

Final report

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Statewide Data Themes: Transportation.Roads
Transportation.LinearReferencingSystem

Executive Summary:

During the time period of this FGDC/USGS CAP grant, the participants in the Utah Geographic Information Council (UGIC) Standards Committee have created plans for an address point data model and a modernization of its road centerline data model. Subcommittee work groups have been created to handle these respective features. Both of these data model plans include multiple participation tiers that are designed to ensure collection of the most important statewide transportation information while suggesting additional, auxiliary information and how it might be collected.

The UGIC Standards Committee is meeting monthly and it is hoped that these data models will be recommended as statewide best practices by Sept 1, 2011.

In addition, Utah has worked with UDOT to incorporate UDOT focused attributes into the statewide roads dataset to improve interagency maintenance of the data. A process to derive a GIS representation of UDOT's highway linear referencing system (LRS) has also been created. This work with UDOT has greatly improved the accuracy with which the state highway system is presented in the roads dataset and has enabled UDOT to derive and maintain LRS geometry that is in agreement with the larger roads dataset.

Utah has also developed a model data sharing agreement between state and local government. This agreement, while currently in use for parcel and PLSS monumentation, can be modified for the use of the emerging address point and road centerline datasets.

Project Narrative:

a) *Project Description:*

The original proposed project tasks are listed below:

1. Build a Utah Inter-Governmental GIS-T Workgroup
2. Refine the Utah Transportation Data Model (UTDM).
3. Define a Tiered Set of Transportation Data Exchange Options.
4. Create a Model Transportation Data Sharing Agreement.

A Utah Inter-Governmental GIS Transportation Steering Group was formed in Late Fall of 2010. The group consisted of membership from the DOT, 911 Dispatch Centers, County Government, City Government, Blue Stakes Call Center, AGRC (the state GIS office), and USGS. The group met several times, expressed satisfaction with the current state data model, the UTDM, and indicated a strong desire to develop an address point data standard as the initial task since this was uncharted territory and an emerging need.

Using the FGDC Addressing Standard (then draft) together with the limited implementation that some cities and counties had utilized to date, the group created a tiered address point data model to be included in the UTDM (Appendix A). This proposed data model was presented to a breakout session at the 2010 Utah Geographic Information Council conference, held concurrently with the ESRI Southwest User Group (SWUG), in Moab Utah. Approximately 25 attendees attended and provided feedback in this 40 minute discussion session.

The goals of the address point data model effort is to have a single geodatabase schema that would be compatible with the addressing standard of FGDC, is relevant to the addressing systems used within Utah, and to be as succinct as possible to make the data easy to use and maintain by local government.

The address model consists of a single geodatabase point feature class with eight attribute coded-value domains and three tiers of data exchange options.

1. Level 1 (4 fields): Basic needs. Designed to meet most address point needs at a state, federal, or general public level.
2. Level 2 (13 fields): Enhanced needs. Designed to include supporting information such as parsed address components and city/placename information for state, federal, or general purpose levels.
3. Level 3 (28 fields): Full dataset. Designed to support a full range of local government business needs.

Using a similar process, AGRC is working with UGIC to finalize a best practice standard for road centerlines that is expected to be approved later this summer. This best practice proposal will represent the work of the UGIC Standards Committee's subcommittee on transportation's attempt to simplify and modernize the existing UTDM. The current proposal calls for a two-tiered data exchange model with Tier 1 being required elements that are needed to satisfy state-level business requirements, such as cartography, address location, LRS, system inventory, and routing. Tier 2 represents other common attributes that local government may choose to maintain and submit if desired. The details of this proposed data model are shown in Appendix B.

The UGIC Standards Committee has consistently communicated that the emerging best practice data models are meant to be data transfer models. While it is possible to adopt these data models for an

organization's data maintenance environment, this is not required nor expected. Rather, this data model will form the foundation of the integrated state-level dataset and partnering organizations should work to ensure that data in their own structure can be mapped to the best practice standard. Appendix C shows the existing state-level data model attribute fields as columns. Within each column, the name of the field containing this information is shown for each contributing partner. While there is much similarity, there is also much diversity. The new best practice proposal needs to operate from a similar perspective but will make the desired data ingredients more clear and more usable.

b) Data content provided to The National Map:

No roads data has been provided to the National Map to date because AGRC is unaware of an active data transfer standard for delivering data to the USGS for these purposes. AGRC has discussed mapping the UTM to the USGS March 2006 Best Practices Transportation Data Model to provide to the National Map, but there seemed to be marginal USGS interest in this as a deliverable. AGRC would be willing to do this if USGS could demonstrate a business need or strategic interest in such a product. AGRC encourages the USGS to work with USDOT, the transportation steward under Circular A-16, to revisit the concept of a national road centerline data model and data models for other transportation modes. The 2006 Best Practices model was a good start to sharing transportation data on a national level.

Content of the State Geographic Information Database (SGID) has been registered on the GOS Portal and FGDC compliant metadata is included when available.

AGRC has updated many statewide transportation layers during the grant period to function effectively within a multi-scale, statewide base map scheme with standard cartographic rendering rule sets and labeling expressions. This data has been included in four published base map tile caches available as REST web services (examples: <http://atlas.utah.gov> and <http://mapserv.utah.gov/cacheviewer>). While many thematic data sets are used in these base maps, the specific transportation data layers utilized in these caches base maps include:

- SGID93.Transportation.Roads
- SGID93.Transportation.UDOTRoutes_LRS (state/federal highway and ramp system definitions)
- SGID93.Transportation.UDOTMileposts_Approx
- SGID93.Transportation.Roads_FreewayExits
- SGID93.Transportation.RoadsShieldLines (for non-duplicative highway shield labeling)
- SGID93.Transportation.Railroads
- SGID93.Transportation.BusRoutes_UTA
- SGID93.Transportation.BusStops_UTA
- SGID93.Transportation.CommuterRailRoute_UTA
- SGID93.Transportation.CommuterRailStops_UTA
- SGID93.Transportation.LightRailRoutes_UTA
- SGID93.Transportation.LightRailStops_UTA
- SGID93.Transportation.Airports
- SGID93.Recreation.SkiLifts

The more complete list of base map datasets is listed at the bottom of this page: <http://gis.utah.gov/map-services/statewide-base-map-streets-and-boundaries>. The USGS and other agencies interested in building a national spatial data infrastructure (SDI) may want to look at Utah's base map services collection and those offered worldwide by the commercial sector. Additionally, USGS could look at developing or partnering to build free, open API's that allow for basic spatial and attribute queries, re-projection, analysis of spatial relationships (containment, connectivity, adjacency, proximity), address and LRS-milepost locations, data problem notification and data download. Other web services, such as routing, are likely to be extremely useful but may be more easily accomplished nationwide by commercial vendors.

With regard to routing and similar purposes that rely on a well-connected road network, AGRC has long strived to ensure connectivity within its roads dataset. During the grant period AGRC developed a beta-level process for deriving a route-finding compatible network dataset. A link to this dataset and the process used to build it is at: <http://gis.utah.gov/sgid-transportation/draft-utah-road-network-dataset>

c) National Map Data Updates:

Updates to the Utah statewide roads dataset are made on a two month cycle at AGRC. The USGS is invited to determine its own periodicity for pulling AGRC's data releases into its national map efforts. The USGS is encouraged to look at the base map cache examples cited above and to request additional supporting documentation and map files from AGRC where interested.

d) Challenges:

AGRC's main issue during the grant period has been a scheduling backlog of data updates and a slow, but consistent, organic emergence of a state data standards and best practices adoption process through the Utah Geographic Information Council. The later is very promising due to its distributed leadership led by members of local government.

e) Data sharing:

USGS has been party to Utah's multi-organizational Geospatial Data Sharing MOU since 1997 and AGRC worked with the USGS and other data partners to extend the time period of this agreement (Appendix D). AGRC has developed a data partnering/sharing agreement with local government and is using it for parcel and PLSS monumentation data (Appendix E). It is expected that this model will be used for address point and road centerline data beginning in Fall of 2011.

Feedback on Cooperative Agreements Program

AGRC greatly appreciates the support of the USGS to enhance our statewide geospatial transportation resources. We feel that this grant funding has allowed us to take our road centerline and related datasets to the next level of performance. While our road centerline dataset was perhaps already one of the better public domain datasets available at the start of the grant period, refining our data model, our data exchange process, our data capabilities for base map cartography (similar to the original goals of TNM), and integrating DOT specific LRS route inventory and related functionality, has greatly improved the dataset. Exposure and utilization of the dataset have been greatly enhanced as a result.

State GIS programs are excellent laboratories for experimentation and development of best and suggested practices. However, until grant and other matching funds are developed and basic data standards are developed and accepted, it's unlikely that the results achieved by individual states will be efficiently woven into a common national data fabric.

Geographic data is most efficiently collected and maintained by empowering local-level efforts. AGRC envisions, in the not-so-distant future, providing a map and web services platform to local Utah governments to allow for distributed data maintenance on a shared web platform similar to other initiatives such as Open Street Maps. Encouraging local authoritative data edits and stewardship together with crowd-sourced edit suggestions seems like the best direction for transportation and other data maintenance to take. The USGS seemed interested in exploring this approach with transportation data, similar to what it has done with the National Hydrologic Dataset (NHD) and with its support for high-resolution aerial imagery. AGRC suggests USGS further consider funding mapping strategies that fit these models.

Appendix A:

Proposed Utah Address Point Data Model 0.1

Geodatabase schema diagram Proposed Utah Address Point Data Model v 0.1

Simple feature class		Geometry		Point			
AddressPoints_Proposed		Contains M values	No	Contains Z values	No		
Field name	Data type	Allow nulls	Requirement Level*	Domain	Precision	Scale	Length
OBJECTID	Object ID						
SHAPE	Geometry	Yes					
IDENTIFIER	String	Yes	1				40
ADDLABEL	String	Yes	1				100
ZIP5	String	Yes	1				5
METAMETHOD	String	Yes	1	MetaMethodDomain			30
ADDNBR	String	Yes	2				10
PRE_DIR	String	Yes	2	DirectionalDomain			1
STREETNAME	String	Yes	2				30
STREETTYPE	String	Yes	2	StreetTypeDomain			4
SUF_DIR	String	Yes	2	DirectionalDomain			1
ADDTYPE	String	Yes	2	AddressType			1
INCORP_CITY	String	Yes	2	IncorporatedCitiesDomain			30
USPS_CITY	String	Yes	2				30
METAUPDATE	String	Yes	2				50
ADDSTATUS	String	Yes	3				1
ALIASNAME	String	Yes	3				30
ALIASTYPE	String	Yes	3	StreetTypeDomain			4
ALIASSUFDIR	String	Yes	3	DirectionalDomain			1
UNITNBR	String	Yes	3				20
COMPLEXNAME	String	Yes	3				50
INFORMAL_CITY	String	Yes	3				30
ACGSNAME	String	Yes	3				50
ZIP4	String	Yes	3				4
LANDMARKNAME	String	Yes	3				50
LANDMARKTYPE	String	Yes	3				20
STRUCTTYPE	String	Yes	3	Needs Domain!			50
USECLASS	String	Yes	3	UseClassDomain			50
METASRC	String	Yes	3				100
NOTES	String	Yes	3				200

Address Point Table to store locations of known addressable features and common place points

- Unique identifier. Must be unique statewide. GUID recommended
- Shortest concatenation of required address elements
- First 5 digits of zip code
- Metadata, Method and Accuracy
- House number portion of address
- Prefix direction
- Street name
- Street type (for non-numeric street names only)
- Suffix direction (for numeric street names only)
- Type of Address
- Incorporated city name, where address is with incorporated city boundaries
- US Postal Service preferred or allowable placename for address
- Last Updated
- Status of Address
- Alias street name
- Alias street type (for non-numeric street names only)
- Alias suffix direction (for numeric street names only)
- Unit, apartment, or suite sub-address number per USPS Standards
- Complex name or area name for apartments, business parks, etc
- Unincorporated placename, ex. Brighton, Emigration Cyn, Notom, Magna, Crescent Jct
- Address Coordinate Grid System name ex. Salt Lake, Provo, Orem, Sanpete County
- Last 4 digits of zip code
- Landmark or common place name
- Type of Landmark or common place
- Type of Structure
- General property usage classification
- Organization providing data and dataset specifics
- Notes, Comments

* Requirement Level indicated level of participation in Address Point Data Gathering, Local government can opt to maintain data at one of the following levels:
 1 = Basic, designed to meet most address point needs at a state, federal, or general public level
 2 = Enhanced, designed to include supporting information for state, federal, or general purpose levels
 3 = Full, designed for full range of local government business needs

Geodatabase D:\2010Projects\Broadband\UtahAddressDataModel.gdb
 Date generated Tuesday, April 20, 2010

Appendix A (continued)

Proposed Utah Address Point Data Model 0.1

Coded value domain
AddressType
Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
B	Building
C	Complex
U	Unit
I	Intersection
E	Entrance
P	Parcel
O	Other

Coded value domain
CommonPlaceTypeDomain
Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

(PARTIAL, NOT COMPLETE)

Code	Description
Airport	Business
Park	Park
School	School

Coded value domain
DirectionalDomain
Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
N	North
S	South
E	East
W	West

Coded value domain
MetaMethodDomain
Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
FC	Field Collected, GPS
PC	Derived From Parcel Centroid
CS	Crowd Sourced
BF	Derived From Building Footprint
GC	Derived From Geocoding a Known Address
O	Other
MP	Manual Placement Using Imagery

Coded value domain
StatusDomain
Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
P	Proposed
A	Active
R	Retired
C	Construction in Progress

Coded value domain
StreetTypeDomain
Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
ALY	Alley
AVE	Avenue
BLVD	Boulevard
CIR	Circle
CT	Court
CV	Cove
DR	Drive
EST	Estate
ESTS	Estates
EXPY	Expressway
FWY	Freeway
HWY	Highway
HOLW	Hollow
JCT	Junction
LN	Lane
LOOP	Loop
PKWY	Parkway
PL	Place
PLZ	Plaza
PT	Point
RAMP	Ramp
RNCH	Ranch
RD	Road
RTE	Route
RUN	Run
RW	Row
SQ	Square
ST	Street
TER	Terrace
TRL	Trail
WAY	Way
HTS	Highlights
CDR	Corner

Coded value domain
UseClassDomain
Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
APT	Apartment
BUS	Business/Commercial
CONDO	Condominium
DX	Duplex
PX	Triplex or OtherPlex
ED	Education
SH	Senior/Elderly Housing/Assisted Living
GOV	Government
LAND	Vacant/Unbuilt Lot
MED	Medical
MH	Mobile Home
OTHER	Other
REL	Religious
SF	Single Family
TH	Townhome

Coded value domain
IncorporatedCitiesDomain
Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
Alpine	Alpine
Alta	Alta
Altamont	Altamont
Alton	Alton
Amalgia	Amalgia
American Fork	American Fork
Annabella	Annabella
Antimony	Antimony
Apple Valley	Apple Valley
Aurora	Aurora
Ballard	Ballard
Bear River City	Bear River City
Beaver	Beaver
Bicknell	Bicknell
Big Water	Big Water
Blanding	Blanding
Bluffdale	Bluffdale
Boulder	Boulder
Bountiful	Bountiful
Brian Head	Brian Head
Brigham City	Brigham City
Bryce Canyon	Bryce Canyon
Cannonville	Cannonville
Castle Dale	Castle Dale
Castle Valley	Castle Valley
Cedar City	Cedar City
Cedar Fort	Cedar Fort
Cedar Hills	Cedar Hills
Centerfield	Centerfield
Centerville	Centerville
Central Valley	Central Valley
Charleston	Charleston
Circleville	Circleville
Clarkston	Clarkston
Clawson	Clawson
Clearfield	Clearfield
Cleveland	Cleveland
Clinton	Clinton
Coalville	Coalville
Corinne	Corinne
Cornish	Cornish
Cottonwood Heights	Cottonwood Heights
Daniel	Daniel
Delta	Delta
Deweyville	Deweyville
Draper	Draper
Duchesne	Duchesne
Eagle Mountain	Eagle Mountain
East Carbon	East Carbon
Elk Ridge	Elk Ridge
Elmo	Elmo
Elsinore	Elsinore
Elwood	Elwood
Emery	Emery
Enoch	Enoch
Enterprise	Enterprise
Ephraim	Ephraim
Escalante	Escalante

Appendix B:

Proposed Revised Utah Transportation Data Model 2.0

Geodatabase Schema Diagram:
Statewide Roads Data Model Standard (Proposed)

Simple feature class				Geometry Polyline				
Statewide Roads Standard for Utah (Proposed)				Contains M values No			Contains Z values No	
Field name	Data type	Allow nulls	Tier Level	Domain	Precision	Scale	Length	
OBJECTID	Object ID							
SHAPE	Geometry	Yes						
ADDR_SYS	String	Yes	1				50	Address System Name
CARTOCODE	String	Yes	1	CARTOCODEDomain			3	Cartographic Code
FULLNAME	String	Yes	1				50	Full Street Name
L_F_ADD	Double	Yes	1		0	0		Left From Address
L_T_ADD	Double	Yes	1		0	0		Left To Address
R_F_ADD	Double	Yes	1		0	0		Right From Address
R_T_ADD	Double	Yes	1		0	0		Right To Address
PREDIR	String	Yes	1	DIRECTIONALDomain			1	Prefix Directional
STREETNAME	String	Yes	1				30	Primary Street Name
STREETTYPE	String	Yes	1	STREETTYPEDomain			4	Primary Street Type
SUFDIR	String	Yes	1	DIRECTIONALDomain			1	Suffix Directional
ALIAS1	String	Yes	1				30	Alias1 Street Name
ALIAS1TYPE	String	Yes	1	STREETTYPEDomain			4	Alias1 Street Type
ALIAS2	String	Yes	1				30	Alias2 Street Name
ALIAS2TYPE	String	Yes	1	STREETTYPEDomain			4	Alias2 Street Type
ACSALIAS	String	Yes	1				8	Address Coordinate Street (Full)
ACSNAME	String	Yes	1				6	Address Coordinate Street Name
ACSSUF	String	Yes	1	DIRECTIONALDomain			1	Address Coordinate Street Suffix
ADDR_QUAD	String	Yes	1	ADDRQUADDomain			2	Address Quadrant
USPS_PLACE	String	Yes	1				30	USPS Preferred Place Name
ZIPLEFT	String	Yes	1				5	Left Zip Code
ZIPRIGHT	String	Yes	1				5	Right Zip Code
COFIPS	String	Yes	1	COFIPSDomain			5	County FIPS Code
ONEWAY	String	Yes	1	ONEWAYDomain			1	One Way Direction
SPEED	Short integer	Yes	1	SPEEDDomain	0			Approximate Speed Limit
VERTLEVEL	String	Yes	1				1	Vertical Elevation
CLASS	String	Yes	2	CLASSDomain			3	Road Classification
HWYNAME	String	Yes	1				10	Highway Abbreviation Name
DOT_RTNAME	String	Yes	1				11	UDOT Route Name
DOT_RTPART	String	Yes	1				3	UDOT Route Part
DOT_F_MILE	Double	Yes	1		0	0		UDOT From Milepost
DOT_T_MILE	Double	Yes	1		0	0		UDOT To Milepost
MODIFYDATE	Date	Yes	1		0	0	8	Date Last Modified
GLOBALID		No	1		0	0	38	Global Identifier
COLLDATE	Date	Yes	2		0	0	8	Feature Collection Date
ACCURACY	String	Yes	2	ACCURACYDomain			2	Accuracy Statement
SOURCE	String	Yes	2				30	Entity Source
NOTES	String	Yes	2				50	Notes
COUNIQUE	String	Yes	2				30	County Identifier
SURFTYPE	String	Yes	2	SURFTYPEDomain			30	Road Surface Type
SURFWIDTH	Short integer	Yes	2		0			Road Surface Width
DSTRBWIDTH	Short integer	Yes	2		0			Road Disturbance Width
LOCALFUNC	String	Yes	2	LOCALFUNCDomain			2	Local Function
MAINTJURIS	String	Yes	2	MAINTJURISDomain			10	Maintenance Jurisdiction
FED_RDID	String	Yes	2				30	Federal Road ID
STATUS	String	Yes	2	STATUSDomain			1	Road Status
ACCESS	String	Yes	1	ACCESSDomain			15	Access Restrictions
USAGENOTES	String	Yes	2				100	Usage Notes
DOT_RTID	Long integer	Yes	1		0			UDOT Route ID
DOT_FUNC	String	Yes	1	DOTFUNCDomain			2	UDOT Function
DOT_COFUND	String	Yes	1	COFIPSDomain			5	UDOT Funded County
LOCALID	String	No	2				38	Local Unique Identifier
SHAPE_Length	Double	Yes			0	0		

Utah road centerline data is used for address location, cartography, and routing. Data is contributed regularly from local, county, state, and tribal governments and is aggregated and improved by the AGRC.

Tier Level 1: Address Location, Cartography, Routing

Tier Level 2: Local Agency Maintenance and Inventory

Appendix B (continued):

Proposed Revised Utah Transportation Data Model 2.0
Tier Level 1: Coded Value Domains

Coded value domain
CARTOCODEDomain

Description
Field type String
Split policy Default value
Merge policy Default value

Code	Description
1	1 - Interstates
2	2 - US Highways, Separated
3	3 - US Highways, Unseparated
4	4 - Major State Highways, Separated
5	5 - Major State Highways, Unseparated
6	6 - Other State Highways (Institutional)
7	7 - Ramps, Collectors
8	8 - Major Local Roads, Paved
9	9 - Major Local Roads, Not Paved
10	10 - Other Federal Aid Eligible Local Roads
11	11 - Other Local, Neighborhood, Rural Roads
12	12 - Other
13	13 - Non-road feature

Coded value domain
DIRECTIONALDomain

Description
Field type String
Split policy Default value
Merge policy Default value

Code	Description
N	North
S	South
E	East
W	West

Coded value domain
ADDRQUADDomain

Description
Field type String
Split policy Default value
Merge policy Default value

Code	Description
NE	Northeast
NW	Northwest
SE	Southeast
SW	Southwest

Coded value domain
STREETTYPEDomain

Description
Field type String
Split policy Default value
Merge policy Default value

Code	Description
ALY	Alley
AVE	Avenue
BLVD	Boulevard
CYN	Canyon
CIR	Circle
COR	Corner
CT	Court
CV	Cove
XING	Crossing
DR	Drive
EST	Estate
ESTS	Estates
EXPY	Expressway
FRK	Fork
FWY	Freeway
HTS	Heights
HWY	Highway
HL	Hill
HOLW	Hollow
JCT	Junction
LN	Lane
LOOP	Loop
PKWY	Parkway
PASS	Pass
PL	Place
PLZ	Plaza
PT	Point
RAMP	Ramp
RNCH	Ranch
RDG	Ridge
RD	Road
RTE	Route
ROW	Row
RUN	Run
SQ	Square
ST	Street
TER	Terrace
TRL	Trail
VLG	Village
WAY	Way

Coded value domain
ONEWAYDomain

Description
Field type String
Split policy Default value
Merge policy Default value

Code	Description
0	0 - Two way
1	1 - One way - Direction of Arc
2	2 - One way - Opposite Direction of Arc

Appendix B (continued):

Proposed Revised Utah Transportation Data Model 2.0

Tier Level 1: Coded Value Domains

Coded value domain	
COFIPSDomain	
Description	
Field type	String
Split policy	Default value
Merge policy	Default value
Code	Description
49001	49001 - Beaver
49003	49003 - Box Elder
49005	49005 - Cache
49007	49007 - Carbon
49009	49009 - Daggett
49011	49011 - Davis
49013	49013 - Duchesne
49015	49015 - Emery
49017	49017 - Garfield
49019	49019 - Grand
49021	49021 - Iron
49023	49023 - Juab
49025	49025 - Kane
49027	49027 - Millard
49029	49029 - Morgan
49031	49031 - Plute
49033	49033 - Rich
49035	49035 - Salt Lake
49037	49037 - San Juan
49039	49039 - Sanpete
49041	49041 - Sevier
49043	49043 - Summit
49045	49045 - Tooele
49047	49047 - Uintah
49049	49049 - Utah
49051	49051 - Wasatch
49053	49053 - Washington
49055	49055 - Wayne
49057	49057 - Weber
16031	16031 - Cassia
04015	04015 - Mohave
56041	56041 - Uinta

Coded value domain	
SPEEDDomain	
Description	
Field type	Short integer
Split policy	Default value
Merge policy	Default value
Code	Description
0	0
5	5
10	10
15	15
20	20
25	25
30	30
35	35
40	40
45	45
50	50
55	55
60	60
65	65
70	70
75	75
80	80

Appendix B (continued):

Proposed Revised Utah Transportation Data Model 2.0

Tier Level 2: Coded Value Domains

Coded value domain
MAINTJURISDomain

Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
BIA	BIA - Bureau of Indian Affairs
BLM	BLM - Bureau of Land Management
DNR	DNR - Department of Natural Resources
DOD	DOD - Department of Defense
NPS	NPS - National Park Service
TRIBAL	TRIBAL - Native American Sovereign Nation
USFW	USFW - United States Fish & Wildlife Service
USFS	USFS - United States Forest Service

Coded value domain
STATUSDomain

Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
A	A - Active
P	P - Proposed
R	R - Retired

Coded value domain
ACCURACYDomain

Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
1	1 - COGO centimeter accuracy
2	2 - COGO, adjusted to fit
3	3 - GPS, mapping grade, accur < 1.5 m
4	4 - GPS, no post-process (address geocode project)
5	5 - Digitized, digital orthophoto
6	6 - Digitized, rectified aerial photo
7	7 - Digitized, digital orthophoto, adjusted to fit
8	8 - Digitized, aerial photo (other)
9	9 - Digitized, CAD drawing on vellum
10	10 - Digitized, scaled CAD drawing on paper
11	11 - Digitized, USGS quadrangle map
12	12 - Other
13	13- Precision information unavailable

Coded value domain
LOCALFUNCDomain

Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
1	1 - Arterial
2	2 - Collector
3	3 - Local
4	4 - Roundabout
5	5 - Resource or special use
6	6 - Trail

Coded value domain
CLASSDomain

Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
A	A - Federal or State maintained
B	B - County maintained
C	C - City maintained
D	D - County, Other
X	X - Private or Restricted

Coded value domain
ACCESSDomain

Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
A	A - Authorized only
F	F - 4WD and/or high clearance may be required
G	G - Gated
S	S - Seasonal
T	T - Tunnel

Coded value domain
DOTFUNCDomain

Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
1	1 - Interstate
2	2 - Expressway
3	3 - Principal Arterial
4	4 - Minor Arterial
5	5 - Major Collector
6	6 - Minor Collector
7	7 - Local

Coded value domain
SURFTYPEDomain

Description
Field type *String*
Split policy *Default value*
Merge policy *Default value*

Code	Description
100	100 - PAVED
200	200 - IMPROVED
300	300 - DIRT
999	999 - OTHER, UNDEFINED

Appendix C:

Mapping of County Road Data Models To UTM

	Highway Name	Full Street Name	Street Name	Street Type	Prefix	Quad Prefix	Suffix
Statewide:							
AGRC (UTDM)	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE_DIR	QUAD_PRE	SUF_DIR
Counties:							
Beaver	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE_DIR		SUF_DIR
Box Elder	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE_DIR		SUF_DIR
Cache			street (includes suffix)	type	pre_dir		
Carbon	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE_DIR		SUF_DIR
Daggett	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE_DIR	QUAD_PRE	SUF_DIR
Davis		street_ful (pre, name, type or sur)	st_name (name + type or sur)	street_typ	prefix_dir		post_dir
Duchesne	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE_DIR	QUAD_PRE	SUF_DIR
Emery	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE_DIR		SUF_DIR
Garfield	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE_DIR	QUAD_PRE	SUF_DIR
Grand	ALT_NAME		S_NAME, ROAD_NAME, STREETNAME	STREETTYPE	PREDIR		
Iron	ALT_NAME	LABEL, LABEL1	S_NAME	S_TYPE	PRE_DIR		SUF_DIR
Juab			Street_Nam	Type	Pre Dir		Suf Dir
Kane		LABEL	S_NAME	S_TYPE	PRE_DIR		
Millard		STREET (pre, name, type, sur)	S_NAME (includes suffix)	TYPE	PRE DIR		
Morgan	ALT_NAME	LABEL (pre, name, type, sur)	S_NAME	S_TYPE	PRE DIR		SUF DIR, SUFDIR_911
Plute	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE DIR	QUAD_PRE	SUF DIR
Rich	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE DIR		SUF DIR
Salt Lake	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE DIR		SUF DIR
San Juan	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE DIR	QUAD_PRE	SUF DIR
Sanpete	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE DIR	QUAD_PRE	SUF DIR
Sevier	ALT_NAME		S_NAME	S_TYPE	PRE DIR	QUAD_PRE	SUF DIR
Summit			NAME	SUFF TYPE	PRE DIR		SUFF DIR
Tooele		S_NAME (includes type)	NAME_ADD	TYPE	PRE DIR		SUF DIR
Uintah		LABEL, street (pre, name, type, sur)	S_NAME (includes suffix)	S_TYPE	PRE DIR		SUF DIR
Utah		STREET (name, type, sur)	STREET_NAM	STREET_TYP	PRE DIR		
VECC (10 City 911)	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE DIR		SUF DIR
Wasatch	HIGHWAY NU (# only)	LABEL	S_NAME	S_TYPE	PRE DIR		SUF DIR
Washington	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE DIR	QUAD_PRE	SUF DIR
Wayne	ALT_NAME	LABEL	S_NAME	S_TYPE	PRE DIR	QUAD_PRE	SUF DIR
Weber		STREET_LAB (for Spillman?)	STREET (includes suffix)	STREETTYPE	PREDIR		SUFDIR

	Quad Suffix	Alias1	Alias1 Type	Alias2	Alias2 Type	Coordinate Street (Full)	Coordinate Street Name
Statewide:							
AGRC (UTDM)	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Counties:							
Beaver		ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Box Elder		ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Cache		alias (prefix, alias, suffix)					
Carbon		ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	
Daggett	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Davis		alias (prefix, alias, suffix)					
Duchesne	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Emery		ALIAS1 (ALIAS1 + TYPE)		ALIAS2 (ALIAS2 + TYPE)		ACS_ALIAS	
Garfield	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Grand							
Iron		ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	
Juab							
Kane	QUAD_SUF	SPALIAS1 (for Spillman?)		SPALIAS2 (for Spillman?)		LOCATION	
Millard							
Morgan		ALIAS1	ALIAS1_TYP			ACS_ALIAS	
Plute	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Rich		ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Salt Lake		ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	
San Juan	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Sanpete	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Sevier	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Summit		ALTNAME (includes type)					
Tooele		ALT_NAME (includes type)					
Uintah		ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP		
Utah		ALT_NAME	ALT_TYP	ALT_NAME2	ALT_TYP2		
VECC (10 City 911)		ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_STREET
Wasatch							ACS_STREET
Washington	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Wayne	QUAD_SUF	ALIAS1	ALIAS1_TYP	ALIAS2	ALIAS2_TYP	ACS_ALIAS	ACS_NAME
Weber		ALIAS				ACS_ALIAS	

Appendix C (continued):

Mapping of County Road Data Models To UTDM

	Coordinate Street Type	Left From Address	Left To Address	Right From Address	Right To Address	Zip Code Left	Zip Code Right
Statewide:							
AGRC (UTDM)	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Counties:							
Beaver	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Box Elder	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Cache		fal	lal	far	lar		
Carbon		L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD		
Daggett	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Davis		left from	left to ad	right from	right to a	zip left	zip right
Duchesne	ACS_SUF	ACS_SUF	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Emery		L_F_ADD	L_T_ADD	R_T_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Garfield	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Grand		FRADDL	TOADDL	FRADOR	TOADOR		
Iron		L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT, LZIP	ZIP_RIGHT, RZIP
Juab		Left From	Left To	Right From	Right To		
Kane		L_F_ADD	L_TO_ADD	R_F_ADD	R_T_ADD		
Millard		L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD		
Morgan		L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Plute	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT, LZIP	ZIP_RIGHT, RZIP
Rich	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Salt Lake		L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
San Juan	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Sanpete	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Sevier	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Summit		FROM_LEFT	TO_LEFT	FROM_RIGHT	TO_RIGHT	ZIP	
Tooele		ZIPCODE					
Uintah		fromleft	toleft	fromright	toright	Lzip	Rzip
Utah		L_ADD_FROM	L_ADD_TO	R_ADD_FROM	R_ADD_TO	ZIPL, ZIP_LEFT	ZIPR, ZIP_RIGHT
VECC (10 City 911)	ACS_SUFDIR	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	L_ZIP	R_ZIP
Wasatch	ACS_SUFDIR	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD		
Washington	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Wayne	ACS_SUF	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	ZIP_LEFT	ZIP_RIGHT
Weber		LEFTFROM	LEFTO	RIGHTFROM	RIGHTO	LEFTZONE	RIGHTZONE

	Address Coord. System	City	Census Feature Code	Speed Limit	One Way Direction	Date of Collection	Accuracy Statement
Statewide:							
AGRC (UTDM)	ADDRESS_SYS	CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Counties:							
Beaver			CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Box Elder			CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Cache							
Carbon		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Daggett		CITY	CFCC, CFCC2	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Davis				mph			
Duchesne		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Emery		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Garfield		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Grand						DATE_COL, S_DATE	S_ACCUR
Iron		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Juab						GPS_DATE	
Kane							
Millard		COMMUNITY_BOUNDARY					
Morgan		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Plute	GRID	CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Rich	ADDRESS_SYS	CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Salt Lake		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
San Juan		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Sanpete		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Sevier	GRID	CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Summit		CITY				DATEADDED	
Tooele						S_DATE	S_ACCUR
Uintah		CITY		SPD_LMT		GPS_DATE	S_ACCUR
Utah		CITY	CFCC				
VECC (10 City 911)			CFCC	SPEED_LIMIT	ONE_WAY	S_DATE	S_ACCUR
Wasatch							
Washington		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Wayne		CITY	CFCC	SPD_LMT	ONE_WAY	S_DATE	S_ACCUR
Weber	GRID	CITY, CITY_NAME	CFCC	SPEEDLIMIT		S_DATE	S_ACCUR

Appendix C (continued):

Mapping of County Road Data Models To UTDM

	County FIPS Code	Entity Source	Notes	County Identifier	Road Classification	Surface Type (Text)	Surface Type (Integer)
Statewide:							
AGRC (UTDM)	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Counties:							
Beaver	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Box Elder	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Cache						paved	
Carbon		SOURCE	NOTES	CO_ROUTE, CO_ROUTE D	CLASS	S_SURF2	S_SURF (double)
Daggett	S_FIPS	SOURCE	NOTES, NOTES2	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Davis						surface ty	
Duchesne	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Emery	S_FIPS	SOURCE		CO_UNIQUE	CLASS	S_SURF2 (unused)	S_SURF
Garfield	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Grand	CO_FIPS, S_FIPS			CO_UNIQUE2, S_UNIQUE	CLASS	SURFNAME	SURFACE, S_SURF
Iron	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS, CLASS B	S_SURF2, ROAD TYPE	S_SURF
Juab			COMMENT			Surface Ty	
Kane	S_FIPS		NOTES	CO_UNIQUE			S_SURF
Millard							
Morgan	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Plute	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Rich	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Salt Lake	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
San Juan	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Sanpete	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Sevier	S_FIPS	SOURCE	NOTE	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Summit							
Tooele	S_FIPS		NOTE	S_UNIQUE	CLASS		S_SURF
Uintah			MNOTES	CO_UNIQUE			S_SURF
Utah	S_FIPS, COUNTY			CO_UNIQUE	CLASS	SURFACE, S_SURF	
VECC (10 City 911)		SOURCE	COMMENTS & VECCCOM.	UNIQUE_ID (GLOBAL)			S_SURF
Wasatch	S_FIPS						
Washington	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Wayne	S_FIPS	SOURCE	NOTES	CO_UNIQUE	CLASS	S_SURF2	S_SURF
Weber	COUNTY			S_UNIQUE			S_SURF

	Surface Width	Disturbance Width	Jurisdiction	Jurisdiction Left	Jurisdiction Right	Function	Agency Function	Access	Usage
Statewide:									
AGRC (UTDM)	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Counties:									
Beaver	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Box Elder	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Cache			owner						
Carbon	S_SURFWIDTH	S_WIDTH	S_JURIS			S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Daggett	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Davis						func type	STREET_CAT		
Duchesne	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Emery	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Garfield	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Grand	S_SURFWIDTH	S_WIDTH	JURISDICTN, S_JURIS			FUNC_CODE, S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Iron	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Juab			Jurisdct						
Kane									
Millard									
Morgan	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Plute	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Rich	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Salt Lake	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
San Juan	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Sanpete	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Sevier	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Summit			JURIS						
Tooele	S_SURFWIDTH	S_WIDTH	S_JURIS			S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Uintah	S_SURFWIDTH	S_WIDTH							
Utah									
VECC (10 City 911)				L_JURIS	R_JURIS			S_ACCESS	S_USE
Wasatch					S_JURIS		S_AGFUNC		
Washington	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Wayne	S_SURFWIDTH	S_WIDTH	S_JURIS	JURIS_LEFT	JURIS_RGHT	S_FUNC	S_AGFUNC	S_ACCESS	S_USE
Weber	S_SURFWIDTH	S_WIDTH	S_JURIS, JURISDICT	JURIS_LEFT	JURIS_RGHT	S_FUNC			

Appendix C (continued):

Mapping of County Road Data Models To UTDM

	Right of Way	Status	Modify Date	Modified By	UDOT Route ID	UDOT Route Name	UDOT Route Part
Statewide:							
AGRC (UTDM)	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC	DOT_RTID	DOT_RTNAME	DOT RTPART
Counties:							
Beaver	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC			
Box Elder	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC			
Cache							
Carbon	S_ROW	S STATUS	LAST EDIT	CHECKED BY			
Daggett	S_ROW	STATUS, S STATUS	ModifiedOn	EditedBy			
Davis							
Duchesne	S_ROW	STATUS	LASTUPDATE, AGRC_MDATE	EDITORNAME, AGRC_SRC			
Emery	S_ROW	S STATUS					
Garfield	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC	DOT_RTID	DOT_RTNAME	DOT RTPART
Grand	ROW, S_ROW	S STATUS					
Iron	S_ROW	S STATUS	AGRC_MDATE	AGRC_SRC			
Juab							
Kane			AGRC_MDATE	AGRC_SRC			
Millard							
Morgan	S_ROW	S STATUS					
Plute	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC			
Rich	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC	DOT_RTID	DOT_RTNAME	DOT RTPART
Salt Lake	S_ROW	S STATUS	SLCO MODIF				
San Juan	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC	DOT_RTID	DOT_RTNAME	DOT RTPART
Sanpete	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC	DOT_RTID	DOT_RTNAME	DOT RTPART
Sevier	S_ROW	STATUS		AGRC_SRC			
Summit		STATUS					
Tooele	S_ROW	S STATUS					
Uintah			EDIT_DATE	EDITOR_NAM			
Utah							
VECC (10 City 911)	S_ROW		M_DATE	EDITOR			
Wasatch		STATUS	M_DATE				
Washington	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC	DOT_RTID	DOT_RTNAME	DOT RTPART
Wayne	S_ROW	STATUS	AGRC_MDATE	AGRC_SRC	DOT_RTID	DOT_RTNAME	DOT RTPART
Weber	S_ROW						

	UDOT From Milepost	UDOT To Milepost	Vertical Elevation	UDOT Funded County	Flag for Questions	Flag for Changes
Statewide:						
AGRC (UTDM)	DOT_F_MP	DOT_T_MP	VERTLEVEL	DOT_FUND	QUES_FLAG	CHNG_FLAG
Counties:						
Beaver					QUES_FLAG	CHNG_FLAG
Box Elder					QUES_FLAG	CHNG_FLAG
Cache						
Carbon						
Daggett						
Davis					QUES_FLAG	CHNG_FLAG
Duchesne					QUES_FLAG	CHNG_FLAG
Emery					QUES_FLAG	CHNG_FLAG
Garfield	DOT_F_MP	DOT_T_MP	VERTLEVEL	DOT_FUND	QUES_FLAG	CHNG_FLAG
Grand						
Iron					QUES_FLAG	CHNG_FLAG
Juab						
Kane						
Millard						
Morgan					QUES_FLAG	CHNG_FLAG
Plute					QUES_FLAG	CHNG_FLAG
Rich	DOT_F_MP	DOT_T_MP	VERTLEVEL	DOT_FUND	QUES_FLAG	CHNG_FLAG
Salt Lake					QUES_FLAG	CHNG_FLAG
San Juan	DOT_F_MP	DOT_T_MP	VERTLEVEL	DOT_FUND	QUES_FLAG	CHNG_FLAG
Sanpete	DOT_F_MP	DOT_T_MP	VERTLEVEL	DOT_FUND	QUES_FLAG	CHNG_FLAG
Sevier					QUES_FLAG	CHNG_FLAG
Summit						
Tooele						
Uintah						
Utah						
VECC (10 City 911)						
Wasatch						
Washington	DOT_F_MP	DOT_T_MP	VERTLEVEL	DOT_FUND	QUES_FLAG	CHNG_FLAG
Wayne	DOT_F_MP	DOT_T_MP	VERTLEVEL		QUES_FLAG	CHNG_FLAG
Weber						

Appendix C (continued):

Mapping of County Road Data Models To UTDM

	OTHER	E911 Fields	E911 Fields	E911 Fields	E911 Fields
Statewide:					
AGRC (UTDM)					
Counties:					
Beaver					
Box Elder		STREET	SIDE	FA_LEFT	FA_RIGHT
Cache		stname	side		
Carbon					
Daggett		MapLabel		ESN	EESN
Davie	route_num		side	fa odd	fa even
Duchesne					
Emery	OHV_DES				
Garfield					
Grand					
Iron	CIRCULATIO, ROAD PLAN	STREET	SIDE	FA_LEFT	FA_RIGHT
Juab					
Kane		STREET (pre, name, type, suf)			
Millard					
Morgan					
Plute		STREET	SIDE	FA_LEFT	FA_RIGHT
Rich					
Salt Lake	ROAD_CODE				
San Juan					
Sanpete					
Sevier	SL_RCODE	STREET	SIDE	FA_LEFT	FA_RIGHT
Summit	PRE_TYPE (ie. SR)				
Tooele	CONSTRUCTIO, BC_SURF, BC_ELIG	NAME_FULL, Street	SIDE	FaLeft	FaRight
Utintah			side		
Utah	CULDESAC, QUALITY, FAE_ROUTE, OFFCNTYRD, MAINT_BY_C				
VECC (10 City 911)	VECCCOMMENTS	STREET	SIDE		
Wasatch	ADD_CHK		SIDE		
Washington	TYPE	GEO_NAME	SIDE	FA_LEFT	FA_RIGHT
Wayne		STREET	SIDE	FA_LEFT	FA_RIGHT
Weber		STR_NAME, STR_TYPE, STR_DIR		LEFT_ESN	RIGHT_ESN

	E911 Fields								
Statewide:									
AGRC (UTDM)									
Counties:									
Beaver									
Box Elder	FZ_LEFT	FZ_RIGHT	LZ_LEFT	LZ_RIGHT	LA_LEFT	LA_RIGHT	LS_ZONE	FS_ZONE	L_CITYCD
Cache									
Carbon									
Daggett	OESN	Telco	Etelco	Otelco	Dir	Lefrange	Righrange	Ecomm	Ocomm
Davie	fz odd	fz even	lz odd	lz even	la odd	la even			l city
Duchesne									
Emery									
Garfield									
Grand									
Iron	FZ_LEFT	FZ_RIGHT	LZ_LEFT	LZ_RIGHT	LA_LEFT	LA_RIGHT	LS_ZONE	FS_ZONE	LCITYCD, CITYL
Juab									
Kane									
Millard									
Morgan									
Plute	FZ_LEFT	FZ_RIGHT	LZ_LEFT	LZ_RIGHT	LA_LEFT	LA_RIGHT	LS_ZONE	FS_ZONE	LCITYCD
Rich									
Salt Lake									
San Juan									
Sanpete									
Sevier	FZ_LEFT	FZ_RIGHT	LZ_LEFT	LZ_RIGHT	LA_LEFT	LA_RIGHT	LS_ZONE	ES_ZONE	LCITYCD, LZIP
Summit									
Tooele	fz left	fz right	lz left	lz right	la left	la right	LSZone	ESZone	LCityCd
Utintah	fz_left	fz_right	lz_left	lz_right	la_left	la_right			Lcitycd
Utah									
VECC (10 City 911)	FZ_LEFT	FZ_RIGHT	LZ_LEFT	LZ_RIGHT	LA_LEFT	LA_RIGHT	LS_ZONE	FS_ZONE	L_CITYCD
Wasatch									L_CITYCD
Washington	FZ_LEFT	FZ_RIGHT	LZ_LEFT	LZ_RIGHT	LA_LEFT	LA_RIGHT	LS_ZONE	FS_ZONE	
Wayne	FZ_LEFT	FZ_RIGHT	LZ_LEFT	LZ_RIGHT	LA_LEFT	LA_RIGHT	LS_ZONE	FS_ZONE	citycd
Weber	LEFT_JURI	RIGHT_JURI	SUFFIX_911	NAME_911					

Appendix C (continued):

Mapping of County Road Data Models To UTDM

	E911 Fields	E911 Fields	E911 Fields	E911 Fields	RIGHT OF WAY Fields	RIGHT OF WAY Fields
Statewide:						
AGRC (UTDM)						
Counties:						
Beaver						
Box Elder	R_CITYCD	EXCLUDE				CLAIM
Cache						
Carbon					several misc fields	
Daggett	State					AG CLAIM, CLAIM
Davis	r city					
Duchesne						
Emery						
Garfield						
Grand						CLAIM
Iron	RCITYCD, CITYR	EXCLUDE	address ranges			
Juab						
Kane			address ranges, FULL_STREE	SPALIAS3, SPALIAS4		
Millard			ESZ	OE		
Morgan			SUFDIR_911, PRE_TYPE			
Plute	RCITYCD					
Rich						
Salt Lake						
San Juan						
Sanpete						
Sevier	RCITYCD, RZIP	EXCLUDE	address ranges, DRWY			
Summit						
Tooele	RCityCd	Exclude, PopExclude	address ranges			CLAIM
Uintah	Rotycd	exclude		3 alias fields, LOCATION		
Utah						
VECC (10 City 911)	R_CITYCD	EXCLUDE				
Wasatch	R_CITYCD					
Washington		EXCLUDE	OTHER_STREET, AP_CITY			
Wayne		EXCLUDE	address ranges	SPALIAS3, SPALIAS4		
Weber						

	RIGHT OF WAY Fields	RIGHT OF WAY Fields	RIGHT OF WAY Fields	RIGHT OF WAY Fields	RIGHT OF WAY Fields	RIGHT OF WAY Fields
Statewide:						
AGRC (UTDM)						
Counties:						
Beaver						
Box Elder	ROUTE_NAME	ROW_CAT	MAINT	AGECNY_RD	NOTES2	RD_ID
Cache						
Carbon	RD_ALIAS1, RD_ALIAS2					
Daggett	ROUTE_NAME	ROW_CAT	MAINT	AGENCY_RD	NOTES2	RD_ID
Davis						
Duchesne						
Emery						
Garfield						
Grand	ROUTE_NAME	ROW_CATEGO	MAINTENANC	AGENCY_RD		
Iron						
Juab						
Kane						
Millard						
Morgan						
Plute						
Rich						
Salt Lake						
San Juan						
Sanpete						
Sevier						
Summit						
Tooele		ROW_CATEGO	MAINTENAC			RoadID
Uintah						
Utah						
VECC (10 City 911)						
Wasatch						
Washington						
Wayne						
Weber		ROW_WIDTH				

Appendix D:

Utah Data Sharing Memorandum

Appendix E:

Local Data Sharing Agreement Example