

# CEMETERY GEODATABASE



*Out of the Ashes*

*Arlington Municipal Cemetery*



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# INTRODUCTION

- ❖ History
- ❖ Cemetery organization
- ❖ Purpose of this project
- ❖ Sources
- ❖ Method
- ❖ Current state
- ❖ What's next?

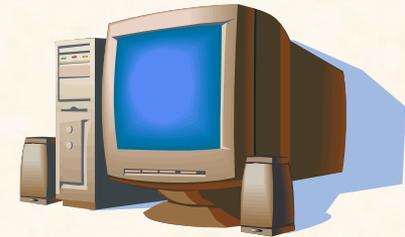


# HISTORY

- ❖ Original “Harwood Cemetery” 1903
- ❖ Destruction of records by fire
- ❖ Sections added in 1959, 1967, 1987 and Urn Garden expanded in 2009



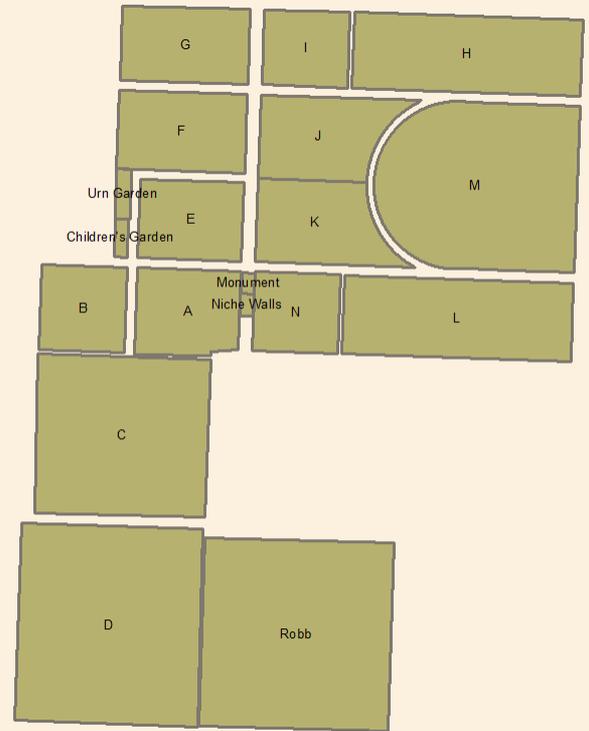
- ❖ The City of Arlington assumes responsibility for Arlington Cemetery in the late 1990s
  
- ❖ Office/Maintenance Building is established on site in 2000
  
- ❖ Data entered into ASP accounting program
  - No easy export capabilities
  - ASP contract dropped 2010
  
- ❖ QuickBooks purchased 2010 not yet implemented



# GEOGRAPHIC ORGANIZATION

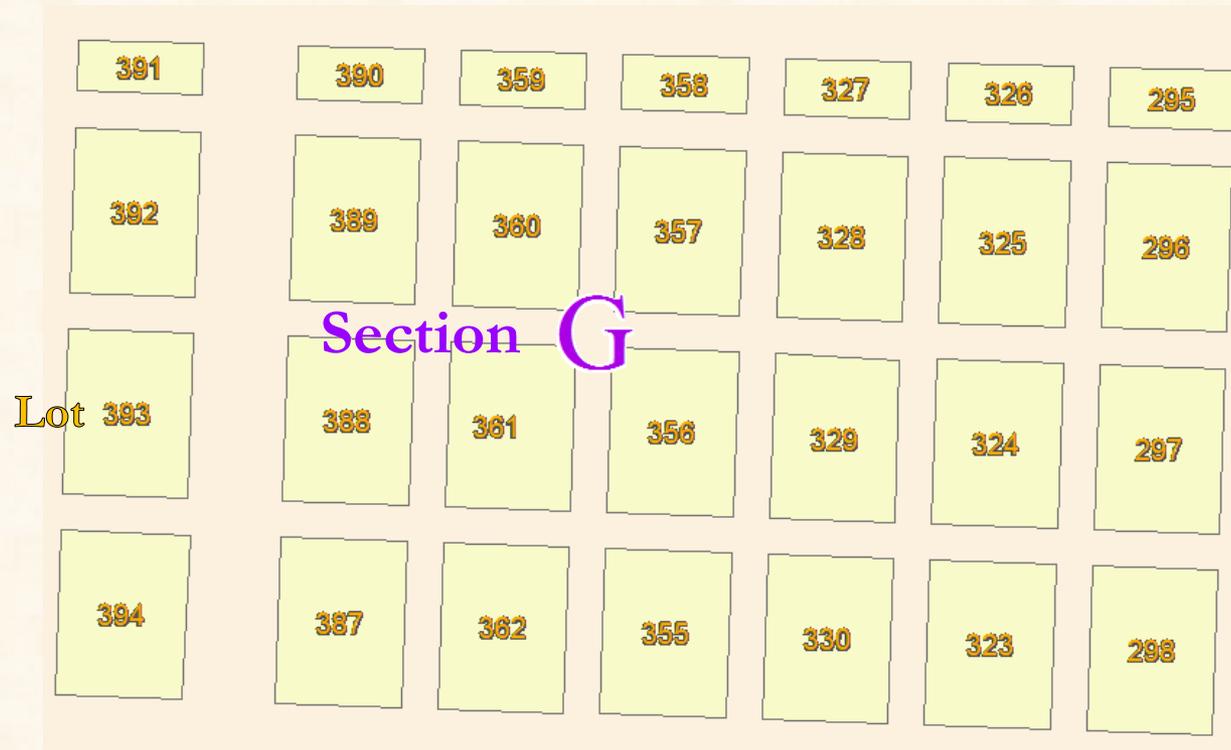
## ❖ Sections

- The largest divisions
- There are 18 Sections



❖ Lots

- There are 524 Lots platted at the Arlington Cemetery



❖ Graves

- There are 4 to 64 graves in any given Lot
- Each Grave can contain as many as four interred (each should have an account)
- Usually one traditional or cremated but,
  - Can add as many as three cremations
- No more than 2 traditional burials and even then, only under special circumstances.

6	12
5	11
4	10
Lot 360	
3	9
2	8
1	7



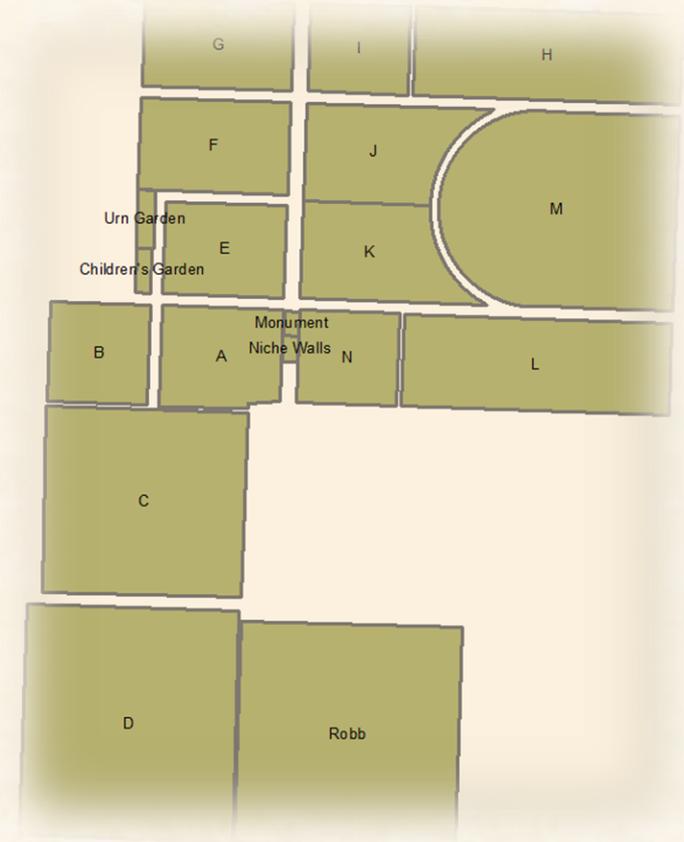
❖ Niche Wall or Columbarium

- There are 2 columbarium at the Arlington Cemetery
- 48 columbaria on each side of each wall for a total of 192 grave spaces for cremated remains only.



# PURPOSE

- ❖ Create a viable inventory of graves sold
  - Know what we have available today
  - Anticipate expansion in the future
- ❖ Improved customer service
- ❖ Improved planning capability



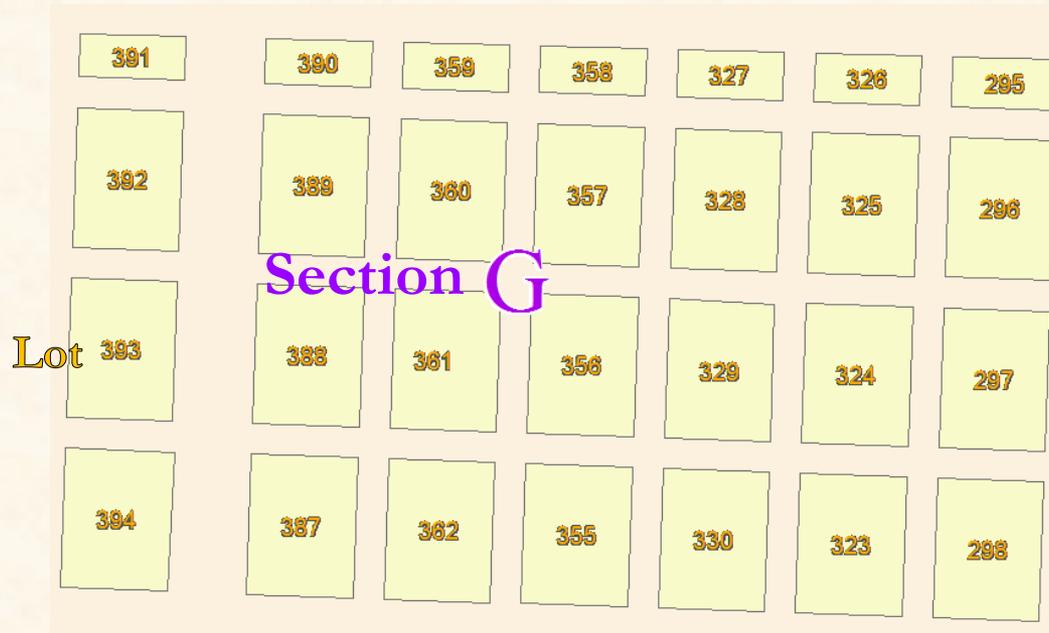




# GEOGRAPHIC ORGANIZATION

(review)

- ❖ Sections
- ❖ Lots
- ❖ Graves



❖ ASP data export



❖ Field work



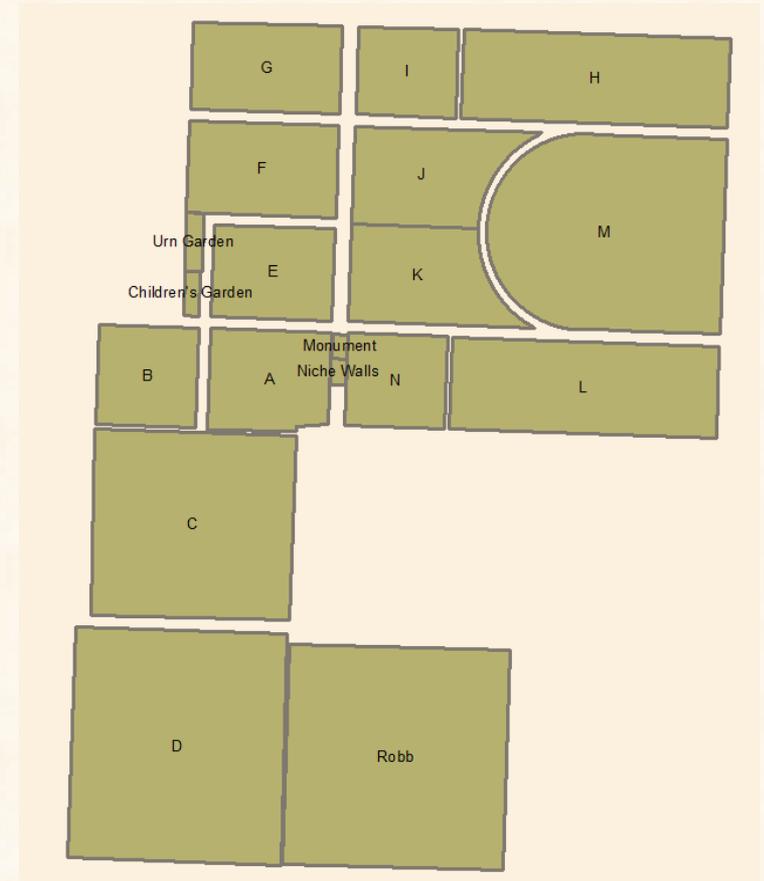
CEC-ZIP-CD	CEMSTR-DECEASED	CEMSTR-LAST-PMT-DT	CEMSTR-LOCATION
0	SUNDBERG, GERTRUDE	1/1/1900	SD L65 R2 G22
0	BERGEVIN, FRANK E	1/1/1900	SD L65 R2 G23
0	CELIA, BERGEVIN	1/1/1900	SD L65 R2 G24
0	HOOPER, EDWARD	1/1/1900	SD L65 R2 G25
0	HAZEL HOOPER	1/1/1900	SD L65 R2 G26
0		1/1/1900	SD L65 R2 G27
0	CONARROE, DAVID	1/1/1900	SD L65 R2 G28
0	CATTERALL, JACK	1/1/1900	SD L65 R2 G29
0	CATTERALL, MARJORIE	1/1/1900	SD L65 R2 G30
0	TANIS, JOHN	1/1/1900	SD L65 R2 G31
0	TANIS, DELLA	1/1/1900	SD L65 R2 G32
0	COOPER, WILLIAM	1/1/1900	SD L65 R2 G33
0	COOPER, ETHEL MAY	1/1/1900	SD L65 R2 G34
0	WHITTLE, CENITHA	1/1/1900	SD L65 R2 G35
0	CROAD, RUTH C E	1/1/1900	SD L65 R2 G36
0	KILMER, KEITH	1/1/1900	SD L65 R2 G36A
0	KILMER, EDNA	1/1/1900	SD L65 R2 G36B
0	HARDEN, ELLEN M	1/1/1900	SD L66 R1 G1
0	WILBANKS, DAVID T JR	1/1/1900	SD L66 R1 G2
0		1/1/1900	SD L66 R1 G3
0	ZUANICH, JOHN V JR	7/3/1990	SD L66 R1 G4
0	BUTLER, CYNTHIA E	1/1/1900	SD L66 R1 G5
0	BUTLER, GEORGE F	6/15/1999	SD L66 R1 G6
0	OVERTON, RUTH E	1/1/1900	SD L66 R1 G7



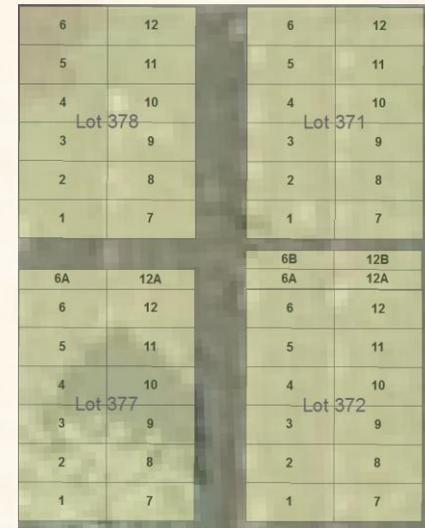
# METHOD

## ❖ Start with

- The most modern section ~
  - The Robb Section
  - Traditional or cremation
- Smallest section ~
  - Children's Garden
  - Small traditional or cremation
- Simplest data ~
  - The Urn Garden
  - Cremated remains only



- ❖ Create a grave feature class
  - Create and populate a graves layer by copying the Lots and dividing them up into graves
  - Edit the graves layer to reflect the known configuration and extent including graves added to the alleyways.



- Populate the LOCATION field (to match the spreadsheet from ASP software)
- Section Lot Row Grave

REC-ZIP-CD	CEMSTR-DECEASED	CEMSTR-LAST-PMT-DT	CEMSTR-LOCATION
0	SUNDBERG, GERTRUDE	1/1/1900	SD L65 R2 G22
0	BERGEVIN, FRANK E	1/1/1900	SD L65 R2 G23
0	CELIA, BERGEVIN	1/1/1900	SD L65 R2 G24
0	HOOPER, EDWARD	1/1/1900	SD L65 R2 G25
0	HAZEL HOOPER	1/1/1900	SD L65 R2 G26
0		1/1/1900	SD L65 R2 G27
0	CONARROE, DAVID	1/1/1900	SD L65 R2 G28
0	CATTERALL, JACK	1/1/1900	SD L65 R2 G29
0	CATTERALL, MARJORIE	1/1/1900	SD L65 R2 G30
0	TANIS, JOHN	1/1/1900	SD L65 R2 G31
0	TANIS, DELLA	1/1/1900	SD L65 R2 G32
0	COOPER, WILLIAM	1/1/1900	SD L65 R2 G33
0	COOPER, ETHEL MAY	1/1/1900	SD L65 R2 G34
0	WHITTLE, CENITHA	1/1/1900	SD L65 R2 G35
0	CROAD, RUTH C E	1/1/1900	SD L65 R2 G36
0	KILMER, KEITH	1/1/1900	SD L65 R2 G36A
0	KILMER, EDNA	1/1/1900	SD L65 R2 G36B
0	HARDEN, ELLEN M	1/1/1900	SD L66 R1 G1
0	WILBANKS, DAVID T JR	1/1/1900	SD L66 R1 G2
0		1/1/1900	SD L66 R1 G3
0	ZUANICH, JOHN V JR	7/3/1990	SD L66 R1 G4
0	BUTLER, CYNTHIA E	1/1/1900	SD L66 R1 G5
0	BUTLER, GEORGE F	6/15/1999	SD L66 R1 G6
0	OVERTON, RUTH E	1/1/1900	SD L66 R1 G7

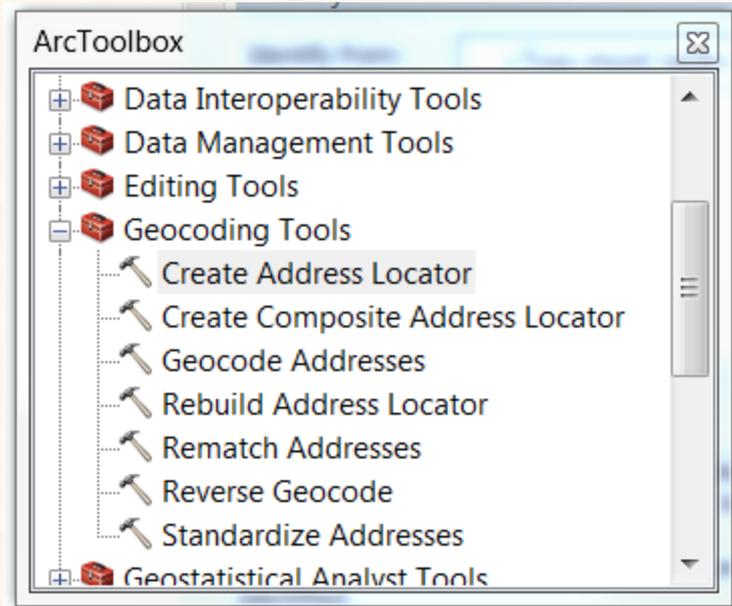
OBJECID *	section	lot	row	grave	LOCATION
5040	A	375	2	9	SA L375 R2 G9
4877	A	376	1	1	SA L376 R1 G1
5189	A	376	1	1A	SA L376 R1 G1A
5191	A	376	1	1B	SA L376 R1 G1B
4984	A	376	1	2	SA L376 R1 G2
4978	A	376	1	3	SA L376 R1 G3
4972	A	376	1	4	SA L376 R1 G4
4966	A	376	1	5	SA L376 R1 G5
5032	A	376	1	6	SA L376 R1 G6
5194	A	376	1	6A	SA L376 R1 G6A
5196	A	376	1	6B	SA L376 R1 G6B
5034	A	376	2	10	SA L376 R2 G10
5033	A	376	2	11	SA L376 R2 G11
4960	A	376	2	12	SA L376 R2 G12
5193	A	376	2	12A	SA L376 R2 G12A
5195	A	376	2	12B	SA L376 R2 G12B
5019	A	376	2	7	SA L376 R2 G7
5190	A	376	2	7A	SA L376 R2 G7A
5192	A	376	2	7B	SA L376 R2 G7B
5036	A	376	2	8	SA L376 R2 G8
5035	A	376	2	9	SA L376 R2 G9
4878	A	377	1	1	SA L377 R1 G1
5031	A	377	1	2	SA L377 R1 G2
4948	A	377	1	3	SA L377 R1 G3

- Save a copy of the Excel spreadsheet as a 97-2003 .xls worksheet

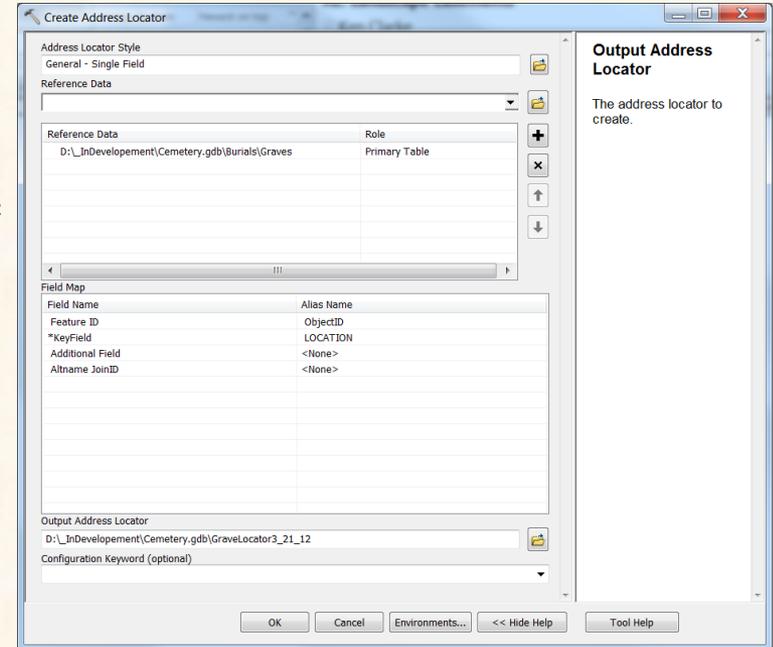


❖ Create geocoding tool

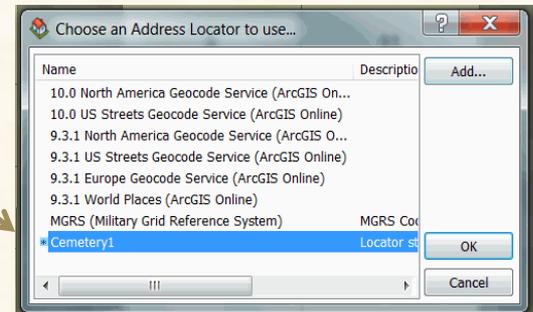
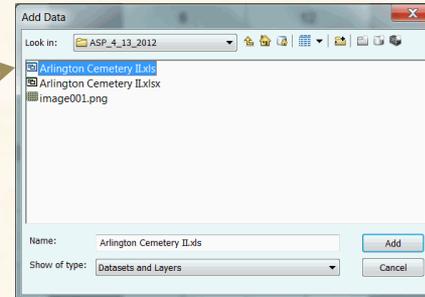
- Open ArcView
- Open toolbox
- Geocoding Tools
- Create address Locator



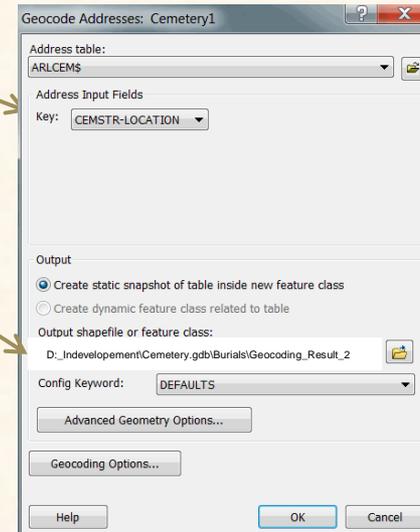
- ❖ Address locator style: General – **Single Field**
- ❖ Use the **Graves** layer for the Reference Data
- ❖ \*Key Field should be the **LOCATION**
- ❖ Output Address locator in the same geodatabase as my reference data



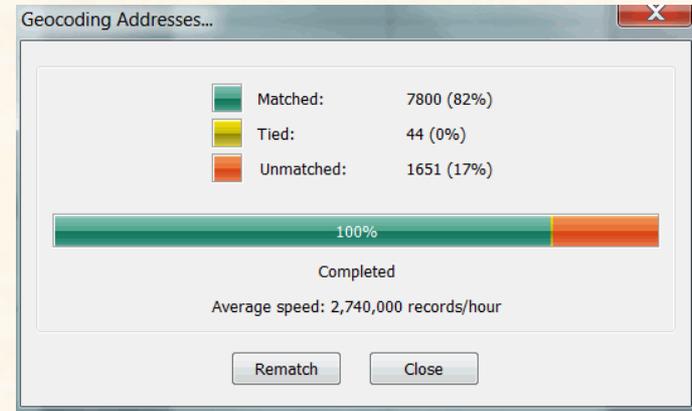
- ❖ Add your Excel data to your map
- ❖ Right click on the data in table of contents
- ❖ Choose Geocode
- ❖ Use the locator you just created



- ❖ Key Field should be the **LOCATION**
- ❖ Output in the same geodatabase



- ❖ When accounts do not georeference;
  - compare information between sources
  - Make edits in ASP
  - Make edits the new burial feature class created by geocoding
  - Make edits to graves feature class
  - Update address locator



- ❖ When accounts do not georeference;
  - When no known location was found within the lot, a “?” grave space was created, in the middle of the lot for unknown burial locations within that lot. Example: SN L352 R? G?

Grave 6A	Grave 12A
Grave 6	Grave 12
Grave 5	Grave 11
Grave 4	Grave 10
Grave 3	Grave 9
Grave 2	Grave 8
Grave 1	Grave 7
Grave 1A	Grave 7A



❖ The geocoded data includes;

- Account
- Location
- Name of deceased
- Buried or cremated
- Birth date
- Death date
- Burial date
- Purchaser
- 4 Address fields
- 1 telephone field
- Mortuary
- 18 very short comment fields

OBJECTID	ACCOUNT	LOCATION	DECEASED
4720	16760	SA L374 R1 G1	DETMAR, JOAN
4721	16758	SA L374 R1 G1A	THOMPSON, ELAINE
4722	16759	SA L374 R1 G1A	HEATON, BURKE D
4723	16761	SA L374 R1 G2	HEATON, ALBERT FLOYD
4724	16762	SA L374 R1 G3	HEATON, SHIRLEY E
4725	16763	SA L374 R1 G4	MORRIS, ZARA
4726	16764	SA L374 R1 G5	LARSON, L W
4727	16765	SA L374 R1 G6	LARSON, EMMA
4728	16770	SA L374 R2 G10	PLYMALE, EUNICE
4729	16769	SA L374 R2 G11	PLYMALE, FRED
4730	16771	SA L374 R2 G12	PLYMALE, LILY M
4731	916771	SA L374 R2 G12A	LARSON, DAVID J
4732	16766	SA L374 R2 G7	MILLET, KATHERYN
4733	16767	SA L374 R2 G8	CHATHMAN, SYLVIA
4734	16768	SA L374 R2 G9	DRAKE, ELLEN
4735	16790	SA L375 R1 G1	PETERSON, PETER
4799	16797	SA L375 R1 G11	JENSEN, KAREN
4736	16791	SA L375 R1 G2	PETERSON, ELDAIE
4737	16792	SA L375 R1 G3	LILLIOREN, ANDREW A
4738	16793	SA L375 R1 G4	LILLIOREN, OLAVA
4739	16794	SA L375 R1 G5	HOIDAL, ROGVALD
4800	16796	SA L375 R1 G6	HOIDAL, ANNA
4801	16795	SA L375 R1 G6	HOIDAL, MARTHA E
4740	16801	SA L375 R2 G10	JFNSFN PFTF

# CURRENT STATE

- ❖ We have a preliminary inventory of graves
  - In the last phase of QA/QC
  - New data export from ASP for comparison
  - Anticipate more accurate reporting



❖ Able to answer customer questions

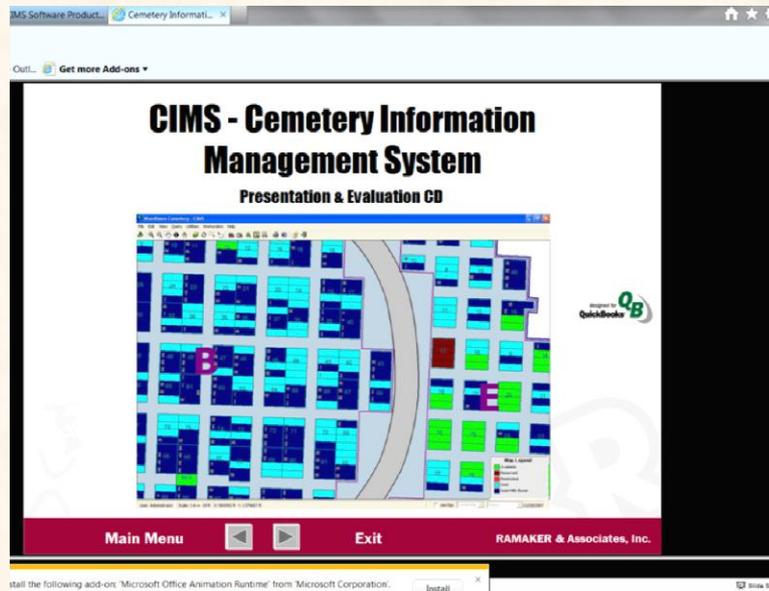
- Where can I be buried?
- Where was my loved one buried?
- Who else is allowed to be buried there?

6	ELGIN, ALINA 16694	12	ROJAHN, OTTO 16700
5	KUNDE, HELGA M 16693	11	ROJAHN, ELSIE 16699
4	KUNDE, CHARLES 16692	10	ROJAHN, RICHARD 16698

345



- ❖ City is in the process of evaluating cemetery specific software that will consume our data and connect with the already purchased QuickBooks software.



# IN THE GREAT BEYOND

- ❖ Kiosk at the Cemetery for research
  - Genealogy
  - Local history
- ❖ Add Veterans records
- ❖ Add hyperlinks to obituaries and photos
- ❖ Make data available on the public web site
- ❖ Increase public interest in the Cemetery



# QUESTIONS?



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