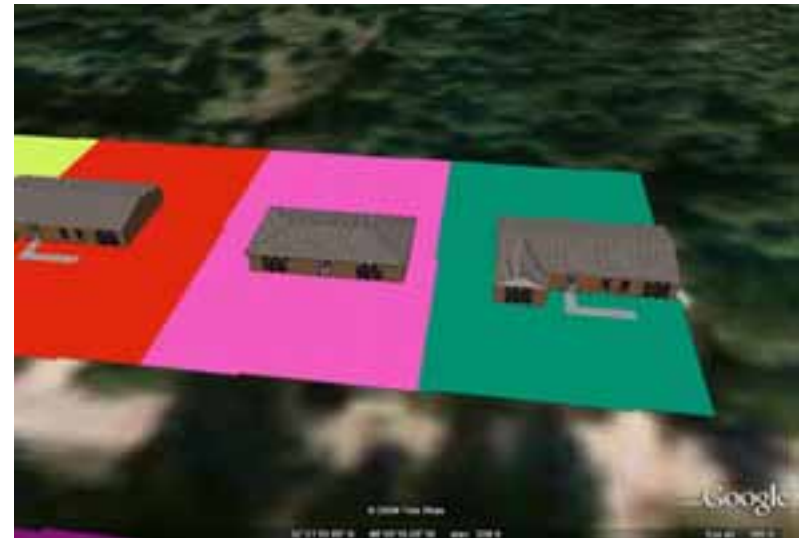


# GIS Applications For A Small Town



Mark Curry  
Tyler Caldwell



We are...

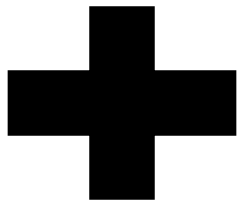
mark and tyler



We are...  
mark and tyler



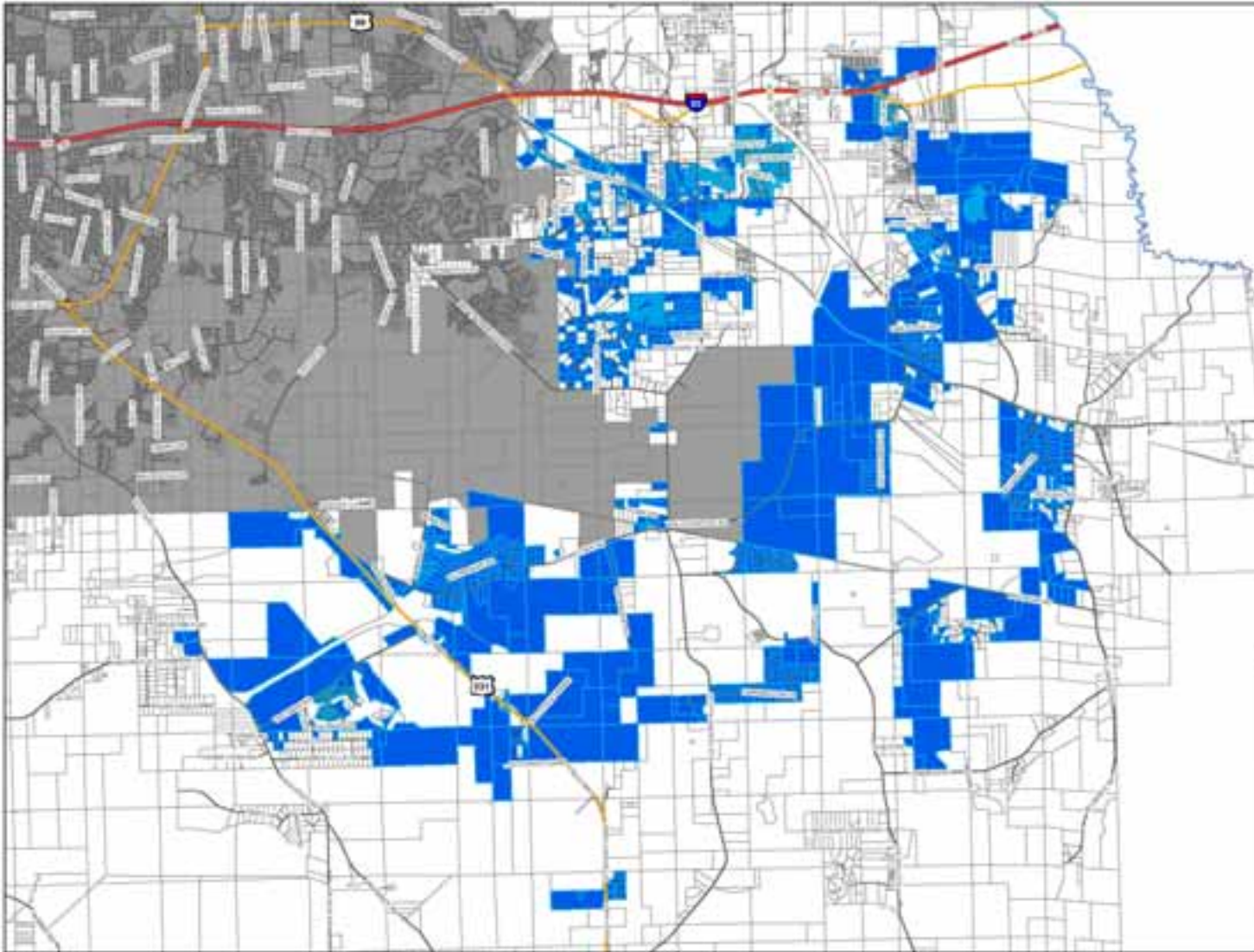




# Welcome







Town of Pike Road  
Montgomery County,  
Alabama



Town of Pike Road  
February, 2008

Legend

- Interstate
- U.S. Highway
- Town Limits
- City of Montgomery







# “Count Pike Road”

3 Step Process

## Designing the survey method



# “Count Pike Road”

3 Step Process

Design  Input survey data



# “Count Pike Road”

3 Step Process

Design  Input  Display



# “Count Pike Road”

3 Step Process

Design → Input → Display

# GIS

Easier – Quicker – More Attractive



# Step 1

Needed volunteers, easy with draw of the school



# Step 1

Get volunteers, easy with draw of the school

## Get addresses for volunteers



# Flawed data

- Often times a problem in a small municipality
- We can not trust our address data
  - Area has grown so rapidly that tax assessor data has not adequately kept up
  - Not able to spatially represent all our volunteers
    - To get them the easiest houses to survey
- Will use the survey to remedy address flaw





# Step 1

Get volunteers, easy with draw of the school

Get addresses for volunteers

Match address to parcel number via Emaps  
...with the help of our intern...



Liz



# Step 1

Get volunteers, easy with draw of the school

Get addresses for volunteers

Match addresses to parcel numbers via Emapsplus.com with the help of our intern

**Select parcels that will be for each volunteer**



# Selecting Parcels

Select by Location



# Selecting Parcels

Select by Location

0.05 mile buffer from street centerline



# Selecting Parcels

Select by Location

0.05 mile buffer from street centerline

**Enter volunteers' names into the fields**



# Step 1

Get volunteers, easy with draw of the school

Get addresses for volunteers

Match addresses to parcel numbers via Emapsplus.com with the help of our intern

Select parcels that will be for each volunteer

**Create map for each volunteer**



# Survey Packets

**Count Pike Road**  
Town of Pike Road  
[Write introduction and purpose]

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

**Count Pike Road**  
Town of Pike Road  
[Write introduction and purpose]

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Do you live in one of the areas? Yes \_\_\_\_\_ No \_\_\_\_\_  
If yes, which area? \_\_\_\_\_  
Do you own or rent the house? Own \_\_\_\_\_ Rent \_\_\_\_\_  
If own, how long? \_\_\_\_\_  
If rent, how long? \_\_\_\_\_  
Do you own or rent the house? Own \_\_\_\_\_ Rent \_\_\_\_\_  
If own, how long? \_\_\_\_\_  
If rent, how long? \_\_\_\_\_

**Number of Children**  
Total Number of Children \_\_\_\_\_  
Total Number of Children \_\_\_\_\_

Grade	Total Number of Children		Children per Grade	
	Count	Percentage	Count	Percentage
Pre-K				
K				
1st				
2nd				
3rd				
4th				
5th				

**Education Attainment**

Education Attainment	Count	Percentage
Less than High School		
High School Graduate		
Some College		
Bachelor's Degree		
Master's Degree		
Professional Degree		
Postgraduate		

**Employment Status**

Employment Status	Count	Percentage
Employed		
Unemployed		
Retired		

Household ID: \_\_\_\_\_ Survey Date: \_\_\_\_\_





# Survey Packets

**COUNT PIKE ROAD**  
THANK YOU!!!

Please remember to:

1. Fill out the complete survey for each home
2. Verify address
3. Call Town Hall with any questions
4. Explain why you are there
5. Be nice

■ Your Lots  
■ Surveyed by others  
 Not in Pike Road (after annexation)

**Survey Packet Form:**

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address Correction (if needed): \_\_\_\_\_  
 Do you own it now? (Yes/No) \_\_\_\_\_  
 How (Check One):  
 Current  Black or African American  Native American and Other Pacific Islander  Other \_\_\_\_\_  
 Number of Employees: \_\_\_\_\_  
 Previous per. use (Tab):  

0-5
6-11
12-14
15-22
23-29
30-35
36-40

 Employment Status: \_\_\_\_\_  
 Neighborhood ID: \_\_\_\_\_ Survey Date: \_\_\_\_\_



# Step 2

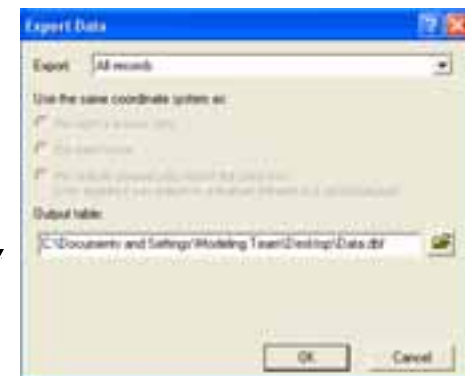
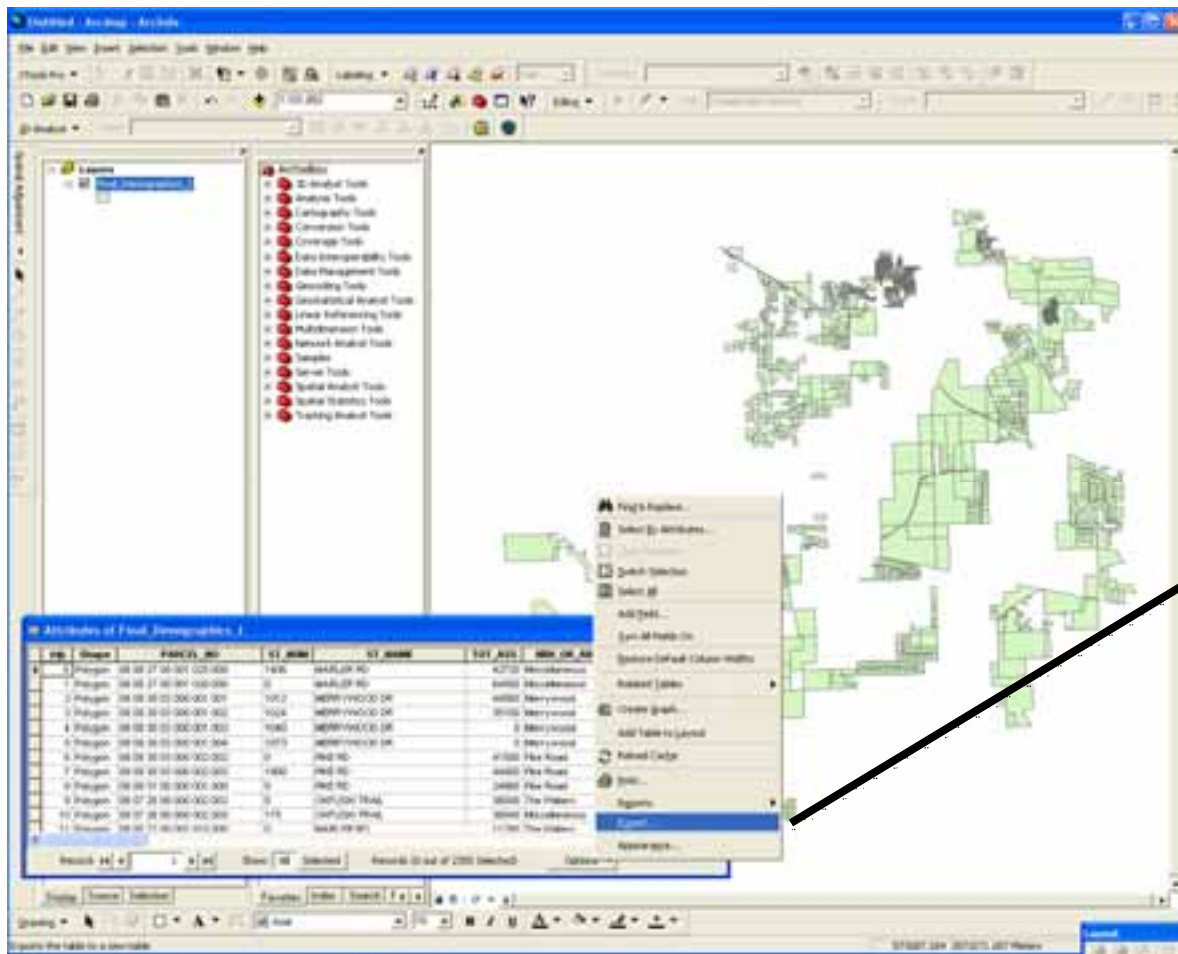
Create Excel sheet

From exported attribute table

Makes for easy data entry

As opposed to editor





# Step 2

Create Excel sheet

Input data, thanks Liz



That's what I'm here for



# Step 2

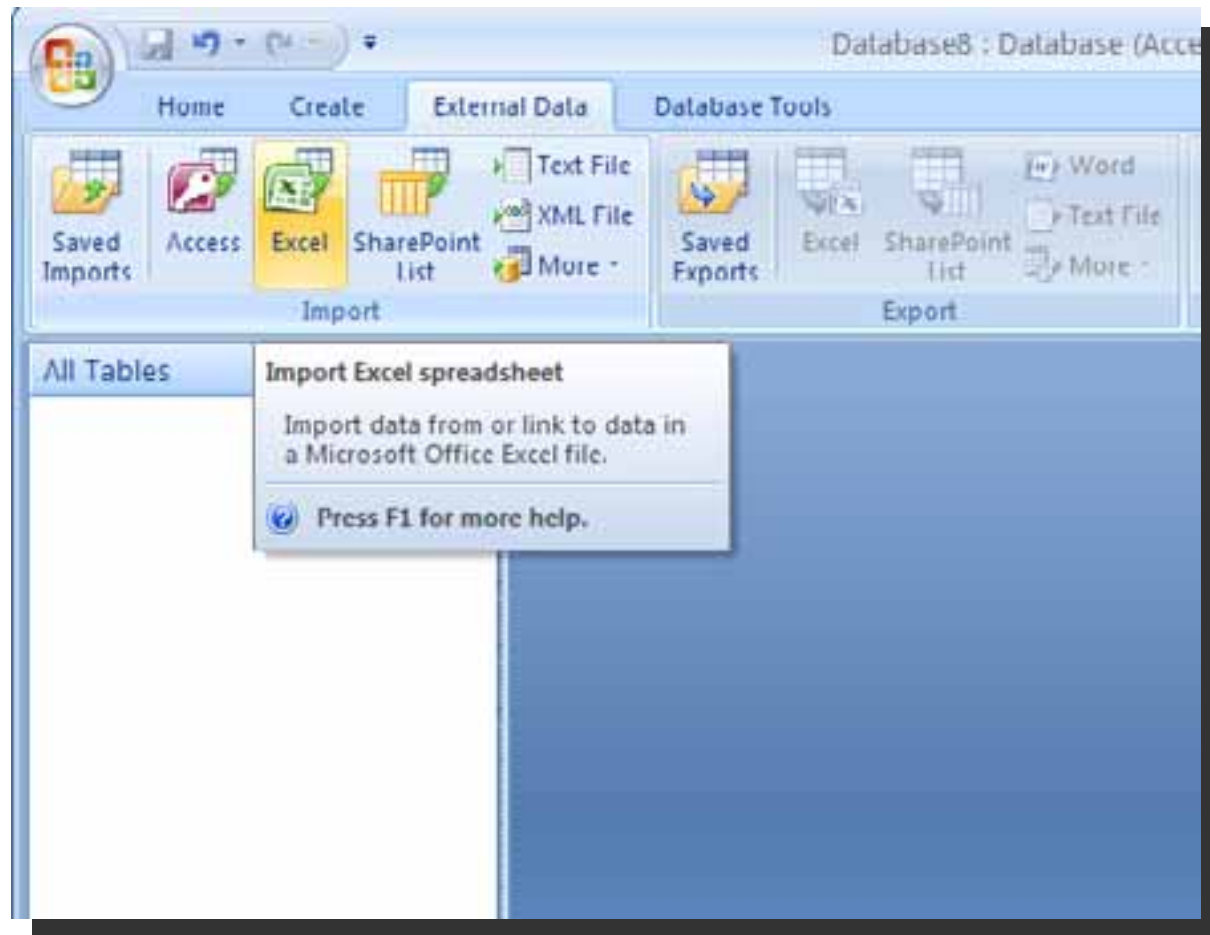
Create Excel sheet that will make data entry easy

Input data, thanks Liz

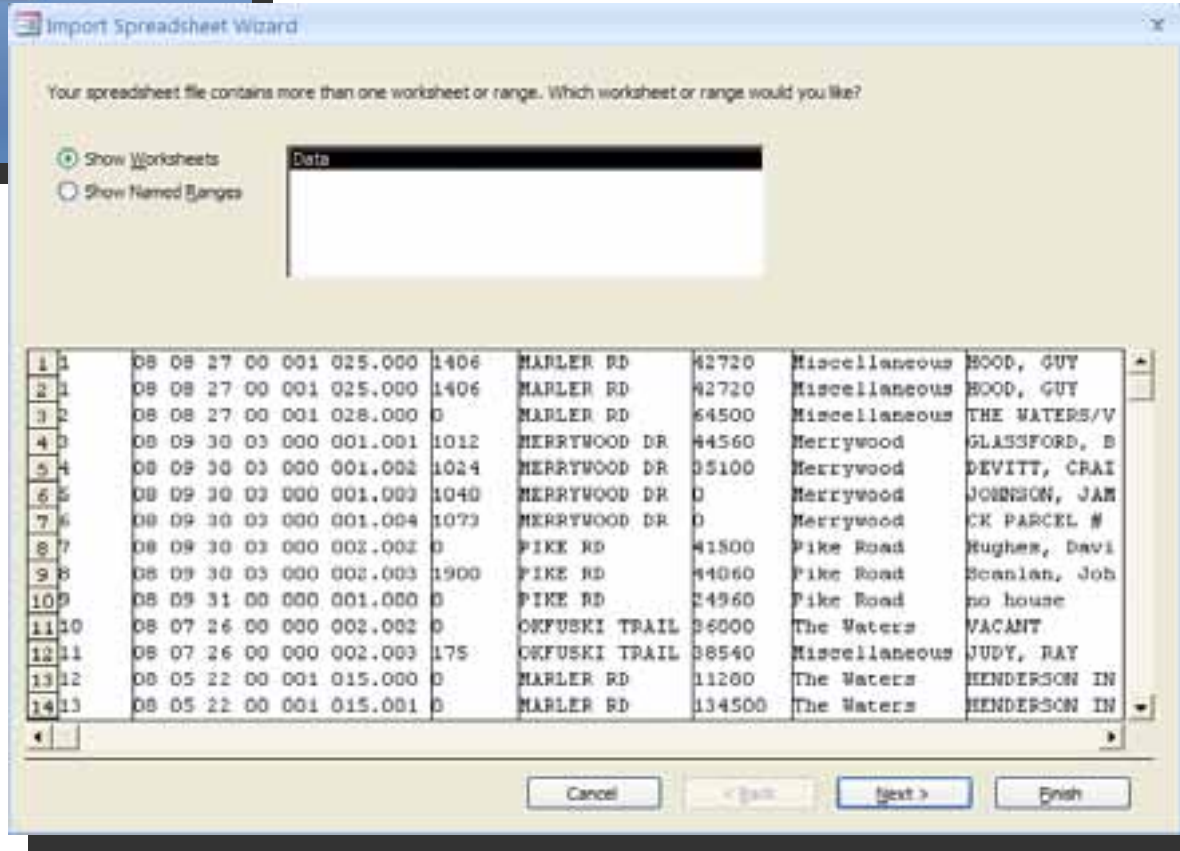
## Transfer data into attribute table

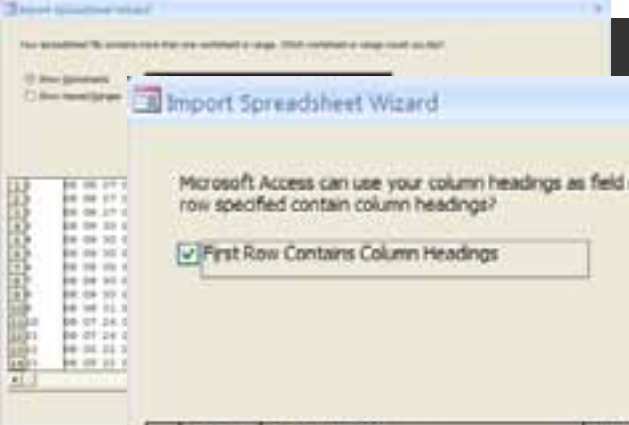
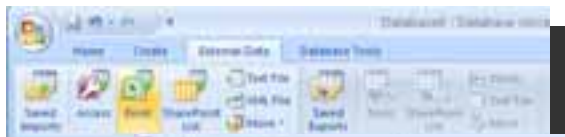












### Import Spreadsheet Wizard

Microsoft Access can use your column headings as field names for your table. Does the first row specified contain column headings?

First Row Contains Column Headings

FID	1	PARCEL NO	ST NUM	ST NAME	TOT ASS	NSH OR ARE	RESIDENT
1	1	08 08 27 00 001 025.000	1406	MARLER RD	42720	Miscellaneous	MOOD, GUY
2	2	08 08 27 00 001 028.000	0	MARLER RD	64500	Miscellaneous	THE WATERS/V
3	3	08 09 30 03 000 001.001	1012	MERRYWOOD DR	44560	Merrywood	GLASSFORD, B
4	4	08 09 30 03 000 001.002	1024	MERRYWOOD DR	35100	Merrywood	DEVITT, CRAI
5	5	08 09 30 03 000 001.003	1040	MERRYWOOD DR	0	Merrywood	JOHNSON, JAN
6	6	08 09 30 03 000 001.004	1073	MERRYWOOD DR	0	Merrywood	CK PARCEL #
7	7	08 09 30 03 000 002.002	0	PIKE RD	41500	Pike Road	Hughes, Davi
8	8	08 09 30 03 000 002.003	1900	PIKE RD	44060	Pike Road	Scanlan, Joh
9	9	08 09 31 00 000 001.000	0	PIKE RD	24960	Pike Road	no house
10	10	08 07 26 00 000 002.002	0	OKFUSKI TRAIL	36000	The Waters	VACANT
11	11	08 07 26 00 000 002.003	175	OKFUSKI TRAIL	38540	Miscellaneous	JUDY, RAY
12	12	08 05 22 00 001 015.000	0	MARLER RD	11280	The Waters	HENDERSON IN
13	13	08 05 22 00 001 015.001	0	MARLER RD	134500	The Waters	HENDERSON IN
14	14	08 07 26 00 000 002.004	245	OKFUSKI TRAIL	23860	Miscellaneous	HICKS, GARY

Buttons: Cancel, < Back, Next >, Finish



Microsoft Access 2003 - Import Spreadsheet Wizard

You can specify information about each of the fields you are importing. Select fields in the area below. You can then modify field information in the 'Field Options' area.

Field Options

Field Name:  Data Type: **Double**

Indexed:   Do not import

FID_1	PARCEL NO	ST NUM	ASS	NBH OR ARE	RESIDENT
1	08 08 27 00 001 025.000	1406		Miscellaneous	HOOD, GUY
2	08 08 27 00 001 028.000	0		Miscellaneous	THE WATERS/V
3	08 09 30 03 000 001.001	1012		Herrywood	GLASSFORD, B
4	08 09 30 03 000 001.002	1024		Herrywood	DEVITT, CRAI
5	08 09 30 03 000 001.003	1040		Herrywood	JOHNSON, JAM
6	08 09 30 03 000 001.004	1073		Herrywood	CK PARCEL #
7	08 09 30 03 000 002.002	0		PIKE RD	Hughes, Davi
8	08 09 30 03 000 002.003	1900		PIKE RD	Scanlan, Joh
9	08 09 31 00 000 001.000	0		PIKE RD	no house
10	08 07 26 00 000 002.002	0		OKFUSKI TRAIL	VACANT
11	08 07 26 00 000 002.003	175		OKFUSKI TRAIL	JUDY, RAY
12	08 05 22 00 001 015.000	0		MARLER RD	HENDERSON IN
13	08 05 22 00 001 015.001	0		MARLER RD	HENDERSON IN
14	08 07 26 00 000 002.004	245		OKFUSKI TRAIL	NICES, GARY

Buttons: Cancel, < Back, Next >, Finish



The screenshot displays the Microsoft Access 2010 interface. The 'Table Tools' ribbon is active, and the 'Export' group is expanded. The 'dBASE File' option is highlighted in the dropdown menu. The background shows a data table with the following columns: ID, FID, and other fields. The table contains 21 rows of data.

ID	FID				
1	1	0			
2	2	0			
3	3	0			
4	4	0			
5	5	0			
6	6	0			
7	7	0			
8	8	0			
9	9	0			
10	10	0			
11	11	0			
12	12	0			
13	13	0			
14	14	0			
15	15	0			
16	16	00 000 007.000	0	OKFUSKI TRAIL	1500.00000
17	17	00 000 008.000	0	OKFUSKI TRAIL	1500.00000
18	18	00 000 009.000	0	OKFUSKI TRAIL	8480.00000
19	19	00 000 010.000	333	OKFUSKI TRAIL	35240.00000
20	20	00 000 011.000	0	OKFUSKI TRAIL	10060.00000
21	21	00 002 008.001	0	MARLER RD	16140.00000



Export - dBASE File

Select the destination for the data you want to export

Specify the destination file name and format.

File name: C:\Documents and Settings\Modeling Team\Desktop\JACKSONVILLE\GIS WORK\Data.dbf Browse...

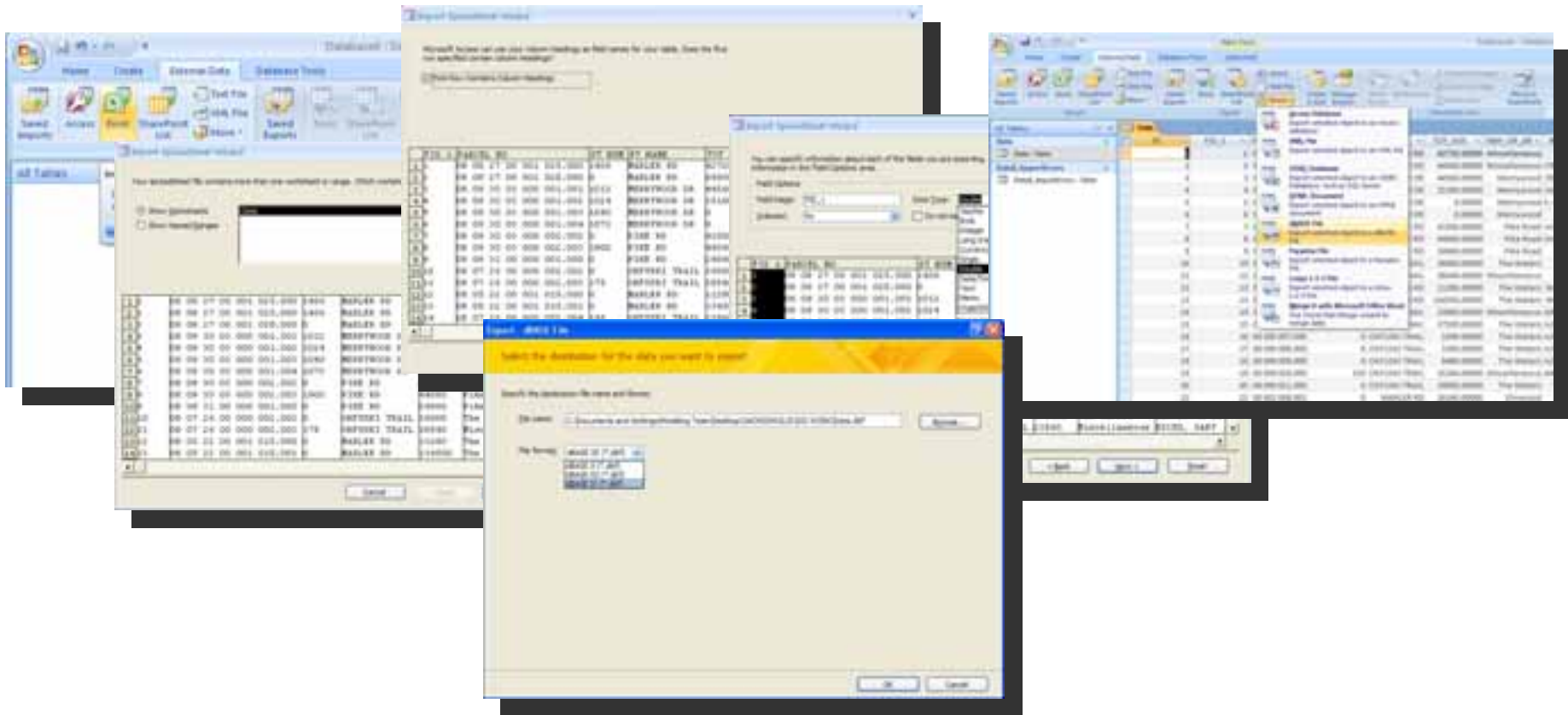
File format: dBASE III (\*.dbf)

- dBASE 3 (\*.dbf)
- dBASE III (\*.dbf)
- dBASE IV (\*.dbf)

OK Cancel

POLYLINE_ID	LINE_ID	LINE_SEQ	LINE_TYPE	LINE_CODE	LINE_NAME	LINE_DESCRIPTION	LINE_STATUS	LINE_CREATED	LINE_UPDATED
1	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
2	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
3	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
4	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
5	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
6	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
7	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
8	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
9	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
10	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
11	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
12	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
13	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
14	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
15	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
16	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
17	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
18	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
19	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
20	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
21	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
22	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
23	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
24	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
25	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
26	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
27	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
28	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
29	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
30	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
31	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
32	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
33	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
34	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
35	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
36	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
37	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
38	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
39	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
40	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000
41	00 00 27 00 000 000 0000	0000	0000	0000	0000	0000	0000	0000	0000





Does Pike Road have 5,000 residents?

Do big brown bears poop in the woods?



Yes, they do!



5,246, to be exact





# Step 3

Displaying the data







