Field Data Collection Automation in the 2010 Census

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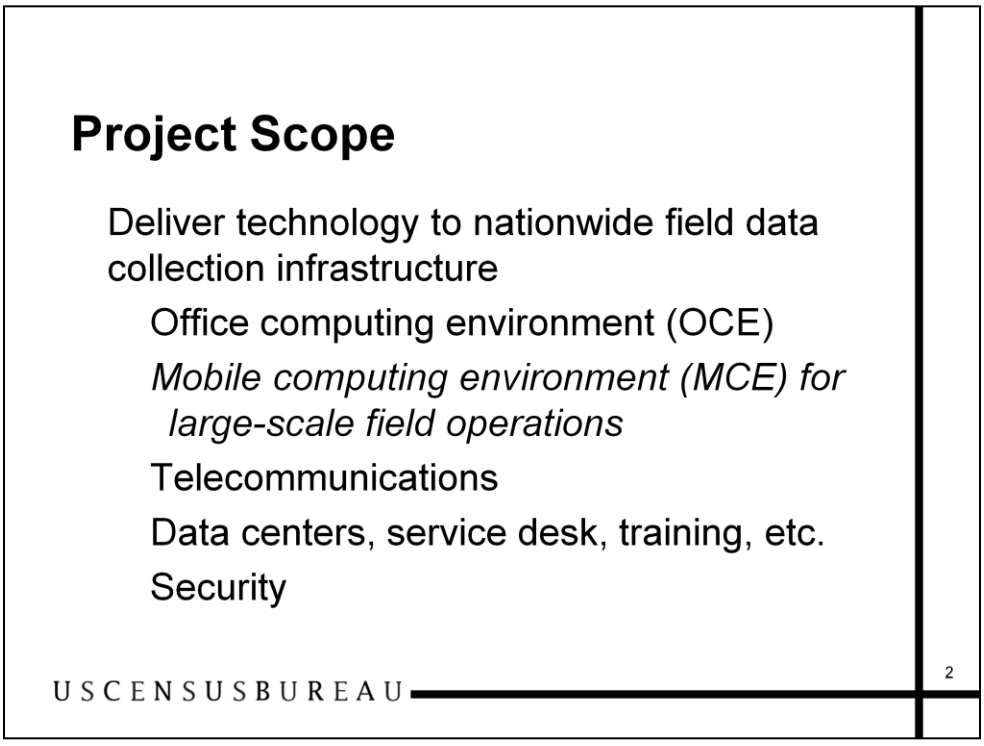


Large-scale: 500K field workers, 450 temporary offices

Must work first time, every time

Schedule-driven: we say "2010" but begins with DR AC in two months

•17 different DR field ops using FDCA

•Others (e.g., CFU) have no PV component . . . but there may be schedule or other linkages

•Still others (e.g., U/L) are not planned for DR but will be part of 2010

Interrelationships, interfaces, and dependencies are complex

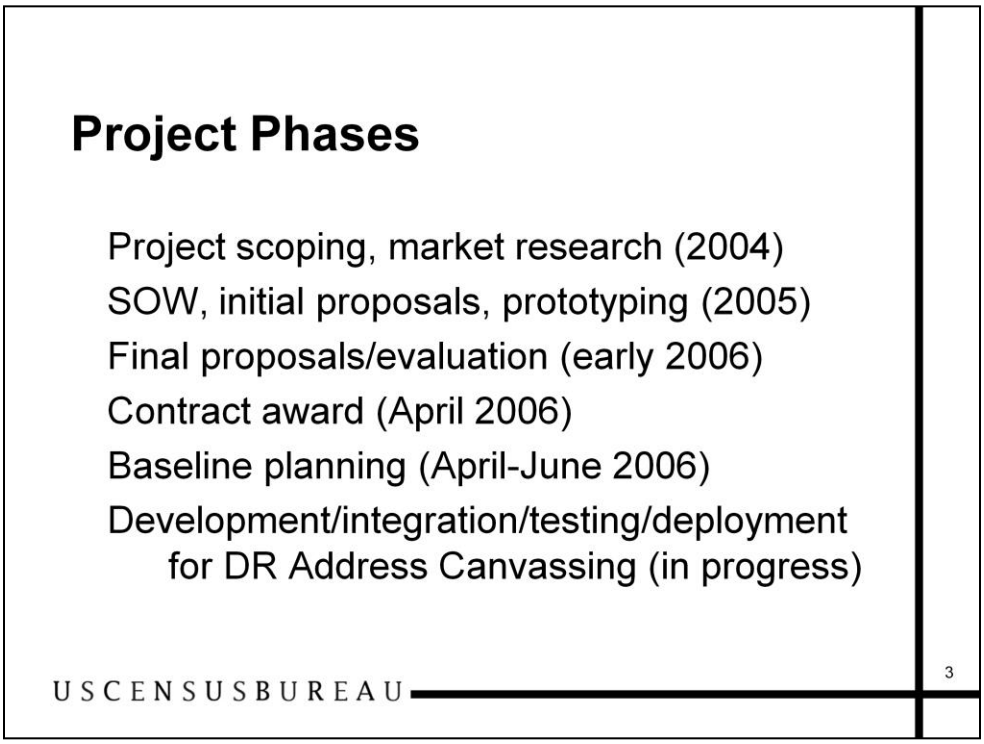
•Operations

•Systems

•Infrastructure

•Logistics/deployment/support

•Schedule/cost/functionality impacts



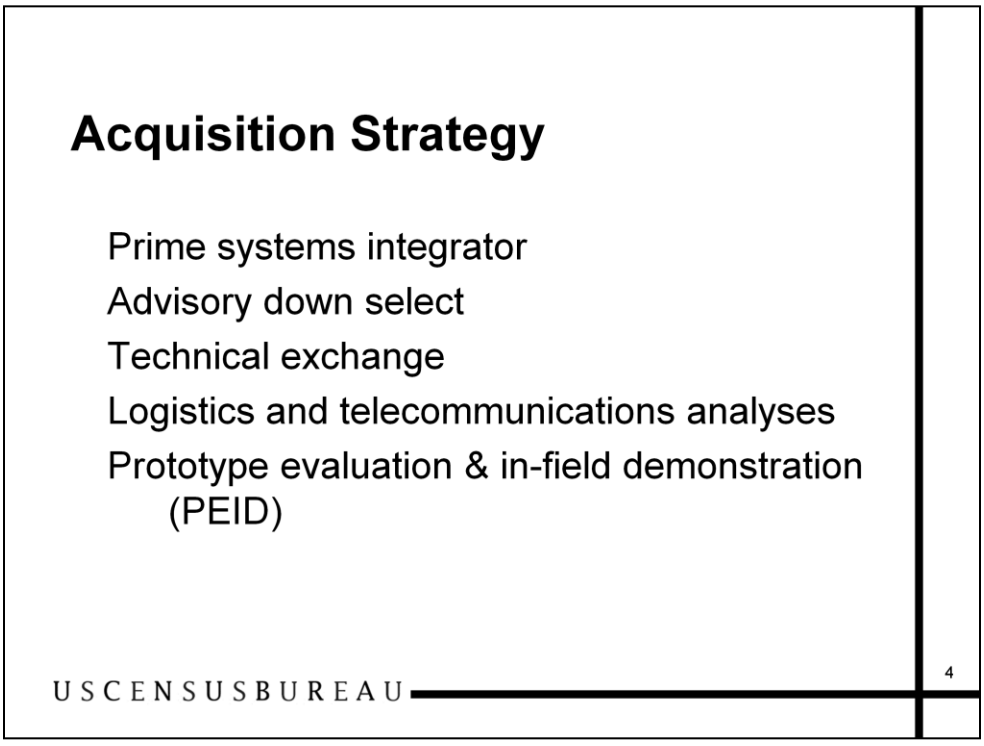
Market research showed technology available (I.e., sufficiently mature)

However, scale/scope of our planned mobile deployment pretty unique, even among the large technology providers

E.g., "nationwide deployment" = two or three users at several dispersed locations (making for a cleaner deployment, for example, one team doing sequential installs/cutovers)

Baseline planning period turned out to be more complex than anticipated

Short window for requirements analysis and decomposition, software and systems development, etc. (AdCan plus core functionality)



Advisory down select process included a brief technical write-up on perceived challenges

Requiring separate, detailed logistics and telecommunications analyses intended to send similar message to vendors/provide reassurance to stakeholders re scale/scope/deployment challenges

•These analyses had to be supported by a model and/or simulation

PEID = similar to operational capability demonstration—but more comprehensive

Prototypes were functional, including MCE (with transmissions), OCE, training, security

E.g., work assigned/transmitted thru OCE, assignments received by CLs/listers, listing conducted on HHCs, completed work & payrolls transmitted from HHCs/received at OCE, management reports available via OCE

Communicate/clarify Census high-level functional requirements

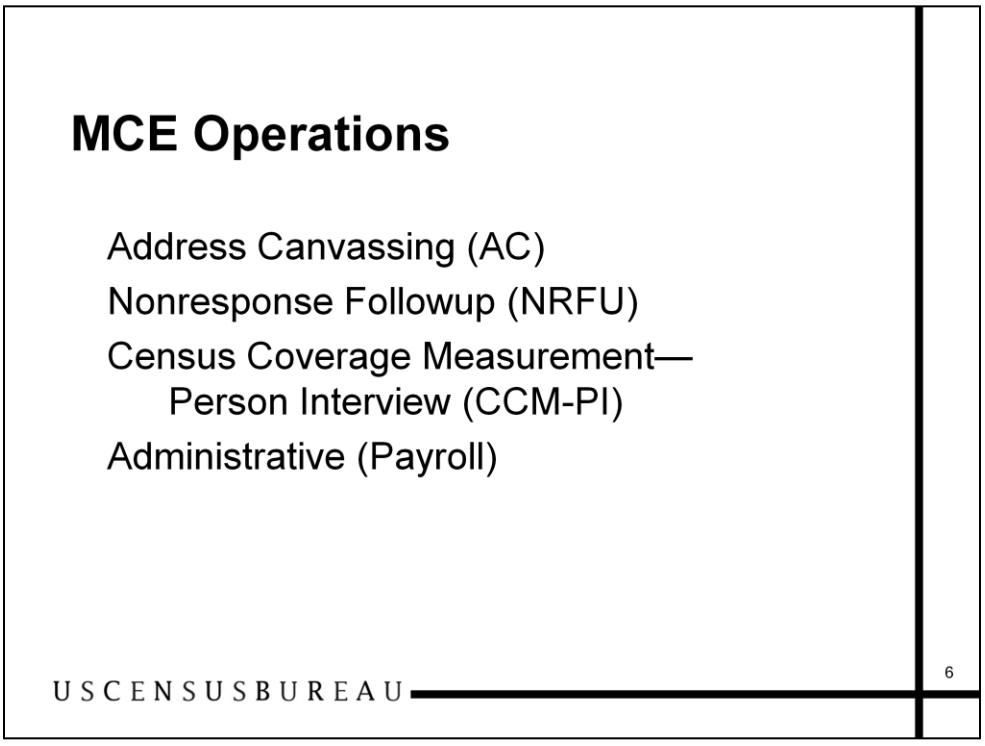
Communicate/clarify field challenges

Reduce software development schedule risk

FDCA Systems Integrator

Harris Corporation
Melbourne, FL

Assured Communications™ for the 21st Century

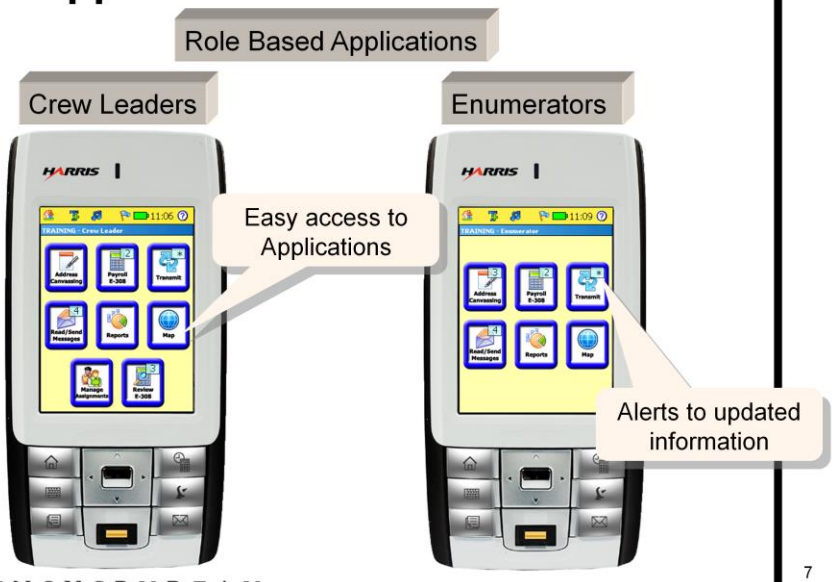


Another challenge: re-use of HHCs across operations

Central re-fit of AC handhelds for NRFU

Redistribute portion of NRFU handhelds in field for CCM

HHC Applications



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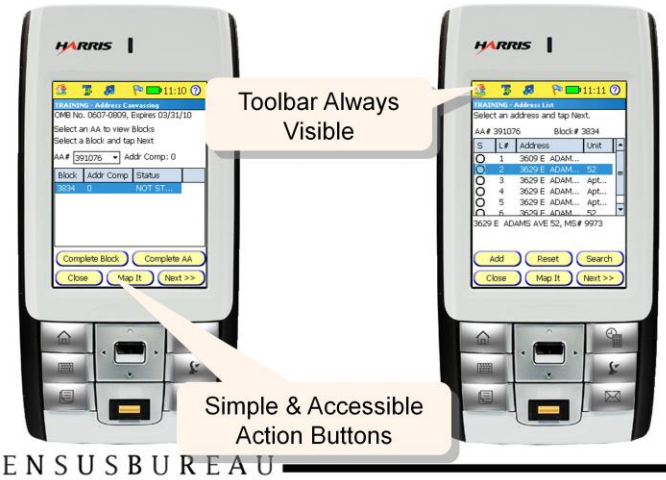
HHC Address Canvassing Ops

Select Assignment Block

Select Housing Units to Canvass



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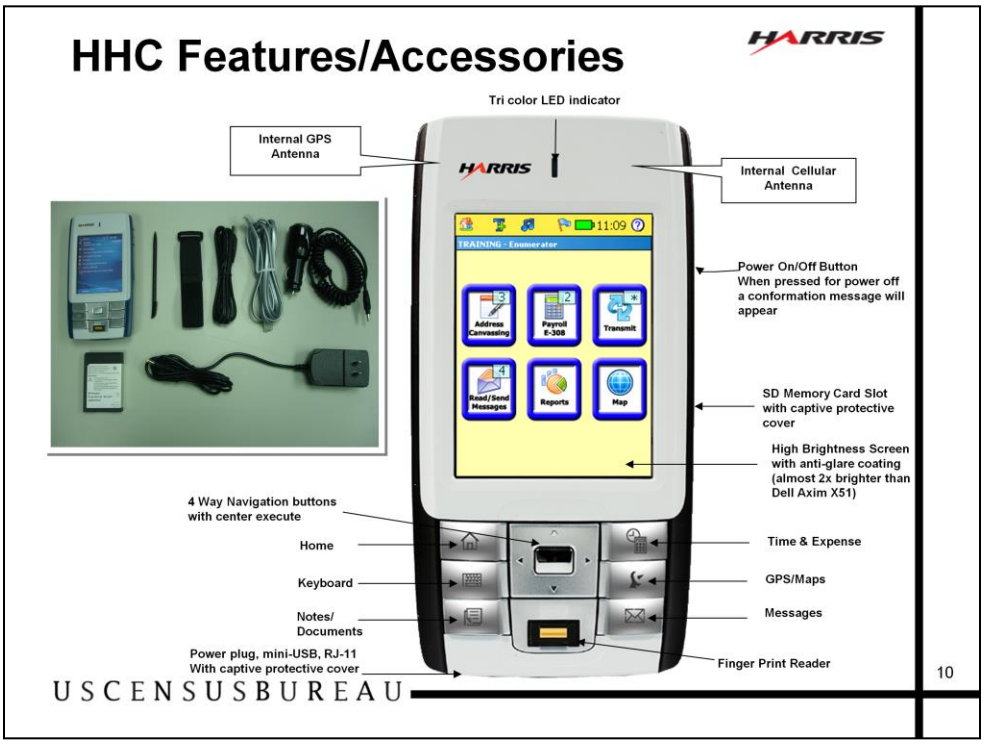
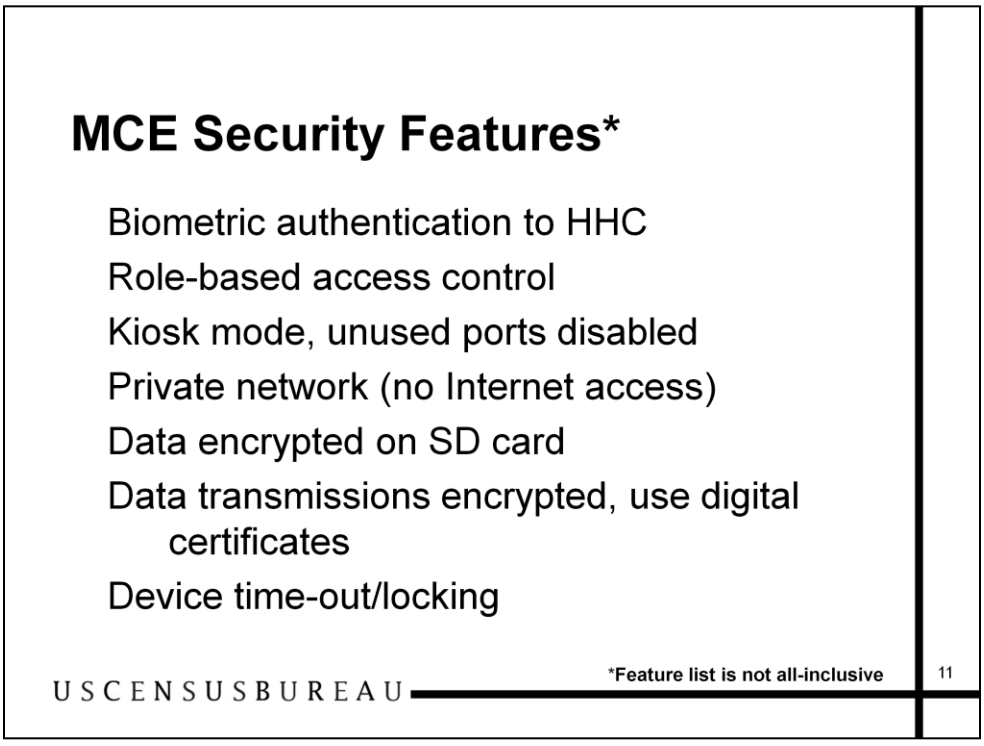
HHC Mapping Ops

Capture Accurate Locations of Housing Units and Streets



INTEGRATED UNIT—basically, no moving parts, no duct tape



DEFENSE IN DEPTH strategy

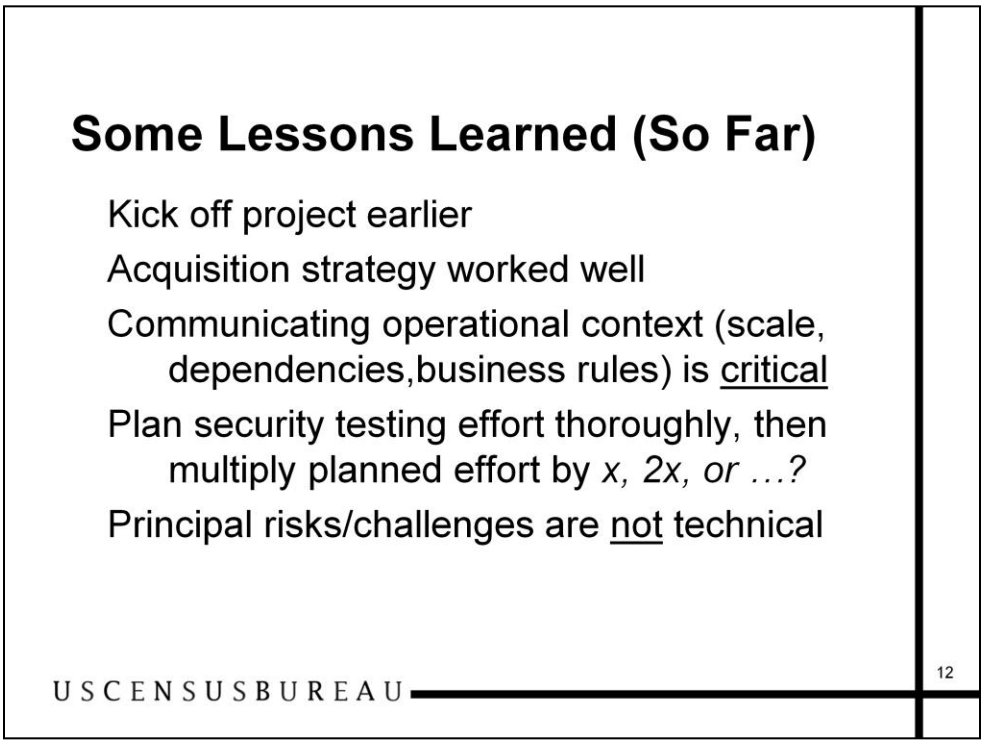
Secure operating environment: only our applications will run
User cannot add/modify software, reach Internet, etc.

Network authentication requires enabled telecom account, matching of certificates, etc.

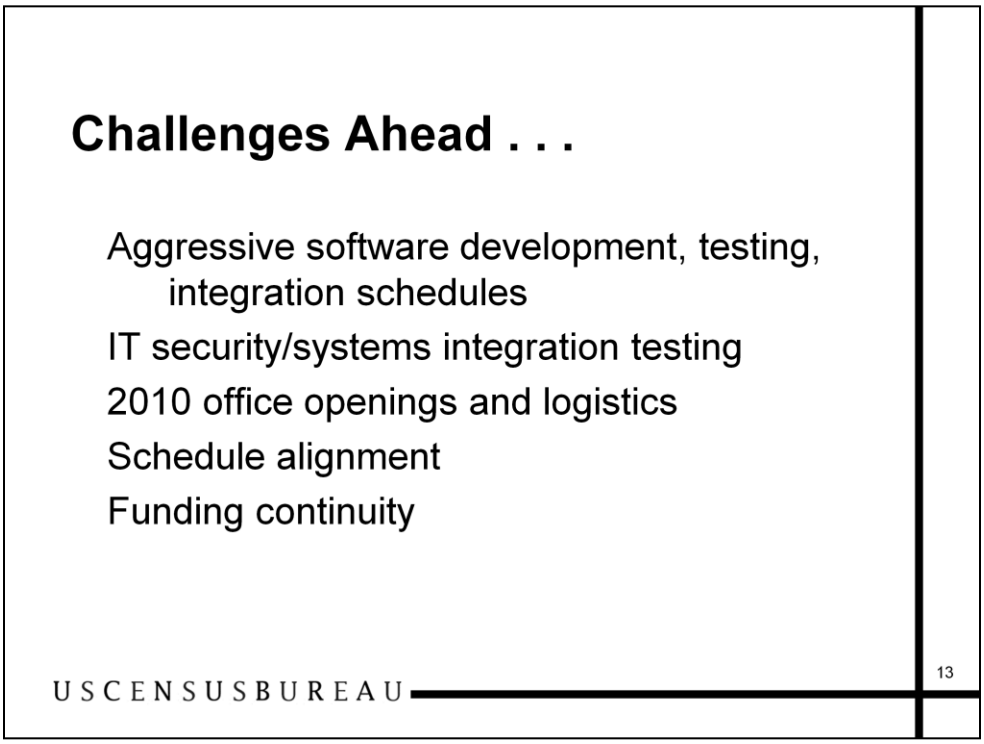
Secure transmission environment
FIPS 140-2 compliant encryption
Private network uses SSL protocol

Additional measures for NRFU:

- **2-factor authentication (biometric plus challenge)**
- **GPS tracking, poison pill**



One example of ST&E scale (in addition to all the paperwork): examine&interview and test phases cover some 716 items across the various families of security controls in NIST Special Publication 800-53A



These are not new issues (they were identifiable pre-award) and they are not going away

"Schedule alignment" refers to addition of a much broader IT stream to operational preparations

Normal IT lifecycle may not always line up well with training development, kit preparation, etc.

Questions?

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