

# Forestry and Fire Protection

## Santa Cruz County Fire Department



## Five-Year Mobile Equipment Replacement Plan

## **MOBILE EQUIPMENT REPLACEMENT PLAN FOR FISCAL YEARS 2011-2016**

### **INTRODUCTION:**

The objective of this plan is to identify and replace mobile equipment that have met or exceeded their serviceable life and replace them with emergency response apparatus, which meet the following criteria:

- Maintains or improves the current level of service
- Cost effective to the citizens of Santa Cruz County
- Incorporates modern fire service technologies
- Safe to operate

This plan will integrate the rotation of select apparatus over the life of the plan to maximize serviceable life.

# DEPARTMENT 5 YEAR MOBILE EQUIPMENT REPLACEMENT PLAN

## HISTORY/SCOPE

As of January 1, 2010, the Santa Cruz County Fire Department's fleet is comprised of 28 vehicles including:

- 9 first-line fire engines
- 3 reserve fire engines
- 2 water tenders
- 5 rescue/squads
- 5 support/admin vehicles (4 on lease)
- 1 quick attack/light engine

The Fire Prevention and Training Bureau each have two of the leased utility vehicles. Santa Cruz County General Services maintain these leases. The average age of the fleet is 15 years old and the average engine age is 16 years old. These figures are obtained conservatively as they account for the most recent engine purchased. The most recent fire engine acquisition was last year's purchase of one Ferrara type 1 fire engine. This engine is due to be delivered during the upcoming fall 2010. The oldest first line engine in the fleet is now 20 years old, followed by four engines that are 19 years old. The only two water tenders in the fleet were purchased in 1994 and are assigned to Bonny Doon and Loma Prieta.

The goal of the 2011-2016 Equipment Replacement Plan is to maintain a fleet of first line engines that are no older than 20 years, and maintain an average engine age of less than 10 years. The Department has prepared three plans as well as an example of how the fleet may look at the end of the planned period should no replacement funds be allocated. Plan "A" is the optimal plan as it allocates sufficient funds to meet the desired goals established in the previous FY 2006-2011 Mobile Equipment Replacement Plan. Plan "B" gets us half way to our goals and Plan "C" simply lets us maintain our fleet at the current level and average engine age. The "Reallocation of Funding from Replacement to Maintenance" is presented not as a viable plan but simply as a forecast of how our current fleet will look without replacement or any significant loss at the end of this planning period.

## FIRE ENGINE SPECIFICATIONS

In an effort to improve continuity, operational efficiency, and safety, as well as reduce apparatus maintenance costs, the Santa Cruz County Fire Department Master Plan (prepared in 2002) identifies the need to produce a standardized specification for vehicles to be purchased and utilized by the department. A committee composed of the Fire Department's Fleet Manager, a Volunteer Company Officer, a Fire Captain and a Battalion Chief filled this first committee. This committee will again be asked to evaluate or current fire engine specifications and make any needed modifications prior to purchasing any new fire apparatus.

A similar committee will also review specifications of water tenders, rescue/squads and utility vehicles.

DRAFT

## REPLACEMENT PLAN COMPARISONS

<b>Plan Analysis</b>	<b>Plan "A"</b>	<b>Plan "B"</b>	<b>Plan "C"</b>	<b>"Reallocation of Funding from Replacement to Maintenance"</b>
<b>Annual Cost</b>	<b>\$655,000</b>	<b>\$450,000</b>	<b>\$330,000</b>	<b>\$0</b>
<b>Avg. Vehicle Age</b>	<b>8.9 years</b>	<b>12.5 years</b>	<b>14.3 years</b>	<b>21 years</b>
<b>Avg. Engine Age</b>	<b>10 years</b>	<b>13 years</b>	<b>15 years</b>	<b>22 years</b>
<b>Total Cost</b>	<b>\$3,930,000</b>	<b>\$2,700,000</b>	<b>\$1,980,000</b>	<b>\$0</b>

DRAFT