



# ENGINEER'S REPORT

## **West Plainfield Fire Protection District** Fire Protection and Emergency Response Services Assessment

Fiscal Year 2023-24

Pursuant to California Government Code Section 50078 et seq. and Article XIID  
of the California Constitution

Engineer of Work:



**SCI Consulting Group**  
Public Finance Consulting Services

4745 Mangels Boulevard  
Fairfield, California 94534  
707.430.4300  
[www.sci-cg.com](http://www.sci-cg.com)

## West Plainfield Fire Protection District

---

### Board of Commissioner's

- James McMullen, Board President
- Jim Yeager, Board Vice President
- Emily Jacob Amy, Commissioner
- Richard Guarino, Commissioner
- Elizabeth Stiles, Commissioner

---

### Fire Chief

- Cherie Rita, Fire Chief

---

### Assistant Chief

- Dave Stiles, Assistant Chief

# Table of Contents

**Introduction..... 4**  
     Legal Analysis of Proposition 218..... 7

**Assessment Process ..... 10**

**Description of Services..... 12**

**Cost and Budget..... 15**

**Method of Apportionment ..... 17**  
     Implementation of an Assessment for Fire Protection Services ..... 17  
     Overview of Special Benefits from Fire Protection Services ..... 18  
     Description of Special Benefit From Fire Protection Services ..... 19  
     General Versus Special Benefit ..... 20  
     Calculating General Benefit..... 22  
     Summary of General Benefits ..... 25  
     Zones of Benefit ..... 26  
     Assessment Apportionment..... 27  
     Method of Assessment..... 27  
     Assessments Calculation ..... 36  
     Appeals of Assessments Levied to Property ..... 37  
     Additional Background on Relative Benefit ..... 37  
     Criteria and Policies..... 38  
     Duration of Assessment ..... 38

**Assessment..... 39**

**Assessment Diagram..... 41**

**Appendix A – Fire Hazard Areas Diagram ..... 43**

**Appendix B – Response Areas Travel Time Diagram..... 44**

**Appendix C – Assessment Roll, Fiscal Year 2023-24..... 45**

**End Notes ..... 46**

## List of Tables

Table 1 – Proposed Assessment Rates.....	6
Table 2 – Apparatus and Equipment Replacement Plan .....	14
Table 3 – Cost and Budget .....	15
Table 4 – Emergency Medical Expenses Versus Overall Budget.....	25
Table 5 – Normalized Fire Risk Factors .....	30
Table 6 – Structure Replacement Factors.....	31
Table 7 – Benefit Summary per Property Type.....	32
Table 8 – Fire Hazard Zone Risk Factors .....	34
Table 9 – Travel Time Premium Factor .....	36
Table 10– Summary Cost Estimate .....	39

DRAFT

## Introduction

The West Plainfield Fire Protection District (“West Plainfield FPD,” “Fire District,” or “District”), was originally formed in 1928 and provides fire protection, fire prevention and emergency response services in south/central area of unincorporated Yolo County between Davis and Winters. West Plainfield FPD is primarily staffed with full-time career firefighters and part-time career firefighters supplemented with volunteer firefighters.

The West Plainfield FPD is governed by Yolo County Board of Supervisors overseeing a local, dependent, five-member Board of Fire Commissioners. The Yolo County Board of Supervisors can delegate any of its power to the Board of Fire Commissioners.

The Fire District covers approximately 33 square miles and serves an approximate population of 900. The District operates out of one fire station in rural Yolo County. West Plainfield FPD responds to over 200 service calls per year, including structure fires, brush fires, vegetation fires, vehicle fires, traffic collisions, search and rescues, hazardous materials incidents and emergency medical calls. In addition, West Plainfield FPD provides fire prevention, community education, emergency preparedness and other services relating to the protection of lives and property.

The proposed assessment district described in this Engineer’s Report is intended to provide an ongoing secure funding source for local fire protection services. West Plainfield FPD is funded through a small portion of local property taxes and miscellaneous fees. The cost of providing fire protection and emergency response services continues to rise each year due to increasing emergency calls, enhanced firefighter training requirements, the growing wildfire risk to the community, and substantial increases in operational costs, including fuel, utilities, equipment, insurance, and personnel.

Competitive wages in neighboring agencies have made it increasingly difficult for the Fire District to retain and attract firefighters. In addition, it is becoming more difficult to retain and attract volunteer firefighters due to increased training requirements and the additional time required to meet these training requirements. The Fire District is not funded by the State or County and has never received any funding from the now-suspended Cal Fire Prevention Fee.

A new funding source will help address the wage disparity and, in turn, increase the retention of our locally trained firefighters. Adequate staffing also allows the Fire District to assemble the recommended number of personnel on the scene of an incident quicker, which is a factor for your Insurance Services Office (ISO) rating, affecting insurance rates. A negative change in ISO rating could result in higher costs with possibly lower coverage limits or the complete loss of homeowners insurance coverage.

West Plainfield FPD seeks to maintain a high level of fire protection and emergency response service by maintaining appropriate staffing levels and providing improved apparatus replacement, maintenance of facilities, and increase in local firefighter wages.

This Engineer's Report supports a proposed new assessment to enhance existing funding sources, associated services and equipment, and fund these improved services and equipment. The proposed rates for this proposed assessment are shown in Table 1, below.

DRAFT

**Table 1 – Proposed Assessment Rates**

Property Type	Proposed Rate	Unit
Single Family	\$450.23	each
Multi-Family	\$186.80	res unit
Commercial/Industrial	\$3,347.56	acre
Office	\$882.50	acre
Storage	\$2,459.16	acre
Parking Lot	\$82.44	each
Vacant	\$60.29	each
Agriculture	\$11.44	acre
Range Land & Open Space	\$0.68	acre

These proposed assessment rates, adjusted by the relative fire hazard zone factor and the relative travel time factor, are used to calculate the specific assessment for each parcel. These factors are explained in more detail in the Method of Apportionment section of this report.

This Engineer's Report (the "Report") was prepared to:

- Describe the fire suppression, safety and emergency response services and equipment that would be funded by the assessments (the "Services")
- Establish a budget for the Services that would be funded by the assessments in 2023-24
- Determine the special benefits received from the proposed Services by property within the West Plainfield Fire Protection District Assessment (the "Assessment District"), and
- Describe the method of apportionment to lots and parcels within the Assessment District.

This Report and the proposed assessments have been made in compliance with California Government Code Section 50078 et seq. (the "Code") and Article XIID of the California Constitution (the "Article").

The Assessment District is narrowly drawn to include only properties that directly receive the additional fire protection and prevention services provided by the assessment funds and are specially benefited from such Services. The Assessment Diagram included in this Report shows the boundaries of the Assessment District.

## Legal Analysis of Proposition 218

The proposed assessment complies with Proposition 218, The Right to Vote on Taxes Act, which was approved by the voters of California on November 6, 1996 and is now Articles XIII C and XIII D of the California Constitution. Proposition 218 provides for benefit assessments to be levied to fund the cost of providing services, improvements, as well as maintenance and operation expenses of a public improvement that provide a special benefit to the assessed property.

Proposition 218 imposes a number of important requirements, including property-owner balloting, for the formation and continuation of assessments, and these requirements are satisfied by the process used to establish this assessment.

---

### **Silicon Valley Taxpayers Association, Inc. v Santa Clara County Open Space District (2008) 44 Cal.4th 431**

On July 14, 2008, the California Supreme Court issued its ruling in *Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space District* (“*Silicon Valley*”). Several of the most important elements of the ruling are:

- Benefit assessments are for special, not general benefit
- The services and/or improvements funded by assessments must be clearly defined
- Special benefits are directly received by and provide a direct advantage to property in the Assessment District

---

### **Dahms v. Downtown Pomona Property (2009) 174 Cal.App.4th 708**

On June 8, 2009, the Court of Appeal amended its original opinion upholding a benefit assessment for property in the downtown area of the City of Pomona. On July 22, 2009, the California Supreme Court granted review and transferred the case back to the Court of Appeal for reconsideration in light of the Supreme Court’s discussion in the *Silicon Valley* case. In *Dahms*, the Appellate Court then upheld the assessment that was 100% special benefit (i.e. 0% general benefit) holding that the services and improvements funded by the assessments were directly provided to property in the assessment District. The Court also upheld discounts and exemptions from the assessment for certain properties.



---

**Bonander v. Town of Tiburon (2009) 46 Cal.4th 646**

On December 31, 2009, the Court of Appeal overturned a benefit assessment approved by property owners to pay for placing overhead utility lines underground in an area of the Town of Tiburon. The Court invalidated the assessments on the grounds that the assessments had been apportioned to assessed property based in part on relative costs within sub-areas of the assessment district, instead of each individual property's proportional special benefits.

---

**Beutz v. County of Riverside (2010) 184 Cal.App.4th 1516**

On May 26, 2010, the California Court of Appeal issued its decision in *Steven Beutz v. County of Riverside* ("Beutz"). This decision overturned an assessment for park maintenance in Wildomar, California, primarily because the general benefits associated with improvements and services were not explicitly calculated, quantified, and separated from the special benefits.

---

**Golden Hill Neighborhood Association V. City of San Diego (2011)199 Cal.App.4th 416**

On September 22, 2011, California Court of Appeal issued its decision in *Golden Hill Neighborhood Association v. City of San Diego*. This decision overturned an assessment for street and landscaping maintenance in the Greater Golden Hill neighborhood of San Diego, California. The court described two primary reasons for its decision. First, as in *Beutz*, the court found the general benefits associated with services were not explicitly calculated, quantified and separated from the special benefits. Second, the court found that the City had failed to document the basis for the assessment on city-owned parcels.

---

**Compliance with Current Law**

This Engineer's Report is consistent with the requirements of Article XIII C and XIII D of the California Constitution and with the *Silicon Valley* decision because the Services to be funded are clearly defined; the Services are available to and will be directly provided to all benefited property in the Assessment District; the Services provide a direct advantage to property in the Assessment District that would not be received in the absence of the assessment; and the Services are benefits that are over and above general benefits conferred on real property located in West Plainfield FPD or to the public at large by other public entities that make up the membership of West Plainfield FPD.

This Report is consistent with *Dahms* because, similar to the *Downtown Pomona* assessment validated in *Dahms*, the Services will be directly provided to property in the Assessment District. More specifically, as discussed hereafter, the Services afford benefits specifically unique and supplied only to property owners within the District, with a corresponding effect that is not shared by other parcels outside of the District or real property in general, including the public at large. While *Dahms* could be used as the basis for a finding of 0% general benefits, this Engineer's Report establishes a more generous separation and quantification of general benefits.

This Report is also consistent with *Bonander* because the Assessment has been apportioned based on the proportional special benefit to each property. Furthermore, the Assessment is consistent with *Beutz* and *Golden Hill* because the general benefits have been explicitly calculated, quantified, and excluded from the Assessment.

DRAFT

## Assessment Process

Following submittal of this Report to West Plainfield FPD for preliminary approval, the West Plainfield FPD Board of Commissioners (the “Board”) may, by Resolution, call for an assessment ballot proceeding and public hearing on the proposed establishment of a Fire Protection and Emergency Response Services Assessment.

If the Board approves such a Resolution, a Notice of Assessment and Assessment Ballot will be mailed to each property owner within the proposed Assessment District boundaries who will be subject to the proposed assessment. The Notice will include a description of the Services to be funded by the proposed assessment, the total amount of the proposed assessment and the amount chargeable to the owner’s parcel, the reasons for the proposed assessment and the basis upon which it was calculated, and an explanation of the process for submitting a ballot. Each Notice will also include a postage prepaid return envelope and a ballot on which the property owner may mark his or her approval or disapproval of the proposed assessment as well as affix his or her signature.

After the ballots are mailed to property owners in the Assessment District, a minimum 45-day time period must be provided for the return of the assessment ballots. Following this balloting time period, a public hearing must be held for the purpose of allowing public testimony regarding the proposed assessments. Ballots will be received if previously mailed and received by the public agency before the public hearing, or if physically submitted at the public hearing. At the public hearing, the public will have the opportunity to speak on the issue. The public hearing is currently scheduled to open August 1, 2023. After receiving ballots and public comment, the public hearing will be closed. The Board will then recess in order that the ballots can be tabulated.

If it is determined that the assessment ballots submitted in opposition to the proposed assessment do not exceed the assessment ballots submitted in favor of the assessment (weighted by the proportional financial obligation of the property for which ballots are submitted), the Board may approve the imposition of assessment for fiscal year 2023-24 and each fiscal year thereafter. If the assessment is confirmed and approved, the Board will order the levy of the assessment to be submitted to the Yolo County Auditor/Controller for inclusion on the property tax roll for Fiscal Year 2023-24. The levy and collection of the assessment would continue year-to-year until terminated by the Board.

The assessment granted by the ballot proceeding would be for a maximum assessment rate of \$450.23 per single family home, increased each subsequent year by the consumer price index not to exceed 5% per year.

In each subsequent year for which the assessment will be continued, an updated proposed budget, assessment rate and an updated assessment roll listing all parcels and their proposed assessment for the upcoming fiscal year shall be prepared and considered by the Board of Directors. At this meeting, the Board will also call for the publication in a local newspaper a legal notice of the intent to continue the assessment for the next fiscal year and set the date for the noticed public hearing. At the annual public hearing, members of the public can provide input to the Board prior to the Board's decision on continuing the services and assessment for the next fiscal year.

If the assessment is confirmed and approved, the levies would be submitted to the Yolo County Auditor/Controller for inclusion on the property tax roll for Fiscal Year 2023-24.

DRAFT

## Description of Services

West Plainfield FPD provides a range of fire suppression and protection, prevention, and other fire and emergency-related services to properties within its boundaries.

This proposed benefit assessment would provide funding for three major areas of service improvements within the District for its’ fire suppression and protection operations (with the majority of the proposed assessment revenue being dedicated to firefighter retention.)

- Increased Firefighter Staffing and Training
- Improved Maintenance and Replacement of Apparatus and Equipment
- Other Services and Supplies

The West Plainfield FPD fire station is located at 24901 County Road 95, Davis, CA 95616

The formula below describes the relationship between the final level of services, the baseline level of service based on existing funding, and the enhanced level of services funded by the assessment if it is approved. It should be noted, due to the fact that current operating costs are increasing at a faster rate than current funding sources, the baseline level of services is diminishing over time.

<i>Final Level of Service</i>	=	<i>Current and Diminishing Baseline Level of Service</i>	+	<i>Proposed Enhanced Level of Service</i>
-------------------------------	---	--	---	---

Below is a more detailed description of these improvements that are provided for the special benefit of property in the Assessment District.

---

### Increased Firefighting Staffing and Training

Firefighting emergency response staffing levels are described colloquially in terms of “speed and weight,” with speed describing the response time and weight describing the number and types of personnel. Also, staffing levels are also commonly described in terms of the number of firefighting staff per fire truck and/or apparatus, such as “4 on an initial response” or “3 on an initial response.” West Plainfield Fire is satisfied with its response time (“speed”) but has determined that its staffing levels (“weight”) need to be improved.

Although there are many approaches to deploying firefighting staff, OSHA guidelines place strict requirements on operations, particularly when firefighters are required to enter potentially Immediately Dangerous to Life and Health (IDLH) environments such as structure fires. In these atmospheres, OSHA requires that personnel use self-contained breathing apparatus (SCBA), that a minimum of two firefighters work as a team inside the structure, and that a minimum of two firefighters be on standby outside the structure to provide assistance or perform rescue.

To meet the “2 in, 2 out” standard, the National Fire Protection Agency (NFPA) recommendation is four (4) personnel per apparatus in a community of this size and risk. The District cannot meet the NFPA recommendation due to budget constraints. The next best option is to align with industry standards and respond adequately to calls by staffing all apparatus with three (3) personnel.

Essentially the “2 in, 2 out” rule severely limits West Plainfield FPD’s ability to respond effectively to many types of emergencies. The challenge is compounded in the case of multiple calls. West Plainfield FPD has determined that an increase in staffing would significantly increase its effectiveness, as well as compliance with OSHA requirements, and would benefit the property owners with heightened levels of property and human life protection.

Improved and increased firefighting staffing levels will significantly contribute to improved safety and protection of real property within the proposed Assessment District.

The proposed assessment is intended to provide funding for additional full-time-staffing, and some additional training. The costs for the proposed staffing increases would support the implementation of “3 on an initial response” staffing are included in the Table 3 Budget.

---

### **Improved Maintenance and Replacement of Apparatus and Equipment**

West Plainfield FPD desires to ensure maintenance and replacement of apparatus in order to maximize safety and effectiveness for fire suppression. Improved maintenance and replacement will significantly contribute to improved safety and protection of real property. It should be noted that the need for equipment replacement will be ongoing. If approved, the proposed assessment will fund this replacement plan by allocating \$180,000 per year to the apparatus and equipment replacement fund. Table 2 below lists the replacement plan for apparatus and equipment.

**Table 2 – Apparatus and Equipment Replacement Plan**

<b>Fiscal Year</b>	<b>Apparatus</b>	<b>EstimatedAmount</b>
2028-29	Engine Type 1	\$1,350,000
2031-32	Water Tender	\$528,000
2042-43	Engine Type 6	\$475,000
2044-45	Engine Type 5	\$499,300
2044-45	Engine Type 5	\$493,300
2046-47	Water Tender	\$812,800
	<b>Estimated Unfunded Total</b>	<b>\$4,158,400</b>

---

### **Other Services and Supplies**

The budget shown in Table 3 includes and summarizes budget allocations for firefighter staffing and training, equipment and apparatus maintenance and replacement, capital repairs, equipment operation and maintenance, professional services, supplies and materials, utilities and administration in support of West Plainfield FPD's operations.

## Cost and Budget

The following budget lists the proposed expenditures funded by the Assessment District in Fiscal Year 2023-24.

**Table 3 – Cost and Budget**

<b>West Plainfield Fire Protection District</b>	
<b>Estimate of Costs</b>	
<b>Fiscal Year 2023-24</b>	
Budget Item	Amount
Service, Apparatus and Equipment Needs	
Firefighter Staffing and Training	\$430,104
Equipment and Apparatus Maintenance and Replacement	\$180,000
Facility Improvements	\$60,000
Capital Repairs	\$17,000
Equipment Operation and Maintenance	\$10,324
Professional Services	\$2,739
Supplies and Materials	\$162,639
Utilities	\$12,000
Administration	\$10,656
Contingency	\$20,000
<b>Total Service Needs (a)</b>	<b>\$905,462</b>
Less: Est. Dedicated Revenue from Property Taxes & Other Sources (b)	-\$462,009
<b>Est Total Revenue from Other Sources (General benefit contribution) (b+c) = (d)</b>	<b>-\$462,009</b>
Net Cost of Servicing to Assessment District (a-d) = (e)	<b>\$443,453</b>
Allowance for County Collection (e * 1%) = (f)	\$4,435
<b>Total Fire Suppression and Protection Services Budget (e-f) =(g)</b>	<b>\$447,888</b>
Total Proposed Assessment Budget (g)	<b>\$447,888</b>
Effective Single Family Equivalent Benefit Units in Assessment District (h)	994.79
<b>Proposed Assessment per Effective Single Family Equivalent Unit (SFE) (g/h)</b>	<b>\$450.23</b>

The “Service Needs” cost estimates are presented in the budget table above for the 2023-24 fiscal year only, but are based upon financial forecasting over a 10-year cycle and beyond. This forecasting concludes that these costs will likely persist consistently into the future. Consistent with the General Benefit requirement described later in this Report, at least 21% of the total cost of the West Plainfield FPD Fire Services must be funded from sources other than this proposed assessment to cover any general benefits from the Services. Therefore, the cost of services of \$905,462 funded by the proposed assessment can be funded exclusively through the assessment levy as a special benefit since the current County contributions from its dedicated ad valorem property tax revenues exceed approximately 51.02%. (\$462,009/\$905,462) of the total cost of West Plainfield FPD Fire Services, far in excess of the above required 21% non-assessment general benefit funding requirements. The 51.02% funding is from property taxes and other sources. The Total SFEs are the sum of the assigned Single Family Equivalent units for each



affected parcel based upon a parcel-by-parcel analysis of the service area consistent with the Method of Apportionment described later in the Report.

DRAFT

## Method of Apportionment

This section includes an explanation of the special benefits to be derived from the Services, the criteria for the expenditure of assessment funds, and the methodology used to apportion the total assessment to properties within the Assessment District.

The Assessment District area consists of all Assessor Parcels within West Plainfield FPD boundaries. The method used for apportioning the assessment is based upon the proportional special benefits from the Services to be provided to the properties in the assessment area over and above general benefits conferred on real property or to the public at large. Special benefit is calculated for each parcel in the Assessment District using the following process:

1. Identification of all benefit factors derived from the improved services
2. Calculation of the proportion of these benefits that are general
3. Determination of the relative special benefit within different areas within the Assessment District
4. Determination of the relative special benefit per property type
5. Calculation of the specific assessment for each individual parcel based upon special vs. general benefit; location, property type, property characteristics, improvements on property and other supporting attributes

## Implementation of an Assessment for Fire Protection Services

California Government Code Section 50078 et. seq. allows agencies which provide fire suppression services, such as West Plainfield FPD, to levy assessments for fire suppression services. Section 50078 states the following:

*“Any local agency which provides fire suppression services directly or by contract with the state or a local agency may, by ordinance or by resolution adopted after notice and hearing, determine and levy an assessment for fire suppression services pursuant to this article.”*

In addition, California Government Code Section 50078.1 defines the term “fire suppression” as follows:

*“(c) “Fire suppression” includes firefighting and fire prevention, including, but not limited to, vegetation removal or management undertaken, in whole or in part, for the reduction of a fire hazard.”*

Therefore, the Services to be provided by the Assessment District fall within the scope of services that may be funded by assessments under the Code.

The assessment must be levied based on the special benefit to property. Special benefit means a particular and distinct benefit received by property over and above any general benefits conferred on real property located in the Assessment District or the public at large. With reference to the requirements for assessment, Section 50078.5 of the California Government Code states:

*"(b) The benefit assessment shall be levied on a parcel, class of improvement to property, or use of property basis, or a combination thereof, within the boundaries of the local agency, zone, or area of benefit."*

*"The assessment may be levied against any parcel, improvement, or use of property to which such services may be made available whether or not the service is actually used."*

Proposition 218, as codified in Article XIID of the California Constitution, has confirmed that assessments must be based on the special benefit to property:

*"No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel."*

Since assessments are levied on the basis of special benefit, they are not a tax and are not governed by Article XIII A of the California Constitution.

The following two sections describe how and why the Fire Protection Services specially benefit properties. This special benefit is particular and distinct from its effect on other property, and that other real property and the public at large do not share the special benefit.

## Overview of Special Benefits from Fire Protection Services

Special Benefit is defined in Article XIID of the California Constitution as a "particular and distinct benefit over and above general benefits." The proposed services and improvements provide "particular and distinct" benefit because they are distinctly defined and described, and are provided directly to the parcels within the Assessment District boundaries. The proposed services and improvements are "over and above general benefits" currently supplied by the West Plainfield FPD and other agencies.

Moreover, this assessment for fire protection services can be clearly contrasted with assessments for parks and recreation, or even open space, as addressed in *Silicon Valley*, because fire services are provided directly to individual parcels in the form of fire prevention and suppression; by contrast, property owners must travel from their properties to dispersed locations to fully enjoy the benefits of parks and open space.

In summary, real property located within the boundaries of the proposed Assessment District distinctly and directly benefits from increased safety and protection of real property and human life in the Assessment District.

### Description of Special Benefit From Fire Protection Services

In order to allocate the assessments, the special benefit arising from the Services that will be provided to property in the Assessment District has been identified and described below. This special benefit must confer a direct advantage to the assessed properties; otherwise it would be general benefit, as described further in this report.

The following special benefit confers to residential, commercial, industrial, institutional, and other lots and parcels resulting from the improved fire protection and emergency response services that will be provided in the Assessment District. This special benefit is summarized as follows:

---

#### Increased safety and protection of real property assets for all property owners within the Assessment District.

The proposed Assessments will fund improved fire suppression, prevention, protection and emergency response services, and thereby can significantly reduce the risk of property damage, human injury, or death associated with fires within the assessment District. Clearly, fire mitigation helps to protect and specifically benefits both improved properties and vacant properties in the Assessment District.

*"Fire is the largest single cause of property loss in the United States. In the last decade, fires have caused direct losses of more than \$120 billion and countless billions more in related cost."*<sup>1</sup>

*"Over 140,000 wildfires occurred on average each year, burning a total of almost 14.5 million acres. And since 1990, over 900 homes have been destroyed each year by wildfires."*<sup>2</sup>

*"The strategies and techniques to address fire risks in structures are known. When implemented, these means have proven effective in the reduction of losses."*<sup>3</sup>

The proposed improved fire suppression, prevention, protection, and emergency response services support this special benefit by providing West Plainfield FPD with the needed resources to protect real property from uncontrolled fires.

The proposed increased firefighting staffing supports this special benefit by providing needed personnel resources. For instance, current OSHA regulations require that two firefighters remain outside a structure during an emergency response to a structure fire, while two firefighters may enter. *(This OSHA Policy is documented as United States Department of Labor - Occupational Safety and Health Administration — OSHA Regulation “2 in 2 out”— The “2In/2 Out” policy is part of paragraph (g)(4) of OSHA’s revised respiratory protection standard, 29 CFR 1910.134.)*

This “2 in, 2 out” requirement places significant limitations on West Plainfield FPD’s ability to respond to structure fires, particularly when second and third calls are made. The proposed assessment would allow West Plainfield FPD to optimize staffing levels and respond with the industry standard of “3 on an initial response” on significantly more emergency calls. Properties receive direct special benefit from the increased staffing because the increase in staffing in turn increases the likelihood that property and life will be protected. For example, if only two firefighters are available to respond to a structure fire, no firefighter would be allowed to enter the structure –significantly delaying critical fire suppression activity.

The increased firefighting staffing specifically satisfies the strict legal requirements of the *Silicon Valley* decision in that these Services are clearly defined, are available to and will be directly provided to all benefited property, and will provide a direct advantage that would not be received in the absence of the assessment.

### General Versus Special Benefit

Article XIII D of the California Constitution requires any local agency proposing to increase or impose a benefit assessment to “separate the general benefits from the special benefits conferred on a parcel.”

In other words:

$$\text{Total Benefit} = \text{General Benefit} + \text{Special Benefit}$$

The rationale for separating special and general benefits is to ensure that property owners subject to the benefit assessment are not paying for general benefits. The assessment, therefore, can fund special benefits but cannot fund general benefits.

Please note that the property owners of the parcels subject to the assessment *should not* and *cannot* be required to pay for the general benefits arising from the proposed service and equipment improvements – this is an essential assessment-payer-protection requirement of all Proposition 218–compliant assessments. In order to clearly and overwhelmingly satisfy this important requirement, the general benefit has been calculated in each step favoring its reasonable maximum to totally avoid any possibility that the total general benefit to be funded from other sources is under-calculated.

There is no statutory formula to calculate, quantify and separate general benefit in support of benefit assessment analysis. General benefits are benefits from improvements or services that are not special in nature, are not “particular and distinct,” and are not “over and above” benefits received by other properties, or the public at large. *Silicon Valley* provides some clarification by indicating that general benefits provide “an indirect, derivative advantage” and are not necessarily proximate to the improvements. Again, in this Report, the general benefit is generously estimated and described, and then budgeted so that it is funded by sources other than the assessment. Although there is not an industry standard for this general benefit calculation, the three-component (plus an adjustment for emergency medical) approach shown in the formula below has been the most-widely used.

	1.) <i>Benefit to Real Property Outside the Assessment District</i>
+	2.) <i>Benefit to Real Property Inside the Assessment District that is Indirect and Derivative</i>
+	3.) <i>Benefit to the Public at Large</i>
+	<i>(Adjustment for Emergency Medical Services)</i>
=	<i>General Benefit</i>

Special benefit, on the other hand, is defined in the California Constitution as “a particular and distinct benefit over and above general benefits conferred on real property located in the district or to the public at large.” The *Silicon Valley* decision indicates that a special benefit is conferred to a property if the property “receives a direct advantage from the improvement (e.g., proximity to a park).” In this assessment, as noted previously, the improved Services are available when needed to all properties in the Assessment District, so the overwhelming proportion of the benefits conferred to property is special, and the benefits are only minimally received by property outside the Assessment District or the public at large.

## Calculating General Benefit

This section provides a measure of the general benefits from the assessments.

### 1.) Benefit to Property Outside the Assessment District

Properties within the Assessment District receive almost all of the special benefits from the Services because the Services will be provided solely in the Assessment District boundaries. (It should be noted that the Services may, at times, be used outside the West Plainfield FPD boundaries. However, this use is part of a mutual aid agreement and is offset, at least in part, by the provision of Services by other outside agencies within the Assessment District boundaries.)

Properties proximate to, but outside of, the boundaries of the Assessment District receive some benefit from the proposed Services due to some degree of indirectly reduced fire risk to their property. Specifically, the parcels immediately contiguous to West Plainfield FPD's boundaries enjoy a reduction to the possibility of a fire "jumping" from an adjacent structure (within the West Plainfield FPD boundaries) because West Plainfield FPD controls structure fires within its boundaries. Because West Plainfield FPD's primary role is directed towards structure fires, as opposed to wildland fires, and structure fires generally "jump" more slowly, it is reasonable to only consider the directly adjacent, but outside, parcels. These are estimated to receive some benefit relative to parcels within the Assessment District, but they do not directly receive the improved fire protection resulting from the Services funded by the Assessments.

At the time the Assessment was proposed, the Engineer of Work, using the Geographic Information Systems, quantified the number of parcels proximate to the Assessment District boundary but outside the Assessment District, and thereby determined that there were approximately 84 directly adjacent properties. Further consideration of the types, use, location and other attributes of the outside but proximate parcels is not warranted due to numeric insignificance, and would not materially increase the accuracy of this analysis:

*84 parcels outside West Plainfield FPD but proximate to the District Boundaries*

*423 parcels in the Assessment District.*

**Calculation:**

*General Benefit to Property Outside the Assessment District =*

*$84 / (423+84) = 16.57\%: \sim \text{rounded to } 17.0\%$*



It can reasonably be argued that properties protected inside, but near the Assessment District boundaries, are offset by similar fire protection provided outside, but near, the Assessment District's boundaries, through mutual aid agreements. However, this analysis uses the more generous approach of finding that 17.0% of the Services may be of general benefit to property outside the Assessment District, and cannot be funded by this assessment.

---

## **2.) Benefit to Property Inside the District that is *Indirect and Derivative***

In determining the proposed Assessment District area, West Plainfield FPD has been careful to only include parcels that will directly receive the benefit of the improved Services. All parcels will directly benefit from the use of the improved Services throughout the Assessment District in order to maintain the same improved level of fire suppression and protection throughout the area. Fire protection and suppression will be provided as needed throughout the area. The shared special benefit - reduced severity and number of fires - would be received on an equivalent basis by all parcels in the Assessment District due to the proposed increased funding. Furthermore, all parcels in the Assessment District would directly benefit from the ability to request or receive service from West Plainfield FPD and to have a West Plainfield FPD resource promptly respond directly to the parcel and address the owner's or resident's service need.

The *Silicon Valley* decision indicates that the fact that a benefit is conferred throughout the Assessment District area does not make the benefit general rather than special, so long as the Assessment District is narrowly drawn and limited to the parcels directly receiving shared special benefits from the service. This concept is particularly applicable in situations involving a landowner-approved assessment-funded extension or improvement of a local government service to benefit lands. This Report therefore concludes that, other than the general benefit to properties outside the Assessment District (discussed above) and to the public at large (discussed below), the general benefit from the fire protection services that is "indirect and derivative" is negligible.

---

## **3.) Benefit To The Public At Large**

Because the Services directly serve and benefit all of the property in the Assessment District, any general benefit conferred on the public at large would be small.



The public at large uses the public highways, and when traveling in and through the Assessment District the public may benefit from the services without contributing to the assessment. Although the protection of this critical infrastructure is certainly a benefit to all the property within West Plainfield FPD, this protection is arguably “indirect and derivative” and possibly benefits people rather than property. A fair and appropriate measure of the general benefit to the public at large therefore is the amount of highway and throughway street area within the Assessment District relative to the overall land area. An analysis of maps of the Assessment District shows that approximately 1.17% of the land area in the Assessment District is covered by highways and throughway streets.

A 2.0% contribution therefore is a generous, fair and appropriate measure of the general benefit to the public at large within the Assessment District and cannot be funded by this assessment.

---

#### **Adjustment to Account for Emergency Medical Services as General Benefit**

For the purposes of this Report, an additional adjustment has been made to the general benefits calculation to account for general benefits that may result from the District’s rescue and emergency medical services (“EMS”) associated with the proposed Services. *(Limitations on the appropriateness of Proposition 218-compliant assessments to fund EMS is still debated - in any case, this assessment does not include funding for EMS).* This assessment is designed to provide funding for fire protection and emergency response services, including fire-related and non-fire-related rescue and associated medical services. However, it is not designed to fund typical, non-fire/non-rescue medical calls (e.g., a cardiac arrest medical call).

West Plainfield FPD is authorized to provide EMS in addition to its primary responsibility of fire prevention and suppression. In fact, a significant portion of West Plainfield FPD’s emergency service calls are associated with providing EMS. Nonetheless, the largest portion by far of the costs associated with operating West Plainfield FPD is support for fire suppression services as illustrated in Table 4, below.

Incremental costs associated with non-fire/non-rescue emergency medical service include almost exclusively the operating costs associated with transportation to such calls such as fuel and maintenance. For further clarification, these are costs that are only incurred because of EMS, and do not include fixed costs such as personnel who would be on active duty in any case as well (as the associated training), and would therefore be incurred in any event in satisfying West Plainfield FPD’s primary responsibility of fire protection and suppression.

Evaluation of the transportation associated with non-fire/non-rescue emergency medical calls for several similar fire districts in California indicates that typically around 2% of overall operating costs are for such calls. An analysis of West Plainfield FPD's actual additional costs for non-fire/non-rescue emergency medical calls is shown in Table 4, below, and supports an adjustment of 1.3%. This adjustment has generously been rounded up to 2%.

**Table 4 – Emergency Medical Expenses Versus Overall Budget**

<b>Emergency Medical Expenses</b>	<b>Annual Costs</b>
EMS Fuel Cost	\$5,035.71
EMS Apparatus Operations and Maintenance Cost	\$3,465.91
EMS Supplies and Equipment	\$1,000.00
Annual EMS Training and Certification Costs	\$2,000.00
<b>Total EMS Cost (a)</b>	<b>\$11,501.63</b>
<hr/>	
Total Budget from Table 4 (b)	<b>\$905,462.00</b>
Percentage of Total Budget on Emergency Medical (a/b)	<b>1.3%</b>

The proposed assessment, as indicated through this Report, will exclusively fund special benefits conferred upon the properties within West Plainfield FPD boundaries, while EMS is directly funded from West Plainfield FPD through non-assessment sources including property taxes. For purposes of this Report, EMS costs over and above those necessary for fire suppression have been treated as general benefits, and it is conceded that these general benefits may exist at the same percentage for the proposed Services as with the existing baseline services. Therefore, it can be concluded that West Plainfield FPD's services are 1.3% general as a result of providing EMS services; The engineer is requiring a 2% adjustment for this component.

### **Summary of General Benefits**

Using a sum of the measures of general benefit for the public at large and land outside the Assessment Area, we find that approximately 21% of the benefits conferred by the proposed Fire Protection and Emergency Response Assessment may be general in nature and must therefore be funded by sources other than the assessment.

**General Benefit Calculation**

17.0% (1. Outside the Assessment District - Adjacent parcels)  
 + 0.0% (2. "Indirect and Derivative" Property within the Assessment District)  
 + 2.0% (3. Public at Large)  
 = 19.0% (Subtotal of General Benefit)

+ 2.0% (Emergency Medical Adjustment)

=**21.0%** (Total of General Benefits)

The Assessment District's total budget for 2023-24 is \$905,462. Of this total assessment budget amount, the District will contribute at least \$462,009 which is more than 51% of the total budget from sources other than this proposed assessment including dedicated property taxes and the existing benefit assessment. This contribution constitutes significantly more than the 21% general benefits estimated by the Assessment Engineer, which must be paid for by non-assessment sources.

## Zones of Benefit

The Assessment District has been narrowly drawn. The assessments will fund improved fire protection services relatively uniformly throughout the Assessment District. Properties of similar type will receive essentially equivalent types of special benefit with reasonable, parcel-by-parcel adjustments for fire hazard zone and proximity to fire stations (as explained later in the Method of Assessment section), and no broad, widespread Zones of Benefit are needed. Instead, each parcel is subject to geographic factors, acting as effective individual mini-zones.

The Assessment Area is extremely rural, and includes a patchwork of areas of moderate fire risk. Further, travel by roadway throughout the Assessment Area is very limited, and travel times from stations to specific parcels vary greatly. Accordingly, in lieu of traditional Zones of Benefits, the specific benefit of each parcel is individually calculated and adjusted for both fire risk zone and response travel time.

## Assessment Apportionment

The Assessment Engineer determined that the appropriate method of assessment should be based on the type of property, the relative risk of fire by type of property, the relative fire hazard zone factor, the relative travel time factor, the relative size of the property, and the relative damage value (replacement cost) of fires by property type. This method is further described below.

## Method of Assessment

The next step in apportioning assessments is to determine the relative special benefit for each property. This process involves determining the relative benefit received by each property in relation to a "benchmark" property, a single family detached dwelling on one parcel (one "Single Family Equivalent Benefit Unit" or "SFE").

This SFE methodology is commonly used to distribute assessments in proportion to estimated special benefits and is generally recognized as providing the basis for a fair and appropriate distribution of assessments. In this Report, all properties are assigned an SFE value, which is each property's relative benefit in relation to the benefit received by a single family home on one parcel.

The relative benefit to properties from fire related services is:

### Equation 1 – Relative Special Benefit to Properties

Special Benefit =

$$\sum(\text{Fire Risk Factors}) * \sum(\text{Structure Replacement Factors}) * \sum(\text{Location/Topography Factors})$$

Simply put, the special benefit conferred to property is the product of the fire risk, the structure replacement costs and the location and topographic factors.

Typically, the development of the rate methodology for fire assessments is based upon fire risk and structure value. However, in this case, due to the particular nature of West Plainfield FPD fire hazards and terrain, two additional factors (Fire Hazard Zone and Proximity (Travel Time) ) were added in support of a uniquely rigorous and detailed, parcel-by-parcel development of rate and assessment.

For example, by this formula, a hypothetical parcel used for a high fire risk operation (i.e., a fireworks factory), with high value structures, in a high fire hazard zone and very close to a fire station, receives a high amount of special benefit. Conversely, a vacant lot not in a high fire hazard area and a long way from a fire station would receive far less special benefit. It follows that the special benefit, and accordingly, the assessment amount, should be calculated and assigned consistent with this logic.

---

### Overview of Approach

Each parcel is evaluated and the special benefit is calculated using 4 attribute criteria:

Risk and Replacement Factors:

- |                                 |               |
|---------------------------------|---------------|
| 1.) Fire Risk                   | (see Table 5) |
| 2.) Structure Replacement Value | (see Table 6) |

These factors are summarized in Table 7

Location and Topography Adjustments:

- |   |               |
|---|---------------|
| 3.) Location and Topography - Hazard Zone             | (see Table 8) |
| 4.) Location and Topography - Proximity (Travel Time) | (see Table 9) |

---

### Overview of Normalization in Adjustments in Multi-Attribute Analysis

One of the greatest engineering challenges in modeling and calculating special benefit on a specific parcel is the need to balance the effect of various attributes in a multi-attribute analysis. In this case, the special benefit method of apportionment is based upon four different attributes and each must be “weighted” to affect the overall special benefit calculation in a reasonable way, commensurate with their effect on the overall special benefit. The general approach taken is to adjust each attribute value towards a reasonable proportion of 1, such that it is consistent with the base unit of 1 Single Family Equivalent. See the “Area Adjustment Factor” used in Table 6 and the Impact Factor used in Tables 8 and 9.

---

#### 1.) Fire Risk Factors

This fire risk is based upon the specific parcel type and use, including use of structure (e.g., used for cooking), type of structure (centralized heating), etc.

In 2021, the National Fire Protection Association (“NFPA”), one of the preeminent authorities on fire protection in the United States, published the Structure Fires by Occupancy 2015-2019 Annual Averages Report. This report comprehensively tabulates the number of fires for each classification of property type within the United States from 2015-2019, and serves as a reasonable and rational basis to determine fire risk.

The percent of fires for each property is then divided by the total number of that property type to determine un-normalized fire risk factors. Finally, the risk factors are normalized based upon a factor of 1.00 for a single family property. Table 5 below tabulates the Fire Risk Factors for each property type.

DRAFT

**Table 5 – Normalized Fire Risk Factors**

<b>Property Type</b>	<b>Percentage of Study Units(a)</b>	<b>Percentage of Fires(b)</b>	<b>Risk Factor(b/a)</b>	<b>Normalized Risk Factor</b>
Single Family	68.4%	52.5%	0.7674	1.0000
Multi-Family	13.1%	23.9%	1.8294	2.3839
Commercial/Industrial	3.4%	14.9%	4.3716	5.6967
Office	0.6%	0.7%	1.2228	1.5934
Storage	0.5%	4.9%	10.6702	13.9045
Parking Lot <sup>(1)</sup>	NA	NA	0.0000	0.2151
Vacant	11.7%	1.9%	0.1651	0.2151
Agriculture	1.7%	1.2%	0.6983	0.9099
Range Land & Open Space	0.8%	0.1%	0.0837	0.1090

Structure Fires by Occupancy 2015-2019 Annual Averages, NFPA, and an analysis of the percentage of properties by property type in the State of California by SCI

(1) This study did not provide sufficient analysis to develop risk factors for parking lots, so the vacant property type is used as a proxy.

The effect of installed fire sprinklers on the special benefit received from the proposed services must be tempered by the fact that many factors including fire type, weather, roofing material, building materials response time, defensible space, use of working smoke detectors, type of windows, maintenance of sprinkler system, etc. likely more significantly affect fire protection. These factors are incorporated into our analysis. Sprinklers have been required for commercial parcels for many years, so that element is already incorporated into our risk analysis. However, more recently, sprinklers for new and renovated residential structures have become required. Special cases will be considered as part of the standard appeals process described later in this Report.

## 2.) Structure Replacement Value Factors

The relative value of different property types was evaluated within the District to determine the Structure Replacement Value Factor according to the following formula:

### Equation 2 – Structure Replacement Value Factors

**Structure Replacement Value =**

Normalized: [((Structure Weighting Factor \* (Average Improved Value)) +

((Land Weighting Factor \* (Average Land Value))] \* Area Adjustment Factor

Where:

- “Structure Weighting Factor” = 10 to “weight” relative importance of structure over land.
- “Average Improved Value” is average of value of all structures and improvements.
- “Normalized:[ ]” process is required to adjust the Structure Replacement Value factor as compared to a Single Family property type. The calculated structure replacement value for a specific property type is divided by the structure replacement value for a single family property type – and then it is multiplied by the area adjustment factor.
- Area Adjustment Factor adjusts for various average parcel size as compared to an average single family residence and only affects multi-family parcels for the service area. Hence, the adjustment factor is 0.42 for multi-family parcels and 1.0 (e.g. no effect) for all other property use types.
- “Land Weighting Factor” = 1
- “Average Land Value” is average of value of all land per property type

Table 6 on the next page is a tabulation of the structure replacement values for each property type as defined by Equation 2, on the previous page.

**Table 6 – Structure Replacement Factors**

Property Type	Average Improvement Values (a)	Average Land Values (b)	Adjusted, Weighted Normalized Replacement Value Factor	Unit
Single Family	\$285,614	\$160,715.91	1.0000	each
Multi-Family	\$120,073	\$48,350.58	0.1741	res unit
Commercial/Industrial	\$379,539	\$142,183.00	1.3052	acre
Office	\$351,315	\$197,932.00	1.2301	acre
Storage	\$110,620	\$78,883.00	0.3928	acre
Parking Lot	\$248,376	\$84,928.00	0.8514	acre
Vacant	\$32,533	\$124,063.00	0.6223	each
Agriculture	\$7,380	\$10,377.00	0.0279	acre
Range Land & Open Space	\$3,919	\$1,889.00	0.0136	acre

- (a) and (b) values derived from an analysis of the 2022 Yolo County Assessor records.



---

### Summary of Risk and Replacement Factors

Per Equation 1, the relative special benefit for each property type (the “SFE” or “Single Family Equivalent” Benefit Units) is determined as the product of the normalized Fire Risk Factors and the normalized Structure Replacement Value Factors. Table 7, below, summarizes the benefit for each property type.

Note that to derive an actual Assessment amount, each of these values needs to be then multiplied by the parcel specific Fire Hazard Zone Risk Factors and Proximity (Travel Time) Risk Factors in Tables 8 and 9, below.

**Table 7 – Benefit Summary per Property Type**

Property Type	Fire Risk Factors	Replacement Cost Factors	SFE Factors	Unit
Single Family	1.0000	1.0000	1.0000	each
Multi-Family	2.3839	0.1741	0.4149	res unit
Commercial/Industrial	5.6967	1.3052	7.4352	acre
Office	1.5934	1.2301	1.9601	acre
Storage	13.9045	0.3928	5.4620	acre
Parking Lot	0.2151	0.8514	0.1831	each
Vacant	0.2151	0.6223	0.1339	each
Agriculture	0.9099	0.0279	0.0254	acre
Range Land & Open Space	0.1090	0.0136	0.0015	acre

---

### Residential Properties

All improved residential properties with a single residential dwelling unit are assigned one Single Family Equivalent or 1.0 SFE. Residential properties on parcels that are larger than one acre receive additional benefit and are assigned additional SFEs on an “Agricultural/Rangeland” basis. Detached or attached houses, zero lot-line houses and town homes are included in this category.

Properties with more than one residential unit are designated as multi-family residential properties. These properties benefit from the Services in proportion to the number of dwelling units that occupy each property. The relative benefit for multi-family properties was determined per Equation 1 to be 0.4149 SFEs per residential unit. This rate applies to condominiums as well.

---

### **Commercial/Industrial & Office Properties**

Commercial and industrial properties are assigned benefit units per acre, since there is a relationship between parcel size, structure size and relative benefits. The relative benefit for commercial and industrial properties was determined per Equation 1 to be 7.4352 SFEs per acre. The relative benefit for office properties was determined per Equation 1 to be 1.9601 SFEs per acre.

---

### **Vacant and Undeveloped Properties**

The relative benefit for vacant properties was determined per Equation 1 to be 0.1339 SFEs per parcel. The relative benefit for stand-alone parking lots was determined per Equation 1 to be 0.1831 SFEs per parcel.

---

### **Rangeland & Open Space Properties**

The relative benefit for range land & open space properties was determined per Equation 1 to be 0.0015 SFEs per acre. (This group includes TPZ parcels.)

---

### **Agricultural Properties**

The relative benefit for agricultural properties requires additional analysis, as required by Government Code 50078 *et seq* and the unique aspects of agricultural properties within the boundaries. This analysis considered how agricultural operations may mitigate risk, onsite or proximate water availability, response time, capability of the fire suppression service, and any other factors which reflect the benefit to the land resulting from the fire suppression service provided. Agricultural properties have been analyzed for fire risk and replacement cost per Equation 1. The relative benefit for agricultural properties was determined per Equation 1 to be 0.0254 SFEs per acre.

---

### **Other Properties**

Properties that do not fit within the major categories described above have been individually reviewed and the special benefit has been individually calculated. These properties are primarily mixed-use properties with the relative special benefit calculated from the relative proportion of each of the underlying property uses.

Article XIID, Section 4 of the California Constitution states that publicly owned properties shall not be exempt from assessment unless there is clear and convincing evidence that those properties receive no special benefit.

All public properties that are specially benefited are assessed. Publicly owned property that is used for purposes similar to private residential, commercial, industrial or institutional uses is benefited and assessed at the same rate as such privately owned property.

Miscellaneous, small and other parcels such as roads, and right-of-way parcels typically do not have significant risk of fire damage. Moreover, for common area parcels, the fire benefits are assigned to the other improved parcels in the project that share common ownership of the common area. These miscellaneous parcels receive minimal benefit from the Services and are assessed an SFE benefit factor of 0.

### 3.) Fire Hazard Zone Risk Factors

CAL FIRE works with local agencies to study various fire risk factors throughout rural California including terrain, vegetation, fuel load, wind, weather, etc. and designates specific geographic areas according to fire risk. Within the Assessment Area certain areas are designated as Very High, High, or Moderate as well as areas that do not fall into any of these zones (“None”). Accordingly, parcels receive higher special benefit from the fire protection and emergency response services if they are higher risk zones.

Refer to Appendix A for a diagram of the Fire Hazard Areas in West Plainfield FPD.

Table 8 shows the normalized Fire Hazard Risk Factor for each fire risk zone.

**Table 8 – Fire Hazard Zone Risk Factors**

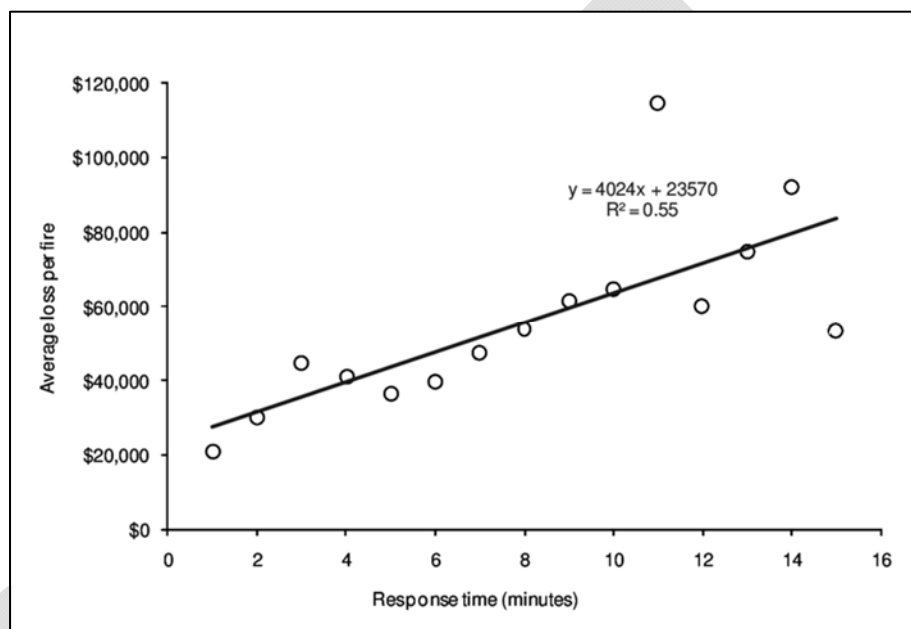
Fire Hazard Zone	Score	Impact Effect	Normalized Fire Hazard Zone Factor
Very High	2	120	1.20
High	1.2	112	1.12
Moderate	1	110	1.10
None	0	100	1

The Score is relative special benefit conferred for each risk zone. The Impact Factor is the relative weight for this risk factor on the overall special benefit calculation, and is the Score multiplied by 10 and added to the base value of 100.

#### 4.) Proximity (Travel Time) Risk Factors

Timely response is a critical factor in responding to emergency calls to ensure the safety of people and protection of property. Numerous studies have confirmed this well-established understanding and the results of one such study is included with this Report. The graph below shows the linear function relationship ranking between response time and loss in dollars. Accordingly, parcels that are closer to a fire station require a shorter travel time for response, and receive a higher level of special benefit than parcels with a longer travel time.

Travel Time versus Property Loss



Source: Neil Challands "The Relationships Between Fire Service Response Time and Fire Outcomes," Fire Technology, July 2010.

Travel time from the closest of the three fire stations to each parcel was calculated and analyzed using Geographical Information Systems.

Refer to Appendix B for a diagram of the Response Areas Travel Time in West Plainfield FPD.

Table 9 below shows the relative normalized value of travel time.

**Table 9 – Travel Time Premium Factor**

Travel Time	Score (\$)	Impact Effect	Normalized Travel Time Factor
<3	43,690	138	1.15
3 to 6	63,810	126	1.05
6 to 8	83,930	120	1.00
8 to 10	104,050	116	0.97
10+	124,170	114	0.95

## Assessments Calculation

Each parcel's assessment is calculated by multiplying the assessment rate by the SFE benefit factor (Table 7), fire hazard zone factor (Table 8) and travel time premium factor (Table 9):

### Example Calculations

**Case #1:** Single Family Residence in High Very Hazard Zone with a 3-6 minute Travel Time

Assessment Rate = Annual Base SFE Rate \* 1.000 (from table 7) \* 1.20 (from table 8)

\* 1.05 (from table 9) = 1.26 \* Annual Base SFE Rate

**Case #2:** Single Family Residence in Moderate Hazard Zone with an 10+ minute Travel Time

Assessment Rate = Annual Base SFE Rate \* 1.000 (from table 7) \* 1.10 (from table 8)

\* 0.95 (from table 9) = 1.045 \* Annual Base SFE Rate

**Case #3:** Commercial Property on 2 Acres in High Very Hazard Zone with a 3–6 minute Travel Time

Assessment Rate = Annual Base SFE Rate \* 7.4352 (from table 7) \* 2 acres\* 1.20 (from table 8) \* 1.05 (from table 9) = 18.7367 \* Annual Base SFE Rate

**Case #4:** Vacant Lot in a Moderate Hazard Zone with a <3 minute Travel Time

Assessment Rate = Annual Base SFE Rate \* .1339 (from table 7) \* 1.10 (from table 8)

\* 1.15 (from table 9) = 0.1694\* Annual Base SFE Rate

Annual Base SFE Rate = \$450.23 for 2023-24

### **Appeals of Assessments Levied to Property**

Any property owner who feels that the assessment levied on the subject property is in error as a result of incorrect information being used to apply the foregoing method of assessment or for any other reason, may file a written appeal with the West Plainfield FPD Fire Chief, or his or her designee. Any such appeal is limited to correction of an assessment during the then current fiscal year. Upon the filing of any such appeal, the Chief, or his or her designee, will promptly review the appeal and any information provided by the property owner. If the Chief, or his or her designee, finds that the assessment should be modified, the appropriate changes shall be made to the assessment roll. If any such changes are approved after the assessment roll has been filed with the County for collection, the Chief, or his or her designee, is authorized to refund to the property owner the amount of any approved reduction. Any dispute over the decision of the Chief, or his or her designee, shall be referred to the West Plainfield FPD Board of Directors; the decision of the Board shall be final.

### **Additional Background on Relative Benefit**

When property owners decide how to cast their ballot for a proposed assessment, each property owner should weigh the perceived value of the Services proposed to them and their property against the proposed cost of the assessment to their property. If property owners of a certain type of property are either opposed or in support of the assessment in much greater percentages than owners of other property types, this is an indication that, as a group, these property owners perceive that the proposed assessment has relatively higher or lower “utility” or value to their property relative to owners of other property types. One can also infer from these hypothetical ballot results, that the apportionment of benefit (and assessments) was too high or too low for that property type. In other words, property owners, by their balloting, ultimately indicate if they perceive the special benefits to their property to exceed the cost of the assessment, and, as a group, whether the determined level of benefit and proposed assessment (the benefit apportionment made by the Assessment Engineer) is consistent with the level of benefits perceived by the owners of their type of property relative to the owners of other types of property.

## Criteria and Policies

This sub-section describes the criteria that shall govern the expenditure of assessment funds and ensures equal levels of benefit for properties of similar type. The criteria established in this Report cannot be substantially modified; however, the Board may adopt additional criteria to further clarify certain criteria or policies established in this Report, or to establish additional criteria or policies that do not conflict with this Report.

## Duration of Assessment

It is proposed that the Assessment be levied for fiscal year 2023-24 and continued every year thereafter, so long as the risk of fire on property in the Assessment District remains in existence and West Plainfield FPD Fire requires funding from the Assessment for improved fire protection and suppression services. As noted previously, if the Assessment and the duration of the Assessment are approved by property owners in an assessment ballot proceeding, the Assessment can be imposed and continued annually after the Board approves an annually updated budget and rate for the Assessment. In addition, the Board must hold an annual public hearing to continue the Assessment.

## Assessment

**WHEREAS**, the Board of Commissioners of the West Plainfield Fire Protection District formed the Fire Protection and Emergency Response Services Assessment District and is proceeding with the proposed levy of assessments under California Government Code sections 50078 et seq. (the “Code”) and Article XIIIID of the California Constitution (the “Article”);

**WHEREAS**, the undersigned Engineer of Work has prepared and filed a report presenting an estimate of costs, a diagram for the Assessment District and an allocation of the estimated costs of the Services upon all assessable parcels within the Assessment District;

**NOW, THEREFORE**, the undersigned hereby recommends the following assessment to cover the estimated cost of said Services, including incidental costs.

The amount to be paid for said Services and the expense incidental thereto, to be paid by the Assessment District for the fiscal year 2023-24 is generally as follows:

**Table 10– Summary Cost Estimate**

FISCAL YEAR 2023-24 BUDGET	
Total for Servicing	\$905,462
Contribution from County Fire	(\$462,009)
Total Allowance for Collections	\$4,435
Total Fire Suppression & Protection Services Budget	\$447,888

An Assessment Diagram is hereto attached and made a part hereof showing the exterior boundaries of said Assessment District. The distinctive number of each parcel or lot of land in said Assessment District is its Assessor Parcel Number appearing on the Assessment Roll.

I do hereby assess and apportion said net amount of the cost and expenses of said Services, including the costs and expenses incident thereto, upon the parcels and lots of land within said Assessment District, in accordance with the special benefits to be received by each parcel or lot, from the Services, and more particularly set forth in the Cost Estimate and Method of Assessment hereto attached and by reference made a part hereof.



The assessment is subject to an annual adjustment tied to the Consumer Price Index-U for San Francisco-Oakland-Hayward as of December of each succeeding year (the "CPI"), with a maximum annual adjustment not to exceed 5%.

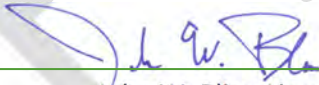
Each parcel or lot of land is described in the Assessment Roll by reference to its parcel number as shown on the Assessor's Maps of Yolo County for the fiscal year 2023-24. For a more particular description of said property, reference is hereby made to the deeds and maps on file and of record in the office of the County Recorder of Yolo County.

I hereby place opposite the Assessor Parcel Number for each parcel or lot within the Assessment Roll, the amount of the assessment for the fiscal year 2023-24 for each parcel or lot of land within the said Assessment District.

Dated: January 10, 2023

Engineer of Work

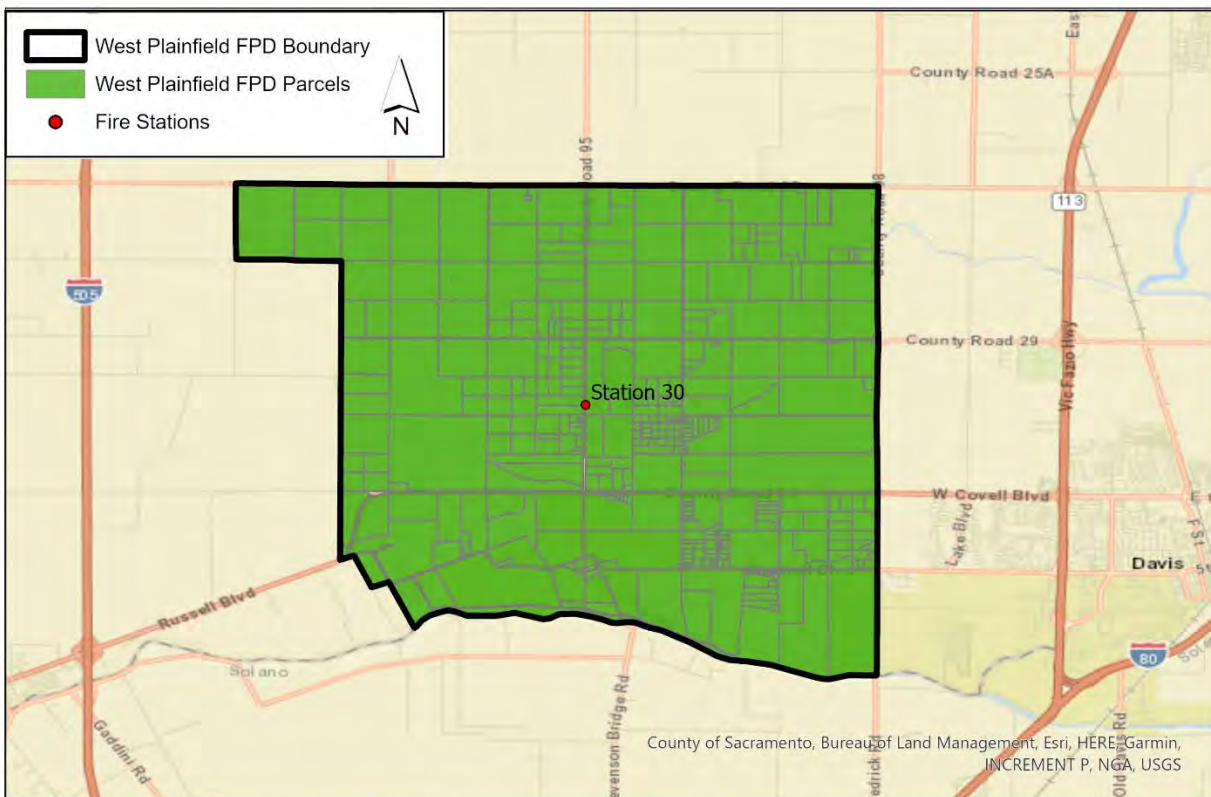


By  \_\_\_\_\_  
John W. Bliss, License  
No. C052091

## Assessment Diagram

The Assessment District includes all properties within the boundaries of the Fire Protection and Emergency Response Services District. The boundaries of the Assessment District are displayed on the following Assessment Diagram. The lines and dimensions of each lot or parcel within the Assessment District are those lines and dimensions as shown on the maps of the Assessor of Yolo County, and are incorporated herein by reference, and made a part of this Diagram and this Report.

DRAFT



FILED IN THE OFFICE OF THE FIRE CHIEF OF THE WEST PLAINFIELD FIRE PROTECTION DISTRICT, COUNTY OF YOLO, CALIFORNIA, THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023.

\_\_\_\_\_  
CLERK OF THE BOARD

RECORDED IN THE OFFICE OF THE FIRE CHIEF OF WEST PLAINFIELD FIRE PROTECTION DISTRICT, COUNTY OF YOLO, CALIFORNIA THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023.

\_\_\_\_\_  
CLERK OF THE BOARD

Note:  
REFERENCE IS HEREBY MADE TO THE MAPS AND DEEDS OF RECORD IN THE OFFICE OF THE ASSESSOR OF THE COUNTY OF YOLO FOR A DETAILED DESCRIPTION OF THE LINES AND DIMENSIONS OF ANY PARCEL SHOWN HEREIN. THOSE MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH PARCELS. EACH PARCEL IS IDENTIFIED IN SAID MAPS BY ITS DISTINCTIVE ASSESSOR'S PARCEL NUMBER.

AN ASSESSMENT WAS CONFIRMED AND LEVIED BY THE BOARD OF COMMISSIONERS OF WEST PLAINFIELD FIRE PROTECTION DISTRICT, COUNTY OF YOLO, ON THE LOTS, PIECES AND PARCELS OF LAND ON THIS ASSESSMENT DIAGRAM ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023 FOR THE FISCAL YEAR 2023-24 AND SAID ASSESSMENT DIAGRAM AND THE ASSESSMENT ROLL FOR SAID FISCAL YEAR WERE FILED IN THE OFFICE OF THE COUNTY AUDITOR OF THE COUNTY OF YOLO ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023. REFERENCE IS HEREBY MADE TO SAID RECORDED ASSESSMENT ROLL FOR THE EXACT AMOUNT OF EACH ASSESSMENT LEVIED AGAINST EACH PARCEL OF LAND.

\_\_\_\_\_  
CLERK OF THE BOARD

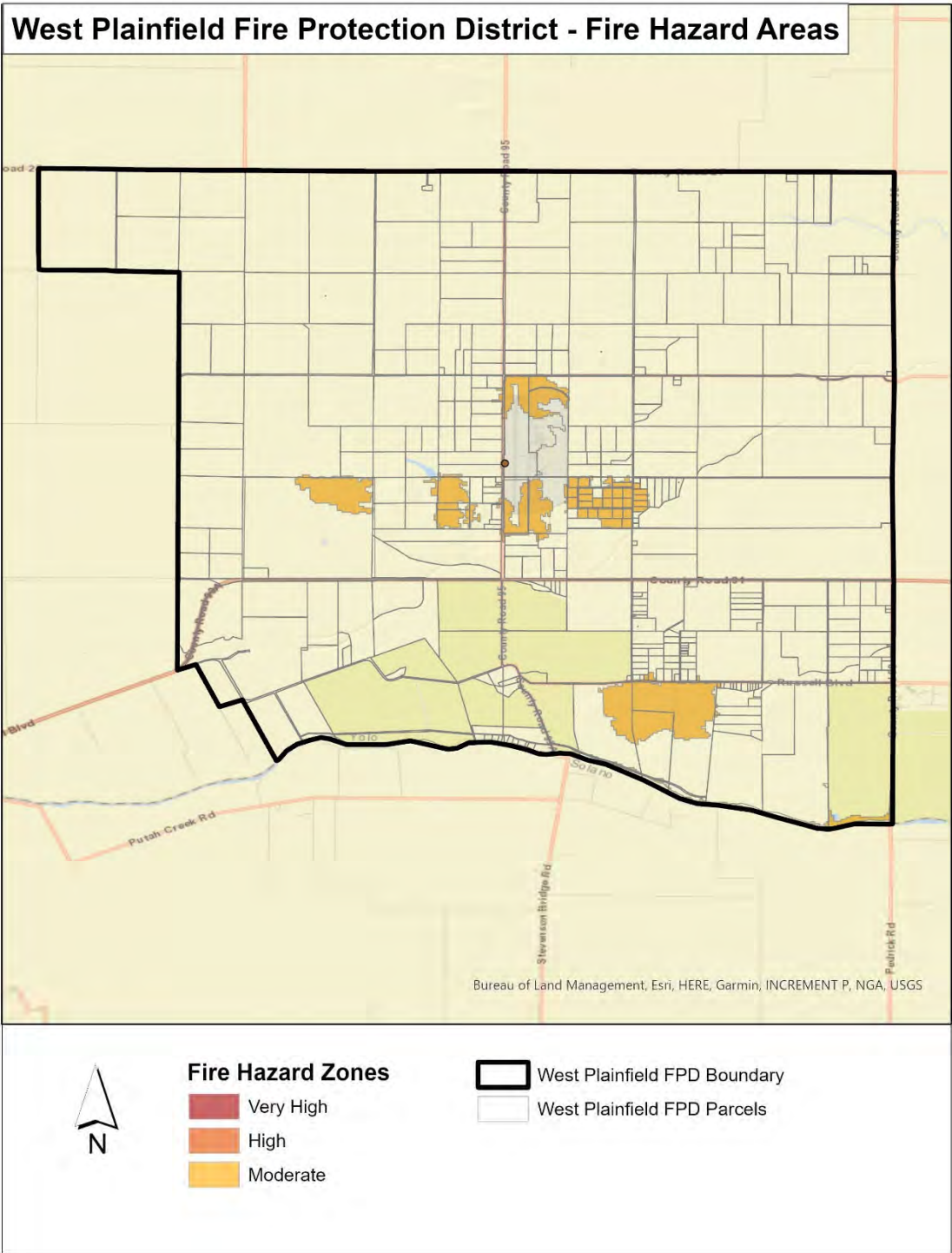
FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023 AT THE HOUR OF \_\_\_\_\_ O'CLOCK \_\_\_\_M. IN THE OFFICE OF THE COUNTY TAX COLLECTOR OF THE COUNTY OF YOLO, STATE OF CALIFORNIA, AT THE REQUEST OF THE BOARD OF WEST PLAINFIELD FIRE PROTECTION DISTRICT.

\_\_\_\_\_  
COUNTY TAX COLLECTOR, COUNTY OF YOLO

## West Plainfield Fire Protection District Fire Protection and Emergency Services Assessment Diagram

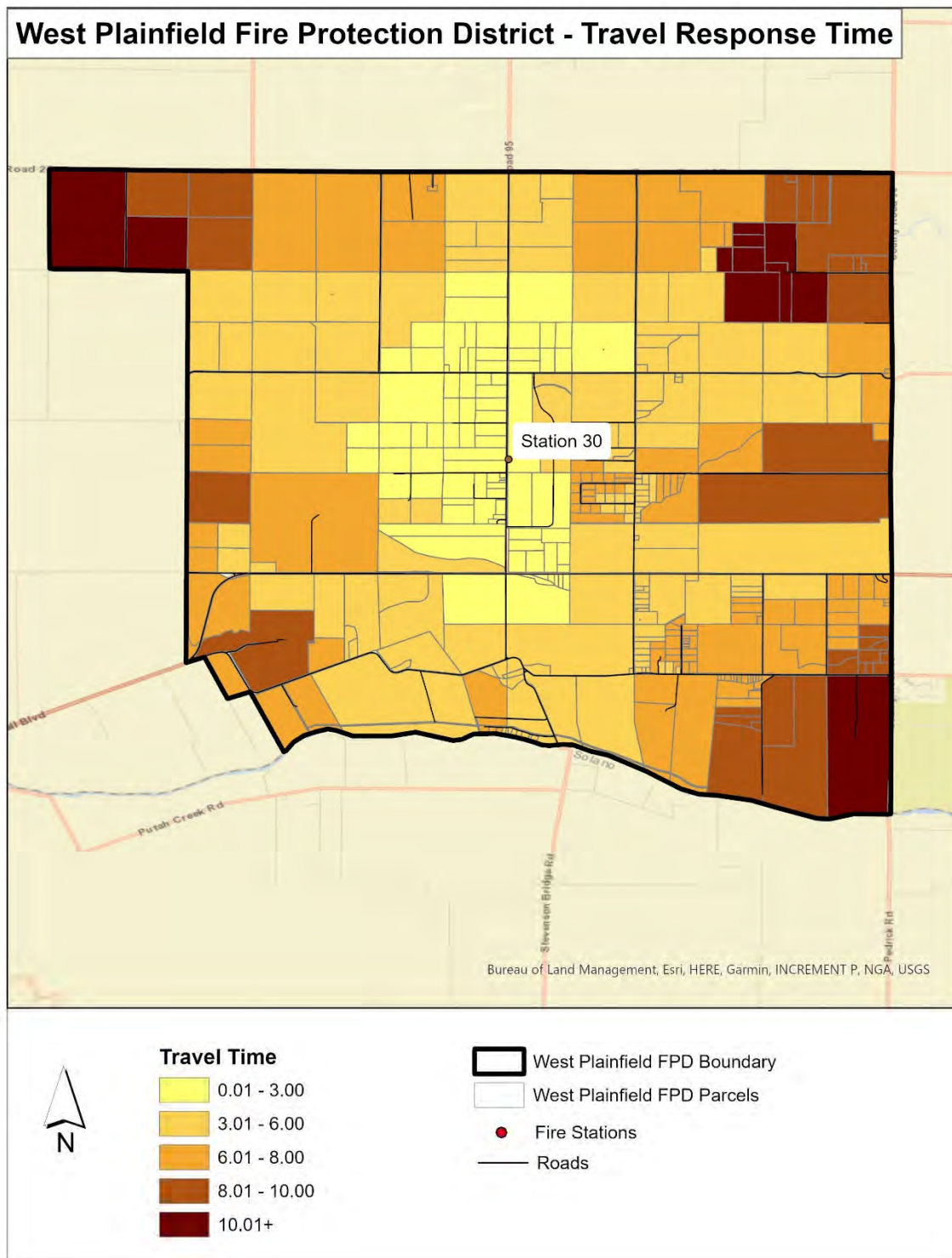
SCI Consulting Group  
4745 Mangels Blvd  
Fairfield, CA 94534  
707-430-4300

# Appendix A – Fire Hazard Areas Diagram





# Appendix B – Response Areas Travel Time Diagram



## Appendix C – Assessment Roll, Fiscal Year 2023-24

The Assessment Roll is made part of this report and is available for public inspection during normal office hours. Each lot or parcel listed on the Assessment Roll is shown and illustrated on the latest County Assessor records and these records are, by reference, made part of this Report. These records shall govern for all details concerning the description of the lots of parcels.

DRAFT

## End Notes

---

<sup>1</sup> Insurance Services Offices Inc. <http://www.rockwall.com/documents/fire/ISO.pdf>

<sup>2</sup> Institute for Business & Home Safety, "Protect Your Home Against Wildfire Damage," <http://www.ibhs.org/publications/view.asp?id=125>

<sup>3</sup> *ibid.*, p.2

DRAFT