

Land parcels are the foundation for many aspects of public and community life. This report presents the findings of a reconnaissance study of information about land parcels in New York State. Broadly defined, this information includes data about parcels that describe their nature, location, use, and association with physical and political geography. The purpose of the study, sponsored by the New York State Office of Real Property Services, was to provide information to help shape strategies for broader understanding and more effective use of parcel data in New York State. Accordingly, it identifies stakeholders and their interests as well as the needs and issues associated with the uses of parcel data in the public, private, and nonprofit sectors.

Parcel information pertains to the smallest unit or lowest common denominator of land ownership. Parcels in land-oriented systems are roughly analogous to cells in an organism; they represent the basic building blocks of larger units and systems. This study approaches the topic of parcel data with a goal of understanding its fundamental characteristics or dimensions. The data for this study was gathered primarily through 35 interviews with people in local and state government, private companies, and non profit organizations located throughout New York State.

Defining 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. Interviewees identified many elements of parcel data, but no two described it in exactly the same way. Taken together, their descriptions comprise a long list of specific attributes that can be divided into eight categories:

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

Range and Value of Parcel Data Uses

The use of parcel data conveys great value to individuals and to public, private, and non-profit organizations. This information is used for a very wide range of purposes from disputing boundary lines, to marketing products to targeted populations, to making disaster recovery plans. Most interviewees reported that parcel data is essential to their core functions. Parcel data uses identified and illustrated in this study can be categorized as addressing, billing, boundary setting, buying and selling land, design and engineering, districting, emergency response, marketing, notification and outreach, permitting/enforcement, planning, public health monitoring, real property taxation, routing, siting, and zoning.

Stakeholders and Their Interests

Given such a wide array of uses, a similarly wide range of public, private, and non-profit organizations, as well as individuals, have a strong interest in parcel data. Direct stakeholders identified in this study include:

- Real Property Assessors
- Community/Neighborhood Groups
- County Real Property Tax Services Offices
- Non-Profit Professional Organizations
- Other County and Municipal Government Agencies
- Private Companies
- State Government Agencies
- Property Owners
- Property Occupants

Stakeholders play any or all of three main roles with respect to parcel data. These roles are data collectors, who gather parcel information directly from the field; parcel data users, who use parcel data to support their core

functions; and data suppliers, who distribute data to other users. Some of the central issues identified in this study relate to the stakeholders and their interests including:

- **Accuracy, timeliness, and consistency.** All stakeholders are interested in accuracy, timeliness, and consistency of data, but at different levels and for different reasons.
- **Digital, on-line, and single point of access.** Most organizations interviewed would prefer a digital, online, single point of access source for parcel data.
- **Revenue generation.** The greatest divide among stakeholders occurs over the question of whether parcel data should be a source of revenue.

Flow and Management of Parcel Data

By tracing the flow of parcel data from the interviewees' organizations to others, we were able to construct a picture of the typical parcel data flow in New York State. In general, parcel data flows in two ways: (1) through routine and systematic channels associated with real property tax administration and (2) through many ad-hoc requests involving users outside the real property tax administration system. This arrangement generates several important issues. First, as data coverage moves from smaller to larger geographic areas, the detail and timeliness of the data decreases. The most detailed and up-to-date information pertains to and is maintained by localities. Very few, infrequently updated data elements are available from any source for the entire state. Consequently, regional and statewide uses of parcel data depend on the user's ability to construct a wider picture from many smaller units of information; and these in turn depend on many separate requests to county and municipal sources. Second, users often discover errors or make improvements to parcel data but, with very few exceptions, no mechanisms exist for them to return corrections or improvements to the data sources. Third, policies and practices for responding to data requests from users are neither uniform nor predictable from time to time or place to place. Several alternative data management programs are in place at both the state and local levels that address some of these issues.

Principles For Treating Parcel Data as a Collective or Statewide Resource

Parcel data is fundamentally important to a wide range of organizations. Each organization has its own mission and practices, but all have one thing in common – parcel data is vital to their work. The findings of this study demonstrate the potential benefits, and the key difficulties, of treating parcel data as a collective or statewide information resource. Under New York State law, responsibility for parcel data is distributed among many organizations at the state, county, and municipal levels. As a consequence, changes in the treatment of parcel data will require a high degree of consensus. We therefore conclude by offering a set of principles that might guide a collaborative approach to future discussions, decisions, and investments.

- **Broad recognition of parcel data content, value, and uses.** A broader appreciation for the many ways people think about and use parcel data can encourage opportunities for collaboration and joint investments.
- **Standard parcel identification and location information.** A common parcel identification scheme would allow data users to integrate and merge data from multiple counties and municipalities across New York State.
- **On-line access in a variety of formats.** Most users want ready access to electronic parcel information, ideally on the web, and via a self-service process.
- **Ready access to authoritative sources.** Many users would prefer a single authoritative source for all parcel data in the state, but many would also be satisfied with multiple sources that follow the same standards and policies.
- **Feedback from data users to data sources for data improvement.** By providing data users the opportunity and a mechanism to communicate corrections and enhancements back to the source, the overall integrity and quality of parcel data can improve with increasing benefit to all future users.
- **Balanced approaches to the costs and benefits associated with collection, use, and supply.** Progress toward treating parcel data as a collective resource will depend on willingness to discuss, experiment with, and evaluate policies and practices that balance costs and benefits for all stakeholders.