

MetroGIS Address Points Database Specifications

Latest version approved by MetroGIS Address Workgroup: 06/10/2010

Address Points Database Standards

In February 2010 a new draft of the national standard was published and submitted to the Federal Geographic Data Committee as a proposed national standard.

<http://www.urisa.org/about/initiatives/addressstandard>. The FGDC has announced a formal public review period for this standard. The intention of the MetroGIS Address Workgroup is to review these specifications for possible modifications when and if a final national address data standard is approved.

See MetroGIS comments on the draft national standard

http://www.mngeo.state.mn.us/committee/standards/address/address_standard.html

The database format for the MetroGIS Address Points Dataset is derived primarily from the November 2005 published draft national standard and the February 2010 published draft national standard, as well as the combined thought and experience of the MetroGIS Address Workgroup. In 2006 the Workgroup conducted a data pilot project to test a preliminary set of data specifications with real data in cities and counties. The results of that pilot suggested some modest changes to the data specifications, mainly with optional items, and also provided some comments on suggested changes and clarifications to the draft national standard. The specifications were modified again after the publishing of the 2010 draft national standard.

At this time, the MetroGIS specifications focus on the ability to encode address point data into a fairly simple, flat database file format (e.g. shapefile). An associated XML schema is under development. See Appendix B for a draft XML formatting template.

The MetroGIS Address Points Dataset will consist of a geospatial points (e.g. a point shapefile) with the following attribute fields. All fields are required to be in the dataset. Those listed as optional are not required to be populated. All other fields are required to be populated where they apply to the address. For example, many addresses do not have occupancy types and thus occupancy type would not apply to those addresses.

Database Fields

Draft National Standard Element	Element Name	Database Field Name	XML Tag from Draft National Standard or “MN” Specific Tag	Field Type	Field Width	Optional
2.4.1.1	National Address Unique Identifier	ADD_ID_NAT	<AddressID>	Text	60	
2.4.1.1	Local Address Unique Identifier	ADD_ID_LOC	<MNAddressIDLocal>	Text	50	
2.2.1.1	Address Number Prefix	ANUMBERPRE	<AddressNumberPrefix>	Text	6	
2.2.1.22	Address Number	ANUMBER	<AddressNumber>	Integer	10	
2.2.1.3	Address Number Suffix	ANUMBERSUF	<AddressNumberSuffix>	Text	6	
2.2.1.4	Separator Element	ANUMBERSEP	*Separator	Text	1	
2.2.2.1	Street Name Pre Modifier	ST_PRE_MOD	<StreetNamePreModifier>	Text	10	
2.2.2.2	Street Name Pre Directional	ST_PRE_DIR	<StreetNamePreDirectional>	Text	9	
2.2.2.3	Street Name Pre Type	ST_PRE_TYP	<StreetNamePreType>	Text	24	
2.2.2.4	Street Name	ST_NAME	<StreetName>	Text	42	
2.2.2.5	Street Name Post Type	ST_POS_TYP	<StreetNamePostType>	Text	12	
2.2.2.6	Street Name Post Directional	ST_POS_DIR	<StreetNamePostDirectional>	Text	9	
2.2.2.7	Street Name Post Modifier	ST_POS_MOD	<StreetNamePostModifier>	Text	12	
2.2.3.1	Subaddress Type 1	SUB_TYPE1	<SubaddressType>	Text	12	
2.2.3.2	Subaddress Identifier 1	SUB_ID1	<SubaddressIdentifier>	Text	12	
2.2.3.1	Subaddress Type 2	SUB_TYPE2	<SubaddressType>	Text	12	
2.2.3.2	Subaddress Identifier 2	SUB_ID2	<SubaddressIdentifier>	Text	12	
Multi	Municipal Jurisdiction Name	MUNI_NAME	*<PlaceName>	Text	30	
Multi	Municipal Jurisdiction Code	MUNI_CODE	*GNISFeatureID	Text	8	
Multi	USPS Place Name	USPS_PLACE	*<PlaceName>	Text	30	Optional
None	County Code	CO_CODE	<MNCountyCode>	Text	3	
Multi	County Name	CO_NAME	*<PlaceName>	Text	20	
2.2.5.3	State Code	STATE_CODE	<StateName>	Text	2	
2.2.5.4	ZIP Code	ZIP	<ZIPCode>	Text	5	
2.2.5.5	ZIP Plus 4	ZIP4	<ZIPPlus4>	Text	4	Optional
2.4.6.8	Location Description	LOC_DESC	<LocationDescription>	Text	40	Optional
2.2.4.1	Landmark Name	LANDMARK	<LandmarkName>	Text	40	Optional
None	Residence	RESIDENCE	<MNResidence>	Text	10	Optional
2.4.6.9	Mailable Address	MAILABLE	<MailableAddress>	Text	10	Optional
2.4.6.3	Lifecycle Status	STATUS	<AddressLifecycleStatus>	Text	10	Optional
2.4.3.2	Parcel Unique Identifier	PIN	<AddressParcelIdentifier>	Text	17	Optional
2.4.2.3	Longitude	LONGITUDE	<AddressLongitude>	Real	double	
2.4.2.4	Latitude	LATITUDE	<AddressLatitude>	Real	double	
None	Positional Accuracy Indicator	POSI_ACCU	<MNPositionalAccuracy>	Integer	2	Optional
None	Address Direct Source	ADIRSOURCE	<MNDirectSource>	Text	40	Optional
2.4.1.2	Address Authority	AAUTHORITY	<AddressAuthority>	Text	40	
None	Editing Organization	EDIT_ORG	<MNEditingOrganization>	Text	40	Optional
None	Update Date	UPDATEDATE	<MNUpdateDate>	Date	8	
None	Comments	COMMENTS	<MNComments>	Text	254	Optional

* See Appendix B for a draft XML formatting template.

Element Descriptions

National Address Unique Identifier, Text, width 60

Local Address Unique Identifier, Text, width 50

2.4.1.1 Address ID: *The unique identification number assigned to an address by the addressing authority.*

Each address record must have a unique ID. This will distinguish it from any other record in the local or national database. It will also allow other datasets to be related to the address database (e.g. landmark names, contact phone number, existence of lifesaving equipment/defibrillator, existence of hazardous waste, etc.).

Note: While the draft national standard specifies “number” in the definition, it also includes examples that are not numbers. MetroGIS will allow non-numeric identifiers.

Local vs. National Unique ID

Each unique official address authority that participates in the MetroGIS Regional Address Dataset must maintain a unique identifier for each address point record. The formatting and structure of that unique identifier is completely at the discretion of the local address authority as long as the ID can be converted to a 50 character text field in the MetroGIS dataset without losing its uniqueness. Because it is envisioned that this data will someday be used at a state or national level, it is desirable to have a nationally unique address ID in the MetroGIS regional dataset. This will be accomplished by appending the GNIS unique ID (in the 8 character text with leading zeros Census format) and a dash to the beginning of the local unique ID. It must be stressed that the GNIS code is meaningless once placed in the unique ID.

Permanence Recommendations

The following are recommended by MetroGIS, but are not required to participate in the Regional Address Points Dataset. Unique IDs should not be reused if they are retired. Unique IDs should not be changed unless there is a change to the geographic feature (occupiable unit) itself. For example, if a street name changes, the street name field of the address record should change, but not the unique ID. If the parcel in which the unit resides is split and the parcel receives a new parcel ID, the unique ID of the address point should not change. If an annexation causes an address point to change jurisdiction from one city or township to another, it is desirable that the unique ID remain the same. It is realized, however, that this may place a burden on local address authorities, especially in the last example. Each address authority will need to determine for itself to what degree it should adhere to these recommendations.

Address Number Elements

This portion of the address could be defined as one or multiple fields. The vast majority of addresses will consist of a simple integer for an address number. A few addresses, however, have a suffix (e.g. 189 ½, 1423B) and some might have a prefix. The National Standard breaks this down into four elements, the first and last of which might not exist in the metro area, but we will include in our pilot database.

Address Number Prefix: Text, width = 6

2.2.1.1 Address Number Prefix: Text *The portion of the complete address number which **precedes** the address number itself.* (e.g. **A** 19 Calle 117, **N6W2** 3001 Bluemound Road).

Address Number: Integer, width = 10

2.2.1.2 Address Number: Integer *The numeric identifier for a land parcel, house, building or other location along a thoroughfare or within a community.*

Address Number Suffix: Text, width = 6

2.2.1.3 Address Number Suffix: Text *The portion of the complete address number which **follows** the address number itself.* (e.g. 123 **1/2** Main Street, 456 **B** Wilson Street)

Separator Element: Text, width = 1

2.2.1.4 Separator Element: Text *A symbol, word or phrase used as a separator between components of a complex element or class. The separator is required for intersection addresses and for two number address ranges, and it may be used in constructing complete a complete street name or a complete address numbers.* (e.g. 61-43 Springfield Boulevard). Note: **We will keep this in our database as a test of the National Standard, but do not believe it will be used in the metro area.**

Street Elements

Street Name Pre Modifier: Text, width = 10

2.2.2.1 Street Name Pre Modifier: Text *A word or phrase that precedes the street name and is not a street name pre directional or a street name pre type.* (e.g. 123 **Old** North First Street).

Street Name Pre Directional:, 9 character text field with fixed domain

2.2.2.2 Street Name Pre Directional: Text *A word preceding the street name that indicates the directional taken by the thoroughfare from an arbitrary starting point, or the sector where it is located.* (e.g. 1234 **North** Main Street).

NOTE: The national standard does not use abbreviations. Domain: North, South, East, West, Northeast, Southeast, Northwest, Southwest.

Street Name Pre Type: Text, width = 12

2.2.2.3 Street Name Pre Type: Text *The element of the complete street name **preceding** the street name element that indicates the type of street.* (e.g. 1500 **Highway** 52, **Avenue** at Port Imperial, 901 **Boulevard** of the Allies)

Highways and County Roads. How are these to be handled?

The draft national standard does include the following language in the notes for the Street Name Pre Type element:

- Domain of Values for this Element: *Although not recognized as street name pre types, Appendix C1 of USPS Publication 28 contains a useful list of street suffixes. Development of a list of street name pre types can incorporate street suffixes from USPS Publication 28 Appendix C1 with local additions.*

USPS Publication 28 only lists single word pre-types. While “Road”, “Highway” and “Freeway” are listed in the Publication 28 (Appendix C1) list of types, “County Road” or “State Highway” are not. No further guidance is provided in the national standard on how to code such pre types. Thus, there are multiple ways such roads could be encoded in the standard

	Street Name Pre Modifier	Street Name Pre Type	Street Name
1	Interstate	Highway	35E
2		Highway	35E
3		Interstate	35E
4			Interstate Highway 35E
5		Interstate Highway	35E

The Address Workgroup has decide to use multi word pre types for highways and similar road types to prevent ambiguity and inconsistency. Thus, we would use the 5th options shown above for county roads, interstate highways, etc..

Street Name: Text, width = 42

2.2.2.4 Street Name: Text *Official name of a street as assigned by a local governing authority, or an alternate (alias) name that is used and recognized, excluding street types, directionals, and modifiers.* (e.g. 1234 **Central** Street Southwest). Note: Use the street name as defined by the official address authority. (e.g. If they say “7th” Street, it’s “7th”. If they say “Seventh” Street, it’s “Seventh”).

Upper vs. Mixed Case:

USPS offers this in section 212 for mailing labels: “Uppercase letters are preferred on all lines of the address block..... Lowercase letters in various type styles are acceptable provided they meet postal guidelines for OCR readability...”

The national standard does not specifically mention the mixed vs. upper case issue, but all examples are shown as mixed case, suggesting that is the preferred format.

Street Name Post Type: Text, width = 12 (no abbreviations)

2.2.2.5 Street Name Post Type: Text *The element of the complete street name **following** the street name element that indicates the type of street.* (e.g. 1234 Central **Street** Southwest) **NOTE: The national standard does not use abbreviations for this element.**

Street Name Post Directional: Text, width = 9

2.2.2.6 Street Name Post Directional: Text *A word following the street name that indicates the directional taken by the thoroughfare from an arbitrary starting point, or the sector where it is located.* (e.g. 1234 Cherry Street **North**). **NOTE: The national standard does not use abbreviations for this element.** Domain: North, South, East, West, Northeast, Southeast, Northwest, Southwest.

Street Name Post Modifier: Text, width = 12

2.2.2.7 Street Name Post Modifier: Text *A word or phrase that follows the street name but is not a street name post-type or street name post directional.* (e.g. 1230 Central Avenue **Extended**).

Subaddress Elements

Within the draft national standard, the two subaddress elements are formatted as repeating pairs because some addresses have multiple subaddress types. This is easy to do in an XML schema, but in a database requires a related table. Because MetroGIS will have implementations that use flat files without related tables (e.g. shape files), it was decided to include two sets of subaddress elements. Any additional subaddress information should be put into the Location Description field.

Subaddress Type1, 2: Text, width = 12

2.2.3.1 Subaddress Type: *The type of subaddress to which the associated Subaddress Identifier applies.* (e.g. **Apartment** 17C, **Building** 6, **Tower** B, **Floor** 2, **Suite** 1040)

Subaddress Identifier1, 2: Text, width = 12

2.2.3.2 Subaddress Identifier: *The letters, numbers, words or combination thereof used to distinguish different subaddresses of the same type when several occur within the same feature.* (e.g. Apartment **17C**, Building **6**, Tower **B**, Floor **2**, Suite **1040**)

Larger-Area Elements

Note: The draft national standard has one element (2.2.5.1 Place Name) to indicate the community of geographic location of the address, the USPS designated city of the address, the county of the address or other types of places related to the address. Additional elements are considered attributes of this element. For example 2.4.7.5 Place Name Type indicates which type of place is being referenced. While this format may be needed at a national level and can work in an XML data structure, it is not well suited to flat database files like shapefiles. It also tends to minimize the critical distinction needed in the MetroGIS community between the municipal jurisdiction, USPS place name and county of the address. Thus these MetroGIS specifications intentionally focus on the definition of those elements in a flat file which does not directly comply with the draft national standard but could be converted to the XML format of that standard.

Municipal Jurisdiction Name: Text, width = 30

Represented by 2.2.5.1 Place Name and 2.4.7.5 Place Name Type: Text The name of the incorporated municipality (city, township, or other local government, excluding counties) in which the address is physically located. In many places this will be different than the city name used by the U.S. Postal Service. (e.g. Bloomington, Castle Rock Township)

Municipal Jurisdiction Code: Text width = 8

Similar to 2.4.7.6 The official federal Geographic Names Information Systems unique identifier code for the city, township or unorganized territory in which the address is physically located. (MetroGIS and the State of MN call this the “CTU” identifier.) See Appendix A for list of values. Note: GNIS has two formats. The U.S. Census format with leading zeros is required in these MetroGIS specifications. The examples in the draft national standard show the USGS integer format.

A cross reference table between GNIS codes and other municipal codes can be can be downloaded from the metadata at http://www.datafinder.org/metadata/county_ctu_lut.htm.

USPS Place Name: Text, width = 30

Represented by 2.2.5.1 Place Name and 2.4.7.5 Place Name Type: Text The name given by the U.S. Postal Service to the post office from which mail is delivered to the address. In many places this will be different from the name of the city or township in which the address is physically located.

County Code: Text, width = 3

The three character FIPS, State and MetroGIS standard county code for the county in which the address resides

County Name: Text, width = 20

Represented by 2.2.5.1 Place Name and 2.4.7.5 Place Name Type: Text The county in which the address resides.. This can be auto filled from the county code.

CO_NAME	CO_CODE
Anoka County	003
Carver County	019
Dakota County	037
Hennepin County	053
Ramsey County	123
Scott County	139
Washington County	163

State Code: Text, width = 2

2.2.5.3 State Name: Text *The names of the US states and state equivalents... The names may be spelled out in full or represented by their two-letter USPS or ANSI abbreviation.* Note: MetroGIS has specified the two character code to remove any ambiguity. This will always be “MN” in our database and is therefore unnecessary, however, we will include it so as to make a standard that could also be used for things like parcel owners, etc. that may reside out of state.

ZIP Code: Text, width = 5

2.2.5.4 ZIP Code: Text *A system of 5-digit codes that identifies the individual Post Office or metropolitan area delivery station associated with an address.*

ZIP Plus 4: Text, width = 4

2.2.5.5 ZIP Plus 4: Text *A 4-digit extension of the 5-digit ZIP Code (preceded by a hyphen) that, in conjunction with the ZIP code, identifies a specific range of the USPS delivery addresses. This element is optional.*

Additional Attributes

Location Description: Text, width = 40

2.4.6.8 Location Description: *A text description providing more detail on how to identify or find the addressed feature.* (e.g. White house at intersection, 400 yards west of water tank) Optional.

Landmark Name: Text, width = 40

2.2.4.1 Landmark Name: *The name of a relatively permanent feature of the landscape that has recognizable identity within a particular cultural context.* Any individual address could represent multiple landmarks, thus we will just include one primary landmark name here. Optional.

Residence: Text, width = 10

Does this address have a residence or living quarters? This also includes multi-use addresses that include a residence when no other address for that residence exists in the database. This data element is **not** intended to indicate whether the residence is currently occupied. Thus apartment units would be included whether they are occupied or vacant. Values are Yes, No or Unknown. Optional.

Mailable Address: Text, width = 10

2.4.6.9 Mailable Address: *Identifies whether an address receives USPS mail delivery (that is, the address is occupiable, and the USPS provides on-premises USPS mail delivery to it).* For example, an address for a cell tower or park with no mailbox would not be a mailable address. Values are Yes, No or Unknown. Optional.

Lifecycle Status: Text, width = 10

2.4.6.3 Address Lifecycle Status: *The lifecycle status of the address*
The status of the address. Values are Active, Retired, Proposed. Optional.

Parcel Unique Identifier: Text, width = 17

2.4.3.2 Address Parcel Identifier: *The primary permanent identifier, as defined by the address parcel identifier source, for a parcel that includes the land or feature identified by an address.* This element will follow the MetroGIS Regional Parcel Dataset format.

Longitude: Numeric, width = double

2.4.2.3 Address Longitude: *The longitude of the address location, in decimal degrees.* Example: -84.29049105

Latitude: Numeric, width = double

2.4.2.4 Address Longitude: *The latitude of the address location, in decimal degrees.* Example: 33.77603207

What datum is assumed for the lat/lon? NAD83 or WGS84? This is yet to be determined.

Note: USNG coordinates will be considered for inclusion in a later version of these specifications.

Positional Accuracy Indicator: Integer, width = 2

A code that indicates the positional accuracy description.

0. Unknown
1. Parcel polygon centroid or random placement within parcel polygon
2. Aligned to doorstep based on aerial photo
3. Placed on correct building, but not necessarily on doorstep
4. Placed over portion of building in which the unit exists.
5. Driveway entrance from road.
6. Preliminary location for new address created without aid of parcel boundaries, air photo, etc.
7. Preliminary location created based on digital pre-final plat
99. Other Please provide documentation of other situations to MetroGIS.

Address Direct Source: Text, width = 40

1.8.5.3 Address Direct Source: Note: This element is no longer included in the unpublished working draft of the national standard. Text *Source from whom the data provider obtained the address, or with whom the data provider validated the address.* For MetroGIS purposes, this field could be used to indicate the department within a city that supplied the address (e.g. Planning and Zoning, Fire Dept., Public Works, etc.) or a provider of addresses on private streets (e.g. U of M, XYZ Company, etc.)

Address Authority: Text, width = 40

2.4.1.2 Address Authority: Text *The name of the authority (e.g., municipality, county) that created or has jurisdiction over the creation, alteration, or retirement of an address.* Note: Entities other than cities and counties might be possible here (e.g. U of M?, State Fair?, 3M (on their campus), Mdewakanton Sioux Community).

Editing Organization: Text, width = 40

This is intended to indicate the organization that made the last change to the data record. This field may not be necessary if the official address authority is clearly defined and is the only organization that is allowed to edit a record. However, the flexibility we envision with the administration of the geographic parts of the regional dataset suggests that this element will be of use at some point. Optional

Update Date, 8 digit integer

This should preferably be filled by the editing application whenever there is an edit. It should use the standard YYYYMMDD format. Note, this element is not part of the National Standard. Optional

Comments: Text, width = 254

A field for free form comments as deemed useful by the address authority. Optional.

Appendix A

The Municipal Code field will use the official federal unique identifier for cities and townships. This is the Geographic Names Information System unique ID. The text format with leading zeros will be used.

MUNI_NAME	MUNI_CODE		
		Eden Prairie	02394614
Afton	02393887	Edina	02394621
Andover	02393954	Elko New Market	02394658
Anoka	02393964	Empire Twp.	00664099
Apple Valley	02393967	Eureka Twp.	00664113
Arden Hills	02393979	Excelsior	02394717
Bayport	02394090	Falcon Heights	02394738
Baytown Twp.	00663529	Farmington	02394747
Belle Plaine	02394113	Forest Lake	02394789
Belle Plaine Twp.	00663556	Fort Snelling (unorg.)	00664202
Benton Twp.	00663571	Fridley	02394826
Bethel	02394156	Gem Lake	02394871
Birchwood Village	02394171	Golden Valley	02394924
Blaine	02394183	Grant	02394963
Blakeley Twp.	00663612	Greenfield	02394988
Bloomington	02394198	Greenvale Twp.	00664346
Brooklyn Center	02393428	Greenwood	02394245
Brooklyn Park	02393429	Grey Cloud Island Twp.	00664354
Burns Twp.	00663708	Ham Lake	02394273
Burnsville	02393472	Hamburg	02394274
Camden Twp.	00663731	Hampton	02394282
Carver	02393762	Hampton Twp.	00664386
Castle Rock Twp.	00663763	Hancock Twp.	00664388
Cedar Lake Twp.	00663767	Hanover	02394288
Centerville	02393784	Hassan Twp.	00664409
Champlin	02393797	Hastings	02394320
Chanhassen	02393799	Helena Twp.	00664443
Chaska	02393809	Hilltop	02394389
Circle Pines	02393526	Hollywood Twp.	00664502
Coates	02393579	Hopkins	02394417
Cologne	02393601	Hugo	02394440
Columbia Heights	02393607	Independence	02395420
Columbus	02393610	Inver Grove Heights	02395429
Coon Rapids	02393628	Jackson Twp.	00664569
Corcoran	02393634	Jordan	02395483
Cottage Grove	02393644	Lake Elmo	02395589
Credit River Twp.	00663886	Lake St. Croix Beach	02394379
Crystal	02393541	Lakeland	02395609
Dahlgren Twp.	00663913	Lakeland Shores	02395610
Dayton	02394471	Laketown Twp.	00664705
Deephaven	02394486	Lakeville	02395614
Dellwood	02394503	Landfall	02395626
Denmark Twp.	00663965	Lauderdale	02395642
Douglas Twp.	00663994	Lexington	02395696
Eagan	02394586	Lilydale	02394457
East Bethel	02394596	Lino Lakes	02395725

Linwood Twp.	00664793	Robbinsdale	02396388
Little Canada	02395733	Rockford	02396406
Long Lake	02395756	Rogers	02396415
Loretto	02395764	Rosemount	02396433
Louisville Twp.	00664829	Roseville	02396435
Mahtomedi	02395818	San Francisco Twp.	00665551
Maple Grove	02395838	Sand Creek Twp.	00665541
Maple Plain	02395841	Savage	02396543
Maplewood	02395846	Scandia	02396548
Marine on St. Croix	02395007	Sciota Twp.	00665569
Marshan Twp.	00664919	Shakopee	02395854
May Twp.	00664932	Shoreview	02395876
Mayer	02395049	Shorewood	02395877
Medicine Lake	02395082	South St. Paul	02395918
Medina	02395084	Spring Lake Park	02395934
Mendota	02395096	Spring Lake Twp.	00665676
Mendota Heights	02395097	Spring Park	02395935
Miesville	02395317	St. Anthony	02396471
Minneapolis	02395345	St. Bonifacius	02396475
Minnnetonka	02395350	St. Francis	02396487
Minnnetonka Beach	02395351	St. Lawrence Twp.	00665519
Minnetrista	02395352	St. Louis Park	02396500
Mound	02395111	St. Marys Point	02396508
Mounds View	02395118	St. Paul	02396511
New Brighton	02395187	St. Paul Park	02396516
New Germany	02395195	Stillwater	02395969
New Hope	02395201	Stillwater Twp.	00665712
New Market Twp.	00665104	Sunfish Lake	02396006
New Prague	02395211	Tonka Bay	02397036
New Trier	02395216	Vadnais Heights	02397106
Newport	02395227	Vermillion	02397127
Nininger Twp.	00665126	Vermillion Twp.	00665860
North Oaks	02395259	Victoria	02397135
North St. Paul	02395261	Waconia	02397159
Northfield	02395265	Waconia Twp.	00665887
Norwood Young America	02395278	Waterford Twp.	00665929
Oak Grove	02395282	Watertown	02397211
Oak Park Heights	02395285	Watertown Twp.	00665931
Oakdale	02395287	Wayzata	02397235
Orono	02396081	West Lakeland Twp.	00665966
Osseo	02396098	West St. Paul	02397275
Pine Springs	02396211	White Bear Lake	02397299
Plymouth	02396242	White Bear Twp.	00665981
Prior Lake	02396284	Willernie	02397314
Ramsey	02396311	Woodbury	02397369
Randolph	02396316	Woodland	02397370
Randolph Twp.	00665377	Young America Twp.	00666069
Ravenna Twp.	00665381		
Richfield	02396362		

Appendix B

DRAFT XML Formatting Template

Updated 4/21/2010

This is intended to be a template to guide the formatting of data into an XML transfer file.

```
<?xml version="1.0" encoding="UTF-8"?>

<addr:AddressCollection version="0.4" xmlns:addr="addr"
xmlns:addr_type="addr_type" xmlns:smil20="http://www.w3.org/2001/SMIL20/"
xmlns:smil20lang="http://www.w3.org/2001/SMIL20/Language"
xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:xml="http://www.w3.org/XML/1998/namespace"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:MNAddr="http://www.datafinder.org/metadata/MetroGIS_Address_Points_Data
base_Specifications.pdf" xsi:schemaLocation="addr addr.xsd ">

  <NumberedThoroughfareAddress>

    <CompleteAddressNumber>
      <AddressNumberPrefix>ANUMBERPRE</AddressNumberPrefix>
      <AddressNumber>ANUMBER</AddressNumber>
      <AddressNumberSuffix>
        Separator="ANUMBERSEP">ANUMBERSUF</AddressNumberSuffix>
      </CompleteAddressNumber>

    <CompleteStreetName>
      <StreetNamePreModifier>ST_PRE_MOD</StreetNamePreModifier>
      <StreetNamePreDirectional>ST_PRE_DIR</StreetNamePreDirectional>
      <StreetNamePreType>ST_PRE_TYP</StreetNamePreType>
      <StreetName>ST_NAME</StreetName>
      <StreetNamePostType>ST_POS_TYP</StreetNamePostType>
      <StreetNamePostDirectional>ST_POS_DIR</StreetNamePostDirectional>
      <StreetNamePostModifier>ST_POS_MOD</StreetNamePostModifier>
    </CompleteStreetName>

    <CompleteSubaddress>
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