

# MIRE

Model Inventory of Roadway Elements



## March TPI Meeting – 3/21/2019

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# What is MIRE?



- **M**odel **I**nventory of **R**oadway **E**lements
- Listing of roadway and traffic elements critical to safety management
- Provides data dictionary – definition, attributes, etc
- Similar to Model Minimum Uniform Crash Codes (MMUCC) but for roadway and traffic data.

# Fundamental Data Elements (FDEs)



## Non-Local Paved Road

Roadway Segment	Intersection	Interchange/Ramp
Segment Identifier (12)	Unique Junction Identifier (120)	Unique Interchange Identifier (178)
Route Number (8)	Location Identifier for Road 1 Crossing Point (122)	Location Identifier for Roadway at Beginning Ramp Terminal (197)
Route/street Name (9)	Location Identifier for Road 2 Crossing Point (123)	Location Identifier for Roadway at Ending Ramp Terminal (201)
Federal Aid/ Route Type (21)	Intersection/Junction Geometry (126)	Ramp Length (187)
Rural/Urban Designation (20)	Intersection/Junction Traffic Control (131)	Roadway Type at Beginning Ramp Terminal (195)
Surface Type (23)	AADT (79) [for Each Intersecting Road]	Roadway Type at Ending Ramp Terminal (199)
Begin Point Segment Descriptor (10)*	AADT Year (80) [for Each Intersecting Road]	Interchange Type (182)
End Point Segment Descriptor (11)*	Unique Approach Identifier (139)	Ramp AADT (191)
Segment Length (13)		Year of Ramp AADT (192)
Direction of Inventory (18)		Functional Class (19)
Functional Class (19)		Type of Governmental Ownership (4)
Median Type (54)		
Access Control (22)		
One/Two-Way Operations (91)		
Number of Through Lanes (31)		
AADT (79)		
AADT Year (80)		

Type of Governmental Ownership (4)
Unique Junction Identifier (120)
Location Identifier for Road 1 Crossing Point (122)
Location Identifier for Road 2 Crossing Point (123)
Intersection/Junction Geometry (126)
Intersection/Junction Traffic Control (131)
AADT (79) [for Each Intersecting Road]
AADT Year (80) [for Each Intersecting Road]
Unique Approach Identifier (139)

Note: AADT = Annual average daily traffic

# Fundamental Data Elements (FDEs)



## Local Paved Road

Roadway Segment
Segment Identifier (12)
Functional Class (19)
Surface Type (23)
Type of Governmental Ownership (4)
Number of Through Lanes (31)
Annual Average Daily Traffic (79)
Begin Point Segment Descriptor (10)
End Point Segment Descriptor (11)
Rural/Urban Designation (20)

## Local Unpaved Road

Roadway Segment
Segment Identifier (12)
Functional Class (19)
Type of Governmental Ownership (4)
Begin Point Segment Descriptor (10)
End Point Segment Descriptor (11)

# Guidance Documents



- Data Development Guidance Document
- Intersection Data Dictionary
- Road Width – based on HPMS Field Manual

# Intersection Data & Services



- Intersections, Road Width & Speed Limit Data on the FTP Server in a file GDB
- Nodes and Node Legs are currently served through ArcGIS Server and will be accessible for editing through a feature service
- ArcGIS Collector Application is available in prototype for editing of nodes and node legs in the field

# Editing the Data



# Editing Demo



# Next Steps



- VTrans needs to complete the testing and deployment of Collector and the editable feature services
- RPCs will need ArcGIS Online accounts and provide the names to VTrans
- Data links and credentials will be sent to each RPC
- Inventory work can begin



# Questions???



(The Herald, Bob Eddy)