Combining Address Fields

Open ArcMap in a Citrix connection. Click on Existing Maps> Browse for more... and navigate to M:\Production\lojic\resources and click on beginner.mxd.

Log into the Oracle Database when the Spatial Database Connection window appears. Remember, only complete the User Name and Password form fields. Keep the Database form field <u>*blank*</u>.

In the *File* Menu, **Save As** H:\CitrixTraining\exercises**combine.mxd** Use <u>Lesson 3 – Managing and Accessing Your Personal Data</u> to download the exercise data and setup a training directory.

Add and Combine Fields in a .dbf table

Click on the Add Data button, go to H:\CitrixTraining\exercises\Lesson 6\Adult Day Care Centers.dbf and add it to combine.mxd. Click on the List by Source button at the top of the Table of Contents to view the table. Scrolling down the theme list may be required to view the table. Right click on the table and Open it. The table should look similar to Figure 1.

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٩du	lt Day	Care Centers				
1	OID	NAME	HOUSE_NUMB	STREET_DIR	STREET_NAM	STREET_TY
•	0	Almost Family - Hikes Point	3403		Breckenridge	Ln
Ī	1	Almost Family - Third Street	4028	s	Third	St
	2	Christian Homes of Kentucky	920	S	4th	St
	3	The Coriathian	1702		Gardiner	Ln
	4	Daybreak Adult Center	2120		Payne	St
	5	ETA Day Center	724	s	44th	St
1	6	Fern Creek/Highview United Minis	7502		Tangelo	Dr
	7	God's Day Care	1110	s	Preston	St
1	8	Highlands Community Ministries	2000		Douglass	Blvd
1	9	Hurstbourne Care Centre	2200		Stony Brook	Dr
1	10	Kaleidoscope	10634		Watterson	Tr

To add a new field that will contain the combined address, click on the **Table Options** button and select the **Add Field** button. In the **Add Field** window (Figure 2), type in **Address** in the Name field and select **Text** from the pulldown menu in the Type field. **Click OK**. A new field called **Address** should be added to the dbf file. (Figure 3)

Table 🗄 • | 碧 • | 🗣 💀 🛯 🕮 🗙 HOUSE_NUMB STREET_DIR STREET_NAM STREET_TYP OID NAME 0 Almost Family - Hikes Point 1 Almost Family - Third Street 3403 4028 Breckenridge Third 2 Christian Homes of Kentucky 920 4th St 3 The Coristhia 1702 4 Daybreak Adult Center 2120 Payne 44th 5 ETA Day Center 724 St 6 Fern Creek/Highview United Minis 7 God's Day Care 8 Highlands Community Ministries Tangelo Preston 7502 Dr 1110 2000 Douglas: Blvd 9 Hurstbourne Care Centre 2200 Stony Brook Dr Tr 10 Kal 10634 14 4 Adult Day Care Centers

Figure 3 - Address field.

Adult Day Care Centers

Notice that some field name are truncated and underscores are used as spaces. This occurs to field names over 10 characters and field names containing spaces when converting an excel file (.xls) to a dbase file. (.dbf)



Right click on the Address field and select **Field Calculator**. Click the **Yes** button if the message window that pops up. **Field Calculator** window will appear. (Figure 4) **It is important that the next steps are followed carefully. Figure 5 shows the first part of the combining expression.**

- Double Click HOUSE_NUMB
- **Type:**&" "&
- **Double Click STREET_DIR**
- **Type:**&" "&
- **Double Click STREET_NAM**
- **Type:**&""&
- **Double Click STREET_TYP**
- Click OK.

ields: OID NAME HOUSE_NUMB STREET_DIR STREET_NAM STREET_TYP Address	Type:	Functions: Abs () Ath () Cos () Exp () Fix () Int () Log () Sin () Sar () Tan ()
Show Codeblock		 : / <u>&+-=</u> A

Figure 4 - Field Calculator window.

Figure 5 - Closeup of the combining expression.

The combined Address field should look like Figure 6.

Save the map document.

Address	
3403 Breckenridge Ln	
4028 S Third St	
920 S 4th St	
1702 Gardiner Ln	
2120 Payne St	
724 S 44th St	
7502 Tangelo Dr	
1110 S Preston St	
2000 Douglass Blvd	
2200 Stony Brook Dr	
10634 Watterson Tr	

Figure 6 - Combined Address field.

Add and Combine (Concatenate) Fields in an excel table

Adding and combining fields in an excel table must be done on your local network where the Excel software is available. **Excel tables cannot be edited in ArcGIS. They are read only in ArcGIS.**

Open **ArcCatalog** and go to the **H:\CitrixTraining\exercises\Lesson 6** directory copy the **Theaters.xls** file to your **V:\mygisfiles** directory.

Open Excel on your local network and go to C:\mygisfiles and open Theaters.xls. (See Figure 7)

Microsoft Excel										
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Theaters										-02
1	2	3	4	5	6	7	8	9	10	11
1 Name	Phone	HouseNumber	StreetDirection	StreetName	StreetType	City	State			
2 Actors Theatre Of Louisville	(502) 561-3344	316	W	Main	St	Louisville	KY			
3 Baxter Avenue Theatres	(502) 459-2288	1250		Bardstown	Rd	Louisville	KY			
4 Belknap Theatre-University	(502) 852-6814	2314	S	Floyd	St	Louisville	KY			
5 Belknap Theatre-University	(502) 852-6814	2301	S	3rd	St	Louisville	KY			
6 Blue Apple Players Inc	(502) 587-7990	625	E	Market	St	Louisville	KY			
7 Broadway Series	(502) 992-1250	611	W	Main	St	Louisville	KY			
8 Bunbury Theatre	(502) 585-5306	112	S	7th	St	Louisville	KY			
9 Children's Theatrte	(502) 625-0660	501	W	Main	St	Louisville	KY			
10 Cinema Deluxe At Preston Xings	(502) 499-6656	9700		Preston Crossing	Blvd	Louisville	KY			
11 Cinemark Tinseltown USA	(502) 326-0088	4400		Towne Center	Dr	Louisville	KY			
12 Corn Island Storytelling Fstvl	(502) 245-0643	651	S	4th	St	Louisville	KY			
13 Dixie Dozen Theatres	(502) 935-3771	6801		Dixie	Hwy	Louisville	KY			
14 Dreams With Wings-Dream Bldrs	(502) 238-4820	1838		Bardstown	Rd	Louisville	KY			
15 Imax Theatre	(502) 561-6100	727	W	Main	St	Louisville	KY			
16 Iroquois Amphitheater	(502) 368-5865	1080		Amphitheater	Rd	Louisville	KY			
17 Kentucky Shakespeare Festival	(502) 637-4933	1387	S	4th	St	Louisville	KY			
18 Kenwood Drive In Theatre	(502) 368-6454	9700		Preston Crossing	Blvd	Louisville	KY			
19 Louisville Dinner Theater	(502) 645-8227	911	S	Brook	St	Louisville	KY			-
A A NO Thesters	1000 000 4404	C.14	107	A	~	1	177			
() PIL(Ineaters/							_			

Add the word "**Address**" to the top of column 9. (Figure 8)

Click on the **first cell below** the "Address" cell and click on the **Insert Function button** in the Formula Bar. (Figure 9)

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3	3 Baxter Avenue Theatres				9-2288		
4	Belknan Theatre-Liniw	ersity	(F	GO2) 85'	2-6814		

Figure 9 - Click on Insert Function button.

T	8	9	10
	State	Address	
sville	KY		

Figure 8 - Add Address.

To create a function, scroll down and select the **Concatenate** function from the list. (Figure 10)

Build the formula:

Text1 – select the HouseNumber cell in the same row at the cell under the Address column.

Text2 – Type in "" to place a space

Text3 - select the StreetDirection cell in the same row at the cell under the Address column.

Insert Function ? X Search for a function: Type a brief description of what you want to do and then Go click Go Or select a category: All -Select a function: COLUMN -COLUMNS COMBIN CONCATENATE CONFIDENCE CORREL COS -CONCATENATE(text1,text2,...) Joins several text strings into one text string. Help on this function Cancel OK

Figure 10 - Select the Concatenate function .

Text4 – Type in " " to place a space

Text5 - select the StreetName cell in the same row at the cell under the Address column.

Text6 – Type in "" to place a space

Text7 - select the StreetType cell in the same row at the cell under the Address column.

Figure 11 shows how the arguments should look while it is being created. Notice the Formula results. It should read **316 W Main St**. Click the **OK** button if the address looks correct.

Function Arguments			? ×
Text1 R	[-6]	= "316"	-
Text2	Si	<u> </u>	
Text3 R	[-5]	"W" = "W"	5
Text4	5	<u> </u>	
Text5	[-4]	🔣 = "Main"	-
Joins several text strin	gs into one text string.	= "316 W Main	St"
Text5: tex str	t1,text2, are 1 to 30 text : ng and can be text strings, n	strings to be joined into a singl umbers, or single-cell reference	e text es.
Formula result =	316 W Main St		
Help on this function		ОК	Cancel

Figure 11 - The Concatenate Function Arguments button.

Select the cell under the Address column that reads **316 W Main St** and drag the cursor down the column to populate the rest of the cells in that column. (Figure 12)

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T	heaters								
	2	3	4	5	6	7	8	9	10
	Phone	HouseNumber	StreetDirection	StreetName	StreetType	City	State	Address	
1	(502) 561-3344	316	W	Main	St	Louisville	KY	316 W Main St	
1	(502) 459-2288	1250		Bardstown	Rd	Louisville	KY	1250 Bardstown Rd	
1	(502) 852-6814	2314	S	Floyd	St	Louisville	KY	2314 S Floyd St	
	(502) 852-6814	2301	S	3rd	St	Louisville	KY	2301 S 3rd St	
	(502) 587-7990	625	E	Market	St	Louisville	KY	625 E Market St	
	(502) 992-1250	611	W	Main	St	Louisville	KY	611 W Main St	
	(502) 585-5306	112	S	7th	St	Louisville	KY	112 S 7th St	
	(502) 625-0660	501	W	Main	St	Louisville	KY	501 W Main St	
	(502) 499-6656	9700		Preston Crossing	Blvd	Louisville	KY	10	
	(502) 326-0088	4400		Towne Center	Dr	Louisville	KY		
	(502) 245-0643	651	S	4th	St	Louisville	KY		
	(502) 935-3771	6801		Dixie	Hwy	Louisville	KY		
	(502) 238-4820	1838		Bardstown	Rd	Louisville	KY		
	(502) 561-6100	727	W	Main	St	Louisville	KY		
	(502) 368-5865	1080		Amphitheater	Rd	Louisville	KY		
	(502) 637-4933	1387	S	4th	St	Louisville	KY		
	(502) 368-6454	9700		Preston Crossing	Blvd	Louisville	KY		
)	(502) 645-8227	911	S	Brook	St	Louisville	KY		
4	▶ ► ► Theaters	/	h.	te e					

Figure 12 - Drag and populate the Address column.

Save the excel file with the Address field populate as C:\mygisfile\TheatersAddress.xls. In ArcCatalog, copy it from V:\mygisfiles to H:\CitrixTraining\exercises\. It now can be added to an .mxd for geocoding.

If you have extra time, add the TheatersAddress.xls to the combine.mxd and geocode it.

Save the combine.mxd.