Iowa Reapportionment News

COMPUTER VENDOR CHOSEN TO SUPPORT IOWA REDISTRICTING

Three computer vendors demonstrated their redistricting software packages to the Redistricting Technology Selection Committee and staff members on November 1, 1989. These vendors were: Election Data Services, Inc. (EDS), Washington, D.C.; Public Systems Associates, Inc. (PSA), Denver, Colorado; and Sammamish Data Systems, Bellevue, Washington. All of the vendors were able to adequately demonstrate the current capabilities of their systems, as well as answer many questions asked by the committee and staff members. Each vendor was supplied with a suggested demonstration agenda specifying several features which they were asked to demonstrate. After the demonstrations were completed, it was obvious that none of the vendors could demonstrate ALL of the features desired by Iowa. The committee decided, however, that EDS and PSA were able to demonstrate the more desirable features and were therefore asked to provide further information about their computerized redistricting systems.

The next twelve weeks involved detailed comparisons of the EDS and PSA systems. Committee and staff members scrutinized the software and hardware features of each vendor, as well as the support services each promised to provide. The staff also contacted many of the references supplied directly by both vendors, as well as several persons who were not referenced by either vendor. These references were generally supportive of both EDS and PSA respectively.

While the systems from EDS and PSA were considered the two best choices by the Redistricting Technology Selection Committee, it should be noted that there are significant differences between them. For example, the EDS system runs on personal computers. Since the legislature is already in the process of supplying legislative staff with personal computers, these computers used in the EDS system could be kept in service after redistricting is completed. This would result in a savings to the legislature in computer hardware costs. This was a definite plus in EDS' favor.

PSA, on the other hand, utilizes a larger minicomputer to run its redistricting system. This type of computer is currently not supported elsewhere in the legislature, and would therefore have potentially less value to the legislature after redistricting is completed. A big plus in PSA's favor was the fact that their redistricting computer program was able to demonstrate more features deemed desirable by the committee and staff members. In other words, the current edition of the PSA redistricting program would require only minor changes to make it totally acceptable. The EDS system requires some additional features to make it acceptable as the system to support Iowa's redistricting. Bearing these facts in mind, the committee and staff members continued negotiations with EDS and PSA, resulting in price reductions from the original cost proposals and promises from both vendors to update their respective systems as necessary to meet the requirements for redistricting specified by the committee and staff.

In December, the Redistricting Technology Selection Committee recommended that the Legislative Council should authorize the committee to set the maximum expenditure for a redistricting computer system at $600,000 and establish July 1, 1990 as the final date for the vendor to supply substantially all of the desirable software functions desired by the legislature. The Legislative Council authorized these recommendations, and both EDS and PSA were notified of these requirements. Both could meet the July 1, 1990 time constraint, but only EDS could match the $600,000 spending limit. PSA indicated that it could not equal the cost ceiling without substantial reductions in service to the legislature. This would result in the legislature or another outside firm providing some of the services that would otherwise have been done by PSA. In its final proposal, EDS did not reduce any of its support services, did meet the $600,000 spending limit, and agreed to provide the desirable software features by July 1, 1990.

On January 31, 1990, the Redistricting Technology Selection Committee met to make its final recommendation for a redistricting computer vendor to the Legislative Council. Senator Hultman and Representative Van Maanen supported PSA, while Senator Hutchins, Representative Arnould and Representative Chapman supported EDS. Therefore, EDS was recommended as the vendor to support Iowa's redistricting effort, and the Legislative Council approved this recommendation on February 1, 1990. Contract negotiations are being finalized.

TENTATIVE EDS TIMETABLE TO DEVELOP AND INSTALL REDISTRICTING COMPUTER SYSTEM

February-May 1990: EDS contract awarded and language negotioated.

May-June 1990: System development begins; Census Bureau TIGER/Line files acquired, checked and corrected; Precinct maps and election return data sent by Iowa to EDS; First computer workstations set up allowing for initial staff familiarization.

June 1990: EDS loads preliminary redistricting system and begins staff training.

July 1, 1990: Additional software features are demonstrated by EDS.

August-October 1990: EDS adjusts computer database to match corrected TIGER/Line files provided by the Census Bureau; EDS sets up remaining workstations and continues staff training.

November 1990: EDS collects 1990 election returns to incorporate into caucus databases.

December 1990: 1990 election return data loaded into caucus computers.

January-March 1991: EDS adjusts database to match post-census TIGER/Line files released by Census Bureau; Census Bureau population data delivered and loaded into database (tentative); Redistricting begins.

July 1991: Adjusted census population data delivered and loaded into database (tentative).

NEW STAFF POSITION APPROVED

In November, the Legislative Council approved a recommendation by the Redistricting Technology Selection Committee that the Service Committee should recommend hiring a temporary full-time research analyst to assist the redistricting staff. The addition of this research analyst will bring the number of Legislative Service Bureau staff working full time on redistricting to three.
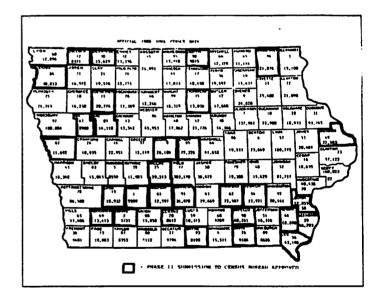
PHASE II COMPLETION LIST

Phase II of the 1990 Census Redistricting Data Program is proceeding on schedule in Iowa. As of April 6, 1990, all 99 Iowa county map sets have been delineated with the current voting precinct lines adjusted to conform with Census block boundaries and then returned to the Census Bureau in Kansas City. Whenever true precinct lines were adjusted by the Legislative Service Bureau staff

to conform to Census Bureau standards, approval from the relevant local jurisdiction was sought.

While most of the Phase II process is completed for the Legislative Service Bureau, it will continue on through much of the summer for the Census Bureau. Once they receive the completed maps from Iowa, they must review and update them to include annexations and boundary changes specified during the Boundary and Annexation Survey completed last year. The Census Bureau then seeks approval from the Legislative Service Bureau staff before making any permanent changes to the voting district maps.

Counties for which the Phase II submissions have been finally approved are shown on the map below. As of April 23, 1990, 29 counties have been finally approved.

POLITICAL SUBDIVISIONS NOT PARTICIPATING

Whenever voting precinct lines were delineated on maps to the Census Bureau, the applicable local jurisdictions were asked to confirm that the boundaries delineated were correct and that any adjustments made to conform to Census block boundaries were acceptable. If no response was received by the Legislative Service Bureau, two reminder letters were sent to the local jurisdiction, the last having a deadline at which date we would presume that all delineations were acceptable. The local jurisdictions which chose not to participate in confirming the precinct boundaries were: Anamosa, Centerville, Colfax, Marshalltown, Newton, Sac County and Warren County.

BUREAU DIRECTED TO KEEP SMALL CITIES WHOLE IN REDISTRICTING

The redistricting staff asked the Redistricting Technology Selection Committee to clarify an interpretation problem with section 42.4, subsection 2, Code 1989. This subsection states that "the number of counties and cities divided among more than one [legislative] district shall be as small as possible. When there is a choice between dividing local political subdivisions, the more populous subdivisions shall be divided before the less populous, but this statement does not apply to a legislative district boundary drawn along a county line which passes through a city that lies in more than one county." This passage is ambiguous when applied to towns split by township lines. The committee recommended and the Legislative Council approved that the computer database for redistricting should be developed so that generally smaller-sized cities will NOT be divided along township boundaries except for those divided by county lines.

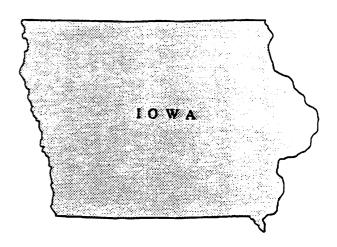## REAPPORTIONMENT TASK FORCE MEETS IN BOISE

The N.C.S.L. Reapportionment Task Force met in Boise, Idaho, on April 20-21, with discussions on a range of issues including the potential adjustment of the Census count by the Census Bureau to "correct" the overcount and undercount, the "New York Counts" campaign to ensure the best possible Census response, a Census Bureau update, comments from the newly appointed director of the Census Bureau, Ms. Barbara Everitt Bryant, and state progress reports on issues and activities. Mr. Gary L. Kaufman of the Legislative Service Bureau was one of the panalists on the last issue. Copies of Mr. Kaufman's presentation are available on request. The next meeting of the Reapportionment Task Force is scheduled for Baltimore, Maryland on June 28-30, 1990.

CENSUS BUREAU ESTIMATES DATA SIZE FOR IOWA

At Boise, the Census Bureau announced estimates of the size of their data products for Iowa. The number of precensus county block maps for Iowa was 1,715; the precensus TIGER/Line File will be 347.38 megabytes; the P.L. 94-171 population data files will be 72.96 megabytes on 1 reel of tape at 6250 bpi and the number of estimated printout pages for the Census population data is 6,400 pages!

LEGISLATURE ADDRESSES HOLDOVER SENATORS ISSUE

The 73rd General Assembly in the 1990 Session addressed the issue of holdover senators. Iowa has a constitutional requirement of having half of the senators elected at each general election. In the 1970's when the Supreme Court adopted the redistricting plan, they merely had half the senators run for 2-year terms to allow for staggered terms in subsequent years. In the 1981 redistricting bill, any senator who had only served 2 years of his or her 4-year term was allowed to continue to represent the new district as long as (1) they were not paired with another incumbent as of the filing deadline date for the primary election and (2) they were residing in an even-numbered senatorial district on this date. This technique allowed one paired senator to threaten to move all the way across the state to represent a vacant even-numbered senatorial district. The press quickly dubbed this person a "leapfrogging senator" and had a heyday on this issue. This session the Senate passed a bill to require the "leapfrogging senator" to move to a district that is at least contiguous to the district in which the senator resided at the previous election. The House attempted to include a provision requiring the holdover senator's district to contain 75% of the population of the senator's old district in order not to have the senator's term shortened, but the Senate prevailed (Senate File 2372).

COMPUTER HARDWARE & SUPPLIES FOR REDISTRICTING, Needed Before 6/1/90

Qty	Description	Unit	Total
2	AST-25 MHz 80486 EISA Tower Computer, 2Mg RAM (4 Mg Cap. on board)	$6,620.00	$13,240.00
4	AST-16 MHz 80386 SX Computer, 1 Mg RAM (4 Mg capacity on board)	1,810.00	7,240.00
2	NEC 5D Color Multisync Monitor (20"-1280*1024 resolution)	2,400.00	4,800.00
4	NEC 4D Color Multisync Monitor (16"-1024*768 resolution)	1,180.00	4,720.00
1	1.2 Gb CDC Wren 7 SCSI Hard Drive (requires SCSI controller below)	4,100.00	4,100.00
1	Pro Comp M-DCB SCSI Controller, Setup Software , and Cable	494.50	494.50
5	80 Mg Connor EDI Hard Drive	615.00	3,075.00
2	AST Super VGA (800*600) Video Display Controller	100.00	200.00
1	0-K Memory Board (holds 16 Mg of 1 Mg SIMM's)	520.00	520.00
10	1 Mg Ram Expansion (1 Mg SIMM's)	138.00	1,380.00
6	Microsoft Serial Mouse - 400 DPI Resolution (with Windows 286)	145.00	870.00
8	Additional Parallel Port	35.00	280.00
2	Additional Floppy Drive (5.25")	89.00	178.00
1	Tripp-Lite 1200 Watt Uninteruptible Power Supply (Novell approved)	700	700.00
6	Tiara 16 Bit Twisted Pair Ether-Net Adapter Cards	300.00	1,800.00
1	Synoptics 2500 8 Unit Network Concentrator	860.00	860.00
1	Mountain 2.2 Gigabyte Tape Backup + Adapt Tech 1540 SCSI Controller	5,465.00	5,465.00
1	Net Arc Full-Time Tape Backup Software	795.00	795.00
15	3M 2.2 Gigabyte Backup Tape Cartridges	30.00	450.00
1	Storage Dimensions LAN Store - 900 MG Read/Write Optical Disk System	6,500.00	6,500.00
2	900 Mg Optical Disk	360.00	720.00
5	Hewlett-Packard LaserJet Series /// Printers (HPGL-2 compatible)	1,595.00	7,975.00
1	Hewlett-Packard PaintJet XL Color Dot Matrix Printer 11"*17"	1,665.00	1,665.00
1	Hewlett-Packard HPGL-2 Emulation Cartridge for PaintJet XL	675.00	675.00
1	A-Size Media Tray for PaintJet XL (allows automatic paper feeding)	65.00	65.00
1	B-Size Media Kit for PaintJet XL (allows automatic paper feeding)	105.00	105.00
1	Hewlett-Packard DraftMaster MX (HPGL-2) E Size Plotter (w/roll feed)	8,405.00	8,405.00
1	Extended Systems ESI-2041C Share Spool (4 printer connection to LaserJet)	680.00	680.00
1	A-B-C Smart Switch for PaintJet Printer Sharing	100.00	100.00
14	Parallel and Serial Printer Cables	10.00	140.00
1	8-Pen Carousel for DraftMaster MX Plotter	73.00	73.00
20	Plotter Pens, 4 Bags Each Size-3P,5P,7P,3T, & 6T	5.25	105.00
1	Long Pen 6" Round Organizer (holds 30 pens)	34.50	34.50
1	Long Pen 6" Short Organizer (holds 30 pens)	32.25	32.25
1	A-size (8.5"*11") Paper for PaintJet XL - 250 sheet pack	17.00	17.00
1	A-size (8.5"*11") Transparency Film for PaintJet XL - 50 sheet pack	52.50	52.50
1	A-size (8.5"*11") Transparency Film for LaserJet /// - 50 sheet pack	19.00	19.00
1	A-size (8.5"*11") Plotter Paper for DraftMaster MX - 250 sheet pack	10.00	10.00
1	A-size (8.5"*11") Transparency Film for DraftMaster MX - 50 sheet pack	37.00	37.00
1	D-size (24"*36") Plotter Paper for DraftMaster MX -250 sheet pack	46.25	46.25
3	E-size (36"*48") Plotter Paper for DraftMaster MX -250 foot roll	27.75	83.25
6	Acco 50676 Surge Protector (with remote on/off switch)	60.00	360.00
6	QVS 3.5" Disk Holder & System Stand	15.00	90.00
6	Mouse Pads	6.00	36.00
6	Glass Glare Gaurds & Cleaner	128.33	770.00
6	3M Box of 10 3.5" HD Diskettes	25.00	150.00

TOTAL   **$80,113.25**