

**DESCRIPTION OF SOFTWARE, DATA, AND
CRITERIA USED TO CREATE
THE COALITION'S SPUBS0178 SENATE PLAN**

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Software Used to Create Coalition SPUBS0178 Plan

Maptitude for Redistricting, Version 6.0 was used to create the Coalition's SPUBS0178 Senate Plan. Maptitude is commercially available software manufactured and sold by Caliper Corporation, a Newton, Massachusetts technology company specializing in the development of geographic information systems (GIS) and transportation software. Maptitude is a professional mapping tool used for redistricting by the Department of Justice and the majority of state legislatures.

Maptitude uses the most recent Census geography and data and TIGER geography. It offers enhanced reports, open access to industry-standard file formats, and interoperability with Google Maps and Google Earth. This combination of features has allowed us to draw the lines through a number of points of view (for example with the combination of data available to us through Maptitude, we were able to see official city, town, village and Census designated place boundaries, as well as where geographical landmarks are located, etc.

Data Used in Creating Coalition SPUBS0178 Plan and Source of Data

- 2010 Census Redistricting Data [P.L. 94-171] (U.S. Census Bureau)
- The 2010 Census geography (U.S. Census Bureau)
- Reference layers (e.g., road geography compiled by Maptitude and spot checked using Google Earth)
- 2010 Census Summary File 1 Data (U.S. Census Bureau)
- 2006-2010 American Community Survey Data (U.S. Census Bureau)
- 2005-2009 American Community Survey Data (U.S. Census Bureau)
- Google Maps, Google Earth, and Google Street View
- Florida 2010 General Election Results (State and Federal) and Florida 2010 Voter Registration Data (Florida Division of Elections, 67 Florida County Supervisors of Election, Florida Department of State)
- Florida 2008 General Election Results (State and Federal) (Florida Division of Elections, 67 Florida County Supervisors of Election)

- Florida 2006 General Election Results (State and Federal) (Florida Division of Elections, 67 Florida County Supervisors of Election)
- Florida 2004 General Election History (State and Federal) (Florida Division of Elections, 67 Florida County Supervisors of Election)

The Census Bureau's 2010 Redistricting Data reports demographic information by race, but does not report citizenship information. Citizen voting age population is, however, commonly considered (and in some cases required) by courts in conducting analyses of minority voting strength under the Voting Rights Act of 1965. *See, e.g., Reyes v. City of Farmers Branch, Tex.*, 586 F.3d 1019, 1023-24 (5th Cir. 2009); *Barnett v. City of Chicago*, 141, F.3d 699, 704 (7th Cir. 1998); *Negron v. City of Miami Beach*, 113 F.3d 1563, 1569 (11th Cir. 1997); *Romero v. City of Pomona*, 883 F.2d 1418, 1426 (9th Cir. 1989), *overruled in part on other grounds by Townsend v. Holman Consulting Corp.*, 914 F.2d 1136, 1141 (9th Cir. 1999). We therefore calculated citizen voting age population for purposes of analyzing minority voting strength.

Estimates of citizenship from 2005 to 2009 are available from the Census Bureau's American Community Survey. These estimates are available at the Block Group level using the TIGER 2000 Census Block group geography. Using standard methodology, American Community Survey data was converted to TIGER 2010. The first step in the process is a spatial join to match what TIGER 2010 Census Blocks fall within the old TIGER 2000 Census Block Groups. Then we disaggregated the estimates from old Block Groups to the new Blocks. The disaggregation is done separately for each race/origin category, and weighted by that race/origin's share of the voting age population in the area in question. For example, to disaggregate the estimated Citizen Voting Age Hispanic for a given TIGER 2000 Block Group, we distribute the population to the 2010 Census Blocks within that Block Group based on each Block's share of the total Voting Age Hispanic population for the blocks making up the old Block Group. In some cases, there is no Census Voting Age population for the race/origin in question. In these cases, we distributed the estimated CVAP evenly across all the TIGER 2010 Blocks in the TIGER 2000 Block Group in question. The standard American Community Survey data does not split apart racial categories by Hispanic vs. Non-Hispanic. However, the Census did a special tabulation for the Department of Justice that does split out total Hispanic and then non-Hispanic by race. The special tabulation of the 2005-2009 American Community Survey is what was used in this process.

Criteria Used in Creating Coalition SPUBS0178 Plan

- United States Constitution, First and Fourteenth Amendments
- Voting Rights Act of 1965, Sections 2 and 5
- Florida Constitution, Article III, Sections 16 and 20
- *In re Senate Joint Resolution of Legislative Apportionment 1176*, --- So.3d ---, 2012 WL 753122 (Fla. March 9, 2012)