This workshop, for intermediate users of the Census and Survey Processing System (CSPro), will focus on building CAPI (Computer Assisted Personal Interviewing) applications for enumeration using Android tablets and smartphones. Participants will learn about ways to adapt survey instruments to smaller screens, to ensure data quality through integrated data checks, and to control the user interface and program flow using logic programming. Participants will also learn to build tools for survey management, tracking, and data transfer.

This workshop focuses on processing a population census or demographic survey, but participants are encouraged to bring any questionnaire relevant to their job responsibilities. It will be conducted in a hands-on, product-oriented environment. Each participant will receive the latest version of the CSPro software and will have exclusive use of a computer and a tablet or smartphone.

**Course Content**

- Designing CAPI applications in CSPro for Android
- Response validation using advanced logic programming
- Controlling the flow of CAPI applications
- Dynamic customization of questions, responses, and forms at runtime
- Capturing and using GPS coordinates
- Launching other Android applications to take pictures, view multimedia, and display maps
- Managing data flow for CAPI surveys
- Tracking enumerator progress and efficiency
- Creating menu and control systems for enumerators and supervisors
- Synchronization of program and data files between Android devices and Internet servers
- Peer to peer synchronization between Android devices in the field with no Internet connection
- Designing multi-lingual CAPI applications

**Audience and Prerequisites**

This workshop is oriented toward computer programmers and IT professionals who currently use CSPro to implement CAPI or key from paper data processing systems and who desire a deeper understanding of techniques for implementing CAPI applications on Android. This course is not geared toward subject-matter specialists, though some may find it useful if they are heavily involved in CSPro data processing tasks. Ideally, participants will have fully processed at least one census or survey in CSPro and can easily write basic CSPro logic.

**Date:** October 28 – November 8, 2019  
**Place:** U.S. Census Bureau Headquarters  
Suitland, Maryland (near Washington, D.C.)  
**Tuition:** US $3,000

Apply early. The workshop will be limited to 15 participants. Those who complete the application requirements will be accepted on a first-come, first-served basis. For more information e-mail pop.international.workshops@census.gov.