



Digital Data Dictionary

Version 5.0

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PROPRIETARY INFORMATION

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INTRODUCTION	1
Additional Documentation	24
FTP Access	24
GIS GRAPHICS FILES OVERVIEW	2
Digital Mapping System	2
GIS Database	2
Database Organization	2
Update System	2
Schemas and Dictionaries	2
Attribute Codes	3
Code Tables	3
Layer-Naming Conventions	4
Primary Layer — Transportation Lines	5
Primary Attributes	5
TRNL — TRANSPORTATION LINES	6
GIS Database Schema	6
Data Dictionary	8
GRPH / GRPH-ABS — Unique Graphic ID Number	8
FEAT — (reserved)	9
TYPE — TBM Transportation Classification	9
STRU — Transportation Structure	10
STAT — Transportation Status	11
SURF — Street Surface Classification	11
DIRP — Directional Prefix (code)	12
DIRPABV-ALF — Directional Prefix Abbreviation (character)	12
PREF — TBM Prefix to Proper Name (code)	13
PREF-ALF — TBM Prefix to Proper Name (character)	13
NAME-ALF — Proper Name (character)	14
NAME — Alternate Name (code)	14
SUFF — TBM Suffix to Proper Name (code)	15
SUFFABV-ALF — TBM Suffix to Proper Name (character)	15
DIRS — Directional Suffix (code)	16
DIRSABV-ALF — Directional Suffix Abbreviation (character)	16
REGN — (reserved)	17
ADLF — Address Left- From	17
ADLT — Address Left- To	18
ADRF — Address Right- From	18
ADRT — Address Right- To	18
ADLV — Address Left- Valid	19
ADRV — Address Right- Valid	20
DRCT — Direction of Traffic	20
JUR1 — Route Jurisdiction, One	21
RTE1-ALF — Route Number, One	22
JRS1 — Special Route Jurisdiction	23
SRD1-ALF — Special Route Designation Number	23
PREFNAME-ALF — Prefix + Name (character)	24
NAMEA-ALF — Full Street Name (character)	24
ZIPCOLEF — Zip Code, Left	25
ZIPCORGT — Zip Code, Right	25
TBMCTYL — TBM City Name, Left (code)	26
TBMCTYL-ALF — TBM City Name, Left (character)	26

- TBMCITYR — TBM City Name, Right (code) 27
- TBMCITYR-ALF — TBM City Name, Right (character) 27
- LFIPS_CO — State and Left County FIPS Code (character) 28
- RFIPS_CO — State and Right County FIPS Code (character) 28
- TBM — Thomas Bros. Maps® Copyright 28
- CSNA — COUNTY, STATE, AND NATIONAL AREAS 29**
- GIS Database Schema 29
- Data Dictionary 29
- GRPH — Unique Graphic ID Number 29
- COUNTY — County Name (code) 30
- COUNTYNAME-ALF — County Name (character) 30
- STATE — State Name (code) 31
- NATIONAL — Country Name (code) 31
- COUNTY_FIPS — County FIPS Code (numeric) 32
- FIPS_CO — State and County FIPS Code (character) 32
- TBM — Thomas Bros. Maps® Copyright 32
- CTYA — CITY AREAS 33**
- GIS Database Schema 33
- Data Dictionary 33
- GRPH — Unique Graphic ID Number 33
- CITY — City Name (code) 34
- CITYNAME-ALF — City Name (character) 34
- JURS —(reserved)..... 34
- CITY_FIPS — City FIPS Code (numeric) 35
- FIPS_CO — State and County FIPS Code (character) 35
- TBM — Thomas Bros. Maps® Copyright 35
- ZIPA — ZIP CODE AREAS 36**
- GIS Database Schema 36
- Data Dictionary 36
- GRPH — Unique Graphic ID Number 36
- ZIPCODE — 5-Digit Zip Code 37
- POZONE — (reserved) 37
- FIPS_CO — State and County FIPS Code (character) 37
- TBM — Thomas Bros. Maps® Copyright 38
- CENA — CENSUS AREAS 39**
- GIS Database Schema 39
- Data Dictionary 39
- GRPH — Unique Graphic ID Number 39
- CENSUS — Census Tract Number 40
- FIPS_CO — State and County FIPS Code (character) 40
- TBM — Thomas Bros. Maps® Copyright 40
- CLTP, CLTL, CLTA — CULTURAL POINTS, LINES, AND AREAS 41**
- Cultural Points (CLTP) 41
- Cultural Lines (CLTL) 41
- Cultural Areas (CLTA) 41
- GIS Database Schema 41
- Data Dictionary 42
- GRPH — Unique Graphic ID Number 42
- TYPE — Cultural Feature Classification 43
- STAT — Cultural Feature Status 43

NAME-ABV-ALF — Name Abbreviation (character).....	44
NAME-ALF — Fully Expanded Name.....	44
ADNUM — Address Number.....	45
DIRP — Directional Prefix (code).....	45
DIRPABV-ALF — Directional Prefix Abbreviation (character).....	46
PREF — TBM Prefix to Proper Street Name (code).....	46
PREF-ALF — TBM Prefix to Proper Street Name (character).....	47
STNAME-ALF — Proper Street Name Location.....	47
STNAME — (reserved).....	47
SUFF — TBM Suffix to Proper Street Name (code).....	48
SUFFABV-ALF — TBM Suffix to Proper Street Name (character).....	48
DIRS — Directional Suffix (code).....	48
DIRSABV-ALF — Directional Suffix Abbreviation (character).....	49
REGN — (reserved).....	49
CITY — City Name (code).....	49
CITYNAME-ALF — City Name (character).....	50
TNUM — Area Code and Telephone Number (character).....	50
AREACODE — Area Code (numeric).....	51
PHONE — Telephone Number (numeric).....	51
FIPS_CO — State and County FIPS Code (character).....	51
TBM — Thomas Bros. Maps® Copyright.....	52
HYDL, HYDA — HYDROLOGY LINES AND AREAS.....	53
Hydrology Lines (HYDL).....	53
Hydrology Areas (HYDA).....	53
GIS Database Schema.....	53
Data Dictionary.....	54
GRPH — Unique Graphic ID Number.....	54
FEAT — (reserved).....	54
TYPE — Hydrology Classification.....	55
STRU — Hydrology Structure.....	56
STAT — Hydrology Status.....	57
PREF — TBM Prefix to Proper Name (code).....	57
NAME-ALF — Proper Name (character).....	58
NAME — (reserved).....	58
SUFF — TBM Suffix to Proper Name (code).....	58
DESIG — Special Designation.....	59
NAMEA-ALF — Full Proper Name (character).....	59
PREF-ALF — TBM Prefix to Proper Name (character).....	60
NAME1-ALF — Alternate Name, One (character).....	60
SUFF-ALF — TBM Suffix to Proper Name (character).....	61
FIPS_CO — State and County FIPS Code (character).....	61
TBM — Thomas Bros. Maps® Copyright.....	61
OWNA — OWNERSHIP BOUNDARY AREAS.....	62
GIS Database Schema.....	62
Data Dictionary.....	63
GRPH — Unique Graphic ID Number.....	63
TYPE — Ownership Jurisdiction (code).....	63
SUBTYPE — Ownership Classification (code).....	64
SUBTYPE-ALF — Ownership Classification (character).....	64
NAME-ABV-ALF — Name Abbreviation (character).....	65
NAME-ALF — Fully Expanded Ownership Name.....	65
ADNUM — Address Number.....	66
DIRP — Directional Prefix (code).....	66
DIRPABV-ALF — Directional Prefix Abbreviation (character).....	66

PREF — TBM Prefix to Proper Street Name (code) 67
PREF-ALF — TBM Prefix to Proper Street Name (character) 67
STNAME-ALF — TBM Proper Street Name Location 67
STNAME — (reserved) 68
SUFF — Suffix to Proper Street Name (code) 68
SUFFABV-ALF — Suffix to Proper Street Name (character) 68
DIRS — Directional Suffix (code) 69
DIRSABV-ALF — Directional Suffix Abbreviation (character) 69
REGN — (reserved) 69
CITY — City Name (code) 70
CITYNAME-ALF — City Name (character) 70
TNUM — Area Code and Telephone Number (character) 70
AREACODE — Area Code (numeric) 71
PHONE — Telephone Number (numeric) 71
NAMEA-ALF — Full Street Name (character) 71
FIPS_CO — State and County FIPS Code (character) 72
TBM — Thomas Bros. Maps® Copyright 72

PGBA, PGDA — TBM PAGE AND GRID AREAS..... 73

GIS Database Schema 73
Data Dictionary 73
GRPH — Unique Graphic ID Number 73
PAGE — TBM Page Number 74
PAGEXT — Close-up Pages, (reserved in PGBA) 74
ROW — Grid Row Number 74
COLUMN — Grid Column Letter 75
FIPS_CO — State and County FIPS Code (character) 75
TBM — Thomas Bros. Maps® Copyright 75

TRSA — TOWNSHIP, RANGE, SECTION, AND RANCHO AREAS 76

GIS Database Schema 76
Data Dictionary 76
GRPH — Unique Graphic ID Number 76
SECTION — Section 77
MERIDIAN — Baseline and Meridian 77
TOWNSHIP — Township 77
RANGE — Range 78
LANDGRANT — Rancho and Landgrant 78
FIPS_CO — State and County FIPS Code (character) 78
TBM — Thomas Bros. Maps® Copyright 79

AAT — ARC ATTRIBUTE TABLE..... 80

GIS Database Schema 80
Clip Arcs and Item Values 80
Data Dictionary 80
GRPH — Unique Graphic ID Number 80
TYPE — Arc Type 81
TBM — Thomas Bros. Maps® Copyright 82

INDEX..... 83

Introduction

Thomas Bros. Maps® (TBM®) provides detailed street map information in both digital and printed formats. The TBM® Database was created and is update digitally, using geographic information systems (GIS) software. Using GIS, TBM® is able to provide database files in a variety of file formats.

The Digital Data Dictionary is available to clients who have purchased TBM® digital data. The purpose of this manual is to outline the structure and attributes of TBM's digital data schemas, code tables and attribute descriptions for all TBM® deliverable layers.

This manual assumes that the reader is familiar with the ARC/INFO data model and file structures.

Additional Documentation

This Digital Data Dictionary is to be used in conjunction with the *Database Administrator's Manual*, which outlines available products, delivery formats and file naming conventions.

FTP Access

Throughout the duration of their contract cycle, clients will be able to FTP the most current documentation and code tables by using their client identification number for access.

GIS Graphics Files Overview

Digital Mapping System

Thomas Bros. Maps® (TBM), a division of Rand McNally, has been publishing detailed street maps since 1915. Up until 1986 TBM had been using manual cartographic processes. In 1986, TBM began researching and developing a computer mapping system, now called the Digital Mapping System.

To create the Digital Mapping System, TBM converted the Thomas Guide street maps for California, Washington, and Oregon into highly accurate, attribute enriched, digital street centerline network databases. As a result, Thomas Bros. Maps® now offers both printed and digital map products.

GIS Database

Thomas Bros. Maps' Digital Mapping System is a collection of map databases called the GIS Database, which is essentially the Thomas Guide in digital form. It offers the same quality and richness of detail seen in the printed Thomas Guide map books. It contains the most accurate and up-to-date intelligent database available for the West Coast and the East Coast, including the Baltimore and Washington D.C. areas.

Database Organization

The GIS Database is a comprehensive set of layers, which has all the data necessary to support a variety of uses. Each layer is composed of an individual data category such as transportation, water, or cultural entities, which are based on single graphic features of points, lines, or polygons. Each layer contains detailed attribute information and is maintained separately. This database organization allows maximum flexibility in combining or separating data for different applications.

Update System

Over the past 80 years, TBM has developed a comprehensive system for updating and maintaining its data. Source data is continually collected, organized, and analyzed to insure data integrity. All updates are made to the GIS Database, based on data availability. File replacement (standard format) and transaction updates are available.

Schemas and Dictionaries

The balance of this manual describes schemas and data dictionaries for each layer in the the Thomas Bros. Maps® GIS Database.

The *schema* organizes the data into the database framework and displays item information (name, width, and field type) for every attribute in the layer. The *data dictionary* describes the layout of the schema and displays the values of the items set in the code tables for our digital customers.

Attribute Codes

To provide efficient data storage, manipulation, and quality control, many attribute values are numeric, where each number has a specific definition. For example, in the TRNL layer, the TYPE attribute classifies transportation lines into numeric categories such as freeways, primary streets, or minor streets, see page 9.

Code Tables

Special look-up tables, called *code tables*, store the actual definitions of these attribute codes. Additions are made to them periodically. Within this document are code values current up to the time this document was created. The following is a list of code table export files, of which the most current, are available to GIS Database licensees.

LAYER	CODE TABLE	DESCRIPTION
Transportation	TRNL.TYPE.CODES	Transportation classification
	TRNL.SURF.CODES	Transportation surface
	TRNL.STAT.CODES	Transportation status
	TRNL.STRU.CODES	Transportation structure
	TRNL.DIRP.CODES	Street name direction prefix
	TRNL.PREF.CODES	Street name prefix
	TRNL.SUFF.CODES	Street name suffix
	TRNL.DIRS.CODES	Street name direction suffix
	TRNL.ADL.CODES	Valid left/right address
	TRNL.DRCT.CODES	Direction of traffic
	TRNL.ALTNAME.CODES	Alternate street name
	TRNL.JUR.CODES	Route jurisdiction
	TRNL.JRS.CODES	Special route jurisdiction
Cultural Features	CLT.TYPE.CODES	Cultural classification
	CLTA.STAT.CODES	Cultural status
Hydrology	HYDA.PREF.CODES	Hydrology name prefix
	HYDA.STAT.CODES	Hydrology status
	HYDA.STRU.CODES	Hydrology area structure
	HYDA.SUFF.CODES	Hydrology name suffix
	HYDA.TYPE.CODES	Hydrology classification
Ownership Boundaries	OWNA.TYPE.CODES	Ownership classification
	OWNA.SUBTYPE.CODES	Ownership area subtype
Political Boundaries	CITY.CODES	Cities and communities
	CITY.FIPS.CODES	City FIPS
	COUNTY.CODES	Counties
	COUNTY.FIPS.CODES	County FIPS
	STATE.CODES	States
NATIONAL.CODES	Nations	
Reference Boundaries	ZIP.CITY.CODES	Communities (based on Zip codes)

	TRSA.LANDGRANT.CODES	land grants
	TRSA.RANGE-DIR.CODES	ranges
	TRSA.TOWNSHIP-DIR.CODES	townships

Layer-Naming Conventions

The GIS Database uses a four-letter naming convention for each layer. The first three letters represent the data category. The fourth letter describes the graphic feature type: "P" for points, "L" for lines, and "A" for areas. For example, the **TRNL** layer contains **TRAnspotation Lines**.

The following layers have been designed, although not all are populated, for all of the counties at this time. Customers are provided with newly populated features in annual updates.

DATA CATEGORY	LAYER	DESCRIPTION
Transportation	TRNL	Transportation Lines
	ANNO	Transportation Annotation
Cultural Features	CLTP	Cultural Points
	CLTL	Cultural Lines
	CLTA	Cultural Areas
Hydrology	HYDL	Hydrology Lines
	HYDA	Hydrology Areas
Ownership Boundaries	OWNA	Ownership Areas
Political Boundaries	CSNA	County, State, National Areas
	CTYA	City Areas
Reference Boundaries	TRSA	Township Range, Section, and Rancho Areas
	ZIPA	Zip Code Areas
	CENA	Census Tract Areas (1990)
	PGBA	TBM Page & Grid
	PGDA	TBM Page only
	ASRA*	Assessor's Book Boundaries (selected counties)

Comment [rj1]:

* ASRA is an available layer but not maintained as other TBM layers.

Primary Layer — Transportation Lines

The transportation line layer (TRNL) is the primary layer in the GIS Database. Street and rail centerlines, along with additional transportation types such as ferries, tramways, and walkways make up this layer.

Within the TRNL layer, each direction of a freeway feature is digitized as a separate line. Single lines represent surface streets unless the opposing lanes of traffic are greater than 100 feet apart.

The TRNL data has enough shape points (vertices) so that it appears smooth up to a scale of 1:6,000 (1 inch equals 500 feet). At scales larger than this, the individual straight line segments that make up a curved street may be seen.

Many of the other layers in the GIS Database are partially composed of street centerlines that have been copied from the TRNL layer. These layers include city areas (CTYA), ownership areas (OWNA), Zip areas (ZIPA), and Census tract areas (CENA). This design results in excellent matching between layers, both for graphic output and analytic purposes.

Primary TRNL Attributes

The GIS Database contains detailed attributes for each graphic feature in every layer. Each layer has been defined with appropriate primary attributes. These attributes vary by layer. For example, the TRNL layer contains the following attributes:

Attribute	Values
Street type:	Freeway, highway, primary, minor, etc.
Structure:	On grade, bridge, overpass, underpass, tunnel
Status:	Open, closed, proposed, restricted
Name:	Official name from city and county government sources
Address:	Block face (left, right, low, high)
Surface:	Paved, unpaved
Direction:	One way, two way
Route:	Jurisdiction + Route No. (e.g., Interstate 210, U.S. 101, State 91)
Special route:	Special route designation + No. (e.g., State Scenic Route 1)
Graphic ID:	A unique value for every graphic throughout the GIS Database
GRPH-ABS	Unique absolute positive number value for all database features
Annotation	Complete feature class (TAT), divided by anno.subclasses.

TRNL — Transportation Lines

The TRNL layer includes transportation lines such as freeways, freeway ramps, highways, streets, alleys, dirt roads, railroads, rapid transit lines, and other miscellaneous transportation centerlines.

GIS Database Schema

The following table describes the AAT schema for TRNL, transportation lines:

ATTRIBUTE NAME	FIELD WIDTH ¹	FIELD TYPE ²	ATTRIBUTE DESCRIPTION
GRPH	4/10	B	Unique graphic ID number
GRPH-ABS	4/10	B	Absolute unique ID value for each feature
FEAT	4/10	B	(reserved)
TYPE	2/7	B	TBM transportation classification
STRU	2/7	B	Transportation structure
STAT	2/7	B	Transportation status
SURF	2/7	B	Street surface classification
DIRP	2/7	B	Directional prefix (code)
DIRPABV-ALF	3/3	C	Directional prefix abbreviation (character)
PREF	2/7	B	TBM prefix to proper name (code)
PREF-ALF	15/15	C	TBM prefix to proper name (character)
NAME-ALF	30/30	C	Proper name (character)
NAME	4/10	B	Alternate name (code)
SUFF	2/7	B	TBM suffix to proper name (code)
SUFFABV-ALF	4/4	C	TBM suffix to proper name (character)
DIRS	2/7	B	Directional suffix (code)
DIRSABV-ALF	3/3	C	Directional suffix abbreviation (character)
REGN	2/7	B	(reserved)
ADLF	4/10	B	Address left - from
ADLT	4/10	B	Address left - to
ADRF	4/10	B	Address right - from
ADRT	4/10	B	Address right - to
ADLV	8/8	C	Address left valid error

¹ Input width/Output width

² B = Binary; I = Integer; C = Character

ATTRIBUTE NAME	FIELD WIDTH ¹	FIELD TYPE ²	ATTRIBUTE DESCRIPTION
ADRV	8/8	C	Address right valid error
DRCT	1/1	I	Direction of traffic
JUR1	2/7	B	Route jurisdiction, one
RTE1-ALF	10/10	C	Route number, one
JUR2	2/7	B	Route jurisdiction, two
RTE2-ALF	10/10	C	Route number, two
JUR3	2/7	B	Route jurisdiction, three
RTE3-ALF	10/10	C	Route number, three
JRS1	2/7	B	Special route jurisdiction
SRD1-ALF	10/10	C	Special route designation number
PREFNAME-ALF	45/45	C	Prefix + name (character)
NAMEA-ALF	52/52	C	Full street name (character)
ZIPCOLEF	5/5	I	Zip code, left
ZIPCORGT	5/5	I	Zip code, right
TBMCITYL	4/10	B	TBM city name, left (code)
TBMCITYL-ALF	30/30	C	TBM city name, left (character)
TBMCITYR	4/10	B	TBM city name, right (code)
TBMCITYR-ALF	30/30	C	TBM city name, right (character)
LFIPS_CO	5/5	C	Left county FIPS code (character)
RFIPS_CO	5/5	C	Right county FIPS code (character)
TBM	12/12	C	Thomas Bros. Maps [®] copyright

Data Dictionary

The following sections describe the individual arc attributes of the Transportation (TRNL) layer:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH
Attribute Format:	Binary
Attribute Size:	4/10
Relate Table:	None
Relate Attribute:	N/A
Description:	GRPH is a unique positive numeric value for all features within the TBM Database. TBM maintains a history of all GRPH usage and assignment. GRPH values are updated when graphic edits occur. GRPH values are never re-used.
Classification:	CODE DESCRIPTION
	> 0 Unique positive numeric value

GRPH-ABS — Absolute unique Graphic ID Number

Attribute Name:	GRPH-ABS
Attribute Format:	Binary
Attribute Size:	4/10
Relate Table:	None
Relate Attribute:	N/A
Description:	GRPH-ABS is an absolute positive numeric value for every feature within the TBM database. This unique value stays with the feature regardless of graphic changes and therefore can be used as a history tracking mechanism.
Classification:	CODE DESCRIPTION
	> 0 Absolute unique positive numeric value

FEAT — (reserved)

Attribute Name:	FEAT	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute is not currently used and is reserved by TBM for future use.	
Classification:	CODE	DESCRIPTION
	N/A	N/A

TYPE — TBM Transportation Classification

Attribute Name:	TYPE	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRNL.TYPE.CODES	
Relate Attribute:	TYPE	
Description:	<p>This is a key attribute of the GIS Database Transportation Layer. TYPE classifies the transportation lines into four major categories:</p> <ol style="list-style-type: none"> 1. Street network (1000) 2. Railway network (2000) 3. Trails, Paths and Walkways (3000) 4. Miscellaneous (4000 +) <p>Within each of these major categories there are subdivisions to a level of detail suitable for most uses of the data. The following classification provides the current level of information included for this attribute.</p>	
Classification:	CODE	DESCRIPTION
	1000+	Any valid type code

STRU — Transportation Structure

Attribute Name:	STRU																
Attribute Format:	Binary																
Attribute Size:	2/7																
Relate Table:	TRNL.STRU.CODES																
Relate Attribute:	STRU																
Description:	<p>This attribute describes the physical nature of the Transportation Type. Most street, rail, and trail transportation types will be classified with code 10, GRADE. For multi-layered features, 60 series codes are used for multi-overpass arcs, and 70 series codes are used for multi-bridge arcs.</p> <p>For example, an interchange with three arcs crossing over each other would be coded 60 for grade, 62 for the top layer, and 61 for the middle arc.</p>																
Classification:	<table border="1"><thead><tr><th>Code</th><th>Description</th></tr></thead><tbody><tr><td>10</td><td>Grade (typical case)</td></tr><tr><td>21</td><td>Overpass (Single layer only)</td></tr><tr><td>23</td><td>Bridge (Single layer only)</td></tr><tr><td>32</td><td>Tunnel</td></tr><tr><td>50</td><td>Ferry</td></tr><tr><td>61 - 69</td><td>Multiple-overpass layers, from grade (61) to highest level (69)</td></tr><tr><td>71 - 79</td><td>Multiple-bridge layers, from grade (71) to highest level (79)</td></tr></tbody></table>	Code	Description	10	Grade (typical case)	21	Overpass (Single layer only)	23	Bridge (Single layer only)	32	Tunnel	50	Ferry	61 - 69	Multiple-overpass layers, from grade (61) to highest level (69)	71 - 79	Multiple-bridge layers, from grade (71) to highest level (79)
Code	Description																
10	Grade (typical case)																
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32	Tunnel																
50	Ferry																
61 - 69	Multiple-overpass layers, from grade (61) to highest level (69)																
71 - 79	Multiple-bridge layers, from grade (71) to highest level (79)																

STAT — Transportation Status

Attribute Name:	STAT	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRNL.STAT.CODES	
Relate Attribute:	STAT	
Description:	This attribute classifies the current status of transportation lines. In most cases, transportation lines will be classified as Completed (code 1).	
Classification:	CODE	DESCRIPTION
	1	Completed or Open (typical case)
	2	Proposed
	6	Under construction (during data capture)
	7	Closed
	8	Restricted
	10	Toll feature
	11	Carpool/HOV lane
	13	Top level of stacked freeway

SURF — Street Surface Classification

Attribute Name:	SURF	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRNL.SURF.CODES	
Relate Attribute:	SURF	
Description:	This attribute records the street surface classification.	
Classification:	CODE	DESCRIPTION
	10	Paved streets (default)
	20	Unpaved streets

DIRP — Directional Prefix (code)

Attribute Name:	DIRP						
Attribute Format:	Binary						
Attribute Size:	2/7						
Relate Table:	TRNL.DIRP.CODES						
Relate Attribute:	DIRP						
Description:	This attribute records the code for the cardinal direction associated with the street address. Typically included as part of the street name, this attribute is not a street prefix, for example, 125 <i>North</i> Main Street. Non-cardinal directions are regionally defined, such as Fox Island in the Seattle area.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>-90</td><td>None/Unknown/NA</td></tr><tr><td>> 1</td><td>Any valid numeric code</td></tr></tbody></table>	CODE	DESCRIPTION	-90	None/Unknown/NA	> 1	Any valid numeric code
CODE	DESCRIPTION						
-90	None/Unknown/NA						
> 1	Any valid numeric code						

DIRPABV-ALF — Directional Prefix Abbreviation (character)

Attribute Name:	DIRPABV-ALF						
Attribute Format:	Character						
Attribute Size:	3/3						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric cardinal direction associated with the street address. For a complete description of the the contents of this attribute, see the companion attribute DIRP on page 12.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid direction abbreviation</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid direction abbreviation
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid direction abbreviation						

PREF — TBM Prefix to Proper Name (code)

Attribute Name:	PREF	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRNL.PREF.CODES	
Relate Attribute:	PREF	
Description:	This attribute records the code for the TBM prefix for the proper street name.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 1	Any valid prefix name
	900	Name-alf in Pref (indexing purposes)

PREF-ALF — TBM Prefix to Proper Name (character)

Attribute Name:	PREF-ALF	
Attribute Format:	Character	
Attribute Size:	15/15	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the alpha-numeric TBM prefix for the proper street name. For a complete description of the contents of this attribute, see the companion attribute PREF on page 13.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid prefix

NAME-ALF — Proper Name (character)

Attribute Name:	NAME-ALF								
Attribute Format:	Character								
Attribute Size:	30/30								
Relate Table:	None								
Relate Attribute:	N/A								
Description:	This attribute records the proper name, minus any prefix or suffix to the name. In the case of arcs type-coded with rail in right-of-way, only the street name is entered in NAME-ALF; the railroad name is not recorded.								
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>Unknown/NA</td></tr><tr><td>*****</td><td>None</td></tr><tr><td>any alpha-numeric</td><td>Valid name</td></tr></tbody></table>	CODE	DESCRIPTION	null	Unknown/NA	*****	None	any alpha-numeric	Valid name
CODE	DESCRIPTION								
null	Unknown/NA								
*****	None								
any alpha-numeric	Valid name								

Notes: For streets with two names, see **NAME** on page 14. For numeric route information, see **JUR1** on page 21 and **RTE1-ALF** on page 22.

NAME — Alternate Name (code)

Attribute Name:	NAME				
Attribute Format:	Binary				
Attribute Size:	4/10				
Relate Table:	TRNL.ALTNAME.CODES				
Relate Attribute:	NAME				
Description:	Alternate street names use a database cross reference (a relate key) called NAME. In some situations, a street has more than one proper name (110TH ST SE is also BOSON ST).				
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>> 0</td><td>Valid ID, alternate name present (see code table; over 42,000 entries)</td></tr></tbody></table>	CODE	DESCRIPTION	> 0	Valid ID, alternate name present (see code table; over 42,000 entries)
CODE	DESCRIPTION				
> 0	Valid ID, alternate name present (see code table; over 42,000 entries)				

SUFF — TBM Suffix to Proper Name (code)

Attribute Name:	SUFF	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRNL.SUFF.CODES	
Relate Attribute:	SUFF	
Description:	This attribute records the code for the suffix to the proper street name.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 1	Any valid suff name
	900	Name-alf in SUFF (indexing purposes)

SUFFABV-ALF — TBM Suffix to Proper Name (character)

Attribute Name:	SUFFABV-ALF	
Attribute Format:	Character	
Attribute Size:	4/4	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the alpha-numeric abbreviated suffix to the proper street name. For a complete description of the contents of this attribute, see the companion attribute SUFF on page 15.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid suffix abbreviation

DIRS — Directional Suffix (code)

Attribute Name:	DIRS						
Attribute Format:	Binary						
Attribute Size:	2/7						
Relate Table:	TRNL.DIRS.CODES						
Relate Attribute:	DIRS						
Description:	This attribute records the code for the cardinal direction associated with the street address when it occurs after NAME-ALF. Typically included as part of the street name, this attribute is not a street suffix, for example, 125 Main Street <i>North</i> . Non-cardinal directions are regionally defined, such as Fox Island in the Seattle area.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>-90</td><td>None/Unknown/NA</td></tr><tr><td>> 1</td><td>Any valid numeric code</td></tr></tbody></table>	CODE	DESCRIPTION	-90	None/Unknown/NA	> 1	Any valid numeric code
CODE	DESCRIPTION						
-90	None/Unknown/NA						
> 1	Any valid numeric code						

DIRSABV-ALF — Directional Suffix Abbreviation (character)

Attribute Name:	DIRSABV-ALF						
Attribute Format:	Character						
Attribute Size:	3/3						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric cardinal direction associated with the street address when it occurs after NAME-ALF . For a complete description of the contents of this attribute, see the companion attribute DIRS on page 16.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid direction abbreviation</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid direction abbreviation
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid direction abbreviation						

REGN — (reserved)

Attribute Name:	REGN	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute is not currently used and is reserved by TBM for future use.	
Classification:	CODE	DESCRIPTION
	N/A	N/A

ADLF — Address Left- From

Attribute Name:	ADLF	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This address attribute describes the beginning address range on the left side of a street block relative to the direction of the arc.	
Classification:	CODE	DESCRIPTION
	0	None
	> 0	Valid values

ADLT — Address Left- To

Attribute Name:	ADLT						
Attribute Format:	Binary						
Attribute Size:	4/10						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This address attribute describes the ending address range on the left side of a street block relative to the direction of the arc.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>0</td><td>None</td></tr><tr><td>> 0</td><td>Valid values</td></tr></tbody></table>	CODE	DESCRIPTION	0	None	> 0	Valid values
CODE	DESCRIPTION						
0	None						
> 0	Valid values						

ADRF — Address Right- From

Attribute Name:	ADRF						
Attribute Format:	Binary						
Attribute Size:	4/10						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This address attribute describes the beginning address range on the right side of a street block relative to the direction of the arc.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>0</td><td>None</td></tr><tr><td>> 0</td><td>Valid values</td></tr></tbody></table>	CODE	DESCRIPTION	0	None	> 0	Valid values
CODE	DESCRIPTION						
0	None						
> 0	Valid values						

ADRT — Address Right - To

Attribute Name:	ADRT						
Attribute Format:	Binary						
Attribute Size:	4/10						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This address attribute describes the ending address range on the right side of a street block relative to the direction of the arc.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>0</td><td>None</td></tr><tr><td>> 0</td><td>Valid values</td></tr></tbody></table>	CODE	DESCRIPTION	0	None	> 0	Valid values
CODE	DESCRIPTION						
0	None						
> 0	Valid values						

ADLV — Address Left- Valid

Attribute Name:	ADLV																		
Attribute Format:	Binary																		
Attribute Size:	8/8																		
Relate Table:	TRNL.ADL.CODES																		
Relate Attribute:	ADL																		
Description:	This address attribute describes the characteristics of the left side of an arc. Note: arc may have more than one code.																		
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>E</td> <td>EVEN/ODD - may be on same side of street or may change mid-street.</td> </tr> <tr> <td>F</td> <td>FLIPPED - address range not in sync with arrow direction</td> </tr> <tr> <td>G</td> <td>GAP - gap in address range with adjacent arc(s)</td> </tr> <tr> <td>L</td> <td>LOW>HIGH - address from is greater than address to</td> </tr> <tr> <td>N</td> <td>NO ERROR - normal address range</td> </tr> <tr> <td>O</td> <td>OVERLAP - address range overlaps with adjacent arc(s)</td> </tr> <tr> <td>S</td> <td>SOURCE NEEDED - address range in dispute. More source needed.</td> </tr> <tr> <td>Z</td> <td>ZERO – Valid zero address for left directional arc</td> </tr> </tbody> </table>	CODE	DESCRIPTION	E	EVEN/ODD - may be on same side of street or may change mid-street.	F	FLIPPED - address range not in sync with arrow direction	G	GAP - gap in address range with adjacent arc(s)	L	LOW>HIGH - address from is greater than address to	N	NO ERROR - normal address range	O	OVERLAP - address range overlaps with adjacent arc(s)	S	SOURCE NEEDED - address range in dispute. More source needed.	Z	ZERO – Valid zero address for left directional arc
	CODE	DESCRIPTION																	
	E	EVEN/ODD - may be on same side of street or may change mid-street.																	
	F	FLIPPED - address range not in sync with arrow direction																	
	G	GAP - gap in address range with adjacent arc(s)																	
	L	LOW>HIGH - address from is greater than address to																	
	N	NO ERROR - normal address range																	
	O	OVERLAP - address range overlaps with adjacent arc(s)																	
S	SOURCE NEEDED - address range in dispute. More source needed.																		
Z	ZERO – Valid zero address for left directional arc																		

ADRV — Address Right - Valid

Attribute Name:	ADRV																		
Attribute Format:	Binary																		
Attribute Size:	8/8																		
Relate Table:	TRNL.ADL.CODES																		
Relate Attribute:	ADL																		
Description:	This address attribute describes the characteristics of the right side of an arc. Note: arc may have more than one code.																		
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>E</td><td>EVEN/ODD - may be on same side of street or may change mid-street</td></tr><tr><td>F</td><td>FLIPPED - address range not in sync with arrow direction</td></tr><tr><td>G</td><td>GAP - gap in address range with adjacent arc(s)</td></tr><tr><td>L</td><td>LOW>HIGH - address from is greater than address to</td></tr><tr><td>N</td><td>NO ERROR - normal address range</td></tr><tr><td>O</td><td>OVERLAP - address range overlaps with adjacent arc(s)</td></tr><tr><td>S</td><td>SOURCE NEEDED - address range in dispute, More source needed</td></tr><tr><td>Z</td><td>ZERO - Valid zero address for right directional arc</td></tr></tbody></table>	CODE	DESCRIPTION	E	EVEN/ODD - may be on same side of street or may change mid-street	F	FLIPPED - address range not in sync with arrow direction	G	GAP - gap in address range with adjacent arc(s)	L	LOW>HIGH - address from is greater than address to	N	NO ERROR - normal address range	O	OVERLAP - address range overlaps with adjacent arc(s)	S	SOURCE NEEDED - address range in dispute, More source needed	Z	ZERO - Valid zero address for right directional arc
CODE	DESCRIPTION																		
E	EVEN/ODD - may be on same side of street or may change mid-street																		
F	FLIPPED - address range not in sync with arrow direction																		
G	GAP - gap in address range with adjacent arc(s)																		
L	LOW>HIGH - address from is greater than address to																		
N	NO ERROR - normal address range																		
O	OVERLAP - address range overlaps with adjacent arc(s)																		
S	SOURCE NEEDED - address range in dispute, More source needed																		
Z	ZERO - Valid zero address for right directional arc																		

DRCT — Direction of Traffic

Attribute Name:	DRCT										
Attribute Format:	Integer										
Attribute Size:	1/1										
Relate Table:	TRNL.DRCT.CODES										
Relate Attribute:	DRCT										
Description:	Stores traffic flow direction relative to the system arc direction.										
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>1</td><td>Two-way</td></tr><tr><td>2</td><td>One-way, traffic with arc direction</td></tr><tr><td>3</td><td>One-way, traffic against arc direction</td></tr><tr><td>4</td><td>One-way, switchable direction</td></tr></tbody></table>	CODE	DESCRIPTION	1	Two-way	2	One-way, traffic with arc direction	3	One-way, traffic against arc direction	4	One-way, switchable direction
CODE	DESCRIPTION										
1	Two-way										
2	One-way, traffic with arc direction										
3	One-way, traffic against arc direction										
4	One-way, switchable direction										

JUR1 — Route Jurisdiction, One

Attribute Name:	JUR1																		
Attribute Format:	Binary																		
Attribute Size:	2/7																		
Relate Table:	TRNL.JUR.CODES																		
Relate Attribute:	JUR1																		
Description:	<p>Classifies the jurisdiction or ownership of a given transportation line. The term "jurisdiction" is preferred over "ownership" due to the complexities of management authority versus outright ownership.</p> <p>JUR1 is the companion attribute to RTE1-ALF, (Route Number One) and is the first of 3 pairs of JUR/RTE attributes. Attribute pairs are used sequentially (JUR1/RTE1-ALF before JUR2/RTE2-ALF). At least one JUR/RTE pair is mandatory for freeways/ highways.</p>																		
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>-90</td> <td>None/Unknown/NA</td> </tr> <tr> <td>1</td> <td>Federal</td> </tr> <tr> <td>2</td> <td>Interstate</td> </tr> <tr> <td>3</td> <td>State</td> </tr> <tr> <td>4</td> <td>County</td> </tr> <tr> <td>5</td> <td>City</td> </tr> <tr> <td>6</td> <td>Special</td> </tr> <tr> <td>7</td> <td>Private</td> </tr> </tbody> </table>	CODE	DESCRIPTION	-90	None/Unknown/NA	1	Federal	2	Interstate	3	State	4	County	5	City	6	Special	7	Private
CODE	DESCRIPTION																		
-90	None/Unknown/NA																		
1	Federal																		
2	Interstate																		
3	State																		
4	County																		
5	City																		
6	Special																		
7	Private																		

Notes: Also see **RTE1-ALF** on page 22. Attributes **JUR2** and **JUR3** are identical to JUR1, and are used in conjunction with **RTE2-ALF - RTE3-ALF**, respectively.

RTE1-ALF — Route Number, One

Attribute Name:	RTE1-ALF	
Attribute Format:	Character	
Attribute Size:	10/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	Route Number is used with the Jurisdiction attribute JUR1 to identify the route number. Examples:	
	<u>ARC</u>	<u>JUR1</u> <u>RTE1-ALF</u>
	Interstate 5	2 5
	State Route 55	3 55
	County Rte. A12	4 A12
Classification:	CODE	DESCRIPTION
	null	Unknown/NA
	*****	None
	any alpha-numeric	Valid name

Notes: On freeways, the "name" is entered into the **NAME-ALF** item (e.g., for Interstate 5 in central Los Angeles, "Golden State" would occur in **NAME-ALF**, **JUR1** would equal 2, and **RTE1-ALF** would be "5"). Also see **JUR1** on page 21.

Attributes **RTE2-ALF** - **RTE3-ALF** are identical to **RTE1-ALF**, and are used in conjunction with **JUR2** - **JUR3**, respectively.

JRS1 — Special Route Jurisdiction

Attribute Name:	JRS1	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRNL.JRS.CODES	
Relate Attribute:	JRS1	
Description:	Special route jurisdiction and/or designation classifies streets into special route categories, such as scenic and truck routes. The companion attribute is SRD1 , special route number. Together, JRS1 and SRD1 are used to symbolize special route markers on map products.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 1	Valid Special route category

SRD1-ALF — Special Route Designation Number

Attribute Name:	SRD1-ALF	
Attribute Format:	Character	
Attribute Size:	10/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	SRD1-ALF contains the alpha name for the special route number in JRS1 to establish the symbology and text used within the symbology for plotting transportation special route markers. Below are examples of two special route designations with their respective special route numbers:	
	SPECIAL ROUTE <u>JURISDICTION</u>	SPECIAL <u>ROUTE NUMBER</u>
	JRS1/SRD1: Federal Scenic Route	I-580
	JRS2/SRD2: State Alternate Route	A12
Classification:	CODE	DESCRIPTION
	null	Unknown/NA
	*****	None
	any alpha-numeric	Valid name

Notes: Also see **JRS1** on page 23.

If **JRS1** > 0, then **SRD1-ALF** may be *****. If **JRS1** ≤ 0, then **SRD1-ALF** must be null.

PREFNAME-ALF — Prefix + Name (character)

Attribute Name:	PREFNAME-ALF								
Attribute Format:	Character								
Attribute Size:	45/45								
Relate Table:	None								
Relate Attribute:	N/A								
Description:	This attribute records the alpha-numeric prefix concatenated with the street name (e.g., <i>Avenue of the Stars</i> , where <i>Avenue of the</i> is the prefix, and <i>Stars</i> is the street name).								
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>Unknown/NA</td></tr><tr><td>*****</td><td>None</td></tr><tr><td>any alpha-numeric</td><td>Valid prefix plus street name</td></tr></tbody></table>	CODE	DESCRIPTION	null	Unknown/NA	*****	None	any alpha-numeric	Valid prefix plus street name
CODE	DESCRIPTION								
null	Unknown/NA								
*****	None								
any alpha-numeric	Valid prefix plus street name								

NAMEA-ALF — Full Street Name (character)

Attribute Name:	NAMEA-ALF								
Attribute Format:	Character								
Attribute Size:	52/52								
Relate Table:	None								
Relate Attribute:	N/A								
Description:	This attribute records the full street name, including all prefixes and suffixes.								
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>Unknown/NA</td></tr><tr><td>*****</td><td>None</td></tr><tr><td>any alpha-numeric</td><td>Valid street name, with prefixes and suffixes</td></tr></tbody></table>	CODE	DESCRIPTION	null	Unknown/NA	*****	None	any alpha-numeric	Valid street name, with prefixes and suffixes
CODE	DESCRIPTION								
null	Unknown/NA								
*****	None								
any alpha-numeric	Valid street name, with prefixes and suffixes								

ZIPCOLEF — Zip Code, Left

Attribute Name:	ZIPCOLEF	
Attribute Format:	Integer	
Attribute Size:	5/5	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the 5-digit Zip code on the left side of a street block relative to the system-defined direction of the arc.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid code

ZIPCORGT — Zip Code, Right

Attribute Name:	ZIPCORGT	
Attribute Format:	Integer	
Attribute Size:	5/5	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the 5-digit Zip code on the right side of a street block relative to the system-defined direction of the arc.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid code

TBMCITYL — TBM City Name, Left (code)

Attribute Name:	TBMCITYL						
Attribute Format:	Binary						
Attribute Size:	4/10						
Relate Table:	CITY.CODES						
Relate Attribute:	TBMCITYL						
Description:	This attribute records the code for the city name on the left side of a street block relative to the system-defined direction of the arc.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>-90</td><td>None/Unknown/NA</td></tr><tr><td>> 0</td><td>Valid city code</td></tr></tbody></table>	CODE	DESCRIPTION	-90	None/Unknown/NA	> 0	Valid city code
CODE	DESCRIPTION						
-90	None/Unknown/NA						
> 0	Valid city code						

TBMCITYL-ALF — TBM City Name, Left (character)

Attribute Name:	TBMCITYL-ALF				
Attribute Format:	Character				
Attribute Size:	30/30				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	This attribute records the alpha-numeric city name on the left side of a street block relative to the system-defined direction of the arc.				
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>any alpha-numeric</td><td>Valid city name or "COUNTY"</td></tr></tbody></table>	CODE	DESCRIPTION	any alpha-numeric	Valid city name or "COUNTY"
CODE	DESCRIPTION				
any alpha-numeric	Valid city name or "COUNTY"				

TBMCITYR — TBM City Name, Right (code)

Attribute Name:	TBMCITYR	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	CITY.CODES	
Relate Attribute:	TBMCITYR	
Description:	This attribute records the code for the city name on the right side of a street block relative to the system-defined direction of the arc.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid city code

TBMCITYR-ALF — TBM City Name, Right (character)

Attribute Name:	TBMCITYR-ALF	
Attribute Format:	Character	
Attribute Size:	30/30	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the alpha-numeric city name on the right side of a street block relative to the system-defined direction of the arc.	
Classification:	CODE	DESCRIPTION
	any alpha-numeric	Valid city name or "COUNTY"

LFIPS_CO — Left County FIPS Code (character)

Attribute Name:	LFIPS_CO
Attribute Format:	Character
Attribute Size:	5/5
Relate Table:	None
Relate Attribute:	N/A
Description:	This attribute records both state and county Federal Place Designation Number (FIPS) codes for the left side of the street block relative to the system-defined direction of the arc.
Classification:	CODE DESCRIPTION
	any alpha-numeric Valid FIPS codes [ex. 06037]

RFIPS_CO — Right County FIPS Code (character)

Attribute Name:	RFIPS_CO
Attribute Format:	Character
Attribute Size:	5/5
Relate Table:	None
Relate Attribute:	N/A
Description:	This attribute records both state and county Federal Place Designation Number (FIPS) codes for the right side of the street block relative to the system-defined direction of the arc.
Classification:	CODE DESCRIPTION
	any alpha-numeric Valid FIPS codes [ex. 06037]

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM
Attribute Format:	Character
Attribute Size:	12/12
Relate Table:	None
Relate Attribute:	N/A
Description:	A Thomas Bros. Maps® copyright is added to every record for all layers. The year denotes the year the data is updated.
Classification:	CODE DESCRIPTION
	(C)200X TBM TBM copyright

CSNA — County, State, and National Areas

The CSNA layer contains polygons for county, state, and national areas. Values for counties, states, and nations are stored as numeric items that relate to appropriate code tables. The county boundaries in this layer are the external county-county, county-state, and county-nation boundaries. For internal county-city (incorporated versus unincorporated) boundaries, see the CTYA layer.

GIS Database Schema

The following table describes the PAT schema for the CSNA layer:

Attribute Name	Field Width ³	Field Type ⁴	Attribute Description
GRPH	4/10	B	Unique graphic ID number
COUNTY	4/10	B	County name (code)
COUNTYNAME-ALF	25/25	C	County name (character)
STATE	2/7	B	State name (code)
NATIONAL	2/7	B	Country name (code)
COUNTY_FIPS	2/7	B	County FIPS code (numeric)
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros. Maps copyright

Data Dictionary

The following sections describe the individual polygon attributes of the CSNA layer:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.	
Classification:	CODE	DESCRIPTION
	> 0	Unique positive numeric value

³ Input width/Output width

⁴ B = Binary; I = Integer; C = Character

COUNTY — County Name (code)

Attribute Name:	COUNTY						
Attribute Format:	Binary						
Attribute Size:	4/10						
Transaction Attr.:	Yes						
Relate Table:	COUNTY.CODES						
Relate Attribute:	COUNTY						
Description:	This attribute records a unique numeric code for every county boundary name.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>-90</td><td>None/Unknown/NA</td></tr><tr><td>> 0</td><td>Valid county codes</td></tr></tbody></table>	CODE	DESCRIPTION	-90	None/Unknown/NA	> 0	Valid county codes
CODE	DESCRIPTION						
-90	None/Unknown/NA						
> 0	Valid county codes						

COUNTYNAME-ALF — County Name (character)

Attribute Name:	COUNTYNAME-ALF				
Attribute Format:	Character				
Attribute Size:	25/25				
Relate Table:	This attribute records the alpha-numeric county name. For a complete description of the contents of this attribute, see the companion attribute COUNTY on page 30.				
Relate Attribute:	None				
Description:	N/A				
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>any alpha-numeric</td><td>Valid name</td></tr></tbody></table>	CODE	DESCRIPTION	any alpha-numeric	Valid name
CODE	DESCRIPTION				
any alpha-numeric	Valid name				

STATE — State Name (code)

Attribute Name:	STATE	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	STATE.CODES	
Relate Attribute:	STATE	
Description:	This attribute records a unique numeric code for every state name.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid state codes

NATIONAL — Country Name (code)

Attribute Name:	NATIONAL	
Attribute Format:	Binary	
Attribute Size:	2/7	
Transaction Attr.:	Yes	
Relate Table:	NATIONAL.CODES	
Relate Attribute:	NATIONAL	
Description:	This attribute records a unique numeric code for every country name.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	1	United States
	2	Mexico
	3	Canada

COUNTY_FIPS — County FIPS Code (numeric)

Attribute Name:	COUNTY_FIPS
Attribute Format:	Binary
Attribute Size:	2/7
Relate Table:	COUNTY.FIPS.CODES
Relate Attribute:	COUNTY
Description:	Records county FIPS code in numeric format.
Classification:	CODE DESCRIPTION
	> 0 Valid FIPS code

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO
Attribute Format:	Character
Attribute Size:	5/5
Relate Table:	None
Relate Attribute:	N/A
Description:	Records both state and county Federal Place Designation Number (FIPS) codes.
Classification:	CODE DESCRIPTION
	any alpha-numeric Valid FIPS codes [ex. 06037]

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM
Attribute Format:	Character
Attribute Size:	12/12
Relate Table:	None
Relate Attribute:	N/A
Description:	A Thomas Bros. Maps® copyright to every record for all layers. The year denotes the year the data is updated.
Classification:	CODE DESCRIPTION
	(C)200X TBM TBM copyright

CTYA — City Areas

The CTYA layer contains polygons for city areas. The CITY code is stored as a numeric field that relates to the code table CITY.CODES. The sources for city boundaries are individual city maps. When city boundaries are coincident with other layers, copies of the arcs are made into the city layer, to insure perfect overlays. When city boundaries are located anywhere within a street right-of-way, TBM depicts that segment of city boundary as being coincident with the street centerline. The same is true when a city boundary is defined by a water polygon.

GIS Database Schema

The following table describes the PAT schema for the CTYA layer:

Attribute Name	Field Width ⁵	Field Type ⁶	Attribute Description
GRPH	4/10	B	Unique graphic ID number
CITY	4/10	B	City name (code)
CITYNAME-ALF	30/30	C	City name (character)
JURS	4/10	B	(reserved)
CITY_FIPS	4/7	B	City FIPS code (numeric)
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros Maps copyright

Data Dictionary

The following sections describe the individual polygon attributes of the CTYA layer:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.	
Classification:	CODE	DESCRIPTION
	> 0	Unique positive numeric value

⁵ Input width/Output width

⁶ B = Binary; I = Integer; C = Character

CITY — City Name (code)

Attribute Name:	CITY						
Attribute Format:	Binary						
Attribute Size:	4/10						
Relate Table:	CITY . CODES						
Relate Attribute:	CITY						
Description:	This attribute contains a unique numeric code for every city name.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>-90</td><td>None/Unknown/NA</td></tr><tr><td>> 0</td><td>Valid code (from table)</td></tr></tbody></table>	CODE	DESCRIPTION	-90	None/Unknown/NA	> 0	Valid code (from table)
CODE	DESCRIPTION						
-90	None/Unknown/NA						
> 0	Valid code (from table)						

CITYNAME-ALF — City Name (character)

Attribute Name:	CITYNAME-ALF						
Attribute Format:	Character						
Attribute Size:	30/30						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric city name.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid city name</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid city name
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid city name						

JURS —(reserved)

Attribute Name:	JURS				
Attribute Format:	Binary				
Attribute Size:	4/10				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	This attribute is not currently used and is reserved by TBM for future use.				
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>N/A</td><td>N/A</td></tr></tbody></table>	CODE	DESCRIPTION	N/A	N/A
CODE	DESCRIPTION				
N/A	N/A				

CITY_FIPS — City FIPS Code (numeric)

Attribute Name:	CITY_FIPS	
Attribute Format:	Binary	
Attribute Size:	4/7	
Relate Table:	CITY.FIPS.CODES	
Relate Attribute:	CITY	
Description:	This attribute records the city FIPS code.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid FIPS code

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO	
Attribute Format:	Character	
Attribute Size:	5/5	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records both state and county Federal Place Designation Number (FIPS) codes for the county.	
Classification:	CODE	DESCRIPTION
	any alpha-numeric	Valid county FIPS codes [ex. 06037]

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM	
Attribute Format:	Character	
Attribute Size:	12/12	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	A Thomas Bros. Maps® copyright to every record for all layers. The year denotes the year the data is updated.	
Classification:	CODE	DESCRIPTION
	(C)200X TBM	TBM copyright

ZIPA — Zip Code Areas

The ZIPA layer contains polygons for Zip Code areas. Where Zip Code boundaries are defined by streets, water, city boundaries, or other entities, those arc segments are copied to the ZIPA layer, so that Zip Code boundaries and other layers match perfectly. The source for Zip Code boundaries is the U.S. Postal Service.

GIS Database Schema

The following table describes the PAT schema for the ZIPA layer:

Attribute Name	Field Width ⁷	Field Type ⁸	Attribute Description
GRPH	4/10	B	Unique graphic ID number
ZIPCODE	5/5	C	5-digit Zip Code
POZONE	4/10	B	(Reserved)
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros Maps copyright

Data Dictionary

The following sections describe the individual polygon attributes of the ZIPA layer:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.	
Classification:	CODE	DESCRIPTION
	> 0	Unique positive numeric value

⁷ Input width/Output width

⁸ B = Binary; I = Integer; C = Character

ZIPCODE — 5-Digit Zip Code

Attribute Name:	ZIPCODE	
Attribute Format:	Character	
Attribute Size:	5/5	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the 5-digit Zip Code.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid code

POZONE — (reserved)

Attribute Name:	POZONE	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute is not currently used and is reserved by TBM for future use.	
Classification:	CODE	DESCRIPTION
	N/A	N/A

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO	
Attribute Format:	Character	
Attribute Size:	5/5	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	Records both state and county Federal Place Designation Number (FIPS) codes for the county.	
Classification:	CODE	DESCRIPTION
	any alpha-numeric	Valid FIPS codes

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM	
Attribute Format:	Character	
Attribute Size:	12/12	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute adds a Thomas Bros. Maps® copyright to every record for all layers. The year denotes the year the data is updated.	
Classification:	CODE	DESCRIPTION
	(C)200X TBM	TBM copyright

CENA — Census Areas

The CENA layer contains polygons for census areas. The source for the information in this layer is the U.S. Bureau of the Census and appropriate county government agencies.

Where census boundaries are defined by streets, water, city boundaries, or other features, those arc segments are copied to the CENA layer, so that census tracts and other layer features match perfectly.

GIS Database Schema

The following table describes the PAT schema for the CENA layer:

Attribute Name	Field Width ⁹	Field Type ¹⁰	Attribute Description
GRPH	4/10	B	Unique graphic ID number
CENSUS	14/14	N	Census tract number
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros. Maps copyright

Data Dictionary

The following sections describe the individual polygon attributes of the CENA layer:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.	
Classification:	CODE	DESCRIPTION
	> 0	Unique positive numeric value

⁹ Input width/Output width

¹⁰ B = Binary; I = Integer; C = Character

CENSUS — Census Tract Number

Attribute Name:	CENSUS
Attribute Format:	Numeric
Attribute Size:	14/14
Relate Table:	None
Relate Attribute:	N/A
Description:	This attribute records the census tract number of the census tract polygon. Unless otherwise noted, these are 1990 boundaries.
Classification:	CODE DESCRIPTION
	> 0 Valid census tract number

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO
Attribute Format:	Character
Attribute Size:	5/5
Relate Table:	None
Relate Attribute:	N/A
Description:	Records both the state and county Federal Place Designation Number (FIPS) codes for the county.
Classification:	CODE DESCRIPTION
	any alpha-numeric Valid FIPS codes[ex. 06037]

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM
Attribute Format:	Character
Attribute Size:	12/12
Relate Table:	None
Relate Attribute:	N/A
Description:	This attribute adds a Thomas Bros. Maps® copyright to every record for all layers. The year denotes the year the data is updated.
Classification:	CODE DESCRIPTION
	(C)200X TBM TBM copyright

CLTP, CLTL, CLTA — Cultural Points, Lines, and Areas

The CLTP, CLTL, and CLTA layers contain cultural points, lines, and areas, respectively. Although these three layers share the same data dictionary, they are maintained as separate layers in the GIS Database. Please see the attribute **TYPE** on page 43 for a complete list.

Cultural Points (CLTP)

Cultural points (CLTP) are represented by a point symbol on a Thomas Bros. Map page. Points include elementary schools, libraries, post offices, hotels, motels, fire stations, and city halls.

Cultural Lines (CLTL)

Cultural lines (CLTL) are linear entities, such as piers and docks, that are too narrow to be represented as areas.

Cultural Areas (CLTA)

Cultural areas (CLTA) are polygons such as major building footprints, airport runways, and dams.

GIS Database Schema

The following table describes the respective AAT and PAT schemas for the CLTP, CLTL, AND CLTA layers:

Attribute Name	Field Width ¹¹	Field Type ¹²	Attribute Description
GRPH	4/10	B	Unique graphic ID number
TYPE	2/7	B	Cultural feature classification
STAT	2/7	B	Cultural feature status
NAME-ABV-ALF	30/30	C	Name Abbreviation (character)
NAME-ALF	60/60	C	Fully expanded name
ADNUM	4/10	B	Address number
DIRP	2/7	B	Directional prefix (code)
DIRPABV-ALF	3/3	C	Directional prefix abbreviation (character)
PREF	2/7	B	TBM Prefix to proper street name (code)
PREF-ALF	15/15	C	TBM Prefix to proper street name (character)
STNAME-ALF	30/30	C	Proper street name location
STNAME	4/10	B	(reserved)

¹¹ Input width/Output width

¹² B = Binary; I = Integer; C = Character

Attribute Name	Field Width ¹¹	Field Type ¹²	Attribute Description
SUFF	2/7	B	TBM suffix to proper street name (code)
SUFFABV-ALF	4/4	C	TBM suffix to proper street name (character)
DIRS	2/7	B	Directional suffix (code)
DIRSABV-ALF	3/3	C	Directional suffix abbreviation (character)
REGN	2/7	B	(reserved)
CITY	4/10	B	City name (code)
CITYNAME-ALF	30/30	C	City name (character)
TNUM	10/10	C	Area code and telephone number (character)
AREACODE	3/3	I	Area code (numeric)
PHONE	7/7	I	Telephone number (numeric)
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros. Maps copyright

Data Dictionary

The following sections describe the individual attributes of the cultural layers:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH				
Attribute Format:	Binary				
Attribute Size:	4/10				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.				
Classification:	<table border="0"> <tr> <td>CODE</td> <td>DESCRIPTION</td> </tr> <tr> <td>> 0</td> <td>Unique positive numeric value</td> </tr> </table>	CODE	DESCRIPTION	> 0	Unique positive numeric value
CODE	DESCRIPTION				
> 0	Unique positive numeric value				

TYPE — Cultural Feature Classification

Attribute Name:	TYPE												
Attribute Format:	Binary												
Attribute Size:	2/7												
Relate Table:	CLT.TYPE.CODES												
Relate Attribute:	TYPE												
Description:	This attribute classifies the cultural elements into TBM categories. There are three major cultural feature types: <ol style="list-style-type: none"> 1. Point features, cltp.pat (codes 1 - 199) 2. Line features, cltl.aat (codes 200 - 399) 3. Area features, clta.pat (codes > 400) 												
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>-90</td> <td>Polygon only (clta.pat): None (not a cultural feature)</td> </tr> <tr> <td></td> <td>Line only (clta.aat): Dividing lines in building footprint layer</td> </tr> <tr> <td>1 - 199</td> <td>Point Features</td> </tr> <tr> <td>200 - 399</td> <td>Line Features</td> </tr> <tr> <td>400 +</td> <td>Area Features</td> </tr> </tbody> </table>	CODE	DESCRIPTION	-90	Polygon only (clta.pat): None (not a cultural feature)		Line only (clta.aat): Dividing lines in building footprint layer	1 - 199	Point Features	200 - 399	Line Features	400 +	Area Features
CODE	DESCRIPTION												
-90	Polygon only (clta.pat): None (not a cultural feature)												
	Line only (clta.aat): Dividing lines in building footprint layer												
1 - 199	Point Features												
200 - 399	Line Features												
400 +	Area Features												

STAT — Cultural Feature Status

Attribute Name:	STAT														
Attribute Format:	Binary														
Attribute Size:	2/7														
Relate Table:	CLTA.STAT.CODES, CLTP.STAT.CODES														
Relate Attribute:	STAT														
Description:	This attribute classifies the current status of the cultural feature.														
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Unclassified</td> </tr> <tr> <td>1</td> <td>Completed or Open (default)</td> </tr> <tr> <td>2</td> <td>Proposed</td> </tr> <tr> <td>3</td> <td>Under construction</td> </tr> <tr> <td>4</td> <td>Closed</td> </tr> <tr> <td>5</td> <td>Restricted</td> </tr> </tbody> </table>	CODE	DESCRIPTION	0	Unclassified	1	Completed or Open (default)	2	Proposed	3	Under construction	4	Closed	5	Restricted
CODE	DESCRIPTION														
0	Unclassified														
1	Completed or Open (default)														
2	Proposed														
3	Under construction														
4	Closed														
5	Restricted														

NAME-ABV-ALF — Name Abbreviation (character)

Attribute Name:	NAME-ABV-ALF	
Attribute Format:	Character	
Attribute Size:	30/30	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the proper core name (e.g., RIO LINDA for Rio Linda High School).	
Classification:	CODE	DESCRIPTION
	null	Unknown/NA
	*****	None
	any alpha-numeric	Valid abbreviated feature name

NAME-ALF — Fully Expanded Name

Attribute Name:	NAME-ALF	
Attribute Format:	Character	
Attribute Size:	60/60	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the fully expanded proper name (e.g., RIO LINDA HIGH SCHOOL for Rio Linda High School).	
Classification:	CODE	DESCRIPTION
	null	Unknown/NA
	*****	None
	any alpha-numeric	Valid fully expanded feature name

ADNUM — Address Number

Attribute Name:	ADNUM	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the street address number.	
Classification:	CODE	DESCRIPTION
	0	None
	> 0	Valid values

DIRP — Directional Prefix (code)

Attribute Name:	DIRP	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRNL.DIRP.CODES	
Relate Attribute:	DIRP	
Description:	This attribute records the cardinal direction associated with the street address. For a complete description of the contents of this attribute, please see the TRNL item DIRP on page 12.	

DIRPABV-ALF — Directional Prefix Abbreviation (character)

Attribute Name:	DIRPABV-ALF						
Attribute Format:	Character						
Attribute Size:	3/3						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric cardinal direction associated with the street address. For a complete description of the the contents of this attribute, see the TRNL item DIRP on page 12.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid direction abbreviation</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid direction abbreviation
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid direction abbreviation						

PREF — TBM Prefix to Proper Street Name (code)

Attribute Name:	PREF
Attribute Format:	Binary
Attribute Size:	2/7
Relate Table:	TRNL.PREF.CODES
Relate Attribute:	PREF
Description:	This attribute records the TBM prefix for the proper street name location. For a complete description of the contents of this attribute, please see the TRNL item PREF on page 13.

PREF-ALF — TBM Prefix to Proper Street Name (character)

Attribute Name:	PREF-ALF	
Attribute Format:	Character	
Attribute Size:	15/15	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the alpha-numeric TBM prefix for the proper street name. For a complete description of the contents of this attribute, see the TRNL item PREF on page 13.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid prefix

STNAME-ALF — Proper Street Name Location

Attribute Name:	STNAME-ALF	
Attribute Format:	Character	
Attribute Size:	30/30	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the proper name of the street or location of the feature.	
Classification:	CODE	DESCRIPTION
	null	Unknown/NA
	*****	None
	any alpha-numeric	Valid name

STNAME — (reserved)

Attribute Name:	STNAME	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute is not currently used and is reserved by TBM for future use.	

SUFF — TBM Suffix to Proper Street Name (code)

Attribute Name:	SUFF
Attribute Format:	Binary
Attribute Size:	2/7
Relate Table:	TRNL.SUFF.CODES
Relate Attribute:	SUFF
Description:	This attribute records the suffix to the proper street name. For a complete description of the contents of this attribute, please see the TRNL item SUFF on page 15.

SUFFABV-ALF — TBM Suffix to Proper Street Name (character)

Attribute Name:	SUFFABV-ALF						
Attribute Format:	Character						
Attribute Size:	4/4						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric abbreviated suffix to the proper street name. For a complete description of the contents of this attribute, see the TRNL item SUFF on page 15.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid suffix abbreviation</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid suffix abbreviation
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid suffix abbreviation						

DIRS — Directional Suffix (code)

Attribute Name:	DIRS
Attribute Format:	Binary
Attribute Size:	2/7
Relate Table:	TRNL.DIRS.CODES
Relate Attribute:	DIRS
Description:	This attribute records the cardinal direction associated with the street street address when it occurs after NAME-ALF . For a complete description of the contents of this attribute, please see the TRNL item DIRS on page 16.

DIRSABV-ALF — Directional Suffix Abbreviation (character)

Attribute Name:	DIRSABV-ALF	
Attribute Format:	Character	
Attribute Size:	3/3	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the alpha-numeric cardinal direction associated with the street address when it occurs after NAME-ALF. For a complete description of the contents of this attribute, see the TRNL item DIRS on page 16.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid direction abbreviation

REGN — (reserved)

Attribute Name:	REGN	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute is currently not used and is reserved by TBM for future use.	
Classification:	CODE	DESCRIPTION
	N/A	N/A

CITY — City Name (code)

Attribute Name:	CITY	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	CITY. CODES	
Relate Attribute:	CITY	
Description:	This attribute contains a unique numeric code for every city name.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid code (from table)

CITYNAME-ALF — City Name (character)

Attribute Name:	CITYNAME-ALF	
Attribute Format:	Character	
Attribute Size:	30/30	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the alpha-numeric city name.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid city name

TNUM — Area Code and Telephone Number (character)

Attribute Name:	TNUM	
Attribute Format:	Character	
Attribute Size:	10/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute stores the telephone number for each cultural feature. The telephone number may include the area code and the telephone number. For example, (714) 863-1984 would be entered in TNUM as 7148631984.	
Classification:	CODE	DESCRIPTION
	null	-90 -90
	any alpha-numeric	Valid telephone number

AREACODE — Area Code (numeric)

Attribute Name:	AREACODE	
Attribute Format:	Integer	
Attribute Size:	3/3	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the 3-digit area code for the telephone number.	
Classification:	CODE	DESCRIPTION
	-90	Unknown/no data
	> 0	Valid area code

PHONE — Telephone Number (numeric)

Attribute Name:	PHONE	
Attribute Format:	Integer	
Attribute Size:	7/7	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the 7-digit telephone number.	
Classification:	CODE	DESCRIPTION
	-90	Unknown/no data
	> 0	Valid telephone number

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO	
Attribute Format:	Character	
Attribute Size:	5/5	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	Records both state and county Federal Place Designation Number (FIPS) codes.	
Classification:	CODE	DESCRIPTION
	any alpha-numeric	Valid FIPS codes [ex. 06037]

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM				
Attribute Format:	Character				
Attribute Size:	12/12				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	A Thomas Bros. Maps® copyright is added to every record for all layers. The year denotes the year the data is updated.				
Classification:	<table><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>(C)200X TBM</td><td>TBM copyright</td></tr></tbody></table>	CODE	DESCRIPTION	(C)200X TBM	TBM copyright
CODE	DESCRIPTION				
(C)200X TBM	TBM copyright				

HYDL, HYDA — Hydrology Lines and Areas

The HYDL and HYDA layers include hydrology lines and areas, respectively.

Hydrology Lines (HYDL)

Typically, hydrology lines are creeks, streams and rivers that are less than 100 feet wide. If a linear water entity is wider than 100 feet, it is included in the hydrology area (HYDA) layer.

In the case of linear polygon features, such as rivers, TBM has digitized centerlines, which are included in the HYDL layer, coded as centerlines.

Hydrology Areas (HYDA)

The HYDA layer includes the coastline, lakes, reservoirs, and major rivers. Also included in the HYDA layer are arcs that divide very large polygons (e.g., the Pacific Ocean) into several smaller polygons. The smaller polygons were created due to software problems encountered in manipulating very large polygons. These dividing arcs are coded as non-hydrology graphics.

GIS Database Schema

The following table describes the respective AAT and PAT schemas for the HYDA and HYDL layers:

Attribute Name	Field Width ¹³	Field Type ¹⁴	Attribute Description
GRPH	4/10	B	Unique graphic ID number
FEAT	4/10	B	(Reserved)
TYPE	2/7	B	Hydrology classification
STRU	2/7	B	Hydrology structure
STAT	2/7	B	Hydrology status
PREF	2/7	B	TBM prefix to proper name (code)
NAME-ALF	60/60	C	Proper name (character)
NAME	4/10	B	(reserved)
SUFF	2/7	B	TBM suffix to proper name (code)
DESIG	2/7	B	Special designation
NAMEA-ALF	65/65	C	Full proper name (character)
PREF-ALF	15/15	C	TBM prefix to proper name (character)
NAME1-ALF	20/20	C	Alternate name, one (character)
NAME2-ALF	20/20	C	Alternate name, two (character)
NAME3-ALF	20/20	C	Alternate name, three (character)

¹³ Input width/Output width

¹⁴ B = Binary; I = Integer; C = Character

Attribute Name	Field Width ¹³	Field Type ¹⁴	Attribute Description
NAME4-ALF	20/20	C	Alternate name, four (character)
SUFF-ALF	20/20	C	TBM suffix to proper name (character)
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros. Maps copyright

Data Dictionary

The following sections describe the individual attributes of the HYDA and HYDL layers:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.	
Classification:	CODE	DESCRIPTION
	> 0	Unique positive numeric value

FEAT — (reserved)

Attribute Name:	FEAT	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute is not currently used and is reserved by TBM for future use.	
Classification:	CODE	DESCRIPTION
	N/A	N/A

TYPE — Hydrology Classification

Attribute Name:	TYPE	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	HYDA.TYPE.CODES	
Relate Attribute:	TYPE	
Description:	This attribute classifies hydrology into categories, such as lake or canal.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 1	Any valid type name

STRU — Hydrology Structure

Attribute Name:	STRU	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	HYDA.STRU.CODE	
Relate Attribute:	STRU	
Description:	This attribute describes the physical nature of the hydrology TYPE. Most hydrology features will be classified as code 11 or 12.	
Classification:	CODE	DESCRIPTION
	-90	Non-plotting
	> 1	Valid structure numeric code

STAT — Hydrology Status

Attribute Name:	STAT	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	HYDA.STAT.CODES	
Relate Attribute:	N/A	
Description:	This attribute classifies the current status of the hydrology feature.	
Classification:	CODE	DESCRIPTION
	1	Perennial
	2	Intermittent
	3	Dry
	4	Frozen

PREF — TBM Prefix to Proper Name (code)

Attribute Name:	PREF	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	HYDA.PREF.CODES	
Relate Attribute:	PREF	
Description:	This attribute records the prefix to the proper name of the feature.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 1	Any valid prefix name

NAME-ALF — Proper Name (character)

Attribute Name:	NAME-ALF								
Attribute Format:	Character								
Attribute Size:	30/30								
Relate Table:	None								
Relate Attribute:	N/A								
Description:	This attribute records the proper name of the hydrology feature, minus any prefix or suffix to the name.								
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>Unknown/NA</td></tr><tr><td>*****</td><td>None</td></tr><tr><td>any alpha-numeric</td><td>Valid name</td></tr></tbody></table>	CODE	DESCRIPTION	null	Unknown/NA	*****	None	any alpha-numeric	Valid name
CODE	DESCRIPTION								
null	Unknown/NA								
*****	None								
any alpha-numeric	Valid name								

NAME — (reserved)

Attribute Name:	NAME				
Attribute Format:	Binary				
Attribute Size:	4/10				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	This attribute is not currently used and is reserved by TBM for future use.				
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>N/A</td><td>N/A</td></tr></tbody></table>	CODE	DESCRIPTION	N/A	N/A
CODE	DESCRIPTION				
N/A	N/A				

SUFF — TBM Suffix to Proper Name (code)

Attribute Name:	SUFF						
Attribute Format:	Binary						
Attribute Size:	2/7						
Relate Table:	HYDA.SUFF.CODES						
Relate Attribute:	SUFF						
Description:	This attribute records the suffix to the proper name of the hydrology feature.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>-90</td><td>None/Unknown/NA</td></tr><tr><td>> 1</td><td>Any valid suffix name</td></tr></tbody></table>	CODE	DESCRIPTION	-90	None/Unknown/NA	> 1	Any valid suffix name
CODE	DESCRIPTION						
-90	None/Unknown/NA						
> 1	Any valid suffix name						

DESIG — Special Designation

Attribute Name:	DESIG	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records any special designations for the hydrology feature.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	1	Wild or scenic waterways

NAMEA-ALF — Full Proper Name (character)

Attribute Name:	NAMEA-ALF	
Attribute Format:	Character	
Attribute Size:	65/65	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the full name, including all prefixes and suffixes.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid name, with prefixes and suffixes

PREF-ALF — TBM Prefix to Proper Name (character)

Attribute Name:	PREF-ALF						
Attribute Format:	Character						
Attribute Size:	15/15						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric prefix to the proper feature name. For a complete description of the contents of this attribute, see the companion attribute PREF on page 57.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid prefix</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid prefix
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid prefix						

NAME1-ALF — Reserved

Attribute Name:	NAME1-ALF						
Attribute Format:	Character						
Attribute Size:	20/20						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute is not currently used and is reserved by TBM for future use.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid alternate name</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid alternate name
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid alternate name						

Note: Attributes **NAME2-ALF**, **NAME3-ALF**, and **NAME4-ALF** are structurally identical to **NAME1-ALF** and are not currently used, but are reserved items by TBM for future use.

SUFF-ALF — TBM Suffix to Proper Name (character)

Attribute Name:	SUFF-ALF	
Attribute Format:	Character	
Attribute Size:	20/20	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the alpha-numeric suffix to the proper feature name. For a complete description of the contents of this attribute, see the companion attribute SUFF on page 58.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid suffix name

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO	
Attribute Format:	Character	
Attribute Size:	5/5	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	Records both state and county Federal Place Designation Number (FIPS) codes.	
Classification:	CODE	DESCRIPTION
	any alpha-numeric	Valid FIPS codes [ex. 06037]

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM	
Attribute Format:	Character	
Attribute Size:	12/12	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	A Thomas Bros. Maps® copyright is added to every record for all layers. The year denotes the year the data is updated.	
Classification:	CODE	DESCRIPTION
	(C)200X TBM	TBM copyright

OWNA — Ownership Boundary Areas

OWNA contains polygons for ownership areas such as military bases, forests, parks cemeteries, and administrative boundaries of colleges, airports, and shopping malls.

GIS Database Schema

The following table describes the PAT schema for the OWNA layer:

Attribute Name	Field Width ¹⁵	Field Type ¹⁶	Attribute Description
GRPH	4/10	B	Unique graphic ID number
TYPE	2/7	B	Ownership jurisdiction (code)
SUBTYPE	2/7	B	Ownership classification (code)
SUBTYPE-ALF	30/30	C	Ownership classification (character)
NAME-ABV-ALF	30/30	C	Name abbreviation (character)
NAME-ALF	60/60	C	Fully expanded ownership name
ADNUM	4/10	B	Address number
DIRP	2/7	B	Directional prefix (code)
DIRPABV-ALF	3/3	C	Directional prefix abbreviation (character)
PREF	2/7	B	TBM prefix to proper street name (code)
PREF-ALF	15/15	C	TBM prefix to proper street name (character)
STNAME-ALF	30/30	C	Proper street name location
STNAME	4/10	B	(Reserved)
SUFF	2/7	B	TBM suffix to proper street name (code)
SUFFABV-ALF	4/4	C	TBM suffix to proper street name (character)
DIRS	2/7	B	Directional suffix (code)
DIRSABV-ALF	3/3	C	Directional suffix abbreviation (character)
REGN	2/7	B	(reserved)
CITY	4/10	B	City name (code)
CITYNAME-ALF	30/30	C	City name (character)
TNUM	10/10	C	Area code and telephone number (character)
AREACODE	3/3	I	Area code (numeric)
PHONE	7/7	I	Telephone number (numeric)
NAMEA-ALF	60/60	C	Full street name (character)
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros. Maps copyright

¹⁵ Input width/Output width

¹⁶ B = Binary; I = Integer; C = Character

Data Dictionary

The following sections describe the individual polygon attributes of the OWINA layer:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH	
Attribute Format:	Binary	
Attribute Size:	4/10	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.	
Classification:	CODE	DESCRIPTION
	> 0	Unique positive numeric value

TYPE — Ownership Jurisdiction (code)

Attribute Name:	TYPE	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	OWNA.TYPE.CODES	
Relate Attribute:	TYPE	
Description:	This attribute classifies polygons into basic jurisdictions.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	1	Federal land
	2	State land
	3	County land
	4	City land
	5	Private land
	6	Special or Regional land

SUBTYPE — Ownership Classification (code)

Attribute Name:	SUBTYPE	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	OWNA.SUBTYPE.CODES	
Relate Attribute:	TYPE	
Description:	The attribute SUBTYPE is a subdivision of TYPE which classifies polygons into more detailed categories.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 1	Any valid subtype

SUBTYPE-ALF — Ownership Classification (character)

Attribute Name:	SUBTYPE-ALF	
Attribute Format:	Character	
Attribute Size:	30/30	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the alpha-numeric ownership subdivision of TYPE. For a complete description of the contents of this attribute, see the companion attribute SUBTYPE on page 64.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid ownership subtype

NAME-ABV-ALF — Name Abbreviation (character)

Attribute Name:	NAME-ABV-ALF	
Attribute Format:	Character	
Attribute Size:	30/30	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the proper core name of the ownership area (e.g., CRESTHAVEN for Cresthaven Park).	
Classification:	CODE	DESCRIPTION
	null	Unknown/NA
	*****	None
	any alpha-numeric	Valid name

NAME-ALF — Fully Expanded Ownership Name

Attribute Name:	NAME-ALF	
Attribute Format:	Character	
Attribute Size:	60/60	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the fully expanded proper name of the ownership area (e.g., CRESTHAVEN PARK for Cresthaven Park).	
Classification:	CODE	DESCRIPTION
	null	Unknown/NA
	*****	None
	any alpha-numeric	Valid name

ADNUM — Address Number

Attribute Name:	ADNUM						
Attribute Format:	Binary						
Attribute Size:	4/10						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the street address number of the feature.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>0</td><td>None/Unknown/NA</td></tr><tr><td>> 0</td><td>Valid values</td></tr></tbody></table>	CODE	DESCRIPTION	0	None/Unknown/NA	> 0	Valid values
CODE	DESCRIPTION						
0	None/Unknown/NA						
> 0	Valid values						

DIRP — Directional Prefix (code)

Attribute Name:	DIRP
Attribute Format:	Binary
Attribute Size:	2/7
Relate Table:	TRNL.DIRP.CODES
Relate Attribute:	DIRP
Description:	This attribute records the cardinal direction associated with the street address. For a complete description of the contents of this attribute, please see the TRNL item DIRP on page 12.

DIRPABV-ALF — Directional Prefix Abbreviation (character)

Attribute Name:	DIRPABV-ALF						
Attribute Format:	Character						
Attribute Size:	3/3						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric cardinal direction associated with the street address. For a complete description of the contents of this attribute, see the TRNL item DIRP on page 12.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid direction abbreviation, prefix</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid direction abbreviation, prefix
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid direction abbreviation, prefix						

PREF — TBM Prefix to Proper Street Name (code)

Attribute Name:	PREF
Attribute Format:	Binary
Attribute Size:	2/7
Relate Table:	TRNL.PREF.CODES
Relate Attribute:	PREF
Description:	This attribute records the TBM prefix for the proper street name. For a complete description of the contents of this attribute, please see the TRNL item PREF on page 13.

PREF-ALF — TBM Prefix to Proper Street Name (character)

Attribute Name:	PREF-ALF						
Attribute Format:	Character						
Attribute Size:	15/15						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric TBM prefix for the proper street name. For a complete description of the contents of this attribute, see the TRNL item PREF on page 13.						
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>null</td> <td>None/Unknown/NA</td> </tr> <tr> <td>any alpha-numeric</td> <td>Valid prefix</td> </tr> </tbody> </table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid prefix
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid prefix						

STNAME-ALF — TBM Proper Street Name Location

Attribute Name:	STNAME-ALF								
Attribute Format:	Character								
Attribute Size:	30/30								
Relate Table:	None								
Relate Attribute:	N/A								
Description:	This attribute records the proper name of the street or location of the feature.								
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>null</td> <td>Unknown/NA</td> </tr> <tr> <td>*****</td> <td>None</td> </tr> <tr> <td>any alpha-numeric</td> <td>Valid name</td> </tr> </tbody> </table>	CODE	DESCRIPTION	null	Unknown/NA	*****	None	any alpha-numeric	Valid name
CODE	DESCRIPTION								
null	Unknown/NA								
*****	None								
any alpha-numeric	Valid name								

Note: In the case of streets type-coded with rail in right-of-way, only the street name — not the railroad name — is entered in **STNAME-ALF**, see page 67.

STNAME — (reserved)

Attribute Name:	STNAME
Attribute Format:	Binary
Attribute Size:	4/10
Relate Table:	None
Relate Attribute:	N/A
Description:	This attribute is not currently used and is reserved by TBM for future use.

SUFF — Suffix to Proper Street Name (code)

Attribute Name:	SUFF
Attribute Format:	Binary
Attribute Size:	2/7
Relate Table:	TRNL.SUFF.CODES
Relate Attribute:	SUFF
Description:	This attribute records the suffix to the proper street name. For a complete description of the contents of this attribute, please see the TRNL item SUFF on page 15.

SUFFABV-ALF — Suffix to Proper Street Name (character)

Attribute Name:	SUFFABV-ALF						
Attribute Format:	Character						
Attribute Size:	4/4						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric abbreviated suffix to the proper street name. For a complete description of the contents of this attribute, see the TRNL item SUFF on page 15.						
Classification:	<table border="0"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>null</td> <td>None/Unknown/NA</td> </tr> <tr> <td>any alpha-numeric</td> <td>Valid suffix abbreviation</td> </tr> </tbody> </table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid suffix abbreviation
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid suffix abbreviation						

DIRS — Directional Suffix (code)

Attribute Name:	DIRS
Attribute Format:	Binary
Attribute Size:	2/7
Relate Table:	TRNL.DIRS.CODES
Relate Attribute:	DIRS
Description:	This attribute records the cardinal direction associated with the street address when it occurs after NAME-ALF. For a complete description of the contents of this attribute, please see the TRNL item DIRS on page 16.

DIRSABV-ALF — Directional Suffix Abbreviation (character)

Attribute Name:	DIRSABV-ALF						
Attribute Format:	Character						
Attribute Size:	3/3						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric cardinal direction associated with the street address when it occurs after NAME-ALF. For a complete description of the contents of this attribute, see the TRNL item DIRS on page 16.						
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>null</td> <td>None/Unknown/NA</td> </tr> <tr> <td>any alpha-numeric</td> <td>Valid direction abbreviation, suffix</td> </tr> </tbody> </table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid direction abbreviation, suffix
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid direction abbreviation, suffix						

REGN — (reserved)

Attribute Name:	REGN				
Attribute Format:	Binary				
Attribute Size:	2/7				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	This attribute is not currently used and is reserved by TBM for future use.				
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table>	CODE	DESCRIPTION	N/A	N/A
CODE	DESCRIPTION				
N/A	N/A				

CITY — City Name (code)

Attribute Name:	CITY						
Attribute Format:	Binary						
Attribute Size:	4/10						
Relate Table:	CITY. CODES						
Relate Attribute:	CITY						
Description:	This attribute contains a unique numeric code for every city name.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>-90</td><td>None/Unknown/NA</td></tr><tr><td>> 0</td><td>Valid code (from table)</td></tr></tbody></table>	CODE	DESCRIPTION	-90	None/Unknown/NA	> 0	Valid code (from table)
CODE	DESCRIPTION						
-90	None/Unknown/NA						
> 0	Valid code (from table)						

CITYNAME-ALF — City Name (character)

Attribute Name:	CITYNAME-ALF						
Attribute Format:	Character						
Attribute Size:	30/30						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the alpha-numeric city name.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>None/Unknown/NA</td></tr><tr><td>any alpha-numeric</td><td>Valid city name</td></tr></tbody></table>	CODE	DESCRIPTION	null	None/Unknown/NA	any alpha-numeric	Valid city name
CODE	DESCRIPTION						
null	None/Unknown/NA						
any alpha-numeric	Valid city name						

TNUM — Area Code and Telephone Number (character)

Attribute Name:	TNUM						
Attribute Format:	Character						
Attribute Size:	10/10						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute stores the area code and telephone number for each ownership area. For example, (949) 863-1984 would be entered in TNUM as 9498631984.						
Classification:	<table border="1"><thead><tr><th>CODE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>null</td><td>-90 -90</td></tr><tr><td>any alpha-numeric</td><td>Valid telephone number</td></tr></tbody></table>	CODE	DESCRIPTION	null	-90 -90	any alpha-numeric	Valid telephone number
CODE	DESCRIPTION						
null	-90 -90						
any alpha-numeric	Valid telephone number						

AREACODE — Area Code (numeric)

Attribute Name:	AREACODE	
Attribute Format:	Integer	
Attribute Size:	3/3	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute stores the 3-digit area code for the telephone number.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid area code

PHONE — Telephone Number (numeric)

Attribute Name:	PHONE	
Attribute Format:	Integer	
Attribute Size:	7/7	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the 7-digit telephone number.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	> 0	Valid telephone number

NAMEA-ALF — Full Street Name (character)

Attribute Name:	NAMEA-ALF	
Attribute Format:	Character	
Attribute Size:	60/60	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the full street name, including all prefixes and suffixes.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid street name, with prefixes and suffixes

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO
Attribute Format:	Character
Attribute Size:	5/5
Relate Table:	None
Relate Attribute:	N/A
Description:	This attribute records the Federal Place Designation Number (FIPS) codes for both state and county.
Classification:	CODE DESCRIPTION
	any alpha-numeric Valid FIPS codes [ex. 06037]

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM
Attribute Format:	Character
Attribute Size:	12/12
Relate Table:	None
Relate Attribute:	N/A
Description:	A Thomas Bros. Maps® copyright is added to every record for all layers. The year denotes the year the data is updated.
Classification:	CODE DESCRIPTION
	(C)200X TBM TBM copyright

PGBA, PGDA — TBM Page and Grid Areas

The PGBA layer contains polygons for Thomas Bros. Maps® Page and Grid® areas. The PGDA layer contains polygons for Thomas Bros. Maps® Page areas only.

GIS Database Schema

The following table describes the PAT schema for the PGBA and PGDA layers:

Attribute Name	Field Width ¹⁷	Field Type ¹⁸	Attribute Description
GRPH	4/10	B	Graphic ID number
PAGE	2/7	B	TBM Page Number
PAGEXT	1/1	C	(reserved in PGBA)
	3/3	C	Close-up pages where applicable (PGDA)
ROW	2/2	I	Grid row number
COLUMN	1/1	C	Grid column letter
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros. Maps copyright

Data Dictionary

The following sections describe the individual polygon attributes of the PGBA and PGDA layers:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH				
Attribute Format:	Binary				
Attribute Size:	4/10				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.				
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>zero</td> </tr> </tbody> </table>	CODE	DESCRIPTION	0	zero
CODE	DESCRIPTION				
0	zero				

¹⁷ Input width/Output width

¹⁸ B = Binary; I = Integer; C = Character

PAGE — TBM Page Number

Attribute Name:	PAGE	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the TBM Page value.	
Classification:	CODE	DESCRIPTION
	0	None/Unknown/NA
	> 0	Valid page number

PAGEXT — Close-up Pages

Attribute Name:	PAGEXT	
Attribute Format:	Character	
Attribute Size:	1/1 (reserved in PGBA) 3/3 (in PGDA)	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the TBM Close-up page value in counties where it is applicable. Reserved for future use in PGBA.	
Classification:	CODE	DESCRIPTION
	0	None/Unknown/NA
	> 0	Valid close-up page numbers

ROW — Grid Row Number

Attribute Name:	ROW	
Attribute Format:	Integer	
Attribute Size:	2/2 (PGBA)	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the TBM Grid row numeric value.	
Classification:	CODE	DESCRIPTION
	1 - 7	Valid row number for a TBM detail page
	1 - 11	Valid row number for a TBM arterial page.

COLUMN — Grid Column Letter

Attribute Name:	COLUMN						
Attribute Format:	Character						
Attribute Size:	1/1						
Relate Table:	None						
Relate Attribute:	N/A						
Description:	This attribute records the TBM Grid column letter value.						
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>A - H; J</td> <td>Valid column letter for TBM detail page; "I" is not used</td> </tr> <tr> <td>A - H; J - L</td> <td>Valid column letter for TBM arterial page; "I" is not used</td> </tr> </tbody> </table>	CODE	DESCRIPTION	A - H; J	Valid column letter for TBM detail page; "I" is not used	A - H; J - L	Valid column letter for TBM arterial page; "I" is not used
CODE	DESCRIPTION						
A - H; J	Valid column letter for TBM detail page; "I" is not used						
A - H; J - L	Valid column letter for TBM arterial page; "I" is not used						

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO				
Attribute Format:	Character				
Attribute Size:	5/5				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	This attribute records both state and county Federal Place Designation Number (FIPS) codes.				
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>any alpha-numeric</td> <td>Valid FIPS code [ex. 06037]</td> </tr> </tbody> </table>	CODE	DESCRIPTION	any alpha-numeric	Valid FIPS code [ex. 06037]
CODE	DESCRIPTION				
any alpha-numeric	Valid FIPS code [ex. 06037]				

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM				
Attribute Format:	Character				
Attribute Size:	12/12				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	A Thomas Bros. Maps® copyright to every record for all layers. The year denotes the year the data is updated.				
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>(C)200X TBM</td> <td>TBM copyright</td> </tr> </tbody> </table>	CODE	DESCRIPTION	(C)200X TBM	TBM copyright
CODE	DESCRIPTION				
(C)200X TBM	TBM copyright				

TRSA — Township, Range, Section, and Rancho Areas

The TRSA layer contains polygons for township, range, section, and rancho areas.

GIS Database Schema

The following table describes the PAT schema for the TRSA layer:

Attribute Name	Field Width ¹⁹	Field Type ²⁰	Attribute Description
GRPH	4/10	B	Unique graphic ID number
SECTION	2/7	B	Section
MERIDIAN	10/10	C	Baseline and meridian
TOWNSHIP	2/7	B	Township
RANGE	2/7	B	Range
LANDGRANT	2/7	B	Rancho and land grant
FIPS_CO	5/5	C	State and County FIPS code (character)
TBM	12/12	C	Thomas Bros. Maps copyright

Data Dictionary

The following sections describe the individual polygon attributes of the TRSA layer:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH				
Attribute Format:	Binary				
Attribute Size:	4/10				
Relate Table:	None				
Relate Attribute:	N/A				
Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used.				
Classification:	<table border="1"> <thead> <tr> <th>CODE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>> 0</td> <td>Unique positive numeric value</td> </tr> </tbody> </table>	CODE	DESCRIPTION	> 0	Unique positive numeric value
CODE	DESCRIPTION				
> 0	Unique positive numeric value				

¹⁹ Input width/Output width
²⁰ B = Binary; I = Integer; C = Character

SECTION — Section

Attribute Name:	SECTION	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute classifies the section number.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	>0	Valid section

MERIDIAN — Baseline and Meridian

Attribute Name:	MERIDIAN	
Attribute Format:	Character	
Attribute Size:	10/10	
Transaction Attr:	No	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records the baseline and meridian.	
Classification:	CODE	DESCRIPTION
	null	None/Unknown/NA
	any alpha-numeric	Valid baseline and meridian

TOWNSHIP — Township

Attribute Name:	TOWNSHIP	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRSA.TOWNSHIP-DIR.CODES	
Relate Attribute:	TOWNSHIP	
Description:	This attribute records the township (e.g., 1N).	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	>0	Valid township

RANGE — Range

Attribute Name:	RANGE	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRSA.RANGE-DIR.CODES	
Relate Attribute:	RANGE	
Description:	This attribute records the range (e.g., 5E).	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	>0	Valid range

LANDGRANT — Rancho and Land Grant

Attribute Name:	LANDGRANT	
Attribute Format:	Binary	
Attribute Size:	2/7	
Relate Table:	TRSA.LANDGRANT.CODES	
Relate Attribute:	LANDGRANT	
Description:	This attribute contains the name of the rancho or landgrant.	
Classification:	CODE	DESCRIPTION
	-90	None/Unknown/NA
	>0	Valid land grant

FIPS_CO — County FIPS Code (character)

Attribute Name:	FIPS_CO	
Attribute Format:	Character	
Attribute Size:	5/5	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	This attribute records both state and county Federal Place Designation Number (FIPS) codes.	
Classification:	CODE	DESCRIPTION
	any alpha-numeric	Valid FIPS code [ex. 06037]

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM	
Attribute Format:	Character	
Attribute Size:	12/12	
Relate Table:	None	
Relate Attribute:	N/A	
Description:	A Thomas Bros. Maps® copyright to every record for all layers. The year denotes the year the data is updated.	
Classification:	CODE	DESCRIPTION
	(C)200X TBM	TBM copyright

AAT — Arc Attribute Table

The AAT maintains arc attributes for the following polygon coverages in the GIS Database:

- CENA
- CLTA
- CSNA
- CTYA
- HYDA
- OWNA
- ZIPA

GIS Database Schema

The following table describes the AAT schema.

Attribute Name	Field Width ²¹	Field Type ²²	Attribute Description
GRPH	4/10	B	Unique graphic ID number
TYPE	2/7	B	Arc type
TBM	12/12	C	Thomas Bros. Maps® copyright

Clip Arcs and Item Values

Each coverage is clipped out of the GIS Database by county line. On polygon coverages, arcs are often created by the clipping process to complete a polygon. The values on the items of the arcs are zero. These arcs are not in the GIS Database, but are very necessary for the topology of the deliverable coverage to be valid. This is important to understand, especially if any processing or plotting is done with the data.

Data Dictionary

The following sections describe the individual attributes of the AAT schemas:

GRPH — Unique Graphic ID Number

Attribute Name:	GRPH
Attribute Format:	Binary
Attribute Size:	4/10
Relate Table:	None
Relate Attribute:	N/A

²¹ Input width/Output width

²² B = Binary; I = Integer; C = Character

Description:	GRPH is a unique positive numeric value within all layers of the entire GIS Database. TBM maintains a history of all GRPH usage and assignment. GRPH values remain unchanged from update to update unless a graphic change has occurred. If a graphic element is ever deleted, it is never re-used. A GRPH of 0 can be valid on the AAT of a polygon coverage if the arc was created during the clip from the GIS database.	
Classification:	CODE	DESCRIPTION
	0	No data/clipped arc
	> 0	Unique positive numeric value

TYPE — Arc Type

Attribute Name:	TYPE	
Attribute Format:	Binary	
Attribute Size:	2/7	
Transaction Attr.:	No	
Relate Table:	ARC.TYPE.CODES	
Relate Attribute:	TYPE	
Description:	This attribute classifies the arcs in polygon coverages into line types appropriate for a given layer.	
LAYER:	CODE	DESCRIPTION
all polygon layers	-90	non-printing arc, usually over hydrology area
	0	None/no data/clipped arc
CENA	1	valid printing census boundary
CLTA	-90	non-printing arcs
CSNA	1	county/county boundary
	2	county/state boundary
	3	county/state/national boundary
CTYA	-4, 4	city/city or city inside county (negative values are for system defined non-plotting purposes)
	-5, 5	city/county1/county2 (negative values are for system defined non-plotting purposes)
HYDA	See type codes for AAT and PAT on page 55.	
OWNA	-90	non-printing arcs
ZIPA	101	ZIP code/ZIP code boundary
	102	ZIP code/Postal zone boundary

TBM — Thomas Bros. Maps® Copyright

Attribute Name:	TBM
Attribute Format:	Character
Attribute Size:	12/12
Relate Table:	None
Relate Attribute:	N/A
Description:	A Thomas Bros. Maps® copyright to every record for all layers. The year denotes the year the data is updated.
Classification:	CODE DESCRIPTION
	(C)200X TBM TBM copyright

A

AAT, arc attribute table, 8
AAT, Data Dictionary, 80
 GRPH, unique graphic ID number, 80
 TBM, Thomas Bros. Maps® copyright, 82
 TYPE, arc type, 80
Attributes
 code tables, 8
 numeric codes, 8

C

CENA, census areas, 54
 CENSUS, census tract number, 55
 FIPS_CO, state and county FIPS code
 (character), 55
 GRPH, unique graphic ID number, 54
 TBM, Thomas Bros. Maps® copyright, 55
Clip Arcs
 AAT, 105
CLTP, CLTL, CLTA, cultural features, 56
 ADNUM, address number, 66
 AREACODE, area code (numeric), 72
 CITY, city name (code), 70
 CITYNAME-ALF, city name (character), 71
 DIRP, directional prefix (code), 66
 DIRPABV-ALF, directional prefix abbreviation
 (character), 67
 DIRS, directional suffix (code), 69
 DIRSABV-ALF, directional suffix abbreviation
 (character), 70
 FIPS_CO, state and county FIPS code
 (character), 72
 GRPH, unique graphic ID number, 57
 NAME-ABV-ALF, name
 abbreviation (character), 65
 NAME-ALF, fully expanded name, 65
 PHONE, telephone number (numeric), 72
 PREF, TBM prefix to proper street name
 (code), 67
 PREF-ALF, TBM prefix to proper street name
 (character), 68
 REGN, (reserved), 70
 STAT, status, 64
 STNAME (reserved), 68
 STNAME-ALF, proper street name location, 68

 SUFF, TBM suffix to proper street name
 (code), 69
 SUFFABV-ALF, TBM suffix to proper street
 name (character), 69
 TBM, Thomas Bros. Maps® copyright, 73
 TNUM, area code and telephone number,
 (character), 71
 TYPE, cultural feature classification, 58
Code Tables
 Cultural Features
 CLT.TYPE.CODES, 8
 CLTA.STAT.CODES, 8

definition of, 8
 Hydrology
 HYDA.PREF.CODES, 8
 HYDA.STAT.CODES, 8
 HYDA.STRU.CODES, 8
 HYDA.SUFF.CODES, 8
 HYDA.TYPE.CODES, 8
 Ownership boundaries
 OWNA.SUBTYPE.CODES, 8
 OWNA.TYPE.CODES, 8
 Political boundaries
 CITY.CODES, 8
 CITY.FIPS.CODES, 8
 COUNTY.CODES, 8
 COUNTY.FIPS.CODES, 8
 NATIONAL.CODES, 8
 STATE.CODES, 8
 Reference boundaries
 TRSA.LANDGRANT.CODES, 8
 TRSA.RANGE-DIR.CODES, 8
 TRSA.TOWNSHIP-DIR.CODES, 8
 ZIP.CITY.CODES, 8
 Transportation
 TRNL.ALTNAME.CODES, 8
 TRNL.DIRP.CODES, 8
 TRNL.DIRS.CODES, 8
 TRNL.DRCT.CODES, 8
 TRNL.JRS.CODES, 8
 TRNL.JUR.CODES, 8
 TRNL.PREF.CODES, 8
 TRNL.STAT.CODES, 8
 TRNL.STRU.CODES, 8
 TRNL.SUFF.CODES, 8
 TRNL.SURF.CODES, 8
 TRNL.TYPE.CODES, 8
CSNA, county state and national areas, 44
 COUNTY, county name (code), 45
 COUNTY_FIPS, County FIPS code (numeric),
 47
 COUNTYNAME-ALF, county name
 (character), 45
 FIPS_CO, state and county FIPS code
 (character), 47
 GRPH, unique graphic ID number, 44
 NATIONAL, country name (code), 46
 STATE, state name (code), 46
 TBM, Thomas Bros. Maps® copyright, 47
CTYA, city areas, 48
 CITY, city name (code), 49
 CITY_FIPS, city FIPS code (numeric), 50
 CITYNAME-ALF, city name (character), 49
 FIPS_CO, state and county FIPS code
 (character), 50
 GRPH, unique graphic ID number, 48
 JURIS, (reserved), 49
 TBM, Thomas Bros. Maps® copyright, 50

D

Data dictionary
 AAT, 105
 CENA, 54

CLTP, CLTL, CLTA, 57
 CSNA, 44
 CTYA, 48
 definition of, 7
 HYDL, HYDA, 75
 OWNA, 87
 PGBA, PGDA, 98
 TRNL, 11
 TRSA, 101
 ZIPA, 51
Digital Mapping System, 5

G

GIS Database

attributes, 7
 code tables, 8
 overview, 5
 update system, 7

H

HYDL, HYDA, hydrology features, 74
 DESIG, special designation, 83
 FEAT, (reserved), 75
 FIPS_CO, state and county FIPS code
 (character), 85
 GRPH, unique graphic ID number, 75
 NAME, (reserved), 80
 NAME1-ALF, alternate name, one (character),
 84
 NAME2-ALF, alternate name, two (character).
 See Name1-alf
 NAME3-ALF, alternate name, three
 (character). See Name1-alf
 NAME4-ALF, alternate name, four (character).
 See Name1-alf
 NAMEA-ALF, full proper name (character), 83
 NAME-ALF, proper name (character), 80
 PREF, TBM prefix to proper name (code), 79
 PREF-ALF, TBM prefix to proper name
 (character), 84
 STAT, hydrology status, 79
 STRU, hydrology structure, 78
 SUFF, TBM suffix to proper name (code), 81
 SUFF-ALF, TBM suffix to proper name
 (character), 85
 TBM, Thomas Bros. Maps® copyright, 85
 TYPE, hydrology classification, 76

L

Layers

primary attributes, 7
 list of, 6
 naming conventions, 5

O

OWNA, ownership boundary areas, 86
 ADNUM, address number, 91
 AREACODE, area code (numeric), 96

CITY, city name (code), 95
 CITYNAME-ALF, city name (character), 95
 DIRP, directional prefix (code), 91
 DIRPABV-ALF, directional prefix abbreviation
 (character), 91
 DIRS, directional suffix (code), 94
 DIRSABV-ALF, directional suffix abbreviation
 (character), 94
 FIPS_CO, state and county FIPS code
 (character), 97
 GRPH, unique graphic ID number, 87
 NAMEA-ALF, full street name (character), 96
 NAME-ABV-ALF, name abbreviation
 (character), 90
 NAME-ALF, fully expanded ownership name,
 90
 PHONE, telephone number (numeric), 96
 PREF, TBM prefix to proper street name
 (code), 92
 PREF-ALF, TBM prefix to proper street name
 (character), 92
 REGN, (reserved), 94
 STNAME, (reserved), 93
 STNAME-ALF, TBM proper street name
 location, 92
 SUBTYPE, ownership classification (code), 88
 SUBTYPE-ALF, ownership classification
 (character), 89
 SUFF, suffix to proper street name (code), 93
 SUFFABV-ALF, suffix to proper street name
 (character), 93
 TBM, Thomas Bros. Maps® copyright , 97
 TNUM, area code and telephone number,
 (character), 95
 TYPE, ownership jurisdiction (code), 87

P

PGBA, PGDA TBM page and grid areas, 98
 COLUMN, grid column letter, 100
 FIPS_CO, state and county FIPS code
 (character), 100
 GRPH, unique graphic ID number, 98
 PAGE, TBM page number, 99
 PAGEXT, close-up pages, 99
 ROW, grid row number, 99
 TBM, Thomas Bros. Maps® copyright , 100
Primary attributes, 7
Primary Layer, transportation lines, 6

R

Reserved attributes

FEAT
 HYDL, HYDA, 75
 TRNL, 12
 JURS
 CTYA, 49
 NAME
 HYDL, HYDA, 80
 PAGEXT
 PGBA, 99

POZONE
 ZIPA, 52
 REGN
 CLTP, CLTL, CLTA, 70
 OWNA, 94
 TRNL, 27
 STNAME
 CLTP, CLTL, CLTA, 68
 OWNA, 93

S

Schema

AAT, 105
 CENA, 54
 CLTP, CLTL, CLTA, 56
 CSNA, 44
 CTYA, 48
 definition of, 7
 HYDL, HYDA, 74
 OWNA, 86
 PGBA, PGDA, 98
 TRNL, 9
 TRSA, 101
 ZIPA, 51
Shape points, 6

T

TRNL, transportation lines
 ADLF, address left from, 17
 ADLT, address left to, 18
 ADRF, address right from, 18
 ADRT, address right to, 18
 ADLV, address left valid , 19
 ADRV, address right valid, 20
 DIRP, directional prefix (code), 12
 DIRPABV-ALF, directional prefix abbreviation
 (character), 12
 DIRS, directional suffix (code), 16
 DIRSABV-ALF, directional suffix abbreviation
 (character), 16
 DRCT, direction of traffic, 32
 FEAT, (reserved), 12
 GRPH, unique graphic ID number, 11
 GRPH-ABS unique absolute ID number, 11
 JRS1, special route jurisdiction, 35
 JUR1, route jurisdiction, one, 33
 JUR2, route jurisdiction, two. *See* JUR1
 JUR3, route jurisdiction, three. *See* JUR1
 LFIPS_CO, left county FIPS code, 42
 NAME, alternate name (code), 21
 NAMEA-ALF, full street name (character), 38
 NAME-ALF, proper name (character), 20
 PREF, TBM prefix to proper name (code), 17
 PREF-ALF, TBM prefix to proper name
 (character), 20
 PREFNAME-ALF, prefix + name (character),
 38
 REGN, (reserved), 27
 RFIPS_CO, right county FIPS code, 42
 RTE1-ALF, route number, one, 34

RTE2-ALF, route number, two. *See* RTE1-ALF
 ALF
 RTE3-ALF, route number, three. *See* RTE1-
 ALF
 SRD1-ALF, special route designation number,
 37
 STAT, transportation status, 15
 STRU, transportation structure, 14
 SUFF, TBM suffix to proper name (code), 21
 SUFFABV-ALF, TBM suffix to proper name
 (character), 25
 SURF, street surface classification, 15
 TBM, Thomas Bros. Maps® copyright , 43
 TBMCITYL, TBM city name, left (code), 40
 TBMCITYL-ALF, TBM city name, left
 (character), 40
 TBMCITYR, TBM city name, right (code), 41
 TBMCITYR-ALF, TBM city name, right
 (character), 41
 TYPE, transportation classification, 12
 ZIPCOLEF, ZIP code left, 39
 ZIPCORGT, ZIP code right, 39
TRNL, transportation lines, 6
TRSA, township, range, section, and rancho
 areas, 101
 FIPS_CO, county FIPS code, 103
 GRPH, unique graphic ID number, 101
 LANDGRANT, rancho and landgrant, 103
 MERIDIAN, baseline and meridian, 102
 RANGE, 103
 schema, 101
 SECTION, 102
 TBM, Thomas Bros. Maps® copyright , 104
 TOWNSHIP, 102

U

Update system, 7

V

Vertices, 6

Z

ZIPA, ZIP code areas, 51
 FIPS_CO, state and county FIPS code, 52
 GRPH, unique graphic ID number, 51
 POZONE, (reserved), 52
 TBM, Thomas Bros. Maps® copyright, 53
 ZIPCODE, 5-Digit ZIP code, 52