

# Creating a pseudo Master Address List for Municipal Government

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# Municipal Address Databases

# Where is Newton?

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Newton



# Vital Signs

## Suburban city

- ~ 83,000 residents
- 14 Villages
- 10 Zip Codes
- 24, 199 parcels
- 38,703 address points
- Built Out

# What is a pseudo Master Address List?

Not an official “Master Address List” but...

- used as part of daily GIS workflow
- used for notifications, school assignments, emergency planning, police reports and in the customer service call center
- recently adopted as part of the address assignment workflow

# Why do we need this?

Need to frequently geocode lists for various departments:

- Lists of incoming students for schools
- City Census
- Addresses for Public Works complaints
- Police reports
- Volunteers

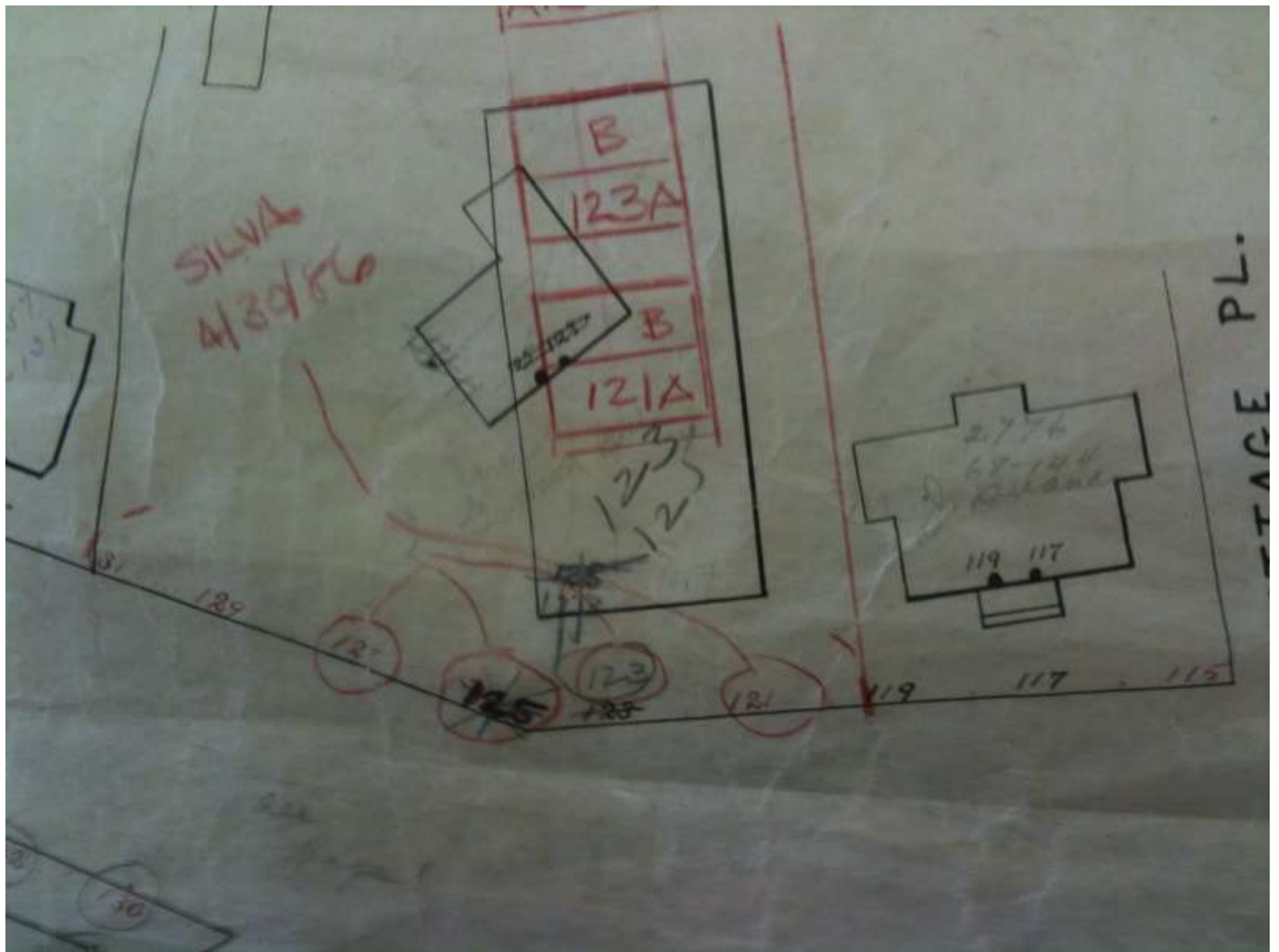


# Newton's current address list

- A series of sheets – mylar, vellum, paper
- Often torn, smudged, overwritten
- Many sheets are missing







# Why address points?





# How to create the address geodatabase

## Data Sources:

- Engineering sheets
- Parcel database – property address and mailing address
- Census lists – city and US
- School enrollments
- Police reports
- DPW databases – facilities and service calls
- Commercial property lists
- Building permits
- Range addresses from parcel database

# How to create the address geodatabase

## Methodology:

- Begin with Parcel Centroids – move to center of largest building on property
- Range properties (2-14 Town House Drive) duplicated
- Other address lists geocoded using above addresses as a base address locator
- Engineering sheets checked for missing addresses
- Field checking – rarely done

# How to create the address geodatabase

## **Attributes: - conforms to MassGIS Address Standard**

- Property ID kept to link to other databases
- Geocoding fields – Pfx\_Dir, Street, St\_Typ, Sfx\_Dir, Zip, etc
- Source of address – Engineering, Assessor's Database, Census, Asset Management Database, Common Mistakes
- Address quality – Good, "Accurate", Bad, Historic, Questionnable, Inactive, Out of Town, Stationing



# Typical addressing problems

## Duplicates

12|CHARLES|ST|AUB|02466

12|CHARLES|ST|HGH|02461

27|NORTH GATE|PARK

27|NORTHGATE|PARK

27|N|GATE|PARK

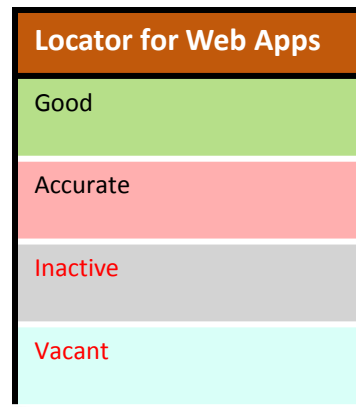
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# Versions of the database

- **1. Geodatabase**
  - Full address list – use for validating addresses and for general desktop GIS purposes
- **2. Geocoding file**
  - Do not include apartments, they will result in tied candidates
  - Shapefile format to support legacy applications
- **3. Address locator for web applications**
  - Use only valid addresses
- **4. Notification Table**
  - Minimize undeliverable addresses



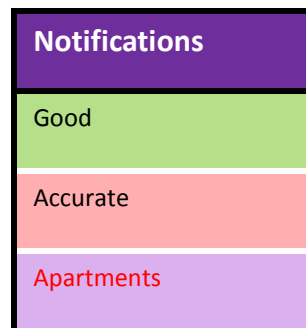
Export File Geodatabase



Shape File  
where = Addr\_Qual <> 'Apartments'



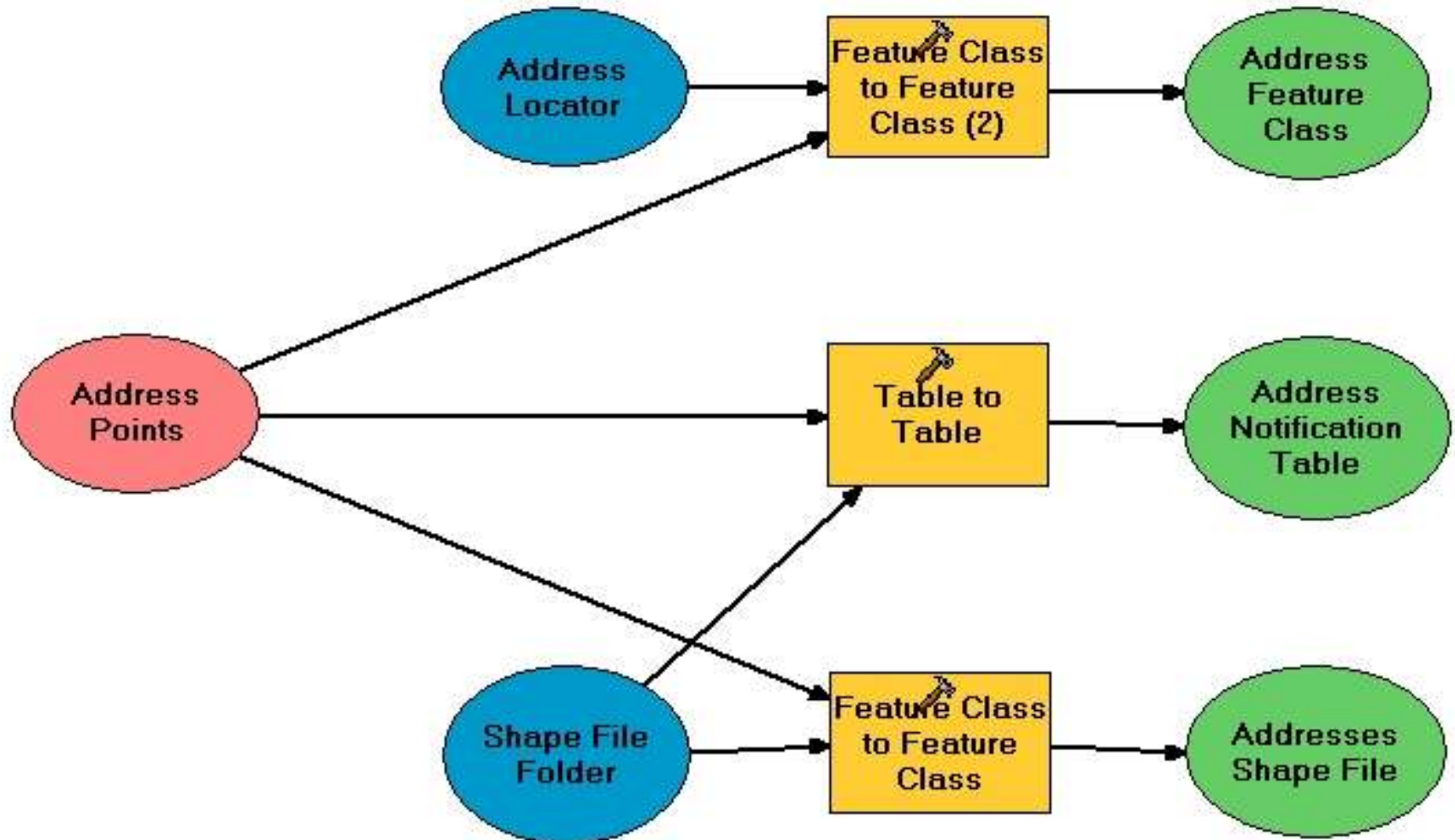
Export Table



\*Vacant includes Open Space addresses  
if they are ever assigned

\*\* Use same file for general internal GIS use

# Address Update Model



# In the future...

- Hopefully this will become a recognized Master Address List
- New addresses are entered as part of the address assignment process
- Schools will use pick lists or drop downs to ensure that students use legal addresses
- Public Works databases have these type of menus but their addresses do not always match the list - only official addresses will be allowed
- This list will help integrate city departments to a common database