

SUBMISSION DOCUMENTATION

Version 4 Statewide Parcel Map Database Project

January 22, 2018

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V4 Data Submission Checklist

Tools

- Address Parsing Tool
- DOR XML Parse Tool
- Data Standardize Tool
- Condo Stack Tool
- Class of Property Dissolve Toolset
- Null Fields and Set to UPPERCASE Tool
- Field Mapping Workflow Documentation
- Summary Table Guide
- Validation and Submission Tool (run in "TEST Mode" will check data)
- GIS Template – Searchable Format

Counties Note

You may need to first groom the data!
Note that counties may need to clean and standardize some of the parcel and tax roll data in order to meet the Searchable Format. The county is responsible for meeting the Searchable Format standard—regardless of whether they work with a third-party vendor. All submissions should be vetted by the county before submission, as vendors do not always catch each error or deviation from the schema fields/domains.

County Incorporate ALL Municipal Data.

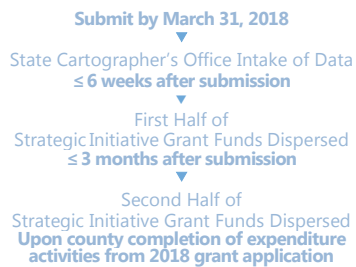
Counties should be the only entity submitting data for V4. If a municipality stewards 1) parcel data and/or 2) tax roll data separately from the county, the county should request, integrate, and submit data **that has been standardized** for the municipality.

Dates of Data

V4 data submitted by **March 31, 2018** should be a snapshot of:

- **Parcel geometry** from January 1, 2018 (or more current if available).
- **Tax roll data** associated with the parcel as finalized in December of 2017 (based on the parcel as it existed on January 1, 2017, as assessment data lags a year behind).

Grant Timeline



Read the Full Submission Documentation!

This checklist does NOT represent all schema specs and requirements. Read the full documentation and ask questions along the way as you prep your data!

Questions?

- **LIO county contacts in your peer counties are a great resource!**
- **Re-read Submission Documentation**
- **Check the FAQs section on the V4 webpage**
- **Technical questions** – contact Codie See, csee@wisc.edu
- **Policy/grant questions** – contact Peter Herreid at 608-267-3369 or peter.herreid@wisconsin.gov

1 ✓ PREP

- Read schema documentation in full and review **V4 webpage!**
- Prep data for the Searchable Format Gather, clean, groom, and standardize!
- Employ any useful **Tools**
- Review your **V3 Observation Report** and rectify all V3 errors

2 ✓ PARCEL FEATURE CLASS WITH TAX ROLL DATA

- All attribute data in the GIS table
- Include county-wide digital parcel data with attributes according to **Apix B** (PARCEL SCHEMA – annotated list ▶)
- Follow instructions in **Apix A** to format, standardize domains, and model condos according to condo model scenario from **Fig A-1**

3 ✓ OTHER LAYERS – PLSS

- Submit PLSS corner data, per **Apix C**

4 ✓ OTHER LAYERS – RML

Submit other layers AS IS, *IF* updated/new, per **Apix D:**

- Zoning: General (county-maintained)
- Zoning: Shoreland (county-maintained)
- Zoning: Airport Protection (county-maintained)
- Rights of Way
- Roads/Streets/Centerlines
- Hydro
- Address Points
- Buildings/Building Footprints
- Land Use
- Parks/Open Space; Trails; Other Recreation

5 ✓ VALIDATE WITH VALIDATION AND SUBMISSION TOOL

- Download then run the **Validation and Submission Tool**. You may need to REPEAT in **TEST mode** (unchecked box in tool) to resolve deviations from schema
- Run Validation and Submission Tool in **FINAL mode**
- Input your **Explain-Certification.txt** file in the tool in section 2
- Certify that your submission is complete (relative to the Element Occurrence Standard) in section "2-Submission Form Basic Info"
- Save the **“.ini” file**—which is your *mandatory* submission form

6 ✓ ZIP AND SUBMIT

- Submit .ini submission form + data to **wisedecade.legis.wisconsin.gov** as a single zipped (.zip) file

Statewide Field Name (Clickable!)	Alias (Full Definition in Apix B)	Benchmark 1 & 2 Requirement
<input type="checkbox"/> STATEID ¹³	Auto-Populated State ID	–
<input type="checkbox"/> PARCELID	Parcel ID	Yes
<input type="checkbox"/> TAXPARCELID	Tax Parcel ID	Yes
<input type="checkbox"/> PARCELDATE	Parcel Date	Yes
<input type="checkbox"/> TAXROLLYEAR	Tax Roll Year	Yes
<input type="checkbox"/> OWNERNAME1 ²	Primary Owner Name ³	Yes
<input type="checkbox"/> OWNERNAME2	Secondary Owner Name ³	Yes – If available
<input type="checkbox"/> PSTLADDRESS	Full Mailing Address (Owner) ⁴	Yes
<input type="checkbox"/> SITEADDRESS	Full Physical Street Address ^{5,6}	Yes
<input type="checkbox"/> ADDNUMPREFIX	Address Number Prefix	Yes – Parse ^{7,8}
<input type="checkbox"/> ADDNUM	Address Number	Yes – Parse ^{7,8}
<input type="checkbox"/> ADDNUMSUFFIX	Address Number Suffix	Yes – Parse ^{7,8}
<input type="checkbox"/> [PREFIX]	Prefix ¹	Yes – Parse ^{7,8}
<input type="checkbox"/> STREETNAME	Street Name	Yes – Parse ^{7,8}
<input type="checkbox"/> [STREETTYPE]	Street Type	Yes – Parse ^{7,8}
<input type="checkbox"/> [SUFFIX]	Suffix	Yes – Parse ^{7,8}
<input type="checkbox"/> LANDMARKNAME	Landmark Name	Yes – Parse ^{7,8}
<input type="checkbox"/> UNITTYPE	Unit Type	Yes – Parse ^{7,8}
<input type="checkbox"/> UNITID	Unit ID	Yes – Parse ^{7,8}
<input type="checkbox"/> PLACENAME	Place Name (Jurisdictional)	Yes
<input type="checkbox"/> ZIPCODE	Zip Code	Yes
<input type="checkbox"/> ZIP4	Zip Code Plus 4	Yes
<input type="checkbox"/> STATE	State	Yes
<input type="checkbox"/> [SCHOOLDIST]	School District	Yes
<input type="checkbox"/> [SCHOOLDISTNO]	School District Number	Yes
<input type="checkbox"/> [IMPROVED]	Improved Structure (CALCULATED)	Yes
<input type="checkbox"/> CNTASSDVALUE	Total Assessed Value ⁹	Yes
<input type="checkbox"/> LNDVALUE	Assessed Value of Land	Yes
<input type="checkbox"/> IMPVALUE	Assessed Value of Improvements	Yes – If applicable
<input type="checkbox"/> FORESTVALUE	Assessed Forested Value	Yes – If applicable
<input type="checkbox"/> ESTFMKVALUE	Estimated Fair Market Value	Yes
<input type="checkbox"/> NETPRPTA	Net Property Tax	Yes
<input type="checkbox"/> GRSPRPTA	Gross Property Tax	Yes
<input type="checkbox"/> [PROPCCLASS]	Class of Property ¹⁰	Yes
<input type="checkbox"/> [AUXCLASS]	Auxiliary Class of Property ¹¹	Yes
<input type="checkbox"/> ASSDACRES	Assessed Acres	Yes
<input type="checkbox"/> DEEDACRES	Deeded Acres	Yes
<input type="checkbox"/> GISACRES	GIS Acres ¹²	No
<input type="checkbox"/> [CONAME]	County Name	Yes
<input type="checkbox"/> LOADDATE ¹³	Load Date	–
<input type="checkbox"/> [PARCFIPS]	Parcel Source FIPS	Yes
<input type="checkbox"/> [PARCERSRC]	Parcel Source Name	Yes
<input type="checkbox"/> [LONGITUDE] ¹³	Longitude of Parcel Centroid	–
<input type="checkbox"/> [LATITUDE] ¹³	Latitude of Parcel Centroid	–

Table Notes

1. **[STANDARDIZE DOMAINS]**: Standardize domains for PREFIX, STREETTYPE, SUFFIX, SCHOOLDIST, SCHOOLDISTNO, IMPROVED [CALCULATED], PROPCCLASS, AUXCLASS, CONAME, PARCFIPS, and PARCERSRC.
2. **REDACTION POLICY**. OWNERNAME1/OWNERNAME2. Owner names are necessary for data submittal to be usable by state agencies. Any redaction of owner names, as required by an existing county or municipal policy, should be handled explicitly in the data *before* it is submitted. If any or all owner names are not included, the county must include the **written policy** for excluding them as adopted by the county or municipality with the data submission. See full schema for more.
3. **OWNERNAME1**. 2nd owner goes in OWNERNAME2; 3rd owner is omitted.
4. **PSTLADDRESS**. Tax bill mailing address (for **owner**—NOT the parcel itself—owner mailing address may be out-of-state); all other mailing addresses omitted.
5. **SITEADDRESS**. Unless no address has been assigned (e.g., no physical structure on parcel). If a site address does not exist as segmented elements in the county land information system, the county must **parse site address elements** before submitting. Address elements are (in this order): ADDNUMPREFIX, ADDNUM, ADDNUMSUFFIX, PREFIX, STREETNAME, STREETTYPE, SUFFIX, LANDMARKNAME, UNITTYPE, UNITID.
6. **SITEADDRESS**. Only include primary address; 2nd address is omitted.
7. **PARSING OF ADDRESS ELEMENTS**. (ADDNUMPREFIX through UNITID). Counties must provide fully parsed site address elements. While PSTLADDRESS and SITEADDRESS are provided as a full field and not parsed, there are **elements of the parcels SITEADDRESS** which should be **parsed in to individual elements with standardized domains**.
8. **ADDRESS ELEMENTS**. (ADDNUMPREFIX through UNITID). Only include address elements from the primary site address.
9. **CNTASSDVALUE**. Total Assessed Value (CNTASSDVALUE) must be calculated before submitting. Often this is Assessed Value of Land + Assessed Value of Improvements. See full schema for more.
10. **PROPCCLASS**. Listed if more than one exists and delimited by commas.
11. **AUXCLASS**. Should be standardized for the assessment classifications of "Special" and "Tax Exempt" specified in schema. Any AUXCLASS class not meeting the definition of one of the Special/Exempt standard domains may be left as is, but contributors must submit a document that defines each of the submitted domains in *Explain-Certification.txt* portion of submission form.
12. **GISACRES**. GIS acres is optional.
13. **STATEID & LOADDATE**. Include STATEID and LOADDATE with submission but **leave <Null>**. Do **NOT** include LONGITUDE/LATITUDE fields, as they are to be populated by the aggregation team.

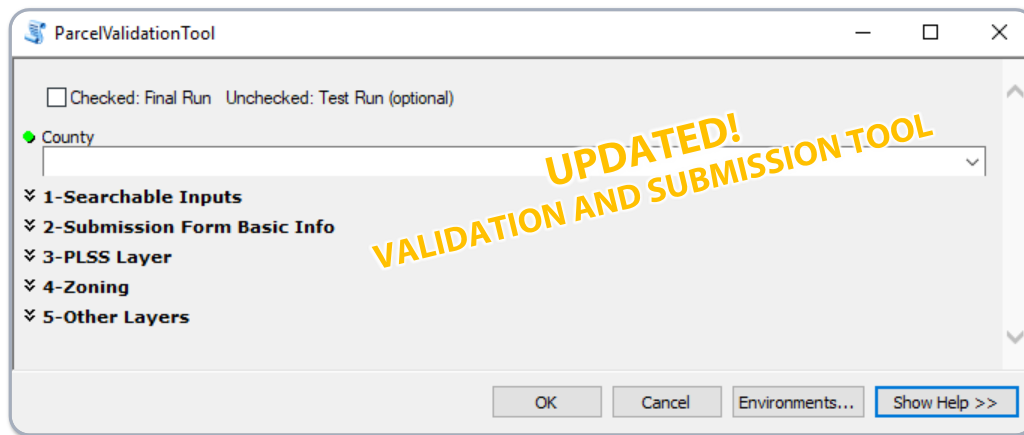
NEW FOR V4

The data acquired through this request will be used to develop a statewide parcel layer for the next version of the Statewide Parcel Map Database Project, Version 4.

The data you are asked to submit for V4 will be extremely similar to the V3 data. The V4 schema is not different in any substantive way. However, there have been some clarifications, and a few other changes for V4.

Modifications for V4

- **Validation and Submission Tool.** Our project partners at the State Cartographer's Office have updated the Validation and Submission Tool that counties are required to run in order to validate their data against the schema. Submitters must run the tool in FINAL mode before they can submit. You must re-download an updated version of the tool, then run it. The Submission Form (an ".ini" file) is produced by running the Validation and Submission Tool in FINAL mode. The .ini Submission Form is a mandatory component of the data submission.



- **Submit PLSS Corner Data.** To maximize return on investment on expenditures related to PLSS, DOA is collecting PLSS corner data, to be shared with SCO for the library associated with Survey Control Finder (formerly called "PLSSFinder"), and for a new sub-project to create an initial version of a statewide PLSS database. PLSS corner data must be submitted this year. See Appendix C for directions.
- **Other Layers – Submit Updated/New Only.** DOA is continuing to combine the V4 data request with a request that has been separate in the past—that of Jaime Martindale of the UW-Madison Robinson Map Library (RML). Therefore, we are requesting a few other layers, in addition to parcels with tax roll attributes. However, **only UPDATED/NEW other layers are to be submitted.** See Appendix D for more.
- **Easier Zoning Data Submission.** For V4, counties only need to submit three layers of county-maintained zoning data: 1) General, 2) Shoreland, and 3) Airport Protection. These layers may be submitted AS IS, except for the requirement that the zoning layers shall be complete. "Complete" means the GIS file should include either:
 - a) a field with a description of the class name for each zoning feature, or
 - b) a field or metadata populated with a link to a valid webpage or web document that contains authoritative/official descriptions of the specific zoning class or all zoning classes within the jurisdiction.
- **No Export Format Option.** There is no longer an option to submit in the Export Format. The Export Format was a flexible format which was converted to the Searchable Format on behalf of counties, requiring a join to be made after the county had submitted. It was permitted for parcel data submission in 2016 and 2017, while the Searchable Format was being phased in, but is no longer accepted. As communicated in many ways since 2015—including in the 2016 and 2017 grant applications—March 31st, 2018 is the deadline for *all* counties to meet the Searchable Format (also known as Benchmarks 1 and 2–Parcel and zoning data submission/Extended parcel attribute set submission). Counties will need to meet the Searchable Format in order to execute their 2018 WLIP Strategic Initiative grant. In some cases in which a county does not meet the Searchable Format requirements with their V4 submission, the county may need to alter its 2018 grant agreement to address deficiencies in its parcel layer or native data.
- **Clarified Documentation.** The V4 documentation has been revised. Some attribute definitions have been clarified. Discard any V3 documentation or V3 links. Replace with this updated Submission Documentation and V4 links. Counties will want to **carefully read the full schema** in order to ensure they are meeting the Searchable Format and to avoid excessive error messages in the Validation and Submission Tool.

TOOLS

Tools and Guides to Assist



Validation and Submission Tool

- **Check your parcel dataset for errors and prepare a parcel submission .ini file**

The Validation and Submission Tool is a dual-purpose tool that helps to:

- 1) Prepare a parcel dataset submission that is free of some of the most commonly found parcel dataset errors; and
- 2) Offers the interface through which to prepare the .ini submission form that must be included with the parcel data submission.

Address Parsing Tool

- **Parse site addresses into sub-address elements**

Use this guide if your county's parcel SITE ADDRESS data is not available as fully parsed address elements meeting the statewide parcel schema and you would like to use the given site address data to help meet the Searchable Format.

DOR XML Parse Tool

- **Translate Wisconsin Department of Revenue Tax Roll XML into a GIS table**

Use this guide if your county's tax roll data is already in XML format and you would like to use that XML data to help meet the Searchable Format.

Data Standardize Tool

- **Standardize file geodatabase feature class data via the creation of a lookup table.**

This toolbox contains a two-tool sequence. The first tool may be used to create a summary table of a field. This table will then be edited by the user and subsequently used as input to the secondary tool. The output of the second tool will include all original field domains as well as newly standardized domains in a new field as defined by the user in the lookup table. The output will be written to a new feature class.

Condo Stack Tool

- **Model condos by stacking condo parcel geometries by owner.**

Use this tool to model condo parcel geometries to match tax roll records with a 1:1 relationship.

Class of Property Dissolve Toolset

- **Format class of property data to the Parcel Initiative's schema definitions.**

This tool may be helpful if you wish to reformat your class of property information so as to meet the requirements of the statewide parcel schema definitions of PROPCLASS and AUXCLASS. This tool will handle various common formats for class of property and may be helpful if your data exists in one of these formats.

Null Fields and Set to UPPERCASE Tool

- **Format all attributes within a feature class to <Null> and UPPERCASE.**

This tool may be helpful if you wish to format your blank fields or fields annotated with a specific string to a true SQL <Null> or if you wish to set all fields to UPPERCASE alpha characters.

Field Mapping Workflow Documentation

- **Use this guide for mapping your parcel attributes to the Statewide Parcel Schema.**

This guide may be useful if you have parcel data formatted to the statewide schema specifications, but the fields do not have one or more of the following qualities:

- FIELD NAME
- ALIAS NAME
- DATA TYPE and/or PRECISION

Summary Table Guide

- **Use this guide if you wish to examine your submission in preparation for submitting your Searchable Format data. This guide is of particular use for cleaning, validating, and standardizing data.**

Creating and using summary tables can be an efficient and effective means for understanding, assessing, and standardizing your data. Through the simple workflows outlined in this guide, you'll be able to know exactly what domains exist within a field and quickly be able to apply corrections to the data, if needed.

GIS Template – Searchable Format

- **Contains the attribute schema and coordinate reference system as specified for achieving the Searchable Format.**

The template contains no features so that you can readily load your parcel features and field map as appropriate using the Field Mapping Workflow Documentation.

A. SEARCHABLE FORMAT

The Searchable Format directly meets the data model requirements of the statewide parcel layer. When submitting in the Searchable Format, the parcel and tax roll data is prepared by the county for immediate aggregation with the statewide layer, matching the schema exactly. Counties must plan to meet the Searchable Format by March 31, 2018 at the latest.

The Searchable Format follows a “FLAT MODEL,” meaning that one-to-many, many-to-many, or many-to-one relationships between geometries and attributes cannot exist. This also means that **all attribute data exists in the GIS table**. Data submissions requiring table joins are prohibited.

1. Searchable Format Parcel Geometries

1.1 File Specifications

- **GIS Template.** A GIS template file has been provided on the [V4 webpage](#) and can be used for submission: `GISTemplates.gdb\SearchableFormatTemplate`
- **File Geodatabase.** Parcel geometries must be submitted as a file geodatabase (.gdb) containing all available digital parcels as a single feature class.
- **Naming Convention.** Parcel feature class in the Searchable Format must follow the naming convention:
 - Geodatabase named with the county name
 - Feature class containing parcel geometries named “PARCELS”
 - Spaces annotated as underscores “_”
 - Punctuation omitted
 - All alpha characters UPPERCASE
 - Examples:
 - ▶ `LA_CROSSE_PARCELS.gdb\PARCELS`
 - ▶ `FOND_DU_LAC_PARCELS.gdb\PARCELS`
 - ▶ `ST_CROIX_PARCELS.gdb\PARCELS`
- **Projection/CRS.** Parcel geometries **must be transformed to the following CRS** (coordinate reference system specifications) using the transformation of choice, if applicable.
 - This CRS may be imported from `GISTemplates.gdb\SearchableFormatTemplate` on the [V4 webpage](#).
 - ▶ Datum: `NAD_1983_HARN_Wisconsin_TM`
 - ▶ WKID: 3071
 - ▶ Authority: EPSG
 - ▶ Projection: Transverse Mercator
 - ▶ False Easting: 520000.0
 - ▶ False Northing: -4480000.0
 - ▶ Central Meridian: -90.0
 - ▶ Scale Factor: 0.9996
 - ▶ Latitude of Origin: 0.0
 - ▶ Linear Unit: Meter (1.0)
 - **Note.** If your data is in a county-specific native projected coordinate system (PCS), you must first **re-project the data**. If you do not re-project before merging into the template, you may encounter the problem of your parcels being relocated to the middle of Lake Michigan (which you can check by overlaying the data to be submitted with a statewide basemap).

1.2 Geometric Specifications

- **1 Feature Class.** All available digital parcel geometries must be included as one GIS feature class for the county parcel jurisdiction.
- **Include all parcels.** File must include all available digital parcels, regardless of tax exemption status.
 - Only current parcels should be included. Historic parcels should be omitted.
- **County submits all county-wide data.** Counties should be the only entity submitting data.
 - If a municipality stewards 1) parcel data and/or 2) tax roll data separately from the county, the county should request, integrate, and submit data for the municipality that has been standardized.
- **Missing Municipal Geometries.** Counties should **not** include a municipal gap covered by a large placeholder polygon. Complete municipal data should be integrated with the county’s initial data submission.
- **Non-parcel features (ROW, GAP, HYDRO, RAIL, etc.).** Geometries that are not tax parcels, such as rights of way (ROW), gaps, or hydrography, need not join to a tax roll element. These elements, however, should be annotated with the appropriate “non-parcel” label in the PARCELID field. The PARCELID field should contain a label of the non-parcel feature. See examples in the schema definition for PARCELID.
- **One-to-One Relationship.** There must be a one-to-one relationship between parcel geometries and records in the attribute table. Each tax parcel geometry must attach to one and only one record; each record must attach to one and only one parcel. However, there are exceptions, which are detailed in section 3.1 below.

- **Condos.** In the case of condos or other collective real property ownerships, if there is more than one tax record for the same area of land, each record must attach to one and only one parcel geometry.

 **Tip:**
The CONDO STACK TOOL may help model condos by stacking condo parcel geometries by owner

- Condos may be presented with one of the following geometric representations (Figure A-1):
 - Condo Type #1–Discrete
 - Condo Type #2–Stacked
 - Condo Type #3–Divided
 - Condo Type #4–Distributed
 - Mixed Type–Condo modeling #1-4
 - Condo Type–Not Applicable

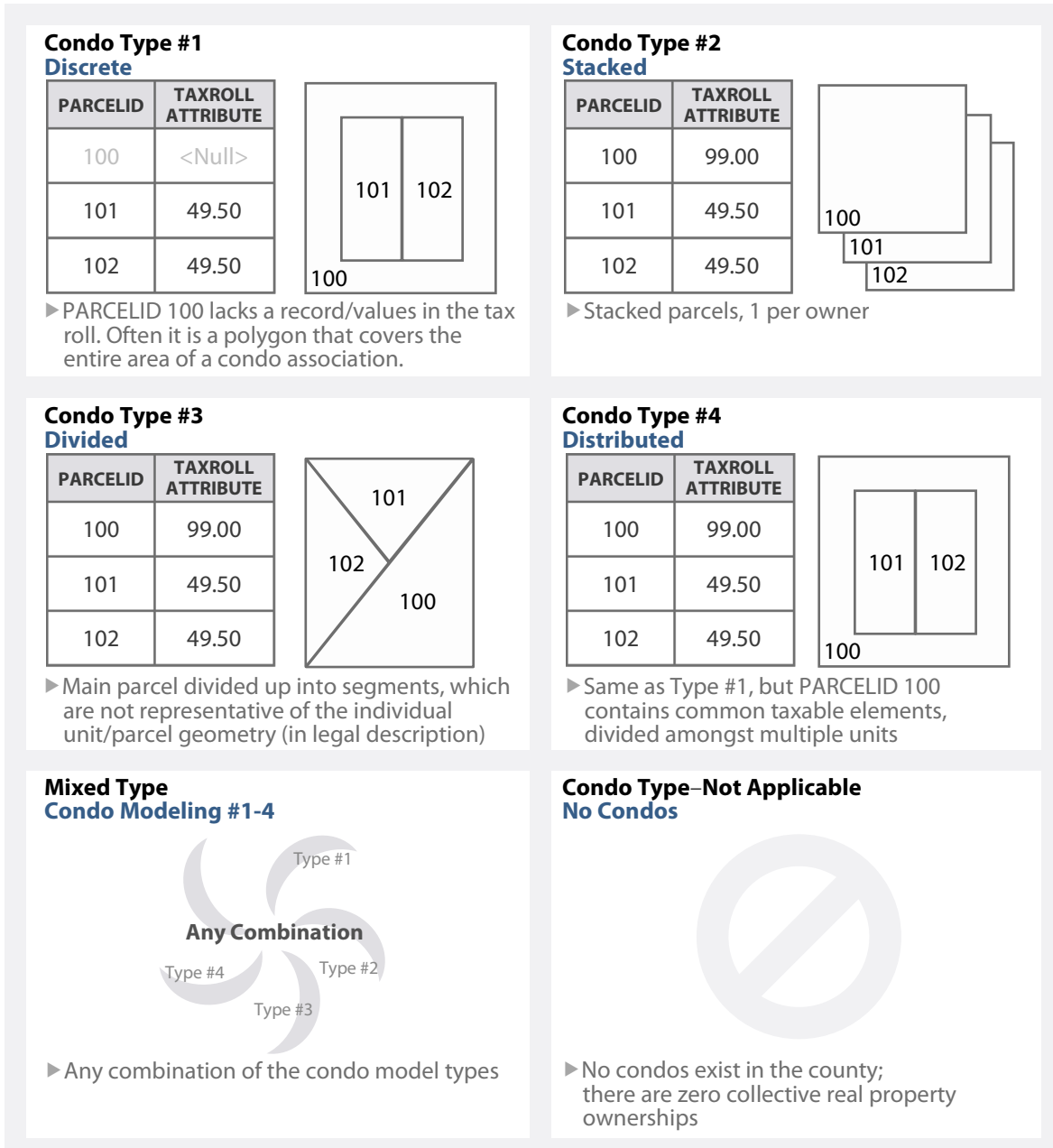


Figure A-1. Condo Model Scenarios



3. Parcel-Attribute Relationships for Searchable Format

3.1 Attaching Geometries to Attribute Records

- **One-to-one relationship.** There must be a one-to-one relationship between parcel geometries and records in the attribute table. Each parcel must attach to one, and only one, record; each record must attach to one, and only one, parcel.
 - Every record in the tax roll should attach to a parcel geometry. If a record exists in the tax roll but not in the parcel geometry, it is a missing parcel geometry. There should be no missing parcel geometries.
 - **Exceptions.** Note, there are exceptions to the one-to-one relationship rule:
 - ▶ Some tax roll elements may not be represented in the parcel layer if they do not have a digital parcel geometry created yet to join to. This might occur for the small number of counties who still have gaps in their county's digital parcel layer.
 - ▶ Some geometries may not have a tax element to join to if the parcel was recently altered. If parcel geometries are updated more frequently than the annual tax roll cycle update, missing parcel geometries can legitimately occur.
 - ▶ Legitimate conditions for exceptions to the one-to-one relationship rule:
 - **Annexations** – e.g., parcel 9-1-1 was annexed to 10-15-0
 - **Split Parcels** – e.g., parcel 9-1-1 was a 40 and has been split into four 10-acre lots, now numbers 9-1012-1; 9-1012-2; 9-1012-3; 9-1012-4, etc.
 - **Merge Parcels** – e.g., parcel 9-1-1 and 9-1-2 were merged together to one parcel, and is now known as 9-1-3
 - **Combination of Split and Merge** – e.g., parcel 9-1-1 and 9-1-2 merged together then divided into 4 lots (9-1012-1; 9-1012-2; 9-1012-3; 9-1012-4)
 - **ROW changes** – Parcel changes due to road rights of way
- In the case of condos, or other collective real property ownerships, if there is more than one tax record for the same area of land, each record must attach to one and only one parcel geometry. See Figure A-1 for acceptable geometric condo model scenarios.
 - Note that under Condo Type #1, a polygon (for a condo association) with no attribute information is acceptable.
- Multiple parcels should not be used to denote multiple site addresses, multiple owners, multiple classes of property, or any other attribute within the same real property. See the full schema in Appendix B for specifications on how to treat multiple elements per individual attribute.

4. Searchable Format Attributes

4.1 Attribute Schema Specifications

- **Standards.** The file geodatabase feature class must include an attribute table adhering to the schema specifications in Appendix B. This includes standardized field names and some standardized domains.
 - A `Parcel_Domain_List` containing acceptable values for parcel domains is available on the V4 webpage.
 - Attributes are defined in the full parcel attribute schema, Appendix B.
-  **Tip:** The `DATA STANDARDIZE TOOL` may help standardize a file geodatabase feature class data via the creation of a lookup table
- **All taxable real property.** The attribute table must include complete, current tax roll elements for all taxable real property in the county.
- **Parcel ID.** A parcel ID must be included that uniquely identifies each parcel via the `PARCELID` field.
 - **Non-Parcel Features.** Geometries that are not tax parcels, such as rights of way (ROW), gaps, or hydrography need not join to a tax roll element. These elements, however, should be annotated with the appropriate "non-parcel" label in the `PARCELID` field (i.e., hydrography name, "ROW," "GAP," etc.—see the `PARCELID` schema definition for more).
- **Handling of Multiple Values.** Multiple attribute elements within one real property must be treated according to specs described in Appendix B. Handling of multiple attribute elements is detailed per attribute in the schema.
- **Attributes Denoted by Alpha Characters as UPPERCASE Strings.** All alpha characters within the statewide database are annotated as UPPERCASE characters. Convert your alpha strings to UPPERCASE.
-  **Tip:** The `NULL FIELDS AND SET TO UPPERCASE TOOL` may help format all attributes within a feature class to `<Null>/UPPERCASE`
- **Format Currency Attributes as Numeric Values/Doubles.** All currency values (values measuring dollar amounts) are annotated in the statewide layer as **numeric values in character format** that exclude any currency formatting such as the dollar sign or comma separators such as the thousands delimiter. Decimal values are rounded up to the nearest hundredth (two decimal places to the right of the decimal) for all currency values, while measurement values (acres) should be annotated as non-rounded numbers. Currency/measurement values are also **acceptable as doubles** (double-precision floating-point number format).
- **Parsed Address Components for SITEADDRESS are Required** for the Searchable Format.
 - While `PSTLADRES` and `SITEADDRESS` are provided as a full field and not parsed, there are elements of the parcel's `SITEADDRESS` which should be parsed into individual elements with standardized domains.
 - ▶ Site address elements to parse are (in this order): `ADDNUMPREFIX`, `ADDNUM`, `ADDNUMSUFFIX`, `PREFIX`, `STREETNAME`, `STREETTYPE`, `SUFFIX`, `LANDMARKNAME`, `UNITTYPE`, `UNITID`.

 **Tip:** The `ADDRESS PARSING TOOL` may help parse site addresses into sub-address elements

5. Element Occurrence Standard

5.1 Attribute Completeness and the Element Occurrence Standard

- **Element Occurrence Standard.** Attribute completeness is subject to the “Element Occurrence Standard.” This means that if an element (such as a property address, a total assessed value, total property tax value, etc.) actually occurs for a given parcel, then this element should be included in the submitted dataset. This also means that there may be justifiable omissions from the submitted dataset. Examples might be missing tax data for tax exempt properties, no address when no structure is present on a property, etc. Data elements must be included only if they actually occur in the county land information system.
- **All Non-Existing Values Must be Populated as <Null>.** For all instances across all fields where a data value does not exist, a true SQL <Null> should be used.
 - A true SQL <Null> should be used instead of blank fields (e.g. “”) or whitespace (e.g. “ ”).
 - A true null is not a string of text that spells out “NULL” in alpha characters.
 - A <Null> value can be calculated into a field using the *Field Calculator* with the formula pictured in Figure A-2, or use the *Null Fields and Set to UPPERCASE Tool*.
 - Note that a true <Null> is not supported by the .dbf (database) format. The database format uses blank values to indicate nulls—noteworthy, because some counties maintain tax roll data in a database format. Therefore, you will need to use a tool or manually convert nulls from database format into true SQL <Null> values in the feature class submission.
 - <Null> indicates that a data value does not exist in the database. (This should not be confused with a value of 0. A null value indicates a *lack of a value*—a lack of a value is not the same thing as a value of zero.)
 - **Use “0” versus <Null> deliberately and with care.** 0 and <Null> have distinct meanings!

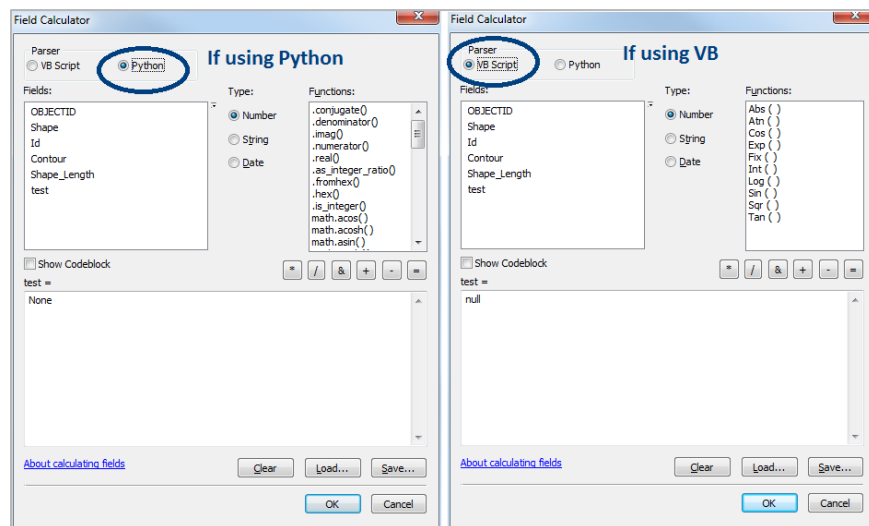


Figure A-2. Populating with <Null>

5.2 Missing Values

- **Designate Missing Values.** If a field is missing data that should be populated in-part or in the field’s entirety, the missing data should be noted in the *Explain-Certification.txt* file (inputted in FINAL mode of the Validation and Submission Tool), with a brief description of the missing data and reason for missing data. See example in Figure A-3.

```
*****
Please provide a brief explanation of any unsolvable errors, missing data, or other
issues with adhering to the submission standards here (if there are none, write NONE):
--PHYSICAL GAP PARCEL GEOMETRIES – Missing 7,000 parcel records. These parcels have
not yet been digitized.
--DEEDACRES – Missing 5,660 parcel records (within the VILLAGE OF XYZ). No DEEDACRES
values are available within VILLAGE OF XYZ for deeds predating 1985.
```

Figure A-3. Explain-Certification.txt file, with example notes on missing values

6. Searchable Format – Validation and Submission Tool + .ini Submission Form

- See the Validation and Submission Tool Guide for further instructions.

B. PARCEL SCHEMA FOR V4

Parcel Schema Legend	
V4 ELEMENTNAME	Denotes database field name
(Element Name)	Full English database field name (Alias)
[Standardized Domains]	Standardized field names and standardized domains required (with available Parcel_Domain_List)
[FGDC: <FGDC Element>]	Denotes database field name modeled after the FGDC <i>U.S. Thoroughfare, Landmark, and Postal Address Data Standard</i> . If name is different from FGDC, the FGDC element's name is also listed.
ELEMENT [AUTO-POPULATED]	Denotes that this field is AUTO-POPULATED by the V4 Project's aggregation team. These fields should be left <Null> for V4 submission.
{TEXT:<#> CHAR}	Denotes the datatype of the file (all attributes are TEXT) and the character length of the field
[CALCULATED]	Indicates an attribute that is calculated by the county, based on the value of another attribute. Applies only to the attribute IMPROVED.

STATEID [AUTO-POPULATED] (State ID) {TEXT:100 CHAR}

- This string field contains the contributing jurisdiction's FIPS code appended to the PARCELID (the unique number or identifier assigned to a parcel by the local authority). Calculate the STATEID by the following syntax:
 - ▶ <PARSELFIPS>+<PARCELID>
 - ▶ Example: If PARSELFIPS = "083" and PARCELID = "123456789," then:
STATEID = 083123456789
- Where PARSELFIPS is the three-digit **county FIPS code** from Table B-1, with leading zeros maintained in PARSELFIPS, and PARCELID is as defined below.
- **Counties include field but leave field <Null> for V4 submission.**

PARCELID (Parcel ID) {TEXT:100 CHAR}

- Unique number or identifier assigned to a parcel by the local GIS authority. The PARCELID is specific to GIS functionality and serves as the primary key to GIS joins or relationships.
- Examples (this list is **not** exhaustive):
 - ▶ **071006113329** ▶ **B-600-88**
 - ▶ **010-0640.01** ▶ **VH-747-E-28**
 - ▶ **4205** ▶ **WA0320124700**
- **PARCELID FOR NON-PARCEL FEATURES** – If the attribute element's geometry is not a parcel, then the PARCELID field should contain a label of the non-parcel feature.
- Rights of ways and hydrography polygon labels should be included with parcel feature class submission.
- Examples of PARCELID for non-parcel features (this list is **not** exhaustive):
 - ▶ PARCELID = **BALSAM LAKE** (to label a hydrography/lake polygon)
 - ▶ PARCELID = **LAKE** (to label a hydrography/lake polygon)
 - ▶ PARCELID = **HYDRO** (to label a hydro polygon)
 - ▶ PARCELID = **WATER** (to label a hydro polygon)
 - ▶ PARCELID = **ROW** (to label a street right of way polygon)
 - ▶ PARCELID = **GAP** (to label a gap in the parcel geometries)
 - ▶ PARCELID = **RAIL** (to label a railroad polygon)

TAXPARCELID (Tax Parcel ID) {TEXT:100 CHAR}

- Unique number or identifier assigned to a parcel that directly joins to the parcel numbers shown in the final taxroll.
- This ID is specific to the tax roll and serves as primary key in joining parcel geometries to tax roll.
- This ID may have commonalities with the PARCELID but is somehow distinct, or may be completely distinct from the PARCELID.
- If the TAXPARCELID is the same as PARCELID, enter a true SQL <Null>
 - ▶ TAXPARCELID must either be <Null> or different from PARCELID.
 - ▶ **In no circumstances should TAXPARCELID be a duplicate of PARCELID.**

PARCELDATE (Parcel Date) {TEXT:25 CHAR}

- Modification date for parcel **geometry**, describing when the parcel geometry was last edited or revised.
- In lieu of individual parcel date records, the parcel dataset's last known geometric editing date can be used. Such geometric edits include the following:
 - ▶ Parcel creation (date the digital geometry for the parcel came into existence)
 - ▶ Parcel division
 - ▶ Parcel merge
 - ▶ Change of parcel vertices
 - ▶ Spatial adjustment of parcel
- **Do NOT populate with the "cut date" or date the data was extracted/exported for V4 submission.**
- If no attribute is maintained for the date of last geometric revision, enter a true SQL <Null>
- Parcels migrated to (Esri) parcel fabric WITHOUT a geometric edit date/GIS parcel creation date: Enter <Null>
 - ▶ For parcels that have been revised or added to the parcel fabric since migrating, include the date of last geometric edit or creation date.

- Dates must be formatted as follows:
 - ▶ Syntax: MM/DD/YYYY
 - ▶ Example: **01/20/1984**

TAXROLLYEAR (Tax Roll Year) {TEXT:10 CHAR}

- The year of the tax roll from which tax information is procured. For V4, this should be 2017.
 - ▶ Example: **2017**
- Submitted data should be a snapshot of:
 - ▶ Parcel geometry from January 1, 2018 or more current if available
 - ▶ Tax roll data associated with the parcel as finalized in December of 2017 (based on the parcel as it existed on January 1, 2017, as assessment data lags a year behind).
- **Parcel Splits/New Parcels.** To designate a parcel that has been split or newly created:
 - ▶ It is acceptable to enter the first year tax roll data will be available in TAXROLLYEAR
 - ▶ This will be a future tax roll year ("**2018**") for new parcels that lack tax roll data for the V4 submission
 - ▶ Alternatively, it is acceptable for TAXROLLYEAR for parcel splits/new parcels to be <Null>

OWNERNAME1 (Primary Owner Name) {TEXT:254CHAR}

- The primary owner name of a parcel.
- In the case of multiple owners, if it is not clear which owner is the primary owner, discretion may be used to place an owner in this field.
- If not feasible to parse owners into separate fields, more than one owner may be included in this field.
- 2nd owner goes in OWNERNAME2; 3rd owner is omitted.
- If surnames are natively maintained in fields separate from first names, they should be concatenated and placed in the OWNERNAME1 field.
- Owner name does not follow formatting syntax and may be provided as is.
- OWNERNAME1 can be ordered in any order (First, Last, Middle Initial).
 - ▶ May or may not include middle initial.
- Owner's first and last names are provided, except in cases when owners share last names.
 - ▶ JANE AND JAMES SMITH
 - ▶ SMITH, JAMES & JANE
- OWNERNAME1 example formats:

JOHN SMITH	SMITH, JOHN R	JOHN R and SUE SMITH	SMITH, SUE & JOHN
JOHN R SMITH	JOHN R & SUE SMITH	JANE, JOHN & SUE SMITH	Other(s)
- **OWNERNAME1 – Redaction Policy**
 - ▶ Owner names are necessary for data submittal to be usable by state agencies. Any redaction of owner names, as required by an existing county or municipal policy, should be handled explicitly in the data *before* it is submitted. If any or all owner names are not included, the county must include the written policy for excluding them as adopted by the county or municipality (by link or full text) within the submission form.
 - ▶ If redaction of owner name is implemented on the submitted data, these names should be attributed as "NOT AVAILABLE" within each redacted record's OWNERNAME1 and/or OWNERNAME2 field.
 - ▶ The exception is public lands. Public lands that have a government-entity as a primary owner in the OWNERNAME1 field shall **not** be redacted.
- **OWNERNAME1 – Public Lands Policy**
 - ▶ Public lands should be designated by way of owner name in the OWNERNAME1 field
 - ▶ Example: OWNERNAME1 = DEPARTMENT OF NATURAL RESOURCES
 - ▶ All county-owned public parcels must have a value in OWNERNAME1
 - ▶ For publicly owned parcels, the same owner should be designated the same way if they own multiple parcels. In other words, standardize the owner names of public parcels.
 - ▶ Example: "ASHLAND COUNTY FOREST" every time, not interchanged with "Ashland Co. Forest"
 - ▶ For publicly-owned parcels, the order of words should be natural language order (with contiguous strings of text being next to each other)
 - ▶ Example: DEPARTMENT OF NATURAL RESOURCES
not "SOURCE DEPARTMENT OF NATURAL RE; URCH ST JOHN'S EV LUTHERAN CH"
 - ▶ **No redaction of public lands in OWNERNAME1.** Public lands that have a government-entity (federal, state, county, or local) as a primary owner in the OWNERNAME1 field shall **not** be redacted.

OWNERNAME2 (Secondary Owner Name) {TEXT:254 CHAR}

- If available. The secondary owner name of a parcel.
- 2nd owner goes in OWNERNAME2; 3rd owner is omitted.
 - ▶ If there are more than two total owners exist for the property, discretion may be used to select the first two owners for the purpose of populating OWNERNAME1 and OWNERNAME2. Remaining owner names will not be included in the dataset.
 - ▶ In the case of multiple owners, if it is not clear which owner is the secondary owner, discretion may be used to place an owner in this field.
- If not feasible to parse owners into separate fields, more than one owner may be included in this field.
- Owner name does not require formatting and may be provided as is.
- When possible, OWNERNAME2 should not be an overflow from OWNERNAME1.
- OWNERNAME2 Redaction Policy – OWNERNAME2 adheres to the same redaction policy as that of OWNERNAME1.

PSTLADDRESS (Full Mailing Address) {TEXT:200 CHAR}

- The primary **owner's full mailing address** or the full mailing address for the tax bill associated with the parcel, whichever is available.
- PSTLADDRESS may have nothing to do with the physical location of a parcel, and may be outside of Wisconsin.
- PSTLADDRESS is a **single field** comprised of:
 - ▶ Address Number Prefix*, Address Number, Address Number Suffix*, Prefix*, Street Name, Street Type*, Suffix*, Unit Type*, Unit ID*, USPS Postal Place Name, State, and Zip Code. (*Where applicable)
 - ▶ If owner mailing address is maintained as two lines (e.g., as two separate mailing label lines), it should be concatenated into one field.
 - ▶ A comma (",") is the preferred separator element, or a space (" ") is an acceptable separator element.
 - ▶ Example – Single-line with comma separator: **123 N MAIN ST, MIDTOWN, WI, 53611**
 - ▶ Example – Single-line concatenated from 2 lines: **123 N MAIN ST MIDTOWN WI 53611**
- **Domain standardization optional.** Owner's mailing address can contain elements with non-standardized domains.
 - ▶ Standard USPS Postal domains/**abbreviations are acceptable** in the owner's mailing address.
- **No partial addresses.** If mailing address in the native data is partial and not a full mailing address, do **not** submit mailing addresses for those specific parcels.
 - ▶ Incorrect: CITY, STATE, ZIP ▶ enter <Null> instead
 - ▶ Incorrect: GILMAN, WI, 54433 ▶ enter <Null> instead
 - ▶ Incorrect: NA, NA, GILMAN, WI, 54433 ▶ enter <Null> instead
 - ▶ Incorrect: STATE, ZIP ▶ enter <Null> instead
 - ▶ Incorrect: STATE, 00000 ▶ enter <Null> instead
- If there is no full owner mailing address, PSTLADDRESS should be populated with a true SQL <Null>
- **PSTLADDRESS – Public Lands Policy**
 - ▶ For county-owned public parcels, enter either a full mailing address for the county, or for the appropriate county department. Enter address uniformly if the same entity owns more than one parcel.
 - ▶ For publicly owned parcels, it is acceptable to enter the full mailing address of the parcel steward's central administration. Enter address uniformly if the same entity owns more than one parcel.
 - ▶ If mailing address in the native data is partial and not a full mailing address, do **not** submit partial mailing addresses for those specific parcels. Full mailing addresses only.
 - ▶ If no mailing address is available for publicly-owned parcels, enter <Null>

SITEADDRESS (Full Physical Address) [Standardized Domains – when broken into individual elements] {TEXT:200 CHAR}

- The full physical address (or site address) of a parcel.
- A **single field** comprised of the following elements:
 - ▶ **ADDNUMPREFIX***
 - ▶ **ADDNUM**
 - ▶ **ADDNUMSUFFIX***
 - ▶ **PREFIX*** [Standardized Domains – when broken into individual element]
 - ▶ **STREETNAME**
 - ▶ **STREETTYPE*** [Standardized Domains – when broken into individual element]
 - ▶ **SUFFIX*** [Standardized Domains – when broken into individual element]
 - ▶ **UNITTYPE***
 - ▶ **UNITID***

*Where applicable
City, State, Zip ▶ **Do NOT include "city, state, zip"** anywhere in SITEADDRESS
- If site address is maintained as elements in multiple fields, it should be concatenated into one field. Line breaks/carriage returns are not accepted.
 - ▶ Example – **N472.5 N JOHNSON STREET**
 - ▶ Example – **543 CTH MM N SUITE 101**
- Only include primary address; 2nd address is omitted.
 - ▶ If there are more than two physical addresses associated with a parcel, such as with an apartment, then a valid primary address is to be used, if available. Such an example of this would be an apartment's on-site office address. Alternatively, discretion may be used to select one "primary" physical address for the parcel.
- Address ranges are not accepted. Field should not have multiple address numbers.
- **Domain standardization optional.** Full physical address in SITEADDRESS can contain elements with non-standardized domains. However, individual address elements require domain standardization in their respective fields.
 - ▶ Standard USPS Postal domains/**abbreviations are acceptable** in SITEADDRESS.
- When a true site address does not exist, populate with <Null>

ADDNUMPREFIX (Address Number Prefix) [FGDC] {TEXT:50 CHAR}

- The portion of the complete address number which precedes the address number itself.
- In Wisconsin, this field is of particular interest due to grid address examples, such as "**W180N**8085 TOWN HALL ROAD." Other examples include ordinal directions as a prefix to the address number, such as "**N2554** JOHNSON STREET"
 - ▶ W180N
 - ▶ N
 - ▶ S379W
 - ▶ S

ADDNUM (Address Number) [FGDC] {TEXT:50 CHAR}

- The whole number component of a posted building identifier.
- Address numbers should always be whole numbers.
 - ▶ 2554
 - ▶ 8085
 - ▶ 4215
 - ▶ 10
- ADDNUM should not be a range. Address ranges (listing one number through a second number) are not accepted.
 - ▶ If there are multiple address numbers, select the primary address number (such as the first number in the range) and remove all secondary address numbers from ADDNUM.

ADDNUMSUFFIX (Address Number Suffix) [FGDC] {TEXT:50 CHAR}

- Rarely used extension of the address number for a posted building identifier.
- Not to be confused with unit divisions within a building (UNITID).
- Examples and contexts:
 - ▶ **A** ▶ (798 **A** 26TH STREET)
 - ▶ **-856** ▶ (2554-**856** MAIN STREET)
 - ▶ **½** ▶ (678 **½** MORRISON STREET)
 - ▶ **.5** ▶ (6895.**5** GORHAM STREET)
- Uncommon – For alpha characters that are part of the actual address number—and **not** a street directional prefix, the alpha characters may be put in ADDNUMSUFFIX
 - ▶ Address = 1234**N** E ISLAND LAKE RD
 - ▶ ADDNUM = 1234
 - ▶ **ADDNUMSUF = N**
 - ▶ PREFIX = E
 - ▶ STREETNAME = ISLAND LAKE
 - ▶ STREETTYPE = ROAD

PREFIX (Prefix) [Standardized Domains] [FGDC: Street Name Pre Type; Street Name Pre Directional] {TEXT:50 CHAR}

- One letter street direction or abbreviation that precedes the street name.
- This field also contains the highway jurisdiction indicator for any Wisconsin highways. See examples below for highway classification context and standardization.

PREFIX domains for street name pre directionals – Abbreviated

N	NW
S	SW
E	NE
W	SE

PREFIX domains for Highways – Abbreviated as below OR fully spelled out as below

CTH	COUNTY HIGHWAY	COUNTY ROAD
N CTH	N COUNTY HIGHWAY	N COUNTY ROAD
E CTH	E COUNTY HIGHWAY	E COUNTY ROAD
S CTH	S COUNTY HIGHWAY	S COUNTY ROAD
W CTH	W COUNTY HIGHWAY	W COUNTY ROAD

STH	STATE HIGHWAY	STATE ROAD
N STH	N STATE HIGHWAY	N STATE ROAD
E STH	E STATE HIGHWAY	E STATE ROAD
S STH	S STATE HIGHWAY	S STATE ROAD
W STH	W STATE HIGHWAY	W STATE ROAD

USH	US HIGHWAY
N USH	N US HIGHWAY
E USH	E US HIGHWAY
S USH	S US HIGHWAY
W USH	W US HIGHWAY

INTERSTATE

- ▶ Highways – highway prefixes can either be fully spelled-out OR abbreviated as above.
- ▶ Highways – any of the following are acceptable in PREFIX:
 - ▶ **COUNTY HIGHWAY / COUNTY ROAD / CTH**
 - ▶ **STATE HIGHWAY / STATE ROAD / STH**
 - ▶ **US HIGHWAY / USH**
 - ▶ “COUNTY” by itself is **not** an acceptable prefix
 - ▶ Usage should be consistent throughout the countywide dataset. Do not use multiple highway domain spelling conventions to designate the same particular highway type.
- Highway classification examples in context:
 - ▶ For address: 2554 **COUNTY HIGHWAY C**
 - ▶ PREFIX = COUNTY HIGHWAY
 - ▶ STREETNAME = C

- ▶ For address: "2554 **COUNTY HIGHWAY** C/H"
 - ▶ PREFIX = COUNTY HIGHWAY
 - ▶ STREETNAME = C/H
- ▶ For address: "2554 **S STATE HIGHWAY** XX"
 - ▶ PREFIX = S STATE HIGHWAY
 - ▶ STREETNAME = XX
- Road "alias" names should **not** be included in the STREETNAME field alongside a highway PREFIX and route ID.
 - ▶ For example, for address: "2554 COUNTY HIGHWAY C/MAIN ST"
 - ▶ PREFIX = COUNTY HIGHWAY; STREETNAME = C (The street name here would be incorrect as "C/MAIN")
 - Or:
 - ▶ STREETNAME = MAIN; STREETTYPE = STREET

STREETNAME (Street Name) [FGDC: Street Name; Street Name Pre Modifier; Street Name Post Modifier] {TEXT:50 CHAR}

- Primary street name.
- The legal street name as assigned by local address authority.
- STREETNAME does **not** include the street type of a named street.
- STREETNAME does **not** include the suffix direction of a coordinate street. Suffix direction belongs in SUFFIX.
- STREETNAME might incorporate a *Street Name Pre Modifier* and/or a *Street Name Post Modifier* (which do not have their own separate fields). In some cases, *Street Name Pre Modifier* might be acceptable in PREFIX field.
- For highways or county roads that share more than one route number or letter (e.g., USH **151/51**), these routes are listed with a delimiter
 - ▶ A forward slash ("/") is the preferred route delimiter, or a hyphen ("-") is an acceptable delimiter.
- STREETNAME does **not** include street aliases.
 - ▶ For example: 2554 STH 23/MAIN ST
 - ▶ Contains a state highway street name ("23") OR the local street name ("MAIN"), but not both.
 - ▶ "23/MAIN" would be incorrect as the street name.
- Do not include PREFIX values still attached to this field (e.g., CTH, STH, USH, etc.)
- Do not include STREETTYPE values in street name.
- Do not include extraneous information attached to STREETNAME, such as building descriptors.
- STREETNAME examples (in bold):
 - ▶ **MAIN STREET**
 - ▶ 4215 W **112TH STREET**
 - ▶ N54W16164 W **BECKER LANE**
 - ▶ 199 USH **151 SOUTH**
 - ▶ 1505 USH **151/51**
 - ▶ 111 #20 **JOHNSON STREET**
 - ▶ 134 CTH **A/D**

STREETTYPE (Street Type) [Standardized Domains] [FGDC: Street Name Post Type] {TEXT:50 CHAR}

- Street type of a named street (for the site address) written to full name of type:
 - ▶ E WASHINGTON **ROAD**
- **Fully spell-out** STREETTYPE domains.
- Abbreviations are **not** acceptable in STREETTYPE (even if they are standard USPS Postal domains).
- STREETTYPE example domains (this list is not exhaustive):

ACCESS	CRESCENT	HEIGHTS	PASS	SPRINGS
ACRES	CREST	HIGHWAY*	PASSAGE	SPUR
ALLEY	CROSS	HILL	PATH	SQUARE
AVENUE	CROSSING	HILLS	PATHWAY	STREET
BAY	CURVE	HOLLOW	PIKE	STRIP
BEACH	DALE	ISLAND	PLACE	SUMMIT
BEND	DRIVE	ISLE	PLAZA	TERRACE
BLUFF	END	JUNCTION	POINT	TOWER
BOULEVARD	ESTATE	KNOLL	PRAIRIE	TRACE
BRANCH	ESTATES	KNOLLS	PRIVATE DRIVE	TRAIL
BYPASS	EXPRESSWAY	LAKE	RAPIDS	TRAILS
CAUSEWAY	EXTENSION	LANDING	RESERVE	TRAILWAY
CENTER	FIELDS	LANE	RETREAT	TURN
CHASE	FOREST	LOOP	RIDGE	TURNPIKE
CIRCLE	FORK	MALL	ROAD	VALE
CLIFF	GARDENS	MANOR	ROUND	VALLEY
CLOSE	GATE	MEADOW	ROW	VIEW
COMMON	GATEWAY	MEADOWS	RUN	VISTA
COMMONS	GLENN	MEWS	SCHOOL	WALK
COURSE	GREEN	NEST	SETTLEMENT	WAY
COURT	GROVE	OVERLOOK	SHORE	WELLS
COVE	HARBOR	PARK	SHORES	
CREEK	HAVEN	PARKWAY	SPRING	

- *Note that "Highway" is seldom a STREETTYPE, as it is most often a PREFIX.

SUFFIX (Street Name Post Directional) [Standardized Domains] [FGDC: Street Name Post Directional; Street Name Post Modifier] {TEXT:50 CHAR}

- Street name post directional.
- One letter street direction that follows the street name.
 - ▶ MAIN STREET **NW**
- In rare cases, SUFFIX field may incorporate a *Street Name Post Modifier*.
- **Abbreviate directionals.**
- SUFFIX accepted domains (this list is not exhaustive):

N	North
S	South
E	East
W	West
NW	North West
SW	South West
NE	North East
SE	South East

LANDMARKNAME (Landmark Name) [FGDC] {TEXT:50 CHAR}

- The common place name of a parcel feature.
 - ▶ WISCONSIN STATE CAPITOL
 - ▶ EAST ENTRANCE - IRVINE PARK
- Provided as available.

UNITTYPE (Unit Type) [FGDC: Subaddress Type] {TEXT:50 CHAR}

- Indicates the unit type associated with a parcel feature (e.g., apartment, room, suite, unit, etc.). Provided as available.
- UNITTYPE should not contain any type of property/structure descriptor.
- **Fully spell-out** UNITTYPE domains.
- UNITTYPE example domains (this list is not exhaustive):

APARTMENT	DEPARTMENT	LOT	SEAT	TOWER
BASEMENT	FLOOR	LOWER	SIDE	TRAILOR
BERTH	FRONT	OFFICE	SLIP	TRAILER
BLOCK	HANGAR	PENTHOUSE	SPACE	UNIT
BUILDING	HANGER	PRIVATE MAIL BOX	STOP	UPPER
CONDOMINIUM	KEY	PIER	STORY	WING
CORRIDOR	LEVEL	REAR	SUITE	
CUBICLE	LOBBY	ROOM	TERMINAL	

UNITID (Unit ID) [FGDC: Subaddress Identifier] {TEXT:50 CHAR}

- UNITID includes the number or letter identification string for a building, apartment, room, suite, unit, room, or desk (as well as other examples).
- Not to be confused with ADDNUMSUFFIX, which is a component to the address number.
- UNITID delineates a unit within an address.
 - ▶ Example: "123 ½ APARTMENT **A**"
 - ▶ ADDNUM = 123
 - ▶ ADDNUMSUFFIX = ½
 - ▶ UNITTYPE = APARTMENT
 - ▶ UNITID = **A**
- If parcels such as condos have distinct PARCELID values and same SITEADDRESS values, UNITID must be populated for these records.
- UNITID should not contain any property/structure descriptions.
- UNITID should **not** contain any values which belong in UNITTYPE (e.g., words like "APARTMENT" or "UNIT").

PLACENAME (Place Name) [FGDC: Complete Place Name] {TEXT:100 CHAR}

- The name of the authoritative jurisdiction that the parcel belongs to.
- This is **NOT the USPS Postal place name** of the parcel, instead, it is the city/village/town where the parcel is actually located; the jurisdictional place name.
 - ▶ The jurisdictional place name for a parcel is **not** necessarily the same as the USPS postal place name.
 - ▶ Note. The parcel's USPS Postal place name is **not** required in this field, nor anywhere else in the V4 schema.
 - ▶ USPS place name is a place name listed in the USPS *City State* file for delivery of mail to an address. Although preferred for postal operations, USPS place names are often not the best-suited place names for non-postal purposes—such as navigation, public service delivery, emergency response, etc.—where jurisdictional place name may be preferred.
- Each PLACE NAME should be standardized to **include the following LSAD descriptors**, as appropriate:
 - ▶ LSAD descriptors:
 - ▶ **CITY OF**
 - ▶ **TOWN OF**
 - ▶ **VILLAGE OF**
 - ▶ PLACENAME examples:
 - ▶ CITY OF CHIPPEWA FALLS
 - ▶ TOWN OF MADISON
 - ▶ CITY OF MADISON
 - ▶ VILLAGE OF LAKE HALLIE
- *All* parcels must have a PLACENAME value, even parcels that have not been assigned an address.

ZIPCODE (Zip Code) [FGDC: ZIP Code] {TEXT:50 CHAR}

- The 5-digit zip code for the parcel's site address.
- This is the mailing zip code for the parcel itself (NOT the owner, whose zip code is provided in PSTLADDRESS and may be out-of-state).
- Provided where available.
- Enter <Null> if no zip code for the parcel's site address is maintained.

ZIP4 (Zip Code Plus 4) [FGDC: ZIP Plus 4] {TEXT:50 CHAR}

- The 4 additional digits appended to the 5-digit zip code for the parcel's site address.
- This is the mailing zip4 for the parcel itself (NOT the owner, whose zip code is provided in PSTLADDRESS and may be out-of-state).
- Provided where available.
- Enter <Null> if no zip4 for the parcel's site address is maintained.

STATE (State) [FGDC: State Name] {TEXT:50 CHAR}

- Two letter state abbreviation of a parcel feature's physical site address.
 - ▶ **WI**
- This is the state where the parcel itself is located (NOT the owner, whose mailing address in PSTLADDRESS may be out-of-state).
- Unless parcels are outside of the state of Wisconsin, this value will be "WI"

SCHOOLDIST (School District) [Standardized Domains] {TEXT:50 CHAR}

- The school district name, as defined in the authoritative file at: sco.wisc.edu/parcels/Parcel_Domain_List.xlsx
 - ▶ **LITTLE CHUTE AREA SCHOOL DISTRICT**
- All parcels for a given county should be populated with SCHOOLDIST domains (with the possible exception of non-parcel features, designated as such in the PARCELID field).
- Domains must remain in UPPERCASE.
- Domain for district name should **exactly** match the domain list with the words "SCHOOL DISTRICT" at the end, separated by a space.
- A parcel should never contain multiple school districts.
 - ▶ For areas that apply a Union High School (UHS) district, the UHS district should be the district populating this field. Elementary districts within a UHS are known as "children" of the "parent" UHS district and should not be included in the data submission.

SCHOOLDISTNO (School District Number) [Standardized Domains] {TEXT:50 CHAR}

- The 4-digit school district number, as defined in the authoritative file at: sco.wisc.edu/parcels/Parcel_Domain_List.xlsx
- All parcels for a given county should be populated with SCHOOLDISTNO domains (with the possible exception of non-parcel features, designated as such in the PARCELID field).
- Domains must remain as four-digit IDs and **maintain leading zeros**.
 - ▶ Include the leading zero(s) on school district codes
 - ▶ e.g., **0084**
- A parcel should never contain multiple school districts.
 - ▶ For areas that apply a Union High School (UHS) district, the UHS district should be the district populating this field. Elementary districts within a UHS are known as "children" of the "parent" UHS district and should not be included in the data submission.
- Note that DOR's electronic file utilizes a 6-digit code.

- ▶ If you are submitting from DOR's XML, use the Validation and Submission Tool to remove the first two digits for submission, or manually remove the first two digits (representing the alphabetized WI county name).
 - ▶ e.g., **0070**, not **310070**

→ **IMPROVED** (Improved Structure) [CALCULATED] [Standardized Domains] {TEXT:10 CHAR}

- Indicates whether the parcel contains an improved value within the IMPVALUE field, with either "YES" or "NO"
- CALCULATED by the county, based on the type of value in IMPVALUE.
- IMPROVED accepted domains:
 - YES** if IMPVALUE is > \$0
 - NO** if IMPVALUE is = \$0 ▶ Value of "NO" (IMPVALUE of \$0) might apply to parcels with no improvements
 - <Null>** if IMPVALUE is <Null> ▶ Might apply to tax exempt parcels, designated by AUXCLASS field
 - ▶ Applies to non-parcel features as labeled in PARCELID—such as GAP, HYDRO, SLIVER, etc.

CNTASSDVALUE (Total Assessed Value) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The total assessed value of the parcel, in US dollars.
- Assessed values are the property values determined by local assessors for individual parcels of real property.
- In most counties, this is equal to assessed value of land plus assessed value of improvements, or:
 - ▶ <LNDVALUE> + <IMPVALUE>
- The value should be provided without currency formatting such as the dollar sign and without comma separators such as the thousands delimiter. Decimal values should be rounded up to the nearest hundredth (two decimal places to the right of the decimal).
 - ▶ 300000.98 (Not \$300,000.98)
 - ▶ 100780.65 (Not 100780.649)
- For tax exempt properties, enter <Null>

LNDVALUE (Assessed Value of Land) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The total value of land, without improvements, in US dollars.
- The value should be provided without currency formatting such as the dollar sign and without comma separators such as the thousands delimiter. Decimal values should be rounded up to the nearest hundredth (two decimal places to the right of the decimal).
 - ▶ 300000.98 (Not \$300,000.98)
 - ▶ 100780.65 (Not 100780.649)
- For tax exempt properties, enter <Null>

→ **IMPVALUE** (Assessed Value of Improvements) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The total value of improvements on the land, in US dollars.
- The value in IMPVALUE is used to calculate the value (YES/NO) in IMPROVED.
- The value should be provided without currency formatting such as the dollar sign and without comma separators such as the thousands delimiter. Decimal values should be rounded up to the nearest hundredth (two decimal places to the right of the decimal).
 - ▶ 300000.98 (Not \$300,000.98)
 - ▶ 100780.65 (Not 100780.649)
- Use "0" versus <Null> deliberately and with care in IMPVALUE field. 0 and <Null> have distinct meanings.

>0	▶ Taxable parcel with improvements	▶ A positive number in IMPVALUE
0	▶ Taxable parcel with <u>no</u> improvements	▶ Value of "0" or 0.00 in IMPVALUE
- **<Null>**
 - ▶ Tax exempt parcels, designated by AUXCLASS field
 - ▶ Non-parcel features as labeled in PARCELID
 - ▶ Parcels yet to be assessed (e.g., a new parcel/split)

FORESTVALUE (Assessed Forested Value) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- ***If* part of the CNTASSDVALUE equation.**
- The total value of forested land (assessed value of forested land), in US dollars.
- This field is **not** applicable to most counties, as values in this field are required to be provided only in cases where counties have a "forest value" included as a part of the formula that totals the amount of CNTASSDVALUE.
- A county **MUST** populate this field **IF** Assessed Forest Value is a variable within the Total Assessed Value formula (CNTASSDVALUE), otherwise this field is optional.
 - ▶ e.g., Assessed Value of Land + Assessed Value of Improvements + **Assessed Forest Value** = Total Assessed Value
- The value should be provided without currency formatting such as the dollar sign and without comma separators such as the thousands delimiter. Decimal values should be rounded up to the nearest hundredth (two decimal places to the right of the decimal).
 - ▶ 300000.98 (Not \$300,000.98)
 - ▶ 100780.65 (Not 100780.649)
- For counties lacking assessed forested land parcels, this field will be <Null>

ESTFMKVALUE (Estimated Fair Market Value) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The estimated fair market value, in US dollars.
- Sometimes referred to as “equalized value.”
- $ESTFMKVALUE = \text{Total Assessed Value} \div \text{Assessment Ratio}$ (where Assessment Ratio is provided by the state Department of Revenue).
 - ▶ Note that there are deviations from this formula.
 - ▶ Agricultural parcels – portions of parcels that are **Agricultural** (PROPCLASS = 4) are assessed at “use value” therefore, $ESTFMKVALUE = \text{<Null>}$
 - ▶ Undeveloped/Agricultural Forest parcels – portions of parcels that are Undeveloped (PROPCLASS = 5) or Agricultural Forest (PROPCLASS= 5M) are assessed at 50% of full market value.
- The value should be provided without currency formatting such as the dollar sign and without comma separators such as the thousands delimiter. Decimal values should be rounded up to the nearest hundredth (two decimal places to the right of the decimal).
 - ▶ 300000.98 (Not \$300,000.98)
 - ▶ 100780.65 (Not 100780.649)
- For tax exempt properties (designated by AUXCLASS field), enter <Null>

NETPRPTA (Net Property Tax) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The net amount of annual property tax, in US dollars. This is the actual property tax paid after deductions or credits are applied.
- $NETPRPTA = \text{Gross property tax} - \text{(reduced by) state property tax credits}$.
- NETPRPTA should always be less than or equal to GRSPRPTA for any given property.
 - ▶ NETPRPTA should reflect only property tax amounts.
 - ▶ NETPRPTA should **not** include special charges such as delinquent utility charges from prior years (which can make NETPRPTA erroneously appear larger than GRSPRPTA).
 - ▶ If NETPRPTA cannot be provided without delinquent charges, do one of two things:
 - 1) <Null> out NETPRPTA for the appropriate records, or
 - 2) Populate NETPRPTA, but provide an explanation of delinquent charges, noting that “non-annual tax” values are included in the **Explain-Certification.txt** section of the submission form.
- The value should be provided without currency formatting such as the dollar sign and without comma separators such as the thousands delimiter. Decimal values should be rounded up to the nearest hundredth (two decimal places to the right of the decimal).
 - ▶ 3670.98 (Not \$3,670.98)
 - ▶ 1780.65 (Not 1780.649)
- For parcels “assessed with” other parcels, this value may be <Null>
- For tax exempt properties, enter <Null>
- Provide at least one—NETPRPTA or GRSPRPTA.
 - ▶ NETPRPTA may be <Null> if GRSPRPTA is populated for a given county.

GRSPRPTA (Gross Property Tax) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The gross amount of annual property tax, in US dollars. This is the total property tax before deductions or credits; the sum of the taxes levied on a property by all local taxing jurisdictions (municipalities, counties, school districts, technical college districts, and special purpose districts).
- GRSPRPTA should always be more than or equal to NETPRPTA for any given property.
- The value should be provided without currency formatting such as the dollar sign and without comma separators such as the thousands delimiter. Decimal values should be rounded up to the nearest hundredth (two decimal places to the right of the decimal).
 - ▶ 3670.98 (Not \$3,670.98)
 - ▶ 1780.65 (Not 1780.649)
- For tax exempt properties, enter <Null>
- Provide at least one—NETPRPTA or GRSPRPTA.
 - ▶ GRSPRPTA may be <Null> if NETPRPTA is populated for a given county.

PROPCLASS (Class of Property) [Standardized Domains] {TEXT:150 CHAR}

- The General class of property for **taxable** real estate, as specified in Wisconsin s. 70.32(2)(a).
- Wisconsin law requires assessors to classify land on the basis of use. Sometimes this involves a judgment of the predominant use. There are eight statutory classifications for real property.
- Domains should either match the 8 classes listed as PROPCLASS domains for taxable properties, OR have a <Null> value for PROPCLASS and a value in AUXCLASS field for tax exempt/special properties (with the exception of non-parcel features, designated as such in PARCELID field).
- **Multiple values.** If more than one class exist for a parcel, each class is listed in PROPCLASS field delimited by commas, as in:
 - ▶ **1,3,4**
 - ▶ **3,4,5M**
 - ▶ List each class once only. No duplicate values.
- If the native data contains a preceding "G" in front of the numeric ID, **this "G" should be omitted** ("3" not "G3").
- If native PROPCLASS domains do not exactly match standard schema domains, provide domains in **Explain-Certification.txt** portion of submission form or provide a web link to a file describing PROPCLASS fields.
- PROPCLASS accepted domains and definitions:

1	Residential	General – Taxable Real Estate
2	Commercial	General – Taxable Real Estate
3	Manufacturing	General – Taxable Real Estate
4	Agricultural	General – Taxable Real Estate
5	Undeveloped	General – Taxable Real Estate
5M	Agricultural forest	General – Taxable Real Estate
6	Productive Forest Land	General – Taxable Real Estate
7	Other	General – Taxable Real Estate



Tip:

The CLASS OF PROPERTY DISSOLVE TOOLSET may help format class of property data to these schema

AUXCLASS (Auxiliary Class of Property) [Standardized Domains] {TEXT:150 CHAR}

- This field contains any domains that are listed in the native dataset as a class of property that does not fit the domains specified in s. 70.32(2)(a), including properties classified in the tax roll as Tax Exempt/Special.
 - ▶ Exempt – defined as federal, state, county, and other-tax exempt
 - ▶ Special – designating Private Forest Cropland, Managed Forest Land, and County Forest Crop Property
- Standard domains apply to properties in the Exempt and Special classifications.
- Domains should either match the those listed as AUXCLASS domains, OR have a <Null> value for AUXCLASS and a value in PROPCLASS field (with the exception of non-parcel features, designated as such in PARCELID field).
 - ▶ Any native domains other than those listed within the standard Exempt/Special fields may be left unstandardized within this field, but MUST be defined in **Explain-Certification.txt** portion of submission form.
- Any classes that meet the definition of class of property specified in s. 70.32(2)(a) are not included in the AUXCLASS field—instead belonging in PROPCLASS.
- **Multiple values.** Listed if more than one exists and delimited by commas.
 - ▶ If multiple AUXCLASSES classes exist upon a give parcel, each class is listed within the AUXCLASS field, delimited by commas, as in:
 - ▶ **X1,W3,X4**
 - ▶ **X3,W5**
- **AUXCLASS EXEMPT** accepted domains and definitions:

X1	Federal	Exempt – Exempt from General Property Taxes
X2	State	Exempt – Exempt from General Property Taxes
X3	County	Exempt – Exempt from General Property Taxes
X4	Other exempt	Exempt – Exempt from General Property Taxes
- **AUXCLASS SPECIAL** accepted domains and definitions:

W1	PFC Regular Class1 - Forest Cropland Before 01/01/72	Special – PFC, MFL and County Forest Crop Property
W2	PFC Regular Class2 - Forest Cropland After 01/01/72	Special – PFC, MFL and County Forest Crop Property
W3	PFC Special Class - Forest Cropland Special	Special – PFC, MFL and County Forest Crop Property
W4	County Forest Crop Land	Special – PFC, MFL and County Forest Crop Property
W5	MFL Before 2005 Open	Special – PFC, MFL and County Forest Crop Property
W6	MFL Before 2005 Closed	Special – PFC, MFL and County Forest Crop Property
W7	MFL After 2004 Open	Special – PFC, MFL and County Forest Crop Property
W8	MFL After 2004 Closed	Special – PFC, MFL and County Forest Crop Property
W9	MFL Ferrous Mining	Special – PFC, MFL and County Forest Crop Property
- **AUXCLASS UNSTANDARDIZED**
<Unstandardized> Other classifications not included in the definition of AUXCLASS or PROPCLASS. Provide definitions in the **Explain-Certification.txt** section of the submission form, inputted in FINAL mode of the Validation and Submission Tool.

ASSDACRES (Assessed Acres) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The parcel area, in acres, specified as total assessed acres for taxation purposes.
- ASSDACRES is not to be confused with DEEDACRES or GISACRES, but may match either or both.
- For parcels “assessed with” other parcels, this value may be <Null>
- Enter <Null> if the local assessor does not provide acre calculations for small parcels.
 - ▶ Parcels less than <1 acre may = <Null> (or in some cases may appear as “0”)

DEEDACRES (Deeded Acres) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The parcel area, in acres, as specified within the legal property description.

GISACRES (GIS Acres) {TEXT:50 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The calculated GIS parcel area, in acres, derived directly from GIS features.
- GISACRES is optional and may be left <Null>

CONAME (County Name) [Standardized Domains] {TEXT:50 CHAR}

- The name of the **county** which the parcel is administratively part of.
- Counties should be the only entity submitting data.
 - ▶ If a municipality stewards 1) parcel data and/or 2) tax roll data separately from the county, the county should request, integrate, and submit data for the municipality **that has been standardized**.
- Periods are **not** permitted in county names in the CONAME field. Spaces are acceptable. See Table B-1 for county spelling conventions.
- Do **not** include the word “_County” in CONAME.

LOADDATE [AUTO-POPULATED] (Load Date) {TEXT:10 CHAR}

- The date (MM/DD/YYYY) when a parcel feature is submitted to the Parcel Initiative from the data contributor. This field will be populated by the parcel aggregation team.
- **Counties include field but leave field <Null> for V4 submission.**

PARCELFIPS (Parcel Source FIPS) [Standardized Domains] {TEXT:10 CHAR}

- Indicates the 3-digit FIPS code of the **county**(the contributing jurisdiction of the parcel dataset), from Table B-1.
- Populate PARCELFIPS for all records. The value should be the same for all records.
- Maintain FIPS code leading zeros in PARCELFIPS.
- Domain example:
 - ▶ **009** (for Brown County)

PARCELSRC (Parcel Source Name) [Standardized Domains] {TEXT:50 CHAR}

- Indicates name of the **county** (the contributing jurisdiction of the parcel dataset), standardized as shown in Table B-1.
- Populate PARCELSRC for all records. The value should be the same for all records.
- Periods are **not** permitted in county names in the PARCELSRC field. Spaces are acceptable.
- Do **not** include the word “_County” in PARCELSRC.

COUNTY NAMES & COUNTY FIPS CODES

- Spelling conventions and county FIPS codes (which should maintain leading zeroes):

ADAMS	001	IOWA	049	POLK	095
ASHLAND	003	IRON	051	PORTAGE	097
BARRON	005	JACKSON	053	PRICE	099
BAYFIELD	007	JEFFERSON	055	RACINE	101
BROWN	009	JUNEAU	057	RICHLAND	103
BUFFALO	011	KENOSHA	059	ROCK	105
BURNETT	013	KEWAUNEE	061	RUSK	107
CALUMET	015	LA CROSSE	063	ST CROIX	109
CHIPPEWA	017	LAFAYETTE	065	SAUK	111
CLARK	019	LANGLADE	067	SAWYER	113
COLUMBIA	021	LINCOLN	069	SHAWANO	115
CRAWFORD	023	MANITOWOC	071	SHEBOYGAN	117
DANE	025	MARATHON	073	TAYLOR	119
DODGE	027	MARINETTE	075	TREMPEALEAU	121
DOOR	029	MARQUETTE	077	VERNON	123
DOUGLAS	031	MENOMINEE	078	VILAS	125
DUNN	033	MILWAUKEE	079	WALWORTH	127
EAU CLAIRE	035	MONROE	081	WASHBURN	129
FLORENCE	037	OCONTO	083	WASHINGTON	131
FOND DU LAC	039	ONEIDA	085	WAUKESHA	133
FOREST	041	OUTAGAMIE	087	WAUPACA	135
GRANT	043	OZAUKEE	089	WAUSHARA	137
GREEN	045	PEPIN	091	WINNEBAGO	139
GREEN LAKE	047	PIERCE	093	WOOD	141

Table B-1. V4 County Naming and FIPS Codes

LONGITUDE [AUTO-POPULATED] (Longitude of Parcel Centroid) {DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The longitude, in decimal degrees, of the parcel's centroid. The centroid of a parcel shape is calculated as is the average position of all the points that participate in the shape.
 - This point is also calculated as and "inside" centroid, meaning that the point is subject to the following contextual qualities:
 - ▶ A non-convex (concave) feature might have a centroid that is outside of the feature itself. The "inside" calculation ensures that this does not happen and that the point resides within the respective polygon's geometry.
 - ▶ A donut-shaped feature might have a centroid that is outside of the feature itself. The "inside" calculation ensures that this does not happen and that the point resides within the respective polygon's geometry.
 - ▶ A multi-part feature might have a centroid that is outside of the feature itself. The "inside" calculation ensures that this does not happen and that the point resides within the respective polygon's geometry.
 - In the final statewide parcel layer, LONGITUDE and LATITUDE for parcel centroids are provided in **decimal degrees**. The parcel centroids are calculated using an ArcGIS ArcPy script, created using ArcGIS's default WGS 84 parameters:
 - ▶ GCS_WGS_1984
 - ▶ WKID: 4326 Authority: EPSG
 - ▶ Angular Unit: Degree (0.0174532925199433)
 - ▶ Prime Meridian: Greenwich (0.0)
 - ▶ Datum: D_WGS_1984
 - ▶ Spheroid: WGS_1984
 - ▶ Semimajor Axis: 6378137.0
 - ▶ Semiminor Axis: 6356752.314245179
 - ▶ Inverse Flattening: 298.257223563
- ▶ **Counties do NOT include field with V4 submission.**

LATITUDE [AUTO-POPULATED] (Latitude of Parcel Centroid) {DOUBLE-PRECISION FLOATING-POINT NUMBER}

- The latitude, in decimal degrees, of the parcel's centroid. The centroid of a parcel shape is calculated as is the average position of all the points that participate in the shape.
 - This point is also calculated as and "inside" centroid, meaning that the point is subject to the following contextual qualities:
 - ▶ A non-convex (concave) feature might have a centroid that is outside of the feature itself. The "inside" calculation ensures that this does not happen and that the point resides within the respective polygon's geometry.
 - ▶ A donut-shaped feature might have a centroid that is outside of the feature itself. The "inside" calculation ensures that this does not happen and that the point resides within the respective polygon's geometry.
 - ▶ A multi-part feature might have a centroid that is outside of the feature itself. The "inside" calculation ensures that this does not happen and that the point resides within the respective polygon's geometry.
 - In the final statewide parcel layer, LONGITUDE and LATITUDE for parcel centroids are provided in **decimal degrees**. The parcel centroids are calculated using an ArcGIS ArcPy script, created using ArcGIS's default WGS 84 parameters:
 - ▶ GCS_WGS_1984
 - ▶ WKID: 4326 Authority: EPSG
 - ▶ Angular Unit: Degree (0.0174532925199433)
 - ▶ Prime Meridian: Greenwich (0.0)
 - ▶ Datum: D_WGS_1984
 - ▶ Spheroid: WGS_1984
 - ▶ Semimajor Axis: 6378137.0
 - ▶ Semiminor Axis: 6356752.314245179
 - ▶ Inverse Flattening: 298.257223563
- ▶ **Counties do NOT include field with V4 submission.**

C. OTHER LAYERS – PLSS

The Version 4 Statewide Parcel Map Database Project will include a sub-project to create an initial version of a statewide PLSS database aggregated from current county PLSS datasets. This database will be based on using accurate county PLSS corner coordinates.

The V4 PLSS data submitted by counties will be the used to build an initial statewide PLSS database. Future submissions are projected to be collected annually for datasets that have been updated (with the potential of allowing for more frequent county submissions).

1. Other Layers – PLSS Submission

1.1 Format/File Specifications for County PLSS Corner Data

- A single geodatabase or shapefile using the naming convention for “Other Layers” from Appendix D, where “**OTHER**” is the name of the file geodatabase and “**COUNTYNAME_PLSS_YEAR**” is the name of the feature class.
 - **YEAR** (YYYY) represents the year from the date of the content—it is the content modification date, or the date that the content was last updated.
 - ▶ e.g., COUNTYNAME_OTHER.gdb**COUNTYNAME_PLSS_YEAR**

1.2 Submit ALL available PLSS corner attributes, including:

CornerID (unique index or unique corner number)

Corner Type (e.g., section corner, meander, water tower, benchmark etc.)

Coordinates (including X,Y or latitude/longitude, coordinate system, datum, units, date, coordinate accuracy*)

- **X, Y or LATITUDE/LONGITUDE**
- **COORDINATE SYSTEM**
- **DATUM**
- **UNITS**
- **DATE**
- ***COORDINATE ACCURACY**
 - Domains for coordinate accuracy:
 - ▶ **SURVEY GRADE** – coordinates collected under the direction of a Professional Land Surveyor, in a coordinate system allowed by 236.18(2), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision
 - ▶ **SUB-METER** – point precision of 1 meter or better
 - ▶ **APPROXIMATE** – point precision within 5 meters or coordinates derived from public records or other relevant information

URL(s) (URLs for all relevant tie sheets; URL path to link each record to their corresponding tie sheet/data sheet)

Other Attributes (any other available attributes)

Examples (this is not an exhaustive list):

- **COORDINATE METHOD**
- **COORDINATE STATUS**
- **MONUMENT TYPE**
- **MONUMENT DATE**
- **ORTHOMETRIC/ELLIPSOID HEIGHTS**
- **SECTION/TOWNSHIP/RANGE**
- **PHOTOS**
- **DATASET METADATA**
- **ET CETERA . . .**

1.3 PLSS Submission Questions

- For questions or assistance, please contact Brenda Hemstead at the State Cartographer’s Office at 608-263-4371 or hemstead@wisc.edu.

D. OTHER LAYERS – RML

For V4 of the Statewide Parcel Map Database Project, the data request has been coordinated between DOA/SCO and the UW-Madison Robinson Map Library (RML). Additional GIS layers are being requested, as a check to enhance accuracy of the V4 parcel layer, and so that they can be shared with RML. RML has made an effort each year to collect and archive local GIS data across Wisconsin. They have focused on collecting annual snapshots of several framework vector layers which are available for download via [GeoData@Wisconsin](mailto:GeoData@Wisconsin.gov), a geoportal developed in partnership with SCO. To reduce the number of data requests, data submitted for V4 will be shared with the Robinson Map Library, archived, and made publicly available.

1. Other Layers – Robinson Map Library Submission

1.1 Other Layers to Submit

- Separately from parcels, submit the layers below AS IS.
 - The datasets should be **complete**. “Complete” means the GIS file should include either:
 - a) a field with a description of each feature name/attribute field/domain (where applicable); or
 - b) a field or metadata populated with a link to a valid webpage or web document that contains authoritative/official metadata and data dictionary for the GIS data.
- **Only submit UPDATED/NEW other layers.**
 - Do **not** submit a given layer if there has been no change to the layer since you last submitted a copy (for the V3 data request in 2017 or directly to RML). Only updated/new other layers should be submitted.
 - If you forget what you submitted last year, you can locate all of your county’s data by typing the name of your county in the text search box in [GeoData@Wisconsin](mailto:GeoData@Wisconsin.gov).

1.2 Format / File Specifications for Other Layers

- Submission format(s) for other layers are flexible:
 - A single file geodatabase with multiple feature classes – named according to naming convention below
 - A series of individual shapefiles – named according to naming convention below
- **File names *must* include a YEAR value as the last 4 digits.**
 - **YEAR** (YYYY) represents the year from the date of the content—it is the content modification date, or the date that the content was last updated.
 - “2018” will be the year value in most cases.
 - You must include the year in filename. If you submit with no date, your data will be labeled “2018” by default.
- **The other layers must be separate from parcels**, regardless of the format in which you submit the other layers (e.g., not in the same file geodatabase).
 - Counties might feasibly submit two separate geodatabases:
 - ▶ **PARCELS.gdb** ▶ with tax roll attributes; and
 - ▶ **OTHER.gdb** ▶ with separate feature classes for each of the other layers and the PLSS layer
- Submit the other layers only IF they already exist.
 - The data can and should be submitted if it exists in the county land information system.
 - The county **NEED NOT CREATE** new data for “Other Layers” if it does not exist.
- Indicate which other layers you are submitting—and which your county does not maintain—in section 5 of the Validation and Submission Tool.

1.3 Naming Convention for Other Layers (Mandatory)

Layer/Theme	Naming Convention
<input type="checkbox"/> .INI SUBMISSION FORM	COUNTYNAME_Final.ini
<input type="checkbox"/> PARCEL FEATURE CLASS WITH TAX ROLL DATA	COUNTYNAME_PARCELS.gdb\PARCELS
<input type="checkbox"/> OTHER LAYERS:	
PLSS	COUNTYNAME_OTHER.gdb\COUNTYNAME_PLSS_YEAR
Zoning – General (county-maintained)	COUNTYNAME_OTHER.gdb\COUNTYNAME_GENERAL_YEAR
Zoning – Shoreland (county-maintained)	COUNTYNAME_OTHER.gdb\COUNTYNAME_SHORELAND_YEAR
Zoning – Airport Protection (county-maintained)	COUNTYNAME_OTHER.gdb\COUNTYNAME_AIRPORT_YEAR
Rights of Way	COUNTYNAME_OTHER.gdb\COUNTYNAME_ROW_YEAR
Roads/Streets/Centerlines	COUNTYNAME_OTHER.gdb\COUNTYNAME_ROADS_YEAR
Hydrography (line and/or polygon)	COUNTYNAME_OTHER.gdb\COUNTYNAME_HYDRO_YEAR_POLY (or “_LINE”)
Addresses	COUNTYNAME_OTHER.gdb\COUNTYNAME_ADDRESSES_YEAR
Buildings/Building Footprints	COUNTYNAME_OTHER.gdb\COUNTYNAME_BUILDINGS_YEAR
Land Use	COUNTYNAME_OTHER.gdb\COUNTYNAME_LANDUSE_YEAR
Parks/OpenSpace (e.g., county forests)	COUNTYNAME_OTHER.gdb\COUNTYNAME_PARKS_YEAR
Trails	COUNTYNAME_OTHER.gdb\COUNTYNAME_TRAILS_YEAR
Other Recreation (boat launches, etc.)	COUNTYNAME_OTHER.gdb\COUNTYNAME_RECREATION_YEAR

VALIDATION AND SUBMISSION TOOL/GUIDE

1. Download Tool

- Download the updated Validation and Submission Tool from www.sco.wisc.edu/parcels/tools

2. Enter attachment called *Explain-Certification.txt* when you run the tool in FINAL mode, the final time

3. Save and include the .ini file with zipped submission, as it is your required Submission Form

SUBMIT .INI SUBMISSION FORM + DATA

@wisedecade.legis.wisconsin.gov

1. Note the WISE-Decade browser requirements

- Compatible with **IE 10+**, **Firefox 28+**, **Chrome 33+**
- If upload via WISE-Decade fails, there is an alternative upload page

2. Look for a confirmation message after upload

- The Progress indicator will display "100%" after a successful upload, as well as a confirmation message.
- **You are done when you see the following confirmation message** (appearance will vary by browser):

