

00102 Centus Tr.

1+ 0 ACS 12 5WI 50101 with ann - 15

I tonat to

Select a geographic type Census Tract

Select one or more geographic areas and click Add to Your Se As Census Tracts within Brazos County, Texas

Select a state.

Your Selection

Search using\_

Dataset: 2012 ACS 5-year estimates 🔘

Geograph Total; Esti Total; Mar Male; Esti Male; Mar Fer

- 11 - A' a' = = 🙀 🕸 - 🚍 West first

■ 7 至- 日· △·ム· 新田田 伊伊 田hophton: 3-5.1 5月 (mm

 312
 5.9

 175
 5.1

 344
 3.3

 299
 5.5

 608
 11.8

 310
 6.7

 342
 5.7

 449
 10.4

 51
 15

 211
 8

 336
 6.1

2 1.4 2.6 1.3 5.5 2.9 2.4 1.7 2.3 2.5 2.8 2.1 ¥.,

5.8 4.8 2.8 5.1 12.8 10.1 12.4 12.4 7.4 6.6 4.4 8.1 6.7 2.7 2.7 0.9 1.8 4.8 1.8 4.3 1.8 2.5 2.2 
 2.3
 6

 5.4
 3.4

 2.4
 3.6

 3.4
 3.6

 4.3
 3.6

 4.4
 4.2

 1.2
 3.8

 4.7
 3.63

 3.9
 4.1

 4.7
 3.5

 1.3
 3.44

1.1 1.4 3.2 2.7 2.7 2.2

2.3 4.4 1.8 2.6 2.6 2.7

2.5 3.3

# Creating a Census/GIS training program

#### Laura Sare and Miriam Olivares





# **Opportunity Noticed**

- Passing patrons with similar needs between GIS and Documents
- Mostly graduate students needing census data for GIS, but also needing further GIS assistance



## **Developing a Workshop**

- Goal: ability to integrate census data into research and assignments
- We did not want to teach principles of GIS
- Instructors' expertise in geospatial technology and government documents essential to offer a comprehensive workshop



## **Developing a Workshop**

- Crucial Needs to teach
  - How to use AFF
  - Downloading TIGER files
  - Joining boundaries to tabular data
  - Symbology help
  - Services and databases Libraries provide



#### **Census** Training

- Census Geography Overview
  - Legal vs. census
  - Nesting
  - What sizes were available in survey types



#### **Census** Training

- Difference between ACS and Decennial data
  - 2010 short form only
  - ACS data are estimates
  - ACS currency vs. accuracy

Å	<b>M</b>		BR AS A&M									
	ment of Commerce ted States <sup>-</sup> <b>ISUS</b> Bureau	F	actF	inde	er (							Feed
MAIN	COMMUNITY FAC	TS GUII	DED SEARCH	ADVANCE	D SEARCH	H DOWNLOA	D CENTER					
	load Center - A art 2 Datase		step guide eographies	-	oading							Dataset
	Select geograph The download cent select from all avail	er allows you	to select from	groups of geo	graphies	s, such as all cour	nties in a sti	ate. To				
	Select a geo	graphic type:				(		Your Sele	ctions			
	Select a stat Texas	e: V				•	]	Search us Dataset: 2012 ACS Census Tra All Census	5-year estir act		County,	Texas 😧
	Brazos Select one o	▼ r more geogr	aphic areas ar izos County, Tex		o Your Se	elections:		Table mat		NEXT )		ANCEL
	a X Cut											
	Ling Copy +	Calibri	- 11 - A A		49	🐨 Wrap Text	General	0.00	Conditiona		Cell	Insert
P	<ul> <li>Format Painter</li> <li>Clipboard G</li> </ul>	<b>В <u>Г Ц</u> -</b> Fo	🖽 *   🧆 * 🛆		Alignme	Merge & Center	• \$ • %	• 1.8 23	Formatting	<ul> <li>as Table *</li> <li>Styles</li> </ul>	Styles *	T
	A1 -		GEO.id		Angrime		* reun	10 G		3090		
	A B	C	D E	F	G	H I	J	К	L	м	N	0
1	GEO.id GEO.id2					HC03_EST_HC03_N						
2	Id Id2 1400000U! 480410001			Mar Male; Esti 714 3900	Male; Mar 542	Female; E Female 4014 4	N Total; Esti 16 9.1		tale; Esti M 12	ale; Mar F 4.4	emale; E 6.2	
4	1400000U! 480410001			518 3088	406		12 5.9		5.8	2.3	6	
5	1400000U! 480410001	03 Census Tri	1496	281 586	163	910 1	79 5.1		4.8	5.4	5.4	1
6	1400000U! 480410002			521 3174	489		16 3.3		2.8	2.4	3.8	
7	1400000U! 480410002 1400000U! 480410003			86 4254 803 3472	527 350		39 9.5 38 13.8		9.1 12.8	3.6 4.5	10.1	
9	14000000! 480410003			s03 3472 193 2054	295		18 13.8 10 6.7		12.8	4.5	4.2	
-				2004	233	avv4 3	0.7	6.7	2012	4.2	4.4	

2859

2552 387

2842 451 15 4 13.6 3.9 8.3 5.7

2856 336 6.1 3.1

222 1499

449 10.8 3.3 12.6

272 2.9

298

446

303

9.3 8.8 16.5

3.1

3.4

4.3

4.9 5.9

2.5

1.1 3.5

2.2 3.4

6.6 4.1

2.7

2.7 1.7

0.9

2.2

2.5

3.4 8.1 6.7

1.7

1.4 2

2.1

10 1400000U! 48041000500 Census Tri

11 1400000U! 48041000603 Census Tr.

12 1400000U! 48041000604 Census Tr.

13 1400000U! 48041000700 Census Tri

14 1400000U: 48041000800 Census Tri

15 1400000U! 48041000900 Census Tr

16 1400000U! 48041001000 Census Tri

17 1400000U! 48041001100 Census Tr.

18 1400000U! 48041001301 Census Tr.

19 1400000U! 48041001302 Census Tri

20 1400000U! 48041001303 Census Tri

21 1400000U! 48041001400 Census Tri

22 1400000U! 48041001601 Census Tri

23 1400000U! 48041001604 Census Tr

24 1400000U! 48041001605 Census Tr

25 1400000U! 48041001606 Census Tr. 3010 H + + H ACS\_12\_5YR\_S0101\_with\_ann

6141 657 3282 433

5288

5749 736 2907

2535 261 1185 177 1350 213 8 3 7.6

5271 455 2415

2890 446 1259 311 1631 268 7.5 8.7 3.1 4,4 3.3 9.8 9.6 4.2

7671 767 4345 690 3326 536

4467 521 1986 365 2481 406 6.3 2.9

2837 225 1427 227 1410 224 2.9 1.9

4038 371 2325 327 1713

5668 667 3315 496 2353 500

3485 703 2105 478 1380 394 2.6 1.3 1.8 1.4 3.8

5495 666 2598 470 2897 614 5.5 2.9 4.8 3.2 6.1

4766 587 2513 481 2253 392 2.4 1.7 1.8 2.7 3.1

3629 377 2011 314 1618 291 2.9 2.8 2.5 2.5

765

353 1511

2736

#### **Census** Training

Using American FactFinder

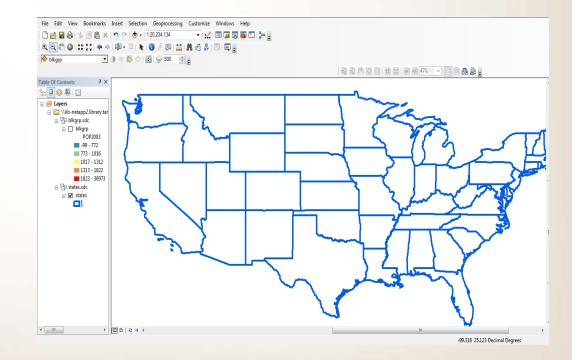
Step-by-step downloading of two tables

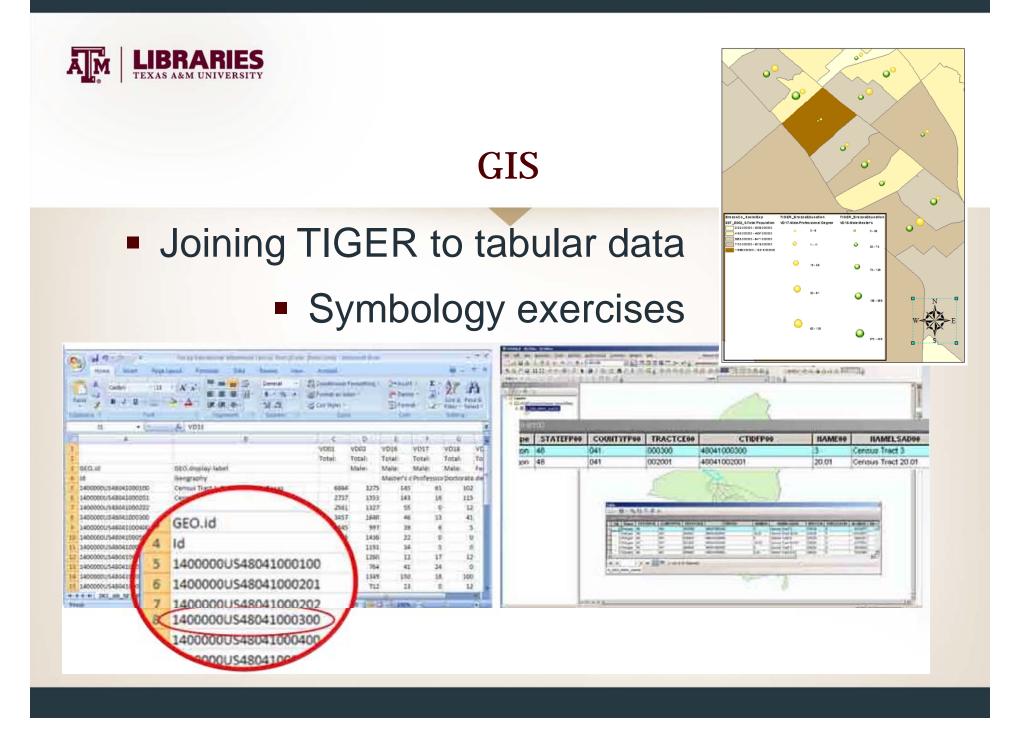
Advanced search for census tract data





- Cleaning downloaded AFF data
- Getting TIGER shapefiles

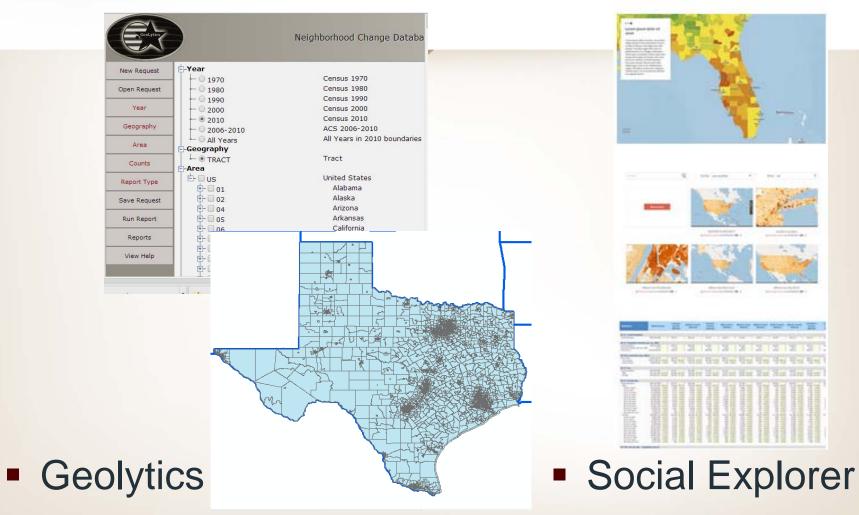






#### **Geospatial databases**







#### **GIS** | Geographic Information Systems

Last Updated: Apr 10, 2014 | URL: http://guides.library.tamu.edu/GIS | 📇 Print Guide | 📓 RSS Updates | 🖂 Email Alerts

Getting St	arted	Bathymetr	У	Census	Data	GIS Journals	/Publicatio	ns	GIS (Vector) Data	LULC	Remote
Training	Trans	sportation	Tu	torials	U.S.	School Data	Climate	Are	GIS for Desktop Licer	nse L	I.S. Databa
			_			A Print Page		Sear			All

ArcGIS for Desktop-Student Licenses

The student copy may only be installed on a student personal computer, not a Texas A&M-owned computer. If intended to be installed in a Texas A&Mowned computer, ArcGIS must be purchased through the <u>Texas A&M Software</u> <u>Center</u>.

If you are interested in obtaining a free copy of ArcGIS Student Edition, we can provide one to you. Just please fill out, sign, and <u>e-mail</u> the form to us. There are four versions of the software. Please fill out the form according to the version you need:

#### Form ArcGIS (ArcView) 9.3.1 Form ArcGIS (ArcInfo) 10 Form ArcGIS Advanced 10.1 Form ArcGIS for Desktop 10.2

Once you e-mail the form to us, we will send the authorization number and instructions for installation and how to obtain the software via internet. For versions 9.3 and 10, you will need to pick up a CD at the Map & GIS Library.

#### ArcGIS for Desktop-Faculty and Staff

Comments (0)

You must purchase ArcGIS through the <u>Texas A&M Software Center</u>. The student copies are only to be installed in student personal computers, not a Texas A&M-owned computer. If intended to be installed in a Texas A&M-owned computer, ArcGIS must be purchased through the <u>Texas A&M Software Center</u>.



#### GIS at Texas A&M

- Campus-wide Esri software license
- Free GIS Student license (personal computers)
- ~20 GIS instructors
- ~45 GIS and Remote sensing courses
- Texas A&M GIS Group (320 members)
- Undergoing initiative to start a GIS Center
- Texas Census Research Data Center (1 of 12 in the U.S.)

Source: http://s44.radikal.ru/i106/1206/a4/e446b3a31f5c.jpg



#### What we Developed

- Time Savers
  - Have students log into lab computers and open GIS desktop before class
  - Have students download AFF tables and shapefiles before class



#### What we Developed

#### Hands on Help

GIS student worker in class



#### What we Developed

#### Backend

- LibCal for enrollment
- Advertise classes at University level



#### **Diverse attendees**

- Student, staff and faculty members
- Across Texas A&M System
- Sciences, Social Sciences and Humanities



## Feedback

- Pace too fast or just right
- Data wanted to download data specific to their discipline
- Review glad to have a review



#### Outcomes

#### Created other instruction requests

 More people learn about our specialties



#### Improvements

- Restrict to only people who have had GIS online training or taken a semester long GIS course
- Create a webinar for students not familiar with GIS



## **Developing a Workshop**

## Learned there is high demand for shortterm GIS learning

	Response	Response	
	Percent	Count	
I heard GIS is beneficial, and want to learn the technology	38.5%	ł	
I am not familiar with GIS, but need to use it on my project (i.e. work, assignment, thesis, etc.)	46.2%		
am a GIS User, and need to learn how to integrate census tables into my GIS project	15.4%	Ċ	
Other (please specify)	0.0%	(	
	answered question	1;	
	skipped question		

Survey Monkey



#### **Future plans**

 Bringing expertise of learning and outreach department to produce a high-quality archived webinar



## **GIS Help**



 Miriam Olivares olivares@tamu.edu

My regrets for not being at this conference (Besides, Washington D.C. is on my bucket list!)



#### Questions

#### Laura Sare – <u>Isare@tamu.edu</u>

Map screenshots created with Esri ArcGIS 10.2 software unless otherwise noted.