

Statewide State Roads Layer

Michigan Geographic Framework

Field Definitions

(Shapefile Attribute Table)
(Sept. 24, 2003 – Version 3b)

The following field definitions make up the shapefile attribute table called Statewide State Roads. This shapefile consists of only the road segments that are owned by the State of Michigan. The Michigan Center for Geographic Information is also distributing three other road segment based Framework layer shapefiles. One layer is called Named Roads and consists of roads where a road name is known. Another layer is called Unnamed Roads and consists of roads where a name has not been determined. Finally, a layer called the All Roads layer, consists of the total of the road segments found in the Named Roads and Unnamed Roads shapefiles. All road layers are also available by individual county.

The attribute table can be found in the file Stroads_MI_v3b.DBF.

Field Name	Type	Size	Description	Comments
FCC	C	3	Framework Classification Code	See FCC Road Appendix at end of document.
RDNAME	C	60	This field contains a concatenated street name made up of the data contained in FEDIRP, NAME, FETYPE, and FEDIRS	For further information, see info on FEDIRP, NAME, FETYPE, and FEDIRS below
FRADDL	N	11	Left side from Address	Potential "from" and "to" address ranges. These ranges were originally transferred from TIGER. Some modifications have since been made.
TOADDL	N	11	Left side to Address	
FRADDR	N	11	Right side from Address	
TOADDR	N	11	Right side to Address	
ZIPL	N	5	Left side ZIP code	ZIP codes as created by the Michigan Center for Geographic Information based on US Postal Service data. These zip code fields may contain incomplete data at this time.
ZIPR	N	5	Right side ZIP code	
FEDIRP	C	2	Feature Prefix Direction	A pre-directional associated with an arc's street name (N, S, E, W, etc.).

Type: C Character
N Numeric

Field Name	Type	Size	Description	Comments
NAME	C	30	Feature Name	The street name assigned to the arc. *
FETYPE	C	4	Feature Type	The street type (AVE, BLVD, RD, ST etc) assigned to the arc.
FEDIRS	C	2	Feature Suffix Direction	A post-directional associated with an arc's street name component (N, S, E, W, etc.).
FEDIRP2	C	2	Secondary Feature Prefix Direction	Road name aliases (e.g., Ford Fwy for I-94 Fwy).
NAME2	C	30	Secondary Feature Name	
FETYPE2	C	4	Secondary Feature Type	
FEDIRS2	C	2	Secondary Feature Suffix Direction	
FEDIRP3	C	2	Feature Direction Prefix 3	A pre-directional used by the Post Office in the Zip+4 associated with an arc's street name (N, S, E, W, etc.). This field will only be filled when some part of the Post Office street name is different from the corresponding part of any of the "primary" street name components (FEDIRP, NAME, etc.)
NAME3	C	30	Feature Name 3	The name used by the Post Office in the Zip+4. This field will only be filled when some part of the Post Office street name is different from the corresponding part of any of the "primary" street name components (FEDIRP, NAME, etc.)
FETYPE3	C	4	Feature Type 3	The street type of the Post Office/Zip+4 name (N, S, E, W, etc.). This field will only be filled when some part of the Post Office street name is different from the corresponding part of any of the "primary" street name components (FEDIRP, NAME, etc.)
FEDIRS3	C	2	Feature Direction Suffix 3	A post-directional associated with an arc's Post Office/Zip+4 name (N, S, E, W, etc.). This field will only be filled when some part of the Post Office street name is different from the corresponding part of any of the "primary" street name components (FEDIRP, NAME, etc.)

Type: C Character

Field Name	Type	Size	Description	Comments
FUNCLASS	N	2	MDOT National Functional Classification (NFC) code 1 - Rural Interstate (principal arterial) 2 - Rural Other Principal Arterial (non-freeway) 5 - Rural Other Freeway (principal arterial) 6 - Rural Minor Arterial 7 - Rural Major Collector 8 - Rural Minor Collector 9 - Rural Local 11 - Urban Interstate (principal arterial) 12 - Urban Other Freeway (principal arterial) 14 - Urban Other Principal Arterial (non-freeway) 16 - Urban Minor Arterial 17 - Urban Collector 19 - Urban Local 0 or uncoded - not a certified public road	Uses United States Department of Transportation (USDOT) system classifying all roads by their transportation function. This system is called the National Functional Classification (NFC) system. There are three major types: (Arterial, Collector, and Local) The classification codes 1-9 are rural The classification codes 10-19 are urban
LEGALSYST	N	2	Indicates ownership of the road 1 – State Trunkline 2 – County Primary 3 – County Local 4 – City Major 5 – City Minor 9 – Not an Act-51 Certified Public Road	The legal system defines the importance of the road and the unit of government that has jurisdiction over the road. This field may or may not be filled in this version of the file.
PR	N	7	Primary/Physical Reference/Road ID number	Michigan Dept. of Transportation (MDOTs) standard for the Linear Referencing System requires that Physical References (PRs) are continuous without gaps or overlaps in mile posting.
BPT	C	8	Permanent, unique segment Beginning Point ID	Used along with PR as the fundamental key in identifying change transactions

Type: C Character
N Numeric

Field Name	Type	Size	Description	Comments
EPT	C	8	Permanent, unique segment Ending Point ID	Used along with PR as the fundamental key in identifying change transactions
LRS_LINK	C	23	Linear Referencing System link field	This field consists of the PR, BPT and EPT fields concatenated (PR, BPT and EPT defined above). This field uniquely identifies a road segment . It will be used to track changes made to road segments that have assigned PRs (Physical Reference numbers) .
FNODE	N	11	From Node Number	The FNODE and TNODE values are obtained from the ArcInfo Arc Attribute Table (AAT). The use of these two fields identifies arc direction and can be used to determine road intersections.
TNODE	N	11	To Node Number	
LENGTH	F	20,5	Arc Length	Feature length in meters obtained from the ArcInfo AAT.
OID	F	20	Object Identification Number : Michigan Geographic Framework (MGF) Version 3.0 ID	Unique ID
MGF_HIST	N	3	MGF Conflation History 0 – Added since conflation 1 – Matched TIGER to MIRIS 2 – Original unmatched MIRIS 3 – Appended unmatched TIGER 4 – Ambiguous	Static field representing original source of geography.

Type: C Character
F Floating Point
N Numeric

Appendix D

Framework Classification Code: Field definitions and Valid Entries

June 10, 2003

The Framework Classification Code (FCC) is a 3-character field in the framework coverage. The initial value in the FCC field is derived from data that is already associated with the feature. As additional editing takes place, the FCC value will be updated based on the definitions described in this document. New features added to framework will be given the appropriate FCC value based on these same definitions. New Classification Codes may also be created as needed.

The FCC is divided into 7 basic themes;

Roads & Trails

Railroads

Power Lines & Power Transmission Lines

Landmarks, Airports, Structures

Hydrography

Non-visible Boundaries

Unclassified

The seven basic themes are further subdivided, listed and defined below.

ROADS

A00 – Future road under construction

A1* – Limited access Interstates and non-Interstates (aka Freeways) such as I 75, I 94, US 27, M 39

Valid Codes:

A11 – Limited access Interstate

A12 – Limited access non-Interstate

A13 – Ramp to or from a limited access highway

A14 – Feature associated with rest areas, weigh stations and MDOT garages that are accessible only from A11 or A12 roads

A15 – Collector/Distributor. Specialized ramp like feature that distributes traffic within complex interchanges. Must connect at both ends with a main line (A11 or A12). Must intersect at least 2 ramps. IE: I 94 and I 69 interchange in Calhoun county near Marshall.

A2* – US Highways & State Highways such as M 52, US 12. (Not limited access)

Valid Codes:

A21 – Divided unlimited access US Highways & State Highways

A22 – Undivided unlimited access US Highways & State Highways

A23 – Ramp to or from an unlimited access highway

A24 – Feature associated with a roadside park along State trunkline

A25 – State owned surface streets that act as service drives to limited access Freeways (A11 or A12)

A3* – These roads are classified based on **National Functional Classification (NFC)**. NFC is an attribute of the Framework coverage. The Michigan Department of Transportation assigned each NFC value. NFC is a planning tool which federal, state and local transportation agencies have used since the late 1960's. The Federal Highway Administration (FHWA) developed this system of classifying all streets, roads and highways according to their function. The FHWA publication, "Highway Functional Classification: Concepts, Criteria and Procedures", provides the basis for much of the following information.

Principal arterials are at the top of the NFC hierarchical system. Principal arterials generally carry long distance, through-travel movements. They also provide access to important traffic generators, such as major airports or regional shopping centers.

Minor arterials are similar in function to principal arterials, except they carry trips of shorter distance and to lesser traffic generators.

Collectors tend to provide more access to property than do arterials. Collectors also funnel traffic from residential or rural areas to arterials.

Valid Codes:

A31 – Divided principal arterial.

A32 – Undivided principal arterial.

A33 – Divided minor arterial.

A34 – Undivided minor arterial.

A35 – Divided collectors.

A36 – Undivided collectors.

A4* – Local roads primarily provide access to property. Local certified roads are classified based on NFC. Uncertified roads are usually private, and have no NFC value.
EXAMPLES: Residential streets; lightly-traveled county roads.

Valid Codes:

A41 – Divided local certified roads.

A42 – Undivided local certified roads.

A43 – Divided local uncertified roads, usually private roads.

A44 – Undivided local uncertified roads, usually private roads.

A45 – Boulevard turnarounds. These features allow traffic to pass through boulevard medians.

A46 – Residential court or cul-de-sac.

A49 – All other features that were originally classified as a road feature in TIGER or MIRIS but do not match any of the criteria used to classify framework roads. More research is needed to better classify these roads.

A5* - Roads with special characteristics, these roads may or may not have been updated in the current framework version.

Valid Codes:

A51 – Unnamed, non PR (Physical Reference Number) roads within Cemeteries.

A52 – Unnamed, non PR internal drives around malls, commercial sites, retail sites, industrial sites, office sites, schools, colleges, and universities.

A53 – Unnamed, non PR driveways. A driveway is defined as a road that serves only one residence.

A54 – Internal roads of Federal, State and Local parks and campgrounds. These roads may have names and PRs.

A55 – Unnamed, non PR roads in residential areas. IE: apartment complexes, mobile home communities, and new developments.

A56 – Unnamed, non PR two-track roads or vehicular trails.

A6* - Non-vehicular transportation features, these features may or may not have been updated in the current framework version.

Hiking trails
Bike trails/paths
Horse riding trails
Snowmobile trails
Cross country ski trails
Ferries
Pedestrian overpasses