METHODOLOGY FOR ESTIMATING
REIMBURSMENT OF FIRE PROTECTION SERVICES
IN PRIVATIZED HOUSING AREAS

Preface: The majority of Air Force installations earn fire protection resources (vehicles and personnel positions) based on their primary mission assigned aircraft. These resources are necessary for the protection of aircraft and structures and include military family housing units. At installations without assigned aircraft, fire protection resources are earned based on the largest single expected fire (fire demand) on the installation.

Most installations have a consolidated central fire station where all the fire protection resources are located. However, a fire department's standards of coverage sometimes require satellite fire stations. Standards of coverage addresses response time and distance and define the "range" of a fire station. Satellite fire stations are provided to protect areas outside the range of the central fire station. Housing areas that are not within the range of the central fire station generate the requirement for a satellite fire station.

Formulas for Calculating Reimbursement:

Two formulas are needed to calculate the cost of fire protection in privatized housing:

CONDITION 1: Fire protection resides in a central or satellite fire station that protects both housing and other Air Force facilities:

(a). CALCULATION: R=N(C+P) where:

(1). R = Reimbursement

(2). N = Average number of annual responses to MFH areas over the past 5 years

(3). C = Cost to operate primary first response vehicles (Rescue, P-22, P-24, and Command) for one hour ($18.80 per hour for this set of vehicles)

(4). P = Personnel Cost (based on one hour wage of a GS-6, Step 5 fire fighter times the number of responders (currently a GS-6, Step 5 fire fighter earns $47,974.16 annually/3744 per year = $12.81 per hour and a typical first response assignment consists of 12 personnel)

(b). EXAMPLE: R = 94 (AF Average) x (($18.80 + (12.81*12))

R = 94 x (18.80 + 153.72)

R = 94 x $172.52

R = $16,216.88 Annual Cost

(**NOTE:** This example uses AF averages to illustrate the methodology. Actual cost and response data from the installation involved should be used for actual application of this methodology)

CONDITION 2: Primary fire protection is from a satellite fire station required solely to protect the privatized housing area and the local community has yet to assume fire protection service responsibility):

(a). CALCULATION: R = (V+E+P+M) where:

(1). R = Reimbursement

(2). V = Government-owned vehicles amortized (straight line) over the expected life of the vehicle (18 years for pumpers and tankers; 12 years for all others). For example: Based on a pumper cost of $275,400 in FY02 and escalated annually; the current year reimbursable cost would be 275,400/18=$15,300.)

(3). E = Annual cost for equipment and supplies, based on most recent five-year average. This will vary by installation and will require separate accounting to capture the O&M costs associated with operating the fire station.

(4). P = Personnel costs based on average GS-6 step 5 fire fighter times the 12-month number of fire fighters authorized and assigned to the satellite fire station. For a typical satellite fire station, one pumper and eleven personnel authorized.

(5). M = Maintenance costs for the fire station facility using annual cost based on past five-year data

(b). EXAMPLE: R = $15,300 + $25,000 (estimated) + $685,644 (salary + 30% benefits) +10,000 (estimated)

R = $730,811 annual cost

(**NOTE:** This example uses AF averages and estimates to illustrate the methodology. Actual cost and response data from the installation involved should be used for actual application of this methodology.)