# Orinda Emergency Services Task Force

Report to the Community on the State of Emergency Services

Presented to the Orinda City Council

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A REPORT ON THE COSTS, OPERATIONS, PERFORMANCE AND FINANCES OF THE MORAGA-ORINDA FIRE DISTRICT (MOFD)

by

The Orinda Citizens Emergency Services Task Force
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# Section I - Overview

> WHAT SHOULD WE THINK OF SOMEONE WHO NEVER ADMITS ERROR, NEVER ENTERTAINS DOUBT BUT ADHERES UNFLINCHINGLY TO THE SAME IDEAS ALL HIS LIFE, REGARDLESS OF NEW EVIDENCE? DOUBT AND SKEPTICISM ARE SIGNS OF RATIONALITY. WHEN WE ARE TOO CERTAIN OF OUR OPINIONS, WE RUN THE RISK OF IGNORING ANY EVIDENCE THAT CONFLICTS WITH OUR VIEWS. IT IS DOUBT THAT SHOWS WE ARE STILL THINKING, STILL WILLING TO REEXAMINE HARDENED BELIEFS WHEN CONFRONTED WITH NEW FACTS AND NEW EVIDENCE.
>
> DIANE RAVITCH
> THE DEATH AND LIFE OF THE GREAT AMERICAN SCHOOL SYSTEM

This report was prepared by an independent group of Orinda Citizens following three years of attempts to get the City to audit how adequately its residents are being served by their emergency services provider, the Moraga-Orinda Fire District (MOFD). This report was prepared with no assistance by MOFD itself. The individuals preparing the report do not include professionals in the field of emergency services; did not have the cooperation of MOFD to provide professional advice on various topics; and did not have the resources to hire outside consultants. The individuals do, however, have expertise in the fields of finance, accounting, engineering and business and are able to provide statistical analysis on several aspects of MOFD's operations and finance pertinent to the provision of emergency services to the residents of Orinda.

MOFD is an independent agency formed in 1997 by the residents of Orinda and Moraga to be a locally controlled, highly professional, financially viable emergency service provider. From Orinda's perspective, the driving incentives for withdrawing from the service provided by the county's fire department (ConFire), were (1) desire for a higher level of emergency medical service including locally sited paramedic ambulance fire engines and (2) keeping Orinda tax dollars for service in Orinda, not elsewhere in the county. (Exhibit I-1)

To the best of our knowledge, no audit of MOFD has been made by the City of Orinda in the 15 years since the District was formed to fully assess its performance.

This study was done to provide Orinda with a perspective of how MOFD is serving it after 15 years. It is accompanied by a website www.OrindaTaskForce.org.

This report is in six parts that relate to MOFD operations:

Section I – **Overview**

Section II - **Organization of the District -** Formation, governance, elections, citizen involvement and meetings.

Section III - **Incidents Served by MOFD** - What services does MOFD provide to the residents of Orinda? What are the nature of the incidents; the staff available to respond to these incidents; the results (limited to a response-time analysis)?

Section IV - **Operational Costs** - What does MOFD cost, where does the money come from, and what are the projections for the future?

Section V - **Tax Funding Allocation** - Are Orinda taxpayers paying their fair share of property taxes to support MOFD? This was one of the prime drivers for Orinda taxpayers to form MOFD.

Section VI - **Financial Stability** - Every government agency that provides its employees with a fixed-benefit retirement plan appears to be in distress. In what condition is MOFD in?

**Summary**

The Task Force believes that MOFD does a credible job for the majority of the community and its service employees appear to be highly skilled. However, there are gaps in service, aspects of the District's operations which the community is not knowledgeable of, and the Task Force has concerns over the District's management of the public's funds.

As opposed to the City of Orinda and the Town of Moraga, the District has no citizen oversight committees or commissions to provide accountability, no "watch-dog" capability. The District often "slips under the radar" of the regional media (Contra Costa Times), and the local media is not designed to provide "investigative" or "confrontational" reporting. If MOFD reports something; the media accepts it at face value. So, for instance, when MOFD reports in its annual financials that it has $11 million in net assets, that is what gets reported in the press (although this report will show that the District has upwards of several hundreds of millions of dollars in future liabilities in excess of offsetting assets.) This report aims to look objectively at our emergency services provider with no intention to denigrate those who literally do, at times, put their lives on the line.

The Task Force concludes that MOFD could continue to avoid difficult financial decisions for years, or even decades, with no apparent ill effects. It is not on the verge of bankruptcy as some public agencies are. However, it is financially unstable and, depending on circumstances, that instability could become apparent in the not-too-distant future, negatively impacting service. At best, if we ignore the situation, we will pass a huge obligation onto future generations of Orindans and Moragans.

In addition, the service provided by MOFD is marginal in some respects (40 percent of its response times to critical emergencies in Orinda exceed industry standards) and the costs are staggering (no other community the Task Force is aware of spends more than 50 percent of its local resources on emergency services).

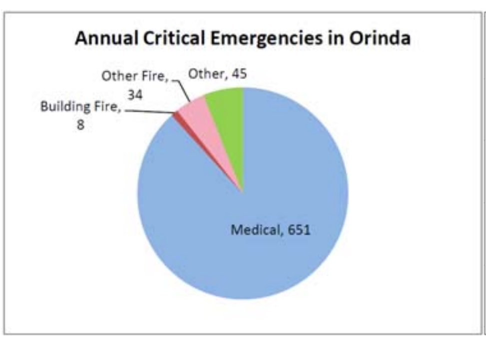
Finally, Orinda taxpayers are paying $1 million per year in excess of their fair share of MOFD's expenses. This is not what Orindans were told would be the cost-sharing with Moraga when MOFD was formed.

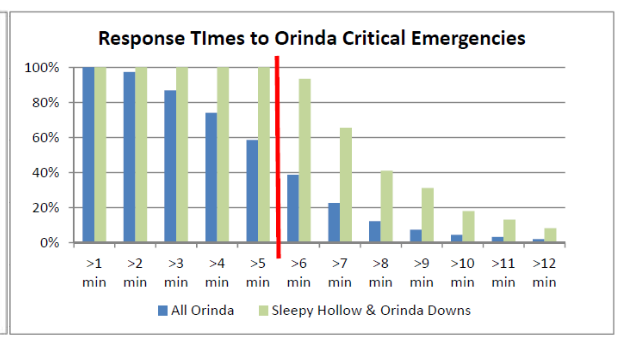
The community, including both the Orinda and Moraga Councils, needs to reassert itself in the long-term oversight and operation of its emergency services provider.

**Incidents Served (Section III)**

The vast majority of incidents that MOFD serves are medical: 80 percent of all incidents and almost 90 percent of all "critical" incidents (these are called code-3 and are responded to with lights and sirens.) Only 5 percent of code-3 incidents are fires and only one in a hundred are structure fires that might involve loss of life. The chance of loss-of-life is even more skewed toward medical emergencies, not fires. And yet, to look at annual reports or the District's Web site, one would think it was one fire after another. It is more exciting to see pictures of a building in flames. However, for every burning building there are more than 100 people on stretchers. The reality is that MOFD's major function is providing emergency medical care.

What does it take to answer a medical emergency? Virtually all of the medical calls serviced by MOFD involve a single victim. However, MOFD does need to be prepared to handle multiple-victim emergencies. Is it necessary, reasonable or optimal to concentrate MOFD's 19 emergency responders into five stations? Does Orinda really require four times the firefighters per capita as serve the ConFire area? MOFD records show that the average number of responders to a code-3 medical incident is 5.5 firefighters, and that the average MOFD firefighter responds to four incidents per week. Is this the most efficient way to use personnel, each costing more than $200,000 per year?

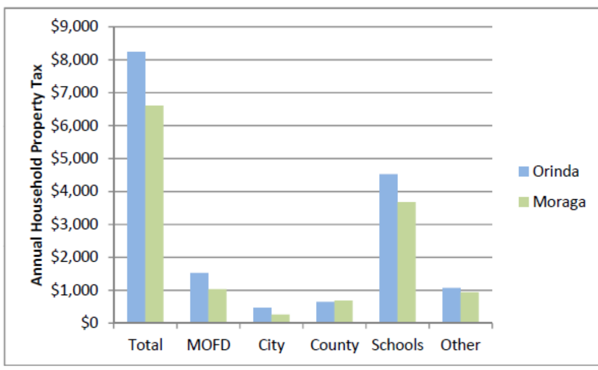


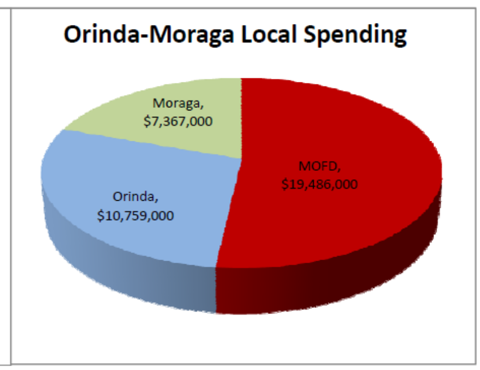




The most disturbing fact the Task Force discovered was that almost 40 percent of all code-3 incidents in Orinda were not answered within the 6-minute time frame guiding the industry. In some areas, like Sleepy Hollow and Orinda Downs, close to 100 percent of the responses do not meet performance standards. If more stations could get responders closer to the incidents, thus reducing response times, and it only takes one or two first responders (with backup) to deal successfully with most medical emergencies, why are our firefighters concentrated four to a station? The Task Force believes that while this may be an appropriate "fire" model; the vast majority of life-threatening emergencies are not fire related. The District and the Firefighters Union may be more concerned with the well being of the employees than the health and safety of the community -- a harsh accusation but the facts appear to so indicate.

### Operational Costs (Section IV)

MOFD has an annual budget of almost \$19 million for the 19 firefighters on each shift -- \$1 million per firefighter. This exceeds the budgets of Orinda and Moraga combined (and the Task Force is unaware of any other community that spends over half of its resources on emergency services.) However, we do have a "spread out" community which requires more service providers than most to attempt to give the community appropriate response times.




But how did so much money get directed to MOFD? Was this the community's plan? The Task Force notes that in the 15 years since the District was conceived, property tax revenues allocated to emergency services have increased from \$7.6 million in 1997 to \$16.3 million in 2012. That is a 5.2 percent annual increase, almost twice the rate of inflation in that time period. If we had held expenses to the rate of inflation, the MOFD tax bill would be \$11.4 million today and we would have \$5 million to spend on infrastructure needs. But such is not the case, and MOFD has figured out how to spend it all. Moreover, it has accumulated millions of dollars of unfunded liabilities.

The community needs to exert more rigorous oversight of its emergency services provider. Orinda and Moraga effectively formed MOFD by recommending that action to voters in 1997. They could have brought the fire department "in house" or been more active in the process by forming a Joint Powers Authority as opposed to handing the responsibility to an independent agency. But they still own the responsibility of confirming that residents are getting, and will continue to receive, adequate and cost-efficient emergency services. Based on what the Task Force has discovered , none of this is a given.

In analyzing MOFD's long-range financial projections with projections of MOFD's employee benefit liabilities, the Task Force believes some very hard decisions are in order, and soon. These need to be community decisions, not just MOFD's. The longer the delay , the worse the problem will become and the greater the liability will increase.

**Tax Funding Allocation (Section V)**

Paying a fair amount for emergency services was one of the main incentives for Orinda taxpayers to join with Moraga to form MOFD in 1997. At the time, the County was spending $700,000 per year received from Orinda's property taxes to subsidize emergency services in other parts of Contra Costa County. Orinda taxpayers thought this reason enough to leave the County emergency services system and form their own district. Orinda taxpayers dedicate significant funds to emergency services. In fiscal year 2011-12 Orindans will give $11.1 million tax dollars to MOFD - $10.5 million in property taxes plus $600,000 in a special parcel tax. It's reasonable to conclude that Orinda taxpayers expect this money to be spent on services in Orinda.

Orindans are served mainly by the 11 MOFD firefighters stationed in Orinda. These firefighters represent 58 percent of the MOFD's total force of 19. However, Orinda taxpayers currently provide 64 percent of MOFD's $17.4 million tax revenue needs. This results in a $1 million mismatch between what Orinda residents pay and the cost of the service they receive.

MOFD claims the $1 million difference represents service provided by Moraga-based units within Orinda. This $1 million represents 14 percent of the tax revenue allocated to the eight firefighters stationed in Moraga. However, Orinda residents do not get 14 percent of the service provided by these Moraga-based units. Net of service that Orinda-based units provide in Moraga, Orinda residents receive 3 percent of Moraga's total operations. This service comes from the Moraga-based ambulance, with 50 percent of that cost covered by fees paid by users for hospital transport. The net cost for this service is a de minimis adjustment to a straight-forward expense allocation by firefighters stationed in each city.

Therefore, the claimed $1 million funding inequity is real and should be addressed before it splits the District, as Orinda taxpayers have shown they will not tolerate subsidizing other cities, even their next-door neighbors.

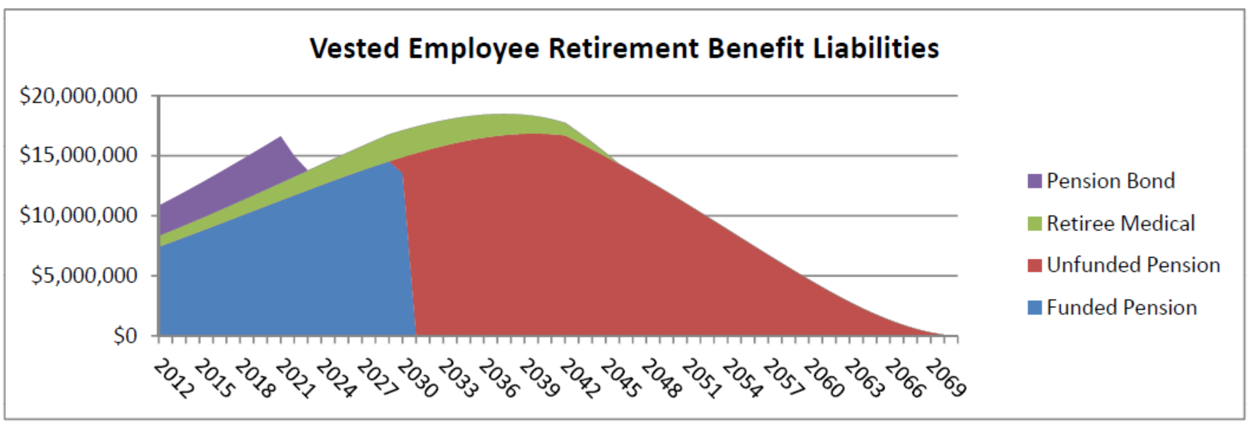
**Financial Stability (Section VI)**

At the end of the Orinda City Council meeting in June 2011, where 220 Orinda residents presented a petition to the Council asking for the creation of this Task Force under the auspices of the Orinda Council, Mayor Smith made the following statement: "We are extremely lucky that we are not in Con-Fire as some had previously requested that we make that change or look at receiving services from them because that agency unfortunately is close to bankruptcy and will be browning out stations." She then said there was no need for Orinda to create a task force and did not bring the issue to a vote.

The Task Force's findings indicate Orinda may not be "extremely lucky," and in fact may be in exactly the same condition as ConFire. Orinda's five-station fire department, whose tax revenues have grown from $9 million to $17 million over 15 years (a total of $200 million), has somehow accrued $700 million in future employee benefits liabilities and currently only has $120 million in assets to cover those liabilities. Even if those assets could grow nearly 8 percent annually, which the pension plan administrator assumes, they would cover only $300 million of these existing liabilities. Right now, in addition to paying $1.5 million annually for newly vested pension benefits each year, the district is paying $3 million annually for unfunded liabilities. This $4.5 million **is almost 50 percent** of what the district pays in total salaries (base plus overtime). And that $4.5 million might have to be doubled if the shortfall is not be passed onto our grandchildren.

Will stations have to be "browned out," or closed, to pay off the debt as other communities are experiencing? The Task Force does not believe so, but serious measures need to be taken soon to prevent it. This is the job of the entire community, not just the MOFD board. The Task Force believes the MOFD board needs community assistance.

In putting together this report, the Task Force asked the MOFD one question: "What are your pension and post-retirement medical liabilities." MOFD President John Wyro said: ' "You have all the data we have and I am not prepared to ask staff to develop more information at this time. Know that we are well aware of the obligations."




The Task Force concludes that MOFD has significant financial problems. It is not going bankrupt, and because Orinda and Moraga are currently served by four times the firefighters per capita as the rest of the county, MOFD will be able to weather the storm without service cuts, but only if appropriate action is taken. The Task Force recommends the community needs to become more involved, and that includes the Orinda and Moraga Councils, in order to make certain it receives the service that it needs.

**Background on this Task Force**

In 2008, following the defeat of two bond measures designed to provide funds for the repair of Orinda's crumbling infrastructure, The City created a Revenue Enhancement Task Force (RETF). The RETF was tasked with exploring all revenue possibilities for reconstructing Orinda's infrastructure.

One of the taxes the RETF focused on was Orinda's property tax. The total annual property tax paid by Orinda's property owners was four times Orinda's total budget. Only 7 percent of that tax came back directly to the City of Orinda; half went to the state for the funding of schools; 10 percent went to the county; 9 percent to an assortment of 12 independent agencies ranging from BART to the Alamo Lafayette Cemetery. But the single largest portion after schools, 22.6 percent, was dedicated to emergency services provided by MOFD. Total tax revenues for emergency services, when supplemented by an additional parcel tax paid to MOFD, was about $10.4 million, which is more than the city's entire budget.

Upon further investigation, four other aspects of this tax came to light:

1) Since the formation of MOFD, it had been growing at a rate of 7.1 percent while inflation was only 3.1 percent (this was in 2008).

2) The Wilder development was projected to add an additional $1 billion to the Orinda tax base, which would generate an additional $2 million for MOFD with no anticipated increase in service to Orinda or cost to MOFD. 3) Orinda's $10.4 million of MOFD's $16.4 million total tax revenue represented 63.4 percent of MOFD's total tax revenue while Orinda was served by 11 (57.9 percent) out of MOFD's 19 on-duty firefighters. The RETF queried "if Orinda taxpayers were served by 57.9 percent of MOFD's staff, why weren't they paying 57.9 percent of its tax revenue ($9.5 million)?" This $900,000 difference could double Orinda's road budget.

4) Tax law not only allowed Orinda control over the taxes going to MOFD (which is how MOFD was formed; Orinda detached from ConFire and formed MOFD with taxes previously dedicated to ConFire being transferred to MOFD), it also allowed MOFD to transfer taxes back to Orinda, if it so desired, in order to eliminate any funding allocation mismatch between Orinda and Moraga).

In December 2008, the RETF presented its findings to the City Council. It presented a plan of combined revenue sources, including a reallocation of property taxes going to MOFD. The reallocation would have resulted in some property tax revenue being transferred back to Orinda, a transfer made possible by MOFD constraining its growth to 4.5 percent. Not surprisingly, MOFD rejected any such transfer. The City Council's reaction to the RETF report was to immediately disband the RETF. It did this before the RETF could hold its final meeting and officially adopt its final report. Consequently the report never became part of the official City record. This report can be found on the Task Force Web site as Exhibit I-2.

Nowhere in the RETF report were MOFD's current expenditures, methods of operation or long term finances questioned. The RETF simply questioned the allocation of tax resources.

Following the dissolving of the RETF, the Orinda City Council did request of MOFD and Moraga to form a Tri-Agency Committee to air the RETF findings, namely that Orinda taxpayers were overfunding MOFD. However, the Committee proceedings consisted solely of MOFD presenting its own analysis of the matter. Not surprisingly perhaps, that analysis concluded no funding inequity existed.

The Orinda representatives to the Tri-Agency meetings took these findings back to the Council in April 2009. The full Council accepted the report but then voted to allocate funds to hire a consultant, in conjunction with MOFD and Moraga, to do an independent evaluation. In other words, the majority of the Orinda Council did not believe the MOFD analysis. Not surprisingly, MOFD and Moraga refused to participate in a consultant-led analysis and the independent evaluation was never performed.

At this same time, Contra Costa LAFCO was preparing its quinquennial report (available at www.contracostalafco.org/municipal_service_reviews/fire_and_emergency_medical_services/CoCo Fire MSR Master - FINAL.pdf) on the status of the county's emergency service providers, including MOFD. Following the denial by MOFD and Moraga to participate in a neutral, consultant-led study, the City Council deferred any further action until LAFCO issued its findings.

In October 2009, the final LAFCO report, determinations and recommendations were released. For MOFD, the report's 27 "determinations" included:

* Service demand levels are average in the District, with 80 incidents annually per 1,000 people compared with the countywide average of 79 incidents per 1,000.
* MOFD's staffing level of 1.9 sworn staff per 1,000 people is substantially higher than the countywide average (0.8), as well as the Bay Area median for urban fire providers (0.9).
* In Orinda, there are water mains that need to be upgraded and hydrants in some areas have low pressure and capacity.
* The District identified service challenges in the Orinda area due to decayed roads and lack of street maintenance and access challenges on steep, windy, narrow roads, particularly in the El Toyonal area.
* The District would benefit from benchmarking its costs against comparable service providers to explore cost savings and promote efficiency.

LAFCO's one "recommendation" to MOFD was "Encourage agencies (*meaning MOFD and Orinda*) to communicate regarding road/water infrastructure challenges and report back to LAFCO within 12 months." (This never happened.)

To the best of the Task Force's knowledge, this information was never formally presented to the Orinda City Council. The LAFCO determinations and recommendations are on the Task Force Web site as Exhibit I-3 and the portion of the LAFCO report pertaining to MOFD is included as Exhibit I-4.

In January 2010, the grass roots group FAIR (Fire And Infrastructure Renewal), formed by former RETF members, approached the Council with a proposal. In discussions with ConFire, it appeared that ConFire would and could provide service to Orinda, equivalent to the service provided by MOFD, at a cost significantly less than the property tax revenue then going to MOFD from Orinda taxpayers. This service would be by contract and thus not tied to property taxes. While FAIR did not think Orinda would get any service benefits from a contract with ConFire, it presented this option to the Council as a strong indication that MOFD was charging Orinda more than its fair share of MOFD operating expenses. It also believed that the City would be open to service-by-contract, as that is how the City provides many of its services, including police service from the County Sherriff's office. Locally controlled services by the regional service provider (probably using the same firefighters which were already serving Orinda), with major savings to the taxpayers/city, and with pension liabilities shifted back to the County, sounded like something the City might consider. MOFD strongly rejected such a plan, as did some Orinda citizens who believed that ConFire, which had overcharged and underserved Orinda a decade and a half earlier, would do so again.

The Orinda City Council's response was to call for another series of Tri-Agency meetings. These proceedings once again, were mostly presentations by MOFD to the Committee, including the same funding equity analysis provided the previous year. However, FAIR was allowed to present its analysis as was another group, OrindaCARES. These presentations were never discussed by the Committee. It languished by allowing itself to be dragged into the November 2010 election season. The Committee Chair, Orinda Mayor Tom McCormick, was unsuccessful in his bid for re-election to the Orinda Council and the Council did not appoint a successor. In April 2011, the Committee, without issuing any report or conclusions, dissolved itself.

The one remaining Orinda representative to the 2010 Tri-Agency, Councilmember Worth, went back to the Orinda City Council at its June 7, 2011, meeting, gave a three-minute verbal report of the Committee's actions, and suggested to the Council that the City set up its own Citizens Emergency Services Task Force to investigate issues that the Tri-Agency Committee had not. At the same meeting, a petition was presented to the Council, signed by 220 Orinda citizens, including former Mayor McCormick, also calling for a Task Force.

At this Orinda City Council meeting, MOFD President John Wyro gave a short address stating: "We welcome and encourage public participation. We need public participation to fully function and I am hoping that out of this that those who have concerns about the operations of the department come share them with us and work together with us to improve it." Following this statement, three of the Council members said it was not in their "purview" to get involved in the business of another agency (even though that agency was responsible for the health and safety of every individual in Orinda) and directed the citizens to take their issues directly to MOFD. No vote was held on the formation of a Citizens Emergency Services Task Force.

On July 20, 2011, Orinda resident Vince Maiorana, one of the petition signers to the Orinda Council asking for creation of a Task Force, told the MOFD board at its regular meeting that a group of citizens was forming a Task Force; that they hoped that MOFD would cooperate; and they would bring their findings to the Board upon completion. There was no response from any member of the Board, either immediately or since. The only response was from MOFD Chief Bradley, who said he would like to be involved.

On July 22, 2011, Steve Cohn, a member of the Task Force, presented a request for information to Chief Bradley. Specifically, he asked for MOFD's long term employee benefit liabilities, both pension and post retirement medical benefits. The only public information then available were values that represent the present value of these liabilities, not the absolute year-by-year values. These requested values, which are the basis for the publicly available "present values," are derived by the District's actuary and the District's pension plan administrator's (CCCERA) actuary. The response from the District to this request was that they did not currently have the information. They did not respond to a further request that they might obtain the information from their actuary. CCCERA responded likewise. Requests directly to the MOFD Board and to CCCERA's Board of Trustees were never answered.

No further requests for information, other than the District's audited financial statement of December 9, the day following its formal adoption by the Board, was requested from the District by the Task Force. All other information used in this Task Force report was obtained by other means or prior to the formation of the Task Force.

Thus, with virtually no assistance from either the City of Orinda or the Moraga-Orinda Fire District, the Citizens Emergency Services Task Force has attempted to compile the equivalent of a grand jury investigation or a service audit of the Moraga-Orinda Fire District, specifically as to how it relates to service in Orinda. Actual data will be noted in the sections of this report as will any assumptions the Task Force has made in the absence of data.

A REPORT ON THE COSTS, OPERATIONS, PERFORMANCE AND FINANCES OF THE MORAGA-ORINDA FIRE DISTRICT (MOFD)

by

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(www.OrindaTaskForce.org / Orinda_Task_Force@comcast.net)

# Section II - MOFD ORGANIZATION

What is the Moraga-Orinda Fire District?

The Moraga-Orinda Fire District (MOFD) is an independent agency run by a board of directors elected by the residents of Orinda, Moraga and the unincorporated area adjacent to Moraga (unincorporated Moraga and Canyon). It serves approximately 34,000 residents and receives over 90 percent of its operating funds from property taxes paid by the population it serves.

Neither the Orinda City Council nor the Moraga Town Council has any direct control over the operation of MOFD (they can only use the power of the "bully pulpit" to influence public sentiment and sway their counterparts on the MOFD board and they do have the power to detach from MOFD with county approval). None of the tax revenue controlled by the City of Orinda or Town of Moraga goes to support the operations of MOFD. MOFD is allocated revenue from property taxes in Orinda and Moraga.

**Formation of MOFD** - MOFD was formed by the vote of the people in June 1997. The new district took over three stations in Orinda previously operated by the county's ConFire and two stations in Moraga previously operated by the Moraga Fire Protection District (MFPD).

Prior to the formation, the Orinda service provided by ConFire cost Orinda taxpayers 22.6 percent of their property taxes. In the last year of service by ConFire (1996/97) this amounted to about $4.3 million -- $475,000 for each of the nine firefighters stationed in Orinda (three engines, each staffed by three firefighters). All ConFire firefighters were trained as emergency medical technicians (EMTs). Ambulance service was provided privately by AMR with ambulances based in Walnut Creek. No tax dollars were used to support the ambulance service, all ambulance costs were covered by user fees.

MFPD served Moraga (incorporated and unincorporated), Canyon, plus 700 homes in South Orinda. The district had two stations with eight firefighters staffing two fire engines and its own ambulance. The ambulance staff, plus at least one firefighter on each engine, were Paramedics, with the remaining firefighters being EMTs. (note: The difference between Paramedics and EMTs is the Paramedics have a higher level of training). This cost $3.3 million in property taxes, plus the District had an additional parcel tax which generated about $500,000 . This total, $3.8 million, also equaled $475,000 for each firefighter serving the district.

The Orinda City Council and a group of Orinda citizens determined that over the four years Orinda had been served by ConFire, Orinda's tax revenue to ConFire exceeded the cost of the service provided to Orinda by about $2.8 million in total ($700,000 per year). In addition, Orinda had a lower level of medical service. Fire engines in Orinda were staffed by EMT-certified firefighters while in Moraga at least one firefighter on each engine was a higher-level Paramedic. Also, the ambulance response from Walnut Creek to Orinda could take up to 20 minutes, almost twice industry standards.

Even though Orinda taxpayers were paying the same $475,000 per firefighter as MFPD taxpayers, it was determined that if Orinda wanted to join Moraga, it too would need a ($530,000) parcel tax due to the poor condition of Orinda's capital equipment. This meant its nine firefighters would each cost $535,000 per year compared to Moraga's $475,000. Despite this disparity, and with no mechanism to eliminate it, once Orinda's equipment was upgraded -- other than local representation on the MOFD board -- Orinda's City Council and a number of other civic leaders supported the merger. The basis of the support was to "stop exporting our taxes to elsewhere in the county," plus "provide better medical service." They succeeded in encouraging 80 percent of the taxpayers to vote for a merger with Moraga to form MOFD on June 3, 1997.

**Governance of MOFD** - MOFD is governed by a board of five directors elected **by division**. There are two divisions in Orinda, two in Moraga, and one split between the two cities with about 55 percent of it located in Orinda (since Orinda's population represents about 52 percent of the District's total population). Currently the director's positions are held by:

| | | |
|---|---|---|
| Division 1 (Moraga) | Frank Sperling | franksperling@comcast.net |
| Division 2 (Moraga) | Fred Weil | fweil@hansonbridgett.com |
| Division 3 (split) | vacant as of 2/29/2012 | |
| | Steve Anderson - Director-Elect | sfecanard@aol.com |
| | South Orinda, west of Moraga Way plus Ivy Drive | |
| Division 4 (Orinda) | John Wyro | wyroco@comcast.net |
| | the rest of South Orinda plus Orinda Woods | |
| Division 5 (Orinda) | vacant as of 2/29/2012 | |
| | Alex Evans - Director Elect | alex@emcresearch.com |
| | the rest of North Orinda | |

The Directors hold a four-year term, with two directors (divisions 2 and 5) elected in presidential election years and three in off-years.

Historically there has been little turnover in the board. Of 22 possible elections since the board was formed; 15 have been unopposed races, 13 of which were incumbents; four have resulted in the re-election of the incumbent; two were two non-incumbent running for an empty seat; and in only one case did a non-incumbent beat an incumbent. See Table II-1.

Coming into a race, an incumbent holds a strong position. The Task Force notes that in four out of the six times in the history of the District that a director has resigned or chosen not to seek re-election, the board has appointed a replacement as opposed to letting voters choose a replacement. In all four cases, the appointed director, now the incumbent, either won the next election or ran unopposed. In the most recent incidence, with the retirement of Director Wilson

Table II-1

# MOFD Election Results

| | | | | |
|---|---|---|---|---|
| Nov-12 | Div 1 | | Frank Sperling (I) | bye year |
| | Div 2 | | Fred Weil (I) | ran unopposed |
| | Div 3 | 14 | Steve Anderson | ran unopposed (2 year term) |
| | Div 4 | | John Wyro (I) | bye year |
| | Div 5 | 13 | Alex Evans | ran unopposed |
| | | | | |
| Mar-12 | Div 3 | | Dick Olsen | resigns |
| | Div 5 | | Brook Mancinelli | resigns |
| | | | | (both to be replaced by vote in November) |
| Nov-10 | | | | |
| | Div 1 | | Frank Sperling (I) | ran unopposed |
| | Div 2 | | Fred Weil (I) | bye year |
| | Div 3 | | Dick Olsen (I) | ran unopposed |
| | Div 4 | | John Wyro (I) | 59% |
| | | | Bob Jungbluth | 41% |
| | Div 5 | | Brook Mancinelli (I) | bye year |
| | | | | |
| Mar-10 | Div 3 | 12 | Dick Olsen | appointed to replace Pete Wilson |
| | | | | |
| Nov-08 | Div 1 | | Frank Sperling (I) | bye year |
| | Div 2 | | Fred Weil (I) | 55.26% |
| | | | Bob Nelson | 44.58% |
| | Div 3 | | Pete WIlson (I) | bye year |
| | Div 4 | | John Wyro (I) | bye year |
| | Div 5 | 11 | Brook Mancinelli | 58.85% |
| | | | Gene Gottfried (I) | 40.76% |
| | | | | |
| Nov-06 | | | | |
| | Div 1 | 10 | Frank Sperling | 55.50% |
| | | | Linda Borelli | 44.50% |
| | Div 2 | | Fred Weil (I) | bye year |
| | Div 3 | | Pete WIlson (I) | ran unopposed |
| | Div 4 | | John Wyro (I) | ran unopposed |
| | Div 5 | | Gene Gottfried (I) | bye year |
| | | | | |
| Nov-04 | Div 1 | | Gordon Nathan | bye year |
| | Div 2 | | Fred Weil (I) | ran unopposed |
| | Div 3 | | Pete WIlson (I) | bye year |
| | Div 4 | | John Wyro (I) | bye year |
| | Div 5 | | Gene Gottfried (I) | ran unopposed |

Table II-1

# MOFD Election Results

| | | | | |
|---|---|---|---|---|
| Nov-03 | Div 2 | 9 | Fred Weil | appointed to replace Ben Ho |
| | | | | |
| Nov-02 | Div 1 | | Gordon Nathan | ran unopposed |
| | Div 2 | | Ben Ho | bye year |
| | Div 3 | | Pete WIlson (I) | 87.80% |
| | | | Anthony Rodriguez | 12.20% |
| | Div 4 | | John Wyro (I) | ran unopposed |
| | Div 5 | | Short term | |
| | | | Gene Gottfried | 70.70% |
| | | | Mark Shaffer | 29.30% |
| | | | | |
| Jun-02 | Div 5 | 8 | Gene Gottfried | appointed to replace Robin Berens |
| | | | | |
| Nov-00 | Div 1 | | Gordon Nathan | bye year |
| | Div 2 | | Ben Ho | ran unopposed |
| | Div 3 | | Pete Wilson | bye year |
| | Div 4 | | Peter Scurr | bye year |
| | Div 5 | 7 | Robin Berens | 51.80% |
| | | | Gene Gottfried | 48.20% |
| | | | | |
| Nov-98 | Div 1 | | Gordon Nathan | ran unopposed |
| | Div 2 | 6 | Ben Ho | appointed to replace Mike Cory |
| | Div 3 | | Pete Wilson | ran unopposed |
| | Div 4 | | Peter Scurr | ran unopposed |
| | Div 5 | | John Wyro | bye year |
| | | | | |
| Jun-97 | Div 1 | 5 | Gordon Nathan | |
| | Div 2 | 4 | Mike Cory | |
| | Div 3 | 3 | Pete Wilson | |
| | Div 4 | 2 | Peter Scurr | |
| | Div 5 | 1 | John Wyro | |

In 15 years

- 14 MOFD Directors total
- 9 New Directors (one original director still on board)
  - 4 new Directors appointed by board
  - 5 new Directors chosen by vote
    - Only one of those three running against incumbent
- 22 elections for director
  - 4 times incumbent did not run
  - 13 times incumbent ran unopposed
  - 4 times incumbent won
  - 1 time incumbent lost

originally announced in late 2009, a public response calling for an election as opposed to an appointment caused Director Wilson to withdraw his retirement notice until it was too late to hold a mid-term election. This delay forced the board either to make an appointment or leave the seat vacant for eight months. The resulting appointee ran unopposed the following November.

The Task Force recommends MOFD review its policy of appointing replacements for retiring directors, especially near the end of a director's term, as in the case of Director Wilson. The very nature of a small, specialized district gives the incumbent a significant advantage. Of the 12 people who have served as MOFD directors, 5 came in as original directors (not elected) and 4 were appointed replacements. The public has only chosen three of all the directors in the 15-year history of MOFD. Lastly, the Task Force notes that including the two new presumptive directors joining in November 2012, 14 members of the community have held a directorship of MOFD since its inception, out of a possible number of 27, so the average Director has served two terms which seems appropriate.

***Further note***: On March 21, 2012, the reduced board of three directors decided to forego replacing-by-appointment the two positions opened by simultaneous resignation of two directors in February. Instead they chose to wait seven months until the voters could choose replacements at the next general election. The Task Force applauds this action that the three remaining directors took even though it added an extra burden on them.

**Division Representation** - While the directors of MOFD have to be responsive to the needs of the entire District, they are elected **by division** and **not at large**. Despite this, in the past the Orinda representatives have appeared to ignore individual needs or attributes of their particular divisions, ostensibly for the betterment of the whole of MOFD. The Task Force believes that has resulted in Orinda residents receiving less service at a higher cost.

Examples include:

1) *Orinda Ambulance Service* - In the first decade of operation, the Orinda ambulance service, one of the key advantages of MOFD compared to ConFire, was provided by the three firefighters stationed in Orinda's downtown station, number 45. When the ambulance was transporting victims to a hospital, this station (which is first responder to twice as many incidents as Orinda's two other stations combined) was empty. In the meantime, Moraga's main station had a full-time ambulance and a back-up paramedic engine. Only nine (53 percent) of MOFD's 17 firefighters were stationed in Orinda while Orinda taxpayers were providing up to 63 percent of the District's property tax revenue.
2) *Response Times* - Only 61 percent of Orinda's code-3 (critical) emergencies are answered within the six-minute industry guideline adopted by MOFD. This compares to a 75 percent compliance rate for Moraga. The Sleepy Hollow / Orinda Downs neighborhood, home to about 10 percent of Orinda's population, has close to a zero percent compliance rate. To the best of the Task Force's knowledge, this non-compliance issue has never been addressed by the MOFD board, including Orinda's representatives.
3) Property tax allocation - Orinda's taxpayers are currently providing 64 percent of the District's property tax revenue, but are only being served by 58 percent of the District's personnel. This $1 million mismatch has existed since the District was formed and has

widened over time. As detailed in Section V of this report, the District, including the representatives of Orinda's taxpayers, has gone to extraordinary lengths to try to explain away this inequity. The Task Force believes that Orinda's representatives should have approached this issue with a more open mind and better represented their taxpayers' rights.

**Citizen Involvement** - All MOFD meetings are open to the public with prior notice provided per provisions of the Brown Act. Meeting agendas are posted at the fire stations and on the District's Web site (www.MOFD.org). In addition, packets for each meeting (staff reports and other documents pertaining to agenda items) are available to the public and also posted on the Web site. The Web site also includes the minutes for the regular monthly meetings and has recently begun posting audio recordings of some of the meetings.

While the District professes the desire and need for public involvement, the Task Force notes that the District currently does not have, and to the best of its knowledge never has had, a standing or long-term committee that includes citizen participants. It has had ad-hoc citizen committees (for reviewing the credentials of Chief and Director candidates, for example), but even those have been very structured with limited influence.

The Task Force believes that the District would be well served by receiving more citizen involvement in the form of standing or report-oriented committees focusing on a number of issues confronting the district, including, but not limited to:

* Finances
* Water supply to hydrants, especially in Orinda
* Fuel supply reduction in Very High Fire Hazard Severity Zones
* Residential fire sprinkler systems - expanding to existing structures

*Example of the need for greater oversight / citizen involvement.* When the District's accountancy firm presented the District with the draft audited financial statement for the fiscal year ended June 30, 2011, it contained at least two errors. The first was a $30 million typo that overstated the District's pension assets, increasing them from $125 million to $155 million. It was on a line with the pension plan's liabilities ($142 million) and its net liability ($18 million). The facts are: (1) This one line, stating pension liabilities, should be a top priority in the current environment of chronically underfunded pension plans; (2) the amounts on this line are the largest numbers in the entire report by a factor of four; (3) with the typo in the asset column, the math no longer works. At least one of these three factors should have caught someone's attention.

The second error was the OPEB / GASB 45 / Retiree Medical Benefit liability given as $24 million. This was the value for two years ago (6/30/2009). In the same report that this value was presented, a value for 6/30/2011 was given as $26 million. Considering this was an accounting for the period ended June30, 2011, and $26 million is more conservative than $24 million, one could logically conclude the latter value should be used, or at least mentioned. It was not.

Both of these items are included in Exhibit VI-4, the version of the audited financials that went to the board for final approval on December 8.

These two errors were given to the staff; the staff passed them onto the Finance Committee; the Finance Committee passed them onto the full board; and the full board ratified the report, including the errors, all with no comments. In addition, prior to the full board approval, a Task Force member sent all members of the board an email, and in the email the $30 million typo was pointed out. Apparently, no one read the email. After the audited financials were approved by the board, the Task Force contacted the staff directly regarding the typo and it was corrected immediately.

While these errors do not substantively affect the operations or finances of the District, they are an indication that more eyes could be needed to make sure that substantive errors that might affect the well-being of the District are not lurking. The community is full of talented professionals who could add that "extra pair of eyes" and give appropriate professional advice.

A REPORT ON THE COSTS, OPERATIONS, PERFORMANCE AND FINANCES OF THE MORAGA-ORINDA FIRE DISTRICT (MOFD)

by

The Orinda Citizens Emergency Services Task Force
(www.OrindaTaskForce.org / Orinda_Task_Force@comcast.net)

# Section III - Emergency Incidents Served by MOFD

The 34,000 residents of Orinda, Moraga and Canyon are served by 19 MOFD firefighters on each shift, which equates to 5.6 firefighters per 10,000 population. The 600,000 residents living in Contra Costa County's ConFire service area are served by 90 firefighters, or 1.5 firefighters per 10,000 residents. The incident rate per capita in the two service areas is identical. Why does it take almost four times the firefighters per capita to serve MOFD?

Of the 1,420 most critical incidents (code-3 / lights and sirens) during the year studied (2009), 1,278 (90 percent) were medical incidents while only 75 (5 percent) were fires. (The other incidents were...?) Of the 75 fires, 16 involved structures which might have threatened the occupants (one structure fire for every 80 medical emergencies). These statistics demonstrate that MOFD is mainly an emergency-medical responder with the added capacity of being able to respond to a variety of other emergencies, including fires.

Most, if not all , the medical emergencies involved a single person . What is the appropriate response to such incidents? Records show that 6,992 MOFD firefighters responded to the 1,420 medical emergencies, an **average** of 4.9 responders per incident. Is this necessary or reasonable?

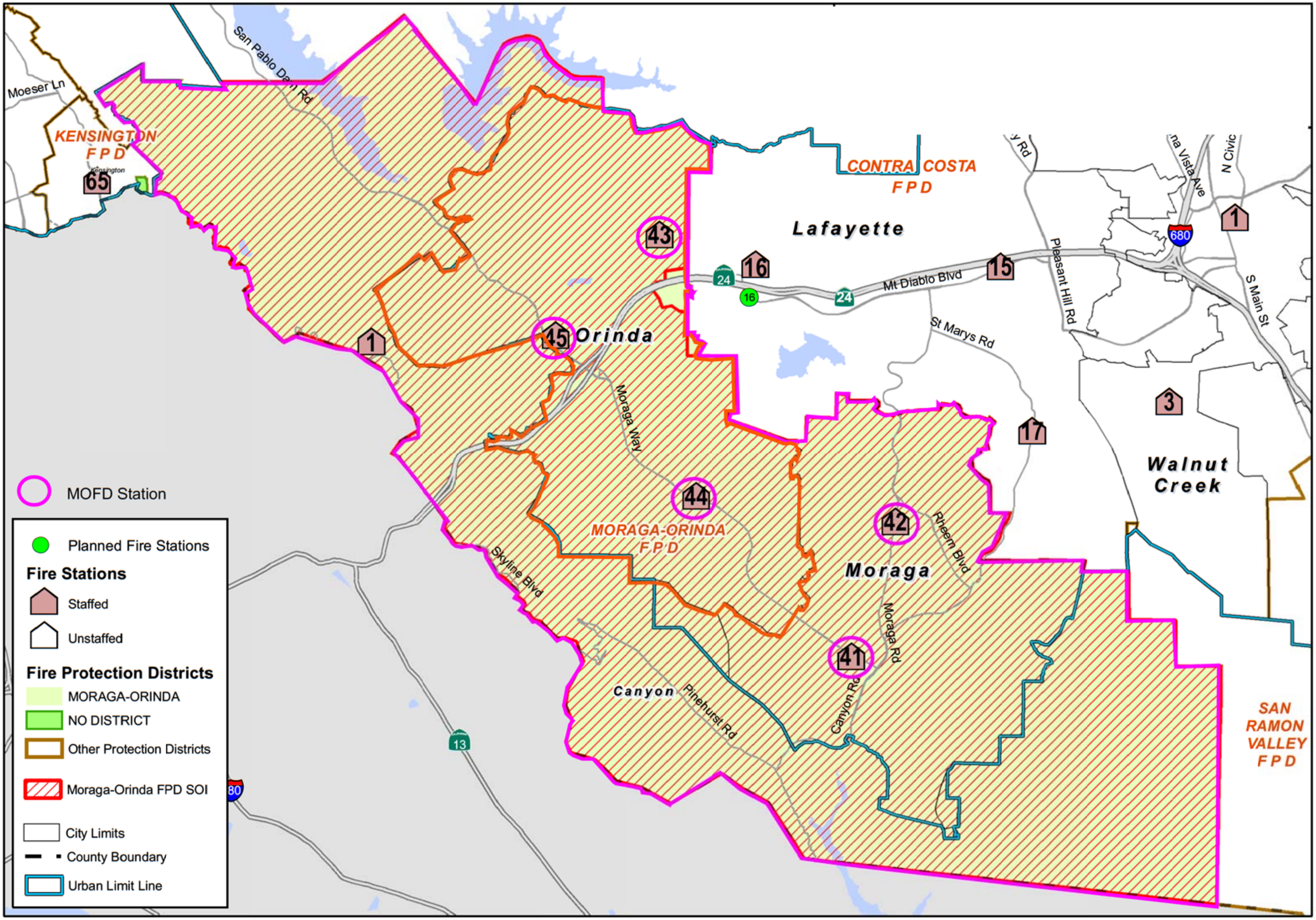
MOFD staffs its stations with three to five emergency personnel. Because the MOFD service area is so wide spread , the practice of concentrating emergency responders in a few stations results in poor response times. In 39 percent of Orinda's critical emergencies the times exceeded the six-minute industry standard (excluding dispatch times). For Moraga, the proportion was 25 percent.

The Task Force suggests MOFD re-examine its emergency-services priorities so it can deal more efficiently with the emergencies that actually occur in our communities.

***Response Force*** - MOFD has five stations, three in Orinda and two in Moraga (Map III-1), staffed by 19 firefighters. The Orinda stations have a total of one ambulance company and three engine companies. . The Moraga stations have one ambulance company and two engine companies. The ambulance companies are staffed by two people, the engine companies by three. Over half of the District's firefighters also are paramedics, with the remainder being EMTs (emergency medical technician). Every unit is staffed by at least one paramedic with the ambulances staffed by two paramedics. The District currently states its goal is to have a 100 percent paramedic-firefighter staff. The Task Force has not seen a study showing that the current mix of paramedics and EMTs doesn't provide appropriate service. Paramedics cost $10-20,000 more than EMTs. The MOFD says current union concessions allow for an all-paramedic force at the same cost as a mixed force. Whether these concessions are temporary or not is unclear.

## Map III-1

# Moraga-Orinda Fire Protection District Boundary and Sphere of Influence




Map created 01/09/2009
by Contra Costa County Department of Conservation and Development
GIS Group
651 Pine Street, 4th Floor North Wing, Martinez, CA 94553-0095
37:59:48.456N 122:06:35.384W

This map or dataset was created by the Contra Costa County Conservation and Development Department with data from the Contra Costa County GIS Program. Some base data, primarily City Limits, is derived from the CA State Board of Equalization's tax rate areas. While obligated to use this data the County assumes no responsibility for its accuracy. This map contains copyrighted information and may not be altered. It may be reproduced in its current state if the source is cited. Users of this map agree to read and accept the County of Contra Costa disclaimer of liability for geographic information.

***Response Frequency*** - Equipment operations (engines and ambulances) are detailed and summarized in Tables III-1 and III-2. In 2009, the District's seven emergency-response units, staffed by 19 personnel, provided 4,687 responses to 2,377 incidents within the MOFD service area. That is an average of 685 annual responses per unit, or about two per day.

Of the responses, 1,944 were by the District's two ambulances averaging just under three per day. The remaining 2,743 responses were by the five fire engines, averaging 1.5 operations per day or 10 per week. There is a great variance between the stations, ranging from one operation per day at Orinda's station 43 (off St. Stephens Dr.) to 2.4 operations per day at Moraga's station 41 on Moraga Way. Since each station is staffed 24/7 by three shifts of firefighters, each shift participated in approximately one-third of those operations.

Not surprisingly, Orinda accounted for 1,256 (about 53 percent) of the District's 2,377 incidents as it has slightly over half of the District's population. Also not surprisingly, slightly over half of the District's total equipment operations went to service those incidents.

Table III-2 details the number of responders, both units and personnel, by type of incident. Of the total 2,377 incidents in 2009, two-thirds were code-3, the highest priority, but 10 percent of those were false alarms. The remaining 1,400 critical incidents equates to an average of 200 responses annually by each of the District's seven units (five engines and two ambulances), or four per week per unit. But the primary (first responder) response-by-unit to critical incidents varies from slightly over 300 per year by each of District's ambulances to fewer than 100 by the engine stationed at Orinda's Station 43 off of St. Stephen's Dr. (2 per week). Again noting the low volume of activity due to the high number of emergency response units per capita.

Overall, including non-emergency responses and false alarms, MOFD units average about two calls per day and put an average of six responders on the scene of each critical incident and 3.5 responders at each non-critical incident.

***Incident Responders*** - While the vast majority of responses in Orinda and Moraga were from units based in the respective city, there is also a significant amount of mutual aid within the District and outside the District. Table III-1 displays this.

The importance of regional mutual aid can be seen in Table III-1. While 145 MOFD units responded to incidents outside of the MOFD service area, emergency units outside MOFD more than reciprocated. The Task Force was able to obtain data only from ConFire, but it is probable that this reflects the lion's share of mutual aid to MOFD. ConFire provided 260 responses into the MOFD service area -- 120 in Orinda and 140 in Moraga. The 2009 LAFCO report also stated that 5 percent of MOFD's operations occurred outside the MOFD service area, while 9 percent of the responses inside the MOFD service area came from other providers. Of the 145 operations from MOFD, Orinda-based units provided two thirds of these.

Orinda-based engines and Moraga-based engines also provide mutual aid within the district to each other's community. Orinda-based engines serviced Moraga incidents 123 times in 2009 and Moraga-based engines serviced Orinda incidents 173 times.

# Table III-1

# MOFD EQUIPMENT OPERATION SUMMARY (2009)

| | Total Operations To Orinda | Moraga | sub total | | Outside MOFD | Total | | Total Ops To Outside of City Limit |
|---|---|---|---|---|---|---|---|---|
| Operations From | 52.2% | 47.8% | | | | | | |
| Engines & Trucks | 1,431 | 1,312 | 2,743 | | 125 | 2,868 | | |
| Orinda | 1,258 | 123 | 1,381 | 50.3% | 83 | 1,464 | 51.0% | 206 |
| E143 | 306 | 20 | 326 | | 49 | 375 | | |
| E443 | 3 | 1 | 4 | | 0 | 4 | | |
| E144 | 319 | 70 | 389 | | 8 | 397 | | |
| E244 | 2 | 0 | 2 | | 0 | 2 | | |
| E145 | 597 | 21 | 618 | | 23 | 641 | | |
| E345 | 30 | 7 | 37 | | 3 | 40 | | |
| OES 290 | 1 | 4 | 5 | | 0 | 5 | | |
| Moraga | 173 | 1,189 | 1,362 | 49.7% | 42 | 1,404 | 49.0% | 215 |
| E141 | 69 | 461 | 530 | | 1 | 531 | | |
| E341 | 5 | 28 | 33 | | 1 | 34 | | |
| T141 | 61 | 222 | 283 | | 15 | 298 | | |
| E142 | 35 | 469 | 504 | | 22 | 526 | | |
| E342 | 3 | 9 | 12 | | 3 | 15 | | |
| | 50.8% | 49.2% | | | | | | |
| Ambulances | 988 | 956 | 1,944 | | 20 | 1,964 | | |
| Orinda | 744 | 139 | 883 | 45.4% | 16 | 899 | 45.8% | 155 |
| M144 | 20 | 12 | 32 | | 1 | 33 | | |
| M145 | 724 | 127 | 851 | | 15 | 866 | | |
| Moraga-M141 | 244 | 817 | 1,061 | 54.6% | 4 | 1,065 | 54.2% | 248 |
| | 51.6% | 48.4% | | | | | | |
| All MOFD Equipment | 2,419 | 2,268 | 4,687 | | 145 | 4,832 | | |
| Orinda | 2,002 | 262 | 2,264 | 48.3% | 99 | 2,363 | 48.9% | 361 |
| Moraga | 417 | 2,006 | 2,423 | 51.7% | 46 | 2,469 | 51.1% | 463 |
| Administration | 165 | 142 | 307 | | 63 | 370 | | |
| Fire Chief | 7 | 1 | 8 | | 1 | 9 | | |
| Battalion Chiefs | 154 | 137 | 291 | | 59 | 350 | | |
| Other | 4 | 4 | 8 | | 3 | 11 | | |
| Con Fire equipment responding to incidents in the MOFD service area | | | | | | | | |
| All operations reported | 120 | 140 | 260 | | | | | |

## Table III-2

# Number of Incidents and Responders by Incident Type

| | Number of Response Units at an Incident | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | more than 3 | Total Incidents | | Total Response Units | Total Responders | |
| Code 3 | | | | | | | | | |
| 12-False Alarms | 16 | 95 | 39 | 8 | 158 | 10% | 358 | 1,056 | 11% |
| 13-Medical | 48 | 995 | 212 | 23 | 1,278 | 81% | 2770 | 6,992 | 75% |
| 14-Fire | 20 | 10 | 7 | 38 | 75 | 5% | 276 | 780 | 8% |
| 15-Fire - potential | 4 | 1 | 0 | 6 | 11 | 1% | 36 | 101 | 1% |
| 16-Rescue | 0 | 0 | 1 | 0 | 1 | 0% | 3 | 8 | 0% |
| 17-Hazmat | 2 | 0 | 1 | 1 | 4 | 0% | 9 | 25 | 0% |
| 18-General assistance | 13 | 15 | 17 | 7 | 52 | 3% | 125 | 335 | 4% |
| Total Code 3 incidents | 103 | 1,116 | 277 | 83 | 1,579 | | | | |
| Total Code 3 units / responders | 103 | 2,232 | 831 | 411 | | | 3577 | 9,297 | |
| responder per incident | | | | | | | 2.3 | 5.9 | |
| | | | | | | | | | |
| non-Code 3 | | | | | | | | | |
| 12-False Alarms | 29 | 10 | 4 | 0 | 43 | 5% | 61 | 180 | 6% |
| 13-Medical | 259 | 124 | 15 | 2 | 400 | 50% | 560 | 1,285 | 46% |
| 14-Fire | 11 | 3 | 1 | 0 | 15 | 2% | 20 | 58 | 2% |
| 15-Fire - potential | 60 | 4 | 0 | 0 | 64 | 8% | 68 | 204 | 7% |
| 16-Rescue | 1 | 0 | 0 | 0 | 1 | 0% | 1 | 3 | 0% |
| 17-Hazmat | 27 | 4 | 0 | 0 | 31 | 4% | 35 | 104 | 4% |
| 18-General assistance | 139 | 92 | 10 | 3 | 244 | 31% | 365 | 986 | 35% |
| Total non-Code 3 | 526 | 237 | 30 | 5 | 798 | | | | |
| Total non-Code 3 units / responders | 526 | 474 | 90 | 20 | | | 1,110 | 2,820 | |
| responder per incident | | | | | | | 1.4 | 3.5 | |
| | | | | | | | | | |
| Total incidents | 629 | 1,353 | 307 | 88 | 2,377 | | | | |
| Total units / responders | 629 | 2,706 | 921 | 431 | | | 4,687 | 12,117 | |
| responder per incident | | | | | | | 2.0 | 5.1 | |

In aggregate, Orinda-based engines provided service outside of Orinda 206 times and Moraga-based engines provided service outside of Moraga 215 times.

The two MOFD ambulances also render service throughout the entire District, with the Orinda-based ambulance handling 139 Moraga incidents and the Moraga-based ambulance handling 244 Orinda incidents. There was some, but minimal, MOFD ambulance service outside the District.

The mutual aid within the District is not just for back-up service, but also for first-responder service (see Table III-3). Orinda-based engines were first-responders to 22 Moraga incidents and the Moraga-based engines reciprocated with 20 first responses to Orinda. The Moraga ambulance was first responder to 83 Orinda incidents, and the Orinda ambulance to 33 Moraga incidents.

***Response Times*** - The 2009 LAFCO report states that response times are one of the two "general indicators of service adequacy for municipal fire provider." Starting at page 252, (Exhibit I-4), LAFCO describes MOFD's response-time performance and offers the following comments:

* "The District's own response time goal is a six-minute response time."
* "District expects it will achieve this goal about 85 percent of the time for medical emergencies and 48-56 percent of the time for fires."
* "MOFPD ambulance response times were not available for 2007, although response-time data were provided for the first six weeks of 2009. Those data indicate that MOFPD responded within 4:39 minutes 50 percent of the time, and within 7:46 minutes 90 percent of the time."

In 2006, MOFD produced a Community Standards of Coverage report (Exhibit III-1). The first page contains the following statement: "It is recognized within the fire service profession that an emergency-service evaluation must take into account both the frequency and severity of the most common types of incidents. Emergency medical responses are the most frequent type of emergencies within the District and require immediate engine-based paramedic response and an advanced life support ambulance transport." The report explains and underscores the importance of fast responses, with six minutes used as the critical yardstick. Anything slower than that in medical incidents is likely to result in brain damage for cardiac arrest patients.

With structural fires, what is called flashover generally occurs in six to 10 minutes, after which the threat to life and property is greatly increased. This is the basis for the District's six-minute response time policy for critical emergencies.

Over the past several years the district has produced a monthly incident report summarizing the prior month's emergency incidents and the response times. This report (Exhibit III-2) has, until recently, only reported median response times and has not addressed how many critical incidents have or have not met the six-minute goal. Recently, however, this information was requested by a director so the report now includes a compliance page (page 4 of Exhibit III-2).

The District's definition of Response Time is measured from when the District receives a ConFire dispatcher call until the first vehicle arrives at the scene. Not included is the time -- usually 1-3 minutes -- it takes the dispatcher to process the call or route it either through the county Sheriff's

# Table III-3

# MOFD Incident First Responders (2009)

| | Total First Responses To | | | | Code 3 First Responses To | | | |
|---|---|---|---|---|---|---|---|---|
| | Orinda | Moraga | All MOFD | | Orinda | Moraga | All MOFD | |
| Operations From | 56.5% | 43.5% | | | 53.4% | 46.6% | | |
| Engines & Trucks | 709 | 545 | 1,254 | | 467 | 408 | 875 | |
| Orinda | 689 | 22 | 711 | 56.7% | 456 | 15 | 471 | 53.8% |
| E143 | 147 | 1 | 148 | | 92 | 1 | 93 | |
| E443 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| E144 | 248 | 15 | 263 | | 176 | 11 | 187 | |
| E244 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| E145 | 291 | 3 | 294 | | 187 | 0 | 187 | |
| E345 | 3 | 0 | 3 | | 1 | 0 | 1 | |
| OES 290 | 0 | 3 | 3 | | 0 | 3 | 3 | |
| Moraga | 20 | 523 | 543 | 43.3% | 11 | 393 | 404 | 46.2% |
| E141 | 11 | 159 | 170 | | 4 | 92 | 96 | |
| E341 | 1 | 2 | 3 | | 1 | 0 | 1 | |
| T141 | 4 | 36 | 40 | | 3 | 24 | 27 | |
| E142 | 4 | 326 | 330 | | 3 | 277 | 280 | |
| E342 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| | 48.7% | 51.3% | | | 49.7% | 50.3% | | |
| Ambulances | 547 | 576 | 1,123 | | 350 | 354 | 704 | |
| Orinda | 464 | 33 | 497 | 44.3% | 301 | 8 | 309 | 43.9% |
| M144 | 1 | 3 | 4 | | 1 | 0 | 1 | |
| M145 | 463 | 30 | 493 | | 300 | 8 | 308 | |
| Moraga-M141 | 83 | 543 | 626 | 55.7% | 49 | 346 | 395 | 56.1% |
| | 52.8% | 47.2% | | | 51.7% | 48.3% | | |
| All MOFD Equipment | 1,256 | 1,121 | 2,377 | | 817 | 762 | 1,579 | |
| Orinda | 1,153 | 55 | 1,208 | 50.8% | 757 | 23 | 780 | 49.4% |
| Moraga | 103 | 1,066 | 1,169 | 49.2% | 60 | 739 | 799 | 50.6% |

Note

The data provided by MOFD did not have valid response times for at least one responder in about 30% of the incidents.
The Task Force considered any reponse time less than one minute to be invalid.
The Task Force ignored the invalid incidents and "grossed up" the distribution among the valld incidents.

dispatcher (land-line calls) or the Highway Patrol dispatcher (cell-phone calls). It does include what's called "turnout time," the time until the vehicle is on the road, and travel time.

Interestingly, the new page in the MOFD response-time report excludes Turnout Time, reporting just travel times. For the first quarter of 2012, travel-time statistics, for Code 3 incidents were:

| | |
|---|---|
| Under 4:30 | 69 percent of the time. |
| Under 6:00 | 89 percent of the time. |
| Under 8:00 | 96 percent of the time. |

On page two of the MOFD report, the average Turnout Time is shown as about a one-and-a-half minutes; thus, the 4:30 Travel Time becomes a 6:00-minute response time, the 6:00-minute Travel Time becomes a 7:30-minute response time, etc. In other words, MOFD achieves the six-minute response-time goal 69 percent of the time and fails to do so 31 percent of the time.

The results of the Task Force analysis for response times are included in Table III-4. The Task Force generally concurs with MOFD's numbers showing that 32 percent of Code 3 incidents, district-wide do not meet the six-minute goal; 20 percent exceed seven minutes and 11 percent exceed eight minutes.

However, in Orinda the six-minute standard is exceeded 39 percent of the time, while in Moraga (plus Canyon) non-compliance is 25 percent. In Orinda, a seven-minute response is exceeded 23 percent of the time and an eight-minute response exceeded 12 percent of the time. In Sleepy Hollow and Orinda Downs, home to about one in 10 Orindans, the six-minute mark is exceeded virtually 100 percent of the time.

These response times exclude the interval from when a 911 call is made and a vehicle dispatched. MOFD data give some insight into this dispatch time. The average is 47 seconds, but 26 percent of the time it exceeds one minute (1:35 average); and 9 percent of the time it exceeds one-and-a-half minutes (2:33 average). In addition to this, 911 calls made from land-line calls are routed through the County Sherriff's office while cell phones are routed through the Highway Patrol dispatcher to the MOFD dispatcher (a service provided by ConFire), adding additional time.

## CONCLUSIONS AND DISCUSSION

Page 12 of the Standards of Coverage report (Exhibit III-1) states the following: "The chance of survival decreases by 10 percent for every minute that passes, so in order to be effective, defibrillation should be delivered within 3-5 minutes of collapse. After 6 minutes brain death is likely to occur and survivability is unlikely." Adding a mere minute to the response times that Orinda residents experience means that more than 60 percent of all responses in Orinda would exceed this six-minute mark -- a sobering thought.

A 2011 MOFD facilities study suggested moving the Orinda station to the bottom of Miner Road to provide overall better response times. This could have merit and fit with the city's overall master plan. However, the Task Force believes it would only partially address the response-time issues in

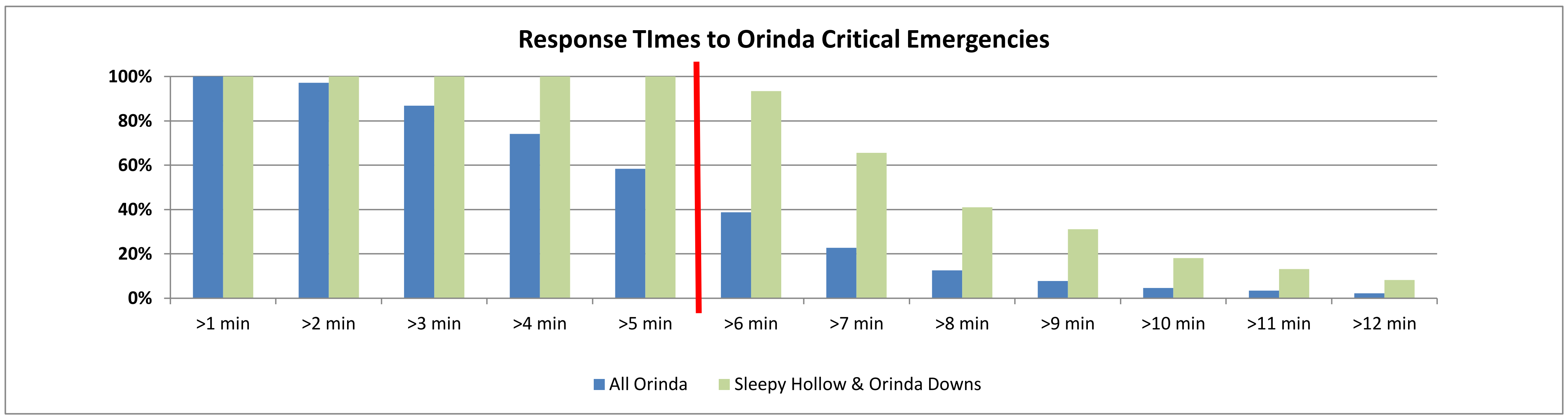
## Table III-4

# MOFD Response Times for First Responder

| Response Time Greater Than | Number of Incidents: Orinda Code 3 medical | Orinda Code 3 | Orinda All | Moraga Code 3 | Moraga All | MOFD Code 3 | MOFD All | Percent of Incidents: Orinda Code 3 medical | Orinda Code 3 | Orinda All | Moraga Code 3 | Moraga All | MOFD Code 3 | MOFD All |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All incidents | 652 | 817 | 1256 | 762 | 1121 | 1579 | 2377 | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0:02:00 | 634 | 794 | 1230 | 740 | 1097 | 1534 | 2327 | 97% | 97% | 98% | 97% | 98% | 97% | 98% |
| 0:03:00 | 558 | 709 | 1123 | 681 | 1026 | 1390 | 2147 | 86% | 87% | 89% | 89% | 91% | 88% | 90% |
| 0:04:00 | 471 | 606 | 992 | 500 | 821 | 1108 | 1817 | 72% | 74% | 79% | 66% | 73% | 70% | 76% |
| 0:05:00 | 364 | 478 | 821 | 323 | 597 | 806 | 1426 | 56% | 58% | 65% | 42% | 53% | 51% | 60% |
| 0:06:00 | 234 | 316 | 600 | 193 | 414 | 514 | 1021 | 36% | 39% | 48% | 25% | 37% | 33% | 43% |
| 0:07:00 | 131 | 186 | 416 | 122 | 277 | 310 | 699 | 20% | 23% | 33% | 16% | 25% | 20% | 29% |
| 0:08:00 | 66 | 102 | 279 | 65 | 191 | 168 | 473 | 10% | 13% | 22% | 9% | 17% | 11% | 20% |
| 0:09:00 | 38 | 63 | 184 | 40 | 130 | 104 | 317 | 6% | 8% | 15% | 5% | 12% | 7% | 13% |
| 0:10:00 | 20 | 37 | 129 | 22 | 82 | 60 | 212 | 3% | 5% | 10% | 3% | 7% | 4% | 9% |
| 0:11:00 | 13 | 27 | 85 | 16 | 59 | 44 | 145 | 2% | 3% | 7% | 2% | 5% | 3% | 6% |
| 0:12:00 | 7 | 17 | 60 | 9 | 45 | 27 | 106 | 1% | 2% | 5% | 1% | 4% | 2% | 4% |

| Dispatch Times* Greater Than | | Average |
|---|---|---|
| 0:00:00 | 100% | 0:00:47 |
| 0:00:30 | 62% | 0:01:06 |
| 0:00:45 | 44% | 0:01:18 |
| 0:01:00 | 26% | 0:01:35 |
| 0:01:15 | 15% | 0:01:58 |
| 0:01:30 | 9% | 0:02:23 |
| 0:01:45 | 6% | 0:02:46 |
| 0:02:00 | 3% | 0:03:25 |

* These are ConFire dispatch times. 911 calls from a land line go through the Sheriff's department and calls from cell phones go through the Highway Patrol to the Sheriff's dispatchers before reaching ConFire dispatch. Each of these take an incremental, but undetermined, extra time.



Sleepy Hollow and Orinda Downs, where two-thirds of all critical incidents have response times exceeding seven minutes, excluding dispatch times.

The Task Force is not making recommendations but merely analyzing available data. As described in Section IV, Orinda and Moraga taxpayers pay a large emergency-services premium; twice the property tax rate for emergency services as the county average. Because of the semi-rural nature of the District, a greater number of response units per capita is required to provide appropriate response times. According to the LAFCO report, MOFD residents have approximately the same number of incidents per capita as the residents in the ConFire service area but, where ConFire serves approximately 600,000 residents with 30 emergency units, MOFD's seven units in five stations serve 34,000, over four times the number of emergency units per capita as ConFire. Do we need still more to provide adequate response times?

A further observation: MOFD's 19 personnel are concentrated in five stations - 3.8 firefighters per station. Most code-3 incidents (90 percent, excluding false alarms) are medical in nature (Table II-5). How many medical personnel are required to be an effective first-response team to an emergency medical incident? Should the MOFD personnel be less concentrated, more spread out?

The MOFD Standards of Coverage report stated "emergency service evaluation must take into account both the frequency and severity of the most common types of incidents." In 2009, there were 652 Code 3 emergencies and eight structure fires. Further, national statistics show there is only one injury for every 30 residential fires and only one death in every 150 fires. Those numbers suggest that in the 20 years that one fire-related death might occur in Orinda there will be 13,000 Code 3 emergencies. How many will be heart attacks or strokes? Does it make sense to staff our stations with three to five firefighters in anticipation of an event that occurs only once every 20 years ? Or would it make more sense to spread them out for the twice-a-day event? Possibly create satellite paramedic stations in ill-served areas like Sleepy Hollow and reduce staffing in, but do not close, underutilized stations.

***Incident Types*** - Table III-5 summarizes and details the incident types dealt with by MOFD in 2009. Of the 2,377 incidents that year, 201 were false alarms, although they still needed to be answered. Of the remaining 2,176 incidents:

1,678 (77 percent) were medical .
296 (14 percent) were general assistance.
90 (4 percent) were fires, 16 of which involved structures.
75 were potential fires, that is reports of smoke or steam.
35 dealt with hazardous materials (gas leaks, flammable material spills, etc.).
2 rescue operations.

Two-thirds of the total incidents, or 1,421, were high-priority, code-3, responded to with lights and sirens:

1,278 medical.
75 fires, including 16 building fires.
68 other.

# Table III-5

# MOFD 2009 Incidents by Type

## Summary

| | All MOFD | | | | Orinda Only | | | | | Moraga and Canyon | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All | Code 0-1 | Code 2 | Code 3 | All | Code 0-1 | Code 2 | Code 3 | Code 3 percent | All | Code 0-1 | Code 2 | Code 3 | Code 3 percent |
| All Dispatches to MOFD Service Area | 2962 | 76 | 771 | 2115 | 1528 | 45 | 423 | 1060 | | 1434 | 31 | 348 | 1055 | |
| Dispatched & cancelled en route | 585 | 8 | 41 | 536 | 272 | 4 | 25 | 243 | | 313 | 4 | 16 | 293 | |
| Incidents attended to | 2377 | 68 | 730 | 1579 | 1256 | 41 | 398 | 817 | | 1121 | 27 | 332 | 762 | |
| False Alarms | 201 | 1 | 42 | 158 | 98 | 1 | 19 | 78 | | 103 | 0 | 23 | 80 | |
| Non False Alarm incidents | 2176 | 67 | 688 | 1421 | 1158 | 40 | 379 | 739 | 100% | 1018 | 27 | 309 | 682 | 100% |
| Medical | 1678 | 2 | 398 | 1278 | 846 | 1 | 193 | 652 | 88% | 832 | 1 | 205 | 626 | 92% |
| Fire | 90 | 1 | 14 | 75 | 51 | 1 | 8 | 42 | 6% | 39 | 0 | 6 | 33 | 5% |
| Building Fire | 16 | 0 | 0 | 16 | 8 | 0 | 0 | 8 | 1% | 8 | 0 | 0 | 8 | 1% |
| Fire - potential | 75 | 0 | 64 | 11 | 56 | 0 | 48 | 8 | 1% | 19 | 0 | 16 | 3 | 0% |
| Rescue | 2 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0% | 1 | 0 | 0 | 1 | 0% |
| Hazmat | 35 | 0 | 31 | 4 | 21 | 0 | 18 | 3 | 0% | 14 | 0 | 13 | 1 | 0% |
| General assistance | 296 | 64 | 180 | 52 | 183 | 38 | 111 | 34 | 5% | 113 | 26 | 69 | 18 | 3% |

## Detail

| | | All MOFD | | | Orinda | | | Moraga | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Code 1 | Code 2 | Code 3 | Code 1 | Code 2 | Code 3 | Code 1 | Code 2 | Code 3 |
| Dispatched & cancelled en route | 11- Canceled | 8 | 41 | 536 | 4 | 25 | 243 | 4 | 16 | 293 |
| Alarm system sounded due to malfunction | 12-False Alarms | 0 | 1 | 14 | 0 | 1 | 12 | 0 | 0 | 2 |
| Alarm system sounded, no fire - unintentional | 12-False Alarms | 0 | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 2 |
| CO detector activation due to malfunction | 12-False Alarms | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 1 | 0 |
| Detector activation, no fire - unintentional | 12-False Alarms | 0 | 1 | 4 | 0 | 1 | 2 | 0 | 0 | 2 |
| Extinguishing system activation due to malfunction | 12-False Alarms | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| False alarm or false call, other | 12-False Alarms | 0 | 14 | 61 | 0 | 4 | 19 | 0 | 10 | 42 |
| Good intent call, other | 12-False Alarms | 0 | 8 | 0 | 0 | 3 | 0 | 0 | 5 | 0 |
| Heat detector activation due to malfunction | 12-False Alarms | 0 | 1 | 3 | 0 | 1 | 2 | 0 | 0 | 1 |
| Local alarm system, malicious false alarm | 12-False Alarms | 0 | 0 | 5 | 0 | 0 | 2 | 0 | 0 | 3 |
| Malicious, mischievous false call, other | 12-False Alarms | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Municipal alarm system, malicious false alarm | 12-False Alarms | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| No incident found on arrival at dispatch address | 12-False Alarms | 0 | 7 | 5 | 0 | 4 | 3 | 0 | 3 | 2 |
| Smoke detector activation due to malfunction | 12-False Alarms | 0 | 3 | 14 | 0 | 3 | 8 | 0 | 0 | 6 |
| Smoke detector activation, no fire - unintentional | 12-False Alarms | 1 | 1 | 27 | 1 | 0 | 17 | 0 | 1 | 10 |
| Sprinkler activation, no fire - unintentional | 12-False Alarms | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| System malfunction, other | 12-False Alarms | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 |
| Unintentional transmission of alarm, other | 12-False Alarms | 0 | 0 | 12 | 0 | 0 | 6 | 0 | 0 | 6 |
| EMS call, excluding vehicle accident with injury | 13-Medical | 1 | 375 | 1181 | 0 | 181 | 581 | 1 | 194 | 600 |
| Medical assist, assist EMS crew | 13-Medical | 0 | 11 | 13 | 0 | 5 | 9 | 0 | 6 | 4 |
| Motor vehicle/pedestrian accident (MV Ped) | 13-Medical | 0 | 1 | 3 | 0 | 0 | 2 | 0 | 1 | 1 |
| Rescue, emergency medical call (EMS) call, other | 13-Medical | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 1 |
| Vehicle accident with injuries | 13-Medical | 1 | 9 | 80 | 1 | 5 | 60 | 0 | 4 | 20 |

# Table III-5

## MOFD 2009 Incidents by Type

### Detail (2 of 3)

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Barbecue, tar kettle | 14-Fire | 0 | 2 | 1 | 0 | 2 | 1 | 0 | 0 | 0 |
| Brush, or brush and grass mixture fire | 14-Fire | 0 | 1 | 6 | 0 | 0 | 3 | 0 | 1 | 3 |
| Building fire | 14-Fire | 0 | 0 | 16 | 0 | 0 | 8 | 0 | 0 | 8 |
| Chimney or flue fire, confined to chimney or flue | 14-Fire | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 |
| Cooking fire, confined to container | 14-Fire | 0 | 2 | 7 | 0 | 2 | 4 | 0 | 0 | 3 |
| Cultivated vegetation, crop fire, other | 14-Fire | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Fire in portable building, fixed location | 14-Fire | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Fire, other | 14-Fire | 1 | 2 | 5 | 1 | 2 | 0 | 0 | 0 | 5 |
| Fires in structures other than in a building | 14-Fire | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Forest, woods or wildland fire | 14-Fire | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 |
| Grass fire | 14-Fire | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 |
| Mobile property (vehicle) fire, other | 14-Fire | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 |
| Natural vegetation fire, other | 14-Fire | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Off-road vehicle or heavy equipment fire | 14-Fire | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Outside equipment fire | 14-Fire | 0 | 1 | 4 | 0 | 1 | 3 | 0 | 0 | 1 |
| Outside rubbish fire, other | 14-Fire | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 |
| Outside rubbish, trash or waste fire | 14-Fire | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 3 |
| Outside storage fire | 14-Fire | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 |
| Passenger vehicle fire | 14-Fire | 0 | 0 | 11 | 0 | 0 | 8 | 0 | 0 | 3 |
| Special outside fire, other | 14-Fire | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 |
| Trash or rubbish fire, contained | 14-Fire | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 1 |
| Unauthorized burning | 14-Fire | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Attempt to burn | 15-Fire - potential | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Smoke or odor removal | 15-Fire - potential | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Smoke scare, odor of smoke | 15-Fire - potential | 0 | 57 | 10 | 0 | 43 | 7 | 0 | 14 | 3 |
| Steam, other gas mistaken for smoke, other | 15-Fire - potential | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Steam, vapor, fog or dust thought to be smoke | 15-Fire - potential | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 2 | 0 |
| Extrication of victim(s) from building/structure | 16-Rescue | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Extrication of victim(s) from vehicle | 16-Rescue | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Flammable gas or liquid condition, other | 17-Hazmat | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |
| Gas leak (natural gas or LPG) | 17-Hazmat | 0 | 10 | 1 | 0 | 7 | 1 | 0 | 3 | 0 |
| Gasoline or other flammable liquid spill | 17-Hazmat | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Hazardous condition, other | 17-Hazmat | 0 | 12 | 2 | 0 | 6 | 2 | 0 | 6 | 0 |
| Hazmat release investigation w/ no hazmat | 17-Hazmat | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 1 |
| Oil or other combustible liquid spill | 17-Hazmat | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Undefined | 18-General assistance | 61 | 0 | 0 | 36 | 0 | 0 | 25 | 0 | 0 |
| Accident, potential accident, other | 18-General assistance | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| Animal problem | 18-General assistance | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |
| Animal problem, other | 18-General assistance | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Animal rescue | 18-General assistance | 1 | 4 | 0 | 1 | 4 | 0 | 0 | 0 | 0 |
| Arcing, shorted electrical equipment | 18-General assistance | 0 | 7 | 4 | 0 | 4 | 3 | 0 | 3 | 1 |
| Assist invalid | 18-General assistance | 0 | 55 | 6 | 0 | 32 | 3 | 0 | 23 | 3 |
| Assist police or other governmental agency | 18-General assistance | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Citizen complaint | 18-General assistance | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Electrical  wiring/equipment problem, other | 18-General assistance | 0 | 8 | 3 | 0 | 4 | 1 | 0 | 4 | 2 |
| Flood assessment | 18-General assistance | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Heat from short circuit (wiring), defective/worn | 18-General assistance | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |

# Table III-5

# MOFD 2009 Incidents by Type

## Detail (3 of 3)

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Light ballast breakdown | 18-General assistance | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Lock-in (if lock out , use 511 ) | 18-General assistance | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Lock-out | 18-General assistance | 0 | 18 | 1 | 0 | 13 | 0 | 0 | 5 | 1 |
| Motor vehicle accident with no injuries | 18-General assistance | 1 | 1 | 23 | 0 | 1 | 19 | 1 | 0 | 4 |
| Overheated motor | 18-General assistance | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 |
| Person in distress, other | 18-General assistance | 0 | 13 | 4 | 0 | 4 | 1 | 0 | 9 | 3 |
| Police matter | 18-General assistance | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Power line down | 18-General assistance | 1 | 8 | 4 | 1 | 6 | 3 | 0 | 2 | 1 |
| Public service | 18-General assistance | 0 | 7 | 1 | 0 | 5 | 1 | 0 | 2 | 0 |
| Public service assistance, other | 18-General assistance | 0 | 7 | 0 | 0 | 4 | 0 | 0 | 3 | 0 |
| Service Call, other | 18-General assistance | 0 | 10 | 0 | 0 | 4 | 0 | 0 | 6 | 0 |
| Severe weather or natural disaster, other | 18-General assistance | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Water or steam leak | 18-General assistance | 0 | 15 | 1 | 0 | 10 | 1 | 0 | 5 | 0 |
| Water problem, other | 18-General assistance | 0 | 12 | 0 | 0 | 11 | 0 | 0 | 1 | 0 |

If the community were forced to focus on a rapid response to life-threatening emergencies, what would be included? Obviously, all medical emergencies. What else? Possibly structure fires?

The following table shows national statistics of injuries and deaths occurring from fires and from medical causes. Based on a national average of one injury per 30 residential fires and one death per 150 fires, Orinda and Moraga might experience a fire-related death once every 10 years. However, we could expect to see 170 heart attacks and 90 strokes annually, with a significant percent of those resulting in death or permanent disability.

| | National | MOFD | Actual or Pro-Rata to National number |
|---|---|---|---|
| Population | 300,000,000 | 34,000 | |
| | | | |
| Residential fires | 377,000 | 16 | (actual) |
| Residential Fire Injuries | 13,050 | 0.55 | one every other year (pro-rata) |
| Residential Fire Deaths | 2,565 | 0.11 | one every 10 years (pro rata) |
| | | | |
| Medical Incidents | | | |
| heart attacks | 1,500,000 | 170 | per year (pro rata) |
| deaths | 500,000 | 57 | per year (pro rata) |
| strokes | 800,000 | 91 | per year (pro rata) |
| deaths | 150,000 | 17 | per year (pro rata) |
| | | | |
| heart attacks + strokes | | 261 | 500 times the fire injury rate |
| heart attack + stroke deaths | | 74 | 700 times the fire death rate |

Obviously, it is not that the community can ignore fires, but if personal safety is primary, we need to understand the realities in order to properly allocate resources. And there are other ways to further minimize the impact of fires.

Residential fire sprinkler systems have proven effective. They eliminate the risk of "flashover" (triggered by heat buildup, literally causing a structure to explode); this is the prime reason for a six-minute response time for structure fires. In a literature search the Task Force could find no record of a death by fire in single family residences with fire sprinklers. For new construction and major remodeling in Orinda sprinklers are mandatory. Would it make sense to create incentives to get people to retrofit existing homes? The insurance industry already provides an incentive with a 10 percent premium reduction. If it would help reduce our fire-protection force needs, the savings could possibly justify subsidies for sprinkler installation. Would a city/agency guaranteed loan program incent people to retrofit their homes and reduce the need for ultra-fast response to building fires?

**With regards to the risk of wild-land fires, the Task Force makes the following observations:**

1) Virtually all of MOFD's Very High Fire Hazard Severity Zones are located in MOFD's Division 5, north of Highway 24.

2) Over half of Orinda's sub-standard hydrants (Exhibit III-3 on the Task Force web site - www.OrindaTaskForce.org) are also located in Division 5's Very High Fire Hazard Severity Zones. While MOFD says that its 3,000-gallon tanker is sufficient to deal with a structure fire served by an inadequate hydrant, it would provide only a few-minutes supply in a wild-land fire. Industry standards are that three adjacent hydrants are supposed to supply over 1,000 gallons per minute each. Exhibit III-3 shows there are areas that this criteria is clearly not met and closer study would probably show that there are even greater areas that this coverage is also lacking.

At the time of formation, Orindans were told that 1/3 of the MOFD parcel tax, called the "fire flow" tax because it is based on the amount of water needed to suppress a house fire, charged annually to property owners would be used for seismic retrofitting of stations and upgrading water pipes in Orinda (see Exhibit III-3). Since the district was formed, over $8 million of tax has been collected. $400,000 has been used for seismic retrofitting. To date, nothing has been spent for water pipe upgrades.

While all MOFD directors are responsible for servicing the District, the "special situations" for this Division 5 is an example of the need for strong divisional representation. Division 5's board representative, Brook Mancinelli, resigned in February 2012. A replacement will be voted for in November 2012. The Task Force suggests that residents of Division 5 understand the special situation existing in Division 5 and choose a representative who is willing to take their issues back to the full board for appropriate deliberation.

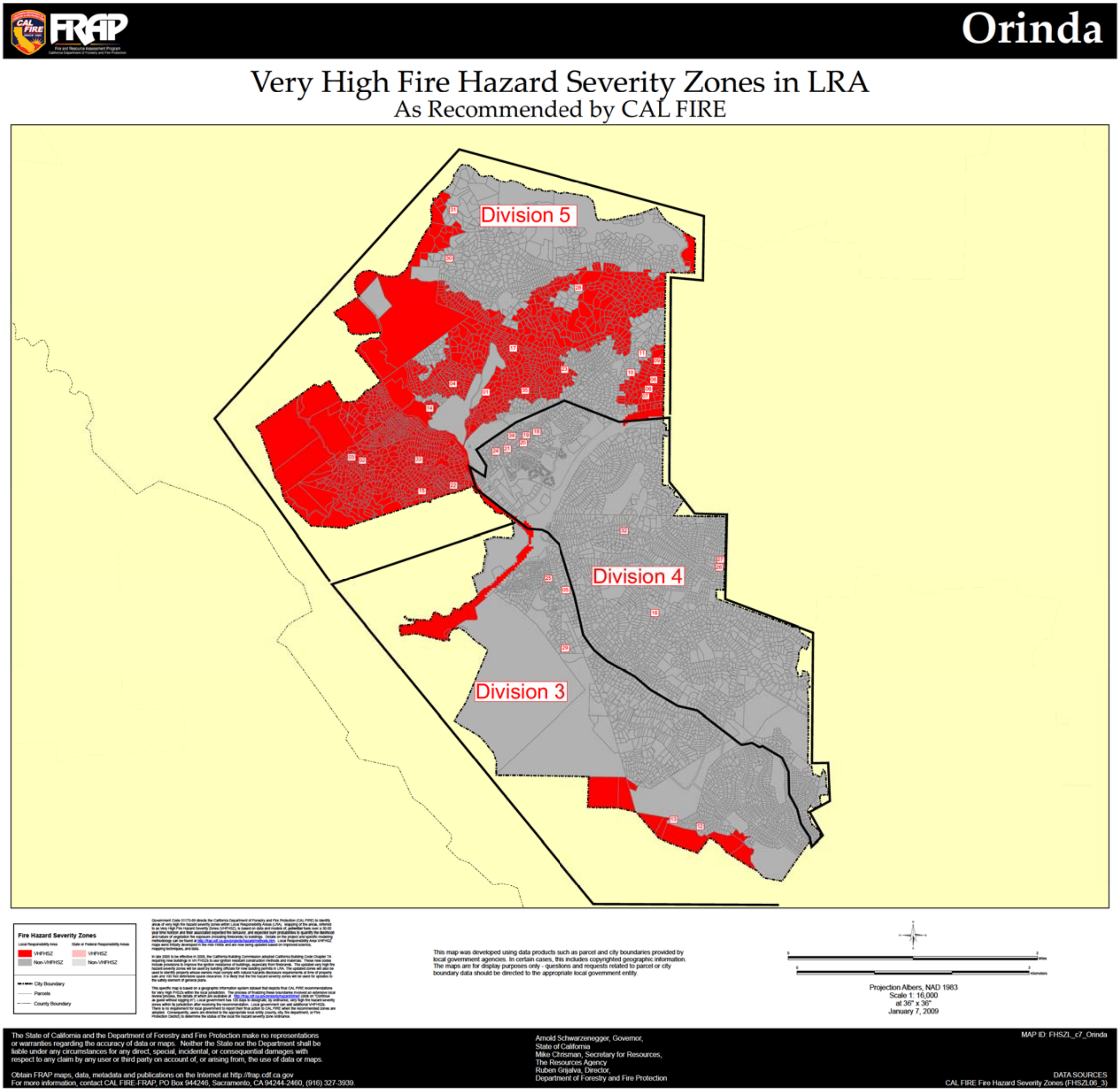
3) Defensible space and vegetation fuel control are issues throughout the District and most homes in Orinda are heavily impacted by excessive undergrowth and overgrowth. The Task Force knows that the District is aware of these issues; has a long-standing weed abatement program; and has recently started other programs regarding wildland fire prevention and awareness. However, the Task Force questions if the appropriate resources are being allocated toward prevention as opposed to suppression of wildland fires. The Task Force has not studied this issue in detail but suggests that it is a topic the community should consider seriously in the future.

***Data utilized for incident analysis*** - In February 2010, the grass-roots group FAIR (Fire And Infrastructure Renewal / www.FairForOrinda.org) requested equipment-response data from MOFD. MOFD originally provided this data, for calendar year 2009, in an Adobe Acrobat, PFD file which is available as Exhibit III-4 on the Task Force web site (www.OrindaTaskForce.org). Upon further request, MOFD provided the same information in an Excel spreadsheet. FAIR reorganized and condensed the data into a 6,249 row by 13 column spreadsheet which can also be accessed on the Task Force's Web site as Exhibit III-5.

Exhibit III-3

Inadequate Fire Hydrants in Orinda

(for more detail go to www.OrindaTaskForce.org/exhibits)



# Section IV - Operational Costs, Revenues, Reserves and Projections

This section summarizes MOFD's annual revenue and expenses plus the District's long range financial plan. It focuses on the long range plan, suggesting alternative growth rates for expenses to address the issue of underfunded retiree benefits, exploring what it will take for the District to both continue providing the service Orinda and Moraga residents expect and pay down the $400-500 million of unfunded deferred employee benefits discussed in Section VI. Those costs are significant. Table IV-4b shows total retirement benefit costs of $10.5 million in 2013/14, over half of the projected revenue for that year.

To understand the details of MOFD revenues and expenses this report examines the fiscal year ending June 30, 2011, but, where appropriate, utilizes the yet-to-be-adopted 2012/13 budget.

In 2010/11 MOFD received $19.6 million in revenue, over 90 percent coming from local property taxes. Revenues to MOFD for the fiscal year 2011/12 were down $430,000, and are budgeted to decrease another $470,000 in 2012/13 (although the County Assessor reports property taxes are rising).

In 2010/11 MOFD spent $100,000 in excess of revenues; in 2011/12 they spent $50,000 in excess of revenues; but in 2012/13 they are budgeting $2.4 million in excess of revenues, mainly due to a planned $2 million expenditure to rebuild Orinda's Station 43 off of St. Stephens Drive. This will lower their cash reserves to $4.2 million.

Of the total 2010/11 expenditures, $18.2 million were operating expenses of which 90 percent, $16.3 million, went to employee salary and benefits. 80 percent of the salaries and benefits went to firefighters with the administration receiving the remaining 20 percent. The average firefighter received $217,000 in salary and benefits. This did not include, however, the cost of the $400 million to $500 million in unfunded benefits that has already been vested by current and past employees. Funding this shortfall over the next 30 years would require $3.6 million starting immediately and increase the annual cost per firefighter to $265,000. This would require a major restructuring of the service model.

Most of the data in this section is restated MOFD data. The Task Force has created four tables:

| | |
|---|---|
| Table IV-1 | A one page Expense and Revenue schedule for last fiscal year 2010/11 |
| Table IV-2 | Property Tax Revenues |
| Table IV-3 | A detailed schedule of every MOFD's employees' cost for 2011 |
| Table IV-4a | A one-page Long Range Financial Forecast going out to 2023 |

MOFD has an annual budget of almost $20 million, exceeding the combined budgets of the City of Orinda and the Town of Moraga. The Task Force is unaware of any other community that spends over 50 percent of its resources on emergency services.

83 percent of MOFD's expenses are for personnel: 67 percent for firefighters and 16 percent for administration personnel. The remaining 17 percent is spent on operational expenses (10 percent) and capital costs (7 percent).

In 2011 (Table IV-3) the average MOFD firefighter received salary and benefits costing the District $235,000 (excluding much of the cost of funding the $400-500 million in unfunded liabilities discussed in Section VI). Including the cost of funding these shortfalls over the next 30 years, the Task Force estimates that the average per-firefighter cost could increase to over $300,000 per year.

91 percent of MOFD's revenue comes from property taxes; both ad valorem taxes (86 percent) and a special parcel tax (5 percent ). 5 percent of MOFD's revenue comes from service charges, mostly ambulance fees. The remaining 4 percent comes from other county sources.

64 percent of the property taxes are paid by Orinda property owners and 36 percent are paid by Moraga property owners (Table IV-2). Including a parcel tax, 24 percent of Orinda's property tax goes to MOFD while 21 percent of Moraga's is so directed. This compares to 14 percent for Lafayette, 16 percent for Danville and 13 percent for Walnut Creek with 12-13 percent being the average for the entire county (LAFCO 2009 MSR - Exhibit I-4 ; page 56).

MOFD has historically had a balanced budget and at the end of 2010/11 had reserves of $7 million. However, over the next four years due to increased pension expenses and facility construction projects, MOFD projects that it will draw its reserves down to as low as $1.5 million (Table IV-4a). It then expects those reserves to revive with a decrease in pension expenses (starting in 2015/16) while constraining other cost increases. The Task Force questions that optimism as the District has $400-500 million in unfunded liabilities which will need to be paid off.

The District has significant resources from its tax revenues. The District probably has the ability to weather the storm of pension funding increases, which the Task Force believes are inevitable, without the specter of functional service cuts but it needs to act now and take actions it has been unwilling to take in the past. The Task Force will explore, in Section VI of this report, how it believes that within 10 years the District will have to be paying $8 million, on top of current pension costs, to pay off its unfunded pension liabilities accrued over the past 30 years, but how, with judicious personnel planning, it can accomplish this with no degradation in service to the community.

**Revenue and Expenses - Fiscal year 2010/11**

Table IV-1 summarizes MOFD's revenue and expenses for MOFD's last complete fiscal year 2010/11. This data came from the 2011/12 budget document which is available as Exhibit IV-1 on the Task Force's Web site, www.OrindaTaskForce.org. Note: at the time of the completion of this report, MOFD's preliminary budget for 2012/13, with preliminary results from 2011/12 has been released and is referenced in this report. It is available as Exhibit IV-1b on the Task Force's Web site.

MOFD breaks its budget into two parts: (1) the General Fund and (2) the Special Revenue Fund. The Special Revenue Fund is essentially the District's capital fund but can be used for other things so it is labeled "special". Table IV-1 aggregates the two.

# Table IV - 1

# MOFD Annual Expenses and Revenues

Fiscal Year 2010/11

## Expenses

| | Administration | Firefighters | All | Expense per Firefighter |
|---|---|---|---|---|
| Employees | 13 ea | 62 ea | | |
| Salaries + Basic Benfits | 2,333,275 | 10,125,053 | 12,458,328 | 163,307 |
| Base | 1,634,496 | 6,756,453 | 8,390,949 | 108,975 |
| Overtime | 195,128 | 1,312,944 | 1,508,072 | 21,177 |
| Total Salary | 1,829,624 | 8,069,397 | 9,899,021 | 130,152 |
| Medical & Life Insurance | 145,590 | 681,514 | 827,104 | 10,992 |
| Pension | 301,184 | 1,222,825 | 1,524,009 | 19,723 |
| Def Comp | 43,723 | 2,980 | 46,703 | 48 |
| Misc | 13,155 | 148,336 | 161,491 | 2,393 |
| Other Employee Expenses | 756,131 | 3,115,651 | 3,871,782 | 50,252 |
| Workers Comp | 156,355 | 623,937 | 780,292 | 10,063 |
| Retiree Medical | 153,556 | 680,033 | 833,589 | 10,968 |
| Pension Bond | 446,220 | 1,811,681 | 2,257,901 | 29,221 |
| Employee s/t | 3,089,407 | 13,240,703 | 16,330,110 | 213,560 |
| Operating Costs | | | 1,920,500 | |
| Total excluding Cap Costs | | | 18,250,610 | |
| Capital Costs | | | 1,457,478 | |
| Total Expenses | | | **19,708,088** | |

## Revenues

| | |
|---|---|
| Property Taxes | 17,769,563 |
| Orinda | 11,366,490 |
| Orinda % of total | 64.0% |
| Ad Valorem | 10,772,528 |
| Parcel | 593,962 |
| Moraga & Canyon | 6,403,073 |
| Ad Valorem | 5,929,066 |
| Parcel | 474,007 |
| Intergovernmental Revenue | 190,681 |
| Measure H | 178,367 |
| Charge For Service | 989,872 |
| Ambulance | 906,709 |
| Vehicle Accident Recovery | 7,146 |
| Other | 76,017 |
| Other Rev | 494,816 |
| | ================== |
| Total Revenue | **19,623,299** |

## Net Surplus / (loss) **(84,789)**

| Fund Balance | Beginning | Earnings | Ending Balance |
|---|---|---|---|
| General Fund | 3,687,406 | 42,676 | 3,730,082 |
| Special Fund | 3,118,340 | (127,476) | 2,990,864 |
| Total | 6,805,746 | (84,800) | 6,720,946 |

Source: Moraga-Orinda Fire District / 2011/12 Draft General and Special Revenue Fund Budgets

Available on-line
http://www.mofd.org/content/agendaminutes/file/090111 Finance Committee Agenda and Board Packet.pdf
Attachment 2 - pages 10-13
Attachment 4 - page 15

# Table IV - 2
# Detail of MOFD Property Tax Revenue 2011/12

| | Rate (1) | 2011/12 Assessed Value | 2011/12 Ad Valorem Tax | | Fire Flow Parcel Tax | Total Property Tax | | Number Of Firefighters Staioned | Percent Of Firefighters Staioned | Tax Allocated by Percent Stationed | Tax Paid in Excess of Tax Allocated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MOFD Total** | **21.176%** | **7,718,747,877** | **16,327,212** | | 1,066,605 | **17,393,817** | | | | | |
| **Orinda + Moraga** | **21.152%** | **7,717,853,900** | **16,325,071** | **100.0%** | 1,066,605 | **17,391,676** | **100.0%** | 19 | **100.0%** | **17,391,676** | **-** |
| Tax Rate Area | | 4,659,791 | | | | | | | | | |
| **Orinda + Unincorporated** | **22.602%** | **4,659,790,595** | **10,529,000** | **64.5%** | **593,198** | **11,122,198** | **64.0%** | 11 | **57.9%** | **10,068,865** | **1,053,333** |
| 18001 | 22.947% | 4,102,685,594 | 9,414,478 | x | 510,892 | 9,925,370 | | 1,011,109 per firefighter | | | |
| 18003 | 24.192% | 47,714,124 | 115,431 | x | 6,417 | 121,848 | | | | | |
| 18007 | 18.212% | 98,560,388 | 179,496 | x | 11,949 | 191,445 | | | | | |
| 18012 | 20.054% | 373,164,095 | 748,333 | x | 59,800 | 808,133 | | | | | |
| 18025 | 19.782% | 700,000 | 1,385 | x | 82 | 1,467 | | | | | |
| 18034 | 13.768% | 398,880 | 549 | x | 77 | 626 | | | | | |
| 18037 | 13.768% | 16,641,657 | 22,913 | x | 1,981 | 24,894 | | | | | |
| 18038 | 22.836% | 10,264,712 | 23,440 | x | 1,619 | 25,059 | | | | | |
| 18039 | 19.687% | 117,812 | 232 | x | 36 | 268 | | | | | |
| 83003 Fish Ranch / Tunnel / Grizzley | 23.803% | 6,520,833 | 15,522 | x | 264 | 15,786 | | | | | |
| 83037 Bear Creek | 23.893% | 3,022,500 | 7,222 | x | 82 | 7,303 | | | | | |
| | | 3,058,063 | | | | | | | | | |
| **Moraga + Unincorporated** | **18.957%** | **3,058,063,305** | **5,796,071** | **35.5%** | **473,407** | **6,269,478** | **36.0%** | 8 | **42.1%** | **7,322,811** | **(1,053,333)** |
| Moraga | 18.921% | 2,954,044,435 | 5,589,260 | | 460,993 | 6,050,252 | | 783,685 per firefighter | | | |
| 15002 | 18.837% | 1,303,017,494 | 2,454,498 | x | 230,204 | 2,684,702 | | | | | |
| 15003 | 18.700% | 55,432,260 | 103,659 | x | 9,102 | 112,761 | | | | | |
| 15004 | 19.003% | 1,487,218,528 | 2,826,130 | x | 208,037 | 3,034,167 | | | | | |
| 15005 | 19.304% | 401,373 | 775 | x | | 775 | | | | | |
| 15006 | 18.874% | 93,390,623 | 176,267 | x | 12,128 | 188,395 | | | | | |
| 15008 | 19.151% | 1,906,044 | 3,650 | x | 282 | 3,932 | | | | | |
| 15010 | 19.272% | 9,149,549 | 17,633 | x | 317 | 17,951 | | | | | |
| 15011 | 18.837% | 3,528,564 | 6,647 | x | 923 | 7,570 | | | | | |
| 15012 | 19.790% | - | - | | | | | | | | |
| Unincorporated Moraga | 19.933% | 104,018,870 | 206,812 | | 12,414 | 219,225 | | | | | |
| 61000 Canyon | 20.817% | 16,277,481 | 33,884 | x | 3,621 | 37,505 | | | | | |
| 61002 Canyon | 20.288% | 256,070 | 520 | x | 61 | 580 | | | | | |
| 77001 S Moraga | 20.329% | 1,529,068 | 3,108 | x | 469 | 3,577 | | | | | |
| 77005 S Moraga | 20.019% | 1,053,701 | 2,109 | x | 209 | 2,318 | | | | | |
| 77006 S Moraga | 19.254% | 14,444,369 | 27,810 | x | 671 | 28,481 | | | | | |
| 77007 S Moraga | 19.692% | 340,747 | 671 | x | 127 | 798 | | | | | |
| 77011 Bollinger Cyn, Mor | 20.160% | 10,908,644 | 21,992 | x | 1,439 | 23,431 | | | | | |
| 77012 Bollinger Cyn, Mor | 19.526% | 35,444,371 | 69,210 | x | 3,441 | 72,650 | | | | | |
| 77014 S Moraga | 19.393% | 17,467,769 | 33,876 | x | 1,664 | 35,539 | | | | | |
| 77015 S Moraga | 20.329% | 286,040 | 581 | x | 80 | 661 | | | | | |
| 83031 On Skyline, N of Pinehurst, technically Orinda | 21.712% | 6,010,610 | 13,050 | x | 633 | 13,683 | | | | | |
| Unincorporated - service area unclear | | 893,977 | 2,141 | | | 2,141 | | | | | |
| 83006 ??? | 24.130% | 460,548 | 1,111 | x | None | 1,111 | | | | | |
| 85063 ??? | 21.131% | 561 | 1 | x | None | 1 | | | | | |
| 85076 ??? | 23.751% | 432,868 | 1,028 | x | None | 1,028 | | | | | |

(1) http://www.co.contra-costa.ca.us/index.aspx?NID=1125

# Table IV-3

# MOFD Employment Cost Detail

| | | | from the Contra Costa Times Data Base - http://www.mercurynews.com/salaries/bay-area/2011 | | | | | | | | | | 2010/11 Fiscal Year Actuals | | | | Vested | Grand |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2011 | | | | s/t | | s/t | | | | | | Workers | | Pension | Total Employee | Benefit Underfunding | Total Employee |
| | | | Base | Other | Base + | OT | Salary | Medical | Pension | Def Comp | Misc | Total | Comp | OPEB | Bond | Cost | (4) | Cost |
| Administration | | | | | | | | | | | | | (1) | (2) | (3) | | | |
| 1 | Bradley, Randall | Fire Chief | 189,600 | 15,155 | 204,755 | 0 | 204,755 | 15,706 | 56,150 | 4,500 | 3,041 | 284,152 | 21,537 | 12,226 | 62,140 | 380,055 | 134,853 | 514,908 |
| 2 | Healy, Stephen B | Division Chief(20 Years) | 151,391 | 33,535 | 184,926 | 53,146 | 238,072 | 15,706 | 48,486 | 0 | 3,488 | 305,752 | 19,452 | 12,226 | 53,658 | 391,088 | 116,447 | 507,535 |
| 3 | Lee, Darrell R | Division Chief(20 Years) | 153,400 | 25,646 | 179,046 | 57,819 | 236,865 | 15,706 | 47,169 | 600 | 0 | 300,340 | 18,833 | 12,226 | 52,201 | 383,600 | 113,284 | 496,884 |
| 4 | O Brien, Matthew | Battalion Chief | 126,612 | 13,401 | 140,013 | 17,415 | 157,428 | 15,706 | 38,266 | 0 | 2,302 | 213,702 | 14,727 | 12,226 | 42,348 | 283,003 | 91,902 | 374,905 |
| 5 | Perkins, David S | Battalion Chief | 139,981 | 12,791 | 152,772 | 38,388 | 191,160 | 15,706 | 41,531 | 100 | 2,782 | 251,279 | 16,069 | 12,226 | 45,961 | 325,536 | 99,743 | 425,279 |
| 6 | Mentink, Michael E | Fire Marshal | 154,607 | 4,916 | 159,523 | 0 | 159,523 | 15,706 | 43,313 | 600 | 2,357 | 221,499 | 16,780 | 12,226 | 47,933 | 298,438 | 104,023 | 402,461 |
| 7 | Leonard, Kathryn L | Fire Prevention Officer | 47,709 | 600 | 48,309 | 0 | 48,309 | 0 | 12,716 | 5,501 | 808 | 67,334 | 5,081 | 12,226 | 14,073 | 98,714 | 30,540 | 129,253 |
| 8 | Casey, Susan Jean | Administrative Services Director | 127,688 | 3,317 | 131,005 | 0 | 131,005 | 1,455 | 33,623 | 8,821 | 2,098 | 177,002 | 2,756 | 12,226 | 37,210 | 229,193 | 80,751 | 309,945 |
| 9 | Daniel, Nancy P | Ems Liason Nurse & Cqi Coordinator | 62,219 | 20,169 | 82,388 | 0 | 82,388 | 9,695 | 17,501 | 350 | 1,214 | 111,148 | 1,733 | 12,226 | 19,368 | 144,475 | 42,032 | 186,506 |
| 10 | Kennedy, Gregory | Ems Liason Nurse & Cqi Coordinator | 15,600 | 0 | 15,600 | 0 | 15,600 | 0 | 0 | 0 | 1,193 | 16,793 | 328 | | 0 | 17,121 | 0 | 17,121 |
| 11 | Pokorny, Christine | Administrative Secretary | 5,933 | 13,115 | 19,048 | 2,787 | 21,835 | 1,054 | 3,350 | 0 | 260 | 26,499 | 401 | 1,223 | 3,707 | 31,830 | 8,046 | 39,875 |
| 12 | Rein, Dennis | Emergency Preparedness Coordinator | 21,060 | 450 | 21,510 | 1,350 | 22,860 | 0 | 0 | 0 | 1,749 | 24,609 | 453 | | 0 | 25,062 | 0 | 25,062 |
| 13 | Samson, Claudia | Accounts Payable Technician | 46,202 | 1,197 | 47,399 | 1,659 | 49,058 | 11,980 | 12,188 | 0 | 698 | 73,924 | 997 | 12,226 | 13,488 | 100,635 | 29,271 | 129,906 |
| 14 | Santos, Grace N | Administrative Secretary | 65,663 | 1,706 | 67,369 | 11,691 | 79,060 | 16,633 | 17,307 | 0 | 1,145 | 114,145 | 1,417 | 12,226 | 19,153 | 146,941 | 41,566 | 188,507 |
| 15 | Turner, Barbara F | Personanel Technician | 65,786 | 3,067 | 68,853 | 2,329 | 71,182 | 1,007 | 17,642 | 7,005 | 1,170 | 98,006 | 1,448 | 12,226 | 19,524 | 131,204 | 42,370 | 173,574 |
| 16 | Williams, Robert A | Telecom & Electrical Support Tech | 20,380 | 0 | 20,380 | 0 | 20,380 | 0 | 0 | 0 | 1,559 | 21,939 | 429 | | 0 | 22,368 | 0 | 22,368 |
| | Bourne, Darren | Fire Aide | 6,372 | 0 | 6,372 | 185 | 6,557 | 0 | 0 | 0 | 502 | 7,059 | 670 | | 0 | 7,729 | 0 | 7,729 |
| | Moschetti, Joe | Fire Aide | 595 | 0 | 595 | 0 | 595 | 0 | 0 | 0 | 46 | 641 | 63 | | 0 | 704 | 0 | 704 |
| | Peterson, Britien | Fire Aide | 9,569 | 0 | 9,569 | 275 | 9,844 | 0 | 0 | 0 | 753 | 10,597 | 1,007 | | 0 | 11,604 | 0 | 11,604 |
| | Schnellbacher, Charles | Fire Aide | 10,100 | 0 | 10,100 | 474 | 10,574 | 0 | 0 | 0 | 809 | 11,383 | 1,062 | | 0 | 12,445 | 0 | 12,445 |
| | Walker, Daniel | Fire Aide | 9,066 | 0 | 9,066 | 594 | 9,660 | 0 | 0 | 0 | 739 | 10,399 | 954 | | 0 | 11,353 | 0 | 11,353 |
| | Zavvar, Ali | Fire Aide | 1,742 | 0 | 1,742 | 0 | 1,742 | 0 | 0 | 0 | 133 | 1,875 | 183 | | 0 | 2,058 | 0 | 2,058 |
| | Berkey, William C | Reserve | 98 | 0 | 98 | 0 | 98 | 0 | 0 | 0 | 7 | 105 | 10 | | 0 | 115 | 0 | 115 |
| | | Administration total | 1,431,373 | 149,065 | 1,580,438 | 188,112 | 1,768,550 | 136,060 | 389,242 | 27,477 | 28,853 | 2,350,182 | 126,391 | 147,931 | 430,765 | 3,055,269 | 934,828 | 3,990,097 |
| Firefighters | | | | | | | | | | | | | | | | | | |
| 1 | Bensley, Jon W | Fire Captain-Paramedic II | 112,754 | 13,234 | 125,988 | 20,248 | 146,236 | 6,061 | 33,894 | 0 | 2,165 | 188,356 | 13,252 | 12,226 | 37,510 | 251,344 | 81,402 | 332,746 |
| 1.8 | Martinez, Michael A | Fire Captain-Paramedic II | 97,462 | 11,935 | 109,397 | 18,014 | 127,411 | 6,061 | 29,575 | 0 | 1,884 | 164,931 | 11,507 | 10,188 | 32,730 | 219,356 | 71,029 | 290,385 |
| 2.8 | Mccullah, Mark S | Fire Captain-Paramedic II | 112,754 | 13,234 | 125,988 | 31,757 | 157,745 | 6,061 | 33,894 | 0 | 2,313 | 200,013 | 13,252 | 12,226 | 37,510 | 263,001 | 81,402 | 344,403 |
| 3.7 | Nichols, Matthew | Fire Captain-Paramedic II | 97,462 | 13,826 | 111,288 | 12,900 | 124,188 | 6,061 | 29,928 | 0 | 1,844 | 162,021 | 11,706 | 10,188 | 33,121 | 217,036 | 71,877 | 288,913 |
| 4.7 | Perry, Anthony J | Fire Captain-Paramedic II | 112,754 | 13,234 | 125,988 | 28,371 | 154,359 | 14,498 | 33,894 | 0 | 2,262 | 205,013 | 13,252 | 12,226 | 37,510 | 268,001 | 81,402 | 349,403 |
| 5.3 | Anaya, Steven M | Fire Captain-Paramedic 1 | 68,889 | 23,436 | 92,325 | 0 | 92,325 | 9,162 | 18,887 | 0 | 1,347 | 121,721 | 9,711 | 7,132 | 20,902 | 159,466 | 45,360 | 204,826 |
| 6.3 | Balao, Daryle F | Fire Captain-Paramedic 1 | 118,096 | 13,888 | 131,984 | 19,216 | 151,200 | 15,706 | 35,506 | 0 | 2,175 | 204,587 | 13,883 | 12,226 | 39,294 | 269,989 | 85,273 | 355,263 |
| 7.3 | Barreto, Felipe | Fire Captain-Paramedic 1 | 118,096 | 13,897 | 131,993 | 11,599 | 143,592 | 15,706 | 35,510 | 0 | 2,047 | 196,855 | 13,884 | 12,226 | 39,298 | 262,263 | 85,283 | 347,546 |
| 7.6 | Consiglio, Kenneth W | Fire Captain-Paramedic 1 | 39,365 | 24,288 | 63,653 | 0 | 63,653 | 4,135 | 12,293 | 0 | 0 | 80,081 | 6,695 | 4,075 | 13,604 | 104,456 | 29,524 | 133,980 |
| 8.6 | Lee, Jerry | Fire Captain-Paramedic 1 | 118,096 | 14,283 | 132,379 | 58,527 | 190,906 | 6,061 | 35,598 | 0 | 2,816 | 235,381 | 13,924 | 12,226 | 39,395 | 300,927 | 85,494 | 386,421 |
| 9.6 | Matulich, Vincent P | Fire Captain-Paramedic 1 | 114,815 | 13,525 | 128,340 | 4,195 | 132,535 | 6,905 | 34,700 | 0 | 1,836 | 175,976 | 13,500 | 12,226 | 38,402 | 240,103 | 83,338 | 323,441 |
| 10.6 | Mcgee, Sean M | Fire Captain-Paramedic 1 | 118,096 | 13,832 | 131,928 | 25,948 | 157,876 | 15,706 | 35,494 | 0 | 2,256 | 211,332 | 13,877 | 12,226 | 39,280 | 276,715 | 85,245 | 361,960 |
| 11.6 | Oliver, Brian J | Fire Captain-Paramedic 1 | 118,096 | 13,885 | 131,981 | 29,892 | 161,873 | 15,706 | 35,509 | 0 | 2,319 | 215,407 | 13,883 | 12,226 | 39,297 | 280,812 | 85,281 | 366,093 |
| 12.6 | Rodgers, Stephen S | Fire Captain-Paramedic 1 | 108,255 | 25,750 | 134,005 | 0 | 134,005 | 13,205 | 33,401 | 0 | 1,961 | 182,572 | 14,095 | 12,226 | 36,964 | 245,857 | 80,218 | 326,075 |
| 13.6 | Dick, Daniel W | Fire Captain | 103,812 | 12,295 | 116,107 | 22,465 | 138,572 | 560 | 31,422 | 7,151 | 2,171 | 179,876 | 12,213 | 12,226 | 34,774 | 239,089 | 75,465 | 314,554 |
| 14.6 | Marquardt, Michael D | Fire Captain | 97,585 | 11,618 | 109,203 | 44,378 | 153,581 | 7,895 | 29,548 | 1,788 | 2,257 | 195,069 | 11,487 | 12,226 | 32,700 | 251,481 | 70,964 | 322,446 |
| 15.6 | Rattary, Michael | Fire Captain | 100,778 | 11,929 | 112,707 | 29,614 | 142,321 | 15,706 | 30,511 | 0 | 2,020 | 190,558 | 11,855 | 12,226 | 33,766 | 248,405 | 73,277 | 321,682 |
| 15.9 | Whitchurch, Michael A | Fire Captain | 35,795 | 20,470 | 56,265 | 57 | 56,322 | 5,235 | 10,852 | 0 | 778 | 73,187 | 5,918 | 4,075 | 12,010 | 95,190 | 26,063 | 121,253 |
| 16.9 | Ford, Jonathan Stephen | Engineer-Paramedic II | 98,359 | 11,842 | 110,201 | 53,011 | 163,212 | 15,706 | 29,713 | 0 | 2,370 | 211,001 | 11,592 | 12,226 | 32,883 | 267,701 | 71,361 | 339,062 |
| 17.9 | Epperson, Matthew E | Engineer-Paramedic 1 | 104,748 | 12,483 | 117,231 | 63,372 | 180,603 | 14,115 | 31,534 | 0 | 2,631 | 228,883 | 12,331 | 12,226 | 34,898 | 288,338 | 75,734 | 364,072 |
| 18.9 | Hill, Timothy A | Engineer-Paramedic 1 | 104,748 | 12,337 | 117,085 | 20,818 | 137,903 | 15,706 | 31,497 | 0 | 2,007 | 187,113 | 12,316 | 12,226 | 34,857 | 246,511 | 75,645 | 322,157 |
| 19.9 | Johansen, Daniel J | Engineer-Paramedic 1 | 104,748 | 12,882 | 117,630 | 55,826 | 173,456 | 15,706 | 31,629 | 0 | 2,474 | 223,265 | 12,373 | 12,226 | 35,003 | 282,867 | 75,962 | 358,829 |
| 20.8 | Murphy, Michael P | Engineer-Paramedic 1 | 89,909 | 10,076 | 99,985 | 47,029 | 147,014 | 14,397 | 24,967 | 0 | 2,141 | 188,519 | 10,517 | 11,207 | 27,630 | 237,873 | 59,962 | 297,836 |
| 21.8 | Whittington, John C | Engineer-Paramedic 1 | 104,748 | 12,410 | 117,158 | 28,465 | 145,623 | 15,706 | 31,519 | 0 | 2,071 | 194,919 | 12,323 | 12,226 | 34,881 | 254,349 | 75,698 | 330,047 |
| 22.8 | Aquilina, Dennis M | Engineer | 95,246 | 11,272 | 106,518 | 22,880 | 129,398 | 15,706 | 28,652 | 0 | 1,830 | 175,586 | 11,204 | 12,226 | 31,709 | 230,724 | 68,812 | 299,537 |
| 23.6 | Brandi, Janet M | Engineer | 67,366 | 9,219 | 76,585 | 1,494 | 78,079 | 10,866 | 21,921 | 0 | 1,119 | 111,985 | 8,056 | 9,169 | 24,259 | 153,469 | 52,647 | 206,116 |
| 24.6 | Campisi, Steven D | Engineer | 95,246 | 11,272 | 106,518 | 32,974 | 139,492 | 15,706 | 28,652 | 0 | 2,024 | 185,874 | 11,204 | 12,226 | 31,709 | 241,012 | 68,812 | 309,825 |

# Table IV-3

# MOFD Employment Cost Detail

| | 2011 (from the Contra Costa Times Data Base - http://www.mercurynews.com/salaries/bay-area/2011) | | Base | Other | s/t Base + | OT | s/t Salary | Medical | Pension | Def Comp | Misc | Total | Workers Comp (2010/11 Fiscal Year Actuals) | OPEB (2010/11 Fiscal Year Actuals) | Pension Bond (2010/11 Fiscal Year Actuals) | Total Employee Cost | Vested Benefit Underfunding (4) | Grand Total Employee Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.6 | Davies, Chris | Engineer | 95,246 | 11,272 | 106,518 | 36,155 | 142,673 | 11,974 | 28,652 | 0 | 2,046 | 185,345 | 11,204 | 12,226 | 31,709 | 240,483 | 68,812 | 309,296 |
| 26.6 | Ford, Evan J | Engineer | 95,246 | 11,272 | 106,518 | 16,421 | 122,939 | 1,404 | 28,652 | 7,151 | 1,938 | 162,084 | 11,204 | 12,226 | 31,709 | 217,222 | 68,812 | 286,035 |
| 27.6 | Goodyear, Adam | Engineer | 95,246 | 11,272 | 106,518 | 6,485 | 113,003 | 15,706 | 28,652 | 0 | 1,643 | 159,004 | 11,204 | 12,226 | 31,709 | 214,142 | 68,812 | 282,955 |
| 28.6 | Mazaika, David | Engineer | 89,381 | 10,719 | 100,100 | 19,680 | 119,780 | 6,061 | 27,141 | 0 | 1,749 | 154,731 | 10,529 | 12,226 | 30,036 | 207,522 | 65,184 | 272,706 |
| 29.6 | Quontamatteo, Michael J | Engineer | 95,246 | 11,272 | 106,518 | 29,874 | 136,392 | 15,706 | 28,652 | 0 | 1,931 | 182,681 | 11,204 | 12,226 | 31,709 | 237,819 | 68,812 | 306,632 |
| 30.6 | Wells, Peter J | Engineer | 95,246 | 11,272 | 106,518 | 39,194 | 145,712 | 1,404 | 28,652 | 6,555 | 2,260 | 184,583 | 11,204 | 12,226 | 31,709 | 239,721 | 68,812 | 308,534 |
| 31.6 | Airola, Jacob J | Firefighter-Paramedic | 87,321 | 14,438 | 101,759 | 33,484 | 135,243 | 11,974 | 27,231 | 0 | 1,796 | 176,244 | 10,704 | 12,226 | 30,136 | 229,309 | 65,400 | 294,709 |
| 32.6 | Budge, Bruce J | Firefighter-Paramedic | 95,061 | 11,301 | 106,362 | 4,478 | 110,840 | 15,706 | 28,611 | 0 | 1,609 | 156,766 | 11,188 | 12,226 | 31,663 | 211,843 | 68,714 | 280,557 |
| 33.6 | Cooley, Laynne Thomas | Firefighter-Paramedic | 95,061 | 13,545 | 108,606 | 20,673 | 129,279 | 11,057 | 29,135 | 0 | 1,906 | 171,377 | 11,424 | 12,226 | 32,243 | 227,270 | 69,972 | 297,242 |
| 34.6 | Costanza, Jared C | Firefighter-Paramedic | 89,112 | 13,967 | 103,079 | 34,012 | 137,091 | 15,706 | 27,657 | 0 | 1,786 | 182,240 | 10,842 | 12,226 | 30,607 | 235,916 | 66,423 | 302,338 |
| 35.6 | Edminster, Matthew Evan | Firefighter-Paramedic | 87,321 | 13,607 | 100,928 | 35,031 | 135,959 | 15,706 | 27,148 | 0 | 1,921 | 180,734 | 10,616 | 12,226 | 30,044 | 233,620 | 65,200 | 298,820 |
| 36.6 | Gehling, Steven B | Firefighter-Paramedic | 87,321 | 13,612 | 100,933 | 29,149 | 130,082 | 14,737 | 27,091 | 0 | 1,887 | 173,797 | 10,617 | 12,226 | 29,981 | 226,620 | 65,063 | 291,684 |
| 37.6 | Hess, Andrew J | Firefighter-Paramedic | 81,790 | 13,289 | 95,079 | 14,131 | 109,210 | 6,061 | 25,378 | 0 | 1,610 | 142,259 | 10,001 | 12,226 | 28,085 | 192,571 | 60,949 | 253,520 |
| 38.6 | Himsl, Katy A | Firefighter-Paramedic | 85,903 | 14,386 | 100,289 | 20,441 | 120,730 | 6,061 | 26,824 | 0 | 1,761 | 155,376 | 10,549 | 12,226 | 29,686 | 207,836 | 64,422 | 272,258 |
| 39.6 | Huebner, Steven M | Firefighter-Paramedic | 95,061 | 11,976 | 107,037 | 1,806 | 108,843 | 15,706 | 28,789 | 0 | 1,532 | 154,870 | 11,259 | 12,226 | 31,860 | 210,215 | 69,141 | 279,356 |
| 40.6 | Iman, David B | Firefighter-Paramedic | 81,790 | 11,870 | 93,660 | 11,902 | 105,562 | 5,959 | 25,098 | 3,576 | 1,609 | 141,804 | 9,852 | 12,226 | 27,775 | 191,657 | 60,277 | 251,934 |
| 41.6 | Lacy, Michael Henry | Firefighter-Paramedic | 95,061 | 14,165 | 109,226 | 8,858 | 118,084 | 15,706 | 29,285 | 0 | 1,666 | 164,741 | 11,489 | 12,226 | 32,409 | 220,865 | 70,333 | 291,197 |
| 42.6 | Lambert, Lucas | Firefighter-Paramedic | 84,526 | 15,113 | 99,639 | 37,664 | 137,303 | 6,061 | 26,684 | 0 | 2,000 | 172,048 | 10,481 | 12,226 | 29,531 | 224,285 | 64,086 | 288,371 |
| 43.6 | Lopez, Matthew J | Firefighter-Paramedic | 81,790 | 13,435 | 95,225 | 15,876 | 111,101 | 11,974 | 25,411 | 0 | 1,593 | 150,079 | 10,016 | 12,226 | 28,122 | 200,443 | 61,029 | 261,471 |
| 44.6 | Morris, Kelly M | Firefighter-Paramedic | 95,061 | 14,287 | 109,348 | 16,587 | 125,935 | 11,974 | 29,364 | 0 | 1,481 | 168,754 | 11,502 | 12,226 | 32,496 | 224,978 | 70,522 | 295,500 |
| 45.6 | Nygard, Brad T | Firefighter-Paramedic | 89,112 | 15,487 | 104,599 | 37,857 | 142,456 | 6,061 | 28,050 | 0 | 2,035 | 178,602 | 11,002 | 12,226 | 31,042 | 232,872 | 67,367 | 300,239 |
| 46.6 | Stephens, Anthony | Firefighter-Paramedic | 85,903 | 14,379 | 100,282 | 21,489 | 121,771 | 11,974 | 26,871 | 0 | 1,774 | 162,390 | 10,548 | 12,226 | 29,738 | 214,901 | 64,535 | 279,437 |
| 47.6 | Thornton, Adam B | Firefighter-Paramedic | 95,061 | 14,001 | 109,062 | 39,906 | 148,968 | 14,514 | 29,210 | 0 | 2,122 | 194,814 | 11,472 | 12,226 | 32,326 | 250,838 | 70,153 | 320,990 |
| 48.1 | Ward, Jason O | Firefighter-Paramedic | 47,575 | 8,418 | 55,993 | 3,604 | 59,597 | 3,536 | 12,209 | 0 | 879 | 76,221 | 5,890 | 6,113 | 13,511 | 101,735 | 29,322 | 131,057 |
| 49.1 | Deweese, Mark A | Firefighter | 86,448 | 10,286 | 96,734 | 27,083 | 123,817 | 972 | 26,018 | 6,555 | 1,938 | 159,300 | 10,175 | 12,226 | 28,794 | 210,494 | 62,486 | 272,981 |
| 50.1 | Elbanna, Daniel | Firefighter | 79,401 | 9,573 | 88,974 | 32,858 | 121,832 | 6,061 | 24,002 | 0 | 1,791 | 153,686 | 9,359 | 12,226 | 26,562 | 201,833 | 57,645 | 259,478 |
| 51.1 | Grgurevic, Anthony David | Firefighter | 83,363 | 10,021 | 93,384 | 28,279 | 121,663 | 6,061 | 25,192 | 0 | 1,791 | 154,707 | 9,823 | 12,226 | 27,879 | 204,635 | 60,503 | 265,137 |
| 52.1 | Hoover, Clayton | Firefighter | 83,363 | 10,020 | 93,383 | 33,158 | 126,541 | 6,061 | 25,192 | 0 | 1,862 | 159,656 | 9,823 | 12,226 | 27,879 | 209,584 | 60,503 | 270,086 |
| 53.1 | Mathews, Christopher | Firefighter | 76,551 | 9,200 | 85,751 | 26,851 | 112,602 | 6,061 | 23,160 | 0 | 1,656 | 143,479 | 9,020 | 12,226 | 25,631 | 190,355 | 55,623 | 245,978 |
| 54.1 | Mulliken, Julie D | Firefighter | 86,448 | 10,286 | 96,734 | 10,656 | 107,390 | 14,514 | 26,018 | 0 | 1,558 | 149,480 | 10,175 | 12,226 | 28,794 | 200,674 | 62,486 | 263,161 |
| 55.1 | Rogness, Stephen R | Firefighter | 81,031 | 9,665 | 90,696 | 19,589 | 110,285 | 6,061 | 24,464 | 0 | 1,625 | 142,435 | 9,540 | 12,226 | 27,074 | 191,274 | 58,754 | 250,029 |
| 56.1 | Williams, Timothy | Firefighter | 86,448 | 10,286 | 96,734 | 26,467 | 123,201 | 5,603 | 26,018 | 0 | 1,817 | 156,639 | 10,175 | 12,226 | 28,794 | 207,833 | 62,486 | 270,320 |
| 56.1 | | firefighter total | 5,446,572 | 770,044 | 6,216,616 | 1,422,748 | 7,639,364 | 608,166 | 1,651,011 | 32,776 | 109,690 | 10,041,007 | 653,901 | 685,658 | 1,827,136 | 13,207,702 | 3,965,172 | 17,172,874 |
| | | firefighter averages | 97,116 | 13,730 | 110,846 | 25,368 | 136,215 | 10,844 | 29,439 | | | 179,037 | 11,659 | 12,226 | 32,579 | 235,501 | 70,701 | 306,203 |
| | | Total Employee Cost | 6,877,945 | 919,109 | 7,797,054 | 1,610,860 | 9,407,914 | 744,226 | 2,040,253 | 60,253 | 138,543 | 12,391,189 | 780,292 | 833,589 | 2,257,901 | 16,262,971 | 4,900,000 | 21,162,971 |

(1) Workers Comp allocated by base salary + and non-badge admin 20% of badged employees

(2) OBEB total allocated equally to all employees receiving pensions ; partially allocated to employees with short years

(3) Pension Bond total allocated by pension amounts

(4) Table IV-4b, the revised long range forecast, shows that by 2013/14 pension costs will increase by $1 mllion, $500,000 will be required to pre-fund future OPEB benefits,

Over 80 percent of MOFD's costs, $16.3 out of $19.7 million are employee costs. In the General Fund budget, most of these appear together ($14 million of them - lines 46-62 of Exhibit IV-1) but an additional $2.3 million is segregated to its own line at the very bottom of the budget: "Transfers to Debt Service Fund" (line 155 of Exhibit IV-1). This Debt Service Fund is for a pension obligation bond - a loan. This loan is discussed in more detail in Section VI but it is, essentially, a pension cost. In 2003, MOFD retroactively granted pension increases to its employees without funding them. This caused their pension-funding rate to increase significantly. In an attempt to reduce this increase, the MOFD Board borrowed $28 million dollars, which they used to fund their pension pre-funding obligation. This reduced the annual pension cost but it added 17 years of debt payments. Table IV-1 puts this pension cost back to where it belongs; as a cost of employment.

While only a small fraction of MOFD's budget document is devoted to employment costs, Table IV-1 gives them much more "weight" due to the fact that they represent 80 percent of the budget. If cuts need to be made to deal with debt obligations (and these do need to be seriously considered), there is only so much you can do with $1.9 million in operating costs or $1.4 million in capital costs. There is much more flexibility with $16 million in personnel expenses.

The personnel costs are broken down by Administration and Firefighter costs in Table IV-1 and the employee costs are further detailed in Table IV-3. Thanks to the Bay Area News Group (the *Contra Costa Times*), this public expense is now public information. While the Task Force is not about to suggest micromanaging MOFD, when all the costs are added up and the Total Employee Cost in Table IV-3 is observed, one has to ask, "What does a public employee, with a relatively secure job for life, do such that 20 of 75 employees cost the community over $250,000 per year?" And those costs do not even reflect the full cost of funding $400-500 million of unfunded but vested future benefits. When those are added in over two thirds of all employees cost over $250,000 per year.

The Pension Bond and Retiree Medical costs (labeled "OPEB," which stands for Other Post Employment Benefit, meaning other than pension) in Table IV-3 might be questioned as valid additions to current employee expenses. All of the OPEB and much of the Pension Bond costs relate to already retired employees. But MOFD has made a conscious decision not to fund future OPEB costs currently, which would have created a sinking fund for when these expenses come due. So we must attribute yesterday's benefits to today's employees. With regards to the Pension Bond, they borrowed this money in order to lower current pension costs so while these expenses may partially relate to past employees, we have to add them to the cost of current employees to get a full sense of how much it costs to provide the service we are getting. If we cut staff or revise benefits, the OPEB costs would not immediately go down nor would the Pension Bond payments go away, but these costs still have to be accounted for as costs of employment. We need to be reminded of what past decisions cost today so we do the right thing for Orindans in the future.

The bottom line: it costs about $1 million dollars per year to support every firefighter position in a fire station (19 positions per shift). Of the $1 million, $670,000 goes directly to the firefighter (split by 3 shifts); $160,000 goes to administrators to manage the operations, training and finances; $100,000 goes to operate the stations and equipment; and $70,000 goes to replace or maintain stations and equipment. So when the observation was made in section III that in Orinda there are 11 firefighters serving 17,600 residents (6.3 firefighters per 10,000 residents while in the ConFire service area is served by 1.5 firefighters per 10,000), it becomes apparent why MOFD costs Orinda taxpayers more than their entire city budget.

**Long Range Financial Forecast Through Fiscal year 2022/23**

Table IV-4a summarizes MOFD's long-range financial forecast. The actual MOFD document is included as Exhibit IV-2 (available on the Task Force web site, www.OrindaTaskForce.org). The MOFD forecast includes 2009/10 and 2010/11 data, and projects five more years to 2016/17. In Table IV-4a, the Task Force then extends the projection out six more years to 2022/23 using MOFD's assumed rate of growth. MOFD has stated that it is creating a 15-20 year forecast but that was not yet released when this report was being produced.

*Expenses*

**Employee Costs** - Currently these are 89 percent of the operating budget ($16.3 million out of $18.3million) and MOFD projects them to increase to 91 percent by 2016/17.

**Salaries and Basic Benefits** - The MOFD forecast assumes 5 percent lower employee costs in 2016/17 than in 2010/11; dropping from 55 percent of the operating budget to 49 percent. Is this possible? Is this reasonable? The reality is that it is necessary and by 2012/13 the budgeted salary expense is already 7% lower than 2010/11. If the task force is correct on other items in the budget, it is probably still not enough. Does this mean an equivalent drop in service because of a loss of personnel? We have seen it other places with stations closing and "brown outs" of stations. Will it happen in Orinda and Moraga?

**Insurance costs** (mostly medical) - These were forecast to increase very slightly but, in fact, have decreased from $825,000 in 2010/11 to $640,000 in 2011/12 with a budgeted $650,000 for 2012/13. The Task Force is not aware of how MOFD obtained such a significant savings but congratulates them for accomplishing this. (note: the employees portion of this expense did not increase so there was true savings.) As for the $833,000 of medical payments for already retired employees (OPEB), this appears to be steadily rising much faster than the 0.5 percent forecast. In the four years between FY 2006/7 and FY 2010/11 these expenses increased an average of 8 percent per year from $609,000 to $833,000. For 2012/13 the budget for this expense further increases to $935,000. It is unclear why the retiree cost is rising while the cost for active employees is decreasing unless the numbers of active employees are decreasing while retired employees are increasing.

The latest long range forecast projects insurance costs increasing at 0.5 percent. The Task Force believes this is unreasonably optimistic despite current savings. MOFD's actuary, John Bartel, in his last report to the Board on projected OPEB liabilities, projected an average annual increase of about 6 percent through 2017. If, in fact, the two insurance lines in the projections did increase at 6 percent instead of the assumed 0.5 percent, this would result in insurance expenses $400,000 greater by 2017 than is shown in the MOFD projections.

**Pension contributions** to MOFD's pension plan administrator (CCCERA) have almost doubled in the past two years from $1.5 million in 2010/11 to $2.6 million in the 2012/13 budget. The long range forecast (Table IV-4a) has them increasing another $300,000 by 2014/15 and then starting to decrease. The Task Force does not believe the decrease will, or should happen for at least a couple of decades. As will be explained in Section VI, the unfunded vested pension liabilities are so massive, it will take significant additions to the pension plan assets if we do not want to leave future generations with our obligations.

## Table IV - 4a

# MOFD Long Range Financial Forecast

| | From MOFD Long Range Forecast Document | | | | | | | Average | Extension of Forecast using MOFD assumptions | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2010/11 actual | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | Annual Growth | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | |
| Expenses | | | | | | | | | | | | | | | |
| Salaries + basic benefits | 10,046,222 | 9,507,646 | 9,506,481 | 9,507,325 | 9,508,177 | 9,509,037 | 9,509,906 | 0.00% | 9,509,906 | 9,509,906 | 9,509,906 | 9,509,906 | 9,509,906 | 9,509,906 | 0.00% |
| Workers Comp | 841,288 | 795,729 | 795,729 | 795,729 | 795,729 | 795,729 | 795,729 | 0.00% | 795,729 | 795,729 | 795,729 | 795,729 | 795,729 | 795,729 | 0.00% |
| Insurances (active) | 827,105 | 824,850 | 828,974 | 833,119 | 837,285 | 841,471 | 845,678 | 0.50% | 849,907 | 854,156 | 858,427 | 862,719 | 867,032 | 871,368 | 0.50% |
| Insurances (retired) | 833,589 | 831,316 | 835,473 | 839,650 | 843,848 | 848,068 | 852,308 | 0.50% | 856,569 | 860,852 | 865,156 | 869,482 | 873,830 | 878,199 | 0.50% |
| Pension | 1,524,009 | 2,069,604 | 2,477,037 | 2,812,345 | 2,932,300 | 2,691,520 | 2,505,407 | 3.90% | 2,505,407 | 2,505,407 | 2,505,407 | 2,505,407 | 2,505,407 | 2,505,407 | 0.00% |
| Pension Bond | 2,257,901 | 2,372,136 | 2,487,498 | 2,613,203 | 2,738,467 | 2,872,509 | 3,014,284 | 4.91% | 3,157,877 | 3,307,377 | 3,466,609 | 3,624,528 | 3,790,090 | 1,687,935 | |
| Employee s/t | 16,330,114 | 16,401,281 | 16,931,192 | 17,401,371 | 17,655,806 | 17,558,334 | 17,523,312 | 1.33% | 17,675,395 | 17,833,427 | 18,001,234 | 18,167,771 | 18,341,994 | 16,248,543 | -1.25% |
| Operating Costs | 1,920,496 | 1,785,112 | 1,734,223 | 1,751,117 | 1,768,179 | 1,785,409 | 1,802,813 | 0.20% | 1,806,374 | 1,809,942 | 1,813,518 | 1,817,100 | 1,820,690 | 1,824,286 | 0.20% |
| Total excluding Cap Costs | 18,250,610 | 18,186,393 | 18,665,415 | 19,152,488 | 19,423,985 | 19,343,743 | 19,326,125 | 1.22% | 19,481,769 | 19,643,370 | 19,814,751 | 19,984,871 | 20,162,684 | 18,072,829 | -1.11% |
| Capital Costs | 1,457,478 | 1,926,030 | 2,274,853 | 1,532,371 | 1,032,491 | 189,497 | 948,612 | ?? | 947,803 | 1,135,260 | 1,009,042 | 1,033,244 | 1,064,241 | 1,096,169 | 3.00% |
| Total Expenses | 19,708,088 | 20,112,423 | 20,940,268 | 20,684,859 | 20,456,476 | 19,533,240 | 20,274,737 | | 20,429,572 | 20,778,630 | 20,823,793 | 21,018,115 | 21,226,925 | 19,168,997 | -0.93% |
| Revenues | | -1.9926% | 0.0000% | 0.5000% | 1.0000% | 1.5000% | 2.0000% | | | | | | | | |
| Property Taxes | 17,769,563 | 17,436,761 | 17,436,761 | 17,630,365 | 18,180,390 | 19,071,822 | 19,926,538 | | 20,582,368 | 21,251,234 | 21,933,397 | 22,384,648 | 22,809,990 | 23,243,839 | |
| Orinda | 11,366,490 | 11,151,832 | 11,151,832 | 11,316,382 | 11,688,132 | 12,283,261 | 12,796,101 | | 13,319,118 | 13,852,515 | 14,396,500 | 14,706,810 | 14,988,391 | 15,275,604 | |
| Orinda % of total | 64.0% | 64.0% | 64.0% | 64.2% | 64.3% | 64.4% | 64.2% | | 64.7% | 65.2% | 65.6% | 65.7% | 65.7% | 65.7% | |
| Ad Valorem | 10,772,528 | 10,557,871 | 10,557,871 | 10,610,660 | 10,716,767 | 10,877,518 | 11,095,069 | | 11,316,970 | 11,543,309 | 11,774,176 | 12,009,659 | 12,249,852 | 12,494,849 | 2% |
| New Developments | | | | 110,160 | 369,403 | 794,481 | 1,085,771 | | 1,382,886 | 1,685,944 | 1,995,063 | 2,069,389 | 2,110,777 | 2,152,992 | |
| Parcel | 593,962 | 593,962 | 593,962 | 595,562 | 601,962 | 611,262 | 615,262 | | 619,262 | 623,262 | 627,262 | 627,762 | 627,762 | 627,762 | |
| Moraga & Canyon | 6,403,073 | 6,284,929 | 6,284,929 | 6,313,983 | 6,492,258 | 6,788,561 | 7,130,437 | | 7,263,250 | 7,398,719 | 7,536,897 | 7,677,839 | 7,821,599 | 7,968,235 | |
| Ad Valorem | 5,929,066 | 5,810,921 | 5,810,921 | 5,839,976 | 5,898,376 | 5,986,851 | 6,106,588 | | 6,228,720 | 6,353,294 | 6,480,360 | 6,609,967 | 6,742,167 | 6,877,010 | 2% |
| New Developments | | | | | 116,375 | 318,203 | 534,042 | | 544,722 | 555,617 | 566,729 | 578,064 | 589,625 | 601,418 | |
| Parcel | 474,007 | 474,007 | 474,007 | 474,007 | 477,507 | 483,507 | 489,807 | | 489,807 | 489,807 | 489,807 | 489,807 | 489,807 | 489,807 | |
| Intergovernmental Revenue | 190,681 | 180,681 | 182,488 | 184,313 | 186,156 | 188,018 | 189,898 | 1.00% | 193,696 | 197,570 | 201,521 | 205,552 | 209,663 | 213,856 | 2% |
| Measure H | 178,367 | 198,367 | 178,367 | 178,367 | 178,367 | 178,367 | 178,367 | | 178,367 | 178,367 | 178,367 | 178,367 | 178,367 | 178,367 | |
| Charge For Service | 989,872 | 1,075,469 | 1,078,355 | 1,133,130 | 1,197,684 | 1,231,009 | 1,192,007 | | 1,144,793 | 1,147,730 | 1,150,674 | 1,108,233 | 1,104,709 | 1,107,679 | |
| Ambulance | 906,709 | 946,223 | 948,588 | 950,960 | 953,337 | 955,721 | 958,110 | 0.25% | 960,505 | 962,907 | 965,314 | 967,727 | 970,146 | 972,572 | 0.25% |
| Vehicle Accident Recovery | 7,146 | 50,000 | 50,125 | 50,250 | 50,376 | 50,502 | 50,628 | 0.25% | 50,755 | 50,882 | 51,009 | 51,136 | 51,264 | 51,392 | 0.25% |
| Other | 76,017 | 79,246 | 79,642 | 131,920 | 193,971 | 224,786 | 183,269 | | 133,533 | 133,942 | 134,352 | 89,369 | 83,299 | 83,715 | |
| Other Rev | 494,816 | 27,000 | 21,100 | 21,100 | 21,100 | 21,100 | 21,100 | | 21,100 | 21,100 | 21,100 | 21,100 | 21,100 | 21,100 | |
| Total Revenue | 19,623,299 | 18,918,278 | 18,897,071 | 19,147,275 | 19,763,696 | 20,690,316 | 21,507,910 | 2.60% | 22,120,324 | 22,796,000 | 23,485,060 | 23,897,900 | 24,323,829 | 24,764,841 | 2.38% |
| Increase over prior year | | -705,021 | -21,207 | 250,204 | 616,421 | 926,620 | 817,594 | | 612,413 | 675,676 | 689,059 | 412,840 | 425,929 | 441,012 | |
| percent from new developments | | | 0% | 44% | 61% | 68% | 62% | | 50% | 46% | 46% | 21% | 12% | 12% | |
| Surplus | -84,789 | -1,194,145 | -2,043,197 | -1,537,584 | -692,780 | 1,157,076 | 1,233,173 | | 1,690,752 | 2,017,370 | 2,661,266 | 2,879,785 | 3,096,904 | 5,595,843 | |
| Capital Reserve Fund | | | | | | | | | | | | | | | |
| Adjustment | -127,463 | -856,574 | -1,205,383 | -461,302 | 48,478 | 906,672 | 157,658 | | | | | | | | |
| Balance at End of Period | 2,990,879 | 2,134,305 | 928,922 | 467,620 | 516,098 | 1,422,770 | 1,580,428 | | | | | | | | |
| Operatiing Reserve Fund | | | | | | | | | | | | | | | |
| Adjustment | 42,674 | -337,571 | -837,814 | -1,076,282 | -741,258 | 250,404 | 1,075,515 | | | | | | | | |
| Balance at End of Period | 3,730,082 | 3,392,511 | 2,554,697 | 1,478,415 | 737,158 | 987,562 | 2,063,077 | | | | | | | | |
| Total MOFD Reserve Funds | 6,720,961 | 5,526,816 | 3,483,619 | 1,946,035 | 1,253,256 | 2,410,332 | 3,643,505 | | 5,334,257 | 7,351,627 | 10,012,894 | 12,892,679 | 15,989,583 | 21,585,426 | |
| number of months of Op Expense | 4.4 | 3.6 | 2.2 | 1.2 | 0.8 | 1.5 | 2.3 | | | | | | | | |

Source: (thru 2016/17) Moraga-Orinda Fire District / Draft Long Range Financial Forecast as of 09/01/11

Available on-line

http://www.mofd.org/content/agendaminutes/file/090111 Finance Committee Agenda and Board Packet.pdf

pages 16-30

**Pension bond** payments, currently \$2.3 million but increasing to almost \$4 million by 2021/22, are a fixed obligation. This debt was made in 2005 in order to purchase \$28 million in pension plan assets to fully fund the then-underfunded plan. The reason the plan was underfunded was because the Board in 2002 granted, retroactively including all vested benefits, a 50 percent increase in pension benefits to all current employees. The reason? Everyone else was doing it. So they borrowed \$28 million dollars at a fixed rate of 5.22 percent and invested it in pension plan assets that they assumed would earn at 7.75 percent. A 100 percent leveraged investment of relatively high yielding assets. The result? After the July 1, 2012 payment the loan has a balance of about \$23.5 million and the assets purchased have a value of about \$34.5 million; \$11 million net of the debt due. But if the District had slowly put the money it paid to the bond holders instead into the pension plan, it would have had assets worth \$15.5 million today; \$4.5 million more than it currently has. This was a risky investment that has not paid off. (see Table VI-1)

**Operating Costs Other than Employment Costs** - These costs are moderate (10 percent of the District's expenses); the Task Force did not examine them to any great detail. It appears that MOFD has the same opinion as they are presented as a single line item in their long-range forecast. The Task Force's only comment is that MOFD's assumption that from 2011/12 these costs will only grow at a 0.2 percent annual rate over the next five years (after cutting 7 percent from 2010/11) might be a bit optimistic.

**Capital Costs** - The MOFD projections show \$8 million in capital expenses over the next six years. These expenses (Exhibit IV-2) include \$2 million for equipment and \$6 million for buildings. Footnote 8 on page 8 of Exhibit IV-2 describes the building expenses as "Station 41 (Moraga) functional remodel, Station 43 (Orinda) reconstruction, new administration building."

Throughout 2011 the staff was supporting the purchase of a \$2 million commercial building adjacent to Moraga's station 41 to act as a new administration building. At their last meeting of 2011 the Directors, on a 3-2 vote, agreed to put down a \$25,000 deposit to purchase the building. Two weeks later, two of the three assenting directors reversed their vote forcing the district to walk away from their \$25,000 deposit. With the new administration building no longer contemplated, the \$8 million projection in Table IV-4a can be reduced by \$2 million.

The second major project for the District is a \$3 million rebuilding of Orinda's Station 43 at the same location as the current Station 43. This is Orinda's, in fact the District's, least utilized facility. Table III-1 shows that the engine unit at this station only responded to 326 incidents within the MOFD service area in 2009. Table III-3 shows that the unit from this station was first responder to critical Code-3 emergencies fewer than 100 times in the year (and only 35 times inside Station 43's primary service area). And, going into details not included in this report's tables and exhibits, 80 percent of these Code-3 emergencies were medical in nature; 10 were fires, mostly vehicle fires on or near Highway 24 that equipment from Orinda's downtown station or ConFire's Station 16 off Upper Happy Valley could have handled within proscribed time frames; and most of the rest were false alarms.

Is it possible that MOFD could save \$3 million (only spending \$200,000 to make sure the station was a least earthquake proof) in capital costs by stationing Orinda's ambulance there (which would still provide appropriate response times for medical emergency transport)? The Task Force believes that the community should question this expenditure when, as will be detailed in Section VI, the District has dug itself a very deep pension-liability hole.

The Task force has no comment on the projected $3 million in expenditures for upgrading Moraga's station 41 and general equipment purchases and leases over the next six years, assuming that they are valid and necessary.

### *Revenues*

**Ad Valorem Property Taxes** - With Orinda's tax base decreasing three percent from 2010/11 to 2011/12, but then growing again by one percent in 2012/13, it is hard to accurately estimate the future. However, the Task Force believes that MOFD's assumed growth rate (footnote 1 of Exhibit IV-2) from zero percent in 2012/13 to two percent in 2016/17 is not unreasonable but probably conservative.

In 2010/11, the average home that sold in Orinda did so for $386 per square foot but the second half had dropped to $373. By the second half of 2011/12 that price had recovered to $410 per square foot. The average assessed value for an Orinda home is $250 per square foot. So the average home selling in Orinda will increase 64 percent in assessed value. While only four percent of Orinda homes sell in an average year (this has been less than three percent in recent years), if four percent of those gain 64 percent in assessed value while the other 96 percent gain the statutory two percent increase, the total tax base should increase 4.5 percent. Even with only three percent selling, the total gain should be just under four percent. It was surprising, therefore, when the Assessor's Office recently announced that Orinda's tax base only increased one percent in 2012/13.

A close examination of assessment data determined the reason for this. While 69 percent of Orinda's homes were re-assessed upward the statutory two percent; eight percent (525 homes) were assessed upwards an average of 30 percent (due to sales and improvements); but 23 percent of Orinda's homes (1,500 homes) were reassessed downward an average of seven percent. These downward re-assessments of Orinda homes reduced the Orinda tax base by $145 million which cost MOFD $325,000 in tax revenue and the city $100,000. The seven percent drop in value for these 1,500 homes reduced them from $403 per square foot to $375. If, in fact, these homes has been re-assessed upward the statutory two percent, their average value would be $410 per square foot which is what homes sold for in the second half of 2011/12.

When questioned about this drop for 1,500 homes, the Assessor's Office said that they initiated the drop in values "proactively" for most properties without a request from the property owners. They stated the drops were based on "current" comparable sales but the Task Force has to question "how current"? It is disturbing that the average appears to be about 12 months out of date. However, even if this apparent un-assessment is not reversed this year it should not be ignored which could substantially increase property tax revenue over the next couple of years, in excess of MOFD's projections. The Task Force did not analyze Moraga property values to see if those were equivalently under-assessed but seeing as the Moraga tax base also increased at less than even the Orinda tax base in 2012/13 it is probable.

**New Development Property Taxes** - Hopefully the proposed projects in Moraga and the developments of Wilder and Pine Grove in Orinda will be fruitful. It should be noted that of the total projected $2.6 million gain in revenue, from $18.9 million in 2011/12 to $21.5 million in 2016/17, that

60 percent of it, $1.6 million, is projected to come from these new developments. If something happens to Moraga's developments (and the reaction to the negative traffic impact of these on Orinda and Lafayette cannot be underestimated), then not only would this directly affect MOFD's revenue, but it would worsen the Orinda/Moraga funding inequity problem.

**Parcel Tax** - Until the pension funding issue is solved several decades from now, it is hard to imagine MOFD charging less than the maximum parcel tax agreed upon by the voters (although Moraga's parcel tax is only being assessed at 20 percent of its cap which is five times Orinda's cap).

**Intergovernmental Revenue / Measure H** - The Task Force accepts these as presented.

**Charge for Service** - The task force believes that reasonable charges for either special services not provided to most residents or for services that the residents will be compensated for, like ambulance service costs, are appropriate. However, new taxes masquerading as fees, especially capitalizing on an event that may already be a disaster in a person's life, should be avoided. And if they are imposed they should only be used to compensate for the District's actual incremental cost for providing that service. As the incident tables indicate, MOFD operations personnel are not overworked. If all it takes to respond to an incident, such as a car accident (even for a non-resident travelling through Orinda on Highway 24), is a little extra time from our emergency providers, we should provide that service and not attempt to capitalize on someone's misfortune. Most of the District's $1.2 million of service charges appear to be warranted but the District should reconsider its Vehicle Accident Recovery fee which was budgeted at $50,000 but is only projected to bring in $15,000 per year.

*Reserves*

The projections of total reserves dropping to $1.3 million by 2014/15, equal to one month of operating expense, is of great concern to the Task Force. The rejection of a $2 million purchase of a new administration building makes the picture slightly better, but only slightly. As will be discussed in Section VI, the Task Force does not believe that pension contributions will, in fact, decrease after 2014/15 and therefore the recovery of reserves after this point is doubtful unless costs, mostly labor costs, can otherwise be reduced.

**A Re-Structured Long Range Financial Forecast**

The Task Force offers the following observations on and suggested revisions to MOFD's long-range forecast. It incorporates the latest financial information available: MOFD's preliminary 2012/13 budget and the 12/31/2011 pension funding results from the pension plan administrator, CCCERA. The Task Force, while impressed with MOFD's conservative assumptions of revenue growth, believes it is overly conservative. The Task Force's projections show $4.5 million more revenue in ten years than MOFD shows. But that revenue will be needed to fund underfunded liabilities. The Task Force also projects $7.4 million more in expenses by 2023 than MOFD and that is after drastically reducing salaries 23% by 2016/17 but then allowing them to increase for the next six years at 3.5%. MOFD (unrealistically) assumes they will remain level for ten years. The Task Force forecast maintains a balanced budget, creates a mechanism to fully fund MOFD's seriously underfunded employee benefit liabilities within 30 years, and builds up reserves to six months of revenue within ten years.

These revisions are detailed in a long-range forecast, Table IV-4b.

Table IV - 4b

# MOFD Long Range Financial Forecast

(Revisions by the Orinda Citizens Emergency Service Task Force in bold)

(Revised growth rates in green)

(Actual 2011/12 and budgeted 2012/13 amounts in italics)

| | 2010/11 actual | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | Average Annual Growth | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Expenses | 0 | | | | | | | | | | | | | | |
| Salaries + basic benefits | 10,046,222 | *9,507,646* | *9,371,176* | **8,808,905** | **8,280,371** | **7,783,549** | **7,316,536** | -6.00% | **7,572,615** | **7,837,656** | **8,111,974** | **8,395,893** | **8,689,750** | **8,993,891** | 3.50% increase |
| Workers Comp | 841,288 | *795,729* | *715,796* | **672,848** | **632,477** | **594,529** | **558,857** | -6.00% | **578,417** | **598,662** | **619,615** | **641,301** | **663,747** | **686,978** | 3.50% increase |
| Insurances (active) | 827,105 | *824,850* | *656,041* | **679,002** | **702,768** | **727,364** | **752,822** | 3.50% | **779,171** | **806,442** | **834,667** | **863,881** | **894,117** | **925,411** | 3.50% increase |
| *Insurances (retired) | 833,589 | *831,316* | *936,447* | **969,223** | **1,003,145** | **1,038,256** | **1,074,594** | 3.50% | **1,112,205** | **1,151,132** | **1,191,422** | **1,233,122** | **1,276,281** | **1,320,951** | 3.50% increase |
| *prefunding retiree insurance | | | | **500,000** | **517,500** | **535,613** | **554,359** | | **573,762** | **593,843** | **614,628** | **636,140** | **658,405** | **681,449** | |
| *Pension | 1,524,009 | *2,069,604* | *2,617,787* | **3,027,787** | **3,444,987** | **3,868,955** | **4,299,285** | | **4,883,937** | **4,940,503** | **4,999,048** | **5,059,642** | **5,122,357** | **5,187,267** | |
| *Pension Bond | 2,257,901 | *2,372,136* | *2,487,498* | *2,613,203* | *2,738,467* | *2,872,509* | *3,014,284* | *4.91%* | *3,157,877* | *3,307,377* | *3,466,609* | *3,624,528* | *3,790,090* | *1,687,935* | |
| *Adt'l Paydown of Unfunded Benefits | | | | **3,391,892** | **2,909,826** | **2,422,598** | **1,931,307** | | **1,442,052** | **950,665** | **983,239** | **1,021,123** | **1,055,143** | **3,421,639** | |
| Employee s/t | 16,330,114 | 16,401,281 | 16,784,745 | 20,662,861 | 20,229,541 | 19,843,372 | 19,502,045 | 3.52% | 20,100,036 | 20,186,280 | 20,821,201 | 21,475,629 | 22,149,888 | 22,905,519 | 2.72% |
| Operating Costs | 1,920,496 | *1,785,112* | *1,825,870* | **1,889,775** | **1,955,918** | **2,024,375** | **2,095,228** | 3.50% | **2,168,561** | **2,244,460** | **2,323,017** | **2,404,322** | **2,488,473** | **2,575,570** | 3.50% |
| Total excluding Cap Costs | 18,250,610 | 18,186,393 | 18,610,615 | 22,552,637 | 22,185,459 | 21,867,746 | 21,597,273 | 3.50% | 22,268,597 | 22,430,741 | 23,144,218 | 23,879,952 | 24,638,361 | 25,481,089 | 2.79% |
| Capital Costs | 1,457,478 | *1,081,639* | **735,877** | **532,371** | **532,491** | 189,497 | 948,612 | ?? | 947,803 | 1,135,260 | 1,009,042 | 1,033,244 | 1,064,241 | 1,096,169 | 3.00% |
| Total Expenses | 19,708,088 | 19,268,032 | 19,346,492 | 23,085,008 | 22,717,950 | 22,057,243 | 22,545,885 | | 23,216,400 | 23,566,001 | 24,153,260 | 24,913,196 | 25,702,602 | 26,577,258 | 2.78% |
| | | | | | | | | | | | | | | | |
| *Total retirement benefit costs | | | | 10,502,105 | 10,613,925 | 10,737,930 | 10,873,830 | | 11,169,833 | 10,943,521 | 11,254,945 | 11,574,554 | 11,902,275 | 12,299,240 | |
| | | | | | | | | | | | | | | | |
| Revenues | | | | | | | | | | | | | | | |
| Property Taxes | 17,769,563 | 17,423,059 | 17,582,221 | 18,295,975 | 19,305,810 | 20,595,495 | 21,784,437 | | 22,792,687 | 23,832,974 | 24,906,395 | 25,769,615 | 26,628,545 | 27,518,546 | |
| Orinda | 11,366,490 | 11,140,437 | 11,250,121 | 10,593,370 | 11,178,064 | 11,924,791 | 12,613,189 | | 13,196,966 | 13,799,292 | 14,420,803 | 14,920,607 | 15,417,927 | 15,933,238 | |
| Orinda % of total | 64.0% | 63.9% | 64.0% | 57.9% | 57.9% | 57.9% | 57.9% | | 57.9% | 57.9% | 57.9% | 57.9% | 57.9% | 57.9% | |
| Ad Valorem | 10,772,528 | *10,546,603* | *10,656,288* | **11,082,540** | **11,525,841** | **11,986,875** | **12,466,350** | 4.00% | **12,965,004** | **13,483,604** | **14,022,948** | **14,583,866** | **15,167,221** | **15,773,909** | 4.00% |
| New Developments | | | | 110,160 | 369,403 | 794,481 | 1,085,771 | | 1,382,886 | 1,685,944 | 1,995,063 | 2,069,389 | 2,110,777 | 2,152,992 | |
| Parcel | 593,962 | *593,833* | *593,833* | 595,433 | 601,833 | 611,133 | 615,133 | | 619,133 | 623,133 | 627,133 | 627,633 | 627,633 | 627,633 | |
| s/t before rebate | 11,366,490 | 11,140,437 | 11,250,121 | 11,788,133 | 12,497,077 | 13,392,489 | 14,167,254 | | 14,967,023 | 15,792,681 | 16,645,144 | 17,280,888 | 17,905,631 | 18,554,535 | |
| Percent cap | | | | 57.90% | 57.90% | 57.90% | 57.90% | | 57.90% | 57.90% | 57.90% | 57.90% | 57.90% | 57.90% | |
| Rebate | | | | **(1,194,763)** | **(1,319,014)** | **(1,467,698)** | **(1,554,065)** | | **(1,770,057)** | **(1,993,389)** | **(2,224,341)** | **(2,360,281)** | **(2,487,703)** | **(2,621,297)** | |
| Moraga & Canyon | 6,403,073 | 6,282,622 | 6,332,100 | 7,702,605 | 8,127,746 | 8,670,703 | 9,171,248 | | 9,595,721 | 10,033,682 | 10,485,592 | 10,849,008 | 11,210,617 | 11,585,308 | |
| Ad Valorem | 5,929,066 | *5,808,718* | *5,858,092* | **6,033,835** | **6,214,850** | **6,401,296** | **6,593,334** | 3.00% | **6,791,134** | **6,994,868** | **7,204,715** | **7,420,856** | **7,643,482** | **7,872,786** | 3.00% |
| New Developments | | | | | 116,375 | 318,203 | 534,042 | | 544,722 | 555,617 | 566,729 | 578,064 | 589,625 | 601,418 | |
| Parcel | 474,007 | *473,904* | *474,007* | 474,007 | 477,507 | 483,507 | 489,807 | | 489,807 | 489,807 | 489,807 | 489,807 | 489,807 | 489,807 | |
| Additional Parcel Tax | | | *0* | **1,194,763** | **1,319,014** | **1,467,698** | **1,554,065** | | **1,770,057** | **1,993,389** | **2,224,341** | **2,360,281** | **2,487,703** | **2,621,297** | |
| Intergovernmental Revenue | 190,681 | *425,180* | *176,664* | 178,431 | 180,215 | 182,017 | 183,837 | 1.00% | 185,676 | 187,532 | 189,408 | 191,302 | 193,215 | 195,147 | 1.00% |
| Measure H | 178,367 | *198,367* | *179,367* | 179,367 | 179,367 | 179,367 | 179,367 | 0.00% | 179,367 | 179,367 | 179,367 | 179,367 | 179,367 | 179,367 | 0.00% |
| Charge For Service | 989,872 | *921,915* | *968,041* | 1,060,056 | 1,154,592 | 1,219,029 | 1,212,310 | | 1,198,591 | 1,236,276 | 1,275,268 | 1,270,218 | 1,305,477 | 1,348,670 | |
| Ambulance | 906,709 | *865,241* | *896,750* | **928,136** | **960,621** | **994,243** | **1,029,041** | 3.50% | **1,065,058** | **1,102,335** | **1,140,916** | **1,180,849** | **1,222,178** | **1,264,954** | 3.50% |
| Vehicle Accident Recovery | 7,146 | *8,244* | *14,981* | | | | | | | | | | | | |
| Other | 76,017 | *48,430* | *56,310* | 131,920 | 193,971 | 224,786 | 183,269 | | 133,533 | 133,942 | 134,352 | 89,369 | 83,299 | 83,715 | |
| Other Rev | 494,816 | *223,903* | *28,750* | 21,100 | 21,100 | 21,100 | 21,100 | | 21,100 | 21,100 | 21,100 | 21,100 | 21,100 | 21,100 | |
| | | | | | | | | | | | | | | | |
| Total Revenue | 19,623,299 | 19,192,424 | 18,935,043 | 19,734,929 | 20,841,084 | 22,197,007 | 23,381,052 | 4.03% | 24,377,421 | 25,457,249 | 26,571,538 | 27,431,602 | 28,327,703 | 29,262,830 | 3.81% |
| Increase over prior year | | -430,875 | -257,381 | 799,886 | 1,106,155 | 1,355,923 | 1,184,044 | | 996,369 | 1,079,828 | 1,114,289 | 860,064 | 896,102 | 935,126 | |
| percent from new developments | | | 0% | 14% | 34% | 46% | 43% | | 31% | 29% | 29% | 10% | 6% | 6% | |
| | | | | | | | | | | | | | | | |
| Surplus | -84,789 | -75,608 | -411,449 | -3,350,079 | -1,876,866 | 139,764 | 835,167 | | 1,161,021 | 1,891,249 | 2,418,278 | 2,518,406 | 2,625,101 | 2,685,572 | |
| | | | | | | | | | | | | | | | |
| Capital Reserve Fund | | | | | | | | | | | | | | | |
| Adjustment | -127,463 | | | | | | | | | | | | | | |
| Balance at End of Period | 2,990,879 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Operatiing Reserve Fund | | | | | | | | | | | | | | | |
| Adjustment | 42,674 | | | | | | | | | | | | | | |
| Balance at End of Period | 3,730,082 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Total MOFD Reserve Funds | 6,720,961 | 6,645,353 | 6,233,903 | 2,883,825 | 1,006,959 | 1,146,723 | 1,981,890 | | 3,142,911 | 5,034,160 | 7,452,438 | 9,970,844 | 12,595,945 | 15,281,517 | |
| number of months of Op Expense | 4.4 | 4.4 | 4.0 | 1.5 | 0.5 | 0.6 | 1.1 | | 1.7 | 2.7 | 3.9 | 5.0 | 6.1 | 7.2 | |

Source: (thru 2016/17) Moraga-Orinda Fire District / Draft Long Range Financial Forecast as of 09/01/11

Available on-line

http://www.mofd.org/content/agendaminutes/file/090111 Finance Committee Agenda and Board Packet.pdf

pages 16-30

*Revenues*

The Task Force believes that MOFD's current revenue projections are valid as a conservative / low-end projection. However, given the $3 billion of "unrealized" market value currently locked into Orinda's and Moraga's real estate, it can be anticipated that the tax base of existing homes will increase at over the two percent annual gain which the MOFD's projections assume. As previously discussed, the Task Force believes that Orinda's tax base of existing homes could easily grow at 4.5 percent. Moraga's tax base growth, since MOFD was formed in 1997, has increased at a rate one percent less than Orinda's.

In its re-structured long range forecast, the Task Force uses a 4.0 percent rate of increase for Orinda's ad valorem property tax starting in 2013/14 (excluding new developments) and a 3.0 percent rate for Moraga.

The Task Force accepts the MOFD forecast for property tax revenue from new developments. The Task Force also accepts the MOFD forecast for revenue from parcel taxes, intergovernmental sources and Measure H and "other" sources. However, it increases the estimated revenue growth from ambulance service to equal the 3.5 percent "inflation" estimate it uses in its expense assumptions. Finally, the Task Force removes the vehicle accident recovery fee as non-substantive and causing more ill will in the community than revenue benefits.

The only other substantive adjustment the Task Force makes to the revenue portion of the long range forecast is incorporating an adjustment to the allocation of property tax revenues between Orinda taxpayers and Moraga taxpayers for the operation of the District.

As discussed in detail in Section V of this report, the Task Force calculates that Orinda taxpayers are currently paying $1 million in excess of the allocated cost of service they are receiving and that misallocation is projected to increase to $2.5 million by 2022.

While the reallocation of tax funding has no net effect on MOFD's net revenue, the Task Force includes it in Table IV-4b.

*Expenses* -

* In Table IV-4b, the Task Force's revised growth rates are in green while MOFD's assumed rates remain in black.

* Insurance costs for Active and Retired Employees - As previously stated, the Task Force believes that MOFD's assumed growth rate of 0.5 percent is unreasonably optimistic. Medical insurance costs, which were level between 2010/11 and 2011/12, are projected to decrease 20 percent this coming year for active employees while increasing 12 percent for retirees. Despite this short term net decrease, the Task Force has chosen the long term inflation rate of 3.5 percent as the growth rate for this category of expenses which are 8 percent of the entire budget. When MOFD's actuary projected retiree medical benefits in his last report in 2010 he assumed a 6 percent long-term growth rate.

* Capital Expenses - The MOFD projection (footnote 8 on the MOFD 9/1/2011 Long Range Forecast - Exhibit IV-2 on the Task Force web site www.OrindaTaskForce.org), includes funds for both a new administration building ($2 million) and a rebuilding of Orinda's station 43 ($3 million). The MOFD Directors have since voted not to purchase a new administration building. Additionally, two directors recently voiced apprehension in going forward with the rebuilding of Station 43. The Task Force believes that when the community understands the financial condition of MOFD, the decision will be made to repair and not rebuild station 43. Most of the $5 million for these two projected is reflected as reduced capital expenditures relative to the MOFD projections for years 2011/12 through 2014/15.

**Funding of Deferred Employee Benefits** - The largest revision that the Task Force made to the MOFD forecast was to provide sufficient money to fully fund newly vested employee benefits and currently unfunded but vested benefits. The magnitude of the problem is described in detail in Section VI of this report. A possible solution to funding these liabilities is presented here.

Newly Vested Benefits

* OPEB - The District has budgeted over $933,000 for medical insurance for retired former employees in fiscal year 2012/13. This benefit never has been, and continues not to be, pre-funded at the time the benefit is vested by the employees. The Task Force considers this a practice that must cease. Vested benefits should be paid for currently not rolled forward for future generations to pay for.

What would it cost to fund just the newly vested OPEB? In the 2010 actuarial report to MOFD, Bartel stated that using a 4.25 percent discount rate, prefunding OPEB would cost $1,068,000 annually. Increasing the assumed discount rate to 7.75 percent reduced the annual cost to $472,000. That implies it would cost about $750,000 per year using a 6.0 percent discount / fund-asset earning rate. However, Bartel made the assumption that medical costs will increase at a rate of 6.0 percent. The Task Force does not believe that a perpetual increase at 2.5 percent over inflation is a reasonable assumption. Hopefully, the rate of increase in medical expenses will slow down to an historic 3.5 percent. If this is true, then a pre-funding starting at about $500,000 per year should be sufficient. This value is used in Tables IV-4b and VI-4 (a, b and c).

* Pension - In 2010/11 MOFD made $1.5 million in pension contributions to CCCERA. The 2010/11 contribution was about the same as the contribution in 2006/07. At a presentation in Orinda on pension funding, *Contra Costa Times* columnist Dan Borenstein stated that "normal" pension funding was 28 percent of base salary. With base salary of about $7 million, this means the "normal" funding, of newly vested benefits should be $2 million; equal to the amount paid by MOFD in the 2010/11 fiscal year. The Task Force is assuming that $2 million is the "normal" cost for funding newly vested pension benefits for 2012/13 and will increase or decrease at the assumed salary increase and decrease rates.

Unfunded Benefits and Other Liabilities

* Pension Bond - The pension bond costs, while not a benefit to retired employees, is an unfunded employee benefit cost and needs to be categorized as such as the proceeds from the bond were used to fund the underfunded pension in 2005. This line item, a known amount, is the value in the MOFD projections and remains unchanged in the Task Force projections.

* OPEB - The District's projection for 2012/13 is $933,000 for medical insurance for retired former employees. This benefit has never been pre-funded. MOFD's actuary (Bartel), whose most recent report is included as Exhibit VI-2, shows the discounted present value of those unfunded benefits as 26.3 million (discounted at 4.25%). Table VI-2a of this report shows that the Task Force estimates the total (undiscounted) amount as approximately $52 million of liabilities spread out over 35 years. Table VI-4c shows the cost of funding these unfunded liabilities over 30 years assuming that funding increases 3 percent each year for 20 years then tapers off to zero over the next 10 years and the funding goes into an asset pool earning 6 percent returns. Column J of that table shows payments starting at $1.24 million, increasing to a maximum of $2.2 million then tapering off.

* Pension - The latest statement (as of 12/31/2011) from MOFD's pension plan administrator says MOFD has pension liabilities of $143.6 million (discounted at 7.75%) and assets with a market value of $112.2 million offsetting them. Table VI-2c shows that the liabilities have an undiscounted value of $622 million and that the assets, assuming a 6 percent asset earning rate, will be exhausted in 18 years. At that time there will still be $425 million in remaining unfunded liabilities. It is incumbent on MOFD to start funding these future liabilities. Table VI-4c shows the unfunded pension liabilities in column C (which includes the Pension Bond payments due). Column D of that table shows that by investing an additional $5.9 million in pension assets earning six percent, and increasing that payment at three percent for 20 years then reducing it to zero over the next ten years, these liabilities can be fully funded.

A portion of this funding will be demanded by CCCERA from MOFD. By the time the full impact of the currently indentified "official" underfunding (the $31 million shortfall between the $112 million in assets and $143 million in liabilities) is taken into account, CCCERA will require that it be paid down over 18 years assuming a 7.75% interest rate. This will result in a $3.25 million payment lasting 18 years. While this is significant, the Task Force believes it will not be sufficient due to the current overly optimistic asset earning assumption of 7.75 percent.

Total Funding Required For Employee Benefits

The funding required to fully fund already vested employee benefits and to start pre-funding new OPEB benefits is aggregated in column O of Table VI-4c. Offsetting these required payments are payments, which already are being made or contemplated and are included in the Long Range Forecast, Table IV-4b. These include pension bond payments and OPEB payments (insurances - retired) plus a significant portion of the pension payment due for overfunding ($3.25 million) as described above. These three amounts are aggregated in column P of Table VI-4c. The resulting Column Q are new, unanticipated costs (although much of the pension payment which grows to $5 million within five years is also currently unanticipated by MOFD).

Savings Required to Offset Increased Benefit Funding

Expenditure cuts are going to have to be made to allow for the increased funding of underfunded employee benefits. Of the required $7.6 dollars in employee benefit funding required next year, $3.5 million per year has already been anticipated. But $4.1 million in 2013/14, which continues for ten years, has not been. If these payments toward the unfunded liabilities are deferred, the amount needed later grows exponentially. Hard decisions are needed now.

* Capital Expenditures - This was already discussed above:
  - Elimination of a new $2 million administrative building has already been accepted by the MOFD Board.
  - Elimination of the rebuilding of Orinda's station 43. This is not a necessary expenditure and we can't afford it.
  - This will save a total of $5 million of the $12 million needed over the next five years.

* Employee salaries - This is the largest single element of the District's budget and the area where savings have to be made. And seeing as the savings are required because of the impact of $400-500 million in unfunded deferred employee benefits, it is not inappropriate that here is where cuts are made. The cuts should not require a diminishment in service. The Task Force estimates that by reducing employment costs by 6 percent each year for four years, the increased deferred benefit funding can be offset and reserves maintained. How can MOFD cut its employment costs by $2 million while maintaining effectiveness?

  - As described in Table IV-3, the average MOFD firefighter, exclusive of Pension Bond and unfunded liabilities, costs the district $179,000. It has also been described that Orinda is staffed by four times the number of firefighters per capita as the rest of the county even though we average the same number of incidents per capita. Further, our response times do not meet industry standards 40 percent of the time, indicating we need to spread out our first-responders more. Orinda's 11 firefighters are concentrated in three stations, almost four per station on average. This number is not required for the 90 percent of time-critical emergencies which are medical, nor for most of the remaining 10% of time-critical emergencies. While the optimal number of firefighters on an engine for structure fires is three or more, most other types of incidents can be adequately served by two or even one first responder as long as there is backup available. In 2009, there were eight structure fires in Orinda and 1,248 other incidents (99.4 percent of the total). In some cities, when there have not been enough funds to pay for three shifts of three firefighters per shift at a station, they have closed the station or not staffed some shifts. We cannot let that happen in Orinda. It is not necessary. It leads to increased response times, which is the crucial factor - not three first responders.

- Moving the Orinda ambulance to Station 43 would accomplish two things:
  1) It would reduce the need to rebuild station 43, where remodeling and structural retrofitting would suffice as the building would only have to house two responders.
  2) It would reduce the Orinda staff from 11 to eight firefighters, eliminating the cost of nine positions (for three shifts) -- a $1.1 million annual savings.
  Orinda would still have eight firefighters, three times per capita that the rest of the county operates, and response times would be unaffected.

- A similar move, relocating the Moraga-based ambulance to the Rheem station, replacing the three-person engine crew, would save another $1.1 million each year. MOFD would still have a total of 13 firefighters for 34,000 residents; 2.5 times the coverage of the rest of the county.

- This total $2.2 million annual savings is enough to cover the savings required through 2016/17.

* Additional cost-savings / operation-enhancement possibilities:
  - Two-tier wage and benefit agreements.
  - One-person "rapid response" paramedic stations to address the poor response times to remote areas. These could provide improved functionality for a much lower cost than current response times provided by the three-to-five-person stations we currently have.
  - Taking into account, when negotiating wages with its firefighters, that their jobs in the MOFD have one-quarter the risk of the average firefighter in ConFire and less than 10 percent of an urban firefighter based on the number of incidents per year they attend.
  - Reviewing the need (according to Table IV-3) for a Fire Chief, two Division Chiefs and two Battalion Chiefs with combined compensations of $1.8 million for a 5-station emergency services department. Is it possible that certain responsibilities could be combined, delegated to Fire Captains, or accomplished by non-safety administrators (possibly retired fire fighters)?

**Conclusion**

If MOFD is going to deal with its retirement benefit obligations, it is going to have to make major revisions to its personnel costs, which will include reduced salaries and benefits and revised operational methods. While having five three-person engines may be required or optimal for a structure fire, alternatives must be explored. More two person response units to more rapidly respond to medical emergencies and techniques like expanded use of home sprinkler systems to allow more time for responding to residential structure fires must be evaluated. California legislation has just been proposed to reduce pension expenses but none of it addresses the $700 million in liabilities already vested against MOFD's future revenues. Current and on-going expenses must be drastically reduced to allow for funding these future liabilities.

**Data utilized**

Most of the data in this section was from MOFD's "2011/12 Draft General and Special Revenue Fund Budgets" and "Draft Long Range Financial Forecast as of 09/01/11" documents presented at the September 1, 2011 meeting of the MOFD Finance Committee. These documents can be found on-line atwww.mofd.org/content/agendaminutes/file/090111 Finance Committee Agenda and Board Packet.pdf

and are also included as Exhibits IV-1 and IV-2 on the Task Force Web site

www.OrindaTaskForce.org

The employee cost data, by employee, (Table IV-3) was derived from the data base created by The Contra Costa Times / Bay Area News Group. It can be found on-line at

http://www.mercurynews.com/salaries/bay-area#results

by selecting "Contra Costa" in the County field and "Moraga-Orinda Fire Dept." in the Entity field.

Tax Data was obtained from the Contra Costa County Auditor - Controller's office.

A REPORT ON THE COSTS, OPERATIONS, PERFORMANCE AND FINANCES OF THE MORAGA-ORINDA FIRE DISTRICT (MOFD)

by

The Orinda Citizens Emergency Services Task Force
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# Section V - Tax Funding Allocation

One of the primary reasons Orinda voters formed MOFD in 1997, withdrawing from service by ConFire, was to ensure that property tax dollars paid by Orinda taxpayers and allocated to emergency services were being spent in Orinda and not elsewhere in the County. That this goal continues to be met has come under question over the past several years. It was an issue raised by residents in the 2006 and 2007 road tax measures. In 2008 the Orinda Revenue Enhancement Task Force determined that Orinda property tax payers were paying significantly more than the cost of the services provided to them. Since then, the grassroots community organization FAIR has reiterated this claim, making presentations to the Orinda City Council, MOFD and the Tri-Agency Ad Hoc Committee to support their claim.

The District is composed of two basic tax-paying and service areas: Moraga, including a few hundred homes in unincorporated Moraga and Canyon, and Orinda. Orinda is serviced by three stations, which house three engine companies and one ambulance company with 11 firefighters per shift. Moraga is serviced by two stations, which house two engine companies and one ambulance company with eight firefighters per shift. 58 percent of the fighters serving the community are based in Orinda and 42 percent in Moraga. Property tax revenue (ad valorem plus parcel taxes) estimated to be received by the district in the current fiscal year totals $17.5 million. Allocating the total by the number of firefighters stationed in each service area would result in $10.1 million being allocated to Orinda operations and $7.4 million to Moraga . Unless there is a significant reason to split the costs of the system differently, the Task Force believes this is a reasonable and simple allocation methodology.

This year Orinda property taxpayers will pay $11.2 million to MOFD. The Task Force investigated what might explain the $1.1 million difference between what Orinda taxpayers will pay and what the above allocation method would indicate. That investigation found no explanation, other than Orinda taxpayers pay more than their allocated share and Moraga taxpayers less -- $1.1 million less. .

## History of the Issue

In 1993, due to county funding reductions, the Contra Costa Board of Supervisors ordered the Orinda Fire Protection District to integrate functionally with the county fire department, ConFire, the Orinda FPD chief retired and management responsibility transferred to ConFire. LAFCO approved Orinda FPD dissolution and consolidation with ConFire in 1994. Orinda opposed the ConFire consolidation due to concerns about negative impacts on Orinda service levels and Orinda taxpayers subsidizing increasing service levels elsewhere. In 1997, Orinda residents voted to detach from ConFire and form MOFD. In the voters pamphlet for the formation of MOFD, the Orinda Mayor at the time, Sargent Littlehale, made the following statement: "We must never again let the Supervisors spend $2.8 million of Orinda's money elsewhere in the County, ignoring Orinda's needs." That $2.8 million, over the four-year period from 1993 to 1997, equated to $700,000 per year; representing 15 percent of the total taxes Orinda was paying to ConFire at the time. (See greater detail in LAFCO report, pg 240, Exhibit I-4.)

In the run-up to Orinda's infrastructure bond Measure Q in 2006, a small group of Orinda citizens re-opened the issue of Orinda, again, paying more than its fair share of emergency services costs. In the five years since, the issue has been discussed in several venues but never resolved.

In 2008 the Orinda Revenue Enhancement Task Force (RETF), chaired by Councilmember Sue Severson, researched the claim and decided it had validity. The RETF suggested to the City Council (Exhibit I-2) that by constraining MOFD's annual growth from an historic 6.1 percent to 4.5 percent (reverting the 1.6 percent annual savings mostly back to Orinda), MOFD could rectify the issue and bring the equity between Orinda and Moraga back in line. MOFD rejected this proposal out of hand, saying they could not possibly live with a 4.5 percent cap on expenditures (in the three years since then, MOFD revenue has grown 2.3 percent per year and they project a 2.6 percent annual growth over the next six years).

In an attempt to settle the issue, Orinda asked Moraga and MOFD to participate in a series of Tri-Agency meetings in 2009 which they agreed to. At these meetings MOFD demonstrated, through the use of "first-due" maps, that Moraga-based units had "first-due" response duties for:

1) all of the incidents in Moraga and Canyon (5,997 parcels)

2) 700 parcels in Orinda

3) plus the Moraga-based ambulance had back-up responsibility for an additional 800 parcels in Orinda (allocating half-responsibility to Moraga-based units).

MOFD further stated that Orinda-based units had no first-due responsibilities in Moraga.

Therefore, out of the total 7,097 (5,997 + 700 + 400) parcels that Moraga-based units were first-due on, Orinda taxpayers were responsible for the cost of 1,100 of these. This equates to the cost of 1.24 of Moraga's 8 firefighters (1,100 divided by 7,097 times the 8 firefighters stationed in Moraga). Added to the 11 firefighters stationed in Orinda's three station, results in Orinda taxpayers being responsible for the cost of 12.24 of the District's 19 firefighters or 64% of the total cost. At the time (2008/09) Orinda taxpayers were paying 64% of the District's total property tax revenue so MOFD concluded that taxes paid and services provided were appropriately allocated. The Tri-Agency Committee, neither requesting nor allowing alternative opinions, accepted this conclusion.

In 2010 there was a second meeting of Tri-Agency Committee where the question of tax-funding inequity was again addressed. MOFD Chief Bradley presented the same case that Chief Nowicki had presented in the prior year's meeting. However, at this meeting two grassroots citizens groups, OrindaCARES and FAIR also were allowed to present.

OrindaCARES made the same basic argument as MOFD, using "first due" maps as the basis for cost allocation with two distinctions:

(1) Instead of using MOFD's "first-due" maps, it said the dividing line between the old Moraga Fire Protection District and the old Orinda Fire Protection District was the "natural" dividing line for service claiming that Moraga-based emergency units provided all service south of this line was and thus Orinda taxpayers were obliged to share the cost of those units.

(2) Furthermore, it said that since all property owners pay the same 1% property tax, per Proposition 13, the fact that Orinda's tax to MOFD is much greater than Moraga's is partially because Orinda's property is worth more per parcel. Therefore, Orinda taxpayers SHOULD pay a greater share of the cost of operating MOFD, greater than even an allocation based solely on service would provide.

FAIR made three basic declarations at the Tri-Agency meeting:

(1) Equitable allocation of emergency services costs was the basis upon which Orinda taxpayers detached from ConFire and formed MOFD in 1997.

(2) It agreed with both MOFD and OrindaCARES that costs should be allocated on the basis of service, but it disagreed with OrindaCARES that it costs should be re-allocated on the basis of property values.

(3) Actual service (from Moraga-based units into Orinda and visa versa - Table III-1) should be the basis of cost allocation, not theoretical service based on parcels shown on a map. The data existed to determine reality without needing to rely on theory. FAIR had the data, obtained from MOFD itself, which disproved MOFD's and OrindaCARES' theory of service allocation, and showed that the service into Orinda from Moraga-based units was largely reciprocated by service into Moraga by Orinda-based units. While Moraga-based units did provide some incremental service into Orinda, the cost of that service was a fraction of the excess taxes Orinda taxpayers were paying to support the District.

The second Tri-Agency Committee listened to the presentations from MOFD, OrindaCARES, and FAIR but disbanded without comments, discussion, or conclusions. The issue was left unresolved.

### Why Concern Ourselves with Funding Equity?

Orindans voted for the formation of MOFD in 1997 for two reasons:

1) To improve service, mainly medical response by putting a paramedic on every response unit and to provide ambulance service that was more responsive than service coming out of Walnut Creek.

2) In the words of Orinda's Mayor Sargent Littlehale in the voter's pamphlet (Exhibit I-1) for the measures that formed MOFD: "To keep Orinda's tax dollars in Orinda ....)

While point (1) is of crucial concern, point (2) says "Yes, funding equity was a major reason for forming MOFD and that equity should be maintained."

In fact, all parties appear to agree that funding equity is important. No one has claimed otherwise. Therefore the Task Force will reexamine the issue.

**Analysis**

Everyone appears to agree that costs of operating MOFD should be shared between Orinda and Moraga taxpayers **mainly** based on the service provided each community. All parties also appear to agree that the majority of service to Orinda residents comes from Orinda-based MOFD units and the majority of service to Moraga residents comes from Moraga-based MOFD units. It is also agreed that Moraga-based units provide service into Orinda. The main disagreement has been "is service provided by Moraga-based units into Orinda significant to the extent it warrants a re-allocation of expenses beyond the basic split based on firefighters stationed in each community?"

MOFD records show that Orinda homes generated 1,256 out of the 2,377 (53 percent) of the District's total incidents (Table III-3). These Orinda incidents were attended by 2,419 of the District's total 4,687 (52 percent) response unit operations (Table III-1), and these response units were manned by 6,269 responders out of the District's total 12,117 (52 percent) responder-operations. So while it appears that Orinda receives 52-53 percent of the service, it is acknowledged that in order to provide appropriate response times, Orinda is primarily served by the 11 firefighters stationed in Orinda who represent 57.9 percent of the District's total force (per shift) of 19. In addition, Orinda receives service from Moraga-abased units but Moraga also receives reciprocal service from Orinda-based units (Table III-1).

The questions are:

1) How much service is provided by Moraga-based units into Orinda and how much reciprocity is provided by Orinda?
2) What is the value of any net service from Moraga to Orinda?
3) Are there other factors to consider in the cost allocation?

**Existing Property Tax Payments** - In 2012/13, MOFD will receive approximately $16.5 million in ad valorem tax and $1.1 million in Parcel tax: $17.6 million total (Table IV-2). Orinda taxpayers will be paying $11.2 million of this total. If Orinda taxpayers were paying 11/19ths (57.9 percent) of the total, based on the firefighters stationed in Orinda, they would be paying $10.2 million or $1 million less than what they are paying. Are there service or other factors which account for this $1 million excess payment?

**Service provided into (and out of) Orinda** - Table III-1 summarizes the total service provided by MOFD emergency service units (5 engine units and two ambulance units). Of the 4,832 total operations by these seven units, 824 of these operations (17 percent) were to incidents outside of their primary service area (the City of Orinda or the Town of Moraga plus Canyon). Moraga-based units provided 100 more operations outside of Moraga-Canyon than Orinda-based units provided outside of Orinda (463 vs.361). The difference is mostly accounted for by ambulance operations (248 out of Moraga vs. 155 out of Orinda). These 100 ambulance operations (200 person-operations for the two-person ambulance crew) represent 3.2 percent of Moraga's total person-operations for the year.

Table III-3 summarizes the first responders to MOFD's 2,377 incidents in 2009. Moraga-based crews were first responder to 103 incidents in Orinda while Orinda-based crews were first responder to 55 incidents in Moraga. The 50 non-reciprocated first responses out of Moraga were all by the Moraga-based ambulance.

Net of reciprocal responses from Orinda, Moraga-based equipment provided one first-response per week into Orinda and an additional one back-up response per week, all provided by the Moraga-based ambulance. Is this significant enough to warrant a reallocation of expenses beyond the basic split based on firefighters stationed in the two communities?

**Value of the net service**

Table III-1 shows MOFD provided 145 emergency unit operations to areas outside of its service area in 2009. Most of these were into the ConFire service area. Table III-1 also shows ConFire provided 260 operations into the MOFD service area. ConFire did not charge MOFD for the net 115 operations (345 person-operations) into the MOFD service area. This difference is considered within the range of the mutual aid agreements between regional emergency service providers.

At the 2008 Tri-Agency meeting, MOFD presented an exhibit (Exhibit V-1) of the cost for operating one of its ambulances. These were direct costs without the allocation of overhead. Since then, costs have not increased substantially. Exhibit V-1 shows the Moraga-based ambulance costs approximately $600 per operation more than it generates from transportation fees. Applying this unit-cost to the 100 operations the ambulance made into Orinda, net of service the Orinda-based ambulance provided to Moraga, results in an annual cost of about $60,000 per year.

The Task Force does not consider this $60,000 expense allocation, 3/10 of one percent of the total budget, significant enough to warrant a reallocation of expenses beyond the simple allocation by fire-fighters stationed in each community.

**Other Possible Factors for Cost Reallocation** -

A) *Equipment repair and depreciation* - At the 2009 Tri-Agency meeting MOFD commented on the fact that equipment used to service Orinda incidents experienced more wear and tear than equipment attending Moraga equipment. As Table II-1 shows, 52 percent of MOFD's equipment is used to service Orinda incidents. But the Task Force suggests that Orinda pay 58 percent of the district's costs. The Task Force believes that paying for 58 percent of equipment costs while only utilizing 52 percent of equipment operations compensates for possible greater wear and tear on Orinda roads.

B) *First Due areas of responsibility* - At the 2009 and 2010 Tri-Agency meetings, based on maps that they presented, MOFD claimed that Moraga-based equipment was "first due" to 700 Orinda parcels and that the Moraga-based ambulance was "first due" (for emergency transport) to an additional 800 Orinda parcels. It was because of these "first due" responsibilities that

Exhibit V-1

(Presented by MOFD to the 2009 Tri-Agency Committee)

# COST TO PROVIDE A DEDICATED AMBULANCE

The Tri-Agency Panel asked the District to calculate the cost of deploying an ambulance 24/7. Keep in mind, that prior to the merge Moraga staffed a dedicated paramedic ambulance, with a back-up ambulance that was utilized for special event staffing and also to be used as a 'rehab' unit. Those same resources remain in place, and since the merger The City of Orinda also now benefits from a dedicated paramedic ambulance (FS 45) as well as a cross-staffed paramedic ambulance (FS 44). It is important to keep in mind that ambulance crews at MOFD are also highly trained firefighters – they immediately become suppression crews at fires and rescue teams at emergency incidents. They are not simply 'ambulance drivers' as many might refer to private ambulance company paramedics/attendants.

What does it cost to provide an ambulance 24/7? Information below is provided in very broad terms:

| | |
|---|---|
| Ambulance (6 to 7 year depreciation – cost to change with refurbish option) | $180,000 |
| Annual vehicle service & maintenance (annual) | $10,000 |
| Communications, radios, mobile data terminals (MDTs) (10 year depreciation) | $7,000 |
| Communication contract (annual) | $2,000 |
| | |
| Ambulance equipment inventory (see attachment) (7 year depreciation) | $52,000 |
| Expired drugs/waste (annual) | $2,000 |
| Equipment service contracts/upgrades (annual) | $3,000 |
| Fuel (annual at $2.19/gallon) | $4,000 |

Crew 6.3 paramedic/firefighters
(does not include hiring costs, academy, safety equipment, etc.)

| | |
|---|---|
| Salaries, benefits, labor costs (annual) (Overtime for backfill not factored in) | $1,042,032 |
| Certifications & specialized training for 6.3 paramedics (annual) | $2,500 |

| | |
|---|---|
| BASIC TOTAL COST TO KEEP AMBULANCE IN SERVICE FOR 1 YEAR | $1,099,374 |
| ANNUAL REVENUE GENERATED PER AMBULANCE | $438,500* |
| ANNUAL NET COST TO OPERATE AMBULANCE | $660,874* |

* In 2010/11 MOFD generated ambulance fees of approximately $850,000 net of administration expenses for 1,960 ambulance operations. This is an average of $435 per operation. The Moraga-based ambulance provided 1,065 of the District's ambulance operations, therefore was responsible for about $460,000 of the District's ambulance fees. Thus, the net cost for the Moraga-based ambulance was about $640,000 which equates to $600 per operation.

MOFD claimed that Orinda taxpayers were responsible for 15 percent of the cost of operating the Moraga stations.

While service may have been provided based on first-due-maps at some point in the past, this is no longer the case. Equipment is now dispatched (by ConFire's central dispatch) on the basis of which emergency unit is closest to the incident and available for service. This is determined by the location of all equipment coming from GPS transponders on each unit and a computer generated response time estimate to the incident location. The maps presented by MOFD are no longer utilized. So which units are responsible for first and backup responses is, by definition, equivalent to the units which actually respond as shown on Table III-1.

Providing service from the nearest station (which the maps reflect) makes sense in a static service model but the reality of providing service is a dynamic model impacted by available units. Including the 700 homes in Orinda, Moraga's three emergency units would service 18,300 residents while Orinda's four emergency units would only serve 15,700 residents. This would make the Moraga units 50 percent busier than the Orinda units and therefore 50 percent more likely to be unavailable than an adjacent Orinda unit for any particular incident. This lack of availability causes Orinda-based units to respond frequently to incidents in Moraga where "the map" says they will never provide such response. It also causes Moraga-based units to provide fewer responses in areas of Orinda where the maps indicate they would be the sole responder.

Simply put, the maps no longer reflect the reality of providing emergency service or allocation of resources.

C) OrindaCARES claimed that Orinda taxpayers *should* pay more for emergency services because their homes are worth more. It believes we all pay the same 1% ad valorem tax and since Orinda properties' assessed value is 60% of the district's total, even though Orinda's population is only 52%, Orinda residents should pay a greater proportion per capita than Moraga residents. The Task Force does not believe that this is the general sentiment of Orinda taxpayers. Orinda taxpayers do pay more per capita for most property tax funded agencies as the table below indicates. While Orinda's residents are served by 28 percent more firefighters per capita than Moraga's residents and therefore should pay 28 percent more for that service; they are, in fact, paying 55 percent more for their service. In 1997 Orinda taxpayers voted to form MOFD because they did not want this tax differential to go elsewhere in the county. Tax law does not obligate it to go elsewhere. Orinda taxpayers have the right "to use it in Orinda". The Task Force would need to see a new poll to believe that this attitude has substantively shifted.

## ALLOCATION OF BASIC 1 PERCENT PROPERTY TAX

| | Orinda | | Moraga | |
|---|---|---|---|---|
| | $ | $/home | $ | $/home |
| Assessed Value | 4,650,247,262 | | 2,954,044,435 | |
| 1% Property Tax | 46,502,473 | 6,550 | 29,540,444 | 5,060 |
| **MORAGA-ORINDA FIRE** | **10,506,256** | **1,480** | **5,589,260** | **957** |
| THE CITY | 3,428,952 | 483 | 1,564,006 | 268 |
| THE COUNTY | 4,779,969 | 673 | 4,048,916 | 694 |
| SCHOOLS | 23,693,386 | 3,337 | 15,635,393 | 2,678 |
| TOTAL SPECIAL DISTRICTS | 4,093,910 | 577 | 2,702,870 | 463 |
| COUNTY LIBRARY | 670,520 | 94 | 423,408 | 73 |
| C C FLOOD CONTROL | 78,677 | 11 | 49,646 | 9 |
| FLOOD CONTROL Z-3B | 9,136 | 1 | 10,161 | 2 |
| CO WATER AGENCY | 16,030 | 2 | 10,117 | 2 |
| CC RES CONSV | 7,262 | 1 | 4,586 | 1 |
| CO CO MOSQUITO ABA | 70,048 | 10 | 44,207 | 8 |
| CENTRAL SANITARY | 853,855 | 120 | 548,831 | 94 |
| ALAMO LAF CEMETERY | 115 | 0 | - | - |
| EAST BAY MUD | 673,088 | 95 | 416,075 | 71 |
| BART | 283,505 | 40 | 178,829 | 31 |
| BAY AREA AIR MGMNT | 82,714 | 12 | 52,118 | 9 |
| EAST BAY REGNL PK | 1,348,961 | 190 | 851,216 | 146 |
| MORAGA LTG MTCE 1 | - | - | 113,678 | 19 |

**What is a fair allocation of tax revenue?**

The Task Force does not believe it unreasonable to just stick with a basic allocation based on firefighters stationed in and for the most part serving each community: **57.9 percent to Orinda / 42.1 percent to Moraga and Canyon**. Separate allocations could be made for administrative expenses, capital expenses and station operating expenses but the Task Force believes that this becomes too complicated to be manageable.

**Should there be an adjustment for net service from Moraga into Orinda?**

(A) If Orinda and Moraga were separate districts, the 100 operations per year provided by Moraga-based equipment into Orinda would fall within the limits of uncompensated mutual aid.

(B) The net allocated cost of the 100 ambulance operations from Moraga into Orinda, $60,000 per year, is only 3/10ths of one percent of MOFD's total budget. The Task Force does not believe this warrants a special reallocation of expenses. The Task Force does not know MOFD operations protocol but it is possible that Moraga residents might be happier if the Orinda-based ambulance was re-deployed closer to Moraga when the Moraga-based ambulance is serving Orinda rather than receive a monetary compensation.

(C) When the district was first formed, Orinda had some extraordinary capital needs warranting a larger-than-normal allocation of expenses to Orinda. As Table V-1 indicates, since the district was formed, Orinda taxpayers have paid $16 million in property taxes more than what they would have paid using an allocation based on the number of firefighters stationed in each community.

At the 2010 Tri Agency meeting, MOFD presented an accounting of capital expenditures for stations and equipment in Orinda and Moraga showing a total of $3.37 million with $3.07 million going to facilities and equipment in Orinda and only $300,000 to Moraga. In addition, there was a new station built in both Orinda (station 44) and Moraga (station 42). The two stations were designed for the same function and, while the Task Force understands that the Orinda station was much more expensive than the one in Moraga, it is probable that the cost differential was mostly due to rapidly rising construction costs as the Moraga station was built several years before the Orinda station. The Task Force is not aware of the actual costs but believes they were in the $2-3 million range. Allocating $2.5 million for each station brings the total facility and equipment cost since the formation of the District to $8.4 million with Orinda's total cost being $5.6 million and Moraga's $2.8 million.

Orinda's $5.6 million is only $1 million in excess of 55 percent of the total $8.4 million which a basic allocation based on firefighters serving the communities would have produced. Yet Orinda taxpayers have paid $16 million in excess. The Task Force believes the argument for reallocation due to excess capital needs is no longer warranted and has not been for a long time.

Given the above three factors, the Task Force believes that there is no significant reason for the cost allocation between Orinda and Moraga taxpayers to vary from a basic allocation based on firefighters stationed in each community.

**Making the Financial Adjustment to Regain and Maintain Funding Equity**

No one expects MOFD to suffer a net financial loss (or gain) in order to restore funding equity (especially in light of the revelations of fiscal distress described in Section VI of this report). However, the Task Force is not sympathetic to the fact that community leaders , including the MOFD Board and Orinda and Moraga Councils, could not see this situation developing in advance. Orinda formed MOFD because, to reiterate Mayor Littehale's statement: "We must never again let the Supervisors spend $2.8 million of Orinda's money elsewhere in the County, ignoring Orinda's needs." That was $700,000 per year for the four years ConFire provided Orinda with service. That has become $1 million per year.

Now we find ourselves looking for a return to an equitable funding situation that Orinda taxpayers were promised from the outset. How can we do that? How can we revert back to Orinda taxpayers paying 57.9 percent of MOFD's total tax revenue needs with Moraga taxpayers paying their 42.1 percent share?

# Table V-1
# MOFD Property Tax Revenue Allocation History

(all costs in $1,000's)

| FYE | | Property Tax Base | | Ad Valorem Taxes to MOFD | | | Fire Flow Parcel Tax | | Total Property Tax | | | | Firefighters per Shift | | | Allocating tax by Firefighters | | | Tax Paid vs Tax Allocated | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Orinda (d) | Moraga (d) | Orinda 22.6% | Orinda % of Total | Moraga 19.0% | Orinda | Moraga | Orinda | Orinda % of Total | Moraga | Orinda + Moraga | Orinda | Moraga | Orinda + Moraga | Orinda | Moraga | Average per firefighter | Orinda | Moraga |
| 1997 | | 2,049,534 (a) | 1,540,961 (b) | 4,632 | 61.3% | 2,921 | | | | | | | | | | | | | | |
| 1998 | 1 | 2,138,163 (a) | 1,595,923 (a) | 4,833 | 61.5% | 3,025 | 593 | 473 | 5,426 | 60.8% | 3,499 | 8,925 | 9 | 8 | 17 | 4,725 | 4,200 | 525 | 701 | (701) |
| 1999 | 2 | 2,297,859 (b) | 1,695,143 (b) | 5,194 | 61.8% | 3,213 | 593 | 473 | 5,787 | 61.1% | 3,687 | 9,474 | 9 | 8 | 17 | 5,015 | 4,458 | 557 | 771 | (771) |
| 2000 | 3 | 2,469,482 (b) | 1,800,531 (b) | 5,581 | 62.1% | 3,413 | 494 | 395 | 6,076 | 61.5% | 3,808 | 9,883 | 9 | 8 | 17 | 5,232 | 4,651 | 581 | 843 | (843) |
| 2001 | 4 | 2,653,923 (b) | 1,912,472 (b) | 5,998 | 62.3% | 3,625 | 494 | 395 | 6,493 | 61.8% | 4,020 | 10,513 | 9 | 8 | 17 | 5,565 | 4,947 | 618 | 927 | (927) |
| 2002 | 5 | 2,852,140 (b) | 2,031,372 (b) | 6,446 | 62.6% | 3,851 | 494 | 395 | 6,941 | 62.0% | 4,245 | 11,186 | 9 | 8 | 17 | 5,922 | 5,264 | 658 | 1,019 | (1,019) |
| 2003 | 6 | 3,065,161 (b) | 2,157,664 (b) | 6,928 | 62.9% | 4,090 | 494 | 395 | 7,422 | 62.3% | 4,485 | 11,907 | 9 | 8 | 17 | 6,304 | 5,603 | 700 | 1,119 | (1,119) |
| 2004 | 7 | 3,294,092 (b) | 2,291,807 (b) | 7,445 | 63.2% | 4,344 | 494 | 395 | 7,940 | 62.6% | 4,739 | 12,678 | 9 | 8 | 17 | 6,712 | 5,966 | 746 | 1,227 | (1,227) |
| 2005 | 8 | 3,540,122 (b) | 2,434,291 (b) | 8,001 | 63.4% | 4,615 | 494 | 395 | 8,496 | 62.9% | 5,009 | 13,505 | 9 | 8 | 17 | 7,150 | 6,355 | 794 | 1,346 | (1,346) |
| 2006 | 9 | 3,804,527 (b) | 2,585,633 (b) | 8,599 | 63.7% | 4,901 | 494 | 395 | 9,093 | 63.2% | 5,296 | 14,389 | 9 | 8 | 17 | 7,618 | 6,771 | 846 | 1,475 | (1,475) |
| 2007 | 10 | 4,117,186 (a) | 2,772,177 (a) | 9,306 | 63.9% | 5,255 | 593 | 473 | 9,899 | 63.3% | 5,728 | 15,627 | 9 | 8 | 17 | 8,273 | 7,354 | 919 | 1,626 | (1,626) |
| 2008 | 11 | 4,371,643 (a) | 2,943,378 (a) | 9,881 | 63.9% | 5,580 | 494 | 395 | 10,375 | 63.5% | 5,974 | 16,349 | 11 | 8 | 19 | 9,465 | 6,884 | 860 | 910 | (910) |
| 2009 | 12 | 4,582,195 (a) | 3,044,010 (a) | 10,357 | 64.2% | 5,770 | 593 | 473 | 10,950 | 63.7% | 6,244 | 17,193 | 11 | 8 | 19 | 9,954 | 7,239 | 905 | 996 | (996) |
| 2010 | 13 | 4,829,259 (a) | 3,095,135 (a) | 10,915 | 65.0% | 5,867 | 593 | 473 | 11,508 | 64.5% | 6,341 | 17,849 | 11 | 8 | 19 | 10,334 | 7,515 | 939 | 1,175 | (1,175) |
| 2011 | 14 | 4,812,131 (a) | 3,041,729 (a) | 10,876 | 65.4% | 5,766 | 594 | 474 | 11,470 | 64.8% | 6,240 | 17,710 | 11 | 8 | 19 | 10,253 | 7,457 | 932 | 1,217 | (1,217) |
| 2012 | 15 | 4,659,791 (a) | 3,058,063 (a) | 10,532 | 64.5% | 5,797 | 594 | 474 | 11,126 | 64.0% | 6,271 | 17,397 | 11 | 8 | 19 | 10,072 | 7,325 | 916 | 1,054 | (1,054) |
| Total through 2011/12 | | | | | | | | | 129,000 | | 75,584 | 204,585 | | | | | | | 16,406 | (16,406) |
| 2013 | 16 | 4,708,252 (a) | 3,084,057 (a) | 10,641 | 64.5% | 5,846 | 594 | 474 | 11,235 | 64.0% | 6,320 | 17,556 | 11 | 8 | 19 | 10,164 | 7,392 | 924 | 1,072 | (1,072) |
| 2014 | 17 | 4,944,583 (c) | 3,176,579 (c) | 11,176 | 65.0% | 6,022 | 596 | 474 | 11,771 | 64.4% | 6,496 | 18,267 | 11 | 8 | 19 | 10,576 | 7,691 | 961 | 1,196 | (1,196) |
| 2015 | 18 | 5,253,406 (c) | 3,333,126 (c) | 11,874 | 65.3% | 6,318 | 602 | 478 | 12,476 | 64.7% | 6,796 | 19,271 | 11 | 8 | 19 | 11,157 | 8,114 | 1,014 | 1,318 | (1,318) |
| 2016 | 19 | 5,642,323 (c) | 3,537,507 (c) | 12,753 | 65.5% | 6,706 | 611 | 484 | 13,364 | 65.0% | 7,189 | 20,553 | 11 | 8 | 19 | 11,899 | 8,654 | 1,082 | 1,465 | (1,465) |
| 2017 | 20 | 5,981,092 (c) | 3,752,208 (c) | 13,518 | 65.5% | 7,113 | 615 | 490 | 14,134 | 65.0% | 7,603 | 21,736 | 11 | 8 | 19 | 12,584 | 9,152 | 1,144 | 1,549 | (1,549) |
| 2018 | 21 | 6,330,874 (c) | 3,861,963 (c) | 14,309 | 66.2% | 7,321 | 619 | 490 | 14,928 | 65.7% | 7,811 | 22,739 | 11 | 8 | 19 | 13,165 | 9,574 | 1,197 | 1,764 | (1,764) |
| 2019 | 22 | 6,692,057 (c) | 3,974,955 (c) | 15,125 | 66.7% | 7,535 | 623 | 490 | 15,748 | 66.2% | 8,025 | 23,773 | 11 | 8 | 19 | 13,764 | 10,010 | 1,251 | 1,985 | (1,985) |
| 2020 | 23 | 7,065,047 (c) | 4,091,279 (c) | 15,968 | 67.3% | 7,756 | 627 | 490 | 16,596 | 66.8% | 8,245 | 24,841 | 11 | 8 | 19 | 14,382 | 10,459 | 1,307 | 2,214 | (2,214) |
| 2021 | 24 | 7,345,263 (c) | 4,211,035 (c) | 16,602 | 67.5% | 7,983 | 628 | 490 | 17,229 | 67.0% | 8,472 | 25,702 | 11 | 8 | 19 | 14,880 | 10,822 | 1,353 | 2,349 | (2,349) |
| 2022 | 25 | 7,621,040 (c) | 4,334,324 (c) | 17,225 | 67.7% | 8,216 | 628 | 490 | 17,853 | 67.2% | 8,706 | 26,559 | 11 | 8 | 19 | 15,376 | 11,183 | 1,398 | 2,477 | (2,477) |
| 2023 | 26 | 7,907,487 (c) | 4,461,250 (c) | 17,872 | 67.9% | 8,457 | 628 | 490 | 18,500 | 67.4% | 8,947 | 27,447 | 11 | 8 | 19 | 15,890 | 11,557 | 1,445 | 2,610 | (2,610) |

(a) Actual
(b) Estimated
(c) Projected
(d) Includes unincorporated areas

The projected growth for both cities assume the following:

(1) Orinda's existing home stock tax base increases at 4.0% (1997-2013 average = 5.3%)
(2) Moraga's existing home stock tax base increases at 3.0% (1997-2013 average = 4.4%)
(3) The value of tax base increases from new developments in Orinda and Moraga from MOFD's 9/1/2011 Long Rang Financial Forecast
(3) The future increases in parcel taxes in Orinda and Moraga from MOFD's 9/1/2011 Long Rang Financial Forecast

Other sections of this report confirm that any savings that MOFD might be able to come up with by instituting operational efficiencies would need to be used to increase underfunded employee retirement benefit accounts. A reallocation of expenses has to be borne by the taxpayers themselves.

Table IV-2 shows that the adjustment for 2012-13 would amount to a rebate to Orinda taxpayers of $1,070,000 and an offsetting increase in the assessment to Moraga taxpayers.

Before the formation of MOFD, Moraga taxpayers agreed to a fire flow parcel tax with a rate not exceeding "30 cents" to provide the premium service they desired. With the addition of Orinda tax money to the District in 1997, the rate charged Moraga taxpayers never needed to exceed 6 cents. The $1.07 million rebate to Orinda taxpayers can be offset by increasing Moraga's parcel tax from "6 cents" ($473,400) to 19.57 cents ($1,543,000); well below the 30-cent cap. This only requires a vote by the MOFD board.

Should there be a cap on MOFD revenue growth? Using the Task Force's assumption that Orinda property tax will grow at four percent and Moraga property tax at three percent; plus MOFD's assumption that new property development in Orinda will generate $2.2 million in new tax revenue in Orinda and $600,000 in Moraga, MOFD's total property taxes will increase 57 percent over the next ten years (Table IV-4b). This is well above the assumed 3.5 percent rate of inflation. During that time period, Orinda's taxes will increase 65 percent while Moraga's only 42 percent. This will cause an additional need for a funding adjustment and that adjustment is projected to be $2.6 million (greater than the 30cent cap) by 2023. The net effect on Moraga taxpayer's a tax increase of 83 percent over the ten year period. At some point do Orinda and Moraga taxpayers agree to cap MOFD's revenue increases?

## Conclusion

There is an inequity in MOFD funding. It is too large to ignore or assume it will fix itself (in fact, projections indicate it is going to continue to grow). Orinda voters have shown previously they are capable of "detaching" from their emergency services provider due to just such a funding issue. Unless MOFD, Orinda and Moraga officials are willing to risk MOFD's dissolution, they need to come to the table, in open session, and honestly discuss this problem among themselves and the community at large, using facts, not assumptions. As long as the District is "homogeneously" staffed by firefighters, the Task Force believes the cost-sharing should be based on the number of firefighters stationed in, and serving, each community.

A REPORT ON THE COSTS, OPERATIONS, PERFORMANCE AND FINANCES OF THE MORAGA-ORINDA FIRE DISTRICT (MOFD)

by

The Orinda Citizens Emergency Services Task Force
(www.OrindaTaskForce.org / Orinda_Task_Force@comcast.net)

# Section VI - Financial Stability of MOFD

Due to a large and relatively stable property tax revenue stream, MOFD, unlike some other agencies, is apparently not at risk of claiming bankruptcy. While many areas in the Bay Area have seen significant decreases in property values and thus taxes, MOFD has actually seen a fractional increase in property tax revenue over the past four years (2%) and significant increase since the District was formed 15 years ago (120%). Their $17 million in property tax revenue is sufficient to staff MOFD with four times the number of firefighters per capita as the neighboring ConFire District. Their buildings and firefighting equipment are in good condition and they currently have $6 million in reserves.

However, MOFD has the same problem as other public agencies; employee benefit liabilities funded by insufficient assets. These are liabilities are **the legal responsibility of the District's taxpayers**. They are for benefits that employees earned and vested for past labors and which the District is obliged to pay for over the next 60 years. The sum of these liabilities (Graph VI-1) is about **$700 million**. This equates to $60,000 per household; 35 times the size of next year's budget; 3.5 times the $200 million in property tax revenue the District has received since being formed 15 years ago. While the District has $112 million of pension plan assets that, with earnings, will pay off some of these liabilities, the Task Force's analysis shows that these assets will fall $400-500 million short of paying off current liabilities. It could take **$4-10 million per year for the next 30 years**, in excess of what is currently anticipated, to pay for these unfunded liabilities.

The Task Force believes that despite the magnitude of the District's indebtedness, steps can be taken which will pay off this debt without negatively impacting the service to the community. But the longer the solution is delayed the harder it will be to implement. This report will discuss the District's financial position, what impact it may have on future operations, and present suggestions on how tracking the District's financial position and funding its liabilities can be improved.

## THE BALANCE SHEET - A SNAPSHOT OF MOFD's FINANCIAL CONDITION

Part of the reason the District has reached its current uncomfortable position of having seriously underfunded liabilities is that standard accounting procedures have masked the true extent of these liabilities and the District has not taken steps to work around the accounting industry's shortcomings.

The annual audited balance sheet should give the District's managers and the community a strong indication of the District's financial condition. The latest published balance sheet, Exhibit VI-1, for the year ending June 30, 2011 shows assets of $42 million (including $7 million in cash), liabilities of $31 million, for a net asset value of $11 million. Quite respectable for an operation with revenue and expenses of close to $20 million per year. But as this report will show, the audited balance sheet bears

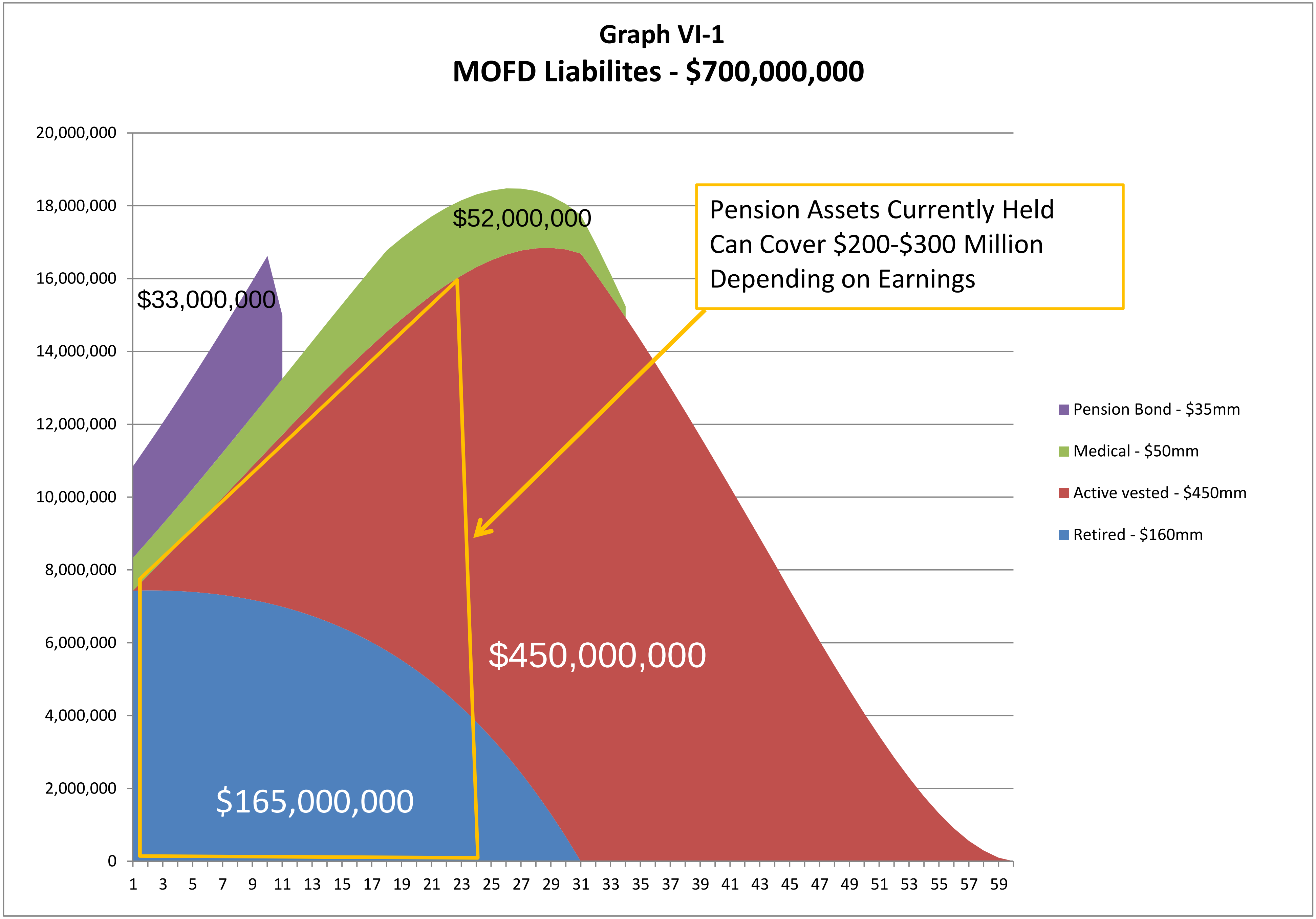
Graph VI-1
MOFD Liabilites - $700,000,000
20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59
$33,000,000
$52,000,000
Pension Assets Currently Held Can Cover $200-$300 Million Depending on Earnings
$450,000,000
$165,000,000
Pension Bond - $35mm
Medical - $50mm
Active vested - $450mm
Retired - $160mm

Exhibit VI-1

**MORAGA-ORINDA FIRE PROTECTION DISTRICT**
**BALANCE SHEET**
**GOVERNMENTAL FUND**
**June 30, 2011**

| | General Fund | Capital Projects Fund | 2011 Total | Adjustments (Note 2) | Statement of Net Assets |
|---|---|---|---|---|---|
| **ASSETS** | | | | | |
| Cash and investments | $ 3,826,973 | $ 3,005,317 | $ 6,832,290 | $ - | $ 6,832,290 |
| Taxes receivable | 105,417 | - | 105,417 | - | 105,417 |
| Other receivables | 652,624 | 1,740 | 654,364 | - | 654,364 |
| Prepaid items | 97,436 | 30,184 | 127,620 | 26,344,837 | 26,472,457 |
| Capital assets, net of accumulated depreciation | - | - | - | 8,348,722 | 8,348,722 |
| Total assets | $ 4,682,450 | $ 3,037,241 | $ 7,719,691 | $ 34,693,559 | $ 42,413,250 |
| **LIABILITIES AND FUND BALANCE** | | | | | |
| Accounts payable | 156,487 | 47,823 | 204,310 | - | 204,310 |
| Salaries and benefits payable | 808,213 | - | 808,213 | - | 808,213 |
| Accrued interest | - | - | - | 672,336 | 672,336 |
| Long-term liabilities: | | | | | |
| OPEB payable (note 13) | - | - | - | 3,493,000 | 3,493,000 |
| Due within one year | - | - | - | 1,275,321 | 1,275,321 |
| Due in more than one year | - | - | - | 25,035,482 | 25,035,482 |
| Total liabilities | 964,700 | 47,823 | 1,012,523 | 30,476,139 | 31,488,662 |
| **FUND BALANCES / NET ASSETS** | | | | | |
| Fund balances: | | | | | |
| Nonspendable | 97,436 | 30,184 | 127,620 | (127,620) | - |
| Restricted | - | - | - | - | - |
| Committed | - | - | - | - | - |
| Assigned | - | 2,959,234 | 2,959,234 | (2,959,234) | - |
| Unassigned | 3,620,314 | - | 3,620,314 | (3,620,314) | - |
| Total fund equity | 3,717,750 | 2,989,418 | 6,707,168 | (6,707,168) | - |
| Total liabilities and fund equity | $ 4,682,450 | $ 3,037,241 | $ 7,719,691 | | |
| Net assets: | | | | | |
| Invested in capital assets | | | | 8,348,722 | 8,348,722 |
| Restricted | | | | - | - |
| Unrestricted | | | | 2,575,866 | 2,575,866 |
| Total net assets | | | | $ 10,924,588 | $ 10,924,588 |

little resemblance to the actual financial condition of the District. In reality the District, has approximately $700 million in long-term liabilities offset by about $130 million in current assets.

**LIABILITIES**

The District three basic liabilities: 1) A Pension Obligation Bond, 2) Post Retirement Medical Benefits for its retirees, and 3) a Defined Benefit Pension Plan

**Pension Obligation Bond** - At the end of 2005, MOFD's pension plan was almost $30 million underfunded due to the fact that in late 2003 they retroactively increased the pension benefits for all current employees by 50 percent. MOFD was obligated to pay this underfunding back over a 15 year period including an assumed interest rate of 7.75 percent, the projected earning rate of the pension plan's assets. An alternative to paying increased payments to the pension plan was to borrow money from the municipal bond market, use the proceeds to fully fund their pension plan, and pay the bond holders back instead of making higher pension plan contributions. So $28.5 million was borrowed at an interest rate of 5.22 percent. The payments were scheduled to continue for 17 years (paying off in 2022), with the payment amounts increasing by about 5 percent each year. In 2012 the annual cost of this loan is $2.5 million; in 5 years it will be $3.1 million; and the last full year of payments (2021) will be $3.9 million. The current loan balance is about $25 million and over the next 10 years the total payments will add up to $33 million. The full repayment schedule for this bond is detailed in Table VI-1. There is further discussion later in this section regarding the appropriateness of obtaining this bond as opposed to paying the higher pension plan payments.

**Post Retirement Medical Benefits (called OPEB - Other Post Employment Benefits)** - MOFD pays medical benefits for life for its retired employees. A full description of the plan is contained in the latest report by the District's actuary (Exhibit VI-2 on the Task Force web site). A summary this benefit's liability includes:

1) In 2010/11 these benefits cost the District $834,000 (Table IV-1). The District's long range forecast only has them growing by 0.5 percent annually so the 2012/13 projection (Table IV-4a) is $835,000. However, the proposed budget for this year has them at $933,000, a 12 percent increase over 2 years.

2) The District does **not** "pre-fund" these costs and currently legislation has not required agencies to pre-fund. However, an accounting is required every three years with the value of liability placed in a footnote to the balance sheet. This liability is slowly being included in the balance sheet.

3) The latest accounting of these liabilities, completed in August 2010, included a valuation for 6/30/2009 and an estimation for 6/30/2011. The accounting does not report actual projected liabilities, but rather gives a present value of those liabilities at a proscribed discount rate (4.25 percent at that point in time) and at the pension plan's projected asset earning rate of 7.75 percent.

| Date of Valuation | Discount Rate | |
|---|---|---|
| | 4.25% | 7.75% |
| June 30, 2009 | $24,104,000 | $15,301,000 |
| June 30, 2011 | $26,342,000 | (16,722,000) est. |

# Table VI-1
# MOFD Pension Bond Investment Performance

| | Pension Bond Liability | | | | | CCCERA Pension Asset Performance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Payment | Interest 5.22% | Principal | Balance | Anualized Earning Rate | Value of Assets Purchased by Bond Proceeds | less Bond Balance Due | Yield To Date | Value of Assets Purchased by Bond Cash Flows | Yield To Date | Bond Benefit ** | | CCCERA IRR to date 3.06% |
| | | | | | | | | | $ cost averaging | | | | |
| | 12,227 | | | | | | | | | | | | |
| 1/1/2006 | | | (28,435) | 28,435 | | 28,435 | - | | 0 | | - | 100.0 | (100.0) |
| 7/1/2006 | 742 | 742 | | 28,435 | 14.23% | 30,391 | 1,956 | | 742 | | 1,214 | | - |
| 1/1/2007 | 742 | 742 | | 28,435 | 14.23% | 32,481 | 4,046 | 1882.1% | 1,535 | 14.2% | 2,511 | 114.2 | - |
| 7/1/2007 | 1,197 | 742 | 455 | 27,980 | 6.03% | 33,446 | 5,466 | 280.2% | 2,778 | 8.7% | 2,688 | | - |
| 1/1/2008 | 730 | 730 | | 27,980 | 6.03% | 34,440 | 6,460 | 116.4% | 3,591 | 7.3% | 2,869 | 121.1 | - |
| 7/1/2008 | 1,325 | 730 | 595 | 27,385 | -28.35% | 29,152 | 1,767 | n/a | 4,365 | -9.1% | (2,598) | | - |
| 1/1/2009 | 715 | 715 | | 27,385 | -28.35% | 24,676 | (2,709) | n/a | 4,409 | -17.0% | (7,118) | 86.8 | - |
| 7/1/2009 | 1,450 | 715 | 735 | 26,650 | 19.68% | 26,995 | 345 | n/a | 6,274 | -7.0% | (5,928) | | - |
| 1/1/2010 | 696 | 696 | | 26,650 | 19.68% | 29,532 | 2,882 | n/a | 7,559 | -0.3% | (4,676) | 103.9 | - |
| 7/1/2010 | 1,586 | 696 | 890 | 25,760 | 13.35% | 31,442 | 5,682 | -26.6% | 9,633 | 2.7% | (3,951) | | - |
| 1/1/2011 | 672 | 672 | | 25,760 | 13.35% | 33,475 | 7,715 | -11.4% | 10,928 | 4.8% | (3,213) | 117.7 | - |
| 7/1/2011 | 1,727 | 672 | 1,055 | 24,705 | 1.76% | 33,768 | 9,063 | -11.0% | 12,751 | 4.3% | (3,688) | | - |
| 1/1/2012 | 645 | 645 | | 24,705 | 1.76% | 34,064 | 9,359 | -10.3% | 13,508 | 3.8% | (4,149) | 119.8 | 119.8 |
| 7/1/2012 | 1,875 | 645 | 1,230 | 23,475 | 3.06% * | 34,581 | 11,106 | -9.0% | 15,588 | 3.7% | (4,482) | | |
| 1/1/2013 | 613 | 613 | | 23,475 | 3.06% | 35,105 | 11,630 | -7.8% | 16,437 | 3.6% | (4,806) | | |
| 7/1/2013 | 2,038 | 613 | 1,425 | 22,050 | 3.06% | 35,638 | 13,588 | -6.8% | 18,724 | 3.5% | (5,136) | | |
| 1/1/2014 | 576 | 576 | | 22,050 | 3.06% | 36,178 | 14,128 | -5.9% | 19,583 | 3.5% | (5,455) | | |
| 7/1/2014 | 2,206 | 576 | 1,630 | 20,420 | 3.06% | 36,727 | 16,307 | -5.2% | 22,086 | 3.4% | (5,779) | | |
| 1/1/2015 | 533 | 533 | | 20,420 | 3.06% | 37,284 | 16,864 | -4.5% | 22,954 | 3.4% | (6,090) | | |
| 7/1/2015 | 2,388 | 533 | 1,855 | 18,565 | 3.06% | 37,849 | 19,284 | -3.9% | 25,690 | 3.3% | (6,405) | | |
| 1/1/2016 | 485 | 485 | | 18,565 | 3.06% | 38,423 | 19,858 | -3.3% | 26,564 | 3.3% | (6,705) | | |
| 7/1/2016 | 2,585 | 485 | 2,100 | 16,465 | 3.06% | 39,006 | 22,541 | -2.9% | 29,551 | 3.3% | (7,010) | | |
| 1/1/2017 | 430 | 430 | | 16,465 | 3.06% | 39,598 | 23,133 | -2.4% | 30,429 | 3.3% | (7,296) | | |
| 7/1/2017 | 2,790 | 430 | 2,360 | 14,105 | 3.06% | 40,198 | 26,093 | -2.0% | 33,680 | 3.2% | (7,587) | | |
| 1/1/2018 | 368 | 368 | | 14,105 | 3.06% | 40,808 | 26,703 | -1.7% | 34,559 | 3.2% | (7,856) | | |
| 7/1/2018 | 3,008 | 368 | 2,640 | 11,465 | 3.06% | 41,427 | 29,962 | -1.4% | 38,092 | 3.2% | (8,130) | | |
| 1/1/2019 | 299 | 299 | | 11,465 | 3.06% | 42,055 | 30,590 | -1.0% | 38,969 | 3.2% | (8,378) | | |
| 7/1/2019 | 3,244 | 299 | 2,945 | 8,520 | 3.06% | 42,693 | 34,173 | -0.8% | 42,804 | 3.2% | (8,631) | | |
| 1/1/2020 | 222 | 222 | | 8,520 | 3.06% | 43,340 | 34,820 | -0.5% | 43,675 | 3.2% | (8,855) | | |
| 7/1/2020 | 3,487 | 222 | 3,265 | 5,255 | 3.06% | 43,998 | 38,743 | -0.3% | 47,825 | 3.2% | (9,082) | | |
| 1/1/2021 | 137 | 137 | | 5,255 | 3.06% | 44,665 | 39,410 | 0.0% | 48,688 | 3.2% | (9,278) | | |
| 7/1/2021 | 3,747 | 137 | 3,610 | 1,645 | 3.06% | 45,342 | 43,697 | 0.2% | 53,173 | 3.2% | (9,476) | | |
| 1/1/2022 | 43 | 43 | | 1,645 | 3.06% | 46,030 | 44,385 | 0.4% | 54,022 | 3.1% | (9,637) | | |
| 7/1/2022 | 1,688 | 43 | 1,645 | - | 3.06% | 46,728 | 46,728 | 0.5% | 56,530 | 3.1% | (9,802) | | |
| | | 8,055 | 25,760 | | | | | | | | | | |

* six year average

** The benefit of "Dollar Cost Averaging" vs. a single highly leveraged purchase

**Defined Benefit Pension Plan Benefits** - MOFD provides its employees a defined benefit pension plan. The employees are divided between "safety" and "non-safety" employees. Safety employees, e.g. firefighters (including the Chief, Division Chiefs, Battalion Chiefs and the Fire Marshall), receive a benefit called "3 at 50". This means that for each year an employee works, he/she vests 3 percent of their final year's salary. The employee starts collecting the vested benefits at age 50 or retirement, whichever is later. For non-safety employees (fewer than 10 at MOFD) the benefits are "2 at 55". Each year following retirement the vested benefits increase at a Cost Of Living Allowance (COLA) equal to that year's increase in the Consumer Price Index (CPI). *Note - On August 31, 2012 the California legislature passed a major pension reform bill. It's possible impact on MOFD is included at the end of this section.*

The value of these accrued benefits is reported annually by MOFD's pension plan administrator, CCCERA (Contra Costa County Employees' Retirement Association). The latest letter of benefit liability for MOFD was as of December 31, 2010 (Exhibit VI-3 on the Task Force web site) but recently, in a report by the Plan's actuary to CCCERA (Exhibit VI-4 on the Task Force web site), the plan's results for 2011 are reported.

As with the value of OPEB liabilities, pension liabilities are reported as the present value of future obligations. For December 31, 2010, the present value of MOFD's pension liabilities, using CCCERA's projected asset earning rate of 7.75 percent as the discount rate, was $142,547,000. Offsetting this liability are assets which the Plan manages assets on MOFD's behalf. The "actuarial value" (explained later) of those assets was $124,642,000. This resulted in a net unfunded "accounting" liability (called the UAAL standing for Unfunded Actuarial Accrued Liability) of $17.9 million.

The actual (undiscounted) future obligations are not reported. When the Task Force requested the detailed projection from both MOFD and CCCERA it was told that those values were not available. The Task Force believes that to only know the discounted value of a liability is equivalent to only knowing one's home mortgage balance and not knowing what the actual payments due are nor the number of years those payments are due for.

It should be noted that the "actuarial value" of the Plan's assets ($124.6 million) differs from the asset's "market value" in that extraordinary gains or losses, in excess of the projected earnings of 7.75 percent are spread over a five year period. As of the December 31 2010 valuation date, there were $7.7 million of unrecognized losses. The "market value" of the assets was only $116,966,000.

**MOFD's Net Liabilities -** MOFD owes a $25 million Pension Bond, plus $26 million of OPEB liabilities, plus $143 million of pension liabilities, for a total of $194 million in total liabilities. Offsetting these are $117 in pension plan assets (this is the market value as of 12/31/2010 which this report will use), $7 million in cash, and $9 million in capital assets and other receivables for a total of $133 million in assets. Thus at the end of fiscal year 2010/11 **MOFD had $61 million in net liabilities**, not the $11 million in net assets which the audited financials show.

*Can MOFD management and the community make appropriate decisions when their audited financial balance sheet shows that the District has net assets of $11 million when, in fact, they have net liabilities of $61 million?*

## What is the source of the $72 million discrepancy in net assets?

The management, who have greater knowledge of the situation that the general public, must know that the $11 million in net assets does not portray the real picture, yet, this is the only number presented to the public. Management knows that footnote 13 in their audited financials states there are $24 million in OPEB liabilities and footnote 8 says there are an additional $18 million of pension plan net liabilities. But even with these $42 million in adjustments, the $11 million net asset balance sheet only reduces to $31 million in net liabilities; half the actual amount. Is management aware of the true magnitude of its liabilities? Where is the additional $30 million of discrepancy?

The largest element is contained on the fourth line of the balance sheet (Exhibit VI-1) which says there are $26 million in prepaid items. This "pre-payment" was, in fact, the money paid to the pension plan in 2005 from pension bond proceeds. While the accounting world might consider this a "pre-payment", the real world knows that it was simply an attempt to make up for past underfunding by trading one liability for another. However, the problem is not in the name given to this amount, the problem is that this $26 million is already accounted for in the $125 million in pension assets declared in footnote 8. In other words, this $26 million is "double dipped". It should either be removed from the balance sheet (reducing balance sheet assets to $16 million and reversing the $11 million in net assets to $15 million in net liabilities), or it should be removed from footnote 8's assets (reducing them to $99 million and increasing the pension plan's net liabilities to $44 million). The accountants can't have it both ways.

The next adjustment is the $7.6 million difference between the accounting value of the pension assets ($124.6 million) and the market value ($117 million) of those assets. While the accountants might say the higher value is an accepted accounting practice, common sense dictates that the market value of the assets be used even if this makes the value fluctuate from year-to-year (indicating the volatility of high risk assets). The Task Force believes that MOFD should start this practice immediately. (Note: New accounting rules are being phased in over the next several years which will, in fact, specify that the assets' market value be used. See page VI-17 for details.)

These two changes add up to $33.5 million, $3.5 million greater than the $30 million discrepancy noted. The final adjustment comes from the fact that $3.5 million of the OPEB liabilities are also double counted. They are on line four of the balance sheet and they are also included in the total OPEB liabilities in footnote 8.

## What Are MOFD's Actual Liabilities?

The $25 million Pension Bond balance, the $24 million in OPEB liabilities used in the balance sheet (or $26 million as of June 2011 from the Bartel report) and the $143 million in pension liabilities are the discounted present value of sixty years of liabilities. The Task Force believes that the balance sheet should show not just the present value of future liabilities but the sum of those liabilities without discounting. This will give MOFD management and the community the facts on exactly what is at risk; the total liability and the possible discounting of that liability. Again, using the home mortgage analogy, the homeowner needs to know what he can pay his loan off for today for AND what the payments will be if he pays it off over time. With this knowledge, if a different interest rate was deemed more appropriate for discounting, the impact of this interest rate change would be calculable.

**Pension Obligation Bond Liabilities** - The pension bond is the one liability for which all aspects of liability are known; both principal and interest liabilities as shown in Table VI-1. While it is not necessary to understand the reason that the Pension Obligation Bond even exists in order to quantify its $25 million balance and $33.4 million in total future cost, the Task Force believes it is worthwhile information for the community to understand why this loan exists.

The Task Force believes it was a bad idea to borrow this money in 2005 and that the community should understand why so that the mistake is not repeated. Currently we are in a similar situation (large unfunded liabilities and low interest rates) so there is a real risk that another pension bond could be borrowed.

Starting in 1999, safety agencies (police and fire) throughout the state substantially increased their employee's pension benefits. This is equivalent to giving the employees a raise, which is not bad per se, but what was bad was that the raise was provided by future benefits without pre-funding the future cost. And the cost was substantive. What inspired the decision to grant employees this raise was a decade of extraordinary gains in the stock market (a ten-year average annual gain in the Dow Jones Industrial Average of over 16 percent with the annual gain being over 20 percent in the second half of the decade) which made it appear that such benefit increases could be self-funded in short order by gains on existing pension assets.

MOFD agreed to retroactively increase their employees' pension benefits by 50 percent in late 2003 even though by then the Dow had actually decreased in value over the past four years so where the money was going to come from to pay these new benefits was questionable. These increased benefits added $28 million of liabilities to the MOFD pension plan. This value was the present value of actual incurred liabilities. The Task Force estimates that the undiscounted new liabilities totaled approximately $175 million (over ten times MOFD's 2003/04 tax revenue); granted by the MOFD Board without knowing how these new benefits would ever be paid. The Board, had just handed out $175 million in bonus payments to 60-70 employees, collectable over time.

This underfunding forced the pension plan to increase MOFD's pension contributions. The underfunding had to be paid down over a 15 year term assuming an interest rate equal to the plan's assumed earning rate of 7.75 percent. That would have amounted to almost $3 million per year in extra payments (over 20% of MOFD's total tax revenue).

However, MOFD, and other agencies, discovered that they had another option. They could borrow money from the bond market at a substantially lower interest rate than 7.75 percent, fully fund their pension plan, and then pay off the bond with lower payments (also agreeing to an accelerating payment schedule with payments starting low and increasing 5% each year to further defer the costs) than they would have had to pay to the pension plan. It did not take a vote of the taxpayers to enter into this loan because a tax increase was not necessary to pay it off and it was a fully collateralized loan (it went to purchase pension plan assets).

However, as many investors have learned before and since, purchasing investments with 100 percent leverage, which is what the MOFD Board did, is risky business. Probably involving more risk than a prudent public agency should take since, if the investment "goes south", it is the taxpayers who have to make up for any losses the pension again becomes under-funded while the pension bond liability does not decrease. However, in late 2005 MOFD did just that and fully funded their plan.

After MOFD borrowed the $28 million at the end of 2005 and invested the proceeds with CCCERA, the decision seemed like a wise one through 2007 with the pension assets gaining $3 million more in value than the pension bond cost in interest (Table VI-1). But then 2008 happened. By the end of the year the pension assets had lost 28 percent of their value and MOFD's leveraged investment was $7 million "under water." Fortunately, this was not a margined stock so there were no "call provisions" and MOFD just continued to pay off its bond on the original schedule. In 2009 and 2010 CCCERA assets regained much of their losses but in 2011 their earning rate dropped to under 2 percent. By the end of 2011 the CCCERA assets MOFD purchased in 2005, minus the remaining balance on the bond, were worth $4 million less than the the value of pension assets would have been worth if the money used for bond payments had been slowly added to the asset pool (dollar cost averaging investing). In addition, the bond obligations continue to increase at 5 percent per year while over the past 5 years MOFD's revenue has only increased at an average of 1.4 percent, putting an additional strain on the budget.

Hopefully the MOFD management has learned a lesson, especially since they are in the same position today, with a seriously underfunded pension and historically low interest rates available for borrowing.

**Final Note**: In the September 4 edition of the *New York Times* there was an article on Pension Obligation Bonds. It appears that MOFD was by far from the only entity who "bought into" the idea that they could save money by purchasing 100% leveraged high yielding investments. And it appears that some are still buying into it but, hopefully, MOFD has learned its lesson. A copy of the NYT article is on the Task Force web site as Exhibit VI-6.

**Post Retirement Medical Benefit liabilities / OPEB** - As stated previously, the Task Force requested the actual OPEB liabilities (year by year) from MOFD but they informed the Task Force that they did not have these values and would not request them from their actuary, John Bartel. So, based on values in Bartel's report of 8/27/2010 (Exhibit VI-2), the Task Force was forced to estimate the stream of medical benefit liabilities. The constraints to the stream was that when discounted at 4.25 percent back to 2011 they equal $26.3 million and when discounted at 7.75% a value of $16.7 million results.

This is the OPEB stream of liabilities displayed in Table VI-2. It extends 34 years and adds up to almost $52 million.

**Pension Plan Liabilities** - All that is known about these liabilities, projected by The Segal Company (CCCERA's actuary), is that when they are discounted at the current assumed CCCERA asset earning rate of 7.75 percent, they present value to $142,547,000 (as of 12/31/2010 - Exhibit VI-3). As neither MOFD nor CCCERA would provide the year-by-year values to the Task Force, the Task Force was forced to estimate theses values also.

To estimate the "shape" of the payment curve that would present value to $142 million, the Task Force broke the liabilities into two parts: Active Employees and Already Retired. While there are probably more exceptions to these assumptions than not, some "simplified" set of rules had to be adopted.

* There are the same number of active employees as retired (with the active employees ranging from 20 years old to 50 and the retired from 50 to 80.
* Vested benefits for retired employees increase 3.5 percent annually.
* For retired employees, each year 1/30th of the current pool would drop out as they reach 80.
* The average retired employee receives 50% of his final year's salary plus COLA.
* For active employees, the eldest (1/30th of total) starts getting benefits next year and continues for 30 years. The second eldest starts the next year and continues for thirty years. And so on until the youngest starts 30 years from now and continues for 30 years.
* Each active employee retires 80 percent vested.

This defined the "pattern" of the vested liabilities due. The values were then scaled such that the entire stream present valued to $142,547,000 using the 7.75 percent discount rate. The result produced a stream with a total liabilities of $617 million dollars due over 60 years. This estimate of Pension Plan liabilities is also contained in Table VI-2a and 2b.

**The questions remaining for these liabilities are:**

1) How should the "current value" of these future liabilities be defined?
2) How much will it cost to fully fund them?
3) What if we don't fully fund them?

**What is the "current value" of these future liabilities?**

The Task Force believes that while MOFD's audited financial balance sheet may adhere to standard accounting practices, the value assets and liabilities included do not reflect the reality of the situation. The audited balance sheet, Exhibit VI-1, shows:

| | |
|---|---|
| Assets - | $42.4 million |
| Liabilities - | $31.5 million |
| Net Assets - | $10.9 million |

But the top line(s) of Table VI-2, a table of total assets and liabilities, shows:

| | |
|---|---|
| Assets - | $117 million current balance |
| Liabilities - | $180-700 million (depending on discount rate) |
| Net Assets - | none - MOFD has massive net liabilities |

These two statements cannot both be describing the current condition of MOFD; but they are. Our accounting system has failed us - or at least the government version has. It has hidden liabilities in footnotes; discounted long term liabilities without openly displaying the degree of discounting; and offset liabilities with assets, presenting just the net liability, when there is no legal offset. The impact of these practices is that entities like MOFD, which believed they were well capitalized, find themselves in distress because they have pension liabilities which are 100 times net worth of the entity "hiding" behind supposedly offsetting assets.

Businesses, which rely on their accounting reports to guide them rather than obfuscate the bad news, use the concept of "fair value" when evaluating long term assets and liabilities. For an asset, the "fair value" is what a third party would be willing to pay for that asset and for a liability, it would be the amount the lender would be willing to take to be paid off in full. The difference between what the asset

# Table VI-2a

# MOFD Employee Benefit Liabilites and Assets

| | Discount Rate | Pension Obligation* | OPEB* | Pension Bond | Total Liabilities | Current Assets and Their Ability to Fund Current Pension Liabilities | | | Unfunded Liability |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Interest | Principal | Balance | |
| | | | | | | 7.75% | (There is only a 42% chance this goal will be met **) | | |
| Total | 0.00% | 617,217,595 | 51,793,042 | 33,405,174 | 702,415,810 | 179,609,388 | 116,966,000 | 116,966,000 | 405,840,422 |
| US Tres Bonds - (3/21/2012) | 3.38% | 290,389,259 | 29,889,057 | 27,356,418 | 347,634,734 | | | | 157,904,405 |
| Inflation rate | 3.50% | 283,739,460 | 29,362,307 | 27,171,282 | 340,273,049 | | | | 153,301,988 |
| 30 yr T (10 yr avg) | 4.50% | 235,966,664 | 25,430,722 | 25,696,310 | 287,093,696 | | | | 121,095,319 |
| | 5.00% | 216,390,117 | 23,735,700 | 25,001,923 | 265,127,740 | | | | 108,395,720 |
| Pension Bond Interest Rate | 5.22% | 208,533,334 | 23,039,923 | 24,705,000 | 256,278,257 | | | | 103,392,903 |
| Warren Buffet | 6.00% | 183,878,134 | 20,793,280 | 23,692,675 | 228,364,088 | | | | 88,083,693 |
| Possible CalPERS rate (3/15/2012) | 7.25% | 152,741,703 | 17,801,435 | 22,192,815 | 192,735,953 | | | | 69,726,378 |
| CCCERA | 7.75% | 142,547,000 | 16,779,211 | 21,631,865 | 180,958,076 | | | | 63,992,076 |

| Year | Pension Obligation* | OPEB* | Pension Bond | Total Liabilities | Interest | Principal | Balance | Unfunded Liability |
|---|---|---|---|---|---|---|---|---|
| 2011 | | | | | | | 116,966,000 | |
| 2012 | 7,434,692 | 900,620 | 2,519,601 | 10,854,913 | 9,064,865 | 1,630,173 | 118,596,173 | 3,420,221 |
| 2013 | 7,848,805 | 950,154 | 2,650,395 | 11,449,354 | 9,191,203 | 1,342,399 | 119,938,572 | 3,600,549 |
| 2014 | 8,268,150 | 1,002,413 | 2,781,010 | 12,051,573 | 9,295,239 | 1,027,089 | 120,965,661 | 3,783,423 |
| 2015 | 8,692,076 | 1,057,546 | 2,920,924 | 12,670,546 | 9,374,839 | 682,763 | 121,648,423 | 3,978,470 |
| 2016 | 9,119,858 | 1,115,711 | 3,069,093 | 13,304,662 | 9,427,753 | 307,895 | 121,956,318 | 4,184,804 |
| 2017 | 9,550,698 | 1,177,075 | 3,219,473 | 13,947,246 | 9,451,615 | -99,083 | 121,857,234 | 4,396,548 |
| 2018 | 9,983,717 | 1,241,814 | 3,376,281 | 14,601,812 | 9,443,936 | -539,781 | 121,317,453 | 4,618,095 |
| 2019 | 10,417,952 | 1,310,114 | 3,543,473 | 15,271,539 | 9,402,103 | -1,015,849 | 120,301,603 | 4,853,587 |
| 2020 | 10,852,349 | 1,382,170 | 3,709,744 | 15,944,262 | 9,323,374 | -1,528,974 | 118,772,629 | 5,091,914 |
| 2021 | 11,285,756 | 1,458,189 | 3,884,311 | 16,628,256 | 9,204,879 | -2,080,877 | 116,691,752 | 5,342,500 |
| 2022 | 11,716,921 | 1,538,389 | 1,730,869 | 14,986,179 | 9,043,611 | -2,673,310 | 114,018,441 | 3,269,258 |
| 2023 | 12,144,480 | 1,623,001 | | 13,767,481 | 8,836,429 | -3,308,051 | 110,710,390 | 1,623,001 |
| 2024 | 12,566,954 | 1,712,266 | | 14,279,220 | 8,580,055 | -3,986,899 | 106,723,491 | 1,712,266 |
| 2025 | 12,982,741 | 1,806,441 | | 14,789,181 | 8,271,071 | -4,711,670 | 102,011,821 | 1,806,441 |
| 2026 | 13,390,105 | 1,905,795 | | 15,295,900 | 7,905,916 | -5,484,189 | 96,527,632 | 1,905,795 |
| 2027 | 13,787,175 | 2,010,614 | | 15,797,788 | 7,480,891 | -6,306,283 | 90,221,349 | 2,010,614 |
| 2028 | 14,171,927 | 2,121,197 | | 16,293,124 | 6,992,155 | -7,179,772 | 83,041,576 | 2,121,197 |
| 2029 | 14,542,184 | 2,237,863 | | 16,780,047 | 6,435,722 | -8,106,462 | 74,935,114 | 2,237,863 |
| 2030 | 14,895,601 | 2,222,066 | | 17,117,668 | 5,807,471 | -9,088,130 | 65,846,985 | 2,222,066 |
| 2031 | 15,229,657 | 2,197,763 | | 17,427,419 | 5,103,141 | -10,126,516 | 55,720,469 | 2,197,763 |
| 2032 | 15,541,643 | 2,164,064 | | 17,705,707 | 4,318,336 | -11,223,307 | 44,497,162 | 2,164,064 |
| 2033 | 15,828,653 | 2,120,009 | | 17,948,663 | 3,448,530 | -12,380,123 | 32,117,039 | 2,120,009 |
| 2034 | 16,087,572 | 2,064,563 | | 18,152,135 | 2,489,071 | -13,598,501 | 18,518,538 | 2,064,563 |
| 2035 | 16,315,060 | 1,996,604 | | 18,311,664 | 1,435,187 | -14,879,873 | 3,638,665 | 1,996,604 |
| 2036 | 16,507,545 | 1,914,925 | | 18,422,470 | 281,997 | -3,638,665 | 0 | 14,501,809 |
| 2037 | 16,661,206 | 1,818,221 | | 18,479,427 | 0 | 0 | 0 | 18,479,427 |
| 2038 | 16,771,958 | 1,705,088 | | 18,477,045 | 0 | 0 | 0 | 18,477,045 |
| 2039 | 16,835,438 | 1,574,009 | | 18,409,447 | 0 | 0 | 0 | 18,409,447 |
| 2040 | 16,846,990 | 1,423,354 | | 18,270,344 | 0 | 0 | 0 | 18,270,344 |
| 2041 | 16,801,648 | 1,251,365 | | 18,053,014 | 0 | 0 | 0 | 18,053,014 |
| 2042 | 16,694,118 | 1,056,152 | | 17,750,270 | 0 | 0 | 0 | 17,750,270 |
| 2043 | 16,126,518 | 835,681 | | 16,962,198 | 0 | 0 | 0 | 16,962,198 |
| 2044 | 15,539,846 | 587,762 | | 16,127,608 | 0 | 0 | 0 | 16,127,608 |
| 2045 | 14,934,902 | 310,044 | | 15,244,947 | 0 | 0 | 0 | 15,244,947 |
| 2046 | 14,312,615 | | | 14,312,615 | 0 | 0 | 0 | 14,312,615 |
| 2047 | 13,674,052 | | | 13,674,052 | 0 | 0 | 0 | 13,674,052 |
| 2048 | 13,020,432 | | | 13,020,432 | 0 | 0 | 0 | 13,020,432 |
| 2049 | 12,353,135 | | | 12,353,135 | 0 | 0 | 0 | 12,353,135 |
| 2050 | 11,673,713 | | | 11,673,713 | 0 | 0 | 0 | 11,673,713 |
| 2051 | 10,983,902 | | | 10,983,902 | 0 | 0 | 0 | 10,983,902 |
| 2052 | 10,285,640 | | | 10,285,640 | 0 | 0 | 0 | 10,285,640 |
| 2053 | 9,581,074 | | | 9,581,074 | 0 | 0 | 0 | 9,581,074 |
| 2054 | 8,872,578 | | | 8,872,578 | 0 | 0 | 0 | 8,872,578 |
| 2055 | 8,162,772 | | | 8,162,772 | 0 | 0 | 0 | 8,162,772 |
| 2056 | 7,454,532 | | | 7,454,532 | 0 | 0 | 0 | 7,454,532 |
| 2057 | 6,751,010 | | | 6,751,010 | 0 | 0 | 0 | 6,751,010 |
| 2058 | 6,055,656 | | | 6,055,656 | 0 | 0 | 0 | 6,055,656 |
| 2059 | 5,372,232 | | | 5,372,232 | 0 | 0 | 0 | 5,372,232 |
| 2060 | 4,704,836 | | | 4,704,836 | 0 | 0 | 0 | 4,704,836 |
| 2061 | 4,057,921 | | | 4,057,921 | 0 | 0 | 0 | 4,057,921 |
| 2062 | 3,436,321 | | | 3,436,321 | 0 | 0 | 0 | 3,436,321 |
| 2063 | 2,845,274 | | | 2,845,274 | 0 | 0 | 0 | 2,845,274 |
| 2064 | 2,290,445 | | | 2,290,445 | 0 | 0 | 0 | 2,290,445 |
| 2065 | 1,777,958 | | | 1,777,958 | 0 | 0 | 0 | 1,777,958 |
| 2066 | 1,314,419 | | | 1,314,419 | 0 | 0 | 0 | 1,314,419 |
| 2067 | 906,949 | | | 906,949 | 0 | 0 | 0 | 906,949 |
| 2068 | 563,215 | | | 563,215 | 0 | 0 | 0 | 563,215 |
| 2069 | 291,464 | | | 291,464 | 0 | 0 | 0 | 291,464 |
| 2070 | 100,555 | | | 100,555 | 0 | 0 | 0 | 100,555 |
| 2071 | 0 | | | 0 | 0 | 0 | 0 | 0 |
| | | | Total Liabilities | 702,415,810 | | | | |
| | | | Projected Earnings | 296,575,388 | 179,609,388 | 116,966,000 | | |
| | | | Unfunded Liabilities | 405,840,422 | | | | |

* Estimated by FAIR. Values requested from MOFD in June 2011 but request denied because they claimed they did not know the values requested,
** Page 17; PENSION MATH: How California's retirement spending is squeezing the state budget; Stanfor Institute for Economic Policy Research; December 13, 201

## Table VI-2b

# MOFD Employee Benefit Liabilites and Assets

| | Discount Rate | Pension Obligation | OPEB | Pension Bond | Total Liabilities | Current Assets and Their Ability to Fund Current Pension Liabilities: Interest | Principal | Balance | Unfunded Liability |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 6.00% | (There is only a 65% chance this goal will be met **) | | |
| Total | 0.00% | 617,217,595 | 51,793,042 | 33,405,174 | 702,415,810 | 95,334,106 | 116,966,000 | 116,966,000 | 490,115,705 |
| US Tres Bonds - (3/8/2012) | 3.18% | 301,975,127 | 30,795,952 | 27,669,025 | 360,440,103 | | | | 208,196,901 |
| Inflation rate | 3.50% | 283,739,460 | 29,362,307 | 27,171,282 | 340,273,049 | | | | 192,728,333 |
| 30 yr T (10 yr avg) | 4.50% | 235,966,664 | 25,430,722 | 25,696,310 | 287,093,696 | | | | 152,995,657 |
| | 5.00% | 216,390,117 | 23,735,700 | 25,001,923 | 265,127,740 | | | | 137,114,452 |
| Pension Bond Interest Rate | 5.22% | 208,533,334 | 23,039,923 | 24,705,000 | 256,278,257 | | | | 130,819,022 |
| Warren Buffet | 6.00% | 183,878,134 | 20,793,280 | 23,692,675 | 228,364,088 | | | | 111,398,088 |
| Possible CalPERS rate (3/15/2012) | 7.25% | 152,741,703 | 17,801,435 | 22,192,815 | 192,735,953 | | | | 87,747,068 |
| CCCERA | 7.75% | 142,547,000 | 16,779,211 | 21,631,865 | 180,958,076 | | | | 80,263,841 |
| | 2011 | | | | | | | 116,966,000 | |
| 7,434,692 | 2012 | 7,434,692 | 900,620 | 2,519,601 | 10,854,913 | 7,017,960 | -416,732 | 116,549,268 | 3,420,221 |
| 7,848,805 | 2013 | 7,848,805 | 950,154 | 2,650,395 | 11,449,354 | 6,992,956 | -855,848 | 115,693,419 | 3,600,549 |
| 8,268,150 | 2014 | 8,268,150 | 1,002,413 | 2,781,010 | 12,051,573 | 6,941,605 | -1,326,545 | 114,366,874 | 3,783,423 |
| 8,692,076 | 2015 | 8,692,076 | 1,057,546 | 2,920,924 | 12,670,546 | 6,862,012 | -1,830,064 | 112,536,810 | 3,978,470 |
| 9,119,858 | 2016 | 9,119,858 | 1,115,711 | 3,069,093 | 13,304,662 | 6,752,209 | -2,367,650 | 110,169,161 | 4,184,804 |
| 9,550,698 | 2017 | 9,550,698 | 1,177,075 | 3,219,473 | 13,947,246 | 6,610,150 | -2,940,548 | 107,228,612 | 4,396,548 |
| 9,983,717 | 2018 | 9,983,717 | 1,241,814 | 3,376,281 | 14,601,812 | 6,433,717 | -3,550,000 | 103,678,612 | 4,618,095 |
| 10,417,952 | 2019 | 10,417,952 | 1,310,114 | 3,543,473 | 15,271,539 | 6,220,717 | -4,197,235 | 99,481,377 | 4,853,587 |
| 10,852,349 | 2020 | 10,852,349 | 1,382,170 | 3,709,744 | 15,944,262 | 5,968,883 | -4,883,466 | 94,597,911 | 5,091,914 |
| 11,285,756 | 2021 | 11,285,756 | 1,458,189 | 3,884,311 | 16,628,256 | 5,675,875 | -5,609,882 | 88,988,029 | 5,342,500 |
| 11,716,921 | 2022 | 11,716,921 | 1,538,389 | 1,730,869 | 14,986,179 | 5,339,282 | -6,377,639 | 82,610,390 | 3,269,258 |
| 12,144,480 | 2023 | 12,144,480 | 1,623,001 | | 13,767,481 | 4,956,623 | -7,187,857 | 75,422,533 | 1,623,001 |
| 12,566,954 | 2024 | 12,566,954 | 1,712,266 | | 14,279,220 | 4,525,352 | -8,041,602 | 67,380,931 | 1,712,266 |
| 12,982,741 | 2025 | 12,982,741 | 1,806,441 | | 14,789,181 | 4,042,856 | -8,939,885 | 58,441,046 | 1,806,441 |
| 13,390,105 | 2026 | 13,390,105 | 1,905,795 | | 15,295,900 | 3,506,463 | -9,883,643 | 48,557,403 | 1,905,795 |
| 13,787,175 | 2027 | 13,787,175 | 2,010,614 | | 15,797,788 | 2,913,444 | -10,873,730 | 37,683,673 | 2,010,614 |
| 14,171,927 | 2028 | 14,171,927 | 2,121,197 | | 16,293,124 | 2,261,020 | -11,910,907 | 25,772,766 | 2,121,197 |
| 14,542,184 | 2029 | 14,542,184 | 2,237,863 | | 16,780,047 | 1,546,366 | -12,995,818 | 12,776,948 | 2,237,863 |
| 13,543,565 | 2030 | 14,895,601 | 2,222,066 | | 17,117,668 | 766,617 | -12,776,948 | 0 | 3,574,102 |
| | 2031 | 15,229,657 | 2,197,763 | | 17,427,419 | 0 | 0 | 0 | 17,427,419 |
| | 2032 | 15,541,643 | 2,164,064 | | 17,705,707 | 0 | 0 | 0 | 17,705,707 |
| | 2033 | 15,828,653 | 2,120,009 | | 17,948,663 | 0 | 0 | 0 | 17,948,663 |
| | 2034 | 16,087,572 | 2,064,563 | | 18,152,135 | 0 | 0 | 0 | 18,152,135 |
| | 2035 | 16,315,060 | 1,996,604 | | 18,311,664 | 0 | 0 | 0 | 18,311,664 |
| | 2036 | 16,507,545 | 1,914,925 | | 18,422,470 | 0 | 0 | 0 | 18,422,470 |
| | 2037 | 16,661,206 | 1,818,221 | | 18,479,427 | 0 | 0 | 0 | 18,479,427 |
| | 2038 | 16,771,958 | 1,705,088 | | 18,477,045 | 0 | 0 | 0 | 18,477,045 |
| | 2039 | 16,835,438 | 1,574,009 | | 18,409,447 | 0 | 0 | 0 | 18,409,447 |
| | 2040 | 16,846,990 | 1,423,354 | | 18,270,344 | 0 | 0 | 0 | 18,270,344 |
| | 2041 | 16,801,648 | 1,251,365 | | 18,053,014 | 0 | 0 | 0 | 18,053,014 |
| | 2042 | 16,694,118 | 1,056,152 | | 17,750,270 | 0 | 0 | 0 | 17,750,270 |
| | 2043 | 16,126,518 | 835,681 | | 16,962,198 | 0 | 0 | 0 | 16,962,198 |
| | 2044 | 15,539,846 | 587,762 | | 16,127,608 | 0 | 0 | 0 | 16,127,608 |
| | 2045 | 14,934,902 | 310,044 | | 15,244,947 | 0 | 0 | 0 | 15,244,947 |
| | 2046 | 14,312,615 | | | 14,312,615 | 0 | 0 | 0 | 14,312,615 |
| | 2047 | 13,674,052 | | | 13,674,052 | 0 | 0 | 0 | 13,674,052 |
| | 2048 | 13,020,432 | | | 13,020,432 | 0 | 0 | 0 | 13,020,432 |
| | 2049 | 12,353,135 | | | 12,353,135 | 0 | 0 | 0 | 12,353,135 |
| | 2050 | 11,673,713 | | | 11,673,713 | 0 | 0 | 0 | 11,673,713 |
| | 2051 | 10,983,902 | | | 10,983,902 | 0 | 0 | 0 | 10,983,902 |
| | 2052 | 10,285,640 | | | 10,285,640 | 0 | 0 | 0 | 10,285,640 |
| | 2053 | 9,581,074 | | | 9,581,074 | 0 | 0 | 0 | 9,581,074 |
| | 2054 | 8,872,578 | | | 8,872,578 | 0 | 0 | 0 | 8,872,578 |
| | 2055 | 8,162,772 | | | 8,162,772 | 0 | 0 | 0 | 8,162,772 |
| | 2056 | 7,454,532 | | | 7,454,532 | 0 | 0 | 0 | 7,454,532 |
| | 2057 | 6,751,010 | | | 6,751,010 | 0 | 0 | 0 | 6,751,010 |
| | 2058 | 6,055,656 | | | 6,055,656 | 0 | 0 | 0 | 6,055,656 |
| | 2059 | 5,372,232 | | | 5,372,232 | 0 | 0 | 0 | 5,372,232 |
| | 2060 | 4,704,836 | | | 4,704,836 | 0 | 0 | 0 | 4,704,836 |
| | 2061 | 4,057,921 | | | 4,057,921 | 0 | 0 | 0 | 4,057,921 |
| | 2062 | 3,436,321 | | | 3,436,321 | 0 | 0 | 0 | 3,436,321 |
| | 2063 | 2,845,274 | | | 2,845,274 | 0 | 0 | 0 | 2,845,274 |
| | 2064 | 2,290,445 | | | 2,290,445 | 0 | 0 | 0 | 2,290,445 |
| | 2065 | 1,777,958 | | | 1,777,958 | 0 | 0 | 0 | 1,777,958 |
| | 2066 | 1,314,419 | | | 1,314,419 | 0 | 0 | 0 | 1,314,419 |
| | 2067 | 906,949 | | | 906,949 | 0 | 0 | 0 | 906,949 |
| | 2068 | 563,215 | | | 563,215 | 0 | 0 | 0 | 563,215 |
| | 2069 | 291,464 | | | 291,464 | 0 | 0 | 0 | 291,464 |
| | 2070 | 100,555 | | | 100,555 | 0 | 0 | 0 | 100,555 |
| | 2071 | 0 | | | 0 | 0 | 0 | 0 | 0 |
| | | | | Total Liabilities | 702,415,810 | | | | |
| | | | | Projected Earnings | 212,300,106 | 95,334,106 | 116,966,000 | | |
| | | | | Unfunded Liabilities | 490,115,705 | | | | |

* Estimated by FAIR. Values requested from MOFD in June 2011 but request denied because they claimed they did not know the values requested,
** Page 17; PENSION MATH: How California's retirement spending is squuexing the state budget; Stanfor Institute for Economic Policy Research; December 13, 201

or liability holder is willing to accept today (the fair value), and the sum of all future receipts or amounts due which would be paid over time, is the discount off the total asset or liability. A balance sheet that attempts to tell the whole story would include all of this information: Total Payments; Discount; Fair Value. This is the balance sheet this report creates for MOFD in Table VI-3.

**What are the Fair Values of MOFD's liabilities?**

**The Pension Obligation Bond**. This is a loan with a defined interest rate and defined principal repayment schedule. Assuming there is no penalty for early payment of principal, the lender would accept $25.0 million as payment in full. But the scheduled remaining payments, stretching out to 2022, add up to $33.4 million. Therefore the "discount" for this liability is the difference between the two: $8.4 million. A balance sheet describing "the full story" would display all three values

| | |
|---|---|
| Total Liability | 33,421,338 |
| Discount | -8,385,856 |
| Fair Value | 25,035,482 |

**Post Retirement Medical Benefits and Pension Benefits** are much more difficult to assign fair value to but the question, "what would the lender take today to pay off the loan?" is the same. Who is the lender? MOFD's current and former employees. What would they take today to be considered "paid in full"?

They would have to ask themselves "what do we have today?" Their answer would be: We have medical benefits that are going to increase in cost at an unknown rate. Plus we have retirement benefits based on an unknown final year of salary which will continue to grow at an unknown rate of inflation until we die at an unknown age. These benefits are guaranteed by a group of property taxpayers with property currently assessed at $8 billion and with a market value of at least $10 billion. In addition there are $117 million of assets being invested by CCCERA, earning over $5 million per year that are also dedicated to paying our pension benefits. To the extent that the CCCERA assets earn less than the 7.75 percent projected return rate or even if the assets actually lose value, like the 28 percent they lost in 2008, that is not our risk.

The Task Force believes that with those answers, that even if MOFD offered to give the employees US treasury bonds and notes (which would take away all investment risk) that would mature to the $670 million of currently assumed future benefits, this still might not be enough to absorb the benefit risks that that the employees would be assuming from the taxpayers. But some discount rate greater than zero percent should be assumed so the long term US Treasury yield rate is what the Task Force is assuming for this analysis.

The ten year average of the long (20-30 year term) US Treasury Bond yield is about 4.50 percent. The CCCERA assumed asset earning rate is 7.75 percent. A recent study said there is only a 42 percent chance this goal will be met while there is a 65 percent chance that a 6 percent earning rate could be achieved.

These rates produces the following fair values for MOFD long term liabilities:

| | Total Liabilities | Fair Value | | |
|---|---|---|---|---|
| Pension Obligation Bond | 33,400,000 | 25,000,000 | 25,000,000 | 25,000,000 |
| | | @ 4.50% | @ 6.0% | @ 7.75% |
| OPEB | 51,800,000 | 25,400,000 | 20,800,000 | 16,800,000 |
| Pension Plan | 617,200,000 | 236,000,000 | 183,900,000 | 142,500,000 |
| TOTAL | 702,400,000 | 286,400,000 | 229,700,000 | 184,300,000 |

**Offsetting Assets**

Understanding MOFD's assets is much more straightforward. In addition to its $7 million of cash reserves, MOFD's major asset is what is held and managed by the pension plan: a $117 million portion of CCCERA's $5 billion asset pool (as of 12/31/2010). The $117 million pension asset value is the market value of the assets as opposed to the actuarial value of $124.6 million displayed in Exhibit VI-3. The Task Force believes the market value is the appropriate value to use. New GASB (Government Accounting Standard Board) rules which will go into effect in the coming years adopt this standard also.

**A "Common Sense" Balance Sheet for MOFD**

Table VI-3 is the Task Force's restatement of the MOFD balance sheet which more clearly describes the District's true assets and liabilities for the District's managers and the community

1) The $26.3 million Prepaid Item, which is actually part of the pension plan assets, is removed and replaced with the full $117 million market value of the pension plan's assets. Also included are the projected earnings on those assets using a 6.00 percent assumed earning rate. The District's pension plan administrator is currently assuming a 7.75 percent earning rate but as stated above a Stanford study determined that there was only a 42 percent chance such long term earnings could be achieved. The study claims that even the 6 percent rate the Task Force is assuming only bears a 65 percent chance of being achieved. Table VI-2b shows that these assets will be able to pay down 18 years of pension liabilities while earning $95 million assuming a 6 percent earning rate.

2) It shows not only the $25 million balance of the Pension Bond but the $8.4 million interest cost.

3) It replaces the $3.5 million in OPEB (retiree medical benefits) liability with the full value of those liabilities. It displays both the total projected (undiscounted) value of these liabilities, $51.8 million, and the $25.4 million Fair Value using a 4.50 percent discount rate (the 10 year average of the long term US Treasury bond).

4) It includes the pension liabilities: Both the total projected (undiscounted) value of these liabilities, $617 million, and the $236 million Fair Value, again using the 4.50 percent discount rate used to discount the OPEB liabilities.

The total (discounted) asset value becomes $133 million; liabilities $289 million; resulting in a net liability of $156 million. Vastly different than the $11 million in net assets the current balance sheet presents.

## Table VI-3

# MOFD Restated Balance Sheet for Fiscal Year Ending June 30, 2011

| | Audited Financials FYE 6/30/2011 (A) | "Common Sense" Revision Discounted (B) | Undiscounted | Discount | note | Change (A)-(B) | note |
|---|---|---|---|---|---|---|---|
| Assets | | | | | | | |
| Cash and investments | 6,832,290 | 6,832,290 | 6,832,290 | | 1 | 0 | |
| Taxes receivable | 105,417 | 105,417 | 105,417 | | 1 | 0 | |
| Other receivables | 654,364 | 654,364 | 654,364 | | 1 | 0 | |
| Prepaid Items | 26,472,457 | 127,620 | 127,620 | | 1 | (26,344,837) | 2 |
| Capital Assets | 8,348,722 | 8,348,722 | 8,348,722 | | 1 | 0 | |
| OPEB | | 0 | | | 1a | 0 | |
| Long Term Asset | | | | | | | |
| Pension Plan (12/31/2010) | | | 212,300,000 | | 8b | | |
| Pension Plan discount @ 6.00% | | | | (95,334,000) | 8b | | |
| Pension Plan Fair Value | | 116,966,000 | | | 8a | 116,966,000 | |
| | =========== | =========== | =========== | =========== | | =========== | |
| Total | 42,413,250 | **133,034,413** | 228,368,413 | (95,334,000) | | 90,621,163 | |
| Liabilities | | | | | | | |
| Accounts payable | 204,310 | 204,310 | 204,310 | | 3 | 0 | |
| Salaries and benefit | 808,213 | 808,213 | 808,213 | | 3 | 0 | |
| Accrued interest | 672,336 | 672,336 | 672,336 | | 3 | 0 | |
| Due within one year | 1,275,321 | 1,275,321 | 1,275,321 | | 4 | 0 | |
| Long term liabilities (due in over 1 year) | | | | | | | |
| Pension Bond (7/2/2011) | | | 33,421,338 | | 5a | | |
| Pension Bond discount | | | | (8,385,856) | 5b | | |
| Pension Bond Fair Value | 25,035,482 | 25,035,482 | | | 5c | | |
| OPEB (6/30/2011) | | | 51,793,042 | | 6 | | |
| OPEB discount | | | | (26,362,320) | 9 | | |
| OPEB Fair Value (6/30/2011) | 3,493,000 | 25,430,722 | | | 7 / 9 | 21,937,722 | |
| Pension Plan (12/31/2010) | | | 617,217,595 | | 10 | | |
| Pension Plan discount | | | | (381,250,931) | 10 | | |
| Pension Plan Fair Value | | 235,966,664 | | | 10 | 235,966,664 | |
| | =========== | =========== | =========== | =========== | | =========== | |
| Total | 31,488,662 | **289,393,048** | 705,392,154 | (415,999,107) | | 257,904,386 | |
| Net Asset / (Liability) | 10,924,588 | **(156,358,635)** | (477,023,741) | | 11 | (167,283,223) | |

1) MOFD audited financials 2010/11, Page 2, Assets, Column 5

1a) OPEB liabilities totally unfunded (MOFD audited financials 2010/11, note 13)

2) Outstanding Pension Obligation Bond balance as of 6/30/2011. The revised statement includes this with the Pension Plan Assets; which it is.

3) MOFD audited financials 2010/11, Page 2, Liabilities, Column 5

4) MOFD audited financials 2010/11, Page 2, Liabilities, Column 5 - includes a 7/1/2011 Pension Obligation Bond principal payment of $1,055,000

5a) All principal and intererest due after 6/30/2011

5b) All intererest due after 6/30/2012

5c) Pension Bond principal due after 6/30/2012 of $24,705,000 plus $330,482 of other (not Pension Obligation Bond) amounts due.

6) Estimate of total OPEB liabilities, not discounted, based on discounted projections by Bartel of $26.34 million using a 4.25% discount rate. Actual projections not available from MOFD.

7) MOFD audited financials 2010/11, Footnote 13.

8a) In a letter dated 10/21/2011, the actuary to MOFD's pension plan administrator (CCCERA) stated that MOFD had assets with an accounting value of $124.64 million. This accounting value "smoothes" the impact of recent extraordinary gains and losses. In its annual report, CCCERA listed the accounting value of its total assets as $5.36 billion but their market value as only $5.03 billion. As MOFD's assets are a portion of CCCERA's assets (and not distinct assets), this means they have a market value of $116.97 million. The payments from this asset balance to pay off currently vested pension liabilities would total $212 million until the current balance would be exhausted in 2030. This assumes a conservative earning rate of 6.00%; 1.75% below CCCERA's existing assumed rate of 7.75% but greater than their 5 year average of 5.3%.

8b) Assuming a 6% earning rate (Table VI-2b) which a Stanford study (footnote ** Table VI-b) indicates there is a 65% chance of acheiving vs. the 42% chance of acheiving a 7.75% earning rate which the pension plan is currently assuming.

9) In its 8/27/2010 letter, MOFD's actuary (Bartel) estimated MOFD's OPEB liability as of 6/30/2011 as $26.34 million using a 4.25% discount rate (based on US Government bond yields). The 10 year average of the US Government 30 year bond yield was 4.50%. Applying that discount rate to the estimated (note 6) projections results in a $25.43 million Fair Value.

10) In the 2010/11 audited financials, the Pension Plan assets and liabilities are "off balance sheet" described Footnote 8). Footnote 8 states that MOFD's pension liabilities are $143 million. This a present value, using a 7.75% discount rate, of 60 years of vested pension benefits which MOFD does not know therefore could not provide to the Task Force. The estimated value of these pension benefits, without discounting, is $620 million. While using a 7.75% discount rate to determine the Fair Value of these benefits is standard accounting practice, it does not make sense. There is no nexus between these liabilities and the assets set aside to fund them. The employees have not accepted the pension plan assets as their payment source. The MOFD taxpayers are fully liable for these payments. Therefore, these liabilities are no different than the OPEB liabilities and should be evaluated using the same discount rate: 4.50%. This produces a Fair Value of $236 million.

11) Although the change in net assets going from a positive $11 million to a negative $156 million appears drastic, it is the "undiscounted" column that should be noted. $705 million in total liabilities. That is 90 times the 2011/12 base salary budget. Discounting those liabilities back at 3.5% (in other words, stating them as uninflated dollars) is still $300 million - 40 times the 2011/12 base salary budget. The current asset pool will only cover $200 million of this $700 million cost if it earns at 6%. Future generations will have to pay for the remaining $500 million.

What does this $156 million value represent? It is the estimation of what the taxpayers would have to pay if they shut down MOFD today, cashed out the assets and paid off the liabilities.

Does this mean that we would have to raise $156 million today to fully fund our future liabilities? No. If the current assets, which are assumed to earn 6.00 percent, were increased by the $111 million highlighted in Table VI-2b, the earnings on those new assets would be approximately the $477 million shortfall shown in the "Undiscounted" column of Table VI-3.

**Further Pension Information**

*Pension Assets and Liabilities as of 12/31/2011* - On June 29, 2012 CCCERA's actuary presented the accounting for the year ending December 31, 2011 (Exhibit VI-4). While the report did not clearly give MOFD pension assets and liabilities it included data that allowed the Task Force to calculate them.

* Discounted liabilities increased from $142.5 to $143.6 million using the same 7.75 percent discount rate as the previous year.
* The actuarial value of the assets decreased from $124.6 to $119.6 million. This resulted in the UAAL (Unfunded Actuarial Accrued Liability) increasing from $17.9 million to $24.0 million.
* However, the market value of the assets also decreased from $117.0 to $112.2 million. Over five years, the unrecognized losses will be amortized to bring the actuarial value of the assets equal to their market value (assuming no further gains or losses in excess of the projected earning rate)so the "true" unfunded liability rose from $25.6 to $31.4 million.
* In order to amortize the $13.5 million difference between the 2011 $31.4 million true unfunded liability and the 2010 reported value of $17.9 million over 18 years will cost another $1.4 million per year on top of the current $1.9 million or $3.3 million just to pay down unfunded liabilities (on top of "normal" costs for newly vested liabilities).

*How do corporations account for pensions that differ from government agencies?* - Corporations are required to pre-fund their pension plans as are government agencies. However, they are required to discount future liabilities at a rate based on current bond yields which have historically been between 5 and 6 percent and are currently below 5 percent, not at an assumed asset earning rate like government agencies currently do. Assuming a 5.5 percent discount rate, MOFD's pension liabilities increase $57 million to $201 million.

For corporations market value adjustments to assets have to be made within 2 years so MOFD's assets would be valued at their $112 million market value in short order making the net unfunded liability $89 million.

Any shortfall between the discounted liabilities and the market value of pension assets are required to be funded over a seven year period. Paying off $89 million over seven years assuming a 5.5% interest rate would cost $15.7 million per year. We would have $2 million left over and that would not even cover the pension bond payments much less the OPEB liabilities.

*New Accounting Rules Are Coming Into Effect* - Over the next few years new rules from the Government Accounting Standards Board (GASB) are coming into effect on how government entities account for pension plans.

1) While they do not place pension assets into the assets section of the balance sheet and liabilities into the liability section as the Task Force suggests, they do move the net assets or liabilities into the balance sheet as opposed to the current practice of relegating them to a footnote.

2) They allow the government agency to discount liabilities at the expected asset earning rate only up to the value of the assets. Any liabilities in excess of those fully funded by assets must be discounted at a rate tied to the current 20 year AA municipal bond yield rate. This rate is currently just over 3 percent.

What would the effect on MOFD be? MOFD's $112 million in assets will be able to pay off $266 of pension liabilities over the next 23 years. After that there will be an additional $356 million in liabilities still outstanding. Discounting these outstanding liabilities at a 3.12% discount rate (the 20 year municipal bond rate as of 6/25/2012 when the new regulations were announced) produces a present value of unfunded liabilities of $126 million.

This new accounting procedure, called GASB 67, will go into effect starting in June 2013 for MOFD's pension plan administrator (so they will report the 12/31/2013 underfunding as such) and it will go into effect for MOFD for their fiscal year ending June 30, 2014, two years from now. This will be quite a shock going from a $24 million liability hidden in a footnote to a $126 million liability on the balance sheet (and by then it might even be greater). The Task Force suggests MOFD prepare the community for this shock by creating a "truthful" balance sheet similar to Table IV-3.

*New California Pension Legislation* - On August 31, 2012 the California legislature passed a bill that will reduce pension costs to government agencies in the future by reducing benefits to employees. It increases the age at which firefighters start receiving pension benefits from 50 to 57. Reduces the 3 percent per year vesting to 2.7% for firefighters. Puts a cap on maximum benefit allowable to $132,000 per year (so the $242,000 benefit that Chief Pete Nowicki started receiving in 2008 would no longer be allowed). Requires employees to pay half of the "normal" cost (cost for newly vested benefits, not for old underfunded benefits).

That is the good news. The bad news is that these changes are pro-active, not retroactive, and they only apply to employees hired starting next year. In other words, it will not affect MOFD's current underfunded liabilities at all and will only slowly start affecting its going-forward costs as new employees are hired when existing employees retire. Note on cost sharing: MOFD employees already pay 24% of their salary which is more than half of the "normal" cost of the pensions.

**Cleaning Up The Mess**

While raising $111 million will be a difficult task, it is not impossible. This is a wakeup call as to what these benefits really cost; a call that can no longer be ignored.

**What will it take so that we do not mortgage our children's and their children's future?**

Table VI-2a shows that even if the MOFD pension plan's $117 million in assets earn at the 7.75 percent rate CCCERA currently projects, they will be exhausted in 25 years; and they are only paying for pension costs, ignoring the $40 million of OPEB expenses and the $33 million of debt service on the pension bond that is due during that time frame. After 2036, there would still be 35 more years of currently vested liabilities which add up to $333 million - a total of $406 million of unfunded liabilities including OPEB and the Pension Bond. But if CCCERA is wrong and these assets only earn at the 6 percent rate the Task Force believes is reasonable (Table VI-2b), then our current assets run out in 19 years (2030) leaving $490 million of unfunded liabilities after that.

What can we do? First, we can figure out what it would take to at least pay off the benefits that are already vested plus the pension bond: the $700 million of total liabilities displayed in Table VI-2 that the last generation has accrued and only partially paid for. We need to make conservative assumptions and test out options. We need better information from MOFD's and CCCERA's actuaries. We need to understand what happens if investment income does not meet expectations; if inflation rates go up or down; if longevity increases. We need to understand what the actuaries believe "final salaries" are going to be based on assumed retirement rates and employment contracts and possibly adjust employment agreements such that an employ might not get $5 of future pension benefits for every dollar of salary he or she earns. The new California law addresses these concerns but not necessarily soon enough or to a degree required to allow for funding existing liabilities.

CCCERA believes that it can earn 7.75 percent but over the past decade it has only earned 5 percent. Maybe it has achieved the 7.75 percent growth over two decades but the 90's were extraordinary with a 16 percent average annual gain in the Dow. Warren Buffet believes that we should be more conservative; assuming 6.00 percent. The Task Force believes it is time to start acting conservatively and make the extra sacrifice needed to protect future generations from our excesses.

The Task Force also believes that we need to pre-fund all of our vested liabilities, including OPEB. Table VI-4b calculates what it will cost to pay down our unfunded pension liabilities over 30 years (column D); pay down our unfunded OPEB liabilities over 30 years (column J); and start pre-funding future OPEB liabilities (column N). The total starts at $7.2 million in 3013 (column O) and increases to $13 million by 2033 before it starts reducing.

That is the bad news. The good news is that some, actually a lot, of the required funding is already in the budget (already being used to pay off past promises as opposed to current services). This includes:

* Pension Obligation Bond payments: $2.65 million in 2013.

* OPEB payments: about $950,000 in 2013; all used to fund existing liabilities.

* Pension Plan contributions: projected to be $3 million by 2013; $1 million of which cover currently vested liabilities with the other $2 million needed to cover newly vesting benefits. This adds up to $4.6 million per year. Almost enough to fund $5.1 million needed if assets can earn at 7.75 percent (Table VI-4a) but it will be $2.6 million shy if they can only earn at 6 percent (Table VI-4b). But there is more bad news.

## Table VI-4a

# Funding Needed to Pay off MOFD Employee Benefit Liabilites

(assuming 7.75% asset earning rate)

| | (A) Currently Vested Pension Liabilities | (B) Pension Liabilities Currently Payable from Asset Pool | (C) Currently Unfunded Pension Liabilities (A) - (B) | (D) Required Funding Increasing at 3.0% | (E) Net Payments To / (From) Asset Pool (D) - (A) | (F) interest 7.75% | (G) Principal (E) + (F) | (H) Asset Balance | (I) Currently Unfunded OPEB Liabilities | (J) Required Funding Increasing at 3.0% | (K) interest 7.75% | (L) Principal (j) + (K) - (I) | (M) Asset Balance | (N) Pre-Fund OPEB 3.0% | (O) Required Funding for Pension and OPEB (D)+(J)+(N) | (P) Existing Funding OPEB plus Pension Bond | (Q) Additional Funding In Excess of Projections (O)-(P) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 650,622,769 | 296,575,388 | 354,047,381 | 127,921,873 | -522,700,896 | 405,734,896 | -116,966,000 | | 50,892,421 | 44,553,927 | 6,338,494 | 0 | | | | | 115,717,125 |
| 2011 | | | | | | | | 116,966,000 | | | | | | | | | over 30 years |
| 2012 | 9,954,293 | 7,434,692 | 2,519,601 | 2,519,601 | -7,434,692 | 9,064,865 | 1,630,173 | 118,596,173 | | | | | 0 | | | | |
| 2013 | 10,499,200 | 7,848,805 | 2,650,395 | 3,407,301 | -7,091,898 | 9,191,203 | 2,099,305 | 120,695,478 | 950,154 | 1,210,573 | 0 | 260,419 | 260,419 | 500,000 | 5,117,875 | 3,600,549 | 1,517,325 |
| 2014 | 11,049,160 | 8,268,150 | 2,781,010 | 3,509,520 | -7,539,640 | 9,353,900 | 1,814,260 | 122,509,738 | 1,002,413 | 1,246,891 | 20,182 | 264,660 | 525,079 | 515,000 | 5,271,411 | 3,783,423 | 1,487,988 |
| 2015 | 11,613,000 | 8,692,076 | 2,920,924 | 3,614,806 | -7,998,194 | 9,494,505 | 1,496,310 | 124,006,048 | 1,057,546 | 1,284,297 | 40,694 | 267,445 | 792,525 | 530,450 | 5,429,553 | 3,978,470 | 1,451,084 |
| 2016 | 12,188,951 | 9,119,858 | 3,069,093 | 3,723,250 | -8,465,701 | 9,610,469 | 1,144,768 | 125,150,816 | 1,115,711 | 1,322,826 | 61,421 | 268,536 | 1,061,061 | 546,364 | 5,592,440 | 4,184,804 | 1,407,636 |
| 2017 | 12,770,171 | 9,550,698 | 3,219,473 | 3,834,948 | -8,935,223 | 9,699,188 | 763,965 | 125,914,781 | 1,177,075 | 1,362,511 | 82,232 | 267,669 | 1,328,730 | 562,754 | 5,760,213 | 4,396,548 | 1,363,665 |
| 2018 | 13,359,998 | 9,983,717 | 3,376,281 | 3,949,996 | -9,410,002 | 9,758,395 | 348,394 | 126,263,174 | 1,241,814 | 1,403,386 | 102,977 | 264,549 | 1,593,279 | 579,637 | 5,933,020 | 4,618,095 | 1,314,925 |
| 2019 | 13,961,425 | 10,417,952 | 3,543,473 | 4,068,496 | -9,892,929 | 9,785,396 | -107,533 | 126,155,641 | 1,310,114 | 1,445,488 | 123,479 | 258,854 | 1,852,132 | 597,026 | 6,111,010 | 4,853,587 | 1,257,424 |
| 2020 | 14,562,093 | 10,852,349 | 3,709,744 | 4,190,551 | -10,371,542 | 9,777,062 | -594,480 | 125,561,161 | 1,382,170 | 1,488,853 | 143,540 | 250,223 | 2,102,355 | 614,937 | 6,294,340 | 5,091,914 | 1,202,427 |
| 2021 | 15,170,067 | 11,285,756 | 3,884,311 | 4,316,267 | -10,853,800 | 9,730,990 | -1,122,810 | 124,438,352 | 1,458,189 | 1,533,518 | 162,933 | 238,262 | 2,340,617 | 633,385 | 6,483,171 | 5,342,500 | 1,140,671 |
| 2022 | 13,447,790 | 11,716,921 | 1,730,869 | 4,445,755 | -9,002,035 | 9,643,972 | 641,938 | 125,080,289 | 1,538,389 | 1,579,524 | 181,398 | 222,532 | 2,563,149 | 652,387 | 6,677,666 | 3,269,258 | 3,408,407 |
| 2023 | 12,144,480 | 12,144,480 | 0 | 4,579,128 | -7,565,352 | 9,693,722 | 2,128,370 | 127,208,660 | 1,623,001 | 1,626,909 | 198,644 | 202,553 | 2,765,702 | 671,958 | 6,877,996 | 1,623,001 | 5,254,995 |
| 2024 | 12,566,954 | 12,566,954 | 0 | 4,716,502 | -7,850,452 | 9,858,671 | 2,008,219 | 129,216,878 | 1,712,266 | 1,675,717 | 214,342 | 177,793 | 2,943,494 | 692,117 | 7,084,336 | 1,712,266 | 5,372,070 |
| 2025 | 12,982,741 | 12,982,741 | 0 | 4,857,997 | -8,124,744 | 10,014,308 | 1,889,564 | 131,106,443 | 1,806,441 | 1,725,988 | 228,121 | 147,668 | 3,091,163 | 712,880 | 7,296,866 | 1,806,441 | 5,490,425 |
| 2026 | 13,390,105 | 13,390,105 | 0 | 5,003,737 | -8,386,368 | 10,160,749 | 1,774,381 | 132,880,824 | 1,905,795 | 1,777,768 | 239,565 | 111,538 | 3,202,701 | 734,267 | 7,515,772 | 1,905,795 | 5,609,977 |
| 2027 | 13,787,175 | 13,787,175 | 0 | 5,153,849 | -8,633,326 | 10,298,264 | 1,664,938 | 134,545,762 | 2,010,614 | 1,831,101 | 248,209 | 68,697 | 3,271,398 | 756,295 | 7,741,245 | 2,010,614 | 5,730,631 |
| 2028 | 14,171,927 | 14,171,927 | 0 | 5,308,464 | -8,863,462 | 10,427,297 | 1,563,834 | 136,109,596 | 2,121,197 | 1,886,034 | 253,533 | 18,370 | 3,289,768 | 778,984 | 7,973,482 | 2,121,197 | 5,852,285 |
| 2029 | 14,542,184 | 14,542,184 | 0 | 5,467,718 | -9,074,466 | 10,548,494 | 1,474,028 | 137,583,624 | 2,237,863 | 1,942,615 | 254,957 | -40,291 | 3,249,477 | 802,353 | 8,212,687 | 2,237,863 | 5,974,823 |
| 2030 | 14,895,601 | 14,895,601 | 0 | 5,631,750 | -9,263,851 | 10,662,731 | 1,398,880 | 138,982,504 | 2,222,066 | 2,000,893 | 251,834 | 30,661 | 3,280,138 | 826,424 | 8,459,067 | 2,222,066 | 6,237,001 |
| 2031 | 15,229,657 | 15,229,657 | 0 | 5,800,702 | -9,428,954 | 10,771,144 | 1,342,190 | 140,324,693 | 2,197,763 | 2,060,920 | 254,211 | 117,368 | 3,397,506 | 851,217 | 8,712,839 | 2,197,763 | 6,515,077 |
| 2032 | 15,541,643 | 15,541,643 | 0 | 5,974,724 | -9,566,920 | 10,875,164 | 1,308,244 | 141,632,938 | 2,164,064 | 2,122,748 | 263,307 | 221,991 | 3,619,497 | 876,753 | 8,974,224 | 2,164,064 | 6,810,161 |
| 2033 | 15,828,653 | 15,828,653 | 0 | 6,153,965 | -9,674,688 | 10,976,553 | 1,301,865 | 142,934,802 | 2,120,009 | 2,186,430 | 280,511 | 346,932 | 3,966,429 | 903,056 | 9,243,451 | 2,120,009 | 7,123,442 |
| 2034 | 16,087,572 | 16,087,572 | 0 | 5,538,569 | -10,549,003 | 11,077,447 | 528,444 | 143,463,246 | 2,064,563 | 1,967,787 | 307,398 | 210,622 | 4,177,051 | 930,147 | 8,436,503 | 2,064,563 | 6,371,940 |
| 2035 | 16,315,060 | 16,315,060 | 0 | 4,923,172 | -11,391,888 | 11,118,402 | -273,486 | 143,189,760 | 1,996,604 | 1,749,144 | 323,721 | 76,261 | 4,253,313 | 958,052 | 7,630,368 | 1,996,604 | 5,633,764 |
| 2036 | 16,507,545 | 3,920,661 | 12,586,884 | 4,307,776 | -12,199,770 | 11,097,206 | -1,102,563 | 142,087,197 | 1,914,925 | 1,530,501 | 329,632 | -54,792 | 4,198,520 | 986,793 | 6,825,070 | 1,914,925 | 4,910,145 |
| 2037 | 16,661,206 | 0 | 16,661,206 | 3,692,379 | -12,968,827 | 11,011,758 | -1,957,069 | 140,130,128 | 1,818,221 | 1,311,858 | 325,385 | -180,978 | 4,017,542 | 1,016,397 | 6,020,634 | 1,818,221 | 4,202,413 |
| 2038 | 16,771,958 | 0 | 16,771,958 | 3,076,983 | -13,694,975 | 10,860,085 | -2,834,890 | 137,295,238 | 1,705,088 | 1,093,215 | 311,360 | -300,513 | 3,717,029 | 1,046,889 | 5,217,087 | 1,705,088 | 3,511,999 |
| 2039 | 16,835,438 | 0 | 16,835,438 | 2,461,586 | -14,373,852 | 10,640,381 | -3,733,471 | 133,561,767 | 1,574,009 | 874,572 | 288,070 | -411,367 | 3,305,662 | 1,078,296 | 4,414,454 | 1,574,009 | 2,840,445 |
| 2040 | 16,846,990 | 0 | 16,846,990 | 1,846,190 | -15,000,801 | 10,351,037 | -4,649,764 | 128,912,004 | 1,423,354 | 655,929 | 256,189 | -511,236 | 2,794,426 | 1,110,645 | 3,612,763 | 1,423,354 | 2,189,409 |
| 2041 | 16,801,648 | 0 | 16,801,648 | 1,230,793 | -15,570,855 | 9,990,680 | -5,580,175 | 123,331,829 | 1,251,365 | 437,286 | 216,568 | -597,511 | 2,196,915 | 1,143,964 | 2,812,043 | 1,251,365 | 1,560,678 |
| 2042 | 16,694,118 | 0 | 16,694,118 | 615,397 | -16,078,721 | 9,558,217 | -6,520,505 | 116,811,324 | 1,056,152 | 218,643 | 170,261 | -667,248 | 1,529,666 | 1,178,283 | 2,012,322 | 1,056,152 | 956,170 |
| 2043 | 16,126,518 | 0 | 16,126,518 | 0 | -16,126,518 | 9,052,878 | -7,073,640 | 109,737,684 | 835,681 | 0 | 118,549 | -717,131 | 812,535 | 1,213,631 | 1,213,631 | 835,681 | 377,951 |
| 2044 | 15,539,846 | 0 | 15,539,846 | | -15,539,846 | 8,504,671 | -7,035,176 | 102,702,508 | 587,762 | | 62,971 | -524,791 | 287,744 | 1,250,040 | 1,250,040 | 587,762 | 662,278 |
| 2045 | 14,934,902 | 0 | 14,934,902 | | -14,934,902 | 7,959,444 | -6,975,458 | 95,727,051 | 310,044 | | 22,300 | -287,744 | 0 | 1,287,541 | 1,287,541 | 310,044 | 977,497 |
| 2046 | 14,312,615 | 0 | 14,312,615 | | -14,312,615 | 7,418,846 | -6,893,768 | 88,833,282 | 0 | | 0 | 0 | 0 | 1,326,168 | 1,326,168 | 0 | 1,326,168 |
| 2047 | 13,674,052 | 0 | 13,674,052 | | -13,674,052 | 6,884,579 | -6,789,472 | 82,043,810 | 0 | | 0 | 0 | 0 | 1,365,953 | 1,365,953 | 0 | 1,365,953 |
| 2048 | 13,020,432 | 0 | 13,020,432 | | -13,020,432 | 6,358,395 | -6,662,037 | 75,381,773 | 0 | | 0 | 0 | 0 | 1,406,931 | 1,406,931 | 0 | 1,406,931 |
| 2049 | 12,353,135 | 0 | 12,353,135 | | -12,353,135 | 5,842,087 | -6,511,048 | 68,870,726 | 0 | | 0 | 0 | 0 | 1,449,139 | 1,449,139 | 0 | 1,449,139 |
| 2050 | 11,673,713 | 0 | 11,673,713 | | -11,673,713 | 5,337,481 | -6,336,231 | 62,534,494 | 0 | | 0 | 0 | 0 | 1,492,613 | 1,492,613 | 0 | 1,492,613 |
| 2051 | 10,983,902 | 0 | 10,983,902 | | -10,983,902 | 4,846,423 | -6,137,479 | 56,397,015 | 0 | | 0 | 0 | 0 | 1,537,392 | 1,537,392 | 0 | 1,537,392 |
| 2052 | 10,285,640 | 0 | 10,285,640 | | -10,285,640 | 4,370,769 | -5,914,871 | 50,482,144 | 0 | | 0 | 0 | 0 | 1,583,513 | 1,583,513 | 0 | 1,583,513 |
| 2053 | 9,581,074 | 0 | 9,581,074 | | -9,581,074 | 3,912,366 | -5,668,707 | 44,813,437 | 0 | | 0 | 0 | 0 | 1,631,019 | 1,631,019 | 0 | 1,631,019 |
| 2054 | 8,872,578 | 0 | 8,872,578 | | -8,872,578 | 3,473,041 | -5,399,537 | 39,413,900 | 0 | | 0 | 0 | 0 | 1,679,949 | 1,679,949 | 0 | 1,679,949 |
| 2055 | 8,162,772 | 0 | 8,162,772 | | -8,162,772 | 3,054,577 | -5,108,195 | 34,305,705 | 0 | | 0 | 0 | 0 | 1,730,348 | 1,730,348 | 0 | 1,730,348 |
| 2056 | 7,454,532 | 0 | 7,454,532 | | -7,454,532 | 2,658,692 | -4,795,839 | 29,509,866 | 0 | | 0 | 0 | 0 | 1,782,258 | 1,782,258 | 0 | 1,782,258 |
| 2057 | 6,751,010 | 0 | 6,751,010 | | -6,751,010 | 2,287,015 | -4,463,996 | 25,045,870 | 0 | | 0 | 0 | 0 | 1,835,726 | 1,835,726 | 0 | 1,835,726 |
| 2058 | 6,055,656 | 0 | 6,055,656 | | -6,055,656 | 1,941,055 | -4,114,601 | 20,931,269 | 0 | | 0 | 0 | 0 | 1,890,798 | 1,890,798 | 0 | 1,890,798 |
| 2059 | 5,372,232 | 0 | 5,372,232 | | -5,372,232 | 1,622,173 | -3,750,059 | 17,181,210 | 0 | | 0 | 0 | 0 | 1,947,522 | 1,947,522 | 0 | 1,947,522 |
| 2060 | 4,704,836 | 0 | 4,704,836 | | -4,704,836 | 1,331,544 | -3,373,292 | 13,807,918 | 0 | | 0 | 0 | 0 | 2,005,948 | 2,005,948 | 0 | 2,005,948 |
| 2061 | 4,057,921 | 0 | 4,057,921 | | -4,057,921 | 1,070,114 | -2,987,807 | 10,820,111 | 0 | | 0 | 0 | 0 | 2,066,126 | 2,066,126 | 0 | 2,066,126 |
| 2062 | 3,436,321 | 0 | 3,436,321 | | -3,436,321 | 838,559 | -2,597,762 | 8,222,349 | 0 | | 0 | 0 | 0 | 2,128,110 | 2,128,110 | 0 | 2,128,110 |
| 2063 | 2,845,274 | 0 | 2,845,274 | | -2,845,274 | 637,232 | -2,208,042 | 6,014,307 | 0 | | 0 | 0 | 0 | 2,191,953 | 2,191,953 | 0 | 2,191,953 |
| 2064 | 2,290,445 | 0 | 2,290,445 | | -2,290,445 | 466,109 | -1,824,337 | 4,189,971 | 0 | | 0 | 0 | 0 | 2,257,712 | 2,257,712 | 0 | 2,257,712 |
| 2065 | 1,777,958 | 0 | 1,777,958 | | -1,777,958 | 324,723 | -1,453,236 | 2,736,735 | 0 | | 0 | 0 | 0 | 2,325,443 | 2,325,443 | 0 | 2,325,443 |
| 2066 | 1,314,419 | 0 | 1,314,419 | | -1,314,419 | 212,097 | -1,102,322 | 1,634,413 | 0 | | 0 | 0 | 0 | 2,395,206 | 2,395,206 | 0 | 2,395,206 |
| 2067 | 906,949 | 0 | 906,949 | | -906,949 | 126,667 | -780,282 | 854,131 | 0 | | 0 | 0 | 0 | 2,467,062 | 2,467,062 | 0 | 2,467,062 |
| 2068 | 563,215 | 0 | 563,215 | | -563,215 | 66,195 | -497,020 | 357,111 | 0 | | 0 | 0 | 0 | 2,541,074 | 2,541,074 | 0 | 2,541,074 |
| 2069 | 291,464 | 0 | 291,464 | | -291,464 | 27,676 | -263,788 | 93,323 | 0 | | 0 | 0 | 0 | 2,617,307 | 2,617,307 | 0 | 2,617,307 |
| 2070 | 100,555 | 0 | 100,555 | | -100,555 | 7,232 | -93,323 | 0 | 0 | | 0 | 0 | 0 | 2,695,826 | 2,695,826 | 0 | 2,695,826 |
| | | | | | | | Total Liabilities | 5,235,288,979 | | | | | | | | | |
| | | | | | | | Projected Earnings | 6,338,494 | 50,892,421 | -44,553,927 | | | | | | | |
| | | | | | | | Unfunded Liabilities | 5,228,950,484 | | | | | | | | | |

Table VI-4b

# Funding Needed to Pay off MOFD Employee Benefit Liabilites

(assuming 6.00% asset earning rate)

| | (A) Currently Vested Pension Liabilities | (B) Pension Liabilities Currently Payable from Asset Pool | (C) Currently Unfunded Pension Liabilities (A) - (B) | (D) Required Funding Increasing at 3.0% | (E) Net Payments To / (From) Asset Pool (D) - (A) | (F) interest 6.00% | (G) Principal (E) + (F) | (H) Asset Balance | (I) Currently Unfunded OPEB Liabilities | (J) Required Funding Increasing at 3.0% | (K) interest 6.00% | (L) Principal (j) + (K) - (I) | (M) Asset Balance | (N) Pre-Fund OPEB 3.0% | (O) Required Funding for Pension and OPEB (D)+(J)+(N) | (P) Existing Funding OPEB plus Pension Bond | (Q) Additional Funding In Excess of Projections (O)-(P) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 650,622,769 | 212,300,106 | 438,322,663 | 204,520,744 | -446,102,025 | 329,136,025 | -116,966,000 | | 50,892,421 | 45,661,758 | 5,230,664 | 0 | | | | | |
| 2011 | | | | | | | | 116,966,000 | | | | | | | | | |
| 2012 | 9,954,293 | 7,434,692 | 2,519,601 | 2,519,601 | -7,434,692 | 7,017,960 | -416,732 | 116,549,268 | | | | | 0 | | | | |
| 2013 | 10,499,200 | 7,848,805 | 2,650,395 | 5,488,567 | -5,010,633 | 6,992,956 | 1,982,323 | 118,531,591 | 950,154 | 1,240,674 | 0 | 290,520 | 290,520 | 500,000 | 7,229,241 | 3,600,549 | 3,628,692 |
| 2014 | 11,049,160 | 8,268,150 | 2,781,010 | 5,653,224 | -5,395,936 | 7,111,895 | 1,715,959 | 120,247,550 | 1,002,413 | 1,277,894 | 17,431 | 292,913 | 583,433 | 515,000 | 7,446,118 | 3,783,423 | 3,662,696 |
| 2015 | 11,613,000 | 8,692,076 | 2,920,924 | 5,822,821 | -5,790,180 | 7,214,853 | 1,424,674 | 121,672,224 | 1,057,546 | 1,316,231 | 35,006 | 293,692 | 877,124 | 530,450 | 7,669,502 | 3,978,470 | 3,691,032 |
| 2016 | 12,188,951 | 9,119,858 | 3,069,093 | 5,997,505 | -6,191,446 | 7,300,333 | 1,108,888 | 122,781,111 | 1,115,711 | 1,355,718 | 52,627 | 292,635 | 1,169,760 | 546,364 | 7,899,587 | 4,184,804 | 3,714,783 |
| 2017 | 12,770,171 | 9,550,698 | 3,219,473 | 6,177,430 | -6,592,741 | 7,366,867 | 774,126 | 123,555,238 | 1,177,075 | 1,396,390 | 70,186 | 289,501 | 1,459,260 | 562,754 | 8,136,575 | 4,396,548 | 3,740,027 |
| 2018 | 13,359,998 | 9,983,717 | 3,376,281 | 6,362,753 | -6,997,245 | 7,413,314 | 416,070 | 123,971,307 | 1,241,814 | 1,438,281 | 87,556 | 284,023 | 1,743,284 | 579,637 | 8,380,672 | 4,618,095 | 3,762,577 |
| 2019 | 13,961,425 | 10,417,952 | 3,543,473 | 6,553,636 | -7,407,789 | 7,438,278 | 30,489 | 124,001,796 | 1,310,114 | 1,481,430 | 104,597 | 275,913 | 2,019,197 | 597,026 | 8,632,092 | 4,853,587 | 3,778,506 |
| 2020 | 14,562,093 | 10,852,349 | 3,709,744 | 6,750,245 | -7,811,848 | 7,440,108 | -371,740 | 123,630,057 | 1,382,170 | 1,525,873 | 121,152 | 264,855 | 2,284,052 | 614,937 | 8,891,055 | 5,091,914 | 3,799,141 |
| 2021 | 15,170,067 | 11,285,756 | 3,884,311 | 6,952,752 | -8,217,315 | 7,417,803 | -799,511 | 122,830,545 | 1,458,189 | 1,571,649 | 137,043 | 250,503 | 2,534,555 | 633,385 | 9,157,786 | 5,342,500 | 3,815,286 |
| 2022 | 13,447,790 | 11,716,921 | 1,730,869 | 7,161,335 | -6,286,455 | 7,369,833 | 1,083,378 | 123,913,923 | 1,538,389 | 1,618,798 | 152,073 | 232,482 | 2,767,037 | 652,387 | 9,432,520 | 3,269,258 | 6,163,262 |
| 2023 | 12,144,480 | 12,144,480 | 0 | 7,376,175 | -4,768,305 | 7,434,835 | 2,666,530 | 126,580,453 | 1,623,001 | 1,667,362 | 166,022 | 210,384 | 2,977,421 | 671,958 | 9,715,496 | 1,623,001 | 8,092,495 |
| 2024 | 12,566,954 | 12,566,954 | 0 | 7,597,460 | -4,969,494 | 7,594,827 | 2,625,333 | 129,205,786 | 1,712,266 | 1,717,383 | 178,645 | 183,763 | 3,161,184 | 692,117 | 10,006,961 | 1,712,266 | 8,294,695 |
| 2025 | 12,982,741 | 12,982,741 | 0 | 7,825,384 | -5,157,357 | 7,752,347 | 2,594,990 | 131,800,777 | 1,806,441 | 1,768,905 | 189,671 | 152,135 | 3,313,319 | 712,880 | 10,307,169 | 1,806,441 | 8,500,729 |
| 2026 | 13,390,105 | 13,390,105 | 0 | 8,060,146 | -5,329,960 | 7,908,047 | 2,578,087 | 134,378,864 | 1,905,795 | 1,821,972 | 198,799 | 114,976 | 3,428,295 | 734,267 | 10,616,384 | 1,905,795 | 8,710,590 |
| 2027 | 13,787,175 | 13,787,175 | 0 | 8,301,950 | -5,485,225 | 8,062,732 | 2,577,507 | 136,956,371 | 2,010,614 | 1,876,631 | 205,698 | 71,715 | 3,500,010 | 756,295 | 10,934,876 | 2,010,614 | 8,924,262 |
| 2028 | 14,171,927 | 14,171,927 | 0 | 8,551,008 | -5,620,918 | 8,217,382 | 2,596,464 | 139,552,835 | 2,121,197 | 1,932,930 | 210,001 | 21,733 | 3,521,744 | 778,984 | 11,262,922 | 2,121,197 | 9,141,725 |
| 2029 | 14,542,184 | 14,542,184 | 0 | 8,807,539 | -5,734,645 | 8,373,170 | 2,638,525 | 142,191,359 | 2,237,863 | 1,990,918 | 211,305 | -35,641 | 3,486,103 | 802,353 | 11,600,810 | 2,237,863 | 9,362,947 |
| 2030 | 14,895,601 | 13,543,565 | 1,352,036 | 9,071,765 | -5,823,836 | 8,531,482 | 2,707,645 | 144,899,005 | 2,222,066 | 2,050,645 | 209,166 | 37,745 | 3,523,848 | 826,424 | 11,948,834 | 2,222,066 | 9,726,768 |
| 2031 | 15,229,657 | 0 | 15,229,657 | 9,343,918 | -5,885,739 | 8,693,940 | 2,808,201 | 147,707,206 | 2,197,763 | 2,112,165 | 211,431 | 125,833 | 3,649,681 | 851,217 | 12,307,299 | 2,197,763 | 10,109,537 |
| 2032 | 15,541,643 | 0 | 15,541,643 | 9,624,235 | -5,917,408 | 8,862,432 | 2,945,025 | 150,652,231 | 2,164,064 | 2,175,530 | 218,981 | 230,447 | 3,880,129 | 876,753 | 12,676,518 | 2,164,064 | 10,512,455 |
| 2033 | 15,828,653 | 0 | 15,828,653 | 9,912,962 | -5,915,691 | 9,039,134 | 3,123,443 | 153,775,674 | 2,120,009 | 2,240,796 | 232,808 | 353,594 | 4,233,723 | 903,056 | 13,056,814 | 2,120,009 | 10,936,804 |
| 2034 | 16,087,572 | 0 | 16,087,572 | 8,921,666 | -7,165,905 | 9,226,540 | 2,060,635 | 155,836,309 | 2,064,563 | 2,016,716 | 254,023 | 206,176 | 4,439,899 | 930,147 | 11,868,530 | 2,064,563 | 9,803,967 |
| 2035 | 16,315,060 | 0 | 16,315,060 | 7,930,370 | -8,384,690 | 9,350,179 | 965,488 | 156,801,797 | 1,996,604 | 1,792,637 | 266,394 | 62,426 | 4,502,325 | 958,052 | 10,681,058 | 1,996,604 | 8,684,454 |
| 2036 | 16,507,545 | 0 | 16,507,545 | 6,939,074 | -9,568,472 | 9,408,108 | -160,364 | 156,641,433 | 1,914,925 | 1,568,557 | 270,140 | -76,229 | 4,426,096 | 986,793 | 9,494,424 | 1,914,925 | 7,579,499 |
| 2037 | 16,661,206 | 0 | 16,661,206 | 5,947,777 | -10,713,428 | 9,398,486 | -1,314,942 | 155,326,491 | 1,818,221 | 1,344,477 | 265,566 | -208,178 | 4,217,918 | 1,016,397 | 8,308,652 | 1,818,221 | 6,490,430 |
| 2038 | 16,771,958 | 0 | 16,771,958 | 4,956,481 | -11,815,476 | 9,319,589 | -2,495,887 | 152,830,604 | 1,705,088 | 1,120,398 | 253,075 | -331,615 | 3,886,303 | 1,046,889 | 7,123,768 | 1,705,088 | 5,418,680 |
| 2039 | 16,835,438 | 0 | 16,835,438 | 3,965,185 | -12,870,253 | 9,169,836 | -3,700,416 | 149,130,187 | 1,574,009 | 896,318 | 233,178 | -444,513 | 3,441,791 | 1,078,296 | 5,939,799 | 1,574,009 | 4,365,790 |
| 2040 | 16,846,990 | 0 | 16,846,990 | 2,973,889 | -13,873,101 | 8,947,811 | -4,925,290 | 144,204,897 | 1,423,354 | 672,239 | 206,507 | -544,608 | 2,897,183 | 1,110,645 | 4,756,772 | 1,423,354 | 3,333,418 |
| 2041 | 16,801,648 | 0 | 16,801,648 | 1,982,592 | -14,819,056 | 8,652,294 | -6,166,762 | 138,038,135 | 1,251,365 | 448,159 | 173,831 | -629,375 | 2,267,808 | 1,143,964 | 3,574,715 | 1,251,365 | 2,323,350 |
| 2042 | 16,694,118 | 0 | 16,694,118 | 991,296 | -15,702,822 | 8,282,288 | -7,420,533 | 130,617,602 | 1,056,152 | 224,080 | 136,068 | -696,004 | 1,571,803 | 1,178,283 | 2,393,659 | 1,056,152 | 1,337,506 |
| 2043 | 16,126,518 | 0 | 16,126,518 | 0 | -16,126,518 | 7,837,056 | -8,289,462 | 122,328,140 | 835,681 | 0 | 94,308 | -741,372 | 830,431 | 1,213,631 | 1,213,631 | 835,681 | 377,951 |
| 2044 | 15,539,846 | 0 | 15,539,846 | | -15,539,846 | 7,339,688 | -8,200,158 | 114,127,983 | 587,762 | | 49,826 | -537,936 | 292,495 | 1,250,040 | 1,250,040 | 587,762 | 662,278 |
| 2045 | 14,934,902 | 0 | 14,934,902 | | -14,934,902 | 6,847,679 | -8,087,223 | 106,040,759 | 310,044 | | 17,550 | -292,495 | 0 | 1,287,541 | 1,287,541 | 310,044 | 977,497 |
| 2046 | 14,312,615 | 0 | 14,312,615 | | -14,312,615 | 6,362,446 | -7,950,169 | 98,090,590 | 0 | | 0 | 0 | 0 | 1,326,168 | 1,326,168 | 0 | 1,326,168 |
| 2047 | 13,674,052 | 0 | 13,674,052 | | -13,674,052 | 5,885,435 | -7,788,616 | 90,301,974 | 0 | | 0 | 0 | 0 | 1,365,953 | 1,365,953 | 0 | 1,365,953 |
| 2048 | 13,020,432 | 0 | 13,020,432 | | -13,020,432 | 5,418,118 | -7,602,314 | 82,699,660 | 0 | | 0 | 0 | 0 | 1,406,931 | 1,406,931 | 0 | 1,406,931 |
| 2049 | 12,353,135 | 0 | 12,353,135 | | -12,353,135 | 4,961,980 | -7,391,155 | 75,308,505 | 0 | | 0 | 0 | 0 | 1,449,139 | 1,449,139 | 0 | 1,449,139 |
| 2050 | 11,673,713 | 0 | 11,673,713 | | -11,673,713 | 4,518,510 | -7,155,202 | 68,153,303 | 0 | | 0 | 0 | 0 | 1,492,613 | 1,492,613 | 0 | 1,492,613 |
| 2051 | 10,983,902 | 0 | 10,983,902 | | -10,983,902 | 4,089,198 | -6,894,704 | 61,258,599 | 0 | | 0 | 0 | 0 | 1,537,392 | 1,537,392 | 0 | 1,537,392 |
| 2052 | 10,285,640 | 0 | 10,285,640 | | -10,285,640 | 3,675,516 | -6,610,124 | 54,648,475 | 0 | | 0 | 0 | 0 | 1,583,513 | 1,583,513 | 0 | 1,583,513 |
| 2053 | 9,581,074 | 0 | 9,581,074 | | -9,581,074 | 3,278,908 | -6,302,165 | 48,346,310 | 0 | | 0 | 0 | 0 | 1,631,019 | 1,631,019 | 0 | 1,631,019 |
| 2054 | 8,872,578 | 0 | 8,872,578 | | -8,872,578 | 2,900,779 | -5,971,800 | 42,374,510 | 0 | | 0 | 0 | 0 | 1,679,949 | 1,679,949 | 0 | 1,679,949 |
| 2055 | 8,162,772 | 0 | 8,162,772 | | -8,162,772 | 2,542,471 | -5,620,301 | 36,754,209 | 0 | | 0 | 0 | 0 | 1,730,348 | 1,730,348 | 0 | 1,730,348 |
| 2056 | 7,454,532 | 0 | 7,454,532 | | -7,454,532 | 2,205,253 | -5,249,279 | 31,504,930 | 0 | | 0 | 0 | 0 | 1,782,258 | 1,782,258 | 0 | 1,782,258 |
| 2057 | 6,751,010 | 0 | 6,751,010 | | -6,751,010 | 1,890,296 | -4,860,714 | 26,644,215 | 0 | | 0 | 0 | 0 | 1,835,726 | 1,835,726 | 0 | 1,835,726 |
| 2058 | 6,055,656 | 0 | 6,055,656 | | -6,055,656 | 1,598,653 | -4,457,003 | 22,187,212 | 0 | | 0 | 0 | 0 | 1,890,798 | 1,890,798 | 0 | 1,890,798 |
| 2059 | 5,372,232 | 0 | 5,372,232 | | -5,372,232 | 1,331,233 | -4,040,999 | 18,146,213 | 0 | | 0 | 0 | 0 | 1,947,522 | 1,947,522 | 0 | 1,947,522 |
| 2060 | 4,704,836 | 0 | 4,704,836 | | -4,704,836 | 1,088,773 | -3,616,063 | 14,530,150 | 0 | | 0 | 0 | 0 | 2,005,948 | 2,005,948 | 0 | 2,005,948 |
| 2061 | 4,057,921 | 0 | 4,057,921 | | -4,057,921 | 871,809 | -3,186,112 | 11,344,038 | 0 | | 0 | 0 | 0 | 2,066,126 | 2,066,126 | 0 | 2,066,126 |
| 2062 | 3,436,321 | 0 | 3,436,321 | | -3,436,321 | 680,642 | -2,755,679 | 8,588,359 | 0 | | 0 | 0 | 0 | 2,128,110 | 2,128,110 | 0 | 2,128,110 |
| 2063 | 2,845,274 | 0 | 2,845,274 | | -2,845,274 | 515,302 | -2,329,972 | 6,258,387 | 0 | | 0 | 0 | 0 | 2,191,953 | 2,191,953 | 0 | 2,191,953 |
| 2064 | 2,290,445 | 0 | 2,290,445 | | -2,290,445 | 375,503 | -1,914,942 | 4,343,445 | 0 | | 0 | 0 | 0 | 2,257,712 | 2,257,712 | 0 | 2,257,712 |
| 2065 | 1,777,958 | 0 | 1,777,958 | | -1,777,958 | 260,607 | -1,517,352 | 2,826,094 | 0 | | 0 | 0 | 0 | 2,325,443 | 2,325,443 | 0 | 2,325,443 |
| 2066 | 1,314,419 | 0 | 1,314,419 | | -1,314,419 | 169,566 | -1,144,854 | 1,681,240 | 0 | | 0 | 0 | 0 | 2,395,206 | 2,395,206 | 0 | 2,395,206 |
| 2067 | 906,949 | 0 | 906,949 | | -906,949 | 100,874 | -806,075 | 875,165 | 0 | | 0 | 0 | 0 | 2,467,062 | 2,467,062 | 0 | 2,467,062 |
| 2068 | 563,215 | 0 | 563,215 | | -563,215 | 52,510 | -510,706 | 364,460 | 0 | | 0 | 0 | 0 | 2,541,074 | 2,541,074 | 0 | 2,541,074 |
| 2069 | 291,464 | 0 | 291,464 | | -291,464 | 21,868 | -269,596 | 94,863 | 0 | | 0 | 0 | 0 | 2,617,307 | 2,617,307 | 0 | 2,617,307 |
| 2070 | 100,555 | 0 | 100,555 | | -100,555 | 5,692 | -94,863 | 0 | 0 | | 0 | 0 | 0 | 2,695,826 | 2,695,826 | 0 | 2,695,826 |

| | | | |
|---|---|---|---|
| Total Liabilities | 5,485,600,415 | | |
| Projected Earnings | 5,230,664 | 50,892,421 | -45,661,758 |
| Unfunded Liabilities | 5,480,369,751 | | |

Table VI-4c

# Funding Needed to Pay off MOFD Employee Benefit Liabilities

(assuming 6% asset earning rate / adjusted to reflect 2011 pension plan results)

| | (A) Currently Vested Pension Liabilities (Pension + Bond) | (B) Pension Liabilities Currently Payable from Asset Pool | (C) Currently Unfunded Pension Liabilities (A) - (B) | (D) Required Funding Increasing at 3.0% | (E) Net Payments To / (From) Asset Pool (D) - (A) | (F) interest 6.00% | (G) Principal (E) + (F) | (H) Asset Balance | (I) Currently Unfunded OPEB Liabilities | (J) Required Funding Increasing at 3.0% | (K) interest 6.00% | (L) Principal (j) + (K) - (I) | (M) Asset Balance | (N) Pre-Fund OPEB 3.5% | (O) Required Funding for Pension and OPEB (D)+(J)+(N) | (P) Existing Funding OPEB plus Pension Bond Plus CCCERA Underfunded Charge | (Q) Additional Funding In Excess of Projections (O)-(P) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 655,182,178 | 197,026,073 | 458,156,105 | 218,542,608 | -436,639,571 | 324,439,571 | -112,200,000 | | 50,892,421 | 45,661,758 | 5,230,664 | 0 | | | | | |
| 2011 | | | | | | | | 112,200,000 | | | | | | | | | |
| 2012 | 10,009,214 | 7,489,613 | 2,519,601 | 2,519,601 | -7,489,613 | 6,732,000 | -757,613 | 111,442,387 | | | | | 0 | | | | |
| 2013 | 10,557,179 | 7,906,784 | 2,650,395 | 5,869,555 | -4,687,624 | 6,686,543 | 1,998,919 | 113,441,306 | 950,154 | 1,240,674 | 0 | 290,520 | 290,520 | 500,000 | 7,610,229 | 4,218,336 | 3,391,892 |
| 2014 | 11,110,238 | 8,329,228 | 2,781,010 | 6,045,641 | -5,064,596 | 6,806,478 | 1,741,882 | 115,183,188 | 1,002,413 | 1,277,894 | 17,431 | 292,913 | 583,433 | 517,500 | 7,841,036 | 4,931,210 | 2,909,826 |
| 2015 | 11,677,209 | 8,756,285 | 2,920,924 | 6,227,010 | -5,450,198 | 6,910,991 | 1,460,793 | 116,643,981 | 1,057,546 | 1,316,231 | 35,006 | 293,692 | 877,124 | 535,613 | 8,078,854 | 5,656,257 | 2,422,598 |
| 2016 | 12,256,320 | 9,187,227 | 3,069,093 | 6,413,821 | -5,842,499 | 6,998,639 | 1,156,140 | 117,800,121 | 1,115,711 | 1,355,718 | 52,627 | 292,635 | 1,169,760 | 554,359 | 8,323,898 | 6,392,591 | 1,931,307 |
| 2017 | 12,840,722 | 9,621,249 | 3,219,473 | 6,606,235 | -6,234,487 | 7,068,007 | 833,520 | 118,633,641 | 1,177,075 | 1,396,390 | 70,186 | 289,501 | 1,459,260 | 573,762 | 8,576,387 | 7,134,335 | 1,442,052 |
| 2018 | 13,433,748 | 10,057,467 | 3,376,281 | 6,804,422 | -6,629,326 | 7,118,018 | 488,693 | 119,122,334 | 1,241,814 | 1,438,281 | 87,556 | 284,023 | 1,743,284 | 593,843 | 8,836,547 | 7,885,882 | 950,665 |
| 2019 | 14,038,383 | 10,494,910 | 3,543,473 | 7,008,555 | -7,029,828 | 7,147,340 | 117,512 | 119,239,846 | 1,310,114 | 1,481,430 | 104,597 | 275,913 | 2,019,197 | 614,628 | 9,104,613 | 8,121,374 | 983,239 |
| 2020 | 14,642,259 | 10,932,515 | 3,709,744 | 7,218,812 | -7,423,448 | 7,154,391 | -269,057 | 118,970,790 | 1,382,170 | 1,525,873 | 121,152 | 264,855 | 2,284,052 | 636,140 | 9,380,824 | 8,359,701 | 1,021,123 |
| 2021 | 15,253,436 | 11,369,125 | 3,884,311 | 7,435,376 | -7,818,059 | 7,138,247 | -679,812 | 118,290,978 | 1,458,189 | 1,571,649 | 137,043 | 250,503 | 2,534,555 | 658,405 | 9,665,430 | 8,610,287 | 1,055,143 |
| 2022 | 13,534,343 | 11,803,474 | 1,730,869 | 7,658,437 | -5,875,906 | 7,097,459 | 1,221,553 | 119,512,530 | 1,538,389 | 1,618,798 | 152,073 | 232,482 | 2,767,037 | 681,449 | 9,958,685 | 6,537,045 | 3,421,639 |
| 2023 | 12,234,192 | 12,234,192 | 0 | 7,888,191 | -4,346,001 | 7,170,752 | 2,824,751 | 122,337,281 | 1,623,001 | 1,667,362 | 166,022 | 210,384 | 2,977,421 | 705,299 | 10,260,852 | 4,890,788 | 5,370,064 |
| 2024 | 12,659,787 | 12,659,787 | 0 | 8,124,836 | -4,534,951 | 7,340,237 | 2,805,286 | 125,142,567 | 1,712,266 | 1,717,383 | 178,645 | 183,763 | 3,161,184 | 729,985 | 10,572,204 | 4,980,053 | 5,592,151 |
| 2025 | 13,078,645 | 13,078,645 | 0 | 8,368,581 | -4,710,063 | 7,508,554 | 2,798,491 | 127,941,058 | 1,806,441 | 1,768,905 | 189,671 | 152,135 | 3,313,319 | 755,534 | 10,893,020 | 5,074,228 | 5,818,793 |
| 2026 | 13,489,019 | 13,489,019 | 0 | 8,619,639 | -4,869,380 | 7,676,463 | 2,807,084 | 130,748,141 | 1,905,795 | 1,821,972 | 198,799 | 114,976 | 3,428,295 | 781,978 | 11,223,589 | 5,173,582 | 6,050,007 |
| 2027 | 13,889,021 | 13,889,021 | 0 | 8,878,228 | -5,010,793 | 7,844,888 | 2,834,096 | 133,582,237 | 2,010,614 | 1,876,631 | 205,698 | 71,715 | 3,500,010 | 809,347 | 11,564,206 | 5,278,401 | 6,285,806 |
| 2028 | 14,276,615 | 14,276,615 | 0 | 9,144,575 | -5,132,041 | 8,014,934 | 2,882,894 | 136,465,131 | 2,121,197 | 1,932,930 | 210,001 | 21,733 | 3,521,744 | 837,674 | 11,915,179 | 5,388,984 | 6,526,195 |
| 2029 | 14,649,608 | 11,450,918 | 3,198,689 | 9,418,912 | -5,230,696 | 8,187,908 | 2,957,212 | 139,422,343 | 2,237,863 | 1,990,918 | 211,305 | -35,641 | 3,486,103 | 866,993 | 12,276,823 | 5,505,650 | 6,771,173 |
| 2030 | 15,005,636 | 0 | 15,005,636 | 9,701,479 | -5,304,156 | 8,365,341 | 3,061,184 | 142,483,527 | 2,222,066 | 2,050,645 | 209,166 | 37,745 | 3,523,848 | 897,338 | 12,649,463 | 5,489,853 | 7,159,609 |
| 2031 | 15,342,159 | 0 | 15,342,159 | 9,992,524 | -5,349,635 | 8,549,012 | 3,199,376 | 145,682,904 | 2,197,763 | 2,112,165 | 211,431 | 125,833 | 3,649,681 | 928,745 | 13,033,433 | 4,847,763 | 8,185,671 |
| 2032 | 15,656,450 | 0 | 15,656,450 | 10,292,300 | -5,364,150 | 8,740,974 | 3,376,824 | 149,059,728 | 2,164,064 | 2,175,530 | 218,981 | 230,447 | 3,880,129 | 961,251 | 13,429,080 | 4,284,064 | 9,145,016 |
| 2033 | 15,945,580 | 0 | 15,945,580 | 10,601,068 | -5,344,512 | 8,943,584 | 3,599,072 | 152,658,800 | 2,120,009 | 2,240,796 | 232,808 | 353,594 | 4,233,723 | 994,894 | 13,836,759 | 3,710,009 | 10,126,749 |
| 2034 | 16,206,411 | 0 | 16,206,411 | 9,540,962 | -6,665,450 | 9,159,528 | 2,494,078 | 155,152,878 | 2,064,563 | 2,016,716 | 254,023 | 206,176 | 4,439,899 | 1,029,716 | 12,587,393 | 3,124,563 | 9,462,830 |
| 2035 | 16,435,580 | 0 | 16,435,580 | 8,480,855 | -7,954,725 | 9,309,173 | 1,354,448 | 156,507,325 | 1,996,604 | 1,792,637 | 266,394 | 62,426 | 4,502,325 | 1,065,756 | 11,339,247 | 2,526,604 | 8,812,643 |
| 2036 | 16,629,487 | 0 | 16,629,487 | 7,420,748 | -9,208,739 | 9,390,440 | 181,700 | 156,689,026 | 1,914,925 | 1,568,557 | 270,140 | -76,229 | 4,426,096 | 1,103,057 | 10,092,362 | 1,914,925 | 8,177,437 |
| 2037 | 16,784,283 | 0 | 16,784,283 | 6,360,641 | -10,423,642 | 9,401,342 | -1,022,300 | 155,666,726 | 1,818,221 | 1,344,477 | 265,566 | -208,178 | 4,217,918 | 1,141,664 | 8,846,783 | 1,818,221 | 7,028,561 |
| 2038 | 16,895,853 | 0 | 16,895,853 | 5,300,534 | -11,595,318 | 9,340,004 | -2,255,315 | 153,411,411 | 1,705,088 | 1,120,398 | 253,075 | -331,615 | 3,886,303 | 1,181,622 | 7,602,555 | 1,705,088 | 5,897,467 |
| 2039 | 16,959,802 | 0 | 16,959,802 | 4,240,427 | -12,719,374 | 9,204,685 | -3,514,690 | 149,896,721 | 1,574,009 | 896,318 | 233,178 | -444,513 | 3,441,791 | 1,222,979 | 6,359,725 | 1,574,009 | 4,785,716 |
| 2040 | 16,971,439 | 0 | 16,971,439 | 3,180,321 | -13,791,119 | 8,993,803 | -4,797,316 | 145,099,406 | 1,423,354 | 672,239 | 206,507 | -544,608 | 2,897,183 | 1,265,784 | 5,118,343 | 1,423,354 | 3,694,989 |
| 2041 | 16,925,763 | 0 | 16,925,763 | 2,120,214 | -14,805,549 | 8,705,964 | -6,099,585 | 138,999,821 | 1,251,365 | 448,159 | 173,831 | -629,375 | 2,267,808 | 1,310,086 | 3,878,459 | 1,251,365 | 2,627,093 |
| 2042 | 16,817,438 | 0 | 16,817,438 | 1,060,107 | -15,757,331 | 8,339,989 | -7,417,342 | 131,582,479 | 1,056,152 | 224,080 | 136,068 | -696,004 | 1,571,803 | 1,355,939 | 2,640,125 | 1,056,152 | 1,583,973 |
| 2043 | 16,245,645 | 0 | 16,245,645 | 0 | -16,245,645 | 7,894,949 | -8,350,696 | 123,231,783 | 835,681 | 0 | 94,308 | -741,372 | 830,431 | 1,403,397 | 1,403,397 | 835,681 | 567,716 |
| 2044 | 15,654,640 | 0 | 15,654,640 | | -15,654,640 | 7,393,907 | -8,260,733 | 114,971,050 | 587,762 | | 49,826 | -537,936 | 292,495 | 1,452,516 | 1,452,516 | 587,762 | 864,754 |
| 2045 | 15,045,227 | 0 | 15,045,227 | | -15,045,227 | 6,898,263 | -8,146,964 | 106,824,086 | 310,044 | | 17,550 | -292,495 | 0 | 1,503,354 | 1,503,354 | 310,044 | 1,193,309 |
| 2046 | 14,418,342 | 0 | 14,418,342 | | -14,418,342 | 6,409,445 | -8,008,897 | 98,815,189 | 0 | | 0 | 0 | 0 | 1,555,971 | 1,555,971 | 0 | 1,555,971 |
| 2047 | 13,775,062 | 0 | 13,775,062 | | -13,775,062 | 5,928,911 | -7,846,151 | 90,969,038 | 0 | | 0 | 0 | 0 | 1,610,430 | 1,610,430 | 0 | 1,610,430 |
| 2048 | 13,116,615 | 0 | 13,116,615 | | -13,116,615 | 5,458,142 | -7,658,472 | 83,310,566 | 0 | | 0 | 0 | 0 | 1,666,795 | 1,666,795 | 0 | 1,666,795 |
| 2049 | 12,444,388 | 0 | 12,444,388 | | -12,444,388 | 4,998,634 | -7,445,754 | 75,864,812 | 0 | | 0 | 0 | 0 | 1,725,133 | 1,725,133 | 0 | 1,725,133 |
| 2050 | 11,759,947 | 0 | 11,759,947 | | -11,759,947 | 4,551,889 | -7,208,058 | 68,656,754 | 0 | | 0 | 0 | 0 | 1,785,513 | 1,785,513 | 0 | 1,785,513 |
| 2051 | 11,065,041 | 0 | 11,065,041 | | -11,065,041 | 4,119,405 | -6,945,635 | 61,711,118 | 0 | | 0 | 0 | 0 | 1,848,006 | 1,848,006 | 0 | 1,848,006 |
| 2052 | 10,361,620 | 0 | 10,361,620 | | -10,361,620 | 3,702,667 | -6,658,953 | 55,052,165 | 0 | | 0 | 0 | 0 | 1,912,686 | 1,912,686 | 0 | 1,912,686 |
| 2053 | 9,651,849 | 0 | 9,651,849 | | -9,651,849 | 3,303,130 | -6,348,719 | 48,703,446 | 0 | | 0 | 0 | 0 | 1,979,630 | 1,979,630 | 0 | 1,979,630 |
| 2054 | 8,938,120 | 0 | 8,938,120 | | -8,938,120 | 2,922,207 | -6,015,914 | 42,687,532 | 0 | | 0 | 0 | 0 | 2,048,917 | 2,048,917 | 0 | 2,048,917 |
| 2055 | 8,223,071 | 0 | 8,223,071 | | -8,223,071 | 2,561,252 | -5,661,819 | 37,025,713 | 0 | | 0 | 0 | 0 | 2,120,629 | 2,120,629 | 0 | 2,120,629 |
| 2056 | 7,509,598 | 0 | 7,509,598 | | -7,509,598 | 2,221,543 | -5,288,056 | 31,737,658 | 0 | | 0 | 0 | 0 | 2,194,851 | 2,194,851 | 0 | 2,194,851 |
| 2057 | 6,800,880 | 0 | 6,800,880 | | -6,800,880 | 1,904,259 | -4,896,621 | 26,841,037 | 0 | | 0 | 0 | 0 | 2,271,671 | 2,271,671 | 0 | 2,271,671 |
| 2058 | 6,100,389 | 0 | 6,100,389 | | -6,100,389 | 1,610,462 | -4,489,927 | 22,351,110 | 0 | | 0 | 0 | 0 | 2,351,179 | 2,351,179 | 0 | 2,351,179 |
| 2059 | 5,411,917 | 0 | 5,411,917 | | -5,411,917 | 1,341,067 | -4,070,850 | 18,280,259 | 0 | | 0 | 0 | 0 | 2,433,471 | 2,433,471 | 0 | 2,433,471 |
| 2060 | 4,739,590 | 0 | 4,739,590 | | -4,739,590 | 1,096,816 | -3,642,775 | 14,637,485 | 0 | | 0 | 0 | 0 | 2,518,642 | 2,518,642 | 0 | 2,518,642 |
| 2061 | 4,087,897 | 0 | 4,087,897 | | -4,087,897 | 878,249 | -3,209,648 | 11,427,837 | 0 | | 0 | 0 | 0 | 2,606,794 | 2,606,794 | 0 | 2,606,794 |
| 2062 | 3,461,705 | 0 | 3,461,705 | | -3,461,705 | 685,670 | -2,776,035 | 8,651,802 | 0 | | 0 | 0 | 0 | 2,698,032 | 2,698,032 | 0 | 2,698,032 |
| 2063 | 2,866,292 | 0 | 2,866,292 | | -2,866,292 | 519,108 | -2,347,184 | 6,304,618 | 0 | | 0 | 0 | 0 | 2,792,463 | 2,792,463 | 0 | 2,792,463 |
| 2064 | 2,307,365 | 0 | 2,307,365 | | -2,307,365 | 378,277 | -1,929,088 | 4,375,530 | 0 | | 0 | 0 | 0 | 2,890,200 | 2,890,200 | 0 | 2,890,200 |
| 2065 | 1,791,092 | 0 | 1,791,092 | | -1,791,092 | 262,532 | -1,528,560 | 2,846,970 | 0 | | 0 | 0 | 0 | 2,991,357 | 2,991,357 | 0 | 2,991,357 |
| 2066 | 1,324,129 | 0 | 1,324,129 | | -1,324,129 | 170,818 | -1,153,311 | 1,693,659 | 0 | | 0 | 0 | 0 | 3,096,054 | 3,096,054 | 0 | 3,096,054 |
| 2067 | 913,649 | 0 | 913,649 | | -913,649 | 101,620 | -812,029 | 881,630 | 0 | | 0 | 0 | 0 | 3,204,416 | 3,204,416 | 0 | 3,204,416 |
| 2068 | 567,376 | 0 | 567,376 | | -567,376 | 52,898 | -514,478 | 367,152 | 0 | | 0 | 0 | 0 | 3,316,571 | 3,316,571 | 0 | 3,316,571 |
| 2069 | 293,617 | 0 | 293,617 | | -293,617 | 22,029 | -271,588 | 95,564 | 0 | | 0 | 0 | 0 | 3,432,651 | 3,432,651 | 0 | 3,432,651 |
| 2070 | 101,298 | 0 | 101,298 | | -101,298 | 5,734 | -95,564 | 0 | 0 | | 0 | 0 | 0 | 3,552,793 | 3,552,793 | 0 | 3,552,793 |
| | | | | | | | Total Liabilities | 5,407,326,177 | | | | | | | | | |
| | | | | | | | Projected Earnings | 5,230,664 | 50,892,421 | -45,661,758 | | | | | | | |
| | | | | | | | Unfunded Liabilities | 5,402,095,513 | | | | | | | | | |

The 2011 pension plan results which were recently released show that MOFD pension liabilities have increased a very small amount ($1 million when discounted at 7.75%) but their assets (market value) have decreased $5 million from $117 million to $112 million due to investment returns of less than 2% in 2011 (Table VI-2c). This has caused the unfunded liabilities to increase from $111 million to $117 million and Table VI-4c shows that this will cause the 2013 funding requirement to increase to $7.6 million.

Can these funds be made available from projected revenues without reducing emergency services to Orinda and Moraga? The Task Force believes they can. Details of the Task Force's suggested reduction in expenses so that increases in employee retirement benefit funding can be increased is presented in Table IV-4b.

To the extent all savings are not consumed by funding past unfunded employee benefits; the District has many other ways to invest its savings in making the community safer and promoting prevention as opposed to reacting to emergencies with maximum resources:

* One-person rapid response medical units in remote areas of the District (Sleepy Hollow / Sanders Ranch) to address some of the excessive response time problems.
* Subsidize the "sprinklering" of all residences to increase personal safety (of both residents and firefighters) and decrease the impact of response times when dealing with residential structure fires.
* Fuel load mitigation projects.
* Water pipe upgrades in Orinda and possibly Moraga also. Can a 3,000 gallon tank truck replace a series of 1,200 gallon per minute hydrants for fighting wild-land fires? Half of Orinda's "grossly inadequate" hydrants are in Very High Fire Hazard Severity Zones. (Exhibit III-2)

**We are not going to just "spend ourselves" out of this mess. We need to start acting smart.**