



FULL DAY PRESENTATION OUTLINE

FULL DAY PRESENTATION (MIN 6 HRS, UP TO 7 HRS WITH Q&A SESSION)

COURSE TITLE: In depth review of Fundamental Concepts Related to Cell Phone Analysis

- a. Students will obtain a basic understanding of cellular network operations, cellular radio frequency theories, and cell phone provider operations. Students will learn what information is available from each cell phone provider, how to obtain that information, and how that information appears in the respective records. The legal process (use of subpoenas, court orders and search warrants) related to obtaining historical data sets will be demonstrated using actual court filings and case examples. Training will be provided on additional sources of information related to phones but not specifically from cell phone providers such as Google, Apple, various cellular applications and motor vehicle telematics. Additional topics include overview of NDCAC cell site database and tools, overview of cell mapping software, tower dump explanation with case example, and IPV4 & IPV6 explanation and overview. Instruction on using this information in realistic investigative scenarios will enable attendees to immediately recognize situations where cellular analysis will benefit case pleadings or investigations.
- b. The course will be taught by at least one or possibly two PCA instructors (depending on the size of the audience and/or topics to be covered). All PCA instructors are certified by the FBI Cellular Analysis Survey Team (CAST) and have been recognized in Federal and State Courts as “expert witnesses”. Instructor biographies are available upon request.

- c. This course includes 6-8 hours of instruction with case examples. Allowing for administrative issues, breaks, lunch and other matters, the course will occupy one full (8 hour) duty day.
- d. The presentation is to be taught at facilities capable of comfortably seating multiple attendees. Audio visual support (large screen projector, microphone, and speakers) is the responsibility of the sponsoring entity.
- e. The presentation may have an unlimited number of attendees; however, PCA reserves the right to cancel presentations that fall below the minimum attendee threshold (if part of the services agreement). Attendee recruitment, registration, billing, and other related tasks are the responsibility of the sponsoring agency.

TOPICS COVERED:

- 1). Overview/introductory comments/introductory slides
- 2). Case Study (well known, national or regional investigation)
- 3). Introduction to historical analysis & techniques, cell towers examples, call detail records (CDRs) overview, drive testing (basic understanding, when to use)
- 4). Review of cell mapping methodologies and supporting studies, admissibility of evidence, acceptance of analytical methodologies within legal and scientific communities
- 5). How to obtain cellular records and legal considerations pertaining to each
- 6). Service providers (retention periods, nomenclature, CDR examples)
- 7). Cellular applications overview (Facebook, Instagram, TextNow, etc.)
- 8). Time zone considerations & conversion tools
- 9). Three quick Excel tips that every user should know
- 10). Overview of available mapping software
- 11). Tower Dumps with two case examples
- 12). Timing Advance/advanced data sets with case examples
- 13). Drive testing with case example
- 14). Introduction to VIOP situations, IPV4 and IPV6 issues
- 15). Google techniques (location data, geofence, Google suite data) with case examples
- 16). Google Takeout overview with case example
- 17). Motor vehicle applications and vehicle telematics
- 18). Layering concepts
- 19). Cell phone forensics

20). Real time analysis & tracking with case example

21). Overview of PCA and services.