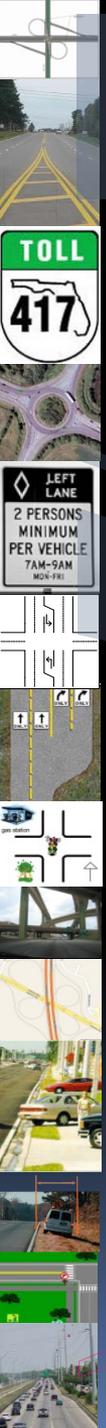
Module III

DATA REPORTING REQUIREMENTS

Learning Outcomes for Module III

You will be able to:

- Describe the Sections and Sample Panel ID datasets
- Explain the relationship between Sections and Sample Panel ID datasets



Sections Dataset File Structure

	Field Number	Field Name
Section	1	Year_Record
	2	State_Code
	3	Route_ID
	4	Begin_Point
	5	End_Point
	6	Data_Item
	7	Section_Length
	8	Value_Numeric
	9	Value_Text
	10	Value_Date
	11	Comments (optional)

- Used to report the State's roadway attribute data (i.e., 69 data items)
- Contains 11 data fields
 - 7 required fields
 - 3 item-dependent fields
 - 1 optional field
- Data Types
 - Numeric
 - Text
 - Date

Field #3: Route_ID

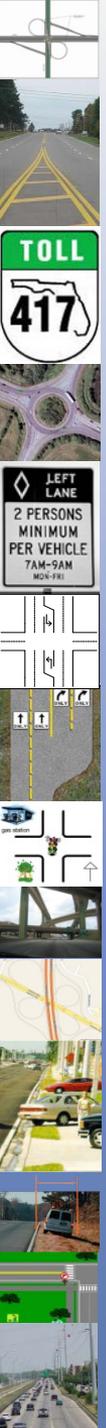
- **Description:** Unique identifier for a given route
- **Guidance:** Must be consistent with Route ID schema used for LRS network purposes
- **Data Type:** Text (up to 120 characters)
- **Coding Example:**



Field #4: Begin_Point

- Description: Point of origin for a given section of road
- Data Type: Numeric (to the nearest .001 of a mile)
- Coding Example:

```
-----|-----|-----|Begin_Point|-----|-----|-----|-----|-----|-----|-----|-----  
-----|-----|-----|1.235|-----|-----|-----|-----|-----|-----|-----|-----
```



Field #5: End_Point

- Description: Point of terminus for a given section of road
- Data Type: Numeric (to the nearest .001 of a mile)
- Coding Example:

```
-----|-----|-----|-----|End_Point|-----|-----|-----|-----|-----  
-----|-----|-----|-----|3.256|-----|-----|-----|-----|-----
```

Field #6: Data_Item

- **Description:** Identifies the specific attribute being reported for a section of road
- **Guidance:** Table 4.2 in the *HPMS Field Manual*
- **Data Type:** Text
- **Coding Example:**

```
-----|-----|-----|-----|-----|Data_Item|-----|-----|-----|-----|-----  
-----|-----|-----|-----|-----|Facility_Type|-----|-----|-----|-----|-----
```

Field #7: Section_Length

- **Description:** True length for a section of road
- **Guidance:** Fields #4 and 5 can be used to obtain calculated length
- **Data Type:** Numeric (to the nearest .001 of a mile)
- **Coding Example:**

```
-----|-----|-----|-----|-----|-----|Section_Length|-----|-----|-----|-----  
-----|-----|-----|-----|-----|-----|3.212|-----|-----|-----|-----
```

Field #8: Value_Numeric

- Description: Numeric value associated with the data item being reported

- Data Type: Numeric

- Coding Example:

```
-----|-----|-----|-----|-----|Data_Item|-----|Value_Numeric|-----|-----|-----  
-----|-----|-----|-----|-----|Facility_Type|-----|2|-----|-----|-----
```

Field #9: Value_Text

- Description: Text value associated with the data item being reported
- Data Type: Text (up to 50 characters)
- Coding Example:

```
-----|-----|-----|-----|-----|Data_Item|-----|Value_Numeric|Value_Text|-----|-----  
-----|-----|-----|-----|-----|Ownership|-----|12|Local Agency|-----|-----
```

Field #10: Value_Date

- Description: Date value associated with the data item being reported

- Data Type: Date

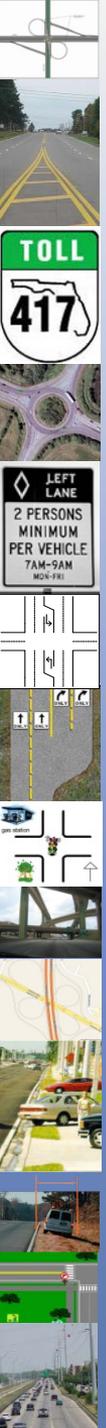
- Coding Example:

```
-----|-----|-----|-----|-----|Data_Item|-----|-----|-----|Value_Date|-----  
-----|-----|-----|-----|-----|IRI|-----|-----|-----|1/2009|-----
```

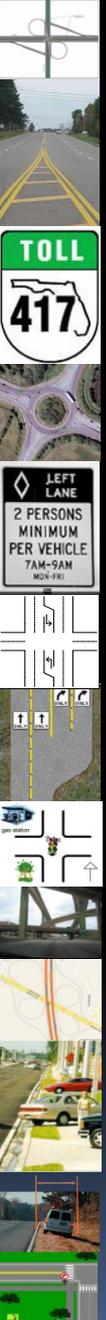
Field #11: Comments (optional)

- Description: Supplemental information for use by the States
- Data Type: Text (up to 100 characters)
- Coding Example:

```
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|Comments  
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|HPMS rocks!
```



Example Sections Dataset

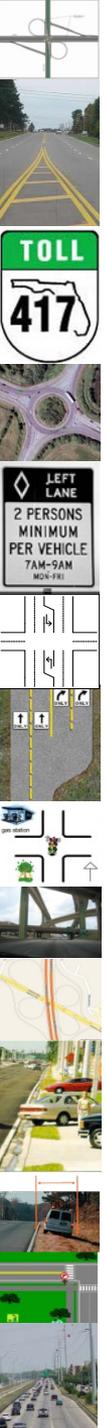


Year_Record	State_Code	Route_ID	Begin_Point	End_Point	Data_Item	Section_Length	Value_Numeric	Value_Text	Value_Date	Comments
2009	41	000100200S00	0	0.75	AADT	0.75	14800	Factored '06 AADT		
2009	41	000100200S00	.75	5.32	AADT	4.57	14700		4/2009	Est. AADT
2009	41	000100200S00	0	0.75	IRI	0.75	118		3/2009	
2009	41	000100200S00	0.75	5.32	IRI	4.57	94		5/2008	
2009	41	000100200S00	5.32	5.69	IRI	0.37	66		4/2008	
2009	41	000100200S00	0	0.75	Through_Lanes	0.75	4			
2009	41	000100200S00	.75	5.32	Through_Lanes	4.57	4			Widened in '08

Sample Panel Identification Dataset File Structure

	Field Number	Field Name
Sample Panel Section	1	Year_Record
	2	State_Code
	3	Route_ID
	4	Begin_Point
	5	End_Point
	6	Section_Length
	7	Sample_ID

- Reports the location of the State's sample sections
- Contains 7 data fields
- Data Types
 - Numeric
 - Text

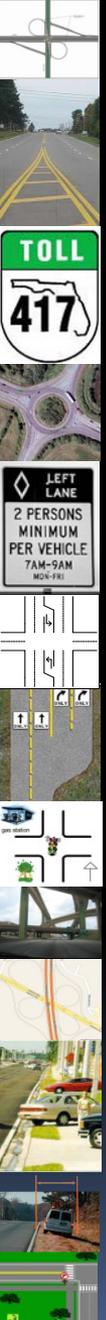


Field #7: Sample_ID

- Description: Unique identifier for a sample section
- Data Type: Text (up to 12 characters)
- Coding Example:

```
-----|-----|-----|-----|-----|-----|Sample_ID  
-----|-----|-----|-----|-----|-----|0001-32-0.50
```

Example Sample Panel ID Dataset



Year_Record	State_Code	Route_ID	Begin_Point	End_Point	Section_Length	Sample_ID
2009	41	000100200S00	0	0.75	0.75	111
2009	41	000100200S00	.75	5.32	4.57	112
2009	41	000100200S00	0	0.75	0.75	113
2009	41	000100200S00	0.75	5.32	4.57	114
2009	41	000100200S00	5.32	5.69	0.37	115
2009	41	000100200S00	0	0.75	0.75	116
2009	41	000100200S00	.75	5.32	4.57	117

Sections and Sample Panel ID Datasets - Relationship

Sections Data

2009	41	000100200S00	0	0.75	Future_AADT	0.75	12000		
2009	41	000100200S00	.75	2.32	Future_AADT	1.57	9000		
2009	41	000100200S00	2.32	4.12	Future_AADT	1.8	16000		



Sample Panel ID Data

2009	41	000100200S00	0	0.35	0.35	111
2009	41	000100200S00	0.82	0.94	0.12	112
2009	41	000100200S00	2.2	3.03	0.83	113

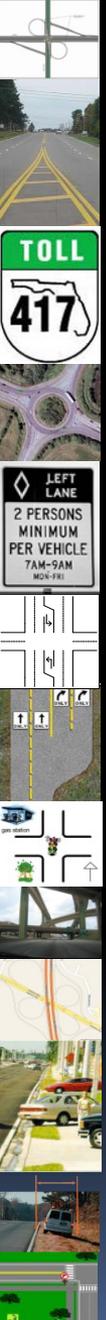


Sample Sections



Data Aggregation/Calculation Concept

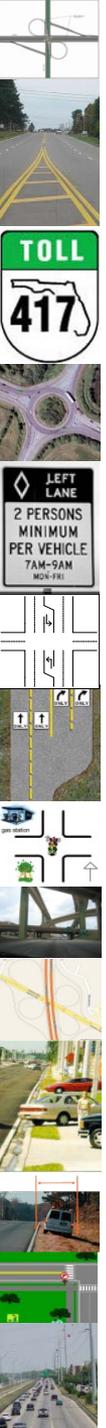
- In most cases, Sections data can be reported for any given extent
- FHWA applies business rules to Sections data for sampling purposes
- Business rules used to obtain a single data item value for each section



Data Aggregation Rules and Calculation Methods

Item Number	Data Item	Method
1	F_System *	No Calculation Required
2	Urban_Code *	No Calculation Required
3	Facility_Type *	No Calculation Required
4	Structure_Type	No Calculation Required
5	Access_Control	Predominance
6	Ownership	Predominance
7	Through_Lanes *	No Calculation Required
8	HOV_Type	Predominance
9	HOV_Lanes ***	Predominance
10	Peak_Lanes	Predominance
11	Counter_Peak_Lanes	Predominance
12	Turn_Lanes_R	Predominance
13	Turn_Lanes_L	Predominance
14	Speed_Limit	Predominance
15	Toll_Charged	Predominance
16	Toll_Type	Predominance
17	Route_Number	Predominance
18	Route_Signing	Predominance
19	Route_Qualifier	Predominance
20	Alternative_Route_Name	Predominance
21	AADT *	No Calculation Required#
22	AADT_Single_Unit	Weighted Averaging
23	Pct_Peak_Single	Weighted Averaging

- Combination
- Minimum Value
- Predominance
- Weighted Averaging



Aggregating/Calculating Sample Section Values

Sections Data

2009	41	000100200S00	0	0.75	Future_AADT	0.75	12000		
2009	41	000100200S00	.75	2.32	Future_AADT	1.57	9000		
2009	41	000100200S00	2.32	4.12	Future_AADT	1.8	16000		



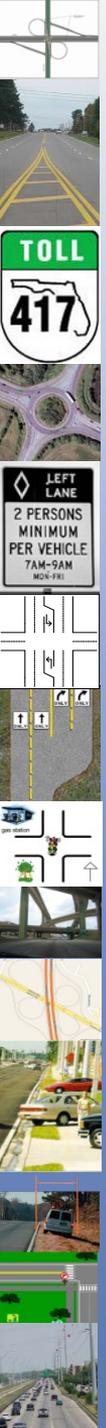
Sample Panel ID Data

2009	41	000100200S00	0	0.35	0.35	111
2009	41	000100200S00	0.82	0.94	0.12	112
2009	41	000100200S00	2.2	3.03	0.83	113



Sample Section Values





1) How many data items are to be reported by the States in the Sections dataset?

a. 20

b. 69

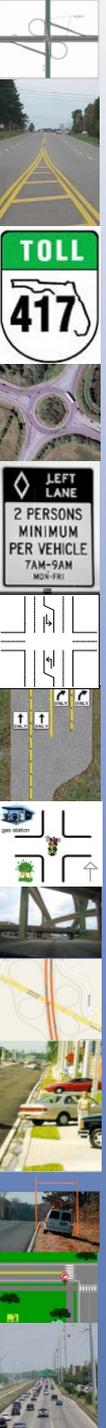
c. 36

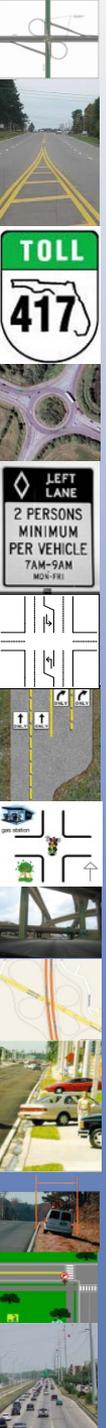
d. 98

4) The Comment field in the Sections dataset is required to be reported by the States.

a. True

b. False



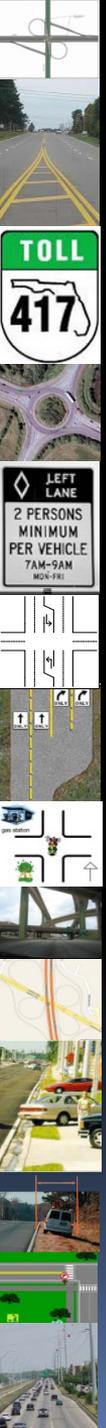


5) The Year of Record field contained in the various datasets is used to indicate which of the following?

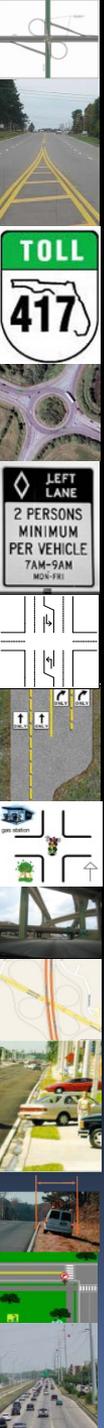
- a. The submittal year
- b. The calendar year for which the data is being reported
- c. The year in which the record player was invented
- d. Both a and b

Lesson 1 Summary

- Sections dataset is used to report roadway attribute data
- Sample Panel ID dataset is used to report location of sample sections
- Business rules are applied to Sections data for sample data purposes



Lesson 1



Questions???