2016 Census Test – Enumeration (COMPASS)

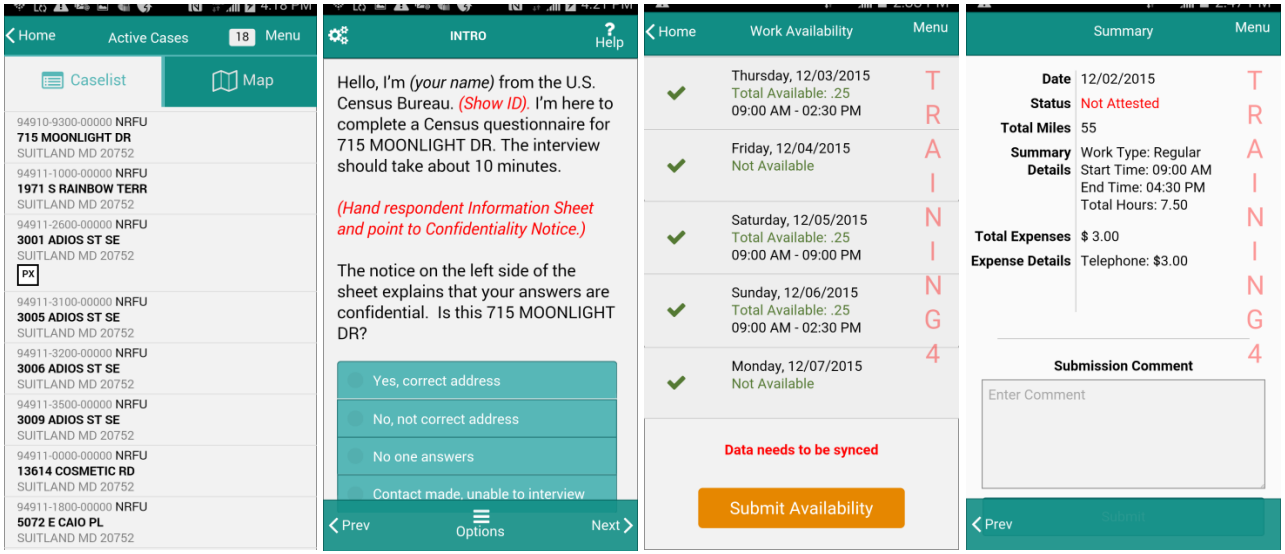
Non-Response Follow-Up (NRFU) Operations

What is COMPASS?

The COMPASS application is being fielded for the 2016 Census Test to collect person interview responses from households not responding to Internet self-response or printed paper Census questionnaires. The COMPASS will also collect time and expense data and enumeration work availability to optimize case assignments.

Key Screens

Active Caselist, Sample Questionnaire screen, Work Availability and Expense & Time



Operational Feature Highlights

- Integrated Case Management, Mapping, Contact History, and Questionnaire (Enumeration)
- Near real-time updates of late returns, case assignments, and contact strategies
- Operates in disconnected and connected states
- Supports Android and iOS

Stakeholders

- 2020 Research and Planning Office
- Decennial Statistical Studies Division
- Nonresponse Follow-up Design and Operation
- Field Division and Population Division
- Application and Development and Services Division
- Office of Information Security

Collaborative Development

- Agile (Iterative) using Scrum Method
- Integrated Project Team
- Demonstrations and evaluation by Stakeholders every 2 weeks

2016 Enhancements

- Revised user interface
- Korean and Chinese Language Capability
- Collection of usual home elsewhere
- Additional Content Edits
- Collection of Multi Units
- NRFU Reinterview

Security

- FIPS 140-2 (Encrypted Data at Rest)
- SSL (Encrypted Data in Motion)
- Respondent Data Removed on Case Completion
- Storing credentials in the native key stores for offline mode

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United States Census Bureau | FUTURE ON Activating Change.

Technical Goals

- ✓ Mobile First Approach
- ✓ Maximize Re-Usability
- ✓ Maximize cross-platform with HTML 5 (HTML, Javascript and CSS)
- ✓ Minimize 3rd Party software requiring distribution licensing
- ✓ Minimize native programming requirements
- ✓ Use C/C++ when needed, pure platform native when necessary
- ✓ Leverage industry standards and best practices
- ✓ Primarily Single Cross-Platform Source Code Base (~95%)
- ✓ Application Wrapper (~5%)
  - – Secure Data Persistence (FIPS 140-2)
  - – OS Integration and Application installation
  - – Communications Management
- ✓ Implements
  - – De-Coupled Standardized Interfaces and Web Services
  - – Interpreted XML Questionnaire Specifications

Platform Features

- Adaptability – Supports ***Multiple*** Operating Systems, Form Factors, UXs, Switchable Layouts and Themes
- Standardized requirements specifications and interfaces leveraging XML and Web Services
- Designed for data collection operations while either connected or disconnected from the internet
- Multiple questionnaires supported through validated XML Specifications dynamically interpreted and displayed
- Rules based Automatic transmissions and synchronization including scheduled times and manual capability
- Supports questionnaires specification in multiple languages
- Deployable as a mobile application on iOS and Android
  - o Offline On-Device Training Mode available
- Access to device specific hardware including GPS, Accelerometer and Storage
- Leverage JAVA/XML processing features for data exchange via staging tables
- Modularize the server components for scalability and distributability