



# Ross Valley Paramedic Authority

## MEMBER AGENCIES

Town of Corte Madera  
Town of Fairfax  
Kentfield Fire Dist.  
City of Larkspur  
County of Marin  
Town of Ross  
Town of San Anselmo  
Sleepy Hollow Fire Dist.

## BOARD OF DIRECTORS SPECIAL MEETING

Thursday, November 7, 2024, at 6:30 p.m.

300 Tamalpais Dr., Corte Madera, CA 94925

Corte Madera Town Hall Council Chambers

<https://us06web.zoom.us/j/83138148133?pwd=8s9EyAhAS0T8YYwcwx49BcssOEg3iQ.1>

Webinar ID: 831 3814 8133 - Passcode: 890029 - Phone: 1-669-900-6833

Pursuant Government Code section 54953(b), Boardmember Roger Meagor will participate in the meeting from a remote teleconference location: 2777 S. Kihei Rd., B103, Kihei, HI 96753. Any votes, should they occur, shall be by roll call.

Please be advised those participating in the meeting remotely via Zoom do so at their own risk. The RVPA regular Board meeting will not be cancelled if any technical problems occur during the meeting. Thank you.

1. Call to Order- Board Chair
2. Roll Call- Executive Officer
3. Pledge of Allegiance – Board Chair
4. Open Time for Public Input. Members of the Public have an opportunity to comment on items not on tonight's agenda. Each member of the public has two minutes in which to speak. Board members and staff are not able to engage in dialogue, answer questions or act on any of the items brought forward. At the Board's discretion, matters brought forth may be placed on a future agenda.
5. Review and approve Meeting Minutes:
  - a. **Staff recommendation:** Approve and adopt the meeting minutes from the October 7, 2024, Special RVPA Board meeting.
6. NEW BUSINESS
  - a. Presentation by Citygate Associates with Mr. Stewart Gary regarding EMS deployment and fiscal assessment issues, and possible direction to staff.
    - i. **Staff recommendation:** Staff recommends you receive the Report from Citygate and direct staff with any follow up items in preparation for the November 21, 2024, Special Meeting where formal Board action/motions will be requested.
7. OLD BUSINESS
  - a. No old business
8. Announcements/Future Agenda Items.
9. Adjournment.

Submitted, /s/ Jason Weber, Executive Officer



# Ross Valley Paramedic Authority

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County of Marin  
Town of Ross  
Town of San Anselmo  
Sleepy Hollow Fire Dist.

## Item 5: Meeting Minutes

ROSS VALLEY PARAMEDICS AUTHORITY  
Held a Special Meeting  
6:30 p.m. Thursday, October 7, 2024  
250 Doherty Drive, Larkspur, 94939

1. Call to Order- Chair Meagor called the meeting to order at 6:30 p.m.
2. Roll Call  
Board Member Attendance: Chair Meagor, Blash, Breen, Corbett, Finn, Robbins, Thomas  
Staff Present: Weber, Martin, Pomi, Longfellow
3. Pledge of Allegiance
4. Open Time for Public Input

There were no comments.

5. New Business
  - a. Procurement of 8-new LIFEPACK 35 cardiac monitors

Executive Officer Weber presented a staff report.

Chair Meagor opened the meeting to public comments.

There were no comments.

Chair Meagor closed the meeting to public comments.

M/s, Breen/Finn, motion to approve and authorize the Executive Officer to procure eight new LP35 Cardiac Monitors from Stryker utilizing a cooperative purchasing agreement through Sourcewell in an amount not to exceed \$485,000 and direct RVPA Finance Officer to transfer funds from the fund balances into the FY24-25 budget to execute the purchase is approved.  
Ayes: All

- b. RVPA Deployment Study Update including additional budget authority

Executive Officer Weber presented the staff report. He recommends the authorization of an additional \$40,000 to complete the study.

A Board member asked what the subcommittee would be doing. Executive Officer Weber stated they would serve as a sounding board and prior to making a presentation to the full Board.

Board member Robbins stated it would be helpful if Board members could meet with the community they represent to obtain input. Executive Officer Weber agreed that was important but asked the Board to be mindful of the time that might take.

Board member Finn favored the continuation of the subcommittee and its use by the Board as a resource. Some of the issues are a bit discreet while others are ready to be addressed by the Board.

A Board member wondered if the subcommittee would be viewed as extraneous. It might make more sense, politically, to keep the process at the Board level.

Chair Meagor opened the meeting to public comments.

Ms. Christa Johnson, Town Manager of Ross, asked when the subcommittee first met and if it consists of representatives from the Town of Corte Madera and the City of Larkspur. The Town of Ross would like to see some closure on this issue and is concerned about the lack of progress being made. These are very important issues that affect the future of emergency medical services in the Ross Valley.

Chair Meagor closed the meeting to public comments.

Executive Officer Weber explained the timeline of the process and what has occurred. He was confident they could meet the deadline.

Legal Counsel Longfellow explained the three options for the Board to consider: 1) Pause the subcommittee; 2) Open the subcommittee meetings to the public; 3) Keep the subcommittee as is with the option of adding another member. She discussed the next steps.

M/s, Robbins/Thomas, motion to allocate an additional \$40,000 to complete the deployment study and to have the subcommittee paused once material information are brought to the full board.

Ayes: All

- c. Second Amendment Lease Agreement with the Town of Ross and Ross Valley Fire Department for the RVPA ambulance quarters at Station 18 in Ross.

Executive Officer Weber presented a staff report.

Chair Meagor opened the meeting to public comments.

There were no comments.

Chair Meagor closed the meeting to public comments.

M/s, Finn/Corbett, motion to authorize the Executive Officer to execute the Second Amendment Lease Agreement with the Town of Ross and Ross Valley Fire Department for the RVPA ambulance quarters at Station 18 in Ross.

Ayes: All

6. Old Business

There were no Old Business Items

7. Announcements/Future Agenda Items

There were no announcements or requests for future agenda items.

8. Adjournment- Chair Meagor adjourned the meeting at 7:01p.m.

Respectfully submitted,

Toni DeFrancis,  
Recording Secretary



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Kentfield Fire Dist.  
City of Larkspur  
County of Marin  
Town of Ross  
Town of San Anselmo  
Sleepy Hollow Fire Dist.

## **Item 6: New Business**

# RVPA Staff Report

**TO:** RVPA Board

**FROM:** Jason Weber, Executive Officer

**SUBJECT:** Presentation of Citygate's EMS Deployment Governance and Fiscal Review of RVPA

**MEETING DATE:** November 7, 2024

## **BACKGROUND:**

Over the last year your Board was asked to consider several policy options with both short- and long-term impacts. The first is surrounding the lease with the Town of Ross, including terms and conditions to continue housing Medic 18 in the Town. The second is a request from the City of Larkspur Manager to expand the scope of the proposed study to consider changes in the contractual jurisdictions and restructuring of the governance model for ambulance and paramedic services, with Larkspur and Corte Madera leaving RVPA.

## **DISCUSSION:**

At your March 2024 meeting, your Board directed staff to engage the services of Citygate to conduct a review and draft a report regarding RVPA's EMS deployment, fiscal structures, and governance (Report). The Board also directed the retention of special legal counsel from the firm of Wright, L'Estrange & Ergastolo. Over the last seven months staff has worked with Citygate and special counsel to develop the attached Report and today's presentation.

The presentation and subsequent question and answer setting, as well as public comment, will give your Board the opportunity to consider the information presented, speak directly with Citygate Public Safety Principal Stewart Gary, specialized legal Counsel Andrew Schouten, General Counsel Emily Longfellow, and staff. Due to the complexity of the issues and detail of the report, staff does not seek any formal decisions from the Board at this meeting.

As outlined in the Report, Citygate and staff propose next steps for the Board as follows:

Near term:

1. Review the Report and ask questions in preparation for November 21, 2024, meeting.

2. Reach agreement to stop consideration to separate RVPA into two parts and document in revised JPA Agreement.
3. Reach agreement with the Town of Ross to continue housing Medic 18 in its current location the Town of Ross.
4. Revise and modernize the JPA Agreement to clearly define policies, fiscal structure, and long-term stability, creating equitable cost recovery for ambulance host agencies and preserving excellent emergency medical services within the greater Ross Valley.

Longer term:

5. Refine as needed Capital Equipment replacement plans and multi-year cost allocations. Provide for an excess revenue true-up calculation to member agencies if reserves are fully funded.
6. Design a more layered, robust backup ambulance plan.
7. Monitor response performance against adopted goals.

Staff will return to your Board on November 21, 2024, with policy questions that need Board action, including the aforementioned near and long-term items. Specifically, the Ross lease and appropriately modernizing the JPA the JPA policies and the JPA fiscal structure around stability and preserving the excellent EMS delivery our constituents and members have enjoyed for over 40years.

**RECOMMENDATION:**

Staff recommends you receive the Report from Citygate and direct staff with any follow up items in preparation for the November 21, 2024, Special Meeting where formal Board action/motions will be requested.

**FISCAL IMPACT:**

Receipt of this report has no immediate fiscal impact.

Respectfully submitted,

Jason Weber, Executive Officer

Attachments:

- a. Citygate EMS Deployment, Fiscal and Governance Review





**CITYGATE**  
FIRE & EMS

# EMS DEPLOYMENT AND FISCAL ASSESSMENT REVIEW

## ROSS VALLEY PARAMEDIC AUTHORITY

### NOVEMBER 1, 2024



**CITYGATE**  
FIRE & EMS

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**ROSS VALLEY**  
Paramedic Authority

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**Ross Valley Paramedic Authority**  
EMS Deployment and Fiscal Assessment Review

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**Attachments**

**Attachment A—RVPA Response Zones**

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## SECTION 1—EXECUTIVE SUMMARY

The Ross Valley Paramedic Authority (RVPA) retained Citygate Associates, LLC (Citygate) to conduct a review of the agency’s EMS deployment, fiscal structures, and governance. In brief, Citygate’s assessment of RVPA governance included the regulations under which RVPA operates and what choices the partners might have should they choose to organize differently. Together, all components of Citygate’s analysis comprise a very detailed review by which RVPA can manage immediate and longer-term program issues.

This report is presented in seven sections: this Executive Summary; Agency Background; Incident Data Analysis; RVPA Structural / Relationship Analysis; RVPA Fiscal Analysis; RVPA Separation (Scenario) Analysis; and finally, a comprehensive and sequential list of all findings and recommendations. Throughout this report, Citygate makes key findings and, where appropriate, specific action item recommendations. Overall, there are **22 key findings** and **11 actionable recommendations**.

### 1.1 POLICY CHOICES FRAMEWORK

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In the United States, the provision of emergency services is a local control issue. Thus, the level of services provided, and any resultant cost, is a local policy choice. While over the decades in California, there has been a large increase in safety regulations related to *fire-related* services, the regulatory environment as it relates to *ambulance* services is *very different*. Citygate highlights this distinction as RVPA and fire agency elected officials are very experienced in day-to-day fire services and local control. However, while the provision of ambulance services may be seen today as a longstanding operation under the supervision of the RVPA Board of Directors and partner agencies, it is **not**.

As Section 6 of this study will explain, Local Emergency Medical Service Agencies (LEMSA) including Marin County EMS have authority under the California Health and Safety Code (§§ 1797.85 and 1797.224) to establish exclusive ambulance operating areas—which restrict operations within an area to one or more designated emergency ambulance providers. RVPA operates in a **non**-exclusive operating area (EOA) that was never placed out to competitive bid per statutes.

Marin County EMS designated Service Area C as a non-exclusive service area with RVPA as the designated provider for the area. Given that, long ago, ambulance transport was not economically viable to be put out to bid in the non-exclusive areas of Marin County, it is apparent that County EMS allowed the RVPA to operate as it was an *integrated sole provider* that provided stable services within the County’s revenue structures. Changing this relationship is the sole regulatory purview of the County EMS agency.

## 1.2 EVALUATION SUMMARY

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In brief, RVPA provides quality paramedic ambulance and first responder services meeting best practices for patient care. Over the years, the structural relationship between the partners has evolved into multiple, overlapping Joint Powers Authorities (JPAs) and contracts for services. There is a significant need for the agreements and fiscal operations to be updated, integrated, and operated with increased transparency under fiscal best practices as they relate to local government operations. There are upcoming operational challenges to be addressed given ever-increasing ambulance service requests. Services provided are *very good*; however, the structures have become far too layered due to the patchwork of decisions made over several decades. It is time to step back, reassess the situation, adjust, and realign business operations to better prepare the partners and the Greater Ross Valley for future challenges.

## 1.3 CORE REVIEW ISSUES – SUMMARY FINDINGS

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Citygate’s scope of work included addressing several questions which can be viewed across the themes summarized within this subsection. Our technical findings, recommendations, and opinions cover the questions asked in detail.

### 1.3.1 Incident Workload and Medic 18 Location

- ◆ Response times are in compliance with best practices for a suburban set of communities that are dispersed across a topography that is difficult to serve.
- ◆ At peak hours of the day, the capacity of the two ambulances is strained, and an improved backup system should be designed.
- ◆ Leave Medic 18 in the Town of Ross as it is economically and operationally well positioned in that location. Any movement from Ross generates these impacts:
  - Moving it west creates too much volume to be managed by Medic 14.
  - Moving it west also removes too much transport revenue from RVPA for Medic 18, destabilizing RVPA’s fiscal solvency.
  - Central Marin Fire Authority should not move the Medic 14 ambulance north if doing so shifts transport revenue area from RVPA Medic 18. If it is moved, it should not have a negative revenue impact on Medic 18.
  - Moving Medic 18 to the east places it too far from the western communities and increases usage on County Fire Medic 96.
- ◆ There is no policy regarding how and when to increase transport capacity.



### 1.3.2 JPA Organization

- ◆ RVPA has too many separate agreements to manage, making common governance and fiscal oversight very cumbersome. The shared governance contracts all sit “on top of each other.”
- ◆ The JPA is more of a cluster of contracts than a typical JPA under a single governance board, managing all revenues and expenditures for the common operational goal.
- ◆ The JPA rules are inadequate to guide who governs what, and how exactly all operating to revenues expense decisions are made.

### 1.3.3 JPA Fiscal Structures

- ◆ The overall JPA agreement, and the JPA to other agency contracts, combined and matched to the available fiscal documents do not define items such as:
  - How rent is handled by the parties for both medic units.
  - How rent is calculated (other than a legacy “ask”).
  - The holdback of Corte Madera revenues lacks transparency to tie to what their actual, complete expenditures are other than a simplistic statement of “costs exceed revenues.”
- ◆ If reserves exceed need, there is not a clear formula to return the excess to the partners.
- ◆ There is no written policy detailing what the ambulance deployment boundaries to revenue collection should be.
- ◆ Given fragmented agreements; and incomplete policies, terms, and formulas—combined with the separation of all revenues to expenditures—the JPA Board would have difficulty simply explaining to the taxpayers how RVPA is fiscally responsible.
- ◆ In Citygate’s experience, RVPA is overly complicated for a small services operation.

### 1.3.4 Implications of Agency Separation(s)

- ◆ RVPA is operating a paramedic ambulance system under the control of the County EMS agency.

- ◆ Any change to operations and resultant fiscal stability would require approval from County EMS and, in some cases, the Board of Supervisors.
- ◆ It is more than likely that County EMS would see separation of the partners as being unstable and thus trigger a new, statutory-compliant process for designating County Service Area C as an exclusive operating area and designating an exclusive ambulance services provider within RVPA boundaries.

#### **1.4 CORE REVIEW ISSUES – SUMMARY RECOMMENDATIONS**

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1. The JPA should be restored to a singular, unified operation for all revenues and expenditures.
2. The JPA agreement needs a robust overhaul to define how all operating and economic terms are handled within the singular control of the JPA Board for the common good.
3. The current ambulance deployment system is nearing capacity and should not rely on mutual aid from either County Fire or bayside fire department partners. A more robust backup plan must be designed.
4. To protect all of its options for decades into the future, the new Town of Ross facility should provide the necessary spaces for a minimum two-person ambulance or paramedic/firefighter squad.
5. Any separation of who provides the two ambulances in County Service Area C (RVPA) should be avoided. RVPA is providing capable paramedic services and fragmentation only will lead to disruption and loss of local control.

#### **1.5 SUGGESTED NEXT STEPS**

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Based on our comprehensive analysis, Citygate offers the following key decision steps:

##### **1.5.1 Near Term**

- ◆ Review and absorb the content, findings, and recommendations of this report.
- ◆ Create a mutual understanding with the Town of Ross to continue to deploy Medic 18 in the Town.
- ◆ Reach written agreement(s) to stop any further consideration regarding the separation of RVPA into two parts.

### 1.5.2 Longer Term

- ◆ Update the RVPA agreement to clearly state operating policies and gain one set of revenues to expenditures with Corte Madera / Central Marin Fire Authority.
- ◆ Refine as needed Capital Equipment replacement plans and multi-year cost allocations. Provide for an excess revenue true-up calculation to member agencies if reserves are fully funded.
- ◆ Design a more layered, robust backup ambulance plan.
- ◆ Monitor response performance against adopted goals.

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## SECTION 2—AGENCY BACKGROUND

### 2.1 HOW THE STUDY WAS CONDUCTED

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Citygate utilized multiple sources to gather, understand, and model information about RVPA services, partner agencies, governance, and fiscal structures. Citygate requested a large amount of relevant background data and information to better understand current costs, service levels, the history of service level decisions, and other prior studies.

In virtual and on-site meetings, Citygate conducted focused interviews with RVPA leadership and other key project stakeholders. Citygate reviewed demographic information related to the RVPA’s service area, including the potential for future growth and development. Citygate also obtained map and electronic response data from which to model current and projected first responder paramedic and ambulance deployment, with the goal to identify the location(s) of stations and the number of personnel required to best serve RVPA’s service area.

### 2.2 ROSS VALLEY PARAMEDIC AUTHORITY DESCRIPTION AND HISTORY

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RVPA is an eight-member Joint Powers Authority (JPA) formed in 1982 as authorized by the California Joint Exercise of Powers Act (Government Code Sections 6500, et seq.), which expressly permits the parties to contract for such services with each other. The joint powers agreement is between the Town of Corte Madera, the City of Larkspur, the Town of Ross, the Town of San Anselmo, the Town of Fairfax, the Kentfield Fire Protection District, the Sleepy Hollow Fire Protection District, and the County of Marin for the purpose of having a single, consolidated agency provide paramedic/life support services throughout the Ross Valley area and across jurisdictional boundaries.

On August 17, 1999, RVPA and the County of Marin entered a contract entitled “Agreement Advanced and Basic Life Support Service.” Under this agreement, Marin County contracted with RVPA for RVPA to provide basic and advanced life support services within a designated service area consistent with *minimum requirements promulgated by the County*. The foregoing 1999 agreement has continuously been in full force and effect from 1999 to the present. The County and RVPA will continue operating under this 1999 agreement for the foreseeable future on a year-to-year basis by mutual consent of the parties. The original model entailed the JPA employing paramedics directly and included a “Paramedic Chief.” This model was replaced within a few years by a contract with Marin County Fire to staff the RVPA-owned ambulance—a contract relationship which still exists today.

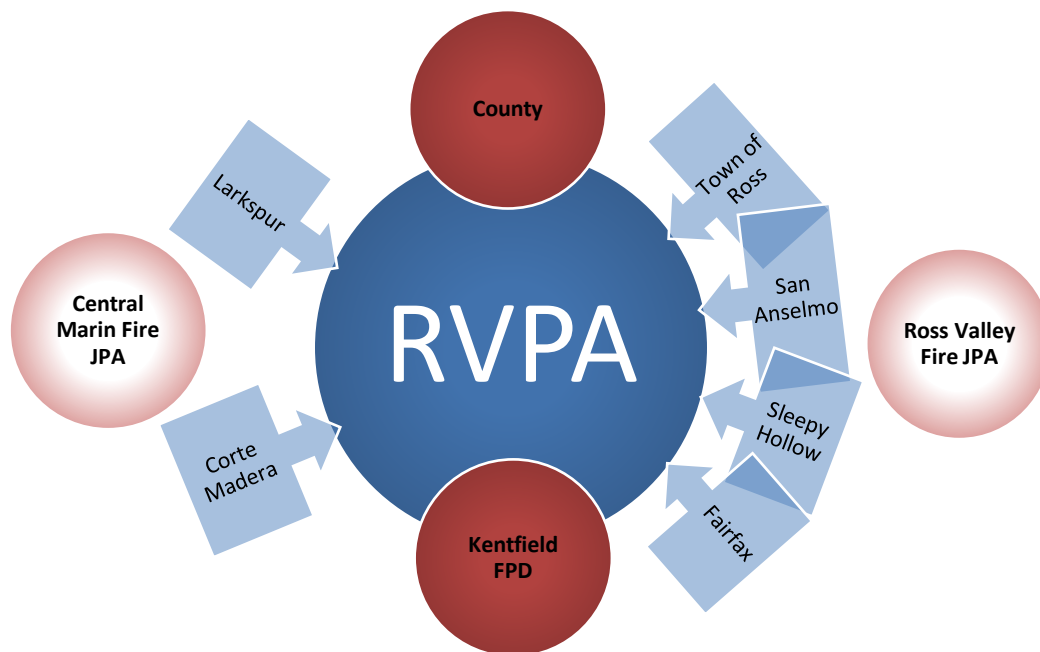
At present, RVPA fiscally supports eight first responder engine companies. Five are Advanced Life Support (ALS) paramedic-staffed, and three are Basic Life Support (BLS) EMT-staffed. For patient transport, RVPA provisions two paramedic Ambulances. Due to the mergers of some of

the community-based fire departments over the years, today, there are three fire agencies, two of which are themselves JPAs—Central Marin Fire Authority and Ross Valley Fire—with the third agency being the Kentfield Fire Protection District. Finally, there is one County Service Area (CSA 27) that is also served via the County-RVPA contract.

RVPA is funded through two principal sources: (1) transport revenue and (2) property tax assessments, which are placed on a ballot by all eight members individually every four years.

The following figure provides a visualization of RVPA’s partner structure and composition.

**Figure 1—Ross Valley Paramedic Authority Composition**



## 2.2.1 Current Unit Daily Staffing Profile

### *Central Marin Fire*

- ◆ E13 – 3 personnel **ALS**
- ◆ M14 – 2 personnel **ALS Ambulance**
- ◆ E15 – 3 personnel **ALS**
- ◆ E16 – 3 Personnel **ALS**

***Kentfield Fire***

- ◆ E17 – 3 personnel **BLS**

***RVPA Ambulance***

- ◆ **M18** – 2 personnel **ALS Ambulance**

***Ross Valley Fire***

- ◆ E18 – 2 personnel **BLS**
- ◆ E19 – 2 personnel **BLS**
- ◆ E20 – 2 personnel **ALS**
- ◆ E21 – 2 personnel **ALS**

***Marin County Fire***

- ◆ **M96** – 2 personnel **ALS Ambulance**

**2.2.2 Current Population Estimates**

The following table shows current population estimates for RVPA-associated communities in the RVPA service area.

**Table 1—RVPA Fire Station Area Population Estimates**

Station Area	Population
<b>Corte Madera</b>	9,065
<b>Larkspur</b>	11,978
<b>Town of Ross</b>	2,415
<b>San Anselmo</b>	12,336
<b>Sleepy Hollow</b>	2,411
<b>Fairfax</b>	7,441
<b>Kentfield Fire</b>	6,544
<b>Total</b>	<b>52,190</b>

County of Marin CSA 27 – no official estimate

### 2.2.3 Housing Element Potential Growth (2023–2031)

- ◆ **Fairfax** – 600 homes
- ◆ **San Anselmo** – 800 homes
- ◆ **Ross** – 111 homes
- ◆ **Larkspur** – 979 homes
- ◆ **Corte Madera** – 725 homes

#### *Unincorporated*

- ◆ **Kentfield** – 211 homes
- ◆ **Sleepy Hollow** – 54 homes
- ◆ **CSA 27** – 330 homes

While the above numbers are from community and regional planning sources, given the topography and zoning challenges in the RVPA service area, Citygate believes these estimates are very optimistic growth numbers that will likely not be fully realized.

Even if all the above units were to be built, totaling 3,810 units—and if, on average, they contained 2.3 people per dwelling unit—the resultant increase in service area population of 8,763 would only add approximately **51 EMS incidents per year** at the current rate of EMS incidents per 1,000 population, or .14 per day. This would represent a minor impact to RVPA EMS services.



## SECTION 3—INCIDENT DATA ANALYSIS

This study was tasked to conduct an in-depth analysis of the incident workloads on RVPA ambulances and, from that analysis, review locations, capacity, and the resultant impacts to revenues. Among other metrics, this section covers—in detail—multiple measures of volume, time-of-day usage, and response times. In the delivery of first responder paramedic fire engines and transport ambulances, no single measure tells the entire story. Multiple metrics must be combined into a composite picture of the service need. This forms the foundation upon which to understand the cost of services and, in the case of RVPA, leads to the following question: *Does the combination of transport revenues and property tax assessments adequately fund the needed operation?*

### 3.1 DATASET IDENTIFICATION AND INCIDENT COUNT MEASURES

The Marin County Sheriff’s Office provided computer-aided dispatch (CAD) data to Citygate. From the data received, Citygate built two Microsoft Excel tables consisting of “Incidents” and “Apparatus Response Times” for data year 2023. Due to the data received being Countywide CAD data, the record set received by Citygate was reduced to only those incidents occurring within the RVPA JPA “beats” (so named in CAD), or fire station response areas, as shown in the following table.

**Table 2—RVPA Fire Station Area IDs and Local Area Name**

<b>Fire Station Response Areas</b>	<b>13</b>	Corte Madera
	<b>15</b>	Larkspur
	<b>16</b>	Larkspur
	<b>17</b>	Kentfield
	<b>18</b>	Ross
	<b>19</b>	San Anselmo
	<b>20</b>	San Anselmo
	<b>21</b>	Fairfax

The record set was further reduced to only those fire agency apparatus unit numbers assigned within the JPA. Due to reserve units being seen by CAD as “primary” units, reserve apparatus ID responses were then folded into primary resource IDs. This merging resulted in a list of active resource IDs, as shown in the following table.

**Table 3—RVPA Active Apparatus Resources**

Active Apparatus
M14
M18
M96
E13
E15
E16
E17
E18
E19
E20
E21

With the stations reduced to *only* RVPA stations involving JPA response apparatus, the following table reflects *adjusted* 2023 incident counts.

**Note:** While the following tables that count responses include Medic 96 (the County Fire unit coming from the Woodacre station), it responds mostly as a mutual aid backfill unit to RVPA incidents, and only accounts for 3.7 percent of all responses.

**Table 4—All Incident Types by Station Area (2023)**

Station	Total
13	1,030
15	919
16	1,693
17	1,394
18	252
19	1,046
20	550
21	1,083
<b>Total</b>	<b>7,967</b>

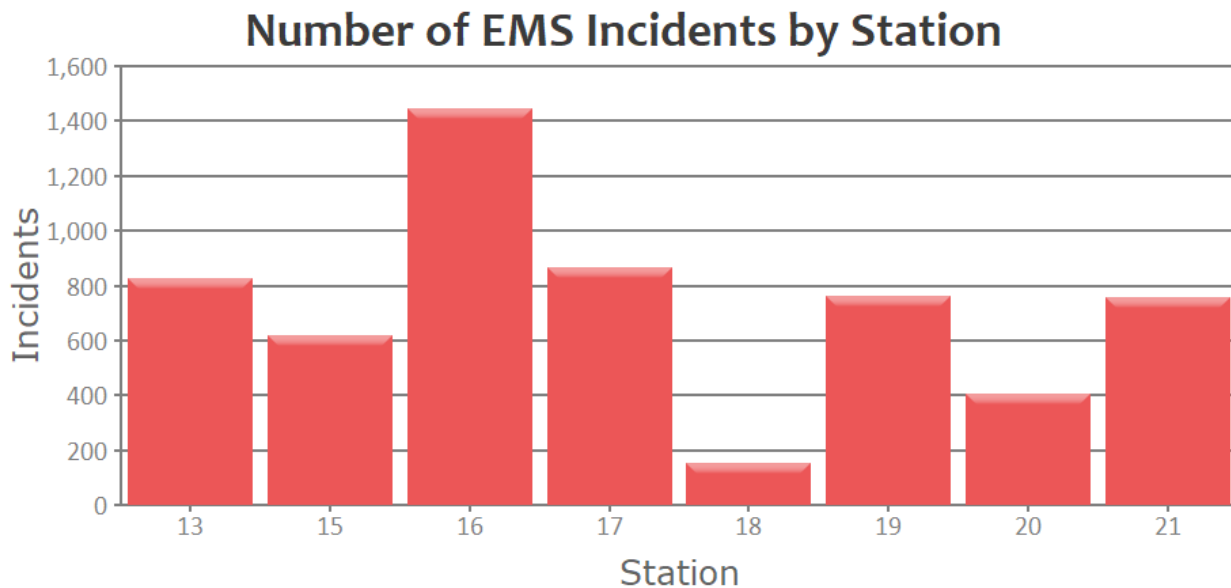
The following table counts EMS incidents by station area when all JPA incidents are further reduced to only EMS incidents.

**Table 5—Number of EMS Incidents by Station Area (2023)**

Station	Incidents	Percent of Total
13	829	14.18%
15	617	10.56%
16	1,445	24.72%
17	867	14.83%
18	155	2.65%
19	765	13.09%
20	407	6.96%
21	760	13.00%
<b>Total</b>	<b>5,845</b>	<b>100%</b>

The following figure shows the same EMS incident counts by volume graph.

**Figure 2—Number of EMS Incidents by Station Area (2023)**



This following set of tables breaks down EMS demand by fire department, agency ID, and community, respectively.

**Table 6—EMS Demand by Fire Department (2023)**

Fire Department	Incidents
Central Marin	2,891
Ross Valley Fire	2,087
Kentfield Fire Dist.	867
<b>Total</b>	<b>5,845</b>

**Table 7—EMS Demand by Community (2023)**

Community	Incidents
Larkspur/Greenbrae	1,445
Unincorporated Kentfield	867
Corte Madera	829
San Anselmo	765
Fairfax	760
Larkspur	617
San Anselmo/Sleepy Hollow	407
Ross	155
<b>Total</b>	<b>5,845</b>

The following set of tables quantifies the demand for only paramedic ambulance responses by Fire Department / Community. As mentioned previously, the two following tables count incidents for Medic 96 (the County Fire unit coming from the Woodacre station), which responds mostly as a mutual aid backfill unit to RVPA incidents, and only accounts for 3.7 percent of all responses.

**Table 8—Ambulance Demand by Fire Department (2023)**

Fire Department	M14	M18	M96	Total	Percent
Central Marin	1,809	584	2	2,395	54%
Kentfield Fire Dist.	127	486	5	618	14%
Ross Valley Fire	159	1,124	159	1,442	32%
<b>Total</b>	<b>2,095</b>	<b>2,194</b>	<b>166</b>	<b>4,455</b>	<b>100%</b>

**Table 9—Ambulance Demand by Community (2023)**

Community	Medic ID				Percent
	M14	M18	M96	Total	
Corte Madera	603	91	1	695	16%
Fairfax	17	428	102	547	12%
Larkspur	437	56	0	493	11%
Larkspur/Greenbrae	769	437	1	1,207	27%
Ross	27	68	1	96	2%
San Anselmo	104	382	14	500	11%
San Anselmo / Sleepy Hollow	11	246	42	299	7%
Unincorporated Kentfield	127	486	5	618	14%
<b>Total</b>	<b>2,095</b>	<b>2,194</b>	<b>166</b>	<b>4,455</b>	<b>100%</b>

**Finding #1:** The volume of ambulance and paramedic first responder engine need varies significantly by population density.

**Finding #2:** When ambulance demand is compared by fire departments providing response—Ross Valley Fire JPA and Kentfield FPD at a combined 46 percent versus Central Marin Fire Authority at 54 percent—there is 8 percent more ambulance demand in the Central Marin Fire Service Area.

### **3.2 INCIDENT DEMAND PATTERNS**

The following table shows RVPA total EMS activity by hour of the day and day of the week for 2023. Green areas have the least activity, while red areas have the heaviest activity. The greatest incident activity is in the late morning through early-evening hours. This is a very typical pattern following the population’s more active waking hours.

**Table 10—EMS Incident County by Hour by Day of Week (2023)**

Hour	1 Mon	2 Tue	3 Wed	4 Thu	5 Fri	6 Sat	7 Sun	Total
00:00-00:59	21	13	15	16	18	19	15	117
01:00-01:59	12	15	18	9	11	27	15	107
02:00-02:59	16	10	11	22	24	19	14	116
03:00-03:59	7	13	13	10	13	11	18	85
04:00-04:59	18	11	14	13	17	16	22	111
05:00-05:59	13	10	15	23	21	13	7	102
06:00-06:59	26	20	25	15	25	14	14	139
07:00-07:59	31	34	22	32	32	21	25	197
08:00-08:59	33	47	38	38	39	39	42	276
09:00-09:59	49	49	62	48	67	41	41	357
10:00-10:59	42	49	61	47	64	48	48	359
11:00-11:59	53	52	54	58	55	40	44	356
12:00-12:59	47	49	51	52	63	59	46	367
13:00-13:59	55	46	48	58	60	53	41	361
14:00-14:59	44	57	57	57	44	52	45	356
15:00-15:59	36	42	53	52	56	40	48	327
16:00-16:59	38	56	42	60	40	40	39	315
17:00-17:59	53	38	59	46	48	35	37	316
18:00-18:59	56	44	38	61	48	56	31	334
19:00-19:59	43	35	42	29	39	41	53	282
20:00-20:59	38	34	41	31	47	47	54	292
21:00-21:59	31	27	28	28	37	36	35	222
22:00-22:59	29	21	21	33	21	32	24	181
23:00-23:59	22	20	23	28	38	23	16	170
<b>Total</b>	<b>813</b>	<b>792</b>	<b>851</b>	<b>866</b>	<b>927</b>	<b>822</b>	<b>774</b>	<b>5,845</b>

**Finding #3:** Across the RVPA, the peak-demand hours for ambulances is 9:00 am to 7:00 pm, six days per week. This is an important factor to track when there are only two primary ambulances in the central and eastern sections of RVPA’s service area.

### 3.2.1 Incident Counts by EMS Incident Types

The following table shows the activity rankings of EMS incidents by dispatch CAD incident type. “AM 1” represents the period from 10:00 am to 5:59 am, “AM 2” represents the period from 6:00 am to 11:59 am, “PM 1” represents the period from 12:00 pm to 5:59 pm, and “PM 2” represents the period from 6:00 pm to 11:59 pm. There are some fire/rescue incidents in this list, but they required the response of an ambulance, so for workload demand service time, they are included.

**Table 11—Number of EMS Incidents All Types (2023)**

EMS Incident Type	AM 1	AM 2	PM 1	PM 2	Total
Falls	136	336	419	262	1,153
Sick Person	77	237	298	168	780
Unconscious/Fainting or Near Fainting	33	102	156	138	429
Unknown Prob / Person Down / Alarm	28	86	98	77	289
Breathing Problems	42	81	92	63	278
Chest Pain	47	74	85	65	271
Traffic / Motor Vehicle Accident	9	60	91	56	216
Stroke/CVA	21	50	63	49	183
Convulsions/Seizures	14	50	58	24	146
Hemorrhage/Bleeding	14	45	37	49	145
Abdominal Pain	22	26	28	46	122
Heart Problem	13	27	47	25	112
Overdose/Poisoning/Ingestion	13	16	25	39	93
Psychiatric/Behavioral Problem	8	14	24	34	80
Traumatic Injuries – Specific	3	26	34	14	77
Cardiac/Respiratory Arrest	11	21	25	15	72
Traumatic Injury	7	22	29	10	68
Back Pain	8	20	21	16	65
Assault or Rape	9	14	17	24	64
Diabetic Problem	4	15	14	21	54
Extrication Traffic / Motor Vehicle Accident	4	8	15	14	41
Allergic Reaction	5	9	18	9	41
Vehicle Vs Ped		12	13	5	30
Interface/Helicopter Transfer	2	6	13	8	29
Choking	1	2	13	10	26
Confirm Death – Cardiac Arrest		9	8	5	22

EMS Incident Type	AM 1	AM 2	PM 1	PM 2	Total
Assault/Rape	2	3	8	9	22
Vehicle Accident	1	4	9	3	17
Headache	3	5	5	2	15
Interfacility Transfer	3	4	3	2	12
Pregnancy/Birth/Miscarriage	1	1	2	2	6
Heat/Cold Exposure	2	1	3		6
Eye Problems		1	3	1	5
Drowning			4		4
Stabbing / Gunshot Wound		1	2		3
Carbon Monoxide / Inhalation Hazard	1		2		3
Animal Bites			2	1	3
Inaccessible Inc / Entrapment			1	1	2
Unknown Problem	1				1
Burns				1	1

From the above list of incident types (as reported to 9-1-1), it is apparent in today’s healthcare system that not all requests for an ambulance represent life-threatening emergencies. Such incidents and responses do, however, take an ambulance out of service for the duration of the incident. The ambulance system is like life insurance in that the system must have stand-by capacity for low-volume, high-risk events. A major consideration for any small ambulance operation is how to handle the high-volume, less acute incidents and still ensure that a resource is available should a severe incident also occur. This is the called the rate of simultaneous demand, which is measured in the following subsection.

### **3.3 SIMULTANEOUS INCIDENT DEMAND AND UNIT WORKLOAD PATTERNS**

#### **3.3.1 Simultaneous Analysis – All EMS Incidents**

Simultaneous incidents occur when other incidents are underway at the time a new incident begins. In 2023, 30.02 percent of RVPA EMS incidents occurred while one or more other incidents were already underway. This is all EMS requests, but not all result in an ambulance transport.



The following table shows the percentage of simultaneous incidents broken down by number of simultaneous incidents.

**Table 12—RVPA Simultaneous Incident Frequency**

Percentage	Simultaneous Incidents
30.02%	2 or more
8.82%	3 or more
2.13%	4 or more
.38%	5 or more

***Number of Simultaneous EMS Incidents***

The following table illustrates the number of (one or more) simultaneous incidents by hour of the day and day of the week in 2023. The redder the cell, the more likely there will be multiple simultaneous incidents.

**Table 13—Number of Simultaneous Incidents by Hour by Day and Day of Week (2023)**

Hour	1 Mon	2 Tue	3 Wed	4 Thu	5 Fri	6 Sat	7 Sun	Total
00:00-00:59	6	2	3	9	6	4	1	31
01:00-01:59	3	2	2	3	1	5	3	19
02:00-02:59	4	4	0	4	5	3	1	21
03:00-03:59	0	2	0	1	0	2	2	7
04:00-04:59	4	1	2	1	5	3	8	24
05:00-05:59	2	2	1	7	3	1	2	18
06:00-06:59	4	4	3	2	5	2	0	20
07:00-07:59	10	8	6	6	21	3	3	57
08:00-08:59	16	20	10	11	16	14	20	107
09:00-09:59	19	26	32	23	40	16	20	176
10:00-10:59	22	26	33	21	41	20	19	182
11:00-11:59	23	29	23	25	40	20	22	182
12:00-12:59	22	25	19	16	30	24	23	159
13:00-13:59	24	19	20	31	30	25	21	170
14:00-14:59	30	26	23	22	20	21	23	165
15:00-15:59	14	33	17	32	24	18	23	161
16:00-16:59	22	25	17	30	22	15	16	147
17:00-17:59	30	21	42	20	21	12	18	164
18:00-18:59	21	20	20	34	25	29	8	157
19:00-19:59	24	16	18	13	17	23	18	129
20:00-20:59	14	8	14	10	22	17	28	113
21:00-21:59	9	10	17	4	14	9	13	76
22:00-22:59	7	5	9	13	3	6	7	50
23:00-23:59	7	6	11	9	13	8	3	57
<b>Total</b>	<b>337</b>	<b>340</b>	<b>342</b>	<b>347</b>	<b>424</b>	<b>300</b>	<b>302</b>	<b>2,392</b>

As the table shows, peak hours for two or more simultaneous incidents occur on Fridays in the late-morning hours. The single busiest hour of the week occurs on Wednesdays during the early evening.

### 3.3.2 Ambulance Mutual Aid Capacity

When the two primary RVPA ambulances are responding to incidents, and a third or fourth is needed, County Fire Medic 96 is utilized for further response. However, Medic 96 covers a very

large area for County Fire. When it is not available, RVPA must request mutual aid from the bayside agencies. These other agencies all operate a small number of ambulances and, like RVPA, are very busy during daylight hours. Secondly, at times, these agencies also ask for and receive mutual aid from RVPA.

### *San Rafael*

The city has four ambulance units (two staffed, two cross-staffed by engine crews) that respond throughout San Rafael and Marinwood. In 2021–2022, the two dedicated, staffed medic units were committed to incidents simultaneously at a rate of six times per day and increasing.

### *Southern Marin Emergency Medical Paramedic System*

In 2023, the Southern Marin Emergency Medical Paramedic System’s (SMEMPS’) Medic 4 and Medic 1 were busy from 11:00 am to 5:00 pm with a simultaneous call rate of 31 percent for two or more incidents at a time. The simultaneous incident rate has been increasing year over year.

### *Novato Fire District*

In 2023, NFPD’s three ambulances were even more busy from late morning to early evening hours than San Rafael’s ambulance units. When it comes to the potential for RVPA to require backup assistance, two of NFPD’s three ambulances are simultaneously committed to incidents *nine times per day on average*.

RVPA should not continue to assume that “free” ambulance mutual from other bayside agencies will always be available. Area fire departments do not staff large quantities of ambulances, and they are all very busy.

<p><b>Finding #4:</b> The rate of simultaneous demand, at 30 percent, is high for a response system with two primary ambulances, and more so during hours of traffic congestion when ambulances must clear the hospital and get back into their primary coverage area. RVPA’s mutual aid partners are also very busy, and thus should not be the sole source of backup ambulances for RVPA.</p>
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### **3.3.3 Unit-Hour Utilization**

The unit-hour utilization (UHU) percentage for apparatus is calculated using the number of responses and the duration of those responses to show the percentage of time a unit is committed to an active incident during a given hour of the day. In Citygate’s experience, a unit-hour utilization workload of 30 percent or higher over *multiple consecutive hours* for 24-hour duty scheduled firefighters becomes the point at which other responsibilities, such as training, do not get completed.

The utilization percentage for apparatus is calculated by two primary factors: (1) the *number* of responses, and (2) the *duration* of responses. The following table shows a UHU summary for RVPA engine companies. The busiest engines are listed first.

**Table 14—Engine Unit-Hour Utilization (2023)**

Hour	E16	E21	E17	E13	E15	E19	E20	E18
00:00	3.19%	3.67%	2.78%	0.97%	1.72%	2.10%	1.22%	0.42%
01:00	2.08%	2.34%	2.61%	2.18%	2.19%	1.11%	0.96%	0.53%
02:00	8.06%	2.09%	2.75%	2.00%	1.97%	1.60%	1.26%	0.42%
03:00	2.33%	1.86%	2.25%	0.54%	0.77%	1.00%	1.02%	0.09%
04:00	2.16%	3.92%	2.10%	1.42%	1.64%	1.81%	1.02%	0.92%
05:00	2.63%	1.78%	3.69%	1.49%	0.74%	1.39%	0.93%	0.65%
06:00	4.95%	2.55%	2.26%	4.56%	2.02%	1.67%	1.20%	1.13%
07:00	9.02%	3.72%	5.89%	6.29%	5.40%	3.47%	2.31%	1.90%
08:00	11.23%	9.12%	7.51%	7.62%	6.62%	3.34%	5.68%	2.87%
09:00	10.44%	15.52%	11.54%	6.36%	7.15%	9.43%	6.13%	5.46%
10:00	13.64%	16.52%	8.32%	7.45%	8.03%	7.50%	5.62%	7.03%
11:00	11.42%	5.92%	5.49%	6.20%	7.55%	5.30%	3.96%	5.21%
12:00	10.55%	8.04%	5.02%	6.03%	4.97%	6.22%	5.06%	3.39%
13:00	9.78%	8.03%	10.19%	7.90%	5.33%	5.64%	4.57%	3.78%
14:00	11.35%	8.75%	10.80%	5.72%	6.52%	4.61%	4.09%	2.94%
15:00	10.08%	8.12%	7.33%	5.29%	6.03%	4.86%	3.92%	3.49%
16:00	9.92%	6.19%	7.96%	5.75%	5.61%	3.40%	3.73%	3.41%
17:00	6.48%	14.68%	7.86%	6.08%	5.13%	4.88%	4.22%	2.59%
18:00	7.83%	5.56%	6.88%	5.83%	5.18%	5.99%	3.40%	3.34%
19:00	5.30%	7.35%	6.95%	3.48%	3.67%	3.27%	4.24%	1.95%
20:00	7.94%	4.56%	4.15%	4.67%	4.56%	4.45%	3.64%	1.85%
21:00	4.05%	4.86%	4.38%	4.51%	4.83%	3.52%	2.16%	1.35%
22:00	4.14%	4.04%	3.62%	2.47%	2.85%	3.17%	2.97%	1.08%
23:00	3.38%	2.71%	3.57%	2.70%	2.33%	2.62%	2.15%	1.24%
<b>Runs</b>	<b>1,683</b>	<b>994</b>	<b>1,087</b>	<b>1,024</b>	<b>972</b>	<b>833</b>	<b>669</b>	<b>460</b>

The following table provides a UHU summary for RVPA’s primary ambulance companies.

**Table 15—Ambulance Unit-Hour Utilization (2023)**

Hour	M18	M14
00:00	10.10%	6.62%
01:00	7.98%	8.52%
02:00	8.47%	8.54%
03:00	8.21%	3.17%
04:00	10.55%	6.75%
05:00	10.44%	5.87%
06:00	10.38%	10.41%
07:00	13.91%	15.91%
08:00	23.01%	18.18%
09:00	27.51%	22.19%
10:00	23.59%	26.08%
11:00	27.34%	24.62%
12:00	26.69%	25.73%
13:00	30.44%	24.45%
14:00	27.21%	28.68%
15:00	26.35%	21.89%
16:00	23.90%	24.38%
17:00	22.37%	23.76%
18:00	19.52%	26.35%
19:00	21.38%	20.39%
20:00	20.45%	21.45%
21:00	15.74%	15.03%
22:00	14.39%	9.49%
23:00	14.50%	10.87%
<b>Runs</b>	<b>2,240</b>	<b>2,186</b>

As the table shows, the 12-hour block from 8:00 am to 8:00 pm is the busiest—covering both commuter periods when traffic congestion is heaviest along the Valley floor in the western area of the JPA.

- Finding #5:** The unit-hour utilization (UHU) rate for paramedic first responder engines is not yet close to even 20 percent, as the engines can clear an incident long before an ambulance can if it must transport a patient to the hospital.
- Finding #6:** The UHU rate for the two core RVPA ambulances is running hour-over-hour in the mid- to high-20<sup>th</sup> percentile from 10:00 am to 6:00 pm. M18, with the longest travel distances, touched 30 percent UHU, Citygate’s upper threshold.
- Finding #7:** The serious UHU rate for the two primary ambulances, combined with the high daylight-hour simultaneous incident rates, means RVPA must have a robust plan to immediately field a third ambulance from RVPA resources as needed.

### 3.4 RESPONSE TIME PERFORMANCE

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This subsection tracks response time performance for the first apparatus (engine or ambulance) to arrive on the scene of JPA *EMS incidents*. The following response time analysis does not include Medic 96—the County Fire unit coming from the Woodacre station, which responds mostly as a mutual aid backfill unit to RVPA incidents, and which only accounts for 3.7 percent of all responses. The response time data needs to focus on and balance the use and locations of the RVPA’s two primary ambulances.

The following measurements are the number of minutes and seconds necessary for 90 percent completion of the following measures.

- ◆ **Call Processing**
- ◆ **Turnout**
- ◆ **Travel**
- ◆ **Dispatch to Arrival**
- ◆ **Call to Arrival**

#### 3.4.1 Call Processing Time

Call processing measures the time from the first incident time record (timestamp) until apparatus are notified of the request for assistance. Call-processing performance depends on what is being measured. The first incident timestamp takes place when the County Sheriff public safety answering point (PSAP) receives a 9-1-1 call and processes the request up to the point where the

responding unit is notified, thus dispatch-handling time. Not all requests for assistance are received via 9-1-1.

The following table shows call-processing performance overall within the JPA area.

**Table 16—EMS Call-Processing Analysis (2023)**

Station	Overall Performance Time (Count)
Department-Wide	1:49 (4,152)

A best practice goal for a dispatch center to answer a call, process, and provide crew notification is 1:30 minutes, with some calls taking longer due to language barriers or confusion related to a caller’s location. Marin County fire agencies have now formed a separate fire dispatch center and Citygate believes the above dispatch time will improve.

### 3.4.2 Turnout Time

Crew turnout measures the time interval from completion of the dispatch notification until the start of vehicle movement to the emergency incident. While the NFPA<sup>1</sup> recommends 1:00 to 1:20 minutes for crew turnout depending on the type of protective clothing that must be donned, Citygate has found that few agencies can meet this performance standard, and thus has long recommended 2:00 minutes averaged across a 24-hour day as an achievable goal for on-duty station personnel.

The following table summarizes 90<sup>th</sup> percentile crew turnout performance.

**Table 17—EMS Turnout Time Analysis (2023)**

Station	Overall Performance Time (Count)
Department-Wide	2:31 (2,902)

**Finding #8:** EMS turnout time is too sluggish—more so given that crews do not have to don heavy structure fire protective clothing, but rather, easier-to-don EMS protection. All RVPA fire departments should make an aggressive effort to lower turnout time with data feedback and training provided to crews.

<sup>1</sup> NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operation to the Public by Career Fire Departments (2020 Edition).

### 3.4.3 First-Unit Travel Time

First-unit travel measures the time interval from the start of apparatus travel until arrival at the emergency incident. In most urban/suburban jurisdictions, a 90<sup>th</sup> percentile first-unit travel time goal of 4:00 minutes<sup>2</sup> would be considered highly desirable to achieve desired outcomes. In many California EMS systems with a paramedic first responder system, the ambulance can arrive after the engine does, and a typical travel time for the ambulance can be 8:00 minutes.

The following table shows travel time performance within the JPA area for any first-arriving unit, whether engine or ambulance.

**Table 18—EMS Travel Time Analysis (2023)**

Station	Overall Performance Time (Count)
Department-Wide	7:10 (4,444)
Station 13	6:25 (692)
Station 15	6:29 (510)
Station 16	8:37 (1,104)
Station 17	6:09 (611)
Station 18	5:53 (104)
Station 19	6:22 (536)
Station 20	7:04 (307)
Station 21	6:21 (580)

As the table shows, 90<sup>th</sup> percentile first-unit travel performance was more than 7:00 minutes, or 3:10 minutes *slower* than the recommended 4:00-minute best practice goal to facilitate desired outcomes in urban/suburban-density communities.

**Finding #9:** EMS travel time for first-arriving units is not close to a best practice goal of 4:00 minutes for urban/suburban jurisdictions. This is due to the topography and limited road network of the RVPA service area. However, it would not be cost effective to add multiple fire stations in effort to meaningfully lower this number for response to a very small quantity of incidents.

<sup>2</sup> Source: NFPA 1710 – Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (2020 Edition).



### 3.4.4 Call to Arrival

Call-to-first-unit arrival measures the time interval from receipt of the 9-1-1 call until the first response apparatus arrives at the emergency incident and is an agency’s true customer service measure. While RVPA has not established a formal total response performance goal, Citygate has long recommended a 7:30-minute call-to-first-unit-arrival goal at 90 percent compliance to achieve positive outcomes in urban/suburban-density communities. As the following table illustrates, call-to-first-unit-arrival performance, in 2023, was 2:27 minutes *slower* than a 7:30-minute goal.

The following table shows overall call-to-arrival performance within the JPA area.

**Table 19—EMS Call to Arrival Analysis (2023)**

Station	Overall Performance Time (Count)
<b>Department-Wide</b>	<b>9:57 (4,887)</b>
<b>Station 13</b>	8:49 (739)
<b>Station 15</b>	9:06 (543)
<b>Station 16</b>	11:21 (1,238)
<b>Station 17</b>	9:10 (672)
<b>Station 18</b>	9:12 (119)
<b>Station 19</b>	9:05 (598)
<b>Station 20</b>	10:18 (331)
<b>Station 21</b>	9:49 (647)

### 3.4.5 Ambulance-Only Response Time Performance by Station Area

This subsection tracks performance for ambulances only by RVPA station area. These times are taken from the times provided in the Patient Care Report (PCR). **These times are for emergency EMS incidents only.** Times are the number of minutes and seconds necessary for 90 percent completion of the following measures.

- ◆ Call Processing
- ◆ Travel Time to Hospital
- ◆ Turnout
- ◆ Hospital Duration
- ◆ Travel
- ◆ Time On-Scene Duration
- ◆ Dispatch to Arrival
- ◆ Total Duration
- ◆ Call to Arrival

The following tables reflect each of these measures by apparatus and station for 2023.

**Table 20—Call-Processing Analysis by Ambulance by Station (2023)**

Station	Overall	M14	M18
Department-Wide	<b>1:35 (2,804)</b>	<b>1:30 (1,247)</b>	<b>1:36 (1,550)</b>

The call-processing time for incidents with dispatched ambulances is 14 seconds faster than the data set which also includes the engines. This may indicate that, for more serious/emergent calls, the dispatch center was responding more quickly.

**Table 21—Turnout Time Analysis by Ambulance by Station (2023)**

Station	Overall	M14	M18
Department-Wide	<b>2:32 (2,744)</b>	<b>1:55 (1,220)</b>	<b>2:49 (1,516)</b>

Ambulance crew turnout time is nearly identical to the data from the engine crew. Either measure indicates the need for improvement to crew turnout time.

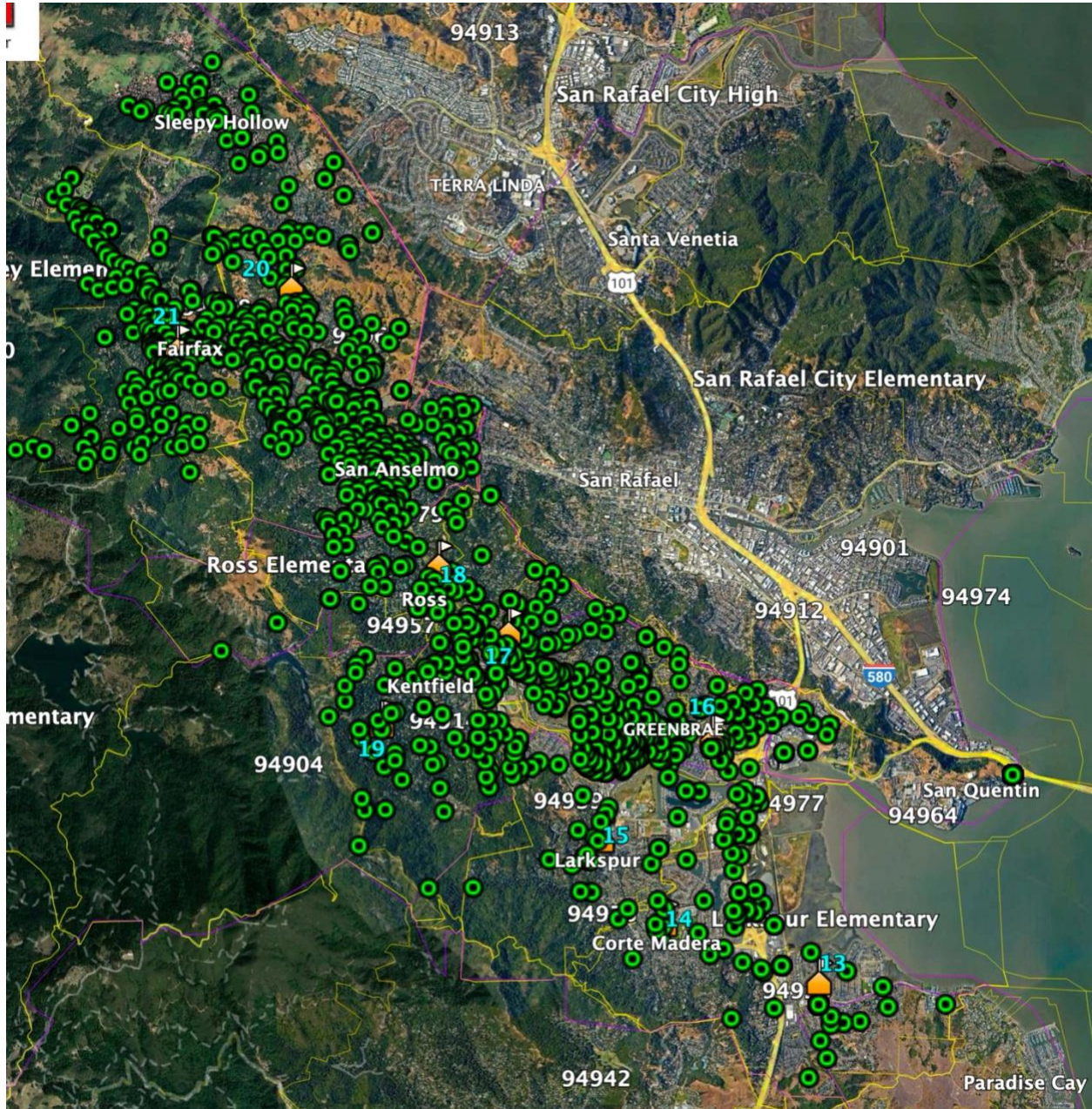
**Table 22—Travel Time Analysis by Ambulance by Station (2023)**

Station	Overall	M14	M18
Department-Wide	<b>9:58 (2,536)</b>	<b>9:34 (1,176)</b>	<b>10:05 (1,354)</b>
Station 13	8:19 (370)	7:06 (333)	11:05 (37)
Station 15	8:03 (300)	7:21 (266)	10:34 (34)
Station 16	9:43 (750)	9:58 (466)	9:13 (283)
Station 17	8:21 (401)	9:43 (59)	7:22 (340)
Station 18	10:26 (66)	14:10 (14)	7:07 (51)
Station 19	10:13 (270)	13:42 (34)	7:24 (236)
Station 20	11:25 (131)	14:59 (1)	11:24 (130)
Station 21	11:37 (248)	13:46 (3)	11:37 (243)

**Finding #10:** Ambulance travel time to 90 percent of incidents, at 9:58 minutes, is 2:48 minutes *slower* than the 7:10-minute performance reflected in the combined data including engines. This clearly shows that only two ambulances struggle to quickly cover and backfill for each other across RVPA’s difficult-to-serve geography.

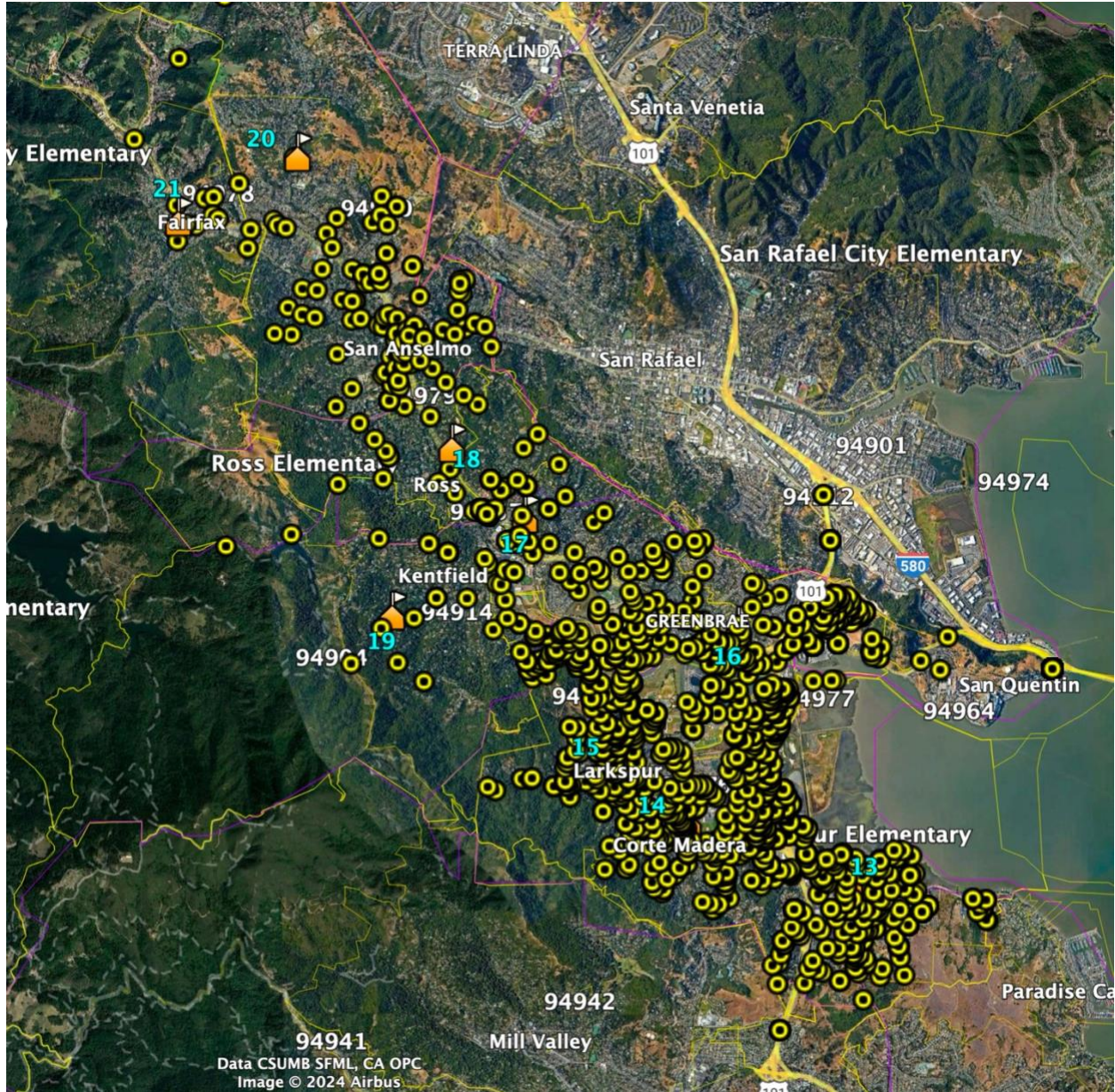
The following map shows all incident locations responded to by Medic 18 across the entire service area in 2023.

**Figure 3—Medic 18 Incident Response Locations (2023)**



The following map shows all incident locations responded to by Medic 14 in 2023.

**Figure 4—Medic 14 Incident Response Locations (2023)**



The two previous maps are very similar. As the data shows, there are slightly more incidents (8 percent) in the eastern half of the RVPA service area. At peak hours of the day, each ambulance may end up anywhere within the RVPA service area. The reduced available capacity presents a very real risk for the RVPA when both ambulances are at the ends of the service area.

**Table 23—Call to Arrival Analysis by Ambulance by Station (2023)**

Station	Overall	M14	M18
<b>Department-Wide</b>	<b>12:50 (2,560)</b>	<b>11:50 (1,186)</b>	<b>13:25 (1,368)</b>
<b>Station 13</b>	11:04 (372)	09:10 (334)	13:33 (38)
<b>Station 15</b>	10:34 (305)	09:58 (269)	13:48 (36)
<b>Station 16</b>	12:14 (756)	12:12 (468)	12:05 (287)
<b>Station 17</b>	10:51 (399)	11:45 (59)	10:04 (338)
<b>Station 18</b>	13:00 (67)	17:03 (15)	09:52 (51)
<b>Station 19</b>	14:06 (274)	16:09 (36)	10:24 (238)
<b>Station 20</b>	14:28 (134)	16:24 (1)	14:16 (133)
<b>Station 21</b>	15:02 (253)	18:53 (4)	14:57 (247)

**Finding #11:** The ambulance call-to-arrival time to 90 percent of incidents, at 13:25 minutes, is at the outer limits of best practices related to patient care for critical patients. As the travel time and simultaneous data indicated, the two ambulances are busy at peak hours of the day and are not always available for a call in their primary response area.

### **3.5 INCIDENT DURATION MEASURES**

The next set of tables measure the time it takes for an ambulance to drive to the hospital, transfer care to emergency department personnel, and then be available for another call—even if they have not yet returned to their assigned primary area.

**Table 24—Scene Duration Analysis by Ambulance by Station (2023)**

Station	Overall	M14	M18
<b>Department-Wide</b>	<b>33:50 (2,599)</b>	<b>28:07 (1,197)</b>	<b>37:43 (1,395)</b>
<b>Station 13</b>	26:02 (374)	26:48 (336)	21:06 (38)
<b>Station 15</b>	28:35 (303)	27:06 (268)	36:37 (35)
<b>Station 16</b>	28:17 (762)	26:45 (469)	29:38 (291)
<b>Station 17</b>	39:16 (413)	46:47 (63)	35:57 (348)
<b>Station 18</b>	41:19 (69)	20:07 (16)	41:27 (52)
<b>Station 19</b>	32:17 (278)	26:35 (39)	32:42 (239)
<b>Station 20</b>	41:13 (135)	13:16 (1)	41:13 (134)
<b>Station 21</b>	49:43 (265)	15:23 (5)	49:43 (258)

**Table 25—Travel Time to Hospital Analysis by Ambulance by Station (2023)**

<b>Station</b>	<b>Overall</b>	<b>M14</b>	<b>M18</b>
<b>Department-Wide</b>	<b>20:04 (1,731)</b>	<b>19:02 (920)</b>	<b>21:37 (807)</b>
<b>Station 13</b>	16:52 (269)	17:11 (245)	15:11 (24)
<b>Station 15</b>	19:56 (215)	19:37 (199)	16:11 (16)
<b>Station 16</b>	17:08 (588)	17:49 (390)	15:40 (198)
<b>Station 17</b>	17:05 (224)	16:11 (36)	16:59 (186)
<b>Station 18</b>	24:18 (40)	24:18 (13)	19:06 (26)
<b>Station 19</b>	22:06 (166)	22:14 (32)	22:06 (134)
<b>Station 20</b>	24:22 (72)	35:34 (1)	23:35 (71)
<b>Station 21</b>	24:48 (157)	32:30 (4)	24:48 (152)

**Table 26—Hospital Duration Analysis by Ambulance by Station (2023)**

<b>Station</b>	<b>Overall</b>	<b>M14</b>	<b>M18</b>
<b>Department-Wide</b>	<b>41:45 (1,813)</b>	<b>42:57 (990)</b>	<b>40:34 (819)</b>
<b>Station 13</b>	43:31 (293)	43:31 (267)	37:11 (26)
<b>Station 15</b>	40:28 (230)	40:41 (213)	29:23 (17)
<b>Station 16</b>	39:49 (612)	40:24 (412)	37:15 (200)
<b>Station 17</b>	47:46 (237)	72:02 (48)	47:10 (187)
<b>Station 18</b>	26:33 (41)	22:30 (12)	28:53 (28)
<b>Station 19</b>	48:52 (166)	52:52 (33)	48:52 (133)
<b>Station 20</b>	30:00 (75)	15:53 (1)	30:00 (74)
<b>Station 21</b>	40:56 (159)	63:01 (4)	40:56 (154)

**Table 27—Total Duration Analysis by Apparatus by Station (2023)**

Station	Overall	M14	M18
<b>Department-Wide</b>	<b>81:43 (2,844)</b>	<b>77:55 (1,259)</b>	<b>87:10 (1,577)</b>
<b>Station 13</b>	76:29 (401)	76:29 (346)	71:47 (55)
<b>Station 15</b>	76:03 (314)	73:30 (273)	77:03 (41)
<b>Station 16</b>	77:23 (808)	78:06 (483)	75:30 (323)
<b>Station 17</b>	93:54 (453)	84:29 (76)	95:16 (374)
<b>Station 18</b>	83:22 (75)	71:14 (19)	94:46 (55)
<b>Station 19</b>	81:34 (318)	88:19 (55)	81:34 (263)
<b>Station 20</b>	86:57 (162)	81:07 (2)	86:57 (160)
<b>Station 21</b>	93:29 (313)	135:48 (5)	92:59 (306)

**Finding #12:** When an ambulance transports to the hospital, its total out-of-service time (duration) ranges from 78 to 87 minutes. If, at peak hours of the day, two incidents only overlap for 30 minutes, the duration loss is over an hour, meaning RVPA has no dedicated, staffed ambulances available at that time.

### 3.6 LOCATION OF MEDIC 18

The total ambulance incident count of 4,455 is the sum of the individual incident responses of the three RVPA ambulances:

- ◆ M14 – 2,095
- ◆ M18 – 2,194
- ◆ M96 – 166

There are 166 responses that represent the County’s M96 unit traveling from Woodacre as backup into Fairfax and Sleepy Hollow only. San Rafael and SMEMPS are utilized East of Fairfax and Sleepy Hollow when both M14 and M18 are committed. If these 166 responses are subtracted from the total of 4,455, the split becomes 2,095 incidents for M14 and 2,194 to M18—a difference of only 99 more incidents being responded to by M18. This essentially represents a 50/50 split in the number of incident engagements per unit.

However, there is another way to view this data: If M18 was not stationed in the Town of Ross, how many RVPA incidents are either west or east of the Ross location? If the 96 incidents in Ross

are subtracted to get a count for either side of Ross, the result is 3,013 incidents east of Ross, and 1,346 incidents west of Ross.

There has been consideration by some RVPA members of moving M18 to be stationed either west or east of where it is currently stationed. In its current Ross location, it is effectively splitting the incident workload, but it is not splitting the geographic coverage of incident locations with M14.

There is no written policy as to how the response zones for the two medic units were created; there is only a map. Oral history also suggests that when the agreement was made with Corte Madera to retain their revenue, there was no consideration as to impact on billing revenue.

There are **four measurable impacts** to be considered in relation to moving the M18 unit.

1. In its current Ross location, it is effectively splitting the incident demand by accident, but it is assigned response areas in Greenbrae and Larkspur. [See: Attachment A]
2. If M18 was moved *west*, it would have to travel farther to get to incidents in the eastern part of RVPA's service area, thus possibly transferring workload to M14.
3. If M18 was moved *east*, it would have to travel farther to incidents west of Ross. An eastern move would effectively place the two medic units closer together.
4. As the fiscal section of this report will model, if M18 was stationed in a more *western* location, and M14 was tasked to respond to the areas in Greenbrae and Larkspur as a result, the associated transport revenue would accrue instead to Corte Madera and damage the remaining economics to RVPA for M18.

**Finding #13:** Medic 18's current location in the Town of Ross should continue as long as RVPA is served by only two ambulances.

**Finding #14:** The workload of the two primary RVPA ambulances is approaching full saturation. RVPA is dependent on County Medic 96 and mutual aid from eastern partner agencies, but those agencies all have large service areas and are themselves busy at peak hours of the day.

**Recommendation #1:** Medic 18 should remain in its present location in the Town of Ross if the agencies can reach agreement on the cost and terms of leasing the facility, as that is the best location for balancing the multiple needs of volume, response time, and allocation of billed revenue.

**Recommendation #2:** Due to significant peak-hour demand and limited mutual aid, RVPA needs to design and fund a more robust third ambulance capacity.



## SECTION 4—RVPA STRUCTURAL / RELATIONSHIP ANALYSIS

Before the fiscal analysis of RVPA can be understood, the complex relationship of RVPA partners must be clearly understood for both service (operating) expense decisions as well as the revenues from all sources needed for the desired level of operations.

RVPA was created in 1980–81 after the eight current members joined to cooperatively staff an ambulance. The original model had the JPA employing paramedics directly and included a “Paramedic Chief.” This model was replaced within a few years by a contract with Marin County Fire to staff the RVPA-owned ambulance—a contract which continues today. At the inception of RVPA, the greater Ross Valley had six fire agencies. Due to mergers via JPAs, it currently has three. Other, unincorporated pockets of the greater Ross Valley (CSA 31 and CSA 27) are the responsibility of the Marin County Fire Department (MCFD) but are covered under contract by the Ross Valley Fire Department (RVFD).

In the late 1990s, the Town of Corte Madera was concerned about the response times of the single paramedic unit. The Town proposed leaving the RVPA and starting its own ambulance service. Ultimately, after negotiations with RVPA, and input from the County of Marin Local EMS Agency (LEMSA), the parties (RVPA and Corte Madera) agreed to allow Corte Madera to staff a second paramedic ambulance, *but to do so*, the Town would retain its paramedic property tax and transport revenue.

Originally, the Corte Madera ambulance service area only included the Town of Corte Madera and providing backup to the RVPA’s M18 unit for service to other areas within the greater Ross Valley. Between 2000 and 2012, additional boundary changes were made to broaden Corte Madera’s M14 zone to include portions of Larkspur. Those boundary shifts were made without a response data analysis or financial analysis. The changes ultimately led to a reduction in revenue as well as increased expenditures to the RVPA.

For these reasons, the agreement with Corte Madera was re-negotiated around 2016. The current RVPA response zone map shows three geographical response areas within RVPA named A, B, and C (Attachment A). The two primary ambulances, M18 and M14, receive backup in the west from County Fire M96 from the Woodacre station, and on the east side via mutual aid—either from Southern Marin FPD or the City of San Rafael.

### 4.1 GOVERNANCE AND AGREEMENTS

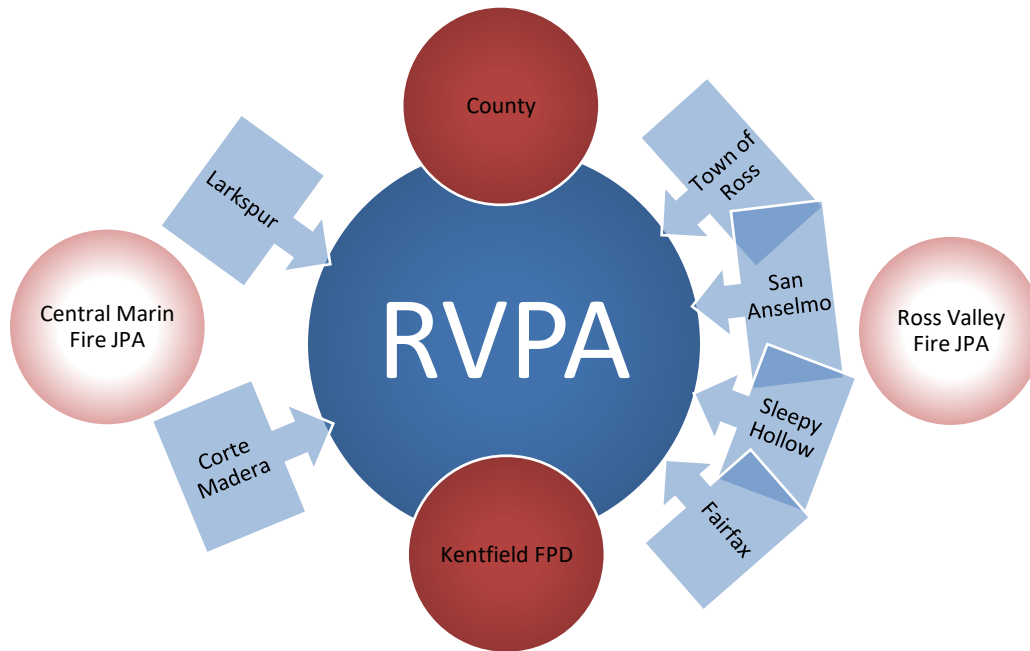
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RVPA’s partner relationships are best understood visually as the current JPA agreement is a very high-level document that did not foresee the creation of multiple fire department JPAs. In the following figure are the eight JPA members—two non-merged fire departments in darker red, and

six local governments in light blue. There are also the two newer JPA fire departments in light red, next to the core RVPA agencies in those JPAs.

The eight core RVPA partners each have one seat on the RVPA Board. Some are elected officials appointed by their city / town / special district, and some are appointed public members, such as the member from Marin County and San Anselmo. Ideally, all RVPA Board members should be elected and, if possible, also be shared fire service Board members.

**Figure 5—RVPA Core Partners**



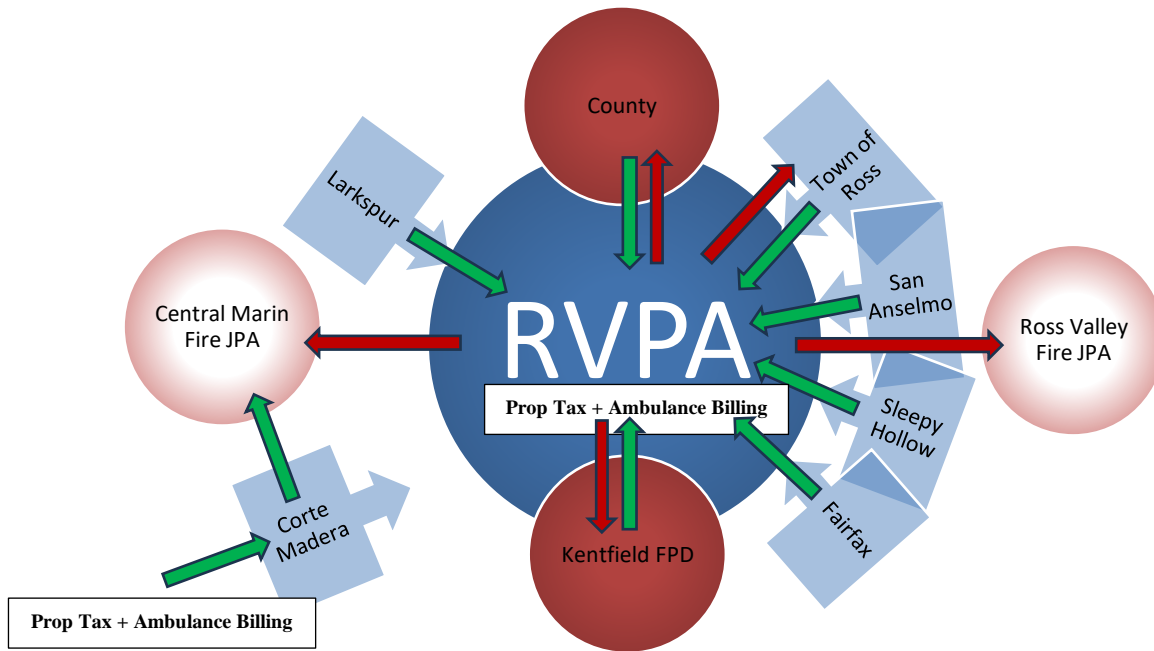
When the RVPA Board meets, some Board members can be representing a core agency while also being on a fire JPA board simultaneously. In a simpler JPA, it is easier to be a JPA member and represent the larger service area from the singular view of their appointive agency. In these JPAs, each city / town / special district team rarely pushes its representative to take a specific JPA position or try to change the JPA itself. The JPA is viewed as a regional service provider.

Given two fire JPAs are now the service providers to six RVPA core members, the various elected official and town manager views regarding what RVPA should or should not do could become complicated. In the above grouping, there are easily **40** total elected officials among the eight core members. Additionally, the three JPAs contribute the overlapping perspectives of **18** further elected officials. All of this representation exists to operate a two-ambulance paramedic first responder system which costs approximately \$5.2 million dollars per year.

The RVPA agreement is vague regarding many issues, and even less clear concerning fiscal revenue or cost apportionment. Some examples include how the revenue retainment with Corte Madera should be treated against expenditures, the issues of payment formulas for services to and from RVPA, and the sharing of revenues more than expenditures.

In the following figure, the fiscal lines of authority are shown in **green arrows** overlaid on the JPA structure. In comparison, the **red arrows** show the direction of RVPA expenditures.

**Figure 6—RVPA Fiscal Authority and Expenses**



All partner agencies that separately have EMS parcel tax paramedic assessments submit that revenue to RVPA. Corte Madera does not. RVPA bills for M18 transport, while Corte Madera bills for M14 and retains that revenue. Additionally, where expenditures are concerned, RVPA pays for some of the cost of services and supplies directly, and also pays for enhanced paramedic staffing services to three paramedic engine-staffed fire agencies and the Town of Ross for facility rent. All of these revenues and costs will be detailed in the section to follow.

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## SECTION 5—RVPA FISCAL ANALYSIS

### 5.1 RVPA FISCAL ANALYSIS

RVPA departs from a centralized revenue collection model typically followed by JPAs throughout the state. Revenues to support RVPA’s mission are collected by RVPA and separately by the Town of Corte Madera. The Town of Corte Madera collects its own parcel tax revenues as well as the transport revenues associated with M14. RVPA collects parcel tax revenues for its other member agencies (Kentfield Fire District, City of Larkspur, County Service Area 27, Town of Fairfax, Town of Ross, Sleepy Hollow Fire District, Town of San Anselmo) and parcel tax revenues associated with the Boardwalk area in Larkspur. RVPA also collects transport revenues associated with M18 and investment income.

#### 5.1.1 Revenue Collections

The following table details revenue collection entities within RVPA.

**Table 28—RVPA Revenue Collection Entities**

Entity	RVPA*	Town of Corte Madera
Kentfield Fire District parcel tax	\$274,134	
City of Larkspur parcel tax	\$701,204	
County Service Area 27 parcel tax, including unincorporated Boardwalk / Greenbrae / Corte Madera	\$70,929	
Town of Fairfax parcel tax	\$363,432	
Town of Ross parcel tax	\$92,991	
Sleepy Hollow Fire District parcel tax	\$88,400	
San Anselmo parcel tax	\$578,616	
Corte Madera parcel tax		\$530,494
<b>Subtotal Tax Revenues:</b>	<b>\$2,169,706</b>	<b>\$530,494</b>
Transport Revenues Medic 18 (FY 23/24 actuals)	\$1,363,531	
Transport Revenues Medic 14 (FY 23/24 actuals)		\$1,477,074
Investments	\$3,000	
<b>Total Revenues</b>	<b>\$3,536,237</b>	<b>\$2,007,568</b>

\*Figures based on FY 24/25 Approved Budget unless otherwise indicated

### 5.1.2 Ambulance Revenue

RVPA and Corte Madera bill for ambulance transport to the patient and the patient’s insurance (if any)—commercial, Medicare and MediCal. When a patient is a resident paying property tax, their insurance is billed once and, if no payment or a low payment is made, there is no further effort on the agency’s part to obtain full revenue as allowed by the insurer.

- ◆ Collected Ambulance Transport Revenue for **RVPA M18**:
  - FY 21/22 = \$1,232,072
  - FY 22/23 = \$1,377,881
  
- ◆ Collected Ambulance Transport Revenue for **Central Marin Fire Authority M14** retained by Corte Madera:
  - FY 21/22 = \$1,159,766
  - FY 22/23 = \$1,014,505

The following tables show the payor mix ratios for all transported patients (resident or not) in 2023.

**Table 29—RVPA M18**

Source	Bill Percentage
<b>Medicare</b>	64%
<b>Medi-Cal</b>	12%
<b>Insurance</b>	15%
<b>Private</b>	9%

**Table 30—Central Marin M14**

Source	Bill Percentage
<b>Medicare</b>	68%
<b>Medi-Cal</b>	11%
<b>Insurance</b>	15%
<b>Private Pay</b>	7%

In Citygate’s experience, the ratios of type follow most California communities with the socio-demography of RVPA’s service area. The low Medi-Cal rate means that the newer California full offset payment (Public Provider Intergovernmental Transfer, or PPIGT) is a very small component

and does not materially increase revenues—due to both low percentages and Medi-Cal incident volumes.

Overall, the *collected* revenue in calendar 2023 averages out to \$1,570 per transport for both units combined. This is below any reasonable RVPA cost per transport of approximately \$2,887 per transport (RVPA expenditures budget of \$5,222,014 divided by 1,809 transports). This deficit creates the historic need for the EMS supplemental property tax.

While billing practices could be more aggressive to collect full payment from at least private and public insurance companies, even those revenue increases would not fully support RVPA without a property tax.

### **5.1.3 Property Tax Revenue**

Since the formation of the RVPA, a special property tax assessment has been used to offset costs not covered by transport billed revenue. These assessments must be renewed every four years by each RVPA local agency (not JPA) member. A sample ballot statement has been:

*To maintain rapid 9-1-1 emergency response times and preserve the number of on-duty paramedics ready to respond to accidents / medical emergencies, shall the Ross Valley Paramedic Authority measure be adopted continuing for four years the paramedic services special tax of \$94.50 per residential living unit or 1,500 square feet of developed nonresidential property, adjusted up to \$3 per year, generating approximately \$xxx,xxx annually, subject to annual audits, public spending disclosure and all funds for local paramedic services?*

[**Note:** Corte Madera maintains its own assessment for paramedic services and retains that funding.]

### **5.1.4 Revenue Transfers**

The RVPA and the Town of Corte Madera both transfer some of the collected revenues to the Central Marin Fire Authority—although this study could not identify documentation or agreements for the contractual basis or itemized contributions for some of these transfers. The Town of Corte Madera funds Central Marin Fire Authority (CMFA) with an annual contribution of \$5,658,990, which does not itemize RVPA specifically and includes other services provided by CMFA to the Town outside of the ambulance program. It is generally understood that Corte Madera parcel tax revenues and M14 transport revenues are part of this annual contribution. The parcel tax revenues collected by RVPA for the Boardwalk area in the City of Larkspur are also transferred to CMFA. The net revenue received by CMFA after these transfers is budgeted at \$2,018,896 in FY 24/25.

The following table shows revenue transfers from RVPA and Corte Madera to CMFA based on the approved budget for FY 24/25.

**Table 31—Revenue Transfers (FY 24/25)**

Revenue Element	RVPA	CMFA	Town of Corte Madera
Corte Madera parcel tax*		\$530,494	(\$530,494)
Unincorporated Boardwalk / Greenbrae / Corte Madera parcel tax	(\$11,328)	\$11,328	
Transport Revenues Medic 14*		\$1,477,074	(\$1,477,074)
<b>Net Transfers</b>	<b>(\$11,328)</b>	<b>2,018,896</b>	<b>(\$2,007,568)</b>

\*These transfers are assumed to be part of the annual contribution from the Town of Corte Madera to Central Marin Fire Authority

**Finding #15:** The Central Marin Fire Authority JPA agreement does not specifically outline the funding mechanisms related to the ambulance program.

Accounting for these transfers, the net revenues available to each entity are represented in the following table.



**Table 32—Total Revenues After Transfers:**

Revenue Element	RVPA	CMFA	Town of Corte Madera
Kentfield Fire District parcel tax	\$274,134		
City of Larkspur parcel tax	\$701,204		
County Service Area 27 parcel tax, except unincorporated Boardwalk / Greenbrae / Corte Madera	\$59,601		
Town of Fairfax parcel tax	\$363,432		
Town of Ross parcel tax	\$92,991		
Sleepy Hollow Fire District parcel tax	\$88,400		
San Anselmo parcel tax	\$578,616		
Corte Madera parcel tax		\$530,494	
Unincorporated Boardwalk / Greenbrae / Corte Madera parcel tax		\$11,328	
<b>Subtotal Tax Revenues</b>	<b>\$2,158,378</b>	<b>\$541,822</b>	<b>\$0</b>
Transport Revenues Medic 18	\$1,363,531		
Transport Revenues Medic14		\$1,477,074	
Investments	\$3,000		
<b>Revenue Grand Total</b>	<b>\$3,524,909</b>	<b>\$2,018,896</b>	<b>\$0</b>

When considered as the intended paramedic *system*, the total revenues available to support RVPA’s mission (including both ambulances and all paramedic engine companies) is \$5,543,805 in FY 24/25, with RVPA managing 64 percent of total revenues and CMFA managing the other 36 percent.

## **5.2 EXPENDITURES**

### **5.2.1 Direct Expenditures**

RVPA incurs several categories of direct expenditures (administrative costs related to the JPA itself and operating costs related to Medic 18). *Separately*, CMFA, a member agency of RVPA, incurs other expenditures as it directly expenses the operations of Medic 14. The expense decisions of CMFA are independent of RVPA.

The following table details direct expenditures for both agencies.

**Table 33—RVPA and CMFA – Direct Expenditures**

Direct Expenditure	RVPA	CMFA
Part-time Clerk	\$4,800	
Financial Services (subcontract)	\$57,615	
Consultant	\$30,000	
Legal	\$25,000	
Prints & Photos	\$1,061	
Postage	\$1,639	
Misc.	\$1,093	
Insurance	\$6,010	
Tax collection service (for all jurisdictions)	\$9,270	
Defibrillators: Cardiac monitors annual maintenance	\$13,113	
M18 Transports billing fees	\$55,729	
Auto fuel	\$19,500	
Disposable Medical Supplies	\$81,955	
Automotive Equipment Repairs	\$7,649	
PP-GMET IGT	\$128,750	
Other Equipment / building	\$2,575	
Equipment replacement	\$175,000	
Personnel cost to operate M14 (6 paramedics) (1)		\$1,773,408
Medical Billing (2)		\$52,367
Medical Supplies (2)		\$82,171
Ambulance Maintenance (2)		\$8,846
Fuel (2)		\$13,989
<b>Subtotal Direct Expenditures</b>	<b>\$620,759</b>	<b>\$1,930,781</b>

(1) The personnel costs incurred by Central Marin Fire for the operation of Medic 14 include a 25 percent overhead fee

(2) These expenditures are not supported by documentation from Central Marin Fire's fiscal system

The table illustrates that, while CMFA is a member agency of RVPA, it separately incurs an important fraction of the paramedic ambulance system's expenditures. Furthermore, the Town of Corte Madera, as the fiscal agent for CMFA, does not organize RVPA / Medic 14 expenditures in a separate account or expenditure category. This means that the accounting of exact expenditures associated with the ambulance and engine medic program by CMFA cannot easily be tracked.

**Finding #16:** The paramedic expenditures of the Central Marin Fire Authority are not supported by interagency agreements and sufficient details, especially for overhead, to be tracked by the RVPA under governmental accounting best practice.

### 5.2.2 Indirect Expenditures

As a JPA with no employees or staff, RVPA has entered into several agreements and subcontracts to fulfill its mission. The following table lists RVPA’s indirect expenditures for services related to the operation of Medic 18 and the staffing of engines with paramedics across its jurisdiction. Separately, CMFA also pays indirect expenditures for the provision of medical supervision services for M14.

The following table details indirect expenditures for both agencies.

**Table 34—RVPA and CMFA – Indirect Expenditures**

Indirect Expenditures	RVPA	CMFA
Payments to other agencies (RVPA share of Medical Director, CQI, Nurse Educator and EMS Specialist; CQI and Medical Director / Clinical Educator for CMFA)	\$115,000	\$37,302
Contract with Ross Valley FD for M18 rent & quarters	\$36,060	
Contract with MCFD to staff M18 (1)	\$1,809,000	
Contract with Ross Valley FD for 10 Engine Paramedics	\$317,240	
Contract with CMFA for incentive pay for 7 Engine Paramedic (2)	\$163,450	
<b>Total Indirect Expenditures</b>	<b>\$2,435,989</b>	<b>\$37,302</b>

(1) MCFD provides Executive Officer and Medic 96 Reserve ambulance at no additional cost; the administrative cost for the staffing of Medic 18 is set at 7.5 percent of the base hourly pay.

(2) Appendix E of the 07/01/23 subcontract between RVPA and CMFA specifies an annual cost of \$158,689 + 3 percent annual adjustment for a FY 24/25 total of \$163,450. RVPA’s approved FY 24/25 Budget sets this expense at \$158,689, omitting the inflator. There are no published and agreed to formulas as to how these expenditures are derived.

The following table shows that, as is the case for the transfer of revenues, RVPA pays its member agencies for training costs and ALS backup (from CMFA).

**Table 35—Reimbursements by Agency**

Reimbursements	RVPA	Central Marin	Kentfield	Ross Valley
EMS Training / Supply Reimbursements (1)				
CMFA Training Reimbursement	(\$35,306)	\$35,306		
RVFD Training Reimbursement	(\$47,290)			\$47,290
Kentfield Training Reimbursement	(\$11,587)		\$11,587	
ALS Backup Reimbursement	(\$103,000)	\$103,000		
<b>Reimbursements Subtotal</b>	<b>(\$197,183)</b>	<b>\$138,306</b>	<b>\$11,587</b>	<b>\$47,290</b>

(1) The EMS training / supply reimbursement program was approved in FY 14/15 or earlier as part of the budget approval process. It was approved as a flat-fee reimbursement program with no year-to-year increase. This same program is also detailed in the subcontracts with CMFA and Ross Valley Fire (there is no subcontract with Kentfield).

**Finding #17:** The RVPA payment to Central Marin Fire District for “ALS Backup” is not notated as to why the payment is made and how it is calculated.

**Finding #18:** Given that RVPA pays Central Marin Fire District for ALS (ambulance) backup, there is no reciprocal payment for RVPA’s backup to Central Marin. This appears to be an imbalanced payment structure.

Altogether, expenditures related to the combined Ross Valley paramedic system are summarized in the following table.

**Table 36—Total Paramedic System Expenditures**

Fiscal Element	RVPA	Central Marin
<b>Direct Expenditures</b>	\$620,759	\$1,930,781
<b>Indirect Expenditures</b>	\$2,633,172	\$37,302
<b>Reimbursements</b>	(\$197,183)	\$138,306
<b>Total</b>	<b>\$3,253,931</b>	<b>\$1,968,083</b>

In line with the current revenue appropriation structures, 62 percent of expenditures are incurred by RVPA, while CMFD spends the other 38 percent of total expenditures.

The following table compares total revenues and total expenditures after all transfers and reimbursements, illustrating a projected total net revenue (after expenditures) of \$321,791 in FY 24/25.

**Table 37—Total Paramedic System Revenues to Expenditures**

Fiscal Element	RVPA	CMFA	Total
<b>Revenues</b>	\$3,524,909	\$2,018,896	\$5,543,805
<b>Expenditures</b>	\$3,253,931	\$1,968,083	\$5,222,014
<b>Net</b>	<b>\$270,978</b>	<b>\$50,813</b>	<b>\$321,791</b>

### **5.3 RESERVES AND REPLACEMENT FUNDS**

As of the beginning of FY 24/25, RVPA holds an unassigned “General Fund” balance of \$761,997, an assigned “Reserve” fund balance of \$1,100,000 (equivalent to 21 percent of the expenditure budget for the entire system, consistent with policy), and an assigned “Equipment Replacement” fund balance of \$1,190,000. This is consistent with the June 2023 Approved Resolution 23-02 for the Classification of Fund Balances as required by GASB 54 and Adoption of the Fund Balance Policy.

Equipment and vehicles associated with medical transport are expensive and must be replaced periodically. RVPA maintains an equipment replacement schedule for the M18 ambulance only, as well as for the cardiac monitors it procures for the entire system. While RVPA contributes \$175,000 to its assigned Equipment Replacement fund annually, the absence of a separate account for RVPA-related expenditures within CMFA makes it difficult to identify whether a replacement fund exists for the M14 ambulance.

The following table details RVPA’s equipment replacement schedule.

**Table 38—RVPA Equipment Replacement Schedule**

Equipment	Ambulance	Cardiac Monitors
<b>Quantity</b>	1 (M18)	8
<b>Last Purchased</b>	2019	2017
<b>Lifespan</b>	6 years	8 years
<b>Next Replacement</b>	2025	2025
<b>Next Replacement Cost</b>	\$525,000	\$460,011
<b>Cost Inflation</b>	5%	5%

A projection of the next two replacement cycles for this equipment is provided in the following table, beginning with the replacement of the M18 ambulance and the purchase of new cardiac monitors in the current fiscal year. The table shows the budgeted annual reserve contribution, projected equipment replacement expenditures, and the equipment fund balance by fiscal year.

**Table 39—Projected Equipment Replacement Schedule**

Fiscal Year	Reserve Contribution	Equipment Replacement	Equipment Fund Balance
FY 23/24	\$75,000		\$1,190,000
FY 24/25 (current cardiac monitors / ambulance [M18] replacements)	\$175,000	\$985,011	\$379,989
FY 25/26	\$175,000		\$554,989
FY 25/26	\$175,000		\$729,989
FY 26/27	\$175,000		\$904,989
FY 27/28	\$175,000		\$1,079,989
FY 28/29	\$175,000		\$1,254,989
FY 29/30 (next ambulance replacement)	\$175,000	\$703,550	\$726,439
FY 30/31	\$175,000		\$901,439
FY 31/32 (next cardiac monitors replacement)	\$175,000	\$679,646	\$396,793
FY 32/33	\$175,000		\$571,793
FY 33/34	\$175,000		\$746,793
FY 34/35	\$175,000		\$921,793
FY 35/36 (ambulance replacement)	\$175,000	\$942,825	\$153,968
FY 36/37	\$175,000		\$328,968
FY 37/38	\$175,000		\$503,968
FY 38/39	\$175,000		\$678,968
FY 39/40 (cardiac monitors replacement)	\$175,000	\$1,004,146	(\$150,178)

**Finding #19:** All equipment needs and replacement plan payments are not expensed to only the RVPA due to the separate handling of revenues and expenditures by CMFA, under the prior RVPA agreement with Corte Madera.

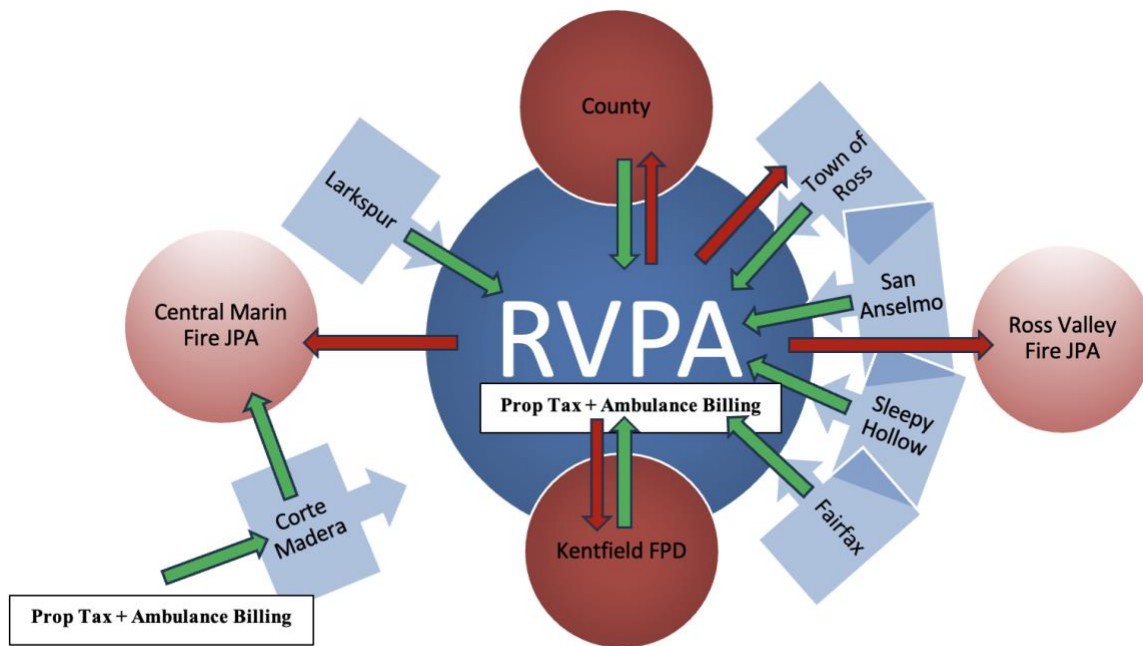
**Recommendation #3:** Include the M14 ambulance and other CMFA equipment needs in the RVPA equipment replacement schedule, provided all revenues and expenses are pooled within the RVPA. Re-assess the equipment replacement fund balance and annual contribution.

**Recommendation #4:** While reserves appear sufficient, a projection to FY 39/40 based on current assumptions shows costs outpacing the fund balance in FY 39/40. Consider replacing the flat fee contribution with a formula associated with inflation.

### 5.3.1 Fiscal Decision Structure

As the fiscal review laid out and the governance review of JPA documents identified, the “rules of engagement” for RVPA as to how revenues and expenditures are controlled and audited for public clarity are **not** documented well enough for something so complicated.

**Figure 7—RVPA Fiscal Authority and Expenditures**



## 5.4 FISCAL OPERATION RECOMMENDATIONS

Based on our review and technical findings, Citygate offers the following recommendations.

- Recommendation #5:** All revenues and expenditures should be centrally booked and managed by the RVPA Board of Directors.
- Recommendation #6:** Absent Recommendation #5 being implemented, the Town of Corte Madera, as the fiscal agent for the Central Marin Fire Authority, should track expenditures related to services provided to RVPA in an enterprise account.
- Recommendation #7:** There should be one purchasing agent for all equipment and materials related to the RVPA system.
- Recommendation #8:** Overhead and administrative costs should be set and applied identically for RVPA agreements. Overhead rates should conform with an agency's adopted fee schedule or, absent that, federal accounting rules for overhead by agencies receiving grants.
- Recommendation #9:** The replacement schedule should be updated to include replacement costs for the Central Marin Fire Authority ambulance, with net revenues contributing to funding replacements for both ambulances and all medical transport equipment.
- Recommendation #10:** If all revenues and expenses are pooled within RVPA, RVPA payments to partners will require common formulas, such as rent for both medic units. Secondly, after the approval of a reserve policy, a true-up mechanism should be implemented to refund member agencies any remaining revenues after expenditures.



## SECTION 6—RVPA SEPARATION ANALYSIS

This section examines the possibility of one or more RVPA partner agencies separating from the RVPA and operating their own paramedic ambulance transport system. This section will begin with the regulatory rule set and then examine the fiscal impacts of a separation scenario based on the fiscal analysis from Section 5 of this report.

### 6.1 AGENCY SEPARATION REGULATORY ANALYSIS

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The RVPA exists to provide two services: (1) paramedic-level ambulance transport, and (2) paramedic first responder engine capability at some locations. While overall EMS care is regulated by the state and County, the provision of ambulance care is heavily regulated by California statute, powers delegated by the state to counties, and a large set of case law from 1980 up to the present.

This section provides an abbreviated overview of the complexity of *ambulance* transport regulations. Up front, RVPA partners need to clearly understand that they provide ambulance service as allowed by the Marin County Local Emergency Medical Service Agency (LEMSA) and, as such, the partners have zero self-determination as to who can provide transport if the RVPA is even slightly changed for transport providers.

#### 6.1.1 EMS Regulatory Framework

LEMSAs including the Marin County EMS have the authority under California Health and Safety Code (§§ 1797.85 and 1797.224) to establish exclusive ambulance operating areas, which restrict operations within the area to one or more designated emergency ambulance providers. This authority extends to ensuring that emergency service providers have a territory that is sufficiently populated, generating enough revenue (typically from fees to insurance) to make these services economically viable.<sup>3</sup>

RVPA operates in a **non**-exclusive operating area (EOA). Marin County EMS designated Service Area C as a non-exclusive service area with RVPA as the designated provider for the area. (Marin County 2020–2022 EMS Plan.) Since its inception, RVPA currently acts as a de facto exclusive provider for Service Area C. Without exclusivity or a regulated, coordinated response system, multiple providers who selectively choose calls will harm the economic viability of other providers' services. As noted, RVPA has effectively acted as an exclusive provider historically.

Given that ambulance transport was not economical to be put out to bid in the non-exclusive areas of Marin County, it is apparent that County EMS was never pressured by another public or private

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<sup>3</sup> County of San Bernardino v. City of San Bernardino, 15 Cal. 4th 909, 931 (1997); Redwood Empire Life Support v. County of Sonoma, 190 F.3d 949, 954 (9th Cir. 1999) (Sections 1797.85 and 1797.2245 “contemplate[] a regulatory ‘deal’ in which an exclusive operator receives protection from competition in profitable, populous areas of a county in exchange for the obligation to serve unprofitable, sparsely populated areas”).

provider to serve the Ross Valley region. In effect, the County let the RVPA operate, as it was an *integrated sole provider* that provided stable services within its revenue structures.

In 1997, the Town of Corte Madera sought to withdraw from RVPA. At that time, Marin County LEMSA did not want to split up Service Area C and was against Corte Madera’s proposed withdrawal. Marin County LEMSA cautioned that if RVPA and Corte Madera could not reach an agreement to maintain Corte Madera as a member, it would consider turning Service Area C into an exclusive operating area and put it out to public *and private* competitive bidding. Ultimately, the parties came to an agreement, keeping RVPA intact.

### **6.1.2 JPA, Local Tax, and County EMS Agency Regulatory Framework**

RVPA is funded in large part through special taxes approved by member jurisdictions. In 2022, member jurisdictions’ voters approved a special tax for the continuation of RVPA as a JPA entity in its current configuration. Unilateral withdrawal from RVPA is likely prohibited until the next EMS tax election cycle in 2026.

The inability to withdraw from RVPA on short notice is evidenced in many ways. For example:

1. Ballot arguments refer to the tax as the “Ross Valley Paramedic Tax.”
2. The Council resolutions submitting the tax refer specifically to continued funding for RVPA.
3. The ballot questions state, “Shall the Ross Valley Paramedic Authority measure be adopted...”

Given that taxpayers specifically approved funding for the RVPA, these monies cannot be used for other emergency services without taxpayer approval at the next election cycle in 2026.

The Joint Power Authority Act is silent regarding member withdrawal and essentially treats the matter as an agreement between parties. Nothing in JPA law specifically prevents withdrawal or changes. The Joint Powers Act, Government Code section 6510 provides: “*The agreement may be continued for a definite term or until rescinded or terminated. The agreement may provide for the method by which it may be rescinded or terminated by any party.*” The state of California desires JPAs to be flexible and adapt over time; however, the RVPA’s second source of ambulance service revenue is tied to a special tax that is only re-authorized every four years.

Currently, RVPA is the approved ALS provider by Marin County LEMSA through the August 17, 1999, Agreement (Agreement for Advanced and Basic Life Support Service). Larkspur is an approved (engine-based) ALS provider by virtue of its subcontract (provided by CMFA to RVPA and dated July 1, 2023), not independently. CMFA is the party to the subcontract with RVPA, not Larkspur. If Corte Madera or Larkspur desired to leave RVPA to provide ambulance services independently, they would no longer be under RVPA’s subcontract with CMFA, and that change

would need to be separately approved by Marin County EMS. The same issues would likely confront the RVPA partners.

Secondly, any separation of RVPA partners could leave other partners economically damaged to the point of not being able to continue under existing revenues. County ambulance regulations would have to apply in non-exclusive areas. Under the Emergency Services Act, public and private EMS providers must be approved by the LEMSA to provide advanced life support (ALS) and limited advanced life support (LALS) services.<sup>4</sup> As such, an RVPA-separating party would need written approval from Marin County EMS. No ambulance service can operate without LEMSA approval.

Conceptually, the following separation pathway scenario uses the bayside partner agencies, as Corte Madera is not pooling its EMS revenues with RVPA.

- ◆ In addition to receiving Marin County EMS approval, Corte Madera, Larkspur, or CMFA would need to obtain a “Certificate of Operation” from Marin County to operate its ambulances on public streets, and Vehicle Permits for each ambulance.<sup>5</sup> County Ambulance Regulations establish requirements for ambulance services and vehicles operating in the County.
- ◆ An application for a Certificate of Operation to operate emergency transport services is required and decided through a public vote of the Marin County Board of Supervisors.<sup>6</sup> The County Ambulance Ordinance and Regulations do not specify the standard the Board of Supervisors will apply in evaluating an application for a Certificate of Operation, leaving it to the Board’s discretion. Regardless of whether Marin County EMS recommends approval or denial of the certificate of operation, the Board of Supervisors may deny in its discretion.

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<sup>4</sup> Health & Safety Code § 1797.178 – “No person or organization shall provide [ALS] or [LALS] unless that person or organization is an authorized part of the emergency medical services system of the local EMS agency...”; Cal. Code Regs. tit. 22, § 100168(b)(4) – “An approved paramedic [i.e., ALS] service provider shall: ...Have a written agreement with the LEMSA to participate in the EMS system and to comply with all applicable State regulations and local policies and procedures, including participation in the LEMSA’s EMSQIP as specified in Chapter 12 of this Division.”; Cal. Code Regs. tit. 22, § 100126(b)(4) – “An approved Advanced EMT [i.e., LALS] service provider shall: ...Have a written agreement with the LEMSA to participate in the LALS program and to comply with all applicable State regulations, and local policies and procedures, including participation in the LEMSA’s EMSQIP as specified in Section 100107.1.”

<sup>5</sup> The County Ambulance Ordinance (Marin County Code ch.7.60) and Regulations for Ambulance Transport Vehicles and Service Operating in Marin County, Marin County Board Of Supervisors Resolution No. 2020-96, dated Sep. 15, 2020 (“County Ambulance Regulations”).

<sup>6</sup> “No person, entity, firm or corporation shall operate, or cause to be operated, an ambulance transport service using the streets or roadways of Marin County without having been issued a certificate of operation by the Marin County emergency medical services agency pursuant to the order of the board of supervisors and in accordance with the regulations promulgated hereunder.” (Marin County Code § 7.60.050; County Ambulance Regulations § V.a.)

- ◆ Marin County EMS determines whether to issue a vehicle permit for an ambulance.<sup>7</sup>

However, rather than processing a new paramedic ambulance provider application from an agency separating from the RVPA, the County EMS agency would be within its statutory authority to choose to change Service Area C into a publicly bid EOA. The LEMSA could choose to issue a Request for Proposals (RFP) for an exclusive ambulance contract. If this occurred, parties would submit bids—including private service providers. Generally, private service providers with experience in responding to RFPs submit highly competitive bids at lower price points than fire departments and public entities, which may have difficulty competing. Public entities that are not experienced in submitting bids will usually need to incur significant costs to prepare a proposal. In such a scenario, the probable result is that Service Area C would then be awarded to a private company.

The County’s rationale in making such a change would likely be due to the fact that exclusivity in an operating area reduces costs and maintains the economic viability of the service. Ambulance service providers have high fixed costs for operational readiness, and an area with low transport volume (such as RVPA) does not necessarily generate the needed revenue, and thus cannot fund the deployment “standby hours” needed. Federal and state law limits reimbursements for Medicare and Medi-Cal patients, and recovery against indigent persons is impractical. If an EOA were to be split, the addition of a new provider means that the existing provider would respond to fewer calls and obtain less transport revenue, though fixed costs would remain the same.

**Finding #20:** Citygate sees no viable regulatory pathway which allows the RVPA ambulance transport JPA be split into two viable operations. Even processing the question would likely trigger the County EMS Agency to competitively bid all of Service Area C and, if the service area was then awarded to a private provider, the firefighter paramedics currently staffing ambulances could be laid off.

**Finding #21:** Given the four-year tax renewal needed in 2026, should one or more RVPA partners choose to pursue separation, they need to do so by January 2025 so that County EMS has at least a year to reconfigure the system before public budgets and tax requests to the voters are set forth in early 2026.

<sup>7</sup> Vehicle Permit Requirement: “No person, entity, firm, or corporation shall operate or cause to be operated, any ambulance transport vehicle upon the streets or roadways of Marin County unless a valid vehicle permit has been issued by the Marin County emergency medical services agency pursuant to verification of a valid certificate of operation.” (Marin County Code § 7.60.060; County Ambulance Regulations § IX.a.)

## 6.2 AGENCY SEPARATION FISCAL ANALYSIS

If the RVPA service area were to be split—with the City of Larkspur, Town of Corte Madera, and the unincorporated area of Kentfield FPD being serviced separately by CMFA—the following fiscal scenario analysis assumes that the following zip codes would no longer be serviced by M18, and instead, the associated transport revenues would go to Central Marin / Larkspur / Corte Madera: 94904, 94925, 94939, and 94976. Additionally, the City of Larkspur parcel tax would no longer be collected by RVPA. Under this scenario, the following table illustrates the corresponding change in revenue allocations.

**Table 40—Revenue Allocation Changes in Separation of Partners**

Revenue Element	RVPA without CMFA/CM	CMFA / CM + Larkspur without RVPA	Change Compared to Status Quo
Kentfield Fire District Tax	\$274,134		Same
City of Larkspur Tax		\$701,204	Revenue collection shifts from RVPA to Larkspur
CSA 27 parcel tax, including unincorporated Boardwalk / Greenbrae / Corte Madera	\$59,601	\$11,328	Same (after transfer)
Town of Fairfax Tax	\$363,432		Same
Town of Ross Tax	\$92,991		Same
Sleepy Hollow Fire District Tax	\$88,400		Same
San Anselmo Tax	\$578,616		Same
Corte Madera Tax		\$530,494	Same
<b>Subtotal Tax Revenues</b>	<b>\$1,457,174</b>	<b>\$1,243,026</b>	
Transport Revenues RVPA M18	\$681,765		RVPA M18 loses 50% of its transport revenue, or \$681,765
Transport Revenues CM M14		\$2,158,839	Central Marin revenues increase by 46%, or \$681,765
Investments	\$3,000		
<b>Revenue Grand Total</b>	<b>\$2,141,939</b>	<b>\$3,401,865</b>	

The changes in revenue allocation would be significant for RVPA, which would experience a *loss* of 39 percent, or \$1,382,969, of total revenue (transport revenue for an enlarged M14 area and loss in parcel tax revenue for Larkspur). By contrast, CMFA’s revenue would *increase* by 69 percent, or \$1,382,969.

While direct expenditures to CMFA from RVPA would decrease by only 11 percent, RVPA would continue to operate M18 and manage all other surviving JPA expenditures, but would no longer have to cover either (1) the expense paid to CMFA for fire engine paramedics and related training costs or (2) ALS backup reimbursement. This projection also assumes a drop in Medi-Cal supplemental funding (GMET) state overhead costs of 50 percent for RVPA.

The absence of enterprise accounting for the paramedic program within CMFA / Town of Corte Madera leads to difficulties in estimating the exact impact of the separation on expenditures for CMFA, so this study assumes that CMFA will continue to incur all expenditures as outlined under the status quo scenario detailed previously. The following table illustrates the net projected effect of a separation.

**Table 41—Net Effect of Separation to Revenue and Expenditures**

Fiscal Element	RVPA	Central Marin	Total
<b>Revenues</b>	\$2,141,939	\$3,401,865	\$5,543,805
<b>Expenditures</b>	\$2,892,561	\$2,162,078	\$5,054,639
<b>Net</b>	<b>(\$750,622)</b>	<b>\$1,239,788</b>	<b>\$489,166</b>

**Finding #22:** The net fiscal effect of a separation of bayside RVPA partners would be that the RVPA cannot remain solvent, while the Central Marin Fire Authority would generate a net profit from its parcel tax and transport revenues of over \$1,300,000, with only about 10 percent in increased additional expenditures.

**Recommendation #11:** Given state and County EMS ambulance regulations, along with the RVPA being supported by additional EMS special taxes, Citygate does not recommend that the RVPA try to separate into two parts. Trying to do so would likely vacate the current non-exclusive operating understanding with the Marin County EMS agency.

## SECTION 7—TECHNICAL FINDINGS AND RECOMMENDATIONS LIST

For ease of reading, this section provides all technical analysis Findings and Recommendations contained within this report. They are presented here comprehensively and sequentially.

### 7.1 KEY FINDINGS

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- Finding #1:** The volume of ambulance and paramedic first responder engine need varies significantly by population density.
- Finding #2:** When ambulance demand is compared by fire departments providing response—Ross Valley Fire JPA and Kentfield FPD at a combined 46 percent versus Central Marin Fire Authority at 54 percent—there is 8 percent more ambulance demand in the Central Marin Fire Service Area.
- Finding #3:** Across the RVPA, the peak-demand hours for ambulances is 9:00 am to 7:00 pm, six days per week. This is an important factor to track when there are only two primary ambulances in the central and eastern sections of RVPA’s service area.
- Finding #4:** The rate of simultaneous demand, at 30 percent, is high for a response system with two primary ambulances, and more so during hours of traffic congestion when ambulances must clear the hospital and get back into their primary coverage area. RVPA’s mutual aid partners are also very busy, and thus should not be the sole source of backup ambulances for RVPA.
- Finding #5:** The unit-hour utilization (UHU) rate for paramedic first responder engines is not yet close to even 20 percent, as the engines can clear an incident long before an ambulance can if it must transport a patient to the hospital.
- Finding #6:** The UHU rate for the two core RVPA ambulances is running hour-over-hour in the mid- to high-20<sup>th</sup> percentile from 10:00 am to 6:00 pm. M18, with the longest travel distances, touched 30 percent UHU, Citygate’s upper threshold.
- Finding #7:** The serious UHU rate for the two primary ambulances, combined with the high daylight-hour simultaneous incident rates, means RVPA must have a robust plan to immediately field a third ambulance from RVPA resources as needed.
- Finding #8:** EMS turnout time is too sluggish—more so given that crews do not have to don heavy structure fire protective clothing, but rather, easier-to-don EMS protection. All RVPA fire departments should make an aggressive effort to lower turnout time with data feedback and training provided to crews.

- Finding #9:** EMS travel time for first-arriving units is not close to a best practice goal of 4:00 minutes for urban/suburban jurisdictions. This is due to the topography and limited road network of the RVPA service area. However, it would not be cost effective to add multiple fire stations in effort to meaningfully lower this number for response to a very small quantity of incidents.
- Finding #10:** Ambulance travel time to 90 percent of incidents, at 9:58 minutes, is 2:48 minutes *slower* than the 7:10-minute performance reflected in the combined data including engines. This clearly shows that only two ambulances struggle to quickly cover and backfill for each other across RVPA’s difficult-to-serve geography.
- Finding #11:** The ambulance call-to-arrival time to 90 percent of incidents, at 13:25 minutes, is at the outer limits of best practices related to patient care for critical patients. As the travel time and simultaneous data indicated, the two ambulances are busy at peak hours of the day and are not always available for a call in their primary response area.
- Finding #12:** When an ambulance transports to the hospital, its total out-of-service time (duration) ranges from 78 to 87 minutes. If, at peak hours of the day, two incidents only overlap for 30 minutes, the duration loss is over an hour, meaning RVPA has no dedicated, staffed ambulances available at that time.
- Finding #13:** Medic 18’s current location in the Town of Ross should continue as long as RVPA is served by only two ambulances.
- Finding #14:** The workload of the two primary RVPA ambulances is approaching full saturation. RVPA is dependent on County Medic 96 and mutual aid from eastern partner agencies, but those agencies all have large service areas and are themselves busy at peak hours of the day.
- Finding #15:** The Central Marin Fire Authority JPA agreement does not specifically outline the funding mechanisms related to the ambulance program.
- Finding #16:** The paramedic expenditures of the Central Marin Fire Authority are not supported by interagency agreements and sufficient details, especially for overhead, to be tracked by the RVPA under governmental accounting best practice.
- Finding #17:** The RVPA payment to Central Marin Fire District for “ALS Backup” is not notated as to why the payment is made and how it is calculated.



- Finding #18:** Given that RVPA pays Central Marin Fire District for ALS (ambulance) backup, there is no reciprocal payment for RVPA's backup to Central Marin. This appears to be an imbalanced payment structure.
- Finding #19:** All equipment needs and replacement plan payments are not expensed to only the RVPA due to the separate handling of revenues and expenditures by CMFA, under the prior RVPA agreement with Corte Madera.
- Finding #20:** Citygate sees no viable regulatory pathway which allows the RVPA ambulance transport JPA be split into two viable operations. Even processing the question would likely trigger the County EMS Agency to competitively bid all of Service Area C and, if the service area was then awarded to a private provider, the firefighter paramedics currently staffing ambulances could be laid off.
- Finding #21:** Given the four-year tax renewal needed in 2026, should one or more RVPA partners choose to pursue separation, they need to do so by January 2025 so that County EMS has at least a year to reconfigure the system before public budgets and tax requests to the voters are set forth in early 2026.
- Finding #22:** The net fiscal effect of a separation of bayside RVPA partners would be that the RVPA cannot remain solvent, while the Central Marin Fire Authority would generate a net profit from its parcel tax and transport revenues of over \$1,300,000, with only about 10 percent in increased additional expenditures.

## **7.2 RECOMMENDATIONS**

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- Recommendation #1:** Medic 18 should remain in its present location in the Town of Ross if the agencies can reach agreement on the cost and terms of leasing the facility, as that is the best location for balancing the multiple needs of volume, response time, and allocation of billed revenue.
- Recommendation #2:** Due to significant peak-hour demand and limited mutual aid, RVPA needs to design and fund a more robust third ambulance capacity.
- Recommendation #3:** Include the M14 ambulance and other CMFA equipment needs in the RVPA equipment replacement schedule, provided all revenues and expenses are pooled within the RVPA. Re-assess the equipment replacement fund balance and annual contribution.
- Recommendation #4:** While reserves appear sufficient, a projection to FY 39/40 based on current assumptions shows costs outpacing the fund balance in FY

39/40. Consider replacing the flat fee contribution with a formula associated with inflation.

**Recommendation #5:** All revenues and expenditures should be centrally booked and managed by the RVPA Board of Directors.

**Recommendation #6:** Absent Recommendation #5 being implemented, the Town of Corte Madera, as the fiscal agent for the Central Marin Fire Authority, should track expenditures related to services provided to RVPA in an enterprise account.

**Recommendation #7:** There should be one purchasing agent for all equipment and materials related to the RVPA system.

**Recommendation #8:** Overhead and administrative costs should be set and applied identically for RVPA agreements. Overhead rates should conform with an agency's adopted fee schedule or, absent that, federal accounting rules for overhead by agencies receiving grants.

**Recommendation #9:** The replacement schedule should be updated to include replacement costs for the Central Marin Fire Authority ambulance, with net revenues contributing to funding replacements for both ambulances and all medical transport equipment.

**Recommendation #10:** If all revenues and expenses are pooled within RVPA, RVPA payments to partners will require common formulas, such as rent for both medic units. Secondly, after the approval of a reserve policy, a true-up mechanism should be implemented to refund member agencies any remaining revenues after expenditures.

**Recommendation #11:** Given state and County EMS ambulance regulations, along with the RVPA being supported by additional EMS special taxes, Citygate does not recommend that the RVPA try to separate into two parts. Trying to do so would likely vacate the current non-exclusive operating understanding with the Marin County EMS agency.

## **ATTACHMENT A—RVPA RESPONSE ZONES**

