

**MOUNTAIN VIEW FIRE DEPARTMENT
FIRE AND ENVIRONMENTAL PROTECTION DIVISION**

**ORGANIZATIONAL ANALYSIS
FINAL REPORT TO FIRE CHIEF JUAN DIAZ**

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Weisgerber Consulting 
Public Safety Management Services

Table of Contents

Introduction.....	3
Re-organization and Strategic Planning.....	4
Succession Planning.....	4
Workload Analysis.....	6
Suppression Company Inspection Program.....	8
Fire Department Fee Schedule (Cost Recovery Capacity).....	9
Database Replacement.....	11
5-year Technology Capital Outlay Program.....	14
Summary.....	14
Attachment 1–Summary: Workload Analysis.....	17
Attachment 2–Summary: Cost Recovery Calculations.....	18
Attachment 3–Third-party ITM Certification Tracking.....	19
Attachment 4–Comprehensive Database Replacement.....	21

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DATE: December 1, 2020

FROM: William Weisgerber, Fire Chief (retired)
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TO: Juan Diaz, Fire Chief
Mountain View Fire Department

SUBJECT: Organizational Analysis and Final Report:
Mountain View Fire Department—Fire and Environmental Protection Bureau

INTRODUCTION:

This report is prepared for Fire Chief Juan Diaz, following a 9-month consultation project with Fire Marshal Eric Anderson--Mountain View Fire Department (MTV) Fire and Environmental Protection Bureau (FEPD), and William Weisgerber—Weisgerber Consulting. It incorporates analyses and recommendations based on first-hand knowledge of the MTV—FEPD during the consultation period of March 9, 2020 through October 30, 2020. Also included herein, are four Attachments comprising six additional pages of Workload Analysis, Cost Recovery Calculations, Third-party Inspection, Testing, Maintenance (**ITM**) Certification Tracking, and Comprehensive Database Replacement.

This is a culmination of the FEPD *Reorganizational and Strategic Plan* completed in October 2020, and two progress reports submitted at 90-day and 180-day milestones of the consultation. The report covers seven primary areas of review, with recommendations for each area and its subcomponents—to assist in developing, building, and implementing strategies for the FEPD, now, and into the future. The primary areas of focus and their interrelated discussion have shaped the analysis of the FEPD in the following sections, as follows:

1. Re-organization and strategic planning
2. Succession planning
3. Workload analysis
 - a. Inspection, plan review totals
 - b. Third-party **ITM** Certification tracking
4. Suppression company inspection program
5. Fire Department Fee Schedule (cost recovery capacity)
 - a. Inspection Billing Collection (billing challenges)
6. Database replacement
 - a. FEPD, Building, Planning, Finance, IT Collaboration
7. 5-year Technology Capital Outlay Program

1. RE-ORGANIZATION AND STRATEGIC PLANNING:

ANALYSIS:

With the FEPD organized into three sections (Fire/Building Safety, Environmental Safety Protection, and Hazardous Materials), the division had a recognizable imbalance in span of control, with seven direct reports to the Fire Marshal, and administrative support staff not aligned for optimal efficiency. Additionally, only two of the three sections (Fire/Building Safety and Environmental Safety Protection) had a direct supervisor for the inspectors. Under this organizational structure (inherited by the current Fire Marshal) a significant amount of direct supervision fell upon the Division Head—impacting the time available to properly plan, organize, and manage the division as a whole.

At the outset of this consultation project, significant groundwork had been laid by the current Fire Marshal for a reorganizational plan to create the efficiencies of optimal span of control for management and supervision of the FEPD.

RECOMMENDATION:

The aforementioned groundwork prepared by the Fire Marshal during the initial months in his position, is the basis for the 40-page *FEPD Reorganization and Strategic Plan (Plan)*, completed in October—as part and parcel of this consultation project. This resulting fully developed *Plan* incorporates essential elements of improved organizational span of control, optimal manager/supervisor-to-subordinate ratios (freeing the Fire Marshal to perform higher level management tasks commensurate with the responsibilities of his position), and a funding strategy that is a net zero proposition, budget-wise. For details of the reorganizational structure, please refer to pages 1-10 of the *Plan*. Details of the funding strategy for reorganization can be found on page 11, of the *Plan*.

The principle of dynamically deployable resources is discussed as a recommendation, on page 5 of the *Plan*. The purpose being to ultimately cross-train inspectors in all three sections to synthesize the disciplines into a highly functional team, with a focused set of supervising coordinators, that can be readily deployable to any area(s) of greatest resource need. Ultimately, the objective being to have a single inspector classification, rotated across all three FEPD sections, yet highly functional in any deployed situation. This strategy will also cultivate a stronger internal candidate pool for succession.

One caveat to the overall net zero financial aspect of the *Plan* is the potential for salary compaction in the Hazardous Materials Section. This should be given further consideration in future budget cycles. However, there will be significant potential for funding relief from this impact in the subsequent discussions of this report on fee schedules, and potential for increased revenue.

2. SUCCESSION PLANNING:

ANALYSIS:

The desire for a bona fide succession plan within the FEPD, and an attendant formalized professional development matrix in support of the succession plan, was identified in the incipient stages of the strategic portion of the *Plan*. The design of a clear career path, and the requisite

steps necessary to prepare for the next position in the organization, needed to be charted in measurable, achievable increments.

There is an additional complication in the succession planning offering, and that is for the attrition replacement of the fire investigation duties, which will be realized upon the ultimate service retirement of the Deputy Fire Marshal. Currently a sworn position, Deputy Fire Marshal is being considered for a non-sworn position upon attrition of the incumbent—raising myriad issues for filling the role of fire investigation duties.

RECOMMENDATION:

Succession planning for the FEPD is addressed on page 12 of the *Plan* and is articulated in the form of an “Acting” program with minimum qualifications (MQs) recommended for each step in the career track. The recommended MQs are scheduled for an incrementally increased implementation, phased-in over a five-year period. This will allow time for candidates to gain the necessary experience and education without hampering their ability to participate in the “Acting” program during the initial phases of implementation.

It is further recommended that all inspection staff should be afforded department-sponsored training opportunities relative to the aforementioned MQs as a foundation, across-the-board, for a pool of succession candidates within the FEPD regulatory compliance space.

The elements for the “Acting” program are discussed on page 12 of the *Plan*, and the MQs are found in Appendix A, beginning on page 13, of the *Plan*. In addition, the FEPD should develop an entry-level curriculum of basic foundational training for new inspector staff, to support and assist them with on-boarding to their new responsibilities.

As there is currently no formalized training program or matrix for on-boarding new inspection staff in the three section disciplines; it is recommended that the development of such an on-boarding training program for new inspectors should be incorporated into the FEPD succession planning over the course of the next 1-3 years, to be established in advance of staff turnover, through attrition.

There are four identified alternatives to address the ultimate succession of the Deputy Fire Marshal position and particularly the fire investigation duties. Of these two components, the investigation duties present the most challenging to the analysis (requisite training and certification, risk management, value-added utility). Contained in Appendix C of the *Plan*—beginning on page 24—there is a detailed analysis of fire investigation duty succession alternatives, along with state and federal training certification requirements, risk management analysis, and a recommendation for implementation. Fortunately, the timeline for this attrition/transition is approximately 3-years. However, the fire department should take full advantage of this time window, as a delay in decision-making and implementation of this transition will significantly impede a successful and timely outcome—regardless of the chosen alternative.

3. WORKLOAD ANALYSIS:

ANALYSIS:

One of the biggest challenges in the regulatory compliance space is an accurate inventory of inspections; and the ratio of resources (inputs) to completed inspections (outcomes). Moreover, when the building occupancy turnover rate is high, whether through new construction or repurposed tenant improvements, the database accuracy can be slow to react—necessitating constant vigilance in the routine inspection cycle.

Code Inspection Staffing Metrics: In a 2,080-hour work year, there is an MTV FEPD metric of 1,222.8 available hours of actual inspection time for each FTE inspector—subtracting hours for: holidays, annual or sick leave, training, meetings, travel time, code/occupancy file research, and data entry. Therefore, it becomes not a matter of how many inspections were completed, but rather how many *can* be completed with the resources available for inspection. Not all inspections are created equal., however, the average MTV FEPD inspection time has been approximately 2 hours.

In 2020, the FEPD completed 3,229 inspections-to-date with 7 inspection staff (some staffing variance occurred between retirement and backfill promotion of staff).

Total Inspection Inventory	Re-Inspections	Total Inspection Visits	Total Inspection Hrs.
3229	1615	4843	5,559

The inspection inventory for 2020, above does not reflect an additional 2,241 billable hours for roundtrip travel time, pre-inspection file review and post inspection data entry, nor 580 hours of plan reviews. **Attachment 1** to this report is a summary of the workload analysis, broken out by sections, tasks, and expressed in billable/non-billable hours. The last three calendar years of inspection totals are shown in the table below:

2018	2,812 inspections completed	7 Inspector staff
2019	3,613 inspections completed	7 Inspector staff
2020	3,229 ¹ inspections completed	7 Inspector staff (and 3 vacancies)

In 2021, when backfill hiring is completed, there will be 10 available inspection staff (Inspectors & Coordinators)—however, the newest 3 Inspectors may not be fully-functional through several months of orientation and training.

With the ancillary workload of new construction inspections, complaints (internal/eternal), hazard abatement, engine company referrals, and special events, a straight-line extrapolation of inspection history tells us that **a complement of 7 FEPD Inspectors and 3 Coordinators, for a full year, would likely be able to complete in excess of 4,500-5,000 inspections annually.** This figure is noteworthy in that occupancies that have been relegated to tri-annual inspection cycles or greater (due to staffing limitations), can now be brought back to more closely model the best practices of annual and bi-annual frequency—thus creating an improved safety

¹ Initial COVID isolation-lockdown protocols impacted 2-months of 2020 inspection time, resulting in approximately 300-400 inspection opportunities lost.

environment for first responders and the community. To complete more annual inspections requires more available inspection hours (staff)—as well as the supervisory and administrative staff to support the efforts of all FEPD Inspectors (Fire/Building Safety, Environmental Safety, Hazardous Materials).

What is not reflected in the statistics are the Environmental Safety inspection hours that are currently attempting to be performed by only two ESP inspection staff, and at that staffing level they are falling increasingly behind schedule for annual completion. Fully staffed with three ESP inspection staff, this would reflect 762 hours/ea. There are approximately 210 Stormwater Permit inspections that are not being completed in a timely manner (e.g., 90 B Occupancy restaurants, 120 commercial or industrial facilities). Moreover, with the current two ESP inspector staff, these Stormwater inspections are only being completed approximately every 3 years. With a fully staffed compliment of three ESP inspector staff these Stormwater Permits would fall back on track for a requisite two-year cycle.

RECOMMENDATION:

This snapshot analysis demonstrates the capacity of FEPD staffing and verifies the number of positions allocated in the FEPD reorganization for inspection, supervision, and administrative support. The baseline analysis, combined with a contemporary, robust replacement database system will serve as integral planning tools to strengthen FEPD productivity and the budget prognostication capability of the Fire Marshal for years to come. This is a dynamic situation, and the strategic plan is a living document to be reviewed and adjusted at regular intervals.

Two additional components are recommended for consideration, to serve as enhancements to the efficacy of the MTV FEPD.

- The first component relates to the inordinate amount of time inspectors spend tracking down certifications (from contract vendors and/or building owners) of mandated ITM for permitted fire protection systems. This is estimated to account for approximately 3.87% of the time, or an average of 79 hours per inspector, per year. **That is time that could be spent performing actual regulatory compliance inspections, and at the minimum average rate of \$195/hour in the fee schedule, that translates to \$107,835 in lost revenue.** The recommendation is for strong consideration to be given to engaging a third-party service to track compliance of permitted fire protection system ITM certifications. This is a highly effective, no-cost to MTV solution, discussed in detail immediately below.
- The second component would be a suppression company inspection program (discussed in detail in section 4., beginning on page 12 of this report).

THIRD-PARTY ITM COMPLIANCE SERVICE: During the course of this consultation project a demonstration was facilitated for the Fire Marshal with representatives of Brycer, LLC², a unique corporation providing a cloud-based, third party service to track permitted fire protection

² Weisgerber Consulting is an independent sole-proprietor company and receives no compensation for recommending "name" products for consideration by clients. All opinions and recommendations are unbiased. Products mentioned by example have proven to perform extremely well in the suggested space.

systems Inspection, Testing, and Maintenance (ITM). This service product is known as The Compliance Engine (TCE), which provides uniform reports (sorted as compliant or deficient) and **are a proven effective instrument in saving fire inspection time and money**. The presentations by Brycer, on TCE, and was demonstrative of the benefits to the building industry, the community, and the MTV FEPPD—in terms of time and costs saved—**by reducing the innumerable hours spent on multiple return visits by inspectors, to gain compliance on just this single aspect of ITM compliance for permitted facility systems**.

This no-cost service is truly a game-changer in terms of streamlining the inspection and tracking process for fire and life safety systems (e.g., sprinkler systems, fire alarm systems, gas distribution systems) within complex building scenarios (high-rise, mid-rise, hospitals, manufacturing, hazardous materials storage and handling). **It can save untold follow-up hours that can be better spent completing actual building and/or occupancy inspection. It is highly recommended to pursue procurement of this type service.** An amplified description of this third-party industry leader is in Attachment 3, on page 20, of this report.

4. SUPPRESSION COMPANY INSPECTION PROGRAM:

ANALYSIS:

While the FEPPD plan review and inspection system reflects the potential for an increasingly successful enterprise capable of significantly increasing cost-recovery and sustainability, there are additional enhancements that can be addressed with a bona fide suppression company inspection program.

The suppression companies can be an under-utilized resource in the inspection space and their absence from the prevention program represents a valuable “lost opportunity,” for also pre-planning buildings and occupancies—along with cultivating district and community familiarization and the potential for further fostering a reservoir of community goodwill.

Absence of suppression company inspection programs could be attributed to a combination of factors ranging from apperceptive base knowledge and corporate culture, to training issues leading to a misunderstanding of the suppression company role in fire inspections. It is essential that the **suppression companies do have a role in the systemic inspection program and realize the importance of their engagement** in creating a safe living and working environment for first-responders, residents, visitors, and the public in the City of Mountain View; and to embrace the concept of an associated building/district pre-planning and familiarization, as a mission critical component of the emergency response system.

RECOMMENDATION:

There are approximately 2,000 B occupancy inspections in the database inventory that are in the capacity of suppression company capability to perform annually. There are seven available suppression companies per shift (5-engines, 1-Truck, 1-Rescue) serving on three shifts, that comprise a total of 21 available companies—each working 120 shifts per year.

With each company dedicating no more than two hours per shift, over only 33% of their annually scheduled shifts (approximately 40 shifts, or four months in the aggregate), they would only need to perform 2.38 inspections per shift for those 40 shifts. Spread out over 50 shifts, they would

only need to perform 1.9 inspections per shift, each. Over 60 shifts (only 50% of the work year) it calculates to 1.58 inspections per shift—and so on.

This is not an insurmountable task and should leave adequate time in the workday for 2-hours training, station and apparatus maintenance, wellness/fitness training, meals, and responding to alarms—allotting 60, 70, or 80 shifts (less weekends and holidays) to pick up the slack, for any combination of inspections missed due to alarm activity or other priority assignments.

This programmatic situation can be addressed through a realistic, on-going, verifiable suppression company inspection training program—reinforced by the Fire Chief, through the Deputy Chief, and Fire Marshal—speaking with a single voice.

5. FIRE DEPARTMENT FEE SCHEDULE (Cost-recovery Capacity):

ANALYSIS:

The duties of the FEPD are both dynamic and static in nature—in that the construction and business industries fluctuate with the economy; yet the buildings themselves remain a constant commodity once completed—whether occupied or vacant. Moreover, vacant buildings are being re-purposed with more regularity and volume than ever before. Resultantly, the legacy inspection inventory remains ever-constant, while the flow of new construction augments the existing building stock in times of economic expansion. Regardless, the FEPD is responsible for the regulatory compliance inspections for the entire life of all buildings.

The FEPD was approved for revisions to existing fees as part of the FY 2020-21 Fire Department Fee Schedule (FEE SCHEDULE). This aligns with Proposition 26 “cost recovery only” guidelines for services provided by public entities. In comportment with the 2016 CA Fire Code, the Authority Having Jurisdiction (AHJ), the City of Mountain View, is authorized to implement a fee schedule associated with the AHJ’s applicable governing authority, to charge for services provided.

The FEE SCHEDULE adopted in 2020 incorporated a fully burdened rate for cost recovery services of Plan Review, Construction Permits, Operating Permits and annual regulatory compliance inspections. These on-going and annual services include the performing of tasks associated with plan review; research of, and compliance with the CA Fire Code; previous compliance records; current ownership; and the actual approval & generation of permits. Cost recovery charges in compliance with Proposition 26, include: baseline salary increases, fringe benefits, operations, maintenance, central service overhead, and other post-employment benefits.

The personnel costs covered by the fully burdened rate are for time spent performing tasks associated with services being conducted and issuance of approvals, permits and fire code clearances.

Three Fire Protection Engineers (FPEs) are budgeted in the FEPD budget but are assigned to work in co-location with the Plan Check Engineers in the Building Department. As a result, the FPE plan review production is not tracked in the FEPD statistics, is not readily available for review by the Fire Marshal, and the offsetting credit for plan review fee revenue is not apparent in the FEPD budget.

The FY2020-21 revised FEE SCHEDULE—going forward—does not include any fees associated with program functional impacts: Technology Enhancement Fees to support ongoing software/hardware updates, maintenance, and replacement costs; nor, Records Management Fees to support on-going electronic and hard-copy record management systems and storage fees.

INSPECTION BILLING COLLECTION AND CHALLENGES: There is currently a serious gap in City processes between inspections being conducted and processed for invoicing, and the issuing of invoices and collecting fees owed by property owners.

The FEPD Plan Review and Inspection Programs (Fire/Building Safety, Environmental Safety Protection, Hazardous Materials Safety) are perfectly capable of significant, on-going cost recovery efforts through the FEE SCHEDULE. However, this is only possible if the process can efficiently issue (and collect) the invoices for inspection work being performed.

Special event inspections are typically performed after hours, and inspectors are paid a minimum of 2 hours of overtime (at time-and-one-half) for after hours and weekends. Without payment receipt for permit inspections, the FEPD would be subsidizing events without compensation.

Other obstacles to timely collections are discussed in subsequent sections (Database Development—Finance interface). However, many uncollected fees appear to be a systemic inefficiency in executing a billing process.

This situation should be part and parcel of an on-going focus by the Fire Marshal, as a mission critical element, fundamental to the “cause and effect” of sustainability in the MTV FEPD. A cursory review of **2020 FEPD billable hours** (in comparison to budget estimates of revenue) have shown that capturing the **entire number of 8,560 billable hours-to-date (at \$195/hr.) would net \$1,669,200—which is double the budget revenue estimate of \$801,000.**

The same principles hold true for the **revenue potential in enforcing a bona fide “fine and penalty”** schedule for repeat violations and delinquent or non-payment of fees. However, the **absence of a current bona fide enforcement program renders a calculation for revenue potential unattainable at this time.**

RECOMMENDATION:

The fees included in the FEE SCHEDULE are sufficient to cover inspection preparation and travel time, on-site compliance inspection, and associated data entry.

However, it is recommended for further review to **include program functional impacts** (Technology Enhancement and Records Management Fees) to support ongoing software/hardware updates, maintenance, and replacement costs; and support of on-going electronic and hard-copy record management systems and storage fees. **These should be considered for either calculation on a pro rata basis into the fully burdened hourly rate or added as a flat rate surcharge³ to every permit issued**, in sustaining the FEPD regulatory compliance role in the safety of the community.

³ Contemporary fee schedules would place these surcharge rates at 3-4%, for each component, per permit.

Further recommendations are to **address the paradox of the FPEs being budgeted in the FEPD, yet are assigned to the Building Department**, without apparent accounting for the fees generated by their plan review work, or any offsetting cost recovery aspect to the FEPD budget. This should be studied for accuracy and reconciled so that FEPD staff-generated revenue is properly credited to the FEDP cost recovery budget efforts.

Special Events Inspection Rates—(*Reduced rates for Food Trucks, NPOs, CBOs*): In development of revisions to the FEE SCHEDULE, it should be noted that “*one size doesn’t fit all*” in the application of a fully burdened rate per inspection hour. The typical Food Truck, Non-Profit Organization, or Community-Based Organization does not necessarily have the capital resources nor the revenue stream-per-event, to pay for a fully burdened rate inspection—particularly a fund-raiser or private event that involves an after-hours/weekend open-flame permit and/or assembly permit that requires an all-day standby at the fully burdened rate. These situations render the vendor or organization into an unsustainable deficit, or zero-sum game situation. Thus, it is recommended that new categories and formulas be developed for consideration of adoption into the FEE SCHEDULE, that address these scenarios with special event flat rates for low-profit vendors and non-profit organizations—while maintaining the fully burdened rate across the board for the other applications.

FEE AND INVOICE COLLECTION: Currently, permit fees and other invoicing is performed by the FEPD administrative staff for each billing cycle, and inspectors often take on a role of “collections” for delinquent payment of fees and fines.

Having FEPD inspectors serve as collections agent for delinquent or unpaid invoices is a serious misallocation of resources, particularly when the Finance Department Accounts Receivable is precisely positioned to perform this type of work in a timely and efficient manner. This work is repetitively unsuccessful in collection of fees and consumes valuable inspector time—in an area not of their expertise—which could have the inspector otherwise engaged in meaningful regulatory compliance activities. A solution to this efficacy dilemma is discussed further in Section 6., beginning on page 11, of this report.

6. DATABASE REPLACEMENT:

ANALYSIS:

With the FEPD database residing in FileMaker Pro, this legacy system is no longer supported and the FEPD is in dire need of a dynamic, robust contemporary database replacement. Not only is the current FileMaker Pro database rapidly slipping past obsolescence, it lacks the contemporary capabilities to support coordinated efforts between regulatory divisions (FEPD, Building, Planning, Code Enforcement) and interface with Finance for real-time fee collection and processing. Currently, the Hazardous Materials Section has the best-tracked inventory of inspections and inspection history—rendered apparent during the effort to compile statistics for analysis in this report. The lack of real time data entry and coordinated inter-disciplinary access has a dramatic impact on both the time efficiencies of inspectors and timely fee collection for cost recovery.

Contemporary database systems are capable of a wide range of coordinated efforts based on address number and location for: address history, plan review, inspections, compliance, and real-time, up-to-date permit fee tracking. The ideal database procurement effort is one coordinated between the regulatory stakeholders (FEPD Building, Planning, Code Enforcement), and their supporting departments: Finance and I.T.

RECOMMENDATION:

Work has begun to seek a database replacement package for the outdated and soon-to-be unsupported FileMaker-Pro legacy system used by the FEPD. The FileMaker-Pro system lacks many of the basic contemporary features for processing, storing, and retrieving essential information relative to address and inspection history; coordinated efforts between the parallel City regulatory divisions of FEPD, Building, and Planning; and ad hoc reporting capabilities. Moreover, there is no interface with Finance with which to efficiently generate invoices, track billing and receivables, or execute fee collection for delinquent payments.

The strategy is to seek a well-developed platform that can support inspection and plan review in a seamless, coordinated fashion for FEPD, Building, and Planning, including simultaneous electronic plan review, and a financial interface for direct billing and permitting.

There are a number of robust platforms available in today's market that can fulfill these prerequisites. There are also fire department-centric database systems available, as well. Nevertheless, platforms that support the optimal collaboration between FEPD, Building, Planning, and Finance are of enormous added value to an organization—as a whole.

The simplest solution would be to procure a fire-discipline centric replacement database. However, the rare opportunity appears to be at hand, for a collaborative effort that would pay huge dividends in the long run for the entire MTV development community. It is unfortunate that not all stakeholder departments have expressed interest in such a collaboration—despite multiple overtures from the Fire Marshal. This amounts to a huge opportunity lost for the entire City.

The most desirable suite of features for such a collaborative software platform are:

- Common address/address history database for all disciplines (FEPD, Building, Planning, Code Enforcement).
- Inspection workload tracking, address, and analysis, with **ad hoc report interface capabilities**.
- **Tablet or smartphone-based field inspections**, single-point data entry (no double entry, or transcribing field notes).
- **Geo-tagged, time stamped, photo-enabled inspection files**.
- **Development project-tracking:**
 - Electronic plan submittals.
 - Simultaneous plan review, comments, and approval condition notes, by all departments.
- **Finance interface with real-time billing and e-payment capability.**

During the course of this consultation project a demonstration was facilitated for the Fire Marshal and members of the FEPD staff, for a product successfully launched by at least three

different fire prevention bureaus in the Sac-Bay Area Region (Oakland, West Sacramento, Roseville). And, while there may be other database products that check most of these boxes, the one that FEPD staff were demonstrated, did check all of the boxes. FEPD staff were able to interact with users via Zoom conference, see a demonstration of the database at various stages of implementation (ranging from pre-launch of vegetation management only, to over seven years' experience in a fully implemented system). The database system FEPD staff were demonstrated was the Accela⁴ database system. An expanded description of the Accela database platform is in Attachment 4, on page 21, of this report.

As was noted in the 180-day progress report to the Fire Chief, the Fire Marshal has proposed the concept of a collaborative coordinated database RFP to the MTV Chief Building Official (CBO) on numerous occasions. In each instance the incumbent CBO expressed no interest in a collaboration, thus no traction was gained for a coordinated approach to planning a replacement database RFP.

Moreover, it has recently been learned that **the new CBO is currently pursuing a stand-alone, independent RFP for replacement of their database.** This is a true “prime opportunity” lost.

As time rapidly becomes of the essence, **the FEPD will need to continue forward with their own project to replace the FileMaker database.** It is recommended that the replacement database be fully evaluated for potential integration with other departments (comparable to the Accela features described herein).

BUILDING & FIRE PREVENTION BUREAU COLLABORATION: As a result of the failed database collaboration opportunity, it is further recommended to establish an effort to better coordinate the efforts of the FEPD and Building bureaus in providing a consistent message on regulatory compliance. Considerable new ground can be covered and developed, in an influential manner toward synergetic progress, through weekly FEPD/Building meetings to coalesce on emerging issues relative to: Alternate Methods or Materials Requests or Hazardous Abatement and Inspections. The synergy and problem-solving rapport developed between the respective Bureau staff in these weekly sessions can be directly co-relevant to subsequent and on-going success with coordinated pre-submittal/pre-construction meetings. A change in culture can serve to open lines of communication and mutual support by and between the two regulatory Bureaus. This can translate—in most cases—to a team atmosphere approach in plan review/approvals, team inspections; inspection/abatement warrant efforts; and database collaboration.

⁴ Weisgerber Consulting is an independent sole-proprietor company and receives no compensation for recommending "name" products for consideration by clients. All opinions and recommendations are unbiased. Products mentioned by example have proven to perform extremely well in the suggested space.

7. 5-YEAR TECHNOLOGY CAPITAL OUTLAY PROGRAM:

ANALYSIS:

FEPD does not have a documented planning tool for technology capital expenditures: procurement, depreciation/amortization, and replacement. This is a very inefficient course for maintaining technological assets in top performing condition for essential everyday use and creates a reactive budgetary process for unplanned procurement.

RECOMMENDATION:

A well-developed Technology Capital Outlay program schedule can be readily achieved with the input of FEPD users and IT staff, regarding key data that includes current inventory, equipment age, established service life, IT standard specifications, and any FEPD-specific technology needs. A detailed analysis and recommendation description can be found in Appendix B—Financials, beginning on page 21 of the *Plan*.

A well-constructed 5-year Technology Capital Outlay Program will prioritize technology procurement by fiscal year (incorporating service life, and replacement amortization); smoothing the technology costs over a 5-year period; creating a manageable, predictable budgetary tool. This same technology capital outlay concept could easily be deployed fire department-wide or even city-wide.

As was also noted in the 180-day progress report to the Fire Chief, the one limitation to preparing a sample Technology Capital Outlay Plan with practical figures for both the *Plan* and this report, was **the non-responsiveness of I.T. staff to assist with data requests. This resulted in the inability to provide any costing information** (technology procurement costs, service life estimates, equipment specs and standards) **to this program development effort.**

SUMMARY: The salient points of the seven primary areas that comprise the FEPD have been outlined as succinctly as possible, herein. And there is much to be proud of in the FEPD, as it has a solid foundation and is staffed with talented personnel. The stage is set for the next phase of development for the FEPD in preparation for sustaining the regulatory compliance integrity of the community, by keeping pace with the current stock and flow of building inventory, and the on-going effort of annual maintenance for mandatory fire code and commercial inspections.

These regulatory services can recover significant costs toward paying for themselves in a well-executed model as noted in this report.

The following index summarizes 10 recommendations for the FEPD, moving forward:

1. Complete the reorganization to establish proper ratio of inspector and support staff to the inspection and plan review inventory.
2. Homogenize inspectors (Fire/Building, Environmental Safety, Hazardous Materials) into a single class, to dynamically manage resources for peak activities as deemed applicable.
3. Maintain established, proven supervision ratios, for consistent, effective accountability.
4. Establish and fund a bon fide, realistic, on-going, verifiable training program for both entry level on-boarding and in-service staff—at all levels.

5. Select, adopt and implement a succession plan to incorporate the fire investigation duties under the Deputy Fire Marshal position.
6. Pursue engagement of third-party ITM certification tracking service to streamline and economize efforts in tracking compliance in the mandatory inspection space—creating more efficient utilization of inspection staff.
7. Continue pursuit of a comprehensive replacement database, incorporating the most desirable suite of features for an interdepartmental collaborative software platform.
8. Leverage data-driven cost-recovery through fully burdened [hourly] rates in a Fire Department Fee Schedule; and a current FEPD metric of 1,222.8 available inspection hours per inspection staff.
9. Remove obstacles to accurate, efficient and timely billing for services:
 - a. Employ and activate a Finance Accounts Receivable interface with the FEPD database, for real-time billing data uploads.
 - b. This will ensure Finance can perform timely, accurate billing on a prescribed regular basis, to sustain FEPD properly staffed levels for completing all mandated code inspections, annually.
10. Develop regularly scheduled Community Development (Fire, Building, Planning) co-op meetings.

These elements—combined with a focused succession plan and associated “Acting” training program—hold the capability to sustain the FEPD at a highly functional level of maximum capacity, in a robust regulatory compliance and public fire education bureau.

IN CONCLUSION, it has been a pleasure to work with Fire Marshal Eric Anderson and the MTV FEPD staff these past nine months. The efforts of the FEPD staff are the first line of defense in the preservation of life-safety and well-being for first responders and the citizens of Mountain View. Through their diligence in the application of related codes and ordinances in the spirit and intent of the CA Fire Code—they have brought to bear their experience and knowledge to the greatest possible outcomes for the community.

The work during this consultation project has been rewarding. On behalf of the Fire Marshal, and myself, we are confident that this effort will be a valuable asset in shaping the future of the organization and the tenor of the FEPD.

ATTACHMENTS:

1. Summary: Work-load Analysis
2. Summary: Cost-Recovery Calculations
3. Third-party ITM Certification Tracking
4. Comprehensive Database Replacement

Table of Contents
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Weisgerber Consulting is an independent sole-proprietor company and receives no compensation for recommending "name" products for consideration by clients. All opinions and recommendations are unbiased. Products mentioned by example have proven to perform extremely well in the suggested space.

ATTACHMENT 1

SUMMARY: WORKLOAD ANALYSIS

BILLABLE HOURS	
<u>INSPECTIONS</u>	
FIRE/BLDG SFAETY	1940 HRS.
MFH	500 HRS. (2300 units)
ESP	1460 HRS.
H/M	1659 HRS.
<u>PLAN REVIEWS</u>	
ESP	260 HRS.
H/M	320 HRS. (160 Reviews)
<u>TRAVEL TIME/ DATA PREP & ENTRY-PER STAFF</u>	
FIRE/BLDG	727 HRS. TOTAL (242 Hrs./ea.)
MFH	75 HRS. TOTAL (75 Hrs./ea.)
ESP	730 HRS. TOTAL (365 Hrs./ea.)
H/M	889 HRS. TOTAL (449.5 Hrs./ea.)
TOTAL BILLABLE HOURS	8,560 HRS.
NON-BILLABLE HOURS	
<u>ITM CERTS AND PERMIT FEES⁵</u>	563 HRS.
<u>MFH COMPLAINT RESOLUTION</u>	200 HRS.
<u>PUB ED EVENTS</u>	224 HRS.
<u>ESP ENVIRONMENTAL OUTREACH</u>	62 HRS.
<u>MEETINGS</u>	
ESP CCORDINATOR	120 HRS.
ESPIs	72 HRS.
<u>TRAINING—PER STAFF</u>	560 HRS. TOTAL (80 Hrs./ea.)
<u>HOLIDAYS AND LEAVE—PER STAFF</u>	2366 HRS. TOTAL (338 Hrs./ea.)
<u>LUNCH & BREAKS/DAY/STAFF</u>	1526 HRS. TOTAL (1HR X 7 ⁶ staff X 218 workdays)
TOTAL NON-BILLABLE HRS	5,693 HRS.
TOTAL BILLABLE HRS	8,560 HRS.
GRAND TOTAL HRS.	14,560 HRS.

⁵ Approximately 3.87% of Inspector's time spent tracking/tracing non-compliant ITM Certificates and delinquent Permit Fees

⁶ Ibid

ATTACHMENT 2

SUMMARY: COST RECOVERY CALCULATIONS (Fully Burdened, Fee Schedule, Hourly Rate)

INSPECTIONS BY SECTION	
FIRE/BLDG	970
MFH	100 Annual Facilities (ave. 23 Units/ea.)
ESP	974
H/M	1185
TOTAL 1st INSPECTIONS	3229

BUDGET BY SECTION	
PREVENTION	\$994,188.59
ESP—STORMWATER	\$624,976.19
ESP—WASTEWATER	\$411,618.83
H/M	\$982,247.40
TOTAL	\$3,013,031.01
TOTAL ADOPTED BUDGET	\$3,830,163.00 (Includes \$817,132: 3 FPEs) ⁷

FULLY BURDENED HRLY RATE	
(Ave. minimum Fee Schedule rate):	\$195.00
TOTAL BILLABLE HOURS:	8,560
	X \$195.00

REVENUE PROJECTION **\$1,669,200**
(COST RECOVERY EQUIVALENT TO 2X CURRENT FEPD REVENUE OF \$801,000)

⁷ 3 Fire Protection Engineers assigned in Building Dept. Excludes 2 PTE FEPD Admin. Staff Funded in PD Budget

ATTACHMENT 3

THIRD-PARTY ITM CERTIFICATION TRACKING (The Compliance Engine)

As a client of The Compliance Engine, by Brycer, LLC, there is *no cost* for any aspect of using this third-party ITM certification tracking service (setup, training, ongoing service) to either MTV or the City. **Savings are gained through the utilization of this service in terms of FEPPD administrative time saved in tracking follow-up on ITMs and reductions in false alarm activity** (emergency response, report writing, compliance follow-up, and billing).

ITM contractors submitting reports through TCE pay an annual, per system, per address filing fee of \$15-\$20 (to Brycer) for TCE. There is no upfront or additional cost to ITM contractors; and **building owners are not required to have any additional inspections or maintenance that is not already required by code.**

ITM contractors receive several benefits from utilizing TCE. However, more importantly to the MTV, is using Brycer's notification feature (renewal, overdue, and deficiency), ITM contractors and the FEPPD have more reliable assurance that ITM work will be scheduled and performed consistently per the code, as TCE Coordinators make direct contact with ITM contractors on past due inspections of properties. **TCE has over 6,500 participating ITM contractors nationwide with over 13,000 AHJ users.**

The inspection report fee is charged to the ITM contractors. And ITM contractors have seen a 9:1 return on this minimal investment through increased ITM capacity and completions. AHJs are realizing a safer community due to improved ITM compliance coverage, and Brycer's education of the ITM contractor marketplace includes the net benefits of using TCE—**this educational effort assists in short-stopping the temptation of a contractor “pass through cost.”** Additionally, use of TCE will benefit MTV in **reducing false alarm activity**, and inoperable fire alarm systems—which will positively impact tenants with a safer working/living environment, and property owners on their insurance premiums. **By way of example, Los Angeles Fire Department has seen a decrease in false alarms in 84% of high-rise buildings that historically had multiple false alarms per year, prior to TCE.**

Among the myriad AHJ's utilizing TCE across the United States (including Chicago, IL and Austin, TX) the following notable west coast agencies are TCE clients:

- 1) Huntington Beach Fire Department
- 2) Long Beach Fire Department
- 3) Los Angeles Fire Department
- 4) Richmond (CA) Fire Department
- 5) San Jose Fire Department
- 6) San Mateo Consolidated
- 7) Seattle Fire Department
- 8) Sunnyvale (CA) Public Safety Department

Direct feedback on utilization of TCE has been received from the former Fire Marshals at both **San Jose (CA) Fire Department** and **Sunnyvale (CA) Public Safety Department** who have seen very positive results in ITM compliance and tracking. Moreover, statistical data from both Seattle (WA) and Los Angeles (CA) Fire Departments have shown not only proven effectiveness for existing ITM inventory, but **also identifying and incorporating a significant number of additional systems that were, heretofore, not in the database inventory.**

Brycer's TCE is **a no-cost item to MTV** and the local building industry, that can **serve to vastly improve efficiency for inspection staff utilization in the field**, and administrative data entry time in the office—while **increasing the integrity of fire and life safety systems in the building stock and the overall safety of the Mountain View community.**

ATTACHMENT 4

COMPREHENSIVE DATABASE REPLACEMENT (Accela)

At the outset of this report, it was noted that “...work has begun to seek a database replacement package for the outdated...FileMaker-Pro legacy system in use by the FEPD...”

The Accela database and associated inspection management system can transform the Inspection program to a better organized, managed, and validated system for the inspection inventory—improving with each new inspection cycle; allowing inspectors to upload address information for field reference and download the new inspection data into the database—to initiate the billing process from the field. Managers and administrative staff will be able to track and monitor inspection history progress and inspector schedules from any device; and, accountability will be geo-tagged with on-site photos, and time-stamped entries embedded in the database file.

Analysis has revealed that the process of data migration from the current database in FileMaker Pro, to a new database, is doable but not practical. In reviewing the three sampled fire departments utilizing Accella, Roseville is by far the most advanced, and chose to freeze their legacy database as the address history reference and began tracking anew with the launch of the Accela system. It is a steep ramp-up, initially, but has proven to be well-worth the effort to accurately track a building inspection, incident history, and have the ability to ad hoc query information electronically, moving forward.

One critical Accela aspect to be taken advantage of is the ability of the Accela software to interface with Finance software for the purposes of accurate real-time billing of inspections. Without this billing interface feature turned on, it will remain an arduous and archaic process for inspectors to track down unpaid permit invoices, and/or for Finance to extract information for uploading into their system for billing—resulting in **hundreds of thousands of dollars going delinquent uncollected.** This interface feature resolves one primary aspect of the current database problem: inspection billing remaining uncollected-to-date.

Roseville is the most advanced agency sampled by FEPD staff and is now approximately 8 years into implementation of Accela. They have a robust system that has paved the way for agencies that follow—as their **system enhancement features paid and implemented over the life of their use, are now incorporated into the Accela package for new users.**

The other aspect that these three sample agencies share, is the collaborative effort by all four regulatory disciplines (Fire, Building, Planning, Code Enforcement). **Again, Roseville was by far the most advanced in the process, as the decision was made at the City Manager level that this was the adopted unified database system that all departments would use—which has the benefit of both a common coordinated platform, and economies of scale for procurement.** The other sampled agencies had a more arduous path to all departments on-boarding the same database system.

A system of this caliber can solve a multitude of issues in managing workload and retrieval of essential analytics for planning and budgeting.

While the Accela solution is not being solely recommended, it apparently does check all the boxes of the requisite desirable features for a collaborative database system; and these characteristics should be incorporated into the procurement RFP, for a database solution.