City of Manhattan, KS
Cemetery Grave Locator
Map/App

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Manhattan, KS

- The Little Apple
- City of 55,000 people
- K-State University & US Army base
- Located in the tallgrass prairie of the Flint Hills
- Bronze Level Bicycle Friendly Community
- Where in the world?
The Request

• Cemetery Sexton had 150+ years of records & maps

• Many different record formats/quality
  – Excel spreadsheet with 30,000 records

• Old maps were hard to read/disorganized

• Public inquiries were time consuming & difficult

• 3rd party product was too expensive

• Could GIS help?
Software

• ELA
  – ArcMap 10.2.2
  – ArcGIS Online
    • Finder App
• Microsoft Excel
ArcGIS Feature Classes

• No previous CAD or GIS data
• All layers drawn off old maps & imagery > very time consuming

• Points
  – Graves

• Polygons
  – Cemeteries
  – Sections
  – Blocks
  – Lots
<table>
<thead>
<tr>
<th>Feature Class</th>
<th>Polygons</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attribute</strong></td>
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<tr>
<td>Cem_ID</td>
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<tr>
<td>Block_ID</td>
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<tr>
<td>Section_ID</td>
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<tr>
<td>Lot_ID</td>
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<tr>
<td>Grave_ID</td>
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<tr>
<td>Full_ID</td>
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</tbody>
</table>

* Use to join with spreadsheet
Excel Spreadsheet

GIS Data: Graves

Full_ID

Join

Add Fields

Excel Spreadsheet

Full_ID
First_Name
Last_Name
Date_Death
Date_Interned

* 30,000+ records
* A lot of time cleaning & organizing data
Uploading to ArcGIS Online

- Uploading of Graves was done by Section to keep records around 1,000. Anymore than this and we found that not-all features would load.

<table>
<thead>
<tr>
<th></th>
<th>Tiles</th>
<th>Features</th>
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</thead>
<tbody>
<tr>
<td>Pros</td>
<td>Caching for quick loading</td>
<td>Query enabled, editable</td>
</tr>
<tr>
<td>Cons</td>
<td>Non queries, display only</td>
<td>inconsistent loading, slow</td>
</tr>
</tbody>
</table>
Uploading to ArcGIS Online

Service
Publish this map as a service on the web using either ArcGIS Server or ArcGIS Online. This command is disabled if you are currently in Layout view.
Uploading to ArcGIS Online
Uploading to ArcGIS Online

Building Cache after publishing saves time & always works.
Uploading to ArcGIS Online

Analyse first to see if there are any 'HIGH' importance errors.

Then Publish (this uploads the files to ArcGIS Online)
### Uploading to ArcGIS Online

#### Open this Layer to build tiles manually

<table>
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Uploading to ArcGIS Online

Check each scale you want tiles built at (generally all) and click 'Create Tiles'.

***This can take some time – several hours or more.
Create Your Map
Create Your App

When you have your webmap how you want it, you save it, and then share it.

The Finder App was used for our project.

- Allows users to search attributes (Last Name, First Name, Date of Death, Lot) in the features layer.
The Finished Product

• The app is embedded on the City’s webpage
• Over 3,100 views
  – Used by Historic & Genealogy Museum
  – Cemetery Crews
  – Florists
  – Relatives/descendents
Questions

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