Relational Database Design: Discussion: The "Parcels" Database

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The Parcels Database

Tables and Primary Keys

Table Primary Key

PARCELS ID

OWNERS OWNERNUM

FIRES ID, FDATE

TAX ID

Relationships

Primary Table.Column Foreign Table.Column Cardinality

OWNERS.OWNERNUM	PARCELS.ONUM	One-to-many
PARCELS.ID	FIRES.ID	One-to-many
PARCELS.ID	TAX.ID	One-to-one

Parcels Database Enhancements

Eliminate intelligent key for parcel ID

Merge the TAX and PARCELS tables *or* add the year to the tax table to keep track of taxes over time (changes the relationship to one-to-many)

Rename PARCELS foreign key ONUM to be consistent with the OWNERS table

Improve comprehensibility of column names

Eliminate the FIRE with no corresponding PARCEL. Choose one of the following:

- Correct the ID in the FIRES table
- o Eliminate the row from FIRES
- o Add a new parcel to PARCELS

Parcels Database Design Dilemmas

How would multiple owners (a many-to-many relationship) be modeled?

How to model parcel sales?