

## 4 Shapefile Attribute Terms Glossary

### 4.1 Edge

A linear object (topological primitive) that extends from a designated start node (From node) and continues to an end node (To node). An edge's geometry can be described by the coordinates of its two nodes, plus possible additional coordinates that are ordered and serve as vertices (or "shape" points) between these nodes. The order of the nodes determines the From-To orientation and left/right sides of the edge. Each edge is uniquely identified by a TLID. A TLID is defined as a permanent edge identifier that never changes. If the edge is split, merged or deleted its TLID is retired.

### 4.2 Face

An areal object (topological primitive), bounded by one or more edges. As a topological primitive, a face is not internally subdivided by edges into smaller polygons but may completely surround other faces (island faces). Each face is uniquely identified by a TFID. A TFID is defined as a permanent face identifier that never changes. If the face is split or merged its TFID is retired. There is a left and right designation for TFID, identified as TFIDL (TFID for the face on the left side of a given edge) and TFIDR (TFID for the face on the right side of the given edge).

### 4.3 Feature

A feature is a unique combination of geometry, feature name, classification and descriptive codes that describe real world objects such as roads, lakes, or buildings. Each edge and face topological primitive may belong to many different features.

### 4.4 Feature Identifier

The *linear feature identifier* (LINEARID) is a unique ID number for linear features and is used to associate the name and attributes of linear features to their spatial primitives (edges) and address ranges as appropriate.

The *point landmark identifier* (POINTID) is a unique ID number for point landmarks.

The *area landmark identifier* (AREAID) is a unique ID number for area landmarks and is used to associate the name and attributes of area landmarks to their spatial primitives (faces).

### 4.5 Feature Indicators

The All Lines shapefile includes the feature indicators ROADFLG, RAILFLG, HYDROFLG and OLFFLG, which indicate if a given edge belongs to a Road feature, Rail feature, Hydrography feature or other linear feature, respectively. An edge can belong to more than one feature type.

### 4.6 Geographic Corridors

A geographic corridor is a narrow strip of land used to connect parts of legal entities to form a contiguous area. Geographic corridors generally follow the edges of a right-of-way around a linear feature such a road but exclude houses and business addressed to that road. These excluded houses and business belong to the legal entities outside of the geographic corridor. The boundaries of geographic corridors form census block boundaries. Geographic offsets are similar to geographic corridors but appear on only one side of a feature (either the left or right). A geographic corridor/offset flag is used to indicate whether or not a face is located inside a geographic corridor or is offset. There is a left and right designation for OFFSET, identified as OFFSETL (Offset flag for the face on the left side of a given edge) and OFFSETR (Offset flag for the face on the right side of a given edge).

### 4.7 GCSEFLG

Short lines flag for geographic corridors and offsets. This field indicates if a feature edge perpendicular to a geographic corridor (or offset) traverses the corridor or helps to define the

corridor's end. If so, address ranges must not be linked to either side of the edge. See Section 5.14 (Places) for more information on geographic corridors and offsets.

#### 4.8 MAF/TIGER Feature Class Code (MTFCC)

The MTFCC is a 5-digit code intended to classify and describe geographic objects or features. The MTFCC replaced the Census Feature Class Code (CFCC) used before 2007 and was expanded to include features that previously did not have codes. To simplify feature classification, some CFCCs were collapsed into a single MTFCC; the characteristics that differentiated these CFCCs were retained as separate feature attributes. MTFCC definitions are available in the metadata files that accompany each shapefile and relationship file and in Appendix F of this document. A crosswalk between CFCC and MTFCC codes can be found on the 2007 TIGER/Line website (<http://www.census.gov/geo/maps-data/data/tiger-line.html>).

#### 4.9 Node

A point object (topological primitive) defined by a single coordinate pair. An isolated node represents a point feature (point landmark) and is not connected to any edge. A connecting node may or may not represent a point feature, but is connected to one or more edges. Each connecting node is uniquely identified by a *permanent node identifier* (TNID). A TNID is defined as a permanent node identifier that never changes. If the node is deleted, its TNID is retired. There is a from and to designation for TNID, identified as TNIDF (TNID for the Start node (From node) of a given edge) and TNIDT (TNID for the End node (To node) of a given edge).

#### 4.10 Parity

Parity is an attribute field in the `addrfeat.shp` used to indicate whether address house numbers within an address range are Odd (O), Even (E), or Both (B) (both odd and even).

#### 4.11 Relationship file

The TIGER/Line relationship files are extracts of selected geographic information from the MAF/TIGER database. Each TIGER/Line relationship file can stand alone as an independent dataset but is designed to be used jointly with the shapefiles to join additional attributes and data to the spatial features.

#### 4.12 Shapefile

A shapefile is a digital vector storage format for storing geometric location and associated attribute information. Each shapefile consists of several files, which are listed in section 3 of this document (Structure and Format).