SUBMISSION DOCUMENTATION
Version 3 Statewide Parcel Map Database Project
January 31, 2017

Contents

Tools

Tools and Guides to Assist. To help counties achieve the Searchable Format, several tools (with guides and video tutorials) are available on the V3 webpage for automating the standardization and grooming of data.

- Validation and Submission Tool
- Data Standardize Tool
- Address Parsing Tool
- DOR XML Parse Tool
- Condo Stack Tool
- Class of Property Dissolve Tool
- Null Fields and Set to UPPERCASE Tool
- Field Mapping Workflow Documentation
- Summary Table Guide
- FEMA Floodplain Guide
- GIS Templates

Dates of Data

V3 data submitted by March 31, 2017 should be a snapshot of:

- **Parcel geometry** from January 1, 2017 (or more current if available).
- **Tax roll data** associated with the parcel as finalized in December of 2016 (based on the parcel as it existed on January 1, 2016, as assessment data lags a year behind).

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 V3. 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.

Grant Timeline

Submit By March 31, 2017
▼
State Cartographer's Office Intake of Data
≤ 2 weeks after submission
▼
DOA Cross-Check of Submission with Grant Application
▼
First Half of Strategic Initiative Grant Funds Dispersed
≤ 2 months after submission
▼
Second Half of Strategic Initiative Grant Funds Dispersed
Upon county completion of expenditure activities from 2017 grant application

Questions?

- **LIO contacts** in your peer counties are a great resource!
- Check the FAQs section on the **V3 webpage**
- **Technical questions –** contact Codie See, csee@wisc.edu
- **Policy/grant questions –** contact Peter Herreid at 608-267-3369 or peter.herreid@wisconsin.gov

✓ PREP

- ☐ **Crucial! Review the schema documentation and V3 webpage**
- ☐ **Choose: SEARCHABLE or EXPORT FORMAT**
  SEARCHABLE FORMAT – County data submittal is ready for immediate aggregation into the statewide layer, as it matches the statewide schema exactly. All attribute data exists in the GIS table. Some domains standardized.
  EXPORT FORMAT – Flexible format which will be converted to the Searchable Format on behalf of counties. Be sure to select 1 of 4 models of **join type** from Appendix F.
- ☐ Become familiar with the available **tools** that may be useful
- ☐ Review your **V2 Observation Report** as a reminder of the ways you fell short of the Searchable Format with your V2 submission

✓ PARCEL FEATURE CLASS WITH TAX ROLL DATA

- ☐ **All attribute data in ONE table**
- ☐ **Include county-wide digital parcel data with attributes according to Appendix B** (**PARCEL SCHEMA** – annotated list on reverse ▶)
- ☐ **SEACHABLE FORMAT ONLY: Follow instructions in Appendix A to format, standardize domains, and model condos**
- ☐ **EXPORT FORMAT ONLY: Choose condo model scenario from Fig A-1 If condos are not modeled geometrically (Figure A-1) so that each record attaches to one and only one parcel geometry, contact SCO.**
- ☐ **EXPORT FORMAT ONLY: If the model requires a join between the attribute data and parcel geometries, specify join PINs in submission form and, if applicable, include XREF TABLE**
- ☐ **EXPORT FORMAT ONLY: Follow instructions in Appendix F to format**

✓ CO. ZONING DATA

- ☐ **Submit a separate feature class for each of 5 types of zoning data the county administers with DESCRIPTION or LINK information** County-administered zoning is limited to county general, farmland preservation, shoreland, floodplain, and airport protection zoning.
- ☐ **Follow instructions in Appendix C and zoning schema in Appendix D**

✓ OTHER LAYERS

Submit other layers AS IS, per Appendix E:
- ☐ Rights-of-Way
- ☐ Roads/Streets/Centerlines
- ☐ Hydro
- ☐ Address Points
- ☐ Buildings/Building Footprints
- ☐ Land Use
- ☐ Parks/Open Space; Trails; Other Recreation Data

✓ VALIDATION AND SUBMISSION TOOL+FORM

- ☐ **SEARCHABLE FORMAT:** Run **Validation and Submission Tool** You may need to **REPEAT** in **TEST mode** until you have reached the Searchable Format
- ☐ **BOTH FORMATS:** Run **Validation and Submission Tool** in **FINAL mode**
- ☐ Input your *Explain-Certification.txt* file in tool
- ☐ **Certify that your submission is complete** (relative to Element Occurrence Standard). Use "**3-Submission Form Basic Info**" in tool
- ☐ **Save the ".ini" file—which is your mandatory submission form**

✓ ZIP & SUBMIT

- ☐ **Submit .ini file + data to wisedecade.legis.wisconsin.gov**

PARCEL SCHEMA

| Statewide Field Name (Clickable!)	Alias (Full Definition in Appendix B)	Benchmark 1 Requirement	Benchmark 2 Requirement	Standardize Domains
☐ STATEID[13]	Auto-Populated State ID	–	–	–
☐ PARCELID	Parcel ID	Yes	Yes	–
☐ TAXPARCELID	Tax Parcel ID[1]	Yes	Yes	–
☐ PARCELDATE	Parcel Date	No	Yes	–
☐ TAXROLLYEAR	Tax Roll Year	Yes	Yes	–
☐ OWNERNME1[2]	Primary Owner Name[3]	No	Yes	–
☐ OWNERNME2	Secondary Owner Name[3]	No	Yes – If available	–
☐ PSTLADRESS	Full Mailing Address (Owner)[4]	No	Yes	–
☐ SITEADRESS	Full Physical Street Address[5,6]	Yes	Yes	–
☐ ADDNUMPREFIX	Address Number Prefix	No	Yes – Parse[7,8]	–
☐ ADDNUM	Address Number	No	Yes – Parse[7,8]	–
☐ ADDNUMSUFFIX	Address Number Suffix	No	Yes – Parse[7,8]	–
☐ PREFIX	Prefix	No	Yes – Parse[7,8]	Yes - PREFIX
☐ STREETNAME	Street Name	No	Yes – Parse[7,8]	–
☐ STREETTYPE	Street Type	No	Yes – Parse[7,8]	Yes - STREETTYPE
☐ SUFFIX	Suffix	No	Yes – Parse[7,8]	Yes - SUFFIX
☐ LANDMARKNAME	Landmark Name	No	Yes – Parse[7,8]	–
☐ UNITTYPE	Unit Type	No	Yes – Parse[7,8]	–
☐ UNITID	Unit ID	No	Yes – Parse[7,8]	–
☐ PLACENAME	Place Name (Jurisdictional)	No	Yes	–
☐ ZIPCODE	Zip Code	No	Yes	–
☐ ZIP4	Zip Code Plus 4	No	Yes	–
☐ STATE	State	No	Yes	–
☐ SCHOOLDIST	School District	No	Yes	Yes - SCHOOLDIST
☐ SCHOOLDISTNO	School District Number	No	Yes	Yes - SCHOOLDISTNO
☐ IMPROVED	Improved Structure	No	Yes	Yes - IMPROVED
☐ CNTASSDVALUE	Total Assessed Value[9]	Yes	Yes	–
☐ LNDVALUE	Assessed Value of Land	Yes	Yes	–
☐ IMPVALUE	Assessed Value of Improvements	Yes – If applicable	Yes – If applicable	–
☐ FORESTVALUE	Assessed Forested Value	Yes – If applicable	Yes – If applicable	–
☐ ESTFMKVALUE	Estimated Fair Market Value	Yes	Yes	–
☐ NETPRPTA	Net Property Tax	Yes	Yes	–
☐ GRSPRPTA	Gross Property Tax	Yes	Yes	–
☐ PROPCLASS	Class of Property[10]	Yes	Yes	Yes - PROPCLASS
☐ AUXCLASS	Auxiliary Class of Property[11]	No	Yes	Yes - AUXCLASS
☐ ASSDACRES	Assessed Acres	Yes	Yes	–
☐ DEEDACRES	Deeded Acres	Yes	Yes	–
☐ GISACRES	GIS Acres[12]	No	No	–
☐ CONAME	County Name	No	Yes	Yes - CONAME
☐ LOADDATE[13]	Load Date	–	–	–
☐ PARCELFIPS	Parcel Source FIPS	No	Yes	Yes - PARCELFIPS
☐ PARCELSRC	Parcel Source Name	No	Yes	Yes - PARCELSRC
☐ ACCESSURL[13,14]	Access URL	–	–	–
☐ LONGITUDE[13]	Longitude of Parcel Centroid	–	–	–
☐ LATITUDE[13]	Latitude of Parcel Centroid	–	–	–

Table Notes

1. **TAXPARCELID.** The ID that will link to the tax roll; provide if this ID is distinct from PARCELID.

2. **REDACTION POLICY.** OWNERNME1/OWNERNME2. 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. **OWNERNME1.** 2nd owner goes in OWNERNME2; 3rd owner is omitted.

4. **PSTLADRESS.** Tax bill mailing address (for **owner**—NOT the parcel itself—owner mailing address may be out-of-state); all other mailing addresses omitted.

5. **SITEADRESS.** 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 address elements** before submitting for both the Searchable and Export formats. Address elements are (in this order): ADDNUMPREFIX, ADDNUM, ADDNUMSUFFIX, PREFIX, STREETNAME, STREETTYPE, SUFFIX, LANDMARKNAME, UNITTYPE, UNITID.

6. **SITEADRESS.** Only include primary address; 2nd address is omitted.

7. **PARSING OF ADDRESS ELEMENTS.** (ADDNUMPREFIX through UNITID). Counties must provide fully parsed site address elements for both the Searchable and Export formats.

8. **ADDRESS ELEMENTS.** (ADDNUMPREFIX through UNITID). Only include address elements from the primary address; any elements from a 2nd address should be omitted.

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. **PROPCLASS.** 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 the submission form.

12. **GISACRES.** GIS acres is optional.

13. **STATEID & LOADDATE.** Include STATEID and LOADDATE with submission but **leave <Null>**. Do NOT include ACCESSURL, LONGITUDE, LATITUDE fields, as they are to be populated by the aggregation team.

14. **ACCESSURL.** Auto-populated. Leave **<Null>** in attribute table but specify URL value in submission form. URL should be a link to a county webpage to view and/or download most current parcel data from steward. Users of the statewide layer will be directed to this web link for the most current, comprehensive information. See full schema for more.

Benchmarks

The 2017 WLIP grant application outlines the official benchmark requirements which follow from the directives associated with Wisconsin s. 59.72(2)(a). The original four benchmarks from the 2016 Strategic Initiative grant application are the exact same as the 2017 benchmarks. There are four benchmarks for parcel data:

- Benchmark 1 – Parcel and Zoning Data Submission
- Benchmark 2 – Extended Parcel Attribute Set Submission
- Benchmark 3 – Completion of County Parcel Fabric
- Benchmark 4 – Completion and Integration of PLSS

Together, Benchmark 1 and 2 make up the **Searchable Format** standard for parcel data.

The Searchable Format

In the Searchable Format, county data submittal is ready for immediate aggregation into the statewide parcel layer. The county performs all data standardization and clean-up *before* submitting data. Counties are to meet the Searchable Format by March 31, 2018 at the latest and are eligible for grant funding assistance to meet this standard. The Searchable Format should be the goal for all V3 submissions. The lessor **Export Format** will not be an option for V4 or thereafter.

Standardized Domains

The checklist table identifies where standard domains are required. Standardized field names and standardized domains are required for the Searchable Format, but standardization may be used voluntarily for those submitting in the Export Format. Fields should be standardized based on Appendix B and the Digital Appendix containing acceptable values for parcel domains.

Address Parsing

Counties must provide fully parsed site address elements for both the Searchable and Export formats. While PSTLADRES and SITEADRESS are provided as a full field and not parsed, there are **elements** of the parcel's **SITEADRESS** which should be **parsed into individual elements with standardized domains**.

Completeness Relative to Element Occurrence Standard

This means that if an element (such as a property address, 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.

Parcel Splits/New Parcels

A parcel that has been split or newly created (with tax roll values not appearing until the following assessment year) will have a <**Null**> value in any attribute field that is a tax roll field (with the possible exception of TAXROLLYEAR). See schema definition for TAXROLLYEAR.

Formatting for Attribute Fields

All attributes denoted by alpha characters should be formatted as UPPPERCASE strings. Currency attributes should be formatted as numeric values or doubles. See full schema for details.

Handling of Multiple Values

For several fields it is possible for more than one field value to exist for a given parcel. In these cases, specific actions should be taken to handle these values properly. Handling of multiple values properly is a requirement of both submission formats—Searchable and Export. Handling multiple values is better defined per individual attribute in the full schema documentation (see PROPCLASS/AUXCLASS; OWNERNME1/2; PSTLADRESS; SITEADRESS; ADDRESS ELEMENTS).

Read the Full V3 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!

ZONING SCHEMA ▼

Statewide Field Name (Clickable)	Definition (Full Definition in Appendix D)
☐ ZONINGFIPS	3-digit county FIPS code for the county
☐ JURISDICTION	County name
☐ ZONINGCLASS	Class of zoning within the given zoning type
☐ DESCRIPTION	Description of the meaning of the zoning class
☐ LINK	Link to metadata or table describing the meaning of the zoning class

New For V3

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 3.

The data you are asked to submit for V3 will be remarkably similar to the V2 data. The V3 schema is not different in any substantive way. However, there have been some clarifications, and a few other changes for V3.

Modifications for V3
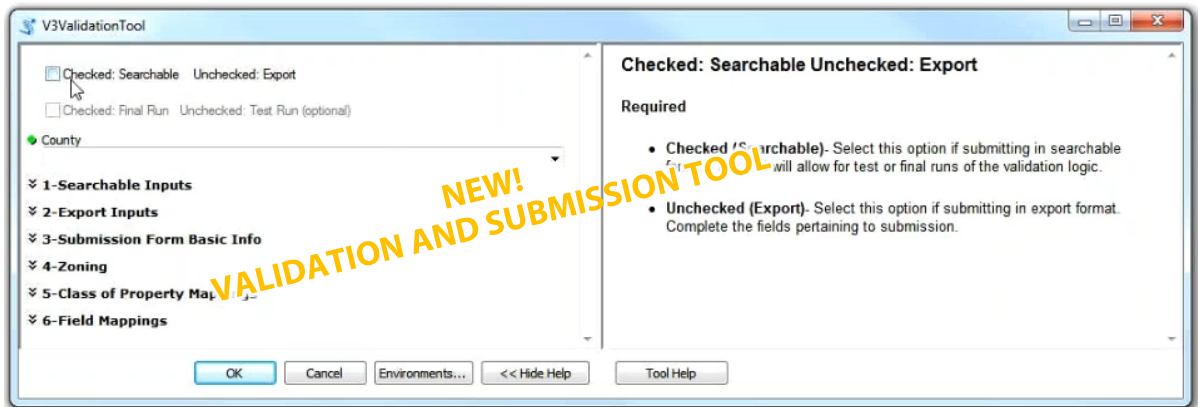
- **Validation and Submission Tool.** Our project partners at the State Cartographer's Office have built a new Validation and Submission Tool that counties are asked to run in order to validate their data against the schema. Searchable Format submitters can run the tool in TEST mode to pinpoint errors. Both Export and Searchable Format submitters must run the tool in FINAL mode in order to create the mandatory submission form.

- **".ini" Submission Form.** There is no longer an Excel Submission Form. The Submission Form (an ".ini" file) is now produced by running the Validation and Submission Tool in FINAL mode. The .ini file that results is the submission form.

- **Streamlined Documentation.** The V3 documentation contains all of the same information as V2, but in fewer pages. Therefore, the documentation pagination and appendix numbering is different. Discard any V2 documentation or V2 links. Replace with V3 Submission Documentation and V3 links.

- **Clarified Attribute Definitions and Examples.** The V3 schema remains essentially the same as the V2 schema, but with clarifications to some attribute definitions and additional examples. Counties will want to **carefully read the full schema definitions** in order to ensure they are meeting the Searchable Format and to avoid excessive error messages in the Validation and Submission Tool.

- **Expanded Domains for PREFIX.**
    - Either standard abbreviations OR fully spelled out highway domains are accepted for V3.
        - ▶ **CTH**, or COUNTY HIGHWAY, or COUNTY ROAD
        - ▶ **STH**, or STATE HIGHWAY, or STATE ROAD
        - ▶ **USH**, or US HIGHWAY

- **"ACCESSURL" To Be Added To Statewide Layer.** There is a new attribute to be added to final statewide layer containing a URL to link to a county webpage to view and/or download most current parcel data from steward. This may be a landing page listing multiple county links for various types of parcel data viewers/apps/open data download sites, or it may be a link to a county GIS web map that displays parcel data. Users of the statewide layer will be directed to this web link for the most current, comprehensive information. Counties should specify the value to be used for ACCESSURL in the FINAL mode of the Validation and Submission Tool.

- **Submit Other Layers.** DOA is combining the V3 data request with a request that has been separate in the past— that of Jaime Martindale of the UW-Madison Robinson Map Library. Therefore, we are requesting a few other layers, in addition to parcels with tax roll attributes and county-maintained zoning. See Appendix E for details.

A. Searchable Format – Parcels

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 in the Searchable Format.

1. **Searchable Format Parcel Geometries**

    1.1 File Specifications

    - **GIS Template.** A GIS template file has been provided on the V3 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 V3 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).
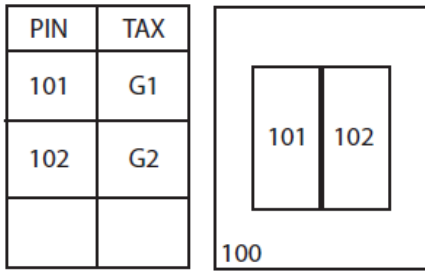
    1.2 Geometric Specifications

    - **1 Feature Class.** All available digital parcel geometries must be included as one GIS feature class for the county parcel jurisdiction.
    - File must include all available digital parcels, regardless of tax exemption status.
    - 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.
    - Only current parcels should be included. Historic parcels should be omitted.
    - **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.
    - **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. 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; or Condo Type #4–Distributed.
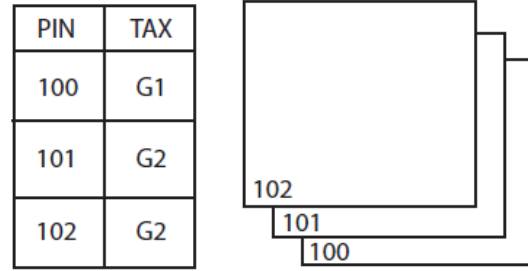
        ⚒ Tip:
        The CONDO STACK TOOL may help model condos by stacking condo parcel geometries by owner
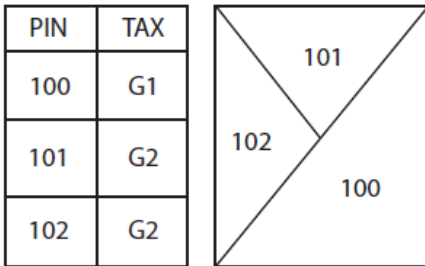
Condo Type #1

PIN	TAX
101	G1
102	G2

[Diagram: box labeled 100 containing 101 | 102]

**No record in tax roll for PIN 100

Condo Type #2

PIN	TAX
100	G1
101	G2
102	G2

[Diagram: stacked boxes labeled 102, 101, 100]

**Stacked parcels, 1 per owner

Condo Type #3

PIN	TAX
100	G1
101	G2
102	G2

[Diagram: box divided into segments labeled 101, 102, 100]

**Main parcel divided up into segments. Not representative of individual unit/parcel geometry. (Common legal description)

Condo Type # 4

PIN	TAX
101	G1
102	G2

[Diagram: box labeled 100 containing 101 | 102]
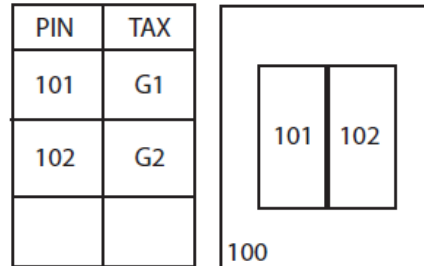
**Follows same model as #1, but PIN 100 contains common taxable elements prorated across 101 & 102

Figure A-1. Condo Model Scenarios #1-4

2. Parcel-Attribute Relationships for Searchable Format

2.1 Attaching Geometries To Attribute Records

- 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.
- 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.
- 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.

3. Searchable Format Attributes

3.1 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 Digital Appendix containing acceptable values for parcel domains is available on the V3 webpage.

  > Tip:
  > The DATA STANDARDIZE TOOL may help standardize a file geodatabase feature class data via the creation of a lookup table

- 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", or "GAP"—see the PARCELID schema definition for more).
- Multiple attribute elements within one real property must be treated according to specifications described in Appendix B. Handling of multiple attribute elements is detailed per attribute in the schema (Appendix B).
- Attributes are defined in the full parcel attribute schema, Appendix B.

- **Attributes Denoted by Alpha Characters as UPPPERCASE 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 (acreages) 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 those submitting in both the Searchable and Export formats.
  - While PSTLADRES and SITEADRESS are provided as a full field and not parsed, there are elements of the parcel's SITEADRESS which should be parsed into individual elements with standardized domains.

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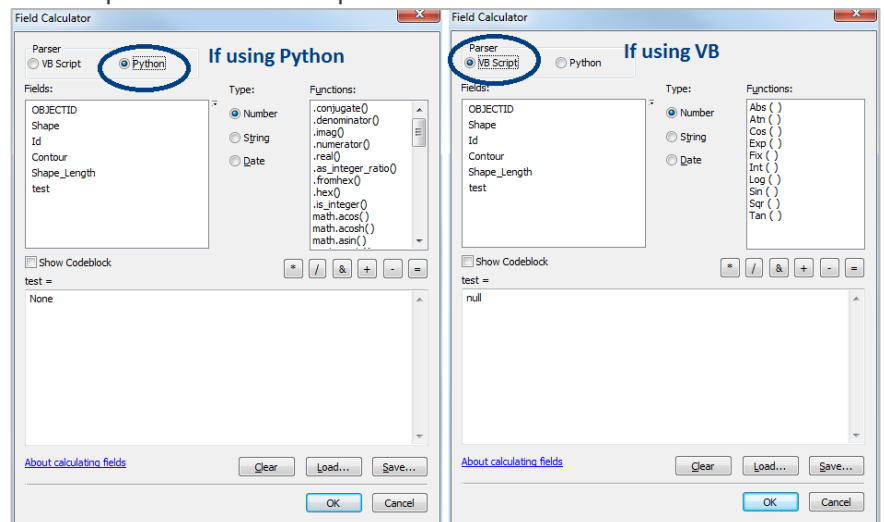 > The ADDRESS PARSING TOOL may help parse site addresses into sub-address elements

4. Element Occurrence Standard

4.1 Attribute Completeness and the 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. Therefore, you will need to use a tool or manually convert nulls from database format into true SQL <Null> in the Searchable Format 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.)

Figure A-2. Populating with <Null>

4.2 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 (in FINAL mode of the Validation and Submission Tool), with a brief description of the missing data and reason for missing data. For example:
  - PHYSICAL GAP PARCEL GEOMETIRES – 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.

5. Parcels Searchable Format – Validation and Submission Tool + Form

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

B. PARCEL SCHEMA FOR V3

Parcel Schema Legend	
V3 ELEMENTNAME	Denotes database field name
(Element Name)	Full English database field name (Alias)
(Standardized Domains)	Standardized field names and standardized domains required (available as a Digital Appendix)
[FGDC: <FGDC Element>]	Denotes database field name modeled after the FGDC U.S. Thoroughfare, Landmark, and Postal Address Data Standard. 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 V3 Project's aggregation team. These fields should be left <Null> for V3 submission.
{TEXT:<#> CHAR}	Denotes the datatype of the file (all are TEXT) and the character length of the field
▶	Arrows point to examples

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:
  - ▶ <**PARCELFIPS**>+<**PARCELID**>
    - ▶ Example: If PARCELFIPS = "083" and PARCELID = "123456789," then: STATEID = 083123456789
- Where PARCELFIPS is the three-digit **county FIPS code** from Table B-1, with leading zeros maintained in PARCELFIPS, and PARCELID is as defined below.
- **Counties include field but leave field <Null> for V3 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.
  - ▶ **071006113329**
  - ▶ **010-0640.01**
- **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.
- Right-of-ways and hydrography polygon labels should be included with parcel feature class submission.
  - ▶ 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 number shown in the final tax roll.
- 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 Parcel ID but is somehow distinct, or may be completely distinct from the Parcel ID.
- If the TAXPARCELID is the same as PARCELID, enter a true SQL <Null>

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 V3 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 V3, this should be 2016.
  - ▶ Example: **2016**
- Submitted data should be a snapshot of:
  - ▶ Parcel geometry from January 1, 2017 or more current if available
  - ▶ Tax roll data associated with the parcel as finalized in December of 2016 (based on the parcel as it existed on January 1, 2016, as assessment data lags a year behind).

- **Parcel Splits/New Parcels**. To designate a parcel that has been spilt or newly created:
  - ▶ It is acceptable to enter the first year tax roll data will be available in TAXROLLYEAR
    - ▶ This will be a "future" year for new parcels that lack tax roll data for the V3 submission
    - ▶ Example: 2017
  - ▶ Alternatively, it is acceptable for TAXROLLYEAR for parcel splits/new parcels to be <Null>

OWNERNME1 (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 OWNERNME2; 3rd owner is omitted.
- Owner name does not follow formatting syntax and may be provided as-is.
- OWNERNME1 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
- OWNERNME1 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)

- **OWNERNME1 – 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 V3 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 OWNERNME1 and/or OWNERNME2 field.
  - ▶ The exception is public lands. Public lands that have a government-entity as a primary owner in the OWNERNME1 field shall NOT be redacted.

- **OWNERNME1 – Public Lands Policy**
  - ▶ Public lands should be designated by way of owner name in the OWNERNME1 field
    - ▶ Example: OWNERNME1 = DEPARTMENT OF NATURAL RESOURCES
  - ▶ All county-owned public parcels must have a value in OWNERNME1
  - ▶ 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 OWNRNM1**. Public lands that have a government-entity (federal, state, county, or local) as a primary owner in the OWNRNM1 field shall NOT be redacted.

OWNERNME2 (Secondary Owner Name) {*TEXT:254 CHAR*}
- If available. The secondary owner name of a parcel.
- 2nd owner goes in OWNERNME2; 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 OWNERNME1 and OWNERNME2. 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, OWNERNME2 should not be an overflow from OWNERNME1.
- OWNERNME2 Redaction Policy – OWNERNME2 adheres to the same redaction policy as that of OWNERNME1.

PSTLADRESS (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.
- PSTLADRESS may have nothing to do with the physical location of a parcel, and may be outside of Wisconsin.
- PSTLADRESS 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 or a space may be used as the separator element.
    - ▶ Example – Single-line with comma separator: **123 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: STATE, ZIP ▶ enter <Null> instead
  - ▶ Incorrect: STATE, 00000 ▶ enter <Null> instead
- If there is no full owner mailing address, PSTLADRESS should be populated with a true SQL <Null>
- **PSTLADRESS – 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 mailing addresses for those specific parcels. Full mailing addresses only.
  - ▶ If no mailing address is available for publicly-owned parcels, enter <Null>

SITEADRESS (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***
    City, State, Zip ▶ **Do NOT include "city, state, zip"** anywhere in SITEADRESS
    *Where applicable
- 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 (SITEADRESS) 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 SITEADRESS.
- 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 "**N**2554 JOHNSON STREET"
  - ▶ N
  - ▶ S
  - ▶ W180N
  - ▶ S379W

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 ADDNUMSUF
  - ▶ 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
  S
  E
  W
  NW
  SW
  NE
  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.
  - ▶ 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 <u>not</u> 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 <u>not</u> include the street type of a named street.
- STREETNAME does <u>not</u> 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 <u>not</u> 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 being 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.
- Values that do not translate to any of the domains listed here will be accepted as-is.
- STREETTYPE example domains:

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.
- Values that do not translate to any of the domains listed here will be accepted as-is.
- SUFFIX accepted domains:

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.
- Values that do not translate to any of the domains listed here will be accepted as-is.
- UNITTYPE example domains:

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**"
    - ▷ 123 = ADDNUM
    - ▷ ½ = ADDNUMSUFFIX
    - ▷ APARTMENT = UNITTYPE
    - ▷ **A** = UNITID
- UNITID should not contain any property/structure descriptions.
- UNITID should <u>not</u> 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 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 V3 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 PSTLADRESS 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 PSTLADRESS 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 PSTLADRESS 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: www.sco.wisc.edu/parcels/V3_Parcel_Domain_List.xlsx
  - ► **LITTLE CHUTE AREA SCHOOL DISTRICT**
- All parcels for a given county should be populated with SCHOOLDIST domains.
- 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: www.sco.wisc.edu/parcels/V3_Parcel_Domain_List.xlsx
- All parcels for a given county should be populated with SCHOOLDISTNO domains.
- Domains must remain as four-digit IDs and **maintain leading zeros**.
  - ► Include the leading zero(s) on school district codes
    - ► e.g., **0084**
    - ► Tip: To maintain leading zeros within a .csv table when opening with Excel, use the *Data > Get External Data > From Text* function in Excel to import the .csv to text fields.
- 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) (Standardized Domains) {*TEXT:10 CHAR or DOUBLE-PRECISION FLOATING-POINT NUMBER*}
- Indicates whether the parcel contains an improved value within the IMPVALUE field.
- IMPROVED is 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> + <Assessed Value of Improvements>
- 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 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 taxable parcels without an improved value, enter "**0**"—to indicate a taxable parcel with no improvements.

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, in US dollars (assessed value of forested land).
- This field is <u>not</u> 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 Total Assessed Value.
- A county **MUST** populate this field <u>**IF**</u> Assessed Forest Value is a variable within the Total Assessed Value formula (CNTASSDVALUE).
  - ▶ 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. This is the most probable price paid by a willing buyer to a willing seller in an arm's-length transaction.
- Sometimes referred to as "market value," "full value," "full market value," or "equalized value."
- ESTFMKVALUE = Total Assessed Value divided by Assessment Ratio
  (where Assessment Ratio is provided by the state Department of Revenue).
  - ▶ Note that there are deviations from this formula.
    - ▶ Parcels that are exclusively Undeveloped (PROPCLASS = 5) or Agricultural Forest (PROPCLASS = 5M), are valued at 50% of full market value.
    - ▶ Parcels that are exclusively **Agricultural** (PROPCLASS = 4) are valued at "use value" therefore, ESTFMKVALUE = <**Null**>
- 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 = Gross tax minus (reduced by) state property tax credits.
- 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>
- Provide at least one—NETPRPTA or GRSPRPTA.
- NETPRPTA may be <Null> if GRSPRPTA is populated for a given county.
- For tax exempt properties, enter <Null>

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).
- 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)
- Provide at least one—NETPRPTA or GRSPRPTA.
- GRSPRPTA may be <Null> if NETPRPTA is populated for a given county.
- For tax exempt properties, enter <Null>

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 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 TOOL may help format class of property data to these schema definitions

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 the 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 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, as 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>

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**.
- Spaces and periods are permitted in county names in the CONAME field. 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 project from the data contributor. This field will be populated by the parcel aggregation team.
- **Counties include field but leave field <Null> for V3 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.
- Maintain FIPS code leading zeros in PARCELFIPS.
  - ▶ Domain example:
  - ▶ **009** (for Brown County)

PARCELSRC (Parcel Source Name) (Standardized Domains) {*TEXT:50 CHAR*}
- Indicates the name of the **county** (the contributing jurisdiction of the parcel dataset), standardized as shown in Table B-1.
- Spaces and periods are permitted in county names in the PARCELSRC field.
- Do **not** include the word "_County" in PARCELSRC.

COUNTY NAMES & COUNTY FIPS CODES
- Spelling conventions and county FIPS codes (which should maintain leading zeroes):

County	FIPS	County	FIPS	County	FIPS
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. V3 County Naming and FIPS Codes

ACCESSURL [AUTO-POPULATED] (Access URL) {*TEXT:254 CHAR*}
- Contains a web link (URL) to a valid webpage to view and/or download most current parcel data from steward.
  - ▶ Preferred—This may be a landing page listing all possible county links for various types of parcel data viewers/apps/open data download sites (e.g., GIS webmapping site, RPL, ROD webpages, etc.)
  - ▶ This may be a link to a county GIS web map that displays parcel data
  - ▶ ACCESSURL should contain a link to documentation that is specific to parcel data—not the general county homepage.
- The link provided must remain valid until a subsequent layer is submitted, an anticipated time period of one year.
- Users of this layer will be directed to this web link for the most current, comprehensive information.
- **Counties do NOT include field with V3 submission.**

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. The centroid should not be confused
- 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.
  - ▶ **Counties do NOT include field with V3 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. The centroid should not be confused
- 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.
- **Counties do NOT include field with V3 submission.**

C. Searchable Format – Zoning

In addition to parcel elements, submission of zoning information is required. Wisconsin statute 59.72(2)(a)(2) refers to "any zoning information maintained by the county," which is interpreted by DOA to mean **zoning ordinances administered by the county**. Zoning information should be submitted and will be aggregated as **several SEPARATE GIS layers**.

1. **Zoning Layers for Inclusion**

   1.1 <u>5 Zoning Layers</u>

   - Table C-1 lists the five zoning types that must be submitted **IF** they are administered by the county.
   - Zoning is limited to county general, farmland preservation, shoreland, floodplain, and airport protection.
     • Do **not** submit zoning ordinance data administered by cities, villages, and towns.
   - If any of these five zoning types are unavailable as zoning information maintained by the county, then the feature class cannot be submitted but should be annotated in the Validation and Submission Tool as: "NOT ADMINISTRED BY COUNTY" or "ADMINISTERED BY COUNTY BUT NOT IN GIS FORMAT"

Table C-1. Zoning Types Maintained by Counties			
Zoning Category	**Zoning Type**	**Statutory Authority**	**County Ordinance**
General	**County General Zoning**	59.64(4)	Yes
Special Purpose	**Farmland Preservation Zoning**	59.64(4), 61.35, 62.23(7), 60.61, or 60.62	Yes
Special Purpose	**Shoreland Zoning**	59.692, 61.351, or 62.231	Yes
Special Purpose	**Floodplain Zoning**	87.3	Yes
Special Purpose	**Airport Protection Zoning**	114.136	Yes

2. **Zoning Geometries**

   2.1 <u>Zoning Geometries</u>

   - **≤ 5 Separate Feature Classes.** Each of the five zoning types must be submitted as separate GIS layers of file geodatabase feature class format.
     • If county zoning types are combined into one common layer, the appropriate features for each layer must be queried and separated into their respective layers.
     • If your feature class for county general zoning contains any of the other four zoning types, submit each layer as a standalone feature class.
       ▶ e.g., single zoning feature class containing both GENERAL and SHORELAND ▶ Submit two separate feature classes
     • Submit a standalone feature class for zoning, even if zoning info is maintained as an attribute within a parcel dataset. Parcel geometries need not be dissolved in such a case—parcel geometries may be submitted as-is.
   - **GIS template**. A GIS template file (GISTemplates.gdb\ZoningFormatTemplate) is available on the V3 webpage and can be used for submission.
   - Files must be named with the following syntax and **must reside in the .gdb of the parcel** feature class being submitted (with the exception of XML data, which can exist on the root level of the zipped package):
     • County General ▶ LA_CROSSE_PARCELS.gdb**GENERAL**
     • Farmland Preservation ▶ LA_CROSSE_PARCELS.gdb\\FARMLAND
     • Shoreland ▶ LA_CROSSE_PARCELS.gdb\\SHORELAND
     • Floodplain ▶ LA_CROSSE_PARCELS.gdb\\FLOODPLAIN
     • Airport Protection ▶ LA_CROSSE_PARCELS.gdb\\AIRPORT
   - **Zoning Projection/CRS.** Before submitting zoning data, ensure the data meets the schema requirements.
     • Zoning layers **must be transformed to the following CRS** (coordinate reference system) specifications using the transformation of choice (if applicable):
       ▶ 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).
   - The nature of geometries within the datasets may vary—the geometries may be bound discretely to parcels or zoning areas may split parcels.

3. Zoning Attribute Requirements

    3.1   <u>Zoning Schema Specifications</u>

- **Standards.** The zoning format follows a simple attribute schema. Detailed descriptions of attributes are in the full zoning schema, Appendix D.
- Ensure each submitted feature class includes the 4 minimum required fields:
  - ZONINGFIPS
  - JURISDICTION
  - ZONINGCLASS
  - DESCRIPTION **or** LINK
- Zoning feature classes **should NOT include excess fields**.
- For directions for processing FEMA floodplain zoning, see the FEMA Floodplain Guide.
- **Attributes Denoted by Alpha Characters as UPPPERCASE 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

- **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. Therefore, you will need to use a tool or manually convert nulls from database format into true SQL <Null> in the Searchable Format 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.)

4. Zoning Searchable Format – Validation and Submission Tool + Form

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

D. ZONING SCHEMA FOR V3

Zoning Schema Legend	
V3 ELEMENTNAME	Denotes database field name
	Field names/ definitions are applicable to all five **county-administered zoning** layers: - County General Zoning - Farmland Preservation Zoning - Shoreland Zoning - Floodplain Zoning - Airport Protection Zoning
(Element Name)	Full English database field name (Alias)
(Standardized Domains)	Standardized field names and standardized domains required (available as a Digital Appendix)
ELEMENT [AUTO-POPULATED]	Denotes that this field is AUTO-POPULATED by the V3 Project's aggregation team. These fields should be left <**Null**> for V3 submission.
{*TEXT:<#> CHAR*}	Denotes the datatype of the file (all are TEXT) and the character length of the field
▶	Arrows point to examples

ZONINGFIPS (Zoning Source FIPS) (Standardized Domains) {*TEXT:10 CHAR*}
- Indicates the three-digit county FIPS code for the **county** (from Table B-1), with leading zeroes maintained.
  - ▶ **025** (for Dane County)
  - ▶ **009** (for Brown County)
- Do not populate with FIPS for municipality

JURISDICTION (Jurisdiction) (Standardized Domains) {*TEXT:100 CHAR*}
- The name of the **county** contributing zoning data from Table B-1, as only county-administered (and not municipal) zoning ordinances are required by statute.
- Do not populate with FIPS for municipality
- Do **not** include the word "_County" in JURISDICION.
- Spaces and periods are permitted in county names in the JURISDICTION field.
  - ▶ FOND DU LAC

ZONINGCLASS (Zoning Class) {*TEXT:100 CHAR*}
- The class name for the zoning feature. Class names are unrestricted but all must contain or link to a DESCRIPTION. Class names may vary across jurisdictions. There are no restrictions on this field, however the content of this field should correlate with the descriptions provided through DESCRIPTION or LINK fields.
  - ▶ R1
  - ▶ R2
  - ▶ Agricultural

DESCRIPTION (Description) {*TEXT:254 CHAR*}
- A 254-character unrestricted field to contain a description of the class name of the zoning feature.
- DESCRIPTION can optionally be used for additional information of value to the end-user:
  - ▶ e.g., zoning sub-classifications or sub-categories
    - ▶ *<body_of_water>* + " Setback " + *<setback>*
    - ▶ "Height Limitation: " + *<height_limitation>* + " FT"
- DESCRIPTION is optional if LINK is correctly populated.

LINK (Link) {*TEXT:254 CHAR*}
- Contains a web link (URL) to a valid webpage or web document that contains authoritative/official descriptions of the given feature's zoning class or all zoning classes within the jurisdiction. This may be one document describing all zoning types and their sub categories or a page describing the feature's zoning class exclusively. The link provided must remain valid until a subsequent zoning layer is submitted, an anticipated time period of one year. Users of this layer will be directed to this web link for zoning class definitions.
- LINK should contain a link to **documentation that is specific** to the zoning type—not the general county zoning page.
- LINK is optional if DESCRIPTION is correctly populated.
  - ▶ http://www.waukeshacounty.gov/uploadedFiles/Media/PDF/County_Ordinance/Appendix_A_09.09.14.pdf
  - ▶ https://www.waukeshacounty.gov/ZoningOrdinances/
  - ▶ http://danedocs.countyofdane.com/webdocs/PDF/plandev/zoning/district_fact_sheets/A-1.pdf
  - ▶ http://danedocs.countyofdane.com/webdocs/PDF/plandev/zoning/district_fact_sheets/C-1.pdf

E. Other Layers

For Version 3 of the Statewide Parcel Map Database Project, the data request has been coordinated between DOA/SCO and the UW-Madison Robinson Map Library. Additional GIS layers are being requested, as a check to enhance accuracy of the V3 parcel layer, but also so that they can be shared with the Robinson Map Library.

The Robinson Map Library at the University of Wisconsin-Madison has made an effort each year to collect and archive local GIS data across Wisconsin. They have focused efforts on collecting annual snapshots of several framework vector layers which are available for download via GeoData@Wisconsin, a geoportal developed in partnership with the State Cartographer's Office.

1. Other Layers – Robinson Map Library Submission

1.1 Other Layers to Submit

- Separately from parcels, submit the following layers AS IS:
  - Rights-of-Way
  - Roads/Streets/Centerlines
  - Hydrography (line and/or polygon)
  - Address Points
  - Buildings/Building Footprints
  - Land Use
  - Parks/Open Space; Trails; Other Recreation Data

1.2 Format for Other Layers

- Submission format(s) for other layers are flexible:
  - 1 single file geodatabase
  - Multiple geodatabases
  - Multiple shapefiles

1.3 Other Layers Files Specifications

- It is recommended that you use the following naming convention:

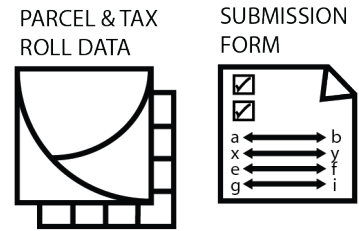| Layer/Theme	Naming Convention	Format
☐ **Parcels with Tax Roll Attributes**	LA_CROSSE_PARCELS.gdb\PARCELS	File geodatabase feature class
☐ **County-Maintained Zoning**	LA_CROSSE_PARCELS.gdb**GENERAL** LA_CROSSE_PARCELS.gdb\FARMLAND LA_CROSSE_PARCELS.gdb\SHORELAND LA_CROSSE_PARCELS.gdb\FLOODPLAIN LA_CROSSE_PARCELS.gdb\AIRPORT	File geodatabase feature class
☐ **OTHER LAYERS:**		
Rights-of-Way	COUNTYNAME_**ROW**_YEAR*	Flexible
Roads/Streets/Centerlines	COUNTYNAME_**ROADS**_YEAR	Flexible
Hydrography (line and/or polygon)	COUNTYNAME_**HYDRO**_YEAR_POLY(or _LINE)	Flexible
Addresses	COUNTYNAME_**ADDRESSES**_YEAR	Flexible
Buildings/Building Footprints	COUNTYNAME_**BUILDINGS**_YEAR	Flexible
Land Use	COUNTYNAME_**LANDUSE**_YEAR	Flexible
Parks/OpenSpace (e.g., county forests)	COUNTYNAME_**PARKS**_YEAR	Flexible
Trails	COUNTYNAME_**TRAILS**_YEAR	Flexible
Other Recreation (boat launches, etc.)	COUNTYNAME_**RECREATION**_YEAR	Flexible

*YEAR represents the year from the **date of the content** (YYYY).

- Regardless of the format in which you submit the other layers, the **other layers must be separate from parcels** (e.g., not in the same file geodatabase).
  - Counties might feasibly submit separate geodatabases—for 1) parcels with separate zoning feature classes, and 2) other layers.
- Submit the above layers only IF they already exist.
  - The data can and should be submitted if it exists in the county land information system. However, **the county NEED NOT CREATE new data for "Other Layers"** if it does not exist. Indicate which other layers you are submitting with in FINAL mode of the Validation and Submission Tool.
- To reduce the number of data requests, the data submitted to DOA for V3 will be shared with the Robinson Map Library, archived, and made publicly available.
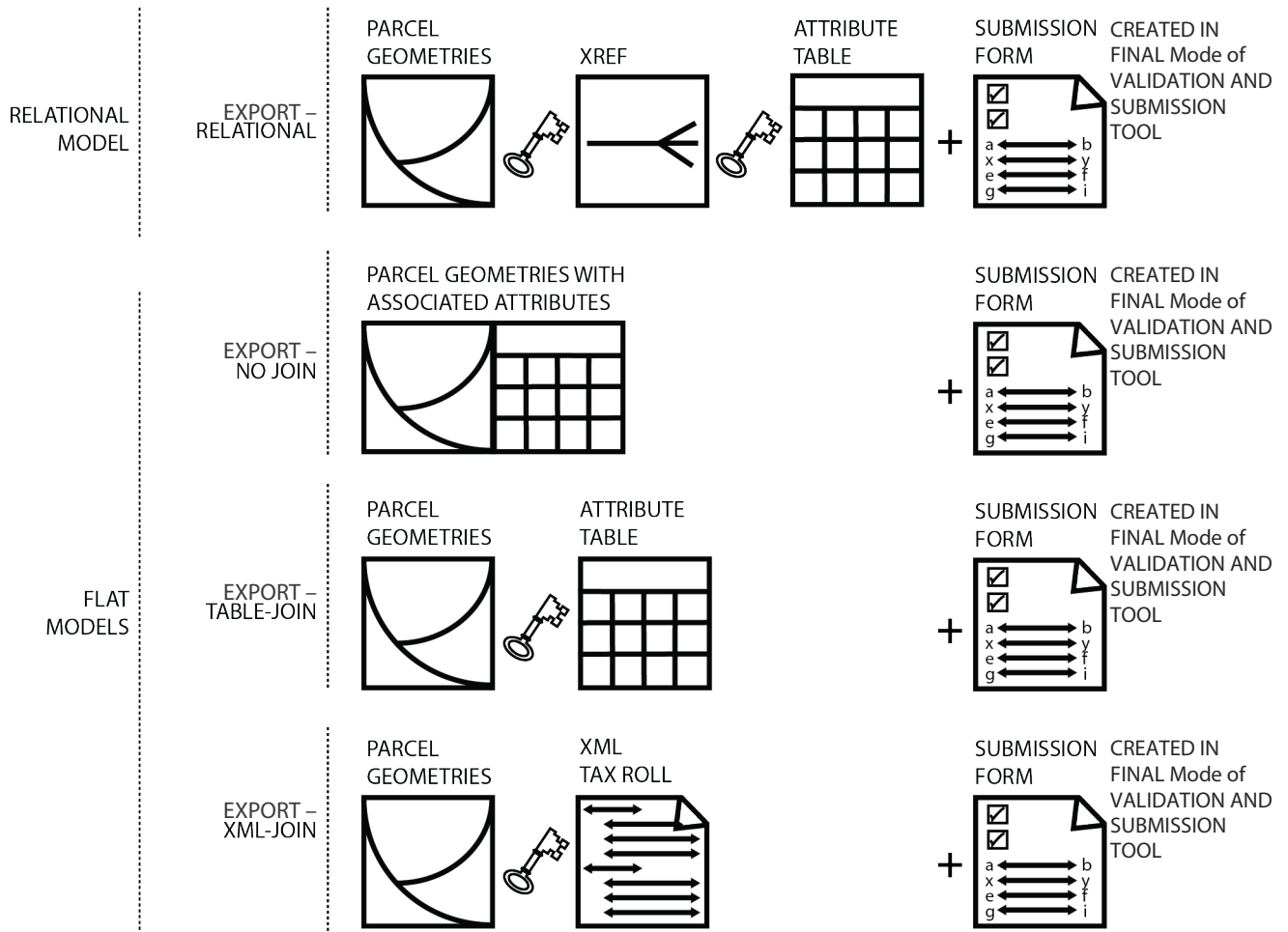
F. Export Format

The Export Format is designed as a temporary exchange standard that facilitates transformation of parcel and tax roll data into the Searchable Format. The Export Format is an exchange standard with a specification that will change over future iterations of the Parcel Initiative, evolving toward and eventually being **replaced by the Searchable Format**.

Figure F-1. Components of Data Submission

In addition to the data, a submission form is required. This submission form describes the submitted data in a manner similar to a crosswalk. The major components of data submission are illustrated in Figure F-1.

There is an option of four separate models for submitting in the Export Format. Each county will have discretion in deciding which model they choose. The models for the Export Format describe how the data components—geometries and parcel attributes—are submitted.

Figure F-2. Models for V3 Data Submission for Those Submitting in Export Format

All data that is stewarded by the county must be submitted following one of these models, not a combination of these models. Figure F-2 shows there is one Export Format pathway for submitting as a "RELATIONAL MODEL" (where a cross-reference or "XREF" table is used to facilitate a join), and three possible pathways for submitting as a "FLAT MODEL."

1. General Specifications for Export Format

1.1 Export Format Attribute Specifications

- All tabular information submitted must meet the attribute requirements identified in the checklist and full schema. However, attribute field names do not need to be submitted conforming to schema definitions in Appendix B as long as the appropriate attribute crosswalk is completed in the submission form.
- All submitted tabular information must be in one, and only one, common table, in File Geodatabase (.gdb) table format or DOR XML format.

> 🔧 **Tip:**
> The DOR XML PARSE TOOL may help translate valid DOR tax roll XML into a GIS table

- Multiple tables are not allowed.
- Attribute requirements are detailed in Appendix B.
- For those submitting in the Export Format, the schema specification of formatting **all attributes denoted by alpha characters in UPPPERCASE** is encouraged.
- <**Null**> values: For all instances across all fields where a data value does not exist, a true SQL <**Null**> should be used instead of blank fields (e.g. "") or whitespace (e.g. " "). A <Null> value can be calculated into a field using the *Field Calculator*, as shown in Figure A-1, or use the Null Fields and Set to UPPERCASE Tool.

> 🔧 **Tip:**
> The NULL FIELDS AND SET TO UPPERCASE TOOL may help format all attributes within a feature class to <Null>/UPPERCASE

- **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.
  - e.g., hydrography name, "ROW", or "GAP"—see the PARCELID schema definition for details.

1.2 Join and Relationship Specifications

- If the model requires a join or relationship between the attribute data and the parcel geometries, then the join or relationship field pairings must be explicitly stated in the submission form. Tables F-1 through F-4 display the information that must be included in the submission form, per the model of choice (i.e., Export–RELATIONAL, Export–NO JOIN, Export–TABLE JOIN, or Export–XML-JOIN).

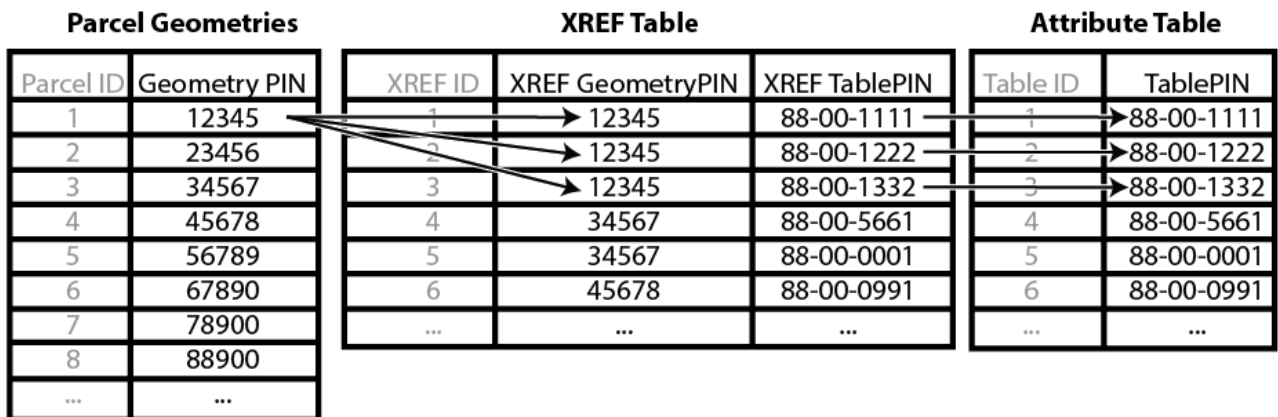| Table F-1. Export– RELATIONAL MODEL Elements	
Parameter	**Definition**
Model Name	The model type submitted (Export–**RELATIONAL**)
Geometry PIN	The parcel field that relates to the XREF table
XREF Geometry PIN	The XREF table field that relates to the parcel field
XREF Table PIN	The XREF table field that relates to the attribute table
Table PIN	The attribute table field that relates to the XREF table

Figure F-3. Illustration of EXPORT–RELATIONAL MODEL fields, which require an XREF table

Table F-2. Export–NO JOIN MODEL Elements

Parameter	Definition
Model Name	The model type submitted (Export–**NO JOIN**: meaning the county has already included parcel geometries and attributes in the same file geodatabase feature class)

Table F-3. Export–TABLE-JOIN MODEL Elements

Parameter	Definition
Model Name	The model type submitted (Export–**TABLE-JOIN**)
Geometry PIN	The parcel field that joins (1:1) to the attribute table
Table PIN	The attribute table field that relates (1:1) to the parcel field

Table F-4. Export–XML-JOIN MODEL Elements

Parameter	Definition
Model Name	The model type submitted (Export–**XML-JOIN**)
Geometry PIN	The parcel field that joins (1:1) to the DOR XML ID
DOR XML ID	The XML field that joins records (1:1) to parcel field (LocalID1, LocalID2, or ParcelID)* *These fields are documented in the DOR County Rolls XML Schema Documentation located at revenue.wi.gov/Pages/Developers/file-transmission-2016-16home.aspx

2. Export Format GIS File Specifications

2.1 File Delivery Format

- **GIS Template**. A GIS template file has been provided on the V3 webpage and can be used for submission to the Export Format: \GISTemplates.gdb\SearchableFormatTemplate
- **File Geodatabase.** Parcel geometries must be submitted as a file geodatabase (.gdb) containing all parcels as a single feature class. Shapefiles and CAD files are not accepted.
- **Naming Convention.** The parcel geometry feature class in Export Format must follow this 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 V3 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).

3. Export Format Attribute File Specifications

3.1 Attribute Specifications

- **Attributes Denoted by Alpha Characters as UPPPERCASE 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 (acreages) 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 those submitting in both the Searchable and Export Format.
    - For those submitting in the Export–XML-JOIN format, note that they are not a part of the Department of Revenue's XML schema.

- If following Export–XML-JOIN Model, any information that cannot be derived from the DOR XML (such as fully parsed addresses) must be included within the attribute table of the feature class containing the parcels. In order to submit parsed addresses with the DOR XML submission, a county must include parsed address elements within the attribute table of the feature class containing parcel geometries.

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

- **Attribute Table File.** Unless following the XML-JOIN or NO JOIN MODELS, tabular data must be submitted as specified here:
    - All attributes for the county's parcel jurisdiction must be included in one table file.
    - Acceptable tabular file types include: file geodatabase (.gdb) table or dBASE (.dbf) table.
    - Attributes do not need to be submitted with standardized field names conforming to the schema in Appendix B and as long as the attribute crosswalk is completed in the submission form. However, **standardization of attribute field names** is encouraged.

- **Attribute Table Naming Convention.** Attribute tables must follow this naming convention:
    - If .gdb ▶DODGE _PARCELS.gdb\ATTR
    - If .dbf ▶DODGE _ATTR.dbf

- **XREF/RELATIONSHIP Table.** XREF/RELATIONSHIP tables must follow this naming convention:
    - If .gdb ▶DODGE_PARCELS.gdb\XREF
    - If .dbf ▶DODGE_XREF.dbf

4. Export Format Geometric Specifications

4.1 Geometries

- All digital parcel geometries must be included as one GIS feature class for the county's parcel jurisdiction.
- File must include all parcels, regardless of tax exemption status.
- Only current parcels will be included. Historic parcels should be omitted.
- Unless following the Export–RELATIONAL MODEL, there must be a one-to-one relationship between parcel geometries and records in the attribute table. Each parcel geometry must attach to one and only one record; each record must attach to one and only one parcel.
- 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. Condos may be presented with one of the four preferred geometric representations from Figure A-2:
    - Condo Type #1–Discrete
    - Condo Type #2–Stacked
    - Condo Type #3–Divided
    - Condo Type #4–Distributed

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

- Condo Type #5–Export–RELATIONAL: If condo or other collective real property ownerships do not follow a Condo Type from #1-4 as seen in Figure A-2, they can follow the Export–RELATIONAL model depicted in Figure F-2. These condos require submission of a special XREF table.
- If unable to submit in condo types #1-5, contact the State Cartographer's Office for directions on how to submit a condo-alternative format.

5. Export Format – Validation and Submission Tool + Form

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

DIGITAL APPENDICES
TOOLS AND GUIDES
VALIDATION AND SUBMISSION TOOL
UPLOAD DATA
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