Texas Congressional Districts - 2002 Election

Legend
- Strong Democrat
- Weak Democrat
- Weak Republican
- Strong Republican

Notes:
A district is rated 'strong' if a party won by more than 35,000 votes.
TX-16 (El Paso) was updated to the correct voting differential of -72,383.

Commentary:
The nature of a congressional district as one of equal population creates a striking picture of urban/rural divide in the Texas Congressional Districts. Dallas, Houston, Austin, San Antonio, and El Paso are all recognizable on this unlabelled map. On a deeper level, East Texas as a 'Weak Democrat' area is not a surprise as it is more culturally (and geologically) similar to Louisiana than the rest of Texas. The only area that jumped out as odd was the 'Weak Democrat' area in north-central Texas. Of course that's were Lubbock, home of Texas Tech, is located. My assumption about this is districts the goal is to turn 'Weak Democrat' areas bordering 'Strong Republican' areas into Republican seats.

Geog 586
Bruce Kinner
Project 1
Deliverable 1
Texas Congressional Redistricting 2003

Legend
- Old Districts 2000
- New Districts 2003
- Strong Democrat
- Weak Democrat
- Weak Republican
- Strong Republican

Notes:
A district is rated "strong" if a party won by more than 360,000 votes.
TX-15 (El Paso) was updated to the correct voting differential of 72,383.

Commentary:
It is difficult to determine the outcome of the redistricting plan by looking at the map. By knowing the background to the story, my initial assumption is the goal is to divide both the "Strong Republican" and "Weak Democrat" districts into new districts that contain a Republican majority and increase the number of Republican districts. Additionally, I would expect the urban core areas to remain very much the same with only minor changes in order to make "Strong Democrat" areas even stronger. Finally, a large amount of fractalization is to be expected as counties are subdivided and grouped for maximum results. These assumptions appear to be accurate but there are so many changes to the districts and it is difficult to visually synthesize them coherently.

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Project 1
Deliverable 2
Deliverable 3 Commentary -

My original intent was to use the projected Republican majority numbers and compare them to the actual outcome. During the processing step of ‘Aggregating Density Surface Data to Areas’, something happens where the sum data becomes distorted. The actual values have some relative value but no longer count an estimated number of votes. Still, the following conclusions can be drawn from the data.

- First there is a slight problem with the project data. When comparing the vote differentials to other sources the values do not agree. For the most part this has little effect on the project but the data suggests Democrats and Republicans split the US House seats 16-16. In reality the split was 17-15 in favor of Democrats. The district in question is #11. 
The estimated outcomes in the map shown above are quite accurate. The 2004 prediction based on the data is a 11-21 split favoring the Republicans. In fact this is what occurred but Districts 1 (the light blue east Texas District with an R) and 17 (a light red district between Dallas and Austin with a D) were opposite the projection. It should be noted that district 17 was an incumbent Democrat who won by only 3%.

While it could be concluded the gerrymandering was too aggressive for District 17, I think it wasn’t aggressive enough in District 9 - a Weak Democrat District SW of Houston. The analysis implies this one should have been redistricted in a way to create another Republican seat since it touches three Strong Republican districts.

Anytime there is visual fractalization of a congressional district there is some level of gerrymandering going on. It can be difficult to apply fractal analysis however, since natural boundaries (which are fractal by nature) such as a river are often used. There are two rules I recommend. First, the centroid of the polygon must reside in the polygon. Second, if a box is drawn around the district al least 75% of the area of the box should be within the district.