

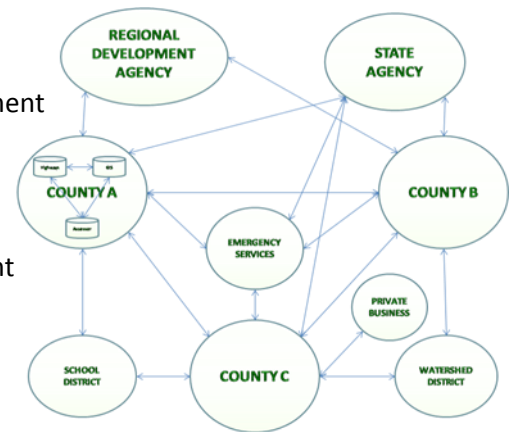
Draft Data Transfer Standard*

Purpose Statement and Overview

Background

As more and more Minnesota counties develop polygon-based GIS cadastral data, sharing that same data and the need for a common data transfer definition is becoming more and more important. Counties regularly share their GIS data for purposes such as emergency & contingency planning, infrastructure management, general planning, regional analysis, redistricting, and edge-matching to name a few. This sharing may be free and at good will, it may involve licensing and contracts, or there may be purchases and payment. Regardless of the county's data sharing policies, everyone would benefit if the shared data contained a common set of attributes and a standardized projection.

This data sharing is poly-directional, consisting of all-way sharing between neighboring counties, state agencies, regional development agencies, municipalities, school districts, emergency services, non-profits, and private businesses. Data sharing may even take place *within* a county's departmental units such as sharing between a county assessor's office and a public works department for example.



Whole Lotta Sharin' Goin' On

With all this sharing going on, the question arises as to the *compatibility* of the data and the importance of the *method* of transfer. By establishing a standard projection and a common set of attributes for the purpose of data exchange, it is the goal of this committee to encourage, streamline, and facilitate parcel data exchange amongst all stakeholders.

We are not proposing a binding requirement with restrictions and compliance measures. Rather, our proposal is to suggest a voluntary standard set of attribute fields to provide a readily accepted and compatible dataset so merging is streamlined and eased. This isn't a new concept. In fact, it's been done before in Minnesota. In the mid 1990's, MetroGIS worked with the 7 metro counties to establish a methodology to share parcel data. The vision guiding the establishment of MetroGIS reads:

“Provide an ongoing, stakeholder governed, metro-wide mechanism through which participants easily and equitably share geographically referenced data that are accurate, current, secure, of common benefit and readily usable.” http://www.metrogis.org/esie_2002.pdf

The MetroGIS standard has evolved over the years, beginning with just a few attributes at the outset, to a rich set of 65 fields that fulfill *most* of the needs of the stakeholders that utilize that data from individual users all the way up to the federal government.

*Discussion handout from a panel session, “Pulling It All Together – Working Toward a Transfer Standard for Parcel Data in MN”, sponsored by the Digital Cadastral Data Committee (<http://www.mngeo.state.mn.us/committee/cadastral/>), at the MN GIS/LIS Conference, October 15, 2010.

Stakeholders Defined

Who are we talking about here? Certainly the counties which have developed GIS data are central to the need. If we were to list every stakeholder, the resulting list would be enormous. But we can categorize stakeholders into approachable groups:

- Individual Users
- Private Business
- Municipalities
- County Agencies
- Cross-county districts
- Regional Agencies
- State Agencies
- Federal Agencies

Outcome

What are we proposing? A data transfer standard presents a mutually-agreed upon framework upon which sharing agreements may be based. Rather than start from scratch we believe adaptation of the MetroGIS set of attributes presents a good starting point for developing a statewide transfer standard. The existing model has been in place for nearly 15 years and has already proven itself as a data transfer mechanism for more than 10% of the counties in Minnesota with GIS data. We propose a similar non-binding agreement which seeks not to rigidly define *how* developers are to capture and store their data, but seeks only to define an accepted *distribution method* for the data. It is left up to the individual counties to decide how to code and capture each specific field, what fields to populate, and licensing and pricing. The counties participating in the MetroGIS data standard represent dense urban populations, but also vast rural areas. Therefore, the data types and attributes of the MetroGIS counties seem to satisfy more than just the needs of urban demand.

How would it work?

- GIS data would be delivered to partners using UTM15/NAD83
- Attribute data would be exported with field names and field types that match the 'standard' (see attached)
- Fields are populated voluntarily as the data originator is able.
- Unsupported data categories are not populated.
- Data would be delivered as-is without regard to edge-matching and capture standards.

Proposed Statewide Common Parcel Attributes

(based on the 'MetroGIS 65' Common attributes)

(http://www.datafinder.org/metadata/MetroGIS_Regional_Parcel_Attributes.pdf)

Field Name	Field Type	Field Size	Description	Field Description with some comments
COUNTY_ID	text	3	Unique County ID	Three digit FIPS and State standard county code.
PIN	text	17	Unique Parcel ID	Unique regional parcel ID comprised of the county PIN with the county code and dash appended to the front.
BLDG_NUM	text	10	House Number	The building or house number of the parcel. (Things like fractional house numbers should be included with this field.)
PREFIX_DIR	text	2	Street Prefix Direction	Street prefix direction for the parcel. Domain = N, S, E, W, NE, NW, SE or SW (as defined in USPS Pub. 28 Appendix B http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf)
PREFIXTYPE	text	6	Street Prefix Type	Street prefix type (e.g. Hwy) for the parcel. Few counties store this data separately.
STREETNAME	text	40	Street Name	Street name for the parcel. If a county is unable to provide the individual street data fields (direction, type, etc), they may be provided as a combined data element in this field.
STREETTYPE	text	4	Street Type	Street type abbreviation for the parcel (as defined by USPS Pub. 28 Appendix C. http://pe.usps.gov/text/pub28/pub28apc.html#508hdr2)
SUFFIX_DIR	text	2	Street Suffix Direction	Street suffix direction for the parcel. Domain = N, S, E, W, NE, NW, SE or SW (as defined in USPS Pub. 28 Appendix B http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf)
UNIT_INFO	text	12	Unit Information	Additional unit information for the parcel for condominiums, etc. (e.g. Unit 5B, Suite 8, etc.)
CITY	text	30	City (actual)	Name of city or township in which the parcel actually resides (not the mailing address city).
CITY_USPS	text	30	City (mailing)	The mailing address city for the parcel as defined by the USPS.
ZIP	text	5	ZIP Code	ZIP code for the parcel.
ZIP4	text	4	ZIP 4 Extension	The four digit zip code extension for the parcel.
PLAT_NAME	text	50	Legal Description Plat Name	The legal description plat name (this is often synonymous with the subdivision name).
BLOCK	text	5	Legal Description Block	The legal description block within the plat.
LOT	text	5	Legal Description Lot	The legal description lot within the block.
ACRES_POLY	numeric	11 (2 dec)	Polygon Acreage	The calculated acreage of the polygon within the GIS spatial data. (numeric field with two decimal places)

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ACRES_DEED	numeric	11 (2 dec)	Deeded Acreage	The deeded acreage of the parcel. (numeric field with two decimal places)
USE1_DESC	text	100	Use Type 1	Description of use type 1.
USE2_DESC	text	100	Use Type 2	Description of use type 2.
USE3_DESC	text	100	Use Type 3	Description of use type 3.
USE4_DESC	text	100	Use Type 4	Description of use type 4.
MULTI_USES	text	1	Multiple Uses	Flag (Y/N) to indicate if multiple uses exist.
LANDMARK	text	100	Landmark/Business Name	Name of the predominant landmark or business on this parcel.
OWNER_NAME	text	50	Owner Name	The full name of the owner. The format should be last name first where available. Inclusion of multiple owners is up to each county.
OWNER_MORE	text	50	Additional Owner Name	Field for additional owner information where available (e.g. joint owner or additional first name first format).
OWN_ADD_L1	text	40	Owner Address Line 1	Mailing address of the owner. Up to three lines may be used. Typically line1 is street address and line2 is city, state & zip, but other variations exist.
OWN_ADD_L2	text	40	Owner Address Line 2	
OWN_ADD_L3	text	40	Owner Address Line 3	
TAX_NAME	text	40	Taxpayer Name	The full (first and last) name of the taxpayer. The format (e.g. last name first or last name last) and inclusion of multiple taxpayers is up to each county.
TAX_ADD_L1	text	40	Taxpayer Address Line 1	Mailing address of the taxpayer. Up to three lines may be used. Typically line1 is street address and line2 is city, state & zip, but other variations exist.
TAX_ADD_L2	text	40	Taxpayer Address Line 2	MetroGIS Regional Parcel Dataset Attributes
TAX_ADD_L3	text	40	Taxpayer Address Line 3	Field Description with some comments Field Type Field
HOMESTEAD	text	1	Homestead Status	Homestead status (Y = yes, N = no, P = partial) Note: The inclusion of this field will allow parcel data users to assume the owner is the occupant for these parcels. Not all counties have this data as a yes or no type field. Those counties can decide if they want to process it into a Y/N field.
EMV_LAND	numeric	11	Est. Market Value - Land	Land estimated market value
EMV_BLDG	numeric	11	Est. Market Value - Buildings	Building estimated market value
EMV_TOTAL	numeric	11	Est. Market Value - Total	Total estimated market value
TAX_CAPAC	numeric	11	Tax Capacity	Tax capacity of the parcel
TOTAL_TAX	numeric	11	Total Tax	Total tax of the parcel

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SPEC_ASSES	numeric	11	Special Assessments	Special assessment value due and payable in the current year.
TAX_EXEMPT	text	1	Tax Exempt Status	Tax exempt (Y/N) (Note: The counties that do have this information tend to have it imbedded in other code fields. A Y/N field will be maintained and counties can decide whether to do the processing to create that information to populate the field.)
XUSE1_DESC	text	100	Exempt Use 1	Description of exempt use type 1.
XUSE2_DESC	text	100	Exempt Use 2	Description of exempt use type 2.
XUSE3_DESC	text	100	Exempt Use 3	Description of exempt use type 3.
XUSE4_DESC	text	100	Exempt Use 4	Description of exempt use type 4.
DWELL_TYPE	text	30	Dwelling Type	Type of dwelling (e.g. single family, duplex, etc.)
HOME_STYLE	text	30	Home Style	Home style description (e.g. rambler, split entry, etc.)
FIN_SQ_FT	numeric	11	Square Footage	Finished square footage
GARAGE	text	1	Garage	Garage (Y/N)
GARAGESQFT	text	11	Garage Square Footage	Garage square footage
BASEMENT	text	1	Basement	Basement (Y/N)
HEATING	text	30	Heating	Type of heating in use
COOLING	text	30	Cooling	Type of cooling in use
YEAR_BUILT	numeric	4	Year Built	Year built
NUM_UNITS	text	6	Number of Units	Number of residential units.
SALE_DATE	date	8	Last Sales Date	Date of last sale
SALE_VALUE	numeric	11	Last Sales Value	Value of last sale
SCHOOL_DST	text	6	School District	Unique school district number
WSHD_DIST	text	50	Watershed District	Watershed district or watershed management organization name
GREEN_ACRE	text	1	Green Acres	Green acres status (Y/N)
OPEN_SPACE	text	1	Open Space	Open space status (Y/N)
AG_PRESERV	text	1	Agricultural Preserve	Agricultural preserve status (Y/N)

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AGPRE_ENRD	date	8	Ag. Preserve Enrolled	Agricultural preserve enrolled date
AGPRE_EXPD	date	8	Ag. Preserve Expiration	Agricultural preserve expiration date
PARC_CODE	numeric	2	Parcel Polygon to Parcel Point and PIN Relationship Code	This field is used to provide information about the relationship between parcel polygons, parcel points and unique tax parcel identifiers (PINs).

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