# Testimony of Cheryl L. Janey President Harris Corporation, Civil Business Unit

## Joint Hearing Oversight and Government Reform Committee Information Policy, Census and National Archives Subcommittee Wednesday, April 9, 2008 2154 Rayburn HOB 2:00 p.m.

Chairman Waxman and Congressman Davis, Chairman Clay and Congressman Turner, and members of this distinguished Committee, my name is Cheryl L. Janey and I am the President of the Civil Business Unit for Harris Corporation. Thank you for this opportunity to discuss Harris Corporation's role in supporting the U.S. Department of Commerce and the U.S. Census Bureau in the modernization of the 2010 Decennial Census.

Harris Corporation is an international communications and information technology company serving government and commercial markets in more than 150 countries. We have 16,000 employees, including nearly 7,000 engineers and scientists, with about 10 percent of them working here in the Capitol Region.

Harris is pleased to play a leading role in what is perhaps the single most critical period of transformation for the U.S. Census in its history. For two centuries, the Census had been administered as a largely manual process: Census enumerators went into the field with pen and paper and collected reams of population data. After the 2000 Census, the Bureau began one of the most important and complex transformations in its history: the modernization of the 2010 Decennial Census, to be achieved by transitioning from a culture of paper to one of automation. Two years ago this month, after a competitive bidding process, the U.S. Census Bureau awarded the Field Data Collection Automation (FDCA) contract, a major part of the bureau's overall modernization and automation program, to Harris Corporation.

Harris's role in the automation process is to provide the Bureau with the technology it needs to make this historic shift. Specifically, we have created the technology to automate

the Census processes and equip enumerators with handheld computerized devices. We are providing the systems integration resources and architecture to securely integrate all of these automation components of an electronic address database that, among other things, digitally maps the type, location, and name of streets, rivers, railroads, and other geographic features.

The Census Bureau wanted this and other databases to be available to enumerators in the field. Harris Corporation designed and refined mobile handheld computing devices to automate work in the field. Although a little larger, they are similar in design to the average off-the-shelf cell phone or Blackberry. With a little training, virtually anyone can use one effectively.

Public reports about the device's current readiness are based on an Address Canvassing Dress Rehearsal held about a year ago. The purpose of the rehearsal, in addition to validating the Census Bureau's business processes, was to provide a realistic field test of the first-production handheld devices and software release to identify any necessary adjustments in advance of decennial operations. We have defined those adjustments (primarily software changes) and have already successfully implemented many of them. Put simply, the handhelds will be ready to work in conformity with Census Bureau specifications.

As you know, the Census Bureau recently made the decision to use the handheld devices for Address Canvassing, but to revert to pen and paper for the non-response follow-up. I cannot speak fully to the rationale behind the Census Bureau's decision-making process. We were not involved in many aspects of that process. I can say, however, that there is more to the kind of wholesale cultural transformation that the Bureau is undergoing than technology alone. The kind of operational, organizational, and managerial changes required would present challenges to any organization, especially one with as deep a history as the Census Bureau.

One of the primary challenges since the inception of this contract is the lack of welldefined and finalized system and process requirements. These have changed dramatically over the course of this project, with an additional 400-plus new or refined requirements

issued just a few months ago – two-thirds of the way through the development process. Such late and ongoing changes in the requirements highlight the continual evolution on the part of the Bureau to determine exactly how the device should function in order to automate the historically manual processes of the Census Bureau. Understanding this provides some context for Secretary Gutierrez's conclusion that, not knowing what "unforeseen difficulties" may arise, Census Bureau officials are more comfortable addressing any such challenges through the paper process, with which they are more familiar. Given the large number of new requirements that have been recently issued, the Bureau appears to be making a cautious and considered decision to avoid the potential of encountering unforeseen challenges as they fully interweave automation into an historically manual operational process.

During our ongoing discussions with the Bureau and the Department of Commerce, we were informed that there was concern that the requirements given to us for non-response follow up may not be complete. In other words, we have designed what the Census Bureau asked for, but what they have asked for may not be what they need.

Let me be clear: This is not to cast blame in any direction. None of us envy the job of the Census leadership in having to determine, years in advance, every single step that must be transferred from a formerly manual paper process into one of automation. As reported by the Government Accountability Office (GAO) and the Census Bureau's independent consultants, this task was further complicated by numerous stakeholders being involved in the project who often called for competing requirements. While Harris prides itself on being an expert in information technology and systems integration, we have no authority to adjudicate the competing goals and requirements of internal Census divisions or stakeholders. That is an inherently governmental responsibility. We must rely on the policy experts to tell us what kind of requirements they need, and we can then design a product accordingly. That is what we have done.

Let me outline for the committee three primary factors we believe contributed to the decision revert to paper, based on our discussions with Census and Commerce officials.

### 1. Insufficient Requirements at the RFP

The first reason offered was that the Bureau lacked sufficient and well-defined specifications for systems and process requirements at the time it originally issued its Request for Proposals (RFP). In other words, they could not be entirely sure what they needed when they solicited bids, but because of tight deadlines moved forward anyway. During recent congressional hearings, it was asked why today's contract projections are higher than the original estimates. The answer is straightforward: We were asked to bid on a project lacking some of the baseline specifications, and the costs have increased as the scope of the project has increased since that original RFP was issued. A review of bids by other companies who competed for the FDCA contract will show that they were comparable to ours because we were all attempting to estimate costs for a project that lacked significant details and requirements.

### 2. Continual Requirement Changes and Additions

The second factor is a direct outgrowth of the first. As Census officials attempted to determine their needs, and the project evolved, they were compelled to repeatedly adjust and add new system and process requirements. We have faced *hundreds upon hundreds* of requests for new requirements over the past two years.

Every month Harris provides complete cost transparency with a view into cost, schedule and technical performance. We have been urging the Bureau for over a year to finalize requirements and have been working with them to that end.

As I have already mentioned, it was just this past January, two years after the contract was first issued, that we received more than 400 new and altered contract modifications. We are not talking about minor or cosmetic new requirements. Every change at this late stage of the process, no matter how small it appears on the surface, requires re-evaluating the system design in order to ensure that each new component is fully integrated into the overall system nationwide.

Aside from the complications involving technical changes and additions, we also incorporated a broad array of alterations and scope increases involving process requirements. These, too, contributed to increasing costs.

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To use just one example, I'd point to the Help Desk function. During a congressional hearing last week, questions arose as to why the costs for the Help Desk have outgrown the original estimates. It should be understood that our original estimates were derived from initial assumptions based on information provided in the RFP. The RFP assumed that field crew chiefs and on-location technical staff would be able to answer field enumerator calls; that, however, is not the case. Additionally, the number of handheld devices deployed for Address Canvassing more than doubled, and the number of field locations increased by approximately 10 percent – all after the original RFP was issued. Original estimates were that the Help Desk would need to absorb about 160,000 calls. The figure has since been revised dramatically upwards to more than 750,000. A much more robust help desk is now proposed, driven by requirements as they are expressed today. As the GAO has warned in at least four different reports dating back to 2006, this lack of clearly defined and finalized systems and process requirements is at the heart of the schedule delays and cost increases associated with the FDCA project.

## 3. Cultural Challenges in Transitioning from Paper to Automation

The last factor cited by Census and Commerce officials during our conversations was the cultural challenges faced by the Bureau in transitioning from paper to automation. In fact, "cultural overload" may best sum up the overall challenge this project has faced. It summarizes everything from underestimating the amount of resources necessary to carry out this transition to difficulties finalizing systems and process requirements to having the comfort level to move forward without more time to test the environment.

Combined with an organizational culture that has limited experience with automation, it is understandable that the Census Bureau would want to be fully confident that all final requirements had been considered and tested. Since this was not the case, the Bureau appears hesitant to move forward with an automated process for such a highly sensitive job as counting and tallying U.S. residents. To quote Secretary Gutierrez in full: "Our flexibility to respond to unforeseen difficulties is greater under the paper-based option because our ability to deploy people is greater and faster than the ability to manufacture additional handhelds on short notice."

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This challenge, however, is not a matter of technology – it is a matter of risk management. That is the same conclusion drawn by the GAO when it decided to categorize the Census project as "high risk" last month. Even going back two years to March of 2006, the GAO was warning that "Until the Bureau finalizes its operational requirements for the census and ensures that the FDCA request for proposal is consistent with the baseline requirements, the project is at risk of having changes to the requirements, potentially affecting its ambitious development and implementation schedule."<sup>1</sup>

Mr. Chairman, if I may, sir, I would like to end my testimony with words of support and encouragement for the Census Bureau. I have tried to the best of my abilities, and without casting any sort of blame, to explain the role of Harris Corporation as a systems integrator, as distinct from the far more difficult and complex responsibilities faced by the Census Bureau in leading the wholesale transition of that agency from a culture of paper to one of automation.

We should remember that historic strides have been taken in the Census modernization effort. Consider for a moment what has been accomplished thus far: The entire Census database has been successfully digitized. The Census Bureau now has GPS-anchored geomapping resources that provide satellite precision. An entire operations network has been put into place with unprecedented security measures to protect the private data of American citizens. Nearly 500 field offices are being successfully integrated into that automated infrastructure. Handheld devices are being readied to replace vanloads of paper for Address Canvassing. Harris is encouraged that automation and the adoption of new technology is moving forward, even if in a slightly more narrowly focused fashion than originally envisioned.

With these strides, the Census Bureau has achieved a set of enduring benchmarks that will form the foundation for continued automation and transformation going forward. This foundation will serve our nation well in the 2010 Decennial Census and beyond. We are

<sup>&</sup>lt;sup>1</sup> (Sources: Government Accountability Office, "Census Bureau Important Activities for Improving Management of Key 2010 Decennial Acquisitions Remain to Be Done," Page 11, March 2006, and "Significant Problems of Critical Automation Program Contribute to Risks 2010 Facing Census," March 5, 2008)

proud to be working alongside the fine men and women of the Census Bureau in that historic transition.

We also understand the importance of being good stewards of government dollars. We understand that they are the people's dollars, taxpayer dollars. I can assure you that we always have and always will continue to operate with the highest regard for this responsibility. The costs for this project have, in fact, increased. However, they have done so in proportion to the increased scope and requirements given to us over the past two years as this program has changed and expanded from its original scope.

Harris is committed to continuing its role as a valued partner helping the Census Bureau make the 2010 Census a success. With the new director, Dr. Murdock, in place at the Bureau, and Secretary Gutierrez at the Department of Commerce, along with the oversight and support of Congress, it is apparent that there is an ongoing commitment from all parties at the highest levels of leadership to making that goal a reality.

Mr. Chairman and Members of the Committee, I appreciate the opportunity to testify before you today. I look forward to answering any questions you may have.