PNL-0611 Ver. 1.3
UC-620

FEDERAL EMERGENCY MANAGEMENT INFORMATION SYSTEM (FEMIS)

DATA MANAGEMENT GUIDE

Version 1.3

RA Burnett
TR Downing
KL Gaustad
M Hoza
SM Johnson
RM Loveall
WD Millard
C Winters
BM Wood

December 1996

Prepared for the CSEPP Office,
United States Army Chemical and Biological Defense Command
under a Related Services Agreement
with the U.S. Department of Energy
Contract DE-AC06-76RLO 1830

Pacific Northwest National Laboratory
Richland, Washington 99352

ACKNOWLEDGMENT

This software and its documentation were produced with Government support under Contract Number DE-AC06-76RLO-1830 awarded by the United States Department of Energy. The Government retains a paid-up non-exclusive, irrevocable worldwide license to reproduce, prepare derivative works, perform publicly and display publicly by or for the Government, including the right to distribute to other Government contractors.

SOFTWARE PRODUCTS

FEMIS integrates the following commercial software products. These products are trademarks or trade names of their respective owners.

Arc/Info® and ArcView® Environmental Systems Research Institute, Inc.

NFS Maestro™ Hummingbird Communications Ltd.

GroupWise™ Novell Inc.

Microsoft® Excel for Windows™, Microsoft® Project for Windows™, Microsoft® PowerPoint™, and Microsoft® Visual Basic™ Microsoft Corporation

Oracle7®, SQL*Net®, PRO*C, and PRO*FORTRAN® Oracle Corporation

Solaris™ SunSoft

UNIX™ UNIX System Laboratories

WordPerfect® for Windows WordPerfect Corporation.

FEMIS integrates the following government-furnished software products.

D2PC (April 1996) U.S. Army ERDEC
PARDOS v3.1 U.S. Army ERDEC
Evacuation SIMulation Model (ESIM v2.5B) Oak Ridge National Laboratories


This document was printed on recycled paper.

DISCLAIMER

Preface

The Federal Emergency Management System is an emergency management planning and analysis tool. The following documents were developed to support system users. The audience for each is identified.

This *FEMIS Data Management Guide* provides the information needed to manage the data files and database used to support the administrative, user-environment, database management, and operational capabilities of the FEMIS. **Audience:** chiefly database administrators and system administrators, but also emergency management planners and analysts who want to know details of the emergency management data.

The *FEMIS System Administration Guide* defines FEMIS hardware and software requirements and gives instructions for installing, FEMIS software package. **Audience:** system administrators and system managers.

The *FEMIS Online Help System* explains how to start and use the FEMIS program, which is designed to help civilian emergency management personnel to plan for and support their responses to a chemical-releasing event at a military chemical stockpile.[a] **Audience:** all users of FEMIS, especially emergency management planners and analysts.

(a) The FEMIS program is being developed by the Pacific Northwest National Laboratory as part of the U.S. Army's Chemical Stockpile Emergency Preparedness Program (CSEPP). Pacific Northwest National Laboratory is operated for the U.S. Department of Energy by Battelle Memorial Institute under Contract DE-AC06-76RLO 1830.

About This Guide

Purpose

The Federal Emergency Management Information System (FEMIS) is an emergency management planning and analysis tool that is being developed under the direction of the U.S. Army Chemical and Biological Defense Command. The ***FEMIS Data Management Guide*** provides the background, as well as the operations and procedures needed to generate and maintain the data resources in the system.

Scope

Database administrators, system administrators, and general users can use this guide to manage the data files and database that support the administrative, user-environment, database management, and operational capabilities of FEMIS. This document provides a description of the relational and spatial information present in FEMIS. It describes how the data was assembled, how it is loaded, and how it is managed while the system is in operation. For details on installing FEMIS, see the ***FEMIS System Administration Guide.***

We encourage you contact us with suggestions or to ask questions. You can contact us by mail, telephone, fax, or E-mail:

Pacific Northwest National Laboratory
Robert M. Loveall
P.O. Box 999, MS K7-28
Richland, WA 99352
Telephone: (509) 375-2251
Fax Number: (509) 375-3641
E-mail address: rm_loveall@pnl.gov

Audience

This guide is addressed chiefly to database administrators and system administrators. It will also be of value to emergency management planners and analysts who want to know details of the emergency management data. Users of this guide are expected to be familiar with the ***FEMIS System Administration Guide***, and with the FEMIS itself.

Prerequisites

This guide assumes the database administrators have some knowledge of the Oracle database management system. Additional training may be required to understand the distributed database components of FEMIS. A complete set of Oracle7 documents should be available to the database administrator.

Organization

This document is organized into nine sections and three appendices that contain supporting information.

Section 1.0 - contains an overview for managing the FEMIS data.

Section 2.0 - lists documents referenced or used as resources for this document.

Section 3.0 - describes how the initial information is compiled and how the relational data and spatial data are initially loaded.

Section 4.0 - discusses how relational data is managed during system operation.

Section 5.0 - describes how the spatial data is managed after it is installed.

Section 6.0 - discusses how exercise data is managed.

Section 7.0 - discusses how the real-time meteorological (Met) data is managed.

Section 8.0 - describes managing the evacuation data model.

Section 9.0 - discusses how the D2 dispersion model data is managed. Subsections describe opening, saving, deleting, and importing a case.

Appendix A - consists of a Site Survey form example. The site specific survey is used to collect an essential set of site parameters needed to preset the site database.

Appendix B - consists of database data model figures for the Main, Spatial, Evacuation, and D2 models.

Appendix C - consists of the FEMIS Data Dictionary, which is a dynamic listing of the current database.

Contents

Acronyms and Definitions

AAT	Arc attribute table
COTS	Commercial-Off-The-Shelf
CFCC	Census Feature Class Code
CLA	Chemical Limited Area
COTS	Commercial-Off-The-Shelf
CSEPP	Chemical Stockpile Emergency Preparedness Program
DBMS	Database management system
DLG	Digital Line Graph
E-mail	Electronic mail
EMIS	Emergency Management Information System
EOC	Emergency Operations Center
EPZ	Emergency Planning Zones
ESF	Emergency Support Function
ESIM	Evacuation SIMulation, part of Oak Ridge Evacuation Modeling System (OREMS)
FEMIS	Federal Emergency Management Information System
FIPS Code	Federal Information Processing Systems Code
GIS	Geographic information system
IBS	Integrated Baseline System
IDYNEV	Interactive DYNamic EVacuation
IEM	Innovative Emergency Management, Inc.
IRZ	Immediate Response Zone
LAN	Local area network
MCE	Maximum Credible Event
Met	Meteorological
OREMS	Oak Ridge Evacuation Modeling System
ORNL	Oak Ridge National Laboratory
PAD	Protective Action Decision
PAR	Protective Action Response
PAT	Point/polygon attribute table
PAZ	Protective Action Zone
PC	Personal computer
PNNL	Pacific Northwest National Laboratory, formerly Pacific Northwest Laboratory (PNL)
SQL	Structured Query Language
SQL script	Sequence of SQL statements that performs database operations
TCP	Traffic Control Point
UNIX	Generic name for the Server Operating System
USGS	United States Geological Survey

1.0 Overview

The Federal Emergency Management Information System (FEMIS©)[a] information resources are described in this ***FEMIS Data Management Guide.*** To comprehend what types of data are present, where the data is located, and how it is managed during the life span of the system, a basic understanding of the FEMIS architecture is necessary. The system is being developed by Pacific Northwest National Laboratory (PNNL)[b] and is designed for a single Chemical Stockpile Emergency Preparedness Program (CSEPP) site that has multiple Emergency Operations Centers (EOCs). The capability to connect to remote CSEPP sites and share information will be present in a future release.

Each EOC has personal computers (PCs) that emergency planners and operations personnel interact with to do their jobs. These PCs are connected via a local area network (LAN) to servers that provide efficient EOC-wide services. Each EOC is interconnected to other EOCs via telecommunications links.

FEMIS is a client/server system where much of the application software is located in the client PC. This client software comprises a graphical user interface that is based on Visual Basic, a government furnished dispersion model, and Commercial-Off-The-Shelf (COTS) software tools such as the ArcView geographic information system (GIS), Microsoft® Project, and GroupWise™ electronic mail (E-mail).

A UNIX™ server provides data management services, Arc/Info GIS capabilities, evacuation (Evac) modeling, electronic GroupWise mail, and Met input processing. A PC communication utility is available to interface with external subsystems. At this time, the weather collection system (Handar Met System) is the only external subsystem.

Figure 1.1 illustrates a conceptual view of FEMIS and the types of information required. Much of this information is located in the Oracle® database management system (DBMS). Between EOCs, the DBMSs cooperate to share data, which allows multiple PC users to share the information while maintaining the integrity and persistence of the data. The user then adds information, makes decisions, displays maps, or uses other FEMIS functionality. Decisions or information are passed back to the FEMIS database and notifications are made to the FEMIS users. Other information exists in the UNIX file system and the Met server. The COTS tool information for the GIS, project management, and E-mail are present in the client file system. Table 1.1 summarizes the types of relational data and the general use of the data.

(a) FEMIS software was copyrighted in 1995 by Battelle Memorial Institute.

(b) Pacific Northwest National Laboratory is operated for the U.S. Department of Energy by Battelle Memorial Institute under Contract DE-AC06-76RLO 1830.

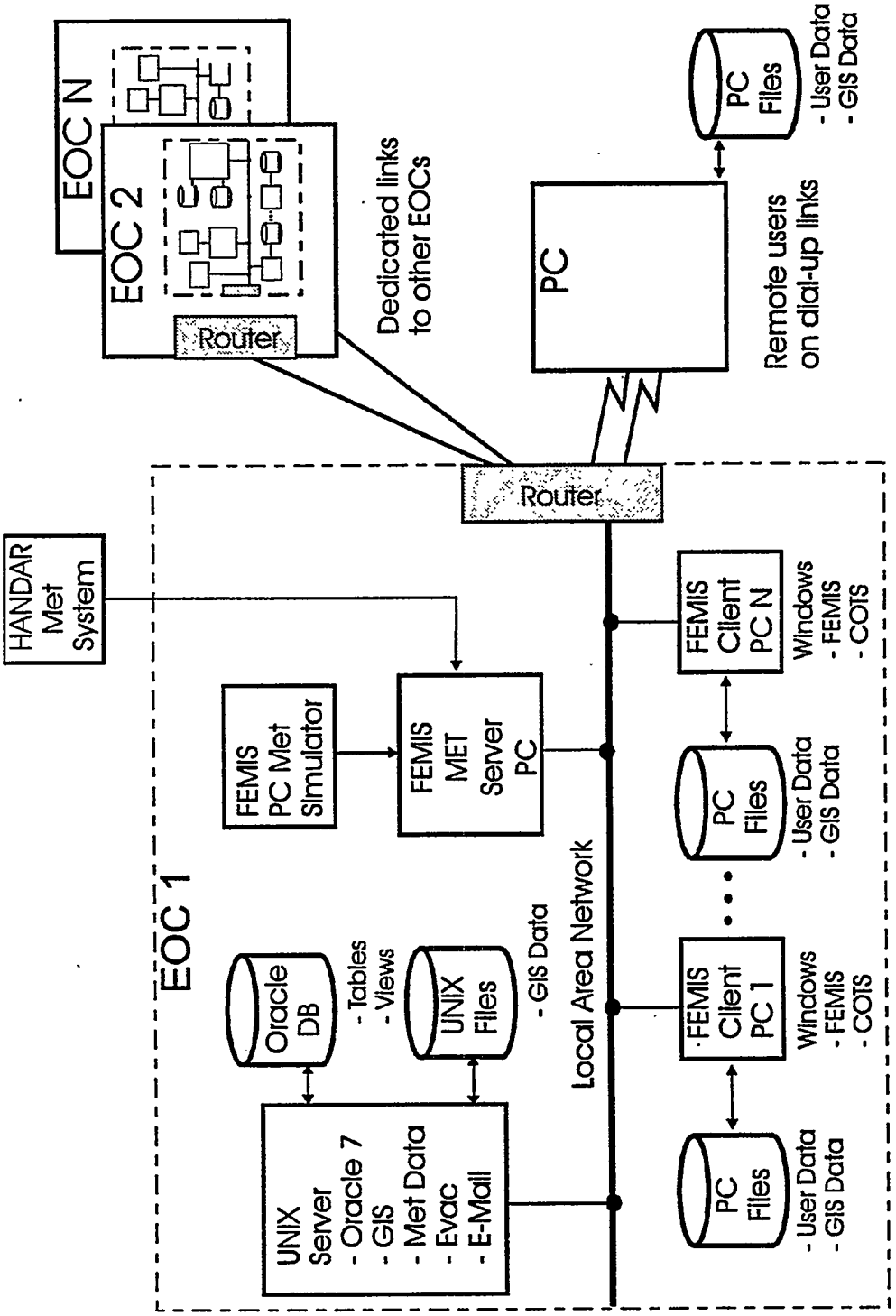


Figure 1.1. Conceptual View of FEMIS

Table 1.1. Types of Relational Data and General Use Description

Data Type	Data Use Description
D2 Data	Relational data tables used by the dispersion model
Electronic Plan Data	Supporting electronic planning information
Evacuation Data	Relational data tables used by the ESIM[a] Evacuation Model
Facility Data	Facilities, resources, and shelters information
Met Data	Weather conditions and tower information
Personnel Data	Person and organization information and user control data
Population Data	Population information including special populations
Resource Data	Resources and Memoranda of Understanding information
Risk Data	Plumes, wedges, threatened areas, and Protective Action Decision (PAD)/Protective Action Responses (PARs) information
Site Data	CSEPP site information including EOC data
Source Data	Chemical agents, munitions, bunkers, events, and casualties
Spatial Data	Relational data supporting the GIS
Work Plan Data	Work plans, MCE data, the journal, and D2/Evacuation case management data
Zone Data	Information about emergency planning zones

(a) Evacuation SIMulation (ESIM) model is part of the Oak Ridge Evacuation Modeling System (OREMS).

Note: See the ***FEMIS System Administration Guide*** for assistance with creating the database, validation and troubleshooting, and installing the Oracle server and relational database management system.

2.0 Resource Documents

FEMIS Software Design Document - An appendix in this design document contains a detailed description of the relational database used in FEMIS.

FEMIS System Administration Guide - This document contains a detailed description of the system administration interface.

Integrated Baseline System (IBS) Data Management Guide, Version 2.1 - This document contains a full description of the data files present in the IBS system.

3.0 Building the Initial Information

After FEMIS is installed, information is present in the database to enable the immediate use of the system. For example, the database tables used for validation are preset with the correct values, base maps are present in the spatial data, and some facility data is present. This section describes how this initial information is obtained and loaded into the system as part of the installation.

The initial information can be grouped into the following three classes:

- CSEPP global - EOCs at all sites will contain identical information for this class of tables. Examples are the relational tables named `State` and `Hazard_Site`. This data is available from Pacific Northwest National Laboratory for new installations.

- Site global - All EOCs at a given site will contain identical information for this class of tables. Examples are the relational tables named `Zone` and `Accident_Class`. This data is obtained from existing sources in electronic form or manually entered.

- EOC specific - Each EOC at the site will have distinct information for this class of tables. Examples are the relational tables named `Facility` and `Memo_Understanding`. Like the site global data, some of this information is available in electronic form and some will be gathered and entered manually.

The latter two classes of data prepared for a site have to be tailored to conditions present at that site. Factors to consider are the number and type of EOCs present, the objectives of the site, and the area of interest for map and GIS theme coverage. Another consideration is the amount of information contained in active Emergency Management Information System (EMIS) and Integrated Baseline System (IBS) databases that can be extracted for the new FEMIS system.

Figure 3.1 illustrates the general process of data preparation at a high level. The detailed steps to accomplish this are described in the following paragraphs.

EMIS is currently being used by the U.S. Army as the onpost automation system at most CSEPP sites. EMIS has a centralized database using the Oracle DBMS, and it also has a GIS that is used somewhat in the same manner as ArcView is used in FEMIS. Therefore, EMIS is a source for onpost relational data, such as igloos, and spatial information, such as base maps tailored to the site environment.

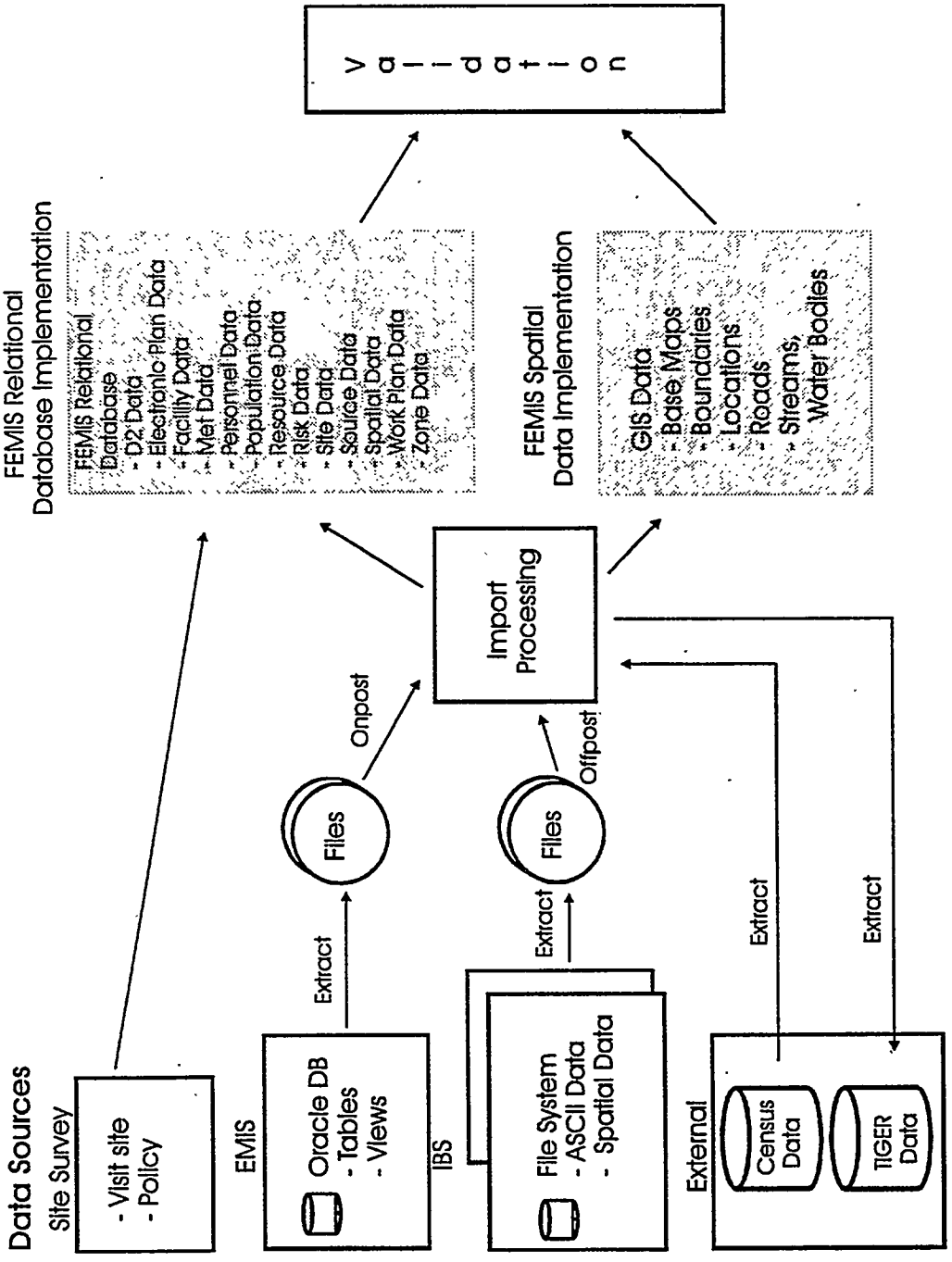


Figure 3.1. General Process of Data Preparation at a High Level

IBS is used at some CSEPP sites for offpost EOC automation at the county and state levels. The IBS EOCs tend to operate autonomously so each contains information that is unique. The data contained in IBS is in ASCII files and binary files for the spatial information. In general, data must be extracted from each IBS system deployed at the site. Then parts of this data have to be merged to ensure that common information is consistent. IBS is a source for offpost facility, personnel, and resource information.

The FEMIS database includes some types of data not present in IBS and EMIS. This type of information is obtained during the Site Survey. Also, the Site Survey is used to validate some of the data captured from IBS and EMIS; more details are provided in Section 3.1, Site Survey.

The extraction and post processing required for relational and spatial data are discussed in Sections 3.2 and 3.3. In general, each relational table or spatial data file requires individualized processing.

Census data and TIGER/Line data provided by the government are important external data sources. As shown in Figure 3.1, subsets of information from these sources are extracted and used for both spatial and relational databases. Section 3.3, Building Spatial Data, discusses how this is accomplished.

The validation step shown in Figure 3.1 is very important. It is accomplished after the spatial and relational databases are created. Even though some validation is done during the import processing, the final validation is needed to ensure consistency between the inter-related tables and files comprising the FEMIS database.

3.1 Site Survey

Although much of the information needed to preset the FEMIS database is available in electronic format, some information is not. Therefore, a means to collect a varied set of parameters that are not available in IBS, EMIS, or the government-furnished external sources is needed. All sites will require a common set of parameters obtained from the Site Survey. Depending on how widely IBS and EMIS are used at a given site, additional information may be required.

The Site Survey provides default and recommended values in many cases. The EOC personnel should review the data provided and modify it directly on the form. The electronic Site Survey forms will use a computer spreadsheet for capturing extensive amounts of data.

An example of a Site Survey is included in Appendix A to indicate the basic information that is needed for FEMIS. Electronic copies of the survey form will be sent to each EOC site for completion. When completed, the survey is returned to the development location for analysis of compatibility with other information. An onsite follow up meeting is held at each EOC to resolve questions and ensure consensus at the site.

3.2 Building Relational Data

The relational database in FEMIS is managed by Oracle7, a commercial DBMS. The distributed processing features of Oracle are utilized to produce a multi-server distributed data architecture. Data replication is widely used to provide a local copy of most shared tables. This replication is important because it allows an EOC to operate autonomously in case the links to other EOCs are not operational. Also, performance is enhanced because the shared tables are located on the local database.

Approximately 180 tables comprise the FEMIS relational database. Four logical data models (Main, Spatial, Evacuation, and D2) describe graphically what information is present and how the data objects are interrelated. The Main data model represents a large collection of general purpose tables, the Spatial data model contains tables used by the GIS, the evacuation (Evac) data model contains evacuation model data, and the D2 model contains tables used by the dispersion model. Diagrams of all four models are included in Appendix B, Database Data Models. Additional detailed information about the data models is available in the ***FEMIS Software Design Document***. Definitions of the database attributes can be found in Appendix C, FEMIS Data Dictionary.

Based on design efforts and testing results, each relational database table is local to an EOC or shared with the other EOCs. Data in the local tables can be accessed only from users logged in to that EOC database. The data in shared tables is available to several EOCs. Details of data placement are made transparent to the FEMIS users, so the FEMIS database appears to be a single, unified collection of tables. This physical design of the Oracle database is provided as a part of database implementation and can be tailored to CSEPP sites.

Approximately one-half of the tables do not contain any information when the system is installed. These are tables, such as the Situation Summary table, that will contain information about the current conditions at the site. As the system is used, data will accumulate in these tables and become a useful resource. The management of these tables will be discussed in Section 4.0, Managing Relational Data.

The remaining tables are preset with data as part of the system installation process. Over the life-cycle of FEMIS, some of the data in this class of tables may require updates after installation, which is discussed in Section 4.0. How preset data is collected and processed to become part of the delivered database is the subject of the remainder of this section.

Tables containing preset information that is universal to all sites are called CSEPP Global tables. During FEMIS development, information was assembled from various sources and loaded into this class of tables. Table 3.1 lists 31 Oracle tables that are in this class and the data model where the Oracle table appears, the table name, whether the table is shared or local, what type of user interface manages the data in the table, (all of these tables are managed by the FEMIS Data Manager called `DataMgr`) and comments.

Table 3.2. illustrates the source of the information, the filename (if appropriate), the loading strategy, and the contents of the information in the table. A PNNL source means that the information was assembled from various sources available to Pacific Northwest National Laboratory.

Table 3.1. CSEPP Global FEMIS Tables

Table #	Model	Table Name	Shared/Local	User Interface	Comments
1	Main	ACCIDENT_CLASS	Local	DataMgr	
2	Main	ACTIVITY	Local	DataMgr	
3	Main	AGENT_MUNITION	Local	DataMgr	
4	Main	CHEMICAL_AGENT	Local	DataMgr	
5	Main	CONTROL_POINT	Local	DataMgr	Read Only
6	Main	DOSAGE	Local	DataMgr	
7	Evac	EP_ERROR_CODES	Local	DataMgr	Read Only
8	Main	FACILITY_TYPE	Local	DataMgr	
9	Main	GOAL	Local	DataMgr	
10	Main	HAZARD	Local	DataMgr	
11	Main	HAZARD_SITE	Local	DataMgr	
12	Main	LOCATION_TYPE	Local	DataMgr	Read Only
13	Main	MEASUREMENT_DEFN	Local	DataMgr	
14	Main	MEASUREMENT_TYPE	Local	DataMgr	
15	Main	MET_PARAMETER	Local	DataMgr	
16	Main	MUNITION	Local	DataMgr	
17	GIS	OBJECT_SUBTYPE	Local	DataMgr	
18	Main	PD_LEVEL	Local	DataMgr	
19	Main	PLAN_DETAIL	Local	DataMgr	Template
20	Main	PLAN_HEADER	Local	DataMgr	Template
21	Main	PRIVILEGE	Local	DataMgr	Read Only
22	Main	PROTECTIVE_ACTION	Local	DataMgr	
23	Main	SHELTER_DEFINITION	Local	DataMgr	
24	Main	STATE	Local	DataMgr	Read Only
25	Main	SYSTEM_MODE	Local	DataMgr	Read Only
26	Main	SYSTEM_PHASE	Local	DataMgr	Read Only
27	Main	SYSTEM_STAGE	Local	DataMgr	
28	Main	VAL_LIST	Local	DataMgr	
29	Main	VAL_LIST_DATA	Local	DataMgr	
30	GIS	VAL_LOCATION_TYPE	Local	DataMgr	
31	Main	ZONE_TYPE	Local	DataMgr	

The other two table classes with preset information contain site-specific and EOC- specific data. Table 3.3 lists the 37 tables in these two classes (similar to Table 3.1) illustrating the data model where the table appears, the table name, whether it is shared or local, what type of user interface manages the data in the table, and comments. More complete details for gathering and loading these tables are provided in Table 3.4.

Table 3.2. Global Preset Database Tables

Table Loaded	Source	Filename	Load Strategy	Contents
ACCIDENT_CLASS	PNNL	None	SQL load using data acquired during development	Global validation for accident classes and descriptions
ACTIVITY	PNNL	None	SQL load using data acquired during development	Global validation for activity codes and descriptions
AGENT_MUNITION	EMIS	AGENT_MN.DAT	SQL load using EMIS data	Global agents, munitions and quantities per munition
CHEMICAL_AGENT	PNNL	None	SQL load using data acquired during development	Global agent codes and types
CONTROL_POINT	PNNL	None	SQL load using software control points	Global control point names and descriptions
DOSAGE	PNNL	None	SQL load using normal D2 dosages	Dosage levels and descriptions from D2 model
EP_ERROR_CODES	PNNL	ERROR.DAT	SQL load ESIM user manual error codes	Error code with description of error
FACILITY_TYPE	PNNL/ IBS	FACIL.DAT	SQL load from both the PNNL data and the Facility_Type field within the facility data file	Global facility types and their descriptions
GOAL	PNNL	None	SQL load with data based on user advisory board	"Save lives, protect property"
HAZARD	PNNL	None	SQL load using data acquired during development	Global hazard type and description
HAZARD_SITE	PNNL	None	SQL load using data acquired during development	Compilation of the names, locations, and description for the CSEPP sites
LOCATION_TYPE	IBS	LOC_TYPE.DAT	SQL load with control data file. To generate the control file, the original data file from IBS must be edited to remove unrelated data.	Global validation for location types and descriptions
MEASUREMENT_DEFN	PNNL	None	SQL load using data acquired during development	Global validation for measurement classes
MEASUREMENT_TYPE	PNNL	None	SQL load using data acquired during development	Global validation for measurement types and description
MET_PARAMETER	PNNL	None	SQL load using data acquired during development	Global validation for parameter codes and descriptions
MUNITION	PNNL	None	SQL load using normal D2 munitions	Global munitions and descriptions

Table 3.2. Global Preset Database Tables (continued)

Table Loaded	Source	Filename	Load Strategy	Contents
OBJECT_SUBTYPE	PNNL/ IBS	FACIL.DAT	SQL load from both the PNNL control data and the Facility_Type field within the facility data file	Global validation for location types and FEMIS object subtypes
PD_LEVEL	PNNL	None	SQL load using data acquired during development	Plan level name and number
PLAN_DETAIL	PNNL	None	SQL load using data acquired during development	Plan reference ID, responsible parties, start, finish, and duration times for plan template
PLAN_HEADER	PNNL	None	SQL load with plan data template	Plan reference ID, name, status, descriptions for initial plan template
PRIVILEGE	PNNL	None	SQL Plus query based on CONTROL_POINT table	Global privilege numbers and flags for assigned privileges based on control points
PROTECTIVE_ACTION	PNNL	None	SQL load using data acquired during development	Global validation for protective actions and descriptions
SHELTER_DEFINITION	PNNL	None	SQL load using data acquired during development	Global validation for shelter types and descriptions
STATE	PNNL	None	SQL load using data acquired during development	Global validation for state codes and names
SYSTEM_MODE	PNNL	None	SQL load using data based on user advisory board	Global system modes, default flags and description
SYSTEM_PHASE	PNNL	None	SQL load using data based on user advisory board	Global phase names, flags and descriptions
SYSTEM_STAGE	PNNL	None	SQL load using data based on user advisory board	Modes, phases, and stages
VAL_LIST	PNNL	None	SQL load using data acquired during development	Validation list names and descriptions for Visual Basic applications
VAL_LIST_DATA	PNNL	None	SQL load using data acquired during development	Validation lists data and text
VAL_LOCATION_TYPE	PNNL	None	SQL load using data acquired during development	Global validation table for location types
ZONE_TYPE	PNNL	None	SQL load using data acquired during development	Global validation for zones and descriptions

Table 3.3. Site-Specific and EOC-Specific FEMIS Tables

Table #	Model	Table Name	Shared/Local	User Interface	Comments
1	Main	AGENCY	Shared	DataMgr	
2	Main	BUNKER	Shared	GIS	Spatial considerations
3	Main	CENSUS_BLOCK	Local	DataMgr	Read only
4	Main	CENSUS_SUBDIVISION	Local	DataMgr	Read only
5	Main	CENSUS_TRACT	Local	DataMgr	Read only
6	Main	COUNTY	Local	DataMgr	
7	Main	DEPARTMENT	Shared	DataMgr	
8	Main	EMERGENCY_SUPPORT	Local	DataMgr	
9	Main	EOC	Local	DataMgr	
10	Main	EOC_OBJECTIVE	Local	DataMgr	
11	Main	EOC_ZONE	Local	DataMgr	
12	Main	FACILITY	Shared	Facility UI	
13	Main	FEMIS_OBJECT	Shared	DataMgr	
14	Main	FEMIS_USER	Local	Manage User UI	
15	GIS	GIS_LAYER	Shared	DataMgr	Data captured with GIS load
16	GIS	GIS_LAYER_DEFINITION	Local	DataMgr	
17	GIS	GIS_OBJECT	Shared	DataMgr	Data captured with GIS load, export
18	Main	MET_TOWER	Shared	DataMgr	Compatibility to Met towers onsite
19	GIS	NAME_SUBSTITUTION	Local	DataMgr	
20	Main	PA_UNIT	Shared	DataMgr	
21	Main	PERSON	Local	Person Form UI	
22	Main	POPULATION_CONDITION	Local	DataMgr	Set up for normal weekday night
23	Main	POPULATION_DEFINITION	Local	DataMgr	
24	Main	POPULATION_LOCATION	Local	DataMgr	
25	Main	POSITION	Local	DataMgr	
26	Main	POSITION_ASSIGNMENT	Local	DataMgr	
27	Main	RESOURCE_CATEGORY	Shared	DataMgr	
28	Main	RESOURCE_DEFINITION	Shared	DataMgr	
29	Main	RESOURCE_FACILITY	Shared	Facility UI	
30	Main	RESOURCE_LOCATION	Shared	Facility UI	
31	Main	STORED_AGENT	Shared	DataMgr	
32	Main	USER_MODE_PRIV	Local	DataMgr	
33	Main	VAL_POSITION	Local	DataMgr	
34	Main	WK_POSITION	Shared	DataMgr	
35	Main	ZONE	Local	DataMgr	
36	Main	ZONE_IN_GROUP	Shared	RA UI	
37	Main	ZONE_RISK_GROUP	Shared	DataMgr	

Table 3.4. Site-Specific and EOC-Specific Preset Database Tables

Table Loaded	Source	Filename	Load Strategy	Contents
AGENCY	IBS	AGENCY_LOOKUP.DAT	SQL load with validated data	Agency codes and their associated agency names
BUNKER	EMIS	GISIGL.DAT (onpost)	SQL load with validated data	Igloo names and codes specific to the site
CENSUS_BLOCK	Census	STF1B tape files	SQL load with census data	State and county FIPS codes and block name
CENSUS_SUBDIVISION	Census	STF1B tape files	SQL load with census data	State and county FIPS codes and subdivision name
CENSUS_TRACT	Census	STF1B tape files	SQL load with census data	State and county FIPS codes and tract name
COUNTY	PNNL	None	SQL load with preset data. Use Site Survey results if different	State and county FIPS codes and county name
DEPARTMENT	PNNL and Site Survey	None	SQL load with Dept_Code set to Agency_Code or Site Survey	Department and agency codes. IBS does not have department code so this is generated.
EMERGENCY_SUPPORT	IBS and Site Survey	EF.DAT	SQL load with preset data. Use Site Survey results if different	Emergency support functions and descriptions
EOC	IBS and Site Survey	None	SQL load with preset data. Use Site Survey results if different.	EOC names, types number, description
EOC_OBJECTIVE	Site Survey	None	SQL load with data from Site Survey	EOC name, notify, decision and goal times, description and dose levels
EOC_ZONE	PNNL	None	Preloaded list of zones associated with an EOC. Use Site Survey results if different.	EOC and zone names
FACILITY	IBS and Site Survey	FACIL.DAT	See Facility Note	Facility names, capacity, description
FEMIS_OBJECT	IBS, PNNL, and EMIS	None	See FEMIS Object Note	FEMIS object names, types, subtypes, x and y points
FEMIS_USER	Site Survey	None	SQL load with data from Site Survey	User code with encrypted password, account status

Table 3.4. Site-Specific and EOC-Specific Preset Database Tables (continued)

Table Loaded	Source	Filename	Load Strategy	Contents
GIS_LAYER	PNNL	None	SQL load with preset data	Data for existing themes
GIS_LAYER_DEFINITION	PNNL	None	SQL load with preset data	Data for defining themes
GIS_OBJECT	PNNL	None	SQL load with preset data	Data for all spatial objects
MET_TOWER	Site Survey	METTOWER.DAT	SQL load with data from the Site Survey	Names and locations of Met towers
NAME_SUBSTITUTION	PNNL	None	SQL load with preset data	Standard case naming
PA_UNIT	Site Survey	None	SQL Plus query based on zone and facility tables	Protective action units, type and zone or facility name
PERSON	IBS	PERSON.DAT	See Person Note	Person reference number, name, address
POPULATION_CONDITION	PNNL	None	SQL load with data for normal conditions	Population condition names, locations, descriptions
POPULATION_DEFINITION	PNNL	None	SQL load with data based on IEM document	Population categories based on age, sex, household types
POPULATION_LOCATION	PNNL	None	SQL load with data based on census blocks, subdivisions, and tracts	Population categories with locations, descriptions, and counts
POSITION	Site Survey	None	SQL load with data from Site Survey	Position code with address, phone and description
POSITION_ASSIGNMENT	Site Survey	None	SQL load with data from Site Survey	Persons who are users
RESOURCE_CATEGORY	IBS and Site Survey	RESOURCE.DAT	SQL load with data from Site Survey	The category and its description
RESOURCE_DEFINITION	IBS and Site Survey	RESOURCE.DAT	SQL load with data from Site Survey	Resource reference number, name, description
RESOURCE_FACILITY	IBS	RESOURCE.DAT	See Resource Note	Resource reference number, name, description

Table 3.4. Site-Specific and EOC-Specific Preset Database Tables (continued)

Table Loaded	Source	Filename	Load Strategy	Contents
RESOURCE_LOCATION	IBS	None	SQL Plus query based on RESOURCE_FACILITY table	Location of the resource at the facility
STORED_AGENT	EMIS	GISIGL.DAT	SQL load with validated data	Bunker name, agent code and munition type
USER_MODE_PRIV	Site Survey	None	SQL Plus query based on tables PERSON, PRIVILEGE and SYSTEM_MODE	Control point names, privilege numbers, user codes, and mode names
VAL_POSITION	Site Survey	VAL_POS.DAT	SQL load with preset data. Use Site Survey results if different	Position codes and names
WK_POSITION	IBS	POSITION_LOOKUP.DAT	SQL load with validated data	Agency, department, and title of position
ZONE	IBS	Spatial data files	SQL load with validated data	Zone name and type
ZONE_IN_GROUP	Site Survey	None	SQL load with data from Site Survey	List of zones in risk groups
ZONE_RISK_GROUP	Site Survey	None	SQL load with data from Site Survey	Name of risk groups

Facility Note: A temporary table, T_FACILITY is created, loaded and updated with the data in FACIL.DAT. The data load is completed when the data is copied from the T_FACILITY table to the facility table. Updates from the Site Survey will be included.

FEMIS Object Note: Since the FEMIS_OBJECT table data represents geographical coordinates for many objects represented in the relational portions of the database it has several different SQL Loader control scripts which load data into the table. Examples include the facilities from each EOC, igloos, zones, blocks, tracks, subdivisions, and counties.

Person Note: Two temporary tables, T_PERSON and T_AGENCY are created, loaded and updated with the data from PERSON.DAT. The data load is completed when the data is copied from the T_PERSON table to the person table. Updates from the Site Survey will be included.

Resource Note: A temporary table, T_RESOURCE_FACILITY is created, loaded and updated with the data in RESOURCE.DAT. The data load is completed when the data is copied from the T_RESOURCE_FACILITY table to the RESOURCE_FACILITY table.

3.3 Building Spatial Data

FEMIS spatial data contains location information in the form of geographic coordinates of points, lines, and polygons that represent physical features and non-physical area boundaries on the surface of the earth. Within FEMIS, this location information is stored as ArcView themes which are accessed by FEMIS applications via the ArcView GIS software. Each theme represents a coherent set of similar geographic features (e.g., roads, facility locations, census tract boundaries). FEMIS spatial data also contains attribute information that is associated with the geographic features that make up the themes. These attribute values are stored and maintained in the FEMIS relational database. They are attached to the features within the ArcView themes as required by the FEMIS applications.

Figure 3.1 shows the general approach to building the initial FEMIS spatial and relational databases. Data from various information sources must be processed by the appropriate FEMIS data import software programs to extract the required data elements and place them into the proper data structures for storage in the FEMIS relational and spatial databases. All required attributes associated with both geographic and non-geographic data objects are stored in the FEMIS relational database. The geographic coordinates of the spatial features, together with selected attributes of those features, are stored as ArcView themes in the FEMIS spatial database.

3.3.1 Data Sources and Import Processing

The five major sources of FEMIS spatial data are discussed below:

1. EMIS (Emergency Management Information System). EMIS was developed for the U.S. Army as an interim onpost emergency management system. EMIS stores and manages spatial data and related attributes for onpost geographic features, model results, and raster image background maps. Most of the attribute information is stored in Oracle relational database tables.

2. IBS (Integrated Baseline System). IBS was developed as an interim offpost emergency management system. IBS stores and manages spatial data and related attributes for offpost geographic features and model results. The information is stored in a file system developed specifically for IBS. Most of the data is available in the form of ASCII text files.

3. TIGER/Line Data. The U.S. Bureau of the Census provides TIGER/Line data files that contain detailed location and attribute information for a variety of physical and non-physical features such as roads, railroads, streams and water bodies, facilities, landmarks, state and county boundaries, census unit boundaries, and other political and administrative boundaries. These ASCII files are organized into 12 record types at the county level (or equivalent to the county level for all states in the United States). Import processing of TIGER/Line data is discussed in detail in Section 3.3.2, TIGER/Line Data.

4. 1990 Census Statistical Data. The U.S. Bureau of the Census provides statistical census data files that contain demographic information from the 1990 decennial census. This data consists of large ASCII files which contain population, family, and household counts within various demographic groupings (i.e., by age, gender, race, household type, income, and other social and economic factors). The information is reported at several geographic levels (e.g., county, subdivision, census tract, block group, block). Selected portions of this data are required by FEMIS applications and must be extracted and attached as attributes to the corresponding TIGER/Line census area polygons.

5. Site Configuration Data. Some spatial data related to planning decisions made at the site (e.g., accident-based planning category boundaries) may not be available from EMIS or any other existing data system. This data must be obtained directly from site personnel and must be entered into ASCII files prior to FEMIS import processing.

The FEMIS spatial data themes are listed and characterized in Table 3.5. They can be divided into three categories as discussed below: system spatial datasets, user-modifiable spatial datasets, and model-related spatial datasets.

1. System spatial datasets change infrequently and are managed and controlled by the system data administrator. Users cannot modify the spatial information contained in these datasets. Examples of system spatial datasets are roads; census blocks, tracts, and subdivisions; and emergency planning zone boundaries. All of these themes must be initially loaded into the FEMIS spatial database.

2. User-modifiable spatial datasets are the themes that can be modified by users from within certain FEMIS modules. User-modifiable themes include facilities, known points, and accident-based planning wedges. The facilities theme is initially loaded with the locations of buildings and other facilities that are known to be of interest for emergency planning purposes. Users can then add other facilities to this theme. Known points are other locations that users may wish to include as named reference points for locating a hypothetical or real event, or for other purposes. Known points themes are not currently included in the spatial database, but in a future release, PNNL plans to include them in the spatial database.

3. Model-related spatial datasets are created by the hazard and evacuation model for each model case that is run. These themes are created and stored on the user's PC. Data on these model-related themes are also stored in the relational database to facilitate access by other users. These themes are generated entirely by the users and are thus not initially loaded.

The following paragraphs briefly discuss the data sources and import processing for each of the FEMIS spatial themes that must be initially loaded. Management of spatial data, after it has been initially loaded, is the responsibility of the site.

Table 3.5. Spatial Data Theme Descriptions

Generic Theme (Layer) Description	Data Source	User Directory	Filename	Data Type	User Modify	FEMIS Object[a]	Number of Themes
Facilities	IBS, FEMIS App	FACILITY	FACILITY	Vector - Point	Yes	Yes	1
Accident Based Planning Wedges	FEMIS App	WA_<eoc_code>	<eoc_code>_WA	Vector - Polygon	Yes	Yes	1 per EOC
D2 Track (Dosage)	FEMIS App	D2_<eoc_code>	D<case_id(7)>	Vector - Polygon	Yes	Yes	1 per EOC and case
D2 Track (Concentration)	FEMIS App	D2_<eoc_code>	K<case_id(7)>	Vector - Polygon	Yes	Yes	1 per EOC and case
D2 Wedge	FEMIS App	D2_<eoc_code>	W<case_id(7)>	Vector - Polygon	Yes	Yes	1 per EOC and case
Evacuation Centroids	FEMIS App	EV_<eoc_code>\E<exercise_num>	C<case_id(7)>	Vector - Point	Yes	No	1 per EOC and case
Evacuation Links	FEMIS App	EV_<eoc_code>\E<exercise_num>	L<case_id(7)>	Vector - Line	Yes	No	1 per EOC and case
Evacuation Nodes	FEMIS App	EV_<eoc_code>\E<exercise_num>	N<case_id(7)>	Vector - Point	Yes	No	1 per EOC and case
Census Blocks	TIGER/Line	CEDBLOCK	<site_code>_TB	Vector - Polygon	No	Yes	1
County Boundaries	TIGER/Line	STCOUNTY	<site_code>_SC	Vector - Polygon	No	Yes	1
Accident-Based Planning Categories	Site Config	ABPC	<site_code>_PC	Vector - Polygon	No	Yes	1
Igloos (point)	EMIS	IGLOO_P	<site_code>_IP	Vector - Point	No	Yes	1
Emergency Planning Zones	IBS	ZONE	<site_code>_EZ	Vector - Polygon	No	Yes	1
Traffic Control Points	IBS, Site Survey	TCP	TCP	Vector - Point	No	Yes	1
Met Towers	Site Config	METTOWER	<site_code>_MT	Vector - Point	No	Yes	1
Warning Sirens	IBS, Site Survey	SIREN	SIREN	Vector - Point	No	Yes	1
Administrative Boundaries	IBS	ADMINBND	<site_code>_AB	Vector - Polygon	No	No	1
Detailed Roads	TIGER/Line	ROADALL	<county_code>_RA	Vector - Line	No	No	1 per county
Major Roads	TIGER/Line	ROADMAJ	<site_code>_RM	Vector - Line	No	No	1
Railroads	TIGER/Line	RAILROAD	<site_code>_RR	Vector - Line	No	No	1
Streams, Water Bodies	TIGER/Line	STREAM	<site_code>_SA	Vector - Line	No	No	1
Elevation Contours	IBS	CONTOUR	<site_code>c<interval(m)>	Vector - Line	No	No	1 per interval value
Image Maps	EMIS	IM_<scale>	<site_code><scale><tile>	Image	No	No	1 or more per scale

(a) "Yes" –> Contains entries in FEMIS_OBJECT table to link spatial and relational data.

3.3.1.1 Facilities

Facility locations and attributes are obtained from the IBS "known points" and "facility" ASCII files. An IBS export utility is used to create an ASCII file containing the facility names, locations, descriptions, and other attribute information. A loader script is used to load the data from this file into the relational database. An SQL script is then used to query the relational database and create an ASCII file containing facility locations and attributes in ArcView `Event Theme` format. This file can be directly loaded as a point theme into ArcView.

3.3.1.2 Accident Based Planning Wedges

Accident Based Planning Wedges are generated within the Threat Analysis module of FEMIS and can be named and saved in the database for later use.

3.3.1.3 D2PC Track Themes

D2PC track (Dosage and Concentration) and wedge themes are dynamic map layers generated within FEMIS. They are based on output from the D2PC model. D2PC cases may be imported from IBS or EMIS, or they may be created from scratch within FEMIS.

3.3.1.4 Evacuation Themes

Evacuation themes (centroids, links, and nodes) are dynamic map layers generated as input to the Evacuation SIMulation (ESIM), part of the Oak Ridge Evacuation Modeling System (OREMS) model within FEMIS. There may be one set of evacuation theme files for every evacuation case in the system. Evacuation cases may be imported from IBS or OREMS, or they may be created from scratch within FEMIS.

3.3.1.5 Census Blocks

The Arc/Info® TIGERTOOL command (see Section 3.3.2) is used to convert TIGER/Line data files into Arc/Info coverages for the counties surrounding the hazard site. Census enumeration district boundaries are then extracted from the Arc/Info coverages, and separate coverages are created for census blocks. These coverages are then converted to ArcView themes. Census tracts and subdivisions are not currently included as themes in the spatial database, but in a future release, PNNL plans to include them in the spatial database.

Census demographic data (e.g., population counts) are extracted from the STF-1B census statistical data files and stored in the relational database as attributes of each census block, tract, or subdivision. These demographic attributes are then attached to an ArcView census theme by running a query that extracts the attributes of each block, tract, or subdivision into an ASCII file, loading this text file into ArcView, and running an Avenue script to join the attribute columns in the text file to the appropriate census theme's data table.

3.3.1.6 County Boundaries

The Arc/Info TIGERTOOL command is used to convert TIGER/Line data files into Arc/Info coverages for the counties surrounding the hazard site. County boundary polygons are then extracted from the full TIGER/Line Arc/Info coverages and stored in a new Arc/Info coverage. This coverage is then converted to an ArcView theme.

3.3.1.7 Accident-Based Planning Categories

For planning purposes, the Accident Based Planning Review Group at each CSEPP site determines the geographic boundaries of several categories of potential accidents. The categories represent different levels of impact severity and are typically represented geographically by concentric circles of differing radii centered on the site's Chemical Limited Area. Given the number of categories and the center and radius of each category's circle, the theme is generated by running an ArcView/Avenue script using the appropriate input parameters for each circle.

3.3.1.8 Igloos (Point)

Igloo location and attribute data are obtained from EMIS. A Structured Query Language (SQL) script is used to extract the data from the EMIS relational database tables and create ASCII files containing the igloo names, locations, and contents (agents/munitions). A loader script is used to load the data from the ASCII file into the appropriate relational database tables. A second SQL script is then used to query the FEMIS relational database and create an ASCII file containing igloo locations and attributes in ArcView `Event Theme` format. Some minor editing of this ASCII file may be needed to transfer multiple agent-munition data for an igloo from multiple records into a single record. This file can be directly loaded as a point theme into ArcView.

3.3.1.9 Emergency Planning Zones

Emergency planning zone boundary and attribute data are extracted from the IBS spatial data zone files into ASCII files. A loader script is used to load the zone data from the ASCII files into the appropriate relational database tables. Another ASCII file containing the zone coordinates in Arc/Info `Generate` format is used to create an Arc/Info polygonal coverage, which is then converted into the ArcView zone theme.

3.3.1.10 Traffic Control Points

The locations of traffic control points are obtained from IBS (if available) or from site survey information. An IBS export utility or a text editor is used to create an ASCII file containing the traffic control point names, locations, descriptions, and other attribute information. A loader script is used to load the data from this file into the relational database. An SQL script is then used to query the relational database and create an ASCII file in ArcView `Event Theme` format. This file contains the traffic control point locations and attribute information and can be directly loaded as a point theme into ArcView.

3.3.1.11 Met Towers

Meteorological monitoring tower data is obtained from the Met subsystem's `METTOWER.DAT` file (see Section 7.0, Managing Meteorological [Met] Data). A loader script is used to load the data from the ASCII file into the appropriate relational database tables. An SQL script is then used to query the relational database and create an ASCII file containing Met tower locations and attributes in ArcView `Event Theme` format. This file can be directly loaded as a point theme into ArcView.

3.3.1.12 Warning Sirens

The locations of warning sirens are obtained from IBS (if available) or from site survey information. An IBS export utility or a text editor is used to create an ASCII file containing the siren names, locations, descriptions, and other attribute information. A loader script is used to load the data from this file into the relational database. An SQL script is then usedto query the relational database and create an ASCII file in ArcView `Event Theme` format. This file contains the siren locations and attribute information and can be directly loaded as a point theme into ArcView.

3.3.1.13 Administrative Boundaries

Data on administrative boundaries (e.g., national forests, state parks, Native American reservations) are obtained from the IBS Administrative Boundaries data layer. An ASCII file containing the spatial coordinates and attributes of Administrative Boundary polygons is exported from IBS, imported into Arc/Info, and then converted into shape files for an ArcView theme using Arc/Info's `ARCSHAPE` command.

3.3.1.14 Road Themes (Detailed, Major)

The Arc/Info TIGERTOOL command is used to convert TIGER/Line data files into Arc/Info coverages for the counties surrounding the hazard site. Road features are then extracted from the full Arc/Info coverages, and separate Arc/Info coverages are created for detailed roads, one theme per county (line segments with a Census Feature Class Code [CFCC] that begins with "A"), and for major roads (CFCC beginning with "A1" or "A2"). These coverages are then converted to ArcView themes.

3.3.1.15 Railroads

The Arc/Info TIGERTOOL command is used to convert TIGER/Line data files into Arc/Info coverages for the counties surrounding the hazard site. Railroad features (CFCC beginning with "B") are then extracted from the full TIGER/Line Arc/Info coverages and stored in a new Arc/Info coverage. This coverage is then converted into an ArcView theme.

3.3.1.16 Streams and Water Bodies

The Arc/Info TIGERTOOL command is used to convert TIGER/Line data files into Arc/Info coverages for the counties surrounding the hazard site. Stream and water body features (CFCC beginning with "H") are then extracted from the full TIGER/Line Arc/Info coverages and stored in a new Arc/Info coverage. This coverage is then converted to an ArcView theme.

3.3.1.17 Elevation Contours

Elevation contour lines are obtained from IBS. An IBS import/export utility is used to generate an ASCII file in Arc/Info `Generate` format for a line (arc) theme. The resulting file may need to be edited or regenerated to retain only the contour lines for the contour interval desired. Multiple files can be generated if multiple contour themes with different contour intervals are desired. Each ASCII file is used to generate an Arc/Info line coverage, and the coverage is then converted into the shape files of an ArcView theme.

3.3.1.18 Image Maps

Background image maps of the area surrounding the hazard site are obtained from the original Sunraster format images used to create the EMIS background image library. Images at up to four different scales (1:24,000, 1:100,000, 1:500,000, and 1:1 million) are currently incorporated into the FEMIS spatial database. The Arc/Info GIS is used to register each image to another FEMIS data layer, such as roads or streams. The image must then be converted to a Tagged Information File Format (TIFF) graphics file, integrated with other images of the same scale, and exported to ArcView.

3.3.1.19 Other Themes

Other spatial data themes may be incorporated into a site-specific spatial database as required by the site. These themes may include (but are not limited to) interstate highways, interstate exits, populated places, place name boundaries, emergency route alerts, fire district boundaries, daytime population centroids, and night time population centroids. The procedures used to prepare and import these datasets into ArcView varies depending upon the source and format of the original data.

3.3.2 TIGER/Line Data

The TIGER/Line files, available on CD-ROM, contain coordinates of points, lines, and polygons that represent physical features (e.g., roads, streams and water bodies, landmarks) and non-physical boundaries (e.g., states and counties, 1990 census tracts and blocks, state parks). The files also contain attribute information (e.g., feature name, feature type, census unit identifier) associated with each point, line, and polygon feature. The attribute information can be used by the Arc/Info GIS software to select individual features by name or to select a group of features by feature type (e.g., interstate highways). The TIGER/Line files also contain topological information (left and right area identifiers for a line segment) that allows Arc/Info to construct polygons and to link the polygon areas to their associated arcs, label points, and area attributes. TIGER/Line files do not contain statistical census demographic data.

Each TIGER/Line dataset represents one county in a given state and may contain up to 12 different record (file) types. Some of the record types are optional, and thus not all county datasets have all 12 files. The format and content of these 12 file types are documented in the *Technical Documentation for TIGER/Line Census Files, 1990* (U.S. Dept. of Commerce, Bureau of the Census, Washington, D.C., 1991).

Arc/Info provides two commands that can be used to convert TIGER/Line data to Arc coverages and associated Info attribute files. The TIGERARC command performs the basic conversion of point, line, and attribute data and completes the conversion rather quickly (usually 3 to 5 minutes). The TIGERTOOL command performs a comprehensive conversion using a macro supplied with Arc/Info, version 6.0 and higher. TIGERTOOL runs TIGERARC and also builds the line and polygon coverages, relates those coverages to the Info files that contain the various attributes associated with the geographic objects, and checks for and reports detectable errors or inconsistencies in the data. TIGERTOOL takes approximately 15 to 20 minutes to complete for a typical county dataset.

The syntax for the TIGERTOOL command for use within FEMIS is as follows:

```
TIGERTOOL <tiger_line_file_prefix> <out_cover_prefix> VTD
```

Each TIGER/Line county dataset contains a set of files with names that are identical except for the last character in the filename. The second item in the command line, `<tiger_line_file_prefix>`, should be set to this common part of the filename. The last character appended to the common filename indicates the file type. The 12 file types are described via an example dataset in the following paragraphs. Similarly, `<out_cover_prefix>` is the filename prefix to be used to identify the output coverages to be created by TIGERTOOL. The VTD option instructs TIGERTOOL to extract and store the Voting Tabulation District boundaries.

The set of TIGER/Line files for Gilliam County, Oregon (State FIPS Code 41, County FIPS Code 021) is given below as an example.

Note: The filenames contain a common prefix (`tgr41021.f4`) followed by a single character denoting the file type.

```
tgr41021.f41 - Type 1: Basic data records
tgr41021.f42 - Type 2: Shape coordinate points
tgr41021.f43 - Type 3: Additional census geographic area codes
tgr41021.f44 - Type 4: Index to alternate feature names
tgr41021.f45 - Type 5: Feature name list
tgr41021.f47 - Type 7: Landmark features
tgr41021.f48 - Type 8: Area landmarks
tgr41021.f4a - Type A: Additional polygon geographic area codes
tgr41021.f4i - Type I: Area boundaries
tgr41021.f4p - Type P: Polygon locations (internal points)
tgr41021.f4r - Type R: Record number ranges
```

There was no Type 6 data file (additional address range and ZIP code information) available for Gilliam County. Because the TIGERTOOL user documentation suggests that Type 4, 5, and 6 files should not be converted if the information in them is not needed, these files can be renamed so TIGERTOOL will not find them under the input file prefix `tgr41021.f4`.

TIGERTOOL creates three output coverages:

1. `<outcover_prefix>1` - contains arc (line) coordinates and polygon topology extracted from the basic data records (Type 1) and the shape coordinate points (Type 2)

2. `<outcover_prefix>2` - point coverage containing polygon label points from Type P records

3. `<outcover_prefix>3` - point coverage containing point landmark features from Type 7 records.

In addition, TIGERTOOL creates a collection of Arc/Info attribute files that contain the attributes of points, lines, and polygons contained in the three GIS coverages. TIGERTOOL also builds a set of "relates" (relational joins) to link these Info attribute files to the arc attribute table (AAT) and point/polygon attribute table (PAT) files of the coverages. These

"relate" definitions are named and stored in a file named `<outcover_prefix>.rel` and can be activated in Arc/Info by using the `RELATE RESTORE <file_name>` command. Items (columns) in the related attribute files can then be accessed in Arc/Info commands as though they were an item in the PAT or AAT file by using the syntax `<relate_name>//<item_name>`. The attribute files created by TIGERTOOL and their associated relate names are listed below.

1. `<outcover_prefix>1.acode` - arc attributes from Type 1 records. Relate name: ACODE.

2. `<outcover_prefix>1.type3` - additional census geographic area codes, including voter tabulation districts, from Type 3 records. Relate name: TYPE3.

3. `<outcover_prefix>1.pcode` - polygon (area) attributes from Type 1 records. Relate name: PCODE.

4. `<outcover_prefix>2.typea` - additional polygon geographic area codes, including congressional districts, from Type A records. Type A files also have reserved place holders for possible future storage of school district boundaries, traffic analysis zones, and urbanized area codes. Relate name: ACODE.

5. `<outcover_prefix>2.xcode` - polygon label points from Type P records. Relate name: XCODE.

6. `<outcover_prefix>2.typei` - area boundary identifiers from Type I records (contains both Type 1 record numbers and Type P polygon identifiers). Links Type 1 line segment records to the corresponding Type P polygon records (left and right). Relate name: TYPEI.

7. `<outcover_prefix>3.xcode` - attributes of point and area landmark features and longitude/latitude coordinates of point landmarks from Type 7 records. Relate name: TYPE7.

8. `<outcover_prefix>3.type8` - polygon identifiers for area landmarks from Type 8 records. Relate name: TYPE8.

These Arc/Info attribute files and the predefined relates allow users of Arcplot (the map display subsystem of Arc/Info) to select and display a specific theme (e.g, all hydrographic features) or a subset of features (e.g., primary and secondary divided highways) by relating the coverage to the CFCC attribute and selecting CFCC values that correspond to the desired feature types. Individual features (e.g., Interstate Highway 84) can be selected by feature name. Polygons of a specific type (e.g., census blocks boundaries) can be displayed by selecting all the line segments for which the left area identifier (e.g., census block identifier) differs from the right area identifier. Once the user has selected a group of similar features, these features can be extracted into an Arc/Info coverage and then exported to an ArcView theme for use within FEMIS.

4.0 Managing Relational Data

The relational database contains approximately 180 tables that hold information used by the application software. As described in Section 3.2 (Building Relational Data), some of the tables are preloaded with records before the system is deployed. As the system is used, new information is added and some of the initial information may be modified or deleted.

The FEMIS application software, including the models, are largely responsible for managing the information in the relational database. This section discusses the default information in the database and then describes the general purpose query tool that allows users to browse and modify data.

In the FEMIS system, all data access protection is performed by means of user interface screens. The System Management section in the ***FEMIS System Administration Guide*** provides the procedures for giving FEMIS users the correct privileges to perform their tasks.

4.1 Site Default Information and Considerations

When the database for a new CSEPP Site is created, a set of default information is defined that meets the specialized requirements of the site. This information is solicited from the EOC users at the site and is loaded into the `EOC_Objective` tables for each EOC.

The type of population information in the database is another default consideration. The database is designed to contain a set of "normal condition" population counts and then have flux or change counts to account for non-normal conditions. The census data available from the government is the primary source of population information.

The census data contains counts for many categories of people, such as by age range, gender, race, etc. For the Utah and Alabama sites that have databases now, the "total population" category was the default. This contains counts for all ages, both sexes, and all races. The definition of attributes of population categories are stored in the table called `Population_Definition`.

The census data is gathered by asking people in residential areas how many people live at that residence. Since most people in a residence are more likely to be at home during the night than the day, these counts best define night time numbers. Also, since many families have routines that are structured around the 5-day workweek, the counts are good indicators of weekday populations while not accounting for the whereabouts of people on weekends or special events. Based on these considerations, the normal condition for population information is weekday, nighttime conditions. These counts are stored in the `Population_Location` table.

nighttime conditions. These counts are stored in the `Population_Location` table.

To create data supporting non-normal population conditions, information about changes to normal population counts needs to be supplied in the `Population_Flux` table. For example, to know how many people were in a census block during the weekday, daytime hours, the `Population_Flux` table would have to have a count of the number of persons leaving (-) or entering (+) the block during the day. Normally this would be a negative value due to people at work or children in school. This flux or change information is difficult to assemble from government sources and it probably has to be entered at the site after the system is installed.

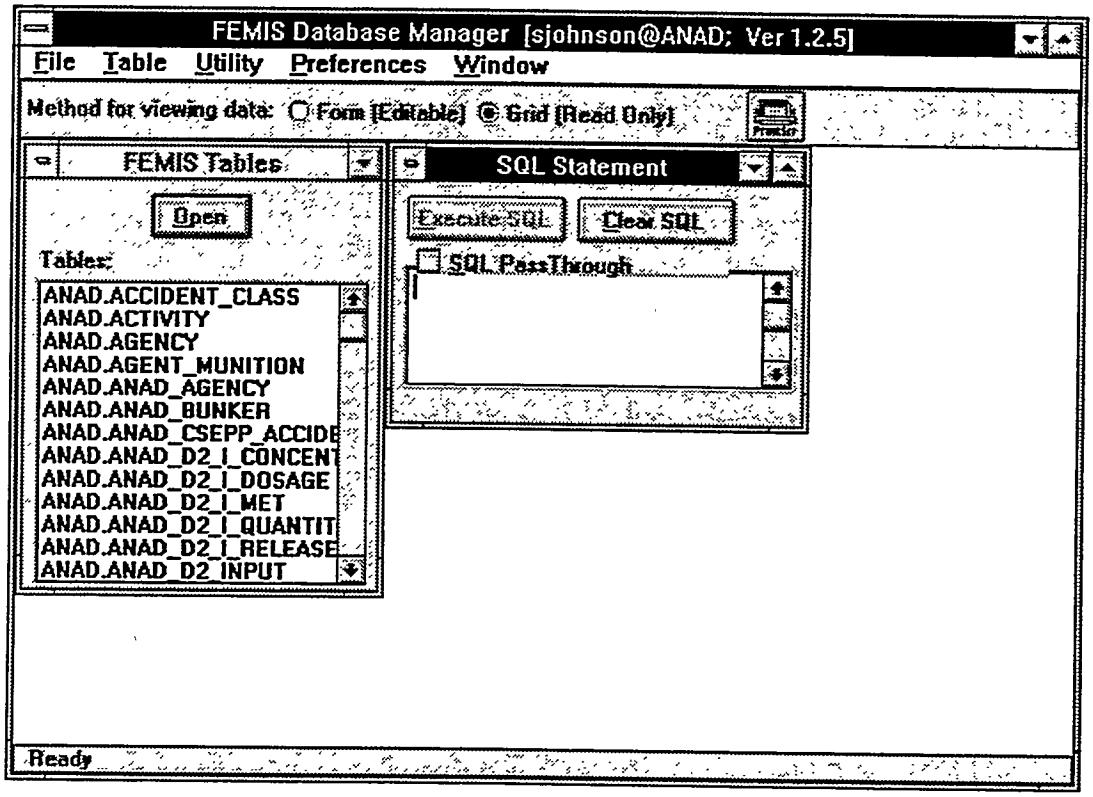
4.2 FEMIS Data Manager Tool

The FEMIS application has many user interface screens for accessing and managing relational data. The online help function provides a convenient user guide. A collection of the relational tables has no formal user screens and relies on a general-purpose tool to manage the records in them. This section discusses how this tool is used and provides guidelines to manage the relational database while FEMIS is in use.

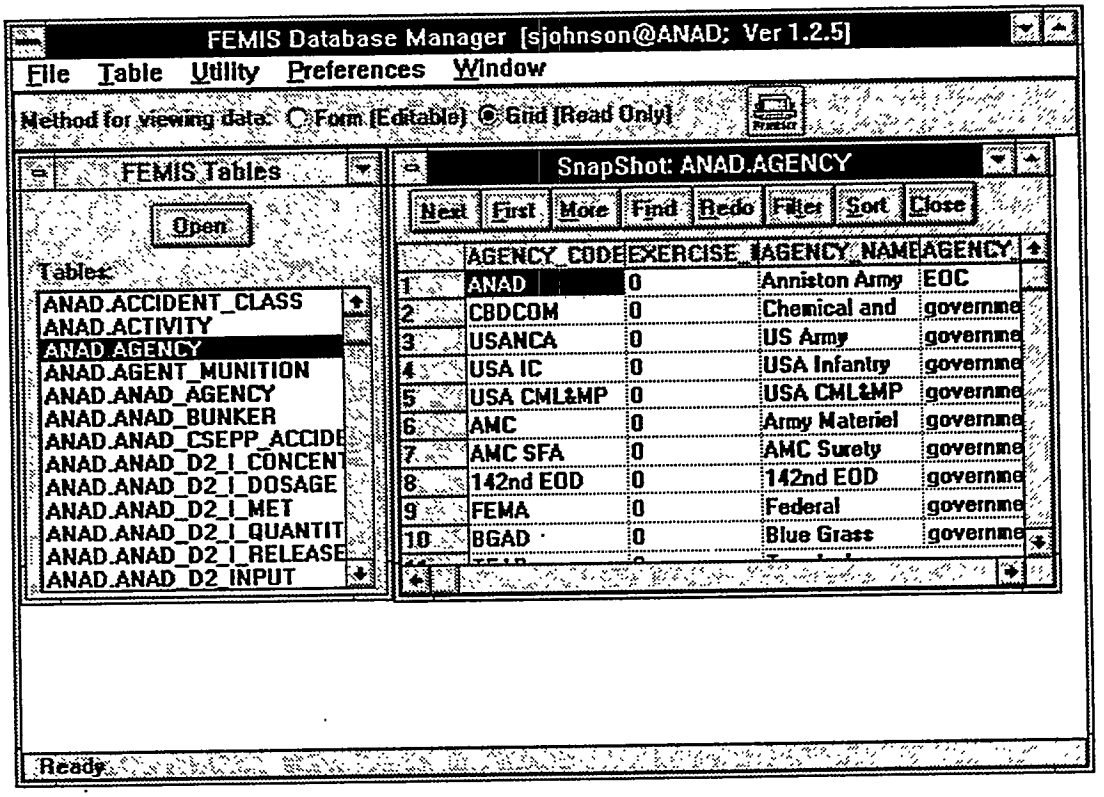
The FEMIS Data Manager Tool is activated in Operational mode by clicking on the `Utility` drop-down menu and then clicking on the `DataMgr` option to display the FEMIS Database Manager window. Within this window are two smaller windows, the FEMIS Tables window and the SQL Statement window. The FEMIS Tables window on the left contains a list of all the tables in the relational database.

Note: Some additional entries such as `ANAD_TABLEXX` appear here; these are views that are used for database replication and you should not access them.

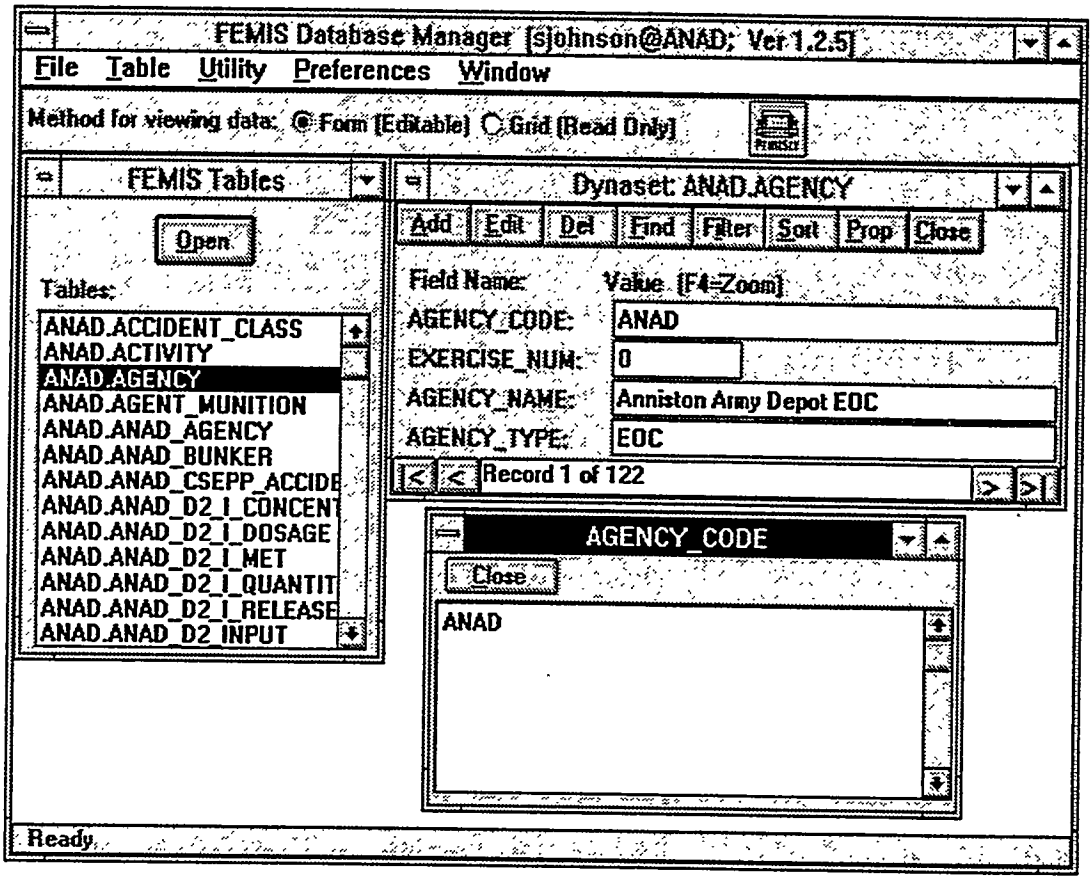
The SQL Statement window on the right is used to formulate a user query, but normally it is not used. It can be changed into an icon by selecting the `Close` option or by double clicking on the control box in the upper left corner of this window.



To view data in a table, select the `Grid` radio button below the main menu, highlight one of the tables from the list, and click on the `Open` button. This will bring up the Snapshot window which contains a multiple-record, grid display of the information in the FEMIS table. If the record is longer than the width of the window or there are more records available than can be shown, scroll bars are presented to view all the records and fields. For tables with many records, the `Next` button is used to select the next group. The `Find, Redo, Filter, and Sort` buttons are search and organization options for the fields in the table.



If you must create new data or edit data that is present, select the `Form` radio button, which will bring up a window such as the one shown in the following example. From this window you can add, edit, or delete records. The `Find, Filter, Sort` and `Prop` buttons are search and organization options for the fields in the table. A zoom feature is present for displaying long fields, which is shown in the next window. Place the cursor in the field and press `F4` (function key 4) to display the zoom box window.



4.3 Managing Relational Data

This section describes several considerations that will help manage the relational database and provides some guidelines to use. Topics included are database integrity, testing modifications, managing exercise data, archiving data, and backup and recovery.

Future upgrades of the FEMIS system will incorporate functions to archive data that must be saved for the record and to discard other data that has no current value.

4.3.1 Database Integrity

The information in the relational database has complex inter-relationships that must be maintained. The user interface windows have been designed and tested to achieve this integrity.

CAUTION

Changing the FEMIS relational database tables can destroy the functionality of the FEMIS application. Observe extreme care when performing any maintenance in the relational database.

Do not allow general users to modify the relational database. Database adjustments should only be performed by qualified Database Administrators.

When changes are made using the FEMIS Data Manager tool or other tools, such as SQL*Plus, care must be taken to prevent inconsistencies in the database. Only FEMIS users that understand the database should be given access to tools that allow modifications.

4.3.2 Testing Modifications

It is recommended that any significant changes to the database are first tested by implementing them on an exercise dataset, see Section 6.0, Managing Exercise Data. If problems are encountered, the exercise data can be easily deleted without any impact on the operational data. When the changes have been tested, then they may be applied to the operational data.

4.3.3 Managing Exercise Data

Each time a new exercise dataset is generated, approximately one-half of the tables in the relational database gain a significant number of new records. If the obsolete exercise data is not removed, database performance may be impacted. Section 6.0, Managing Exercise Data, describes the maintenance of this type of data. Each dataset should be documented and unnecessary data deleted.

4.3.4 Archiving Tables

The Journal table (where events are logged) and the Met tables require some maintenance because these tables grow daily as the system is used. The frequency of archiving depends on how the system is used. If, for example, FEMIS was operated 7 days a week for 24 hours a day with continuous Met feed, the `Met_Condition` table records could increase or grow by approximately 1000 records per day. In a month, nearly 30,000 records would accumulate, and in a year the count would be approximately 360,000. The Journal table rate of growth would be less than the Met tables, but after a year's time, it may approach 100,000 records. These numbers of records would not fill the tables or the database but would be undesirable to view in the Status Boards.

Data should be archived when users indicate too many records are present or when the Database Administrator determines older records in the table are no longer useful. Because the archived data can be reloaded, archival does not mean the data is lost. Once the FEMIS system use pattern is set and fairly stable, archiving can be done periodically as part of standard system administration policies.

A timed archiving capability is available to periodically remove records from these two tables. The ***FEMIS System Administration Guide*** describes how to use this capability. The manual archiving program still exists and can be used for special situations and is described below.

The archive program is located in the `/home/femis/database/eocdba` directory.

Note: The archive program is a generic tool for archiving two types of data for any FEMIS database. The tool will allow you to archive and delete data for other EOCs -- do not archive or delete data for other EOCs unless authorized to do that task.

The following example illustrates how to archive Journal data for the onpost EOC in Utah.

Go to the directory where the archive programs are kept.

```
% cd ~femis/database/eocdba
```

Start the archive program.

```
% archive.sh
```

The first menu which pops up allows you to select the database from which you wish to archive data.

```
Databases
==========
tead
ctoo
utst
==========
Choice ==>
```

For example: we want to archive data for the onpost EOC, we enter `tead`.

The second menu which pops up allows you to select the type of data to archive.

```
Archive Data Menu
==================
met
journal
==================
Choice ==>
```

For example: we want to archive Journal data, we enter `journal`.

Then you will see some informational messages, including the directory into which the `.dmp` file will be placed and the name of the `.dmp` file.

```
* * * MSG: Output to: /files6/home/femis/dev/inf/eocdba

* * * MSG: Exporting to: tead_1996-04-19-09-52_journal.dmp
```

Note: The `.dmp` file name includes both the date and time.

Then the actual export begins, so you will see some messages from the Oracle Export utility, `exp`. The name of each table and the number of records exported are also displayed; you should verify that the record count is an expected value.

When the export completes, you should see the message:

```
Export terminated successfully without warnings.
```

Then you will be asked whether the export completed ok -- did you see the above message saying the export completed successfully?

```
Did the export complete successfully? [N] ==>
```

If it did, then enter `Y` and the program will continue and allow you to specify which data to delete. If the export did not work properly OR if you do not want to delete any data, then enter `N`.

Normally you will enter `Y`, and then you will be asked for an archive date.

```
Enter archive date (MM/DD/YY) [04/23/96] ==>
```

Any data older than the date you enter will be deleted from the database. If you want the default date (today) to be used, just press `<Enter>`.

Then you will be asked to confirm the deletion of data.

```
Do you really want to delete records older than 4/1/96? [N] ==>
```

If you do want to delete the data, enter `Y`.

Then the Oracle SQL*Plus utility will delete records from the table(s), displaying some more status messages as it runs. The last message from SQL*Plus is the important one -- how many rows were deleted? Was it the expected number?

Finally, the archive tool will display the 'archive complete' message and exit.

```
* * * MSG: Archive of journal in tead is complete
```

The `.dmp` file should then be moved to the `exports` directory.

```
% mv *.dmp ../exports
```

The `.dmp` file will be backed up to tape as part of the normal system backup process. However, the Database Administrator should periodically remove old `.dmp` files, especially when the volume of data is over 100MB.

4.3.5 Backup and Recovery of the Database

The database files should be backed up at regular intervals. One backup per day, during off-use times, should be sufficient; the site System Administrator may decide that more frequent backups are desirable. In case of disk failures or other serious problems involving the database, the files can be restored from the last backup. See the ***FEMIS System Administration Guide*** for additional details on backing up the database.

5.0 Managing Spatial Data

FEMIS spatial datasets are stored as ArcView themes (layers). Each theme represents a specific type of geographic feature (e.g., roads, state and county boundaries, facility locations) within the area of interest surrounding the CSEPP site. Table 3.5 lists each of the standard FEMIS spatial themes and describes the storage structures and other characteristics of these themes. The data files for each spatial theme are stored on the UNIX server in a directory structure that allows them to be easily installed on each PC. Users maintain copies of these theme files in a parallel directory structure on their client PCs for use with the ArcView GIS software. In update mode, the FEMIS GIS setup program checks the modification date of themes on the server and automatically updates the local copies of the theme files if they are obsolete.

The `GIS_LAYER_DEFINITION` table, in the relational database, contains information on the spatial data storage structure in the form of a set of rules defining the FEMIS naming convention for themes, file directories, files, and ArcView legends. In addition, tables in the relational database contain attribute values and other information about the features in the spatial themes. Other tables link the spatial data to this attribute information.

The FEMIS spatial data can be divided into three categories: system spatial data, user-modifiable spatial data, and model-related spatial data. These categories are discussed below.

1. System spatial data themes change infrequently and are managed and controlled by the system data administrator. Users cannot modify the spatial information contained in these themes. Examples of system spatial themes are roads, census blocks, and emergency planning zone boundaries.

2. User-modifiable spatial data themes can be modified by users from within certain FEMIS modules. User modifications are restricted to adding new features (map objects) to an existing theme. The system data administrator retains control over modification and deletion of existing features in these themes. Facilities are an example of a user-modifiable spatial theme.

3. Model-related spatial data themes are created for each model case that is run. These themes are temporarily generated and stored on the user's PC as needed.

5.1 System Spatial Datasets

The following paragraphs briefly describe the management and maintenance process for the "static" FEMIS spatial themes that cannot be modified by FEMIS users.

5.1.1 Census Blocks

Enumeration district boundaries are maintained by the Database Administrator. Changes in the data would originate from updated TIGER/Line data from the U.S. Bureau of the Census. Depending on the nature and magnitude of the changes, the data administrator could choose either to regenerate the entire theme from the new TIGER/Line files for the affected counties (the recommended method), or to use Arc/Info's ArcEdit utility to edit the Arc/Info coverage and then export the modified coverage to ArcView.

5.1.2 County Boundaries

The county boundaries theme is maintained by the Database Administrator. Changes in the data would originate from updated TIGER/Line data from the U.S. Bureau of the Census. Depending on the nature and magnitude of the changes, the data administrator could choose either to regenerate the entire theme from the new TIGER/Line files (the recommended method), or to use Arc/Info's ArcEdit utility to edit the existing Arc/Info coverage and then export the modified coverage to ArcView.

5.1.3 Accident-Based Planning Categories

The Database Administrator is responsible for maintaining this theme at each site. If changes in the category boundaries are recommended by the Accident Based Planning Review Group, the theme can be regenerated by running the ArcView/Avenue script `createABPC` using the desired parameters for center location and radius.

5.1.4 Igloos (point)

Igloo themes are maintained by the Database Administrator at each site. Changes in the data from Onpost (new igloo constructed, existing igloo destroyed, or a correction in the location and/or content of an existing igloo) are made by updating the igloo information in the relational database, and then running an SQL script to regenerate the ArcView event theme file for igloos.

5.1.5 Emergency Planning Zones

This theme is maintained by the Database Administrator at each site. Changes in the data, due to changes in zone boundaries or the addition of new zones, can be made by editing the ASCII "Generate" text file for zones, regenerating the Arc/Info coverage from the ASCII file, and then converting the coverage to an ArcView theme that replaces the previous Zone theme.

5.1.6 Traffic Control Points

The traffic control points themes, one for each EOC, are maintained by the Database Administrator. If a new traffic control point is established, an existing traffic control point is removed or a correction is needed in the location of an existing traffic control point. The location correction would be made by updating the information on traffic control points in the relational database, and then running the SQL script to regenerate the ArcView event theme file for traffic control points.

5.1.7 Met Towers

The Met tower point location theme is maintained by the Database Administrator. If a new Met tower is constructed, an existing tower is taken out of service, or a correction is needed in the location data for an existing tower, the changes would be made by updating the information on Met towers in the relational database, and then running an SQL script to regenerate the ArcView event theme file for Met towers.

5.1.8 Warning Sirens

The warning sirens point location theme is maintained by the Database Administrator. If a new warning siren is constructed, an existing siren is taken out of service or a correction is needed in the location of an existing siren. The location correction would be made by updating the information on sirens in the relational database, and then running the SQL script to regenerate the ArcView event theme file for sirens.

5.1.9 Administrative Boundaries

Administrative boundaries (e.g., national forest boundaries) are maintained by the Database Administrator. Changes in the data will likely originate from new or updated United States Geological Survey (USGS) Digital Line Graph (DLG) data, which was the original source of the IBS Administrative Boundaries data. Depending on the nature and magnitude of the changes, the data administrator could choose either to regenerate the entire theme from the new USGS data files (the recommended method), or to use Arc/Info's ArcEdit utility to edit the Administrative Boundaries coverage and then export the modified coverage to ArcView.

5.1.10 Road Themes (Detailed, Major)

Road network themes (Detailed and Major) are maintained by the Database Administrator. Changes in the data would originate from updated TIGER/Line data from the U.S. Bureau of the Census. Depending on the nature and magnitude of the changes, the data administrator could choose either to regenerate each affected theme from the new TIGER/Line files (the recommended method), or to use Arc/Info's ArcEdit utility to edit the appropriate Arc/Info coverages and then export the modified coverages to ArcView.

5.1.11 Railroads

The railroads theme is maintained by the Database Administrator. Changes in the data would likely originate from updated TIGER/Line data from the U.S. Bureau of the Census. Depending on the nature and magnitude of the changes, the data administrator could choose either to regenerate the entire theme from the new TIGER/Line files for the affected counties (the recommended method), or to use Arc/Info's ArcEdit utility to edit the existing Arc/Info railroads coverage and then export the modified coverage to ArcView.

5.1.12 Streams and Water Bodies

The streams and water bodies theme is maintained by the Database Administrator. Changes in the data would originate from updated TIGER/Line data from the U.S. Bureau of the Census. Depending on the nature and magnitude of the changes, the data administrator could choose either to regenerate the entire theme from the new TIGER/Line files for the affected counties (the recommended method), or to use Arc/Info's ArcEdit utility to edit the existing Arc/Info coverage and then export the modified coverage to ArcView.

5.1.13 Elevation Contours

The elevation contours theme is maintained by the Database Administrator. Changes in the data would likely originate from new or updated USGS elevation data, which was the original source of the IBS Elevation Contours data. Depending on the nature and magnitude of the changes, the data administrator could choose either to regenerate the entire theme from the new USGS data files (the recommended method), or to use Arc/Info's ArcEdit utility to edit the elevation contours coverage and then export the modified coverage to ArcView.

5.1.14 Image Maps

Image maps are maintained by the Database Administrator. Revised image maps are incorporated into the spatial database in the same manner as the original image maps were installed (registration in Arc/Info, conversion to a TIFF graphics file, integration with other images, and export to ArcView). An image map of an area not previously represented would be added to the image files. A revised image map of an area previously represented would replace the obsolete image map file of the same area.

5.2 User-Modifiable Spatial Datasets

This section discusses accident-based planning wedge themes and facility themes. Users that have the appropriate privileges can modify these themes from within FEMIS.

5.2.1 Facilities

Separate facility themes exist for each EOC. Users can add, delete, or modify facilities in their EOC's facility theme from within FEMIS. After a user has finished making the changes and submits the new information to the database, an SQL-PASSTHRU query is automatically run from the FEMIS application. This query updates the appropriate database tables and creates an ASCII text file that is used to generate a new facility theme for the EOC. The Database Administrator can update any EOC's facility theme by following the same process.

5.2.2 Accident-Based Planning Wedges

Separate accident-based planning wedge themes exist for each EOC. Users can add or delete wedges in their EOC's planning wedge theme from within FEMIS. After a user has finished making the changes and submits the new information to the database, an SQL-PASSTHRU query is automatically run from the FEMIS application. This query updates the appropriate database tables and creates an ASCII text file that is used to generate a new planning wedge theme for the EOC. The Database Administrator can update any EOC's planning wedge theme by following the same process.

5.3 Model-Related Spatial Datasets

Model related spacial datasets include the following themes: D2 track (Dosage), D2 track (Concentration), evacuation nodes, evacuation links, and evacuation centroids. For each of these themes, the actual ArcView GIS files are located on the PC. No model files for the GIS are stored on the server.

5.3.1 D2 Theme Data

Although GIS D2 files may be found on the PC, they are in fact regenerated each time a D2 plotting function is invoked. These GIS D2 files are viewed as temporary files.

5.3.2 Evacuation Theme Data

Evacuation theme data is stored in the database; however, this data is used to generate GIS files within ArcView on a PC by PC basis. For example, if someone changes some geographic information for an evacuation case on one PC, the evacuation grid for that case will need to be regenerated on any other PC to utilize the latest information. The GIS layer for an existing evacuation case may be generated on any PC by using the `Create Network` option contained within the evacuation interface.

6.0 Managing Exercise Data

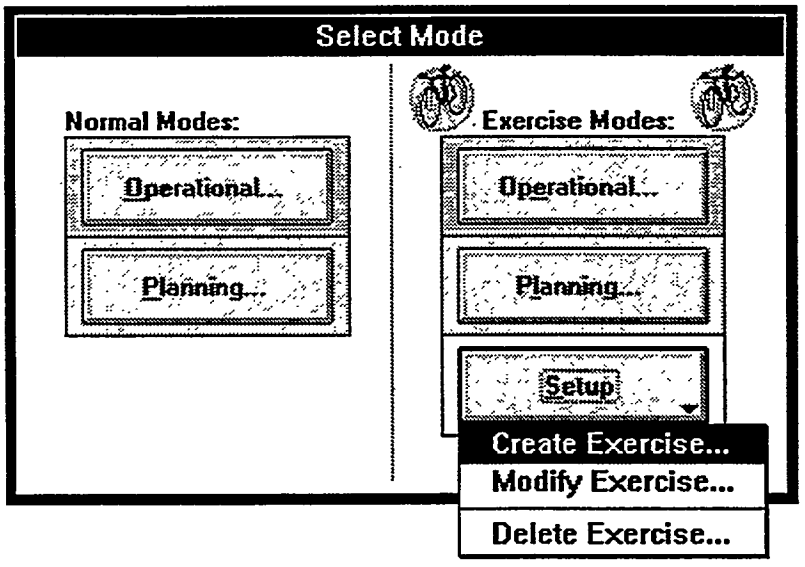
Training and readiness are evaluated through exercises. The FEMIS system supports training or exercise of any aspect of the system's use while still maintaining the integrity of the real world data and situation. In Exercise mode, FEMIS uses copies of the real data so the exercise can be as similar to real world use as possible. Both Planning and Operational modes exist under exercise.

An exercise situation can be set up to meet exercise objectives. Over 90 of the tables in the relational database are used for exercises. Each table can contain data for many exercises. This section describes how to manage this type of data.

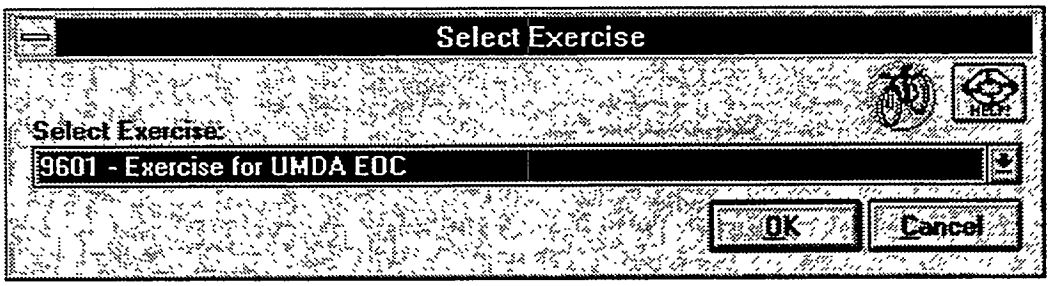
When you are in Exercise mode, a bike icon is displayed on FEMIS windows.

6.1 Selecting Exercise Modes

To start Exercise model from the Select Mode window, click on either the `Operational` or `Planning` button located on the right side of this window. You will use these modes for training or formal site exercises.



The Select Exercise window is displayed with a drop-down list so you can select an exercise. After you have selected an exercise, the Tracking Navigator window is displayed.



To create, modify, or delete an exercise, click on the `Setup` button, which displays these three options: Create Exercise, Modify Exercise, or Delete Exercise.

6.2 Creating an Exercise in Exercise Mode

FEMIS enables the appropriate environment to be created for a desired exercise. Because exercise objectives may require particular circumstances, the user should have a clear understanding of the new exercise before proceeding.

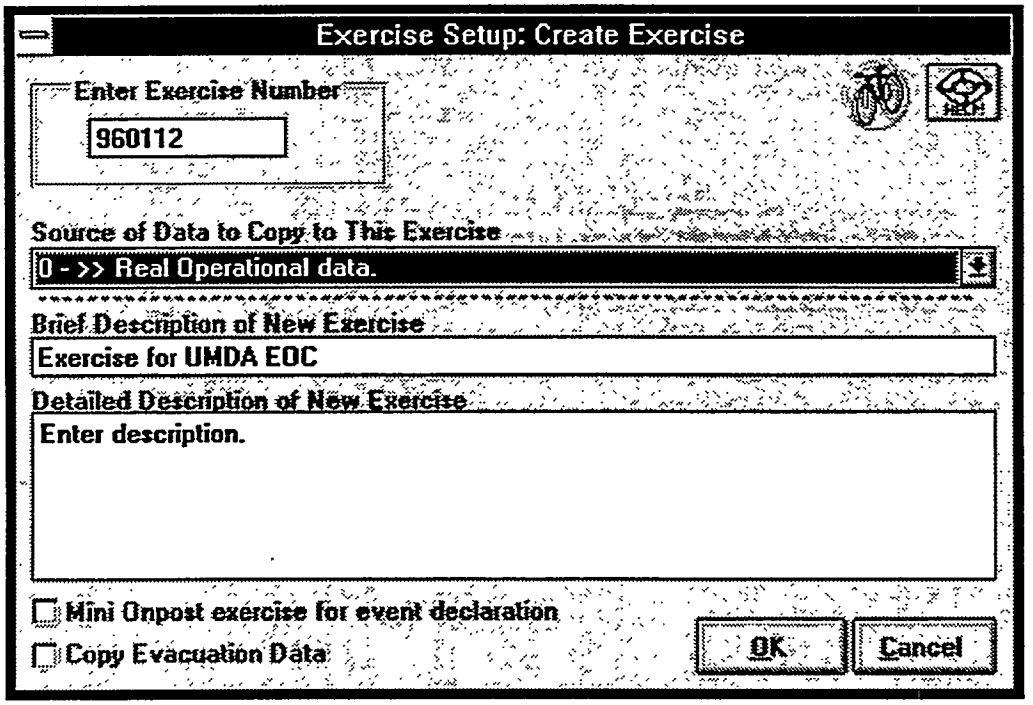
From the Select Mode window, click on the `Setup` button and then the `Create Exercise` option to display the Exercise Setup: Create Exercise window.

To create a unique exercise, click on the drop-down list button to display the available choices for the `Source of Data to Copy to This Exercise`. Usually you will want to use Real Operational data as the basis of the new exercise, so you will select `0 - >> Real Operations data.` from the list. You can also select an existing exercise, assign it a new number, and later modify it serve your exercise purpose (see Section 6.3, Modifying an Exercise in Exercise Mode).

The `Mini Onpost exercise for event declaration` checkbox creates exercise data for an event. The `Copy Evacuation Data` checkbox allows the Evacuation tables to be copied. Due to the size of these tables, use this option sparingly.

To save the new exercise, click the `OK` button. The FEMIS Exercise Manager message window indicates the exercise has been created and displays the total records copied. Click the `Cancel` button to exit without creating a new exercise.

FEMIS will ensure data integrity between exercise, real, and planning data. During an exercise some data may be entirely simulated while other data may be real. FEMIS enables you to specify when the data is real in as non-obtrusive a way as possible.

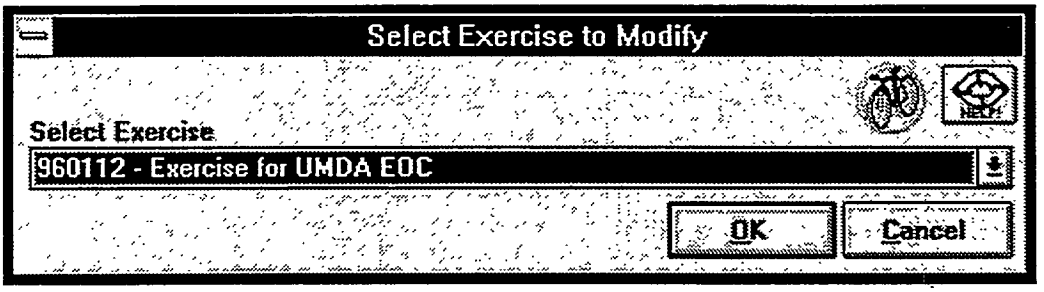


During the exercise itself, FEMIS supports exercise control by allowing the controller to inject information into the exercise data, use E-mail, and review the exercise using FEMIS status boards.

6.3 Modifying an Exercise in Exercise Mode

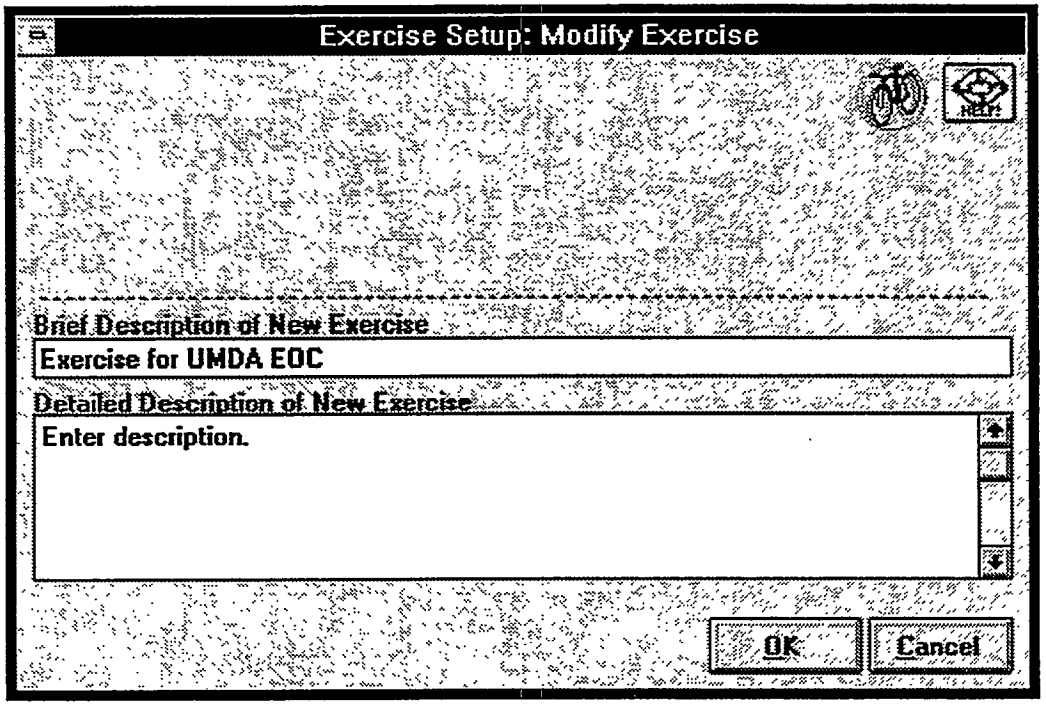
FEMIS enables the system manager/exercise director to modify an existing exercise to fit changing site requirements.

To modify an exercise, click on the `Modify Exercise` option to display the Select Exercise to Modify window.



From the drop-down list, select the name of the exercise you want to modify and click the OK button.

The Exercise Setup: Modify Exercise window is displayed with the details of the selected exercise prefilled in the various fields.



At this point, you can modify the exercise to fit your needs by using the FEMIS user interface, which includes the FEMIS Data Manager. The Brief Description of New Exercise and the Detailed Description of New Exercise fields should be modified to indicate details of the modified exercise.

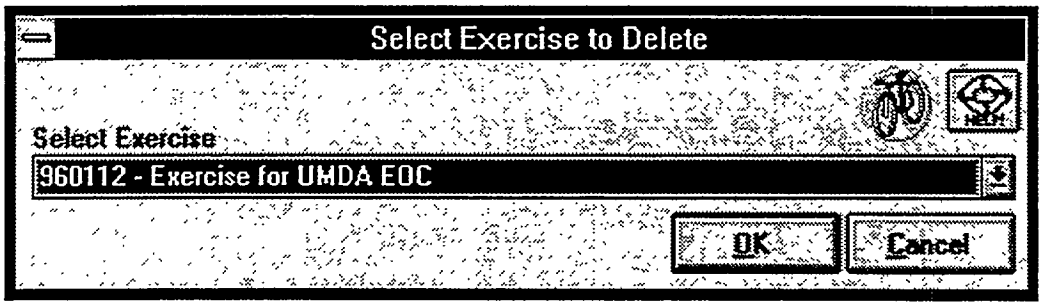
Click the OK button to save your changes. Click the `Cancel` button to exit without modifying the exercise.

6.4 Deleting an Exercise in Exercise Mode

FEMIS enables you to delete an exercise without affecting the Operations mode.

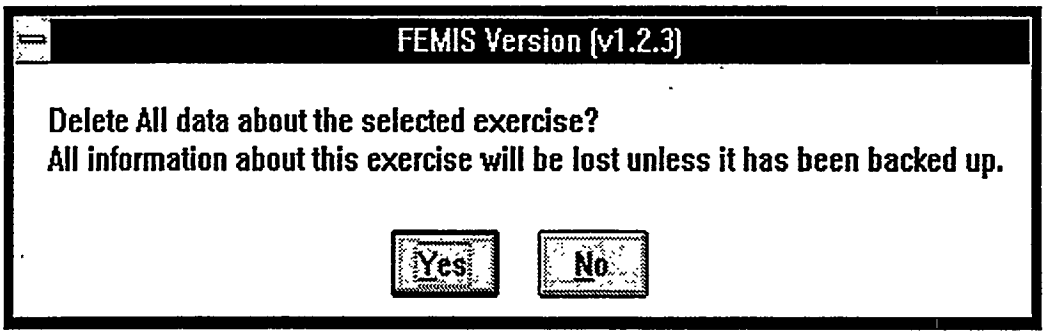
Exercises take up a lot of database space. To keep your database from filling up with exercises, delete them as necessary.

To delete an exercise, click the `Delete` option to display the Select Exercise to Delete window. From the drop-down list, select the exercise to be deleted.



Click the OK button to delete the selected exercise. The FEMIS Exercise Manager message window asks you to confirm that this exercise should be deleted.

Click the `Cancel` button to exit without deleting an exercise.



7.0 Managing Meteorological (Met) Data

Meteorological (Met) information is normally supplied continuously by EMIS or the subsystem that collects data from the towers. The subset of data required for dispersion modeling is stored in the relational database in real time. As shown in Figure 1.1, the FEMIS Met server collects the data and sends it to the UNIX server where it is loaded into the `MET_CONDITION` database table. If EMIS is used for the Onpost EOC, EMIS will supply the meteorological (Met) data, and DEI will load it into the same `MET_CONDITION` table in the FEMIS database.

For the FEMIS UNIX Met subsystem to operate correctly on the UNIX server, a tower configuration file must be available. This file contains information about the Met towers and sensors for the site. An example of this file, `METTOWER.DAT`, is shown in Table 7.1. When the FEMIS system is installed, this file may need to be modified to reflect the current configuration.

Data records will accumulate in the `Met_Condition` table while the Met collection subsystem is in operation. Because there is no automated archive function that removes old data, archiving has to be done periodically by the Database Administrator or a user that is familiar with meteorological (Met) data, see Section 4.3.4, Archiving Tables. To illustrate how the data records accumulate, we will use the example of 10 towers with each tower providing 4 data records every hour. Each record is about 100 bytes or nearly 3MB a month.

$$10\ towers\ x\ \frac{4\ records}{hr}\ x\ \frac{24\ hr}{day}\ x\ \frac{7\ day}{week}\ =\ \frac{6720\ records}{week}$$

Note: If you do not archive the meteorological (Met) data weekly, you will not be able to delete the data because the rollback segment will be too small.

If site policy requires that the old information has to be saved, then the data must be copied to a permanent media for the archiving.

Table 7.1. METTOWER.DAT File Example

Type	Description	Data Units
1	Wind Speed	m/sec, km/hr, ft/sec, miles/hr, knots
2	Wind Direction	deg
3	Wind Gust Speed	m/sec, km/hr, ft/sec, miles/hr, knots
4	Wind Gust Direction	deg
5	Wind Sigma	deg
6	Air Temperature	C, F
7	Relative Humidity	%
8	Atmospheric Pressure	mm_hg, in_hg, atm, bar, mil bar, psi
9	Height of Mixing Layer	m, km, ft
10	Cloud Height	m, km, ft
11	Cloud Cover	%
12	Rain Gauge	mm, cm, inches
13	Tipping Bucket	#
14-98	Unused/Unknown	
99	Battery Voltage	(volts)

TOWER_ID towerid lat(deg min sec dir) lon(deg min sec dir)
CLUSTER clusterid height-in-meters
SENSOR sensorid type units

TOWER_ID 00000001 37 44 03.85 N 084 11 45.70 W
CLUSTER 00000001 15
SENSOR 01 99 volts
SENSOR 61 01 m/sec
SENSOR 63 02 deg
SENSOR 64 04 deg
SENSOR 66 06 C

TOWER_ID 00000002 37 41 35.94 N 084 11 09.52 W
CLUSTER 00000001 15
SENSOR 01 99 volts
SENSOR 51 01 m/sec
SENSOR 53 02 deg
SENSOR 54 04 deg
SENSOR 56 06 C

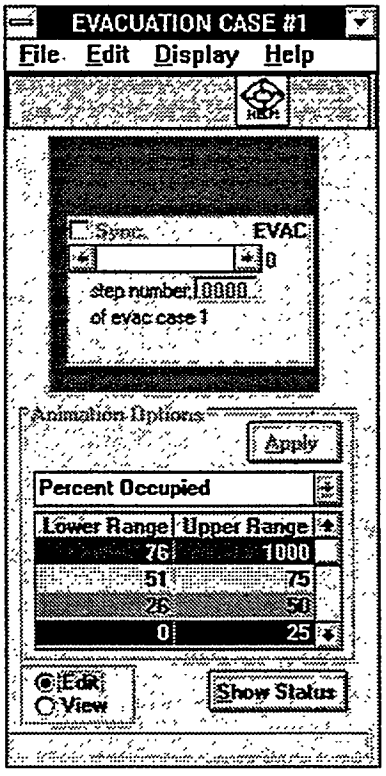
8.0 Evacuation (Evac) Data

Evacuation model case data is managed from the Evacuation Case interface by activating the `Edit` radio button and then selecting an option under the pull-down `File` menu. These options enable you to 1) Create a new evacuation case, 2) Open an existing case, 3) Save an existing case with a new case number, 4) Delete a case, 5) Import a case, and 6) Export a case.

8.1 Creating an Evacuation Case

> **CAUTION**
>
> Creating a new evacuation case is an involved process and is NOT recommended for those without FEMIS evacuation software training.

To create a case, click the `New Case` menu item under the `File` pull-down menu on the Evacuation Case window.

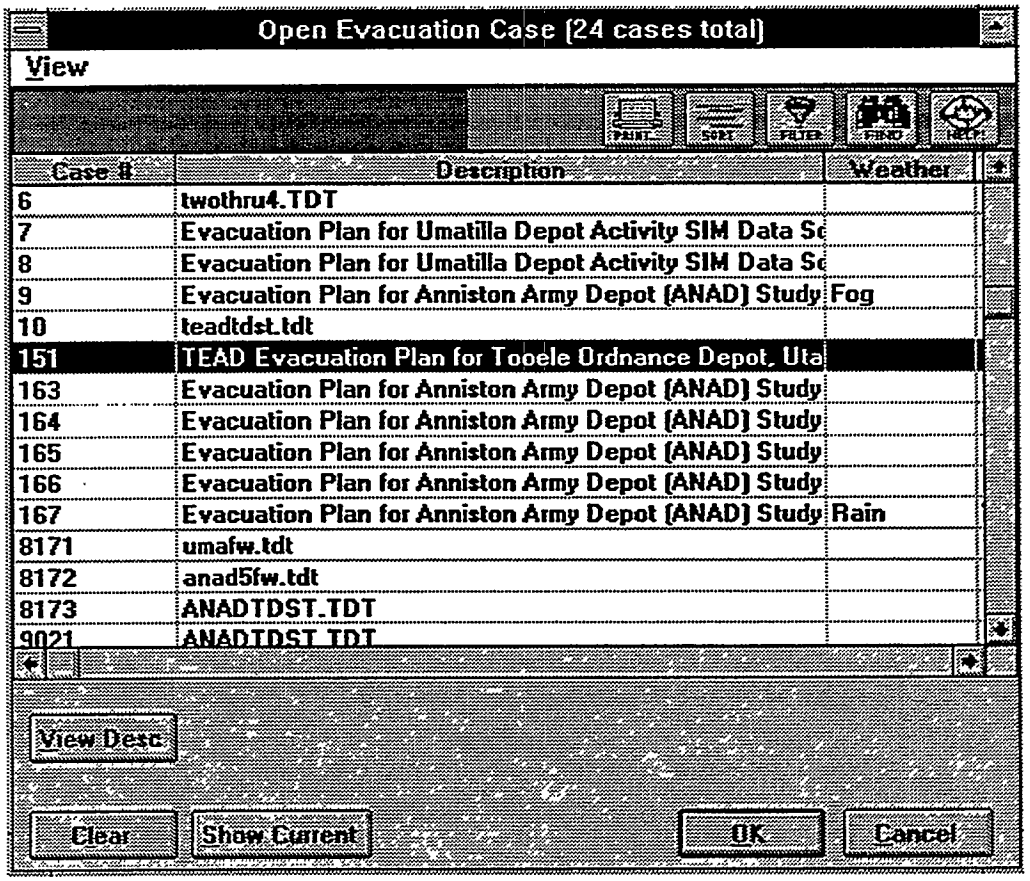


The New Case window displays with a suggested case number for the new case. You can enter your own case number, if you do not want to use the suggested case number. After you click OK, a window to enter a case description, affected evacuation zones, and case conditions will display. Once you have entered this information and clicked the OK button, the (Add) Case Parameters: Evac Case # window is displayed. This window contains high level case information, such as case identification, run control, and time period/output control. Once you fill out this form, click the OK button. The next step is to actually build the evacuation network and add a traffic load to it. To create the network, use the `Add` options under the `Edit` pull-down menu. To modify the network, use the `Modify` options under `Edit` pull-down menus.

8.2 Opening an Existing Case

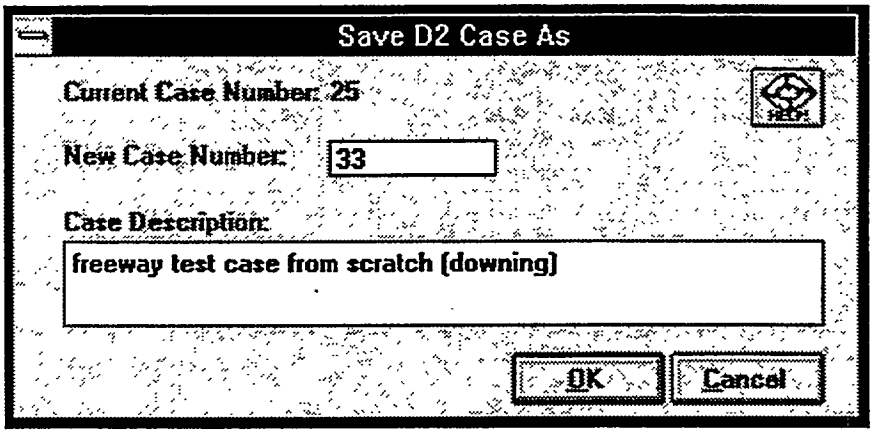
The `Open Case` options works like a typical Windows File Open command, by displaying a window listing the evacuation cases available to open. Select a case from the list and click on the OK button to open the case.

If you want to preview a complete description of a case, highlight the case and then click the `View Desc` button. If you want your current case to be highlighted, you can click the `Show Current` button. To clear highlighted cases, click on the `Clear` button.



8.3 Saving an Evacuation Case

Changes made to an evacuation case are saved as you modify the case. It is therefore unnecessary to have a special save option for the evacuation case shown in the interface. If you want to save your current case with a new case number, however, use the `Save Case As` option from the `File` pull-down menu. This option will copy all the input of your current case to a new case number, and you can then modify the new case as desired.

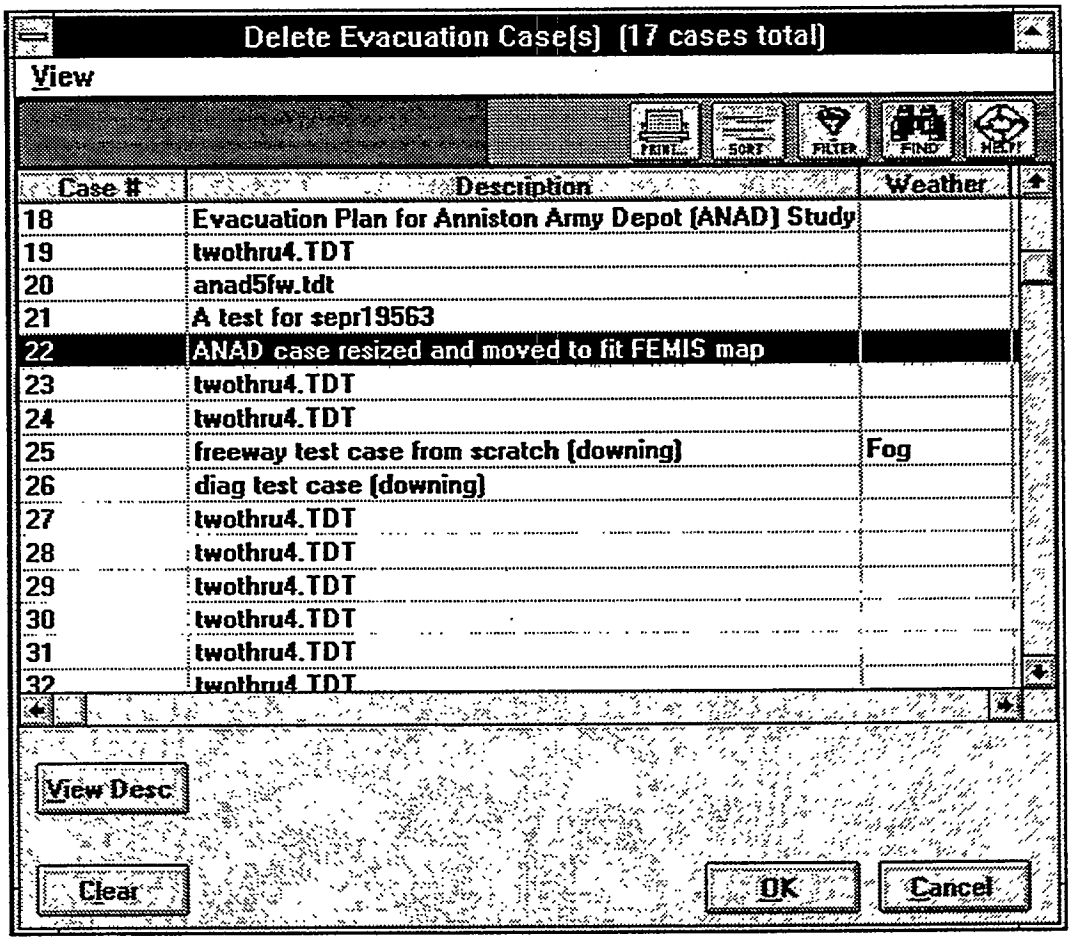


8.4 Deleting an Evacuation Case

To delete an evacuation case, complete the following steps.

1. Select `Delete Case` from the `File` pull-down menu. A window with a listing of evacuation cases will display.

2. Select the case you want to delete. If you want to delete more than one case, hold down the <CTRL> key while you click on additional cases. Click the OK button. A message will display requesting verification of the cases to be deleted. Click the `Yes` button to delete, or click the `No` button to cancel.



8.5 Importing an Evacuation Case

FEMIS can import existing ESIM or IDYNEV input files for execution. Generally, IDYNEV input files come from IBS, and ESIM input files come from OREMS. Before you can import a file, you must know whether it is an ESIM or IDYNEV file. The import file must also be accessible from your PC.

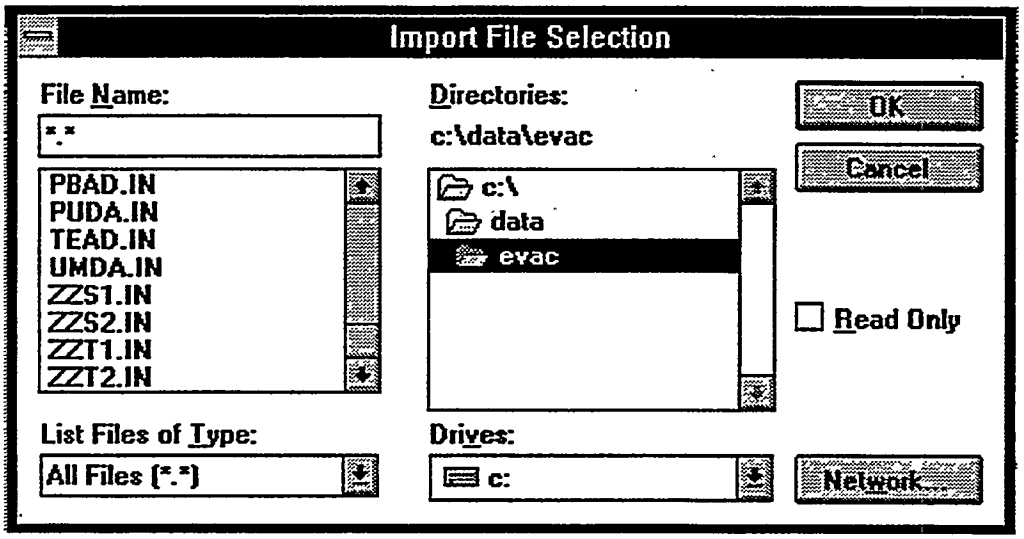
CAUTION

If you transfer an input file from one platform to another, verify that the carriage returns were properly converted and the first column in the file was not deleted.

To verify, bring up the new PC file into a DOS editor and compare it with the original file on the other platform. If they are different, the import utility will not be able to import the file without some cleanup.

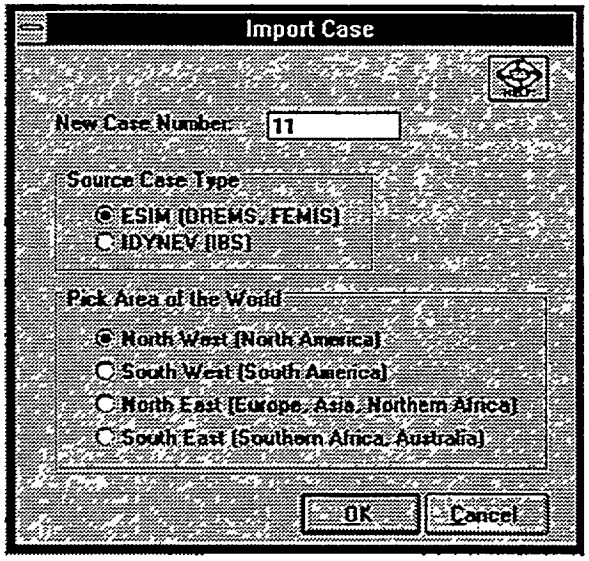
To import an evacuation case, complete the following steps.

1. Select the `Import Case` option from the `File` pull-down menu. An Import window similar to the following example will display. The `Read Only` checkbox and the `Network` button are standard Windows NT items.



Note: Evacuation case files will usually have a `.in`, `.dat`, or `.tdt` file name extension.

2. To find the file you want to import, click on the drive and file path names until the file you want is listed. Select the file from the list and click on the `OK` button. The Import Case window will display.

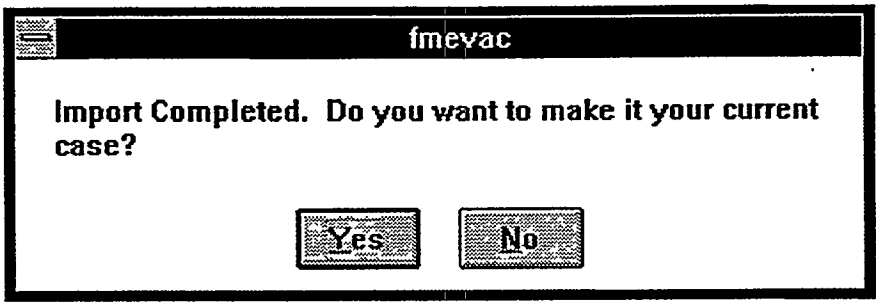


3. When the Import Case window displays, a new suggested case number will be displayed in the New Case Number field. You can accept this case number or enter your own.

Case numbers must be unique within an EOC for a particular exercise. If you select a case number which is already in use, you will be warned, and a new case number will be suggested.

Indicate the type of file you are importing: ESIM (OREMS, FEMIS) or IDYNEV (IBS) by clicking on the radio button next to the appropriate file type. Verify that the case is in the correct area of the world, and click the OK button to complete the import process.

When the file import is complete, the system will display a message box similar to the following.



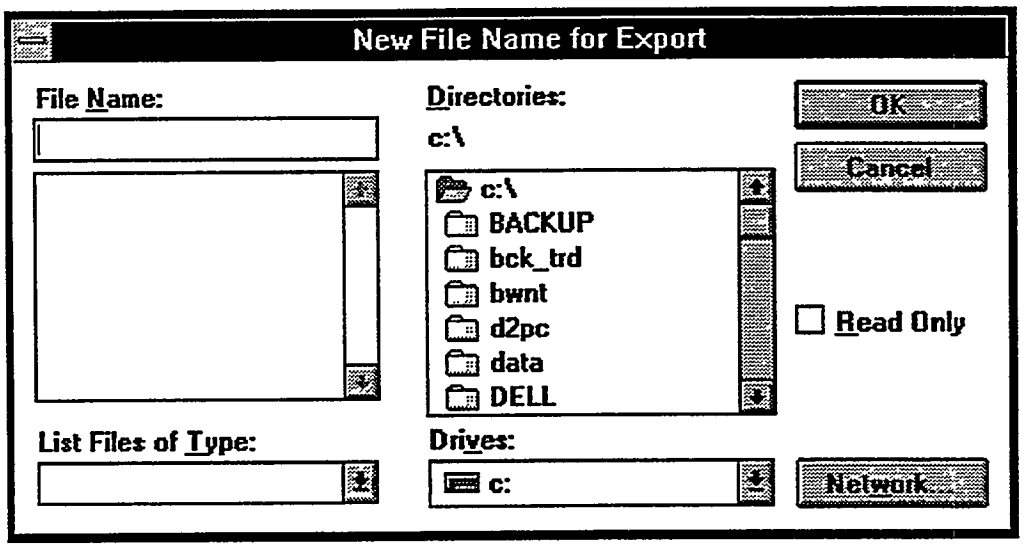
4. To make the imported case your current case, click on the `Yes` button. Click the `No` button to keep your current case (the imported case will be added to your evacuation case list where you can open it later).

   Note: The import function only imports input information. You will need to run the case before output information can be viewed.

8.6 Exporting an Evacuation Case

The export function allows a user to create an ESIM input file based on an evacuation case stored in the database. This function may be useful if you want to share cases with another EOC. The case could be exported from one EOC database and imported to another EOC database.

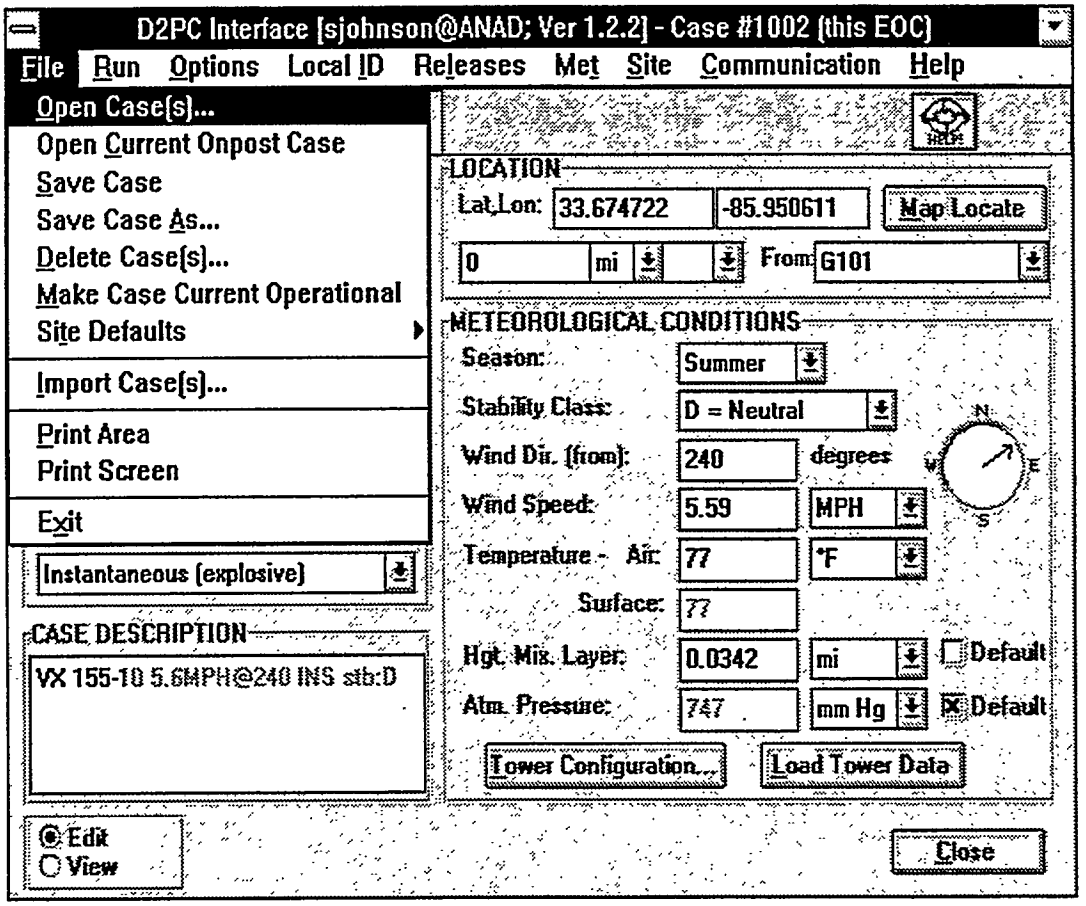
To export a case, open the case. Next pick the `Export Case` option from the `File` pull-down menu. You will be given a standard file selection window as shown below. The `Read Only` checkbox and the `Network` button are standard Windows NT items.



Enter the filename you want to be created and select the directory in which the new file is to be placed. Once this is done, click the OK button and the file will be exported.

9.0 Managing D2 Model Data

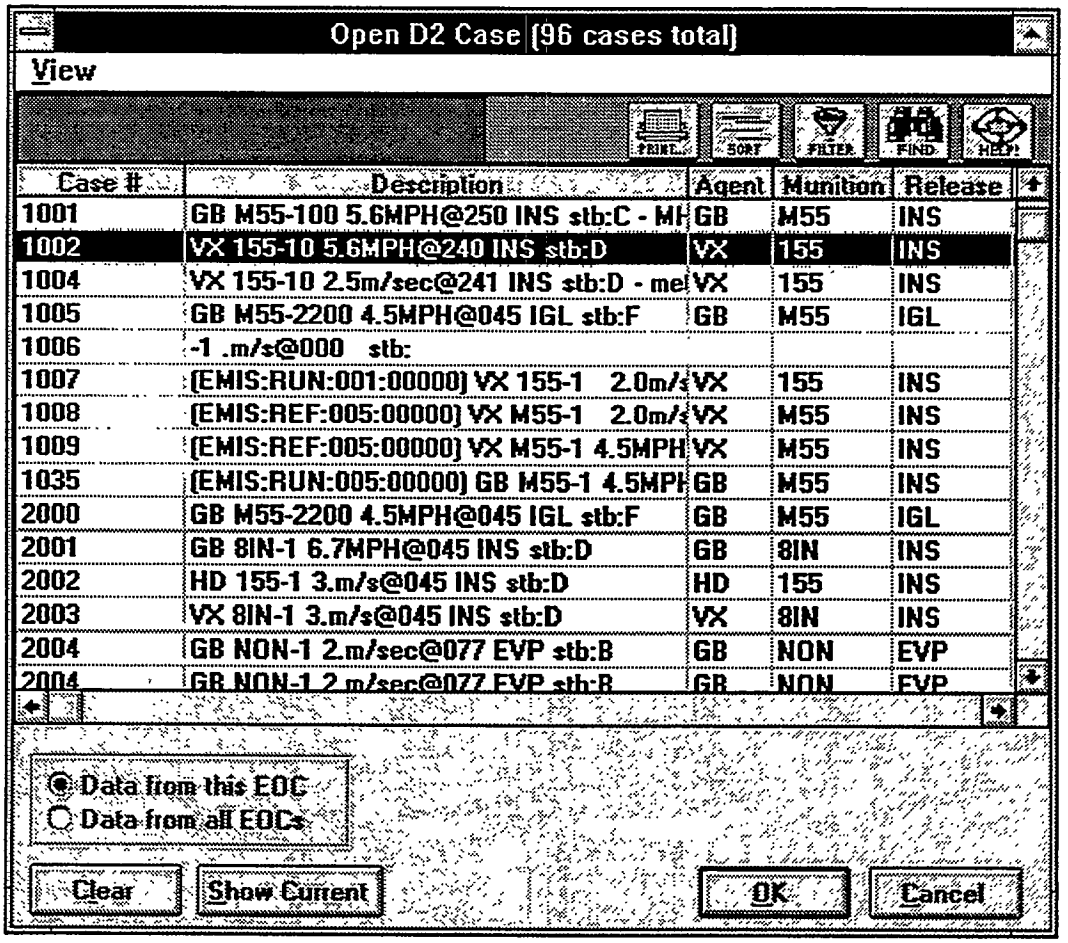
D2 model data is managed from the D2PC interface by activating the `Edit` radio button and then selecting an option under the pull-down `File` menu. These options enable you to: 1) Open Case(s), 2) Save Case or Save Case As, 3) Delete Case(s), and 4) Import Case(s).



9.1 Opening a D2 Case

The `Open Case(s)` options work like a typical Windows File Open command, by displaying a window listing the current D2 cases available for opening. You have two options to open a case. The first option is to select a case from the list by double-clicking on the case entry. The second option is to click once to highlight the case, and click on the OK button. To clear highlighted cases, click on the `Clear` button.

By opening more than one D2PC case, you can have these cases plotted on the map. To open more than one case, hold down the <CTRL> key while clicking on additional cases. Each case number will be added to the `Current Case` a pull-down list on the Open D2 Case window above the OK button. From this list, select the D2PC case you actually want to view in the D2PC interface. The other cases will not display in the D2PC interface but will be plotted on the map the next time you select the `Run and Plot Model Results` option.

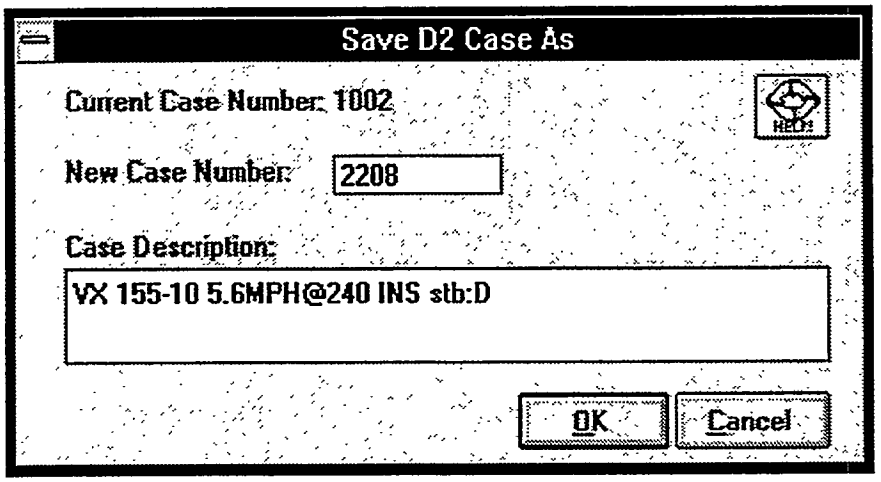


9.2 Saving a D2 Case

The `Save Case(s)` option enables you to save any changes to the current D2 case. This option saves your changes to the case you currently have open. To save D2 case changes to a new case, use the `Save Case As` option.

The `Save Case As` option enables you to save D2 case changes to a new case number which creates a new D2 case.

1. When you select this option, a screen similar to the following example will display.



2. A suggested new case number will be displayed in the New Case Number field. If the suggested case number is not acceptable, enter your own number.

3. Type a case description in the Case Description field. You can enter details such as type of release, wind speed, and temperature.

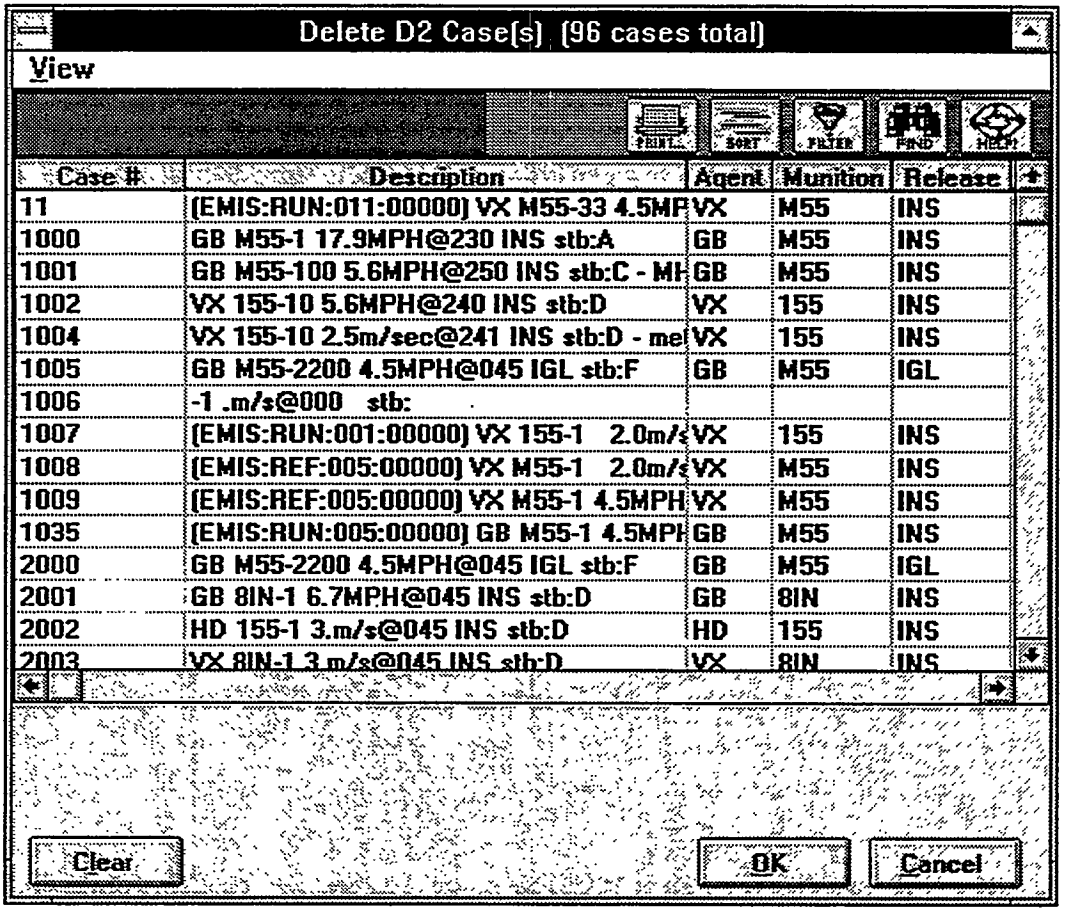
4. Click on the `OK` button to save the D2 case to the new case number, or click on the `Cancel` button to quit without saving the case.

9.3 Deleting a D2 Case

1. Select `Delete Case(s)` from the `File` pull-down menu. A screen similar to the following will display.

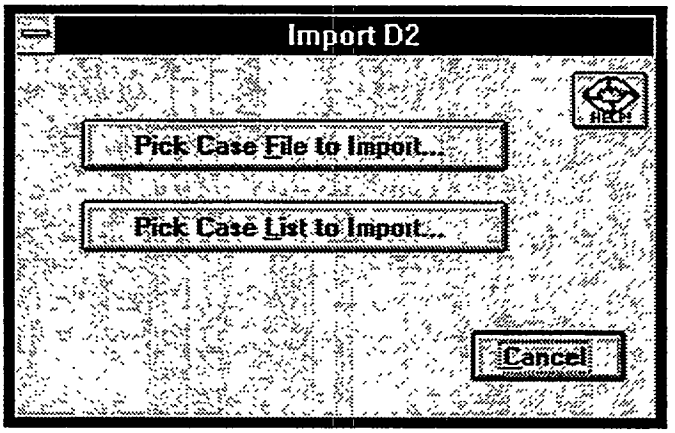
2. Select the D2 case(s) you want to delete from the list and click the `OK` button. The case(s) will be deleted.

3. You cannot delete the current operational case. If the case you want to delete is the current case, select a different case to be your current case; then you can delete the other case.



9.4 Importing a D2 Case

1. Select the `Import Case(s)` option from the `File` pull-down menu. An Import D2 window similar to the following example will display.

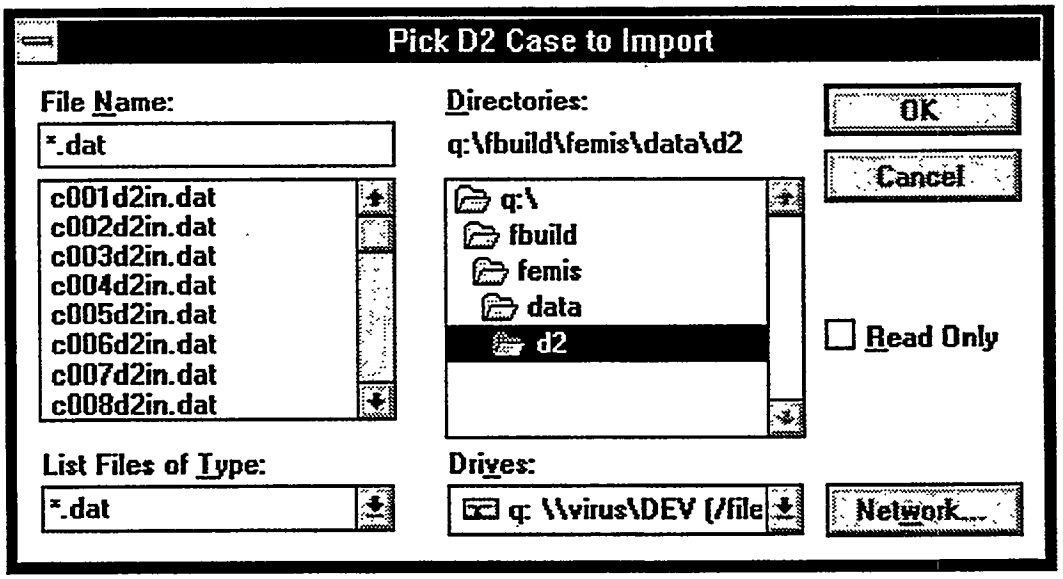


The two options available are 1) to load a single case, or 2) to load multiple cases. To create a Case List, the user must use an editor and produce a file that contains the full path name for each D2 case included in the List. The default list file extension is `*.lst`; an example filename is `myd2list.lst`.

2. Click the `Pick Case File to Import` button to import a single case or the `Pick Case List to Import` button to import multiple cases. A file listing box similar to the following example will display.

   The default extension for D2 Case files is `.dat`, and the default extension for D2 Case List files is `.lst`. Files with other extensions can be displayed by changing the extension in the File Name box.

3. To find the file you want to import, click on the drive and file path names until the files you want are listed. Select the file from the list and click on the OK button to import the file or file list. The `Read Only` checkbox and the `Network` button are standard Windows NT items.



For more details regarding managing D2 cases, see the FEMIS Online Help. .

Appendix A
Site Survey Form

Appendix A
Site Survey Form

Because FEMIS encompasses different functionality than IBS and EMIS, some site-specific information that is essential for FEMIS is not present electronically. This type of information is obtained during the database kickoff meetings held at each site. The Site Survey form, designed by Innovative Emergency Management, Inc., (IEM) and Pacific Northwest National Laboratory (PNNL), is used to gather this information. The surveys are tailored for each site.

An example of a Site Survey is included to indicate the types of information needed for FEMIS. This example is for the Umatilla site in Oregon.

Umatilla Site FEMIS Database Survey: Priority 1 Data, *Umatilla Chemical Depot*

INTRODUCTION

The Federal Emergency Management Information System (FEMIS) is under development by Battelle Memorial Institute, Pacific Northwest National Laboratory (PNNL). The system's purpose is to serve as the automation system in support of the Chemical Stockpile Emergency Preparedness Program (CSEPP).

The government is preparing to field FEMIS v1.2 at the Umatilla, OR site. For FEMIS to work properly at the Umatilla site, the software must have site-specific geographical data. IEM has been tasked by the government to populate a FEMIS database for the Umatilla site.

To start this task, IEM is hosting a Umatilla FEMIS database meeting at PNNL facilities on July 9, 1996. The meeting will be attended by representatives from the Umatilla jurisdictions and from PNNL. Meeting participants will generate a list of requested data for the FEMIS database. The final data list will be included in the *Umatilla FEMIS Database Meeting: After-Action Report*, to be distributed July 12.

In that report, the requested data will be ranked according to a set of priorities:

- Priority 1: These data are *required* data and must be present in the database for FEMIS to operate.
- Priority 2: These data are supporting data that are not needed for FEMIS to operate, but are *critical* to planning and response in FEMIS, and are *easy* to gather and maintain.
- Priority 3: These data are supporting data that are not needed for FEMIS to operate, and are *critical* to planning and response in FEMIS, but are *difficult* to gather or maintain.
- Priority 4: These data are supporting data that are not needed for FEMIS to operate, and are *not critical* to planning and response in FEMIS, but are *easy* to gather and maintain.
- Priority 5: These data are supporting data that are not needed for FEMIS to operate, and are *not critical* to planning and response in FEMIS, and are *difficult* to gather or maintain.

To facilitate the gathering of Priority 1 data, IEM is distributing this survey to all Umatilla jurisdictions. The survey results are needed as soon as possible, but no later than July 26, 1996, to expedite fielding of the FEMIS database. A survey for gathering data at Priority 2-5 will be provided later, based on guidance from the CSEPP Core Team.

HOW TO USE THIS SURVEY

PLEASE ANSWER THE QUESTIONS IN THIS SURVEY AS COMPLETELY AS POSSIBLE.

When done, please return the survey to IEM by mail or fax. Send the survey to the attention of Todd Pierce at the following address.

Dr. Todd M. Pierce
IEM, Inc.
7423 Picardy Avenue, Suite E
Baton Rouge, LA 70808
504/767-8191 (phone)

504/767-8122 (fax)

If you need help answering any of the survey questions, please contact Todd Pierce at the same address.

PLEASE BEGIN SURVEY ON THE NEXT PAGE

EOC INFORMATION

Please review the following information about your Emergency Operating Center. This information will be used to identify your FEMIS database. Please correct any erroneous information.

1. EOC Agency Name: **Umatilla Chemical Depot**

2. EOC Code: **UMCD (for *UM*atilla Chemical *D*epot)**
(4 letters maximum)

Please review the following information about your EOC response functions. This information will be used to group tasks by function in an electronic plan in FEMIS. Please correct any erroneous information.

3. Listed below are the emergency support functions for response that are currently in FEMIS. Please review the list and perform the following actions:

A. Delete any unneeded functions by drawing a line through the function in column A, *FUNCTION.*
B. Edit a function by drawing a line through the function and writing the new function next to the old one in column B, *EDIT FUNCTION.*
C. List any new functions by writing them in column C, *NEW FUNCTIONS.*

A. FUNCTION	B. EDIT FUNCTION	C. NEW FUNCTIONS
Alert Notification		
Communications		
Damage Assessment		
Direction Control		
Energy		
EOC Activation		
Evacuation		
Firefighting		
Food		
Hazard Analysis		
Hazardous Materials		
Health and Medical Services		
Information and Planning		
Law Enforcement		
Mass Care		
Public Information		
Public Works and Engineering		
Resource Support		
Sheltering		
Transportation		
Urban Search and Rescue		

EMERGENCY PLANNING ZONES

Please answer the following question about your Emergency Planning Zones. This information will be used when you make a Protective Action Decision in FEMIS.

4. Which Emergency Planning Zones (EPZs) are your EOC responsible for? In other words, what are the EPZs for which your EOC can make a Protective Action Decision (PAD)? Please list them below.

EMERGENCY PLANNING ZONES FOR YOUR EOC	

PLEASE TURN PAGE TO BEGIN NEXT SECTION.

EOC POSITIONS

Please review the following information about your EOC positions. This information will be used when creating the FEMIS personnel database. Please correct any erroneous information.

5. Listed below are the EOC positions currently in FEMIS. Please review the list and perform the following actions:

A. Delete any unneeded positions by drawing a line through the position in column A, *EOC POSITION.*
B. Edit a position by drawing a line through the position and writing the new position next to the old one in column B, *EDIT EOC POSITION.*
C. Add any new positions by writing them in column C, *NEW EOC POSITION.*

A. EOC POSITION	B. EDIT EOC POSITION	C. NEW EOC POSITION
Accounting Personnel		
Administration Clerk		
Administration Officer		
Agriculture Department Representative		
Ammunition Branch Representative		
Assistant EOC Coordinator/Director		
Automation System Manager		
Auditor		
Chemical Accident or Incident Control Officer		
Casualty Coordinator		
Chemical Changehouse Operator		
Chart Control Operator		
Chemical Lab Representative		
Chemical Operations Director		
Chief Plotter		
City Government Representative		
Civil Defense Director		
Claims Officer		
Communications Coordinator		
Communications Representative		
Command Post Officer		
Community Affairs Representative		
Chemical Containment Team Representative		
County Government Representative		
CSEPP Coordinator		
Deputy Director of Operations		
Depot Commander		
Department of Environmental Quality Representative		
Director of Operations		
Dispatcher		
Department of Natural Resources Representative		

A. EOC POSITION	B. EDIT EOC POSITION	C. NEW EOC POSITION
Emergency Aid Organization Representative		
Emergency Medical Personnel		
Emergency Team Captain		

A. EOC POSITION	B. EDIT EOC POSITION	C. NEW EOC POSITION
EMIS System Manager		
Engineering Assistant		
Environmental Branch Representative		
EOC Coordinator		
EOC Coordinator/Director		
EOC Operations Officer		
Environmental Protection Agency Representative		
Equipment Coordinator		
Evacuation Coordinator		
Exercise Controller		
Exercise Evaluator		
Explosive Ordnance Disposal Representative		
Facilities Coordinator		
Federal Emergency Management Agency Representative		
Fire Protection/Prevention Representative		
Governor's Representative		
Hazard Analyst/Modeler		
Hazard Plotter		
Health Department Representative		
Human Resource Coordinator		
Information Systems Command Representative		
Information Coordinator/Manager		
Insurance Commission Representative		
Inventory Management Representative		
Initial Response Force (IRF) Commander		
Law Enforcement Representative		
Legal Counselor		
Legal Officer		
Logistics Director/Officer		
Medical Facility Representative		
Message Controller		
Military Affairs Representative		
Monitoring Team Coordinator		
National Guard Coordinator		
On-Scene Coordinator (OSC)		
Operations Analyst		
Operations Officer		

A. EOC POSITION	B. EDIT EOC POSITION	C. NEW EOC POSITION
Personnel Coordinator		
Planner		
Production and Planning Control Representative		
Plotter		
Post Sergeant Major		

A. EOC POSITION	B. EDIT EOC POSITION	C. NEW EOC POSITION
Public Information/Public Affairs Officer		
Public Information Coordinator		
Public Safety Representative		
Public Works/Infrastructure Representative		
Quality Assurance Representative		
Radio Operator		
Recorder		
Records Section Representative		
Report Coordinator		
Resource Coordinator		
Resource Management Officer		
Safety Representative		
Sampling Specialist		
School Superintendent		
Security Guard		
Security/Intelligence Officer		
Shelter Coordinator		
Social Services Representative		
Special Population Coordinator		
Service Response Force Commander (SRF)		
State Coordinating Officer		
State Emergency Management Director		
State Emergency Management Liaison		
Storage Section Representative		
Surety Officer		
Training Officer		
Transportation/Highway Department Representative		

PLEASE TURN PAGE TO BEGIN NEXT SECTION

RESOURCE CATEGORIES

Please review the following information about resource categories. This information will be used when creating the FEMIS resource database. Please correct any erroneous information.

6. Listed below are the resource categories currently in FEMIS. Please review the list and perform the following actions:

A. Delete any unneeded categories by drawing a line through the position in column A, *RESOURCE CATEGORY.*
B. Edit a category by drawing a line through the category and writing the new category next to the old one in column B, *EDIT RESOURCE CATEGORY.*
C. Add any new categories by writing them in column C, *NEW RESOURCE CATEGORY.*

A. RESOURCE CATEGORY	B. EDIT RESOURCE CATEGORY	C. NEW RESOURCE CATEGORY
Barricades		
Cars		
Communication Equipment		
Construction Equipment		
Dry Goods		
Emergency Equipment		
First Aid Supplies		
Food		
Generators		
Hand Tools		
Heavy Equipment		
Lights		
Medical Equipment		
Office Machines		
Paving Equipment		
People		
Power Tools		
Prefabricated Buildings		
Rescue Squad		
Scales		
Siren-Non-rotating		
Siren-Rotating		
Transport Vehicles		
Trucks		
Water		
Weapons		

PLEASE TURN PAGE TO BEGIN NEXT SECTION.

ACCIDENT CATEGORIES

Please answer the following question about your accident categories. This information will be used when creating the FEMIS map database.

7. Please list below the accident categories for your site. For each category, please indicate the range of downwind No Effects distances (for example, from 0 km to 2 km, or 2 km to 6 km). Add more categories if needed.

Category I	Downwind No Effects distance from _____ km to _____ km
Category II	Downwind No Effects distance from _____ km to _____ km
Category III	Downwind No Effects distance from _____ km to _____ km
Category IV	Downwind No Effects distance from _____ km to _____ km
Category V	Downwind No Effects distance from _____ km to _____ km
Category ___	Downwind No Effects distance from _____ km to _____ km
Category ___	Downwind No Effects distance from _____ km to _____ km

FACILITIES

Please answer the following question about your facilities. This information will be used when creating the FEMIS facilities database.

8. Use the attached Table 1 to list basic information about facilities you would like to have in your FEMIS facilities database. For the Priority 1 data, IEM needs only the following information:

A. Facility Name
B. Facility Address
C. Latitude and Longitude (if known)
D. EPZ Containing the Facility

You may also provide this information electronically in a word processor or spreadsheet format, if desired.

If you have more facilities than can fit in Table 1, please make extra copies of Table 1.

Further facility information would be gathered as Priority 2 data.

CONTACT INFORMATION

Please provide the requested contact information.

9. Name of Person Who Completed This Survey: _____

10. Phone # of Person Who Completed This _____

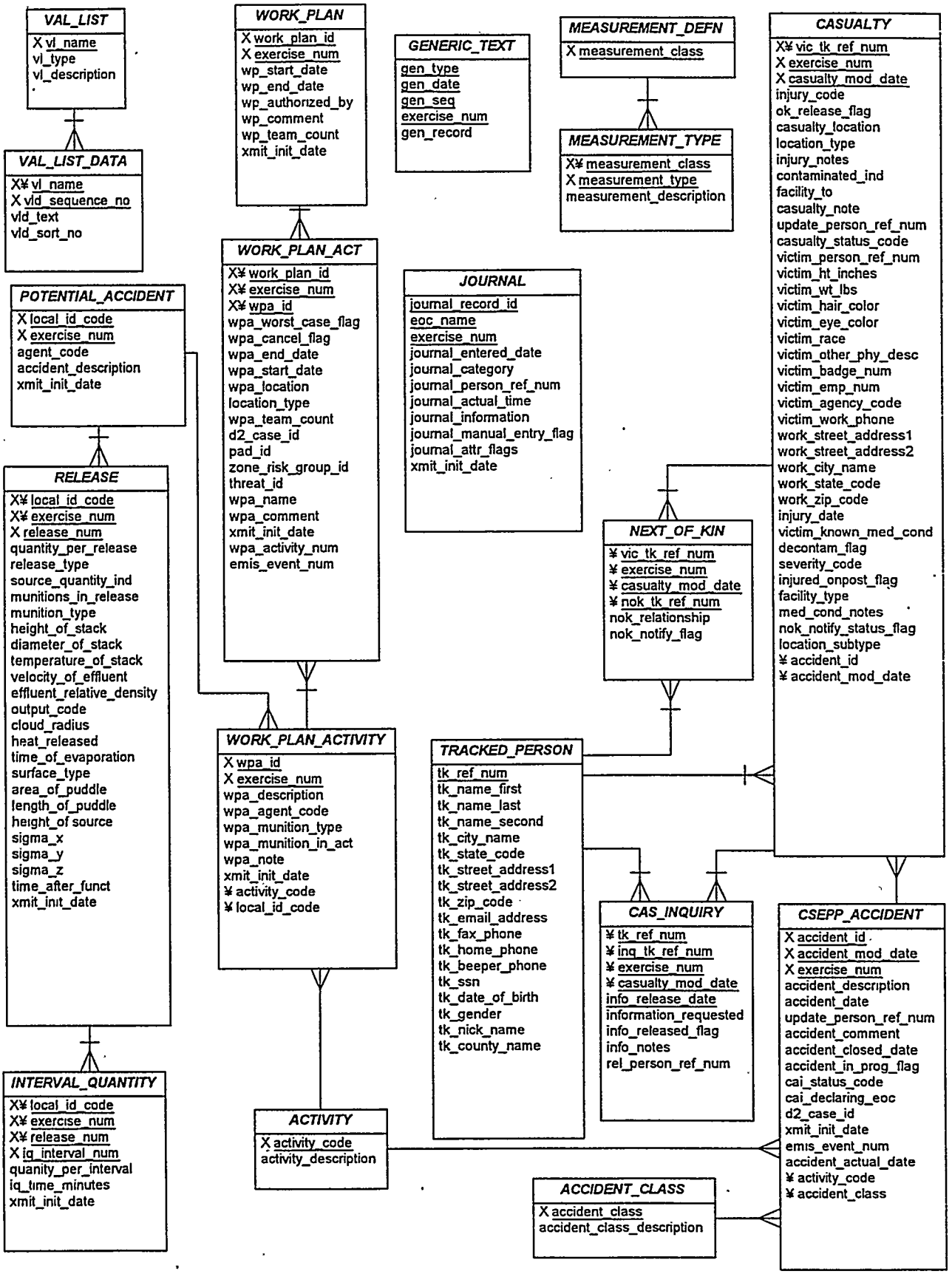
Survey: _____

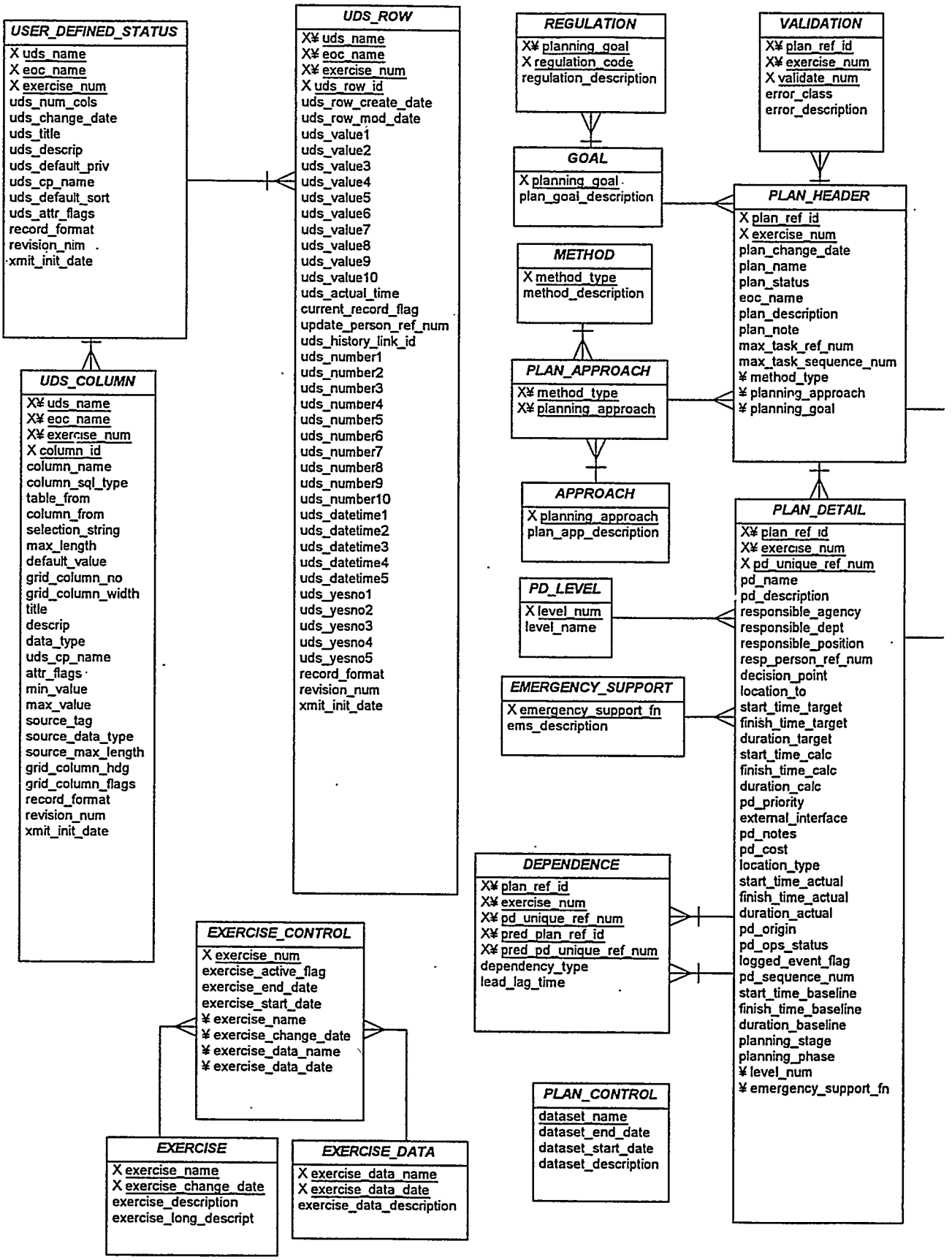
YOU HAVE NOW COMPLETED THIS SURVEY.
THANK YOU FOR YOUR TIME.

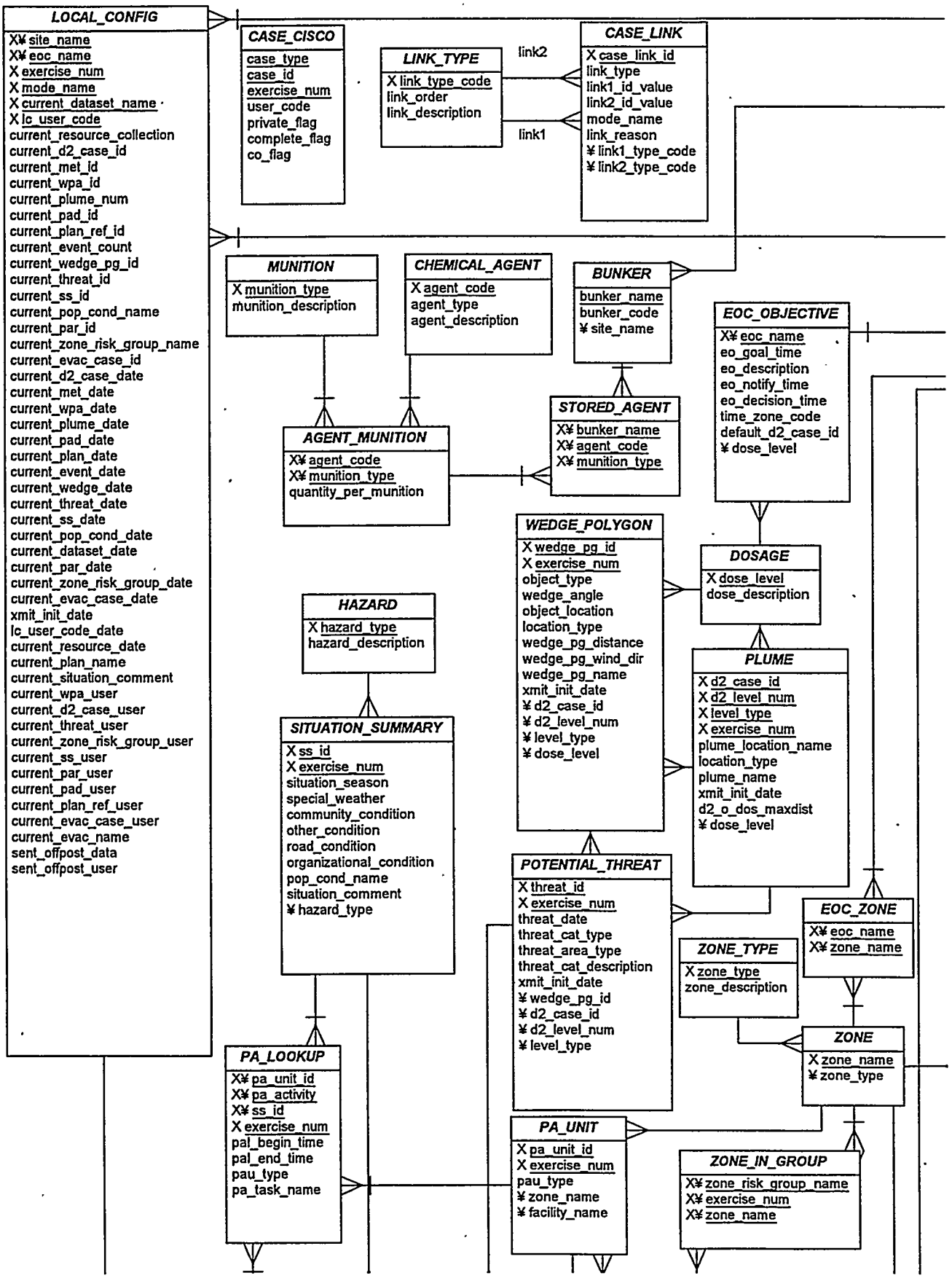
Appendix B
Database Data Models

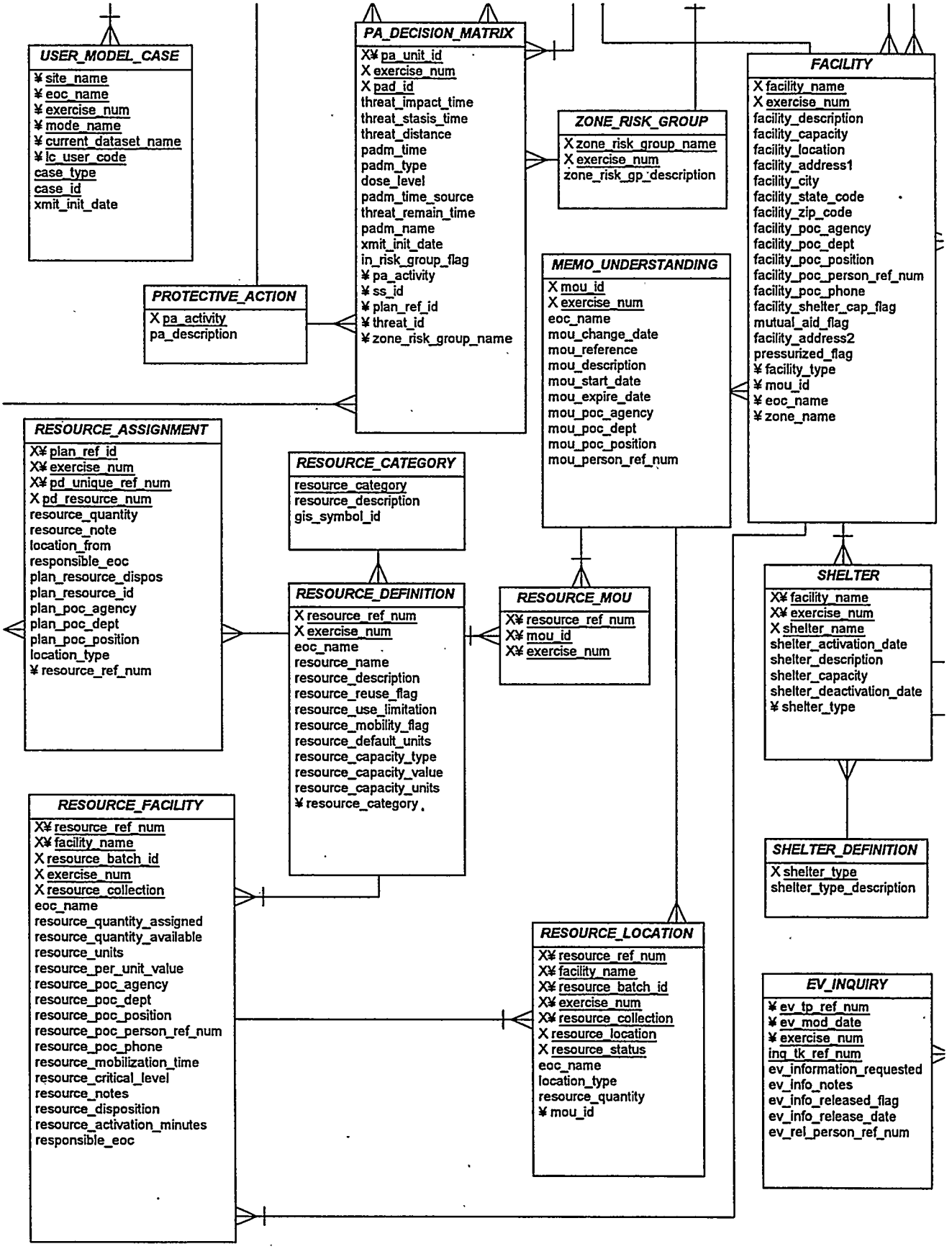
Appendix B
Database Data Models

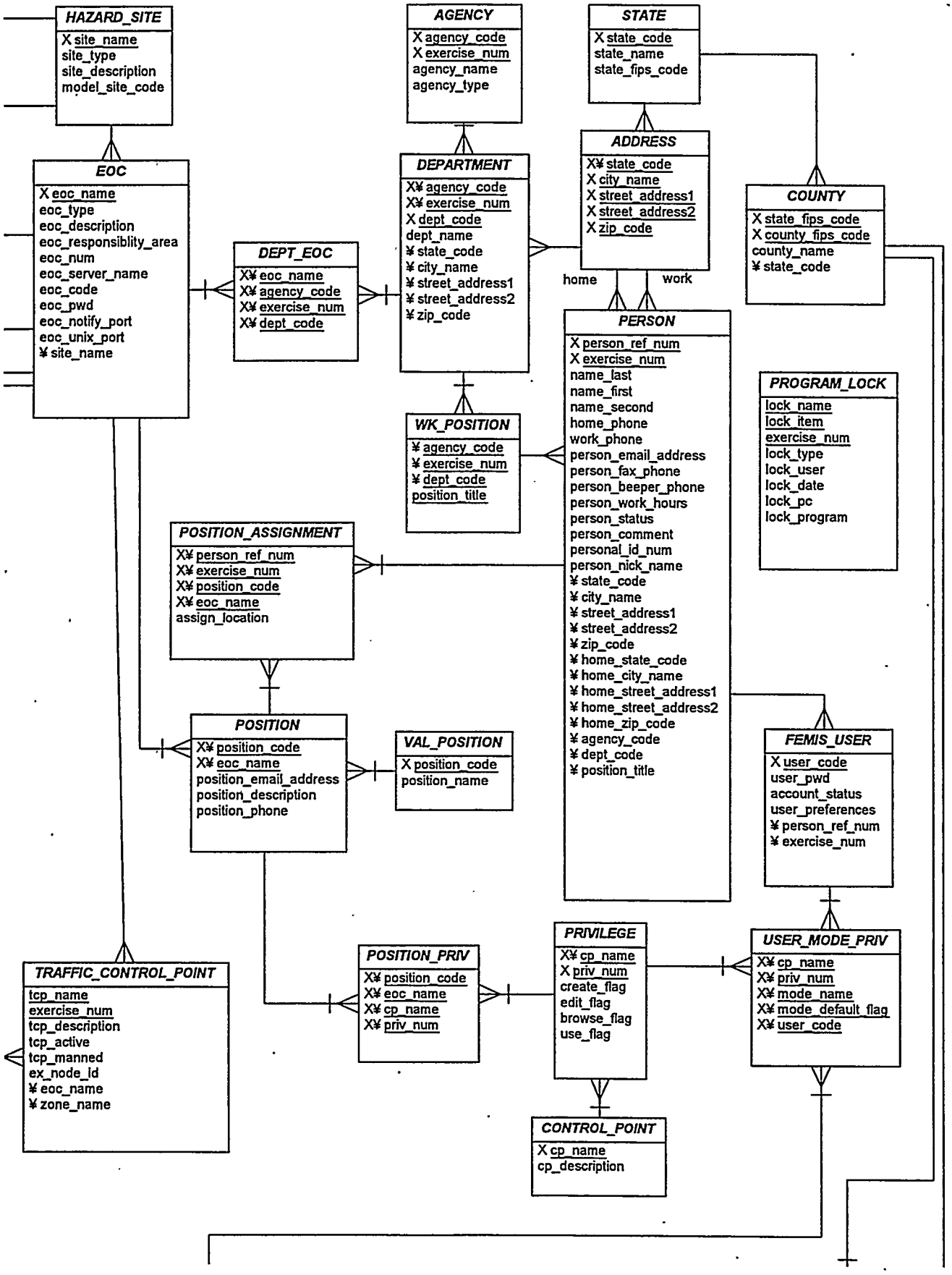
Diagrams for the four logical data models (Main, Spatial, Evacuation, and D2) illustrate what information is present and how the data objects are interrelated. The Main data model represents a large collection of general purpose tables. The Spatial data model contains tables used by the GIS. The Evacuation (Evac) data model contains the Evacuation tables. The D2 model contains tables used by the D2PC dispersion model interface.

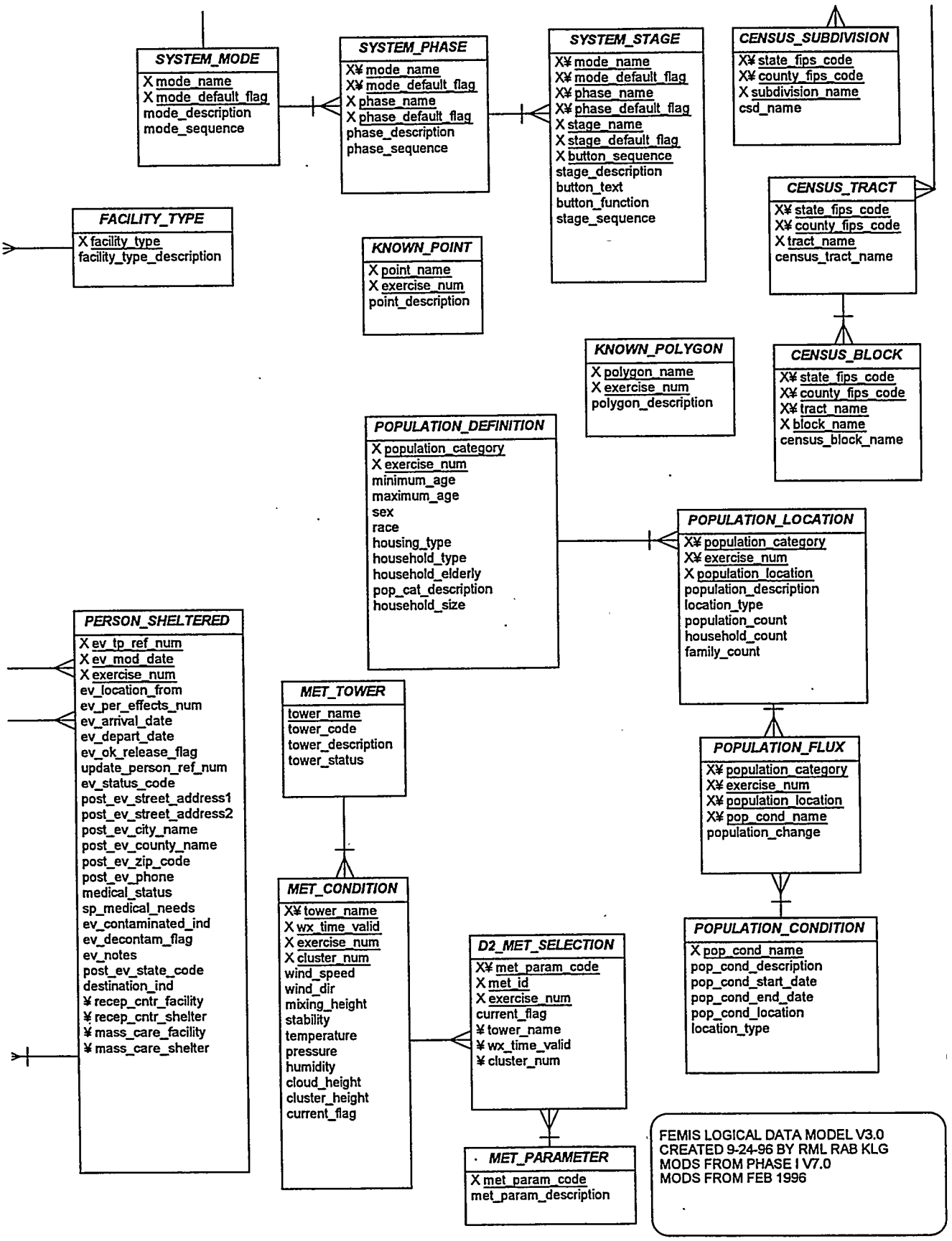

VAL_LIST
X vl_name
vl_type
vl_description
VAL_LIST_DATA
X¥ vl_name
X vld_sequence_no
vld_text
vld_sort_no
POTENTIAL_ACCIDENT
X local_id_code
X exercise_num
agent_code
accident_description
xmit_init_date
RELEASE
X¥ local_id_code
X¥ exercise_num
X release_num
quantity_per_release
release_type
source_quantity_ind
munitions_in_release
munition_type
height_of_stack
diameter_of_stack
temperature_of_stack
velocity_of_effluent
effluent_relative_density
output_code
cloud_radius
heat_released
time_of_evaporation
surface_type
area_of_puddle
length_of_puddle
height_of source
sigma_x
sigma_y
sigma_z
time_after_funct
xmit_init_date
INTERVAL_QUANTITY
X¥ local_id_code
X¥ exercise_num
X¥ release_num
X iq_interval_num
quanity_per_interval
iq_time_minutes
xmit_init_date
WORK_PLAN
X work_plan_id
X exercise_num
wp_start_date
wp_end_date
wp_authorized_by
wp_comment
wp_team_count
xmit_init_date
WORK_PLAN_ACT
X¥ work_plan_id
X¥ exercise_num
X¥ wpa_id
wpa_worst_case_flag
wpa_cancel_flag
wpa_end_date
wpa_start_date
wpa_location
location_type
wpa_team_count
d2_case_id
pad_id
zone_risk_group_id
threat_id
wpa_name
wpa_comment
xmit_init_date
wpa_activity_num
emis_event_num
WORK_PLAN_ACTIVITY
X wpa_id
X exercise_num
wpa_description
wpa_agent_code
wpa_munition_type
wpa_munition_in_act
wpa_note
xmit_init_date
¥ activity_code
¥ local_id_code
ACTIVITY
X activity_code
activity_description
GENERIC_TEXT
gen_type
gen_date
gen_seq
exercise_num
gen_record
JOURNAL
journal_record_id
eoc_name
exercise_num
journal_entered_date
journal_category
journal_person_ref_num
journal_actual_time
journal_information
journal_manual_entry_flag
journal_attr_flags
xmit_init_date
MEASUREMENT_DEFN
X measurement_class
MEASUREMENT_TYPE
X¥ measurement_class
X measurement_type
measurement_description
NEXT_OF_KIN
¥ vic_tk_ref_num
¥ exercise_num
¥ casualty_mod_date
¥ nok_tk_ref_num
nok_relationship
nok_notify_flag
TRACKED_PERSON
tk_ref_num
tk_name_first
tk_name_last
tk_name_second
tk_city_name
tk_state_code
tk_street_address1
tk_street_address2
tk_zip_code
tk_email_address
tk_fax_phone
tk_home_phone
tk_beeper_phone
tk_ssn
tk_date_of_birth
tk_gender
tk_nick_name
tk_county_name
CASUALTY
X¥ vic_tk_ref_num
X exercise_num
X casualty_mod_date
injury_code
ok_release_flag
casualty_location
location_type
injury_notes
contaminated_ind
facility_to
casualty_note
update_person_ref_num
casualty_status_code
victim_person_ref_num
victim_ht_inches
victim_wt_lbs
victim_hair_color
victim_eye_color
victim_race
victim_other_phy_desc
victim_badge_num
victim_emp_num
victim_agency_code
victim_work_phone
work_street_address1
work_street_address2
work_city_name
work_state_code
work_zip_code
injury_date
victim_known_med_cond
decontam_flag
severity_code
injured_onpost_flag
facility_type
med_cond_notes
nok_notify_status_flag
location_subtype
¥ accident_id
¥ accident_mod_date
CAS_INQUIRY
¥ tk_ref_num
¥ inq_tk_ref_num
¥ exercise_num
¥ casualty_mod_date
info_release_date
information_requested
info_released_flag
info_notes
rel_person_ref_num
CSEPP_ACCIDENT
X accident_id
X accident_mod_date
X exercise_num
accident_description
accident_date
update_person_ref_num
accident_comment
accident_closed_date
accident_in_prog_flag
cai_status_code
cai_declaring_eoc
d2_case_id
xmit_init_date
emis_event_num
accident_actual_date
¥ activity_code
¥ accident_class
ACCIDENT_CLASS
X accident_class
accident_class_description


USER_DEFINED_STATUS
X uds_name
X eoc_name
X exercise_num
uds_num_cols
uds_change_date
uds_title
uds_descrip
uds_default_priv
uds_cp_name
uds_default_sort
uds_attr_flags
record_format
revision_nim
xmit_init_date
UDS_ROW
X¥ uds_name
X¥ eoc_name
X¥ exercise_num
X uds_row_id
uds_row_create_date
uds_row_mod_date
uds_value1
uds_value2
uds_value3
uds_value4
uds_value5
uds_value6
uds_value7
uds_value8
uds_value9
uds_value10
uds_actual_time
current_record_flag
update_person_ref_num
uds_history_link_id
uds_number1
uds_number2
uds_number3
uds_number4
uds_number5
uds_number6
uds_number7
uds_number8
uds_number9
uds_number10
uds_datetime1
uds_datetime2
uds_datetime3
uds_datetime4
uds_datetime5
uds_yesno1
uds_yesno2
uds_yesno3
uds_yesno4
uds_yesno5
record_format
revision_num
xmit_init_date
UDS_COLUMN
X¥ uds_name
X¥ eoc_name
X¥ exercise_num
X column_id
column_name
column_sql_type
table_from
column_from
selection_string
max_length
default_value
grid_column_no
grid_column_width
title
descrip
data_type
uds_cp_name
attr_flags
min_value
max_value
source_tag
source_data_type
source_max_length
grid_column_hdg
grid_column_flags
record_format
revision_num
xmit_init_date
REGULATION
X¥ planning_goal
X regulation_code
regulation_description
VALIDATION
X¥ plan_ref_id
X¥ exercise_num
X validate_num
error_class
error_description
GOAL
X planning_goal
plan_goal_description
PLAN_HEADER
X plan_ref_id
X exercise_num
plan_change_date
plan_name
plan_status
eoc_name
plan_description
plan_note
max_task_ref_num
max_task_sequence_num
¥ method_type
¥ planning_approach
¥ planning_goal
METHOD
X method_type
method_description
PLAN_APPROACH
X¥ method_type
X¥ planning_approach
APPROACH
X planning_approach
plan_app_description
PLAN_DETAIL
X¥ plan_ref_id
X¥ exercise_num
X pd_unique_ref_num
pd_name
pd_description
responsible_agency
responsible_dept
responsible_position
resp_person_ref_num
decision_point
location_to
start_time_target
finish_time_target
duration_target
start_time_calc
finish_time_calc
duration_calc
pd_priority
external_interface
pd_notes
pd_cost
location_type
start_time_actual
finish_time_actual
duration_actual
pd_origin
pd_ops_status
logged_event_flag
pd_sequence_num
start_time_baseline
finish_time_baseline
duration_baseline
planning_stage
planning_phase
¥ level_num
¥ emergency_support_fn
PD_LEVEL
X level_num
level_name
EMERGENCY_SUPPORT
X emergency_support_fn
ems_description
DEPENDENCE
X¥ plan_ref_id
X¥ exercise_num
X¥ pd_unique_ref_num
X¥ pred_plan_ref_id
X¥ pred_pd_unique_ref_num
dependency_type
lead_lag_time
EXERCISE_CONTROL
X exercise_num
exercise_active_flag
exercise_end_date
exercise_start_date
¥ exercise_name
¥ exercise_change_date
¥ exercise_data_name
¥ exercise_data_date
PLAN_CONTROL
dataset_name
dataset_end_date
dataset_start_date
dataset_description
EXERCISE
X exercise_name
X exercise_change_date
exercise_description
exercise_long_descript
EXERCISE_DATA
X exercise_data_name
X exercise_data_date
exercise_data_description


LOCAL_CONFIG
X¥ site_name
X¥ eoc_name
X exercise_num
X mode_name
X current_dataset_name
X lc_user_code
current_resource_collection
current_d2_case_id
current_met_id
current_wpa_id
current_plume_num
current_pad_id
current_plan_ref_id
current_event_count
current_wedge_pg_id
current_threat_id
current_ss_id
current_pop_cond_name
current_par_id
current_zone_risk_group_name
current_evac_case_id
current_d2_case_date
current_met_date
current_wpa_date
current_plume_date
current_pad_date
current_plan_date
current_event_date
current_wedge_date
current_threat_date
current_ss_date
current_pop_cond_date
current_dataset_date
current_par_date
current_zone_risk_group_date
current_evac_case_date
xmit_init_date
lc_user_code_date
current_resource_date
current_plan_name
current_situation_comment
current_wpa_user
current_d2_case_user
current_threat_user
current_zone_risk_group_user
current_ss_user
current_par_user
current_pad_user
current_plan_ref_user
current_evac_case_user
current_evac_name
sent_offpost_data
sent_offpost_user
CASE_CISCO
case_type
case_id
exercise_num
user_code
private_flag
complete_flag
co_flag
LINK_TYPE
X link_type_code
link_order
link_description
link2
link1
CASE_LINK
X case_link_id
link_type
link1_id_value
link2_id_value
mode_name
link_reason
¥ link1_type_code
¥ link2_type_code
MUNITION
X munition_type
munition_description
CHEMICAL_AGENT
X agent_code
agent_type
agent_description
BUNKER
bunker_name
bunker_code
¥ site_name
EOC_OBJECTIVE
X¥ eoc_name
eo_goal_time
eo_description
eo_notify_time
eo_decision_time
time_zone_code
default_d2_case_id
¥ dose_level
AGENT_MUNITION
X¥ agent_code
X¥ munition_type
quantity_per_munition
STORED_AGENT
X¥ bunker_name
X¥ agent_code
X¥ munition_type
WEDGE_POLYGON
X wedge_pg_id
X exercise_num
object_type
wedge_angle
object_location
location_type
wedge_pg_distance
wedge_pg_wind_dir
wedge_pg_name
xmit_init_date
¥ d2_case_id
¥ d2_level_num
¥ level_type
¥ dose_level
DOSAGE
X dose_level
dose_description
HAZARD
X hazard_type
hazard_description
PLUME
X d2_case_id
X d2_level_num
X level_type
X exercise_num
plume_location_name
location_type
plume_name
xmit_init_date
d2_o_dos_maxdist
¥ dose_level
SITUATION_SUMMARY
X ss_id
X exercise_num
situation_season
special_weather
community_condition
other_condition
road_condition
organizational_condition
pop_cond_name
situation_comment
¥ hazard_type
POTENTIAL_THREAT
X threat_id
X exercise_num
threat_date
threat_cat_type
threat_area_type
threat_cat_description
xmit_init_date
¥ wedge_pg_id
¥ d2_case_id
¥ d2_level_num
¥ level_type
EOC_ZONE
X¥ eoc_name
X¥ zone_name
ZONE_TYPE
X zone_type
zone_description
ZONE
X zone_name
¥ zone_type
PA_LOOKUP
X¥ pa_unit_id
X¥ pa_activity
X¥ ss_id
X exercise_num
pal_begin_time
pal_end_time
pau_type
pa_task_name
PA_UNIT
X pa_unit_id
X exercise_num
pau_type
¥ zone_name
¥ facility_name
ZONE_IN_GROUP
X¥ zone_risk_group_name
X¥ exercise_num
X¥ zone_name


USER_MODEL_CASE
¥ site_name
¥ eoc_name
¥ exercise_num
¥ mode_name
¥ current_dataset_name
¥ lc_user_code
case_type
case_id
xmit_init_date
PA_DECISION_MATRIX
X¥ pa_unit_id
X exercise_num
X pad_id
threat_impact_time
threat_stasis_time
threat_distance
padm_time
padm_type
dose_level
padm_time_source
threat_remain_time
padm_name
xmit_init_date
in_risk_group_flag
¥ pa_activity
¥ ss_id
¥ plan_ref_id
¥ threat_id
¥ zone_risk_group_name
ZONE_RISK_GROUP
X zone_risk_group_name
X exercise_num
zone_risk_gp_description
FACILITY
X facility_name
X exercise_num
facility_description
facility_capacity
facility_location
facility_address1
facility_city
facility_state_code
facility_zip_code
facility_poc_agency
facility_poc_dept
facility_poc_position
facility_poc_person_ref_num
facility_poc_phone
facility_shelter_cap_flag
mutual_aid_flag
facility_address2
pressurized_flag
¥ facility_type
¥ mou_id
¥ eoc_name
¥ zone_name
PROTECTIVE_ACTION
X pa_activity
pa_description
MEMO_UNDERSTANDING
X mou_id
X exercise_num
eoc_name
mou_change_date
mou_reference
mou_description
mou_start_date
mou_expire_date
mou_poc_agency
mou_poc_dept
mou_poc_position
mou_person_ref_num
RESOURCE_ASSIGNMENT
X¥ plan_ref_id
X¥ exercise_num
X¥ pd_unique_ref_num
X pd_resource_num
resource_quantity
resource_note
location_from
responsible_eoc
plan_resource_dispos
plan_resource_id
plan_poc_agency
plan_poc_dept
plan_poc_position
location_type
¥ resource_ref_num
RESOURCE_CATEGORY
resource_category
resource_description
gis_symbol_id
RESOURCE_DEFINITION
X resource_ref_num
X exercise_num
eoc_name
resource_name
resource_description
resource_reuse_flag
resource_use_limitation
resource_mobility_flag
resource_default_units
resource_capacity_type
resource_capacity_value
resource_capacity_units
¥ resource_category
RESOURCE_MOU
X¥ resource_ref_num
X¥ mou_id
X¥ exercise_num
SHELTER
X¥ facility_name
X¥ exercise_num
X shelter_name
shelter_activation_date
shelter_description
shelter_capacity
shelter_deactivation_date
¥ shelter_type
SHELTER_DEFINITION
X shelter_type
shelter_type_description
RESOURCE_FACILITY
X¥ resource_ref_num
X¥ facility_name
X resource_batch_id
X exercise_num
X resource_collection
eoc_name
resource_quantity_assigned
resource_quantity_available
resource_units
resource_per_unit_value
resource_poc_agency
resource_poc_dept
resource_poc_position
resource_poc_person_ref_num
resource_poc_phone
resource_mobilization_time
resource_critical_level
resource_notes
resource_disposition
resource_activation_minutes
responsible_eoc
RESOURCE_LOCATION
X¥ resource_ref_num
X¥ facility_name
X¥ resource_batch_id
X¥ exercise_num
X¥ resource_collection
X resource_location
X resource_status
eoc_name
location_type
resource_quantity
¥ mou_id
EV_INQUIRY
¥ ev_tp_ref_num
¥ ev_mod_date
¥ exercise_num
inq_tk_ref_num
ev_information_requested
ev_info_notes
ev_info_released_flag
ev_info_release_date
ev_rel_person_ref_num


HAZARD_SITE
X site_name
site_type
site_description
model_site_code
AGENCY
X agency_code
X exercise_num
agency_name
agency_type
STATE
X state_code
state_name
state_fips_code
EOC
X eoc_name
eoc_type
eoc_description
eoc_responsiblity_area
eoc_num
eoc_server_name
eoc_code
eoc_pwd
eoc_notify_port
eoc_unix_port
¥ site_name
DEPT_EOC
X¥ eoc_name
X¥ agency_code
X¥ exercise_num
X¥ dept_code
DEPARTMENT
X¥ agency_code
X¥ exercise_num
X dept_code
dept_name
¥ state_code
¥ city_name
¥ street_address1
¥ street_address2
¥ zip_code
ADDRESS
X¥ state_code
X city_name
X street_address1
X street_address2
X zip_code
COUNTY
X state_fips_code
X county_fips_code
county_name
¥ state_code
home
work
PERSON
X person_ref_num
X exercise_num
name_last
name_first
name_second
home_phone
work_phone
person_email_address
person_fax_phone
person_beeper_phone
person_work_hours
person_status
person_comment
personal_id_num
person_nick_name
¥ state_code
¥ city_name
¥ street_address1
¥ street_address2
¥ zip_code
¥ home_state_code
¥ home_city_name
¥ home_street_address1
¥ home_street_address2
¥ home_zip_code
¥ agency_code
¥ dept_code
¥ position_title
WK_POSITION
¥ agency_code
¥ exercise_num
¥ dept_code
position_title
PROGRAM_LOCK
lock_name
lock_item
exercise_num
lock_type
lock_user
lock_date
lock_pc
lock_program
POSITION_ASSIGNMENT
X¥ person_ref_num
X¥ exercise_num
X¥ position_code
X¥ eoc_name
assign_location
POSITION
X¥ position_code
X¥ eoc_name
position_email_address
position_description
position_phone
VAL_POSITION
X position_code
position_name
FEMIS_USER
X user_code
user_pwd
account_status
user_preferences
¥ person_ref_num
¥ exercise_num
TRAFFIC_CONTROL_POINT
tcp_name
exercise_num
tcp_description
tcp_active
tcp_manned
ex_node_id
¥ eoc_name
¥ zone_name
POSITION_PRIV
X¥ position_code
X¥ eoc_name
X¥ cp_name
X¥ priv_num
PRIVILEGE
X¥ cp_name
X priv_num
create_flag
edit_flag
browse_flag
use_flag
USER_MODE_PRIV
X¥ cp_name
X¥ priv_num
X¥ mode_name
X¥ mode_default_flag
X¥ user_code
CONTROL_POINT
X cp_name
cp_description


SYSTEM_MODE
X mode_name
X mode_default_flag
mode_description
mode_sequence
SYSTEM_PHASE
X¥ mode_name
X¥ mode_default_flag
X phase_name
X phase_default_flag
phase_description
phase_sequence
SYSTEM_STAGE
X¥ mode_name
X¥ mode_default_flag
X¥ phase_name
X¥ phase_default_flag
X stage_name
X stage_default_flag
X button_sequence
stage_description
button_text
button_function
stage_sequence
CENSUS_SUBDIVISION
X¥ state_fips_code
X¥ county_fips_code
X subdivision_name
csd_name
CENSUS_TRACT
X¥ state_fips_code
X¥ county_fips_code
X tract_name
census_tract_name
CENSUS_BLOCK
X¥ state_fips_code
X¥ county_fips_code
X¥ tract_name
X block_name
census_block_name
FACILITY_TYPE
X facility_type
facility_type_description
KNOWN_POINT
X point_name
X exercise_num
point_description
KNOWN_POLYGON
X polygon_name
X exercise_num
polygon_description
POPULATION_DEFINITION
X population_category
X exercise_num
minimum_age
maximum_age
sex
race
housing_type
household_type
household_elderly
pop_cat_description
household_size
POPULATION_LOCATION
X¥ population_category
X¥ exercise_num
X population_location
population_description
location_type
population_count
household_count
family_count
PERSON_SHELTERED
X ev_tp_ref_num
X ev_mod_date
X exercise_num
ev_location_from
ev_per_effects_num
ev_arrival_date
ev_depart_date
ev_ok_release_flag
update_person_ref_num
ev_status_code
post_ev_street_address1
post_ev_street_address2
post_ev_city_name
post_ev_county_name
post_ev_zip_code
post_ev_phone
medical_status
sp_medical_needs
ev_contaminated_ind
ev_decontam_flag
ev_notes
post_ev_state_code
destination_ind
¥ recep_cntr_facility
¥ recep_cntr_shelter
¥ mass_care_facility
¥ mass_care_shelter
MET_TOWER
tower_name
tower_code
tower_description
tower_status
POPULATION_FLUX
X¥ population_category
X¥ exercise_num
X¥ population_location
X¥ pop_cond_name
population_change
MET_CONDITION
X¥ tower_name
X wx_time_valid
X exercise_num
X cluster_num
wind_speed
wind_dir
mixing_height
stability
temperature
pressure
humidity
cloud_height
cluster_height
current_flag
D2_MET_SELECTION
X¥ met_param_code
X met_id
X exercise_num
current_flag
¥ tower_name
¥ wx_time_valid
¥ cluster_num
POPULATION_CONDITION
X pop_cond_name
pop_cond_description
pop_cond_start_date
pop_cond_end_date
pop_cond_location
location_type
MET_PARAMETER
X met_param_code
met_param_description
FEMIS LOGICAL DATA MODEL V3.0
CREATED 9-24-96 BY RML RAB KLG
MODS FROM PHASE I V7.0
MODS FROM FEB 1996

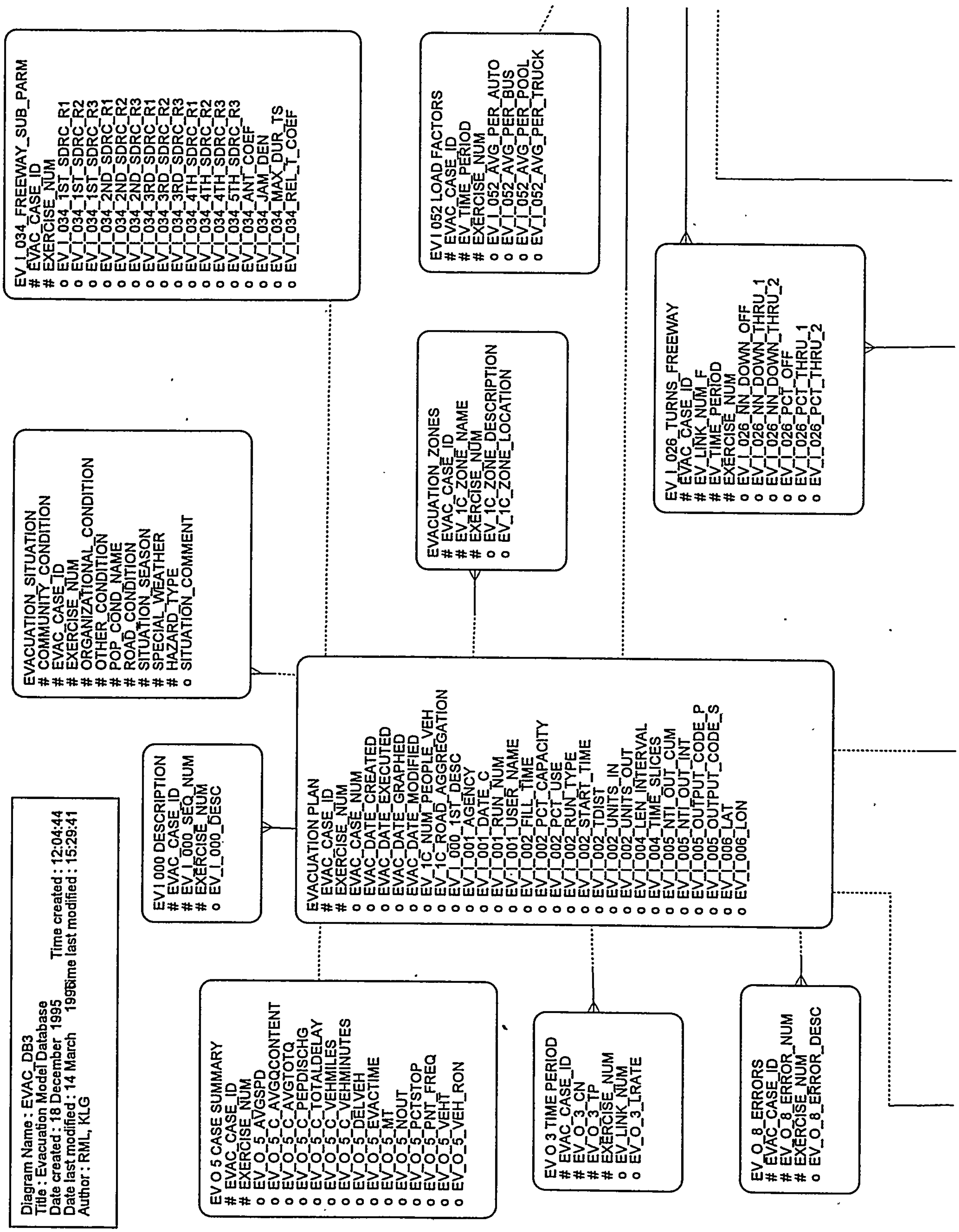
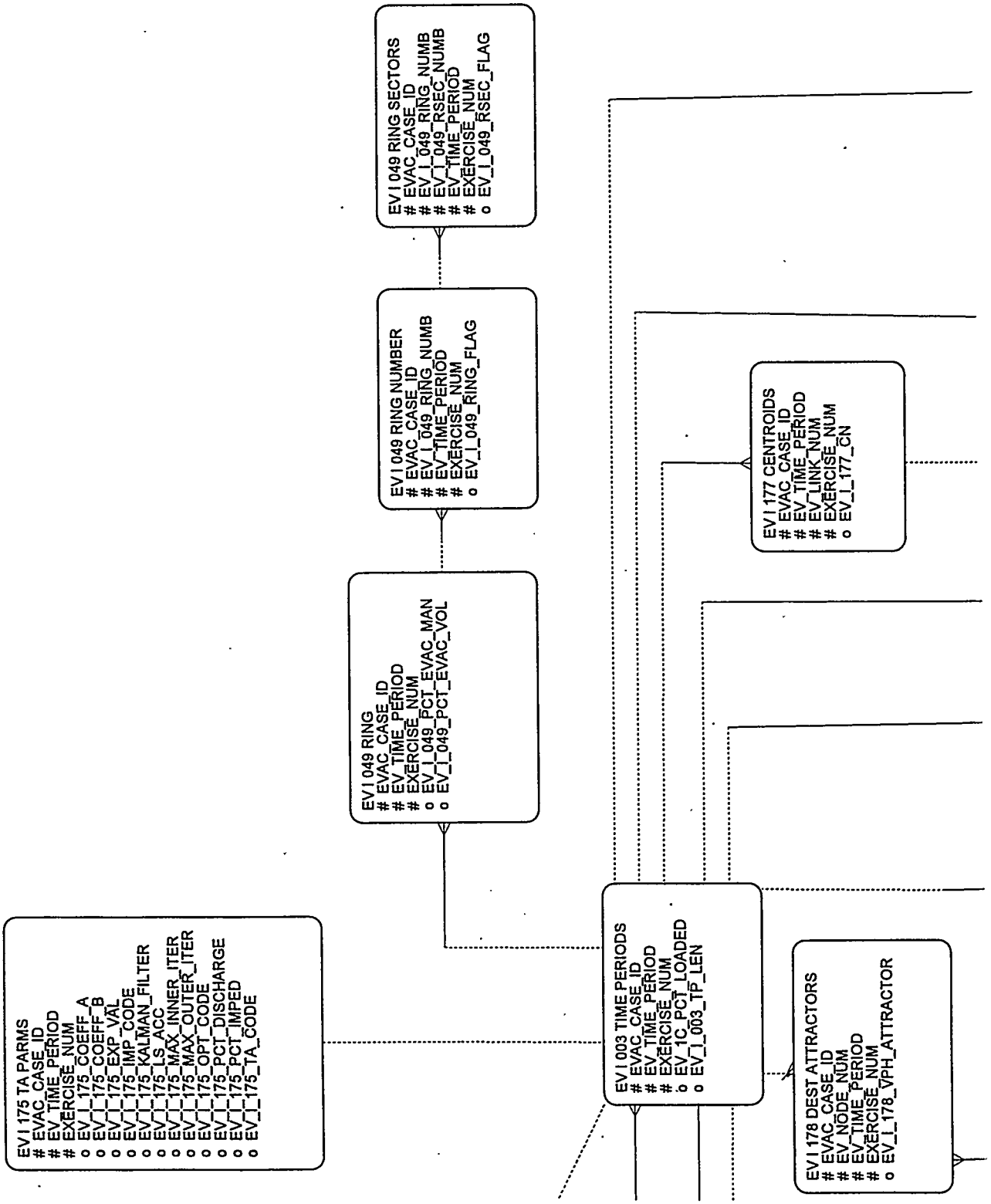
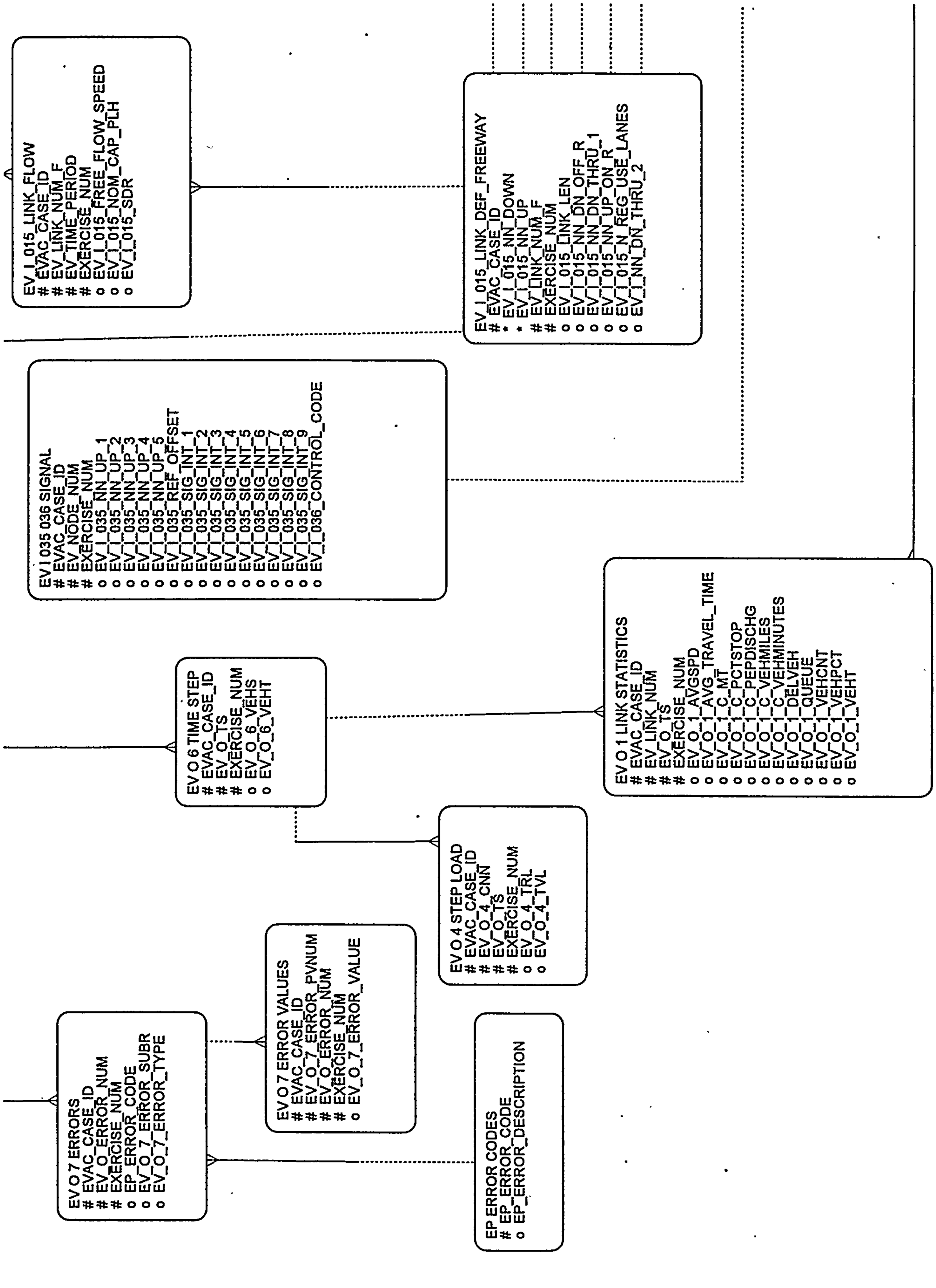


Diagram Name : EVAC_DB3
Title : Evacuation Model Database
Date created : 18 December 1995 Time created : 12:04:44
Date last modified : 14 March 1996 Time last modified : 15:29:41
Author : RML, KLG
EV_I_034_FREEWAY_SUB_PARM
EVAC_CASE_ID
EXERCISE_NUM
o EV_I_034_1ST_SDRC_R1
o EV_I_034_1ST_SDRC_R2
o EV_I_034_1ST_SDRC_R3
o EV_I_034_2ND_SDRC_R1
o EV_I_034_2ND_SDRC_R2
o EV_I_034_2ND_SDRC_R3
o EV_I_034_3RD_SDRC_R1
o EV_I_034_3RD_SDRC_R2
o EV_I_034_3RD_SDRC_R3
o EV_I_034_4TH_SDRC_R1
o EV_I_034_4TH_SDRC_R2
o EV_I_034_4TH_SDRC_R3
o EV_I_034_5TH_SDRC_R3
o EV_I_034_ANT_COEF
o EV_I_034_JAM_DEN
o EV_I_034_MAX_DUR_TS
o EV_I_034_REL_T_COEF
EV I 052 LOAD FACTORS
EVAC_CASE_ID
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_052_AVG_PER_AUTO
o EV_I_052_AVG_PER_BUS
o EV_I_052_AVG_PER_POOL
o EV_I_052_AVG_PER_TRUCK
EVACUATION_SITUATION
COMMUNITY_CONDITION
EVAC_CASE_ID
EXERCISE_NUM
ORGANIZATIONAL_CONDITION
OTHER_CONDITION
POP_COND_NAME
ROAD_CONDITION
SITUATION_SEASON
SPECIAL_WEATHER
HAZARD_TYPE
o SITUATION_COMMENT
EVACUATION_ZONES
EVAC_CASE_ID
EV_1C_ZONE_NAME
EXERCISE_NUM
o EV_1C_ZONE_DESCRIPTION
o EV_1C_ZONE_LOCATION
EV_I_026_TURNS_FREEWAY
EVAC_CASE_ID
EV_LINK_NUM_F
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_026_NN_DOWN_OFF
o EV_I_026_NN_DOWN_THRU_1
o EV_I_026_NN_DOWN_THRU_2
o EV_I_026_PCT_OFF
o EV_I_026_PCT_THRU_1
o EV_I_026_PCT_THRU_2
EV I 000 DESCRIPTION
EVAC_CASE_ID
EV_I_000_SEQ_NUM
EXERCISE_NUM
o EV_I_000_DESC
EVACUATION PLAN
EVAC_CASE_ID
EXERCISE_NUM
o EVAC_CASE_NUM
o EVAC_DATE_CREATED
o EVAC_DATE_EXECUTED
o EVAC_DATE_GRAPHED
o EVAC_DATE_MODIFIED
o EV_1C_NUM_PEOPLE_VEH
o EV_1C_ROAD_AGGREGATION
o EV_I_000_1ST_DESC
o EV_I_001_AGENCY
o EV_I_001_DATE_C
o EV_I_001_RUN_NUM
o EV_I_001_USER_NAME
o EV_I_002_FILL_TIME
o EV_I_002_PCT_CAPACITY
o EV_I_002_PCT_USE
o EV_I_002_RUN_TYPE
o EV_I_002_START_TIME
o EV_I_002_TDIST
o EV_I_002_UNITS_IN
o EV_I_002_UNITS_OUT
o EV_I_004_LEN_INTERVAL
o EV_I_004_TIME_SLICES
o EV_I_005_NTI_OUT_CUM
o EV_I_005_NTI_OUT_INT
o EV_I_005_OUTPUT_CODE_P
o EV_I_005_OUTPUT_CODE_S
o EV_I_006_LAT
o EV_I_006_LON
EV O 5 CASE SUMMARY
EVAC_CASE_ID
EXERCISE_NUM
o EV_O_5_AVGSPD
o EV_O_5_C_AVGQCONTENT
o EV_O_5_C_AVGTOTQ
o EV_O_5_C_PEPDISCHG
o EV_O_5_C_TOTALDELAY
o EV_O_5_C_VEHMILES
o EV_O_5_C_VEHMINUTES
o EV_O_5_DELVEH
o EV_O_5_EVACTIME
o EV_O_5_MT
o EV_O_5_NOUT
o EV_O_5_PCTSTOP
o EV_O_5_PNT_FREQ
o EV_O_5_VEHT
o EV_O_5_VEH_RON
EV O 3 TIME PERIOD
EVAC_CASE_ID
EV_O_3_CN
EV_O_3_TP
EXERCISE_NUM
o EV_LINK_NUM
o EV_O_3_I_RATE
EV_O_8_ERRORS
EVAC_CASE_ID
EV_O_8_ERROR_NUM
EXERCISE_NUM
o EV_O_8_ERROR_DESC


EV I 049 RING SECTORS
EVAC_CASE_ID
EV_I_049_RING_NUMB
EV_I_049_RSEC_NUMB
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_049_RSEC_FLAG
EV I 049 RING NUMBER
EVAC_CASE_ID
EV_I_049_RING_NUMB
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_049_RING_FLAG
EV I 049 RING
EVAC_CASE_ID
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_049_PCT_EVAC_MAN
o EV_I_049_PCT_EVAC_VOL
EV I 177 CENTROIDS
EVAC_CASE_ID
EV_TIME_PERIOD
EV_LINK_NUM
EXERCISE_NUM
o EV_I_177_CN
EV I 175 TA PARMS
EVAC_CASE_ID
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_175_COEFF_A
o EV_I_175_COEFF_B
o EV_I_175_EXP_VAL
o EV_I_175_IMP_CODE
o EV_I_175_KALMAN_FILTER
o EV_I_175_LS_ACC
o EV_I_175_MAX_INNER_ITER
o EV_I_175_MAX_OUTER_ITER
o EV_I_175_OPT_CODE
o EV_I_175_PCT_DISCHARGE
o EV_I_175_PCT_IMPED
o EV_I_175_TA_CODE
EV I 003 TIME PERIODS
EVAC_CASE_ID
EV_TIME_PERIOD
EXERCISE_NUM
o EV_1C_PCT_LOADED
o EV_I_003_TP_LEN
EV I 178 DEST ATTRACTORS
EVAC_CASE_ID
EV_NODE_NUM
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_178_VPH_ATTRACTOR


EV_I_015_LINK_FLOW
EVAC_CASE_ID
EV_LINK_NUM_F
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_015_FREE_FLOW_SPEED
o EV_I_015_NOM_CAP_PLH
o EV_I_015_SDR
EV_I_015_LINK_DEF_FREEWAY
EVAC_CASE_ID
* EV_I_015_NN_DOWN
* EV_I_015_NN_UP
# EV_LINK_NUM_F
# EXERCISE_NUM
o EV_I_015_LINK_LEN
o EV_I_015_NN_DN_OFF_R
o EV_I_015_NN_DN_THRU_1
o EV_I_015_NN_UP_ON_R
o EV_I_015_N_REG_USE_LANES
o EV_I_NN_DN_THRU_2
EV I 035 036 SIGNAL
EVAC_CASE_ID
EV_NODE_NUM
EXERCISE_NUM
o EV_I_035_NN_UP_1
o EV_I_035_NN_UP_2
o EV_I_035_NN_UP_3
o EV_I_035_NN_UP_4
o EV_I_035_NN_UP_5
o EV_I_035_REF_OFFSET
o EV_I_035_SIG_INT_1
o EV_I_035_SIG_INT_2
o EV_I_035_SIG_INT_3
o EV_I_035_SIG_INT_4
o EV_I_035_SIG_INT_5
o EV_I_035_SIG_INT_6
o EV_I_035_SIG_INT_7
o EV_I_035_SIG_INT_8
o EV_I_035_SIG_INT_9
o EV_I_036_CONTROL_CODE
EV O 6 TIME STEP
EVAC_CASE_ID
EV_O_TS
EXERCISE_NUM
o EV_O_6_VEHS
o EV_O_6_VEHT
EV O 1 LINK STATISTICS
EVAC_CASE_ID
EV_LINK_NUM
EV_O_TS
EXERCISE_NUM
o EV_O_1_AVGSPD
o EV_O_1_AVG_TRAVEL_TIME
o EV_O_1_C_MT
o EV_O_1_C_PCTSTOP
o EV_O_1_C_PEPDISCHG
o EV_O_1_C_VEHMILES
o EV_O_1_C_VEHMINUTES
o EV_O_1_DELVEH
o EV_O_1_QUEUE
o EV_O_1_VEHCNT
o EV_O_1_VEHPCT
o EV_O_1_VEHT
EV O 4 STEP LOAD
EVAC_CASE_ID
EV_O_4_CNN
EV_O_TS
EXERCISE_NUM
o EV_O_4_TRL
o EV_O_4_TVL
EV O 7 ERRORS
EVAC_CASE_ID
EV_O_ERROR_NUM
EXERCISE_NUM
o EP_ERROR_CODE
o EV_O_7_ERROR_SUBR
o EV_O_7_ERROR_TYPE
EV O 7 ERROR VALUES
EVAC_CASE_ID
EV_O_7_ERROR_PVNUM
EV_O_ERROR_NUM
EXERCISE_NUM
o EV_O_7_ERROR_VALUE
EP ERROR CODES
EP_ERROR_CODE
o EP_ERROR_DESCRIPTION

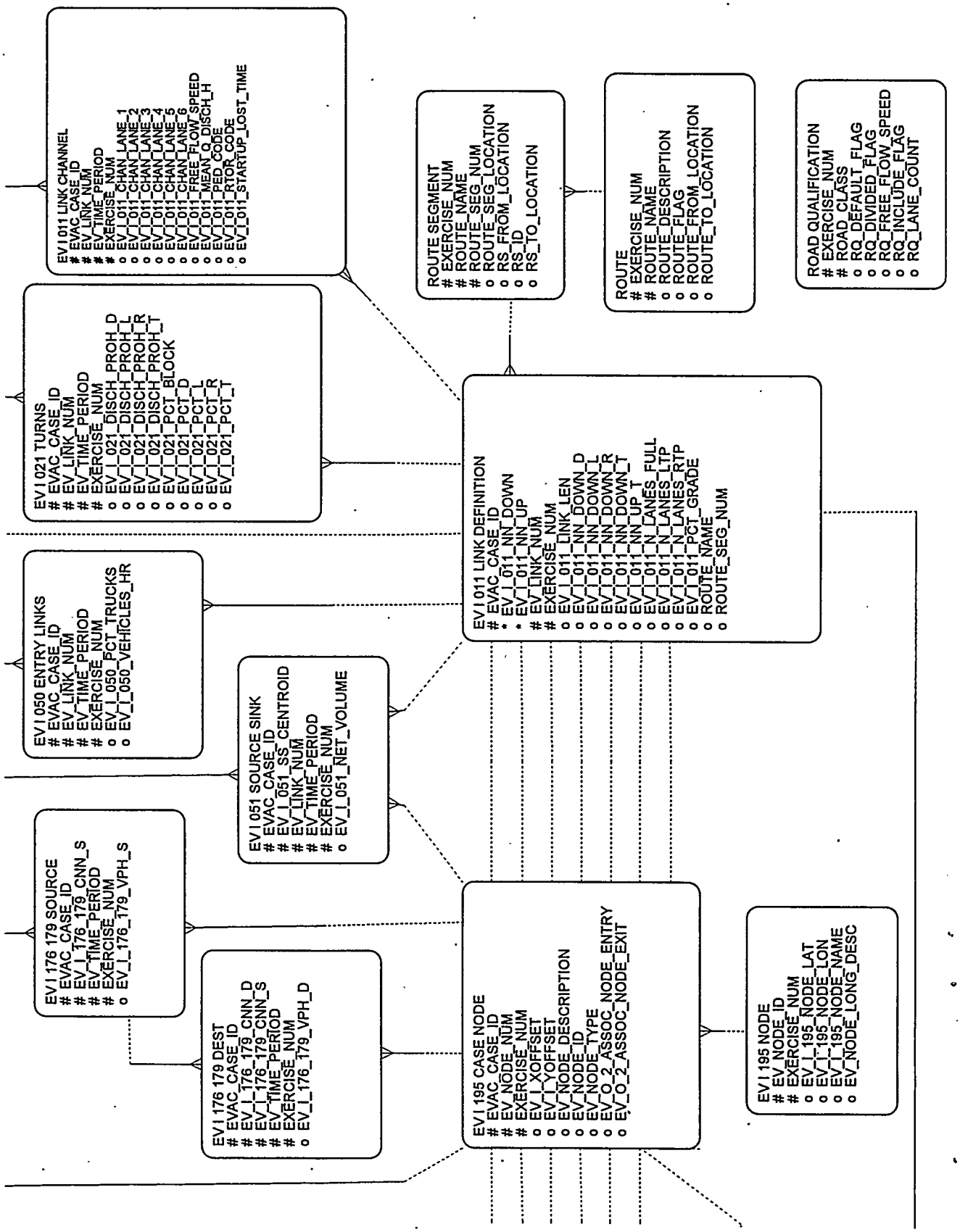

EV I 011 LINK CHANNEL
EVAC_CASE_ID
EV_LINK_NUM
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_011_CHAN_LANE_1
o EV_I_011_CHAN_LANE_2
o EV_I_011_CHAN_LANE_3
o EV_I_011_CHAN_LANE_4
o EV_I_011_CHAN_LANE_5
o EV_I_011_CHAN_LANE_6
o EV_I_011_FREE_FLOW_SPEED
o EV_I_011_MEAN_Q_DISCH_H
o EV_I_011_PED_CODE
o EV_I_011_RTOR_CODE
o EV_I_011_STARTUP_LOST_TIME
ROUTE SEGMENT
EXERCISE_NUM
ROUTE_NAME
ROUTE_SEG_NUM
o ROUTE_SEG_LOCATION
o RS_FROM_LOCATION
o RS_ID
o RS_TO_LOCATION
ROUTE
EXERCISE_NUM
ROUTE_NAME
o ROUTE_DESCRIPTION
o ROUTE_FLAG
o ROUTE_FROM_LOCATION
o ROUTE_TO_LOCATION
ROAD QUALIFICATION
EXERCISE_NUM
ROAD_CLASS
o RQ_DEFAULT_FLAG
o RQ_DIVIDED_FLAG
o RQ_FREE_FLOW_SPEED
o RQ_INCLUDE_FLAG
o RQ_LANE_COUNT
EV I 021 TURNS
EVAC_CASE_ID
EV_LINK_NUM
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_021_DISCH_PROH_D
o EV_I_021_DISCH_PROH_L
o EV_I_021_DISCH_PROH_R
o EV_I_021_DISCH_PROH_T
o EV_I_021_PCT_BLOCK
o EV_I_021_PCT_D
o EV_I_021_PCT_L
o EV_I_021_PCT_R
o EV_I_021_PCT_T
EV I 011 LINK DEFINITION
EVAC_CASE_ID
* EV_I_011_NN_DOWN
* EV_I_011_NN_UP
# EV_LINK_NUM
# EXERCISE_NUM
o EV_I_011_LINK_LEN
o EV_I_011_NN_DOWN_D
o EV_I_011_NN_DOWN_L
o EV_I_011_NN_DOWN_R
o EV_I_011_NN_DOWN_T
o EV_I_011_NN_UP_T
o EV_I_011_N_LANES_FULL
o EV_I_011_N_LANES_LTP
o EV_I_011_N_LANES_RTP
o EV_I_011_PCT_GRADE
o ROUTE_NAME
o ROUTE_SEG_NUM
EV I 050 ENTRY LINKS
EVAC_CASE_ID
EV_LINK_NUM
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_050_PCT_TRUCKS
o EV_I_050_VEHICLES_HR
EV I 051 SOURCE SINK
EVAC_CASE_ID
EV_I_051_SS_CENTROID
EV_LINK_NUM
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_051_NET_VOLUME
EV I 176 179 SOURCE
EVAC_CASE_ID
EV_I_176_179_CNN_S
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_176_179_VPH_S
EV I 176 179 DEST
EVAC_CASE_ID
EV_I_176_179_CNN_D
EV_I_176_179_CNN_S
EV_TIME_PERIOD
EXERCISE_NUM
o EV_I_176_179_VPH_D
EV I 195 CASE NODE
EVAC_CASE_ID
EV_NODE_NUM
EXERCISE_NUM
o EV_I_XOFFSET
o EV_I_YOFFSET
o EV_NODE_DESCRIPTION
o EV_NODE_ID
o EV_NODE_TYPE
o EV_O_2_ASSOC_NODE_ENTRY
o EV_O_2_ASSOC_NODE_EXIT
EV I 195 NODE
EV_NODE_ID
EXERCISE_NUM
o EV_I_195_NODE_LAT
o EV_I_195_NODE_LON
o EV_I_195_NODE_NAME
o EV_NODE_LONG_DESC

Diagram Name : GIS_LDS
Title :
Date created : 15 October 1996 Time created : 11:38:58
Date last modified : 15 October 1996 Time last modified : 12:13:42
Author :

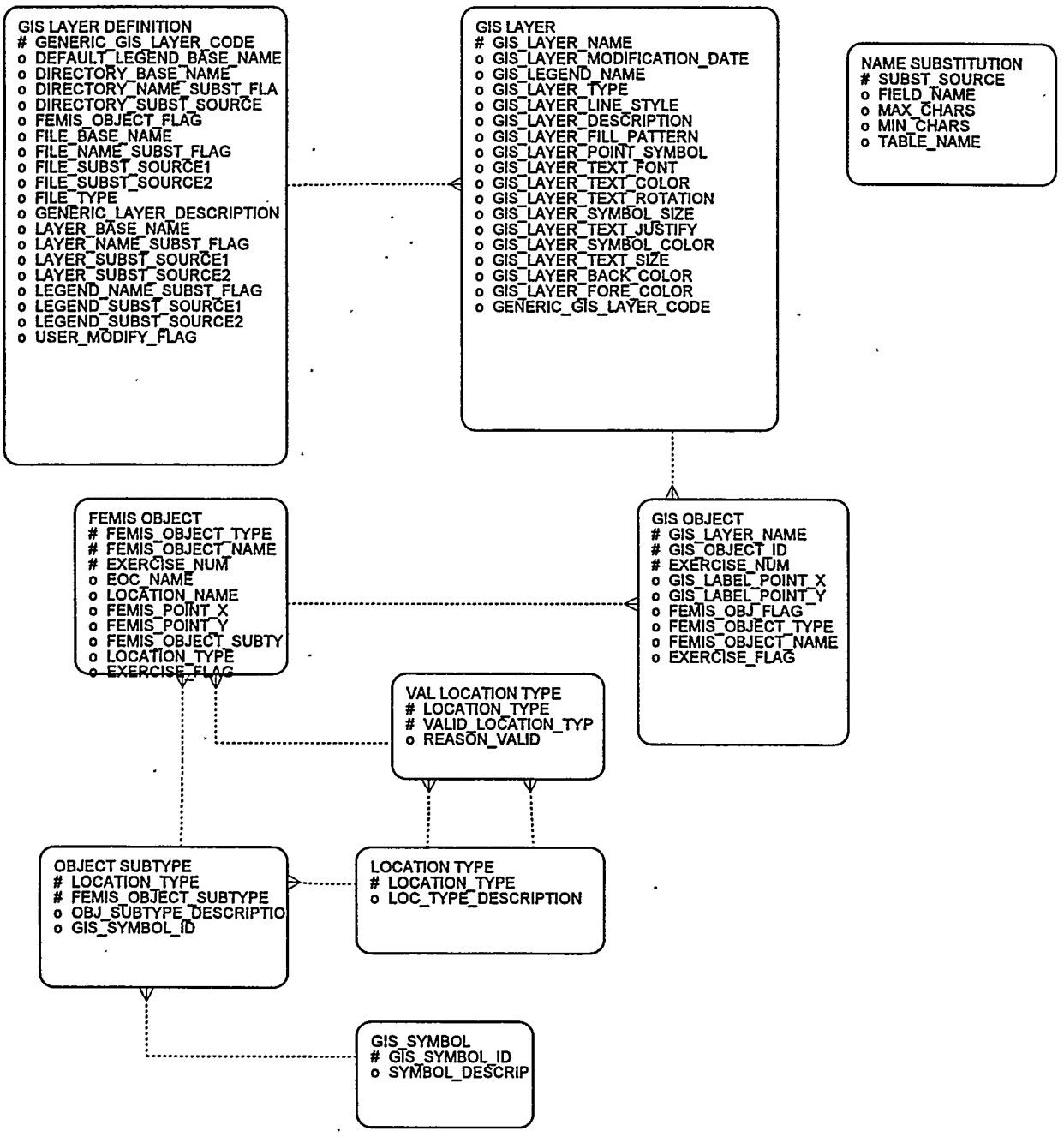
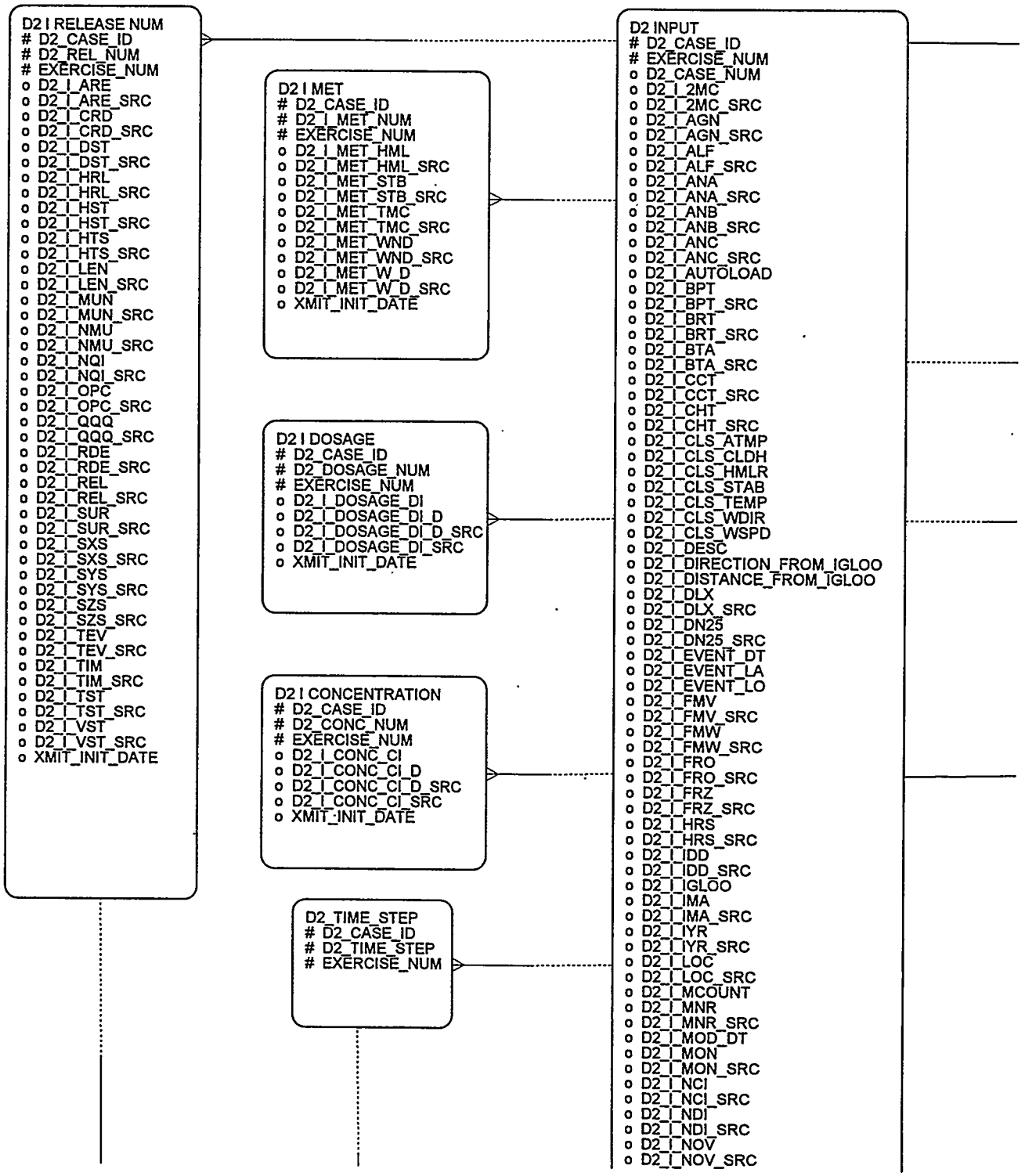
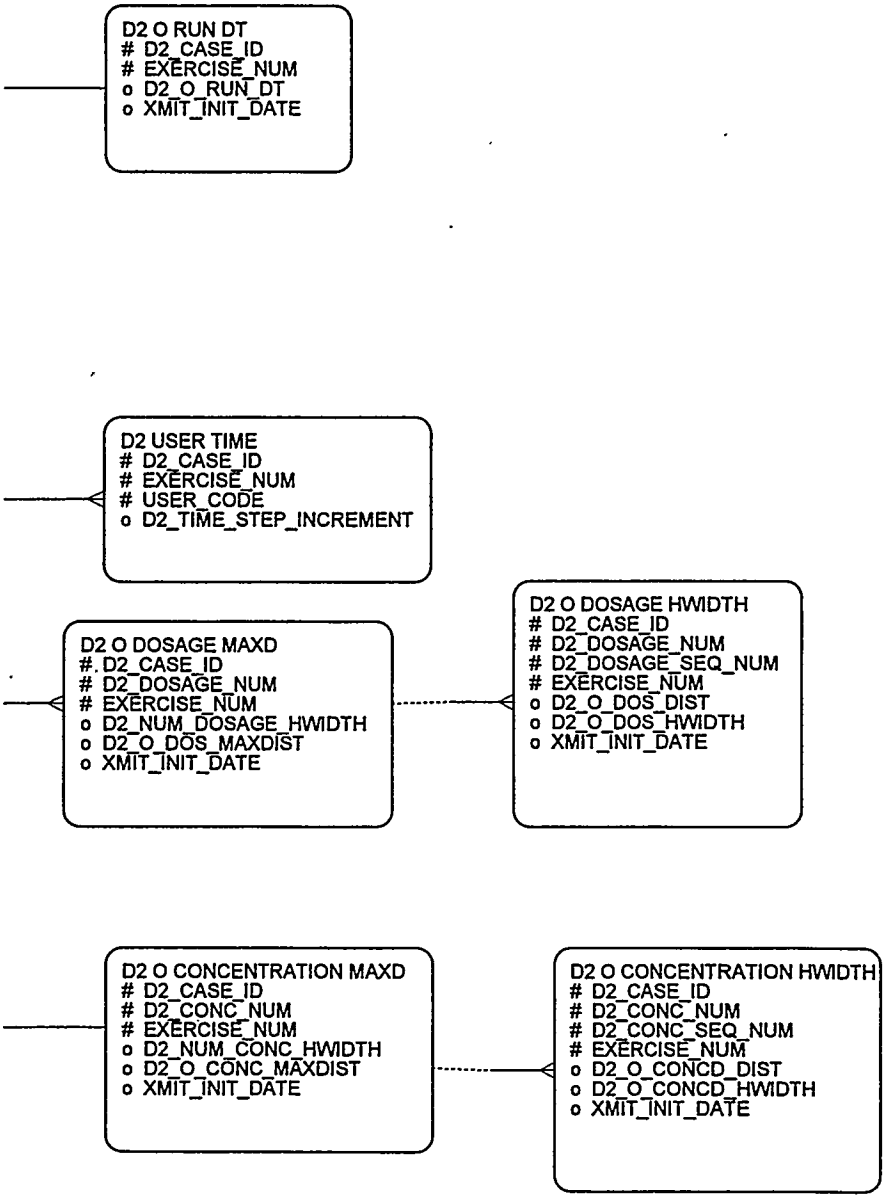
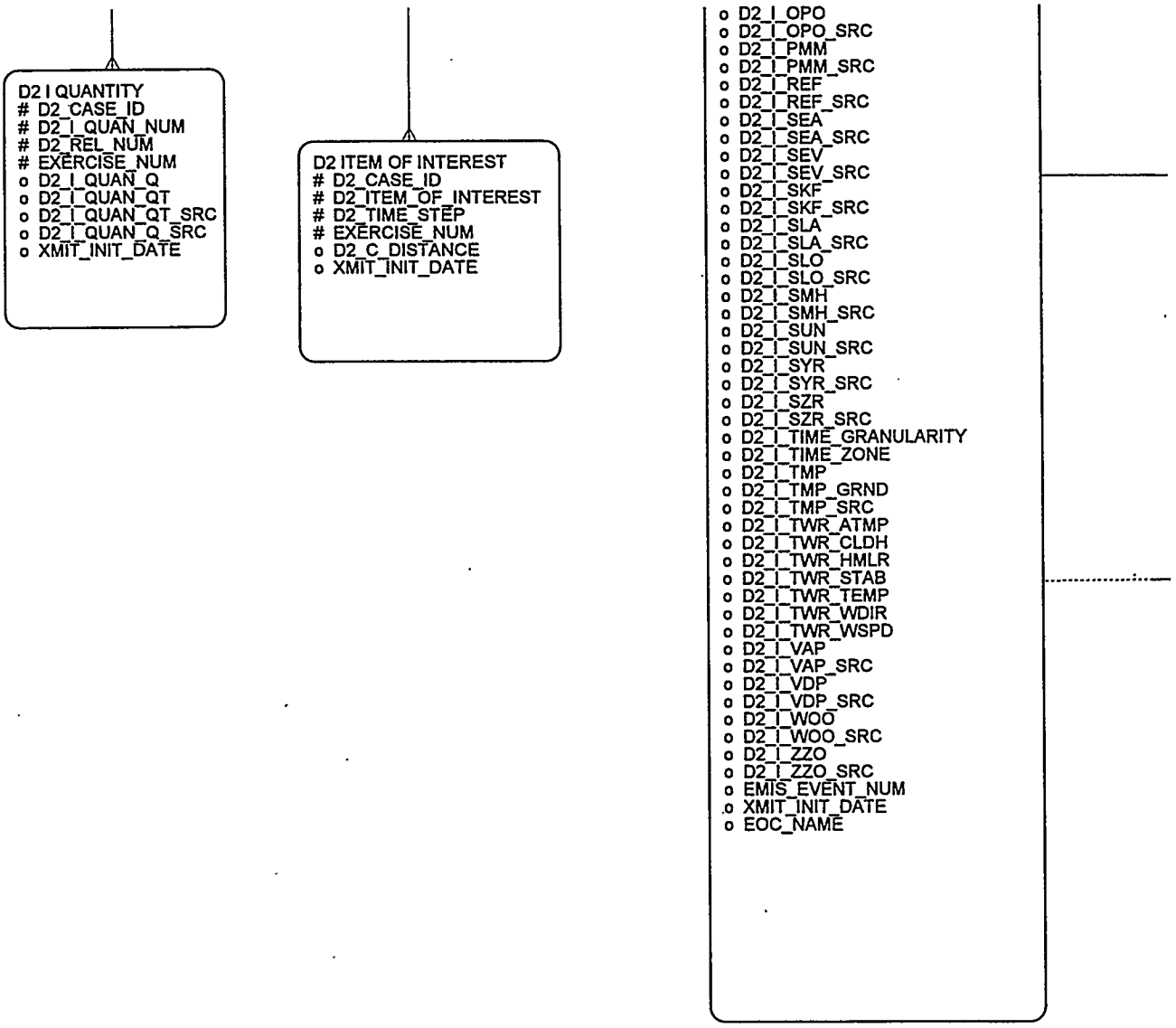
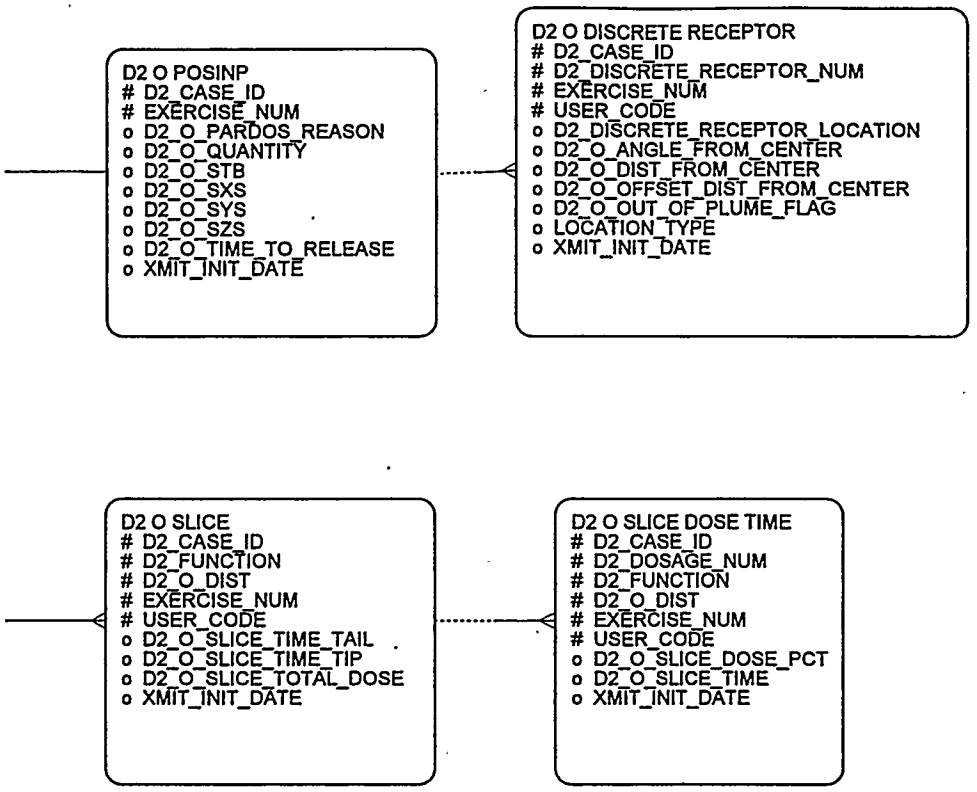


Diagram Name : D2_DB2
Title : D2 Model Database
Date created : 14 October 1996 Time created : 17:53:11
Date last modified : 14 October 1996 Time last modified : 17:53:11
Author : rml




D2 O RUN DT
D2_CASE_ID
EXERCISE_NUM
o D2_O_RUN_DT
o XMIT_INIT_DATE
D2 USER TIME
D2_CASE_ID
EXERCISE_NUM
USER_CODE
o D2_TIME_STEP_INCREMENT
D2 O DOSAGE MAXD
D2_CASE_ID
D2_DOSAGE_NUM
EXERCISE_NUM
o D2_NUM_DOSAGE_HWIDTH
o D2_O_DOS_MAXDIST
o XMIT_INIT_DATE
D2 O DOSAGE HWIDTH
D2_CASE_ID
D2_DOSAGE_NUM
D2_DOSAGE_SEQ_NUM
EXERCISE_NUM
o D2_O_DOS_DIST
o D2_O_DOS_HWIDTH
o XMIT_INIT_DATE
D2 O CONCENTRATION MAXD
D2_CASE_ID
D2_CONC_NUM
EXERCISE_NUM
o D2_NUM_CONC_HWIDTH
o D2_O_CONC_MAXDIST
o XMIT_INIT_DATE
D2 O CONCENTRATION HWIDTH
D2_CASE_ID
D2_CONC_NUM
D2_CONC_SEQ_NUM
EXERCISE_NUM
o D2_O_CONCD_DIST
o D2_O_CONCD_HWIDTH
o XMIT_INIT_DATE


D2 I QUANTITY
D2_CASE_ID
D2_I_QUAN_NUM
D2_REL_NUM
EXERCISE_NUM
o D2_I_QUAN_Q
o D2_I_QUAN_QT
o D2_I_QUAN_QT_SRC
o D2_I_QUAN_Q_SRC
o XMIT_INIT_DATE
D2 ITEM OF INTEREST
D2_CASE_ID
D2_ITEM_OF_INTEREST
D2_TIME_STEP
EXERCISE_NUM
o D2_C_DISTANCE
o XMIT_INIT_DATE
o D2_I_OPO
o D2_I_OPO_SRC
o D2_I_PMM
o D2_I_PMM_SRC
o D2_I_REF
o D2_I_REF_SRC
o D2_I_SEA
o D2_I_SEA_SRC
o D2_I_SEV
o D2_I_SEV_SRC
o D2_I_SKF
o D2_I_SKF_SRC
o D2_I_SLA
o D2_I_SLA_SRC
o D2_I_SLO
o D2_I_SLO_SRC
o D2_I_SMH
o D2_I_SMH_SRC
o D2_I_SUN
o D2_I_SUN_SRC
o D2_I_SYR
o D2_I_SYR_SRC
o D2_I_SZR
o D2_I_SZR_SRC
o D2_I_TIME_GRANULARITY
o D2_I_TIME_ZONE
o D2_I_TMP
o D2_I_TMP_GRND
o D2_I_TMP_SRC
o D2_I_TWR_ATMP
o D2_I_TWR_CLDH
o D2_I_TWR_HMLR
o D2_I_TWR_STAB
o D2_I_TWR_TEMP
o D2_I_TWR_WDIR
o D2_I_TWR_WSPD
o D2_I_VAP
o D2_I_VAP_SRC
o D2_I_VDP
o D2_I_VDP_SRC
o D2_I_WOO
o D2_I_WOO_SRC
o D2_I_ZZO
o D2_I_ZZO_SRC
o EMIS_EVENT_NUM
o XMIT_INIT_DATE
o EOC_NAME


D2 O POSINP
D2_CASE_ID
EXERCISE_NUM
o D2_O_PARDOS_REASON
o D2_O_QUANTITY
o D2_O_STB
o D2_O_SXS
o D2_O_SYS
o D2_O_SZS
o D2_O_TIME_TO_RELEASE
o XMIT_INIT_DATE
D2 O DISCRETE RECEPTOR
D2_CASE_ID
D2_DISCRETE_RECEPTOR_NUM
EXERCISE_NUM
USER_CODE
o D2_DISCRETE_RECEPTOR_LOCATION
o D2_O_ANGLE_FROM_CENTER
o D2_O_DIST_FROM_CENTER
o D2_O_OFFSET_DIST_FROM_CENTER
o D2_O_OUT_OF_PLUME_FLAG
o LOCATION_TYPE
o XMIT_INIT_DATE
D2 O SLICE
D2_CASE_ID
D2_FUNCTION
D2_O_DIST
EXERCISE_NUM
USER_CODE
o D2_O_SLICE_TIME_TAIL
o D2_O_SLICE_TIME_TIP
o D2_O_SLICE_TOTAL_DOSE
o XMIT_INIT_DATE
D2 O SLICE DOSE TIME
D2_CASE_ID
D2_DOSAGE_NUM
D2_FUNCTION
D2_O_DIST
EXERCISE_NUM
USER_CODE
o D2_O_SLICE_DOSE_PCT
o D2_O_SLICE_TIME
o XMIT_INIT_DATE

Appendix C
FEMIS Data Dictionary

Appendix C
FEMIS Data Dictionary

Table Name
ACCIDENT_CLASS

The Accident Class table is a validation table for different types of accidents.

Sequence	Name	N	Format
1	ACCIDENT_CLASS	N	VARCHAR2(20)
2	ACCIDENT_CLASS_DESCRIPTION	Y	VARCHAR2(127)

Table Name
ACTIVITY
The Activity table contains a list of valid CSEPP activities.

Sequence	Name	N	Format
1	ACTIVITY_CODE	N	VARCHAR2(20)
2	ACTIVITY_DESCRIPTION	Y	VARCHAR2(127)

Table Name
AGENCY
The Agency table contains CSEPP agencies and other agencies that are important to the mission of FEMIS.

Sequence	Name	N	Format
1	AGENCY_CODE	N	VARCHAR2(20)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	AGENCY_NAME	Y	VARCHAR2(64)
4	AGENCY_TYPE	Y	VARCHAR2(20)

Table Name
AGENT_MUNITION
The Agent Munition table maintains combinations of agents and munitions.

Sequence	Name	N	Format
1	AGENT_CODE	N	VARCHAR2(2)
2	MUNITION_TYPE	N	VARCHAR2(4)
3	QUANTITY_PER_MUNITION	Y	NUMBER(13,2)

Table Name
APPROACH
The Approach table has a list of valid approaches to accomplish the mission of FEMIS.

Sequence	Name	N	Format
1	PLANNING_APPROACH	N	VARCHAR2(40)
2	PLAN_APP_DESCRIPTION	Y	VARCHAR2(127)

Table Name
BTB_DEPENDENCE

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PD_UNIQUE_REF_NUM	N	NUMBER(7,0)
4	PRED_PLAN_REF_ID	N	NUMBER(9,0)
5	PRED_PD_UNIQUE_REF_NUM	N	NUMBER(7,0)
6	DEPENDENCY_TYPE	Y	VARCHAR2(10)
7	LEAD_LAG_TIME	Y	NUMBER(6,2)

Table Name
BTB_PLAN_DETAIL

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PD_UNIQUE_REF_NUM	N	NUMBER(7,0)
4	PD_NAME	Y	VARCHAR2(254)
5	PD_DESCRIPTION	Y	VARCHAR2(254)
6	RESPONSIBLE_AGENCY	Y	VARCHAR2(20)
7	RESPONSIBLE_DEPT	Y	VARCHAR2(20)
8	RESPONSIBLE_POSITION	Y	VARCHAR2(20)
9	RESP_PERSON_REF_NUM	Y	NUMBER(9,0)
10	DECISION_POINT	Y	VARCHAR2(1)
11	LOCATION_TO	Y	VARCHAR2(30)
12	START_TIME_TARGET	Y	DATE 7
13	FINISH_TIME_TARGET	Y	DATE 7
14	DURATION_TARGET	Y	NUMBER(8,0)
15	START_TIME_CALC	Y	DATE 7
16	FINISH_TIME_CALC	Y	DATE 7
17	DURATION_CALC	Y	NUMBER(8,0)
18	PD_PRIORITY	Y	NUMBER(2,0)
19	EXTERNAL_INTERFACE	Y	VARCHAR2(1)
20	PD_NOTES	Y	VARCHAR2(1999)
21	PD_COST	Y	NUMBER(10,2)
22	LOCATION_TYPE	Y	VARCHAR2(8)
23	START_TIME_ACTUAL	Y	DATE 7
24	FINISH_TIME_ACTUAL	Y	DATE 7
25	DURATION_ACTUAL	Y	NUMBER(8,0)
26	PD_ORIGIN	Y	VARCHAR2(10)
27	PD_OPS_STATUS	Y	VARCHAR2(15)

28	LOGGED_EVENT_FLAG	Y	VARCHAR2(1)
29	PD_SEQUENCE_NUM	Y	NUMBER(10,0)
30	START_TIME_BASELINE	Y	DATE 7
31	FINISH_TIME_BASELINE	Y	DATE 7
32	DURATION_BASELINE	Y	NUMBER(8,0)
33	PLANNING_STAGE	Y	VARCHAR2(30)
34	PLANNING_PHASE	Y	VARCHAR2(20)
35	LEVEL_NUM	N	NUMBER(1,0)
36	EMERGENCY_SUPPORT_FN	Y	VARCHAR2(30)

Table Name
BTB_PLAN_HEADER

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PLAN_CHANGE_DATE	Y	DATE 7
4	PLAN_NAME	N	VARCHAR2(64)
5	PLAN_STATUS	Y	VARCHAR2(11)
6	EOC_NAME	Y	VARCHAR2(30)
7	PLAN_DESCRIPTION	Y	VARCHAR2(254)
8	MAX_TASK_REF_NUM	Y	NUMBER(7,0)
9	MAX_TASK_SEQUENCE_NUM	Y	NUMBER(10,0)
10	PLAN_NOTE	Y	VARCHAR2(1999)
11	METHOD_TYPE	Y	VARCHAR2(20)
12	PLANNING_APPROACH	Y	VARCHAR2(40)
13	PLANNING_GOAL	Y	VARCHAR2(40)

Table Name
BTB_RESOURCE_ASSIGNMENT

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PD_UNIQUE_REF_NUM	N	NUMBER(7,0)
4	PD_RESOURCE_NUM	N	NUMBER(3,0)
5	RESOURCE_REF_NUM	Y	NUMBER(9,0)
6	RESOURCE_QUANTITY	Y	NUMBER(10,0)
7	RESOURCE_NOTE	Y	VARCHAR2(127)
8	LOCATION_FROM	Y	VARCHAR2(30)
9	LOCATION_TYPE	Y	VARCHAR2(8)
10	RESPONSIBLE_EOC	Y	VARCHAR2(30)
11	PLAN_RESOURCE_DISPOS	Y	VARCHAR2(30)
12	PLAN_RESOURCE_ID	Y	NUMBER(9,0)
13	PLAN_POC_AGENCY	Y	VARCHAR2(30)
14	PLAN_POC_DEPT	Y	VARCHAR2(30)
15	PLAN_POC_POSITION	Y	VARCHAR2(30)

Table Name
BUNKER

The Bunker table contains information about the sites where chemical weapons are stored.

Sequence	Name	N	Format
1	BUNKER_NAME	N	VARCHAR2(30)
2	BUNKER_CODE	N	VARCHAR2(7)
3	SITE_NAME	Y	VARCHAR2(30)

Table Name
CASE_CISCO

The Case Check-in-check_out table contains information about case that are in use.

Sequence	Name	N	Format
1	CASE_TYPE	N	VARCHAR2(4)
2	CASE_ID	N	NUMBER(9,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	USER_CODE	Y	VARCHAR2(8)
5	PRIVATE_FLAG	Y	VARCHAR2(1)
6	COMPLETE_FLAG	Y	VARCHAR2(1)
7	CO_FLAG	Y	VARCHAR2(1)

Table Name
CASE_LINK

The Case Link table contains information about how cases are related.

Sequence	Name	N	Format
1	CASE_LINK_ID	N	NUMBER(9,0)
2	LINK_TYPE	Y	VARCHAR2(15)
3	LINK1_ID_VALUE	Y	NUMBER(9,0)
4	LINK2_ID_VALUE	Y	NUMBER(9,0)
5	MODE_NAME	N	VARCHAR2(10)
6	LINK_REASON	Y	VARCHAR2(127)
7	LINK1_TYPE_CODE	N	VARCHAR2(10)
8	LINK2_TYPE_CODE	N	VARCHAR2(10)

Table Name
CASUALTY

The Casuality table contains summary information about the victims of an accident.

Sequence	Name	N	Format
1	VIC_TK_REF_NUM	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)

3	CASUALTY_MOD_DATE	N	DATE 7
4	INJURY_CODE	Y	VARCHAR2(20)
5	OK_RELEASE_FLAG	Y	VARCHAR2(1)
6	CASUALTY_LOCATION	Y	VARCHAR2(92)
7	LOCATION_TYPE	Y	VARCHAR2(8)
8	LOCATION_SUBTYPE	Y	VARCHAR2(40)
9	INJURY_NOTES	Y	VARCHAR2(254)
10	CONTAMINATED_IND	Y	VARCHAR2(1)
11	FACILITY_TO	Y	VARCHAR2(30)
12	FACILITY_TYPE	Y	VARCHAR2(40)
13	CASUALTY_NOTE	Y	VARCHAR2(254)
14	UPDATE_PERSON_REF_NUM	N	NUMBER(9,0)
15	CASUALTY_STATUS_CODE	Y	NUMBER(1,0)
16	VICTIM_PERSON_REF_NUM	Y	NUMBER(9,0)
17	VICTIM_HT_INCHES	Y	NUMBER(3,0)
18	VICTIM_WT_LBS	Y	NUMBER(3,0)
19	VICTIM_HAIR_COLOR	Y	VARCHAR2(10)
20	VICTIM_EYE_COLOR	Y	VARCHAR2(10)
21	VICTIM_RACE	Y	VARCHAR2(20)
22	VICTIM_OTHER_PHY_DESC	Y	VARCHAR2(127)
23	MED_COND_NOTES	Y	VARCHAR2(1999)
24	VICTIM_BADGE_NUM	Y	VARCHAR2(10)
25	VICTIM_EMP_NUM	Y	VARCHAR2(10)
26	VICTIM_AGENCY_CODE	Y	VARCHAR2(20)
27	VICTIM_WORK_PHONE	Y	VARCHAR2(17)
28	WORK_STREET_ADDRESS1	Y	VARCHAR2(40)
29	WORK_STREET_ADDRESS2	Y	VARCHAR2(40)
30	WORK_CITY_NAME	Y	VARCHAR2(20)
31	WORK_STATE_CODE	Y	VARCHAR2(2)
32	WORK_ZIP_CODE	Y	VARCHAR2(10)
33	INJURY_DATE	Y	DATE 7
34	VICTIM_KNOWN_MED_COND	Y	VARCHAR2(127)
35	DECONTAM_FLAG	Y	VARCHAR2(1)
36	SEVERITY_CODE	Y	VARCHAR2(12)
37	INJURED_ONPOST_FLAG	Y	VARCHAR2(1)
38	NOK_NOTIFY_STATUS_FLAG	Y	VARCHAR2(1)
39	ACCIDENT_ID	Y	NUMBER(9,0)
40	ACCIDENT_MOD_DATE	Y	DATE 7

Table Name
CAS_INQUIRY

The Casuality Inquiry table contains information about accident inquiries.

Sequence	Name	N	Format
1	VIC_TK_REF_NUM	N	NUMBER(9,0)
2	INQ_TK_REF_NUM	N	NUMBER(9,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	CASUALTY_MOD_DATE	N	DATE 7
5	INFO_RELEASE_DATE	N	DATE 7
6	INFORMATION_REQUESTED	Y	VARCHAR2(127)

7	INFO_RELEASED_FLAG	Y	VARCHAR2(1)
8	INFO_NOTES	Y	VARCHAR2(254)
9	REL_PERSON_REF_NUM	Y	NUMBER(9,0)

Table Name
CENSUS_BLOCK

The Census Block table defines a block name within a tract.

Sequence	Name	N	Format
1	TRACT_NAME	N	VARCHAR2(30)
2	BLOCK_NAME	N	VARCHAR2(30)
3	STATE_FIPS_CODE	N	VARCHAR2(2)
4	COUNTY_FIPS_CODE	N	VARCHAR2(3)
5	CENSUS_BLOCK_NAME	N	VARCHAR2(30)

Table Name
CENSUS_SUBDIVISION

The Census Subdivision table defines a suddivisions within a county.

Sequence	Name	N	Format
1	SUBDIVISION_NAME	N	VARCHAR2(30)
2	STATE_FIPS_CODE	N	VARCHAR2(2)
3	COUNTY_FIPS_CODE	N	VARCHAR2(3)
4	CSD_NAME	N	VARCHAR2(30)

Table Name
CENSUS_TRACT

The Census Tract table defines a tract within a district.

Sequence	Name	N	Format
1	TRACT_NAME	N	VARCHAR2(30)
2	STATE_FIPS_CODE	N	VARCHAR2(2)
3	COUNTY_FIPS_CODE	N	VARCHAR2(3)
4	CENSUS_TRACT_NAME	N	VARCHAR2(30)

Table Name
CHEMICAL_AGENT

The Chemical Agent table describes the agents stored at a CSEPP site.

Sequence	Name	N	Format
1	AGENT_CODE	N	VARCHAR2(2)
2	AGENT_TYPE	Y	VARCHAR2(30)
3	AGENT_DESCRIPTION	Y	VARCHAR2(127)

Table Name
CONTROL_POINT

The Countrol Point table contains the software branch points used to contro user access privileges.

Sequence	Name	N	Format
1	CP_NAME	N	VARCHAR2(30)
2	CP_DESCRIPTION	Y	VARCHAR2(127)

Table Name
COUNTY

The County table contains the name of counties and the state they are in.

Sequence	Name	N	Format
1	STATE_FIPS_CODE	N	VARCHAR2(2)
2	COUNTY_FIPS_CODE	N	VARCHAR2(3)
3	COUNTY_NAME	Y	VARCHAR2(30)
4	STATE_CODE	Y	VARCHAR2(2)

Table Name
CSEPP_ACCIDENT

The CSEPP_Accident table describes the chemical or other type of accident that has occured.

Sequence	Name	N	Format
1	ACCIDENT_ID	N	NUMBER(9,0)
2	ACCIDENT_MOD_DATE	N	DATE 7
3	EXERCISE_NUM	N	NUMBER(9,0)
4	ACCIDENT_DESCRIPTION	Y	VARCHAR2(127)
5	ACCIDENT_DATE	N	DATE 7
6	UPDATE_PERSON_REF_NUM	N	NUMBER(9,0)
7	ACCIDENT_COMMENT	Y	VARCHAR2(1999)
8	ACCIDENT_CLOSED_DATE	Y	DATE 7
9	ACCIDENT_IN_PROG_FLAG	N	VARCHAR2(1)
10	CAI_STATUS_CODE	N	NUMBER(1,0)
11	CAI_DECLARING_EOC	N	VARCHAR2(30)
12	D2_CASE_ID	Y	NUMBER(9,0)
13	ACTIVITY_CODE	Y	VARCHAR2(20)
14	ACCIDENT_CLASS	Y	VARCHAR2(20)
15	XMIT_INIT_DATE	Y	DATE 7
16	EMIS_EVENT_NUM	Y	NUMBER(4,0)
17	ACCIDENT_ACTUAL_DATE	Y	DATE 7

Table Name
D2_INPUT

The table that contains common D2 input parameters and other control information.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	D2_CASE_NUM	Y	NUMBER(9,0)
4	D2_I_EVENT_DT	Y	VARCHAR2(28)
5	D2_I_EVENT_LA	Y	NUMBER(12,6)
6	D2_I_EVENT_LO	Y	NUMBER(12,6)
7	D2_I_IGLOO	Y	VARCHAR2(30)
8	D2_I_DISTANCE_FROM_IGLOO	Y	NUMBER(8,2)
9	D2_I_DIRECTION_FROM_IGLOO	Y	VARCHAR2(2)
10	D2_I_MOD_DT	Y	VARCHAR2(28)
11	D2_I_DESC	Y	VARCHAR2(127)
12	D2_I_TWR_STAB	Y	VARCHAR2(9)
13	D2_I_CLS_STAB	Y	NUMBER(2,0)
14	D2_I_TWR_WSPD	Y	VARCHAR2(9)
15	D2_I_CLS_WSPD	Y	NUMBER(2,0)
16	D2_I_TWR_WDIR	Y	VARCHAR2(9)
17	D2_I_CLS_WDIR	Y	NUMBER(2,0)
18	D2_I_TWR_TEMP	Y	VARCHAR2(9)
19	D2_I_CLS_TEMP	Y	NUMBER(2,0)
20	D2_I_TWR_ATMP	Y	VARCHAR2(9)
21	D2_I_CLS_ATMP	Y	NUMBER(2,0)
22	D2_I_TWR_CLDH	Y	VARCHAR2(9)
23	D2_I_CLS_CLDH	Y	NUMBER(2,0)
24	D2_I_TWR_HMLR	Y	VARCHAR2(9)
25	D2_I_CLS_HMLR	Y	NUMBER(2,0)
26	D2_I_NOV	Y	NUMBER(1,0)
27	D2_I_NOV_SRC	Y	VARCHAR2(1)
28	D2_I_LOC	Y	VARCHAR2(3)
29	D2_I_LOC_SRC	Y	VARCHAR2(1)
30	D2_I_SEA	Y	VARCHAR2(3)
31	D2_I_SEA_SRC	Y	VARCHAR2(1)
32	D2_I_AGN	Y	VARCHAR2(2)
33	D2_I_AGN_SRC	Y	VARCHAR2(1)
34	D2_I_TMP	Y	NUMBER(8,4)
35	D2_I_TMP_SRC	Y	VARCHAR2(1)
36	D2_I_VDP	Y	NUMBER(1,0)
37	D2_I_VDP_SRC	Y	VARCHAR2(1)
38	D2_I_OPO	Y	NUMBER(1,0)
39	D2_I_OPO_SRC	Y	VARCHAR2(1)
40	D2_I_PMM	Y	NUMBER(6,2)
41	D2_I_PMM_SRC	Y	VARCHAR2(1)
42	D2_I_BRT	Y	NUMBER(6,2)
43	D2_I_BRT_SRC	Y	VARCHAR2(1)
44	D2_I_2MC	Y	NUMBER(1,0)
45	D2_I_2MC_SRC	Y	VARCHAR2(1)
46	D2_I_NDI	Y	NUMBER(2,0)
47	D2_I_NDI_SRC	Y	VARCHAR2(1)

48	D2_I_IMA	Y	NUMBER(1,0)
49	D2_I_IMA_SRC	Y	VARCHAR2(1)
50	D2_I_NCI	Y	NUMBER(2,0)
51	D2_I_NCI_SRC	Y	VARCHAR2(1)
52	D2_I_IYR	Y	NUMBER(4,0)
53	D2_I_IYR_SRC	Y	VARCHAR2(1)
54	D2_I_MON	Y	VARCHAR2(3)
55	D2_I_MON_SRC	Y	VARCHAR2(1)
56	D2_I_IDD	Y	NUMBER(2,0)
57	D2_I_IDD_SRC	Y	VARCHAR2(1)
58	D2_I_HRS	Y	NUMBER(4,0)
59	D2_I_HRS_SRC	Y	VARCHAR2(1)
60	D2_I_CCT	Y	NUMBER(2,0)
61	D2_I_CCT_SRC	Y	VARCHAR2(1)
62	D2_I_CHT	Y	NUMBER(8,2)
63	D2_I_CHT_SRC	Y	VARCHAR2(1)
64	D2_I_ALF	Y	NUMBER(6,2)
65	D2_I_ALF_SRC	Y	VARCHAR2(1)
66	D2_I_SYR	Y	NUMBER(6,2)
67	D2_I_SYR_SRC	Y	VARCHAR2(1)
68	D2_I_BTA	Y	NUMBER(6,2)
69	D2_I_BTA_SRC	Y	VARCHAR2(1)
70	D2_I_SZR	Y	NUMBER(6,2)
71	D2_I_SZR_SRC	Y	VARCHAR2(1)
72	D2_I_WOO	Y	VARCHAR2(2)
73	D2_I_WOO_SRC	Y	VARCHAR2(1)
74	D2_I_FMW	Y	NUMBER(6,3)
75	D2_I_FMW_SRC	Y	VARCHAR2(1)
76	D2_I_FMV	Y	NUMBER(6,3)
77	D2_I_FMV_SRC	Y	VARCHAR2(1)
78	D2_I_DN25	Y	NUMBER(6,3)
79	D2_I_DN25_SRC	Y	VARCHAR2(1)
80	D2_I_VAP	Y	NUMBER(6,3)
81	D2_I_VAP_SRC	Y	VARCHAR2(1)
82	D2_I_BPT	Y	NUMBER(6,2)
83	D2_I_BPT_SRC	Y	VARCHAR2(1)
84	D2_I_ANA	Y	NUMBER(6,2)
85	D2_I_ANA_SRC	Y	VARCHAR2(1)
86	D2_I_ANB	Y	NUMBER(6,2)
87	D2_I_ANB_SRC	Y	VARCHAR2(1)
88	D2_I_ANC	Y	NUMBER(6,2)
89	D2_I_ANC_SRC	Y	VARCHAR2(1)
90	D2_I_FRZ	Y	NUMBER(6,2)
91	D2_I_FRZ_SRC	Y	VARCHAR2(1)
92	D2_I_SLA	Y	NUMBER(12,6)
93	D2_I_SLA_SRC	Y	VARCHAR2(1)
94	D2_I_SLO	Y	NUMBER(12,6)

Table Name
D2_INPUT

The table that contains common D2 input parameters and other control information.

Sequence	Name	N	Format
95	D2_I_SLO_SRC	Y	VARCHAR2(1)
96	D2_I_SUN	Y	NUMBER(6,3)
97	D2_I_SUN_SRC	Y	VARCHAR2(1)
98	D2_I_FRO	Y	NUMBER(6,3)
99	D2_I_FRO_SRC	Y	VARCHAR2(1)
100	D2_I_ZZO	Y	NUMBER(6,2)
101	D2_I_ZZO_SRC	Y	VARCHAR2(1)
102	D2_I_DLX	Y	NUMBER(6,2)
103	D2_I_DLX_SRC	Y	VARCHAR2(1)
104	D2_I_MNR	Y	NUMBER(1,0)
105	D2_I_MNR_SRC	Y	VARCHAR2(1)
106	D2_I_REF	Y	NUMBER(6,2)
107	D2_I_REF_SRC	Y	VARCHAR2(1)
108	D2_I_SEV	Y	NUMBER(6,2)
109	D2_I_SEV_SRC	Y	VARCHAR2(1)
110	D2_I_SKF	Y	NUMBER(6,3)
111	D2_I_SKF_SRC	Y	VARCHAR2(1)
112	D2_I_SMH	Y	NUMBER(8,2)
113	D2_I_SMH_SRC	Y	VARCHAR2(1)
114	D2_I_MCOUNT	Y	NUMBER(3,0)
115	D2_I_AUTOLOAD	Y	VARCHAR2(1)
116	D2_I_TIME_GRANULARITY	Y	NUMBER(3,0)
117	D2_I_TIME_ZONE	Y	VARCHAR2(4)
118	XMIT_INIT_DATE	Y	DATE 7
119	D2_I_TMP_GRND	Y	NUMBER(8,4)
120	EMIS_EVENT_NUM	Y	NUMBER(4,0)
121	EOC_NAME	Y	VARCHAR2(30)

Table Name
D2_ITEM_OF_INTEREST

This table contains D2 input parameters and other control information.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_TIME_STEP	N	NUMBER(4,0)
3	D2_ITEM_OF_INTEREST	N	VARCHAR2(6)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	D2_C_DISTANCE	Y	NUMBER(6,0)
6	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_I_CONCENTRATION

This table contains D2 input parameters and other control information.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_CONC_NUM	N	NUMBER(3,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	D2_I_CONC_CI	Y	NUMBER(15,9)
5	D2_I_CONC_CI_D	Y	VARCHAR2(127)
6	D2_I_CONC_CI_SRC	Y	VARCHAR2(1)
7	D2_I_CONC_CI_D_SRC	Y	VARCHAR2(1)
8	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_I_DOSAGE

This table contains D2 input parameters and other control information.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_DOSAGE_NUM	N	NUMBER(2,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	D2_I_DOSAGE_DI	Y	NUMBER(10,4)
5	D2_I_DOSAGE_DI_D	Y	VARCHAR2(127)
6	D2_I_DOSAGE_DI_SRC	Y	VARCHAR2(1)
7	D2_I_DOSAGE_DI_D_SRC	Y	VARCHAR2(1)
8	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_I_MET

This table contains D2 input parameters and other control information.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_I_MET_NUM	N	NUMBER(3,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	D2_I_MET_STB	Y	VARCHAR2(1)
5	D2_I_MET_HML	Y	NUMBER(8,2)
6	D2_I_MET_WND	Y	NUMBER(6,3)
7	D2_I_MET_W_D	Y	NUMBER(6,3)
8	D2_I_MET_TMC	Y	NUMBER(6,2)
9	D2_I_MET_STB_SRC	Y	VARCHAR2(1)
10	D2_I_MET_HML_SRC	Y	VARCHAR2(1)
11	D2_I_MET_WND_SRC	Y	VARCHAR2(1)

Table Name
D2_I_MET

This table contains D2 input parameters and other control information.

Sequence	Name	N	Format
12	D2_I_MET_W_D_SRC	Y	VARCHAR2(1)
13	D2_I_MET_TMC_SRC	Y	VARCHAR2(1)
14	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_I_QUANTITY

This table contains D2 input parameters and other control information.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_REL_NUM	N	NUMBER(3,0)
3	D2_I_QUAN_NUM	N	NUMBER(2,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	D2_I_QUAN_Q	Y	NUMBER(13,2)
6	D2_I_QUAN_QT	Y	NUMBER(6,2)
7	D2_I_QUAN_Q_SRC	Y	VARCHAR2(1)
8	D2_I_QUAN_QT_SRC	Y	VARCHAR2(1)
9	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_I_RELEASE_NUM

This table contains D2 input parameters and other control information.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_REL_NUM	N	NUMBER(3,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	D2_I_MUN	Y	VARCHAR2(3)
5	D2_I_MUN_SRC	Y	VARCHAR2(1)
6	D2_I_REL	Y	VARCHAR2(3)
7	D2_I_REL_SRC	Y	VARCHAR2(1)
8	D2_I_NMU	Y	NUMBER(6,2)
9	D2_I_NMU_SRC	Y	VARCHAR2(1)
10	D2_I_NQI	Y	NUMBER(1,0)
11	D2_I_NQI_SRC	Y	VARCHAR2(1)
12	D2_I_TEV	Y	NUMBER(6,2)
13	D2_I_TEV_SRC	Y	VARCHAR2(1)
14	D2_I_SUR	Y	VARCHAR2(3)
15	D2_I_SUR_SRC	Y	VARCHAR2(1)
16	D2_I_ARE	Y	NUMBER(7,3)
17	D2_I_ARE_SRC	Y	VARCHAR2(1)

18	D2_I_LEN	Y	NUMBER(7,3)
19	D2_I_LEN_SRC	Y	VARCHAR2(1)
20	D2_I_OPC	Y	NUMBER(1,0)
21	D2_I_OPC_SRC	Y	VARCHAR2(1)
22	D2_I_HST	Y	NUMBER(7,3)
23	D2_I_HST_SRC	Y	VARCHAR2(1)
24	D2_I_DST	Y	NUMBER(7,3)
25	D2_I_DST_SRC	Y	VARCHAR2(1)
26	D2_I_TST	Y	NUMBER(6,3)
27	D2_I_TST_SRC	Y	VARCHAR2(1)
28	D2_I_VST	Y	NUMBER(6,3)
29	D2_I_VST_SRC	Y	VARCHAR2(1)
30	D2_I_RDE	Y	NUMBER(6,3)
31	D2_I_RDE_SRC	Y	VARCHAR2(1)
32	D2_I_HRL	Y	NUMBER(11,2)

Table Name
D2_I_RELEASE_NUM

This table contains D2 input parameters and other control information.

Sequence	Name	N	Format
33	D2_I_HRL_SRC	Y	VARCHAR2(1)
34	D2_I_CRD	Y	NUMBER(8,2)
35	D2_I_CRD_SRC	Y	VARCHAR2(1)
36	D2_I_QQQ	Y	NUMBER(13,2)
37	D2_I_QQQ_SRC	Y	VARCHAR2(1)
38	D2_I_HTS	Y	NUMBER(8,2)
39	D2_I_HTS_SRC	Y	VARCHAR2(1)
40	D2_I_SXS	Y	NUMBER(8,2)
41	D2_I_SXS_SRC	Y	VARCHAR2(1)
42	D2_I_SYS	Y	NUMBER(8,2)
43	D2_I_SYS_SRC	Y	VARCHAR2(1)
44	D2_I_SZS	Y	NUMBER(8,2)
45	D2_I_SZS_SRC	Y	VARCHAR2(1)
46	D2_I_TIM	Y	NUMBER(6,2)
47	D2_I_TIM_SRC	Y	VARCHAR2(1)
48	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_MET_SELECTION

This table determins which combination of Met parameters are used.

Sequence	Name	N	Format
1	MET_PARAM_CODE	N	VARCHAR2(2)
2	MET_ID	N	NUMBER(9,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	CURRENT_FLAG	N	VARCHAR2(1)
5	TOWER_NAME	N	VARCHAR2(30)
6	WX_TIME_VALID	N	DATE 7
7	CLUSTER_NUM	N	NUMBER(2,0)

Table Name
D2_O_CONCENTRATION_HWIDTH

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_CONC_NUM	N	NUMBER(3,0)
3	D2_CONC_SEQ_NUM	N	NUMBER(4,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	D2_O_CONCD_DIST	Y	NUMBER(10,2)
6	D2_O_CONCD_HWIDTH	Y	NUMBER(10,2)
7	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_O_CONCENTRATION_MAXD

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_CONC_NUM	N	NUMBER(3,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	D2_O_CONC_MAXDIST	Y	NUMBER(10,2)
5	D2_NUM_CONC_HWIDTH	Y	NUMBER(4,0)
6	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_O_DISCRETE_RECEPTOR

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	USER_CODE	N	VARCHAR2(7)
3	D2_DISCRETE_RECEPTOR_NUM	N	NUMBER(4,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	D2_DISCRETE_RECEPTOR_LOCATION	Y	VARCHAR2(92)
6	LOCATION_TYPE	Y	VARCHAR2(4)
7	D2_O_ANGLE_FROM_CENTER	Y	NUMBER(6,3)
8	D2_O_OUT_OF_PLUME_FLAG	Y	VARCHAR2(3)
9	D2_O_DIST_FROM_CENTER	Y	NUMBER(10,2)
10	D2_O_OFFSET_DIST_FROM_CENTER	Y	NUMBER(10,2)
11	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_O_DOSAGE_HWIDTH

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_DOSAGE_NUM	N	NUMBER(2,0)
3	D2_DOSAGE_SEQ_NUM	N	NUMBER(4,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	D2_O_DOS_DIST	Y	NUMBER(10,2)
6	D2_O_DOS_HWIDTH	Y	NUMBER(10,2)
7	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_O_DOSAGE_MAXD

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_DOSAGE_NUM	N	NUMBER(2,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	D2_O_DOS_MAXDIST	Y	NUMBER(10,2)
5	D2_NUM_DOSAGE_HWIDTH	Y	NUMBER(4,0)
6	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_O_POSINP

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	D2_O_QUANTITY	Y	NUMBER(13,2)
4	D2_O_TIME_TO_RELEASE	Y	NUMBER(6,2)
5	D2_O_SXS	Y	NUMBER(8,2)
6	D2_O_SYS	Y	NUMBER(8,2)
7	D2_O_SZS	Y	NUMBER(8,2)
8	D2_O_PARDOS_REASON	Y	VARCHAR2(80)
9	XMIT_INIT_DATE	Y	DATE 7
10	D2_O_STB	Y	VARCHAR2(1)

Table Name
D2_O_RUN_DT

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)

2	EXERCISE_NUM	N	NUMBER(9,0)
3	D2_O_RUN_DT	Y	DATE 7
4	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_O_SLICE

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_FUNCTION	N	VARCHAR2(14)
3	USER_CODE	N	VARCHAR2(7)
4	D2_O_DIST	N	NUMBER(10,2)
5	EXERCISE_NUM	N	NUMBER(9,0)
6	D2_O_SLICE_TOTAL_DOSE	Y	NUMBER(10,4)
7	D2_O_SLICE_TIME_TIP	Y	NUMBER(8,2)
8	D2_O_SLICE_TIME_TAIL	Y	NUMBER(8,2)
9	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_O_SLICE_DOSE_TIME

This table contains D2 output results.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_FUNCTION	N	VARCHAR2(14)
3	USER_CODE	N	VARCHAR2(7)
4	D2_O_DIST	N	NUMBER(10,2)
5	D2_DOSAGE_NUM	N	NUMBER(2,0)
6	EXERCISE_NUM	N	NUMBER(9,0)
7	D2_O_SLICE_DOSE_PCT	Y	NUMBER(5,2)
8	D2_O_SLICE_TIME	Y	NUMBER(10,4)
9	XMIT_INIT_DATE	Y	DATE 7

Table Name
D2_USER_TIME

This table contains D2 control parameters.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	USER_CODE	N	VARCHAR2(7)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	D2_TIME_STEP_INCREMENT	Y	NUMBER(3,0)

Table Name
DEPARTMENT

The Department table names the departments in agencies that are concerned with the FEMIS mission.

Sequence	Name	N	Format
1	AGENCY_CODE	N	VARCHAR2(20)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	DEPT_CODE	N	VARCHAR2(20)
4	DEPT_NAME	Y	VARCHAR2(30)
5	STATE_CODE	Y	VARCHAR2(2)
6	CITY_NAME	Y	VARCHAR2(20)
7	STREET_ADDRESS1	Y	VARCHAR2(40)
8	STREET_ADDRESS2	Y	VARCHAR2(40)
9	ZIP_CODE	Y	VARCHAR2(10)

Table Name
DEPENDENCE

The Dependence table shows the plan detail task(s) that must be finished before the indicated task is done.

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PD_UNIQUE_REF_NUM	N	NUMBER(7,0)
4	PRED_PLAN_REF_ID	N	NUMBER(9,0)
5	PRED_PD_UNIQUE_REF_NUM	N	NUMBER(7,0)
6	DEPENDENCY_TYPE	Y	VARCHAR2(10)
7	LEAD_LAG_TIME	Y	NUMBER(6,2)

Table Name
DEPT_EOC

The Dept Eoc table contains the departments of agencies located within an EOC.

Sequence	Name	N	Format
1	EOC_NAME	N	VARCHAR2(30)
2	AGENCY_CODE	N	VARCHAR2(20)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	DEPT_CODE	N	VARCHAR2(20)

Table Name
DOSAGE

The Dosage table is a validation of the dose levels used to run the D2 model.

Sequence	Name	N	Format
1	DOSE_LEVEL	N	VARCHAR2(40)
2	DOSE_DESCRIPTION	N	VARCHAR2(127)

Table Name
EMERGENCY_SUPPORT

The Emergency Support table contains valid support functions for use in an electronic plan.

Sequence	Name	N	Format
1	EMERGENCY_SUPPORT_FN	N	VARCHAR2(30)
2	EMS_DESCRIPTION	N	VARCHAR2(127)

Table Name
EOC

The EOC table contains information about EOCs at a CSEPP site.

Sequence	Name	N	Format
1	EOC_NAME	N	VARCHAR2(30)
2	EOC_CODE	Y	VARCHAR2(4)
3	EOC_TYPE	Y	VARCHAR2(30)
4	EOC_DESCRIPTION	Y	VARCHAR2(127)
5	EOC_RESPONSIBLITY_AREA	Y	VARCHAR2(92)
6	EOC_NUM	Y	NUMBER(3,0)
7	EOC_SERVER_NAME	Y	VARCHAR2(30)
8	EOC_PWD	Y	VARCHAR2(10)
9	EOC_NOTIFY_PORT	Y	NUMBER(9,0)
10	EOC_UNIX_PORT	Y	NUMBER(9,0)
11	SITE_NAME	N	VARCHAR2(30)

Table Name
EOC_OBJECTIVE

The EOC Objective table contains operational objectives for center.

Sequence	Name	N	Format
1	EOC_NAME	N	VARCHAR2(30)
2	EO_GOAL_TIME	Y	NUMBER(6,2)
3	EO_DESCRIPTION	Y	VARCHAR2(127)
4	EO_NOTIFY_TIME	Y	NUMBER(6,2)
5	EO_DECISION_TIME	Y	NUMBER(6,2)

6	TIME_ZONE_CODE	Y	VARCHAR2(3)
7	DOSE_LEVEL	Y	VARCHAR2(40)
8	DEFAULT_D2_CASE_ID	Y	NUMBER(9,0)

Table Name
EOC_ZONE

The EOC Zone table contains the mapping of zones to EOCs.

Sequence	Name	N	Format
1	EOC_NAME	N	VARCHAR2(30)
2	ZONE_NAME	N	VARCHAR2(30)

Table Name
EP_ERROR_CODES

These are the error codes used in the Evac model.

Sequence	Name	N	Format
1	EP_ERROR_CODE	N	NUMBER(5,0)
2	EP_ERROR_DESCRIPTION	Y	VARCHAR2(900)

Table Name
EVACUATION_PLAN

The Evacuation Plan table contains data describing how an evacuation should take place.

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	EVAC_CASE_NUM	Y	NUMBER(9,0)
4	EVAC_DATE_CREATED	Y	DATE 7
5	EVAC_DATE_MODIFIED	Y	DATE 7
6	EVAC_DATE_EXECUTED	Y	DATE 7
7	EVAC_DATE_GRAPHED	Y	DATE 7
8	EV_I_000_1ST_DESC	Y	VARCHAR2(72)
9	EV_I_001_USER_NAME	Y	VARCHAR2(36)
10	EV_I_001_DATE_C	Y	DATE 7
11	EV_I_001_AGENCY	Y	VARCHAR2(24)
12	EV_I_001_RUN_NUM	Y	NUMBER(4,0)
13	EV_I_002_RUN_TYPE	Y	NUMBER(1,0)
14	EV_I_002_FILL_TIME	Y	NUMBER(4,0)
15	EV_I_002_PCT_USE	Y	NUMBER(3,0)
16	EV_I_002_PCT_CAPACITY	Y	NUMBER(3,0)
17	EV_I_002_START_TIME	Y	DATE 7
18	EV_I_002_UNITS_IN	Y	VARCHAR2(1)
19	EV_I_002_UNITS_OUT	Y	VARCHAR2(1)
20	EV_I_002_TDIST	Y	VARCHAR2(1)
21	EV_I_004_LEN_INTERVAL	Y	NUMBER(4,0)
22	EV_I_004_TIME_SLICES	Y	NUMBER(4,0)
23	EV_I_005_NTI_OUT_CUM	Y	NUMBER(4,0)

24	EV_I_005_NTI_OUT_INT	Y	NUMBER(4,0)
25	EV_I_005_OUTPUT_CODE_S	Y	VARCHAR2(1)
26	EV_I_005_OUTPUT_CODE_P	Y	VARCHAR2(1)
27	EV_I_006_LON	Y	NUMBER(13,8)
28	EV_I_006_LAT	Y	NUMBER(13,8)
29	EV_1C_NUM_PEOPLE_VEH	Y	NUMBER(4,2)
30	EV_1C_ROAD_AGGREGATION	Y	VARCHAR2(30)

Table Name
EVACUATION_SITUATION

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	OTHER_CONDITION	N	VARCHAR2(256)
4	ORGANIZATIONAL_CONDITION	N	VARCHAR2(256)
5	POP_COND_NAME	N	VARCHAR2(30)
6	ROAD_CONDITION	N	VARCHAR2(256)
7	SITUATION_SEASON	N	VARCHAR2(6)
8	SPECIAL_WEATHER	N	VARCHAR2(15)
9	COMMUNITY_CONDITION	N	VARCHAR2(256)
10	HAZARD_TYPE	N	VARCHAR2(15)
11	SITUATION_COMMENT	Y	VARCHAR2(127)

Table Name
EVACUATION_ZONES

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	EV_1C_ZONE_NAME	N	VARCHAR2(30)
4	EV_1C_ZONE_LOCATION	Y	VARCHAR2(92)
5	EV_1C_ZONE_DESCRIPTION	Y	VARCHAR2(127)

Table Name
EV_INQUIRY

Sequence	Name	N	Format
1	EV_TP_REF_NUM	N	NUMBER(9,0)
2	EV_MOD_DATE	N	DATE 7
3	EXERCISE_NUM	N	NUMBER(9,0)
4	INQ_TK_REF_NUM	N	NUMBER(9,0)
5	EV_INFORMATION_REQUESTED	Y	VARCHAR2(127)
6	EV_INFO_NOTES	Y	VARCHAR2(254)
7	EV_INFO_RELEASED_FLAG	Y	VARCHAR2(1)
8	EV_INFO_RELEASE_DATE	N	DATE 7
9	EV_REL_PERSON_REF_NUM	Y	NUMBER(9,0)

Table Name
EV_I_000_DESCRIPTION

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_I_000_SEQ_NUM	N	NUMBER(4,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_I_000_DESC	Y	VARCHAR2(72)

Table Name
EV_I_003_TIME_PERIODS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_I_003_TP_LEN	Y	NUMBER(4,0)
5	EV_1C_PCT_LOADED	Y	NUMBER(3,0)

Table Name
EV_I_011_LINK_CHANNEL

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_LINK_NUM	N	NUMBER(5,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_I_011_CHAN_LANE_1	Y	VARCHAR2(1)
6	EV_I_011_CHAN_LANE_2	Y	VARCHAR2(1)
7	EV_I_011_CHAN_LANE_3	Y	VARCHAR2(1)
8	EV_I_011_CHAN_LANE_4	Y	VARCHAR2(1)
9	EV_I_011_CHAN_LANE_5	Y	VARCHAR2(1)
10	EV_I_011_CHAN_LANE_6	Y	VARCHAR2(1)
11	EV_I_011_FREE_FLOW_SPEED	Y	NUMBER(2,0)
12	EV_I_011_MEAN_Q_DISCH_H	Y	NUMBER(4,0)
13	EV_I_011_PED_CODE	Y	VARCHAR2(1)
14	EV_I_011_RTOR_CODE	Y	VARCHAR2(1)
15	EV_I_011_STARTUP_LOST_TIME	Y	NUMBER(3,0)

Table Name
EV_I_011_LINK_DEFINITION

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_LINK_NUM	N	NUMBER(5,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_I_011_NN_UP	N	NUMBER(4,0)
5	EV_I_011_NN_DOWN	N	NUMBER(4,0)
6	EV_I_011_LINK_LEN	Y	NUMBER(5,0)
7	EV_I_011_N_LANES_FULL	Y	NUMBER(1,0)
8	EV_I_011_N_LANES_LTP	Y	NUMBER(1,0)
9	EV_I_011_N_LANES_RTP	Y	NUMBER(1,0)

10	EV_I_011_PCT_GRADE	Y	NUMBER(3,0)
11	EV_I_011_NN_DOWN_L	Y	NUMBER(4,0)
12	EV_I_011_NN_DOWN_T	Y	NUMBER(4,0)
13	EV_I_011_NN_DOWN_R	Y	NUMBER(4,0)
14	EV_I_011_NN_DOWN_D	Y	NUMBER(5,0)
15	EV_I_011_NN_UP_T	Y	NUMBER(4,0)
16	ROUTE_NAME	Y	VARCHAR2(30)
17	ROUTE_SEG_NUM	Y	NUMBER(6,0)

Table Name
EV_I_015_LINK_DEF_FREEWAY

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_LINK_NUM_F	N	NUMBER(5,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_I_015_NN_UP	N	NUMBER(4,0)
5	EV_I_015_NN_DN_THRU_1	Y	NUMBER(4,0)
6	EV_I_015_NN_DN_THRU_2	Y	NUMBER(4,0)
7	EV_I_015_NN_DN_OFF_R	Y	NUMBER(4,0)
8	EV_I_015_NN_DOWN	N	NUMBER(4,0)
9	EV_I_015_LINK_LEN	Y	NUMBER(4,0)
10	EV_I_015_N_REG_USE_LANES	Y	NUMBER(1,0)
11	EV_I_015_NN_UP_ON_R	Y	NUMBER(4,0)

Table Name
EV_I_015_LINK_FLOW

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_LINK_NUM_F	N	NUMBER(5,0)
5	EV_I_015_SDR	Y	NUMBER(1,0)
6	EV_I_015_NOM_CAP_PLH	Y	NUMBER(4,0)
7	EV_I_015_FREE_FLOW_SPEED	Y	NUMBER(3,0)

Table Name
EV_I_021_TURNS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_LINK_NUM	N	NUMBER(5,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_I_021_PCT_L	Y	NUMBER(4,0)
6	EV_I_021_PCT_T	Y	NUMBER(4,0)
7	EV_I_021_PCT_R	Y	NUMBER(4,0)
8	EV_I_021_PCT_D	Y	NUMBER(4,0)
9	EV_I_021_DISCH_PROH_L	Y	VARCHAR2(1)
10	EV_I_021_DISCH_PROH_T	Y	VARCHAR2(1)
11	EV_I_021_DISCH_PROH_R	Y	VARCHAR2(1)

12	EV_I_021_DISCH_PROH_D	Y	VARCHAR2(1)
13	EV_I_021_PCT_BLOCK	Y	NUMBER(3,0)

Table Name
EV_I_026_TURNS_FREEWAY

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_LINK_NUM_F	N	NUMBER(5,0)
5	EV_I_026_NN_DOWN_THRU_1	Y	NUMBER(4,0)
6	EV_I_026_PCT_THRU_1	Y	NUMBER(3,0)
7	EV_I_026_NN_DOWN_THRU_2	Y	NUMBER(4,0)
8	EV_I_026_PCT_THRU_2	Y	NUMBER(3,0)
9	EV_I_026_PCT_OFF	Y	NUMBER(3,0)
10	EV_I_026_NN_DOWN_OFF	Y	NUMBER(4,0)

Table Name
EV_I_034_FREEWAY_SUB_PARM

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	EV_I_034_REL_T_COEF	Y	NUMBER(4,0)
4	EV_I_034_ANT_COEF	Y	NUMBER(4,0)
5	EV_I_034_MAX_DUR_TS	Y	NUMBER(4,0)
6	EV_I_034_1ST_SDRC_R1	Y	NUMBER(4,0)
7	EV_I_034_1ST_SDRC_R2	Y	NUMBER(4,0)
8	EV_I_034_1ST_SDRC_R3	Y	NUMBER(4,0)
9	EV_I_034_2ND_SDRC_R1	Y	NUMBER(4,0)
10	EV_I_034_2ND_SDRC_R2	Y	NUMBER(4,0)
11	EV_I_034_2ND_SDRC_R3	Y	NUMBER(4,0)
12	EV_I_034_3RD_SDRC_R1	Y	NUMBER(4,0)
13	EV_I_034_3RD_SDRC_R2	Y	NUMBER(4,0)
14	EV_I_034_3RD_SDRC_R3	Y	NUMBER(4,0)
15	EV_I_034_4TH_SDRC_R1	Y	NUMBER(4,0)
16	EV_I_034_4TH_SDRC_R2	Y	NUMBER(4,0)
17	EV_I_034_4TH_SDRC_R3	Y	NUMBER(4,0)
18	EV_I_034_5TH_SDRC_R3	Y	NUMBER(4,0)
19	EV_I_034_JAM_DEN	Y	NUMBER(4,0)

Table Name
EV_I_035_036_SIGNAL

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_NODE_NUM	N	NUMBER(4,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_I_035_REF_OFFSET	Y	NUMBER(4,0)
5	EV_I_035_NN_UP_1	Y	NUMBER(4,0)
6	EV_I_035_NN_UP_2	Y	NUMBER(4,0)

7	EV_I_035_NN_UP_3	Y	NUMBER(4,0)
8	EV_I_035_NN_UP_4	Y	NUMBER(4,0)
9	EV_I_035_NN_UP_5	Y	NUMBER(4,0)
10	EV_I_035_SIG_INT_1	Y	NUMBER(4,0)
11	EV_I_035_SIG_INT_2	Y	NUMBER(4,0)
12	EV_I_035_SIG_INT_3	Y	NUMBER(4,0)
13	EV_I_035_SIG_INT_4	Y	NUMBER(4,0)
14	EV_I_035_SIG_INT_5	Y	NUMBER(4,0)
15	EV_I_035_SIG_INT_6	Y	NUMBER(4,0)
16	EV_I_035_SIG_INT_7	Y	NUMBER(4,0)
17	EV_I_035_SIG_INT_8	Y	NUMBER(4,0)
18	EV_I_035_SIG_INT_9	Y	NUMBER(4,0)
19	EV_I_036_CONTROL_CODE	Y	VARCHAR2(45)

Table Name
EV_I_049_RING

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_I_049_PCT_EVAC_MAN	Y	NUMBER(3,0)
5	EV_I_049_PCT_EVAC_VOL	Y	NUMBER(3,0)

Table Name
EV_I_049_RING_NUMBER

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_I_049_RING_NUMB	N	NUMBER(1,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_I_049_RING_FLAG	Y	VARCHAR2(1)

Table Name
EV_I_049_RING_SECTORS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_I_049_RING_NUMB	N	NUMBER(1,0)
4	EV_I_049_RSEC_NUMB	N	NUMBER(2,0)
5	EXERCISE_NUM	N	NUMBER(9,0)
6	EV_I_049_RSEC_FLAG	Y	VARCHAR2(1)

Table Name
EV_I_050_ENTRY_LINKS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)

3	EV_LINK_NUM	N	NUMBER(5,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_I_050_VEHICLES_HR	Y	NUMBER(4,0)
6	EV_I_050_PCT_TRUCKS	Y	NUMBER(3,0)

Table Name
EV_I_051_SOURCE_SINK

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_LINK_NUM	N	NUMBER(5,0)
4	EV_I_051_SS_CENTROID	N	NUMBER(4,0)
5	EXERCISE_NUM	N	NUMBER(9,0)
6	EV_I_051_NET_VOLUME	Y	NUMBER(4,0)

Table Name
EV_I_052_LOAD_FACTORS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_I_052_AVG_PER_AUTO	Y	NUMBER(4,0)
5	EV_I_052_AVG_PER_POOL	Y	NUMBER(4,0)
6	EV_I_052_AVG_PER_TRUCK	Y	NUMBER(4,0)
7	EV_I_052_AVG_PER_BUS	Y	NUMBER(4,0)

Table Name
EV_I_175_TA_PARMS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_I_175_EXP_VAL	Y	NUMBER(4,0)
5	EV_I_175_MAX_INNER_ITER	Y	NUMBER(4,0)
6	EV_I_175_COEFF_A	Y	NUMBER(4,0)
7	EV_I_175_COEFF_B	Y	NUMBER(4,0)
8	EV_I_175_KALMAN_FILTER	Y	NUMBER(4,0)
9	EV_I_175_MAX_OUTER_ITER	Y	NUMBER(4,0)
10	EV_I_175_LS_ACC	Y	NUMBER(4,0)
11	EV_I_175_IMP_CODE	Y	VARCHAR2(1)
12	EV_I_175_OPT_CODE	Y	VARCHAR2(1)
13	EV_I_175_TA_CODE	Y	VARCHAR2(1)
14	EV_I_175_PCT_DISCHARGE	Y	NUMBER(3,0)
15	EV_I_175_PCT_IMPED	Y	NUMBER(3,0)

Table Name
EV_I_176_179_DEST

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_I_176_179_CNN_S	N	NUMBER(4,0)
4	EV_I_176_179_CNN_D	N	NUMBER(4,0)
5	EXERCISE_NUM	N	NUMBER(9,0)
6	EV_I_176_179_VPH_D	Y	NUMBER(4,0)

Table Name
EV_I_176_179_SOURCE

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_I_176_179_CNN_S	N	NUMBER(4,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_I_176_179_VPH_S	Y	NUMBER(4,0)

Table Name
EV_I_177_CENTROIDS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_LINK_NUM	N	NUMBER(5,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_I_177_CN	Y	NUMBER(4,0)

Table Name
EV_I_178_DEST_ATTRACTORS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_TIME_PERIOD	N	NUMBER(2,0)
3	EV_NODE_NUM	N	NUMBER(4,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_I_178_VPH_ATTRACTOR	Y	NUMBER(4,0)

Table Name
EV_I_195_CASE_NODE

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_NODE_NUM	N	NUMBER(4,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_NODE_ID	Y	NUMBER(9,0)
5	EV_NODE_DESCRIPTION	Y	VARCHAR2(127)

6	EV_NODE_TYPE	Y	VARCHAR2(1)
7	EV_O_2_ASSOC_NODE_ENTRY	Y	NUMBER(4,0)
8	EV_O_2_ASSOC_NODE_EXIT	Y	NUMBER(4,0)
9	EV_I_XOFFSET	Y	NUMBER(6,0)
10	EV_I_YOFFSET	Y	NUMBER(6,0)

Table Name
EV_I_195_NODE

Sequence	Name	N	Format
1	EV_NODE_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	EV_I_195_NODE_NAME	Y	VARCHAR2(20)
4	EV_I_195_NODE_LON	Y	NUMBER(13,8)
5	EV_I_195_NODE_LAT	Y	NUMBER(13,8)
6	EV_NODE_LONG_DESC	Y	VARCHAR2(127)

Table Name
EV_O_1_LINK_STATISTICS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_O_TS	N	NUMBER(3,0)
3	EV_LINK_NUM	N	NUMBER(5,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_O_1_VEHPCT	Y	NUMBER(3,0)
6	EV_O_1_VEHCNT	Y	NUMBER(6,0)
7	EV_O_1_DELVEH	Y	NUMBER(8,0)
8	EV_O_1_AVGSPD	Y	NUMBER(3,1)
9	EV_O_1_VEHT	Y	NUMBER(8,0)
10	EV_O_1_QUEUE	Y	NUMBER(6,0)
11	EV_O_1_AVG_TRAVEL_TIME	Y	NUMBER(8,2)
12	EV_O_1_C_PCTSTOP	Y	NUMBER(3,0)
13	EV_O_1_C_MT	Y	NUMBER(7,1)
14	EV_O_1_C_PEPDISCHG	Y	NUMBER(10,0)
15	EV_O_1_C_VEHMILES	Y	NUMBER(10,0)
16	EV_O_1_C_VEHMINUTES	Y	NUMBER(10,0)

Table Name
EV_O_3_TIME_PERIOD

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_O_3_TP	N	NUMBER(2,0)
3	EV_O_3_CN	N	NUMBER(4,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_O_3_LRATE	Y	NUMBER(4,0)
6	EV_LINK_NUM	Y	NUMBER(5,0)

Table Name
EV_O_4_STEP_LOAD

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_O_TS	N	NUMBER(3,0)
3	EV_O_4_CNN	N	NUMBER(4,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_O_4_TVL	Y	NUMBER(5,0)
6	EV_O_4_TRL	Y	NUMBER(5,0)

Table Name
EV_O_5_CASE_SUMMARY

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	EV_O_5_VEHT	Y	NUMBER(8,0)
4	EV_O_5_PCTSTOP	Y	NUMBER(3,0)
5	EV_O_5_MT	Y	NUMBER(7,1)
6	EV_O_5_AVGSPD	Y	NUMBER(3,1)
7	EV_O_5_DELVEH	Y	NUMBER(8,0)
8	EV_O_5_NOUT	Y	NUMBER(3,0)
9	EV_O_5_EVACTIME	Y	NUMBER(6,0)
10	EV_O_5_C_PEPDISCHG	Y	NUMBER(10,0)
11	EV_O_5_C_VEHMILES	Y	NUMBER(10,0)
12	EV_O_5_C_VEHMINUTES	Y	NUMBER(10,0)
13	EV_O_5_C_TOTALDELAY	Y	NUMBER(10,0)
14	EV_O_5_C_AVGQCONTENT	Y	NUMBER(6,1)
15	EV_O_5_PNT_FREQ	Y	NUMBER(8,0)
16	EV_O_5_C_AVGTOTQ	Y	NUMBER(9,1)
17	EV_O_5_VEH_RON	Y	NUMBER(9,4)

Table Name
EV_O_6_TIME_STEP

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_O_TS	N	NUMBER(3,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_O_6_VEHS	Y	NUMBER(8,0)
5	EV_O_6_VEHT	Y	NUMBER(8,0)

Table Name
EV_O_7_ERRORS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_O_ERROR_NUM	N	NUMBER(4,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_O_7_ERROR_TYPE	Y	VARCHAR2(12)

5	EV_O_7_ERROR_SUBR	Y	VARCHAR2(6)
6	EP_ERROR_CODE	Y	NUMBER(5,0)

Table Name
EV_O_7_ERROR_VALUES

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_O_ERROR_NUM	N	NUMBER(4,0)
3	EV_O_7_ERROR_PVNUM	N	NUMBER(1,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	EV_O_7_ERROR_VALUE	Y	NUMBER(9,0)

Table Name
EV_O_8_ERRORS

Sequence	Name	N	Format
1	EVAC_CASE_ID	N	NUMBER(9,0)
2	EV_O_8_ERROR_NUM	N	NUMBER(4,0)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_O_8_ERROR_DESC	Y	VARCHAR2(2000)

Table Name
EXERCISE

The Exercise table contains scenario parameters for the exercises.

Sequence	Name	N	Format
1	EXERCISE_NAME	N	VARCHAR2(20)
2	EXERCISE_CHANGE_DATE	N	DATE 7
3	EXERCISE_DESCRIPTION	Y	VARCHAR2(127)
4	EXERCISE_LONG_DESCRIPT	Y	VARCHAR2(1999)

Table Name
EXERCISE_CONTROL

The Exercise Control table is the link between the exercise data and the exercise scenario data.

Sequence	Name	N	Format
1	EXERCISE_NUM	N	NUMBER(9,0)
2	EXERCISE_ACTIVE_FLAG	Y	VARCHAR2(1)
3	EXERCISE_END_DATE	Y	DATE 7
4	EXERCISE_START_DATE	Y	DATE 7
5	EXERCISE_NAME	N	VARCHAR2(20)
6	EXERCISE_CHANGE_DATE	Y	DATE 7
7	EXERCISE_DATA_NAME	Y	VARCHAR2(20)
8	EXERCISE_DATA_DATE	Y	DATE 7

Table Name
EXERCISE_DATA

The Exercise Data describes when the exercise data base was created and a description of the data.

Sequence	Name	N	Format
1	EXERCISE_DATA_NAME	N	VARCHAR2(20)
2	EXERCISE_DATA_DATE	N	DATE 7
3	EXERCISE_DATA_DESCRIPTION	Y	VARCHAR2(127)

Table Name
FACILITY

The Facility table contains information about a building or structure that may need to be considered for some protective action.

Sequence	Name	N	Format
1	FACILITY_NAME	N	VARCHAR2(30)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	FACILITY_DESCRIPTION	Y	VARCHAR2(127)
4	FACILITY_CAPACITY	Y	NUMBER(5,0)
5	FACILITY_LOCATION	Y	VARCHAR2(92)
6	PRESSURIZED_FLAG	Y	VARCHAR2(1)
7	FACILITY_ADDRESS1	Y	VARCHAR2(40)
8	FACILITY_CITY	Y	VARCHAR2(20)
9	FACILITY_STATE_CODE	Y	VARCHAR2(2)
10	FACILITY_ZIP_CODE	Y	VARCHAR2(10)
11	FACILITY_POC_AGENCY	Y	VARCHAR2(30)
12	FACILITY_POC_DEPT	Y	VARCHAR2(30)
13	FACILITY_POC_POSITION	Y	VARCHAR2(20)
14	FACILITY_POC_PERSON_REF_NUM	Y	NUMBER(9,0)
15	FACILITY_POC_PHONE	Y	VARCHAR2(17)
16	FACILITY_SHELTER_CAP_FLAG	Y	VARCHAR2(1)
17	MUTUAL_AID_FLAG	Y	VARCHAR2(1)
18	FACILITY_ADDRESS2	Y	VARCHAR2(40)
19	FACILITY_TYPE	N	VARCHAR2(40)
20	MOU_ID	Y	NUMBER(9,0)
21	EOC_NAME	N	VARCHAR2(30)
22	ZONE_NAME	Y	VARCHAR2(30)

Table Name
FACILITY_TYPE

The Facility table contains the valid list of facility types that may be used.

Sequence	Name	N	Format
1	FACILITY_TYPE	N	VARCHAR2(40)
2	FACILITY_TYPE_DESCRIPTION	N	VARCHAR2(127)

Table Name
FEMIS_OBJECT

The FEMIS Object table contains positional information about all objects that can be viewed by the GIS.

Sequence	Name	N	Format
1	FEMIS_OBJECT_TYPE	N	VARCHAR2(8)
2	FEMIS_OBJECT_NAME	N	VARCHAR2(30)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EOC_NAME	Y	VARCHAR2(30)
5	LOCATION_NAME	Y	VARCHAR2(30)
6	FEMIS_POINT_X	Y	NUMBER(20,6)
7	FEMIS_POINT_Y	Y	NUMBER(20,6)
8	FEMIS_OBJECT_SUBTYPE	Y	VARCHAR2(40)
9	LOCATION_TYPE	Y	VARCHAR2(8)
10	EXERCISE_FLAG	Y	VARCHAR2(1)

Table Name
FEMIS_USER

The FEMIS User table contains information about all users of the system.

Sequence	Name	N	Format
1	USER_CODE	N	VARCHAR2(8)
2	USER_PWD	Y	VARCHAR2(10)
3	ACCOUNT_STATUS	Y	VARCHAR2(30)
4	USER_PREFERENCES	Y	LONG
5	PERSON_REF_NUM	N	NUMBER(9,0)
6	EXERCISE_NUM	N	NUMBER(9,0)

Table Name
GENERIC_TEXT

Sequence	Name	N	Format
1	GEN_TYPE	N	VARCHAR2(30)
2	GEN_DATE	N	DATE 7
3	GEN_SEQ	N	NUMBER(4,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	GEN_RECORD	Y	VARCHAR2(80)
6	XMIT_INIT_DATE	Y	DATE 7

Table Name
GIS_LAYER

This table defines the GIS layers or themes available.

Sequence	Name	N	Format
1	GIS_LAYER_NAME	N	VARCHAR2(30)
2	GIS_LAYER_MODIFICATION_DATE	Y	DATE 7

3	GIS_LEGEND_NAME	Y	VARCHAR2(16)
4	GIS_LAYER_TYPE	Y	VARCHAR2(10)
5	GIS_LAYER_LINE_STYLE	Y	NUMBER(3,0)
6	GIS_LAYER_DESCRIPTION	Y	VARCHAR2(127)
7	GIS_LAYER_FILL_PATTERN	Y	NUMBER(,)
8	GIS_LAYER_POINT_SYMBOL	Y	NUMBER(3,0)
9	GIS_LAYER_TEXT_FONT	Y	NUMBER(3,0)
10	GIS_LAYER_TEXT_COLOR	Y	NUMBER(3,0)
11	GIS_LAYER_TEXT_ROTATION	Y	NUMBER(3,0)
12	GIS_LAYER_TEXT_SIZE	Y	NUMBER(3,0)
13	GIS_LAYER_TEXT_JUSTIFY	Y	VARCHAR2(2)
14	GIS_LAYER_SYMBOL_COLOR	Y	NUMBER(3,0)
15	GIS_LAYER_SYMBOL_SIZE	Y	NUMBER(3,0)
16	GIS_LAYER_BACK_COLOR	Y	NUMBER(3,0)
17	GIS_LAYER_FORE_COLOR	Y	NUMBER(3,0)
18	GENERIC_GIS_LAYER_CODE	Y	VARCHAR2(2)

Table Name
GIS_LAYER_DEFINITION

This table contains parameters that control a GIS layer presentation.

Sequence	Name	N	Format
1	GENERIC_GIS_LAYER_CODE	N	VARCHAR2(2)
2	GENERIC_LAYER_DESCRIPTION	Y	VARCHAR2(40)
3	USER_MODIFY_FLAG	Y	VARCHAR2(1)
4	FEMIS_OBJECT_FLAG	Y	VARCHAR2(1)
5	LAYER_BASE_NAME	Y	VARCHAR2(8)
6	LAYER_NAME_SUBST_FLAG	Y	VARCHAR2(1)
7	LAYER_SUBST_SOURCE1	Y	VARCHAR2(12)
8	LAYER_SUBST_SOURCE2	Y	VARCHAR2(12)
9	DEFAULT_LEGEND_BASE_NAME	Y	VARCHAR2(16)
10	LEGEND_NAME_SUBST_FLAG	Y	VARCHAR2(1)
11	LEGEND_SUBST_SOURCE1	Y	VARCHAR2(12)
12	LEGEND_SUBST_SOURCE2	Y	VARCHAR2(12)
13	DIRECTORY_BASE_NAME	Y	VARCHAR2(8)
14	DIRECTORY_NAME_SUBST_FLAG	Y	VARCHAR2(1)
15	DIRECTORY_SUBST_SOURCE	Y	VARCHAR2(12)
16	FILE_BASE_NAME	Y	VARCHAR2(8)
17	FILE_TYPE	Y	VARCHAR2(10)
18	FILE_NAME_SUBST_FLAG	Y	VARCHAR2(1)
19	FILE_SUBST_SOURCE1	Y	VARCHAR2(12)
20	FILE_SUBST_SOURCE2	Y	VARCHAR2(12)

Table Name
GIS_OBJECT

This table contains parameters describing the GIS objects.

Sequence	Name	N	Format
1	GIS_LAYER_NAME	N	VARCHAR2(30)
2	GIS_OBJECT_ID	N	NUMBER(9,0)

3	EXERCISE_NUM	N	NUMBER(9,0)
4	GIS_LABEL_POINT_X	Y	NUMBER(20,6)
5	GIS_LABEL_POINT_Y	Y	NUMBER(20,6)
6	FEMIS_OBJ_FLAG	Y	VARCHAR2(1)
7	FEMIS_OBJECT_TYPE	Y	VARCHAR2(8)
8	FEMIS_OBJECT_NAME	Y	VARCHAR2(30)
9	EXERCISE_FLAG	Y	VARCHAR2(1)

Table Name
GIS_SYMBOL

Sequence	Name	N	Format
1	GIS_SYMBOL_ID	N	NUMBER(9,0)
2	SYMBOL_DESCRIPTION	Y	VARCHAR2(127)

Table Name
GOAL

The Goal table is used to validate CSEPP goals.

Sequence	Name	N	Format
1	PLANNING_GOAL	N	VARCHAR2(40)
2	PLAN_GOAL_DESCRIPTION	Y	VARCHAR2(128)

Table Name
HAZARD

The Hazard table describes common hazards that are possible during the CSEPP mission.

Sequence	Name	N	Format
1	HAZARD_TYPE	N	VARCHAR2(15)
2	HAZARD_DESCRIPTION	N	VARCHAR2(127)

Table Name
HAZARD_SITE

The Hazard Site table has general information about the FEMIS site.

Sequence	Name	N	Format
1	SITE_NAME	N	VARCHAR2(30)
2	SITE_TYPE	N	VARCHAR2(20)
3	MODEL_SITE_CODE	Y	VARCHAR2(30)
4	SITE_DESCRIPTION	Y	VARCHAR2(127)

Table Name
INTERVAL_QUANTITY

Sequence	Name	N	Format
1	LOCAL_ID_CODE	N	VARCHAR2(20)

2	EXERCISE_NUM	N	NUMBER(9,0)
3	RELEASE_NUM	N	NUMBER(2,0)
4	IQ_INTERVAL_NUM	N	NUMBER(2,0)
5	QUANTITY_PER_INTERVAL	Y	NUMBER(13,2)
6	IQ_TIME_MINUTES	Y	NUMBER(6,2)
7	XMIT_INIT_DATE	Y	DATE 7

Table Name
JOURNAL

The Journal table is used to save significant events that occured while the FEMIS system was in operation.

Sequence	Name	N	Format
1	JOURNAL_REC_ID	N	NUMBER(9,0)
2	EOC_NAME	N	VARCHAR2(30)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	JOURNAL_ENTERED_DATE	N	DATE 7
5	JOURNAL_CATEGORY	N	VARCHAR2(15)
6	JOURNAL_PERSON_REF_NUM	N	NUMBER(9,0)
7	JOURNAL_ACTUAL_TIME	Y	DATE 7
8	JOURNAL_SUBJECT	Y	VARCHAR2(30)
9	JOURNAL_INFORMATION	Y	VARCHAR2(2000)
10	JOURNAL_MANUAL_ENTRY_FLAG	Y	VARCHAR2(1)
11	JOURNAL_ATTR_FLAGS	Y	VARCHAR2(10)
12	XMIT_INIT_DATE	Y	DATE 7

Table Name
KNOWN_POINT

A control table that describes an area defined by a point on a map.

Sequence	Name	N	Format
1	POINT_NAME	N	VARCHAR2(30)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	POINT_DESCRIPTION	Y	VARCHAR2(127)

Table Name
KNOWN_POLYGON

A control table that describes an area defined by a polygon on a map.

Sequence	Name	N	Format
1	POLYGON_NAME	N	VARCHAR2(30)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	POLYGON_DESCRIPTION	Y	VARCHAR2(127)

Table Name
LINK_TYPE

The Link Type table contains information about the relationship between cases.

Sequence	Name	N	Format
1	LINK_TYPE_CODE	N	VARCHAR2(10)
2	LINK_ORDER	Y	NUMBER(2,0)
3	LINK_DESCRIPTION	Y	VARCHAR2(127)

Table Name
LOCAL_CONFIG

The Local Configuration table contains information about the current state of the system.

Sequence	Name	N	Format
1	SITE_NAME	N	VARCHAR2(30)
2	EOC_NAME	N	VARCHAR2(30)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	MODE_NAME	N	VARCHAR2(10)
5	CURRENT_DATASET_NAME	N	VARCHAR2(20)
6	LC_USER_CODE	N	VARCHAR2(8)
7	CURRENT_D2_CASE_ID	Y	NUMBER(9,0)
8	CURRENT_MET_ID	Y	NUMBER(9,0)
9	CURRENT_WPA_ID	Y	NUMBER(9,0)
10	CURRENT_PLUME_NUM	Y	NUMBER(9,0)
11	CURRENT_PAD_ID	Y	NUMBER(9,0)
12	CURRENT_PLAN_REF_ID	Y	NUMBER(9,0)
13	CURRENT_PLAN_NAME	Y	VARCHAR2(64)
14	CURRENT_EVENT_COUNT	Y	NUMBER(2,0)
15	CURRENT_WEDGE_PG_ID	Y	NUMBER(9,0)
16	CURRENT_THREAT_ID	Y	NUMBER(9,0)
17	CURRENT_SS_ID	Y	NUMBER(9,0)
18	CURRENT_SITUATION_COMMENT	Y	VARCHAR2(127)
19	CURRENT_POP_COND_NAME	Y	VARCHAR2(30)
20	CURRENT_PAR_ID	Y	NUMBER(9,0)
21	CURRENT_ZONE_RISK_GROUP_NAME	Y	VARCHAR2(30)
22	CURRENT_EVAC_CASE_ID	Y	NUMBER(9,0)
23	CURRENT_RESOURCE_COLLECTION	Y	VARCHAR2(20)
24	CURRENT_D2_CASE_DATE	Y	DATE 7
25	CURRENT_MET_DATE	Y	DATE 7
26	CURRENT_WPA_DATE	Y	DATE 7
27	CURRENT_PLUME_DATE	Y	DATE 7
28	CURRENT_PAD_DATE	Y	DATE 7
29	CURRENT_PLAN_DATE	Y	DATE 7
30	CURRENT_EVENT_DATE	Y	DATE 7
31	CURRENT_WEDGE_DATE	Y	DATE 7
32	CURRENT_THREAT_DATE	Y	DATE 7

Table Name
LOCAL_CONFIG

The Local Configuration table contains information about the current state of the system.

Sequence	Name	N	Format
33	CURRENT_SS_DATE	Y	DATE 7
34	CURRENT_POP_COND_DATE	Y	DATE 7
35	CURRENT_DATASET_DATE	Y	DATE 7
36	LC_USER_CODE_DATE	Y	DATE 7
37	CURRENT_PAR_DATE	Y	DATE 7
38	CURRENT_ZONE_RISK_GROUP_DATE	Y	DATE 7
39	CURRENT_EVAC_CASE_DATE	Y	DATE 7
40	CURRENT_RESOURCE_DATE	Y	DATE 7
41	XMIT_INIT_DATE	Y	DATE 7
42	CURRENT_WPA_USER	Y	VARCHAR2(8)
43	CURRENT_D2_CASE_USER	Y	VARCHAR2(8)
44	CURRENT_THREAT_USER	Y	VARCHAR2(8)
45	CURRENT_ZONE_RISK_GROUP_USER	Y	VARCHAR2(8)
46	CURRENT_SS_USER	Y	VARCHAR2(8)
47	CURRENT_PAR_USER	Y	VARCHAR2(8)
48	CURRENT_PAD_USER	Y	VARCHAR2(8)
49	CURRENT_PLAN_REF_USER	Y	VARCHAR2(8)
50	CURRENT_EVAC_CASE_USER	Y	VARCHAR2(8)
51	CURRENT_EVAC_NAME	Y	VARCHAR2(80)
52	SENT_OFFPOST_DATE	Y	DATE 7
53	SENT_OFFPOST_USER	Y	VARCHAR2(8)

Table Name
LOCATION_TYPE

The Location Type table describes the kinds of objects that can be displayed in the GIS.

Sequence	Name	N	Format
1	LOCATION_TYPE	N	VARCHAR2(8)
2	LOC_TYPE_DESCRIPTION	Y	VARCHAR2(127)

Table Name
MEASUREMENT_DEFN

The Measurement Definition table describes the valid units of measurements.

Sequence	Name	N	Format
1	MEASUREMENT_CLASS	N	VARCHAR2(10)

Table Name
MEASUREMENT_TYPE
The Measurement Type table describes the valid classes of measurements.

Sequence	Name	N	Format
1	MEASUREMENT_CLASS	N	VARCHAR2(10)
2	MEASUREMENT_TYPE	N	VARCHAR2(10)
3	MEASUREMENT_DESCRIPTION	Y	VARCHAR2(127)

Table Name
MEMO_UNDERSTANDING

The Memo of Understanding table documents an agreement to supply resources, services, etc.

Sequence	Name	N	Format
1	MOU_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	EOC_NAME	Y	VARCHAR2(30)
4	MOU_CHANGE_DATE	Y	DATE 7
5	MOU_REFERENCE	Y	VARCHAR2(10)
6	MOU_DESCRIPTION	Y	VARCHAR2(127)
7	MOU_START_DATE	Y	DATE 7
8	MOU_EXPIRE_DATE	Y	DATE 7
9	MOU_POC_AGENCY	Y	VARCHAR2(20)
10	MOU_POC_DEPT	Y	VARCHAR2(20)
11	MOU_POC_POSITION	Y	VARCHAR2(20)
12	MOU_PERSON_REF_NUM	Y	NUMBER(9,0)

Table Name
METHOD

The Method table contains the valid list of methods for FEMIS operations.

Sequence	Name	N	Format
1	METHOD_TYPE	N	VARCHAR2(20)
2	METHOD_DESCRIPTION	Y	VARCHAR2(127)

Table Name
MET_CONDITION

The Met Condition table has the current weather parameters fro m towers in operation.

Sequence	Name	N	Format
1	TOWER_NAME	N	VARCHAR2(30)
2	WX_TIME_VALID	N	DATE 7
3	EXERCISE_NUM	N	NUMBER(9,0)
4	CLUSTER_NUM	N	NUMBER(2,0)

5	WIND_SPEED	Y	NUMBER(5,2)
6	WIND_DIR	Y	NUMBER(3,0)
7	MIXING_HEIGHT	Y	NUMBER(5,0)
8	STABILITY	Y	VARCHAR2(1)
9	TEMPERATURE	Y	NUMBER(5,1)
10	PRESSURE	Y	NUMBER(6,2)
11	HUMIDITY	Y	NUMBER(4,1)
12	CLOUD_HEIGHT	Y	NUMBER(5,0)
13	CLUSTER_HEIGHT	Y	NUMBER(5,0)
14	CURRENT_FLAG	Y	VARCHAR2(1)

Table Name
MET_PARAMETER

This is the Weather database area that contains weather related information.

Sequence	Name	N	Format
1	MET_PARAM_CODE	N	VARCHAR2(2)
2	MET_PARAM_DESCRIPTION	N	VARCHAR2(127)

Table Name
MET_TOWER

The Met Tower table contains information about the sensors on the tower.

Sequence	Name	N	Format
1	TOWER_NAME	N	VARCHAR2(30)
2	TOWER_CODE	N	VARCHAR2(9)
3	TOWER_DESCRIPTION	Y	VARCHAR2(127)
4	TOWER_STATUS	Y	VARCHAR2(127)

Table Name
MUNITION

The Munition table describes the munitions that are commonly stored with chemical weapons.

Sequence	Name	N	Format
1	MUNITION_TYPE	N	VARCHAR2(4)
2	MUNITION_DESCRIPTION	Y	VARCHAR2(127)

Table Name
NAME_SUBSTITUTION

The Name Substitution table controls how case numbers are formulated.

Sequence	Name	N	Format
1	SUBST_SOURCE	N	VARCHAR2(12)

2	TABLE_NAME	Y	VARCHAR2(30)
3	FIELD_NAME	Y	VARCHAR2(30)
4	MIN_CHARS	Y	NUMBER(2,0)
5	MAX_CHARS	Y	NUMBER(2,0)

Table Name
NEXT_OF_KIN

The Next of Kin table contains information about a victims relatives or NOK.

Sequence	Name	N	Format
1	VIC_TK_REF_NUM	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	CASUALTY_MOD_DATE	N	DATE 7
4	NOK_TK_REF_NUM	N	NUMBER(9,0)
5	NOK_RELATIONSHIP	Y	VARCHAR2(20)
6	NOK_NOTIFY_FLAG	Y	VARCHAR2(1)

Table Name
OBJECT_SUBTYPE

The Object Subtype table contains valid subtypes for GIS objects.

Sequence	Name	N	Format
1	LOCATION_TYPE	N	VARCHAR2(8)
2	FEMIS_OBJECT_SUBTYPE	N	VARCHAR2(40)
3	OBJ_SUBTYPE_DESCRIPTION	Y	VARCHAR2(127)
4	GIS_SYMBOL_ID	Y	NUMBER(9,0)

Table Name
PA_DECISION_MATRIX

The PA Decision Matrix table contains many of the parameters describing the threat that are used to make protective action decisions and recomendations.

Sequence	Name	N	Format
1	PA_UNIT_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PAD_ID	N	NUMBER(9,0)
4	PADM_NAME	Y	VARCHAR2(30)
5	THREAT_IMPACT_TIME	Y	NUMBER(6,2)
6	THREAT_STASIS_TIME	Y	NUMBER(6,2)
7	THREAT_DISTANCE	Y	NUMBER(7,0)
8	PADM_TIME	Y	NUMBER(6,2)
9	PADM_TYPE	N	VARCHAR2(3)
10	DOSE_LEVEL	Y	VARCHAR2(40)
11	PADM_TIME_SOURCE	Y	VARCHAR2(2)
12	THREAT_REMAIN_TIME	Y	NUMBER(6,2)
13	PA_ACTIVITY	N	VARCHAR2(12)
14	SS_ID	Y	NUMBER(9,0)

15	PLAN_REF_ID	Y	NUMBER(9,0)
16	THREAT_ID	Y	NUMBER(9,0)
17	ZONE_RISK_GROUP_NAME	Y	VARCHAR2(30)
18	IN_RISK_GROUP_FLAG	Y	VARCHAR2(1)
19	XMIT_INIT_DATE	Y	DATE 7

Table Name
PA_LOOKUP

The PA Lookup table contains protective action recommendations for each protective action unit.

Sequence	Name	N	Format
1	PA_UNIT_ID	N	NUMBER(9,0)
2	PA_ACTIVITY	N	VARCHAR2(12)
3	SS_ID	N	NUMBER(9,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	PAL_BEGIN_TIME	Y	NUMBER(6,2)
6	PAL_END_TIME	Y	NUMBER(6,2)
7	PAU_TYPE	N	VARCHAR2(10)
8	PA_TASK_NAME	Y	VARCHAR2(50)

Table Name
PA_UNIT

The PA Unit table contains a list of protective action units for use in planning.

Sequence	Name	N	Format
1	PA_UNIT_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PAU_TYPE	N	VARCHAR2(10)
4	ZONE_NAME	N	VARCHAR2(30)
5	FACILITY_NAME	Y	VARCHAR2(30)

Table Name
PD_LEVEL

The PD Level table contains identifying information for each level of the plan.

Sequence	Name	N	Format
1	LEVEL_NUM	N	NUMBER(1,0)
2	LEVEL_NAME	N	VARCHAR2(30)

Table Name
PERSON

The Person table contains information about people that interact with FEMIS.

Sequence	Name	N	Format
1	PERSON_REF_NUM	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	NAME_LAST	Y	VARCHAR2(20)
4	NAME_FIRST	Y	VARCHAR2(12)
5	NAME_SECOND	Y	VARCHAR2(12)
6	HOME_PHONE	Y	VARCHAR2(17)
7	WORK_PHONE	Y	VARCHAR2(17)
8	PERSON_EMAIL_ADDRESS	Y	VARCHAR2(40)
9	PERSON_FAX_PHONE	Y	VARCHAR2(17)
10	PERSON_BEEPER_PHONE	Y	VARCHAR2(17)
11	PERSON_WORK_HOURS	Y	VARCHAR2(30)
12	PERSON_STATUS	Y	VARCHAR2(30)
13	PERSON_COMMENT	Y	VARCHAR2(30)
14	PERSONAL_ID_NUM	Y	NUMBER(9,0)
15	PERSON_NICK_NAME	Y	VARCHAR2(12)
16	STATE_CODE	Y	VARCHAR2(2)
17	CITY_NAME	Y	VARCHAR2(20)
18	STREET_ADDRESS1	Y	VARCHAR2(40)
19	STREET_ADDRESS2	Y	VARCHAR2(40)
20	ZIP_CODE	Y	VARCHAR2(10)
21	HOME_STATE_CODE	Y	VARCHAR2(2)
22	HOME_CITY_NAME	Y	VARCHAR2(20)
23	HOME_STREET_ADDRESS1	Y	VARCHAR2(40)
24	HOME_STREET_ADDRESS2	Y	VARCHAR2(40)
25	HOME_ZIP_CODE	Y	VARCHAR2(10)
26	AGENCY_CODE	Y	VARCHAR2(20)
27	DEPT_CODE	Y	VARCHAR2(20)
28	POSITION_TITLE	Y	VARCHAR2(20)

Table Name
PERSON_SHELTERED

The Person Sheltered table contains identifying information about the evacuee.

Sequence	Name	N	Format
1	EV_TP_REF_NUM	N	NUMBER(9,0)
2	EV_MOD_DATE	N	DATE 7
3	EXERCISE_NUM	N	NUMBER(9,0)
4	EV_LOCATION_FROM	Y	VARCHAR2(60)
5	EV_PER_EFFECTS_NUM	Y	VARCHAR2(12)
6	EV_ARRIVAL_DATE	Y	DATE 7
7	EV_DEPART_DATE	Y	DATE 7
8	EV_OK_RELEASE_FLAG	Y	VARCHAR2(1)
9	UPDATE_PERSON_REF_NUM	Y	NUMBER(9,0)
10	EV_STATUS_CODE	Y	NUMBER(1,0)

11	POST_EV_STREET_ADDRESS1	Y	VARCHAR2(40)
12	POST_EV_STREET_ADDRESS2	Y	VARCHAR2(40)
13	POST_EV_CITY_NAME	Y	VARCHAR2(20)
14	POST_EV_COUNTY_NAME	Y	VARCHAR2(20)
15	POST_EV_STATE_CODE	Y	VARCHAR2(2)
16	POST_EV_ZIP_CODE	Y	VARCHAR2(10)
17	POST_EV_PHONE	Y	VARCHAR2(17)
18	MEDICAL_STATUS	Y	VARCHAR2(40)
19	SP_MEDICAL_NEEDS	Y	VARCHAR2(127)
20	EV_CONTAMINATED_IND	Y	VARCHAR2(1)
21	EV_DECONTAM_FLAG	Y	VARCHAR2(1)
22	DESTINATION_IND	Y	VARCHAR2(1)
23	EV_NOTES	Y	VARCHAR2(256)
24	MASS_CARE_FACILITY	Y	VARCHAR2(30)
25	MASS_CARE_SHELTER	Y	VARCHAR2(30)
26	RECEP_CNTR_FACILITY	Y	VARCHAR2(30)
27	RECEP_CNTR_SHELTER	Y	VARCHAR2(30)

Table Name
PLAN_APPROACH

The Plan Approach table contains the pairing of a method and an approach for an electronic plan.

Sequence	Name	N	Format
1	METHOD_TYPE	N	VARCHAR2(20)
2	PLANNING_APPROACH	N	VARCHAR2(40)

Table Name
PLAN_CONTROL

The Plan Control table contains control information about an electronic plan.

Sequence	Name	N	Format
1	DATASET_NAME	N	VARCHAR2(20)
2	DATASET_END_DATE	Y	DATE 7
3	DATASET_START_DATE	Y	DATE 7
4	DATASET_DESCRIPTION	Y	VARCHAR2(127)

Table Name
PLAN_DETAIL

The Plan Detail table contains the lower level detail of an electronic plan.

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PD_UNIQUE_REF_NUM	N	NUMBER(7,0)
4	PD_NAME	Y	VARCHAR2(254)
5	PD_DESCRIPTION	Y	VARCHAR2(254)

6	RESPONSIBLE_AGENCY	Y	VARCHAR2(20)
7	RESPONSIBLE_DEPT	Y	VARCHAR2(20)
8	RESPONSIBLE_POSITION	Y	VARCHAR2(20)
9	RESP_PERSON_REF_NUM	Y	NUMBER(9,0)
10	DECISION_POINT	Y	VARCHAR2(1)
11	LOCATION_TO	Y	VARCHAR2(30)
12	START_TIME_TARGET	Y	DATE 7
13	FINISH_TIME_TARGET	Y	DATE 7
14	DURATION_TARGET	Y	NUMBER(8,0)
15	START_TIME_CALC	Y	DATE 7
16	FINISH_TIME_CALC	Y	DATE 7
17	DURATION_CALC	Y	NUMBER(8,0)
18	PD_PRIORITY	Y	NUMBER(2,0)
19	EXTERNAL_INTERFACE	Y	VARCHAR2(1)
20	PD_NOTES	Y	VARCHAR2(1999)
21	PD_COST	Y	NUMBER(10,2)
22	LOCATION_TYPE	Y	VARCHAR2(8)
23	START_TIME_ACTUAL	Y	DATE 7
24	FINISH_TIME_ACTUAL	Y	DATE 7
25	DURATION_ACTUAL	Y	NUMBER(8,0)
26	PD_ORIGIN	Y	VARCHAR2(10)
27	PD_OPS_STATUS	Y	VARCHAR2(15)
28	LOGGED_EVENT_FLAG	Y	VARCHAR2(1)
29	PD_SEQUENCE_NUM	Y	NUMBER(10,0)
30	START_TIME_BASELINE	Y	DATE 7
31	FINISH_TIME_BASELINE	Y	DATE 7
32	DURATION_BASELINE	Y	NUMBER(8,0)

Table Name
PLAN_DETAIL

The Plan Detail table contains the lower level detail of an electronic plan.

Sequence	Name	N	Format
33	PLANNING_STAGE	Y	VARCHAR2(30)
34	PLANNING_PHASE	Y	VARCHAR2(20)
35	LEVEL_NUM	N	NUMBER(1,0)
36	EMERGENCY_SUPPORT_FN	Y	VARCHAR2(30)

Table Name
PLAN_HEADER

The Plan Header table contains high level, header information about an electronic plan.

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PLAN_CHANGE_DATE	Y	DATE 7
4	PLAN_NAME	N	VARCHAR2(64)
5	PLAN_STATUS	Y	VARCHAR2(11)
6	EOC_NAME	Y	VARCHAR2(30)

7	PLAN_DESCRIPTION	Y	VARCHAR2(254)
8	MAX_TASK_REF_NUM	Y	NUMBER(7,0)
9	MAX_TASK_SEQUENCE_NUM	Y	NUMBER(10,0)
10	PLAN_NOTE	Y	VARCHAR2(1999)
11	METHOD_TYPE	Y	VARCHAR2(20)
12	PLANNING_APPROACH	Y	VARCHAR2(40)
13	PLANNING_GOAL	Y	VARCHAR2(40)

Table Name
PLUME

The Plume table contains the identifier and location of a plume from a D2 model.

Sequence	Name	N	Format
1	D2_CASE_ID	N	NUMBER(9,0)
2	D2_LEVEL_NUM	N	NUMBER(2,0)
3	LEVEL_TYPE	N	VARCHAR2(1)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	PLUME_LOCATION_NAME	Y	VARCHAR2(30)
6	LOCATION_TYPE	Y	VARCHAR2(8)
7	PLUME_NAME	Y	VARCHAR2(30)
8	DOSE_LEVEL	Y	VARCHAR2(40)
9	D2_O_DOS_MAXDIST	Y	NUMBER(10,2)
10	XMIT_INIT_DATE	Y	DATE 7

Table Name
POPULATION_CONDITION

The Population Condition table contains the valid modifying conditions for population data.

Sequence	Name	N	Format
1	POP_COND_NAME	N	VARCHAR2(30)
2	POP_COND_DESCRIPTION	Y	VARCHAR2(127)
3	POP_COND_START_DATE	Y	DATE 7
4	POP_COND_END_DATE	Y	DATE 7
5	POP_COND_LOCATION	Y	VARCHAR2(92)
6	LOCATION_TYPE	Y	VARCHAR2(8)

Table Name
POPULATION_DEFINITION

The Population Definition table describes categories of populations based on age, sex and race.

Sequence	Name	N	Format
1	POPULATION_CATEGORY	N	VARCHAR2(20)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	MINIMUM_AGE	Y	NUMBER(3,0)
4	MAXIMUM_AGE	Y	NUMBER(3,0)
5	SEX	Y	VARCHAR2(1)

6	RACE	Y	VARCHAR2(20)
7	HOUSING_TYPE	Y	VARCHAR2(60)
8	HOUSEHOLD_TYPE	Y	VARCHAR2(2)
9	HOUSEHOLD_ELDERLY	Y	VARCHAR2(2)
10	POP_CAT_DESCRIPTION	Y	VARCHAR2(127)
11	HOUSEHOLD_SIZE	Y	NUMBER(2,0)

Table Name
POPULATION_FLUX

The Population Flux table contains the actual change value from the Population Condition.

Sequence	Name	N	Format
1	POPULATION_CATEGORY	N	VARCHAR2(20)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	POPULATION_LOCATION	N	VARCHAR2(30)
4	POP_COND_NAME	N	VARCHAR2(30)
5	POPULATION_CHANGE	Y	NUMBER(5,0)

Table Name
POPULATION_LOCATION

The Population Location table describes the population at a given location.

Sequence	Name	N	Format
1	POPULATION_CATEGORY	N	VARCHAR2(20)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	POPULATION_LOCATION	N	VARCHAR2(30)
4	POPULATION_DESCRIPTION	Y	VARCHAR2(127)
5	LOCATION_TYPE	N	VARCHAR2(8)
6	POPULATION_COUNT	Y	NUMBER(8,0)
7	HOUSEHOLD_COUNT	Y	NUMBER(8,0)
8	FAMILY_COUNT	Y	NUMBER(8,0)

Table Name
POSITION

The Position table has a description of the operator positions for users from an agency.

Sequence	Name	N	Format
1	POSITION_CODE	N	VARCHAR2(20)
2	EOC_NAME	N	VARCHAR2(30)
3	POSITION_EMAIL_ADDRESS	Y	VARCHAR2(40)
4	POSITION_DESCRIPTION	Y	VARCHAR2(127)
5	POSITION_PHONE	Y	VARCHAR2(17)

Table Name
POSITION_ASSIGNMENT

The Assignment table shows the valid operator positions that a person may assume.

Sequence	Name	N	Format
1	PERSON_REF_NUM	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	POSITION_CODE	N	VARCHAR2(20)
4	EOC_NAME	N	VARCHAR2(30)
5	ASSIGN_LOCATION	Y	VARCHAR2(92)

Table Name
POSITION_PRIV

The Position Privilege table has the mapping of operator positions and privleges.

Sequence	Name	N	Format
1	POSITION_CODE	N	VARCHAR2(20)
2	EOC_NAME	N	VARCHAR2(30)
3	CP_NAME	N	VARCHAR2(30)
4	PRIV_NUM	N	NUMBER(2,0)

Table Name
POTENTIAL_ACCIDENT

The Potential Accident table describes the potential accident arising from a work plan activity.

Sequence	Name	N	Format
1	LOCAL_ID_CODE	N	VARCHAR2(20)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	AGENT_CODE	Y	VARCHAR2(2)
4	ACCIDENT_DESCRIPTION	Y	VARCHAR2(127)
5	XMIT_INIT_DATE	Y	DATE 7

Table Name
POTENTIAL_THREAT

The Potential Threat table describes potential threats arising from an accident.

Sequence	Name	N	Format
1	THREAT_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	THREAT_DATE	Y	DATE 7
4	THREAT_CAT_TYPE	Y	VARCHAR2(20)
5	THREAT_AREA_TYPE	Y	VARCHAR2(20)
6	THREAT_CAT_DESCRIPTION	Y	VARCHAR2(127)

7	WEDGE_PG_ID	Y	NUMBER(9,0)
8	D2_CASE_ID	Y	NUMBER(9,0)
9	D2_LEVEL_NUM	Y	NUMBER(2,0)
10	LEVEL_TYPE	Y	VARCHAR2(1)
11	XMIT_INIT_DATE	Y	DATE 7

Table Name
PRIVILEGE

The Privelege table describes the authorities and roles of the user.

Sequence	Name	N	Format
1	CP_NAME	N	VARCHAR2(30)
2	PRIV_NUM	N	NUMBER(2,0)
3	CREATE_FLAG	N	VARCHAR2(1)
4	EDIT_FLAG	N	VARCHAR2(1)
5	BROWSE_FLAG	N	VARCHAR2(1)
6	USE_FLAG	N	VARCHAR2(1)

Table Name
PROGRAM_LOCK

The Program Locking table controls multi-user locking.

Sequence	Name	N	Format
1	LOCK_NAME	N	VARCHAR2(40)
2	LOCK_ITEM	N	VARCHAR2(80)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	LOCK_TYPE	Y	VARCHAR2(10)
5	LOCK_USER	Y	VARCHAR2(8)
6	LOCK_DATE	Y	DATE 7
7	LOCK_PC	Y	VARCHAR2(40)
8	LOCK_PROGRAM	Y	VARCHAR2(8)

Table Name
PROTECTIVE_ACTION

The Protective Action tables describes the protective action activities that are to be used or have been recommended for use.

Sequence	Name	N	Format
1	PA_ACTIVITY	N	VARCHAR2(12)
2	PA_DESCRIPTION	N	VARCHAR2(127)

Table Name
REGULATION

The Regulation table contains a list of regulations that relate to FEMIS operations.

Sequence	Name	N	Format
1	PLANNING_GOAL	N	VARCHAR2(40)
2	REGULATION_CODE	N	VARCHAR2(20)
3	REGULATION_DESCRIPTION	Y	VARCHAR2(127)

Table Name
RELEASE

The Release table describes the agent released from a potential accident.

Sequence	Name	N	Format
1	LOCAL_ID_CODE	N	VARCHAR2(20)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	RELEASE_NUM	N	NUMBER(2,0)
4	QUANTITY_PER_RELEASE	Y	NUMBER(13,2)
5	RELEASE_TYPE	N	VARCHAR2(3)
6	SOURCE_QUANTITY_IND	Y	VARCHAR2(1)
7	MUNITIONS_IN_RELEASE	Y	NUMBER(6,2)
8	MUNITION_TYPE	Y	VARCHAR2(4)
9	HEIGHT_OF_STACK	Y	NUMBER(7,3)
10	DIAMETER_OF_STACK	Y	NUMBER(7,3)
11	TEMPERATURE_OF_STACK	Y	NUMBER(6,3)
12	VELOCITY_OF_EFFLUENT	Y	NUMBER(6,3)
13	EFFLUENT_RELATIVE_DENSITY	Y	NUMBER(6,3)
14	OUTPUT_CODE	Y	NUMBER(1,0)
15	CLOUD_RADIUS	Y	NUMBER(8,2)
16	HEAT_RELEASED	Y	NUMBER(11,2)
17	TIME_OF_EVAPORATION	Y	NUMBER(6,2)
18	SURFACE_TYPE	Y	VARCHAR2(3)
19	AREA_OF_PUDDLE	Y	NUMBER(7,3)
20	LENGTH_OF_PUDDLE	Y	NUMBER(7,3)
21	HEIGHT_OF_SOURCE	Y	NUMBER(8,2)
22	SIGMA_X	Y	NUMBER(8,2)
23	SIGMA_Y	Y	NUMBER(8,2)
24	SIGMA_Z	Y	NUMBER(8,2)
25	TIME_AFTER_FUNCT	Y	NUMBER(6,2)
26	XMIT_INIT_DATE	Y	DATE 7

Table Name
RESOURCE_ASSIGNMENT

The Resource Assignment table show the resources assigned to the details of an electronic plan.

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	PD_UNIQUE_REF_NUM	N	NUMBER(7,0)
4	PD_RESOURCE_NUM	N	NUMBER(3,0)
5	RESOURCE_REF_NUM	Y	NUMBER(9,0)
6	RESOURCE_QUANTITY	Y	NUMBER(10,0)
7	RESOURCE_NOTE	Y	VARCHAR2(127)
8	LOCATION_FROM	Y	VARCHAR2(30)
9	LOCATION_TYPE	Y	VARCHAR2(8)
10	RESPONSIBLE_EOC	Y	VARCHAR2(30)
11	PLAN_RESOURCE_DISPOS	Y	VARCHAR2(30)
12	PLAN_RESOURCE_ID	Y	NUMBER(9,0)
13	PLAN_POC_AGENCY	Y	VARCHAR2(30)
14	PLAN_POC_DEPT	Y	VARCHAR2(30)
15	PLAN_POC_POSITION	Y	VARCHAR2(30)

Table Name
RESOURCE_CATEGORY

This is the validation data for the types of resources.

Sequence	Name	N	Format
1	RESOURCE_CATEGORY	N	VARCHAR2(20)
2	RESOURCE_DESCRIPTION	N	VARCHAR2(127)
3	GIS_SYMBOL_ID	Y	NUMBER(9,0)

Table Name
RESOURCE_DEFINITION

This is the validation data for the types of resources.

Sequence	Name	N	Format
1	RESOURCE_REF_NUM	N	NUMBER(9,0)
2	EOC_NAME	Y	VARCHAR2(30)
3	RESOURCE_NAME	Y	VARCHAR2(40)
4	RESOURCE_DESCRIPTION	Y	VARCHAR2(127)
5	RESOURCE_REUSE_FLAG	Y	VARCHAR2(1)
6	RESOURCE_USE_LIMITATION	Y	VARCHAR2(254)
7	RESOURCE_MOBILITY_FLAG	Y	VARCHAR2(1)
8	RESOURCE_DEFAULT_UNITS	Y	VARCHAR2(10)
9	RESOURCE_CAPACITY_TYPE	Y	VARCHAR2(10)
10	RESOURCE_CAPACITY_VALUE	Y	NUMBER(10,0)
11	RESOURCE_CAPACITY_UNITS	Y	VARCHAR2(10)
12	RESOURCE_CATEGORY	N	VARCHAR2(20)

Table Name
RESOURCE_FACILITY

The Resource Facility table describes the amount and kind of resource found at a facility.

Sequence	Name	N	Format
1	RESOURCE_REF_NUM	N	NUMBER(9,0)
2	FACILITY_NAME	N	VARCHAR2(30)
3	RESOURCE_BATCH_ID	N	NUMBER(9,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	RESOURCE_COLLECTION	N	VARCHAR2(20)
6	EOC_NAME	Y	VARCHAR2(30)
7	RESOURCE_QUANTITY_ASSIGNED	Y	NUMBER(10,2)
8	RESOURCE_QUANTITY_AVAILABLE	Y	NUMBER(10,2)
9	RESOURCE_UNITS	Y	VARCHAR2(10)
10	RESOURCE_PER_UNIT_VALUE	Y	NUMBER(10,2)
11	RESOURCE_POC_AGENCY	Y	VARCHAR2(20)
12	RESOURCE_POC_DEPT	Y	VARCHAR2(20)
13	RESOURCE_POC_POSITION	Y	VARCHAR2(20)
14	RESOURCE_POC_PERSON_REF_NUM	Y	NUMBER(9,0)
15	RESOURCE_POC_PHONE	Y	VARCHAR2(17)
16	RESOURCE_MOBILIZATION_TIME	Y	NUMBER(5,0)
17	RESOURCE_CRITICAL_LEVEL	Y	NUMBER(9,0)
18	RESOURCE_NOTES	Y	VARCHAR2(254)
19	RESOURCE_DISPOSITION	Y	VARCHAR2(20)
20	RESOURCE_ACTIVATION_MINUTES	Y	NUMBER(5,0)
21	RESPONSIBLE_EOC	Y	VARCHAR2(30)

Table Name
RESOURCE_LOCATION

The Resource Location table describes the amount and kind of resource found at a secondary facility.

Sequence	Name	N	Format
1	RESOURCE_REF_NUM	N	NUMBER(9,0)
2	FACILITY_NAME	N	VARCHAR2(30)
3	RESOURCE_BATCH_ID	N	NUMBER(9,0)
4	EXERCISE_NUM	N	NUMBER(9,0)
5	RESOURCE_LOCATION	N	VARCHAR2(92)
6	RESOURCE_COLLECTION	N	VARCHAR2(20)
7	RESOURCE_STATUS	N	VARCHAR2(10)
8	EOC_NAME	Y	VARCHAR2(30)
9	LOCATION_TYPE	Y	VARCHAR2(8)
10	RESOURCE_QUANTITY	Y	NUMBER(9,0)
11	MOU_ID	Y	NUMBER(9,0)

Table Name
RESOURCE_MOU

The Resource MOU table describes Memos of Understanding for a resource.

Sequence	Name	N	Format
1	RESOURCE_REF_NUM	N	NUMBER(9,0)
2	MOU_ID	N	NUMBER(9,0)
3	EXERCISE_NUM	N	NUMBER(9,0)

Table Name
ROAD_QUALIFICATION

The Road Qualification table contains information about a roadway used for Evac modeling.

Sequence	Name	N	Format
1	EXERCISE_NUM	N	NUMBER(9,0)
2	ROAD_CLASS	N	VARCHAR2(2)
3	RQ_INCLUDE_FLAG	Y	CHAR(10)
4	RQ_FREE_FLOW_SPEED	Y	CHAR(10)
5	RQ_LANE_COUNT	Y	CHAR(10)
6	RQ_DIVIDED_FLAG	Y	CHAR(10)
7	RQ_DEFAULT_FLAG	Y	CHAR(10)

Table Name
ROUTE

The Route table contains information about a road or highway used for Evac modeling.

Sequence	Name	N	Format
1	EXERCISE_NUM	N	NUMBER(9,0)
2	ROUTE_NAME	N	VARCHAR2(30)
3	ROUTE_DESCRIPTION	Y	VARCHAR2(127)
4	ROUTE_FLAG	Y	VARCHAR2(1)
5	ROUTE_TO_LOCATION	Y	VARCHAR2(30)
6	ROUTE_FROM_LOCATION	Y	VARCHAR2(30)

Table Name
ROUTE_SEGMENT

The Route Segment table contains information about a road segment used for Evac modeling.

Sequence	Name	N	Format
1	EXERCISE_NUM	N	NUMBER(9,0)
2	ROUTE_NAME	N	VARCHAR2(30)
3	ROUTE_SEG_NUM	N	NUMBER(6,0)
4	ROUTE_SEG_LOCATION	Y	VARCHAR2(92)
5	RS_TO_LOCATION	Y	VARCHAR2(92)

6	RS_FROM_LOCATION	Y	VARCHAR2(92)
7	RS_ID	Y	NUMBER(7,0)

Table Name
SHELTER

The Shelter table contains information about a facility that can operates as a shelter.

Sequence	Name	N	Format
1	FACILITY_NAME	N	VARCHAR2(30)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	SHELTER_NAME	N	VARCHAR2(30)
4	SHELTER_ACTIVATION_DATE	Y	DATE 7
5	SHELTER_DEACTIVATION_DATE	Y	DATE 7
6	SHELTER_DESCRIPTION	Y	VARCHAR2(127)
7	SHELTER_CAPACITY	Y	NUMBER(5,0)
8	SHELTER_TYPE	N	VARCHAR2(10)

Table Name
SHELTER_DEFINITION

The Shelter Definition table defines capabilities of a shelter used for evacuation.

Sequence	Name	N	Format
1	SHELTER_TYPE	N	VARCHAR2(10)
2	SHELTER_TYPE_DESCRIPTION	Y	VARCHAR2(127)

Table Name
SITUATION_SUMMARY

The Situation Summary table contains information about conditions present at the onset of a planned or actual emergency.

Sequence	Name	N	Format
1	SS_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	SITUATION_SEASON	Y	VARCHAR2(6)
4	SPECIAL_WEATHER	Y	VARCHAR2(15)
5	COMMUNITY_CONDITION	Y	VARCHAR2(256)
6	OTHER_CONDITION	Y	VARCHAR2(256)
7	ROAD_CONDITION	Y	VARCHAR2(256)
8	ORGANIZATIONAL_CONDITION	Y	VARCHAR2(256)
9	POP_COND_NAME	Y	VARCHAR2(30)
10	HAZARD_TYPE	Y	VARCHAR2(15)
11	SITUATION_COMMENT	Y	VARCHAR2(127)

Table Name
STATE

The State table contains information about the states of the USA.

Sequence	Name	N	Format
1	STATE_CODE	N	VARCHAR2(2)
2	STATE_NAME	Y	VARCHAR2(15)
3	STATE_FIPS_CODE	Y	VARCHAR2(2)

Table Name
STORED_AGENT

The Stored Agent table contains information about agents stored at a CSEPP site.

Sequence	Name	N	Format
1	BUNKER_NAME	N	VARCHAR2(30)
2	AGENT_CODE	N	VARCHAR2(2)
3	MUNITION_TYPE	N	VARCHAR2(4)

Table Name
SYSTEM_MODE

The System Mode table contains a list of the modes that FEMIS can assume.

Sequence	Name	N	Format
1	MODE_NAME	N	VARCHAR2(10)
2	MODE_DEFAULT_FLAG	N	VARCHAR2(1)
3	MODE_DESCRIPTION	Y	VARCHAR2(127)
4	MODE_Sequence	Y	NUMBER(2,0)

Table Name
SYSTEM_PHASE

The System Phase table contains a list of the Phases that FEMIS can assume.

Sequence	Name	N	Format
1	MODE_NAME	N	VARCHAR2(10)
2	MODE_DEFAULT_FLAG	N	VARCHAR2(1)
3	PHASE_NAME	N	VARCHAR2(20)
4	PHASE_DEFAULT_FLAG	N	VARCHAR2(1)
5	PHASE_DESCRIPTION	Y	VARCHAR2(127)
6	PHASE_Sequence	Y	NUMBER(2,0)

Table Name
SYSTEM_STAGE

The System Stage table contains a list of the stages that FEMIS can assume.

Sequence	Name	N	Format
1	MODE_NAME	N	VARCHAR2(10)
2	MODE_DEFAULT_FLAG	N	VARCHAR2(1)
3	PHASE_NAME	N	VARCHAR2(20)
4	PHASE_DEFAULT_FLAG	N	VARCHAR2(1)
5	STAGE_NAME	N	VARCHAR2(30)
6	STAGE_DEFAULT_FLAG	N	VARCHAR2(1)
7	BUTTON_Sequence	N	NUMBER(2,0)
8	STAGE_DESCRIPTION	Y	VARCHAR2(127)
9	BUTTON_TEXT	Y	VARCHAR2(32)
10	BUTTON_FUNCTION	Y	VARCHAR2(10)
11	STAGE_Sequence	Y	NUMBER(2,0)

Table Name
TRACKED_PERSON

The Tracked Person table contains the names and addresses of accident victims or their next of kins.

Sequence	Name	N	Format
1	TK_REF_NUM	N	NUMBER(9,0)
2	TK_NAME_FIRST	Y	VARCHAR2(12)
3	TK_NAME_LAST	Y	VARCHAR2(20)
4	TK_NAME_SECOND	Y	VARCHAR2(12)
5	TK_CITY_NAME	Y	VARCHAR2(20)
6	TK_STATE_CODE	Y	VARCHAR2(2)
7	TK_STREET_ADDRESS1	Y	VARCHAR2(40)
8	TK_STREET_ADDRESS2	Y	VARCHAR2(40)
9	TK_ZIP_CODE	Y	VARCHAR2(10)
10	TK_EMAIL_ADDRESS	Y	VARCHAR2(40)
11	TK_FAX_PHONE	Y	VARCHAR2(17)
12	TK_HOME_PHONE	Y	VARCHAR2(17)
13	TK_BEEPER_PHONE	Y	VARCHAR2(17)
14	TK_SSN	Y	VARCHAR2(15)
15	TK_DATE_OF_BIRTH	Y	DATE 7
16	TK_GENDER	Y	VARCHAR2(1)
17	TK_NICK_NAME	Y	VARCHAR2(12)
18	TK_COUNTY_NAME	Y	VARCHAR2(20)

Table Name
TRAFFIC_CONTROL_POINT

Describes the necessary points of interest along the evacuation route.

Sequence	Name	N	Format
1	TCP_NAME	N	VARCHAR2(30)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	TCP_DESCRIPTION	Y	VARCHAR2(127)
4	TCP_ACTIVE	Y	VARCHAR2(1)
5	TCP_MANNED	Y	VARCHAR2(1)
6	ACCESS_CONTROL	Y	VARCHAR2(1)
7	EOC_NAME	N	VARCHAR2(30)
8	ZONE_NAME	Y	VARCHAR2(30)
9	EV_NODE_ID	Y	NUMBER(9,0)

Table Name
UDS_COLUMN

Maintains data areas that can be used for the column data for a User Defined Status Board.

Sequence	Name	N	Format
1	UDS_NAME	N	VARCHAR2(30)
2	EOC_NAME	N	VARCHAR2(30)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	COLUMN_ID	N	NUMBER(9,0)
5	COLUMN_NAME	N	VARCHAR2(30)
6	COLUMN_SQL_TYPE	N	VARCHAR2(15)
7	TABLE_FROM	Y	VARCHAR2(60)
8	COLUMN_FROM	Y	VARCHAR2(250)
9	SELECTION_STRING	Y	VARCHAR2(1000)
10	MAX_LENGTH	Y	NUMBER(3,0)
11	DEFAULT_VALUE	Y	VARCHAR2(127)
12	GRID_COLUMN_NO	Y	NUMBER(3,0)
13	GRID_COLUMN_WIDTH	Y	NUMBER(3,0)
14	TITLE	Y	VARCHAR2(30)
15	DESCRIP	Y	VARCHAR2(127)
16	DATA_TYPE	Y	VARCHAR2(30)
17	UDS_CP_NAME	Y	VARCHAR2(30)
18	ATTR_FLAGS	Y	VARCHAR2(30)
19	MIN_VALUE	Y	VARCHAR2(127)
20	MAX_VALUE	Y	VARCHAR2(127)
21	SOURCE_TAG	Y	VARCHAR2(30)
22	SOURCE_DATA_TYPE	Y	VARCHAR2(30)
23	SOURCE_MAX_LENGTH	Y	VARCHAR2(4)
24	GRID_COLUMN_HDG	Y	VARCHAR2(30)
25	GRID_COLUMN_FLAGS	Y	VARCHAR2(30)
26	RECORD_FORMAT	Y	VARCHAR2(30)
27	REVISION_NUM	Y	NUMBER(,)
28	XMIT_INIT_DATE	Y	DATE 7

Table Name
UDS_ROW

This table contains data areas that can be used for the row data for User Defined Status Boards.

Sequence	Name	N	Format
1	UDS_NAME	N	VARCHAR2(30)
2	EOC_NAME	N	VARCHAR2(30)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	UDS_ROW_ID	N	NUMBER(9,0)
5	UDS_ROW_CREATE_DATE	Y	DATE 7
6	UDS_ROW_MOD_DATE	Y	DATE 7
7	UDS_VALUE1	Y	VARCHAR2(2000)
8	UDS_VALUE2	Y	VARCHAR2(2000)
9	UDS_VALUE3	Y	VARCHAR2(2000)
10	UDS_VALUE4	Y	VARCHAR2(2000)
11	UDS_VALUE5	Y	VARCHAR2(2000)
12	UDS_VALUE6	Y	VARCHAR2(2000)
13	UDS_VALUE7	Y	VARCHAR2(2000)
14	UDS_VALUE8	Y	VARCHAR2(2000)
15	UDS_VALUE9	Y	VARCHAR2(2000)
16	UDS_VALUE10	Y	VARCHAR2(2000)
17	UDS_ACTUAL_TIME	Y	DATE 7
18	CURRENT_RECORD_FLAG	Y	VARCHAR2(1)
19	UPDATE_PERSON_REF_NUM	Y	NUMBER(9,0)
20	UDS_HISTORY_LINK_ID	Y	NUMBER(9,0)
21	UDS_NUMBER1	Y	NUMBER(,)
22	UDS_NUMBER2	Y	NUMBER(,)
23	UDS_NUMBER3	Y	NUMBER(,)
24	UDS_NUMBER4	Y	NUMBER(,)
25	UDS_NUMBER5	Y	NUMBER(,)
26	UDS_NUMBER6	Y	NUMBER(,)
27	UDS_NUMBER7	Y	NUMBER(,)
28	UDS_NUMBER8	Y	NUMBER(,)
29	UDS_NUMBER9	Y	NUMBER(,)
30	UDS_NUMBER10	Y	NUMBER(,)
31	UDS_DATETIME1	Y	DATE 7
32	UDS_DATETIME2	Y	DATE 7

Table Name
UDS_ROW

This table contains data areas that can be used for the row data for User Defined Status Boards.

Sequence	Name	N	Format
33	UDS_DATETIME3	Y	DATE 7
34	UDS_DATETIME4	Y	DATE 7
35	UDS_DATETIME5	Y	DATE 7
36	UDS_YESNO1	Y	VARCHAR2(1)
37	UDS_YESNO2	Y	VARCHAR2(1)
38	UDS_YESNO3	Y	VARCHAR2(1)

39	UDS_YESNO4	Y	VARCHAR2(1)
40	UDS_YESNO5	Y	VARCHAR2(1)
41	RECORD_FORMAT	Y	VARCHAR2(30)
42	REVISION_NUM	Y	NUMBER(,)
43	XMIT_INIT_DATE	Y	DATE 7

Table Name
USER_DEFINED_STATUS

This is the high level description table of a User Defined Status Board.

Sequence	Name	N	Format
1	UDS_NAME	N	VARCHAR2(30)
2	EOC_NAME	N	VARCHAR2(30)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	UDS_NUM_COLS	Y	NUMBER(2,0)
5	UDS_CHANGE_DATE	Y	DATE 7
6	UDS_TITLE	Y	VARCHAR2(127)
7	UDS_DESCRIP	Y	VARCHAR2(255)
8	UDS_DEFAULT_PRIV	Y	VARCHAR2(15)
9	UDS_CP_NAME	Y	VARCHAR2(30)
10	UDS_DEFAULT_SORT	Y	VARCHAR2(255)
11	UDS_ATTR_FLAGS	Y	VARCHAR2(30)
12	RECORD_FORMAT	Y	VARCHAR2(30)
13	REVISION_NUM	Y	NUMBER(,)
14	XMIT_INIT_DATE	Y	DATE 7

Table Name
USER_MODEL_CASE

The User Model Case table is used to track the cases that a FEMIS user is currently accessing.

Sequence	Name	N	Format
1	SITE_NAME	N	VARCHAR2(30)
2	EOC_NAME	N	VARCHAR2(30)
3	EXERCISE_NUM	N	NUMBER(9,0)
4	MODE_NAME	N	VARCHAR2(10)
5	CURRENT_DATASET_NAME	N	VARCHAR2(20)
6	LC_USER_CODE	N	VARCHAR2(8)
7	CASE_TYPE	N	VARCHAR2(4)
8	CASE_ID	N	NUMBER(9,0)
9	XMIT_INIT_DATE	Y	DATE 7

Table Name
USER_MODE_PRIV

The User Mode Privilege table maps the privileges available to a user in the corrent mode.

Sequence	Name	N	Format
1	CP_NAME	N	VARCHAR2(30)
2	PRIV_NUM	N	NUMBER(2,0)
3	MODE_NAME	N	VARCHAR2(10)
4	MODE_DEFAULT_FLAG	N	VARCHAR2(1)
5	USER_CODE	N	VARCHAR2(8)

Table Name
VALIDATION

Sequence	Name	N	Format
1	PLAN_REF_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	VALIDATE_NUM	N	NUMBER(3,0)
4	ERROR_CLASS	Y	VARCHAR2(40)
5	ERROR_DESCRIPTION	Y	VARCHAR2(127)

Table Name
VAL_LIST

The Val List table is used to validate various sets of user entered values.

Sequence	Name	N	Format
1	VL_NAME	N	VARCHAR2(30)
2	VL_TYPE	Y	VARCHAR2(10)
3	VL_DESCRIPTION	Y	VARCHAR2(127)

Table Name
VAL_LIST_DATA

The Val List Data table contains validate sets of system values.

Sequence	Name	N	Format
1	VL_NAME	N	VARCHAR2(30)
2	VLD_SEQUENCE_NO	N	NUMBER(7,0)
3	VLD_TEXT	Y	VARCHAR2(80)
4	VLD_SORT_NO	Y	NUMBER(7,0)

Table Name
VAL_LOCATION_TYPE

The Val Location Type table contains validate location types for objects that can be located at or near another object.

Sequence	Name	N	Format
1	LOCATION_TYPE	N	VARCHAR2(8)
2	VALID_LOCATION_TYPE	N	VARCHAR2(8)
3	REASON_VALID	Y	VARCHAR2(127)

Table Name
VAL_POSITION

The Val Position table is used to validate position descriptions.

Sequence	Name	N	Format
1	POSITION_CODE	N	VARCHAR2(20)
2	POSITION_NAME	Y	VARCHAR2(50)

Table Name
WEDGE_POLYGON

The Wedge or Polygon table contains parameters about the wedge or user defined polygon used for threat analysis.

Sequence	Name	N	Format
1	WEDGE_PG_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	OBJECT_TYPE	Y	VARCHAR2(4)
4	WEDGE_ANGLE	Y	NUMBER(3,0)
5	OBJECT_LOCATION	Y	VARCHAR2(92)
6	LOCATION_TYPE	Y	VARCHAR2(8)
7	WEDGE_PG_DISTANCE	Y	NUMBER(10,2)
8	WEDGE_PG_WIND_DIR	Y	NUMBER(3,0)
9	WEDGE_PG_NAME	Y	VARCHAR2(30)
10	D2_CASE_ID	Y	NUMBER(9,0)
11	D2_LEVEL_NUM	Y	NUMBER(2,0)
12	LEVEL_TYPE	Y	VARCHAR2(1)
13	DOSE_LEVEL	Y	VARCHAR2(40)
14	XMIT_INIT_DATE	Y	DATE 7

Table Name
WK_POSITION

The Work Position table has information about the positions within a department.

Sequence	Name	N	Format
1	AGENCY_CODE	N	VARCHAR2(20)
2	EXERCISE_NUM	N	NUMBER(9,0)

3	DEPT_CODE	N	VARCHAR2(20)
4	POSITION_TITLE	N	VARCHAR2(20)

Table Name
WORK_PLAN

The Work Plan table has header information about a work plan.

Sequence	Name	N	Format
1	WORK_PLAN_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	WP_START_DATE	Y	DATE 7
4	WP_END_DATE	Y	DATE 7
5	WP_AUTHORIZED_BY	Y	VARCHAR2(20)
6	WP_COMMENT	Y	VARCHAR2(254)
7	WP_TEAM_COUNT	Y	NUMBER(6,0)
8	XMIT_INIT_DATE	Y	DATE 7

Table Name
WORK_PLAN_ACT

The Work Plan Act is a link between the Work Plan and the activities on the Work plan.

Sequence	Name	N	Format
1	WORK_PLAN_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	WPA_ID	N	NUMBER(9,0)
4	WPA_NAME	Y	VARCHAR2(30)
5	WPA_WORST_CASE_FLAG	Y	VARCHAR2(1)
6	WPA_CANCEL_FLAG	Y	VARCHAR2(1)
7	WPA_END_DATE	Y	DATE 7
8	WPA_START_DATE	Y	DATE 7
9	WPA_LOCATION	Y	VARCHAR2(92)
10	LOCATION_TYPE	Y	VARCHAR2(8)
11	WPA_TEAM_COUNT	Y	NUMBER(3,0)
12	D2_CASE_ID	Y	NUMBER(9,0)
13	PAD_ID	Y	NUMBER(9,0)
14	ZONE_RISK_GROUP_NAME	Y	VARCHAR2(30)
15	THREAT_ID	Y	NUMBER(9,0)
16	WPA_COMMENT	Y	VARCHAR2(512)
17	XMIT_INIT_DATE	Y	DATE 7
18	WPA_ACTIVITY_NUM	Y	NUMBER(2,0)
19	EMIS_EVENT_NUM	Y	NUMBER(4,0)

Table Name
WORK_PLAN_ACTIVITY

The Work Plan Activity table contains information a specific work plan item.

Sequence	Name	N	Format
1	WPA_ID	N	NUMBER(9,0)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	WPA_DESCRIPTION	Y	VARCHAR2(254)
4	WPA_AGENT_CODE	Y	VARCHAR2(2)
5	WPA_MUNITION_TYPE	Y	VARCHAR2(4)
6	WPA_MUNITION_IN_ACT	Y	NUMBER(7,0)
7	WPA_NOTE	Y	VARCHAR2(254)
8	ACTIVITY_CODE	Y	VARCHAR2(20)
9	LOCAL_ID_CODE	Y	VARCHAR2(20)
10	XMIT_INIT_DATE	Y	DATE 7

Table Name
ZONE

The Zone table contains the zones that have been defined for a site.

Sequence	Name	N	Format
1	ZONE_NAME	N	VARCHAR2(30)
2	ZONE_TYPE	N	VARCHAR2(5)

Table Name
ZONE_IN_GROUP

The Zone In Group table contains the zones that are in a risk group.

Sequence	Name	N	Format
1	ZONE_RISK_GROUP_NAME	N	VARCHAR2(30)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	ZONE_NAME	N	VARCHAR2(30)

Table Name
ZONE_RISK_GROUP

The Zone Risk Group table contains the names of risk groups commonly used at an EOC.

Sequence	Name	N	Format
1	ZONE_RISK_GROUP_NAME	N	VARCHAR2(30)
2	EXERCISE_NUM	N	NUMBER(9,0)
3	ZONE_RISK_GP_DESCRIPTION	Y	VARCHAR2(127)

Table Name
ZONE_TYPE

The Zone Type table contains the valid list of zone types that may be used.

Sequence	Name	N	Format
1	ZONE_TYPE	N	VARCHAR2(5)
2	ZONE_DESCRIPTION	Y	VARCHAR2(127)

Distribution

No. of Copies

2 DOE Office of Scientific and Technical Information

OFFSITE

2 Madhu Beriwal, President
Innovative Emergency Management, Inc.
Four United Plaza
8555 United Plaza Boulevard, Suite 100
Baton Rouge, LA 70809

2 Jung Hong, President
Applied Computing Systems, Inc.
120 Longview Drive
Los Alamos, NM 87544

2 Darius M. Kwiedorowicz
Program Manager for CSEPP
ATTN: SFAE-CD-E, Bldg E5101
Aberdeen Proving Ground, MD 21010

2 Gene Fuzy
Innovative Emergency Mgt., Inc.
515 South 700 East, Suite 2D
Salt Lake City, UT 84102

John C. Bower
Bower Software
1114 E. 19th Avenue
Spokane, WA 99203

Jonathan A. Arp
Strategix, Inc.
3616 W. Court St., Suite H
Pasco, WA 99301

No. of Copies

ONSITE

38 **Pacific Northwest National Laboratory**

M. E. Boling (2)
M. J. Burford
R. A. Burnett
R. A. Byrum
T. R. Downing
P. M. Fangman
K. L. Gaustad
L. H. Gerhardstein
N. A. Holter
M. Hoza
D. M. Johnson
R. L. Johnson
S. M. Johnson
R. M. Loveall
T. J. Martin
W. D. Millard (2)
J. V. Ramsdell
S. L. Savelli
D.R. Sisk
L. R. Stoops
S. Tzemos
C. Winters
B. M. Wood (9)
Information Release (5)