

# Using the ArcGIS Parcel Fabric to Maintain the Authoritative “system of Record” of Land in the United States.

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## SUMMARY

Since 1980 when the Committee on Geodesy of the U.S. National Academy of Sciences recommended a national multi-purpose cadastre in the United States, local governments have implemented various methods to maintain an inventory of the land records within their jurisdictions. These methods range from manual drafting on paper to drafting using Computer Aided Design (CAD), to generic Geographical Information Systems (GIS) tools, to purpose-built parcel fabric that meets modern requirements. As digital fiscal cadastre emerged in the United States, other governmental departments realized the importance of the cadastre, beyond valuation, to support additional functions such as planning, public safety, and funding of departments and programs. Government entities understood that there was a demand beyond the cadaster and that these databases would become the foundation of many other informational products that would be vital to making informed decisions. The demands of the system, software and data, became more challenging. Beyond the capability of locating a property, additional questions were being asked about the rights – who owns the property? Do they own the air rights? Who owns the subsurface rights? the responsibilities – what entity is responsible for maintaining the vegetation along the tract of land adjacent to the railroad? and the restrictions – Parcel A cannot be used as a petrol station due to its proximity to the aquifer recharge zone. Today’s demands on information can be exceeded with the capabilities provided by the ArcGIS Parcel Fabric. The parcel fabric provides a comprehensive framework for managing, editing, and sharing parcel data. This paper will demonstrate the parcel fabric capabilities and explore how government entities have implemented the parcel fabric as their authoritative system of record within the United States.

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