



Maptitude
For Redistricting

Redistricting Software and Data — Post-Redistricting

Howard Simkowitz

Caliper Corporation

www.caliper.com

www.redistricting.com

Possibilities:

- Policy Analysis with ACS Data
- Precinct and Election Management
- Political Campaigns
- Anything else requiring Mapping or GIS technology and data



Maptitude
For Redistricting

What Is ACS?

- The American Community Survey (ACS) is an ongoing statistical survey that samples a small percentage of the population every year -- giving communities, governments, corporations, and policy makers the information they need to make informed decisions and plan investments and services.
- A lot of data
- Requires effort to work with it effectively



Maptitude

For Redistricting

Major ACS Data Categories

- age
- sex
- race
- family and relationships
- income and benefits
- health insurance
- education
- veteran status
- disabilities
- where you work and how you get there
- where you live and how much you pay for some essentials



What Is Caliper Doing with ACS?

- Custom ACS Data DVDs Free to All Clients with an Up-to-Date License of Mapitude for Redistricting or Extension
- First DVD Available September, 2012
- Block Group Level Data – 5 Year Estimates – Smallest Areas, Most Reliable
- Join Data to Block Group Geography
- Disaggregate and Aggregate to Other Levels of Geography
- Disaggregate/Aggregate Wizard in Mapitude for Redistricting



Maptitude
For Redistricting

Data on Custom DVD

- Census Profile Data – 100%
- ACS Data - Estimates



Census Profile Data

- Total Population and Population in 5-Year Increments
- Male and Female Population in 5-Year Increments
- Race
- Hispanic Origin, Puerto Rican, Cuban
- People in Households (e.g., Female headed households)
- People in Group Quarters – Institutionalized/Noninstitutionalized
- Family Relationships
- Housing Units



ACS Data

- Total Population and Population in 5-Year Increments
- Male and Female Population 18+ and 65+
- Race and Hispanic Origin
- Household Information (e.g., Households with children < 18)
- M/F – M, S, D, W
- In School and Highest Degree
- Language Ability (e.g., +5, Speak other lang., English < Very Well)



ACS Data (continued)

- Journey-to-Work – Travel Mode, Travel Time
- Occupation (Mgt, Service, Sales, Const, Transp, Agr, Manuf, W/Ret)
- Household Income
- Family Income
- Poverty
- Housing Units – Size, When Built, Rooms, Bedrooms, Heat, Kit, Plumbing, Phone, Value, Mortgage, Rent
- Language Ability (e.g, +5, Speak other lang., English < Very Well)



Maptitude

For Redistricting

Disaggregate/Aggregate Wizard

Aggregation-Disaggregation Wizard

Data Source
 Layer Table

Table

Match Field

Matching Layer
Layer

Match Field

<Back Next> Ca

Aggregation-Disaggregation Wizard

Disaggregation Fields

Disaggregate	Field	Weight by
<input checked="" type="checkbox"/>	[Total President]	Population
<input checked="" type="checkbox"/>	[Rep President]	Population
<input checked="" type="checkbox"/>	[Dem President]	Population
<input checked="" type="checkbox"/>	[Green President]	Population
<input checked="" type="checkbox"/>	[Total US Sen]	Population
<input checked="" type="checkbox"/>	[Rep US Sen]	Population
<input checked="" type="checkbox"/>	[Dem US Sen]	Population

Minimum Threshold

<Back Next> Cancel

Aggregation-Disaggregation Wizard

Aggregation Layers

Aggregate	Layer
<input checked="" type="checkbox"/>	Census Place
<input checked="" type="checkbox"/>	Voting District
<input checked="" type="checkbox"/>	County

<Back Finish Cancel



Maptitude

For Redistricting

ACS Data Table In Mapitude

Dataview5 - Block Group+ACS2010_BlockGroup

[5+_English only]	[5+_Other language]	[5+_Other lang_Engl <very well]	[5+_Other lang_Spanish]	[5+_Other lang_Sp_Engl <very well]	[5+_Other lang_Indo-European]	[5+_Other lang_Indo_Engl <very well]	[5+_Other lang_As
807	248	142	149	142	25	0	
925	192	9	61	0	39	9	
946	569	178	279	69	142	109	
342	233	0	151	0	24	0	
453	166	0	43	0	0	0	
628	454	35	121	35	14	0	
753	156	0	0	0	0	0	
524	446	12	145	0	53	12	
616	397	35	99	20	136	15	
640	321	72	46	15	227	57	
1,392	1,238	262	328	68	497	194	
442	667	93	21	11	165	82	
437	926	0	0	0	10	0	
334	655	10	75	10	0	0	
236	569	42	183	42	0	0	
243	739	28	74	28	25	0	
225	1,084	100	307	87	13	13	
294	237	0	0	0	58	0	
306	589	124	261	124	14	0	
400	494	19	38	0	67	19	
732	975	30	95	30	0	0	
475	1,742	75	164	60	76	15	
433	1,905	43	247	43	0	0	
480	1,037	211	233	194	93	17	



Maptitude
For Redistricting

Precinct & Election Management

- GIS + Redistricting + P&E Management
- Reprecinct
- Assign Voters to Correct Precinct
- Create Street Index File for Voter Registration Software
- Calculate Unique Ballot Styles and Precinct Splits
- Consolidate Precincts into Voting Precincts
- Print Precinct Map Books



Maptitude

For Redistricting

Precincting Voters

Base with Ed Streets.map - Johnson County, Kansas

Voters Selection

Selection: [Dropdown] [Color Picker]

0 of 0

ID	600009
[Last Name]	SMITH
[First Name]	PATRICIA
[Middle Name]	L
Suffix	
House	11755
PreDir	W
Street	175TH
Type	ST
SufDir	
Apt	
City	OLATHE
State	KS
ZipCode	66062
Gender	F
DateRegistered	12/29/1992 0:0
PrecinctCode	1001
School	229
SchoolMember	229-3&6
Commissioner	3
StateRep	27
StateSen	11
SBOE	2
Drainage	
Water	1
DOB	6/29/1946 0:00
PoliticalParty	R
[92 March Primary]	
[92 April General]	
[92 August Primary]	
November General	
[93 March Primary]	
[93 April General]	
[94 March Primary]	
[94 April General]	
[94 August Primary]	
November General	
[95 March Primary]	

227A



Maptitude

For Redistricting

Street Index File for Voter Registration Software

Dataview2 - Street Index

Street	Type	PreDir	From	To	ZIP	Place	Parity	VTD
167TH	ST	W	—	—	—			20091000010
167TH	ST	W	6703	9439	66085	Stilwell	O	20091000010
167TH	TER	W	14800	15099	66062	Olathe	B	20091000010
168TH	ST	W	8900	9099	66085	Stilwell	B	20091000010
169TH	ST	W	9000	9099	66085	Stilwell	B	20091000010
170TH	TER	W	10300	11099	66062	Olathe	B	20091000010
170TH	TER	W	8700	9599	66085	Stilwell	B	20091000010
172ND	TER	W	7900	8899	66085	Stilwell	B	20091000010
175TH	ST	W	8700	15096	66062	Olathe	B	20091000010
175TH	ST	W	15097	15099	66062	Olathe	O	20091000010
176TH	TER	W	10700	11899	66062	Olathe	B	20091000010
177TH	TER	W	10300	11899	66062	Olathe	B	20091000010
179TH	ST	W	8700	9306	66013	Bucyrus	E	20091000010
179TH	ST	W	9308	9817	66013	Bucyrus	B	20091000010
179TH	ST	W	9818	10298	66013	Bucyrus	E	20091000010
179TH	ST	W	10300	11899	66013	Bucyrus	B	20091000010
179TH	ST	W	7100	8699	66085	Stilwell	B	20091000010
179TH	TER	W	10775	10799	66013	Bucyrus	O	20091000010
179TH	TER	W	10800	18254	66013	Bucyrus	B	20091000010
179TH	TER	W	18255	18321	66013	Bucyrus	O	20091000010
183RD	ST	W	11379	12681	66013	Bucyrus	O	20091000010
183RD	ST	W	11900	12680	66062	Olathe	E	20091000010
183RD	ST	W	12682	15099	66062	Olathe	B	20091000010
183RD	ST	W	7100	8199	66085	Stilwell	B	20091000010



Maptitude

For Redistricting

Campaign Management

- Create maps to better understand your constituency
- Add registered voters to your map; work directly with voter files from a political party or a county election office
- Map events and supporters; work directly with files from other campaign, fundraising, and list management software
- Map yard signs, and ensure coverage throughout your district
- Create precinct, event, and polling place maps, map books, and reports
- Design efficient neighborhood walks with detailed walk lists keyed to the map



Maptitude
For Redistricting

Campaign Management (continued)

- Design efficient driving routes for neighborhood “drives” in situations where the target locations are too dispersed to walk or you are making deliveries. The detailed “drive” list includes driving directions and information about each stop keyed to the map
- Design efficient routes to drive voters to their polling place
- Design efficient routes to deliver supplies to the polling places
- Create precinct boundaries based on information in the voter file
- Update Streets and Other Geographic Features