

## Description of the Relationship Tables

The All Lines shapefile (edges.shp) contains the geometry and attributes of each topological primitive edge. Each edge has a unique TLID (TIGER/Line Identifier) value. The left and right faces for an edge can be determined by linking on the TFIDL (left) or TFIDR (right) attribute to the TFID attribute in the Topological Faces relationship table (faces.dbf).

The Address Ranges relationship table (addr.dbf) contains the attributes of each address range. Each address range has a unique ARID value. The edge to which an address range applies can be determined by linking to the edges shapefile on the TLID attribute. Multiple address ranges can apply to the same edge (an edge can have multiple address ranges).

The Address Range-Feature Name relationship table (addrfn.dbf) contains a record for each address range-linear feature name relationship. The purpose of this relationship file is to identify all street names associated with each address range. An edge can have several feature names; an address range located on an edge can be associated with one or any combination of the available feature names (an address range can have multiple feature names). The address range is identified by the ARID attribute, which can be used to link to the Address Ranges relationship table. The linear feature name is identified by the LINEARID attribute that relates the address range back to the featnames.dbf table.

The Feature Names relationship table (featnames.dbf) contains a record for each feature name-edge combination, and includes the feature name attributes. The edge to which a Feature Names relationship table record applies can be determined by linking to the All Lines shapefile on the TLID attribute. Multiple Feature Names relationship table records can link to the same edge, for example, a road edge could link to US Hwy 22 and Rathburn Road. The linear feature to which the feature name applies is identified by the LINEARID attribute. Multiple feature names may exist for the same edge (linear features are not included in the data set, but could be constructed using the All Lines shapefile and the relationship tables).

The Topological Faces relationship table contains the attributes of each topological primitive face. Each face has a unique TFID value. The face geometries can be built from the All Lines shapefile using the edges' left and right face relationships. The geometries of each geographic entity can then be built by dissolving the face geometries on the appropriate attribute(s) in the Topological Faces relationship table.

The Area Landmark shapefile (arealm.shp) contains the geometry and attributes of each area landmark. Each area landmark has a unique AREAID value.

The Topological Faces-Area Landmark relationship table (facesal.dbf) contains a record for each face-area landmark relationship. The face to which a Topological Faces-Area Landmark relationship table record applies can be determined by linking to the Topological Faces relationship table on the TFID attribute. The area landmark to which a

Topological Faces-Area Landmark relationship table record applies can de determined by linking to the Area Landmark shapefile on the AREAID attribute. A face may be part of multiple area landmarks. An area landmark may consist of multiple faces.

The Area Hydrography shapefile contains the geometry and attributes of each area hydrography feature. Each area hydrography feature has a unique HYDROID value.

The Topological Faces-Area Hydrography relationship table contains a record for each face-area hydrography feature relationship. The face to which a Topological Faces-Area Hydrography relationship table record applies can be determined by linking to the Topological Faces table on the TFID attribute. The area hydrography feature to which a Topological Faces-Area Hydrography relationship table record applies can be determined by linking to the Area Hydrography shapefile on the HYDROID attribute. A face may be part of multiple area water features. An area water feature may consist of multiple faces.

# TIGER/Line Shapefiles Relationship Tables

edges.shp	
PK	<u>tlid</u>
	<b>statefp</b> <b>countyfp</b> countyns tfidl tfidr mtfcc fullname smid lfromadd ltoadd rfromadd roadd zipl zipr featcat hydroflg railflg roadflg olfflg passflg divroad exttyp ttyp deckedroad artpath

faces.dbf	
PK	<u>tfid</u>
	<b>statefp</b> <b>countyfp</b> <b>statefp00</b> <b>countyfp00</b> <b>tractce00</b> <b>blkgrpce00</b> <b>blockce00</b> suffix1ce <b>cousubfp</b> submcdfp placefp conctyfp uace <b>cd108fp</b> <b>cdfp</b> <b>cdsessn</b> vtdst00 sdlust sldlst aiannhce comptyp anrcfp trsubce ttractce00 csafp cbsafp metdivfp cnectafp nectafp nctadvfp elsdlea scsdlea undslea lwflag

facesal.dbf	
PK	<u>tfid</u>
PK	<u>areaid</u>

areaid: foreign key

arealm.shp	
PK	<u>areaid</u>
	<b>statefp</b> <b>countyfp</b> countyns ansicode fullname mtfcc

hydroid: foreign key

facesah.dbf	
PK	<u>tfid</u>
PK	<u>hydroid</u>

areawater.shp	
PK	<u>hydroid</u>
	<b>statefp</b> <b>countyfp</b> countyns ansicode fullname mtfcc

addr.dbf	
PK	<u>arid</u>
	<b>tlid</b> <b>fromhn</b> <b>tohn</b> <b>side</b> zip plus4 fromtyp totyp mtfcc

addrfn.dbf	
PK	<u>arid</u>
PK	<u>linearid</u>

linearid: key

{linear features}	
PK	<u>linearid</u>

tfidl: key to tfid of Left Face

tfidr: key to tfid of Right Face

tlid: foreign key

tlid: foreign key

tfid: foreign key

tfid: foreign key

linearid: key

featnames.dbf	
PK	<u>tlid</u>
PK	<u>linearid</u>
	fullname name predirabr pretypabr prequalabr sufdirabr suftypabr sufqualabr predir pretyp prequal sufdir suftyp sufqual mtfcc <b>paflag</b>