Homeland Security

Interoperable Communications ICTAP Technical Assistance Program

Office of Emergency Communications

Communication Assets Survey and Mapping (CASM) Tool

Short Introduction

Outline

- **Overview**
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  - Usage
- **CASM Benefits**
- **CASM Features**
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CASM: General Information

- **CASM tool was released 18 July 2005 for general use by Urban Areas that received grants from the Department of Homeland Security, Office of Grants and Training and who had requested ICTAP services.**

- **CASM is composed of two web-based software components:**
  - Communication Assets Survey – CAS (data collection)
  - Communication Assets Mapping - CAM (interoperability analysis)

- **Access to the CASM tool may be initiated by an urban area or state. Once initiated, individual access to the data that is entered for an urban area or state is managed by the initiating party.**

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CASM: Purpose

- **Provide a tool to assess public safety communications and interoperability.**
  - A single database to collect information about land mobile radio systems, other interoperability methods and how they are used by public safety agencies within an urban area or state.
  - A method to display the data.
  - Tools to analyze the data and visualize interoperability gaps in accordance with the SAFECOM Interoperability Continuum framework.

CASM: Security

- **Three primary components to security**
  - Data is stored on a server at a DoD facility, subject to standard DoD security measures, including periodic internal probes.
  - Utilizes HTTPS (http protocol with secure sockets layer) which encrypts the data as it travels over the internet.
  - Controlled Data Access; all users have individual user accounts
    - Each account has access only to the urban area or state they are associated with.
    - Strong passwords are enforced.
    - 3 Strikes Rule: after three unsuccessful attempts to login with an incorrect password, the account is locked until the user requests an administrator to unlock it.
    - User account creation is controlled by the urban area or state.

CASM: Usage (as of Feb 2009)

- **Currently 60 Urban Areas (UAs), States and Territories setup in CASM**
  - 48 States and Territories
  - 16 Urban Areas
  - 3 National Views (National Guard, CEDAP, and FEMA)
- **Currently more than 2100 CASM user accounts**

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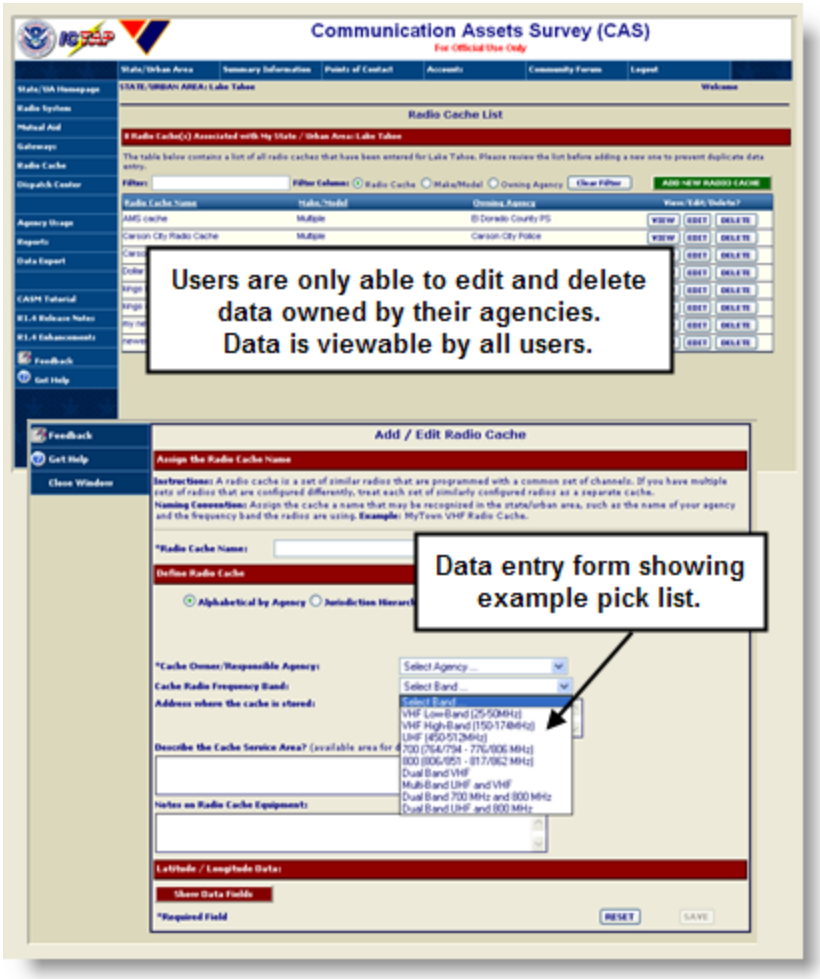
CASM: Benefits

- **Using CASM, your Urban Area or State will benefit by:**
  - **Sharing Data**. CASM makes communication assets and interoperability data available to authorized users within an urban area or state. Assists participating public safety agencies in understanding the interoperability methods used by neighboring agencies.
  - **Access to Up-to-Date Data**. Repetitive data collection efforts need not be conducted once data has been entered into CASM. Maintenance of existing data is easy and may be done at any time.
  - **Identifying Gaps**. CASM provides a number of different ways to visualize potential interoperability between agencies in an urban area or state. This information may be used to design solutions to interoperability gaps.
  - **Reporting Options**. CASM provides eight different pre-formatted reports that may be converted to standard word processing or spreadsheet documents for further customization by individual users.

CASM: CAS Features



Assets Inventory

- Web-based data collection component. All that is required is a web browser, such as Internet Explorer or FireFox.
- Data is entered into a single database by geographically disparate users, where and when it is convenient.
- Form-driven data entry with numerous pick-lists and prompts to assist users in entering uniform data.
- Data duplication is minimized; data entered on one form reappears on other forms as selection choices.
- Data entry process is organic; when one user enters data, it is viewable and, in some cases, selectable to other users.
- Many opportunities to enter notes and comments.
- All assets may include a Point of Contact for reference.

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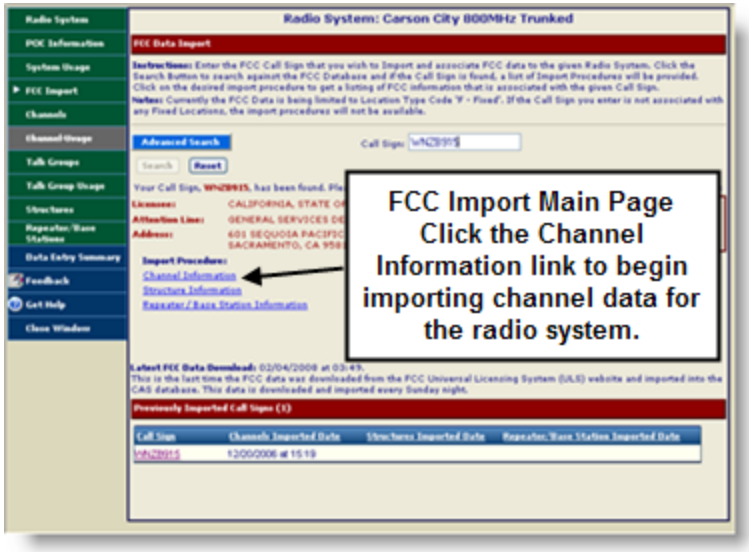
CASM: CAS Features

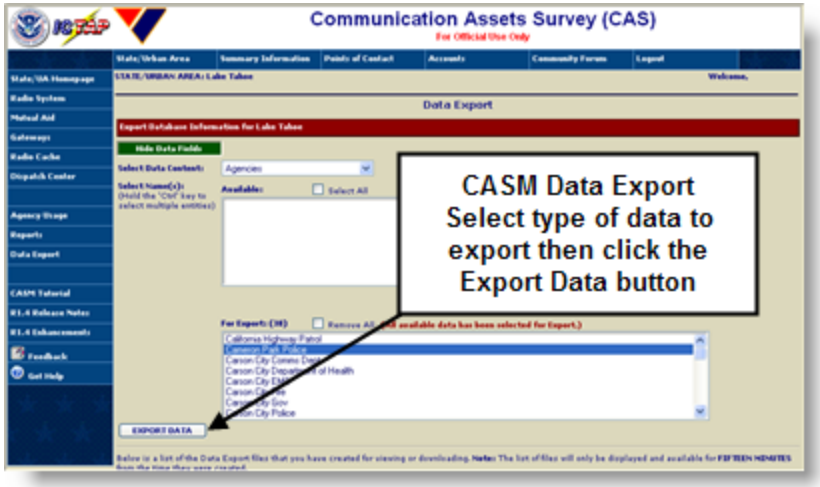
FCC Data Import

- Import data from the FCC database into CASM to populate channels, structures and repeater/base station information for a radio system.
- Data may be selected, validated and modified before it is imported into CASM.

Data Export

- Data may be exported from the CASM database to tab separated files for use in MS Excel or your own custom application.





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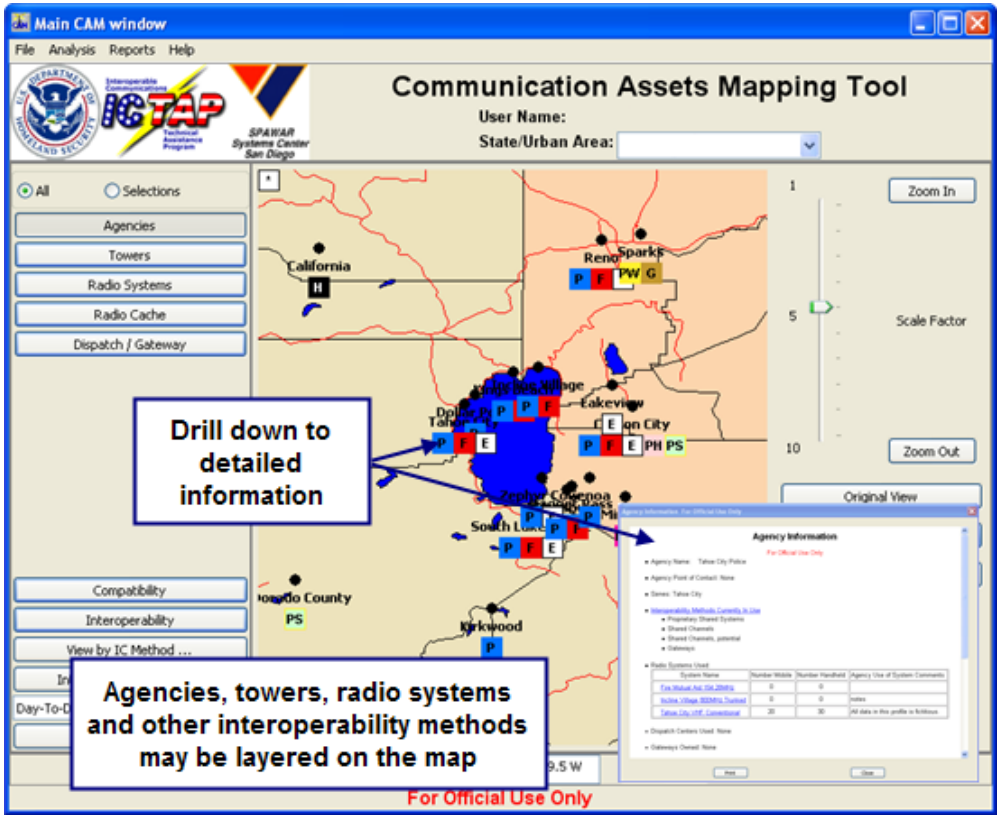
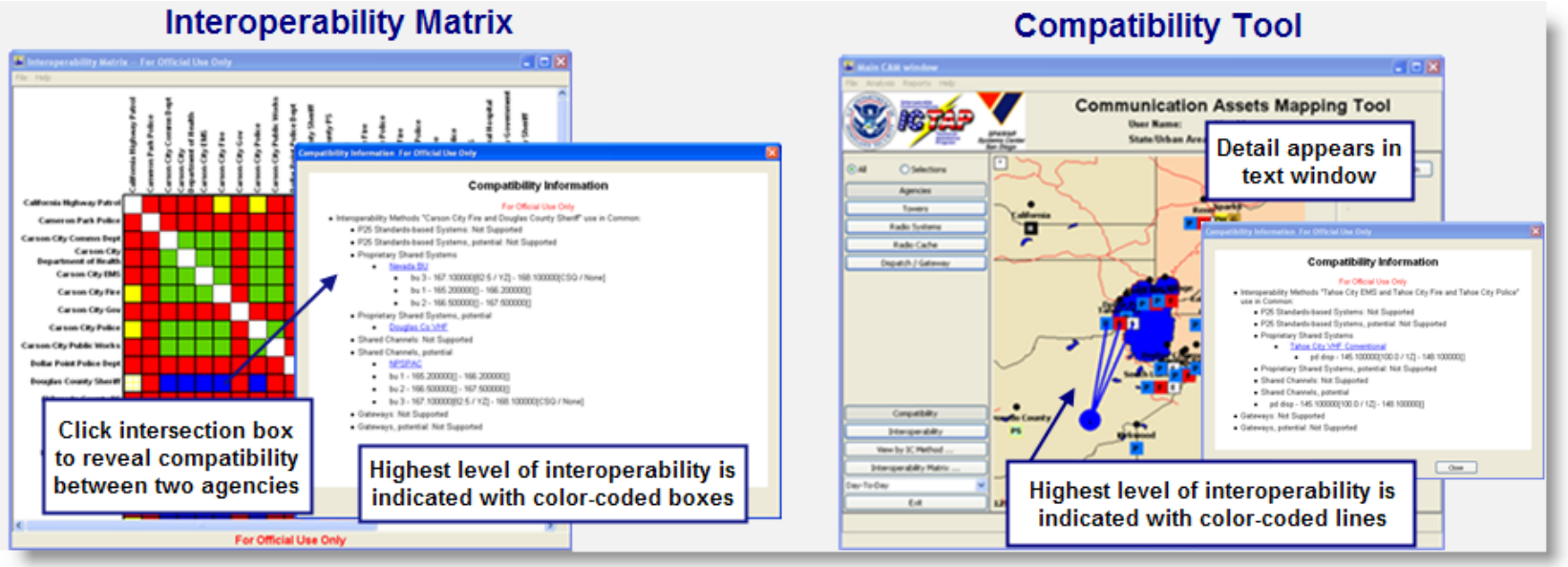
CASM: CAM Features

Assets Display

- Web-based application installed on user's computer. CAM retrieves the newest data entered through the CAS component each time it is launched.
- Agencies, communication assets and interoperability methods are viewable in a map-based interface.
- Detailed information is available by clicking map icons and "drilling-down" through text screens.



CASM: CAM Features



Interoperability

- Urban area or state Interoperability is displayed in a clear, color-coded format.
- Inter-agency Interoperability is illustrated using the *Interoperability Matrix or Compatibility Tool* and is calculated based on data entered by agency representatives.

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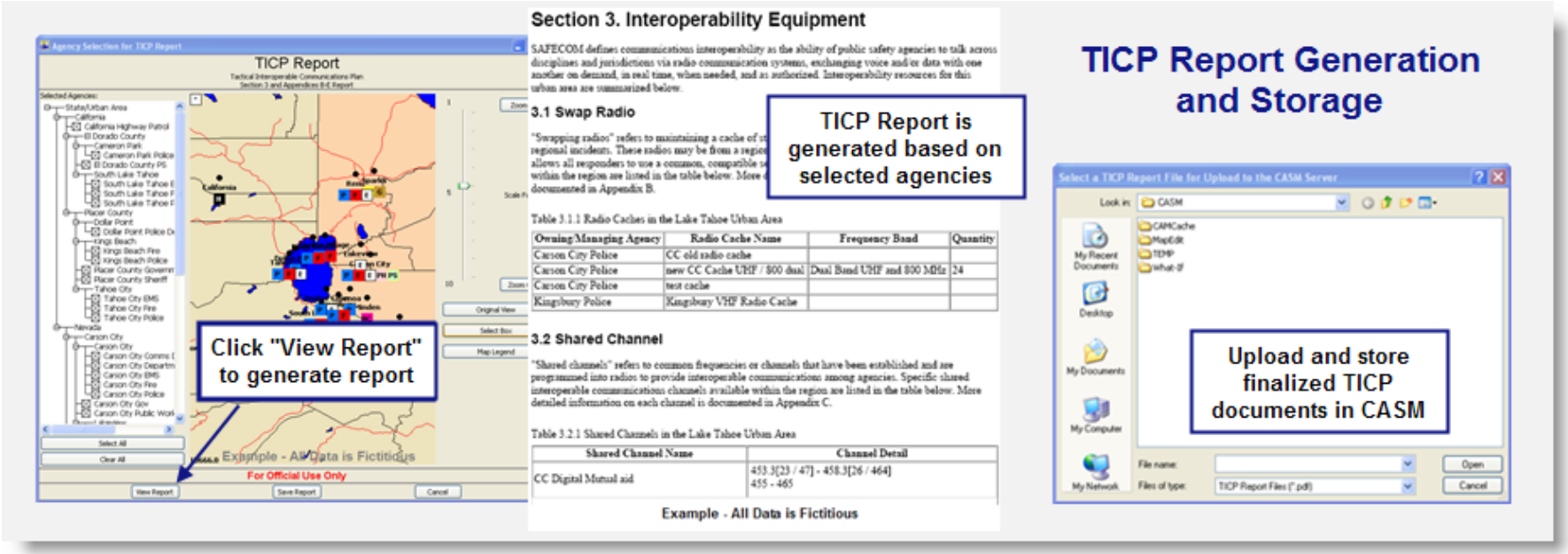
CASM: CAM Features

TICP

- Interoperable Equipment portion of the Tactical Interoperable Communications Plan (TICP) Report can be generated directly from CASM data [Section 3 and Appendices B-E]
- Finalized TICP documents may be uploaded and stored in CASM



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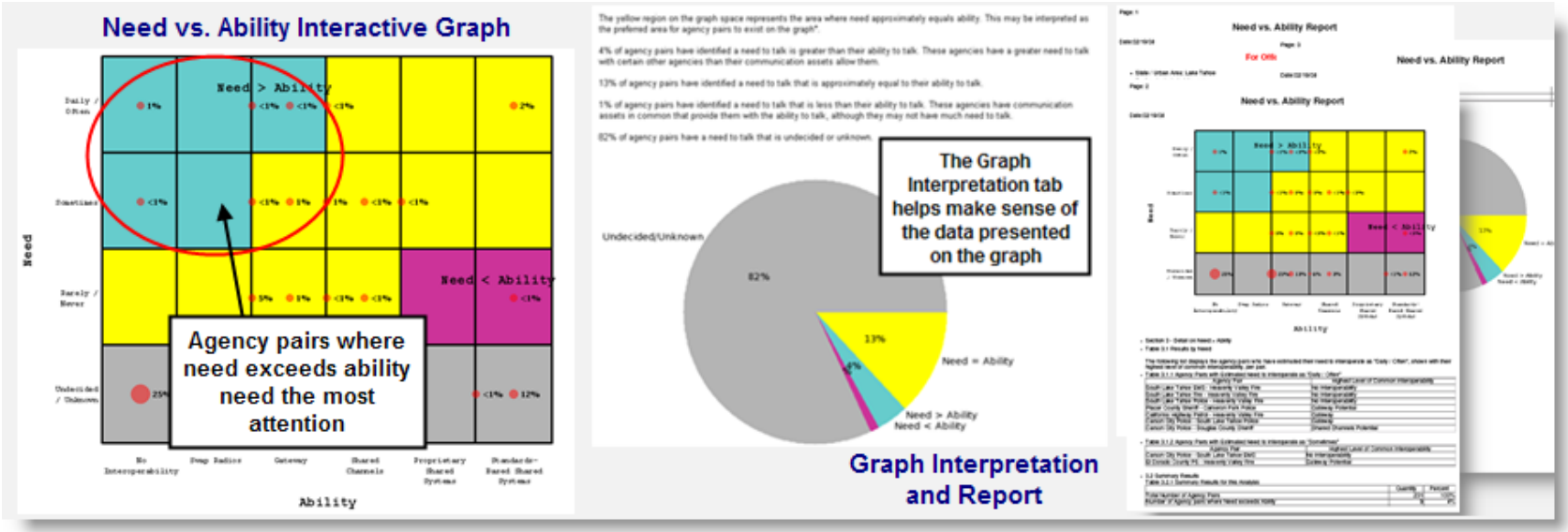
CASM: CAM Features

Need vs. Ability Analysis

- Identify Interoperability Gaps
  - Compares agencies' stated need to talk to each other on a day-to-day basis with their ability to talk based on interoperability calculated by CAM.
  - Find agency pairs that have the most need to talk, but have the least ability.
- Interactive graph with printable graph interpretation and report



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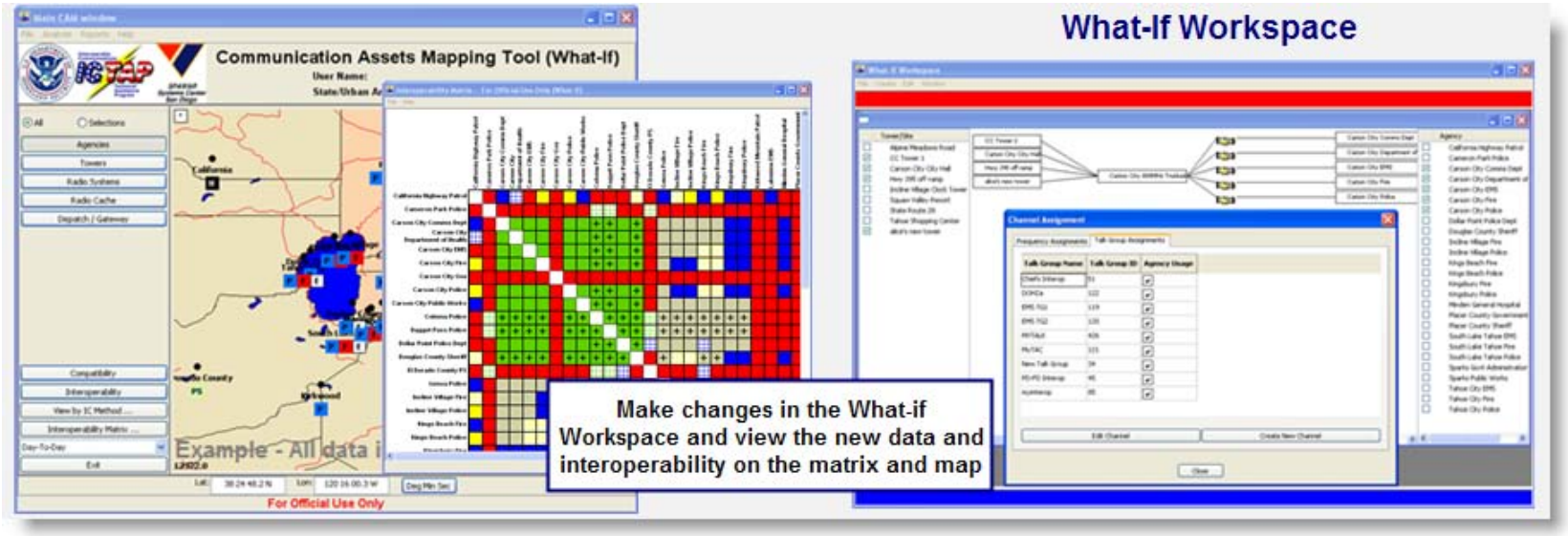
CASM: CAM Features

What-if Feature

- Enhances Interoperability Planning and Disaster Recovery Planning
  - Model new systems considered for acquisition, optimize existing systems or plan elimination of systems/devices. Visualize changes to interoperability.
- Easy to use. Enables users to make temporary changes to data without impacting the “real” data in the database.



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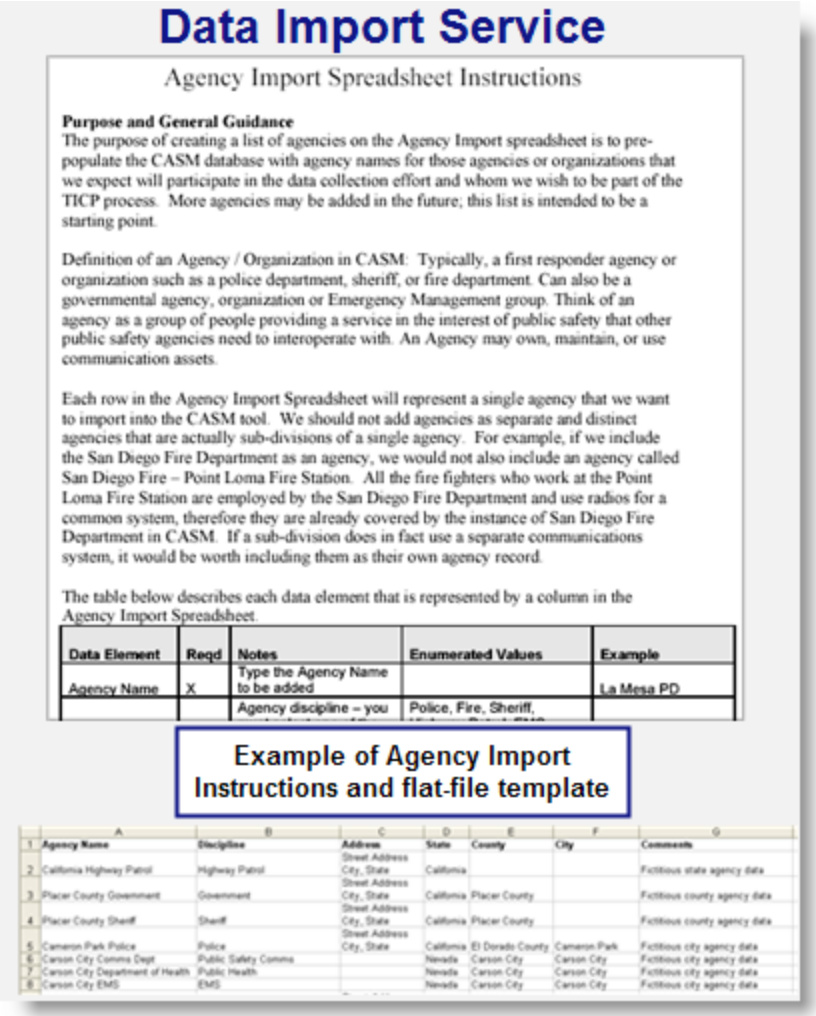
CASM: Other Features

General Data Import Service

- **Import data from local databases into CASM**
  - Agencies, Channels, Talk Groups, Towers, Repeaters, Dispatch Centers and Points of Contact lists may be imported.
  - Users convert data from their database(s) to a CASM flat-file template and submit for import.
  - Data imported into CASM is not synched with local databases.



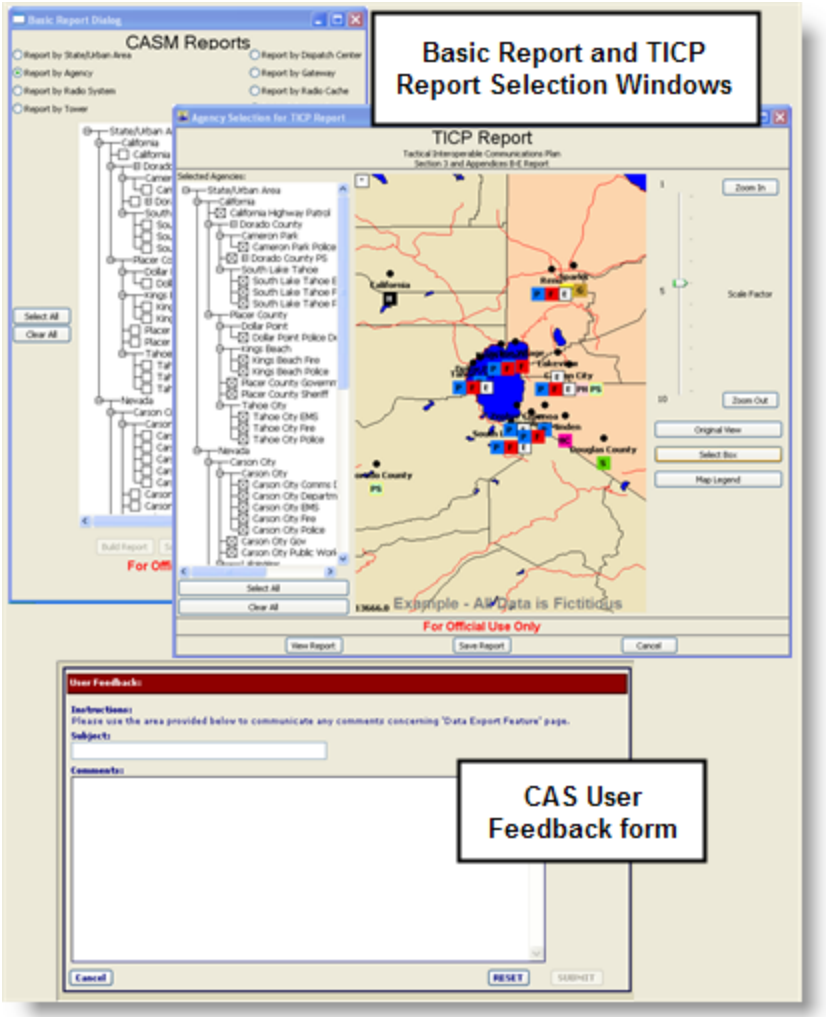
CASM: Other Features

Reports

- Comprehensive reports can be generated, printed and saved.
- TICP Report (Section 3 and Appendices B-E) may be generated directly from CASM data.

User Feedback

- CASM is continually improving to meet the needs of the user community. You can assist by submitting your ideas and suggestions directly to the CASM development team.



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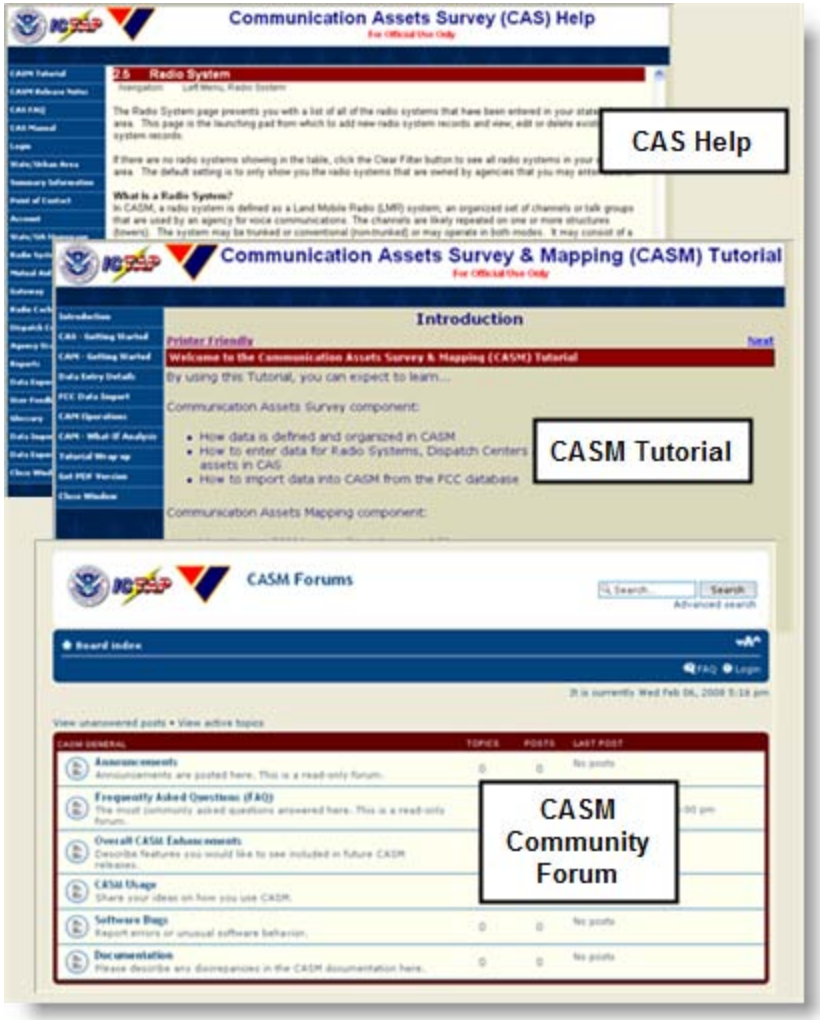
CASM: Other Features

Help & Tutorial

- Online, printable Help from every CAS page and from the CAM menu.
- Self-paced Tutorial available for you to use at any time.

CASM Community Forum

- Access the Community Forum to share information with other CASM users across the country.



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CASM: Support / Help Desk

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