Agenda Item No. 12.

Staff Report

Date: November 9, 2023

To: Mayor Brekhus and Council Members

From: Christa Johnson, Town Manager

Subject: 2025 Closure of Ross Fire Station 18 and Emergency Medical Response

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Recommendation:
Mayor Brekhus and Council Member Robbins recommend that the Town Council engage in a general discussion regarding the planned closure of the Ross Fire Station 18 in July 2025 and the status of the provision of emergency medical services in Ross.

Background and discussion:
This item was placed on the agenda at the request of Mayor Brekhus and Councilmember Robbins. Their memorandum to the Town Council is attached to this staff report. (Attachment 1)

Ross Fire Station 18
The Town of Ross joined the Ross Valley Fire Department (RVFD) in 2012. RVFD staffs the Ross Fire Station 18 and three other stations. The Town of Ross is responsible for maintaining Station 18. The fire station, with the exception of the three bays, is physically and functionally obsolete with significant structural deficiencies. It was built in 1927, long before the 1986 Essential Service Act (ESA), which established requirements for public safety building construction. Public safety personnel generally consider the Ross fire station to be in the worst physical and functional condition of any station in Marin County.

After approximately two years of extensive study, community outreach, and Town Council discussion and deliberation, on March 11, 2021 the Ross Town Council voted 5-0 to rebuild the Town's police, paramedic and administrative buildings and move forward without a fire station in the Master Plan for the Town Civic Center. Attachment 2 to this report contains the staff report for the March 11, 2021 meeting and its attachments. Attachment 3 are the adopted minutes from the March 11, 2021 meeting.

On March 10, 2022 the Ross Town Council voted 5-0 to authorize the Town Manager to execute the Third Amendment to the Ross Valley Fire Department Joint Powers Agreement (JPA)

(Attachment 4) that outlined a plan for closing Ross' Fire Station 18 on July 1, 2025 and stating the details regarding ongoing staffing levels and related issues. The Ross Valley Fire Department (RVFD) Board approved the Third Amendment unanimously. Future amendments to the JPA would require approval by each member's governing body (Town Councils and Sleepy Hollow Fire Protection District Board). RVFD Interim Chief Dan Mahoney will attend the November 9 Town Council meeting and will be available for questions.

In September 2019, a Standards of Coverage (SOC) Assessment was commissioned by the Town of Ross and the RVFD that provided data and a SOC assessment to provide a foundation for future fire service planning. The SOC report made several findings and recommendations. The 2019 Standards of Coverage Assessment by Citygate Associates, LLC is attached to this staff report. (Attachment 5)

Ross Paramedic Ambulance 18

The Ross Valley Paramedic Authority (RVPA) has operated one of its two paramedic ambulances out of the Ross Fire Station since the early 1980's. On June 15, 2023 the Ross Town Council adopted a Master Facilities Plan that included a new paramedic ambulance facility. The estimated cost (based on 2023 construction estimates) to build this new paramedic facility is $2 million. Since 1982, a series of four-year leases have been executed between the Town and the RVPA for the RVPA's use of the Town's facilities. The RVPA prefers the four-year lease term as that is the term of the RVPA's main funding source, a parcel tax. The current four-year lease expires June 30, 2024. (Attachment 6) Staff is currently working with RVPA staff to extend the lease. It is Town staff's goal to obtain a longer lease term. The RVPA Board will consider a lease extension at an upcoming meeting.

According to RVPA Chief Executive Officer Jason Weber, the paramedics have operated out of the Ross station for 40 years without problems and he nor the RVPA Board have indicated their interest nor intention of relocating the RVPA paramedics to another location.

The process to relocate the paramedics would be lengthy and costly and would require a majority vote of the RVPA Board that includes a Ross council member. Steps would include at a minimum the following: It would take a majority of the RVPA Board to request that Chief Weber begin looking into the possibility of moving the paramedic ambulance. He would recommend that a Deployment Analysis for Advanced Life Support Services be commissioned, and development of this report would take 6-9 months. The study results would be presented to the RVPA Board and it would be necessary for a majority of the Board to vote to direct Chief Weber to begin the site selection process to identify where the paramedic ambulance would be relocated. A paramedic ambulance would most likely need to be sited in a commercial or industrial area due to modern zoning requirements, or another fire station. The RVPA would need to buy property or lease it. A station and ambulance bay would need to be built at a likely significantly higher cost than building a station in Ross as part of a complete civic center renovation. Chief Weber will attend the November 9 Town Council meeting and will be available for questions.

Fiscal, resource and timeline impacts:
There are no fiscal impacts related to this agenda item beyond staff time for the preparation of this staff report. Costs regarding the provision of fire and emergency medical services and building related facilities are significant. Any proposed changes to how these services are provided will require thorough analysis by Town staff and consultants.

Environmental review (if applicable)
This agenda item is not an action item and is not subject to the California Environmental Quality Act.

Attachments
1. Memorandum from Mayor Brekhus and Councilmember Robbins to Town Council for the November 9, 2023 Town Council meeting, agenda item #12.
2. Staff report for the March 11, 2021 Town Council meeting, agenda item #11 and its attachments.
3. Adopted minutes for March 11, 2021 Town Council meeting
4. Third Amendment to the Amended and Restated Ross Valley Fire Department Joint Powers Agreement, dated February 2022
5. 2019 Standards of Coverage Assessment by Citygate Associates, LLC
6. 2020 Town of Ross and RVPA lease agreement

ATTACHMENT 1

Memo from Mayor Brekhus and Councilmember Robbins to Ross Town Council
For agenda item on November 9, 2023 meeting

Mayor Elizabeth Brekhus and Councilmember Elizabeth Robbins, the Town Council's representatives to the Ross Valley Fire Department (RVFD) and the Ross Valley Paramedic Authority (RVPA), have asked the Town Council to discuss paramedic services to Ross and to discuss the status of the Ross fire station. The purpose of these discussions is to ensure that the Town of Ross continues to have emergency medical responders in Ross, and to ensure that there is a long-term commitment from the Paramedic Authority to continue to base the paramedics in Ross since the Town is planning to build a multi-million-dollar paramedic facility on the Town civic center site.

Retaining emergency medical workers in Ross is a concern because the Ross fire station is scheduled to close in July 2025 and the Paramedic Authority does not have a long-term contract to remain in Ross. Firefighters at Ross Valley Fire Department double as emergency medical technicians (EMTs) and provide emergency medical services for all 911 calls; the paramedics in the Ross Valley Paramedic Authority ambulance also respond. If the Ross fire station closes the emergency response time is expected to be unchanged for 85% of the 911 calls. However, if the RVPA ambulance were to be relocated, then Ross would no longer have emergency medical responders in town. The response time for a 911 call would increase by a minimum of 2 minutes from the current average of 7 minutes 55 seconds, resulting in a response time found in an edge suburban or rural area. A long-term contract with the Ross Valley Paramedic Authority would ensure the presence of emergency medical workers in Ross, as would keeping the Ross fire station open.

Ross's public safety facilities housing the fire department, police department, and paramedics, along with its administrative facilities, have needed modernization and repair for over a decade. The Town Council discussed upgrading the facilities and closing the fire station in multiple meetings and in a community workshop from the fall of 2019 through March 2021, after which the Town Council voted to rebuild all facilities (including a paramedics facility) and to close the fire station. Discussions focused primarily on fire risk and fire insurance issues, and less on emergency medical response. Reasons for not rebuilding the fire station included the rarity of structure fires in Ross, the proximity of other fire stations in San Anselmo and Kentfield, and the high cost of rebuilding the fire station.

Revisiting the status of emergency services is important to ensure that emergency medical responders continue to be based in Ross. Discussions should take into consideration the timing and budgetary implications of current Ross Valley Fire Department discussions about whether to contract with Central Marin Fire Department for fire chief services and whether to consolidate the Ross Valley Fire Department with the Central Marin Fire Department. The Ross Valley Fire Department is also in the process of increasing engine staffing from 2 to 3 persons.

ATTACHMENT 2

Agenda Item No. 11.

Staff Report

Date: March 11, 2021

To: Mayor McMillan and Council Members

From: Joe Chinn, Town Manager

Subject: Town Council Decision on which Town Facilities (Police, Fire, Paramedic, Administrative) to Include in a Master Plan to Modernize Within Ross

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Recommendation

Town Council to discuss and decide on which Town facilities to include in the Facilities Master Plan to modernize and reconstruct within Ross. The alternative options of facilities to include in the Master Plan to reconstruct for Council to choose from include:

- Alternative A – Rebuild police, paramedic, and administrative space with fire services being relocated to a neighboring station outside of Ross;
- Alternative B – Rebuild police and administrative space with fire services and paramedic services being relocated to a neighboring station outside of Ross;
- Alternative C – Rebuild the fire station, police, paramedic, and administrative space all in Ross; and
- Alternative D – Different mix of facilities than above alternatives to be built in Ross.

Background and discussion

The police station and the fire station, with the exception of the two fire engine bays, are physically and functionally obsolete with significant structural deficiencies. Both were built in 1927, long before the 1986 Essential Service Act (ESA), which established requirements for public safety building construction. Public safety personnel generally consider the Ross police and fire stations to be in among the worst physical and functional condition of any stations in Marin County.

Modern fire and paramedic (EMS) facilities are designed to create travel paths for personnel from living spaces to apparatus bays, ensuring faster response times. Since 2005, firefighters have been sleeping in a portable not connected to the building. Other living spaces and dorms are distant from firetrucks and ambulances. A portion of the fire station was permanently closed a few years ago due to building conditions.

The portion of the building with police facilities was originally constructed as a residence and later converted to the police station; the floor plan does not begin to meet the standards for a modern police facility, and its conditions have been deteriorating for decades. In addition to the police station, fire station and paramedic facilities, the Town is considering constructing space to house administrative staff, a majority of who are located in a portable building behind Town Hall.

In February of 2016 and again in June 2020, Construction and Development Solutions Inc. (CDS) conducted a Property Condition Assessment of the property. The CDS assessment found that there are a number of building systems and components with a diminished level of integrity and capacity. This is due to exceeding limits on their life expectancy, in addition to non-compliance with the Essential Service Act (ESA) requirements for public safety construction. Given the issues related to non-compliance with ESA due to the building's current use as a public safety structure, CDS's findings indicate that it would be cost prohibitive to correct the issues related to the non-compliance of the ESA due to seismic and flooding issues. Given the deficiencies found, the cost of re-construction within the existing building footprint could easily equal or exceed that of a new ground up facility. This finding is similar to what the Council was told around 2010 by Mack5, a construction management firm: that the cost of remodeling the building was more than the cost of constructing a new facility. In addition, if the existing building were to be completely remodeled and rehabilitated to meet ESA and current building standards, there are still significant physical site constraints and building footprint issues that make this option cost prohibitive such as the flood risk, poor building layout and design, and site traffic circulation problems.

The Town of Ross held public meetings on August 13 and October 29, 2020, and January 14, 2021, to discuss the longstanding need to improve town facilities for fire, police, paramedics, and administrative staff. The Town Council August 13, 2020 meeting discussion of modernizing the Town facilities included a summary of the various studies conducted to that date: the CDS Assessment; the Citygate Associates comprehensive Standards of Coverage assessment which provides the foundation for analyzing and planning for fire and paramedic services; and McGrath Architects conceptual site plans and cost estimates for four options. In addition, the staff report and presentation among other items included additional information on fire and paramedic operational considerations, and facility funding and potential funding sources (staff report included as Attachment 1).

On October 29, 2020, the Town held a community workshop using Zoom related to the Town facilities and services that was facilitated by MIG consultants. Approximately 44 members of the public attended the interactive public workshop. The participants provided their thoughts and questions related to Town facilities and services (Attachment 2 Community Workshop Summary). Based on the questions heard at the community workshop and other comments received by the public, a Frequently Asked Questions (FAQs) document was created to answer the most common questions heard (Attachment 4).

The Town has created a website link for the Modernizing Ross Town Facilities project (link - http://www.townofross.org/civiccenter) containing links to each of the three studies referred to above, all the attachments in this document, videos of the October 29 Workshop, a video of the police and fire stations, as well as other links to additional information on this project.

Community Questionnaire and Results

The Town conducted an online questionnaire in December 2020 to collect input from residents and stakeholders on public safety services and for the replacement of police, fire, paramedic, and administrative facilities in Ross. The Town promoted the questionnaire by multiple email blasts and a postcard sent to every property address in Ross.

Three hundred thirty-six (336) stakeholders completed the questionnaire between December 3 and December 30, 2020. The instrument was hosted on SurveyMonkey and included 11 closed- and open-ended questions. Questionnaire participants were most concerned about medical emergency response, police remaining in the community, and fire and wildfire safety. In a question that asked participants to prioritize among public safety needs: the top response was medical emergency response; followed by police in the community; then local structure and neighborhood fire response which was followed closely by regional wildfire prevention and response; next flooding prevention, preparedness and response; and lastly Public Safety Power Shutoff (PSPS) preparedness.

The questionnaire tested the public support for two of the four options that were included in the August 13 staff report. The two options tested were:

- For about $14.6 million, the Town can rebuild police, paramedic quarters, and administrative space with fire services being provided from a neighboring station.
- For about $28.4 million, the Town can rebuild the fire station, police, paramedic quarters, and administrative space.

Related to the $14.6 million option above:

Are you willing to pay a tax of approximately $189 per year per $1 million of property assessed value (for example, $490/year for the average property assessed at $2.6 million) to replace police, paramedic, and administrative facilities (the lower cost option)?

Most respondents (63%) indicated they are willing to pay a tax of approximately $189 per year per $1 million of property assessed value to replace police, paramedic, and administrative facilities, or the lower cost option. Twenty-eight percent (28%) of respondents replied "no" and 9% responded "I don't know."

Related to the $28.4 million option above:

Are you willing to pay a tax of approximately $520/year per $1 million of property assessed value (for example, $1,350/year for the average property assessed at $2.6 million) to keep a fire engine in Ross and maintain current response times, in addition to replacing police, paramedic, and administration facilities (the higher cost options)?

Most respondents (55%) indicated they are not willing to pay a tax of approximately $520 per year per $1 million of property assessed value to keep a fire engine in Ross and maintain current response times, in addition to replacing police, paramedic, and administration facilities.

The Community Questionnaire Summary is included in Attachment 3.

There were four optional open-ended questions in the survey that asked participants to provide a reason for how they responded to the tax questions as well as a more general area to share comments. The main themes of the responses to the open-ended questions are included in the summary. Some of the comments included desire for information on items such as impacts to public safety and wildfire safety, projected costs, rehabilitation versus rebuilding, and alternative options. Many of the items requested were already included in the FAQ sheet as well as the past staff report. Staff did update the FAQ sheet with some additional items to address some of the additional information requests included in the comments. Staff has been and will continue to be available to answer resident questions or provide additional information that is requested. Townwide emails and Town Morning After newsletter articles have frequently mentioned that if residents have questions or comments to contact Town Manager Chinn or Planning and Building Director Streeter which a number of community residents have done over time.

At the January 14, 2021 Council meeting, the results of the community questionnaire were presented along with a discussion of responses to the most common questions asked by residents. At the meeting there was a discussion that some Town residents were interested to see if private fundraising could fund the additional cost of a fire station. It was recommended by the Council to bring the modernizing facilities item to the March 11 Council meeting to provide the private fundraisers some time to explore the viability of fundraising for the fire facility cost, receive more feedback from the community, and have Council make a decision on the facilities to reconstruct. The private fundraising efforts did not yield enough interest within the community to be able to raise most or all of the approximately $14 million to construct the fire facility along with the other facilities.

Fiscal, resource and timeline impacts

The rough draft facility cost figures were provided by Mary McGrath Architects based on their experience with design and construction of public safety and other governmental facilities in the Bay Area. Many of the expense estimates are very preliminary and are anticipated to change as scopes and designs move forward on the respective projects. Figures will be updated as better information becomes known. Potential funding sources will be dependent on the facilities the Town decides to rebuild with the cost range being from $12.2 million to $28.4 million.

The Town has been actively saving funds to assist in funding a portion of the facility costs and anticipates that it will have approximately $7 million available to contribute to the facilities. The remainder of the costs would likely need to come from property owners through some form of voter-approved financing, paid over 30 years via property tax bills. The questionnaire tested

resident support for a new tax based on two options with project costs of $14.6 million and $28.4 million, respectively.

If the Town decides not to construct a new fire station in Ross, the higher cost project of $28.4 million will be reduced by $13.8 million to $14.6 million. In addition, if the fire station is not constructed in Ross, it is likely the Town will also have lower annual operational costs for fire services. However, the exact amount cannot be determined until after negotiations with the other members of the Ross Valley Fire Department and adjacent fire agencies.

Timing and Process

Following the Council decision on what facilities to reconstruct, the Town will hire a Master Plan consultant to move the project forward, further developing the concept and design of the site facilities. There will be significant public participation opportunities as part of the Master Plan design process. Environmental analysis, which could include preparation of an initial study, public scoping meetings, and development of an Environmental Impact Report will run concurrently with development of the Facilities Master Plan through 2021. A vote on a potential ballot measure for funding would likely occur after certification of the environmental review and Council approval of the Facilities Master Plan. Staff time and consultant costs associated with this project will be funded from the Town's Facilities Fund.

Depending on the option selected by the Town Council of what facilities to construct, other negotiations and agreements with other entities may be needed. For example, if the Council elects not to re-construct the fire station in Ross then the RVFD JPA would have to be re-negotiated with all four partners of the JPA – San Anselmo, Fairfax, Ross, and Sleepy Hollow. In addition, there could be impacts to related existing labor contracts with RVFD firefighters. Additionally, an agreement may be needed with the Kentfield Fire Protection District for any services they provide. In addition, a new lease agreement would be needed with the Ross Valley Paramedic Authority if they stay on-site.

Environmental review (if applicable)

Council's consideration of this report is not subject to the California Environmental Quality Act (CEQA). Once the Facilities Master Plan project is scoped and defined, the appropriate level of environmental review will be determined.

Alternative actions

Alternatives are being discussed throughout this process.

Attachments

1. August 13, 2020 Staff Report
2. October 29, 2020 Community Workshop Summary
3. January 14, 2021 Staff Report with Community Questionnaire Summary Attachment
4. Town Facilities Modernization Frequently Asked Questions (FAQs) and Responses
5. Public Comment since January 14, 2021 Council Meeting

ATTACHMENT 1

TOWN OF ROSS

Agenda Item No. 12.

Staff Report

Date: August 13, 2020

To: Mayor McMillan and Council Members

From: Joe Chinn, Town Manager
Jason Weber, Ross Valley Fire Department Fire Chief
Rich Simonitch, Public Works Director

Subject: Modernizing Civic Center Facilities Related to Fire, Paramedic, Police, and Administration Facilities

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Recommendation

This is a discussion item to receive input from the Council and the community related to modernizing existing facilities on the Town Civic Center site. The existing facilities being discussed are for fire, paramedic, police, and Town administrative facilities. This is the first Council meeting on this topic which will include additional public meetings with the goal for Council to make a decision in November or December 2020 on civic facilities to modernize in Ross.

Background and discussion

The current public safety facilities building was constructed in 1927 or 93 years ago. The current building is physically and functionally obsolete, and for many years has been in need of major repair and renovation. The building was designed significantly prior to 1986 Essential Service Act (ESA) requirements for public safety construction as well as modern wood construction techniques. There is a significant amount of deferred maintenance and the design is not up to current public safety standards. Furthermore, except for the construction of the rear apparatus bays in 1995, there has been no real annual investment in the main building to keep it up to minimal standards. The fire bays are below the one hundred (100) year flood elevation. Thus, the current facility needs a major overhaul to meet current public safety facility requirements to provide modern public safety services.

In February of 2016 and again in June 2020, Construction and Development Solutions Inc. (CDS) conducted a Property Condition Assessment of the property. The assessment included analysis by outside experts to report on the site topography, exterior and interior building, life safety,

exiting, ADA compliance, structural conditions, lead and asbestos, electrical, mechanical, and plumbing systems.

The CDS assessment found that there are a number of building systems and components with a diminished level of integrity and capacity. This is due to exceeding limits on their life expectancy, in addition to non-compliance with the Essential Service Act (ESA) requirements for public safety construction. Given the issues related to non-compliance with ESA due to the building's current use as a public safety structure, CDS's findings indicate that it would be cost prohibitive to correct the issues related to the non-compliance of the ESA due to seismic and flooding issues. Given the deficiencies found, the cost of re-construction within the existing building footprint could easily equal that of a new ground up facility. This finding is similar to what the Council was told around 2010 by Mack5, a construction management firm that the cost or remodeling the building was more than the cost of constructing a new facility.

The significant findings from the CDS assessments that relate to the condition of the structure are summarized as follows:

- Structural Deficiencies: There are several deficiencies to the structural integrity of the building including lack of seismic upgrades at the foundation, in-fill construction, lack of floor girder connections and seismic concerns due to irregular shapes of the buildings. It is concluded that the extent of these structural deficiencies alone would require substantial re-configuration and not likely feasible or cost effective to repair.

- Mechanical Systems: Most of the building's electrical and HVAC components are at the end of their life expectancy and need to be upgraded to Title 24 standards. This would require almost complete removal and replacement of these components.

- Plumbing: The domestic water system shows signs of corrosion and should be replaced in its entirety.

- Pests and organisms: termites, rodents, fungus, wood eating beetles and other organisms have affected various areas of the site and structure.

If the existing building were to be completely remodeled and rehabilitated to meet ESA and current building standards, there are still significant physical site constraints that make this option cost prohibitive:

- Building layout and design: The building layout which was put together over time is poorly laid out as shown in the Attachment 1 site plan. The fire and paramedic bays are at the back of the site away from access to Sir Francis Drake Blvd. The police station was built as a house for personnel and thus is not laid out for a modern police department. Two portables have been added to the site one for fire personnel sleeping quarters and the

other for Town planning, building, and public works staff. Overall, the buildings are inefficiently sited on a parcel which lacks depth due to the creek behind the buildings.

- Site traffic circulation: The onsite vehicular and pedestrian circulation present a potential safety challenge. Fire stations require a clear and unimpeded path of travel for apparatus and support vehicles to and from the site. Administrative staff and the public vehicles that go to and from the civic center campus present possible circulation and parking conflicts as well as safety concerns for pedestrian's visiting the various buildings. The site is constrained, and safety vehicle access should be separated from non-safety staff and the public. There is little to no room to separate access with the current building location and shape.

- Flood Risk: The existing apparatus bays were inundated with floodwaters during the 2005 flood (generally accepted as a 100-year flood) compromising the use of the entire station as a public safety building which must operate under emergency conditions for 72 hours following an emergency event. The 2005 flood also came very close to flooding the lowest floor of the firehouse which would therefore also need to be raised to 1' above the 100-year flood. Consequently, the paved areas around the site would require significant reconstruction to meet the new elevated grades of the apparatus bays and fire station.

Service Options

The Town has several options of facilities that need to be modernized at the Civic Center site. The existing Civic Center site facilities were largely constructed in the 1920's along with the fire bay addition added around 1995 and the two temporary portable buildings. The Town has an option of whether to modernize the fire station and paramedic facilities on-site or have the services provided in another location outside of Ross.

The Town hired Mary McGrath Architects to look at the Civic Center site and determine the space needs for the various services if they were provided on-site, develop a conceptual site plan for each option to determine fit on site, and provide a rough cost budget to develop each option.

The four options are:

- Option 1 – Joint-use Police and Fire Station including paramedic quarters, and new administration space adjoining the existing Town Hall
- Option 2 – Joint-use Police and Fire Station without paramedic quarters, and new administration space adjoining the existing Town Hall
- Option 3 – Joint Police and Administration building; modular paramedic quarters, no fire station.
- Option 4 - Joint Police and Administration building; no fire station or paramedic space.

A rough site layout for each of the four options is shown in Attachment 2.

Fire and Paramedic Services in the Town of Ross

The Town of Ross receives fire suppression, emergency medical services, fire prevention and inspections, and disaster response services from the Ross Valley Fire Department (RVFD). RVFD is a Joint Powers Authority (JPA) that is comprised of the Towns of San Anselmo, Ross, and Fairfax, and the Sleepy Hollow Fire Protection District. In 2012, the Town of Ross went from having its own fire department to joining RVFD. RVFD currently has four fire stations (Station 18 in Ross, Station 19 in downtown San Anselmo, Station 20 on Butterfield in San Anselmo which is the closest station to Sleepy Hollow, and Station 21 in Fairfax). The department serves approximately 25,000 residents including Ross's 2,550 residents. Each of the four RVFD fire stations is staffed with a two-person fire engine. In the case, of the Ross Station (station 18), the on-duty fire personnel sleep in a portable trailer that the Town has leased since 2005 due to issues with the station's sleeping quarters.

The Ross Valley Paramedic Authority (RVPA) also has two paramedics housed at the Ross fire station. RVPA contracts with Marin County Fire Department for staffing including (2) Firefighter Paramedics on each shift. The paramedics are housed and operate out of the existing Ross Station 18. The paramedic ambulance serves an area from Highway 101 to the east and Woodacre to the west, thus a territory significantly larger than served by RVFD. The only RVPA staffing in the Ross Valley is located at Station 18 with the other RVPA ambulance located in Corte Madera serving Corte Madera and parts of Larkspur. Ross is the mid-point for the RVPA Paramedic Ambulance (M-18) service area - there are the same number of calls going both to the east and west of the Station. The paramedics provide emergency medical services to the entire RVPA area and also when not on a medical call will go to fire calls for service as the staff are all firefighters that are also paramedics.

Given this dynamic, there are different service options of: locating both fire and the paramedics in Ross (as is currently done at Station 18); just locating the fire services in Ross; just locating the paramedic authority in Ross; or neither.

Fire and Paramedic Operational Considerations

RVFD and the Town of Ross contracted with Citygate Associates, LLC (Citygate) in 2019 to provide a comprehensive Standards of Coverage (SOC) assessment to provide a foundation for future fire service planning for RVFD. As part of the study, Citygate provided an analysis of the impact on current level of services received in Ross if the fire engine in the Town was relocated, and alternatively, the fire engine and ambulance were relocated from their present location in the Town. Below is a summary of some of the findings from the Citygate study.

- Low number of incidents in Ross with very few "working" fires. In a two-year period Ross Station 18 ran 627 calls for service. Of those 292 were code 3 dispatches (lights and siren). Of the 292, the vast majority 247 (85%) were medical and 7 (2%) were dispatches to structure fires with 2 of those being actual fires and 1 a vegetation fire for a total of 3 actual fires or (1%).

- Ross enjoys good response times based on geography with an average response time of 7:55. Fire Response would increase approximately 2 minutes on average with no station which would be similar to outer suburban averages. If the ambulance remains in Ross, response times would be identical to current with the exception of when the ambulance is committed to other incidents which has averaged 15% of the time or 37 times in two years.

- There is no indication that the closure of the Ross Station 18 would substantially impact ISO ratings which insurance companies use to determine risk (thus costs to consumers). This is assuming neighboring fire stations can provide services to effectively mitigate incidents and are within 5 miles of the fire station providing response.

- In emergencies, without a fire station in Ross responses would be provided by either San Anselmo Fire Station 19 (1.1 miles to Town Hall) or Kentfield Fire Station (.65 miles to Town Hall). In non-emergency calls, principal responding station would likely be from the San Anselmo fire station. This reliance on neighboring fire stations (Kentfield and San Anselmo) would increase simultaneous calls in either jurisdiction. 1.5-2 times per week either engine would be unable to respond requiring response from a more distant fire resource.

- In 2017 and 2018 the Ross Engine 18 responded to – 60% of calls in Ross, 28% to San Anselmo, 2% Fairfax, 9% Kentfield, 1% east in 2017 and 2018. Ross engine went to other Ross Valley areas 145 times while other RVFD engines responded to Ross a total of 18 times. This is reflective of the limited need for multiple unit responses within the Town of Ross (fires, major traffic accidents and other multi-company responses).

Some other fire and paramedic operational considerations that were not part of the Citygate study:

- We estimate approximately 170 homes have sprinkler systems or approximately 20% of total homes. The Town is averaging approximately 18 sprinkler permits annually.

- The existing civic center site provides substantial challenges with limited ingress/egress. At best, it will be difficult to site all facilities and accommodate parking and traffic circulation safely.

Capital and Operating Cost Considerations

Public safety facilities typically encompass police, fire, medical response, rescue and other related operations. In contrast to general office buildings, facilities used by public safety agencies must be configured and equipped to be integral parts of the work their occupants do. This involves evidence storage, shops for repairing specialized equipment, separated

decontamination areas and equipment, communications and technical tools, secure spaces for specialized vehicles, ammunition storage, sleeping quarters, emergency operations capacity and a large number of other special facility aspects. These all drive up the facilities cost. These facilities must also be designed and built to keep them secure and functional in natural and man-made disasters.

The rough cost estimates for each of the four options range from $12.2 million to $28.4 million as shown below as estimated by McGrath Architects.

Option	Description	Services not Included on Site	Cost Estimate	Building Sq. Ft.
1	Police and Fire (2 company), Admin.	--	$28.4 Million	15,200
2	Police and Fire (1 company), Admin.	Paramedic	$24.4 Million	12,235
3	Police and Admin Blding, Ambulance B.	Fire	$14.6 Million	8,040
4	Police and Administration Building	Fire and Paramedic	$12.2 Million	5,080

It is important to note in all cases that in addition to the capital cost being discussed above, Ross has an annual operating cost to the RVFD of $2,159,000 to pay for the annual cost of fire personnel and operations and maintenance costs including a fire vehicle replacement fund. To assist in paying for a share of the annual fire and police operating expenses, in November 2016 the Town of Ross voters approved a public safety parcel tax with a 79% voter approval. The current tax rate is $1,069 per parcel and the current tax expires at the end of Fiscal Year 2024-25. The public safety parcel tax is a critical funding source for the Town's on-going police and fire annual operating costs and will need to be renewed ideally by November 2024.

Facility Funding and Potential Funding Sources

The funding sources for the facility will come from several sources – existing fund balances and additional fund balances that can be saved, a likely financing that would be backed by a new voter approved tax revenue source, and potentially some donations to the extent can be raised.

Currently, the Town Facilities Fund has approximately $4.3 million that can be used for this project. In two years and briefly reviewing other fund balances the amount of cash available for this project could reasonably be in the $7 million range.

Financing will be needed to fully fund any of the options above. There are several options available all would require Ross voter approval at a two-thirds level. Some of the alternatives are provided below:

- General Obligation Bond (GOB) require a 2/3 voter approval, and is paid back by property owners as an ad valorem tax on property tax bills. The annual tax per property is based on the assessed value of each parcel. The Ross School had a GOB measure passed and it is currently being assessed on Ross School District property owners. The annual debt service on a GOB is typically lower than other types of local government funding because

of the credit quality tied to the ad valorem tax base of the community and the efficiency of the financing.

- Certificates of Participation (COP's) backed by a parcel tax to pay the debt obligation. No public vote is required for a COP. However, the COP needs a revenue source to repay it and the most likely source would be a parcel tax which does require a 2/3 voter approval. The Town only has a total of approximately 837 taxable parcels.

- Community Facilities District (i.e., Mello-Roos Districts) levies a special tax that can pay for public facilities including police and fire stations. Property owners in a CFD are taxed annually for their share of the debt service on any bonds the CFD has issued to build facilities. The annual special tax on each parcel is a fixed amount and is not tied to the assessed value of the parcel. CFD's require a 2/3rds majority vote of residents living in the CFD. It would work similar to the parcel tax.

The Town had a preliminary bond financing analysis performed on the General Obligation Bond and Certificates of Participation options. The interest rate on COP's is higher than a GOB and the financing is less efficient, and thus the annual debt service costs are approximately 10% greater than a GOB's debt service.

The table shows a comparison of tax rates needed to support a 30 year bond debt service (thus 30 years of taxes) for a General Obligation Bond and a COP backed by a parcel tax.

Tax Rates of GOB and COP Financing

Construction Proceeds	Annual GOB Tax per $1M Assessed Value	Annual COP/Parcel Tax per Parcel
$10,000,000	$243	$708
$20,000,000	$485	$1,417

Please note that interest rates are currently at very low rates. The tax levels above assume a small increase in interest rates from current rates at the time bonds would be issued. If interest rates are higher than assumed, either the tax rates will have to be higher to get the same amount of bond proceeds or the amount of construction proceeds will be lower than shown at a given tax rate.

Another potential source of some funding for new facilities may be donations. It is said that much of the fire bay addition that occurred around 1995 was funded by donations from residents.

Questions to Consider

Below are some sample questions for the Council to consider:

- What is the long-term vision for public safety facilities in Ross?

- What is the likelihood the current public safety parcel tax approved by voters in November 2016 will be approved in or before 2024 if a new capital tax is requested before then? The public safety parcel tax is a critical component to providing a large share of the annual staffing and operating costs of police and fire services.

- What is the process the Town should follow to receive significant public input on this major decision? In the end, voter approval will be needed to construct the facilities with different tax levels needed depending on the facilities that are to be constructed. Town staff is recommending adding additional workshops and/or Council meetings related to this topic, a resident survey, Town emails and newsletter, and materials on the website related to this topic to assist the public in getting additional information and being able to provide input on this critical Town topic.

Fiscal, resource and timeline impacts

The rough draft cost figures were provided by Mary McGrath Architects based on their experience with design and construction of public safety and other governmental facilities in the Bay Area. Many of the expense estimates are very preliminary and are anticipated to change as scopes and designs move forward on the respective projects. Figures will be updated as better information becomes known. Potential funding sources are discussed above and the funding sources will be dependent on the facilities the Town decides to rebuild with the cost range being from $12.2 million to $28.4 million.

Timing and Process

Development of a project concept is anticipated to take place from September through November of this year. This will involve substantial community outreach in the form of a project website, resident survey, workshops, Town emails and newsletter, and/or Council meetings on the topic. December 2020 is the target for the Council determination of a final project concept. Following this determination, the Town will hire a Civic Center Master Plan consultant to move the project forward, further developing the concept and design of the site facilities. Environmental analysis, which could include preparation of an initial study, public scoping meetings, and development of an Environmental Impact Report will run concurrently with development of the Civic Center Master Plan through the first three quarters of 2021. A vote on a potential ballet measure for funding would likely occur after certification of the environmental review and Council approval of the Civic Center Master Plan. Staff time and consultant costs associated with this project will be derived from the Town's Facilities Fund.

Depending on the option selected by the Town Council of what facilities to construct, other negotiations and agreements with other entities may be needed. For example, if the Council elects not to re-construct the fire station in Ross then the RVFD JPA would have to be re-negotiated with all four partners of the JPA – San Anselmo, Fairfax, Ross, and Sleepy Hollow. In addition, there could be impacts to related existing labor contracts with RVFD firefighters. Additionally, an agreement may be needed with the Kentfield Fire District Fire Protection District

for any services they provide. In addition, a new lease agreement would be needed with the Ross Valley Paramedic Authority if they stay on-site.

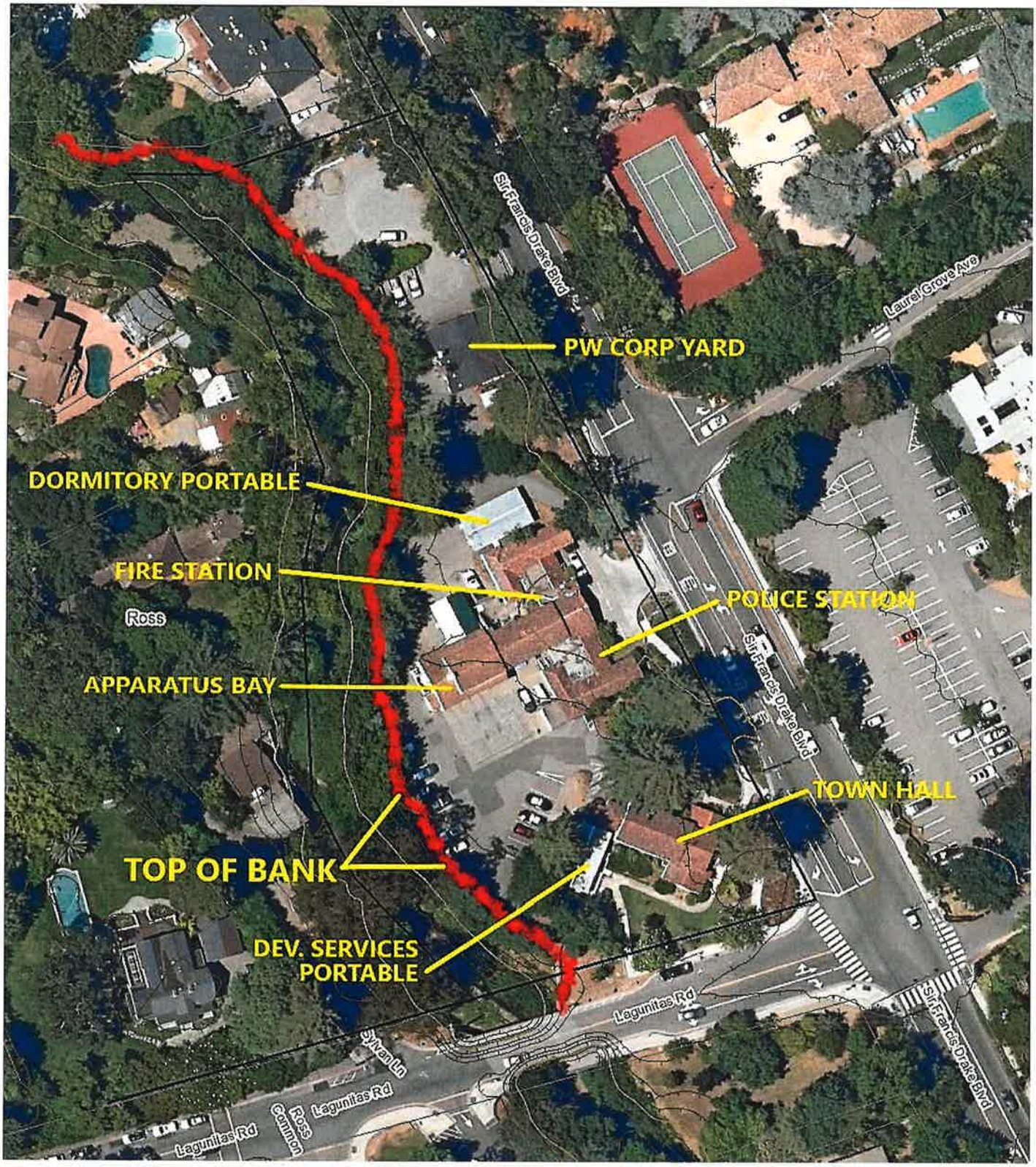
Environmental review (if applicable)
Council's consideration of this report is not subject to the California Environmental Quality Act (CEQA). Once the Civic Center Master Plan project is scoped and defined, the appropriate level of environmental review will be determined.

Alternative actions
Alternatives are to be discussed throughout this process.

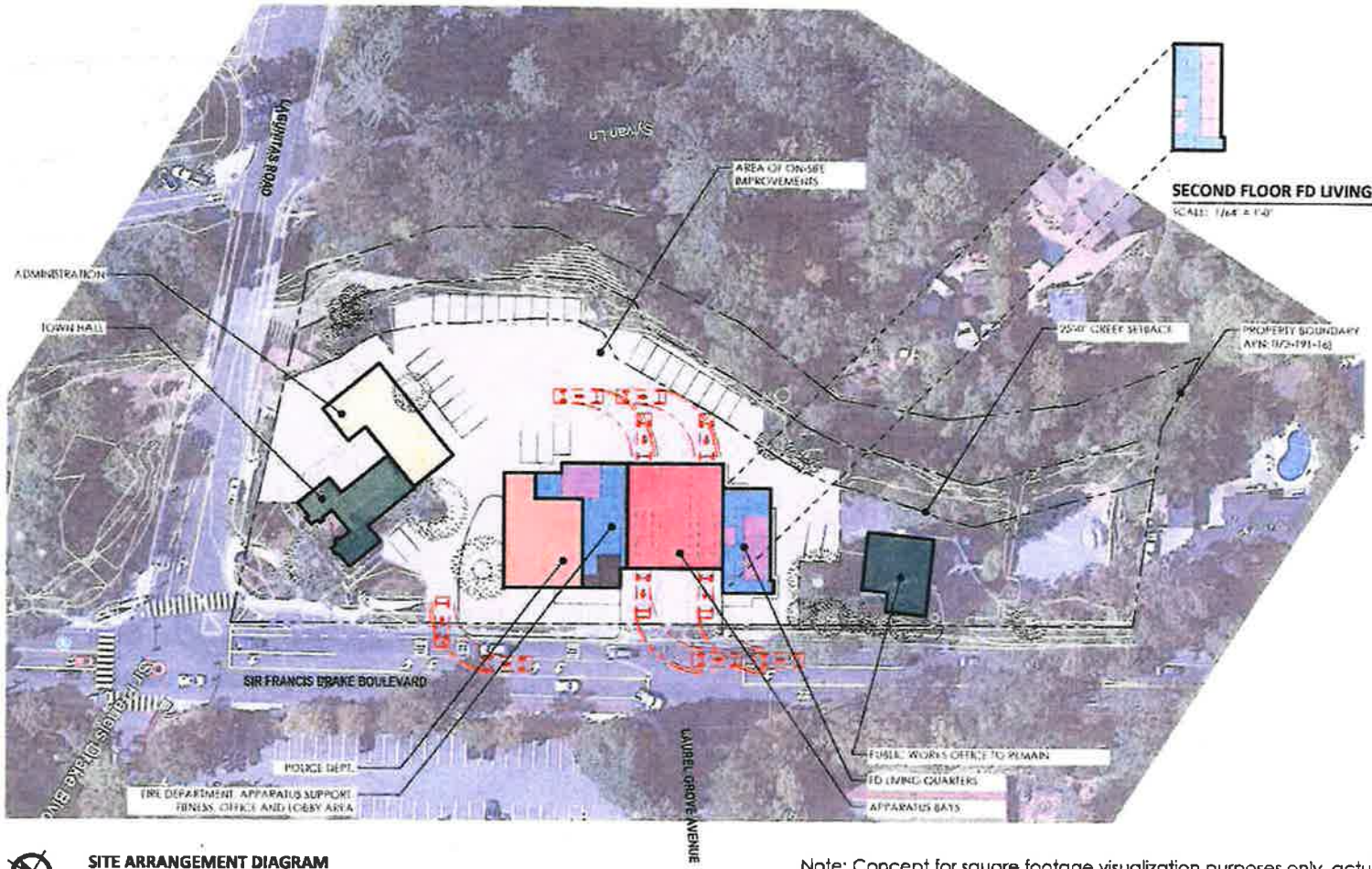
Attachments
1. Current Civic Center Site Layout
2. Mary McGrath conceptual site arrangement diagram for Options 1 - 4

ATTACHMENT 1

SITE PLAN - ROSS CIVIC CENTER

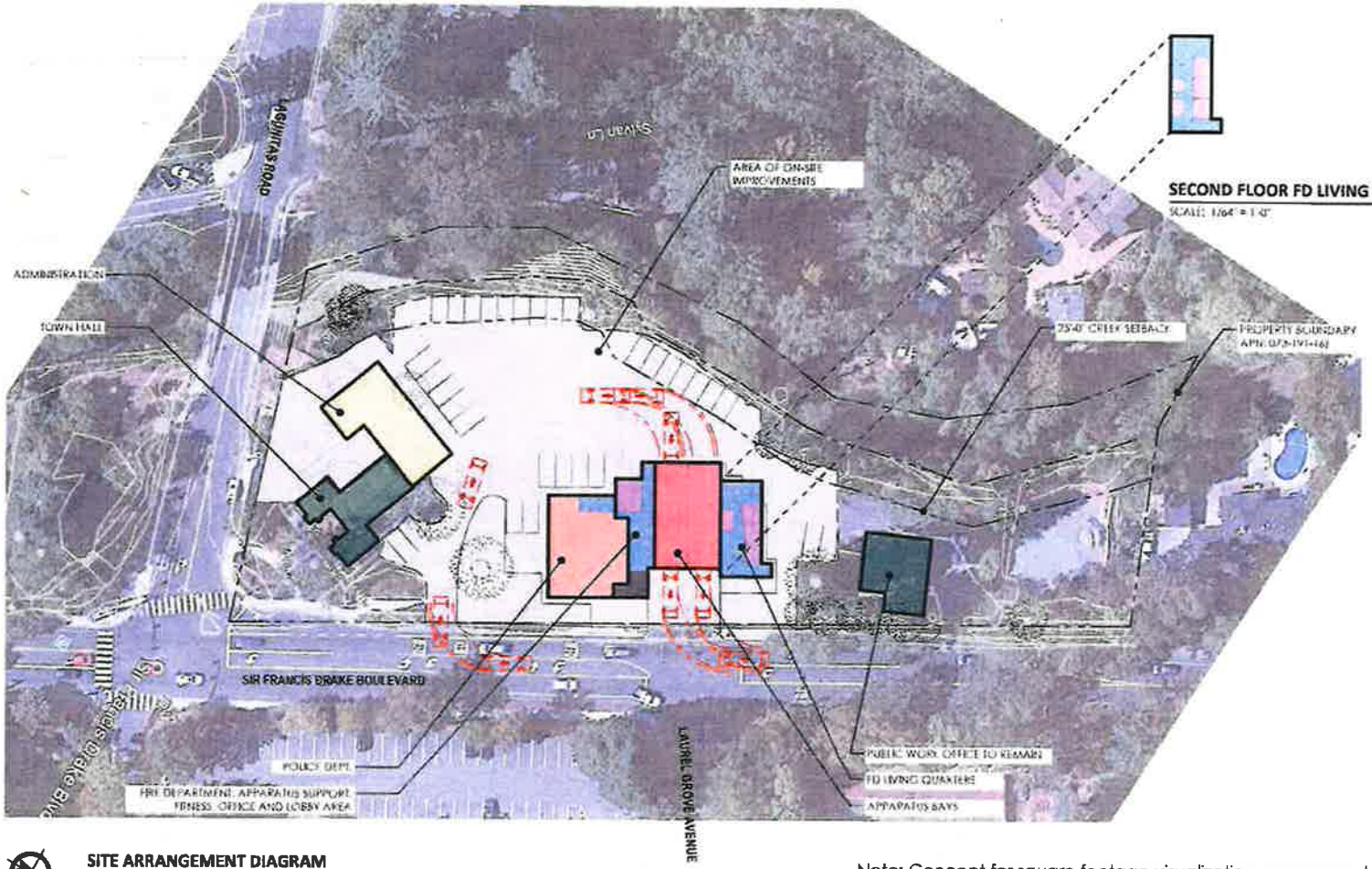


ATTACHMENT 2



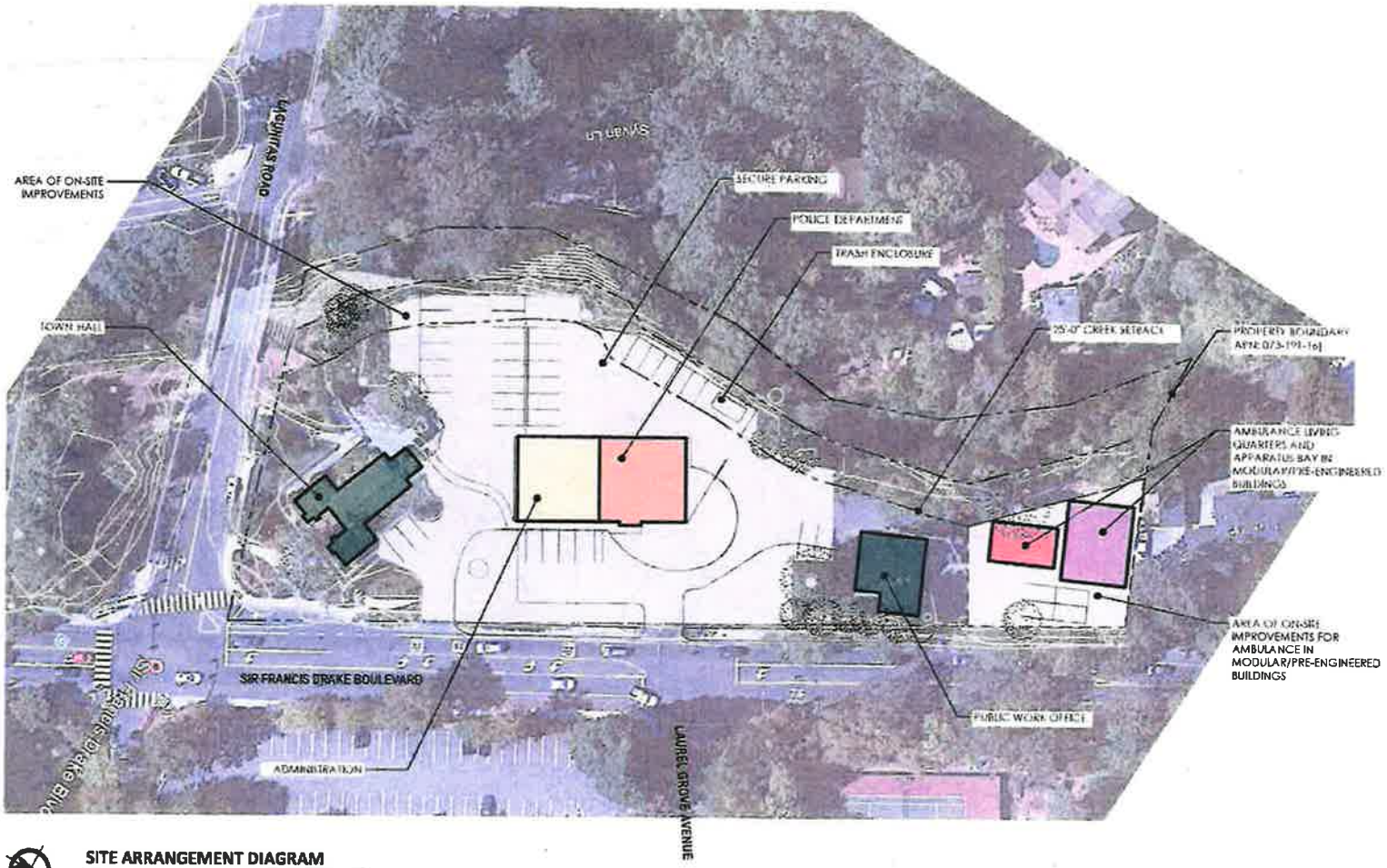
SITE ARRANGEMENT DIAGRAM
SCALE: 1/64" = 1'-0"

Note: Concept for square footage visualization purposes only, actual arrangement of buildings may be different



SITE ARRANGEMENT DIAGRAM
SCALE: 1/64" = 1'-0"

Note: Concept for square footage visualization purposes only, actual arrangement of buildings may be different



SITE ARRANGEMENT DIAGRAM
SCALE: 1/64" = 1'-0"

Note: Concept for square footage visualization purposes only, actual arrangement of buildings may be different

SITE ARRANGEMENT DIAGRAM

SCALE: 1/64" = 1'-0"

Note: Concept for square footage visualization purposes only, actual arrangement of buildings may be different

ATTACHMENT 2

Modernizing Ross Civic Center
Community Workshop
SUMMARY

Introduction

The Town of Ross sponsored a community workshop on October 29, 2020, from 6:00 to 8:00 pm using Zoom video conferencing. Forty-four (44) members of the public attended the workshop, as well as Town staff and MIG consultants. Of the participants who responded to an ice breaker poll, 90% indicated they live in Ross. The workshop recording can be viewed here: https://www.townofross.org/civiccenter

Town Manager Joe Chinn offered welcoming remarks and recognized all the Town Council members in attendance as well as members of Town staff. He then introduced the MIG consulting team and turned over the meeting to the facilitator Carolyn Verheyen.

Ms. Verheyen gave an overview of the workshop objectives and outlined the evening's agenda. She offered a few ground rules to help facilitate participation and followed with a brief orientation to the Zoom meeting platform, explaining to participants the tools for engaging in the discussion.

Background on the Civic Center

Next Mr. Chinn and Ross Valley Fire District and Marin County Fire Chief Jason Weber gave a PowerPoint presentation featuring background and technical information regarding current conditions at the Town buildings housing police, fire, paramedic, and administrative functions housed in a portable. They also presented conclusions from a variety of background studies and analyses of the facilities, a description of fire and paramedic service levels and an overview of potential costs of various options and funding mechanisms.

Framing the Discussion

Following the presentation, Ms. Verheyen polled participants on their initial opinions around modernizing Town facilities. These polls were not intended to be statistically

representative of the community, rather to take the pulse of workshop participants. Poll results are presented below:

- ***What level of priority do you believe it is to modernize these facilities?*** (30 total respondents)
  - High priority – 15 (50%)
  - Somewhat high priority – 5 (17%)
  - Neutral – 6 (20%)
  - Somewhat low priority – 2 (7%)
  - Low priority – 2 (7%)
- ***Before tonight, had you heard about the need to modernize the Civic Center?*** (30 total responses)
  - Yes – 27 (90%)
  - No – 3 (10%)
- ***What do you consider to be the most significant public safety need for the Ross community?*** (30 total responses)
  - Medical emergency response – 12 (40%)
  - Wildfire prevention and response – 12 (40%)
  - Police in the community – 3 (10%)
  - Public safety power shutoff preparedness – 2 (7%)
  - Other – 1 (3%)

Participants asked Town staff questions about the two options to address fire engine and paramedic ambulance facilities as well as the studies and process identifying those options.

Breakout Discussion Groups

The group then split up into three breakout rooms to discuss four questions:

1. *What is your vision for the new Civic Center Building?*
2. *How important is it to keep a fire station in Ross?*
3. *How willing are you to pay for this?*
4. *How important is having paramedic services stationed in Ross?*

Input collected throughout the workshop is summarized by question below. Video recordings of each breakout session have also been posted to the Town of Ross website.

What is your vision for the new Civic Center building?
Some participants saw this as an opportunity to create a sense of place and of history as new facilities are developed. It was observed that the phrase "Civic Center" denoted the idea of a cultural center or gathering place and some thought it shouldn't be used to refer to the public safety functions as well.

Some people felt that the site wasn't ideal with its potential for flooding. Some participants noted that having high-quality services and facilities was part of what makes the Town special. Several would like to see additional service options considered, including those that had been eliminated previously. There were requests for additional information related to costs and past studies.

How important is it to keep a fire station in Ross?
Several participants indicated they would prefer to keep full services in town given the increasing severity of wildfires and perceptions that excellent services are a selling point for the Town and help keep Ross property values high. Other participants disagreed and expressed feeling comfortable moving the fire station outside of Ross and increasing response times by two minutes.

One small group discussed the rare occurrence of fires in Ross, with only 3 fires two years. This group also discussed the likelihood of climate related fires, particularly in open spaces such as Mount Tam. Participants asked questions about potential costs, savings, benefits and drawbacks, such as potential changes in homeowner's insurance or operational costs.

How willing would you be to pay for the fire station to remain in Ross?
Participants requested more information regarding upfront and ongoing costs. Several were willing to pay higher taxes to continue stationing services in town, while others were not. Participants requested additional options, including options that would lower costs and look at innovative service models. Participants speculated about Town opinions and preferences, the impacts of raised taxes for those on fixed incomes and no-cost options. One participant suggested that small fire stations might not provide career paths for in-house firefighters.

How important is having paramedic services stationed in Ross?
Participants asked questions about response time and requested data on a variety of indicators. Participants would like to know the number of medical emergencies that require paramedic services, and the impacts of longer response times. Several

people would prefer to keep paramedic services stationed in Ross, noting that medical emergencies are unpredictable and urgent.

Breakout Group Reports

At the conclusion of the breakout group sessions, everyone re-convened in the main "room" to hear a representative from each group offer highlights from the discussions.

Next Steps

Town Manager Joe Chinn stated that the participants asked very good questions in the workshop and the Town will provide additional information in response to those questions. A number of studies are also on-line to assist in providing information to residents. He described the next steps in the modernizing Town facilities process including: responding to questions; distribution of a Community Questionnaire; and further presentation and discussion of these issues at upcoming Town Council meetings. He mentioned that residents can email Town staff their questions and thoughts. He thanked all of the community members who participated in the workshop for the healthy discussion.

ATTACHMENT 3

Agenda Item No. 11.

Staff Report

Date: January 14, 2021

To: Mayor McMillan and Council Members

From: Joe Chinn, Town Manager

Subject: Discussion of the Modernization of Town Police, Fire, Paramedic, and Administrative Facilities and Results of the Community Questionnaire on the Topic

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Recommendation

Discuss the modernization of Town police, fire, paramedic, and administrative facilities and hear a presentation of the results of the community questionnaire on this topic. Council to discuss and ask questions related to the questionnaire or any other items they want to discuss related to the facilities modernization project, receive public input, and provide any direction for the February or March Council meeting on this topic. It is recommended at the February or March Council meeting, the Town Council select which facilities to reconstruct.

Background and discussion

The police station and the fire station, with the exception of the two fire engine bays, are physically and functionally obsolete with significant structural deficiencies. Both were built in 1927, long before the 1986 Essential Service Act (ESA), which established requirements for public safety building construction. Public safety personnel generally consider the Ross police and fire stations to be in among the worst physical and functional condition of any stations in Marin County.

Modern fire and paramedic (EMS) facilities are designed to create travel paths for personnel from living spaces to apparatus bays, ensuring faster response times. Since 2005, firefighters have been sleeping in a portable not connected to the building. Other living spaces and dorms are distant from firetrucks and ambulances. A portion of the fire station was permanently closed a few years ago due to building conditions.

The portion of the building with police facilities was originally constructed as a residence and later converted to the police station; the floor plan does not begin to meet the standards for a modern police facility, and its conditions have been deteriorating for decades. In addition to the

police station, fire station and paramedic facilities, the Town is considering constructing space to house administrative staff, a majority of who are located in a portable building behind Town Hall.

In February of 2016 and again in June 2020, Construction and Development Solutions Inc. (CDS) conducted a Property Condition Assessment of the property. The CDS assessment found that there are a number of building systems and components with a diminished level of integrity and capacity. This is due to exceeding limits on their life expectancy, in addition to non-compliance with the Essential Service Act (ESA) requirements for public safety construction. Given the issues related to non-compliance with ESA due to the building's current use as a public safety structure, CDS's findings indicate that it would be cost prohibitive to correct the issues related to the non-compliance of the ESA due to seismic and flooding issues. Given the deficiencies found, the cost of re-construction within the existing building footprint could easily equal or exceed that of a new ground up facility. This finding is similar to what the Council was told around 2010 by Mack5, a construction management firm: that the cost of remodeling the building was more than the cost of constructing a new facility. In addition, if the existing building were to be completely remodeled and rehabilitated to meet ESA and current building standards, there are still significant physical site constraints and building footprint issues that make this option cost prohibitive such as the flood risk, poor building layout and design, and site traffic circulation problems.

On August 13 and October 29, 2020, the Town of Ross held public meetings to discuss the longstanding need to improve town facilities for fire, police, paramedics, and administrative staff. The Town Council August 13, 2020 meeting discussion of modernizing the Town facilities included a summary of the various studies conducted to that date: the CDS Assessment; the Citygate Associates comprehensive Standards of Coverage assessment which provides the foundation for analyzing and planning for fire and paramedic services; and McGrath Architects conceptual site plans and cost estimates for four options. In addition, the staff report and presentation among other items included additional information on fire and paramedic operational considerations, and facility funding and potential funding sources (staff report included as Attachment 2). On October 29, 2020, the Town held a community workshop using Zoom related to the Town facilities and services that was facilitated by MIG consultants. Approximately 44 members of the public attended the interactive public workshop. The participants provided their thoughts and questions related to Town facilities and services (Attachment 3 Community Workshop Summary). Based on the questions heard at the community workshop and other comments received by the public, a Frequently Asked Questions (FAQs) document was created to answer the most common questions heard (Attachment 4).

The Town has created a website link for the Modernizing Ross Town Facilities project (link - http://www.townofross.org/civiccenter) containing links to each of the three studies referred to above, all the attachments in this document, videos of the October 29 Workshop, as well as other links to additional information on this project.

Community Questionnaire and Results

The Town conducted an online questionnaire in December 2020 to collect input from residents and stakeholders on public safety services and for the replacement of police, fire, paramedic, and administrative facilities in Ross. The Town promoted the questionnaire by multiple email blasts and a postcard sent to every property address in Ross.

Three hundred thirty-six (336) stakeholders completed the questionnaire between December 3 and December 30, 2020. The instrument was hosted on SurveyMonkey and included 11 closed- and open-ended questions. Ninety-eight percent (98%) of participants own property or live in Ross.

Questionnaire participants were most concerned about medical emergency response, police remaining in the community, and fire and wildfire safety. In a question that asked participants to prioritize among public safety needs: the top response was medical emergency response; followed by police in the community; then local structure and neighborhood fire response which was followed closely by regional wildfire prevention and response; next flooding prevention, preparedness and response; and lastly Public Safety Power Shutoff (PSPS) preparedness.

The questionnaire tested the public support for two of the four options that were included in the August 13 staff report. The two options tested were:

- For about $14.6 million, the Town can rebuild police, paramedic quarters, and administrative space with fire services being provided from a neighboring station.
- For about $28.4 million, the Town can rebuild the fire station, police, paramedic quarters, and administrative space.

Related to the $14.6 million option above:

Question 3. Are you willing to pay a tax of approximately $189 per year per $1 million of property assessed value (for example, $490/year for the average property assessed at $2.6 million) to replace police, paramedic, and administrative facilities (the lower cost option)?

Most respondents (63%) indicated they are willing to pay a tax of approximately $189 per year per $1 million of property assessed value to replace police, paramedic, and administrative facilities, or the lower cost option. Twenty-eight percent (28%) of respondents replied "no" and 9% responded "I don't know."

Related to the $28.4 million option above:

Question 5. Are you willing to pay a tax of approximately $520/year per $1 million of property assessed value (for example, $1,350/year for the average property assessed at $2.6 million) to keep a fire engine in Ross and maintain current response times, in addition to replacing police, paramedic, and administration facilities (the higher cost options)?

Most respondents (55%) indicated they are not willing to pay a tax of approximately $520 per year per $1 million of property assessed value to keep a fire engine in Ross and maintain current response times, in addition to replacing police, paramedic, and administration facilities.

The Community Questionnaire Summary is included as Attachment 1.

There were several optional open-ended questions in the survey that asked participants to provide a reason for how they responded to the tax questions as well as a more general area to share comments. The main themes of the responses to the open-ended questions are included in the summary. Some of the comments included desire for information on items such as impacts to public safety and wildfire safety, projected costs, rehabilitation versus rebuilding, and alternative options. Many of the items requested are already included in the FAQ sheet as well as the past staff report. Staff did update the FAQ sheet with some additional items to address some of the additional information requests included in the comments. Staff has been and will continue to be available to answer resident questions or provide additional information that is requested.

Fiscal, resource and timeline impacts

The rough draft facility cost figures were provided by Mary McGrath Architects based on their experience with design and construction of public safety and other governmental facilities in the Bay Area. Many of the expense estimates are very preliminary and are anticipated to change as scopes and designs move forward on the respective projects. Figures will be updated as better information becomes known. Potential funding sources will be dependent on the facilities the Town decides to rebuild with the cost range being from $12.2 million to $28.4 million.

The Town has been actively saving funds to assist in funding a portion of the facility costs and anticipates that it will have approximately $7 million available to contribute to the facilities. The remainder of the costs would likely need to come from property owners through some form of voter-approved financing, paid over 30 years via property tax bills. The questionnaire tested resident support for a new tax based on two options with project costs of $14.6 million and $28.4 million, respectively.

If the Town decides not to construct a new fire station in Ross, the higher cost project of $28.4 million will be reduced by $13.8 million to $14.6 million. In addition, if the fire station is not constructed in Ross, it is likely the Town will also have lower annual operational costs for fire services. However, the exact amount cannot be determined until after negotiations with the other members of the Ross Valley Fire Department and adjacent fire agencies.

<u>Timing and Process</u>

At the February or March 2020 Council meeting, the Town Council is to determine which facilities to reconstruct. Following this determination, the Town will hire a Master Plan consultant to move the project forward, further developing the concept and design of the site facilities. There will be significant public participation opportunities as part of the Master Plan design process.

Environmental analysis, which could include preparation of an initial study, public scoping meetings, and development of an Environmental Impact Report will run concurrently with development of the Facilities Master Plan through 2021. A vote on a potential ballot measure for funding would likely occur after certification of the environmental review and Council approval of the Facilities Master Plan. Staff time and consultant costs associated with this project will be funded from the Town's Facilities Fund.

Depending on the option selected by the Town Council of what facilities to construct, other negotiations and agreements with other entities may be needed. For example, if the Council elects not to re-construct the fire station in Ross then the RVFD JPA would have to be re-negotiated with all four partners of the JPA – San Anselmo, Fairfax, Ross, and Sleepy Hollow. In addition, there could be impacts to related existing labor contracts with RVFD firefighters. Additionally, an agreement may be needed with the Kentfield Fire Protection District for any services they provide. In addition, a new lease agreement would be needed with the Ross Valley Paramedic Authority if they stay on-site.

Environmental review (if applicable)
Council's consideration of this report is not subject to the California Environmental Quality Act (CEQA). Once the Facilities Master Plan project is scoped and defined, the appropriate level of environmental review will be determined.

Alternative actions
Alternatives are being discussed throughout this process.

Attachments

1. Community Questionnaire Summary
2. August 13, 2020 Staff Report
3. October 29, 2020 Community Workshop Summary
4. Town Facilities Modernization Frequently Asked Questions (FAQs) and Responses

Modernizing Ross Town Facilities
Online Community Questionnaire
SUMMARY

Introduction

The Town of Ross (Town or Ross) conducted an online questionnaire in December 2020 to collect input from residents and stakeholders on public safety services and for the replacement of outdated Town facilities, specifically those needed to provide police, fire, paramedic, and administrative services. The Town promoted the questionnaire extensively.

Three hundred thirty-six (336) responders completed the questionnaire between December 3 and December 30, 2020. The instrument was hosted on SurveyMonkey and included 11 closed- and open-ended questions. The Town collected basic demographic information to determine the reach of the questionnaire and identify any gaps in public engagement. Ninety-eight percent (98%) of participants own property or live in Ross.

Key Findings

Key themes and takeaways from the Questionnaire analysis are listed below.

- ***Public Safety*** – Participants are most concerned about medical emergency response, police remaining in the community, and wildfire safety. Some participants noted increased fire hazards due to climate change and wildfires.
- ***Preference for Lower Cost Option*** – Participants' responses indicate a preference for the lower cost option replacing police, paramedic, and administrative facilities with strong support for a tax level to construct these facilities.
- ***Cost*** – Many participants objected to the costs of both options, and particularly the higher cost option. Some participants expressed a reluctance to pay additional taxes.
- ***Information*** – Some participants would like information around the impacts to public safety and wildfire safety, projected costs, cost-benefits of keeping a fire station in Town, rehabilitation versus rebuilding, and alternative options.

Detailed Results

The full results of each question are summarized below. Some questions allowed participants to select two or more answers, resulting in total counts greater than the number of respondents. For each chart, "n" represents the total number of responses for the question. Percentages are provided for questions that require participants to select one answer. Where

respondents wrote-in comments, key recurring themes are provided. Themes are listed in order of frequency.

Question 1. What do you consider to be the most significant public safety needs for the Ross community? Acknowledging that these are all important, please rank your top three choices below, with one indicating your highest relative priority, two indicating your next priority, and three indicating your third relative priority.

Participant responses indicate **medical emergency response** as respondents' highest public safety need (133). Police in the community was selected as the second highest priority. The next highest relative priorities were local structure and neighborhood fire response, and regional wildfire prevention and response.

Figure 1. Question 1: Most Significant Public Safety Needs

Public Safety Need	1 = Highest Relative Priority	2 = Second Relative Priority	3 = Third Relative Priority
Medical emergency response	133	107	48
Police in the community	102	93	50
Flooding prevention, preparedness, and response	18	23	50
Regional wildfire prevention and response	35	43	57
Local structure and neighborhood fire response	31	53	94
Public Safety Power Shutoff (PSPS) preparedness	4	4	20

(n = 325)

Question 2. Please use this scale to respond to the following question: 1 = Very High Priority; 2 = Somewhat High Priority; 3 = Neutral; 4 = Somewhat Low Priority; 5 = Very Low Priority. What level of priority do you believe it is to…?

Participants ranked keeping police and staff departments in Town (178), keeping paramedic services in Town (168), keeping our fire engine stationed in Ross and maintaining current

response times (114) as a "Very High Priority." Replacing outdated Town facilities (62) was ranked relatively lower.

Figure 2. Question 2: Priority Issues

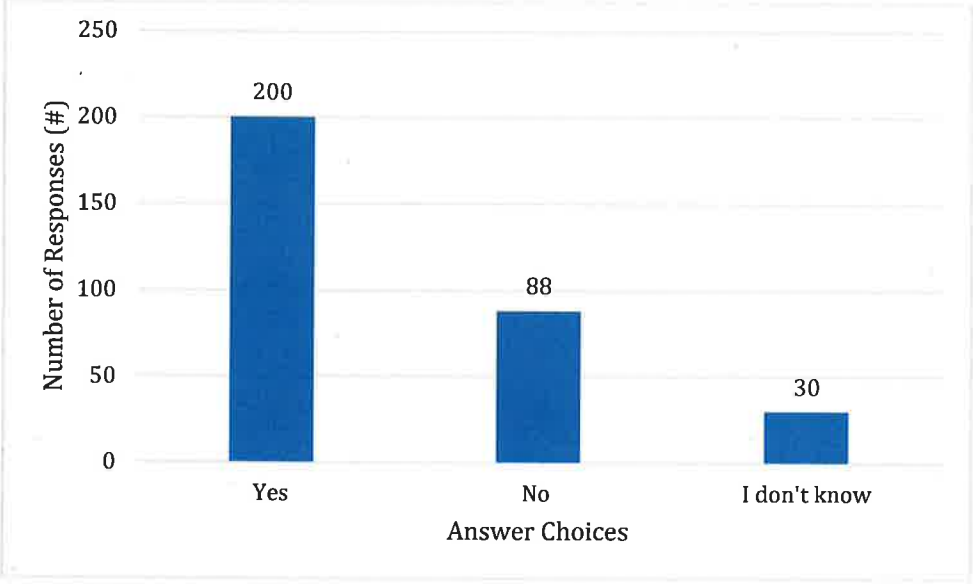
Public Safety Need	1 = Very High Priority	2 = Somewhat High Priority	3 = Neutral	4 = Somewhat Low Priority	5 = Very Low Priority	Total Number of Responses (n)
Keep police and staff departments in Town	178	70	32	25	25	330
Keep paramedic services in Town	168	76	39	25	23	331
Keep our fire engine stationed in Ross and maintain current response times	114	50	49	58	59	330
Replace outdated Town facilities	62	75	76	49	67	329

(n = 331)

Question 3. Are you willing to pay a tax of approximately $189 per year per $1 million of property assessed value (for example, $490/year for the average property assessed at $2.6 million) to replace police, paramedic, and administrative facilities (the lower cost option)?

Most respondents (63%) indicated they are willing to pay a tax of approximately $189 per year per $1 million of property assessed value to replace police, paramedic, and administrative facilities, or the lower cost option. Twenty-eight percent (28%) of respondents replied "no" and 9% responded "I don't know."

Figure 3. Question 3: Willingness to Pay to Replace Police, Paramedic and Administrative Facilities
(n = 318)



Question 4. Please share the reasons for your response. (Optional)

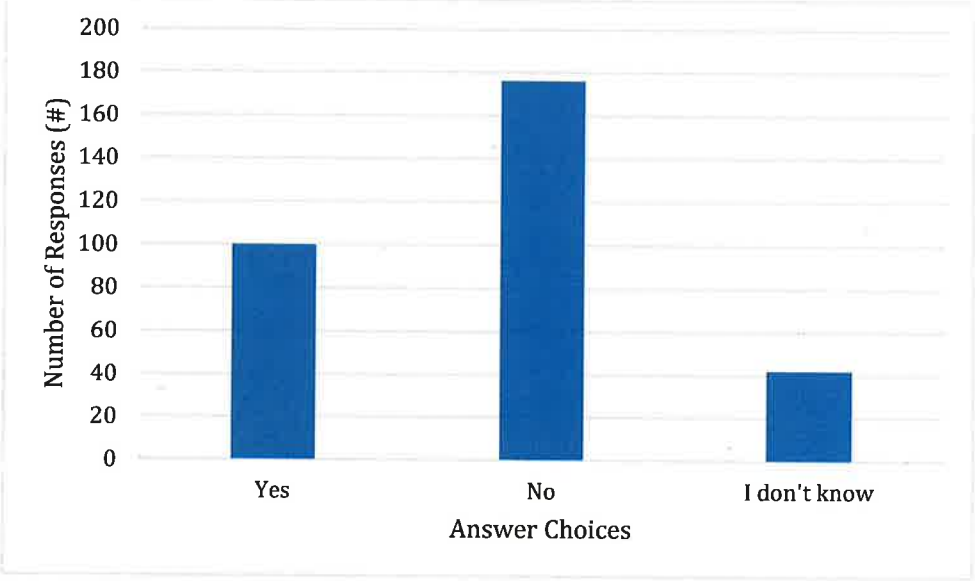
- ***Keeping Services in Town*** – Many participants would like to keep fire, medical and/or police services stationed in Town and are willing to pay to do so. However, participants disagree about which services to keep, with some prioritizing one or two types of services rather than all three.
- ***High Taxes in Ross*** – Participants noted that residents' tax burdens are already high and increasing local taxes could disproportionately impact less affluent households.
- ***Regional Solutions*** – Participants would like to look at regional solutions for providing services, particularly fire.
- ***Additional Options*** – Participants noted that limited options were presented and would like to find lower cost options, including options for rehabilitating existing facilities.
- ***Cost*** – Participants felt that the lower cost option is too expensive.
- ***Affordability*** – Participants are concerned about the impacts of increased taxes for less affluent residents, including those who are retired and living on fixed incomes. Several participants shared that they could not afford increased taxes.
- ***Information*** – Participants would like information around the impacts to public safety and wildfire safety, projected costs, cost-benefits of keeping a fire station in Town, rehabilitation vs. rebuilding and alternative options.
- ***Town Identity*** – Participants would like to consider the impact of relocating services on the Town's identity and shared sense of community, such as the loss of direct community outreach.
- ***Safety*** – Some participants noted the public safety benefits of keeping services in Town.

- ***Necessary or Unnecessary*** – While some participants feel strongly feel that facility updates are necessary and urgent, some feel that these updates are unnecessary and excessive.

Question 5. Are you willing to pay a tax of approximately $520/year per $1 million of property assessed value (for example, $1,350/year for the average property assessed at $2.6 million) to keep a fire engine in Ross and maintain current response times, in addition to replacing police, paramedic, and administration facilities (the higher cost options)?

Most respondents (55%) indicated they are not willing to pay a tax of approximately $520 per year per $1 million of property assessed value to keep a fire engine in Ross and maintain current response times, in addition to replacing police, paramedic, and administration facilities (the higher cost option).

Figure 4. Question 5: Willingness to Pay to Keep a Fire Engine Stationed in Ross



(n = 318)

Question 6. Please share the reasons for your response. (Optional)

- ***Cost*** – Many participants objected to the costs for the higher cost option. More participants expressed this point of view regarding the higher cost option relative to the lower cost option.
- ***Keeping Services in Town*** – Participants would like to keep fire services in Town, noting fire safety, climate change and the increased likelihood of wildfires. Several participants believe "local control" is important for maintaining quality services.

- ***Regional Solutions*** – Participants would like to partner with nearby towns and cities such as San Anselmo and Kentfield to provide fire services. Several participants stated that Ross is too small to provide in-Town fire services efficiently.
- ***Safety*** – Participants are concerned about the fire, wildfire, and general safety implications of relocating fire services outside of Town. Some participants felt strongly that minutes can be "a matter of life and death."
- ***Extended Response Times*** – Some participants expressed that the two-minute extended response time for services was agreeable, with some noting that the extended response time was "minimal" or "modest".
- ***High Taxes*** – Some observed that local taxes are high in Ross and share that they would not be willing to pay additional taxes.
- ***Information*** – Participants would like information around the impacts to public safety and wildfire safety, projected costs, cost-benefits of keeping a fire station in Town, rehabilitation versus rebuilding and alternative options.
- ***Affordability*** – Some participants would not be able to afford the tax increases for the higher cost option.
- ***Unnecessary*** – A few participants believe the proposed facility updates to be unnecessary.

Question 7. If you responded "I don't know" to Questions 3 or 5, please describe what additional information you need to help you form an opinion. (Optional)

- ***Information*** – Participants would like information around the impacts to public safety and wildfire safety, projected costs, cost-benefits of keeping a fire station in Town, rehabilitation vs. rebuilding and alternative options, and design.
- ***Cost*** – Some participants would like more information about the cost estimates and cost-benefits.
- ***Additional Options*** – A few participants would like to see additional options.

Question 8. Please share any other comments you have about the Town facilities modernization effort. (Optional)

- ***Design*** – Many participants commented on the design of updated facilities. Numerous participants would like to retain a similar architectural style, look, and character.
- ***Additional Options*** – Many participants would like to see additional options for updating facilities and funding. For example, participants would like to look at rehabilitation of the facilities instead of new construction and delay making a decision until after COVID-19 and the current recession.

- ***Keeping Services in Town*** – Participants would like to keep services in Town. However, there was not consensus on which services should be stationed in Town and whether facilities should be constructed. Some participants felt that services should remain in Ross without updating facilities.
- ***Cost*** – Participants disagree with the high cost and would like to see lower cost options, including a "bare bones" facility.
- ***Information*** – Participants would like information around the impacts to safety and fire safety, benefits of keeping a fire station in-Town, projected costs, the decision-making process, alternatives, design, and functionality.
- ***High Taxes*** – A few participants felt they already pay high local taxes and are not willing to pay additional taxes.
- ***Public Outreach and Engagement*** – A few participants appreciated that the Town is involving the community regarding this project and approved of the Town's outreach and engagement efforts. Some expressed gratefulness for the opportunity to provide input.

Next Steps

Town staff and MIG will respond to stakeholder questions, provide additional information, and present the results of the questionnaire to the Town Council at the Council meeting on January 14, 2021.

Town of Ross
California

Modernizing Ross Town Facilities
Online Community Questionnaire
SUMMARY

Appendix: Questionnaire Instrument

Introduction

We are interested in your opinion about how police, fire, and paramedic services should be provided and funded in the future. Your feedback will help us plan for the future and set priorities to ensure ongoing public safety and emergency preparedness.

This questionnaire is estimated to take about 5 minutes to complete, and your response is anonymous. It follows up on information from the Town website and in the facilities FAQs emailed to residents in mid-November. Thank you in advance for your participation.

Our Town's public safety building -- which currently includes police, fire, and paramedics -- was originally constructed in 1927. While it has served our community well over those 93 years, today it is physically and functionally obsolete, with extensive structural deficiencies, and is not compliant with Essential Service Act requirements for public safety buildings. The building is generally considered to be in the worst physical and functional condition of any station in Marin County. A construction management company found it would be cost prohibitive to correct the numerous deficiencies and non-compliance issues.

In determining how to best modernize the Town's facilities with a new public safety building, some choices need to be made. We are seeking input from our residents on various options for future service delivery.

What are the choices?

We are considering several options to address our fire and paramedic facilities, assuming the community wants to keep police and administrative facilities in Town. These options include:

- For about **$28.4 million**, we can rebuild the fire station, along with police, paramedic quarters, and administrative space (higher cost option); or
- For about **$14.6 million**, we can relocate our fire staff to a neighboring station, and rebuild police, paramedic quarters, and administrative space (lower cost option)

Another option that would reduce costs to $12.2 million is relocating all fire and paramedic staff from Ross, although this option would increase medical response times by an average of 2 minutes. Under all options, the Ross Town Hall building and Council Chambers will remain.

A 2019 emergency management and fire protection planning assessment concluded that alternative approaches to fire protection in Ross are possible, based on the relatively low number of working fires in the two-year period studied.

Keeping our fire engine in Ross and maintaining current response times would cost residents an additional $13.8 million for a new fire station (higher cost option).

Relocating fire services to a neighboring community would increase response time for fires and non- medical calls by approximately 2 minutes. Keeping an ambulance in the Ross Station would maintain the same response times for 85% of medical calls, and for the other 15% of calls, when the ambulance is committed on other incidents, response times would increase by approximately 2 minutes (lower cost option).

1. What do you consider to be the most significant public safety needs for the Ross community? **Acknowledging that these are all important, please rank your top three (3) choices below, with 1 indicating your highest relative priority, 2 your next priority, and 3 indicating your third relative priority.**

Medical emergency response

Police in the community

Flooding prevention, preparedness and response

Regional wildfire prevention and response

Local structure and neighborhood fire response

Public Safety Power Shutoff (PSPS) preparedness

2. Please use this scale to respond to the following question: 1 = Very High Priority; 2 = Somewhat High Priority; 3 = Neutral; 4 = Somewhat Low Priority; 5 = Very Low Priority.

What level of priority do you believe it is to...

	5 = Very low priority	4 = Somewhat low priority	3 = Neutral	2 = Somewhat high priority	1 = Very high priority
Replace outdated Town facllities	○	○	○	○	○
Keep police and staff departments in Town	○	○	○	○	○
Keep our fire engine stationed in Ross and maintain current response times	○	○	○	○	○
Keep paramedic services in Town	○	○	○	○	○

Funding

When construction begins in a couple of years, the Town will have saved approximately $7 million to contribute to fund these facilities. The remainder would need to come from residents through some form of voter-approved financing, paid over 30 years via property tax bills.

If we were to finance this project through a general obligation bond, the lower cost option would be approximately $189 a year per $1 million of property assessed value; the higher cost option would be approximately $520 a year per $1 million of property assessed value.

As an example, the average property in Ross is currently assessed at about $2.6 million. Using the figures above, the average property would pay approximately $490/year for the lower cost option, or $1,350/year for the higher cost option. Thus, keeping a fire engine in Ross would cost approximately an additional $860/year for 30 years in property taxes for the average assessed value property.

3. Are you willing to pay a tax of approximately $189 per year per $1 million of property assessed value (for example, $490/year for the average property assessed at $2.6 million) to replace police, paramedic, and administrative facilities (the lower cost option)?

- ◯ Yes
- ◯ No
- ◯ I don't know

4. Please share the reasons for your response. (Optional)

5. Are you willing to pay a tax of approximately $520/year per $1 million of property assessed value (for example, $1,350/year for the average property assessed at $2.6 million) to keep a fire engine in Ross and maintain current response times, in addition to replacing police, paramedic, and administration facilities (the higher cost option)?

- ◯ Yes
- ◯ No
- ◯ I don't know

6. Please share the reasons for your response. (Optional)

7. If you responded "I don't know" to Question 3 or 5, please describe what additional information you need to help you form an opinion. (Optional)

Determining what services to locate here in Ross is only the first step in the Town facilities modernization effort. After we determine what we want to provide in our community, we can begin the design development phase of the project, which will consider the new facilities' look and configuration.

8. Please share any other comments you have about the Town facilities modernization effort. (Optional)

Demographics

Your responses in this section will help us ensure we include feedback from different demographics.

9. Do you currently live or own property in the Town of Ross?

- ◯ Yes
- ◯ No

10. Select the age range that applies to you:

- ◯ 18 - 30
- ◯ 31 - 40
- ◯ 41 - 50
- ◯ 51 - 60
- ◯ 61 - 70
- ◯ 71 and older

11. What was your approximate total household income, before taxes, during the past 12 months?

- ◯ Less than $50,000
- ◯ $50,000 to $99,999
- ◯ $100,000 to $249,999
- ◯ $250,000 to $499,999
- ◯ $500,000 or more
- ◯ Prefer not to say

Thank You!

Thank you for participating in this questionnaire. We hope you will stay involved as the Town of Ross continues to consider the Town facilities modernization project.

ATTACHMENT 4

Town Facilities Modernization
Frequently Asked Questions (FAQs)

On August 13 and October 29, the Town of Ross held public meetings to discuss the longstanding need to improve town facilities for fire, police, paramedics, and administrative staff. Many of these facilities were constructed almost 100 years ago and are physically and functionally obsolete. Topics for discussion included whether to renovate or rebuild existing facilities, and associated costs; whether a fire station in Ross is necessary for safety and what are the alternatives; funding options; and next steps. Any project would not include Town Hall, where Town Council meetings are held.

Other documents that may be useful:

- Project summary
- August 13, 2020 Town Council meeting staff report
- Ross Valley Fire Department Fire Chief Jason Weber October 29 public workshop discussion of fire and paramedic facilities transcript
- Project webpage with links to detailed background studies

The following is a list of frequently asked questions informed by the October 29 public workshop:

1. Why is the town discussing improvements to its public safety facilities?

Public safety personnel generally consider the Ross police and fire station to be in the worst physical and functional condition of any station in Marin County. The police station and the fire station, with the exception of the two fire engine bays, are physically and functionally obsolete with significant structural deficiencies. Both were built in 1927, long before the 1986 Essential Service Act (ESA), which established requirements for public safety building construction.

Modern fire and paramedic (EMS) facilities are designed to create travel paths for personnel from living spaces to apparatus bays, ensuring faster response times. Since 2005, firefighters have been sleeping in a portable not connected to the building. Other living spaces and dorms are distant from firetrucks and ambulances. Additionally, EMS stations for cleaning blood and other body fluids are non-existent, increasing contamination risks of sinks and counters in living spaces (kitchen, bathrooms, etc.).

The portion of the building with police facilities was originally constructed as a residence and later converted to the police station; the floor plan does not begin to meet the standards for a modern police facility, and its conditions have been deteriorating for decades. In addition to the police station, fire station and paramedic facilities, the Town is considering constructing space to house administrative staff, a majority of who are located in a portable building behind Town Hall.

2. Can we renovate these facilities instead of rebuilding them?

No. Renovating the existing buildings to ESA and FEMA requirements could cost as much as or more than demolishing the old buildings and constructing a new building and would not resolve the existing floor plan and parcel constraints.

3. What is the cost to rebuild the fire and police stations, along with building a new administrative space? What is the cost of the project if the fire station is not rebuilt (fire engines would be based in neighboring towns)?

Including rebuilding the fire station, the project cost is estimated at $28.4 million. If the project does not include a fire station, the cost is estimated at $14.6 million, a difference of $13.8 million.

4. If the fire station is not rebuilt in Ross, are there other costs or savings?

Besides saving approximately $13.8 million in construction costs, it is likely the Town will also have lower annual operational costs for fire services. However, the exact amount cannot be determined until after negotiations with the other members of the Ross Valley Fire Department and adjacent fire agencies.

5. Why are the projected public facility building costs so much higher than home construction?

A publicly funded Essential Services Act building requires many more costs for planning, designing, and construction, including:

- Seismic design requirements, which include larger footings, more rebar, seismic strapping, and more geotechnical work.
- Labor compliance laws for public buildings require workers to be paid "prevailing wage." (Marin County's prevailing wage rates are among the highest in California.)
- Significant specialty systems, equipment, and furniture for public safety buildings.
- Sustainable design and increased energy conservation measures.
- Reconstruction of Sir Francis Drake frontage and the driveway entry, including undergrounding overhead utilities.
- Demolition and hazardous material removal.
- Temporary facilities for staff and emergency equipment during construction.
- CEQA special studies and certification.
- Cost escalation of 12% on costs since construction will not occur for several years.

6. Why spend additional funds to rebuild the fire station and other facilities on a site we know is prone to flooding? Why not relocate these facilities to another site, such as the Ross Post Office or another property in Town?

There are no other suitable Town-owned properties in Ross that are outside of a flood hazard zone. The Ross Post Office and Ross Common are in a federally-regulated floodway, which severely restricts new development. Although still subject to flooding, the current fire station and police building are outside the regulatory floodway. Construction is allowed in this zone as long as the first floor of the structure is at least 1' above the "100-year base flood elevation" (BFE).

We currently estimate an additional cost of approximately $150,000 (for site grading and fill) to elevate a new fire station and other facilities 1' above the BFE. Conversely, it would be infeasible to raise the current fire station, which consists of steel-framed service bays and attached 2nd storey living spaces. The service bays would need to be reconstructed over the new fill, and then the adjoining portions of the old structure would need to be reconfigured to conform to the new service bay elevation.

7. If Ross does not rebuild the fire station, how will fire services be provided?

Ross would receive fire services from a neighboring fire station in San Anselmo (1.1 miles away) or Kentfield (.65 miles away). Police services would remain based in Ross. Paramedic services could continue to be provided from Ross or could alternatively be moved to another location.

8. Would there be a difference in fire or paramedic response time if we do not rebuild the fire station?

For 90% of all emergency incidents in Ross, the fire engine response time is currently 7 minutes, 55 seconds; this is considered good for a suburban community. Relocating fire services outside of Ross will increase response times for fires and non-medical calls by approximately 2 minutes, to 9 minutes, 55 seconds similar to average outer suburban response times. If paramedic services were to remain stationed in Ross, 85% of emergency medical calls would still be answered in 7 minutes, 55 seconds. The higher two minute response time would occur when the Ross-stationed ambulance is out on another call. Ross police vehicles also carry defibrillators and would continue to respond to medical emergencies.

9. What does a two minute more response time to a fire or medical emergency mean?

We would expect minimal outcome changes associated with medical emergencies as the ambulance would still provide an average response time of 7 minutes 55 seconds 85% of the time. The volume of working fire Fstincidents in Ross is extremely low (3 in a two-year period). Outcomes in those cases would likely be very similar with potential in structure fires to have further interior loss but the fire still remain within the building of origin. For wildland fires, a similar outcome would be expected, as additional staffing would be provided on days of higher risk such as red flag warnings.

10. If there is a major wildfire in Marin and Ross what is the effect of the fire station being located in Ross versus not having a station in Ross?

Typically, wildfires generate a broad regional response and the quality of response is more contingent on the size of the responding force (personnel and equipment) than the locations of individual fire stations. In recent years, the regional response has been proactively organized and coordinated during red flag warnings and other high fire risk events with additional staff and fire engines placed strategically throughout the County to respond to potential incidents.

11. What is the effect on fire insurance if the fire station is not located in Ross?

Fire insurance carrier's policies can vary but fire insurance rates are predominantly based on the type of construction, hydrant location and water system pressure, fire protection (sprinklers) and occupancy of a building. Insurance providers use analytics companies such as Insurance Services Office (ISO) to help determine risks with insuring properties. We do not expect a change to the Ross Valley Fire Department's ISO rating if Ross no longer has a fire station.

12. Are there other towns in Marin that do not have their own fire stations?

The City of Belvedere does not have a fire station in the city. Belvedere had a fire station until 1981 when the city began contracting for fire protection services with the Tiburon Fire Protection District. Fire protection services for Belvedere are provided from a fire station located in Tiburon.

13. Is it feasible for the Town to set up its own separate fire department?

No. In 2012, the Ross Town Council voted unanimously to merge the Ross Fire Department with Ross Valley Fire Department. This was done not only to expand fire protection services, but also to save costs through reduced overhead and administration costs, overtime and the elimination of Social Security contributions.

14. Once the scope of the project is decided, how will it be funded?

When construction begins, the Town anticipates that it will have approximately $7 million available to contribute to the facilities. Large capital improvements often need funding from new taxes. Any taxes or assessments would require a 2/3 voter approval. The Town has not determined which method of tax or assessment would be used to finance the facilities. Three options are being considered: a general obligation bond; a certificate of participation backed by a parcel tax; or a community facilities special tax. The decision on which option to use would not be made until after the Town decides what facilities will be rebuilt, and likely not until after the facilities are designed with an associated cost estimate.

15. Could the current Ross Public Safety Parcel Tax help fund the construction project?

Ross residents currently pay a Public Safety Parcel Tax ($1,069 per parcel) to help support the annual operational costs of providing police and fire services. This tax is in effect through 2025; a 2/3 voter approval is required for amendment or extension. A separate facilities tax measure would be necessary to fund capital improvements and would also be subject to a 2/3 voter approval.

16. Is there a "no tax" option?

No. The buildings housing public safety personnel and equipment are in such a state of obsolescence and disrepair that further delay in addressing this issue could jeopardize the town's ability to provide these services.

17. What are the next steps?

- Questionnaire emailed and postcard mailed to residents for input
- Town Council to determine which Town facilities to reconstruct
- Project design and concurrent environmental review
- Ballot measure for funding
- Preparation of construction drawings
- Federal, state, and local permitting
- Construction (including temporary facilities)

ATTACHMENT 5

March 4, 2021

To the Town Council,

After the January council meeting, I agreed to explore the viability of raising private funds from Town residents to rebuild the fire station. With two months and $14M as a goal, it was more than a tall order. But as a life-long resident I feel a tremendous civic pride that Ross has maintained a fire station since 1927. I watched with concern as the deferred maintenance accrued and Town leadership continued to kick the challenge of rebuilding public safety buildings down the road. The Ross fire station is a deeply embedded presence for many long-time residents, and I suspected that other residents would appreciate that once this decision was made, the Town will not have another opportunity to rebuild one.

It was a humbling two months, and I have a new appreciation for the saying, "Your cause is not my cause." There were a handful of residents who expressed an interest in helping with this effort, but two months was not enough time to employ the traditional tools for a fundraising campaign: build a committee, manage the talking points, map out a pyramid and outreach efforts. I started my outreach with a handful of potential donors, and continued to reach out to over a dozen residents who could potentially make a gift, and I got no traction. These residents said they would vote for a higher bond to keep the fire station, but it was not a philanthropic priority to them.

A common theme in this feedback was a frustration at the high cost of construction, and a desire to press the Town to engage with better value engineering methods. A few were concerned that the cost estimates will only increase during the planning phase, and we will be in a situation of "moving goalposts." One of the best comments I heard could be summarized this way: "If I wanted to live in a town with its own fire district, I'd move to Kentfield, which has a larger population and tax basis to support that. We have 800 households with no significant commercial revenue, and it is unfair to assume that a tiny minority of residents should shoulder the cost of a privately funded fire station. We don't have enough people in this town to be able to afford that. If there are not enough residents who would vote to support the higher cost option, the Town has it's answer."

After years of putting off the conversation to rebuild the Ross fire station, it is ironic that the community feedback process began in August 2020 during the largest wildfire season in modern California history. Residents had six months to give feedback about whether they want to pay the higher cost of keeping the fire station in Ross or rely on the shared resources and "zone defense" strategy of regional fire response that has become more prevalent and necessary across the state. I viewed a Ross fire station as an insurance policy that would not single-handedly protect the Town in a catastrophic wildfire, but it would help. Most residents might agree with this in theory, but the ones who spoke up during the last six months (while wildfires were literally burning all around us) said that they did not want to pay for it.

Sincerely,

Molly Gamble

Joe Chinn - Town Manager

From: Lynn Chatley <lachatley@aol.com>
Sent: Thursday, February 11, 2021 9:33 AM
To: Joe Chinn - Town Manager
Subject: City Hall remodel

We are in favor of not building a fire station but keeping the EMT capability

Bruce and Lynn Chatley
3 Skyland Way
Ross

Sent from my iPhone

Patrick Streeter

From: Murray Kenney <mkenney@ravenasset.com>
Sent: Thursday, February 11, 2021 10:37 AM
To: Patrick Streeter
Subject: Ross Public Safety Buildings

Follow Up Flag: Follow up
Flag Status: Flagged

Mr Streeter;

I have been a Ross Resident and homeowner since 2003 and I strongly supported the construction of the new Ross School. I do not, however support the expenditure of significant funds for new public safety facilities and would vote against any bond measures to that effect. Given the number of large nearby facilities in San Anselmo, Larkspur, San Rafael, Greenbrae and Kentfield, many of which have been newly built and which have excess capacity, it would be a waste of public funds to invest in duplicative capacity in Ross, a town of fewer than 3,000 residents. If the Town Administration wants to invest in public safety, I would recommend spending taxpayer funds on burying utility wires. This would not only make our town safer in the event of wildfires and winter storms, but also make it more beautiful by eliminating unsightly poles and wires.

Putting money into a fire station would be extremely wasteful, given the location of nearby stations in Kentfield, San Anselmo, San Rafael, Larkspur, Greenbrae and Fairfax. The most likely time large capacity would be needed for fire fighting would be a wildfire, and responses to those are not dependent upon stations. The current capacity for day to day fire response far exceeds the demand, given how few structure fires occur in this area.

Kentfield (population 7,000 or 2.5x Ross) makes do with temporary sheriff facilities in the College of Marin parking lot. There are large police facilities that I would suspect are underutilized in downtown San Anselmo (less than 1 mile from most of Ross) and in Larkspur (newly constructed) within 3 miles of most of Ross. Every day I see Central Marin police officers driving through Ross on their way to Larkspur. Why spend $12 million on a building housing a 6 man police force? Under no scenario does this make financial sense. The Town's Rainy Day Fund could be spent instead on burying utility wires on the main streets or on paying down our unfunded Pension and Post Retirement Health Care liabilities.

Thank you for your consideration and work on this matter.

Murray Kenney and Lisa James
11 Southwood Ave #321
Ross CA 94957
mkenney@ravenasset.com

Joe Chinn - Town Manager

From: Patty Treadwell <carpross@sonic.net>
Sent: Friday, February 12, 2021 9:44 AM
To: Joe Chinn - Town Manager
Subject: Public Safety Facilities

Good Morning Joe,

I want to go on record for strongly supporting rebuilding the Public Safety Facilities in Ross.

I would like to see the fire, police, paramedic, and administrative facilities here in Ross.

I would be willing to pay additional taxes to supporting have ALL of these facilities here.

Thank you,
Patty Treadwell

ATTACHMENT 3

REGULAR MEETING of the ROSS TOWN COUNCIL
THURSDAY, MARCH 11, 2021

Held by Teleconference

1. 6:00 p.m. Commencement.

Mayor Julie McMillan, Mayor Pro Tempore Elizabeth Robbins, Council Member Elizabeth Brekhus, Council Member C. William Kircher, Jr., Council Member Beach Kuhl; and Town Attorney Benjamin Stock

2. Posting of agenda.

Town Clerk Lopez reported that the agenda was posted according to government requirements.

3. Minutes – February 11, 2021

Mayor McMillan confirmed there were no corrections to the minutes and asked for a motion.

Council Member Kuhl moved and Mayor Pro Tempore Robbins seconded, to approve the February 11, 2021 Regular Meeting Minutes. Motion carried unanimously (5-0).

4. Demands.

The demands were met.

5. Open Time for Public Expression - None

6. Mayor's Report.

Happy almost spring! It's gratifying to see so many Marin businesses and schools reopening, and so many residents receiving vaccinations, positive signs that we are returning to a 'new normal'!

We all seem to be experiencing climate change: Record-breaking warm temperatures; rainfall less than a third of normal; flowers and trees blooming earlier than ever; and the realization that California's wildfire season this year could be even worse than last's, which broke all records.

In late February the Town Council held its annual Strategic Planning Session, with a review of the Town Goals. Recognizing the need to prioritize addressing climate change, we added a new Town Goal: "Promote environmental stewardship." Since 2010, Ross has also had its own Climate Action Plan, and has reduced its greenhouse gases by 28% (2005-18), above the countywide average.

In Marin, gas cars are the biggest contributor to greenhouse gases. After 2035, California will no longer sell gas cars, only electric vehicles (EVs). Councilmember Kircher and I have been participating in the county's Climate Action Committee. Recently this committee heard a presentation from Drive Clean Bay Area. It offers free workshops to show why your next car should be an EV, and provides some preferred pricing options. Please visit Drive Clean Bay Area to learn more. Also at our Strategic Planning Session, the Council agreed to continue further discussion on installing an EV charger in the Post Office parking lot, near Lagunitas.

Finally, I am almost finished with Resilient Neighborhoods' five-part online sessions to help Marin residents reduce their carbon footprint. Resilient Neighborhoods has eliminated more than 8.6 million pounds of annual C02 emissions. I encourage you to do your part to reduce your household's climate footprint. Two more free online sessions start later this month (March 25 (afternoons) or March 31 (evenings)). Please sign up at Resilient Neighborhoods.

7. Council Committee & Liaison Reports

Mayor Pro Tempore Robbins reported as a member on the Economic Recovery Committee, announced that federal relief funding is available for small businesses.

Council Member Kircher reported on his attendance to the Marin Clean Energy (MCE) Board of Directors meeting in February.

8. Staff & Community Reports

a. Town Manager

Joe Chinn, Town Manager, announced that the playing fields were re-opened, the master plan work for the Commons landscape rehabilitation will soon start, outdoor dining events will begin in April and he asked residents to support downtown businesses.

b. Ross Property Owners Association

Mark Fritts, RPOA, reported on RPOA membership drive activities and Ross Auxiliary current and future planned activities, noting they will be holding a fundraising event for improvements to the playground at Ross School and a Spring Hunt.

9. Consent Agenda.

The following items will be considered in a single motion, unless removed from the consent agenda:

a. Town Council response to Marin County Civil Grand Jury Report released December 14, 2020 entitled "Roadblocks to Safer Evacuation in Marin".

b. Execution of a Consultant Services Agreement with Moe Engineering Inc. for design and construction management services for the 2021 pavement rehabilitation project.

c. Town Council authorization of Mayor to sign letter opposing SB 9 (Atkins) Increased Density in Single-Family Zones Unless Amended (as Introduced 12/7/2020).

d. Town Council Award of Contract for Professional Consulting Services to BKF Engineers for the Laurel Grove Safe Pathways to School Phase Two Project.

Mayor McMillan asked for a motion.

Council Member Brekhus moved and Mayor Pro Tempore Robbins seconded, to approve the Consent Agenda. Motion carried unanimously (5-0).

End of Consent Agenda.

10. Public Hearings on Planning Projects – Part I.

Public hearings are required for the following planning application. Staff anticipates that this item may be acted upon quickly with no oral staff report, Council discussion, or public comment. If discussion or public comment is requested, the Council may consider the item later in the agenda.

a. 96 Laurel Grove Avenue, Design Review and Hillside Lot Permit, and Town Council consideration of adoption of Resolution No. 2196.

Mehul Patel & Inna Fabikant, 96 Laurel Grove Avenue, A.P. No. 072-211-14, Zoning: R-1: B-A; Hillside Lot, General Plan: VL (Very Low Density), Flood Zone: X (Minimal risk area outside the 1% and 0.2%-annual-chance floodplains).

Project Summary: The applicant is requesting approval to construct a new 756-square-foot pool/spa and associated mechanical equipment vault behind the existing single-family residence. Design Review and Hillside Lot Permit are required for an activity or project resulting in more than 50 cubic yards of grading or filling.

Matthew Weintraub, Planner, gave the staff report and overview of the request for design review and Hillside Lot Permit at 96 Laurel Grove Avenue. The ADR Group reviewed the project and recommends approval as proposed, and staff recommends adoption of Resolution No. 2196.

Mayor McMillan confirmed the applicant did not wish to make a presentation. There were no questions of Council Members.

Mayor McMillan opened the public comment period. There were no public speakers and she closed the public comment period.

Mayor McMillan asked for a motion.

Council Member Brekhus moved and Mayor Pro Tempore Robbins seconded, to approve 96 Laurel Grove Avenue and adopt Resolution No. 2196. Motion carried unanimously (5-0).

End of Public Hearings on Planning Projects – Part I.

Administrative Agenda.

11. Discussion and Town Council decision on what Town Facilities (Police, Fire, Paramedic, Administrative) to include in a Master Plan to modernize within Ross.

Joe Chinn, Town Manager, said the item is a discussion and Council decision relating to which facilities to modernize in the Town related to police, fire, paramedic and administrative services. He gave a PowerPoint presentation and overview of discussions held over the last 8 months, as well as displays of photographs showing on-going deterioration of the public safety building.

Mr. Chinn described building options in different locations, the three alternatives A, B, and C and their costs, public engagement and participation, the three studies presented at the Council's August 2020 meeting, community workshops, questionnaire and the project website.

Jason Weber, Ross Valley Fire Chief, spoke about the deteriorating conditions of the Police/Fire building, closure of a portion of the building due to mold, and on-going repairs, detailed fire and paramedic services, operational considerations, the four-member Fire JPA and its current staffing and ambulance services through RVPA. He then described call data and dispatch services, and ambulance and fire response.

Mary McGrath, Mary McGrath Architects, provided an overview of what they used to develop their cost models and budget, development of a space needs outline, assumptions made in designing the building for NFTA standards, soft and hard costs, contingencies, costs per square feet, inflation factors, and presented recently built fire stations and their costs, particularly the San Rafael Fire Station which came in at $14.0 million.

Mr. Chinn said the Town will not start construction until about 2024 or 2025 and the Council must also consider unforeseen on-site and off-site costs. He then reviewed the community survey specific responses regarding support, priorities, tax question results, key findings, potential funding sources, noting that fundraising was considered; however, the idea did not yield sufficient interest.

Regarding process, staff is looking for a decision on what facilities the Council wishes to reconstruct and modernize at the site. Following this, the Town will hire a master plan consultant to move the project forward, review options of how facilities can be reconstructed and built, public participation opportunities, environmental analysis, scoping meetings, work on a future ballot measure after certification of environmental review and Council approval of the facilities master plan. Other negotiations and agreements with other entities may be needed, as well. He asked the Council to discuss and recommend which facilities to include in the facilities master plan in Ross and consider the three alternatives or other options.

Council Member Kuhl asked to explain why annual costs for providing fire service would go down if they eliminate the fire station, noting the Town will still have to pay its share of the same number of fire engines. Mr. Chinn explained that the Town's costs are higher because they have one station for only 2,500 people wherein other cities have a higher population per fire station and there will be other items such as one less fire engine.

Council Member Brekhus questioned whether costs were accurate, questioned what the design cost would be, and suggested having a discussion to fully understand the process and negotiations if they eliminate the fire station. Mr. Chinn said as the project goes through the design process, construction costs will be better refined and the estimate amounted to $1,500 to $2,000 per square foot for a fire station including all soft and hard costs.

Ms. McGrath added that the design would require a cost-estimator to cost the design which would be approximately 5% to 10% of the design fee for the first year. The real time would

depend on how much time it takes with community outreach and options the design team would prepare.

Mayor McMillan referred to a letter from law firm regarding a CEQA analysis and asked what the appropriate timing is for this.

Town Attorney Ben Stock explained that cities are allowed to plan and scope a project before doing CEQA analysis and before the matter is considered a project subject to approval under CEQA. The Town is developing the types of services it wants to have studied in a master facilities plan. Based upon direction tonight, the plan will be drafted and the Town will conduct the appropriate environmental analysis. The first step is an Initial Study and if that finds certain impacts, then a Negative Declaration would be prepared or an EIR.

Mayor McMillan opened the public comment period.

Ed Dong, Ross Citizens for the Responsible Development of Town Facilities, said he believes facilities could be delivered at a far lower cost than as outlined in the report in the range of $16 million versus $28 million. He described architects and contractors that have designed and constructed several projects for less per square foot and suggested forming a task force to explore options for bid alternatives to ensure the Town keeps its fire station.

Laura Conrow spoke about the Town not notifying residents regarding accurate response times, asked that the three videos she submitted be sent to those noticed on this matter, and voiced concerns about the critical nature of increasing current response times to fires.

Stephanie Lamare asked the Council to reconsider eliminating the fire station given the great risk of losing homeowner insurance policies. She also voiced concerns with fire danger if the station is non-operational.

Molly Gamble supported Council Member Brekhus's comments regarding negotiating operating costs before deciding whether to rebuild the firehouse and questioned how long it would take.

Sally Shekou said she and her husband cannot imagine a Town without a fire station. She and her firm wrote a detailed email about CEQA obligations to consider the historic structure of this building as well as the public impact of a 2 minute delay before making a decision, and asked to analyze these first because all current alternatives require demolition of the fire station.

Francis Parnell cited the discrepancy between the consultant report and Mr. Dong's statements and suggested delaying a decision until the Council can review cost estimates to ensure they are accurate, especially for any ballot measure.

Bob Herbst thinks it is terrible to make such an important decision during COVID and while meetings are held by Zoom. He suggested stepping back and taking more time in making a decision. Many people do not believe the numbers are accurate, noted the Town needs 67% and not 62% for the $14 million measure to pass, and reported on their formation of a task force of

deeply experienced residents with real estate and construction experience who can work together on refining and reducing costs.

Isaiah Nengo said the firehouse and post office are two iconic buildings which gives the Town its identity. He agreed with comments of others on cost estimates and suggested taking time to review other alternatives.

Bill Conrow echoed comments of speakers, thinks the most critical issue is to preserve the fire station, spoke about national response times which the Town exceeds, global warming which has destroyed towns, and thinks these will increase if the station is eliminated. He also voiced concerns with elimination of homeowner insurance and pointed out that the Council promised to keep its own fire station when the Town joined the JPA.

Chief Weber agreed this is a tough decision to make and it involves trade-offs, the ability for the community to support a bond measure and debating costs. He spoke about the time temperature curve, a fire's exponential growth, flashovers, the need for working smoke detectors and fire sprinklers.

Regarding the decision being ill-informed, they have already reviewed data and response times. Regarding insurance cancellations, these are associated with wildfire prevention and protection of the home predominantly and this also has to do with water supply, staffing, engine location, distance from hydrants, distance from a fire station. From a municipal standpoint, they are working with ISO for these discussions and he did not see a significant change. Wildfire risk and insurance is really about defensible space, home hardening and those sorts of items around one's house.

Regarding a comment about negotiating impacts, they would work with the three other member JPA agencies on the impacts of this decision regarding shifting costs, changes to labor agreements, staffing minimums, and detrimental condition of the existing fire station.

Mayor McMillan asked if Chief Weber could also address whether the Town would be less safe in a wildfire without having a fire station.

Chief Weber explained that they are not referencing the magnitude or the potential. They have high fire severity zones and, typically, fire growth that they see in the mega fires is during specific weather events that are predictable. Staffing adjustments are made for these with the JPA and the Town as to how to keep a level of protection they are comfortable with during those events. The wildland fire piece is about weight, speed and numbers and the first engine arriving is important, but it depends where the fire is and the other station locations. There is some increased risk in closing the fire station which would be 2 minutes so while not terrible, it is not great.

Mayor McMillan asked for Mr. Chinn or Ms. McGrath to discuss the numbers in more detail and their confidence in the current numbers proposed.

Ms. McGrath explained they used a project to compare with and one of the contributors to a letter built. The station in Alamo is a simple stucco fire station and costs used in the McGrath estimate are the real numbers in Marin County to build a station. The budgeting numbers as far as contingencies have been proven and she would encourage the Council to obtain another opinion with how to do contingencies because public construction and budgeting is very different than private development.

Mr. Chinn added that the cost of a fire station is expensive and another Bay Area public safety building architect confirmed the end cost to be $1500 to $2000 per square foot as on target for this area. The consultant spoke about the recent stations built in Tomales Bay and the $14 million San Rafael station, noting Ross's station as well as police and admin offices would not start construction until 2024, so numbers will inflate over time. He thought some value engineering could make a small difference, but they also will want to match the Town Hall and Post Office architectural style which is a more expensive style to build.

Council Member Kircher referred to adding 2 minutes to the response time base and asked if this is an average or minimum addition and asked if this was based on having the Ross engine in town or not. Chief Weber replied that the 2 minutes is an average response from one of the other two stations to the center part of town, with some longer and some shorter. When talking about medical aid, if the ambulance remains in town 85% of the time there would be no net change for acute care. 15% of the time it would be an average of 2 minutes longer. There is also a certain time factor when the engines are not available which would be slightly longer.

Council Member Kircher asked and confirmed that if Ross did not handle a fire in town, Kentfield has an added engine but they automatically go with the closest appropriate resource.

Mayor Pro Tempore Robbins then asked and confirmed there were a total of 2 structure fires and one vegetation fire over a two year timeframe during 2017 and 2018.

Council Member Brekhus thought it might make more sense to have the labor and long-term discussions first because it would provide better analysis for future costs.

Mr. Chinn said he feels it is better to negotiate after the Council has made a decision and thinks it makes the negotiation more real. It would not be easy to negotiate a hypothetical situation, but if the station closes, costs will go down some but how much is part of the negotiation. Also, if there was not an agreement the reality is that there will be a number of months before an RFP is put together, hired, and the master plan process started.

Mayor Pro Tempore Robbins summarized her thoughts that the historic issue is very important and the façade and style should be retained. Response times are a key issue but response times are within the standards and the Town also does not have many fires. Also, insurance is based more on the wildfire risk and not how close one is to a fire station, and keeping the paramedics in town is important. It then comes back to the questionnaire results where many people want to keep the station but most do not want to pay for it. Therefore, she would be supportive of the option to replace everything but the fire station, as it seems the bond measure may not pass.

Council Member Kircher echoed Mayor Pro Tempore Robbins' comments, knows there is a controversy about the survey. It was clear that the support is not there for a 2/3 support for a bond measure, even for the lower cost option. He reviewed the $16 million spreadsheet and not much will be known until they start costing it. He thinks undergrounding would benefit the Town more in a wildfire or earthquake situation because wildfires are more a regional response and not a local response. Regarding response times, the average varies and while it could be tragic, the odds are low compared to the risk of a catastrophic wildfire in the community.

Council Member Kuhl thanked the residents led by Mr. Dong and Mr. Conrow for their input and work which has been an important exercise to help the Town understand the issues especially the costing issues.

Regarding the observation that in 1995 the Council promised to keep the station open, this is 26 years ago but nobody believed that meant they would keep the station in perpetuity. They have reached a situation where it is not practical to keep the station and there is no easy guideline on how to decide whether the figures for cost will be accurate. He would like to keep the fire station but the survey showed that they do not have the money and the Town cannot afford to keep it. Therefore, he suggested moving on with the alternative that does not include the fire station.

Council Member Brekhus added that she is concerned about fire insurance, did not think the survey was poorly done and she has heard more people say they were shocked at the numbers. If renegotiations of the JPA were done, she questioned if this would mean analysis of a scaled down civic center, spending $200,000 towards that and not knowing what the cost delta would be for the Town, which is an issue. At that point, it might make sense to look at the plan and give residents a deeper view of what the difference is between the two plans.

Mayor McMillan said her view is that she would love to retain the fire station but the questionnaire is brutally honest and unfortunately, there is no traction in private fundraising results. Based on comments from the Fire Chief and Town Manager, there is an opportunity for the operational costs of their fire service to go down so she is confident with this, and even if they were to go up, they will not go up by the cost of a firehouse over a 50 year time period.

Regarding delaying the situation because of COVID, on the contrary, she believes there has been more participation from the public in Council meetings than ever before. The Town has also been discussing these issues for over a year and does not think the Council should wait any longer and should move forward.

She agrees with all Council Member comments, values and appreciates the work of the citizens, letters, and participation which show a deep care for the Town. There will be plenty of opportunities during the design and master plan phase and environmental review for added participation so she is hopeful to work together and come up with the best product for their Town. Lastly, she wanted to clarify that this decision does not terminate fire protection services for Ross residents.

Mayor McMillan asked for a motion.

Mayor Pro Tempore Robbins moved and Council Member Kuhl seconded, to rebuild the police, paramedic and administrative buildings and move forward without a fire station in the Master Plan. Motion carried unanimously (5-0).

BREAK
Mayor McMillan called for a brief recess at 8:43 p.m. and resumed the meeting at 8:52 p.m.

12. Discussion of the Town's Comment Letter for the Corte Madera Creek Flood Risk Management Project Draft Environmental Impact Report.

Rich Simonitch, Public Works Director, said staff requests Council discussion and authorization for the Town Manager to sign the attached draft comment letter regarding the Corte Madera Creek Flood Risk Management Project DEIR. The Town received correspondence from the public and he clarified that staff and Council will do its best to take these into consideration but the public must still submit their own comments to the DEIR to the County by the March 17th deadline.

He then reviewed the definition of an EIR and described elements of the comment letter, described the town's tree removal and alteration ordinance as it pertains to the project and displayed an aerial view of the proposed planning for the area. He spoke about his experience with open channel flow which engineers typically avoid whenever possible. It increases flows downstream, is unsteady, turbulent and dangerous, causes increased scour and erosion and again, is very dangerous. The hydraulic model represents the best available information and results were peer reviewed.

He spoke about the analysis done for Alternative 1 and the proposed project and flood benefits which include 11 commercial and 99 residential properties and 23 institutional. By not doing Alternative 1, he described the benefits residential properties would see, the 10, 25, and 100 year for the existing condition, the proposed project and Alternative 1. With the proposed project, they see quite a bit of flood reduction but most of the flood protection comes from the removal of the fish ladder.

He then gave an overview of the project schedule. Regarding next steps, the Town will have discretionary design review where the project is presented to the Council and he spoke of the many considerations to be reviewed at that time.

Council Member Kuhl asked if the Town could indicate in their request for changes to the EIR that they favored Alternative 1 over the proposed project. Mr. Simonitch said a statement of selection of a preferred project does not appear to be an element of CEQA which is the purpose of the letter and they should not mix those issues.

Planning and Building Director Patrick Streeter said they are planning on holding a workshop in the future which would relate to the Town's preference for an alternative, but the purpose of this letter is to comment on the DEIR and that would not be a comment related to an impact.

Mayor Pro Tempore Robbins said she thinks the DEIR needs to have better drawings of what Frederick Allen Park will look like, where the trees will be, and for the letter to request more specific locations and pictures showing the fish ladder looking downstream. She also thinks it would be helpful to see a better picture of where the tree planting will be done in relationship to the flood walls. Regarding modeling, she asked if the EIR could acknowledge the limitations of the modeling because it may not play out as expected and not provide much benefit for Ross.

Mayor McMillan requested the requirement to retain an arborist about how fast the trees will grow back. Mr. Simonitch said they can ask for this as they move into the design phase.

Mr. Streeter commented that the impact that is identified is a temporary impact until the trees grow into position and they are assuming 10 years in the EIR. In the letter, they ask what the validity is of that 10 years and whether it will bring it back to pre-project conditions. In the design phase, if this project is chosen, that is a mitigation measure and the City will have its own arborist review this to ensure the growth rate is appropriate to comply with that mitigation measure.

In response to Mayor McMillan regarding the U.S. Army Corps planting variance process, Mr. Simonitch deferred to Flood Control staff to respond and pointed out that the EIR shows the worst-case scenario which is that the variance is not being granted.

Mayor McMillan referred to shade options proposed and confirmed this was more of a design issue. She said the consultant stated at the county meeting that the project would cause a significant flood risk reduction in the Town and she asked what "significant" means.

Mr. Simonitch explained that when showing the slides of the existing flood condition and in going to the proposed project or Alternative 1, for the 25 year storm many of the parcels were removed from any inundation. However, he believes "significant" is a subjective term.

Mayor McMillan asked if story poles or markers could be installed to be able to better visualize what the plan will look like. Mr. Streeter replied this is part of the Town's design review policy and this can be requested prior to the workshop. Mr. Simonitch said staff was thinking the story poles could be installed on the same day of the workshop. He agreed visualization of this needs to happen and staff is working on this with the County.

Council Member Brekhus voiced frustration about not defining flooding impacts to individual crawl spaces and finish floors and asked what the obstacle is to the Flood District providing decision-makers this kind of analysis. Mr. Simonitch thought there may be cost prohibitions relating to it but agrees this is an essential part of flood risk reduction and the County would have to answer this.

Joanna Dixon, Marin County Flood Control District, said on their GIS layers and map they have the parcels and can tell where the modeling causes water surface rise or decrease on the parcels, but they do not have elevations for all structures. From some overhead aerial images, footprints of buildings can be seen but they do not know what they are and they may have different elevations. It would take a very thorough survey to identify all of the finished floors of any structures.

At this point, the District has been proceeding knowing there is a flood risk reduction benefit by doing the project for the 25-year storm event and they would hope this would be valuable to the Town regardless of the extent of that reduction. But, she understands that the modifications to the park are a significant concern to the Town and these are decisions for the Council to consider.

Council Member Brekhus said she is in a property that was considered potentially impacted and thinks it would take a few minutes for someone to come to her house to identify grades and spaces and that taking the 96 properties would be a worthwhile effort to get this data. She also cited the amount of tax dollars the Town has put towards the Flood District, questioned the benefits seen, what they are being asked to bear and thinks better data is needed.

Mayor McMillan asked if this could be added to the comment letter.

Mr. Streeter said they could include language in the project description that the research by the County is not adequate to identify what the effects of this project will be, so this could be included but there is not an impact in the body of the EIR they can point it to.

Mayor McMillan opened the public comment period.

Garil Page said the point of the DEIR and EIR is to give someone an understanding of what is proposed in order to make meaningful analysis of what they are looking at. To the degree they are not getting the information needed to make a meaningful analysis, this document is deficient and that is a legitimate point to make. She also suggested stating there is more local support as far as it being in line with the goals, plans and ordinances of the Town and cite the General Plan and ordinances. Lastly, the fish ladder removal is part of every one of these proposals except for the "No Project" alternative, so it should not be lumped with the proposed project because it is also part of Alternative 1.

If the Council wants to know about the effects and consequences about removal of the fish ladder, the County is only 35% complete in their hydrology and federal funding for the bridges are future projects will affect all of these simulations. That is indefinitely removed from consideration because the funding is not there. Because these are important considerations, she urged the Council to raise these concerns.

Leslie O'Connell referred to the review provided by Schaaf and Wheeler on page 7 which she read and asked if someone could go into more detail about the instability which is a concern. The peer review also mentioned a 100 foot Lagunitas Bridge and she asked if that applies to all alternatives. It is also a responsibility for the DEIR to provide enough information on all alternatives to

compare them. She questioned where Mr. Simonitch found the water surface elevation maps, as the only ones she could find for Alternative 1 were for future conditions and not for current conditions, so she questioned why the DEIR did not include them.

Also, the DEIR did not address at all the overland water from the northeast side of Sir Francis Drake which was brought up orally in one of the meetings before the DEIR was written. Also is the larger consideration of how realistic it is for them to complete this project by December 2022. If they were to start the project, stripping out all trees and a section of the concrete channel and not be able to finish it, she questioned what would happen and said it could be a dire situation.

Mayor McMillan recommended Ms. O'Connell also send her comments to the County separately.

Brad O'Connell referred to 1) Habitat, stating the focus has been on the park side and questioned if those living on the Sir Francis Drake side will be ignored, given they have mature habitat running down through several properties with a rich grove of trees. If planted, they are being offered as a highly unrealistic promise that it will all grow back in 10 years; 2) Aesthetics, noting the loss of trees means they will be looking for years at dirt and in the backs of businesses; 3) Privacy, stating homes will be impacted; and 4) Efficacy, noting all of the adverse consequence will be imposed on the people on the left bank for very little in the way of actual flood reduction relative to Alternative 1.

Charlie Goodman said when he was Mayor, he and Council Member Kuhl wrote a side letter to the County expressing all of their concerns and he suggested doing this for Alternative 1. He takes exception with Mr. Simonitch's comments about the supercritical speed they currently have down the 800 feet of the creek, but this has never overflowed and no one has ever fallen in or been hurt there.

Also, Mr. Simonitch said it is difficult to judge the measurements, but in taking this into consideration it never overflowed the banks in that 800 feet. He was not sure why the Town wants to spend millions of dollars in taxpayer money to take this out when it has never overflowed. He asked to look at the protection level the Town currently has which is 100 year and now they tell people they will have a 25-year level of protection which makes no sense. In the last EIR, he submitted a question about the maintenance and number of truckloads of sediment that would be in there which was not addressed in the EIR and has never gotten an answer from the County. They have also completely left out the area from the Winship Bridge to the Lagunitas Road Bridge which is a critical situation, and they have not done the hydrology work because they are relying on information that came from the Army Corps when they had the bypass channel, so the study was never done. In closing, he thinks Alternative 1 is really the best alternative because it is less costly, less disruptive to the Town and it provides virtually the same level of protection they have now.

Mayor McMillan concluded the discussion, confirmed the Council had no added comments and moved onto the next item.

13. Town Manager update and Council discussion on Town activities in response to COVID.

Joe Chinn, Town Manager, reported that current COVID numbers are going down in Marin County. It is expected if patterns continue they will move from the red tier to the orange tier which would allow more activities. Right now, 30% of adults 18 and over have had at least one dose of the vaccine. Marin County has the highest rate of vaccination in counties with over 200,000 population. Starting March 15th, those over 65 and some industries can get vaccinated. The State is going to start taking over categories and one new category will be those aged 16 to 64 that have chronic medical conditions.

End of Administrative Agenda.

Public Hearings on Planning Projects – Part II.
Project applicants will be limited to no more than 15 minutes total for owner, architect, engineer, etc. presentations.

14. 10 Fernhill Avenue, Design Review, Variance and Nonconformity Permit, and Town Council consideration of adoption of Resolution No. 2194.
Albert and Julie Stoll, 10 Fernhill Avenue, A.P. No. 073-051-18, Zoning: R-1: B-10, General Plan: ML (Medium Low Density), Flood Zone: AE (Areas subject to inundation by the 1-percent-annual-chance flood event).

Project Summary: The applicant is requesting approval to construct a new pool; reconstruct and alter an existing garage accessory structure; and construct new permeable paving and landscaping for the existing single-family residence. Variance is required to construct a new pool that encroaches 7.5' into the west side yard setback. Nonconformity Permit is required to extend, reconstruct and structurally alter the existing garage accessory structure which is nonconforming with respect to the minimum allowable east side yard setback and maximum allowable floor area. Design Review is required to alter/reconstruct an existing building exceeding 200 square feet of floor area, to increase the building roof height, and for an activity or project resulting in more than 50 cubic yards of grading.

Matthew Weintraub, Planner, gave an overview of the request by Albert and Julie Stoll for design review, Variance and Nonconformity Permit. The Council had previously considered this project on February 11, 2021 and directed the applicant to make revisions proposed by the Council which the applicant has addressed. The adjacent neighbors support the revised project as well as the ADR Group, and staff recommends the Council approve the project and adopt Resolution No. 2914.

Mayor Pro Tempore Robbins said by moving the pool over, it puts the spa close to the neighbor's fence, and she asked if the neighbor at 12 Fernhill is supportive of the revision.

Mr. Weintraub said at this time it does not seem to be an issue, but he deferred to the applicant.

John Clarke, applicant, confirmed the two changes made to the garage and pool which neighbors have accepted, said they invited the neighbors to be present during the time of planting to ensure proper screening locations, described the 24 inch box trees which will be 12 to 14 feet tall at the time of planting, and that a 20'-5" cap on the trees replacing the redwoods will be reviewed annually by an arborist who will determine the need for pruning. Regarding the spa, he confirmed there has been no issue brought up by the adjacent neighbor and described the resultant circulation improvements.

Mayor McMillan opened the public comment period.

Rupert Russell, 8 Fernhill Avenue, confirmed that the replacement trees for the redwood trees will be 12 to 14 feet high at the time of planting and thanked the applicant and the Stoll's for their efforts.

Mayor McMillan closed the public comment period.

Mayor McMillan asked for a motion.

Mayor Pro Tempore Robbins moved and Council Member Brekhus seconded, to approve 10 Fernhill Avenue and adopt Resolution No. 2194. Motion carried unanimously (5-0).

End of Public Hearings on Planning Projects – Part II.

15. No Action Items:

a. **Council correspondence:** Council Member Brekhus stated she has continued communications about the dog park, continues to drive by the park, has questioned and confirmed it is not being used, and asked to revisit this.

b. **Future Council items:**
Council Member Brekhus requested agendizing the dog park matter, and Council Member Kuhl voiced his support.

16. Adjournment.
Mayor McMillan adjourned the meeting at 10:16 p.m.

Julie McMillan, Mayor

ATTEST:

Linda Lopez, Town Clerk

ATTACHMENT 4

THIRD AMENDMENT TO AMENDED AND RESTATED JOINT POWERS AGREEMENT

This Third Amendment to the Amended and Restated Joint Powers Agreement ("Third Amendment") is entered into as of January 1, 2022 (the "Third Amendment Effective Date"), and is made by and among the Town of Fairfax, a municipal corporation ("Fairfax"), the Town of San Anselmo, a municipal corporation ("San Anselmo"), the Sleepy Hollow Fire Protection District, an independent special district of the State of California ("Sleepy Hollow"), and the Town of Ross, a municipal corporation ("Ross"), each a "Member," and collectively referred to as the "Members."

RECITALS

A. Fairfax, San Anselmo and Sleepy Hollow entered into that certain Amended and Restated Joint Powers Agreement dated as of July 1, 2010 (the "Agreement"). All capitalized terms used herein without definition shall have the same meanings assigned to them in the Agreement.

B. The Agreement governs the operations of the Ross Valley Fire Department (the "Authority").

C. The Members entered into the First Amendment to the Amended and Restated Joint Powers Agreement, effective as of July 1, 2012 (the "First Amendment"), to (i) include Ross as a Member of the Authority; (ii) modify the composition of the Board; (iii) revise the Members' cost sharing and ownership rights; and (iv) address certain other issues agreed upon among the Members.

D. The Members entered into the Second Amendment to the Amended and Restated Joint Powers Agreement, effective as of February 13, 2014 (the "Second Amendment"), to: (i) establish a Management Committee and (ii) implement the provisions of Government Code § 54956.96, permitting the disclosure of certain closed session information in an authorized closed session of a Member.

E. The Members desire to enter into this Third Amendment to the Amended and Restated Joint Powers Agreement to: (1) provide for the closure of the Ross Fire Station and (ii) allocate Authority resources, savings and costs attributable to the Ross Fire Station closure.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Members agree as follows:

AGREEMENT

1. Section 9.2, **Fire Station Maintenance,** is hereby amended by adding subsections d., e. and f. to read as follows:

> **"9.2 Fire Station Maintenance**
>
> **d. Closure of the Ross Fire Station**. Fire Station 18, located at 33 Sir Francis Drake Boulevard in Ross, CA (the "Ross Fire Station") shall be closed on July 1,

2025, or upon a written agreement among all Members to close on an earlier date (such closure date being the "Ross Fire Station Closure Date").

e. One Time Cost For Remodel of Fire Station 21. On or before the Ross Fire Station Closure Date, the Town of Fairfax shall contribute one-time costs not to exceed $210,000 to fund the interior remodel of Fire Station 21, located at 10 Park Road in Fairfax, CA ("Station 21") to accommodate additional staffing.

f. **Shared Costs for Station 19**. Commencing in the first fiscal year following the Ross Fire Station Closure Date, and in each fiscal year thereafter, the Town of Ross and the Town of San Anselmo shall share the maintenance costs of Fire Station 19, located at 777 San Anselmo Avenue in San Anselmo, CA ("Station 19") for which the Town of San Anselmo is responsible pursuant to Section 9.2 a. The Town of Ross shall contribute twenty-seven percent (27%) and the Town of San Anselmo shall contribute seventy-three percent (73%) toward maintenance costs; provided, however, that the Town of San Anselmo and the Town of Ross shall agree upon an annual budget for such costs for the ensuing fiscal year. The foregoing requirement to agree upon an annual budget is intended to obtain an agreement for the total annual maintenance costs to be shared by the parties and in no event shall such agreement modify the annual percentage obligations for Station 19 maintenance costs of either the Town of Ross or the Town of San Anselmo. Subsequent to adopting the annual budgets for the Town of Ross and Town of San Anselmo, and prior to incurring any unbudgeted cost under Section 9.2 a. in excess of $10,000 for Fire Station 19, the Town of San Anselmo shall notify the Town of Ross, and the parties shall meet and confer and agree on any such cost to be incurred.

2. Effective on the Ross Fire Station Closure Date, Section 9.4, **Certain Service Levels**, shall be deleted in its entirety and replaced with the following:

"9.4, Certain Service Levels. The Authority's three fire stations will be routinely open, fully staffed and equipped for 24-hour continuous operation by not less than three (3) full-time sworn trained firefighters at two of the three fire stations and not less than two (2) full-time sworn trained firefighters at the third fire station. Notwithstanding the foregoing, the Fire Chief shall have the sole discretion as to the most effective manner of handling and responding to calls for service. This includes positioning both equipment and staffing between and among the fire stations to meet conflicting demands. Consequently, the Members acknowledge that there may be times when equipment or personnel may not be available from all three fire stations."

3. A new Section 9.5, **Closure of Ross Fire Station**, is hereby added to the Agreement to read as follows:

"9.5 Closure of Ross Fire Station and Movement of Personnel. As of the Ross Fire Station Closure Date, the Fire Chief shall move personnel from the Ross Fire Station to Station 19 and Station 21 as the Fire Chief deems appropriate."

4. Section 24.5, **Existing Capital Assets**, subsection a., **Ross Fire Station**, is hereby amended by restating subsection a. to read as follows:

a. Ross Fire Station. Beginning on the Ross Fire Station Closure Date, the Authority's annual operations costs will be reduced (the "Savings") due to the closure of the Ross Fire Station, the elimination of one engine from the Authority's vehicle replacement schedule, the planned transition of three (3) Captain positions to three (3) Firefighter/Paramedic positions, and the planned transition of three (3) Engineer positions to three (3) Firefighter/ Paramedic positions, with such personnel changes occurring upon the resignation or retirement of the current Captain and Engineer personnel. The annual amount of Savings shall be detailed in the annual budget prepared pursuant to Section 6.2, with the portion of the Savings attributable to personnel changes determined at the time the changes occur, based on the difference in salary and fully loaded benefits of such personnel. The annual amount of the Savings, as shown on the annual budget, shall be credited to the amount of the annual contribution owed by the Town of Ross pursuant to Section 7.1. After the full Savings, by the elimination of one engine from the Authority's vehicle replacement schedule, the planned transition of three (3) Captain positions to three (3) Firefighter/Paramedic positions, and the planned transition of three (3) Engineer positions to three (3) Firefighter/Paramedic positions has been realized, the Members' Percentage Shares (Section 8.1) shall be adjusted to reflect the savings attributed to Ross. In addition, The Town of Ross will be billed by the Authority for actual legal costs (not to exceed $15,000) incurred by the Authority in connection with the preparation of this Third Amendment.

5. Except as expressly modified by this Third Amendment, all other terms and conditions of the Agreement are hereby ratified and confirmed and shall remain in full force and effect and binding on the parties.

6. This Third Amendment may be executed on behalf of the respective Members in one or more counterparts, all of which collectively shall constitute one document and agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Third Amendment as of the date first written above.

TOWN OF SAN ANSELMO, a municipal corporation

By: _____
Alexis Fineman, Mayor

ATTEST:

_____
Town Clerk

TOWN OF FAIRFAX, a municipal corporation

By: _____
Stephanie Hellman, Mayor

ATTEST:

_____
Town Clerk

SLEEPY HOLLOW FIRE PROTECTION DISTRICT, an independent special district of the State of California

By: _____
Name: _____
Title: _____

ATTEST:

_____
Secretary

TOWN OF ROSS, a municipal corporation

By: _____
Elizabeth Robbins, Mayor

ATTEST:

_____
Town Clerk

IN WITNESS WHEREOF, the parties hereto have executed this Third Amendment as of the date first written above.

TOWN OF SAN ANSELMO, a municipal corporation

By: _____
Brian Colbert, Mayor

ATTEST:

_____
Town Clerk

TOWN OF FAIRFAX, a municipal corporation

By: _____
Stephanie Hellman, Mayor

ATTEST:

_____
Town Clerk

SLEEPY HOLLOW FIRE PROTECTION DISTRICT, an independent special district of the State of California

By: _____
Name: _____
Title: _____

ATTEST:

_____
Secretary

TOWN OF ROSS, a municipal corporation

By: _____
Elizabeth Robbins, Mayor

ATTEST:

_____
Town Clerk

IN WITNESS WHEREOF, the parties hereto have executed this Third Amendment as of the date first written above.

TOWN OF SAN ANSELMO, a municipal corporation

By: _____
Brian Colbert, Mayor

ATTEST:

_____
Town Clerk

TOWN OF FAIRFAX, a municipal corporation

By: _____
Stephanie Hellman, Mayor

ATTEST:

_____
Town Clerk

SLEEPY HOLLOW FIRE PROTECTION DISTRICT, an independent special district of the State of California

By: _____
Name: RICHAD C. SHORTALL
Title: PRESIDENT

ATTEST:

_____
Secretary

TOWN OF ROSS, a municipal corporation

By: _____
Elizabeth Robbins, Mayor

ATTEST:

_____
Town Clerk

IN WITNESS WHEREOF, the parties hereto have executed this Third Amendment as of the date first written above.

TOWN OF SAN ANSELMO, a municipal corporation

By: _____
Brian Colbert, Mayor

ATTEST:

_____
Town Clerk

TOWN OF FAIRFAX, a municipal corporation

By: _____
Stephanie Hellman, Mayor

ATTEST:

_____
Town Clerk

SLEEPY HOLLOW FIRE PROTECTION DISTRICT, an independent special district of the State of California

By: _____
Name: _____
Title: _____

ATTEST:

_____
Secretary

TOWN OF ROSS, a municipal corporation

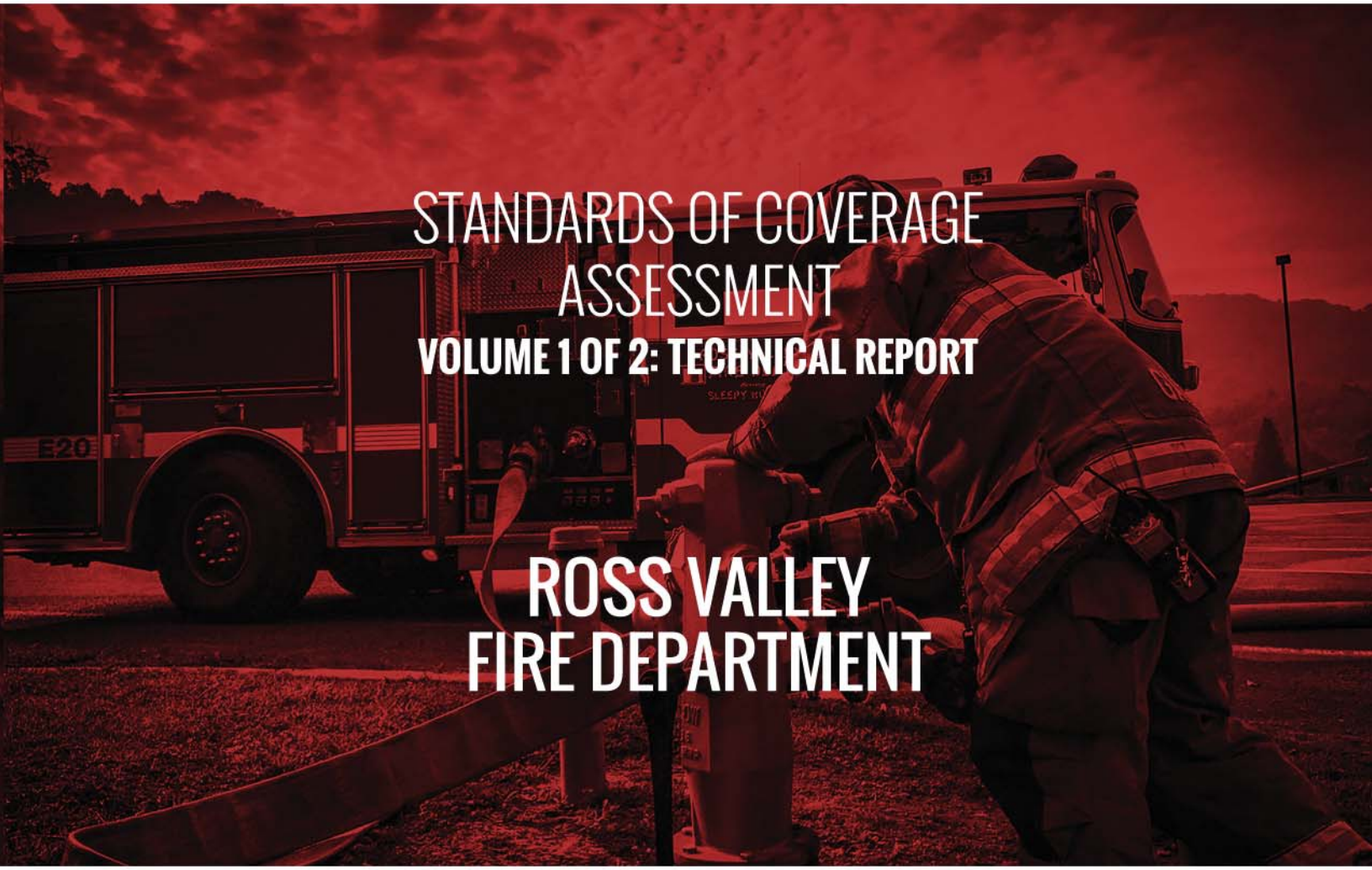
By: Elizabeth Robbins
Elizabeth Robbins, Mayor

ATTEST:

_____
Town Clerk

ATTACHMENT 5

CITYGATE ASSOCIATES, LLC
PUBLIC SAFETY SERVICES



STANDARDS OF COVERAGE ASSESSMENT

VOLUME 1 OF 2: TECHNICAL REPORT

ROSS VALLEY FIRE DEPARTMENT

SEPTEMBER 2019

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ROSS VALLEY FIRE DEPT.

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EXECUTIVE SUMMARY

The Ross Valley Fire Department (Department) is a consolidated department protecting lives, property, and the environments of Ross, San Anselmo, Sleepy Hollow, and Fairfax. The Department retained Citygate Associates, LLC (Citygate) to conduct a comprehensive Standards of Coverage (SOC) assessment to provide a foundation for future fire service planning. The goal of this assessment is to identify both current services and desired service levels, and then to assess the Department's ability to provide them. As part of this study, the Town of Ross (Town) requested an analysis of the impact on the current level of services if the fire engine in the Town was relocated, and alternatively, the fire engine and ambulance were relocated from their present location in the Town. After understanding any possible gaps in operations and resources, Citygate has provided recommendations to improve Department operations and services over time.

This assessment is presented in several parts, including this Executive Summary outlining the most significant findings and recommendations; the fire station/crew deployment analysis supported by maps and response statistics; and an assessment of specific fire crew deployment choices for the Town of Ross. A separate Map Atlas (**Volume 2**) contains all the maps referenced throughout this report. Overall, there are 18 findings and 3 specific action recommendations.

POLICY CHOICES FRAMEWORK

There are no mandatory federal or state regulations directing the level of fire service staffing, response times, or outcomes. Thus, the level of fire protection services provided are a *local policy decision* and communities have the level of fire services that they can afford, which may not always be the level desired. However, if services are provided at all, local, state, and federal regulations relating to firefighter and citizen safety must be followed.

OVERALL SUMMARY OF CURRENT ROSS VALLEY FIRE CREW DEPLOYMENT

Citygate finds that that the Department is well organized being a partnership of several agencies to accomplish its mission to serve a suburban population in a municipal land-use pattern although in hilly terrain with few cross-connecting roads aside from the main roads on the valley floor. The Department serves mostly residential and small downtown populations with a mixed land-use pattern typical of Marin County communities. The small towns and the road to West Marin attract a high number of visitors that also must be protected. However, the hilly geography and the limited road network, which is dependent on one main connector road, makes the area very difficult to serve efficiently from a small number of fire stations.

Fire service deployment, simply stated, is about the *speed* and *weight* of the response. *Speed* refers to initial response (first-due) of all-risk intervention resources (engines, trucks, and/or ambulances) strategically deployed across a jurisdiction for response to emergencies within a time interval to

achieve desired outcomes. *Weight* refers to multiple-unit responses (Effective Response Force, or ERF, commonly also called a First Alarm) for more serious emergencies such as building fires, multiple-patient medical emergencies, vehicle collisions with extrication required, or technical rescue incidents. In these situations, a sufficient number of firefighters must be assembled within a reasonable time interval to safely control the emergency and prevent it from escalating into a more serious event.

Most suburban communities desire outcomes to include limiting building fire damage to only part of the inside of an affected building and/or minimizing permanent impairment resulting from a medical emergency. To do so, the initial units should arrive within 7:30 minutes from 9-1-1 notification and a multiple-unit ERF should arrive within 11:30 minutes of 9-1-1 notification at the Marin County Sheriff's Dispatch Center (Comm Center), all at 90 percent or better reliability. Total response time to emergency incidents includes three distinct components: (1) 9-1-1 call processing/dispatch time; (2) crew turnout time; and (3) travel time. Recommended best practices for these response components are 1:30 minutes, 2:00 minutes, and 4:00/8:00 minutes respectively for first-due and multiple-unit ERF responses in urban/suburban areas.

In the Department, the current fire station system provides the following first-due unit response time performance across a variety of population density/risk areas for emergency medical and fire incident types. As Table 1 shows, *all* station areas receive service *longer* than a best practices goal point of 7:30 minutes.

Table 1—Call to Arrival Performance to 90 Percent of Fire and EMS Incidents (Taken from Table 16)

Station Area	2018
Department-Wide	08:45
Station 18	07:55
Station 19	07:45
Station 20	08:47
Station 21	09:07

The Department's dispatch times are *excellent*. Crew turnout times need modest improvement. The times in Table 1 do, however, reflect a longer *travel* time slower than an urban/suburban preferred 4:00 minutes for 90 percent of the incidents, as Table 2 displays.

Table 2—Travel Time Performance to 90 Percent of Fire and EMS Incidents (Taken from Table 15)

Station Area	2018
Department-Wide	06:09
Station 18	04:40
Station 19	05:38
Station 20	06:24
Station 21	06:30

The overall longer-than-desired first-due unit travel times are *not* the result of a lack of fire stations. They are the result of the non-grid street network design, simultaneous incidents at peak hours of the day, and traffic congestion—particularly rush hour and tourism on weekends.

CITYGATE'S OVERALL OPINIONS

The Department is very difficult to serve efficiently from a small number of fire stations due to the hilly geography and the limited road network, which is dependent on one main connector road. Over time, each population cluster opened a fire station for a minimum single first unit response and knew they were co-dependent on each other for multiple-unit serious emergencies. The geography cannot be changed and improving the road network is not politically feasible or cost-effective. Thus, reducing coverage by removing any one or more fire engines or the paramedic ambulance will increase response times to the local community receiving reduced coverage.

While the state fire code now requires fire sprinklers even in residential dwellings, it will be many more years before the vast majority of homes are replaced or remodeled with automatic fire sprinklers. If the communities' desired outcomes include limiting building fire damage to only part of the inside of an affected building, minimizing permanent impairment resulting from a medical emergency, and keeping wildland fires small to a few acres at the ignition point, then the communities served by the Ross Valley Fire Department will need first-due unit coverage in all neighborhoods.

However, even with maintaining the current four-station spacing, given the topography, not all hillside areas can receive response time coverage consistent with suburban best practice incident outcomes and a Citygate performance recommendation of a first-due arrival within 7:30 minutes from 9-1-1 dispatch notification and a multiple-unit Effective Response Force (ERF) arrival occurring within 11:30 minutes of 9-1-1 notification, all at 90 percent or better reliability.

The Department's call processing performance is excellent. The crew turnout time needs modest improvement but even such attainable improvement cannot substantially lower the fire unit travel

times which are longer than desired. Department resources and equipment are appropriate to protect against the hazards likely to impact the Department's service area, but the daily staffing of eight firefighters on four engines, plus a two-firefighter/paramedic ambulance from the Ross Valley Paramedic Authority (RVPA) and a Duty Chief Officer only provides a *minimum* total response force sufficient to begin controlling a single emerging to serious fire incident, or to provide care at an EMS incident with one to five patients.

In terms of emergency incident workload per unit, no single fire unit or station area is approaching workload saturation. The level of simultaneous incidents is not high enough to warrant another unit at peak hours of the day. Citygate is, however, concerned about the overall limited Department staffing per day and its ability to respond with more "weight of attack" to keep emerging serious emergencies controlled. Even Countywide mutual aid resources are not quickly available in this part of Marin County, as they would be in an urban area with flat terrain and interconnected roads.

The quantity of calls in the Town of Ross (or any other single historic population cluster in the joint Department's service area) is too small and too volatile from which to use historical incidents as the only criteria to maintain the fire station. Providing fire services is akin to purchasing fire insurance, and it is important to consider the desired level of protection. The public policy issue is whether to have access to a fire station nearby or farther away, knowing that a station farther away, even with its unit(s) available for response, cannot offer more than edge suburban or emerging rural area response times to much of the Town of Ross.

Deployment Key Findings and Recommendations

The following are findings and recommendations presented throughout the report.

Finding #1: The Department has legacy response performance objectives partially consistent with best practice recommendations as published by the Commission on Fire Accreditation International. However, they should be updated to reflect current risks and desired outcomes for all types of emergency risk outcomes.

Finding #2: The Department has a standard response plan that considers risk and establishes an appropriate initial response for each incident type. Each type of call for service receives the combination of engines, specialty units, and command officers customarily needed to begin to control that type of incident based on Department experience.

Finding #3: The mapping analysis shows the need for neighborhood-based first response units for fire and EMS incidents.

Finding #4: The risk assessment maps show there are risks to be protected from fire besides just single-family homes, and some areas have lower fire flow capacity for serious or conflagration size fires.

Finding #5: The Department's service demand is consistent, indicating the need for a 24-hours-per-day, seven-days-per-week fire and EMS emergency response system.

Finding #6: The number of simultaneous incidents is volatile. However, in a four-station department, it is very rare that more than two incidents occur at once.

Finding #7: Call processing performance at 1:04 minutes is *better than* a best practice recommendation of 1:30 minutes.

Finding #8: Crew turnout performance at 2:41 minutes is *slower* than a Citygate-recommended goal of 2:00 minutes or less.

Finding #9: First-due unit travel time performance to 90 percent of the incidents Department-wide at 6:09 minutes is well past the Department's likely goal of 4:00 minutes, a goal consistent with best practices.

Finding #10: The Department's call to arrival time to 90 percent of the incidents at 8:45 is slower than a Citygate's recommended goal of 7:30 minutes in developed suburban areas. The principal reason is the longer travel times, reflective of the topography and road network in the Department's service area.

Finding #11: The Effective Response Force (First Alarm) *travel* times are only modestly longer than a best practices goal of 8:00 minutes and are reflective of the good, central placement of the four fire stations.

Finding #12: In the Town of Ross, on EMS emergencies, Engine 18 responded 214 times and Medic 18 responded 169 times in a two-year period.

Finding #13: In the Town of Ross, adjoining Engines 17 (Kentfield) and Engine 19 each arrived first over a two-year period 19 and 20 times, totaling 39. Thus, the outside units only arrived/were needed first 12.6 percent of the time.

Finding #14: In a two-year period, Engines 18 and 17 (Kentfield) were assigned to incidents at the same time 78 times or 16 percent of Engine 18's total responses. Stated this way, if Engine 18 was closed, there are approximately 1.5 incidents per week to which Engine 17 will not be available to respond.

Finding #15: Closing Station 18 will add about 2:00 minutes *minimum* of travel time into that station area.

Finding #16: In the Ross Valley Fire Department, Station 18 has the best travel time of any of the four station areas at 4:40 minutes, only 40 seconds longer than an urban/suburban best practice recommendation of 4:00 minutes. Adding 2:00 minutes travel, plus dispatch and turnout time of at least 3:00 minutes, moves a Town of Ross total response time from 7:40 to 9:40 which would be more like an edge suburban area or emerging rural area. First unit response times of 10:00 minutes-plus means small fires will become larger and critical EMS patients may not receive lifesaving care.

Finding #17: If the Engine 18 daily firefighter count of two were transferred to Engine 19, or reduced to one being transferred, they would be joining an engine that serves a much larger area and is more exposed to simultaneous incident demand. Due the dynamic nature of 9-1-1 emergencies, there is no way to predict if all of the Town of Ross Engine 18 and Medic 18 first arrivals would be covered by just Engines 19 and 17 (Kentfield) or by other units even farther away.

Finding #18: Covering the Town of Ross from either Station 19 or 17 (Kentfield) depends on essentially one road being open and not congested with traffic. Any one accident or natural emergency could close the road, effectively making the Town of Ross a cul-de-sac served from one direction and, in a sub-regional emergency, either Engine 19 or 17 would be shared with a larger service area.

Recommendation #1: **Adopt Updated Deployment Policies:** The Ross Valley Fire Department governing Board should adopt *updated*, complete performance measures to aid deployment planning and to monitor performance. The measures of time should be designed to deliver outcomes that will save patients medically salvageable upon arrival and to keep small but serious fires from becoming more serious. With this is mind, Citygate recommends the following measures:

1.1 Distribution of Fire Stations: To treat pre-hospital medical emergencies and control small fires, the first-due unit should arrive within 8:30 minutes, 90 percent of the time from the receipt of the 9-1-1 call at dispatch; this equates to a 90-second dispatch time, a 2:00-minute company turnout time, and a 5:00-minute travel time.

1.2 Multiple-Unit Effective Response Force for Serious Emergencies: To confine building fires near the room of origin, keep vegetation fires under one acre in size, and treat multiple medical patients at a single incident, a multiple-unit ERF of at least 12 personnel, including at least one Duty Chief Officer, should arrive within 12:30 minutes from the time of 9-1-1 call receipt in dispatch, 90 percent of the time; this equates to a 90-second dispatch time, 2:00-minute company turnout time, and 9:00-minute travel time.

1.3 Hazardous Materials Response: Provide hazardous materials response designed to protect the Department's service areas from the hazards associated with uncontrolled release of hazardous and toxic materials. The fundamental mission of the Fire Department's response is to isolate the hazard, deny entry into the hazard zone, and notify appropriate officials/resources to minimize impacts on the community. This can be achieved with a first-due total response time of 8:30 minutes or less to provide initial hazard evaluation and/or mitigation actions. After the initial evaluation is completed, a determination can be made whether to request additional resources from the regional hazardous materials team.

1.4 Technical Rescue: Respond to technical rescue emergencies as efficiently and effectively as possible with enough trained personnel to facilitate a successful rescue with a first-due total response time of 8:30 minutes or less to evaluate the situation and/or initiate rescue actions. Following the initial evaluation, assemble additional resources as needed within a total response time of 12:30 minutes to safely complete rescue/extrication and delivery of the victim to the appropriate emergency medical care facility.

Recommendation #2: Consider maintaining the current location of all four engines and keeping Medic 18 in the Town of Ross to balance its coverage area to the west and east.

Recommendation #3: Consider providing a third firefighter per day on the three engines other than Engine 18. Doing so would raise the daily weight of attack from 12 to 15 and, with Kentfield's three personnel, to 18. This force would be sufficient to provide the weight of attack and simultaneous incident

redundancy for suburban positive outcomes. Especially on serious building and wildland fire ignitions, there is no second chance to stop the fire. This is a local policy decision to be made by the affected communities to determine the level of fire service that they can afford.

NEXT STEPS

- Review and absorb the content, findings, and recommendations of this report.
- Adopt revised response performance goals as recommended.
- Request staff to return with a community engagement plan to discuss adding up to three more firefighters per day, one on each of the three engines other than Engine 18.

SECTION 1—INTRODUCTION AND BACKGROUND

The Ross Valley Fire Department (Department) retained Citygate Associates, LLC (Citygate) to conduct a comprehensive Standards of Coverage (SOC) assessment to provide a foundation for future fire service planning. The goal of this assessment is to identify both current services and desired service levels and then to assess the Department's ability to provide them. Citygate's scope of work and corresponding Work Plan were developed consistent with Citygate's Project Team members' experience in fire administration and deployment. Citygate utilizes various National Fire Protection Association (NFPA) and Insurance Services Office (ISO) publications as best practice guidelines, along with the self-assessment criteria of the Commission on Fire Accreditation International (CFAI).

1.1 REPORT ORGANIZATION

This report is organized into the following sections. **Volume 2** (Map Atlas) is separately bound.

Executive Summary: Summary of current services and significant future challenges.

Section 1 Introduction and Background: An introduction to the study and background facts about the Department.

Section 2 Standards of Coverage Assessment: An overview of the SOC process and detailed analysis of existing deployment policies, outcome expectations, community risk, critical tasks, distribution and concentration effectiveness, reliability and historical response effectiveness, and overall deployment evaluation.

Section 3 Town of Ross Focused Study: An assessment of the effectiveness of locating one of the Department's engines and/or ambulances in the Town of Ross.

Section 4 Overall Evaluation: An overall deployment evaluation with concluding recommendations.

Appendix A Risk Assessment

1.1.1 Goals of the Report

This report cites findings and provides recommendations, as appropriate, related to each finding. Findings and recommendations throughout this report are sequentially numbered. A complete list of all these same findings and recommendations is provided in the Executive Summary.

This document provides technical information about the way fire services are provided and legally regulated and the way the Department currently operates. This information is presented in the form of recommendations and policy choices for consideration by the Department's leadership.

The result is a solid technical foundation upon which to understand the advantages and disadvantages of the choices facing Department's partners regarding the best way to provide fire services and, more specifically, at what level of desired outcome and expense.

1.1.2 Limitations of Report

In the United States, there are no federal or state regulations requiring a specific minimum level of fire services. Each community, through the public policy process, is expected to understand the local fire and non-fire risks and its ability to pay, and then choose its level of fire services. *If* fire services are provided at all, federal and state regulations specify how to do so safely for the public and for the personnel providing the services.

While this report and technical explanation can provide a framework for the discussion of Department services, neither this report nor the Citygate team can make the final decisions, nor can they cost out every possible alternative in detail. Once final strategic choices receive policy approval, Department staff can conduct any final costing and fiscal analysis as typically completed in its normal operating and capital budget preparation cycle.

1.2 Project Approach and Scope of Work

1.2.1 Project Approach and Research Methods

Citygate utilized multiple sources to gather, understand, and model information about the Department. Citygate requested a large amount of background data and information to better understand current costs, service levels, history of service level decisions, and other prior studies.

In subsequent site visits, Citygate performed focused interviews of the Department's project team members and other project stakeholders. Citygate reviewed demographic information about the Department's service area and the potential for future growth and development. Citygate also obtained map and response data from which to model current and projected future fire service deployment, with the goal to identify the location(s) of stations and crew quantities required to best serve the Department as it currently exists and to facilitate future deployment planning.

Once Citygate gained an understanding of the Department's service area and its fire and non-fire risks, the Citygate team then developed a model of fire services that was tested against the travel time mapping and prior response data to ensure an appropriate fit. Citygate also evaluated future service area growth and service demand by risk types. This resulted in Citygate proposing an approach to both address current needs with effective and efficient use of existing resources and long-range needs. The result is a framework for enhancing Fire Department services while meeting reasonable community expectations and fiscal realities.

1.2.2 Project Scope of Work

Citygate's approach to this Standards of Coverage assessment involved:

- Reviewing information provided by the Department and the Town along with conducting stakeholder listening sessions with project stakeholders.
- Utilizing a geographic mapping software program to model fire station travel time coverage.
- Using an incident response time analysis program called StatsFD™ to review the statistics of prior incident performance, plotting the results on graphs and geographic mapping exhibits.
- Identifying and evaluating future Department population and related development growth.
- Projecting future service demand by risk type.
- Identifying and evaluating potential alternate service delivery models.
- Recommending appropriate risk-specific response performance goals.
- Identifying a long-term strategy, including incremental short- and mid-term goals to achieve desired response performance objectives.
- Utilizing the CFAI self-assessment criteria and other NFPA standards as the basis for evaluating the deployment services provided.

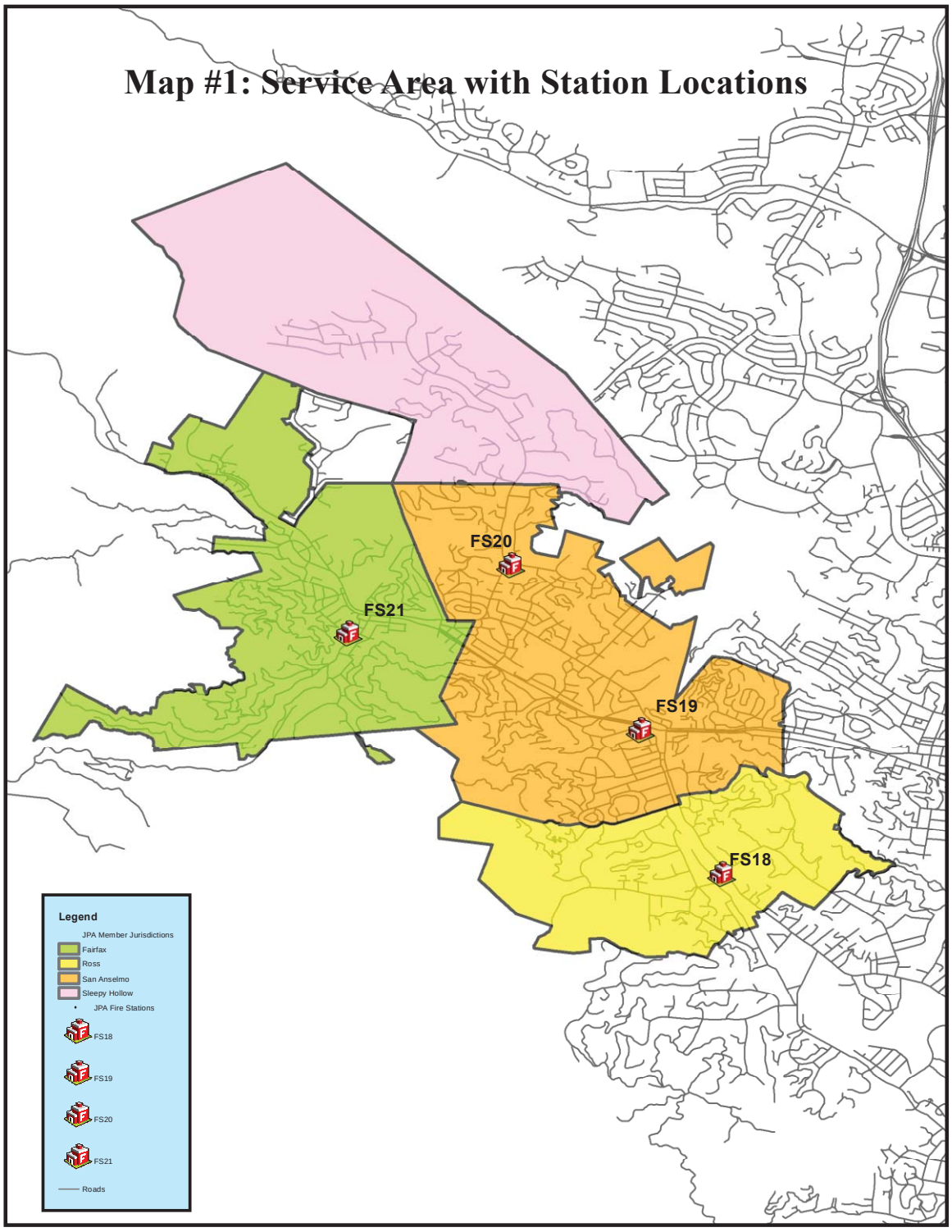
1.3 Communities Served Overview

The Department is a consolidated department protecting lives, property, and the environments of Ross, San Anselmo, Sleepy Hollow, and Fairfax. Ross Valley fire departments trace their history to the early 1900s, with the formation of small volunteer fire departments in the newly formed towns of Ross, San Anselmo, and Fairfax. Built near the wildfire prone slopes of Mount Tamalpais, these communities were and continue to be acutely aware of the risk of fire.

In 1982, the Fairfax Fire Department and the San Anselmo Fire Department joined forces and became known as the Ross Valley Fire Service. At the time Sleepy Hollow was receiving fire protection from the Town of San Anselmo through a contract for service and Sleepy Hollow chose not to become a member of the joint powers authority (JPA) while maintaining a non-voting seat on the Board. In 2010, the JPA was expanded to make Sleepy Hollow a full member of the JPA, ending its contract for service with the Town of San Anselmo. With the expansion of the JPA, the name was changed to the Ross Valley Fire Department. In 2012, Ross Valley Fire Department's Board of Directors voted to consolidate fire services with the Town of Ross, incorporating the

Town of Ross Fire Station 18 into the Ross Valley Fire Department. The current aggregate population of the Department's service area is estimated to be 24,785.

Figure 1—Fire Station Districts and General Geography



1.4 Fire Department Overview

The Department's service capacity for building fire, wildland fire, medical emergency, hazardous materials, and technical rescue risk consists of eight personnel on duty daily staffing four Type-1 fire engines and one Duty Battalion Chief, operating from the Department's four fire stations. In addition, Medic 18 with two paramedic/firefighters from the Ross Valley Paramedic Authority (RVPA) is located at Station 18 in the Town of Ross.

All response personnel are trained to either the Emergency Medical Technician (EMT) level—capable of providing Basic Life Support (BLS) pre-hospital emergency medical care—or EMT-Paramedic (Paramedic) level—capable of providing Advanced Life Support (ALS) pre-hospital emergency medical care. Ground paramedic ambulance service is provided by the RVPA in the Department's service area.

Response personnel are also trained to the U.S. Department of Transportation Hazardous Material First Responder Operational (FRO) level to provide initial hazardous material incident assessment, hazard isolation, and for support for the Countywide hazardous material response team.

The Department also operates a cross-staffed Office of Emergency Services (OES) Type-1 (Structural Fire) engine from Station 20, a cross-staffed Type-3 (Wildland Fire) engine from Station 21, plus two reserve structure fire engines, one breathing air resupply unit, one hazardous materials response unit, and one utility truck. Technical rescue personnel and heavy rescue equipment would come from the County mutual aid system.

1.4.1 Facilities and Resources

The Department provides the aforementioned services from four fire stations as shown in Table 3.

Table 3—Fire Department Facilities and Assigned Resources

Station	Location	*Primary* Assigned Resources	*Minimum* Staffing
18	33 Sir Francis Drake Blvd., Ross	Engine	2
19	777 San Anselmo Ave., San Anselmo	Engine Battalion Chief	2 1
20	150 Butterfield Rd., San Anselmo	Engine	2
21	10 Park Road, Fairfax	Engine	2
Total *Per Day*			9

Source: Fire Department

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SECTION 2—STANDARDS OF COVERAGE ASSESSMENT

This section provides a detailed, in-depth analysis of the Department's current ability to deploy and mitigate emergency risks within its service area. The response analysis uses prior response statistics and geographic mapping to help the Department and the community to visualize what the current response system can and cannot deliver.

2.1 STANDARDS OF COVERAGE PROCESS OVERVIEW

The core methodology used by Citygate in the scope of its deployment analysis work is *Standards of Cover*, 5th and 6th editions, which is a systems-based approach to fire department deployment published by the Commission on Fire Accreditation International (CFAI). This approach uses local risk and demographics to determine the level of protection best fitting a community's needs.

The Standards of Coverage (SOC) method evaluates deployment as part of a fire agency's self-assessment process. This approach uses risk and community expectations on outcomes to help elected officials make informed decisions on fire and emergency medical services deployment levels. Citygate has adopted this multi-part systems approach as a comprehensive tool to evaluate fire station locations. Depending on the needs of the study, the depth of the components may vary.

Such a systems approach to deployment, rather than a one-size-fits-all prescriptive formula, allows for local determination. In this comprehensive approach, each agency can match local needs (risks and expectations) with the costs of various levels of service. In an informed public policy debate, a governing board "purchases" the fire and emergency medical service levels the community needs and can afford.

While working with multiple components to conduct a deployment analysis is admittedly more work, it yields a much better result than using only a singular component. For instance, if only travel time is considered, and frequency of multiple calls is not considered, the analysis could miss over-worked companies. If a risk assessment for deployment is not considered, and deployment is based only on travel time, a community could under-deploy to incidents.

Table 4 describes the eight elements of the Standards of Coverage process.

Table 4—Standards of Coverage Process Elements

SOC Element		Description
1	Existing Deployment Policies	Reviewing the deployment goals the agency has in place today.
2	Community Outcome Expectations	Reviewing the expectations of the community for response to emergencies.
3	Community Risk Assessment	Reviewing the assets at risk in the community. (For this report, see Appendix A—Risk Assessment.)
4	Critical Task Analysis	Reviewing the tasks that must be performed and the personnel required to deliver the stated outcome expectation for the ERF.
5	Distribution Analysis	Reviewing the spacing of first-due resources (typically engines) to control routine emergencies.
6	Concentration Analysis	Reviewing the spacing of fire stations so that more complex emergencies can receive sufficient resources in a timely manner (First Alarm Assignment or the ERF).
7	Reliability and Historical Response Effectiveness Analysis	Using prior response statistics to determine the percent of compliance the existing system delivers.
8	Overall Evaluation	Proposing Standard of Coverage statements by risk type as necessary.

Source: CFAI *Standards of Cover*, 5th Edition

Fire service deployment, simply summarized, is about the *speed* and *weight* of the response. *Speed* refers to initial response (first-due), all-risk intervention resources (engines, trucks, and/or ambulances) strategically deployed across a jurisdiction for response to emergencies within a specified time interval to control routine to moderate emergencies without the incident escalating to greater size or severity. *Weight* refers to multiple-unit responses for more serious emergencies such as building fires, multiple-patient medical emergencies, vehicle collisions with extrication required, or technical rescue incidents. In these situations, a sufficient number of firefighters must be assembled within a reasonable time interval to safely control the emergency and prevent it from escalating into a more serious event. Table 5 illustrates this deployment paradigm.

Table 5—Fire Service Deployment Paradigm

Element	Description	Purpose
Speed of Response	Travel time of initial response of all-risk intervention units strategically located across a jurisdiction.	Controlling routine to moderate emergencies without the incident escalating in size or complexity.
Weight of Response	Number of firefighters in a multiple-unit response for serious emergencies.	Assembling enough firefighters within a reasonable time frame to safely control a more complex emergency without escalation.

Thus, smaller fires and less complex emergencies require a single-unit or two-unit response (engine and/or specialty resource) within a relatively short response time. Larger or more complex incidents require more units and personnel to control. In either case, if the crews arrive too late or the total number of personnel is too few for the emergency, they are drawn into an escalating and more dangerous situation. The science of fire crew deployment is to spread crews out across a community or jurisdiction for quick response to keep emergencies small with positive outcomes, without spreading resources so far apart that they cannot assemble quickly enough to effectively control more serious emergencies.

2.2 CURRENT DEPLOYMENT

SOC ELEMENT 1 OF 8
EXISTING DEPLOYMENT POLICIES

Nationally recognized standards and best practices suggest using several incremental measurements to define response time. Ideally, the clock start time is when the 9-1-1 dispatcher receives the emergency call. In some cases, the call must then be transferred to a separate dispatch center. In this setting, the response time clock starts when the dispatch center receives the 9-1-1 call into its computer-aided dispatch (CAD) system. Response time increments include dispatch center call processing, crew alerting and response unit boarding (commonly called turnout time), and actual driving (travel) time.

The Department's response time goals are somewhat dated and not completely up to best practice recommendations. They were most recently discussed in a 2005 Standards of Cover (adopted March of 2005) done by staff as a companion to the 2005 Strategic Plan:

- First unit on-scene within total reflex time of 7-minutes to all areas served with a high potential for life loss, economic value or fire flow. Further 8-minutes for areas with a moderate or low potential for life loss, economic value or fire flow. Time was to be from the 911 call receipt to 90% of the incidents.

- Confine 90% of all structure fires within 30-minutes of arrival after 911 call receipt to the area of involvement as reported by the first arriving fire units, using an Effective Response Force of 14 firefighters with a fire flow stream(s) application of 1,500 gallons per minute (GPM).
- Maintain an emergency response capability, measured from 911 call receipt to arrival, that will ensure initiation of wildland structural fire protection with the first arriving unit within 8-minutes, and the first alarm companies within 12-minutes to 90% of all responses in all areas.
- Maintain an Emergency Medical Response of EMT-Ds,[1] measured from 911 call receipt to arrival, within 8-minutes to 90% of the incidents in all areas served.

Cities, towns, and counties in California have General Plans for land use regulation. One required chapter is a Safety Element. In reviewing the Ross Valley Fire Department's partners General Plans, none of them mention response times. As would be expected in the Marin County region, all of the General Plans contain significant goals and policies for the mitigation of wildfire, including vegetation management, structure resistance to fires, and road access.

The Department does not appear to regularly report measures of response time performance, per the 2005 criteria, to itself and its partner local governments. Internally, Service Level Objectives were reviewed on a regular basis until 2013.

Having adopted performance measures pertaining to all types of risks beside fire and EMS, such as hazardous materials and technical rescues, is considered a best practice today. The Department does have a service level history that can be documented in retrospective response times, number of response companies, and minimum staffing.

Currently, National Fire Protection Association (NFPA) Standard 1710,[2] a recommended deployment standard for career fire departments in urban/suburban areas, recommends initial (first-due) intervention unit arrival within 4:00 minutes *travel* time and recommends arrival of all the resources comprising the multiple-unit First Alarm within 8:00 minutes *travel* time, at 90 percent or better reliability.

As the Department's 2005 goals properly cited, response time begins with the receipt of the 9-1-1 call. The most recent published best practices by the NFPA for dispatching have increased the dispatch processing time up to 90 seconds and, if there are language barriers, 120 seconds. Further,

[1] Emergency Medical Technician – Defibrillator capable.

[2] 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 (2016 Edition).

for crew turnout time, 60-80 seconds is recommended depending on the type of protective clothing that has to be donned.

If the travel time measures recommended by the NFPA (and Citygate) are added to dispatch processing and crew turnout times recommended by Citygate and best practices, then a realistic 90 percent first unit arrival goal is now 7:30 minutes from the time of the Marin County Sheriff's Dispatch Center (Comm Center) receiving the call. This is comprised of 90 seconds dispatch + 2:00 minutes crew turnout + 4:00 minutes travel.

Finding #1:	The Department has legacy response performance objectives partially consistent with best practice recommendations as published by the Commission on Fire Accreditation International. However, they should be updated to reflect current risks and desired outcomes for all types of emergency risk outcomes.

2.2.1 Current Deployment Model

Resources and Staffing

The Department's current deployment model consists of four engines staffed with a minimum of two personnel each and one Battalion Chief, for a total daily minimum year-round continuous staffing of at least 9 personnel operating from four fire stations, plus a two-firefighter/paramedic ambulance from the Ross Valley Paramedic Authority (RVPA). The Department has automatic and mutual aid agreements with all the fire agencies in Marin County and is also a signatory to the State of California Mutual Aid Agreements.

Response Plan

The Department is an all-risk fire agency providing the people it protects with services that include fire suppression, pre-hospital paramedic (ALS) EMS, hazardous material and technical rescue response, and other non-emergency services, including fire prevention, community safety education, and other related services.

Given these risks, the Department utilizes a tiered response plan calling for different types and numbers of resources depending on incident/risk type. The Sheriff's Dispatch Center (Comm Center) process selects and dispatches the closest and most appropriate resource types pursuant to the Department's response plan, as shown in Table 6.

Table 6—Response Plan by Incident Type

Incident Type	Resources Dispatched	Total Personnel*
Single-Patient EMS	1 Engine + 1 Paramedic Ambulance	**4**
Vehicle Fire	1 Engine	**2**
Building Fire, Initial Response**	3 Engines, 1 Ladder Truck, 1 Paramedic Ambulance, 1 Battalion Chief	**12**
Wildland Fire	4 Engines or Wildland Engines, 1 Paramedic Ambulance, 1 Battalion Chief	**12**
Rescue	3 Engines, 1 Ladder Truck, 1 Paramedic Ambulance, 1 Battalion Chief	**12**
Hazardous Material	4 Engines, 1 Paramedic Ambulance, 1 Battalion Chief	**12**

* Personnel were calculated as follows: engines = 2 personnel (except if Engine 17 (Kentfield) staffs 3 personnel); ladder truck = 3 personnel from outside the Department; paramedic ambulance = 2 personnel.

** Confirmed serious fires receive a second Battalion Chief and a fourth engine

Source: Fire Department

Finding #2: The Department has a standard response plan that considers risk and establishes an appropriate initial response for each incident type. Each type of call for service receives the combination of engines, specialty units, and command officers customarily needed to begin to control that type of incident based on Department experience.

2.3 Outcome Expectations

SOC Element 2 of 8
Community Outcome Expectations

The Standards of Coverage process begins by reviewing existing emergency services outcome expectations. This includes determining for what purpose the response system exists and whether the governing body has adopted any response performance measures. If so, the time measures used must be understood and good data must be available.

Current national best practice is to measure percent completion of a goal (e.g., 90 percent of responses) instead of an average measure. Mathematically, this is called a fractile measure.[3] This is because measuring the average only identifies the central or middle point of response time

[3] A *fractile* is that point below which a stated fraction of the values lies. The fraction is often given in percent; the term percentile may then be used.

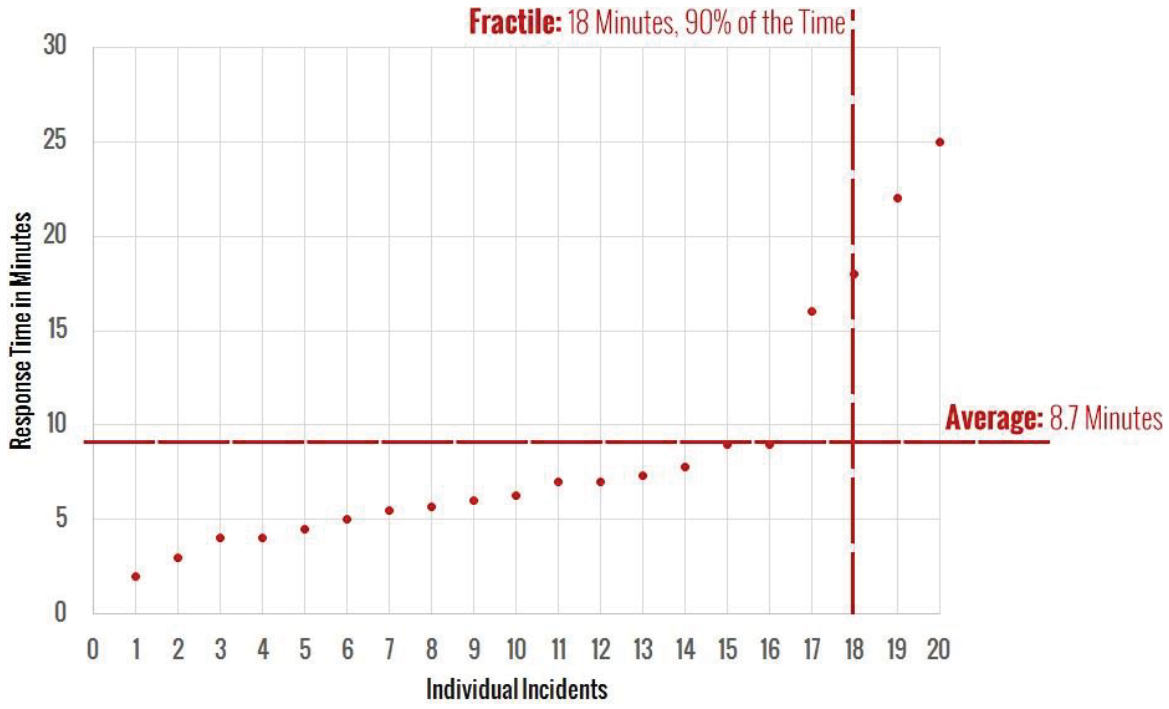
performance for all calls for service in the data set. Using an average makes it impossible to know how many incidents had response times that were way above the average or just above.

For example, Figure 2 shows response times for a fictitious fire department. This agency is small and receives 20 calls for service each month. Each response time has been plotted on the graph from shortest response time to longest response time.

Figure 2 shows that the average response time is 8.7 minutes. However, the average response time fails to properly account for four calls for service with response times far exceeding a threshold in which positive outcomes could be expected. In fact, it is evident in Figure 2 that 20 percent of responses are far too slow and that this jurisdiction has a potential life-threatening service delivery problem. Average response time as a measurement tool for fire services is simply not sufficient. This is a significant issue in larger cities if hundreds or thousands of calls are answered far beyond the average point.

By using the fractile measurement with 90 percent of responses in mind, this small jurisdiction has a response time of 18:00 minutes, 90 percent of the time. This fractile measurement is far more accurate at reflecting the service delivery situation of this small agency.

Figure 2—Fractile versus Average Response Time Measurements



More importantly, within the Standards of Coverage process, positive outcomes are the goal, and from that crew size and response time can be calculated to allow appropriate fire station spacing (distribution and concentration). Emergency medical incidents include situations with the most

severe time constraints. The brain can only survive 4:00 to 6:00 minutes without oxygen. Cardiac arrest and other events can cause oxygen deprivation to the brain. Cardiac arrests make up a small percentage; drowning, choking, trauma constrictions, or other similar events have the same effect. In a building fire, a small incipient fire can grow to involve the entire room in a 6:00- to 8:00-minute time frame. If fire service response is to achieve positive outcomes in severe emergency medical situations and incipient fire situations, *all* responding crews must arrive, assess the situation, and deploy effective measures before brain death occurs or the fire spreads beyond the room of origin.

Thus, from the time of 9-1-1 receiving the call, an effective deployment system is *beginning* to manage the problem within a 7:00- to 8:00-minute total response time. This is right at the point that brain death is becoming irreversible and the fire has grown to the point of leaving the room of origin and becoming very serious. Thus, most urban/suburban population density communities desire a first-due response goal that is within a range to give the situation hope for a positive outcome. It is important to note the fire or medical emergency continues to deteriorate from the time of inception, not the time the fire engine starts to drive the response route. Ideally, the emergency is noticed immediately and the 9-1-1 system is activated promptly. This step of awareness—calling 9-1-1 and giving the dispatcher accurate information—takes, in the best of circumstances, 1:00 minute. Then crew notification and travel time take additional minutes. Upon arrival, the crew must approach the patient or emergency, assess the situation, and deploy its skills and tools appropriately. Even in easy-to-access situations, this step can take 2:00 minutes or more. This time frame may be increased considerably due to long driveways, apartment buildings with limited access, multiple-story apartments or office complexes, or shopping center buildings.

Unfortunately, there are times when the emergency has become too severe, even before the 9-1-1 notification and/or fire department response, for the responding crew to reverse; however, when an appropriate response time policy is combined with a well-designed deployment system, then only anomalies like bad weather, poor traffic conditions, or multiple emergencies slow the response system down. Consequently, a properly designed system will give citizens the hope of a positive outcome for their tax dollar expenditure.

For this report, total response time is the sum of Marin County Sheriff's Dispatch Center (Comm Center) dispatch processing plus crew turnout, and road travel time steps. This is consistent with CFAI and NFPA and Citygate best practice recommendations.

2.4 COMMUNITY RISK ASSESSMENT

SOC ELEMENT 3 OF 8
COMMUNITY RISK ASSESSMENT

The third element of the SOC process is a community risk assessment. Within the context of an SOC study, the objectives of a community risk assessment are to:

- Identify the values at risk to be protected within the community or service area.
- Identify the specific hazards with the potential to adversely impact the community or service area.
- Quantify the overall risk associated with each hazard.
- Establish a foundation for current/future deployment decisions and risk-reduction/hazard mitigation planning and evaluation.

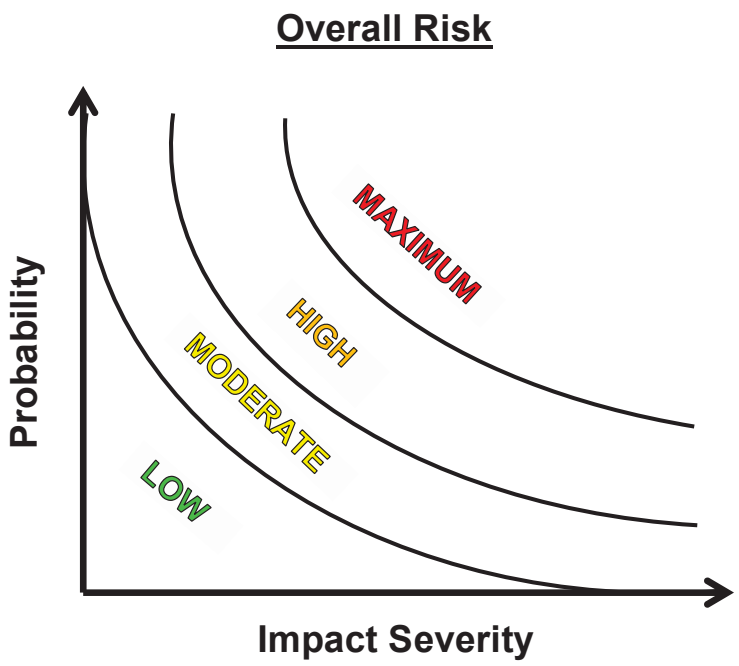
A *hazard* is broadly defined as a situation or condition that can cause or contribute to harm. Examples include fire, medical emergency, vehicle collision, earthquake, flood, etc. *Risk* is broadly defined as the *probability of hazard occurrence* in combination with the *likely severity of resultant impacts* to people, property, and the community as a whole.

2.4.1 Risk Assessment Methodology

The methodology employed by Citygate to assess community risks as an integral element of an SOC study incorporates the following elements:

- Identification of geographic planning sub-zones (risk zones) appropriate to the community or jurisdiction.
- Identification and quantification (to the extent data is available) of the specific values at risk to various hazards within the community or service area.
- Identification of the fire and non-fire hazards to be evaluated.
- Determination of the probability of occurrence for each hazard.
- Identification and evaluation of multiple relevant impact severity factors for each hazard by planning zone using agency/jurisdiction-specific data and information.
- Quantification of overall risk for each hazard based on probability of occurrence in combination with probable impact severity as shown in Figure 3.

Figure 3—Overall Risk



2.4.2 Risk Assessment Summary

Citygate's comprehensive risk assessment is contained in Appendix A of this study. Citygate's evaluation of the values at risk and hazards likely to impact the Ross Valley Fire Department service area yields the following:

1. The Department serves a diverse population, with densities ranging from less than 500 people per square mile to approximately 5,000 per square mile, over a varied land use pattern.
2. The Department's service area population is projected to grow by only 7.7 percent over the next 11 years to 2030, or an average annual growth of approximately 0.7 percent.
3. The service area includes nearly 11,000 housing units, as well as a large inventory of non-residential occupancies.
4. Marin County has a mass emergency notification system to effectively communicate emergency information to the public in a timely manner.
5. The Department's overall risk for five hazards related to emergency services provided range from **Low** to **High**, as summarized in Table 7.

The values in the summary table *do not* place a severity measure on any one risk type; they reflect a composite formula of the probability of occurrence in combination with probable impact severity. For example, while the Department's service area has significant wildland fire risks, the Department experienced only 19 vegetation fires over this study's two-year period, comprising 0.34 percent of total service demand. However, EMS is a daily occurrence, ranging from low- to high-risk individual medical events.

Table 7—Overall Risk by Hazard

Hazard	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Building Fire	*Low*	*Low*	*Moderate*	*Moderate*
Vegetation Fire	*Low*	*Low*	*Low*	*Low*
Medical Emergency	*High*	*High*	*High*	*High*
Hazardous Material	*Moderate*	*Moderate*	*Moderate*	*Moderate*
Technical Rescue	*Low*	*Low*	*Low*	*Low*

2.5 Critical Task Time Measures—What Must Be Done over What Time Frame to Achieve the Stated Outcome Expectation?

SOC Element 4 of 8
Critical Task Time Study

Standards of Coverage (SOC) studies use critical task information to determine the number of firefighters needed within a timeframe to achieve desired objectives on fire and emergency medical incidents. Table 8 and Table 9 illustrate critical tasks typical of building fire and medical emergency incidents, including the minimum number of personnel required to complete each task. These tables are composites from Citygate clients in urban/suburban departments similar to Ross Valley, *but with the more typical* unit staffing of three personnel per engine and two personnel per ambulance. It is important to understand the following relative to these tables:

- It can take a considerable amount of time after a task is ordered by command to complete the task and arrive at the desired outcome.
- Task completion time is usually a function of the number of personnel that are *simultaneously* available. The fewer firefighters available, the longer some tasks will take to complete. Conversely, with more firefighters available, some tasks are completed concurrently.

- Some tasks must be conducted by a minimum of two firefighters to comply with safety regulations. For example, two firefighters are required to search a smoke-filled room for a victim.
- Given the two-firefighter staffing on the Department units, the time to completion will be longer, at times significantly depending on task complexity or a hard to access patient or fire location.

2.5.1 Critical Firefighting Tasks

Table 8 illustrates the critical tasks required to control a typical single-family dwelling fire with six response units (engines/chief), for a total Effective Response Force of *16* personnel, where the Ross Valley Fire Department initially sends **12**. A confirmed serious fire additionally receives a second Battalion Chief and a fourth engine raising this to 15 personnel. However, in many locations these additional units come from much farther away. These tasks are taken from typical fire departments' operational procedures, which are consistent with the customary findings of other agencies using the Standards of Coverage process. No conditions exist to override the Occupational Safety and Health Administration two-in/two-out safety policy, which requires that firefighters enter Immediately Dangerous to Life and Health atmospheres, such as building fires, in teams of two, while two more firefighters are outside and immediately ready to rescue them should trouble arise.

Scenario: *Simulated approximately 2,000 square-foot, two-story residential fire with unknown rescue situation. Responding companies receive dispatch information typical for a witnessed fire. Upon arrival, they find approximately 50 percent of the second floor involved in fire.*

Table 8—First Alarm Residential Fire Critical Tasks – 16 Personnel

Critical Task Description		Personnel Required
1st-Due Engine (3 personnel)		
1	Conditions report	1
2	Establish supply line to hydrant	2
3	Deploy initial fire attack line to point of building access	1–2
4	Operate pump and charge attack line	1
5	Establish incident command	1
6	Conduct primary search	2
2nd-Due Engine (3 personnel)		
7	If necessary, establish supply line to hydrant	1–2
8	Deploy a backup attack line	1–2
9	Establish Initial Rapid Intervention Crew (IRIC)	2
1st-Due Truck (3 personnel)		
10	Conduct initial search and rescue if not already completed	2
11	Deploy ground ladders to roof	1–2
12	Establish horizontal or vertical building ventilation	1–2
13	Open concealed spaces as required	2
Chief Officer		
14	Transfer of incident command	2
15	Establish exterior command and scene safety	1
3rd Due Engine and Rescue Unit (3 personnel each)		
16	Establish Initial Rapid Intervention Crew (IRIC)	3
17	Secure utilities	2
18	Deploy second attack line as needed	2
19	Conduct secondary search	2

The duties in Table 8, grouped together, form an Effective Response Force (ERF) or First Alarm Assignment. These distinct tasks must be performed to effectively achieve the desired outcome; arriving on scene does not stop the emergency from escalating. While firefighters accomplish these

tasks, the incident progression clock keeps running. These tasks are also consistent with nationally published research studies.[4]

Fire in a building can double in size during its free-burn period before fire suppression is initiated. Many studies have shown that a small fire can spread to engulf an entire room in less than 4:00 to 5:00 minutes after free burning has started. Once the room is completely superheated and involved in fire (known as flashover), the fire will spread quickly throughout the structure and into the attic and walls. For this reason, it is imperative that fire suppression and search/rescue operations commence before the flashover point occurs if the outcome goal is to keep the fire damage in or near the room of origin. In addition, flashover presents a life-threatening situation to both firefighters and any occupants of the building.

2.5.2 Critical Medical Emergency Tasks

The Department responds to more than 1,407 EMS incidents annually, including vehicle accidents, strokes, heart attacks, difficulty breathing, falls, childbirths, and other medical emergencies.

For comparison, Table 9 summarizes the critical tasks required for a cardiac arrest patient, typically with at least five personnel responding, where the Department sends four.

[4] Report on Residential Fireground Field Experiments, National Institute of Standards and Technology Technical Note 1661, April 2010. 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, 2016 Edition.

Table 9—Cardiac Arrest Critical Tasks – Three Engine Personnel + Two Personnel ALS Ambulance

Critical Task		Personnel Required	Critical Task Description
1	Chest compressions	1–2	Compression of chest to circulate blood
2	Ventilate/oxygenate	1–2	Mouth-to-mouth, bag-valve-mask, apply O_2
3	Airway control	1–2	Manual techniques/intubation/cricothyroidomy
4	Defibrillate	1–2	Electrical defibrillation of dysrhythmia
5	Establish I.V.	1–2	Peripheral or central intravenous access
6	Control hemorrhage	1–2	Direct pressure, pressure bandage, tourniquet
7	Splint fractures	2–3	Manual, board splint, HARE traction, spine
8	Interpret ECG	2	Identify type and treat dysrhythmia
9	Administer drugs	2	Administer appropriate pharmacological agents
10	Spinal immobilization	2–5	Prevent or limit paralysis to extremities
11	Extricate patient	3–4	Remove patient from vehicle, entrapment
12	Patient charting	1–2	Record vitals, treatments administered, etc.
13	Hospital communication	1–2	Receive treatment orders from physician
14	Treat en route to hospital	2–3	Continue to treat/monitor/transport patient

2.5.3 Critical Task Analysis and Effective Response Force Size

What does a deployment study derive from a critical task analysis? The time required to complete the critical tasks necessary to stop the escalation of an emergency (as shown in Table 8 and Table 9) must be compared to outcomes. As shown in nationally published fire service time vs. temperature tables, after approximately 4:00 to 5:00 minutes of free burning a room fire will escalate to the point of flashover. At this point, the entire room is engulfed in fire, the entire building becomes threatened, and human survival near or in the room of fire origin becomes impossible. Additionally, brain death begins to occur within 4:00 to 6:00 minutes of the heart stopping. Thus, the ERF must arrive in time to prevent these emergency events from becoming worse.

The Department's daily staffing plus automatic aid is sufficient to deliver a single ERF of **12** personnel to a building fire—if they can arrive in time, which the statistical analysis of this report will discuss in depth. Mitigating an emergency event is a team effort once the units have arrived. This refers to the *weight* of response analogy; if too few personnel arrive too slowly, then the emergency will escalate instead of improving. The outcome times, of course, will be longer and yield less desirable results if the arriving force is later or smaller.

The quantity of staffing and the arrival timeframe can be critical in a serious fire. Fires in older and/or multiple-story buildings could well require the initial firefighters needing to rescue trapped or immobile occupants. If the ERF is too small, rescue and firefighting operations *cannot* be conducted simultaneously.

Fires and complex medical incidents require that additional units arrive in time to complete an effective intervention. Time is one factor that comes from *proper station placement*. Good performance also comes from *adequate staffing* and training. But where fire stations are spaced too far apart, and one unit must cover another unit's area or multiple units are needed, these units can be too far away and the emergency will escalate and/or result in less-than-desirable outcomes.

Previous critical task studies conducted by Citygate, the National Institute of Standards,[5] and NFPA Standard 1710 find that all units need to arrive with 15+ firefighters within 11:30 minutes (from the time of 9-1-1 call) at a building fire to be able to *simultaneously and effectively* perform the tasks of rescue, fire suppression, and ventilation.

A question one might ask is, "If fewer firefighters arrive, such as does occur in the Ross Valley Department, *what* from the list of tasks mentioned would not be completed?" This is also critical as given the two-firefighter staffing, the initial force is a smaller count as it takes the third- and fourth-due units much longer to arrive. Most likely, the search team would be delayed, as would ventilation. The attack lines would only consist of two firefighters, which does not allow for rapid movement of the hose line above the first floor in a multiple-story building. Rescue is conducted with at least two-person teams; thus, when rescue is essential, other tasks are not completed in a simultaneous, timely manner. Effective deployment is about the **speed** *(travel time)* and the **weight** *(number of firefighters)* of the response.

Sixteen initial personnel could handle a moderate-risk, confined residential fire; however, even an ERF of 16 personnel will be seriously slowed if the fire is above the first floor in a low-rise apartment building or commercial/industrial building. This is where the capability to add additional personnel and resources to the standard response becomes critical.

The Department has to initially dispatch extra units via mutual aid to deliver more personnel, given the two-firefighter per unit staffing, but doing so to deliver the "weight of attack" comes at two disadvantages—first, it takes longer (speed of attack) and second, more units are out of service should another simultaneous incident occur.

Given that the Department's ERF plan delivers **12** personnel to a moderate-risk building fire, it reflects a goal to confine serious building fires to the *building of origin, not* the room of origin or

[5] Report on Residential Fireground Field Experiments, National Institute of Standards and Technology Technical Note #1661, April 2010.

to prevent the spread of fire to adjoining buildings or wildland areas. This is a lesser desired outcome for urban/suburban areas, where the goal is to confine a building fire to or very near to the room of origin. That goal requires more firefighters more quickly.

The Department's current physical response to building fires is, in effect, its de-facto deployment measure to its populated areas—*if those areas are within a reasonable travel time from a fire station*. Thus, this becomes the baseline policy for the deployment of firefighters.

2.6 Distribution and Concentration Studies—How the Location of First-Due and First Alarm Resources Affects Emergency Incident Outcomes

SOC Element 5 of 8
DISTRIBUTION STUDY

SOC Element 6 of 8
CONCENTRATION STUDY

The Department is served today by four fire stations deploying four engine companies and one Battalion Chief as the duty Incident Commander. It is appropriate to understand using geographic mapping tools what the existing stations do and do not cover for both risks to be protected and the geography that units must travel over.

In brief, there are two geographic perspectives to fire station deployment:

- **Distribution** – the spacing of first-due fire units to control routine emergencies before they escalate and require additional resources.
- **Concentration** – the spacing of fire stations sufficiently close to each other so that more complex emergency incidents can receive sufficient resources from multiple fire stations quickly. As indicated, this is known as the **Effective Response Force**, or, more commonly, the First Alarm Assignment—the collection of a sufficient number of firefighters on scene, delivered within the concentration time goal to stop the escalation of the problem.

To analyze first-due fire unit risks to be protected and coverage, Citygate used a geographic mapping tool to produce the maps described in the following subsection, which can be found in **Volume 2**.

2.6.1 Deployment Baselines

Map #1 – General Geography, Station Locations, and Response Resource Types

Map #1 shows the Department boundary, communities, and fire station service areas. This is a reference map for other maps that follow.

Map #2a – Risk Assessment: Planning Zones

Map #2a shows the four risk planning zones, as recommended by the CFAI, used for this study, which are the same as each station's initial (first-due) response area.

Map #2b – Risk Assessment: High Risk Occupancies

Map #2b displays the locations of the higher-risk building occupancies within the Department, as defined by the CFAI. These building occupancies typically require a larger initial ERF (staffing) due to the higher risks associated with these specific occupancies. It is apparent that there are high-risk occupancies in every planning zone.

Map #2c – Risk Assessment: Hazardous Materials Use/Storage Occupancies

Map #2c displays the locations of the higher-risk commercial building occupancies that use and/or store regulated Hazardous Materials. The regulations for these uses are enforced by the County Department of Public Works as the State-designated Certified Unified Program Agency (CUPA) for the County.

Map #2d – Risk Assessment: Wildland Fire Severity Zones

Map #2d displays the California Department of Forestry and Fire Protection (CAL FIRE) State Responsibility Areas for wildland fire protection, where the state has primary fiscal responsibility for wildfires through the Marin County Fire Department.

Map #2e – Risk Assessment: Lower Fire Flow (Water) Locations

Map #2e displays the locations of fire hydrants on older, smaller water mains that can only provide up to 500 or 1,000 gallons per minute of firefighting flow. Most newer communities can provide neighborhood fire flows substantially higher than this and most current fire department pumpers can easily pump 1,500-2,000 gallons per minute. Larger commercial building fires can require 2,000 to 5,000 gallons per minute, provided by several pumpers and hydrants.

Map #3 – Distribution: First-Due Travel Distance Coverage

This map displays the Insurance Service Office (ISO) recommendation that fire stations in developed areas cover a 1.5-mile *distance* response area. Depending on a jurisdiction's road network, the 1.5-mile measure usually equates to a 3:30- to 4:00-minute travel time. Thus the 1.5-mile measure is a reasonable indicator of station spacing and overlap. This map shows first-due unit coverage distance of 1.5 miles across the public road network from the Department's current fire station locations. The 1.5-mile coverage goes from very light meaning a single unit to very dark where three units overlap. The coverage also assumes all units are in station and available for response.

The purpose of response coverage modeling is to determine response time coverage across a jurisdiction's geography and station locations. This geo-mapping design is then validated against dispatch time data in the next section of this study to reflect actual response times. There should be some overlap between station areas so that a second-due unit can have a chance of an acceptable response time when it responds to a call in a different station's first-due response area. As can be seen, there is some overlap coverage in the more built-up areas of the Department.

Map #4 – Medic 18 Ambulance Coverage Areas

This map displays the service area assigned to Medic 18, where the goal is to cover the most populated areas within 8:00 minutes *travel* time. This map shows the importance for Medic 18 to be centrally located to cover from Greenbrae west to Sleep Hollow and Fairfax.

Map #5 – All Incident Locations

Map #5 shows the location of all incidents from 2017 through 2018. It is apparent that incidents occur in most all areas of the Department and to other areas for mutual aid.

Map #6 – Emergency Medical Services and Rescue Incident Locations

Map #9 illustrates only the emergency medical and rescue incident locations over the last two years. With the majority of the calls for service being medical emergencies, virtually all areas of the Department need pre-hospital emergency medical services. The greatest population density also incurs the highest EMS demand patterns. Medic 18 responses are not located on this map.

Map #7 – All Fire Locations

This map identifies the location of all fires within the Department over the last two years. All fires include any type of fire call, from vehicle to dumpster to building. There are obviously fewer fires than medical or rescue calls. Even given this, it is evident that fires occur in all fire station areas.

Map #8 – Structure Fire Locations

Map #8 displays the location of the structure fire incidents over the last two years. While the number of structure fires is a smaller subset of total fires, there are two meaningful findings from this map. First, there are structure fires in every fire station area, and second, there are a relatively small number of building fires in the Department overall, which in Citygate's experience is consistent with other similar smaller communities in the western United States.

Finding #3:	The mapping analysis shows the need for neighborhood-based first response units for fire and EMS incidents.

Finding #4: The risk assessment maps show there are risks to be protected from fire besides just single-family homes, and some areas have lower fire flow capacity for serious or conflagration size fires.

2.7 STATISTICAL ANALYSIS

SOC ELEMENT 7 OF 8
RELIABILITY & HISTORICAL RESPONSE EFFECTIVENESS STUDIES

The map sets described in Section 2.6 above and presented in **Volume 2** show the ideal situation for response times and the response effectiveness given perfect conditions with no competing calls, traffic congestion, units out of place, or simultaneous calls for service. Examination of the actual response time data provides a picture of actual response performance with simultaneous calls, rush hour traffic congestion, units out of position, and delayed travel time for events such as periods of severe weather.

The following subsections provide summary statistical information regarding the Department and its services.

2.7.1 Demand for Service

The Department provided both federal National Fire Reporting System (NFIRS) version 5 incident and computer-aided dispatch (CAD) apparatus response data for two complete years from January 1, 2017 through December 31, 2018.

In 2018, the Department responded to 2,685 incidents, which is a daily demand of 7.36 incidents. During this same period, there were 7,503 individual apparatus responses. This means there was an average of 2.8 apparatus responses per incident, which is considered high and is likely due to the low staffing levels on each apparatus. The number of incidents has been calculated from NFIRS 5 records furnished for 2017 and 2018. According to these records, the Department experienced a decline in the number of incidents from 2017 through 2018.

Figure 4—Annual Service Demand by Year

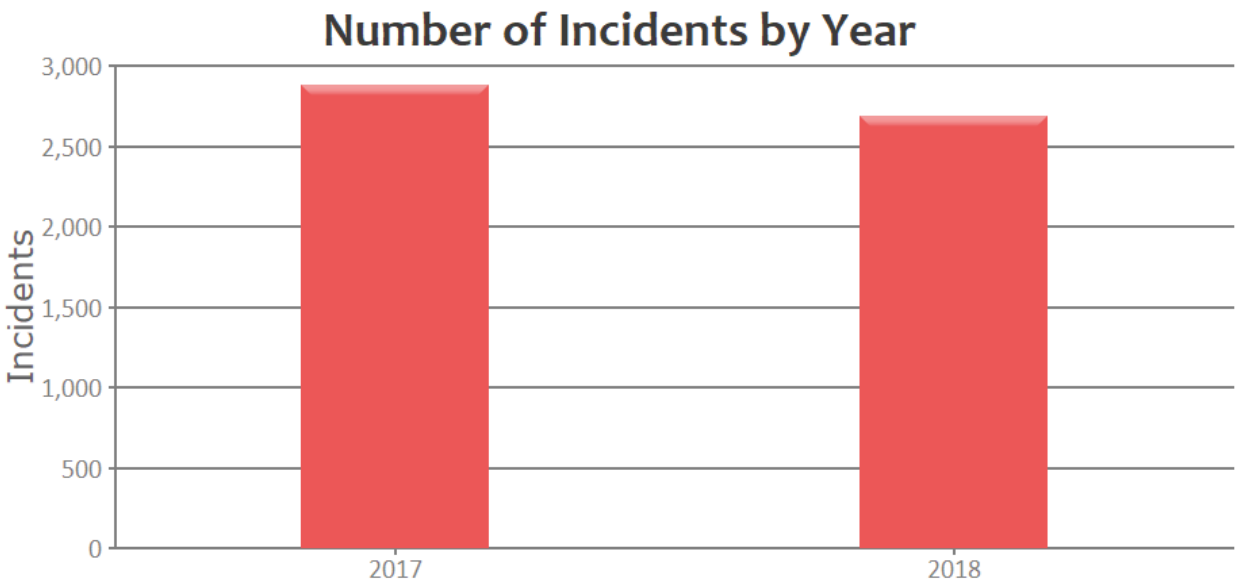


Figure 5 illustrates the number of incidents by incident type. While fire and EMS incidents remained relatively constant, there was a decrease in the number of other incident types. A reduction in the number of "other" incidents was most responsible for the decline in the total number of incidents.

Figure 5—Number of Incidents by Year – All Incident Types

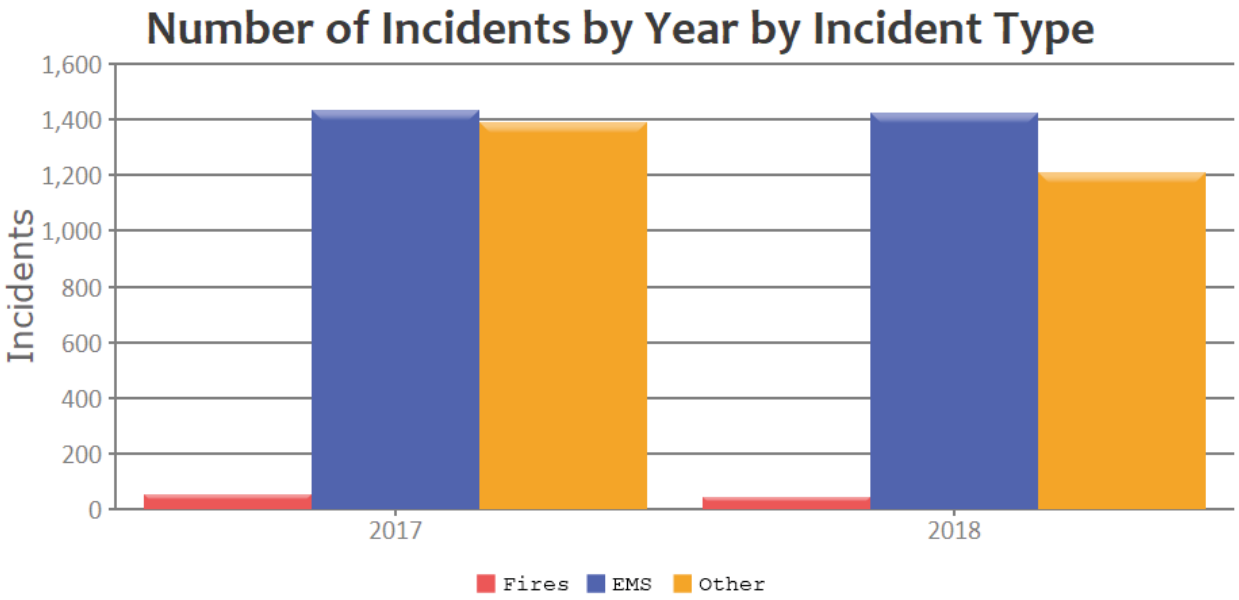
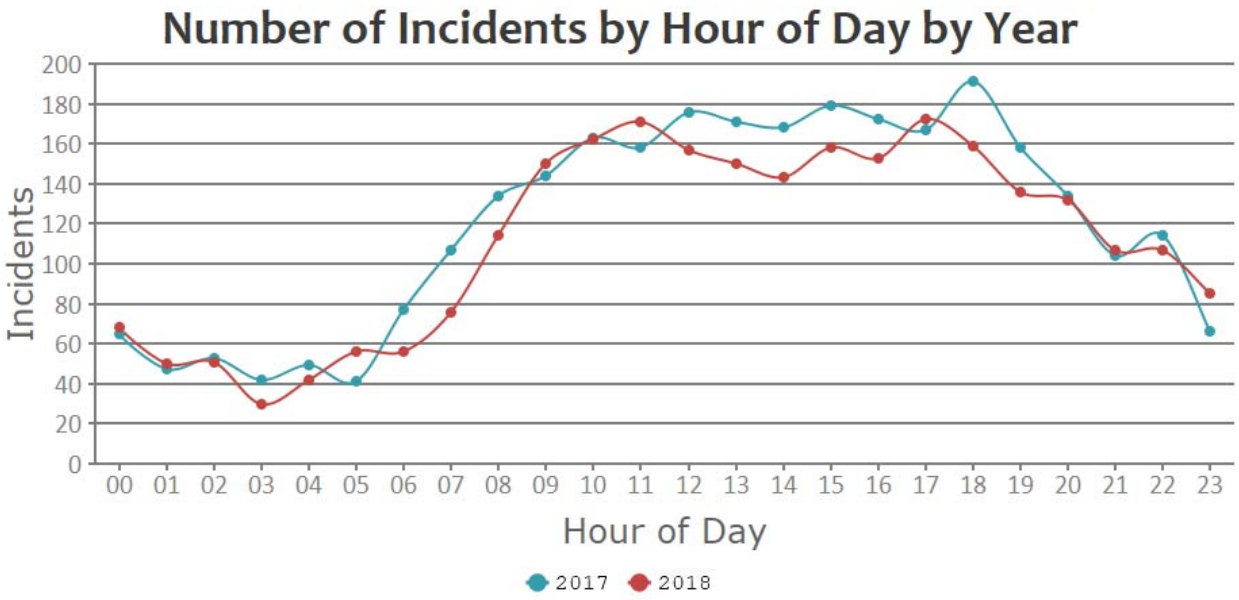


Figure 6 shows service demand by hour of day, illustrating that calls for service occur at every hour of the day and night, requiring fire and EMS response capability 24 hours per day, every day of the year. There was also a pattern of increased activity in 2017 during the morning, afternoon, and early evening hours.

Figure 6—Service Demand by Hour of Day and Year



Finding #5: The Department's service demand is consistent, indicating the need for a 24-hours-per-day, seven-days-per-week fire and EMS emergency response system.

The next figure illustrates the number of incidents by station area in 2018. Station 21 had the highest volume of activity.

Figure 7—Number of Incidents by Station – 2018

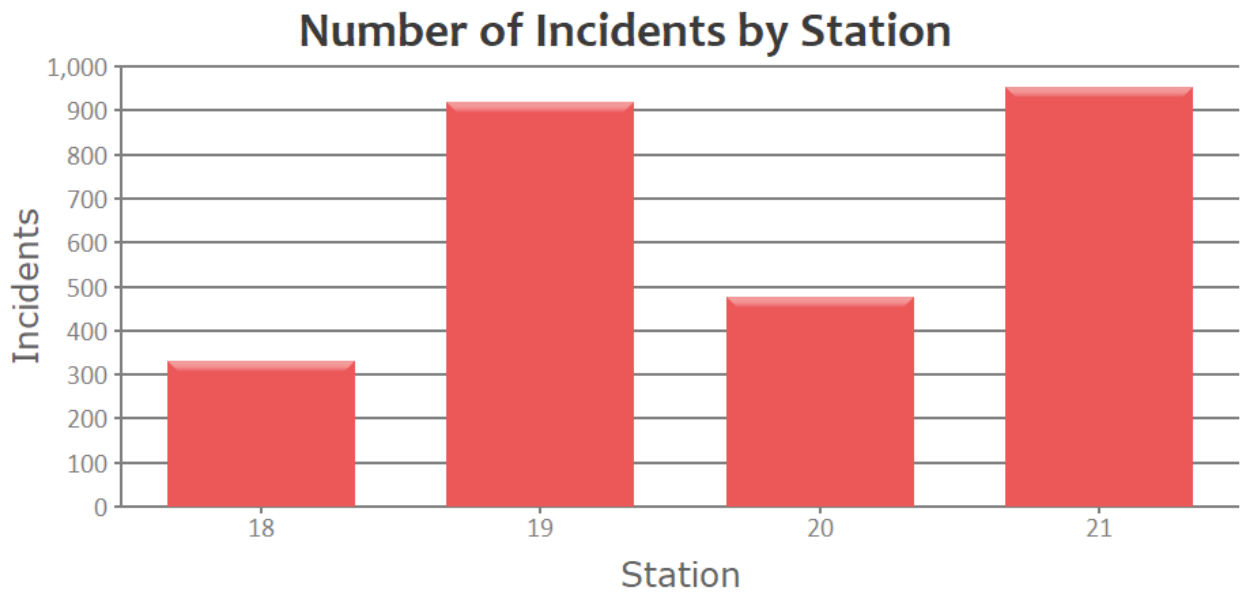


Table 10 lists the activity rankings of incidents by incident quantity, for more than 15 occurrences in a year. Note the strong ranking for EMS incidents.

Table 10—Incidents: Quantity by Incident Type – 2018

Incident Type	2018
321 EMS call, excluding vehicle accident with injury	1,343
611 Dispatched and canceled en route	232
553 Public service	197
554 Assist invalid	135
651 Smoke scare, odor of smoke	126
550 Public service assistance, other	75
322 Vehicle accident with injuries	51
743 Smoke detector activation, no fire – unintentional	49
700 False alarm or false call, other	41
745 Alarm system sounded, no fire – unintentional	35
412 Gas leak (natural gas or LPG)	32
444 Power line down	31

Incident Type	2018
600 Good intent call, other	30
622 No incident found on arrival of incident address	22
733 Smoke detector activation due to malfunction	20
740 Unintentional transmission of alarm, other	17
324 Motor vehicle accident no injuries	16
500 Service call, other	16
111 Building fire	16
735 Alarm system sounded due to malfunction	16
736 CO detector activation due to malfunction	15

Table 11 illustrates the ranking of incidents by property types. The highest rankings for incidents by property type are residential dwellings. Only those property types with 25 or more incidents are shown.

Table 11—Incidents: Quantity by Property Use – 2018

Property Use (NFIRS Code/Description)	2018
419 1 or 2 family dwelling	1,338
429 Multifamily dwellings	271
962 Residential street, road or residential driveway	218
960 Street, other	157
963 Street or road in commercial area	80
900 Outside or special property, other	72
311 24-hour care nursing homes, 4 or more persons	58
215 High school/junior high school/middle school	39
965 Vehicle parking area	34
161 Restaurant or cafeteria	29
888 Fire station	29
519 Food and beverage sales, grocery store	26
931 Open land or field	25

2.7.2 Simultaneous Emergency Incident Activity

Simultaneous incidents occur when other incidents are underway at the time a new incident develops. In the Department's response area during 2018, 16.05 percent of incidents occurred

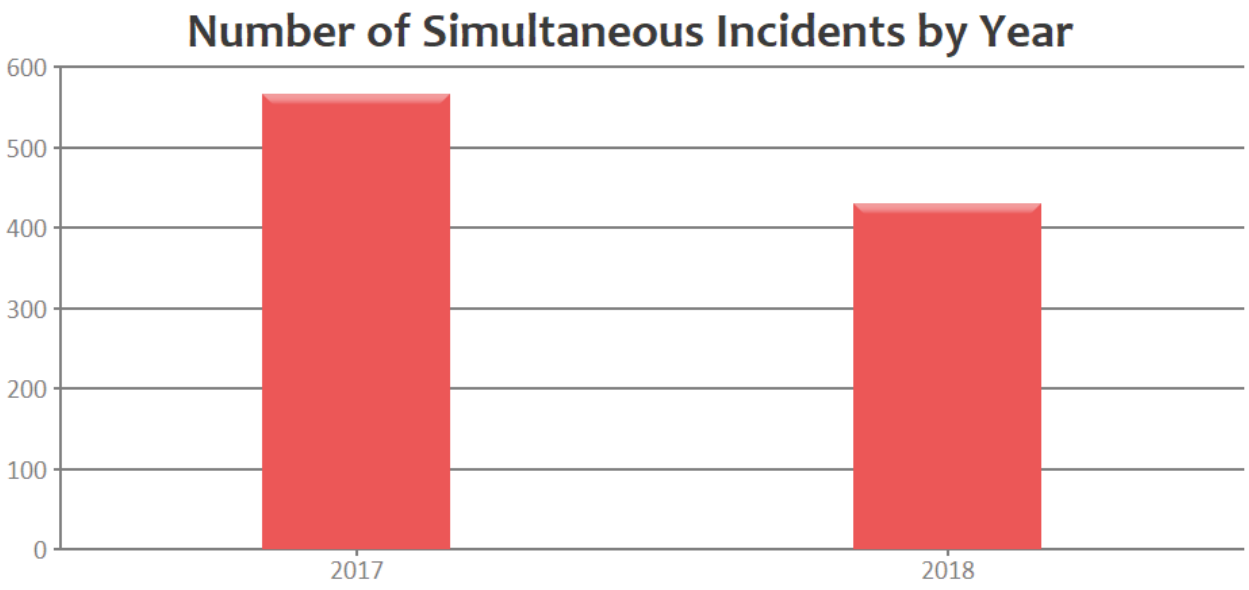
while one or more other incidents were underway. The following is the percentage of simultaneous emergency incidents broken down by the number of simultaneous incidents. Non-emergency incidents are not included as a unit can be re-dispatched to a serious emergency.

Table 12—Percentage by Number of Simultaneous *Emergency* Incidents

Number of Simultaneous Incidents	Percentage
1 or more simultaneous incidents	16.05%
2 or more simultaneous incidents	01.30%
3 or more simultaneous incidents	00.01%

The following graph shows the number of simultaneous incidents can be volatile and recently decreased.

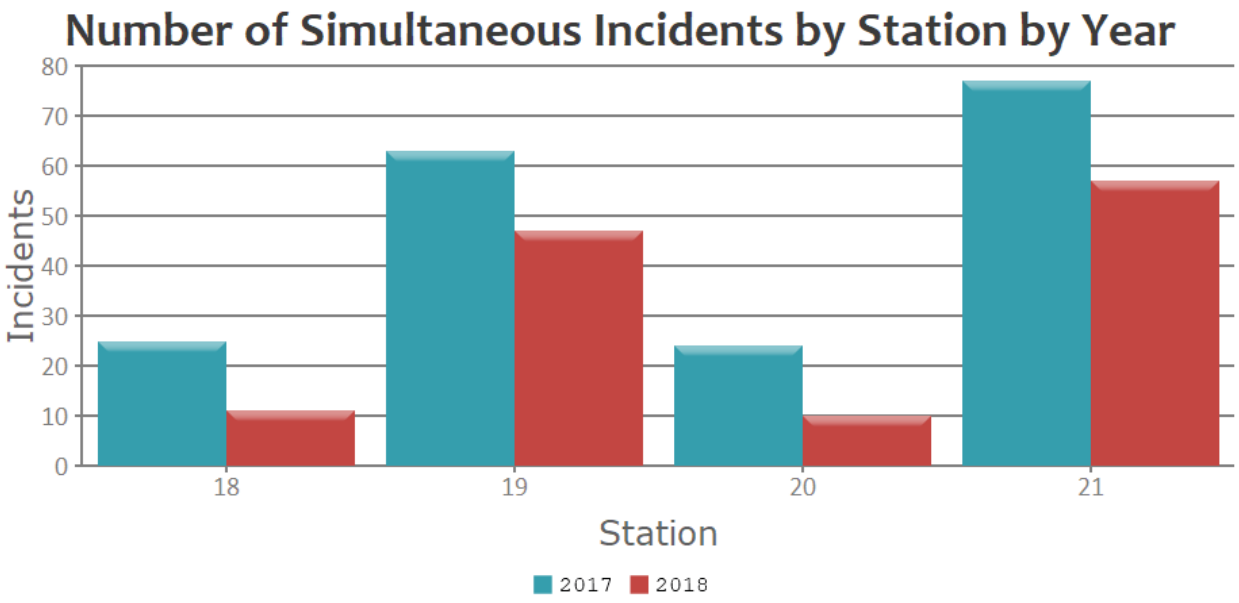
Figure 8—Number of Simultaneous Incidents by Year



In a larger region, simultaneous incidents in different station areas have very little operational consequence. However, when simultaneous incidents occur within a single station area, there can be significant delays in response times.

Figure 9 illustrates the number of single-station simultaneous incidents by station area by year. Station 21 has the highest number of in-station-area simultaneous incidents. Each station area experienced a significant drop in the number of simultaneous incidents from the previous year.

Figure 9—Number of Single-Station Simultaneous Incidents by Station by Year



Finding #6:	The number of simultaneous incidents is volatile. However, in a four-station department, it is very rare that more than two incidents occur at once.

2.7.3 Operational Performance

Measurements for the performance for the first apparatus to arrive on the scene of emergency incidents are the number of minutes and seconds necessary for 90 percent completion of the following components:

- Call processing
- Turnout
- Travel
- Dispatch to arrival
- Call to arrival

Each one of these components starts with a year-to-year comparison followed by a representation of performance over incremental time segments. Finally, each section includes a graph breaking down compliance with a stated goal by hour of day.

2.7.4 Call Processing

Call processing measures the time from the first incident time stamp in the Marin County Sheriff's Dispatch Center (Comm Center) until apparatus are notified of the request for assistance.

Table 13 shows call processing is 1:04 minutes for 90 percent compliance.

Table 13—Call Processing Performance to 90 Percent of Fire and EMS Incidents

Station	2018
Department-Wide	**01:04**
Station 18	01:12
Station 19	01:03
Station 20	01:01
Station 21	01:04

Finding #7: Call processing performance at 1:04 minutes is *better than* a best practice recommendation of 1:30 minutes.

2.7.5 Turnout Time

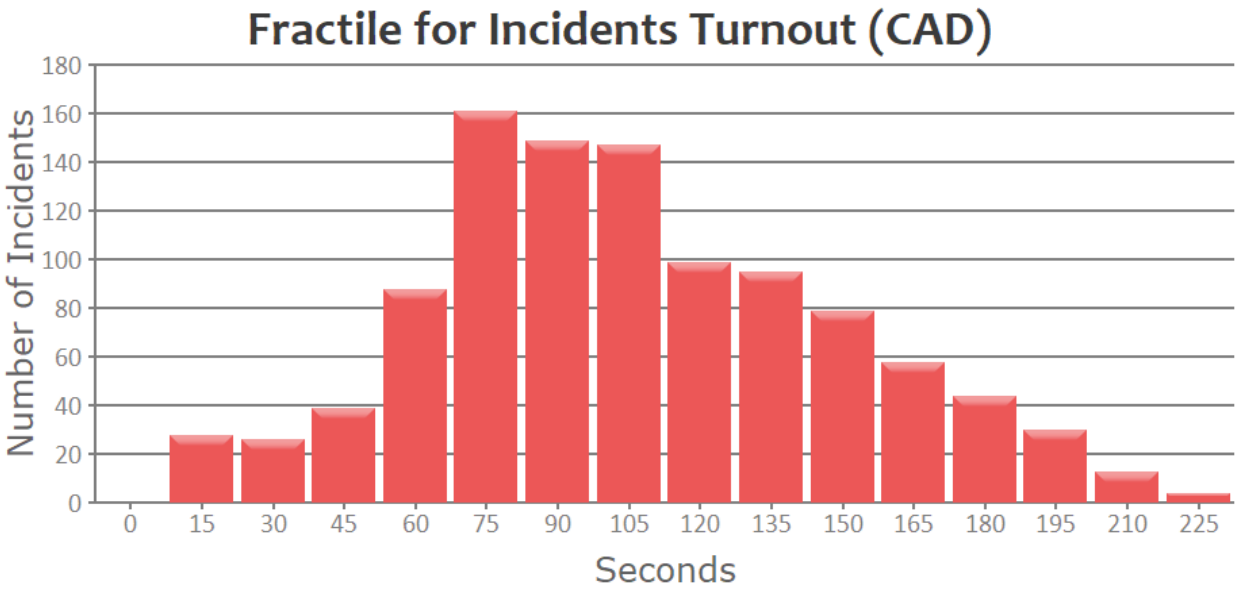
Turnout time measures the time from apparatus notification until apparatus starts traveling to the scene. In Table 14, a 2:00-minute Citygate recommended goal is used for measurement. Only one fire station is less than 30 seconds from a 2:00-minute turnout time.

Table 14—Turnout Time Performance to 90 Percent of Fire and EMS Incidents

Station	2018
Department-Wide	**02:41**
Station 18	02:19
Station 19	02:50
Station 20	02:38
Station 21	02:40

Figure 10 illustrates fractile turnout time performance. The peak segment for turnout performance is 75 seconds.

Figure 10—Fractile for Incidents Turnout (CAD)



Finding #8: Crew turnout performance at 2:41 minutes is *slower* than a Citygate-recommended goal of 2:00 minutes or less.

2.7.6 Travel Time

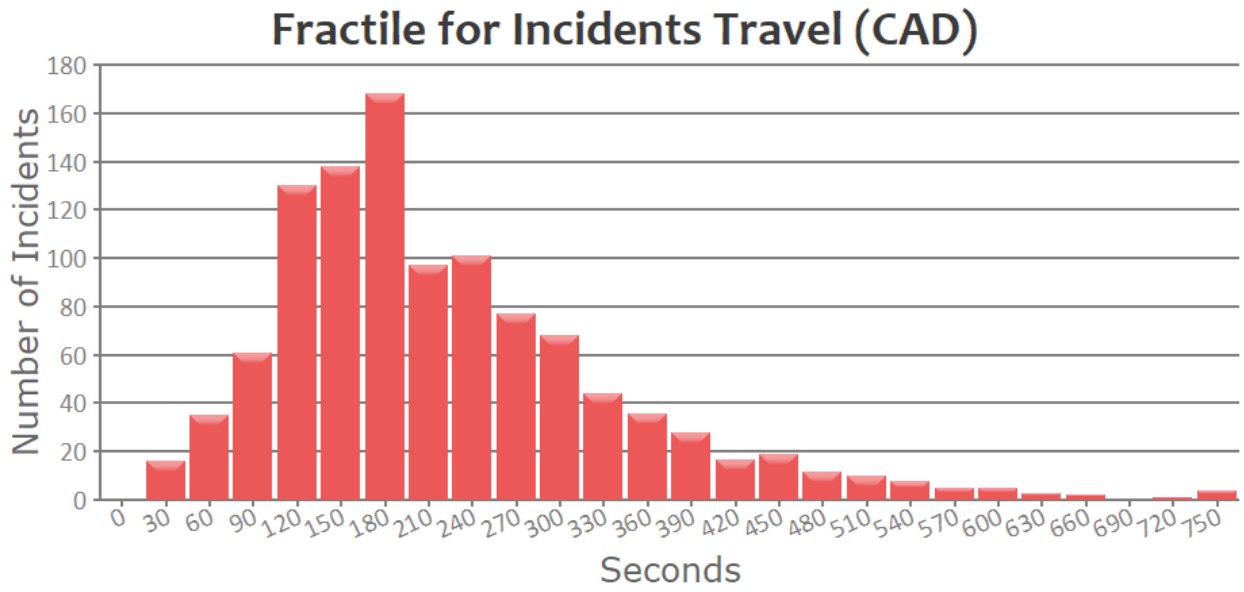
Travel time measures time to travel to the scene of the emergency. In most urban and suburban fire departments, a 4:00-minute travel time 90 percent of the time would be considered highly desirable. Table 15 shows that no stations achieve that goal.

Table 15—Travel Time Performance to 90 Percent of Fire and EMS Incidents

Station	2018
Department-Wide	**06:09**
Station 18	04:40
Station 19	05:38
Station 20	06:24
Station 21	06:30

The following graph illustrates fractile travel time performance. The peak segment for travel time performance is 180 seconds, or 3:00 minutes. There is a rapid drop-off in volume after the 180-second mark.

Figure 11—Fractile for Incidents Travel (CAD)



Finding #9: First-due unit travel time performance to 90 percent of the incidents Department-wide at 6:09 minutes is well past the Department's likely goal of 4:00 minutes, a goal consistent with best practices.

2.7.7 Call to Arrival

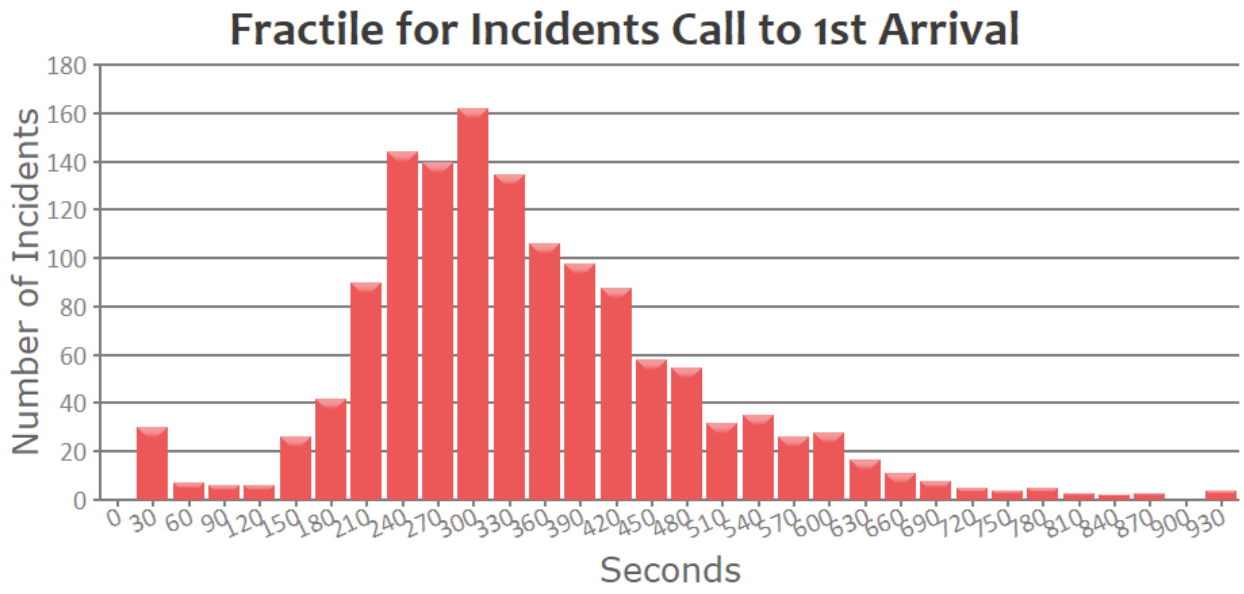
Call to arrival measures time from receipt of the request for assistance until the apparatus arrives on the scene. The existing Department total response time goal is 7:00 minutes to 90 percent of the emergency incidents.

Table 16—Call to Arrival Performance to 90 Percent of Fire and EMS Incidents

Station	2018
Department-Wide	**08:45**
Station 18	07:55
Station 19	07:45
Station 20	08:47
Station 21	09:07

The following graph illustrates fractile call to arrival performance. The peak segment is 300 seconds, or 5:00 minutes. The right-shifted graph indicates a number of incidents with longer travel times.

Figure 12—Fractile for Incidents Call to First Arrival



Finding #10: The Department's call to arrival time to 90 percent of the incidents at 8:45 is slower than a Citygate's recommended goal of 7:30 minutes in developed suburban areas. The principal reason is the longer travel times, reflective of the topography and road network in the Department's service area.

2.7.8 Effective Response Force (First Alarm) Concentration Measurements

The minimum (not including the Chief Officer or ambulance) ERF for structure fires from the Department is three engines and one ladder truck. Additionally, an ambulance unit and one Chief Officer are sent. A best practices goal is for the last arriving unit's travel time to be less than 8:00 minutes in developed areas.

Table 17—Distribution – Structure Fire Initial Response – Fourth-Due Unit Travel Time Performance to 90 Percent of Fire and EMS Incidents

Station	2018
Station 18	08:50
Station 19	08:19
Station 20	10:20
Station 21	10:21

Finding #11: The Effective Response Force (First Alarm) *travel* times are only modestly longer than a best practices goal of 8:00 minutes and are reflective of the good, central placement of the four fire stations.

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SECTION 3—TOWN OF ROSS FOCUSED STUDY

As part of the overall Standards of Cover assessment for the Ross Valley Fire Department partnership, the Town of Ross requested a focused study for the need to maintain the fire engine and/or Medic Ambulance 18 in the Town's fire station which dates to 1926. As all the partners know, replacing or relocating this station will be very difficult due to land use limitations. To evaluate the need for a station in the Town of Ross a series of questions must be considered. These questions are all answered in this section. After this section and Citygate's resultant findings, the last section of this study will provide a set of comprehensive recommendations.

The incident data range used in this section (except for items #1 and #2 below) is the same as the overall analysis in Section 2.7—January 1, 2017 through December 31, 2018.

3.1 QUESTIONS REGARDING STATION 18

1. How many fires have there been in the Town in each of the last six years? How many of them were structure versus non-structural?

   - One structure fire; 25 non-significant structure fires such as arcing wires or smell of smoke from equipment.

2. What is the fire loss estimate in the Town for the last six years?

   - $198,107

3. What is the breakdown of calls by year in the Town for two or three years?

Figure 13—Number of Incidents by Year by Incident Type – Station 18

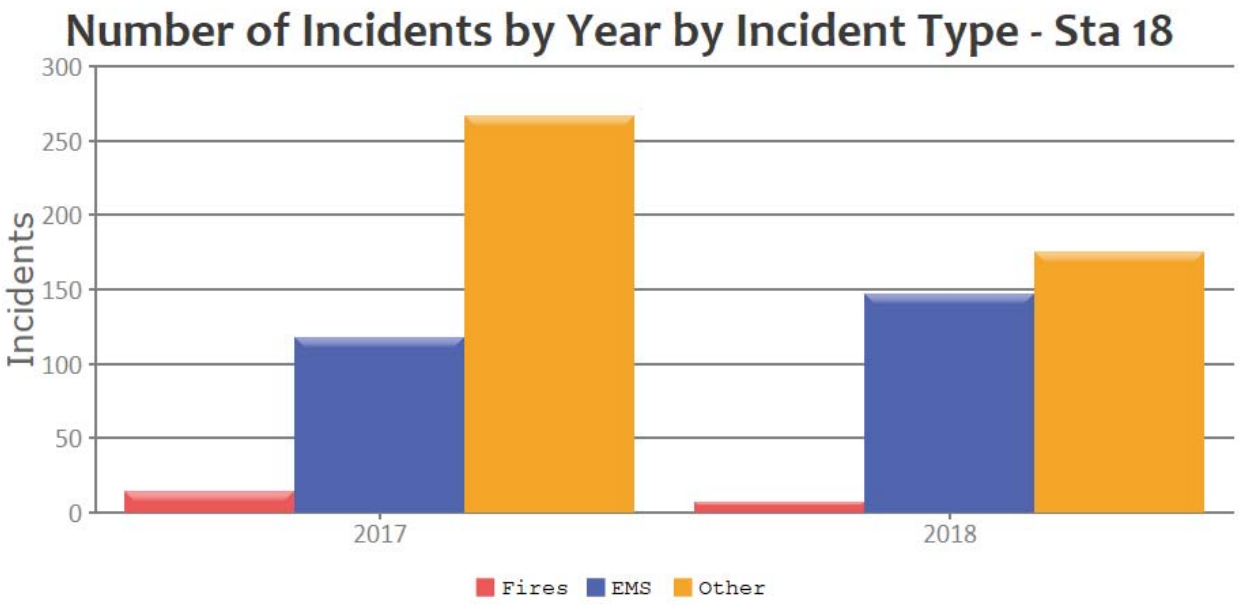


Table 18—Incidents: Quantity – Year by Incident Type for Station 18 – 2017 and 2018

Incident Type	2017	2018
321 EMS call, excluding vehicle accident with injury	114	133
611 Dispatched and canceled en route	71	38
553 Public service	28	20
554 Assist invalid	25	6
550 Public service assistance, other	11	15
651 Smoke scare, odor of smoke	10	11
412 Gas leak (natural gas or LPG)	11	9
571 Cover assignment, standby, move-up	8	11
743 Smoke detector activation, no fire – unintentional	8	10
745 Alarm system sounded, no fire – unintentional	10	7
400 Hazardous condition, other	13	2
444 Power line down	7	6
322 Vehicle accident with injuries	2	10
700 False alarm or false call, other	8	3
744 Detector activation, no fire – unintentional	5	5
622 No incident found on arrival of incident address	7	3

Incident Type	2017	2018
733 Smoke detector activation due to malfunction	6	3
735 Alarm system sounded due to malfunction	5	3
111 **Building fire**	**7**	
736 CO detector activation due to malfunction	3	3
740 Unintentional transmission of alarm, other	1	4
324 Motor vehicle accident no injuries	2	3
500 Service call, other	2	2
900 Special type of incident, other	1	2
730 System malfunction, other	2	1
650 Steam, other gas mistaken for smoke, other	1	2
600 Good intent call, other	1	2
531 Smoke or odor removal	1	2
440 Electrical wiring/equipment problem, other	3	
812 Flood assessment	2	
800 Severe weather or natural disaster, other	2	
746 Carbon monoxide detector activation, no CO	2	
734 Heat detector activation due to malfunction	2	
653 Barbecue, tar kettle	1	1
551 Assist police or other governmental agency	1	1
520 Water problem, other	1	1
463 Vehicle accident, general cleanup	1	1
131 Passenger vehicle fire	1	1
118 Trash or rubbish fire, contained	2	
100 Fire, other		2
813 Wind storm, tornado/hurricane assessment	1	
621 Wrong location	1	
552 Police matter	1	
522 Water or steam leak		1
521 Water evacuation	1	
462 Aircraft standby		1
461 Building or structure weakened or collapsed	1	
441 Heat from short circuit (wiring), defective/worn	1	
422 Chemical spill or leak	1	

Incident Type	2017	2018
354 Trench/below grade rescue		1
162 Outside equipment fire	1	
160 Special outside fire, other		1
151 Outside rubbish, trash or waste fire		1
142 Brush, or brush and grass mixture fire	1	
141 Forest, woods or wildland fire		1
140 Natural vegetation fire, other	1	
130 Mobile property (vehicle) fire, other	1	
116 Fuel burner/boiler malfunction, fire confined	1	
113 Cooking fire, confined to container		1
Total	**400**	**330**

4. What is the service call comparison between each of the four stations? Are there industry averages or norms with which that can be compared?

   - There are no comparisons; all communities are different and "purchase" fire protection stand-by as "fire insurance" if they use it once a year or once a day.
   - See Figure 7 on page 37 for volume by station.

5. In the Town, what is the 90 percent response time to fire calls, emergency calls, and all calls – anywhere Station 18 went?

   - The following table shows the Station 18 response times to emergency incidents. The time listed is the time to completion, 90 percent of the time; the number in parenthesis is the number of records included in the calculation.

Table 19—Station 18 Response Times to All Calls at 90 Percent Compliance

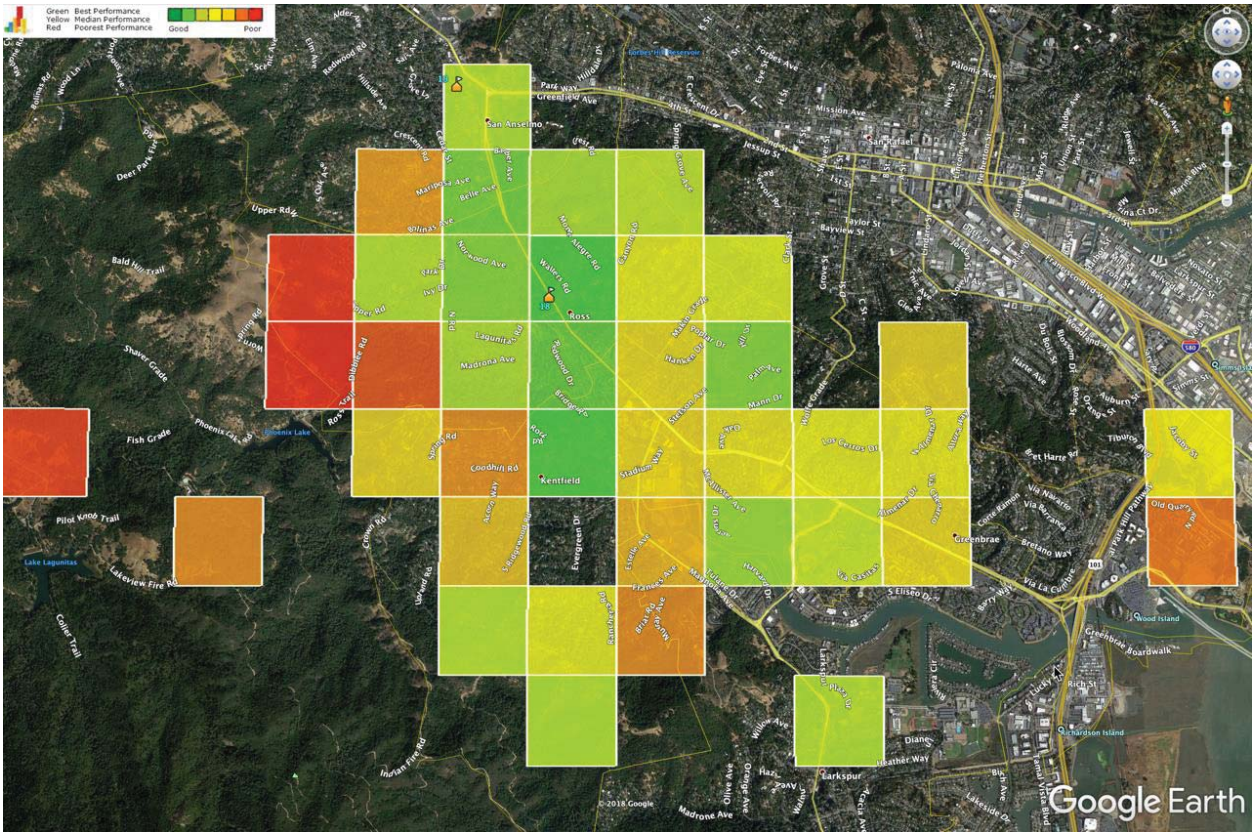
Response Element—Station 18	Overall	2017	2018
Dispatch Processing	01:12 (214)	00:52 (93)	01:12 (121)
Crew Turnout	02:32 (170)	02:38 (77)	02:19 (93)
Travel Time	05:05 (174)	05:14 (78)	04:40 (96)
Call to Arrival	08:28 (226)	08:40 (100)	07:55 (126)

6. What does the map that shows 90 percent response times by Station 18 look like?

   ➢ As would be expected, the better response times tend to be closer to the stations and along the main road network. However, given the low quantity of incidents (small sample size math) and that some incidents are covered by units not in the station, or are responded to by a station farther away due to simultaneous incidents, the following map is <u>not</u> a static picture year over year.

   The following map shows in green where travel time is the fastest—at or near the desired goal point of 4:00 minutes. Orange to red indicates the longest travel times of 5:00 to 9:00 minutes.

<u>Figure 14—90 Percent Response Times by Distance for All Department Stations</u>



7. What is the number of events that Station 18 responded to in the response areas for Stations 19, 20, and 21?

   ➢ The following table lists the responses by vehicle ID.

- The table also includes multiple-unit responses as some complex incidents require more staffing.

Table 20—Responses by Vehicle ID – 2017 and 2018

City	E18	E19	E20	E21	M14	M18
San Anselmo	133	1,550	761	117	188	1,012
Fairfax	12	29	213	1,733	22	707
Ross	**287**	15		3	38	187
Sleepy Hollow			95	11		42
Kentfield	**44**	3				804
Woodacre				7		
Fallon				4		2
Larkspur	2	1		2		131
Greenbrae	2					756
Forest Knolls				2		
San Rafael		1				
San Geronimo				1		
Point Reyes Station				1		
Corte Madera	1					151
Total	**481**	**1,599**	**1,069**	**1,881**	**248**	**3,792**

8. What is the number of medical emergencies the Ross Valley Paramedic Authority responds to in the Town per year?

   - The following table shows the number of responses by apparatus by destination station area.

Table 21—EMS Responses by Station 18 Apparatus by Destination Station Area

Station	E18	M18	Total
18	214	169	383
19	60	862	922
20	12	192	204
21	12	707	719
Total	**298**	**1,930**	**2,228**

The previous table shows Medic 18's most frequent destination is Station 19, followed by Station 21. The station least likely to require a medic unit is Station 18. However, Medic 18 is a regional unit and, as such, is properly located in the middle of its response area east to west. This table also shows Engine 18 is more likely to remain inside Station 18's area but, if drawn outside, is most likely to travel into Station 19's area.

The following list shows which engine arrived first to EMS events in the Town of Ross. When both Station 18 units respond from inside the Town, arriving first is only a matter of seconds. The purpose of this table is to also show units other than those at Station 18 which arrive first:

- Engine 18 arrived first 165 times
- Engine 23 arrived first 40 times
- Engine 19 arrived first 6 times
- Engine 17 arrived first 3 times (Kentfield)
- Engine 21 arrived first 1 time
- Medic 18 arrived first 33 times
- Medic 14 arrived first 2 times

These numbers were calculated for all apparatus responding to EMS incidents and tend to mimic actual operational arrivals. If the search from the regional CAD data for the last two years is for where Station 18 EMS incidents involved both Engine 18 and Medic 18, there were 224 incidents.

9. How often was Station 17 (Kentfield) first on scene to a Town call? What is Station 17's response time to a Town call?

   - In 2017 and 2018, **Engine 17** arrived first in Station 18's area 19 times for *all* incident types. The 90 percent travel time was a little over 8:00 minutes, but this figure is highly volatile and ranges from 5:00 minutes to 21:00 minutes travel time across the various areas of the Town.

10. How often was Station 19 (San Anselmo) first on scene to a Town call?

    - In 2017 and 2018, **Engine 19** arrived first in Station 18's area 20 times to *all types* of incidents. The 90 percent travel time was about 9:45 minutes; again, this figure is highly volatile.

11. What is Station 19's average response time to a Town call?

    ➢ By national best practices, response times are not reported as averages, but as a fractile percent of a goal point. The following table lists anywhere Station 19 responded. The time listed is the time to completion 90 percent of the time; the number in parenthesis is the number of records included in the calculation.

Table 22—Station 19 Response Times to All Calls at 90 Percent Compliance

Response Element—Station 19	Overall	2017	2018
Dispatch Processing	01:02 (971)	01:01 (481)	01:03 (490)
Crew Turnout	02:44 (773)	02:40 (383)	02:50 (390)
Travel Time	05:50 (788)	06:00 (387)	05:38 (401)
Call to Arrival	08:03 (991)	08:23 (490)	07:45 (501)

3.2 Impact if Fire Station 18 Closes

12. Provide a current map of the first response for Stations 17, 18, 19, 20, and 21.

    ➢ Please refer to Map #3 in the Map Atlas of this report in **Volume 2**.

13. If Station 18 closed, what is the first response map for Stations 17, 19, 20, and 21? What is the zone of coverage map for the back-up initial response with closure of Station 18?

    ➢ Station 17 is outside of Citygate's historical statistical and geographic analysis. The Marin County Fire Chiefs Association would have to create a response matrix based on fire reporting districts to create a map. Based on existing station locations for 17 and 19, the Town of Ross would not receive the same coverage as from Station 18.

14. What is the impact to response times in Stations 19, 20, and 21 areas without Station 18?

    ➢ Simultaneous incidents occur when other incidents are underway at the time a new incident begins. In the entire Ross Valley Fire Department's response area during 2018, 16.05 percent of incidents occurred while one or more other incidents were underway.

      In 2017, Station 17 was on an incident *at the same time as Station 18* **45** times. In 2018, Engines 17 and 18 were on incidents at the same time **33** times.

In 2017 and 2018 combined, Engine 18 had 481 responses anywhere. Across two years, Engines 17 and 18 were active at the same time 78 times, or **16** percent of all of Engine 18's responses.

Stated this way, if Engine 18 was closed, there are approximately 1.5 incidents per week to which Engine 17 will not be available to respond.

Then for Engine 18 and Engine 19 from the other direction, based on year 2018 data, both units are committed together approximately 109 times, or two times per week. This is higher than the Engine 18/17 measure. Most occurrences average a joint co-commitment time of 38 minutes.

So, when Engine 18 is busy there is a small chance every week that either or both Engines 17 and 19 also will not be available. This makes sense as all units have more calls for service during peak daylight hours of the day, versus after midnight.

Table 23—Distribution Travel Time Analysis of Fire and EMS Responses from 01/01/17 to 12/31/18

Station Area	Apparatus Arrivals	Home Resources	Outside Resources	Outside Percent	Overall Travel	Home Travel	Outside Travel	Delta Home/Out
18	969	881	88	9.08%	07:03 (602)	06:43 (550)	08:44 (52)	2:01
19	2,586	1,859	727	28.11%	06:38 (1,913)	06:29 (1,385)	07:13 (528)	0:44
20	1,248	903	345	27.64%	07:05 (1,022)	06:33 (756)	08:28 (266)	1:55
21	2,627	1,992	635	24.17%	07:22 (1,629)	06:46 (1,303)	08:31 (326)	1:45

Closing Station 18 will add about 2:00 minutes of travel time into that station area. Overall medic travel times will be reduced to some incidents if Medic 18 were to be moved west, as the unit is located closer to a higher medic demand area.

15. What is the impact of having first response from Station 19 with a three-person engine and Station 17 with a four-person engine versus Station 18 as a two-person engine?

    - Total staff (weight) is the same firefighter count of eight. But the Town firefighters are now located in and serving two other areas and are thus subject to simultaneous incident use in Stations 19 and 17's areas.

16. If RVPA stays in the Town, is there a response time change to medical emergencies?

- No, if the ambulance is available. Otherwise response time depends on Engine 19 or Engine 17 being available to respond.
- Other medic units needed in the Town of Ross when Medic 18 was not available were Medic 14 (53 times), Medic 95 (eight times), and one each for Medic 97, Medic 94, Medic 59, and Medic 13. This means other medic units needed to respond into Station 18's territory 65 times in two years.

17. If RVPA moves to Station 17 or Station 19, what is the average change in response time to a medical emergency?

- Per Table 23, without a Station 18 resource, there are an additional 2:00 minutes of travel time, meaning total response time (dispatch processing, turnout, and travel time) is almost 12:00 minutes from 9-1-1, which is the same as a rural level of response.
- Moving Medic 18 to Station 17 would also move it farther away from the highest incident densities that it serves.

Finding #12: In the Town of Ross, on EMS emergencies, Engine 18 responded 214 times and Medic 18 responded 169 times in a two-year period.

Finding #13: In the Town of Ross, adjoining Engines 17 (Kentfield) and Engine 19 each arrived first over a two-year period 19 and 20 times, totaling 39. Thus, the outside units only arrived/were needed first 12.6 percent of the time.

Finding #14: In a two-year period, Engines 18 and 17 (Kentfield) were assigned to incidents at the same time 78 times or 16 percent of Engine 18's total responses. Stated this way, if Engine 18 was closed, there are approximately 1.5 incidents per week to which Engine 17 will not be available to respond.

Finding #15: Closing Station 18 will add about 2:00 minutes *minimum* of travel time into that station area.

Finding #16: In the Ross Valley Fire Department, Station 18 has the best travel time of any of the four station areas at 4:40 minutes, only 40 seconds longer than an urban/suburban best practice recommendation of 4:00 minutes. Adding 2:00 minutes travel, plus dispatch and turnout time of at least 3:00 minutes, moves a Town of Ross total response time from 7:40 to 9:40 which would be more like an edge suburban area or emerging rural area. First unit response times of 10:00 minutes-plus means small fires will become larger and critical EMS patients may not receive lifesaving care.

Finding #17: If the Engine 18 daily firefighter count of two were transferred to Engine 19, or reduced to one being transferred, they would be joining an engine that serves a much larger area and is more exposed to simultaneous incident demand. Due the dynamic nature of 9-1-1 emergencies, there is no way to predict if all of the Town of Ross Engine 18 and Medic 18 first arrivals would be covered by just Engines 19 and 17 (Kentfield) or by other units even farther away.

Finding #18: Covering the Town of Ross from either Station 19 or 17 (Kentfield) depends on essentially one road being open and not congested with traffic. Any one accident or natural emergency could close the road, effectively making the Town of Ross a cul-de-sac served from one direction and, in a sub-regional emergency, either Engine 19 or 17 would be shared with a larger service area.

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SECTION 4—OVERALL EVALUATION

SOC ELEMENT 8 OF 8
OVERALL EVALUATION

The Department serves mostly residential and small downtown populations with a mixed land-use pattern typical of Marin County communities. However, the hilly geography and the limited road network dependent on one main connector road, is very difficult to serve efficiently from a small number of fire stations.

Over time, each population cluster opened a fire station for a minimum single first unit response and knew they were co-dependent on each other for multiple-unit serious emergencies. The geography cannot be changed and improving the road network is not politically feasible or cost-effective. Thus, reducing coverage by removing any one or more fire engines or the paramedic ambulance will increase response times to the local community receiving reduced coverage.

While the state fire code now requires fire sprinklers even in residential dwellings, it will be many more years before the vast majority of homes are replaced or remodeled with automatic fire sprinklers. If the communities' desired outcomes include limiting building fire damage to only part of the inside of an affected building, minimizing permanent impairment resulting from a medical emergency, and keeping wildland fires small to a few acres at the ignition point, then the communities served by the Ross Valley Fire Department will need first-due unit coverage in all neighborhoods.

However, even with maintaining the current four-station spacing, given the topography, not all hillside areas can receive response time coverage consistent with suburban best practice incident outcomes and a Citygate performance recommendation of a first-due arrival within 7:30 minutes from 9-1-1 dispatch notification and a multiple-unit Effective Response Force (ERF) arrival occurring within 11:30 minutes of 9-1-1 notification, all at 90 percent or better reliability.

The Department's call processing performance is excellent. The crew turnout time needs modest improvement but even such attainable improvement cannot substantially lower the fire unit travel times which are longer than desired over the challenging geography and road network.

Department resources and equipment are appropriate to protect against the hazards likely to impact the Department's service area, but the daily staffing of eight firefighters on four engines, plus a two-firefighter/paramedic ambulance from the Ross Valley Paramedic Authority (RVPA) and a Duty Chief Officer only provides a *minimum* total response force sufficient to begin controlling a single emerging to serious fire incident, or to provide care at an EMS incident with one to five patients.

In terms of emergency incident workload per unit, no single fire unit or station area is approaching workload saturation. The level of simultaneous incidents is not high enough to warrant another unit at peak hours of the day. Citygate is, however, concerned about the overall limited Department

staffing per day and its ability to respond with more "weight of attack" to keep emerging serious emergencies controlled. Even Countywide mutual aid resources are not quickly available in this part of Marin County, as they would be in an urban area with flat terrain and interconnected roads.

In reviewing the Town of Ross questions about the utility of its fire station, while maintaining a fire crew in town is expensive, any alternative solution will raise response times beyond suburban best practice goals and come at the cost of sharing staffing with a larger service area. Relocating the crews out of the Town of Ross impacts more than just the Town. As an example, even if the Town paid Kentfield for fire coverage, Kentfield would be serving the entire Town of Ross in addition to its own community, which would mean the Kentfield fire unit would occasionally not be available to respond to an emergency call in its primary area.

The quantity of calls in the Town of Ross (or any other single historic population cluster in the joint Department's service area) is too small and too volatile from which to use historical incidents as the only criteria to maintain the fire station. Providing fire services is akin to purchasing fire insurance, and it is important to consider the desired level of protection. The public policy issue is whether to have access to a fire station nearby or farther away, knowing that a station farther away, even with its unit(s) available for response, cannot offer more than edge suburban or emerging rural area response times to much of the Town of Ross.

4.1 DEPLOYMENT RECOMMENDATIONS

Based on the technical analysis and findings contained in this Standards of Coverage assessment, Citygate offers the following deployment recommendations:

Recommendation #1:	**Adopt Updated Deployment Policies:** The Ross Valley Fire Department governing Board should adopt *updated*, complete performance measures to aid deployment planning and to monitor performance. The measures of time should be designed to deliver outcomes that will save patients medically salvageable upon arrival and to keep small but serious fires from becoming more serious. With this is mind, Citygate recommends the following measures:

1.1 Distribution of Fire Stations: To treat pre-hospital medical emergencies and control small fires, the first-due unit should arrive within 8:30 minutes, 90 percent of the time from the receipt of the 9-1-1 call at dispatch; this equates to a 90-second dispatch time, a 2:00-minute company turnout time, and a 5:00-minute travel time.

1.2 Multiple-Unit Effective Response Force for Serious Emergencies: To confine building fires near the room of origin, keep vegetation fires under one acre in size, and treat multiple medical patients at a single incident, a multiple-unit ERF of at least 12 personnel, including at least one Duty Chief Officer, should arrive within 12:30 minutes from the time of 9-1-1 call receipt in dispatch, 90 percent of the time; this equates to a 90-second dispatch time, 2:00-minute company turnout time, and 9:00-minute travel time.

1.3 Hazardous Materials Response: Provide hazardous materials response designed to protect the Department's service areas from the hazards associated with uncontrolled release of hazardous and toxic materials. The fundamental mission of the Fire Department's response is to isolate the hazard, deny entry into the hazard zone, and notify appropriate officials/resources to minimize impacts on the community. This can be achieved with a first-due total response time of 8:30 minutes or less to provide initial hazard evaluation and/or mitigation actions. After the initial evaluation is completed, a determination can be made whether to request additional resources from the regional hazardous materials team.

1.4	Technical Rescue: Respond to technical rescue emergencies as efficiently and effectively as possible with enough trained personnel to facilitate a successful rescue with a first-due total response time of 8:30 minutes or less to evaluate the situation and/or initiate rescue actions. Following the initial evaluation, assemble additional resources as needed within a total response time of 12:30 minutes to safely complete rescue/extrication and delivery of the victim to the appropriate emergency medical care facility.
Recommendation #2:	Consider maintaining the current location of all four engines and keeping Medic 18 in the Town of Ross to balance its coverage area to the west and east.
Recommendation #3:	Consider providing a third firefighter per day on the three engines other than Engine 18. Doing so would raise the daily weight of attack from 12 to 15 and, with Kentfield's three personnel, to 18. This force would be sufficient to provide the weight of attack and simultaneous incident redundancy for suburban positive outcomes. Especially on serious building and wildland fire ignitions, there is no second chance to stop the fire. This is a local policy decision to be made by the affected communities to determine the level of fire service that they can afford.

APPENDIX A

RISK ASSESSMENT

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APPENDIX A—RISK ASSESSMENT

A.1 COMMUNITY RISK ASSESSMENT

SOC ELEMENT 3 OF 8
COMMUNITY RISK ASSESSMENT

The third element of the Standards of Coverage (SOC) process is a community risk assessment. Within the context of an SOC study, the objectives of a community risk assessment are to:

- Identify the values at risk to be protected within the community or service area.
- Identify the specific hazards with the potential to adversely impact the community or service area.
- Quantify the overall risk associated with each hazard.
- Establish a foundation for current/future deployment decisions and risk-reduction/hazard-mitigation planning and evaluation.

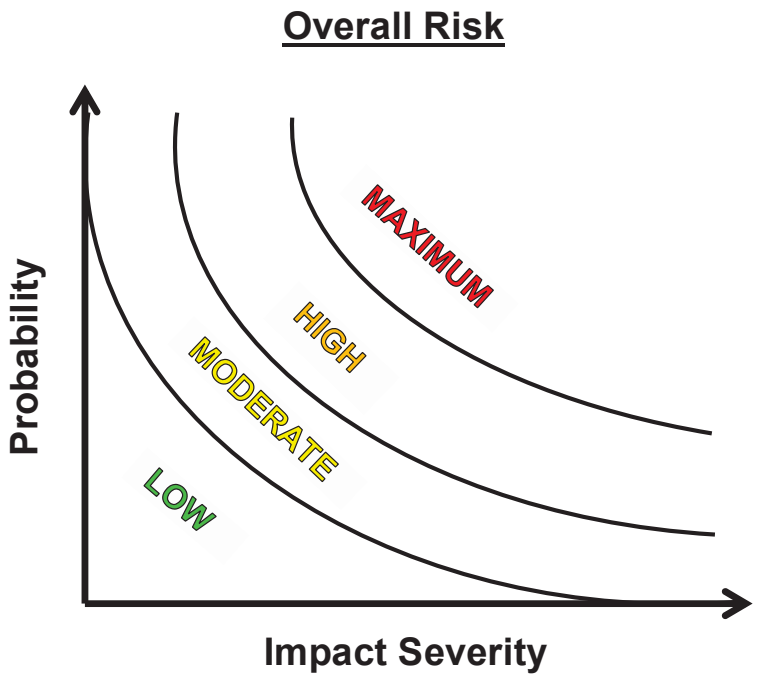
A hazard is broadly defined as a situation or condition that can cause or contribute to harm. Examples include fire, medical emergency, vehicle collision, earthquake, flood, etc. Risk is broadly defined as the *probability of hazard occurrence* in combination with the *likely severity of resultant impacts* to people, property, and the community as a whole.

A.1.1 Risk Assessment Methodology

The methodology employed by Citygate to assess community risks as an integral element of an SOC study incorporates the following elements:

- Identification of geographic planning sub-zones (risk zones) appropriate to the community or jurisdiction.
- Identification and quantification (to the extent data is available) of the specific values at risk to various hazards within the community or service area.
- Identification of the fire and non-fire hazards to be evaluated.
- Determination of the probability of occurrence for each hazard.
- Identification and evaluation of multiple relevant impact severity factors for each hazard by planning zone using agency/jurisdiction-specific data and information.
- Quantification of overall risk for each hazard based on probability of occurrence in combination with probable impact severity, as shown in Figure 15.

Figure 15—Overall Risk



Citygate used the following data sources for this study to understand the hazards and values to be protected in the District:

- U.S. Census Bureau population and demographic data
- District Geographical Information Systems (GIS) data
- Marin County General Plan and Zoning information
- Marin County Multi-Jurisdictional Local Hazard Mitigation Plan
- Fire Department data and information.

A.1.2 Risk Assessment Summary

Citygate's evaluation of the values at risk and hazards likely to impact the Ross Valley Fire Department service area yields the following:

1. The Department serves a diverse population, with densities ranging from less than 500 people per square mile to approximately 5,000 per square mile over a varied land use pattern.
2. The Department's service area population is projected to grow by only 7.7 percent over the next 11 years to 2030, or an average annual growth of approximately 0.7 percent.

3. The service area includes nearly 11,000 housing units as well as a large inventory of non-residential occupancies.

4. Marin County has a mass emergency notification system to effectively communicate emergency information to the public in a timely manner.

5. The Department's overall risk for five hazards related to emergency services provided range from **Low** to **High**, as summarized in Table 24.

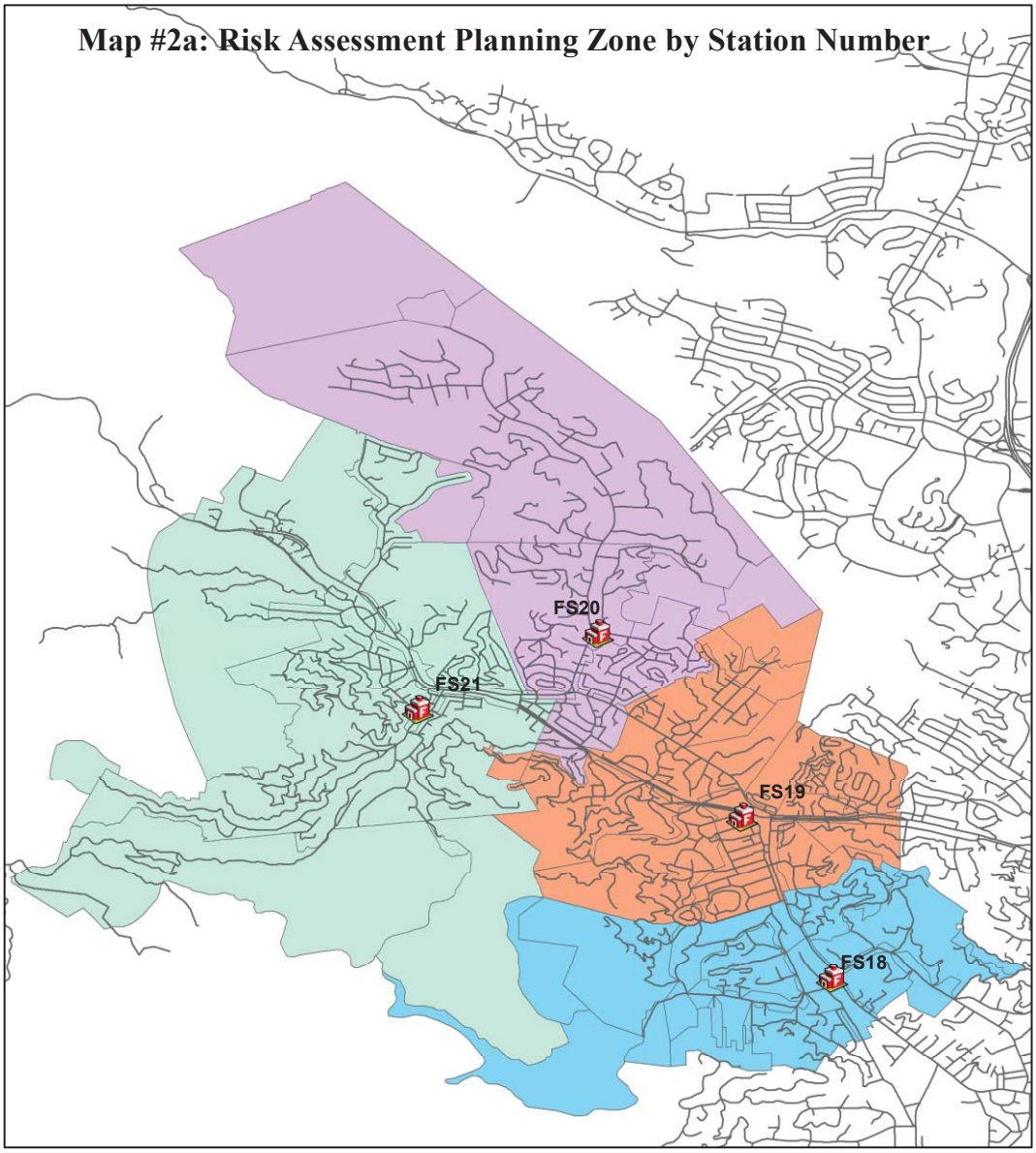
Table 24—Overall Risk by Hazard

Hazard	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Building Fire	*Low*	*Low*	*Moderate*	*Moderate*
Vegetation Fire	*Low*	*Low*	*Low*	*Low*
Medical Emergency	*High*	*High*	*High*	*High*
Hazardous Material	*Moderate*	*Moderate*	*Moderate*	*Moderate*
Technical Rescue	*Low*	*Low*	*Low*	*Low*

A.1.3 Planning Zones

The Commission on Fire Accreditation International (CFAI) recommends that jurisdictions establish geographic planning zones to better understand risk at a sub-jurisdictional level. For example, portions of a jurisdiction may contain predominantly moderate risk building occupancies, such as detached single-family residences, while other areas contain high- or maximum-risk occupancies, such as commercial and industrial buildings with a high hazard fire load. If risk were to be evaluated on a jurisdiction-wide basis, the predominant moderate risk could outweigh the high or maximum risk and may not be a significant factor in an overall assessment of risk. If, however, those high- or maximum-risk occupancies are a larger percentage of the risk in a smaller planning zone, then it becomes a more significant risk factor. Another consideration in establishing planning zones is that the jurisdiction's record management system must also track the specific zone for each incident to be able to appropriately evaluate service demand and response performance relative to each specific zone. For this assessment, Citygate utilized four planning zones, incorporating each fire station's first-due response area, as shown in Figure 16.

Figure 16—Risk Planning Zones



A.1.4 Values at Risk to Be Protected

Values at risk, broadly defined, are tangibles of significant importance or value to the community or jurisdiction potentially at risk of harm or damage from a hazard occurrence. Values at risk typically include people, critical facilities/infrastructure, buildings, and key economic, cultural, historic, and/or natural resources.

People

Residents, employees, visitors, and travelers in a community or jurisdiction are vulnerable to harm from a hazard occurrence. Particularly vulnerable are specific at-risk populations, including those unable to care for themselves or self-evacuate in the event of an emergency. At-risk populations typically include children less than 10 years of age, the elderly, and people housed in institutional settings. Table 25 summarizes key demographic data for the Ross Valley Fire Department's service area.

Table 25—Key Demographic Data – Ross Valley Fire Department

Demographic	2017	Percentage
Population	**24,785**	
Under 10 years	2,150	**8.67%**
10 – 19 years	3,483	**14.05%**
20 – 64 years	14,217	**57.36%**
65-74 years	3,111	**12.55%**
75 years and older	1,824	**7.36%**
Median age	**48.4**	**N/A**
Housing Units	**10,813**	
Owner-Occupied	7,683	**71.05%**
Renter-Occupied	2,534	**23.43%**
Average Household Size	**2.53**	**N/A**
Ethnicity		
Caucasian	22,492	**90.75%**
Asian	910	**3.67%**
Other	1,383	**5.58%**
Education (population over 24 yrs. of age)	**18,158**	**73.26%**
High School Graduate	17,546	**96.63%**
Undergraduate Degree	11,134	**61.32%**
Graduate/Professional Degree	5,309	**29.24%**
Employment (population over 15 yrs. of age)	**20,261**	**81.75%**
In Labor Force	13,816	**68.19%**
Unemployed	626	**4.53%**
Population Below Poverty Level	1,091	**4.40%**
Population without Health Insurance Coverage	487	**1.96%**

Source: U.S. Census Bureau (2017)

Of note from Table 25 is the following:

- More than 28.5 percent of the population is under 10 years or over 65 years of age.

- The Department's service area population is predominantly Caucasian (91 percent), followed by Asian (3 percent), and other ethnicities (6 percent).
- Of the population over 24 years of age, more than 96 percent has completed high school or equivalency.
- Of the population over 24 years of age, more than 61 percent have a college degree.
- Slightly more than 68 percent of the population 15 years of age or older is in the workforce; of those, 4.5 percent are unemployed.
- The population below the federal poverty level is 4.4 percent.
- Only two percent of the population does not have health insurance coverage.

The service area population is projected to increase by approximately 1,900 (7.7 percent) to nearly 27,000 over the next 11 years to 2030,[6] for an average annual growth of approximately 175 (0.7 percent).

Buildings

The service area includes nearly 11,000 housing units, as well as a large inventory of non-residential occupancies, including office, research, professional service, retail sales, restaurants/bar, motel, church, school, government facility, healthcare, and other non-residential uses.

Building Occupancy Risk Categories

The CFAI identifies the following four risk categories that relate to building occupancy:

Low Risk – includes detached garages, storage sheds, outbuildings, and similar building occupancies that pose a relatively low risk of harm to humans or the community if damaged or destroyed by fire.

Moderate Risk – includes detached single-family or two-family dwellings; mobile homes; commercial and industrial buildings less than 10,000 square feet without a high hazard fire load; aircraft; railroad facilities; and similar building occupancies where loss of life or property damage is limited to the single building.

High Risk – includes apartment/condominium buildings; commercial and industrial buildings more than 10,000 square feet without a high hazard fire load; low-occupant load buildings with high fuel loading or hazardous materials; and similar occupancies with potential for substantial loss of life or unusual property damage or financial impact.

[6] Reference: Marin County Housing Element 2015-2023, Figure II-2

Maximum Risk – includes buildings or facilities with unusually high risk requiring an Effective Response Force (ERF) involving a significant augmentation of resources and personnel and where a fire would pose the potential for a catastrophic event involving large loss of life and/or significant economic impact to the community.

Evaluation of the service area building inventory reveals 174 high risk building uses as they relate to the CFAI building fire risk categories as summarized in Table 26, Table 27, and Map #2B in **Volume 2** (Map Atlas).

Table 26—High Risk Building Occupancy Inventory by Risk Category

Building Occupancy Classification[2]		Number	Risk Category[1]
A-1	Assembly	5	***High***
H	Hazardous	0	***High***
I-4	Institutional	1	***High***
R-1	Hotel/Motel	2	***High***
R-2	Multi-Family Residential	148	***High***
R-2.1	Assisted Living Facilities	4	***High***
R-3.1	Residential Care Facilities	9	***High***
R-4	Care Facilities – Greater than 6 Persons	5	***High***
Total		**174**	

[1] CFAI *Standards of Cover* (5th Edition)
Source: Ross Valley Fire Department

Table 27—High Risk Occupancy Inventory by Planning Zone

Occupancy Classification	Planning Zone				Total
	Sta. 18	Sta. 19	Sta. 20	Sta. 21	
A-1	1	2	1	1	**5**
I-4		1			**1**
R-1		1	1		**2**
R-2	1	110	37		**148**
R-2.1	2	1	1		**4**
R-3.1	1	5	2	1	**9**
R-4		4	1		**5**
Total	**5**	**124**	**43**	**2**	**174**

Source: Ross Valley Fire Department

Critical Infrastructure / Key Resources

The U.S. Department of Homeland Security defines Critical Infrastructure / Key Resources (CIKR) as those physical assets essential to the public health and safety, economic vitality, and resilience of a community, such as lifeline utilities infrastructure, telecommunications infrastructure, essential government services facilities, public safety facilities, schools, hospitals, airports, etc. A hazard occurrence with significant impact severity affecting one or more of these facilities would likely adversely impact critical public or community services. No critical facilities or key resources were identified by the Department for this assessment.

Economic Resources

No economic resources were identified for this assessment.

Natural Resources

No natural resources were identified for this assessment.

A.1.5 Hazard Identification

Citygate utilizes prior risk studies where available, fire and non-fire hazards as identified by the CFAI, and agency/jurisdiction-specific data and information to identify the hazards to be evaluated for this study.

The 2018 Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) identifies the following 13 hazards for the County.

Table 28—Marin County Hazards

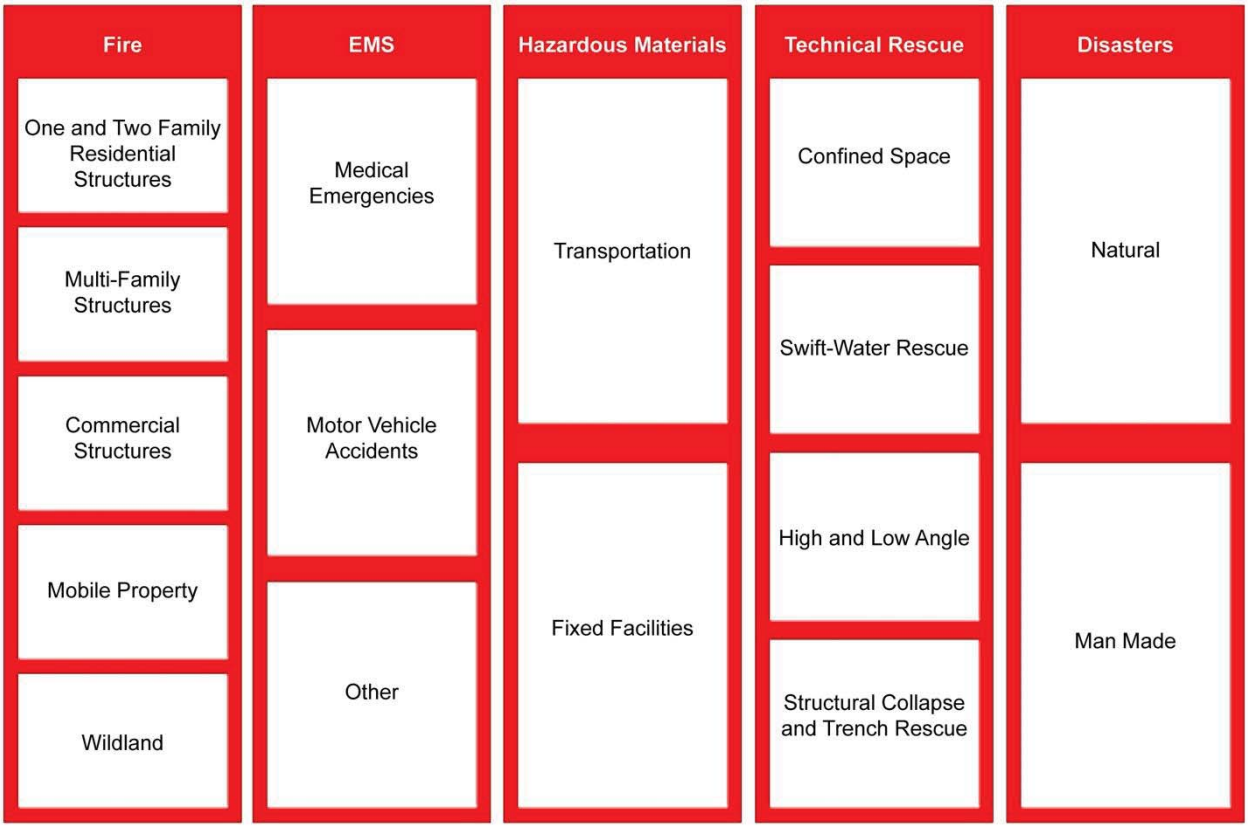
Hazard	
1	Coastal erosion
2	Dam failure
3	Drought
4	Earthquake
5	Flood
6	Heat
7	Landslide/mudslide/debris flow
8	Levee failure
9	Liquefaction
10	Severe wind/tornado
11	Severe storm
12	Tsunami/seiche
13	Wildfire

Reference: 2018 Marin County LHMP, Table 3-1

Although the Fire Department has no legal authority or responsibility to mitigate any of these hazards other than wildfire, it does provide services related to all these hazards, including fire suppression, emergency medical services, technical rescue, and hazardous materials response.

The CFAI groups hazards into fire and non-fire categories, as shown in Figure 17. Identification, qualification, and quantification of the various fire and non-fire hazards are important factors in evaluating how resources are or can be deployed to mitigate those risks.

Figure 17—Commission on Fire Accreditation International Hazard Categories



Source: CFAI *Standards of Cover* (5th Edition).

Subsequent to review and evaluation of the hazards identified in the 2018 Marin County Multi-Jurisdictional LHMP and the fire and non-fire hazards as identified by the CFAI as they relate to services provided by the Department, Citygate evaluated the following five hazards for this risk assessment:

- Building Fire
- Vegetation Fire
- Medical Emergency
- Hazardous Material Release/Spill
- Technical Rescue

A.1.6 Service Capacity

Service capacity refers to the Department's available response force; the size, types, and condition of its response fleet and any specialized equipment; core and specialized performance capabilities

and competencies; resource distribution and concentration; availability of automatic and/or mutual aid; and any other agency-specific factors influencing its ability to meet current and prospective future service demand relative to the risks to be protected.

The Department's service capacity for building and vegetation fire, medical emergency, hazardous materials, and technical rescue risk consists of eight firefighters on four engines, plus a two-firefighter/paramedic ambulance from the Ross Valley Paramedic Authority (RVPA) and a Duty Chief Officer.

All response personnel are trained to either the Emergency Medical Technician (EMT) level, capable of providing Basic Life Support (BLS) pre-hospital emergency medical care, or EMT-Paramedic (Paramedic) level, capable of providing Advanced Life Support (ALS) pre-hospital emergency medical care. Ground paramedic ambulance service is provided by the Ross Valley Paramedic Authority (RVPA). Air ambulance services, when needed, are provided by Reach Air Medical Services (Concord, Santa Rosa, or Napa), LifeFlight (Palo Alto), the California Highway Patrol, or Sonoma County Sheriff. Three regional hospitals provide emergency medical services, including Marin General Hospital, Kaiser Permanente Medical Center San Rafael, and Novato Community Hospital. Marin General Hospital is also a Level-III trauma center.

Response personnel are also trained to the U.S. Department of Transportation Hazardous Material First Responder Operational (FRO) level to provide initial hazardous material incident assessment, hazard isolation, and support for a hazardous material response team. Additional hazardous materials response capacity is available from the Marin County Hazardous Materials Response Team. The Hazardous Materials Response Unit is housed at the Ross Valley Fire Department and is cross-staffed by Ross Valley personnel as needed for regional response.

Technical rescue services are provided by the Marin County Urban Search and Rescue (US&R) Regional Task Force, a multi-agency/discipline team with the tools, equipment, and training to conduct confined space, low/high-angle rope rescue, breaching, shoring, excavation, trench, and water rescue operations.

A.1.7 Probability of Occurrence

Probability of occurrence refers to the probability of a future hazard occurrence during a specific period. Because the CFAI agency accreditation process requires annual review of an agency's risk assessment and baseline performance measures, Citygate recommends using the 12 months following completion of an SOC study as an appropriate period for the probability of occurrence evaluation. Table 29 describes the five probability of occurrence categories and related scoring criteria used for this analysis.

Table 29—Probability of Occurrence Scoring Criteria

Score	Probable Occurrence	Description	General Criteria
0–1.0	***Very Low***	Improbable	Hazard occurrence is *unlikely*
1.25–2.0	***Low***	Rare	Hazard *could occur*
2.25–3.0	***Moderate***	Infrequent	Hazard *should occur* infrequently
3.25–4.0	***High***	Likely	Hazard *likely to occur* regularly
4.25–5.0	***Very High***	Frequent	Hazard is *expected to occur* frequently

Citygate's SOC assessments use recent multiple-year hazard response data to determine the probability of hazard occurrence for the ensuing 12-month period.

A.1.8 Impact Severity

Impact severity refers to the extent a hazard occurrence impacts people, buildings, lifeline services, the environment, and the community as a whole. Table 30 describes the five impact severity categories and related scoring criteria used for this analysis.

Table 30—Impact Severity Scoring Criteria

Score	Impact Severity	General Criteria
0 – 1.0	**Insignificant**	• No serious injuries or fatalities • Few persons displaced for only a short duration • None or inconsequential damage • None or very minimal disruption to community • No measurable environmental impacts • Little or no financial loss
1.25 – 2.0	**Minor**	• Some minor injuries; no fatalities expected • Some persons displaced for less than 24 hours • Some minor damage • Minor community disruption; no loss of lifeline services • Minimal environmental impacts with no lasting effects • Minor financial loss
2.25 – 3.0	**Moderate**	• Some hospitalizations; some fatalities expected • Localized displacement of persons for up to 24 hours • Localized damage • Normal community functioning with some inconvenience • Minor loss of critical lifeline services • Some environmental impacts with no lasting effects, or small environmental impact with long-term effect • Moderate financial loss
3.25 – 4.0	**Major**	• Extensive serious injuries; significant number of persons hospitalized • Many fatalities expected • Significant displacement of many people for more than 24 hours • Significant damage requiring external resources • Community services disrupted; some lifeline services potentially unavailable • Some environmental impacts with long-term effects • Major financial loss
4.25 – 5.0	**Catastrophic**	• Large number of severe injuries and fatalities • Local/regional hospitals impacted • Large number of persons displaced for an extended duration • Extensive damage • Widespread loss of critical lifeline services • Community unable to function without significant support • Significant environmental impacts and/or permanent environmental damage • Catastrophic financial loss

A.1.9 Overall Risk

Overall hazard risk is determined by multiplying the *probability of occurrence score* by the *impact severity score*. The resultant total determines the overall *risk rating* as shown in Table 31.

Table 31—Overall Risk Score and Rating

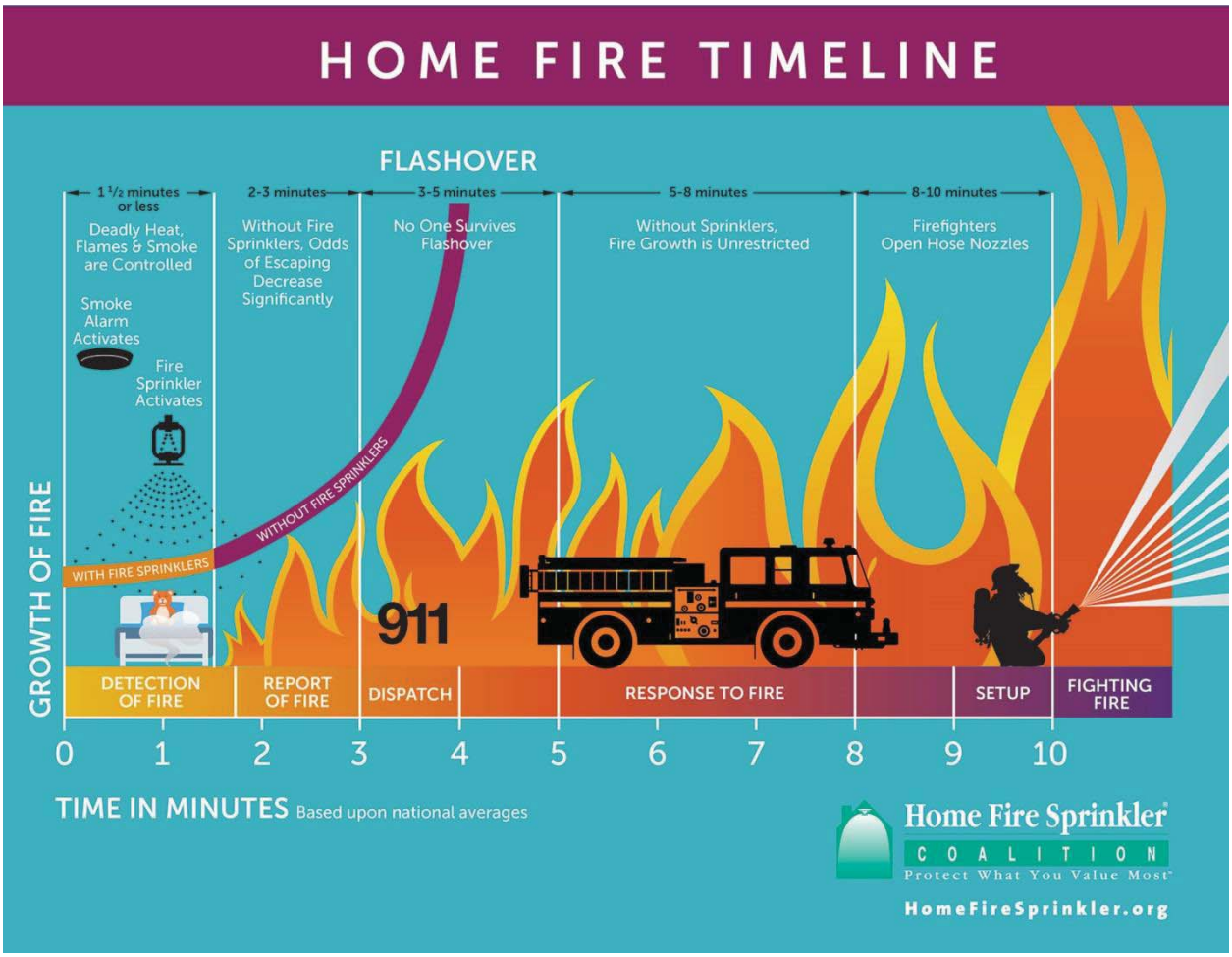
Overall Risk Score	Overall Risk Rating
0–5.99	***LOW***
6.0–11.99	***MODERATE***
12.0–19.99	***HIGH***
20.0–25.0	***MAXIMUM***

A.1.10 Building Fire Risk

One of the primary hazards in any community is building fire. Building fire risk factors include building size, age, construction type, density, occupancy, number of stories above ground level, required fire flow, proximity to other buildings, built-in fire protection/alarm systems, available fire suppression water supply, building fire service capacity, fire suppression resource deployment (distribution/concentration), staffing, and response time. Citygate used available data from the Department and the U.S. Census Bureau to assist in determining the Department's building fire risk.

Figure 18 illustrates the building fire progression timeline and shows that flashover, which is the point at which the entire room erupts into fire after all the combustible objects in that room reach their ignition temperature, can occur as early as 3:00 to 5:00 minutes from the initial ignition. Human survival in a room after flashover is extremely improbable.

Figure 18—Building Fire Progression Timeline



Source: http://www.firesprinklerassoc.org

Population Density

Population density within the service area ranges from less than 500 to approximately 5,000 people per square mile. Although risk analysis across a wide spectrum of other Citygate clients shows no direct correlation between population density and building fire *occurrence*, it is reasonable to conclude that building fire *risk* relative to potential impact on human life is greater as population density increases, particularly in areas with high density, multiple-story buildings.

Water Supply

A reliable public water system providing adequate volume, pressure, and flow duration in close proximity to all buildings is a critical factor in mitigating the potential impact severity of a community's building fire risk. Potable water is provided by the Marin Municipal Water District,

and according to Fire Department staff, available fire flow is insufficient in several sections of the service area as shown in Map #2E in **Volume 2** (Map Atlas).

Building Fire Service Demand

For calendar years 2017 and 2018, the Department experienced 44 building fire incidents comprising 1 percent of total service demand over the same period, as summarized in Table 32.

Table 32—Building Fire Service Demand

Risk	Year	Planning Zone				Total	Percent Total Service Demand
		Sta. 18	Sta. 19	Sta. 20	Sta. 21		
Building Fire	2017	3	3	7	11	**24**	0.83%
	2018	0	5	7	8	**20**	0.75%
Total		**3**	**8**	**14**	**19**	**44**	**0.79%**
Percent of Total Service Demand		.79%	0.42%	1.46%	0.97%	**0.79**%	

Source: Ross Valley Fire Department incident data

As Table 32 illustrates, building fire service demand was consistent across the two-year study period, with the highest volume of incidents occurring at Station 21 and the lowest at Station 19. Overall, the Department's building fire service demand is very low, comprising less than one percent of all calls for service, which is consistent with other California jurisdictions of similar size and demographics.

Probability of Building Fire Occurrence

Table 33 summarizes Citygate's scoring of building fire probability by planning zone based on building fire service demand from Table 32.

Table 33—Building Fire Probability Scoring

Building Fire	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Probability Score	1.25	1.50	2.0	2.25

Building Fire Impact Severity

Table 34 summarizes Citygate's scoring of the Department's probable building fire impact severity by planning zone.

Table 34—Building Fire Impact Severity Scoring

Building Fire	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Impact Severity Score	3.0	3.0	3.0	3.0

Overall Building Fire Risk

Table 35 summarizes the Department's overall building fire risk scores and ratings by planning zone.

Table 35—Overall Building Fire Risk

Building Fire	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Total Risk Score	3.75	4.50	6.00	6.75
Risk Rating	***Low***	***Low***	***Moderate***	***Moderate***

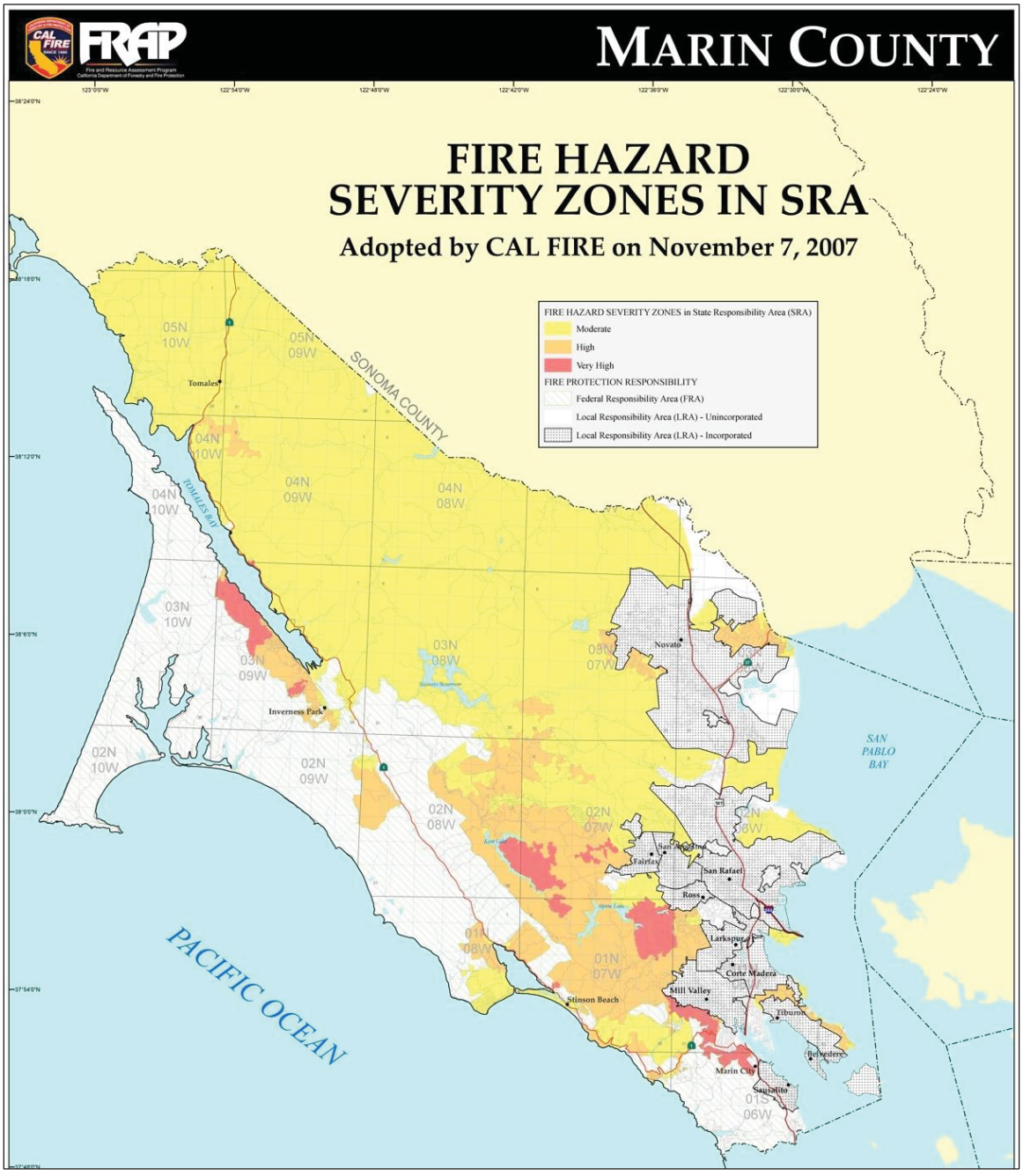
A.1.11 Vegetation Fire Risk

Most of the service area is susceptible to a vegetation fire, particularly along the northern and western edges abutting the Mount Tamalpais watershed.

Wildland Fire Hazard Severity Zones

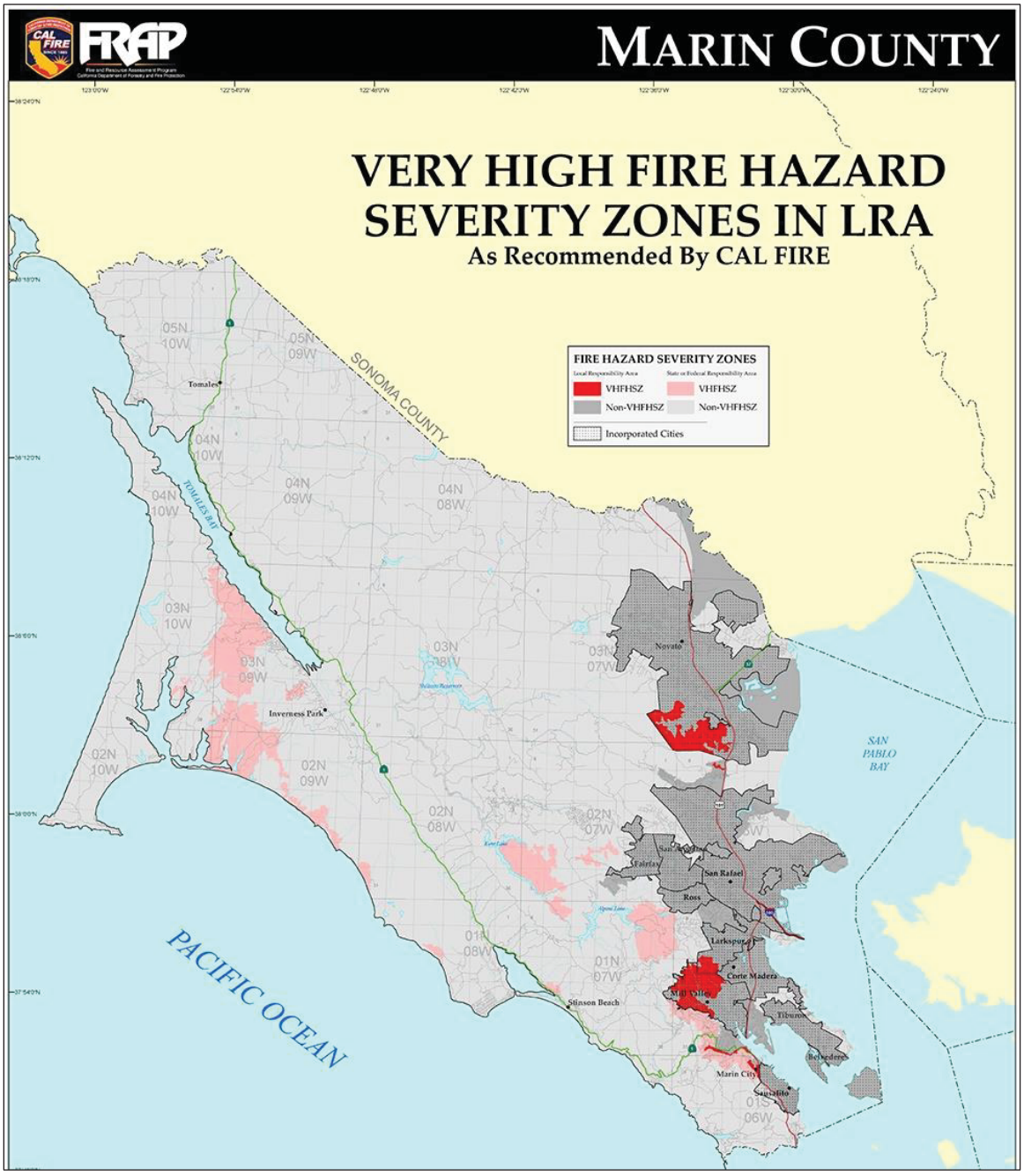
The California Department of Forestry and Fire Protection (CAL FIRE) designates wildland Fire Hazard Severity Zones (FHSZ) throughout the State based on analysis of multiple wildland fire hazard factors and modeling of potential wildland fire behavior. For State Responsibility Areas (SRAs) where CAL FIRE has fiscal responsibility for wildland fire protection, CAL FIRE designates Moderate, High, and Very High FHSZs by county, as shown in Figure 19 for Marin County. Note the ***Moderate***, ***High***, and ***Very High*** FHSZs immediately to the north, northeast, and west of the service area.

Figure 19—SRA Wildland Fire Hazard Severity Zones – Marin County



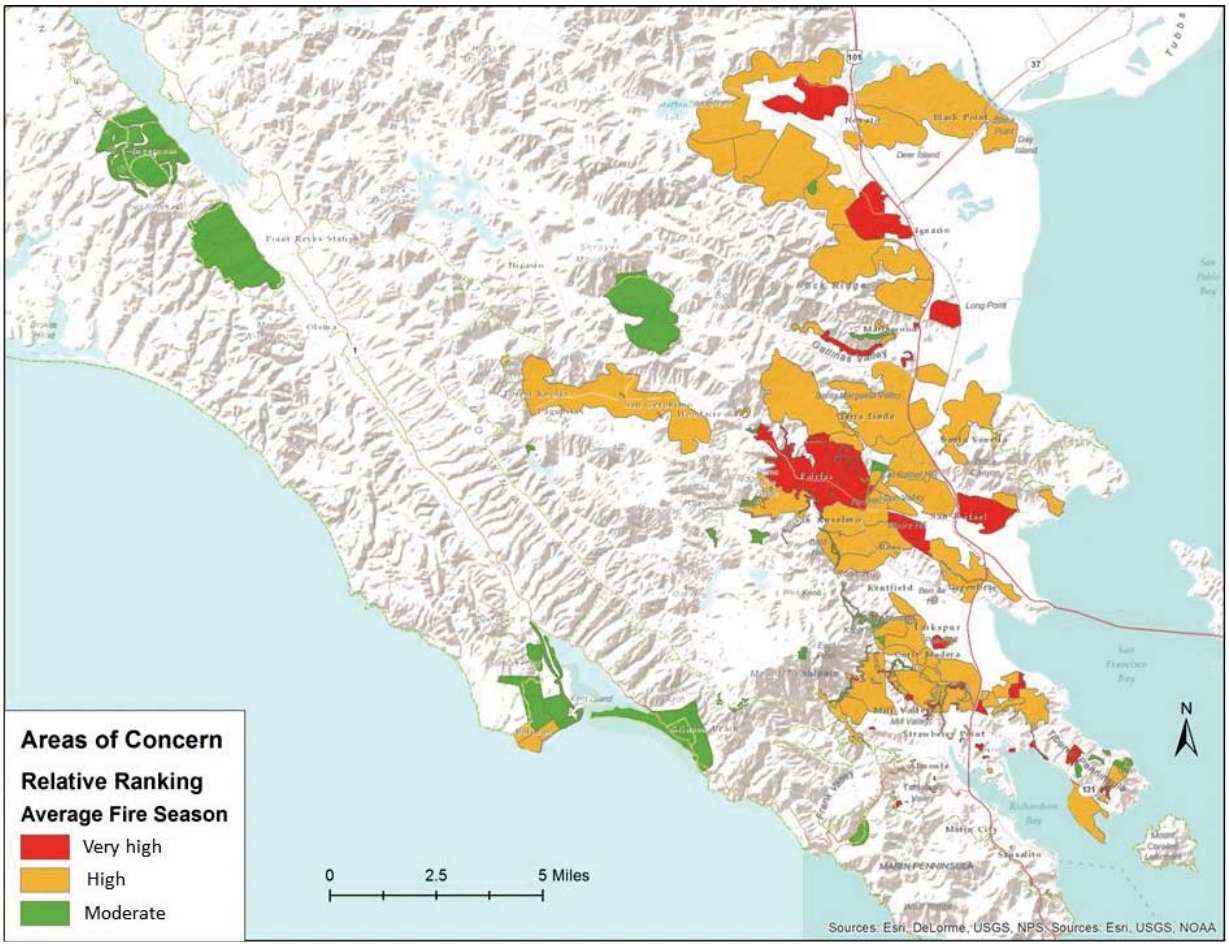
CAL FIRE also identifies recommended FHSZs for Local Responsibility Areas (LRAs), where a local jurisdiction bears the fiscal responsibility for wildland fire protection, including incorporated cities, as shown in Figure 20 for Marin County.

Figure 20—Wildland Fire Hazard Map



Note that there are no recommended FHSZs within the Department's service area. The 2016 Marin County Fire Department Community Wildfire Protection Plan (CWPP), however, identifies significant sections of the service area as **Moderate**, **High** and **Very High** Areas of Concern based on composite geospatial modeling of population density, potential flame length, and potential rate of spread as shown in Figure 21.

Figure 21—Areas of Wildfire Concern – Marin County CWPP



Reference: 2016 Marin County CWPP, Figure 15

Vegetative Fuels

Vegetative fuel factors influencing fire intensity and spread include fuel type (species), height, arrangement, density, and moisture. Vegetative fuels within the service area, in addition to decorative landscape species, include both native and non-native annual and perennial plant species, including grasses, weeds, shrubs, and chamise, and mostly hardwood trees including bay, eucalyptus, madrone, and oak. The majority of the service area has moderate to high vegetative fuel density. Once ignited, vegetation fires can burn intensely and contribute to rapid fire spread under the right fuel, weather, and topographic conditions.

Weather

Weather elements such as temperature, relative humidity, wind, and lightning also affect vegetation fire potential and behavior. High temperatures and low relative humidity dry out vegetative fuels, creating a situation where fuels will more readily ignite and burn more intensely.

Wind is the most significant weather factor influencing vegetation fire behavior; higher wind speeds increase fire spread and intensity. Wildland fire season, when vegetation fires are most likely to occur due to fuel and weather conditions, occurs from approximately June through October in Marin County. Summer weather within the service area typically includes cool mornings, warm afternoons and evenings, and west/northwest breezes that can reach 15-25 miles per hour. Occasional summer gradients can produce temperatures in the high 90s to low 100s, low relative humidity, and offshore winds as high as 40 miles per hour. These weather conditions create the potential for a large, damaging wildfire.

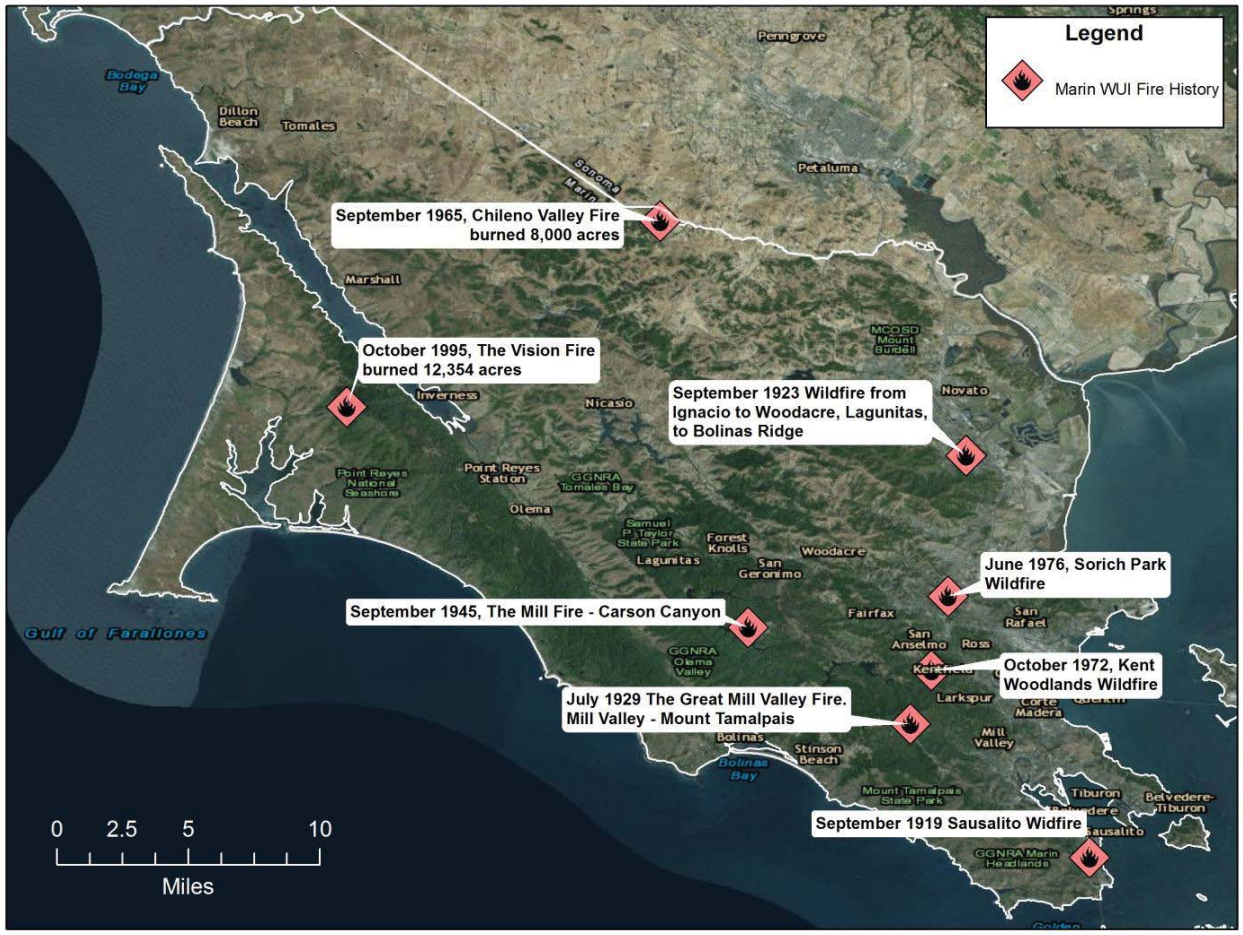
Topography

Vegetation fires tend to burn more intensely and spread faster when burning uphill and up-canyon, except for a wind-driven downhill or down-canyon fire. The service area's terrain varies from flat to steep slopes, which can contribute significantly to wildfire behavior and spread.

Wildfire History

Since the early 1900s, there have been several large wildland fires in Marin County, including the 1972 Kent Woodlands Fire, 1976 Scorich Park Fire, and 1995 Vision Fire (12,354 acres) as shown in Figure 22.

Figure 22—Marin County Wildfire History



Source: Marin County CWPP, Figure 6

Water Supply

Another significant vegetation fire impact severity factor is water supply immediately available for fire suppression. According to Department staff, available fire flow is insufficient in several sections of the service area as shown in Map #2E in **Volume 2** (Map Atlas).

Wildland Fire Hazard Mitigation

Hazard mitigation refers to specific actions or measures taken to prevent a hazard from occurring and/or to minimize the severity of impacts resulting from a hazard occurrence. While none of the hazards subject to this study can be entirely prevented, measures *can* be taken to minimize the consequences or impacts when those hazards do occur.

The Towns of Ross, San Anselmo, and Fairfax, and the Sleepy Hollow Fire Protection District, have adopted the 2016 California Fire Code and the 2015 International Wildland Urban Interface Code with amendments.

The 2016 Marin County CWPP identifies the following wildfire hazard mitigation strategies, in addition to building codes, ordinances, and standards, and defensible space enforcement and public education strategies:

- Residential chipper programs
- Increasing dedicated staffing for vegetation management programs
- Annual weed abatement program
- Implementing an enhanced County Vegetation Management Program (conditional on voter approval of a Municipal Service Tax)
- Fuel breaks
- Eucalyptus and pine tree removal
- Roadside fuel reduction
- Evacuation route fuel reduction
- Creation of shaded fuel breaks in WUI transition zones

Vegetation Fire Service Demand

The Department experienced only 19 vegetation fires over the two-year study period, comprising 0.34 percent of total service demand over the same period, as summarized in Table 36.

Table 36—Vegetation Fire Service Demand

Risk	Year	Planning Zone				Total	Percent Total Service Demand
		Sta. 18	Sta. 19	Sta. 20	Sta. 21		
Vegetation Fire	2017	2	3	1	5	**11**	0.38%
	2018	1	3	2	2	**8**	0.30%
Total		**3**	**6**	**3**	**7**	**19**	**0.34%**
Percent of Total Service Demand		0.41%	0.32%	0.31%	0.36%	0.34%	

Source: Ross Valley Fire Department incident data

As Table 36 shows, overall vegetation fire service demand is extremely low.

Probability of Vegetation Fire Occurrence

Table 37 summarizes Citygate's scoring of vegetation fire probability by planning zone based on vegetation fire service demand from Table 36.

Table 37—Vegetation Fire Probability Scoring

Vegetation Fire	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Probability Score	1.25	1.50	1.25	1.50

Vegetation Fire Impact Severity

Table 38 summarizes Citygate's scoring of probable vegetation fire impact severity by planning zone.

Table 38—Vegetation Fire Impact Severity Scoring

Vegetation Fire	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Impact Severity Score	3.0	3.0	3.0	3.0

Overall Vegetation Fire Risk

Table 39 summarizes the Department's overall vegetation fire risk scores and ratings by planning zone.

Table 39—Overall Vegetation Fire Risk

Vegetation Fire	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Total Risk Score	3.75	4.50	3.75	4.50
Risk Rating	***Low***	***Low***	***Low***	***Low***

A.1.12 Medical Emergency Risk

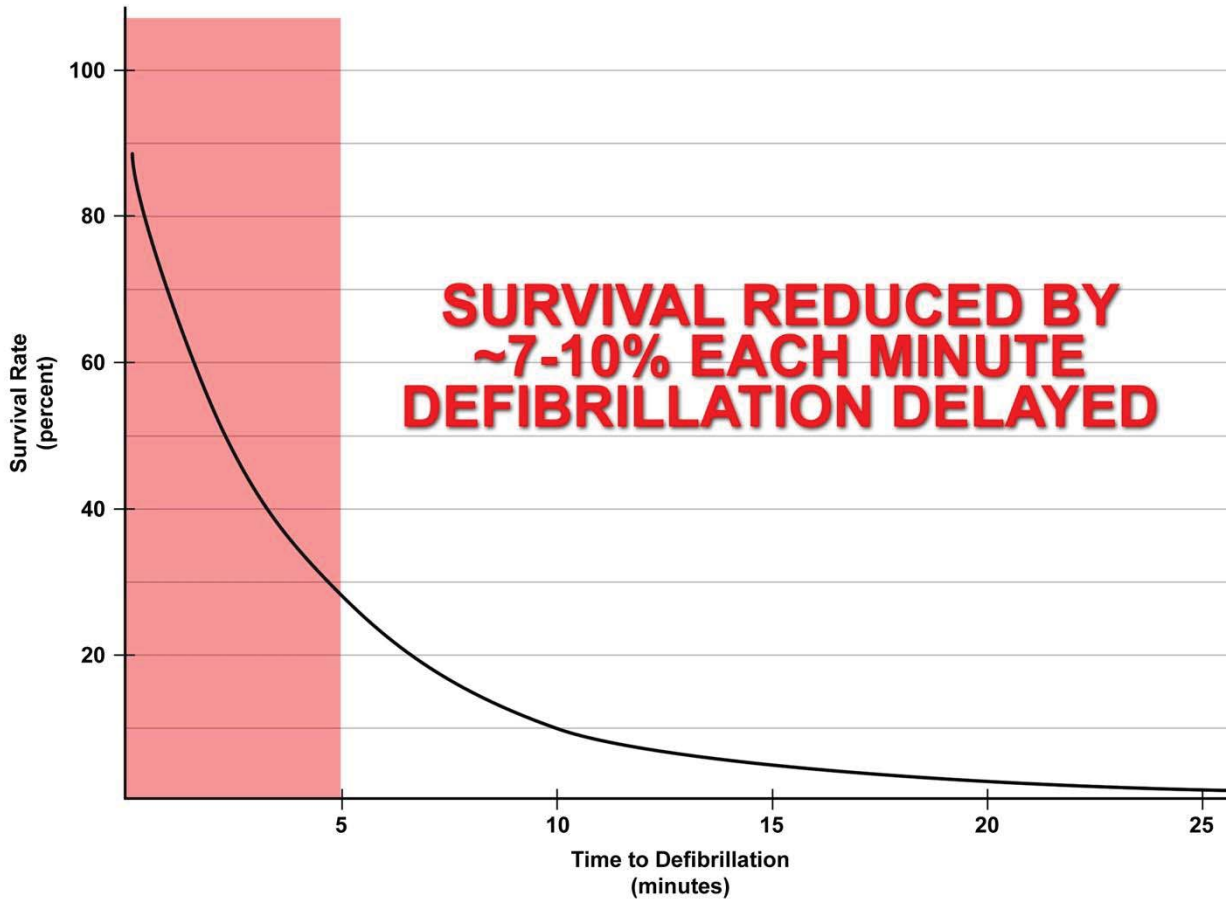
Medical emergency risk in most communities is predominantly a function of population density, demographics, violence, health insurance coverage, and vehicle traffic.

Medical emergency risk can also be categorized as either a medical emergency resulting from a traumatic injury or a health-related condition or event. Cardiac arrest is one serious medical emergency among many where there is an interruption or blockage of oxygen to the brain.

Figure 23 illustrates the reduced survivability of a cardiac arrest victim as time to defibrillation increases. While early defibrillation is one factor in cardiac arrest survivability, other factors can

influence survivability as well, such as early CPR and pre-hospital advanced life support interventions.

Figure 23—Survival Rate versus Time to Defibrillation



Source: www.suddencardiacarrest.org

Population Density

The Department's service area population density ranges from less than 500 people per square mile to approximately 5,000 per square mile. Risk analysis across a wide spectrum of other Citygate clients shows a direct correlation between population density and the *occurrence* of medical emergencies, particularly in high urban population density zones.

Demographics

Medical emergency risk tends to be higher among older, poorer, less-educated, and uninsured populations. According to the U.S. Census Bureau, nearly 20 percent of the service area population is 65 and older; 4.4 percent of the population is at or below poverty level; only 3.4 percent of the population over 24 years of age has less than a high school education or equivalent; and only two

percent of the population does not have health insurance coverage.[7] Overall, this indicates a well-educated and employed population with good health insurance coverage, all factors that can contribute to reducing medical emergency service demand.

Vehicle Traffic

Medical emergency risk tends to be higher in those areas of a community with high daily vehicle traffic volume, particularly those areas with high traffic volume traveling at high speeds. The service area transportation network includes Sir Francis Drake Boulevard, the primary two-lane regional thoroughfare with a very high daily traffic volume, particularly during weekday commute hours and on weekends.

Medical Emergency Service Demand

Medical emergency service demand over the two-year study period includes more than 2,800 calls for service comprising slightly more than 51 percent of total service demand over the same period, as summarized in Table 40.

Table 40—Medical Emergency Service Demand

Risk	Year	Planning Zone				Total	Percent Total Service Demand
		Sta. 18	Sta. 19	Sta. 20	Sta. 21		
Medical Emergency	2017	118	488	243	584	**1,433**	49.81%
	2018	146	499	240	539	**1,424**	53.10%
Total		**264**	**987**	**483**	**1,123**	**2,857**	**51.39%**
Percent of Total Service Demand		36.16%	51.98%	50.21%	57.06%	51.39%	

Source: Ross Valley Fire Department incident data

As Table 40 shows, medical emergency service demand varies by planning zone and is trending consistently over the past two years. Overall, the Department's medical emergency service demand is similar to other California jurisdictions of similar size and demographics.

Probability of Medical Emergency Occurrence

Table 41 summarizes Citygate's scoring of medical emergency probability by planning zone based on medical emergency service demand from Table 40.

[7] Source: U.S. Census Bureau (2017)

Table 41—Medical Emergency Probability Scoring

Medical Emergency	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Probability Score	4.0	4.5	4.25	4.75

Medical Emergency Impact Severity

Table 42 summarizes Citygate's scoring of probable medical emergency impact severity by planning zone.

Table 42—Medical Emergency Impact Severity Scoring

Medical Emergency	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Impact Severity Score	3.0	3.0	3.0	3.0

Overall Medical Emergency Risk

Table 43 summarizes the Department's overall medical emergency risk scores and ratings by planning zone.

Table 43—Overall Medical Emergency Risk

Medical Emergency	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Total Risk Score	12.0	13.5	12.75	14.25
Risk Rating	***High***	***High***	***High***	***High***

A.1.13 Hazardous Material Risk

Hazardous material risk factors include fixed facilities that store, use, or produce hazardous chemicals or waste; underground pipelines conveying hazardous materials; aviation, railroad, maritime, and vehicle transportation of hazardous materials into or through a jurisdiction; vulnerable populations; emergency evacuation planning and related training; and specialized hazardous material service capacity.

Fixed Hazardous Materials Facilities

The Marin County Department of Public Works, serving as the State-designated Certified Unified Program Agency for the County, identified 38 facilities within the Department's service area requiring a State or County hazardous material operating permit as shown on Map #2C in **Volume 2** (Map Atlas).

Transportation-Related Hazardous Materials

The Department also has transportation-related hazardous material risk due to hazardous materials transported into or through its service area, primarily on Sir Francis Drake Boulevard.

Population Density

Because hazardous material emergencies have the potential to adversely impact human health, it is logical that the higher the population density, the greater the potential population exposed to a hazardous material release or spill. The service area population density ranges from less than 500 people per square mile to approximately 5,000 per square mile.

Vulnerable Populations

Persons vulnerable to a hazardous material release/spill include those individuals or groups unable to self-evacuate, generally including children under the age of 10, the elderly, and persons confined to an institution or other setting where they are unable to leave voluntarily. Almost 29 percent of the service area population is under age 10 years or is 65 years of age and older.

Emergency Evacuation Planning, Training, Implementation, and Effectiveness

Another significant hazardous material impact severity factor is a jurisdiction's shelter-in-place / emergency evacuation planning and training. In the event of a hazardous material release or spill, time can be a critical factor in notifying potentially affected persons, particularly at-risk populations, to either shelter-in-place or evacuate to a safe location. Essential to this process is an effective emergency plan that incorporates one or more mass emergency notification capabilities, as well as pre-established evacuation procedures. It is also essential to conduct regular, periodic exercises involving these two emergency plan elements to evaluate readiness and to identify and remediate any planning and/or training gaps to ensure ongoing emergency incident readiness and effectiveness.

The Office of Emergency Services (OES), within the Marin County Sheriff's Office, is responsible for disaster/emergency preparedness and management in the unincorporated areas of the County, including hazard information, coordination with other local/regional emergency management organizations, emergency preparedness, and disaster response, communications, and recovery. OES also manages AlertMarin, a free, subscription-based, mass emergency notification system that can provide emergency alerts, notifications, and other emergency information to email

accounts, cell phones, smartphones, tablets, and landline telephones. AlertMarin notifications can be initiated by designated fire or law enforcement agency personnel.

The Sheriff's Office is also responsible for initiating emergency evacuations in the unincorporated areas of the County. No information was identified for this assessment relative to pre-planned evacuation routes, evacuation procedures, or evacuation exercises.

Hazardous Material Service Demand

The Department responded to 91 hazardous material incidents over the two-year study period, comprising 1.64 percent of total service demand over the same period, as summarized in Table 44.

Table 44—Hazardous Material Service Demand

Risk	Year	Planning Zone				Total	Percent Total Service Demand
		Sta. 18	Sta. 19	Sta. 20	Sta. 21		
Hazardous Material	2017	12	18	7	**12**	**49**	**53.8%**
	2018	9	14	10	**9**	**42**	**46.2%**
Total		**21**	**32**	**17**	**21**	**91**	**100%**
Percent of Total Service Demand		2.88%	1.69%	1.77%	1.07%	1.64%	

Source: Ross Valley Fire Department incident data

As Table 44 indicates, hazardous material service demand is relatively consistent across all planning zones and years. While this service demand seems high for this size agency and jurisdiction, it is most likely due to Department personnel cross-staffing the Hazardous Materials Response unit for responses to other regional jurisdictions, rather than hazardous materials incidents within the service area. Overall, the Department's hazardous material service demand is low.

Probability of Hazardous Material Occurrence

Table 45 summarizes Citygate's scoring of hazardous materials probability by planning zone based on hazardous material service demand from Table 44.

Table 45—Hazardous Material Probability Scoring

Hazardous Material	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Probability Score	2.50	2.75	2.25	2.50

Hazardous Material Impact Severity

Table 46 summarizes Citygate's scoring of probable hazardous material impact severity by planning zone.

Table 46—Hazardous Material Impact Severity Scoring

Hazardous Materials	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Impact Severity Score	3.0	3.0	3.0	3.0

Overall Hazardous Material Risk

Table 47 summarizes the Department's overall hazardous material risk scores and ratings by planning zone.

Table 47—Overall Hazardous Material Risk

Hazardous Materials	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Total Risk Score	7.50	8.25	6.75	7.50
Risk Rating	***Moderate***	***Moderate***	***Moderate***	***Moderate***

A.1.14 Technical Rescue Risk

Technical rescue risk factors include active construction projects; structural collapse potential; confined spaces, such as tanks and underground vaults; bodies of water, including rivers and streams; industrial machinery use; transportation volume; and earthquake, flood, and landslide potential.

Construction Activity

There is ongoing residential, commercial, and/or infrastructure construction activity occurring within the Department's service area.

Confined Spaces

There are multiple tanks, vaults, and temporary open trenches within the Department's service area.

Bodies of Water

Bodies of water within the Department's service area include Corte Madera, Fairfax, Ross, San Anselmo, and Sleepy Hollow creeks.

Transportation Volume

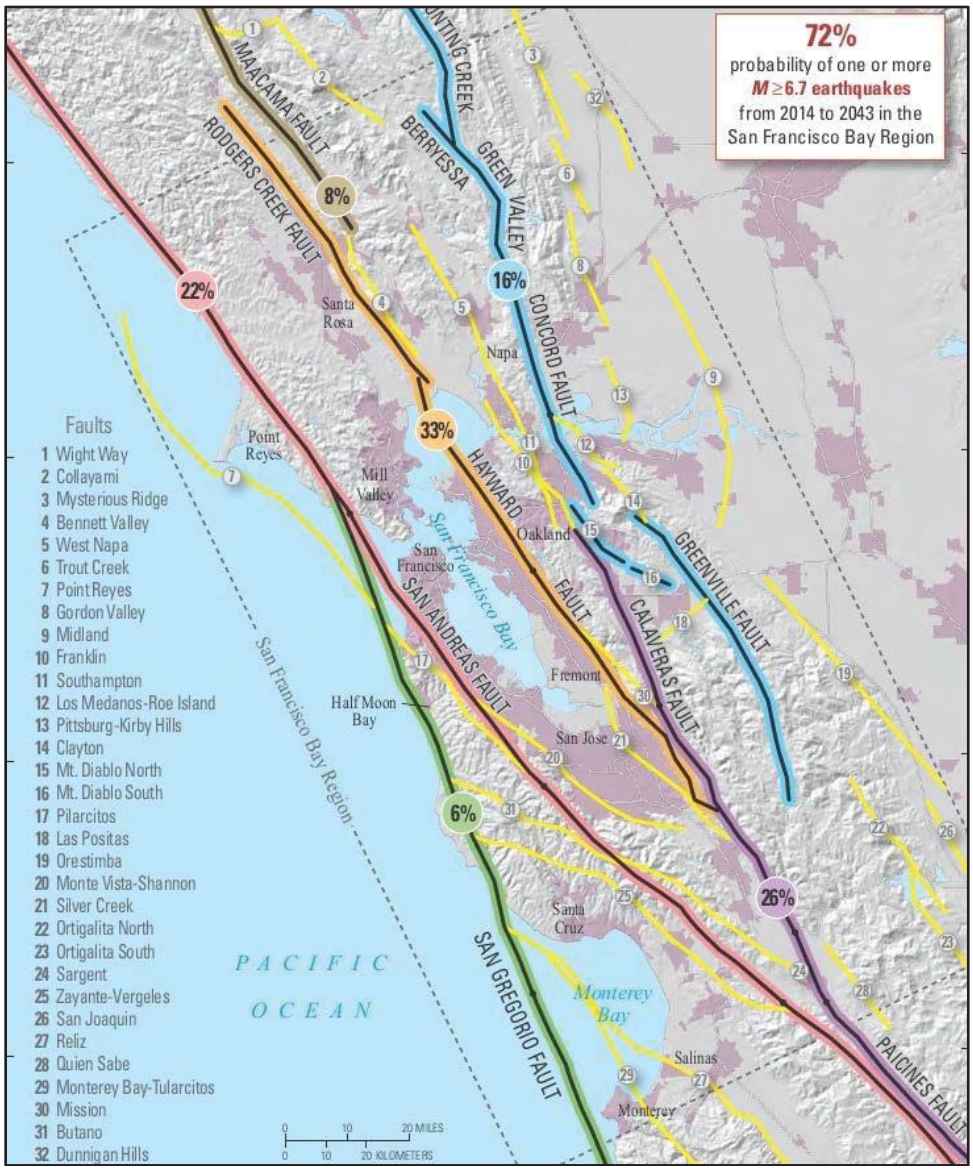
Another factor is transportation-related incidents requiring technical rescue. This risk factor is primarily a function of vehicle, railway, maritime, and aviation traffic. Vehicle traffic volume is the greatest of these factors within the service area, with Sir Francis Drake Boulevard carrying a high daily traffic volume.

Earthquake Risk[8]

The potential for earthquake damage exists throughout Marin County due to the combination of the number of active faults within and near the County and the presence of soils vulnerable to liquefaction. Active faults include the Hayward, Rodgers Creek, and San Andreas as shown in Figure 24. According to the Working Group on California Earthquake Probabilities, there is a 72 percent probability of at least one earthquake of magnitude 6.7 or greater within the Bay Area before 2043. The Association of Bay Area Governments (ABAG) Resilience Program projects a 52 percent chance of a magnitude 6.7 or greater earthquake on one of the faults affecting Marin County by 2036.

[8] Reference: 2018 Marin County Multi-Jurisdictional Local Hazard Mitigation Plan, Section 3

Figure 24—Earthquake Faults



Flood Risk[9]

All of Marin's watersheds are small and largely prone to flash flooding. Several Marin communities, including Ross Valley, are protected by levees. Flooding has historically resulted in extensive damage in many County communities, including most of the Department's service area, from significant flood events in 1955, 1958, 1964, 1969, 1970, 1982, 1983, 1986, 1995, 1997,

[9] Reference: 2018 Marin County Multi-Jurisdictional Local Hazard Mitigation Plan, Section 3

1998, 2005, 2006, and 2017. Figure 25 shows the flood hazard zones within the Department's service area as identified by the Federal Emergency Management Agency (FEMA).

Figure 25—Flood Hazard Areas

Technical Rescue Service Demand

Over the two-year study period, there were a total of six technical rescue incidents comprising 0.11 percent of total service demand for the same period, as summarized in Table 48.

Table 48—Technical Rescue Service Demand

Risk	Year	Planning Zone				Total	Percent Total Service Demand
		Sta. 18	Sta. 19	Sta. 20	Sta. 21		
Technical Rescue	2017	0	0	0	3	**3**	0.10%
	2018	1	1	0	1	**3**	0.11%
Total		**1**	**1**	**0**	**4**	**6**	**0.11%**
Percent of Total Service Demand		0.14%	0.05%	0.00%	0.20%	0.11%	

Source: Ross Valley Fire Department incident data

As Table 48 shows, technical rescue service demand is extremely low.

Probability of Technical Rescue Occurrence

Table 49 summarizes Citygate's technical rescue probability scoring by planning zone based on service demand from Table 48. These probability scores are based predominantly on known historical flood data rather than recent service demand history.

Table 49—Technical Rescue Probability Scoring

Technical Rescue	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Probability Score	1.25	1.25	1.25	1.25

Technical Rescue Impact Severity

Table 50 summarizes Citygate's scoring of probable technical rescue impact severity by planning zone.

Table 50—Technical Rescue Impact Severity Scoring

Technical Rescue	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Impact Severity Score	3.0	3.0	3.0	3.0

Overall Technical Rescue Risk

Table 51 summarizes the Department's overall technical rescue risk scores and ratings by planning zone.

Table 51—Overall Technical Rescue Risk

Technical Rescue	Planning Zone			
	Sta. 18	Sta. 19	Sta. 20	Sta. 21
Total Risk Score	3.75	3.75	3.75	3.75
Risk Rating	***Low***	***Low***	***Low***	***Low***

ATTACHMENT 6

LEASE AGREEMENT

This Lease Agreement ("Lease"), effective July 1, 2020, is made by and between the Town of Ross ("Landlord"), the Ross Valley Paramedic Authority, a joint powers agency of the State of California ("Tenant"), and the Ross Valley Fire Department, a Joint Powers Authority of the State of California ("Third Party Beneficiary"), (collectively, the "Parties").

RECITALS

A. Tenant previously leased from Third Party Beneficiary a certain portion of the space, consisting of sleeping areas with bathroom, office space, engine bay and storage room ("the Premises"), within the Ross Valley Fire Department, Station 18, located at 33 Sir Francis Drake Boulevard, Ross, California.

B. The four-year term of the current lease agreement between Tenant and Third-Party Beneficiary ended on June 30, 2019.

C. The Parties have agreed to enter into a new lease agreement for the Premises for an additional four (4) year term, with the annual rent increase of two-and-a-half percent (2.5%) per year.

AGREEMENT

Now therefore, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. **Premises.** Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord on the terms and conditions set forth herein.

2. **Term.** The term of this Lease shall commence on July 1, 2020 ("Lease Commencement Date"), and end on June 30, 2024, unless terminated earlier as set forth herein.

3. **Rent.** The annual rent for the first year of the term (July 1, 2020 through June 30, 2021) shall be $31,052.08. The annual rent shall increase at the beginning of each fiscal year ("FY") thereafter, effective July 1, by an amount equal to two-and-a-half percent (2.5%) of the prior year's rent ($31,828.38 for FY 2021-2022, $32,624.09 for FY 2022-2023, and $33,439.69 for FY 2023-2024). In each fiscal year, the annual rent shall be due by August 1. Per the Joint Powers Authority agreement between the Landlord and the Third-Party Beneficiary, the lease payment will be made from Tenant direct to the Third-Party Beneficiary, unless otherwise notified by the Landlord in writing.

4. **Use.** The Premises are to be used for storage and maintenance of a paramedic vehicle and for related storage, office use and personnel housing. Landlord covenants that so long as Tenant pays the rent and performs the covenants hereof,

Tenant shall peaceably and quietly have, hold, and enjoy the Premises subject to the provisions of this Lease.

5. **Termination.** Landlord, Tenant or Third-Party Beneficiary may terminate this Lease prior to expiration of the term by written notice to the other party 180 days in advance of the termination date. Upon the expiration or earlier termination of the Lease as provided herein, Tenant shall vacate and remove all personal property from the Premises and return possession of the Premises to Landlord in the condition existing on the Lease Commencement Date, reasonable wear and tear excepted.

6. **Maintenance.** Tenant shall take good care of the Premises and shall surrender the Premises at the termination of this Lease in as good condition as the beginning of the term, excepting reasonable wear and tear, or other cause not due to misuse or neglect by the Tenant or its employees. Tenant shall use the Premises in conformance with all applicable laws, orders, and regulations.

7. **Repair.** Landlord shall make all necessary repairs to the Premises at Landlord's sole expense except for repairs made necessary by misuse or neglect by Tenant or Tenant's employees.

8. **Alterations.** Tenant shall not make any alterations, additions, or improvements in, to, or about the Premises, without first obtaining Landlord's written consent, which consent shall not be unreasonably withheld or delayed.

9. **Assignment or Subletting.** Tenant shall not assign or sublet this Lease, in whole or in part, without Landlord's prior written consent, which consent shall not be unreasonably withheld or delayed.

10. **Utilities.** Landlord shall furnish all utilities to the Premises at Landlord's sole expense except Tenant's telephone service, which shall be Tenant's sole responsibility.

11. **Damage or Destruction.** If the Premises are damaged by fire or any other cause to such an extent that the Premises are no longer usable for the purposes for which it was leased, Tenant may give Landlord a written notice of election to terminate the Lease, and termination of the Lease shall be effective immediately upon giving such notice.

12. **Condemnation.** If the Premises or any part thereof or any estate therein, or any other part of the building materially affecting Tenant's use of the Premises, shall be taken by eminent domain, this Lease shall terminate on the date when title vests pursuant to such taking.

13. **Waiver.** The failure of either party to insist on strict performance of a covenant or condition or to exercise any option contained in this Lease, shall not be construed as a waiver of such covenant, condition, or option in any other instance.

14. **Indemnification, Hold Harmless, and Duty to Defend.** Tenant shall defend, indemnify, and hold Landlord, its officials, officers, employees, volunteers and agents serving as independent contractors in the role of officials (collectively "Indemnitees") free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any negligent or reckless acts or omissions or willful misconduct of Tenant, its employees, or its agents in connection with Tenant's use of the Premises, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses, except for such loss or damage arising from the negligence or willful misconduct of any Indemnitees. With respect to its duty to defend pursuant to this Section, Tenant shall defend Indemnitees at Tenant's own cost, expense and risk, and shall pay and satisfy any judgment, award, or decree that may be rendered against Indemnitees, except to the extent such judgment, award, or decree is based upon the negligence or willful misconduct of any Indemnitees. Tenant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Tenant, Landlord, its directors, officials, officers, employees, agents or volunteers. All duties of Tenant under this Section shall survive termination of this Agreement.

15. **Insurance.** Tenant shall procure and maintain for the duration of this Lease insurance against claims for injuries to person or damage to property which may arise from or in connection with Tenants' activities on the Premises. Specifically, Tenant shall maintain the following minimum scope and limits of insurance:

A. Commercial General Liability coverage with minimum limits of $1,000,000 per occurrence for bodily injury, personal injury, products and completed operations, and property damage. If Commercial General Liability or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

B. Automobile Liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage.

16. **Entire Agreement; Severability.** This Lease shall constitute the entire agreement between the parties with respect to the Premises, and may be modified only by a duly authorized writing signed by both Parties. If any provision of this Lease, or portion thereof, is determined to be illegal, invalid, or unenforceable, the remaining provisions of the Lease shall remain in full force and effect.

17. **Notice.** Notices by the Parties to the other Parties shall be in writing and shall be deemed to have been duly given only if delivered personally or sent by registered or certified mail in a post-paid envelope addressed, if to Landlord, to 31 Sir Francis Drake Boulevard, Ross, California; if to Tenant, to P.O. Box 518, Woodacre,

California; if to Third Party Beneficiary, to 777 San Anselmo Ave., San Anselmo, California.

18. **Attorney Fees.** In any action or proceeding by any of the parties to enforce this Lease or any provision of this Lease, the prevailing party shall be entitled to recover reasonable attorney's fees and all other costs incurred.

19. **Successors and Assigns.** The provisions of this Lease shall apply to and bind the heirs, successors and assigns of the parties.

20. **Compliance with Applicable Law.** Tenant, at its expense, shall comply with all statutes, ordinances and governmental rules and regulations applicable to Tenant and/or the Premises.

20. **Governing Law and Venue.** This Lease shall be governed by California law and venue shall be in the Superior Court in the County of Marin, and no other place.

21. **Headings.** The titles or heading to sections in this Lease shall have no effect on interpretation of its provisions.

22. **Authorization.** Each individual signing below warrants that he or she is authorized to do so by the party that he or she represents, and that this Lease is legally binding on that party.

The Parties have executed this Lease as witnessed by their signatures below.

LANDLORD:	TENANT:
Town of Ross	Ross Valley Paramedic Authority
s/ Joe Chinn	s/ Bruce Corbet
Joe Chinn Town Manager	Bruce Corbet Chairman
Name/Title	Name/Title
Date: 2/9/21	Date: 12-3-2020

THIRD PARTY BENEFICIARY

Ross Valley Fire Department

s/ _____

Richard Shortall, President
Name/Title

Date: 10/23/2020