Mapping ArcGIS Parcel Fabric to LADM
Commonalities, Gaps and Implementation

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Parcel Fabric Data Model
LADM Ontology in Parcel Fabric

Supports Any Language
LADM in Parcel Fabric: Ready to Use
Both LADM and the PF models are:

- flexible and extendable to meet unique business needs (‘profiles’)
- object oriented
- use relationships between entities
- account for the physical representation and the legal representation.
- support multiple systems of legal descriptions, formal and informal
Extending the Parcel Fabric Data Model

To Extend, One Can Add:

- additional fields as needed
- domains (AKA ‘code list’) to certain fields
- and configure topology rules to model the correct parcel behavior
- and configure attribute rules to model the correct parcel behavior
- other capabilities such as contingent values, subtypes and metadata.

Or Additionally:

- Enable versioning to allow multi-user editing
- Enable replica tracking, editor tracking and add GlobalIDs (UUID) to allow for disconnected editing capabilities.
The base LADM schema can be easily extended.
‘OID’ – the PF uses the DBMS OIDs as well as UUID (GlobalID) for PKs and FKs. GlobalIDs are necessary for maintaining object uniqueness across replicas (connected and disconnected workflows).

built-in Quality Rules as part of the schema

built-in Workflows

feature Level metadata

Feature Class metadata

explicit parcel lineage
All cadastral features are associated to their source.
Parcel Fabric / LADM Gaps

- The parcel fabric does not cover LA_Party or LA_RRR
  - these systems are usually maintained outside of a geographic information system in a registry
LADM Is Implemented Now as Parcel Fabric

Non-US Based Implementations
• Cyprus
  pop. 1.2m
• Bonaire
  pop. 20k
• Medellin, Colombia

US Based Implementations
• Bureau of Land Management
• Harris County, TX
  pop. 4.7m – 1.8m parcels
• Miami Dade County, FL
  pop 2.7m