Section 1 – Project Description

Kitsap 911 (Kitsap) is improving its public safety Computer Aided Dispatch (CAD) system. The CAD system, equipment, interfaces, and services described in this RFP will be used to support critical public safety dispatching, coordination, and communication between various law enforcement, fire, rescue/emergency medical service agencies and/or departments operating with Kitsap both within and outside Kitsap County, Washington.

CAD systems operated by Kitsap must be available for continuous duty, "24/7", free of all known/identified coding errors. Within this document the package of equipment, software, interfaces, and services will be referred to as the "*Furnished System".*

The contract between Kitsap and the selected respondent will include all:

- Planning
- Liaison
- Design
- Software/Interface Development/Programming
- Project Management
- Hardware
- Software
- Shipping and Transportation
- Integration/Conversion assistance
- Installation management and labor
- Training
- Travel and Lodging
- Warranty Service

All work and materials, both software and hardware will be subject to the approval of Kitsap's project manager as described in the specifications. Kitsap seeks proposals from qualified and experienced CAD technology suppliers for this purpose.

1.1 Project Objectives

The objectives of this project are to:

A. Meet the user's needs by providing a highly reliable CAD system and value-added professional services as described in this document.
B. Provide end user software that is usable on a variety of platforms[1] to support the operational needs of public safety users of the new CAD system, existing CAD System during the CAD transition, and interoperability with other agencies and organizations[2] described later in this document.
C. Enhance the current system infrastructure to support a distributed environment split between Kitsap's primary location and Backup Center.

[1] Including but not limited to Desktops (Virtual and Physical), Laptops, Phones, and Tablets.
[2] Including but not limited to 3rd part Proposers as well as other 911 dispatch centers

Blake Island, as well as the northeastern part of Mason County and the northwestern part of Pierce County. Kitsap County covers a total area of 566 square miles consisting of 395 square miles of land and 171 square miles of water. Thirty percent of the total area of Kitsap County is water. Kitsap County includes the lands of the Suquamish and Port Gamble S'Klallam tribes. The highest point in the county is Gold Mountain, a Kitsap radio and microwave tower site.

Kitsap County has a population of 275,611 (2020 census). Bremerton is the largest city and Port Orchard, across the Sinclair Inlet south of Bremerton, is the county seat. The largest employer in the county is the United States Navy, with installations at the Puget Sound Naval Shipyard, Naval Base Kitsap, and the Naval Undersea Warfare Center Keyport.

Kitsap County has ground transportation connections to the north via the Hood Canal Bridge, to the south from Mason and Pierce Counties primarily served by the Tacoma Narrows Bridge from Point Fosdick to Tacoma. Waterway transportation connections include Washington State Ferries running from Bremerton to downtown Seattle, from Kingston to Edmonds, and from Southworth to West Seattle via Vashon Island, and Kitsap Transit ferries from Bremerton, Bainbridge Island, Kingston, and Southworth to downtown Seattle.

2.3.2 Information about Kitsap

In 2023, Kitsap handled 184,281 9-1-1 calls and a total call volume of 301,457 calls as shown in Figure 1.

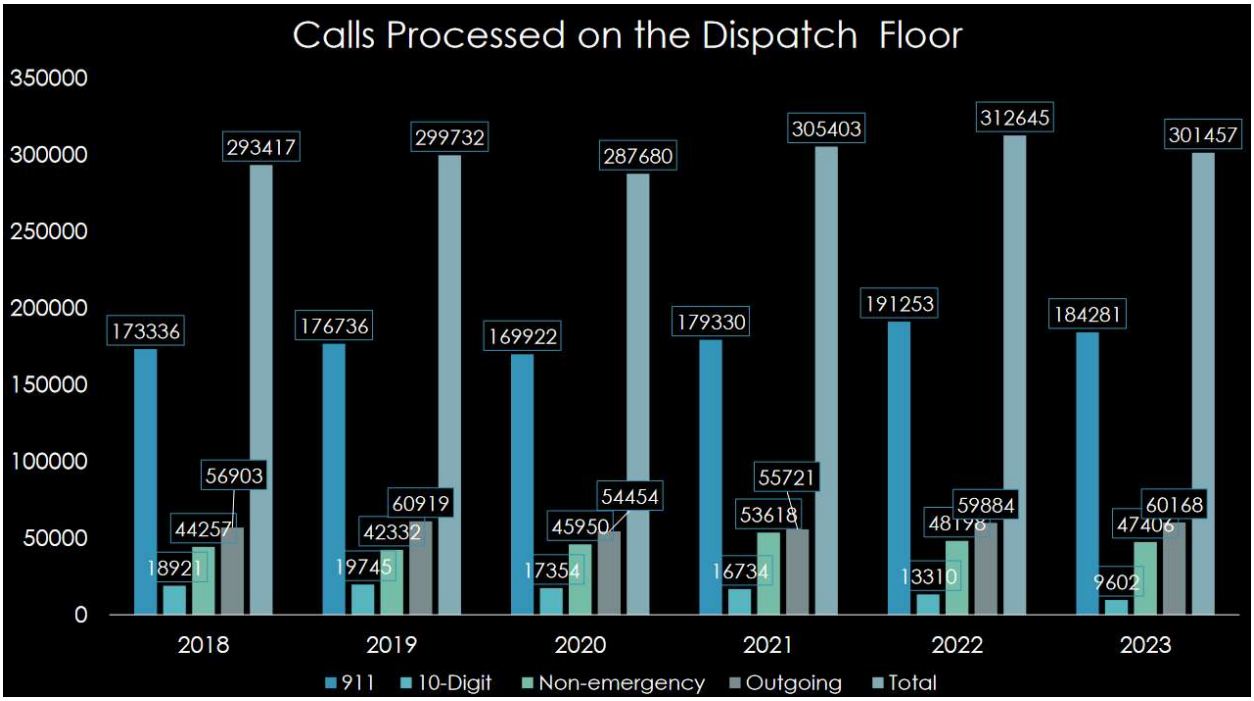


Figure 1 - 911 Call Distribution

Kitsap provides dispatching services for the following agencies (shown in alphabetical order):

- Bainbridge Island Fire Department
- Bainbridge Island Police Department
- Bremerton Fire Department
- Bremerton Police Department
- Central Kitsap Fire and Rescue

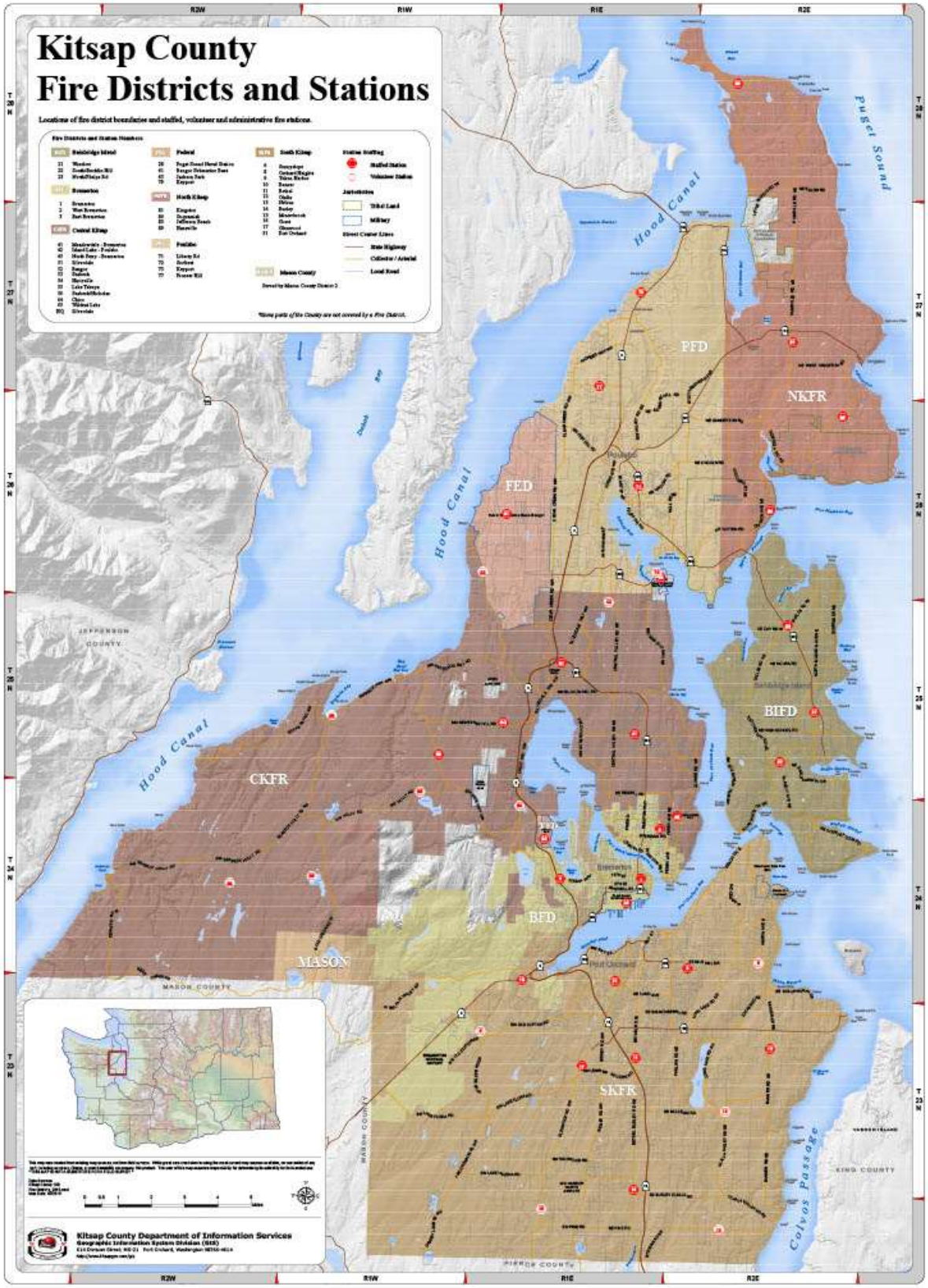


Figure 2-Kitsap County Fire Districts

3 SECTION 3 – EXISTING SYSTEM DESCRIPTION

Kitsap (formerly known as CENCOM) houses a dispatch center, equipment room including servers, radio system equipment, phone system equipment, and offices. The figure below shows the facility located at 911 Carver Street W, Bremerton, WA 98312 in Kitsap County.

Figure 4 - Kitsap (CENCOM)

The equipment room at Kitsap has a raised floor. The 9-foot racks extend through the raised floor and are bolted to the concrete floor. Kitsap has adequate space, power, grounding/bonding, and HVAC for the new CAD equipment both virtual and/or physical.

Figure 5- Equipment Room

3.1 CAD System

The Intergraph Computer-Aided Dispatch (I/CAD) system used by Kitsap is manufactured and supported by Hexagon Systems. I/CAD and I/Dispatch suite of software is used for incident management. Kitsap is currently on version 9.3 Maintenance Release (MR) 6, provided by Hexagon.

Kitsap has a software maintenance agreement with Hexagon for updates. The CAD servers are running Windows OS Server 2012 R2 and are patched quarterly. Kitsap has extended software service and support with Microsoft for Windows Server 2012 until October 2026.

3.1.1 Database Servers

Kitsap currently uses Microsoft SQL Server 2012 for all CAD Database servers and primarily administers them via SQL Management Studio in conjunction with Hexagon's CADDBM utility. The database servers and their usage are as follows:

- CAD01 (Principal) – 6-month CAD Data retention
- CAD02 (Mirror) - Cannot be actively queried. Provides automatic toning to ACOM
- Archive (Witness) - 6-year CAD Data retention
- TRAIN - Running DEV, TRAIN, and TEST SQL instances

3.1.2 CAD Reports

Kitsap performs a variety of daily, hourly, monthly, and ad-hoc reports. Reports are generated by PowerShell scripts, direct SQL queries, and Crystal Reports. Kitsap distributes reports internally, to member agencies, and to the public as requested via public disclosure requests. Kitsap is currently in the process of auditing all reports; the current list of reports and their frequency is shown below:

Report Name	Description	Generated
Response CENCOM for YYYY-MM	Call Performance Statistics	Manual
Fire Summary - YYYY	Averages and Counts of Fire Events, Call Performance Statistics	Manual
LE Calls by Source Exclude CELL BIPD	LE Events by Call Source	Manual
LE Calls by Source Exclude CELL BPD	LE Events by Call Source	Manual
LE Calls by Source Exclude CELL KCSO	LE Events by Call Source	Manual
LE Calls by Source Exclude CELL PGPD	LE Events by Call Source	Manual
LE Calls by Source Exclude CELL POPD	LE Events by Call Source	Manual
LE Calls by Source Exclude CELL PPD	LE Events by Call Source	Manual
LE Calls by Source Exclude CELL SPD	LE Events by Call Source	Manual
Officer Initiated Data YYYY-MM	Chart of Officer Initiated Data	Manual
Response BIPD	Response Times and Details	Manual
Response BPD	Response Times and Details	Manual
Response KCSO	Response Times and Details	Manual
Response PGPD	Response Times and Details	Manual
Response POPD	Response Times and Details	Manual
Response PPD	Response Times and Details	Manual
Response SPD	Response Times and Details	Manual
Response Comparison Summary	Comparison of LE Response Times	Manual
Stats Report YYYY-MM	Various database queries	Manual
PFD Monthly Data		Auto
SKFR Monthly Data		Auto
BFD Monthly Data		Auto
IDC Report		Auto
BFD IDC Report		Auto
Monthly III		Auto
Special Situations		Auto
CIO Events Report		Auto
FireOps-LE-Events		Auto

3.1.3 Response Plans

All Fire and EMS agencies managed by Kitsap utilize run cards and response plans to tailor their unit and equipment responses to events. These run cards include the ability to send out alert notifications both via the Purvis Alerting system and via SMTP page and email. Additionally, the response plans allow for units to be selected based on unit type, specified equipment, AVL location/distance to event, beat/station order, and IF/ELSE statements. These plans allow for separate plans to be embedded referred to as “nested plans” to allow for a modular approach to response building. A nested plan is denoted by the bolded box, and the question/conditional is denoted by a diamond shaped box. A sample response plan is shown below:

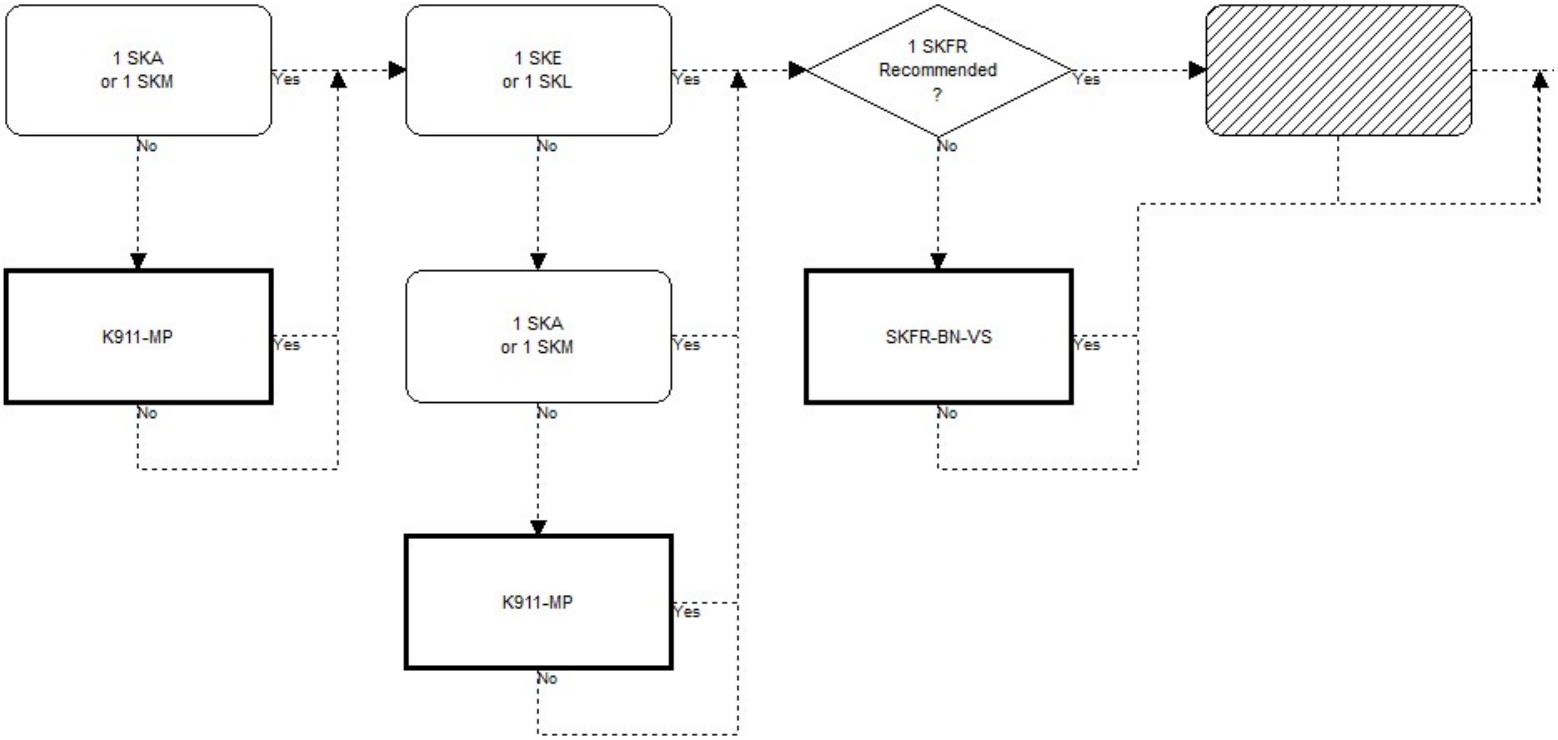


Figure 6- Sample Response Plan

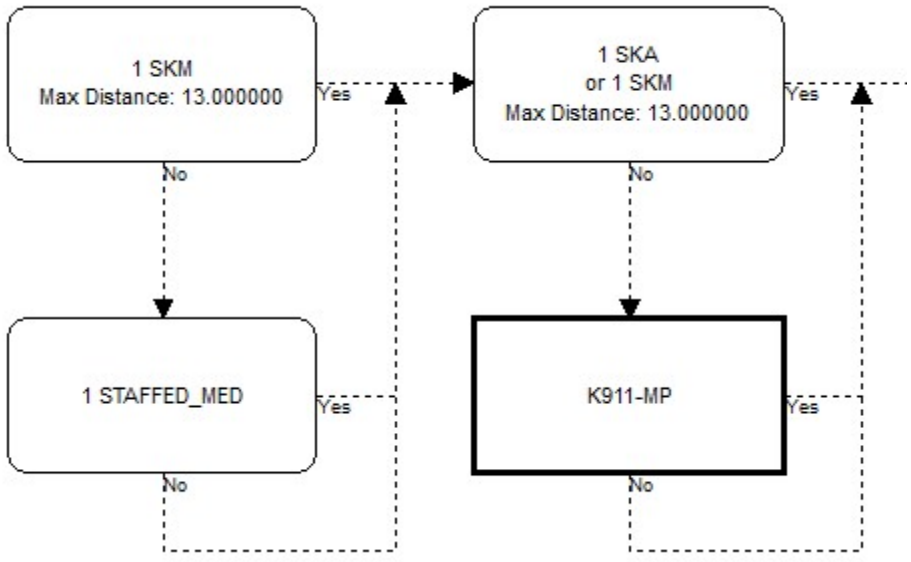
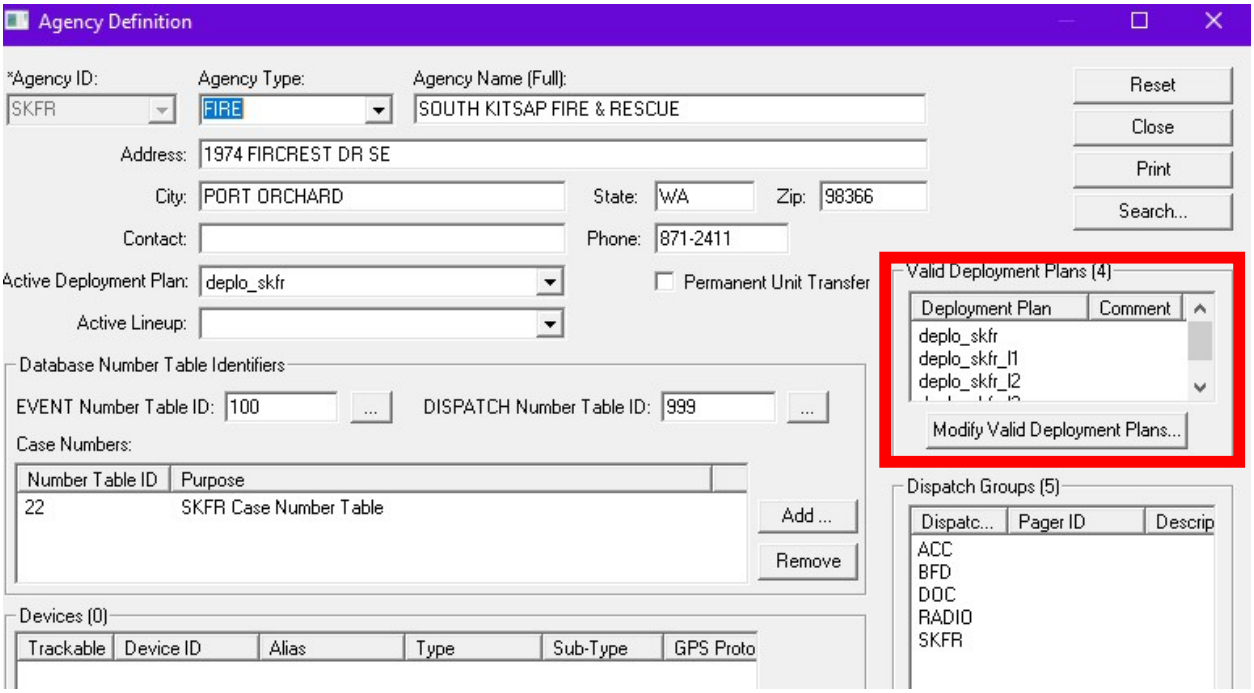


Figure 7- Sample Response with AVL limiter

3.1.4 Changing Gears

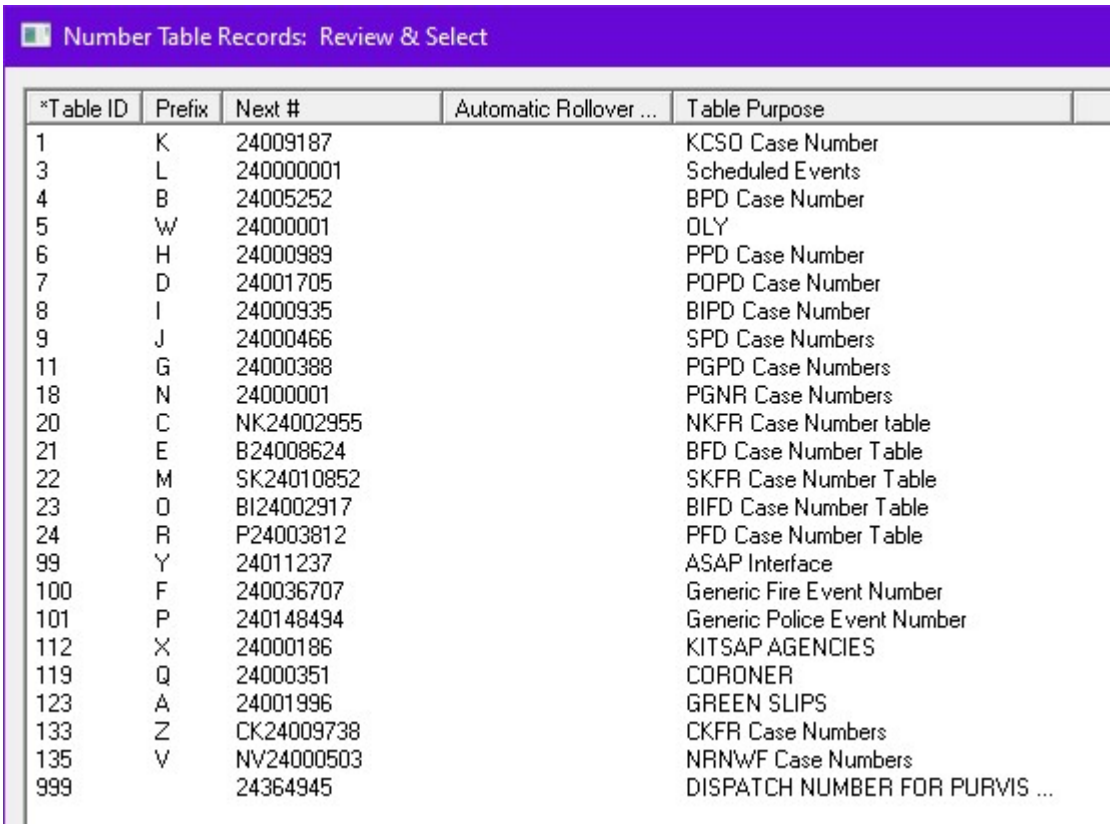
Kitsap employs a system to change response compliment based on current workload. Kitsap refers to this system as Changing Gears. During a Changing Gears scenario, Kitsap alters the response compliment by swapping out all deployment records for one or more agencies on the fly. Kitsap supervisors are given limited access to the CADDBM configuration utility to perform this function. A sample agency with multiple deployment sets specified and used by Changing Gears is pictured below:



3.1.5 Event and Case Numbers

Kitsap uses unique event numbers to differentiate between Law and Fire events, in addition to Medical Examiner events, callouts for agencies such as utilities or roads, county-wide event notifications, and address verification events for the ASAP to PSAP system. Kitsap also uses case numbers to differentiate

Fire agencies which are automatically assigned for reporting purposes, and case numbers for Law which are assigned as requested by field units. These numbers roll annually so that the first two digits represent the year, and the remaining digits count up incrementally. Kitsap's current case numbers are included below:



Number Table Records: Review & Select

*Table ID	Prefix	Next #	Automatic Rollover ...	Table Purpose
1	K	24009187		KCSO Case Number
3	L	240000001		Scheduled Events
4	B	24005252		BPD Case Number
5	W	24000001		OLY
6	H	24000989		PPD Case Number
7	D	24001705		POPD Case Number
8	I	24000935		BIPD Case Number
9	J	24000466		SPD Case Numbers
11	G	24000388		PGPD Case Numbers
18	N	24000001		PGNR Case Numbers
20	C	NK24002955		NKFR Case Number table
21	E	B24008624		BFD Case Number Table
22	M	SK24010852		SKFR Case Number Table
23	O	BI24002917		BIFD Case Number Table
24	R	P24003812		PFD Case Number Table
99	Y	24011237		ASAP Interface
100	F	240036707		Generic Fire Event Number
101	P	240148494		Generic Police Event Number
112	X	24000186		KITSAP AGENCIES
119	Q	24000351		CORONER
123	A	24001996		GREEN SLIPS
133	Z	CK24009738		CKFR Case Numbers
135	V	NV24000503		NRNWF Case Numbers
999		24364945		DISPATCH NUMBER FOR PURVIS ...

Figure 8- Case and Event Numbers

3.1.6 Line Ups

Kitsap uses Line Ups to allow dispatchers to quickly and easily log on units with a predefined set of attributes. These attributes include vehicles, personnel, radios, and crew. Utilizing the lineup ties these attributes together. These attributes are automatically assigned when a user logs on to a specific unit and references the line up during login. A sample line up for a shared crew Medic unit is included below:

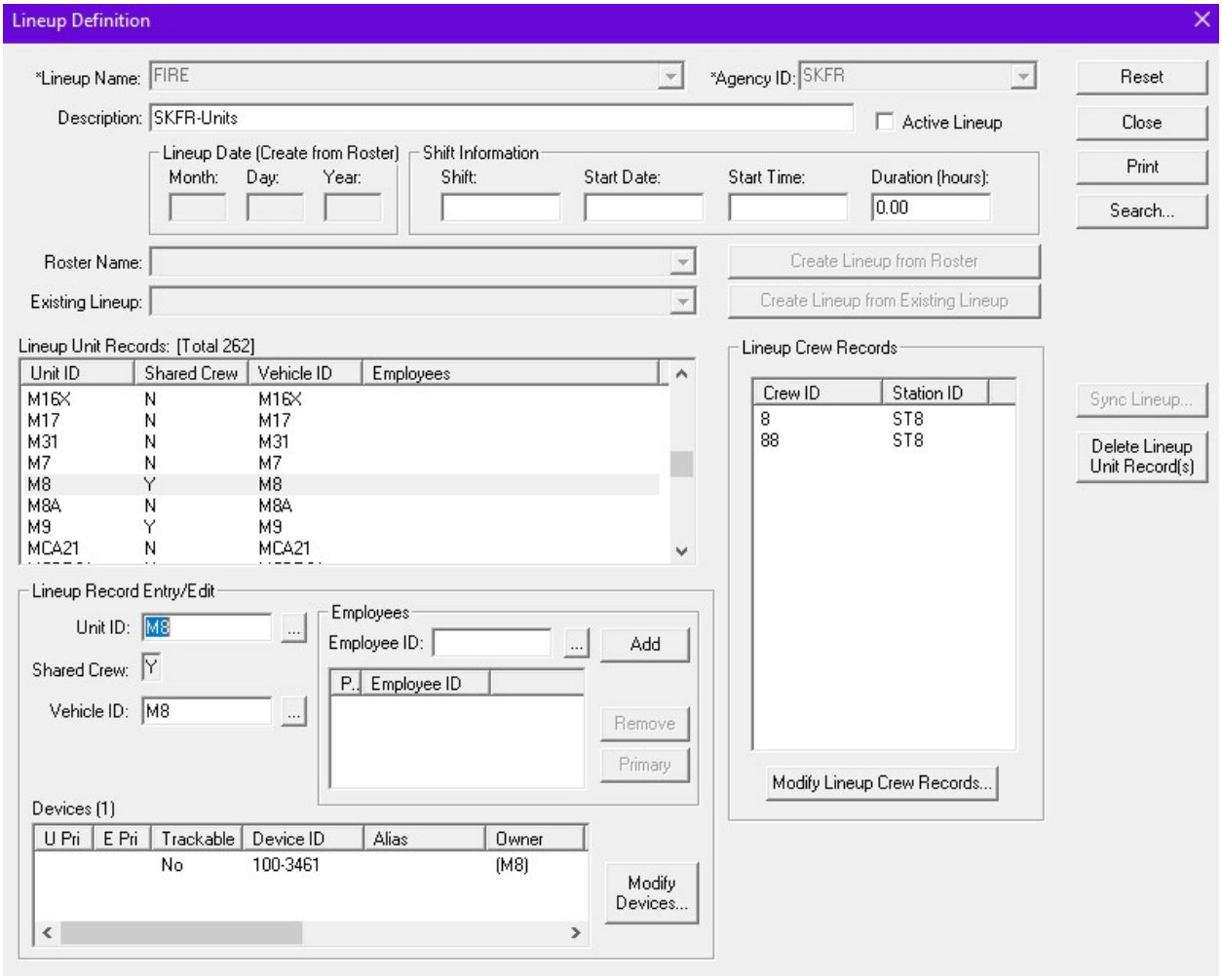


Figure 9- Sample Medic Line Up

3.1.7 Event Definitions

Kitsap utilizes event definitions to tailor the response compliment to events by agency. These event definitions specify status alarm intervals for units attached to the event, alarm levels for increased call severity, and default response plans defined by alarm level. When increasing the alarm level, the current system balances the alarm to account for additional units already on the call when processing the recommendation. A sample Commercial Structure Fire event definition is included below:

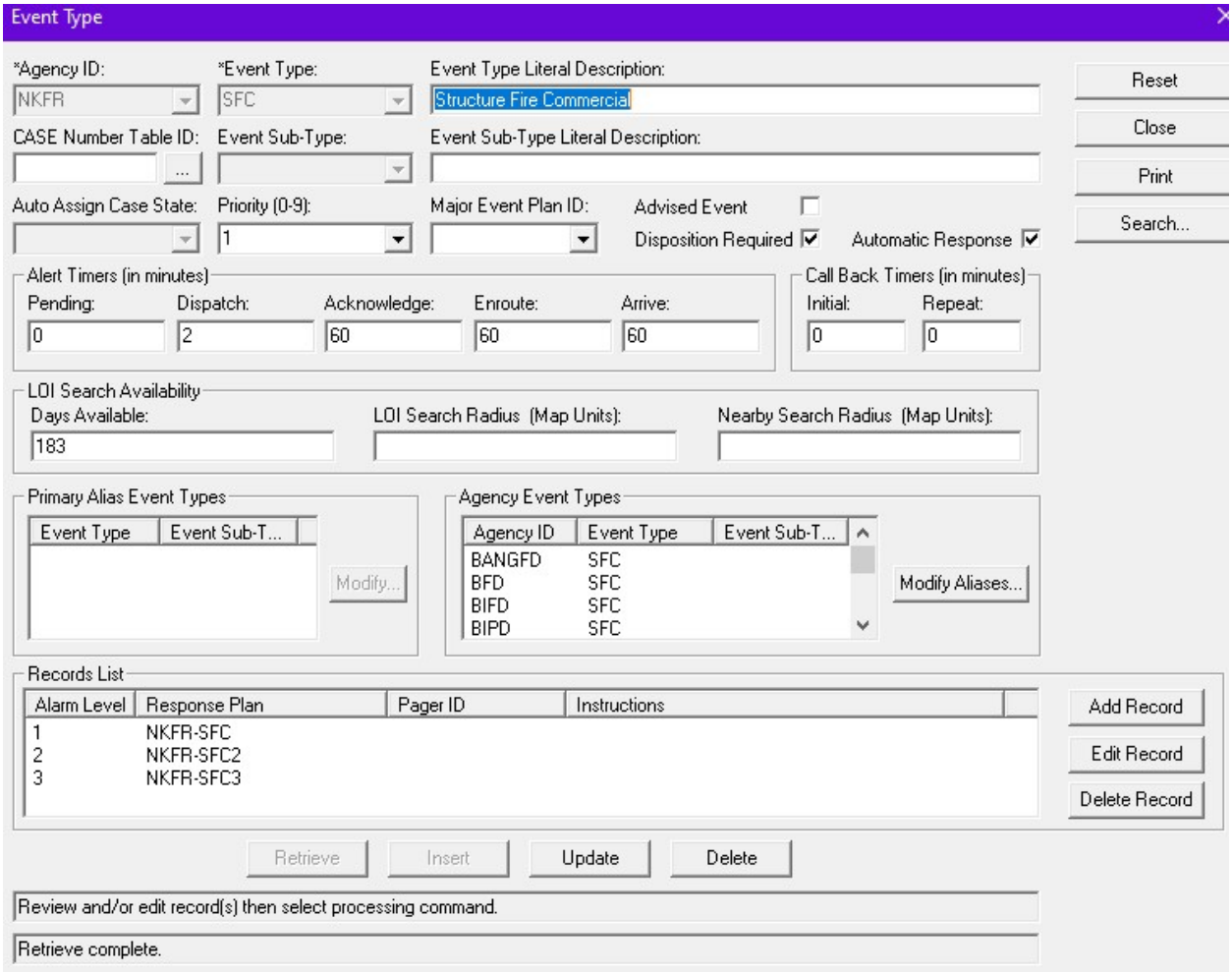


Figure 10- Sample Event Definition

3.1.8 Deployment Records

Kitsap uses a combination of AVL based deployments and beat based deployments. Kitsap also utilizes the ability to override the default response plan, pager, and beat order for each ESZ and/or agency per deployment plan. These deployment plans are also utilized for Changing Gears. A sample deployment record for an ESZ within one deployment plan is included below:

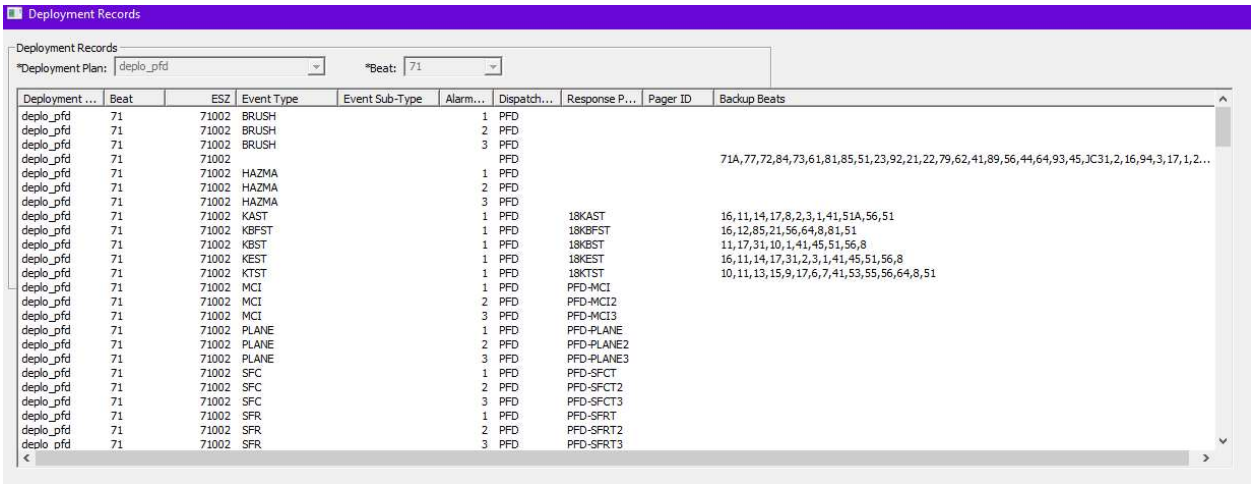


Figure 11- Sample Deployment Record

3.2 INTERFACES

3.2.1 Fire Station Alerting

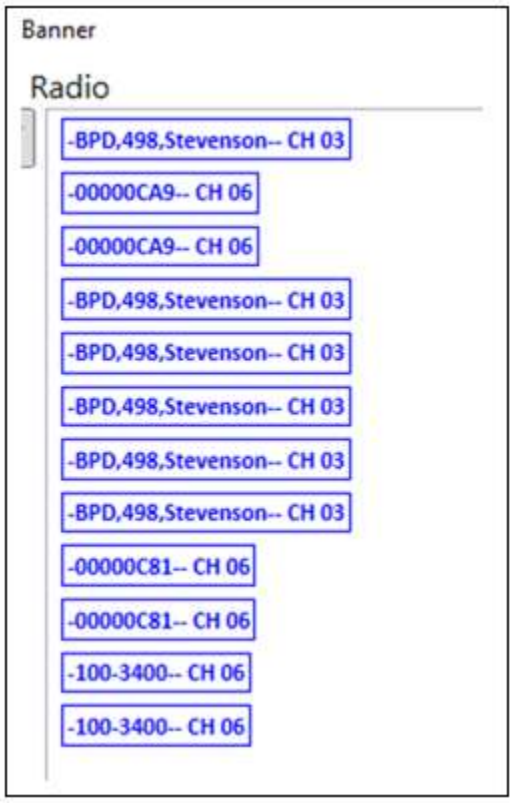
Kitsap has installed a PURVIS Fire Station Alerting System (PURVIS FSAS™) in 25 fire stations around the county. The capabilities of the system are:

1. Automated CAD through the Hexagon CAD system. Hexagon is supplying the interface to the PURVIS API (Application Programming Interface) using the Hexagon Xalt framework.
2. Automated voice dispatch over radio (Channel: Fire 1).
3. IP alerting to fire stations, including automated voice alerting over station speakers with message display on status message board.

3.2.2 PTTID

Kitsap uses PTT ID signals to identify user radios on its VHF channels LE 1, LE 2, LE 3, LE 4, Fire 1, Fire 2, Fire 3, Fire 4, Fire 5, and TAC7[27]. PTT ID is not used on interoperability channels.

The dispatchers use an application called Banner to show a radio log with the last call at the top of the stack. Below is an example of a Banner screen capture and the translation between the Banner channel ID and the Kitsap channel ID. The screen capture shows a typical law enforcement example in the format of agency, badge, and name as well as fire examples using hexadecimal (Motorola MDC1200®) IDs and decimal (Kenwood Fleetsync®) ID with the channel number.



Banner Channel ID	Cencom Channel ID
CH 1	LE 1
CH 2	LE 2
CH 3	LE 3
CH 4	LE 4
CH 5	Fire 1
CH 6	Fire 2
CH 7	Fire 3
CH 8	Fire 4
CH 9	Fire 5
CH 10	TAC 7

Figure 15 - Example of Banner App Screen Capture and Channel Translation Table

[27] Currently on VHF, however we are in the process of moving to a P25 system