

Notes on Comparison of DCDATS to PRISM

Review 03/07/2013 by Mark Kotz

This document is a comparison of the [proposed Digital Cadastral Data Attribute Transfer Standard \(DCDATS\)](#) to the [proposed Property Records Information System of Minnesota \(PRISM\)](#) data schema. The review is conducted from the perspective of a geospatial parcel data user who is unfamiliar with the purpose of or needs for PRISM. This limited perspective will inherently result in some biases in this comparison.

This document is intended to provide information and guidance to MnGeo and the Digital Cadastral Data Committee. It is expected that MnGeo will use this review to craft a separate response to and conversation with the Dept. of Revenue to further understand the similarities and differences between these two important data projects and explore opportunities to work together.

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Source of PRISM Information

Link to PRISM project review web page http://www.revenue.state.mn.us/local_gov/prop_tax_admin/Pages/PRISM-Stakeholder.aspx

Documents used for this review are listed on that page as:

- Logical File Layout
- Data Definitions and Validations
- Code Tables

Nothing was used from the Zip folder named Schema.

Review Comments

Comparing PRISM data schema to proposed Digital Cadastral Data Attribute Transfer Standard (DCDATS)

What Does Highlighting Mean?

Yellow	Elements that are included in both but are inconsistent in a way that seems problematic
Green	DCDATS elements that are not apparent in PRISM
Blue	Elements are presumed to exist, but not verified
None	Elements are included in both and are consistent, or are inconsistent in a way that seems very reasonable and allows an automated routine to create the consistency.

State Coding Standards: (see prism-code-tables.xls for proposed PRISM codes)

1. PRISM County Code **does not comply with state and national standards**, and thus is not consistent with DCDATS.
 - a. <http://mn.gov/oet/policies-and-standards/geospatial/gis-pages/mn-county-identification-codes.jsp>
2. PRISM City/Town Code **does not comply with state and national standards**, and thus is not consistent with DCDATS.
 - a. <http://mn.gov/oet/policies-and-standards/geospatial/gis-pages/CTU-Identifier-Codes.jsp>
3. PRISM School Code appears to be consistent with Dept. of Education codes and thus is consistent with DCDATS. No state standard exists for these codes, though the Dept. of Education codes are a common de-facto standard.
4. Lake # is not part of DCDATS. However, for the sake of completeness from a state geospatial standards perspective, the Lake # code used in PRISM **does** appear to comply with state standard.
 - a. <http://mn.gov/oet/policies-and-standards/geospatial/gis-pages/mn-basin-identification-codes.jsp>

DCDATS Data Element Comparison to PRISM

The first five columns come directly from the proposed DCDATS standard. The far right column shows the comparison to PRISM.

Field Name	Field Type	Field Length	Description	Comments	PRISM Comments
COUNTY_ID	text	3	Unique County ID	Three-character FIPS and State standard county code .	Included but inconsistent coding. Does not use state & federal standard.
PIN	text	25	Unique Parcel ID	Unique statewide parcel ID comprised of the county PIN with the COUNTY_ID followed by a dash appended to the front.	Included but does not append county code. Appending the county code is a simple, automatable post-processing task.

BLDG_NUM	text	10	House Number	The building or house number of the parcel. Fractional house numbers should be included with this field.	Included as "Location Address 1" = street address. Not parsed into the seven fields defined in DCDATS.
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).	Included as "Location Address 1" = street address. Not parsed into the seven fields defined in DCDATS.
PREFIXTYPE	text	6	Street Prefix Type	Street prefix type (e.g., Hwy) for the parcel. Few data producers store this data separately.	Included as "Location Address 1" = street address. Not parsed into the seven fields defined in DCDATS.
STREETNAME	text	40	Street Name	Street name for the parcel. If the separate street data fields (direction, type, etc.) cannot be provided, they may be included as a combined data element in this field.	Included as "Location Address 1" = street address. Not parsed into the seven fields defined in DCDATS.
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#508hd_r2).	Included as "Location Address 1" = street address. Not parsed into the seven fields defined in DCDATS.
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).	Included as "Location Address 1" = street address. Not parsed into the seven fields defined in DCDATS.
UNIT_INFO	text	12	Unit Information	Additional unit information for the parcel for condominiums, etc. (e.g., Unit 5B, Suite 8).	Included as "Location Address 1" = street address. Not parsed into the seven fields defined in DCDATS.
CITY	text	30	City (actual)	Name of city or township in which the parcel actually resides. This may differ from the mailing address city used by the USPS.	Included as "Location Address 2" = "City/Town of parcel". This implies that the value is for the actual city or township in which the parcel resided and not the USPS designated city used by that location; however, this is not explicitly stated. Experience suggests that this could be misinterpreted.
CITY_USPS	text	30	City (mailing)	The mailing address city for the parcel as defined by the USPS.	Not included. See DCDATS "CITY" field for additional info.
ZIP	text	5	ZIP Code	ZIP code for the parcel.	Included. Does not indicate if this should be zip plus 4. What does "*match standards" mean?
ZIP4	text	4	ZIP 4 Extension	The four-digit ZIP code extension for the parcel.	Not explicitly included.
PLAT_NAME	text	50	Legal Description Plat Name	The legal description plat name. This is often synonymous with the subdivision name.	Not included.

BLOCK	text	5	Legal Description Block	The legal description block identifier within the plat.	Not included
LOT	text	5	Legal Description Lot	The legal description lot number within the block.	Not included
ACRES_POLY	numeric	11 (2 dec)	Polygon Acreage	The calculated acreage of the polygon within the geospatial data (numeric field with two decimal places).	This can be calculated from spatial data.
ACRES_DEED	numeric	11 (2 dec)	Deeded Acreage	The deeded acreage of the parcel (numeric field with two decimal places).	Included
USE1_DESC	text	100	Use Type 1	Description of use type 1.	This could be the same as the Property Type Code. There is a one-to-many relationship which would allow a routine to gather up to four codes.
USE2_DESC	text	100	Use Type 2	Description of use type 2.	ditto
USE3_DESC	text	100	Use Type 3	Description of use type 3.	ditto
USE4_DESC	text	100	Use Type 4	Description of use type 4.	ditto
MULTI_USES	text	1	Multiple Uses	Flag (Y/N) to indicate if multiple uses exist.	Not explicitly define. Would need to be generated from a logic rule.
LANDMARK	text	100	Landmark/Business Name	Name of the predominant landmark or business on this parcel.	Not included
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 optional.	Not included
OWNER_MORE	text	50	Additional Owner Name	Field for additional owner information where available (e.g., joint owner or additional first name first format).	Not included
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 and ZIP, but other variations exist.	Not included
OWN_ADD_L2	text	40	Owner Address Line 2		Not included
OWN_ADD_L3	text	40	Owner Address Line 3		Not included

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 data provider.	Included as 4 parsed fields. This would be easy to concatenate in an automated routine.
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 and ZIP, but other variations exist.	Included
TAX_ADD_L2	text	40	Taxpayer Address Line 2		Included
TAX_ADD_L3	text	40	Taxpayer Address Line 3		Included as parsed fields of City, State Zip code. This would be easy to concatenate in an automated routine.
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 producers have this data as a Y/N type field.	Included. Homestead Type Code
EMV_LAND	numeric	11	Est. Market Value - Land	Land estimated market value.	Included. A one-to-many relationship exists, so processing would be needed to look for and combine multiple records in a parcel.
EMV_BLDG	numeric	11	Est. Market Value - Buildings	Building estimated market value.	Defined as "Building/Other" EMV. Ditto on one-to-many relationship.
EMV_TOTAL	numeric	11	Est. Market Value - Total	Total estimated market value.	Not explicitly provided, but It is presumed that this is a simple calculation of the two fields above.
TAX_CAPAC	numeric	11	Tax Capacity	Tax capacity of the parcel.	Several fields exist related to this. (As the reviewer, I admit having limited knowledge of what actually constitutes tax capacity, so I can't say with certainty that it is included. Seems like it is.)
TOTAL_TAX	numeric	11	Total Tax	Total tax of the parcel.	It is not apparent that this exists explicitly. It is presumed that it does exist or is derivable.
SPEC_ASSES	numeric	11	Special Assessments	Special assessment value due and payable in the current year.	Included
TAX_EXEMPT	text	1	Tax Exempt Status	Tax exempt (Y/N). Note: The data producers that have this information tend to have it imbedded in other code fields. Additional processing may be necessary to convert the data to this Y/N format.	This can be determined from the R/P Indicator field.

XUSE1_DESC	text	100	Exempt Use 1	Description of exempt use type 1.	This can be derived from the Exempt Code
XUSE2_DESC	text	100	Exempt Use 2	Description of exempt use type 2.	This can be derived from the Exempt Code
XUSE3_DESC	text	100	Exempt Use 3	Description of exempt use type 3.	This can be derived from the Exempt Code
XUSE4_DESC	text	100	Exempt Use 4	Description of exempt use type 4.	This can be derived from the Exempt Code
DWELL_TYPE	text	30	Dwelling Type	Type of dwelling (e.g., single family, duplex, etc.).	Not included
HOME_STYLE	text	30	Home Style	Home style description (e.g., rambler, split entry, etc.).	Not included
FIN_SQ_FT	numeric	11	Square Footage	Finished square footage.	Not included
GARAGE	text	1	Garage	Garage (Y/N).	Not included
GARAGESQFT	text	11	Garage Square Footage	Garage square footage.	Not included
BASEMENT	text	1	Basement	Basement (Y/N).	Not included
HEATING	text	30	Heating	Type of heating in use.	Not included
COOLING	text	30	Cooling	Type of cooling in use.	Not included
YEAR_BUILT	numeric	4	Year Built	Year built.	Not included
NUM_UNITS	text	6	Number of Units	Number of residential units.	Included
SALE_DATE	date	8	Last Sales Date	Date of last sale.	Not included
SALE_VALUE	numeric	11	Last Sales Value	Value of last sale.	Not included
SCHOOL_DST	text	4	School District	Unique four-character school district number as defined by the MN Dept. of Education and listed at http://education.state.mn.us/Directories/report_c4.js .	Included. Coding is consistent with DCDATS.
WSHD_DIST	text	50	Watershed District	Watershed district or watershed management organization name.	This can be derived from the Special Taxing District Code for watershed districts. If WMO's do not have taxing authority (I can't remember, is that the distinction?) then they would not be included.
GREEN_ACRE	text	1	Green Acres	Green acres status (Y/N).	This was not immediately apparent but it might be buried in the weeds of the data.

OPEN_SPACE	text	1	Open Space	Open space status (Y/N).	This was not immediately apparent, but it might be buried in the weeds of the data.
AG_PRESERV	text	1	Agricultural Preserve	Agricultural preserve status (Y/N).	This was not immediately apparent, but it might be buried in the weeds of the data.
AGPRE_ENRD	date	8	Ag. Preserve Enrolled	Agricultural preserve enrolled date.	Not included
AGPRE_EXPD	date	8	Ag. Preserve Expiration	Agricultural preserve expiration date.	Not included
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). Guidance on how to populate this field can be found in the MetroGIS specifications. See the detailed explanation of this field at the end of the MetroGIS specifications document .	This applies only to geospatial data.
SECTION	text	2	PLSS Section	Section number.	Not included
TOWNSHIP	text	3	PLSS Township	Township number.	Not included
RANGE	text	3	PLSS Range	Range number.	Not included
RANG_DIR	text	1	PLSS Range Direction	0 = west, 1 = east (Cook Co. only), 2 = indicates a west half township or west half range	Not included
LEGAL_DESC	text	256	Legal Description	Abbreviated legal description.	Not included
EDIT_DATE	date	8	Maintenance Date of Parcel	The date on which the spatial or tabular data for an individual parcel polygon was last updated or edited.	This applies only to geospatial data.
EXPORT_DATE	date	8	Export Date of the Polygon	The date the entire dataset was exported from the producer's GIS for external delivery.	This applies only to geospatial data.