

Definition(s) of Parcel Data

The definition of parcel data depends on its intended use. Interviewees in the study usually defined "parcel data" by describing how they **use** it to support their work. For example, planning departments said that parcel data is the parcel identification number but also the zoning codes, actual uses and boundaries, and physical characteristics. Planning departments need this information to run planning scenarios and make development decisions. By contrast, real property tax administration officials referred to parcel data as parcel identification and location, information about any structures on the parcel, the parcel owner, and the assessed value. More specifically within the area of taxation, some described parcel data as being the legal definition of the parcel (i.e., a deed), while others referred to the tax map characteristics.

After gathering parcel data definitions from each of the interviewees, we researched parcel data definitions and classifications in other states. Ohio, Wisconsin, and Nebraska have made concerted efforts to define parcel data but their definitions lack many of the nuances reported in our interviews. The Ohio Cadastral Task Force, for example, recommended a core group of attributes associated with parcel data that included a parcel identifier, a county code, a tax code, valuation data, and a lot description. In Wisconsin, a state law established a definition of 'land information' under the Land Records Modernization Plan which outlined a broad framework for thinking about parcel data as "...any physical, legal, or economic, or environmental information or characteristics concerning land, water, groundwater, subsurface resources, or air in this state." Finally, in 2000, Nebraska issued the "Guidebook for a Local Government Multipurpose Land Information System" which outlined the general types of parcel characteristics as spatial reference attributes, cadastral reference attributes and parcel attributes. None of these definitions captures the variety or richness of detail that emerged in our interviews.

Taken as a whole, the interviewees in our study generated a long list of descriptive of parcel characteristics as shown in Table 1. Using layman's terms, the attributes are grouped into eight categories of common characteristics. For example, the category "parcel location" contains 'parcel address', which can be thought of as descriptive data (i.e., 123 Main Street) or spatial data (i.e., a set of coordinates), or both.

Although this listing does not include all possible attributes, it represents the common characteristics interviewees use to describe parcel data. The categories include:

- parcel identification
- parcel location
- ownership
- occupancy and use
- structures and improvements
- taxation
- physical geography
- infrastructure

Parcel identification and location attributes comprise the numbering scheme used to identify the parcel and the characteristics that describe its location on the earth as well as its location within the boundaries of a municipality, school, water, or other districts. Ownership attributes identify the owner and provide historical information about ownership. Occupancy and use attributes describe the type of current use as well as details about what people or organizations occupy the parcel. Structures and improvements present details about what is built on the property. Taxation attributes present tax rates, sales history, exemptions, and payment information. Physical geography describes the parcel in terms such as its soil type, size, and water features, while infrastructure attributes represent large-scale initiatives such as road and bridge placement, utility and power grids, and water and sewer lines.

Table 1. Parcel Data Categories and Attributes Identified in the Study

<p>Parcel Identification</p> <ul style="list-style-type: none">• Section block & lot number - or specified ID number• History of splits and merges of parcel that affect the ID number <p>Parcel Location</p> <ul style="list-style-type: none">• Full address including street, city, state, and zip• Acreage or lot size• Tax map number• Coordinates for mapping elements such as points	<p>Structures and Improvements</p> <ul style="list-style-type: none">• Type of structure (e.g., residential, commercial)• Age of structure• Building footprint• Number of stories• Style of construction• Number of bedrooms• Number of baths• Sewer; water; septic hook-up• Square footage• Condition (interior/exterior)
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<ul style="list-style-type: none">and polygons• Mapping projection (mathematical model) used to depict three dimensional data• Datum (spatial reference system) used in the mapping projection• Centroid (coordinates of the approximate geographic center of the parcel)• Metes & bounds (perimeter description)• District codes and boundary• Municipal codes and boundary• Election code and boundary• Special districts codes and boundary• Special water protection codes and boundary• Fire districts code and boundary• School districts codes and boundary• Neighborhood code and boundary <p>Ownership</p> <ul style="list-style-type: none">• Owner name• Owner full address including street, city, state, and zip• Owner telephone number• Change in ownership history <p>Occupancy and Use</p> <ul style="list-style-type: none">• Occupant name• Occupant full address including street, city, state, and zip• Occupant phone number• Usage codes• Zoning codes• Farm lands codes• Planning codes• Residential and commercial zone• Environmental Permit issued• Easements (i.e., right of way)	<ul style="list-style-type: none">• Year built• History of improvements• Quality of construction (including materials and workmanship)• Utility service <p>Taxation</p> <ul style="list-style-type: none">• Tax rate• Assessed value• Sale price• Sale date• Exemptions• Payment information <p>Physical Geography</p> <ul style="list-style-type: none">• Flood plain data and boundary• Wetlands data and boundary• Habitat type and boundary• Soil data and boundary• Topography (landforms)• Aquifer data (water under land surface)• Land cover information (such as forests)• Hydrography (bodies of water) <p>Infrastructure</p> <ul style="list-style-type: none">• Road/Bridge data• Tunnel data• Power grid data• Water/Sewer infrastructure• Telephone/Cable infrastructure
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