STANDARD OF COVER LINEAR PROCESS MODEL

FILTERS APPLIED
{
- Call taker from AFD or EMS
- All Frontline units
- Unit responded code 3 (or equivalent)
- Unit was not cancelled before arrival
- CAD and the ARR times match
- Unique incidents only
- Removes "junk" call
- City of Austin Service Area
- Calendar Year
}

INITIAL DATASET

Yearly, the Research Analyst Senior (RAS) pulls the Records Management System (RMS) records that are fed directly from Computer Assisted Dispatch (CAD) into IBM SPSS Statistics Software (SPSS).

Contains: All AFD and ESD response records, including those outside COA

DUPLICATES

The RAS removes duplicate incidents and incidents that are missing incident numbers.

Contains: All AFD and ESD response records, including those outside COA, minus duplicates

CALL TAKING AGENCY

The Call Taking Agency Lookup Table is merged with the main data to determine call-taking agency. For Standard of Cover, only call takers from EMS and AFD are included in the analysis.

ALL FRONTLINE UNITS

The RAS identifies which units are frontline units regardless of unit department (Engines, Ladders, Quints, Rescues, Brush Trucks, AFR Units, Battalion Chiefs, Squads)

CODE 3 CALLS OR EQUIVALENT

The RAS determines which calls responded Code 3 (lights and sirens). In the case of county units, we do not have the ability to determine Code 3 status. To determine if county units responded with lights and sirens the RAS looks at the priority description. Priority descriptions of 1 were the equivalent of Code 3 status prior to July 9th 2013. After July 9th, Priority 1, 2, 3, and 4Ms were determined to be the equivalent of Code 3 calls for county units.

FIRST ARRIVING

The RAS identifies incidents where the reporting officer indicates that the unit was second arriving or greater.

CAD VS. RMS DATA

To ensure that the data are correct, the RAS compares the data recorded within CAD and the data recorded on the ARR. The RAS determines how many frontline units have a CAD Time of Arrival time that matches ARR Time of Arrival time.

VALID TIME STAMPS

The RAS determines which cases have valid arrival time stamp data within both the CAD records and the Apparatus Run Report (ARR) located in RMS.

FIRST–IN EMERGENCY

The RAS identifies which calls meet the criteria of Code 3 Calls or equivalent, CAD and RMS data match, the unit has valid time stamps, the order of AFD arrival was first/only or left blank, the unit was not cancelled before arrival, and the unit did not have a stage time.

INCIDENT MARKER

The RAS creates an Incident Marker to identify unique incident numbers.

INCIDENT AND UNIT TIME SEGMENTS

The RAS calculates the time segments by coding calls with invalid times as having missing time components. For Standard of Cover, the RAS calculates Phone Pickup to 1st Arrived by subtracting Time Phone Pickup from Time First Unit Arrived.

JUNK CALLS

The RAS determines calls that have fictional units, invalid problem types, or calls where CAD was down.

SERVICE AREA

The RAS identifies incidents that occurred within the City of Austin Service Area.