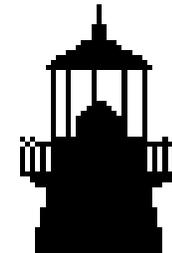


Perceptual Mapping & Campaign 2000

**8th Sawtooth Software Conference
Hilton Head Island
March 23, 2000**



**John A. Fiedler
POPULUS, Principal**

POPULUS[®]

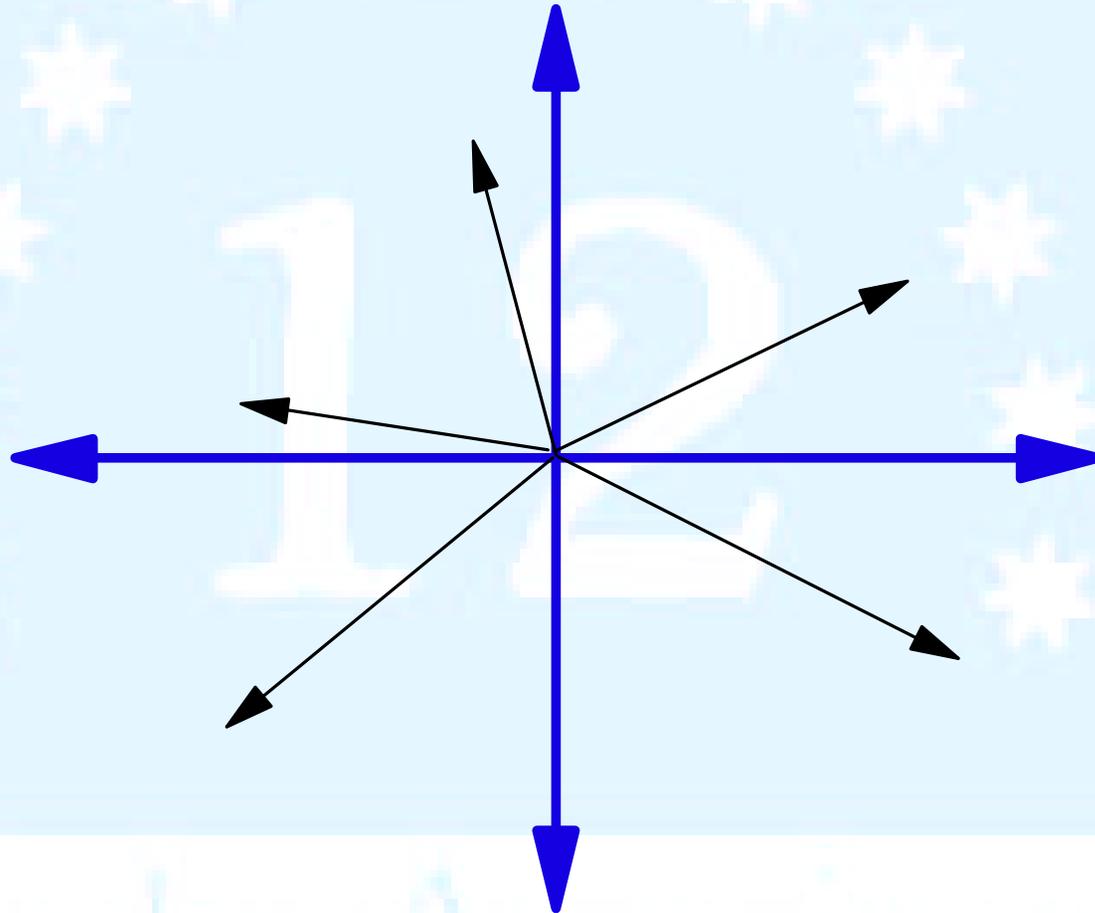
**Robert A. Maxwell
12 Americans, Inc., President**



Presentation Outline

- ✘ **Understanding Political Issues, Segments, and Electoral Outcomes**
- ✘ **Background**
 - ✘ Johnson's 1968 political segmentation paper in JMR
 - ✘ Thirty-two years of progress in ...
 - ✘ *Mapping techniques*
 - ✘ *Clustering algorithms*
 - ✘ *Data collection*
- ✘ **Turn of the millennium**
 - ✘ *Mapping: Political Landscape: February, 2000: APM versus CPM*
 - ✘ *Segmentation: 28,000 interviews from the General Social Survey using modified CCA*
 - ✘ *Editorial Use: Data collection via Internet for MSNBC.COM*
- ✘ **Methods & Madness**

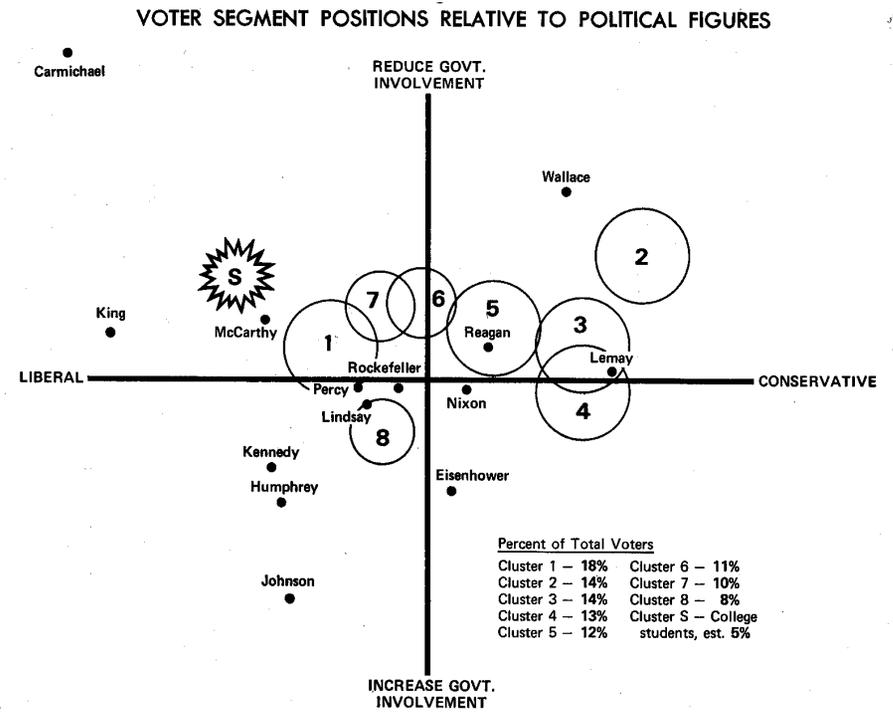
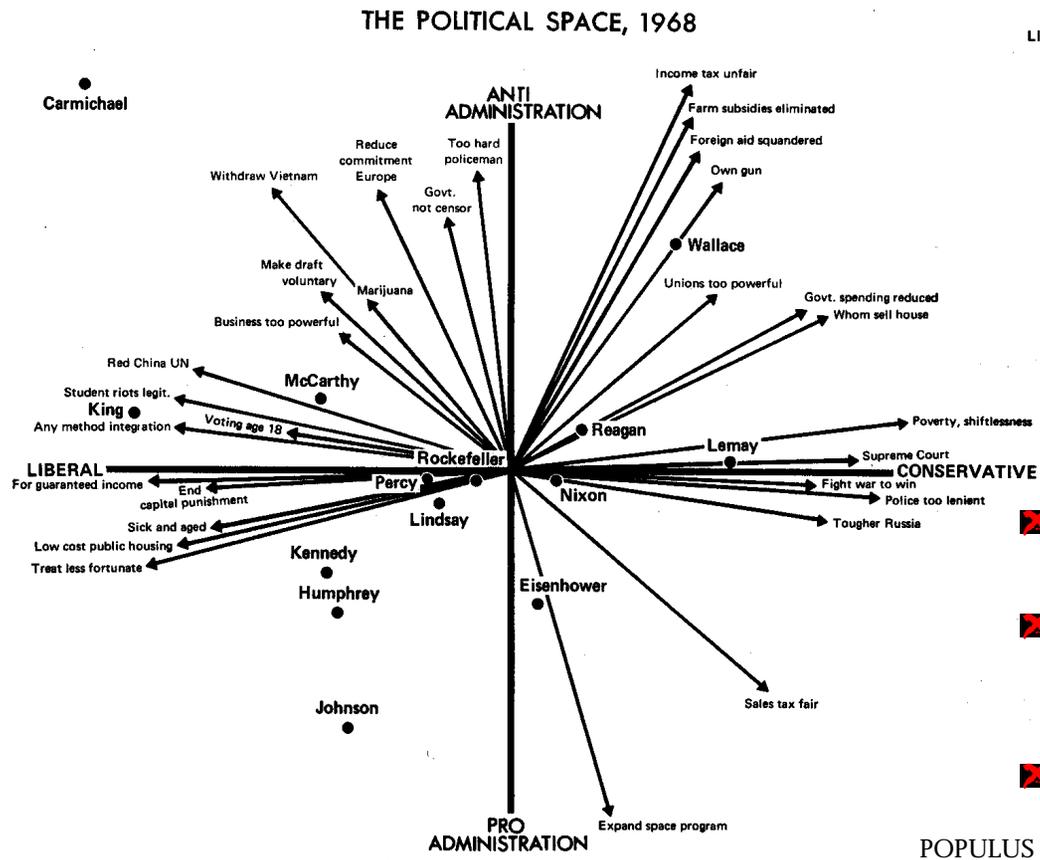
Mapping



Twelve Americans

Times Have Changed in 32 Years!

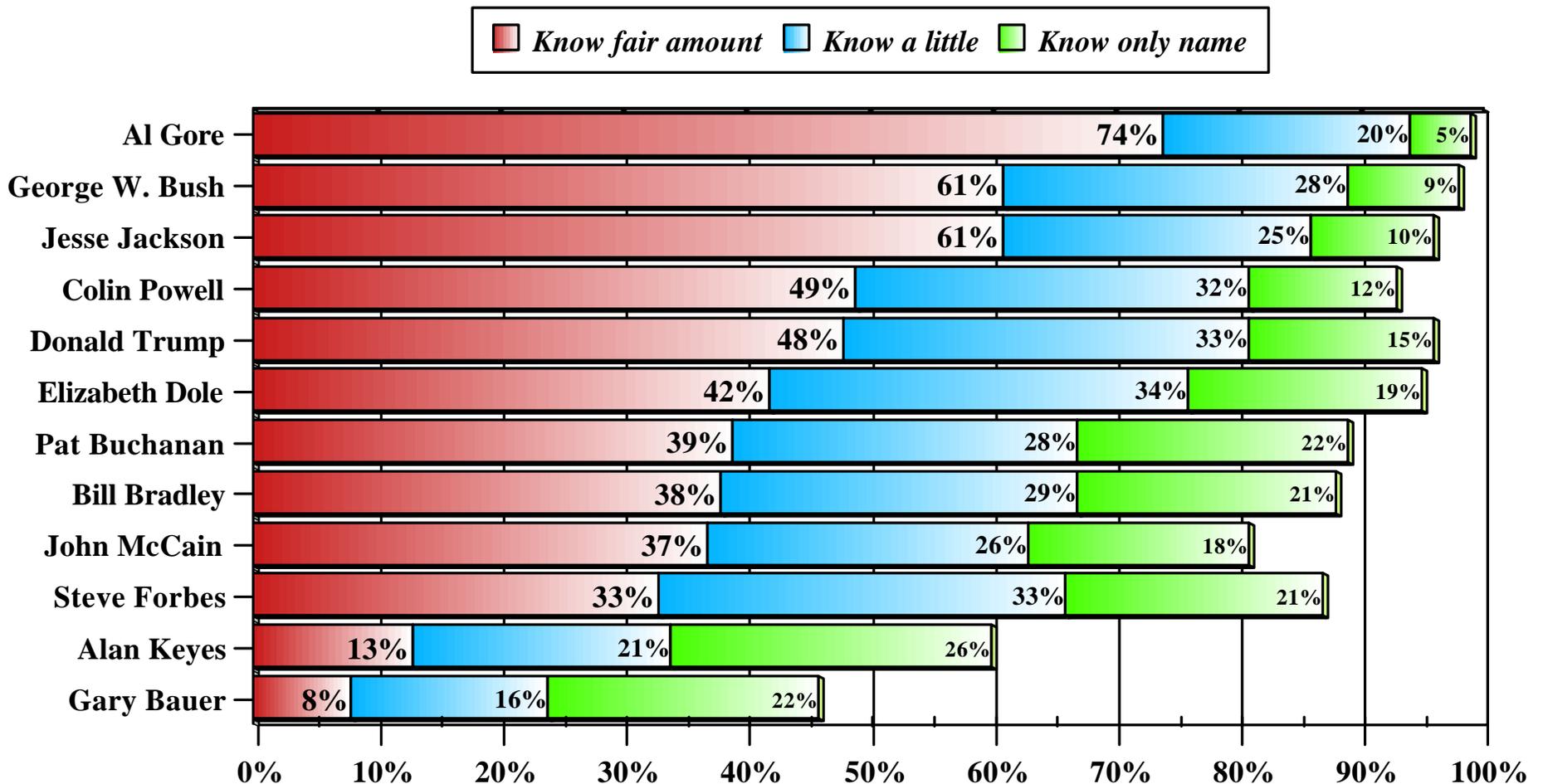
- ❌ Everyone on the map has died except Ronald Reagan and he was still twelve years from the presidency
- ❌ The Cold War was hot and the economy was not
- ❌ Abortion and gay rights were not even on the horizon as issues



- ❌ Perceptual mapping mostly relied on nonmetric multidimensional scaling
- ❌ Cluster Analysis relied on hierarchical approaches and Q-factor analyses
- ❌ Good graphics and computer time were both very expensive

Bradley & McCain Lack Depth of Familiarity Enjoyed by Those Who Have Received National Publicity

How much would you say you know about [NAME] ?



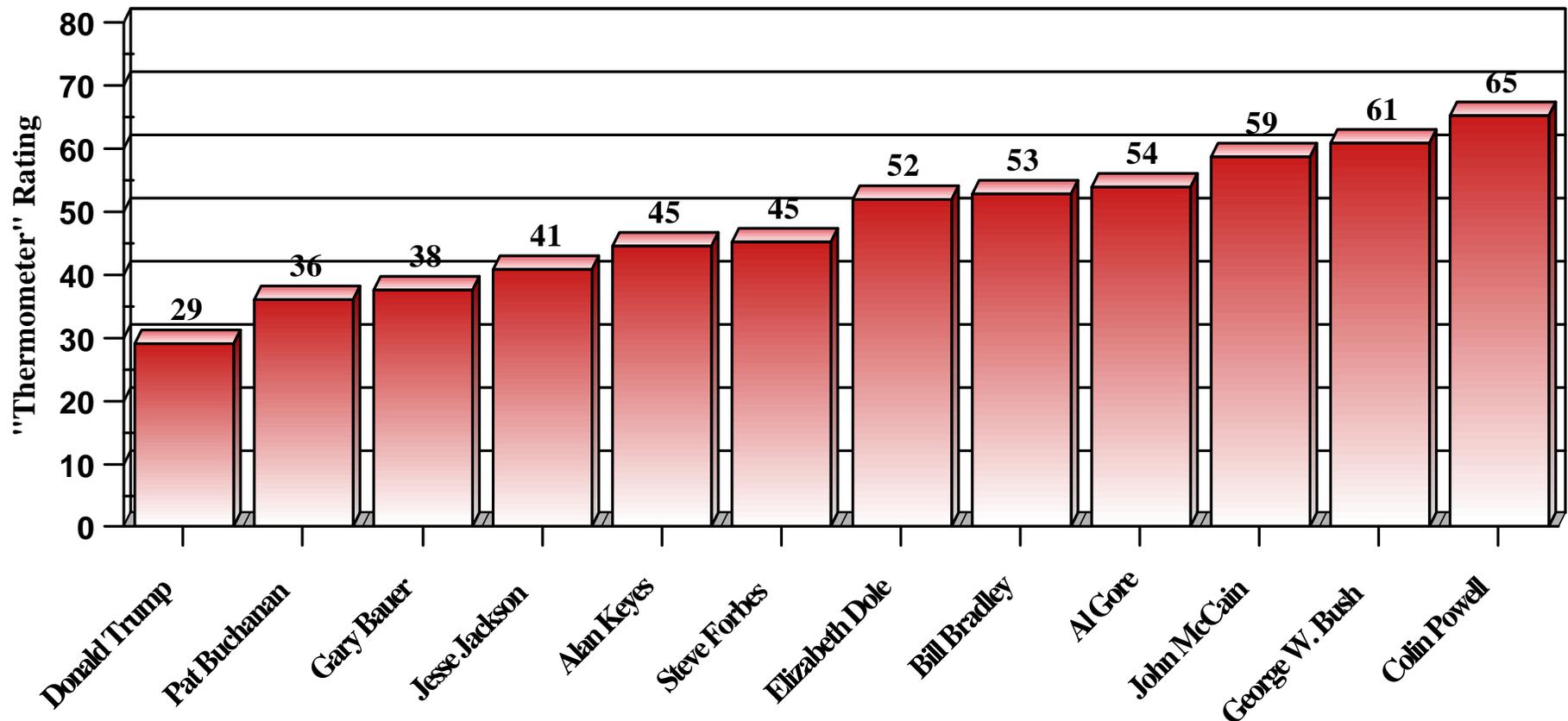
Source: 12Americans.com Survey of 1,207 US Citizens - Jan 29 - Feb 6, 2000
© 12Americans.com, 2000

Only Bush and Powell Enjoy Highest Level of Regard

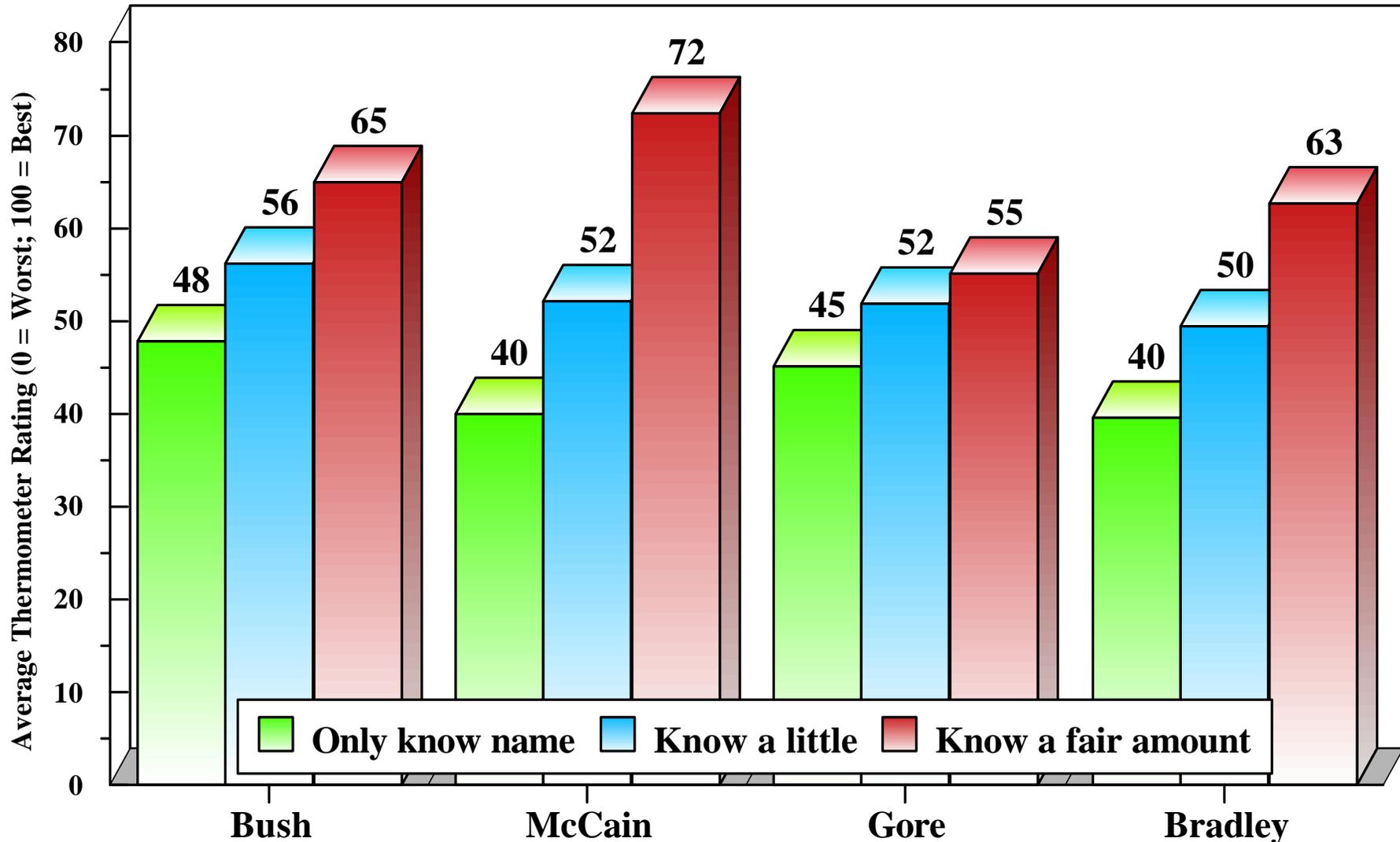
I'd like to get your feelings about the political figures you know.

The worst possible person would get a zero and the best possible person 100;

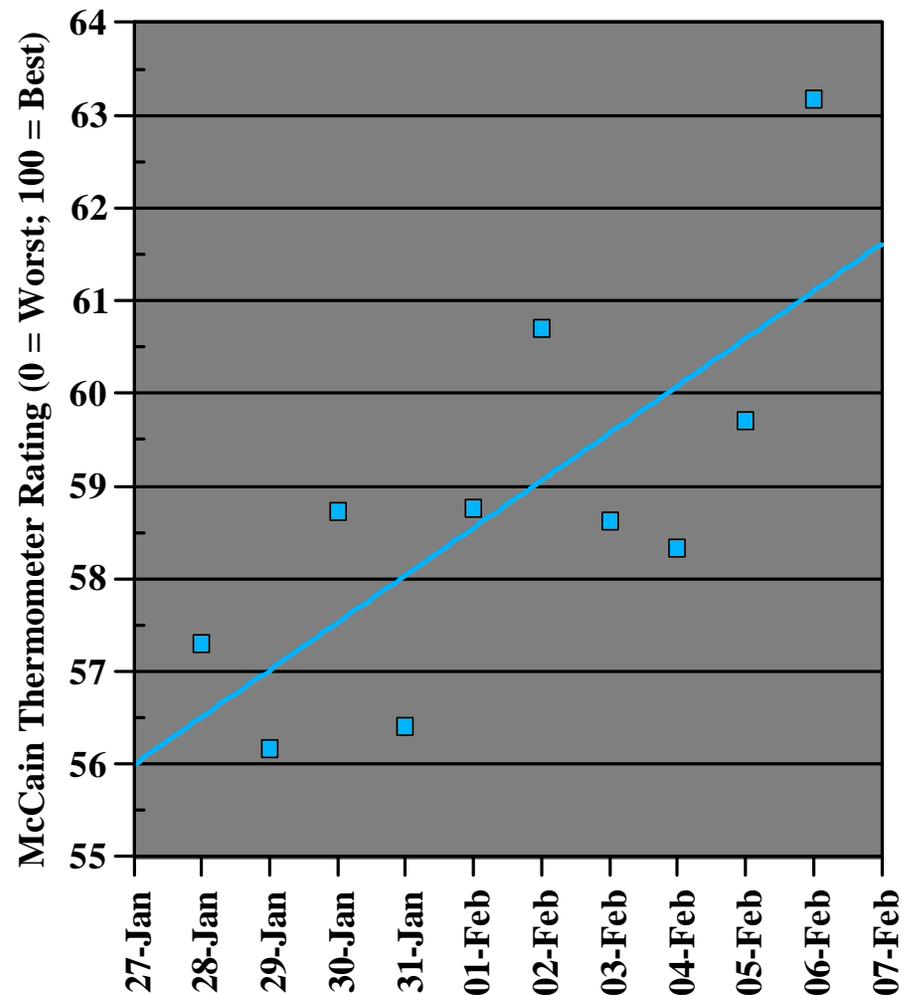
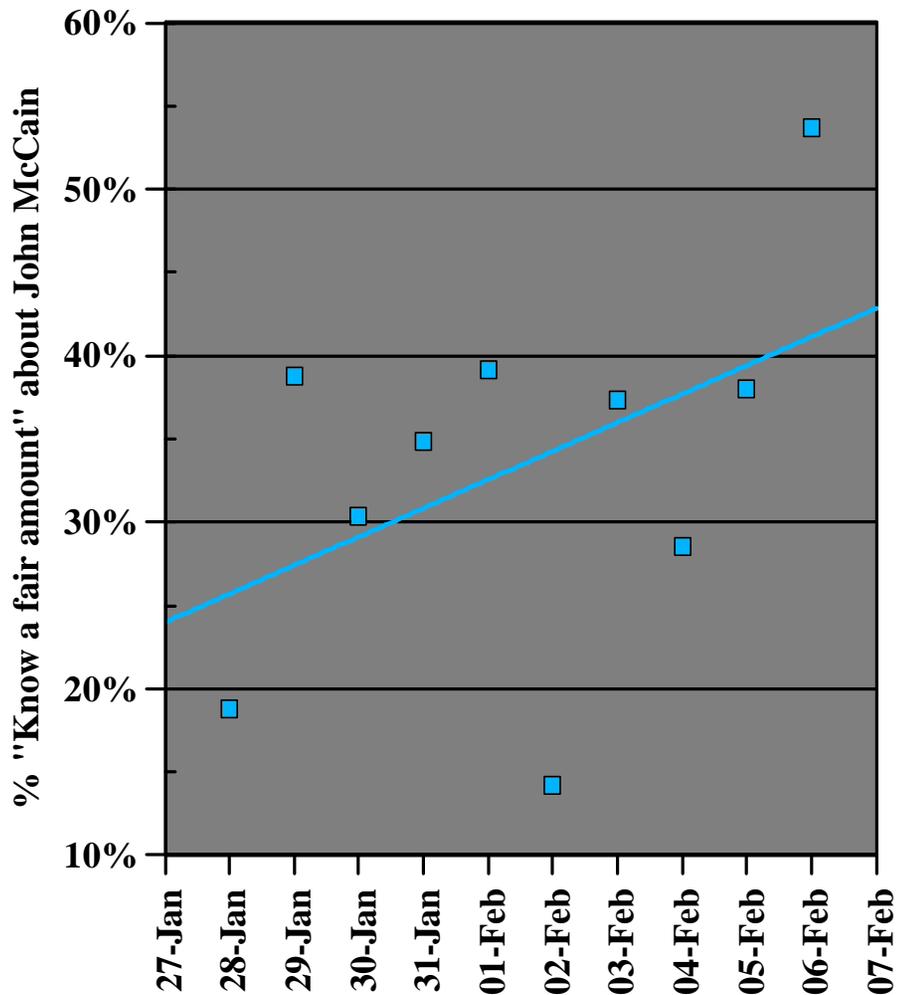
if you're neutral about someone, answer 50. Of course you can use any number in between.



McCain Grows Greatest in Overall Esteem as Voters Know Him Better



McCain's Rise in First Week of February Is Dramatic

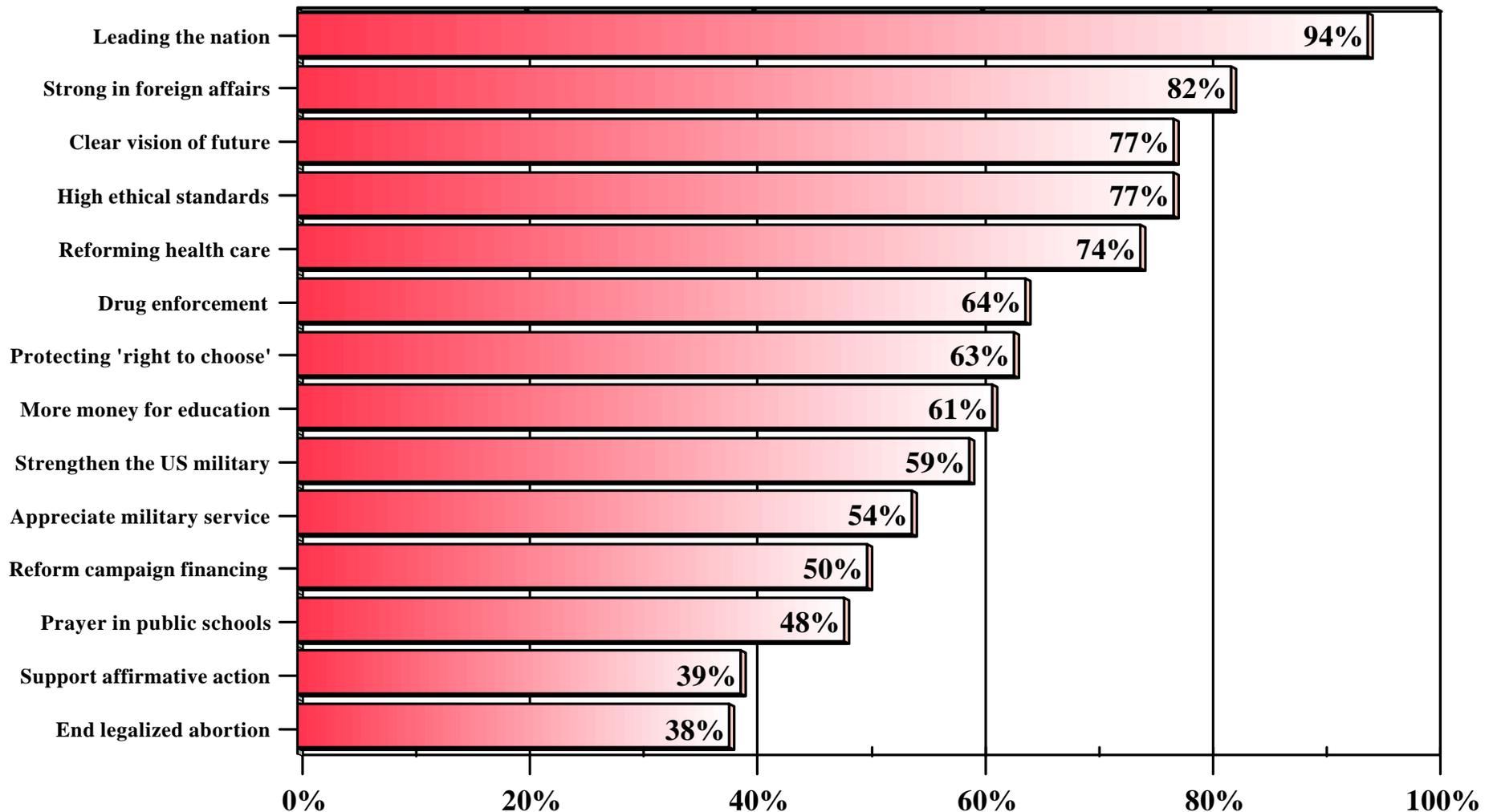


Source: 12Americans.com Survey of 1,207 US Citizens - Jan 29 - Feb 6, 2000

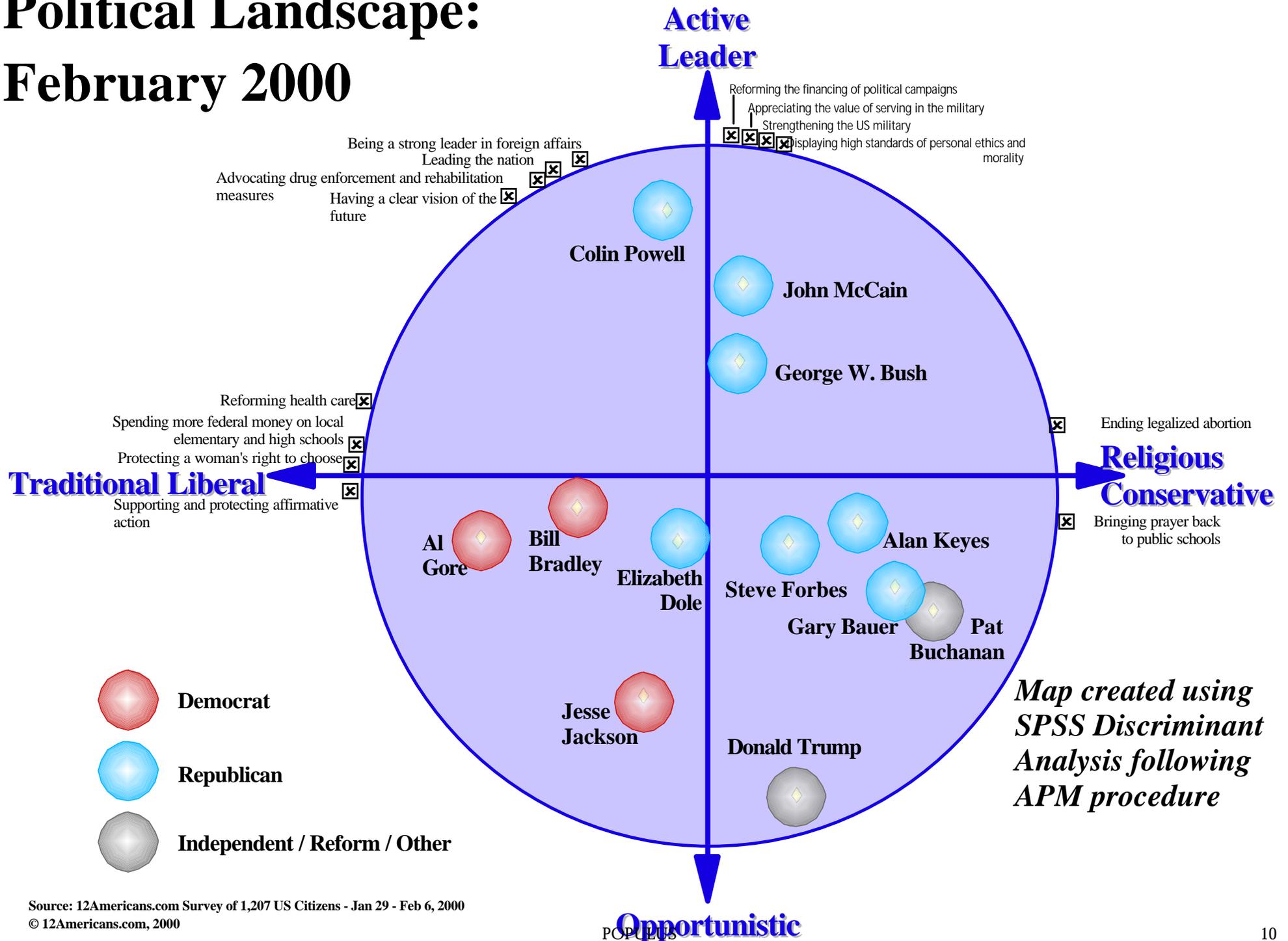
© 12Americans.com, 2000

Daily samples may not reflect total population - day-to-day variations may be attributed to small sample size
 Probability that trends are not positive < .01

Issue Priority Among US Citizens

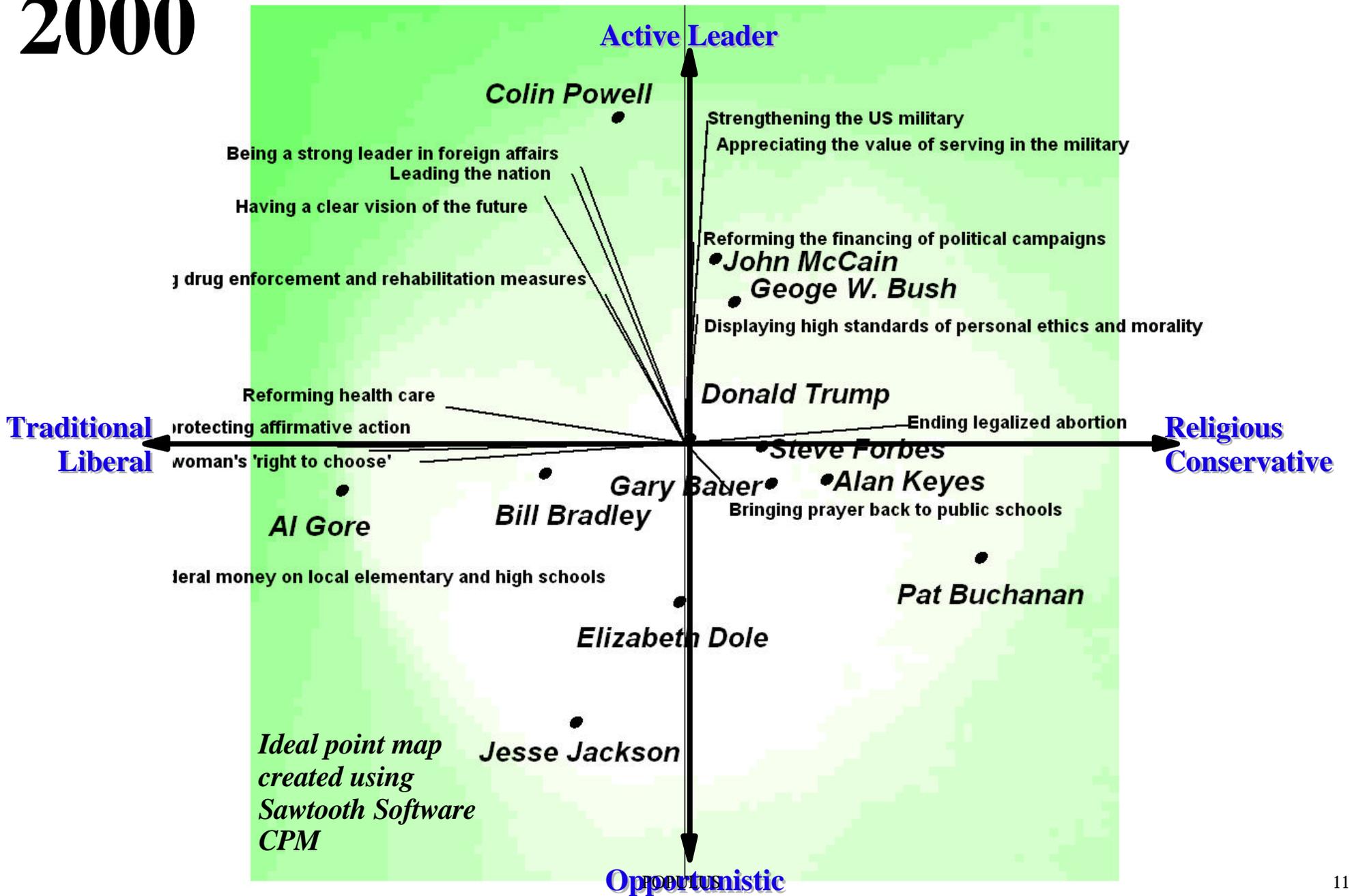


Political Landscape: February 2000

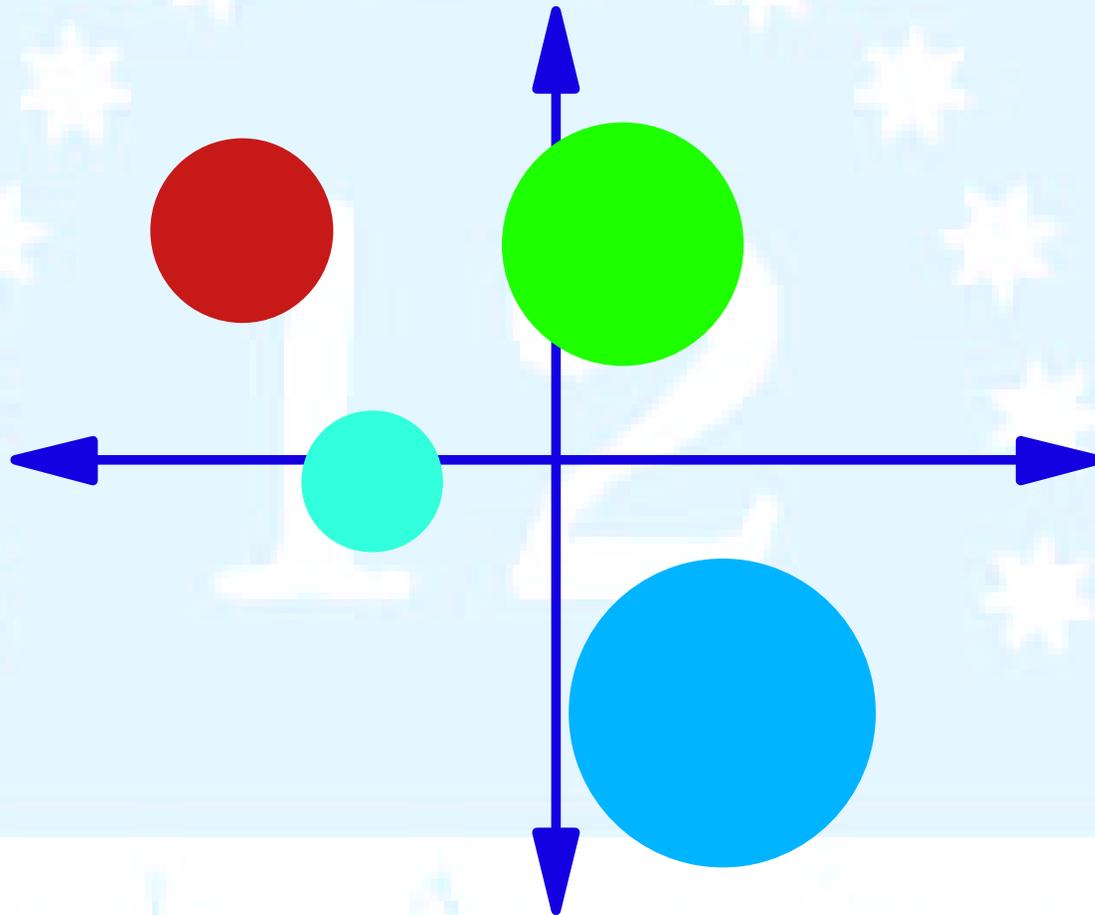


Source: 12Americans.com Survey of 1,207 US Citizens - Jan 29 - Feb 6, 2000
© 12Americans.com, 2000

Political Landscape: February 2000



Segmentation

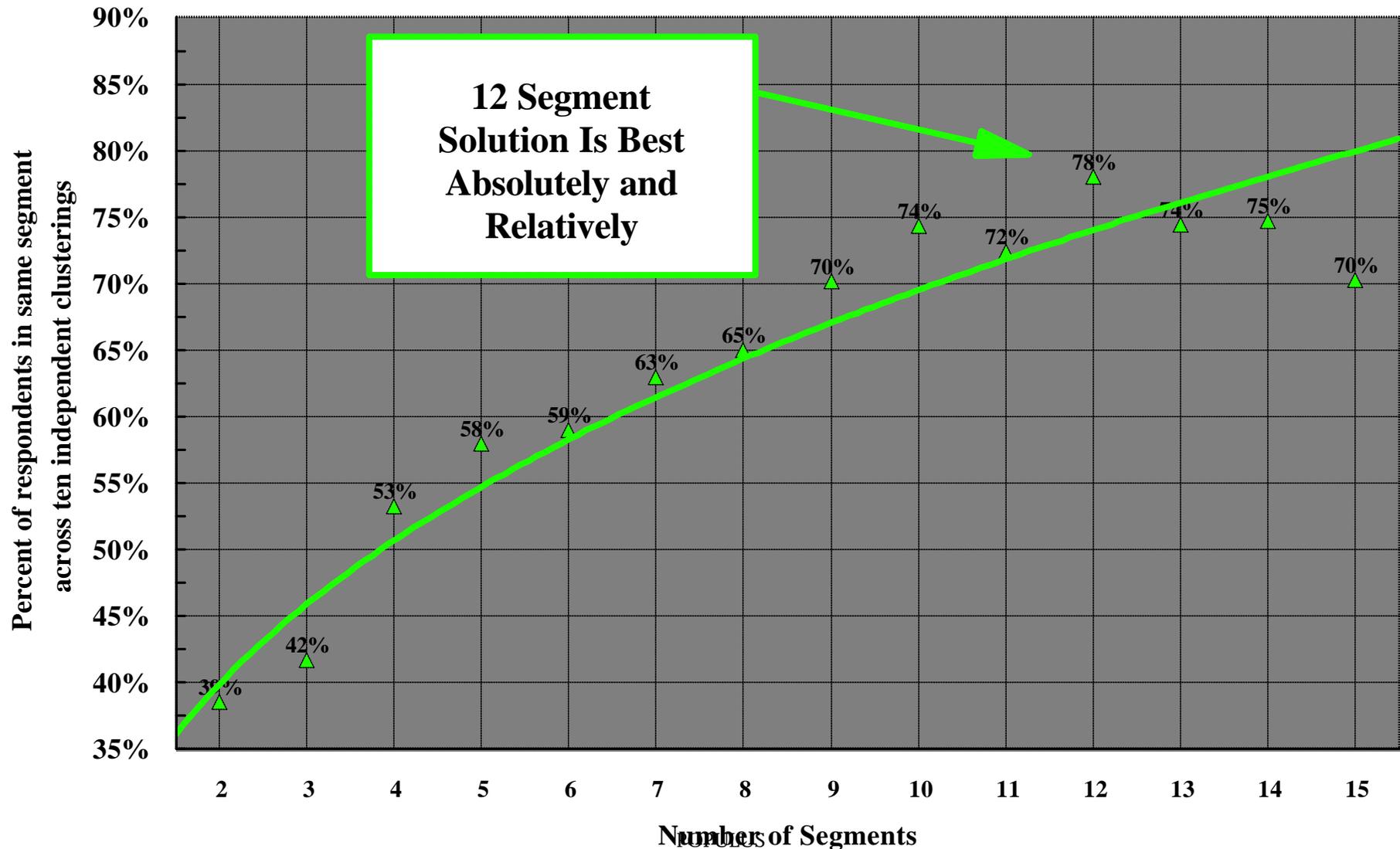


Segmentation Based on General Social Survey (GSS)

- ✘ **The GSS consists of a series of federally-funded surveys of the US English-speaking population which has been conducted every two years since 1972. The cumulative data set now consists of 38,116 interviews and over 3,500 variables**
- ✘ **Survey topics include religion, culture, work orientation, racial attitudes, political attitudes and behavior, medical care, national security, civil liberties, and Social Security. The questionnaire code book is 1,477 pages in length**
- ✘ **Twelve Americans has excerpted 93 variables as the basis of its analyses**

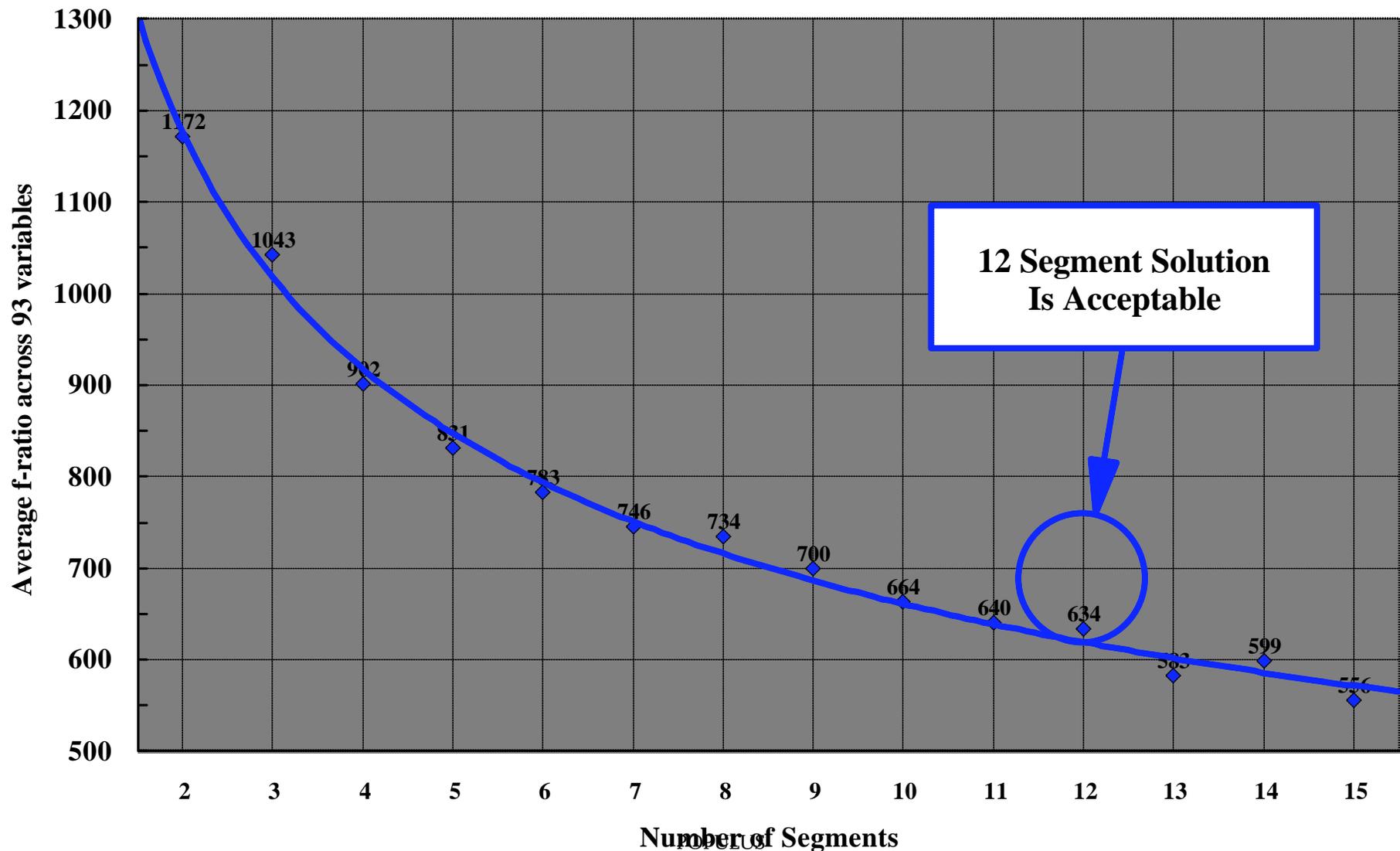
Segmentation Reproducibility:

12 Segments Is Most Reliable Solution



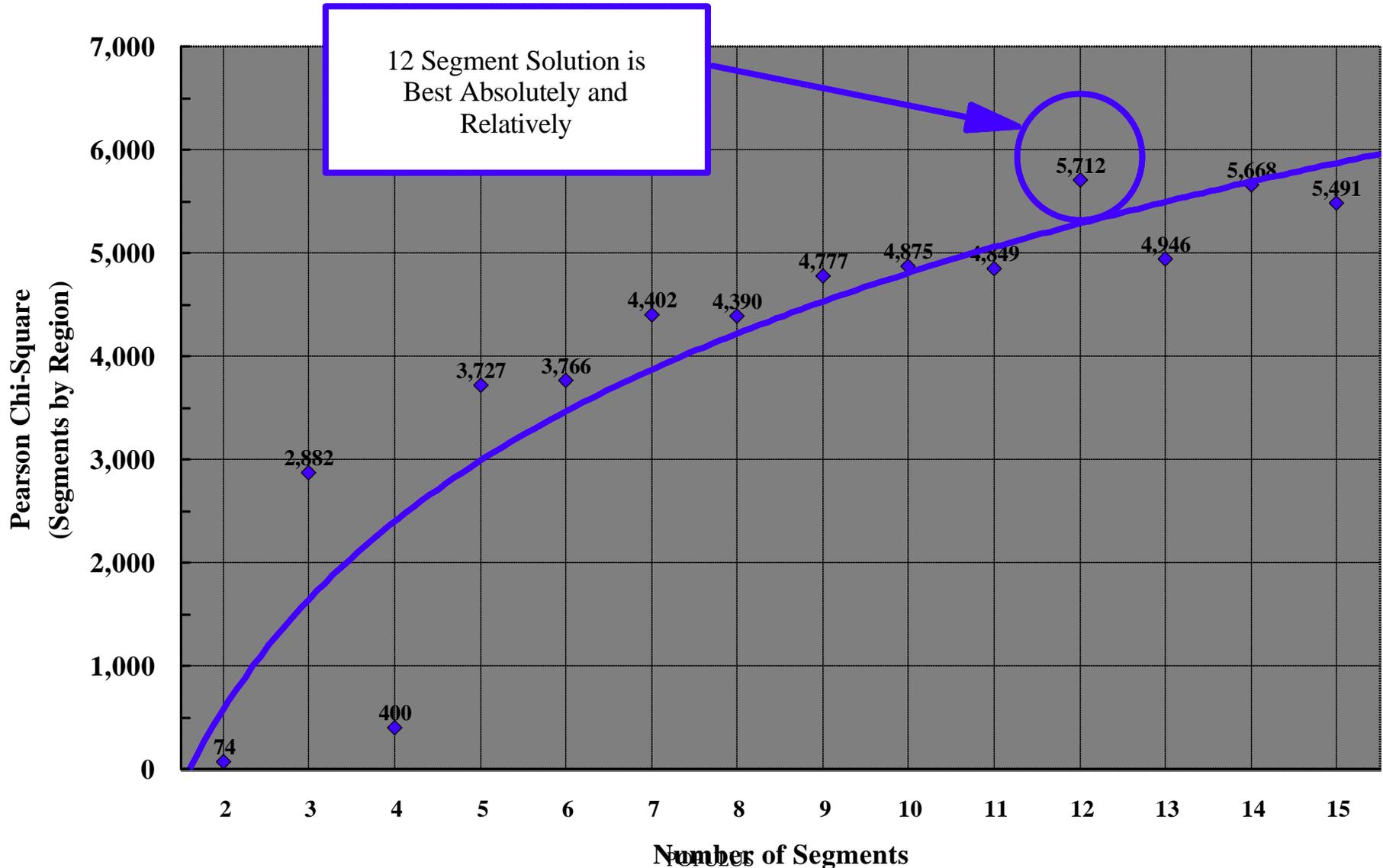
Segmentation Discrimination:

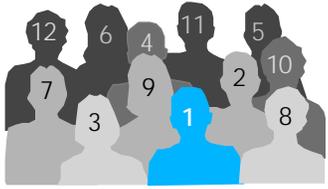
No Solution Scores Uniquely Well



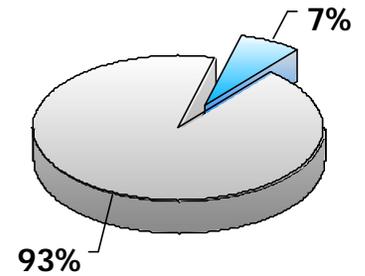
Segmentation Validity:

12 Segment Solution Relates Well to Geographic Differences

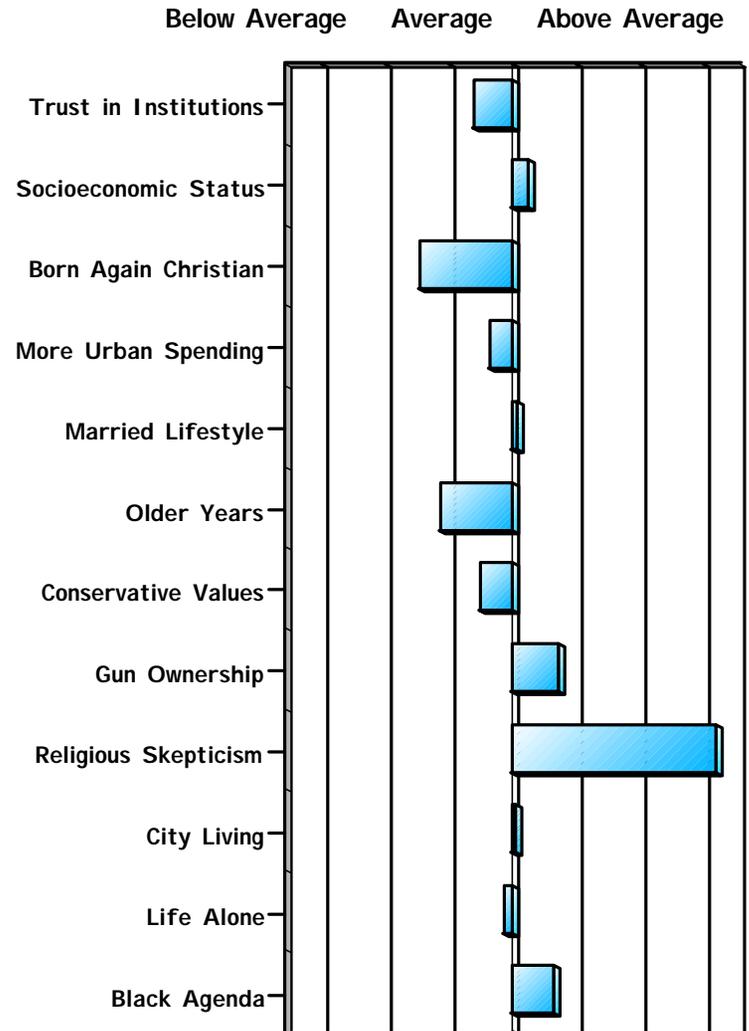


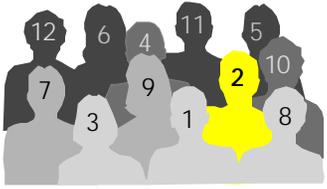


Free Spirits



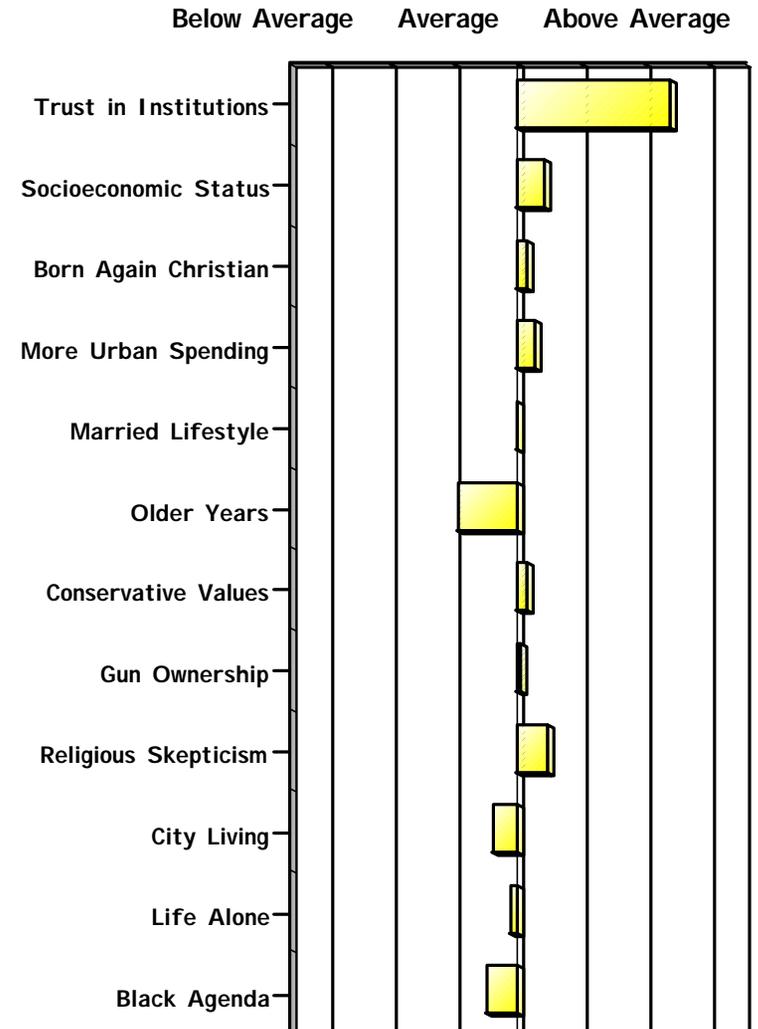
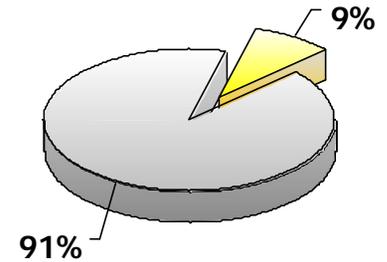
We're young, educated, and pretty happy. We're busy and have absolutely no time for organized religion. We're pretty skeptical about most institutions and organizations. We don't trust the government and we feel alienated from the political system. We would like to see more spending on those things that help people: welfare and assisting the poor, improving the conditions of blacks, and protecting the environment. We'd pay for that by down sizing the military.

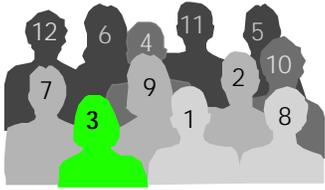




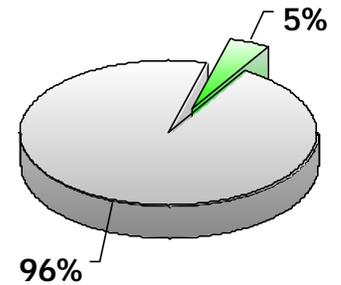
Bright Eyes

We really trust the public and private institutions that lead our country whether their governmental, business, scientific, or religious. We're happy to be young and well-educated. We think the balance of spending in Washington is about right except for the fact we need to spend more on improving and protecting the environment.

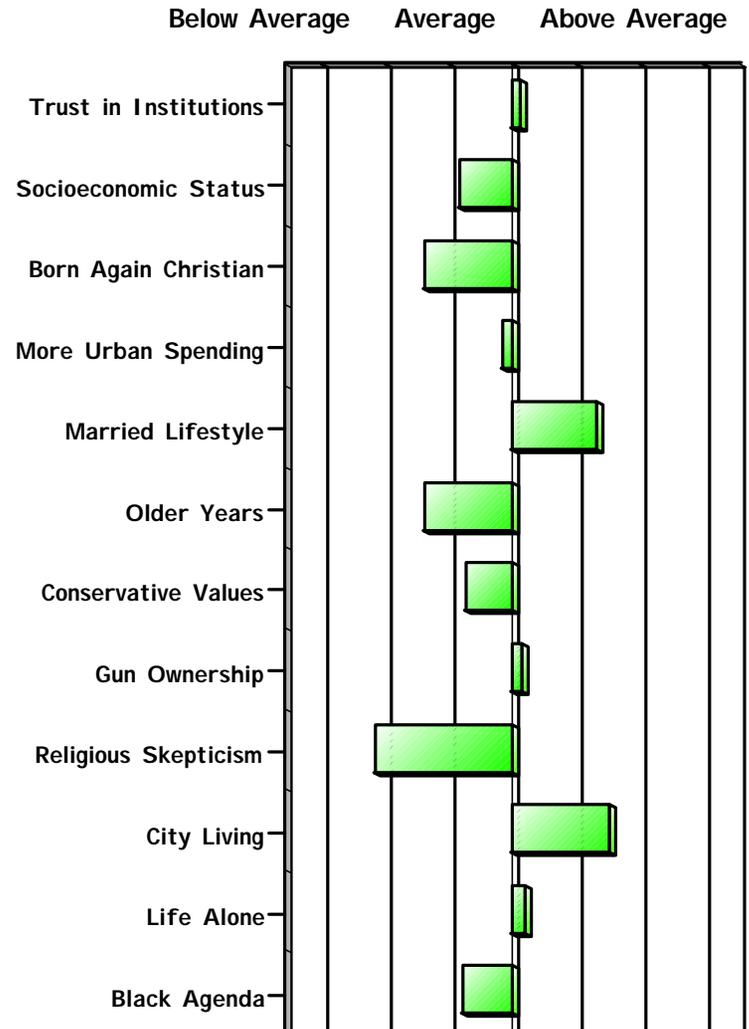


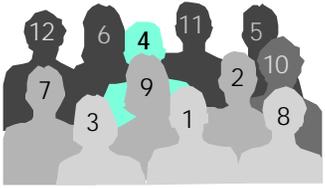


Newly Minted

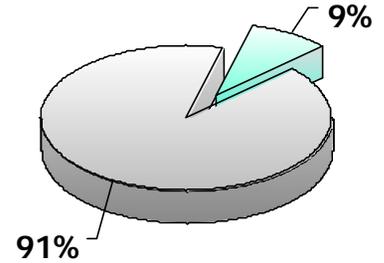


Our families are new to the States coming from countries to the south. We're pretty happy about things right now, but we're not without our problems. Many of us are struggling economically. Religion, mostly Catholicism, is part of our lives and family culture. When we look at the bigger world we feel good about government and science. We're worried about banks and big companies and how they treat us. Washington needs to spend more on assistance to the poor, education, health and solving city problems; it should spend less on the military and foreign aid. And, let's not spend any more than we are on welfare and improving the conditions of blacks.

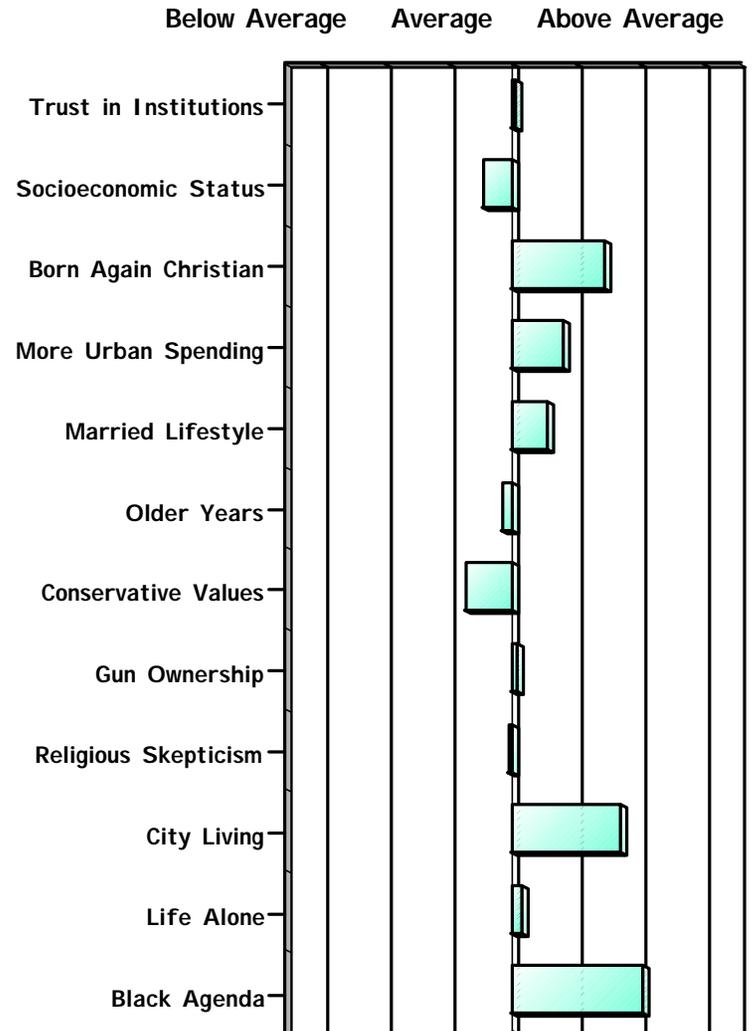


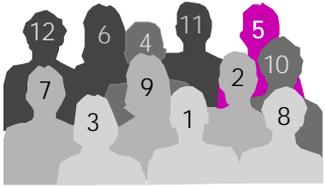


Urban Believers

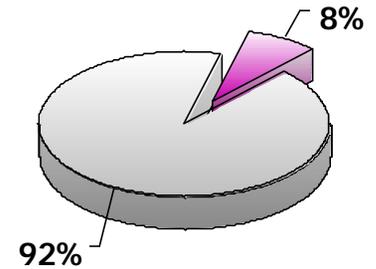


We live in really big cities. We have very Christian beliefs; we also believe strongly that the government should do more to help solve the social and urban ills we see every day. We're not well off economically and we're not too happy with the way things are. Now is the time for the government to spend more on welfare, improving the conditions of blacks, assisting the poor, education, health, social security, dealing with drug addiction, fighting crime, and solving the problems of our cities. Let's stop spending money on faraway things like the military, space exploration, and foreign aid.

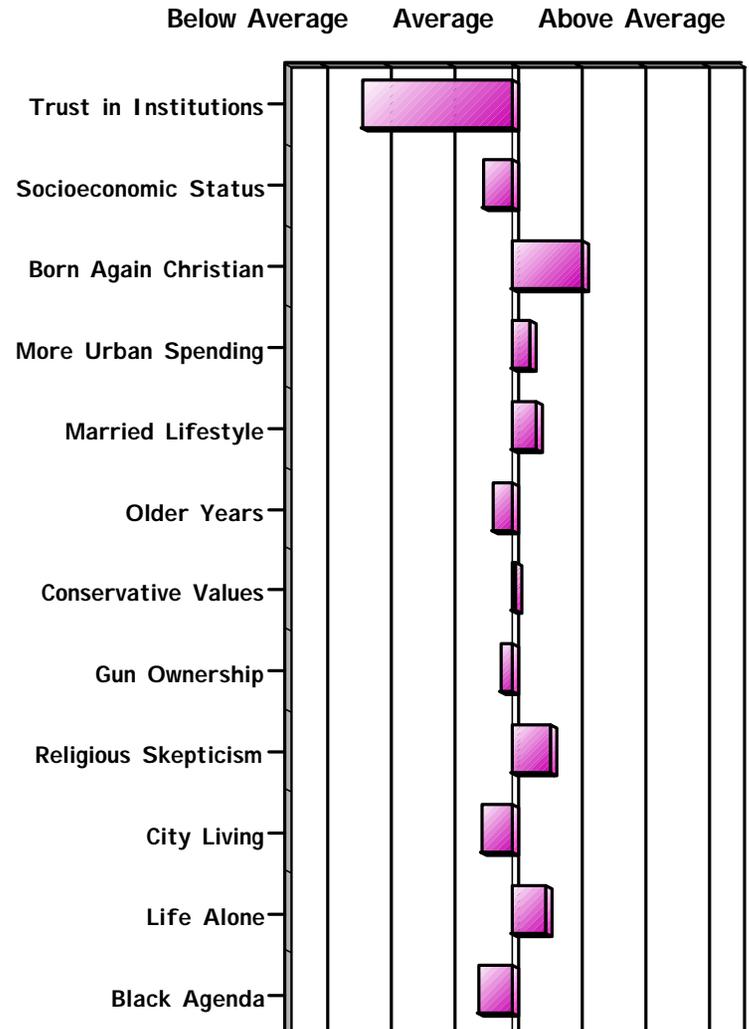


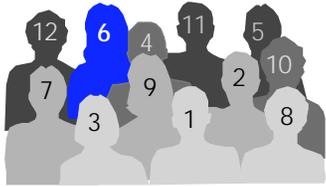


Big Hearts

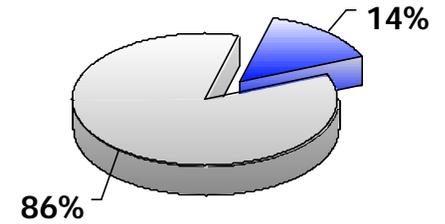


We're unhappy with the way things are in America since we're not doing well financially. We don't trust banks and other money organizations, big companies, organized labor, TV, the press, education, and all branches of government. Government should spend more money on the poor, education, the environment, health, fighting crime, social security, dealing with drug addiction, and solving the problems of big cities. It should spend less on welfare, the military, improving conditions of blacks, foreign aid and space exploration. We believe in God but we don't put much trust in organized religions. We do trust doctors and scientists, however.

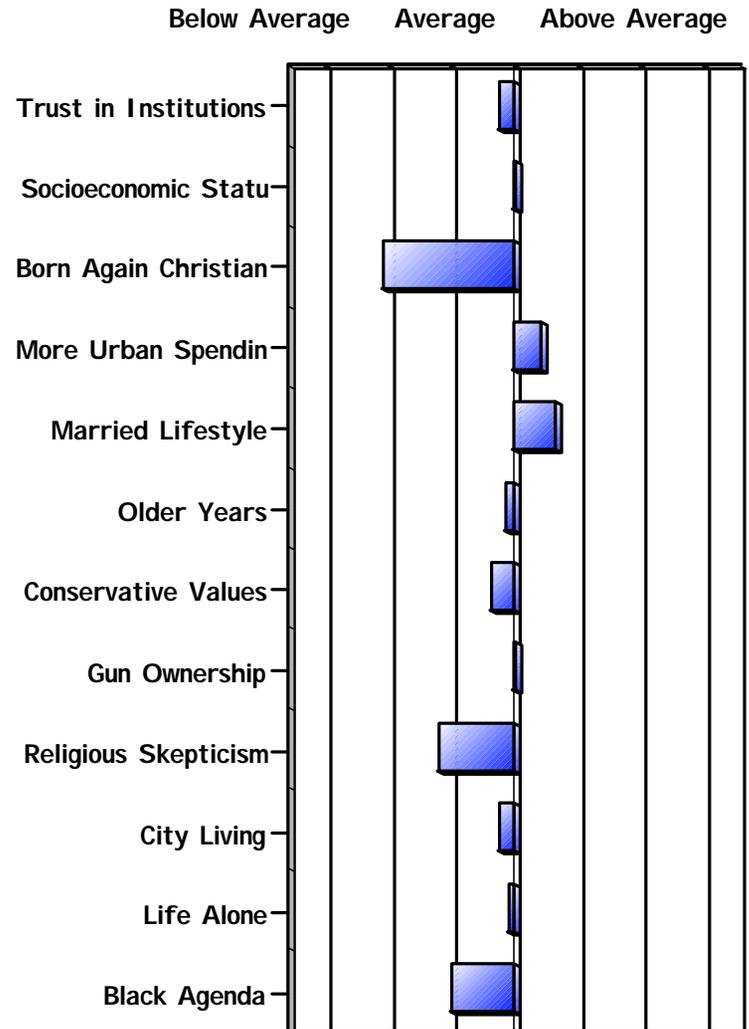


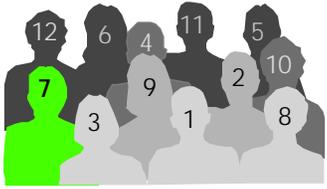


Centrists

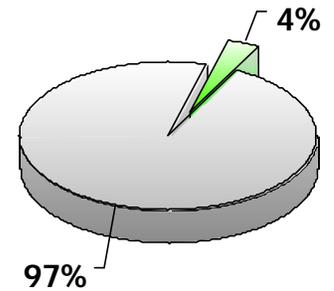


We're pretty happy with the way things are going; we're middle-of-the road politically and economically. Religion is important but we don't go around trying to convert people. Generally, we have trust and confidence in all aspects of American society -- most of the time. That doesn't mean we don't want changes in how the government spends our money. It's clear that we spend too little on assistance to the poor, improving education and health, the environment, fighting crime, and solving the problems of our cities. At the same time we need to cut what is being spent on welfare, foreign aid, and space exploration. Let's help the people in the middle.

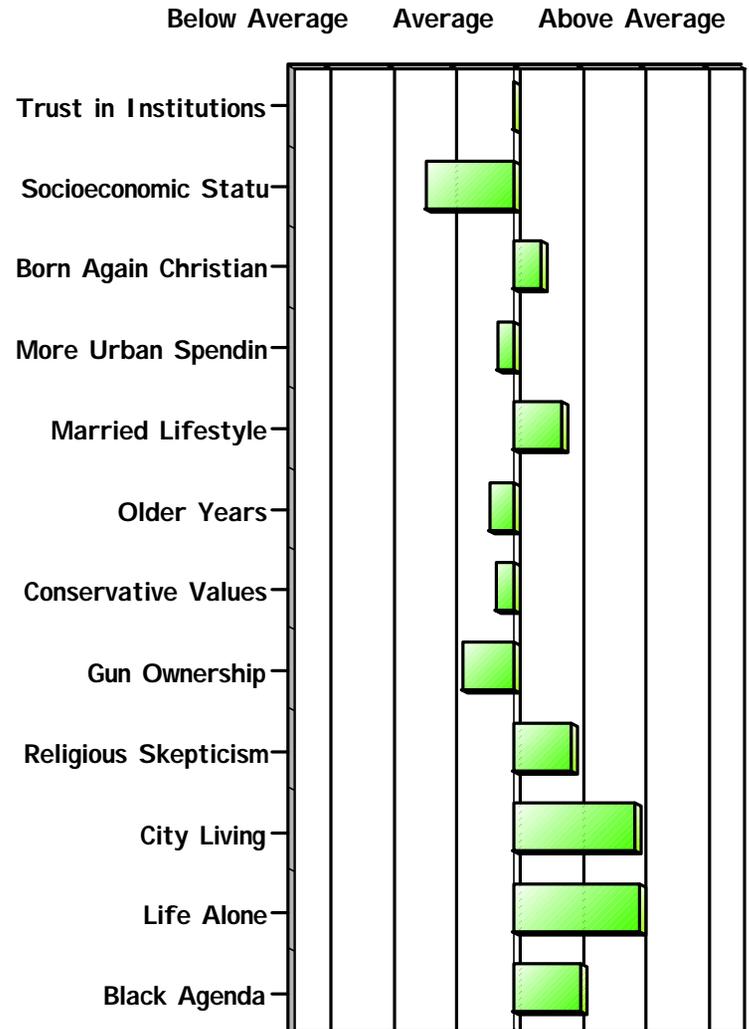


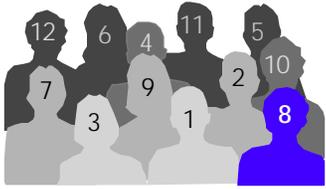


Hands On

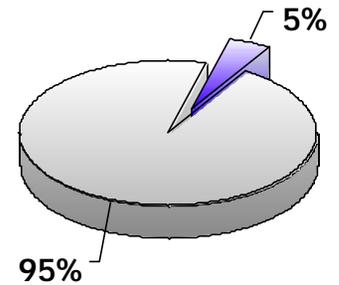


We're blue collar Americans who do the work that makes America work and many of us work and live as single parents. Things could be better on the money side. The government needs to invest more in people like us who aren't at all that well off and spend less on foreign aid and space exploration. We're careful about whom we trust -- organized labor, TV, the press, and people like scientists. We've come not to trust banks and big corporations.

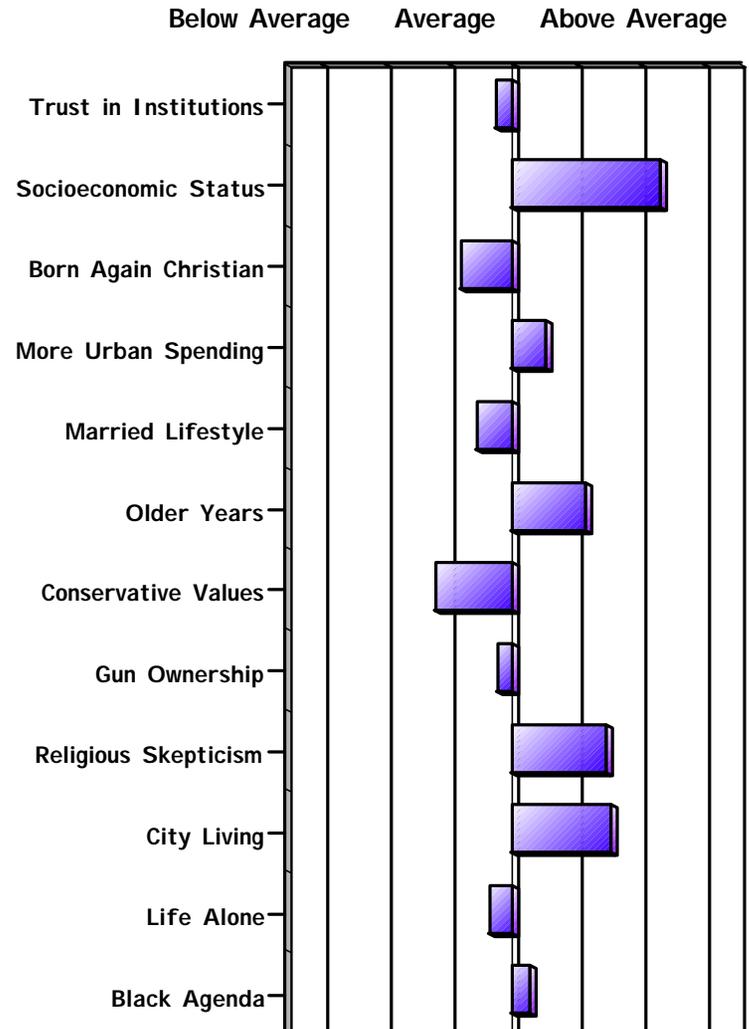


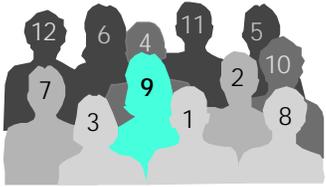


Passionate Liberals

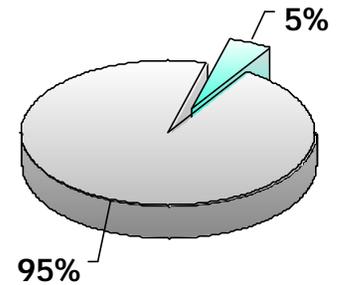


We're liberal and proud of it. Some call us New Democrats and we certainly vote democratic. America has been good to us in terms of income and education and we need to help those in need. The federal government needs to spend more on almost everything, especially welfare, improving the conditions of blacks and others in need; we need to expand our vision and spend more on space exploration. Just make sure we waste a lot less on the military. We're skeptical and distrustful of organized and politicized religion, the military establishment, and most major corporations. We appreciate the work of truly educated leaders in our country like the Supreme Court, doctors and surgeons, and scientists.

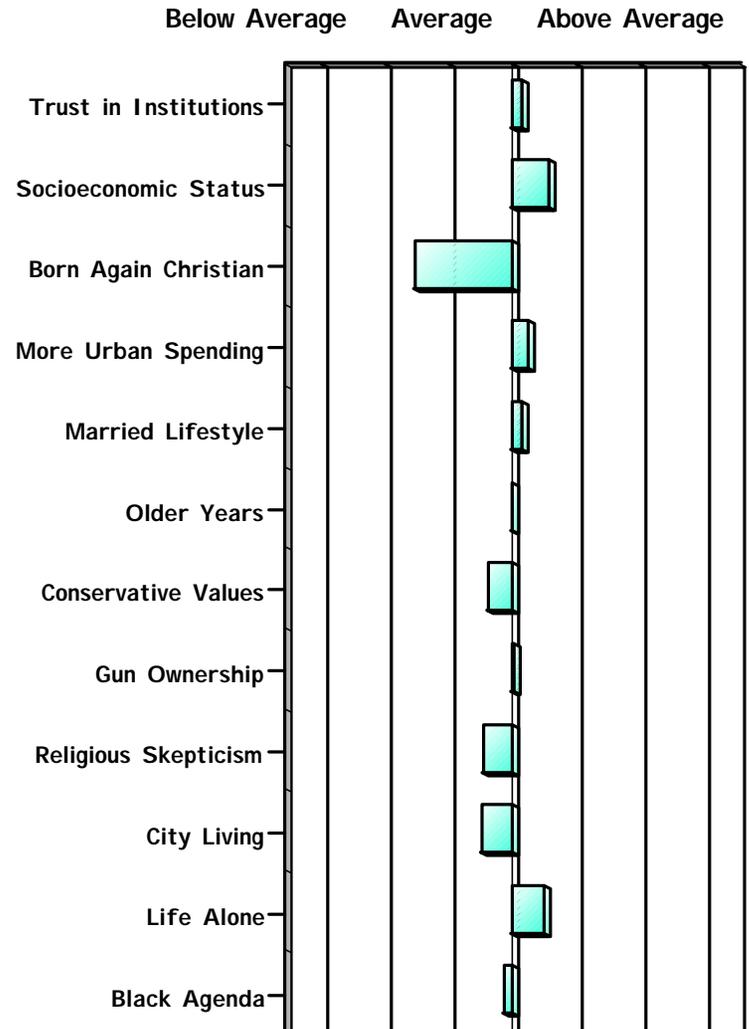




Yankee Pragmatists

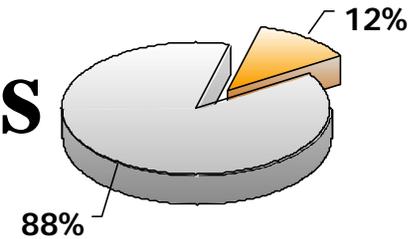


We share the values found in traditional New England Yankees, where many -- but not all -- of us live. We're moderate in our political leanings and attitudes toward institutions and religion. We're also pretty happy with things and are doing well financially. And our moderation is reflected in our practical level of trust in almost all institutions of society. Unlike many Americans, we've learned to trust the press, big companies, banks and financial institutions. Of course we really admire the Supreme Court and the scientific community.

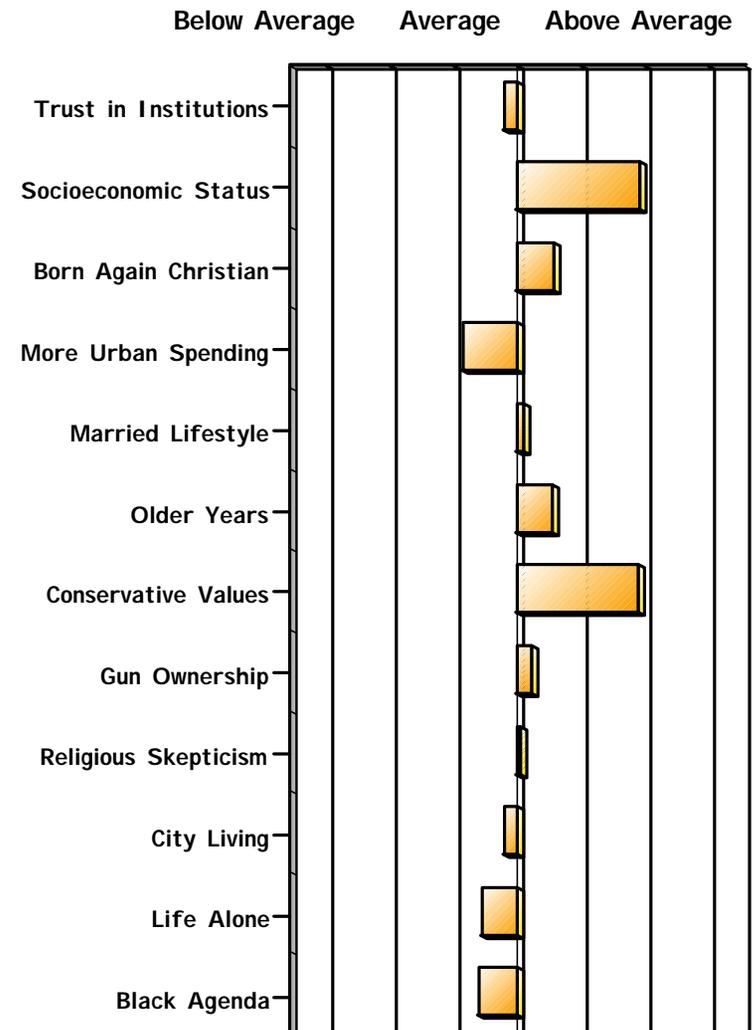


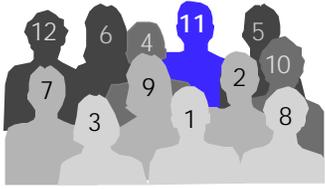


Passionate Conservatives

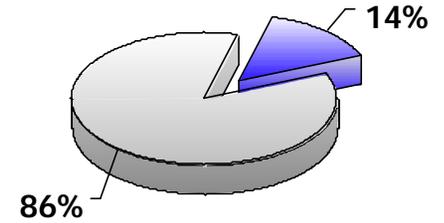


Our social and political agenda is clear: we're conservative. We're happy. We're well educated and financially well off. Our trust in institutions leans to the private sector; we trust banks and financial institutions, big companies, the scientific community, medicine and organized religion. We're deeply suspicious of organized labor, the press and TV, Congress and the educational system. We feel government spending on nearly all social programs (e.g., assistance to the poor, welfare, improving the conditions of blacks, drug addiction) is just right and need not be increased. We think there's too much spending, however, on the environment. We miss the Gipper.

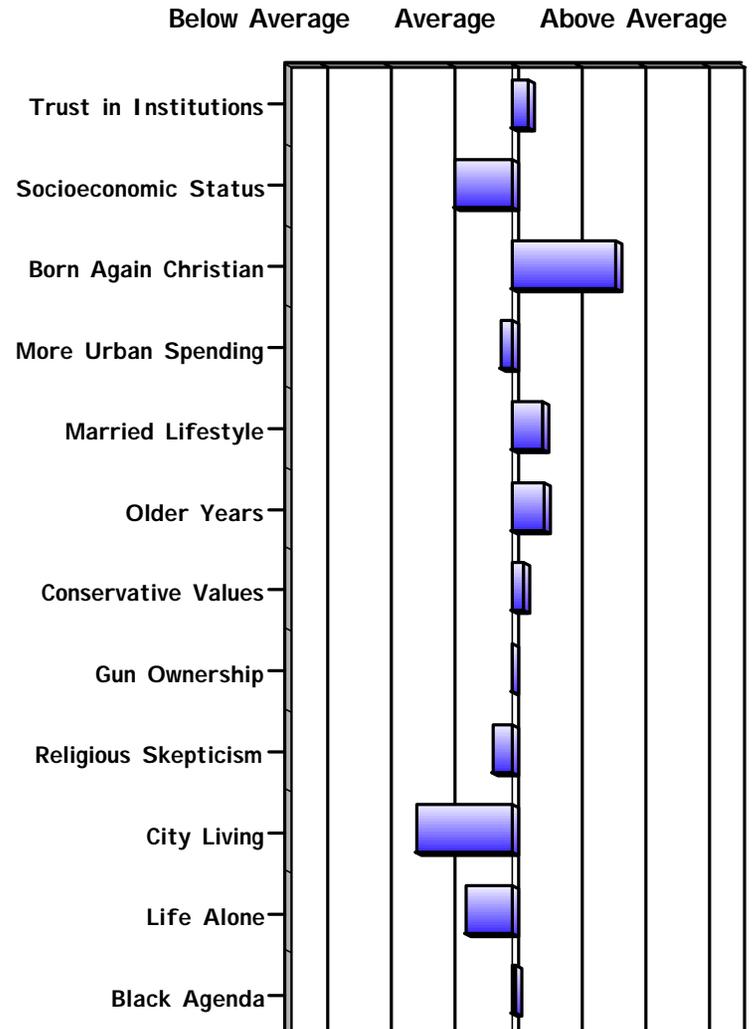


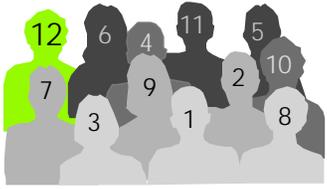


Country Comfort

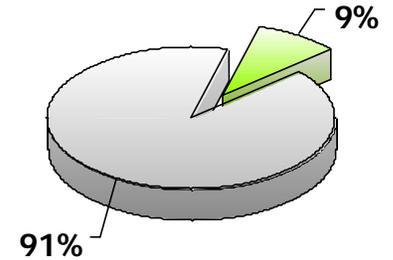


Living out in the country suits us. We're very religious and just don't like city living. Generally, we're pretty happy, although we could be better off financially. However, despite these feelings we still have faith in America's institutions and a great deal of confidence in the military and medicine. When it comes to government spending we have a wide mix of opinions. For example, we feel too little is being spent on such things as assistance to the poor, social security, dealing with drug addiction and halting the rising crime rate. However, we think too much is being spent on welfare, improving the conditions of blacks, foreign aid, and space exploration.

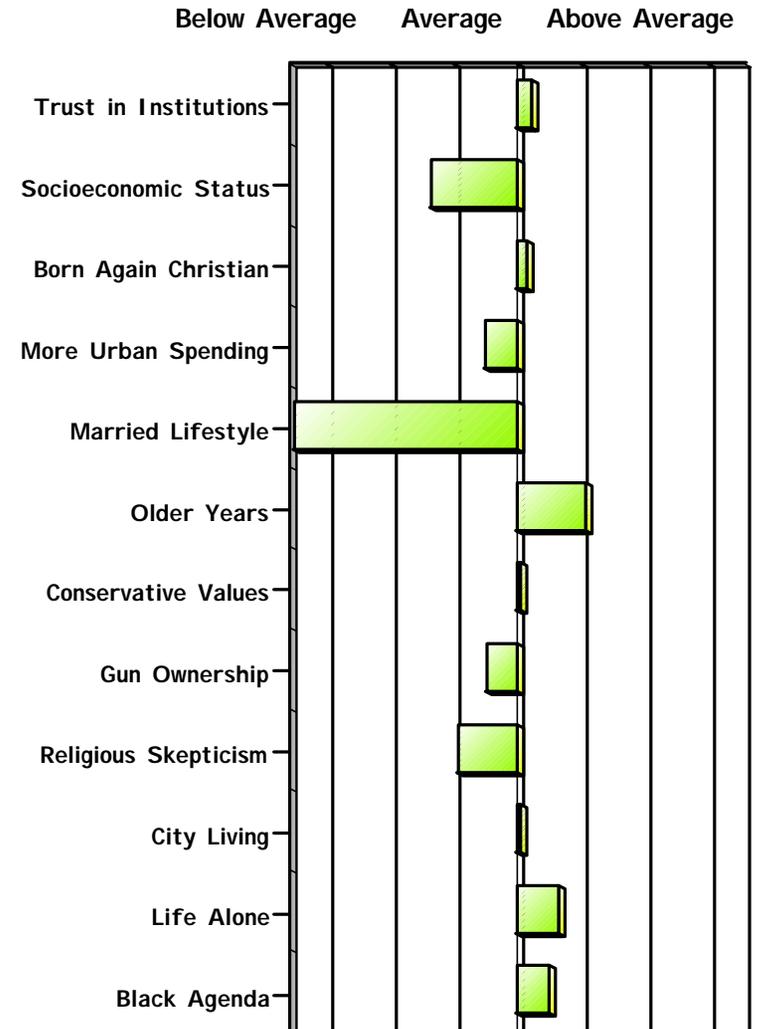




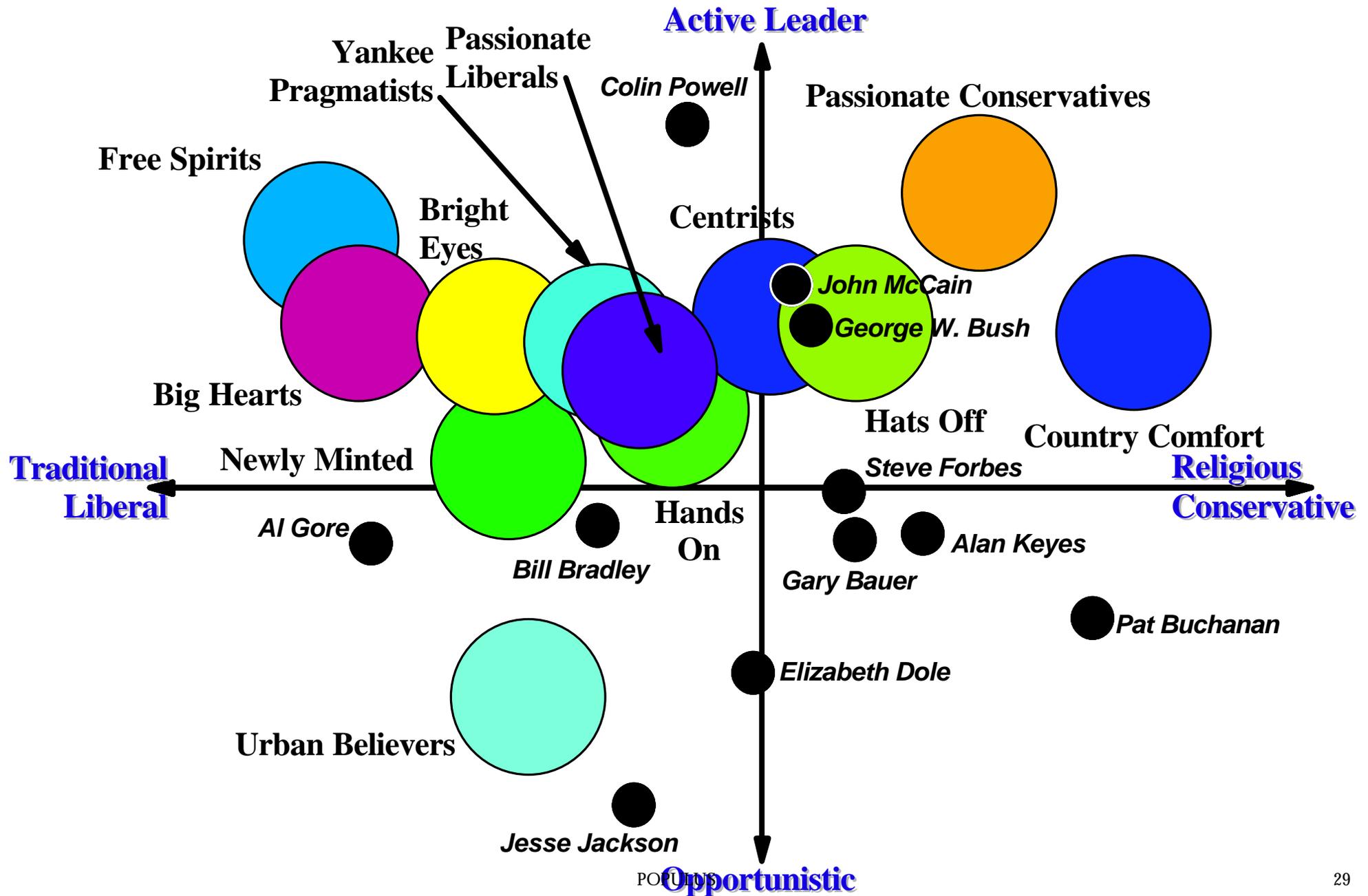
Hats Off



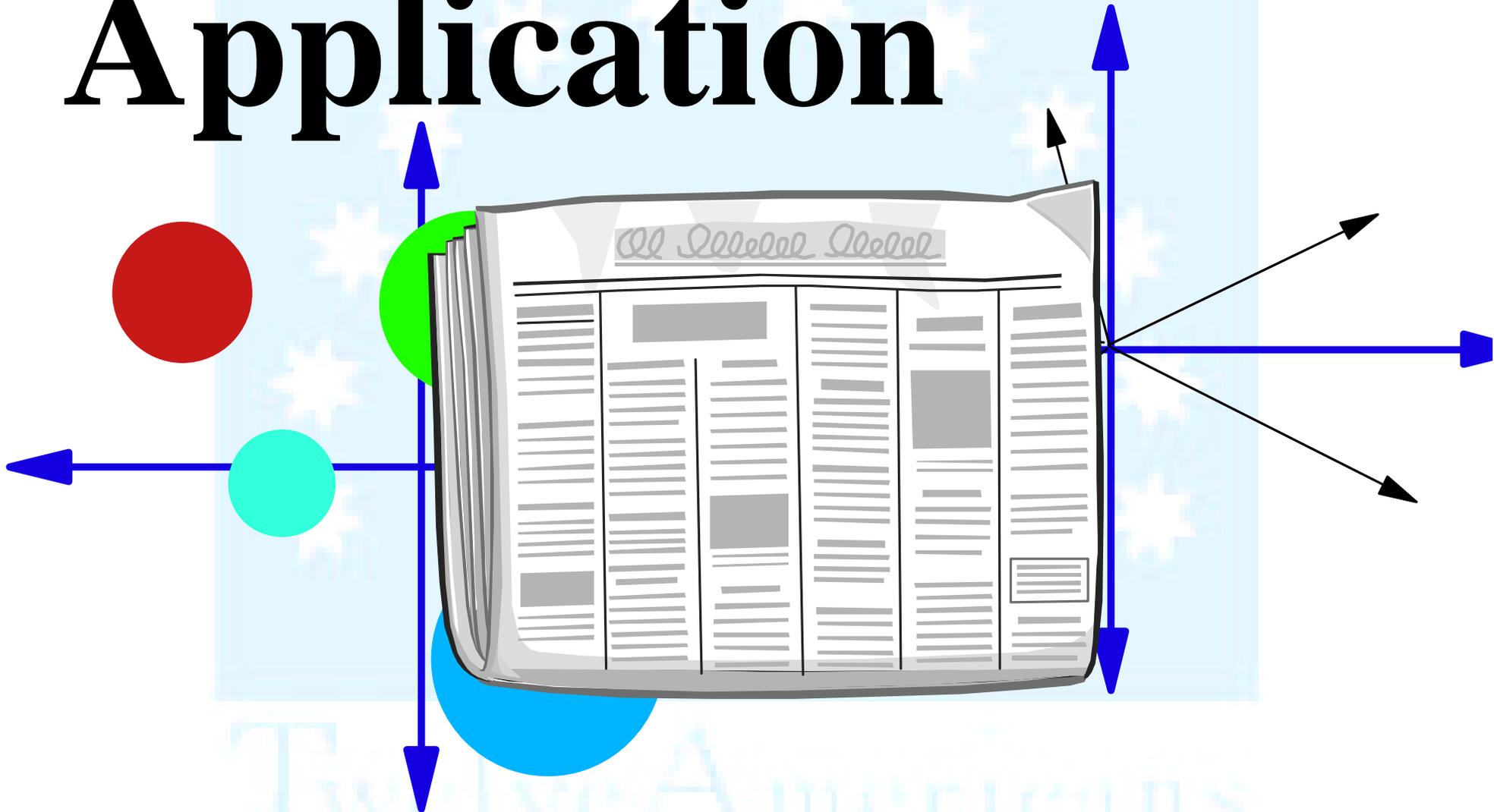
We're older and have seen America through many changes. Right now many of us aren't too happy, especially with our economic condition. Despite this, most of us still have a great deal of faith in America's institutions -- the military, organized religion, banks and financial institutions -- although some of us have lost faith in the Presidency and Congress. When it comes to government spending we think more could be spent on the military, dealing with drug addiction, halting the rising crime rate and assisting the poor. Otherwise we think spending on most other issues such as welfare and improving the conditions of blacks is just about right.



Political Landscape: February 2000



Editorial Application



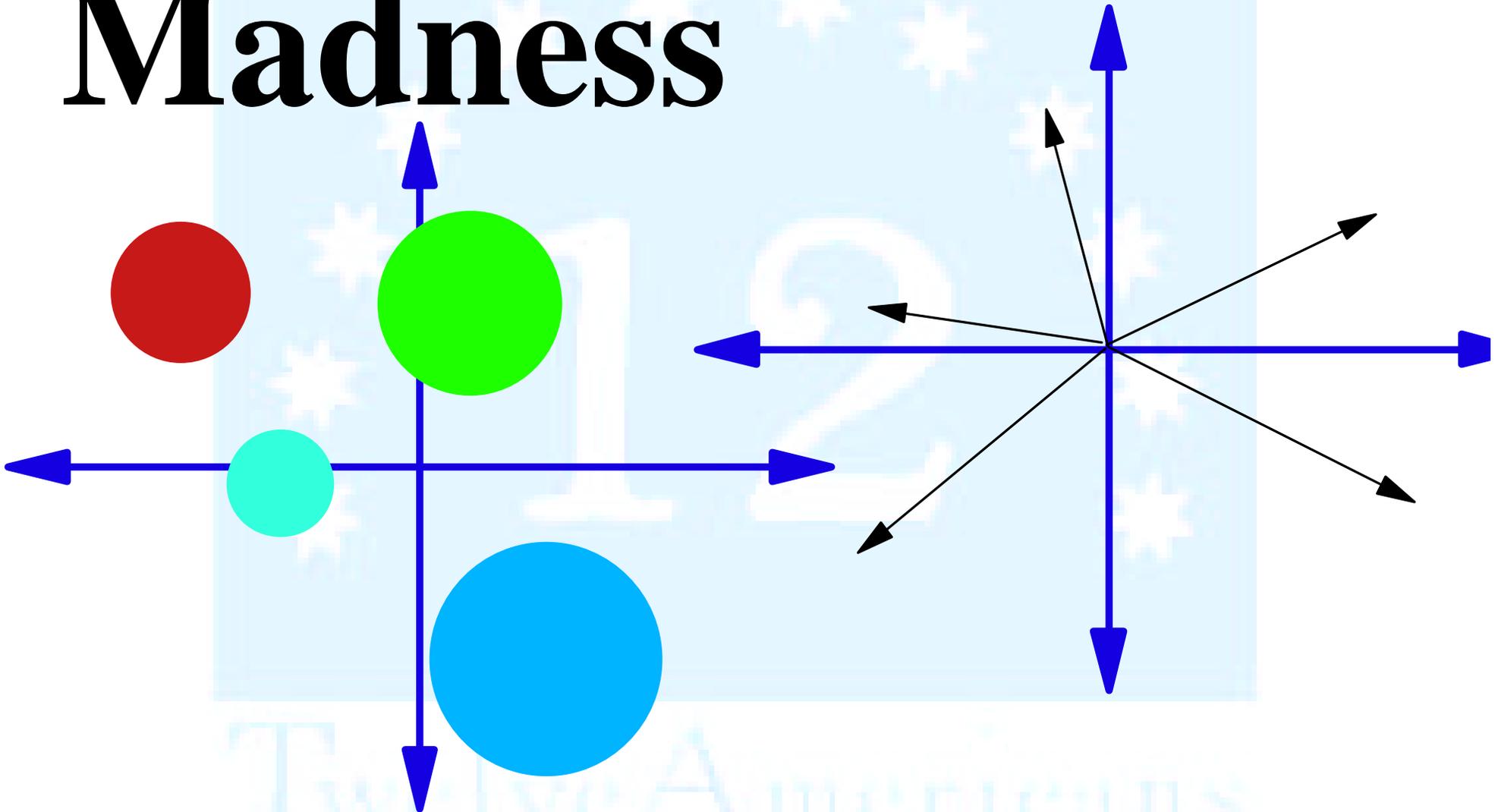
Twelve Americans

Decision 2000

- ❌ **MSNBC.COM** has selected the 12 Americans approach for its Internet polling for the presidential election
- ❌ **Segmented methodology** will assure equal volume to all voices
- ❌ **Continuously updated mapping** will show progress of campaigns



Methods & Madness



Methods

✘ Mapping

- ✘ Discriminant-based mapping is easier to implement and more intuitive "out of the box"
- ✘ CPM is more powerful and, because its ability to graphically represent demand, potentially more insightful; but ...
 - ✘ *It requires far more analytic effort than either correspondence analysis or discriminant analysis*
 - ✘ *To produce the maps shown here requires capabilities not included in the current commercial release*
 - ✘ *The graphics module offers weak control of label placement, produces only coarse bitmap images, and lacks Object Linking and Embedding (OLE)*

✘ Clustering

- ✘ CCA is exceptionally easy to use as are many other k-means programs
- ✘ CCA offers a uniquely accessible approach to assessing the reliability and discrimination of a wide range of solutions

Madness

✘ Why Al Gore should win:

- ✘ Better known than George Bush
- ✘ Closer to the ideals of more segments of voters
- ✘ More total "demand" on left side of map

✘ Why George Bush should win:

- ✘ Better positioned to balance conflicting ideals of voter segments
- ✘ Possesses greater degree of perceived leadership traits
- ✘ Segments closest to Bush are most likely to vote; segments closest to Gore, least likely to vote

✘ The Buchanan wild card

- ✘ Formidable without federal funds, more so with millions
- ✘ Strong appeal to *Hats Off, Country Comfort, Passionate Conservatives*; cross pressure on Catholic and union segments: *Yankee Pragmatists and White Liners*

✘ If we had to guess today ... Al Gore