COROLLA FIRE & RESCUE SQUAD, INC.



STRATEGIC PLAN

2022 – 2027…

Acknowledgements

This document represents the third edition of a Corolla Fire and Rescue (Corolla Fire) Strategic Plan. Our first Strategic Plan (Plan) was about as basic as possible and, although valuable, reflected a simplified approach to the task. The second edition reflected considerably more time and effort and drew upon the knowledge and perspectives of a dedicated group of volunteer 'team' members.

We began the second edition plan early in calendar year 2016. Throughout the process, I asked the team members to provide their views on several topics. After acquainting them with an overview of the process, I primarily used a series of questionnaires and worksheets to gain insight into their views on each component of the plan. Local demographics were examined from many perspectives, including research provided through Currituck County government.

If a Strategic Plan is developed properly, the word ***strategic*** should be emphasized. Strategic means "relating to the identification of long-term or overall aims and interests and the means of achieving them."[1] If correct, they do not change dramatically within the context of a few years. Specific Goals within each Strategic Objective, however, should be updated as each is either achieved or in need of amendment. This document, therefore, continues the approaches of the second edition. Demographics are much more available now and all related projections and assumptions were developed based on current projections.

Finally, I must recognize the Corolla Fire and Rescue Fire Chief and the current Corolla Fire Board of Directors for their reviews, suggestions and editing assistance. I thank each of them for their time and insights in finalizing the 2022-2027 Strategic Plan.

Robert (Bob) Wemyss

[1] Merriam-Webster.com

COROLLA FIRE AND RESCUE SQUAD, INC.
STRATEGIC PLAN
2022-2027…

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Introduction

This Corolla Fire and Rescue Squad Strategic Plan is a comprehensive study of the history, growth and projected future need for fire services and emergency assistance within the Corolla, North Carolina community.

This plan contains a history of the Corolla Fire and Rescue Squad, Inc., which, first and foremost, is an all-volunteer organization. The data included reflects the logarithmic growth of fire service response needs over the history of the organization, including the 2018 addition of professional personnel dedicated to Corolla's Service District.

Based on the analyses of the data review and environmental assessments, goals and objectives have been created to provide strategic direction to meet the forecasted future fire and emergency response needs of the Corolla community. These needs cover, but are not limited to, a broad spectrum of concerns ranging from aging structures; equipment types, including numbers and replacement; and manpower requirements.

The results of this in-depth study are defined and presented herein for use in identifying and developing the solutions required to support the needs of the expanding Corolla community.

Richard Shortway
Fire Chief

Al Marzetti
CFRS President

II. MISSION, VISION and CORE VALUES

MISSION STATEMENT:

The mission of Corolla Fire and Rescue Squad is to protect the lives and properties of the citizens and visitors of the Currituck County Outer Banks from fire, fire-related emergencies, injury and life safety emergencies, including risks identification and mitigation, and the perils of any natural or man-made disasters we may encounter.

VISION STATEMENT:

Our vision is to provide the best possible fire protection services through constant training and skills development of our volunteer members, and seemless interaction with our professional personnel, ensuring the availability of quality, well maintained vehicles and equipment, and effective internal operations and practices in recognition of the continued growth and evolving needs of the communities we serve to include education and risks identification and prevention.

CORE VALUES:

Commitment to the Community

Dedicated Volunteers

Focus on Training & Immediate Objectives

Teamwork

Honesty and Integrity

Cooperative Support of One Another

III. EXECUTIVE SUMMARY OF CORE STRATEGIES AND OBJECTIVES

The following Chapters will present a review of our previous Strategic Plan and significant events during those years. The 2017 - 2022 Strategic Plan detailed three (3) Objectives supported by several specific Goals.

The first Objective was to "Ensure the availability of trained and capable fire and fire suppression staffing to effectively deliver services within areas served by CFR." We believe that objective was fully achieved. Career firefighters at both of our stations for the last four (4) years, manning CFR's first-out engines, has greatly elevated the level of fire suppression services, both in terms of response times and the quality of the response. In addition, and largely through the efforts of Chief Richard Shortway, the volunteer force is on the way to being rejuvenated with a significant number of new members

Due to our member age profile, we were concerned that the number of NCFSA certified volunteer members would decrease to potentially dangerous levels as members retired from active service. That concern proved to be correct; our volunteer roster has, in fact, declined by about 25%. But it has now stabilized, and we have enjoyed an influx of younger members in the same time period.

Coupled with the addition of professional firefighters, we are better able than ever before to both protect the Corolla community and provide viable mutual aid assistance to neighboring fire departments. The "Look Back" is presented in much more detail in **Chapter Four** of this document.

Next, we re-examined the environment within which we operate, and the demographics and other data used to develop meaningful forecasts supporting our new Objectives and Goals. This is key to be able to plan for changes in this environment that may require incremental resources and/or a different approach.

In the context of this strategic plan, the external environmental assessments address issues that are outside our ability to control. Traditionally, the external environment is addressed in terms of four major categories: political, economic, social (community demographics), and technological. Changes in weather patterns also need to be considered. In recent years, a major environmental trend shows both an increase in the number of tourists, and an increase in full and/or part-time residents. This has resulted in an increase in call volume and many of these calls are now spread over an expanding “shoulder” season.

Chapter Five details our evaluations of both categories, and their implications for future operations. Chapter Five will also describe the reassessment of the demographics and their effects on our district and on Corolla Fire.

Chapter Six presents the overall Assumptions used in the creation of this document. Two new assumption were added dealing with both the recent increases in visitor populations and the expanded duration of their stays – the ‘extended shoulder season.’ Both have implications, not only with respect to fire emergencies, but non-fire incidents as well.

This Strategic Planning process has identified or reinforced significant core concerns to Corolla Fire and Rescue. Within this document, we have developed four

(4) Objectives and specific Goals within each to address those issues. The four Objectives and supporting Goals are discussed in **Chapter Seven**. Achieving the stated objectives and goals, both in the short term and the longer term, will permit us to continue to fulfill our mission and achieve our corporate vision.

1. Aging Equipment.

Corolla Fire will celebrate its Fortieth (40) birthday during the next five-year planning period. Of note, we still have, and use, apparatus that nearly mirrors that age!

Venerable ole' Engine 64 is now thirty-five (35) years old. It is as spry as ever and an exception in so far as "antique" equipment is concerned. But it is still 35 years old! Platform 61 has now surpassed thirty (30) years and has been completely rebuilt once. Even our newest "First-out" engine is a 2007 Pierce pumper.

It is becoming critical that we formally address the systematic replacement of our aging fleet, as our apparatus is now frequently out-of-service for repairs and newer technology enhances the effectiveness of senior firefighters . **Objective 1** addresses this issue and will define specific Goals to tackle the issue.

2. Personnel.

CFR currently has thirty-four (34) NCSFA-certified volunteer firefighters on its roster.[2] Many of our certified members are retired senior residents who graciously volunteer their time and energies to help protect their communities from hazards of fire,

[2] Data as of November 1, 2021

natural disasters, injuries and other life safety emergencies. Newer members have tended to reflect 'working age' volunteers. In total, this group largely mirrors the demographics of the Corolla resident base, which is predominantly a retirement-aged populous. But it also includes a number of younger people who work long hours during the "Season" and often travel for extended periods during the winter. While many of these younger residents have shown a willingness to volunteer, their availability to respond to calls is limited due to long work hours and travel.

At least in the near term, it appears that the most likely pool of volunteers will continue to be retired senior citizens and newer, younger residents in the district. Recruiting individuals who work in Corolla but live outside of Corolla has been difficult. We have also found that a smaller number of the newly retired residents appear less interested in joining the fire service than was the case in the prior decade.

Our challenge will be to improve and adapt processes to thoroughly research the availability of willing, physically capable, resident volunteer member candidates within each of the Corolla developments. **Objective 2** addresses this issue and will define specific Goals to tackle the issue.

Objective 2 will also address ways to make training of volunteers more effective in order to prepare volunteers to respond to fire and rescue events in a safe and productive manner. In brief, this includes (1) structuring group volunteer training sessions with a specific theme or purpose, (2) developing and publishing an overall training plan with stated goals, possibly along the lines of the Firefighter I & II programs, and (3) continuing to encourage training with career firefighters. A focused training program should have as its objective 'to adequately prepare volunteers to effectively respond to a fire scene, not just to ensure everyone satisfies the annual "36 hours of training" requirement for the year.'

3. Structures and Facilities.

Objective 3 addresses the adequacy of existing structures (fire stations) and the desirability for additional facilities to meet the current and future needs of volunteer members and the professional firefighters assigned to the Corolla district. An obvious near-term action is to complete the planned Firefighter Training Facility to be located behind the Pine Island station. However, our aging structures must also be addressed. Objective 3 details specific goals in both arenas.

4. Community Risk Identification and Prevention.

Finally, **Objective 4** develops Goals to address significant and recurring community risk issues through formalized plans and programs to further educate the public and instill preventive intervention techniques. Community Risk Identification and Prevention is fast becoming a critical element and now weighs heavily in our ISO assessments.

Education efforts designed to mitigate the frequency of adverse fire and rescue events can help stem the rate of increase of call volume and may reduce the burden on our firefighting resources as well as reduce the strains and stresses on our membership. In this regard, CFRS relies primarily on our volunteers who are active in CFR Cares, Inc., which develops educational programs, community outreach and other resources to address both fire safety and personnel safety. Additionally, continuing to educate owners and rental management companies on the need to consistently service fire alarm systems is a key to reducing the high number of “false alarms”. Reducing avoidable fire calls obviously reduces the stresses on personnel and fire apparatus.

IV. A LOOK BACK

A REVIEW AND ANALYSES OF PRIOR GOALS:

The 2017 - 2022 Strategic Plan detailed three (3) Objectives supported by several specific Goals. It is important that we examine those Strategic Objectives and access our success in achieving each.

2017-2022 Objective #1: Member and Fire Personnel:

Ensure the availability of trained and capable fire and fire suppression staffing to effectively deliver services within areas served by CFR.

GOAL #1:

- **Develop processes to thoroughly research the availability of willing, physically capable, resident volunteer member candidates within each of the Corolla communities.**

Largely through the efforts of Chief Shortway, Corolla Fire has benefitted from many new, younger volunteer members. At the time of publication, the initial Strategic Plan reflected an average member age of 65. Of the 44 volunteer members in 2016, 36 (i.e., 80%) were over 60 years of age. Of equal concern, 16 members (i.e. 36%) had already reached 70 years of age and, of those, 2 were 80 years old.

At the time of this writing in 2021, our average member age is now 58. This represents a decrease of 11% over the five (5) year period since 2016. There are two primary reasons for the decrease.

1. Our volunteer roster has declined to 34 members as of this writing. The underpinning reason for the decrease is the loss, or retirement of many of our 'older' members. No fewer than 27 of the former NCSFA certified volunteer members in 2016 are on our roster in 2021.

2. On the flip side, we have seen a net new member increase of 17 volunteers over the same period. Most of our new members are younger adults, and most are new to the Corolla community.

   The combined effect is a relatively stable, but smaller volunteer membership with an average age of 58 years. We anticipate this "younger age" trend will continue into coming years.

GOAL #2:

- **Thoroughly analyze and document the need for paid firefighters and research alternatives for obtaining funding to support cost and potential means to attract and retain willing, physically capable, paid professional firefighters to augment the CFR volunteers.**

Goal #2 has been completely accomplished. In the Spring of 2018, having successfully garnered community support and the approval of the Currituck County Board of Commissioners, we 'effectively' became a "combination", volunteer/professional, fire department with the addition of thirty-nine (39) full-time paid firefighters. It is important to recognize that technically we continue to be a volunteer organization supported by career firefighters under permanent Automatic Aid agreement with Currituck County Fire & EMS.

Each station, Whalehead and Pine Island, is staffed by a full four-person fire crew (an engine company), a two-person EMS crew twenty-four hours a day – seven days a week, and a shift Captain. The county organization includes three (3) shift captains and six (6) lieutenant positions. Active volunteers continue to supplement the county staff and respond to fire incidents and rescue calls, in other apparatus including Platform 61, Tanker 62, Engines 64 & 65, Brush Trucks 61 & 62, REHAB 62 and SRV 61. Volunteers are also active in securing landing zones for air ambulances.

GOAL #3:

- **Examine the adequacy of existing structure (fire stations) to house increased numbers of personnel.**

In the years since adding the career personnel stationed at each station, Corolla Fire has made several modifications to both structures. Both facilities can now accommodate the six person crews plus a Captain at the Pine Island station. Accommodating crews of this size will need to continue throughout the next five-year planning period. Both stations continue to age, especially the Whalehead facility which was originally built in 1983 and expanded over the years since. It is therefore necessary to continue to monitor the physical plant, including the mechanical systems. Improvements would also be required if there would ever be a need to add an additional paid crew, such as a truck company, although this is not anticipated during the 2022-2027 plan period.

2017-2022 Objective #2: Facilities and Equipment Viability:

Examine and continue to monitor fire apparatus in term of needs, age and condition:

GOAL #1:

- **Our 'first-out' equipment continues to age, and maintenance costs steadily increase. Develop a replacement schedule to address the issues using repair histories for each vehicle.**

Corolla Fire continues to evaluate equipment and formalize a replacement strategy and timeline. During the year since the initial Strategic Plan, Corolla Fire did retire Engine 62, a 1997 Pierce Pumper. In 2020, it was replaced by a 2006 Pierce Pumper (Engine 66), giving CFRS an additional 10 years' service life expectancy. Corolla Fire also added an additional Brush truck, a 2006 Ford F-350 purchased from Carova Volunteer Fire Department. That vehicle was numbered Brush 61. (the original Brush 61 was renumbered to Brush 62 and located in the Pine Island station).

GOAL #2:

- **Evaluate the need for any additional equipment, including the availability of facilities to house said equipment. Also include a timeframe for any identified additions.**

The evaluation is ongoing. As our needs change so will facilities needs change. Corolla Fire has formalized a protocol to define specific equipment needs, including

associated timelines. The Chief now maintains a 'maintenance log' detailing all expenditures for each apparatus. By analyzing maintenance costs, Corolla Fire can better track recurring issues and deteriorating conditions of any vehicle. This accumulated data will permit the development of a 'replacement schedule', as well as the need, if any, for additional equipment. The initial "Equipment Schedule" should be completed before the end of calendar year 2021.

GOAL #3:

- **Work with county officials, including the County Manager, the Fire & EMS Advisory Board (F.E.A.B.), and others to improve the process for prioritizing replacement of apparatus throughout all the VFD's in the County and the associated budgeting requirements.**

County wide, Currituck County is currently only able to fund a new engine/pumper approximately once every two (2) years. With six (6) volunteer departments, some with multiple stations, and 80% of the apparatus in the county over 20 years old, it is obvious that the level of funds reserved for fire apparatus replacement is grossly inadequate.

In March of 2021, a new proposal was discussed at a Fire EMS Advisory Board meeting (FEAB). The proposed plan would provide a county wide fire tax to be used to fund apparatus purchases. The proposal, as it stands at this writing, would establish a 1.29 cents tax per $100 of property valuation, generating an estimated $900,000 annually. Such funding would permit as many as two (2) pumper engines annually to be replaced. The earliest this fire tax would be imposed would be for the 2022-23 fiscal year.

Objective #3: Community Risk Identification and Prevention

Reduce the significant and recurring community risk issues through formalized plans and programs to further educate the public and instill preventive intervention techniques.

GOAL #1:

- **"Formalize fire and life safety programs and materials to address specific issues to the Corolla community…"**

CFR Cares was established in response to multiple deaths of pedestrians and bicyclists along Route 12. It's first initiative was to provide education and safety equipment to international students working in Corolla during the season. These "F1b visa" workers were typically unfamiliar with the inherent traffic risks here. CFR Cares personnel conduct 'safety orientation' sessions at the beginning of each tourist season and coordinate the distribution of safety and traffic awareness materials, reflective clothing, bicycle lights and helmets throughout the season as new F1b visa workers arrive.

Beginning in 2019, and through the leadership of CFR Cares, Inc., Corolla Fire was awarded a two (2) mile stretch of Route 12 to be designated as our "Adopt-A-Highway" section. Two (2) signs were erected in memory of pedestrians who lost their lives walking along NC 12. Roadside liter pickup is required four times per year. Volunteers from Corolla Fire, CFR Cares, county paid crews and international students will participate in these efforts.

Pool Safety initiatives, including print materials and educational efforts, were introduced by CFR Cares to counter annual pool drownings by guests and visitors to the area. Placards were printed and, in cooperation with Harris Teeter, placed on grocery carts where they will regularly be seen by shoppers. These efforts will continue in coming years. Additionally, CFR Cares purchased 'Rip Current Safety' signs and distributed free of charge to Homeowner Associations for installation at dune crossovers to the beach.

CFR Cares develops and runs a Bike/Ped Safety Rodeo for the students of the WEVS Charter School at Corolla Park each spring.

We now maintain five (5) beach wheelchairs for easier access to beaches by disabled persons.

Corolla Fire partners with the American Red Cross in hosting semi-annual blood drives. During the COVID 19 pandemic, we spearheaded a project permitting 'locals' to make face masks which were provided free of charge to anyone in need.

Reflective address signs are sold at cost to property owners. These signs enhance accurate responses by Firefighters, EMS personnel, and Sheriff deputies.

The Fire Chief and Fire Officers continue to emphasize to Homeowner Associations and Rental Management Companies the need to replace obsolete fire alarms and to change fire alarm batteries annually. CFR also pushed the County to pass a "False Alarm" ordinance that would fine owners who had multiple false alarms within a specified period, as an incentive to maintain fire alarms and fire alarm systems.

Implementation of this ordinance by the County has faltered and, during the next Strategic Plan period, CFR will continue to push for a robust implementation system for this ordinance. Roughly 60% of the fire calls are dispatched as “Inv. Report of Smoke or Alarms” which predominantly turn out to be false alarms.

G**OAL #2:**

- **Formalize programs to communicate issues to the Corolla community through presentations and discussions with various HOA’s, employers and other public gatherings of both residents and visitors.**

Corolla Fire personnel, led by the Fire Chief, are available at annual HOA meetings held at the Fire Stations. Owners are briefed on various ‘fire safety’ issues. These meetings also provide opportunities for property owners to ask questions about what they can do to reduce fire hazards at their homes.

As a result of precautions resulting from the COVID 19 restrictions, the annual meetings were suspended in 2020 and we are in the process of reestablishing normal schedules. It should be noted that the North Carolina Legislature recently passed a law allowing remote electronic homeowner meetings, so CFR will need to figure out new ways to reach homeowners groups. CFR has recently updated its website and created a Facebook page and a YouTube channel, so it will look to determine the optimal way to use these media to communicate with homeowners.

GOAL #3:

- **Formalize programs to communicate issues through presentations and discussions with the students and teachers at Corolla's Water's Edge Village School (WEVS)**.

Programs such as use of fire extinguishers, smoke detectors, fire safety drills, etc. are provided to the Corolla school upon request. As with the HOA meetings however, and as a result of precautions resulting from the COVID 19 restrictions, these sessions were suspended in 2020 but were reestablished in the Spring of 2021.

SIGNIFICANT EVENTS OF THE LAST FIVE YEARS:

The year 2017 saw several significant events within the department. The efforts to secure a full-time paid staff continued in earnest. The results of the mail polling of Corolla property owners overwhelmingly supported the proposal. Over 90% of responses were in favor of a professional contingent at both stations.

Corolla Fire also welcomed a new Fire Chief. After many dedicated years of service, Chief Richard Galganski elected to retire. The Corolla Fire Board announced that Richard Shortway would become the new Fire Chief, effective in July 2017.

Currituck County, in conjunction with other volunteer companies in the County, established a new "Tanker Task Force". This provided protocols for available tankers from one district to assist other districts when the needs dictate. Tanker 62 was included in the resource fleet and has been called upon several times to assist mainland stations.

In 2017, Corolla Fire responded to 406 fire calls, from the Dare County line to the beach strands. Our member roster further declined, and by the end of 2017, Corolla Fire had 30 certified volunteer members.

2018 began with a full and comprehensive inspection by the North Carolina Department of Insurance, colloquially known as an ISO inspection. The North Carolina Response Rating System (NCRRS) inspect fire districts for proper staffing levels, sufficient equipment, proper maintenance practices, communications capabilities, availability of adequate water sources and community education and risk reduction programs.

The NCRRS rating system rates each department using a scoring range from one (1) - the highest rating, to ten (10) - indicating a department is not recognized as a certified department by the state.

Within the context of the 2018 inspection, 105.5 total points were available. Corolla Fire received a total score of 58.44, which resulted in a rating of Five (5), an improvement from the former Six (6) rating previously achieved. It should be noted that the score of 58.44 was only 1.56 points from a rating of Four (4), a level achieved by fewer than 80 departments in the state.[3]

Six (6) total-bay air ventilation units were installed at the Whalehead station to provide much needed ventilation and exhaust gases removal. These units continuously detect gas levels and start automatically.

Corolla Fire achieved a milestone in May of 2018. Having successfully garnered community support and the approval of the Currituck County Board of Commissioners,

[3] From the NCDOI website, July 2019

we ‘effectively’ became a “combination”, volunteer/professional, fire department with the addition of thirty-nine (39) full-time paid firefighters. It is important to recognize that technically we continue to be a volunteer organization supported by a professional firefighting crew under a permanent Automatic Aid agreement with Currituck Fire and EMS. Each station, Whalehead and Pine Island, is staffed by a full four-person fire crew (an engine company) and two-person EMS crew twenty-four hours a day – seven days a week. The county organization includes three (3) shift captains and six (6) lieutenant positions. Active volunteers continue to supplement the county staff and respond to fire incidents, in other apparatus including Platform 61, Tanker 62, Engines 64 & 65, Brush Trucks 61 & 62, REHAB 62 and SRV 61.

In 2018, Corolla Fire responded to 331 fire calls, from the Dare County line to the beach strands. Our volunteer member roster further declined and at the end of 2018, Corolla Fire had 28 certified volunteer members, but we effectively added 39 full time paid personnel.

Beginning in 2019, and through the leadership of CFR Cares, Inc., Corolla Fire was awarded a two (2) mile stretch of Route 12 to be designated as our “Adopt-A-Highway” section. Two (2) signs were erected in memory of pedestrians who lost their lives walking along NC 12. Roadside liter pickup is required four times per year. Volunteers from Corolla Fire, CFR Cares, county paid crews and international students will participate in these efforts.

Pool Safety initiatives, including print materials and educational efforts, were introduced by CFR Cares to counter annual pool drownings by guests and visitors to the area. These efforts will continue in coming years.

Finally, Corolla Fire, through the leadership of Chief Shortway, proposed the concept of a dedicated Training Center complex to the County Board of Commissioners. The Training Center would be located on county owned land behind the Pine Island Station and would provide firsthand structural fire training, to our professional firefighters, and volunteers. This effort will become paramount during the following year(s), and it is hoped that this will both aid in the recruitment of volunteers and reduce overtime for career firefighters in addition to elevating the firefighting capability of all firefighters in our fire district.

In 2019, Corolla Fire responded to 319 fire calls, from the Dare County line to the beach strands. Our volunteer member roster recovered due to the efforts of members, staff and particularly Chief Shortway. At the end of 2019, Corolla Fire had 34 certified volunteer members, but more importantly – our average member age decreased from 65 in 2016 to 63.1 by the end of 2019.

In 2020, we would see the most unusual challenges yet faced. In the first quarter of 2020, we began to experience a global pandemic known as the Coronavirus or COVID - 19. The Outer Banks, like many other locations, was effectively isolated from the rest of the country. No visitors, in fact no one other than permanent residents, were permitted access to Corolla for nearly two (2) months. Forecasts of severe economic impacts were thought to be a given and the traditional vacation season thought to be a thing of the past.

But the Fire Department continued, operating with the now common place “social distancing and contact restrictions” initiated in response to COVID 19. By the end of May, travel and visitation restrictions began to ease. And, despite limits on staffing, inside access to restaurants, continued mandates on social distancing, etc., visitation and rentals rebounded and actually increased from prior years.

We acquired two (2) firefighting vehicles; Brush truck 61, a 2006 Ford F-350 (old Brush 61 was redesignated Brush 62) and Engine 66, a 2006 Pierce Enforcer. Engine 62 was retired after twenty-three (23) years of service.

Corolla Fire also upgraded our Whalehead Station based cascade system to a higher-pressure system needed to support new SCBA breathing air packs and bottles introduced by Currituck County.

In 2020, Corolla Fire responded to 413 fire calls, from the Dare County line to the beach strands. Our volunteer member roster remained relatively stable. At the end of 2020, Corolla Fire had 29 certified volunteer members, but more importantly – our average member age dramatically decreased from a high of 65 in 2016 to 58.7 by the end of 2020. This is in large part due to recruitment efforts targeting younger personnel, but also reflects the loss or retirement of a significant number of older members.[4]

Today Corolla boasts over four thousand (4,000) homes and businesses. The total structures property tax value is estimated at over three billion ($3,200,000,000) dollars, with market values considerably higher. Although the numbers of properties have grown, our year-round, permanent population is still fewer than one thousand (1,000), but pales in comparison to the in-season tourist population which can balloon our weekly totals to over sixty thousand (60,000). This “resort community” phenomenon poses many challenges for our volunteers.

[4] A complete History of Corolla Fire and Rescue Squad, Inc. can be found in Appendix __

V. A LOOK FORWARD

(a). ENVIRONMENTAL ASSESSMENTS

EXTERNAL ENVIRONMENTAL ASSESSMENTS:

In the context of this strategic plan, the external environmental assessments address issues that are outside our ability to control. Traditionally, the external environment is addressed in terms of four major categories: political, economic, social (community demographics), and technological. We will address these categories in a slightly modified approach. Data supporting the findings can be found in Appendix “C”.

POLITICAL / ECONOMIC:

The primarily political environment in our case is defined as ‘Currituck County’, and the Board of Commissioners (“BOC”). There are presently no incorporated cities or towns in Currituck County. Funding for ongoing operations of CFRS’ fire suppression responsibilities is primarily pursuant to a fire suppression contract with Currituck County. Significant support, particularly over the last two years, has come from CFR Foundation, both in terms of funding additional and replacement apparatus, equipment such as radios and CO monitors and employee salaries. This has been enabled by continuing generous support from the Corolla community and absentee property owners. The salaries and benefits of paid firefighters is funded under a fire service district tax imposed on property owners within the Poplar Branch township (basically, Corolla).

Our assumption for purposes of the strategic plan is that the County will continue to provide operational funding for fire suppression activities. Not much assistance is anticipated in the way of County-funded apparatus in the near term. Therefore, we are addressing the first two traditional categories, political and economic as a single, unified category within the strategic plan.

Corolla Fire submits its projected budget, through the Fire / EMS Chief, to the Currituck County Manager and the Board of Commissioners (BOC) on an annual basis. The budget reflects our best estimate of operating requirements for each period based, in part on prior history, and known expectations or 'exceptions' for the near term. We begin the process early in the calendar year and target March to April for completion and submission to the County. Since the County operates on a fiscal year basis -- July 1 through June 30 of the following year -- our budget cycle is similarly formatted. Typically, we submit the next successive budget (fiscal year) in our annual package, but also look forward one to three fiscal years thereafter. Changes to the budget may come out of BOC review and the BOC may determine to approve a budget on either a single year or multi-year basis.

Historically, County funding has been relatively consistent, as have Corolla Fire's annual operational requirements. Typically, these operational requirements include fuel, vehicle and station maintenance, hose replacement, equipment for the apparatus, communications equipment, and personal protective equipment for certified members. County funding for non-routine expenses, however, has been less consistent. Where County funding is insufficient for Corolla Fire's immediate needs, it can seek financial assistance from Corolla Fire and Rescue Foundation, Inc. (Foundation) for the shortfall. Foundation is funded by donations from residents, property owners, businesses and visitors to the Currituck Outer Banks. Corolla Fire also could seek grants from various national, state, and local organizations. Historically we have not placed a significant emphasis on securing grants. However, during the last half of 2021, and early 2022, we will again emphasize grants as potential financing methods.

Corolla Fire is now putting a major focus on grant applications and is currently working to secure a major FEMA grant which would provide 90% of the cost of a new aerial truck to replace Platform 61. The balance would need to come from Corolla Foundation. For this application, CFR has secured the services of a grant writer specializing in obtaining grants for emergency response organizations to frame our case in the application but has had to pull together all of the supporting data and provide the key arguments based on the Corolla environment. Additionally, active roster members have been completing the FEMA courses necessary to be considered a fully NIMS-compliant organization. The grant writer has advised us that there is a very good chance that our grant application will be successful.

The NC State Firefighters' Association ("NCSFA") also provides financial resources, but these funds may only benefit volunteers on Corolla Fire's NCSFA certified roster and only in certain enumerated circumstances. The requests for use of these funds are limited and subject to a case-by-case approval by the NCSFA.

COMMUNITY/SOCIAL ASSESSMENTS:

The most critical factor within this category centers on the demographics of CFR and the Corolla community. Corolla is a relatively unique unincorporated community covering approximately six square miles on a 13-mile strip of a remote barrier island. Corolla is relatively affluent, has a substantial number of property owners who are non-resident investors, has high-cost housing due to its status as a popular vacation destination and a cost of living markedly higher than the rest of the State. Due to the small permanent population, there are minimal services available, particularly health care. Corolla demographics are markedly different from the mainland portion of Currituck County.

Based on County tax records, properties in Corolla have a total value in excess of three billion dollars ($3,200,000,000). This is predominantly comprised of single-family homes, a few of which have 20-plus bedrooms. Current estimates put the number of residences at about forty-one hundred (4,100). Commercial businesses number about one hundred and seventy-five (175).

More importantly, Corolla has fewer than one thousand (1,000) full-time and part-time residences, the majority of whom are retired senior citizens. However, the population swells between May and October, with up to sixty thousand (60,000) or more vacationers during the High Season of July and August. These demographics present profound and unique challenges to CFR.

Because Corolla is a resort community, businesses find themselves in a position of having to earn twelve months' worth of income in as few as three to four "summer" months of activity. After the "Season", businesses normally close operations because it is not economically viable to remain open. With a small resident population and only sporadic visitors during the off-season, there is not enough business to break even, let alone earn a profit.

Staffing Corolla businesses is also becoming extremely difficult. Corolla alone does not have enough 'labor age' residents to support the existing commercial businesses. In the past, this labor gap was filled by international students, who obtained VISAs to work for the summer. Lingering COVID-19 pandemic restrictions have drastically cut this "foreign student" labor pool and it is unclear when these restrictions will lift. This appears to be the greatest limiter on commercial development as the burgeoning tourism business has increased Currituck County Occupancy Tax revenues over the last year from $16 million to $19 million as housing construction has exploded and tourists appear to be packing in even more people into existing housing.

OTHER ISSUES:

Though weather extremes, specifically nor'easters, hurricanes or tropical storms, have a definite impact on our area, they are not specifically addressed in this strategic plan, as the weather on the Outer Banks has always been the weather. Make no mistake, Corolla Fire has prepared for such natural events and detailed guidelines and procedures have been developed to deal with major storm events. As such, they are identified and considered, but the focus is on the impact of economic trends regarding continuing development and other man-made elements.

Prior to 1985, the Currituck Outer Banks was a quiet, remote, and very sparsely populated area. The Historic Corolla Village, the Lighthouse, the Whalehead Club in Historic Corolla Ocean Sands, and a few private hunt clubs accounted for most of the structures in the area. There were no paved roads and virtually no commercial activity. The decade of the 1990s, in particular, the late 1990s, saw growth at a staggering pace as word spread about the Outer Banks. Developers abounded and residential housing was constructed at a rapid rate to keep up with demand, far outpacing the support infrastructure needed. The pace of development slowed in the 2,000's and came to a near standstill with the 2008 financial crisis.

The consequence is that most residential structures in Corolla are approaching 25 to 35 years in age. While by relative standards, this may appear to be a "newer" community, when factors such as the unforgiving environment of ocean air, salt, relentless storms, and wind are considered, the likelihood of increasing structure fires is pronounced. Many homes also have wood or vinyl siding or cedar shake, which accelerate the time it takes for a fire to turn into a full-blown conflagration.

Given frequent high wind conditions, high density of construction, a trend for larger houses, dry brush in the hot summer months, and the propensity of vacationers to be more focused on having a good time than fire safety, it is certain that large-scale fire emergencies will increase and Corolla Fire will find itself in the position of trying to save the neighborhood, not just the structure where the fire started. While a difficult task, we will work to mitigate some of the more correctable incident occurrences through the efforts of the CFR Cares organization.

INTERNAL ENVIRONMENTAL ASSESSMENTS:

As noted earlier, CFR currently has about 34 NCSFA-certified volunteer firefighters on its roster. Many of our certified members are retired senior residents who graciously volunteer their time and energies to help protect their communities from hazards of fire, natural disasters, injuries, and other life safety emergencies. Newer members have tended to reflect 'working age' volunteers. In total, this group largely mirrors the demographics of the Corolla resident base, which is largely a retirement-aged populous.

While there are number of younger permanent residents, it has been problematic recruiting from this base as they typically tend to work extremely long hours during the summer months and often travel during the winter months. Chief Shortway has been successful in recruiting younger residents in the last couple of years, although their availability for fire calls has been an issue due to their work schedules. At least in the near term, it appears that the most likely pool of volunteers will continue to be retired senior citizens and newer, younger residents in the district.

The chart below illustrates the relative ages of our volunteer members in 2016. As the chart shows, the average age in 2016 was over 65. Of the 44 volunteer

members, **36** (i.e., **80%**) were over **60 years of age**, **16** members (i.e., **36%**) had already reached **70 years of age** and, of those, 2 were **80 years old**. The typical age of our "new members" was **63 years of age** at the time they became members.

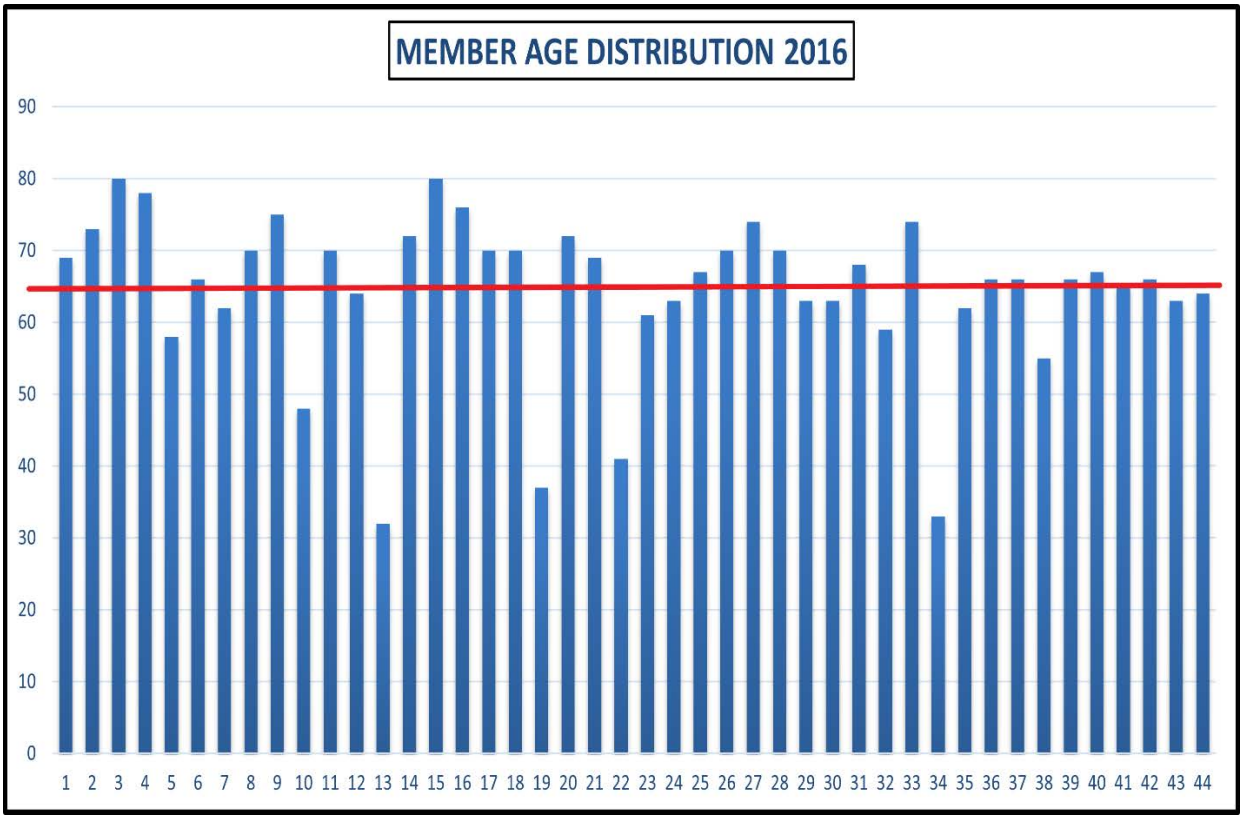


Chart 1

The linear prospects of that profile were deeply concerning. We concluded the most senior membership would soon not be able to function at the levels necessary to maintain effective fire protection and suppression services on behalf of Corolla Fire. Our Strategic Plan set forth Objectives and Goals intended to address those issues.

A similar chart illustrated why this “senior volunteer” structure would no longer be viable in the future. As the chart showed, call volume continued to increase and there were no obvious factors that would cause call volume trend not to continue to increase. Assuming the same rate of increase in call volume as experienced from 2011 through 2015 (i.e., 32%) over the next 5 years, we projected Corolla Fire would face well over 500 calls by 2022. At the same time, CFR’s certified membership had remained relatively constant, and the average age continued to creep higher. It appeared inevitable that, at some point, the available human resources become overwhelmed.

Inevitability, however, can be managed - at least to some degree. It was inevitable that our oldest members would discontinue active volunteer service at some point. In fact, no fewer than twenty-seven (27) of members on the 2016 roster are absent from our current (2021) roster of NCSFA Certified members. In anticipation of that eventuality, Corolla Fire, and Chief Shortway, have actively recruited new volunteers. The current roster reflects the net addition of seventeen (17) new member. As the chart below illustrates, thirteen (13) of those new member are younger than 60 years of age, and of those, nine (9) are younger than the age of forty (40). In just five years, our average member age has dropped to under fifty-eight (58). The proverbial silver lining...

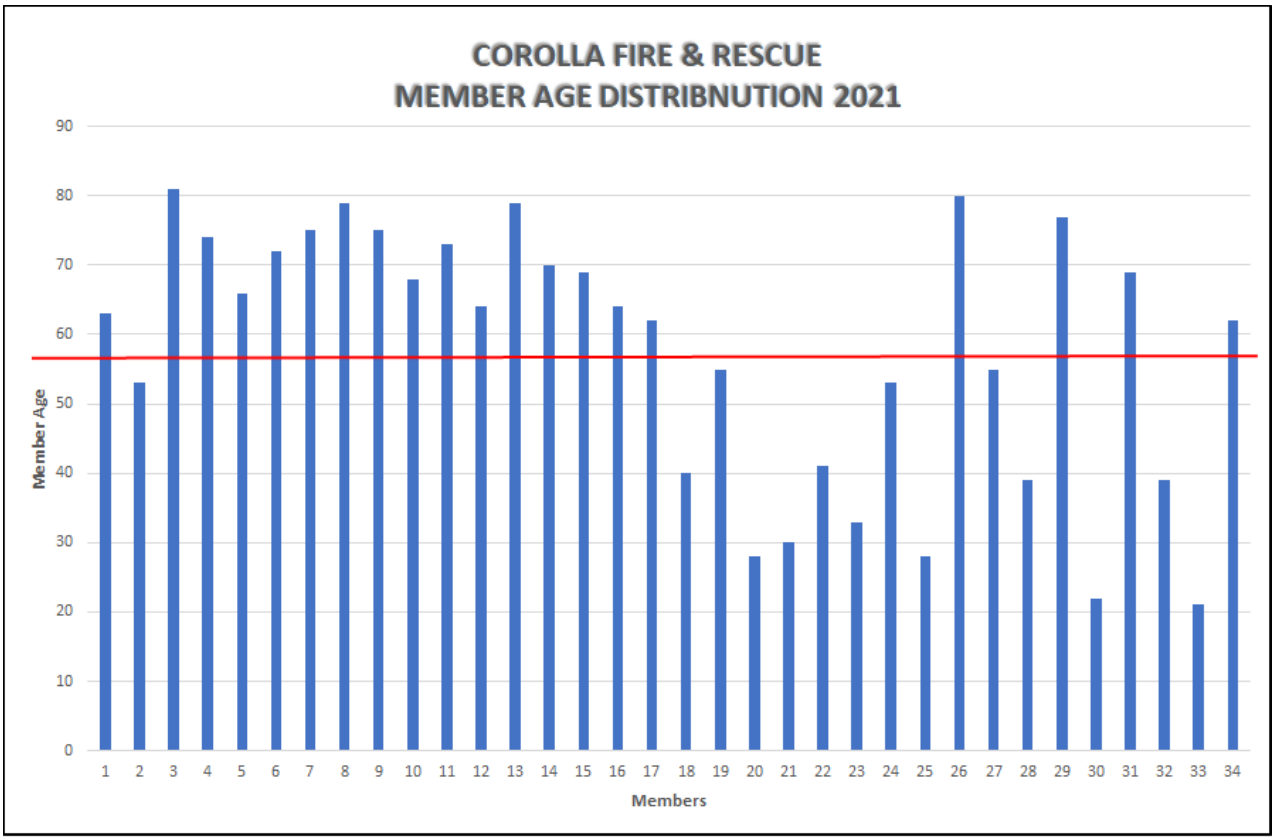


Chart 2

Since its inception, Corolla Fire's annual call volume has increased at an exponential rate. It is interesting, however, that the level of calls has stalled over the last five (5) years. Growth in call volume and the typical spread of fire calls over a calendar year are depicted in graphs below.

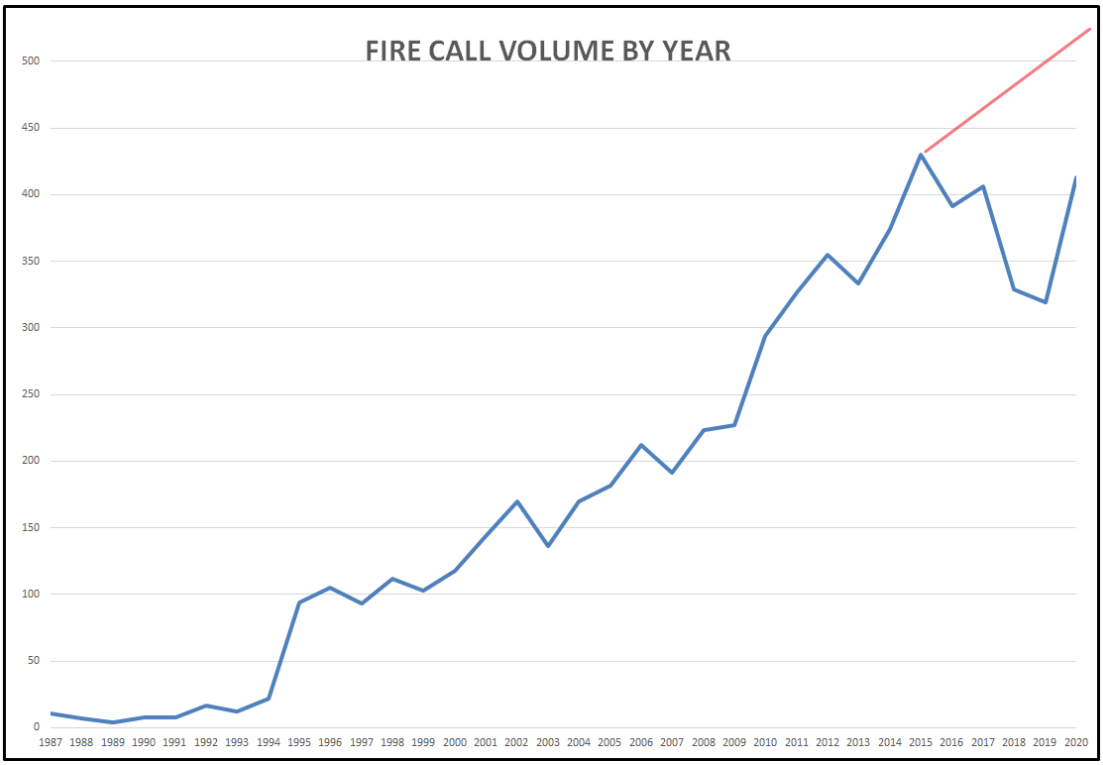


Chart 3

The red line illustrates the call volume projection developed from data through 2016. Although a linear projection, it none the less reflected our expectation and fears. But, real life, as we know, is not always linear.

Actual call numbers showed a stepped decline for the years 2016 - 2019. Those years show a significant reduction in “avoidable calls”, such as smoke alarm calls, pedestrian accidents, cooking related calls, etc. Those years also reflect a determined effort by Corolla Fire leadership and CFR Cares efforts to educate owners, renters, and seasonal students of potential hazards and fire related issues. During those years we took advantage of opportunities at annual HOA meetings, to inform owners about smoke alarm maintenance/replacement guidelines. Rental companies were likewise advised of maintenance/replacement needs. As a result, false alarm calls were dramatically reduced.

Safety and traffic awareness materials, reflective clothing, bicycle lights and helmets were provided to visiting international students at the beginning of each tourist season. CFR Cares personnel conducted ‘safety orientation’ sessions and coordinated the dissemination of these materials. As a result, pedestrian and vehicular accident calls were dramatically reduced as well.

A look at 2020, and continuing into 2021, reinforces this correlation. Because of the COVID 19 pandemic in 2020, HOA meetings were and continue to be suspended. The opportunities for face-to-face meetings with owners and renters was eliminated. A result, false alarm calls, many of which are equipment maintenance/replacement issues, have escalated and are reflected in call volumes in 2020 and thus far in 2021.

If we look again at the linear progression line, we haven’t really varied that much from our 2016 forecasted call volume. The calendar year 2021 is on track to be our busiest year yet and will come very close to the ‘trend line’ developed in 2016. That same linear projection suggests call volume will continue to rise over the succeeding five-year period.

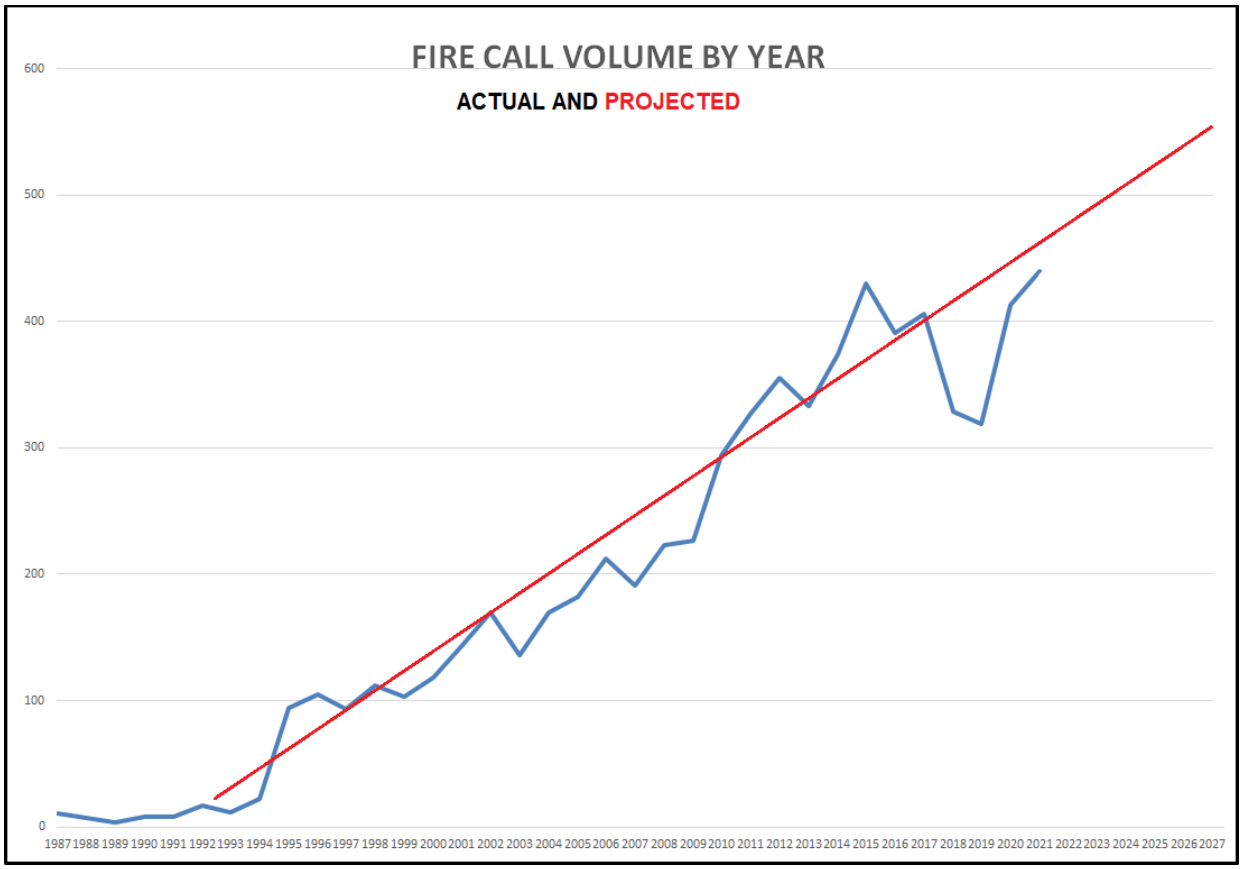


Chart 4

One dynamic that does not change significantly from year-to-year is the typical spread of fire and fire related calls over the course of any given year. As the illustration in Chart # 5 shows (page 31), call frequency generally tracks the population trend during the year. However, other factors affect call volume as Summer and Fall bring the prospect for more severe weather patterns, including thunderstorms, lightning strikes, tropical systems, periods of drought, etc. March and April bring high winds, major renovation work during the off-season often involving volatile materials, and fewer people around to notice when a fire starts -- all potentially impacting fire and fire-related activities.

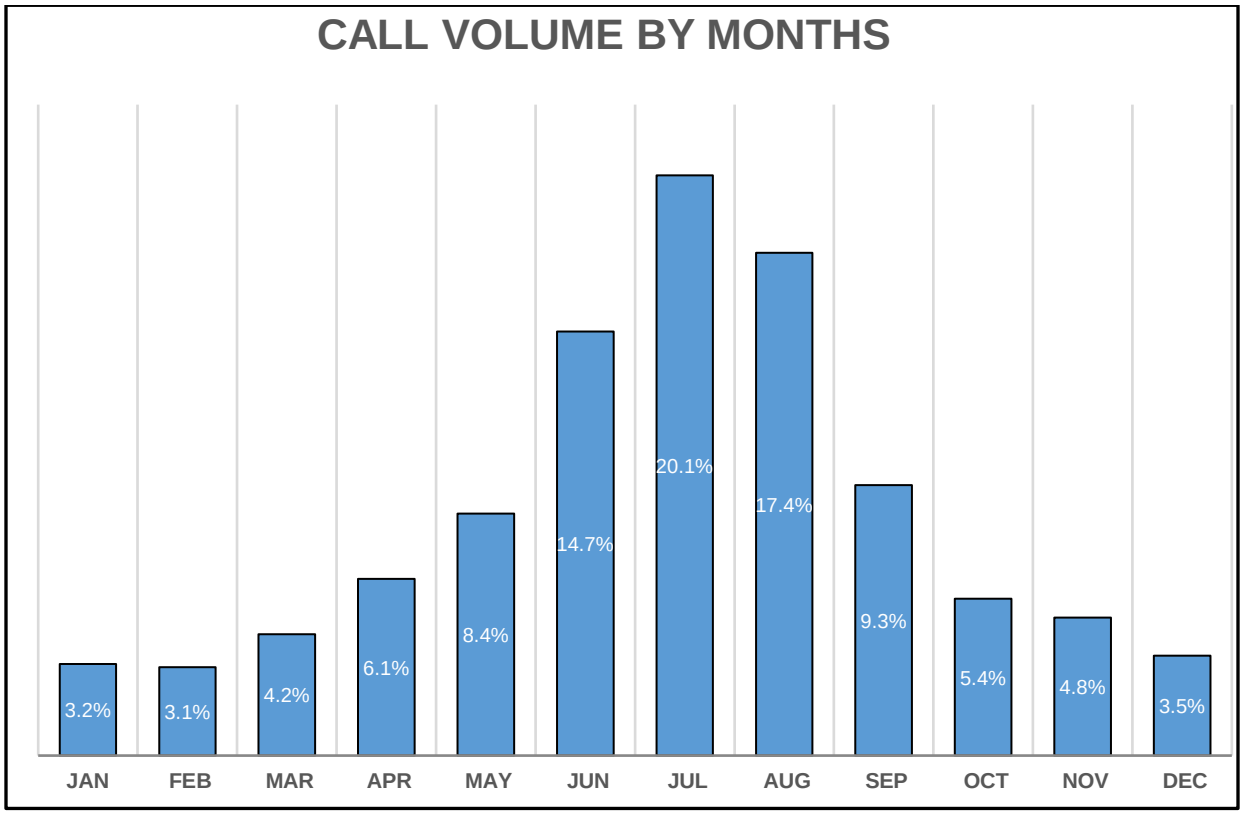


Chart 5

Regardless of the specific reasons, our data continues to show that the call frequency pattern depicted in the chart has remained relatively constant over the last 35 years. The stress on the Department caused by this distribution of calls is exacerbated by the fact that many volunteers choose to leave Corolla during the Season because they rent out their homes or because they do not enjoy being in Corolla when the population density rivals Boston and Chicago. Our salvation has been the addition of the core group of professional firefighters during 2018. Absent that one element, it is doubtful the remaining volunteers could effectively handle the call loads.

(b). REVIEW OF THE STRATEGIC PLANNING PROCESS:

If a Strategic Plan is developed properly, the word ***strategic*** should be emphasized. Strategic means relating to the identification of long-term or overall aims and interests and the means of achieving them. If done properly, they do not change dramatically even within the context of a several years. To achieve that context, any strategic plan must be developed on a strong foundation. The foundation is provided by four (4) major categories.

1. **Identification of Core Values.** An organization's values are most obvious in how it does things and with whom it does them, not in what it does. The Values should articulate how the organization will conduct itself. The values statement should answer the question, "how do we want to treat others, and how do we want to be treated ourselves"?

2. **Identification Of Mandates.** Before an organization can accurately define its mission, it should know exactly what it is required to do and by whom. Our mandates were identified specifically as depicted in our Articles of Incorporation and the contract for fire services in place with Currituck County. Our central mandate is to provide fire suppression and prevention services as is stated in both documents.

3. **Stakeholder Identification.** A stakeholder analysis is the means for identifying who the organization's internal and external stakeholders are, how they evaluate the organization, how they influence the organization, what the organization needs from them, and how important they are. A stakeholder analysis is particularly useful in providing valuable information about the political situation facing the organization.

4. **A S.W.O.T. Analysis,** The Strengths, Weaknesses, Opportunities, and Threats analysis is a key prelude to identifying and framing strategic issues. There is often a tendency to jump straight to strategic issues without really understanding the context of the issues. As a result, strategic issues are often

misidentified which, in turn, means that the strategies developed fail to address the real issues. Solving the wrong problem is a classic mistake that can be prevented by good S.W.O.T. and Stakeholder analyses. An in depth S.W.O.T. analysis also brings to the surface clues about the probable contours of effective strategies because every successful strategy builds on strengths and takes advantage of opportunities while developing action plans to overcome or minimize the effects of weaknesses and challenges.

The findings from the 2016 focus group exercises regarding the above-noted categories are set forth in Appendix “B”.

For 2022-2027 edition of Corolla Fire and Rescue’s Strategic Plan, we thoroughly reviewed each section. In each case, we found that the determinations made in 2016 are still valid today and continue to accurately support the latest edition of our Strategic Plan.

VI. ASSUMPTIONS

To develop the 2016-2022 Strategic Plan, the Focus Groups were asked to reply to the following questions in a “crystal ball” exercise:

1. How would you describe Corolla in the years following 2022 if the Mid-Currituck bridge is built and if the bridge is not built?
2. Which of the two scenarios do you think is more likely?
3. How do you think CFR would need to change to continue as an effective fire department in the years following 2022?
4. In your view, what is the most important “goal or objective” for CFR to include in its strategic planning?

The responses to each question were analyzed and supported the Objectives and Goals reflected in that edition. Many of those questions are still relevant today and will certainly impact the new edition of Corolla Fire’s Strategic Plan as well.

A review of the “Assumptions” exercise can be found in Appendix “C”. Appendix “C” will outline the questions, range of responses and resulting assumptions used in the creation of the 2016-2022 document.

NEW ASSUMPTIONS FOR THE 2022-2027 PLAN PERIOD.

1. Identification of possible emerging trends in the post COVID-19 environment.

- An increase in the number of full-time and part-time residents. With the introduction of COVID-19 “lockdown” protocols, more people are now able to work remotely than ever before. Additionally, fear of contracting the disease has caused more people to want to escape major metropolitan areas pushing people to move to remote locations. The following indicate that this trend has impacted Corolla:

    - The demand for post office boxes, both at the Corolla post office and within each of the major development appears to be increasing dramatically.
    - The waiting list at the WEVS charter school has more than doubled from prior years.
    - Turnover of residential houses is off the charts and new construction is booming. Although there are still mega-mansions being built in Corolla, the rapid price escalation has spawned an increasing number of densely compacted smaller units. . This trend to clustered 700 square-foot mini homes, such as Beacon Quarters and Whalehead Beach Club will present firefighting scenarios not previously present in Corolla.
    - The escalating cost of housing in the Corolla market, may drive the younger workforce to move away from our service area to seek more affordable housing in Kitty Hawk and Kill Devil Hills?

The key takeaway from these issues is the potential for impact on Corolla Fire, our operations, volunteer personnel, and the increasing costs of providing fire protection to our citizens. Budgets constraints, increasing densities and congestion within our communities, infrastructures, i.e. hydrant access, as well as accelerating wear and tear on equipment and apparatus need to underpin our Objectives and Goals for the new strategic plan period.

2. Will increases in seasonal duration and/or populations continue at the same pace as has been recently experienced?

The increases in seasonal duration and/or population were unforeseen in 2016. During the 'delayed" season in 2020 and continuing through the 2021 season, visitors have been coming to Corolla in greater numbers, earlier in the year and staying longer into the former 'post season'. Although no one knows for sure, there seem to be two or three significant events leading up to the recent visitor/vacationer patterns.

- One, the Covid-19 pandemic and the resulting 'lock-down' periods that resulted.
- Two, the fact that, because of the lockdowns, school aged children were not restricted to traditional 'summer vacation' periods and therefore able to vacation sooner and further into the year than they normally would have.

If these reasons are accurate, the implication would be that once resolved, things would return to normal. The wild card is that "normal' may be something other than what it once was! A new dynamic, 'virtual classrooms' and 'virtual workplace' could

have a permanent effect on vacation schedules for some time to come. Additionally, parents who essentially homeschooled their children during this period may continue to do so. Census Bureau data shows that the homeschooling percentage between 2012 and 2019 held relatively constant at around 3.3%. 2021-22 has seen an uptick to 11.1%. As surveys indicate that this in not just attributable to COVID restrictions but also to politically motivated curriculum and concerns over quality of education in public schools, this trend may continue even if COVID restrictions go away.

With the prospect of increasing tourists and longer seasons, commercial businesses and the associated commercial infrastructure changes may certainly follow. This will be tough in Corolla. Businesses are dependent on a 'seasonal' workforce. The problem is the availability of the seasonal, international workforce which has also been impacted by the Covid-19 pandemic and resulting travel restrictions. Absent a solution, businesses will be hard-pressed to keep up with the higher, longer season. Some may not survive.

What are some of the other consequences of increases in seasonal duration and/or populations?

Two key factors, originally identified by the 2016 focus groups, are still relevant today.

- Since Route 12 is the only road through the entirety of Corolla, there will inevitably be an increase in vehicular and pedestrian accidents, which will draw more heavily, not only on the resources of CFR, but also on Currituck EMS. The logical outgrowth of this scenario speaks to the need for additional facilities, equipment and, of course, Fire & County EMS personnel.

- The second main factor concerns the increase of fires and incidents stemming from increased fire carelessness. There is a sense that visitors are becoming less considerate and less careful. This category includes elements such as fireworks, bonfires, cooking and grilling, throwing lit cigarettes into dry mulch, etc. Once again, the logical result is the need for additional or improved facilities, equipment, and Fire & EMS personnel.

A third factor has emerged and concerns the increases in non-fire related incidents. As noted above, we have seen a significant uptick in the number of tourists who are new to the Outer Banks or to Corolla. They rent and stay in houses very unlike their own and they pack ever-increasing numbers of people into rental homes in an attempt to spread out the cost per person. Often, these homes have amenities way beyond what they have seen before, such as swimming pools, hot tubs, elevators, multiple floors, outside decks on elevated floors, etc. Their inclination upon arrival is to seek-out, try-out and all too often become victims of tragic accidents. Many of these incidents involve young children and occur on the day of arrival as adults, busy unpacking and catching up with friends and relatives they may have not seen for a while, lose sight of the little ones.

In the three (3) years preceding the pandemic, we saw that in person presentations to residents and property owners at annual POA meetings did produce dramatic results in several categories including smoke detector uses and maintenance, safety around the home and safety on roads and beaches. Unfortunately the Covid-19 pandemic caused those POA meetings to be cancelled both in 2020 and much of 2021. Call volumes in these categories again rose to pre-2017 levels.

Our challenge will be to find additional ways to communicate and educate owners and visitors about these, and similar pitfalls. If POA meetings will no longer offer a forum to speak directly to residents and owners than we must find other ways. The SafeCorolla.com webpage recently created by Currituck's Emergency Management staff provides current information on a number of safety related topics.

We proved that information is an effective tool. We must find newer and innovative methods to continue to get the 'messages' out before the uninformed become victims. We have recently updated our website, created a Facebook page and a YouTube channel for Corolla Fire & Rescue Squad. We will need to figure out how to optimize these social media tools to better educate our visitors.

VII. OBJECTIVES AND GOALS

Objective #1: Vehicular Fire and Rescue Equipment Viability:

Examine, monitor and replace fire or rescue apparatus in term of needs, age and condition:

GOAL #1:

- Develop a formal replacement schedule and estimated timeline to optimize replacement of our Fire and Rescue apparatus. Our ‘first-out’ equipment continues to age, and maintenance cost steadily increase. The model should be developed using repair histories for each vehicle and known and anticipated issues.

GOAL #2:

- Work with county officials, including the County Manager, the Fire Emergency Advisory Board (F.E.A.B.), and others to improve and formalize the budgeting process, and advocate within the community to support a re-implementation of the fire tax to ensure funding for the timely replacement of qualifying apparatus in Corolla and other fire districts in the county.

- Identify and regularly monitor alternative sources for ‘lightly used’ apparatus in instances where new apparatus cannot be obtained. Examples would be internet sites such as Gov-Deals, contacts with other agencies, print materials, etc.

GOAL #3:

- Evaluate the need for any other additional equipment, including the availability of facilities to house said equipment. Investigate any new or emerging technologies that facilitate firefighting by older firefighters. Also include a timeframe for any identified additions.

GOAL #4:

- Pursue opportunities provided through FEMA's Assistance to Firefighters Grant Program (**AFG**). The AFG program is designed to help firefighters and other first responders obtain critically needed equipment including, protective gear, emergency vehicles, training and other resources necessary for protecting emergency response personnel and their communities from fire and related hazards. In our case, the most immediate need would be the procurement of an 'elevated waterway vehicle' to replace Platform 61.
- Pursue opportunities for funding through 'grant' monies, state programs, non-profit programs and other sources available to volunteer departments.

RECOMMENDED CHAMPIONS:

The Corolla Fire Chief's office, the Board of Directors, and the Training Division Chief

RECOMMENDED TIME FRAME:

Fiscal year 2022-27 and assess annually thereafter.

Objective #2: Member and Fire Personnel:

Ensure the continued availability of capable, trained volunteer fire and fire suppression staffing to effectively deliver services within areas served by CFR.

GOAL #1:

- Improve and adapt processes to thoroughly research the availability of willing, physically capable, resident volunteer member candidates within each of the Corolla communities.

    i. Participate in events sponsored by homeowner's associations (HOA's) to acquaint resident owners with our organization and explain roles they might play as volunteer members.

    ii. Work with the Currituck County Training Officer to assist with recruitment efforts both within and outside of the Corolla area.

    iii. Update print materials and web-based resources to further develop recruitment efforts and to more broadly disseminate our opportunities to serve our communities through CFR.

    iv. Outreach to businesses to reach interested younger employed persons in Corolla. Develop approaches to make younger recruits welcome and comfortable in the volunteer department.

RECOMMENDED CHAMPIONS:

The Fire Chief and Training Division Officer, with the assistance of the internal volunteer personnel and the training office of Currituck County Fire & EMS.

RECOMMENDED TIME FRAME:

Ongoing.

GOAL #2:

- **Develop in-house training and training curricula to ensure all volunteer members have the maximum opportunities to obtain classroom and practical training consistent with NCSFA and National Incident Management System (NIMS) requirements.**

TRAINING AND MEETINGS DEFINED (State of North Carolina Requirements) GS 58-86-2 (13).

"Training sessions" for eligible firefighters means sessions in which attendance will result in the preparation of, or knowledge gained by, the member in the area of fire prevention, fire suppression, or protection of life and property. Such drill or training sessions held by the eligible fire department to meet the requirements of this article shall be held for the purpose of providing a learning or preparation experience for the members.

i. Develop and publish training schedules designed to accommodate the training needs of the department, with the varied availability needs of the members. The Goal is to maximize the opportunities for training for all members by providing training opportunities every week.

ii. Develop internal departmental goals to address specific training targets such as driver – operator certifications as they pertain to each apparatus. Ensure that group departmental trainings are focused on developing the skills necessary for effectively fighting fires and conducting rescue operations, not just to meet the "36 hour" training requirement

iii. Develop and publish available training courses and classes to promote third party education and training opportunities designed to develop and maximize volunteer Firefighter I & II Certification.

iv. Develop and nurture a dialog with appropriate Currituck County firefighting personnel to promote daily training opportunities for volunteer members.

RECOMMENDED CHAMPIONS:

The Training Division Chief and the Corolla Fire Chief's office.

RECOMMENDED TIME FRAME:

Fiscal year 2022-27 and beyond.

OBJECTIVES AND GOALS

Objective #3: Fire Department Structures and Facilities:

Examine the adequacy of existing structures (fire stations) and the desirability for additions to existing facilities to meet the current and future needs of volunteer members and the professional firefighters assigned to the Corolla district.

GOAL #1:

- Examine the adequacy of existing structure (fire stations) to adequately house the increased numbers of personnel assigned to Corolla's district.

    i. The research should address physical plant, systems and any necessary contractual issues arising from the addition of personnel.

    ii. If it is determined that additions to existing facilities, or the need for expanding facilities is indicated, work with county officials to achieve timely approvals and financially sound solutions.

    iii. If it is determined that additions to existing facilities may not be adequate, or the need for additional facilities is indicated, identify potential available real estate and work with county officials to achieve timely and financially sound solutions.

GOAL #2:

- Complete the dedicated Fire Training Center currently planned. The Training Center will be built from modified cargo containers and designed to simulate varied fire and/or rescue scenarios.

This facility will permit duty crews, off-duty crews, to obtain specific firefighting techniques and skills without the need to travel outside of the fire district. The facilities may also serve volunteers and possibly crews from other departments.

- The Training Center is being designed to 'grow and/or change' as situations and conditions change. As such, develop and maintain records to enable planned, systematic modifications, additions and/or general improvements to the Training Center to insure it remains relevant well into the future.

Initial completion is currently targeted for early 2022.

RECOMMENDED CHAMPIONS:

The Corolla Fire Chief's office.

RECOMMENDED TIME FRAME:

Fiscal year 2022-27 and beyond as may be appropriate.

OBJECTIVES AND GOALS

Objective #4: Community Risk Identification and Prevention:

Reduce the significant and recurring community risk issues through formalized plans and programs to further educate the public and instill preventive intervention techniques.

GOAL #1:

- Formalize fire and life safety programs and materials to address specific issues to the Corolla community including, but not limited to the following.

    i. Beach environment issues frequently contributing to structure and grounds fires in Corolla. For example, the effects of salt and sea air on exterior electrical devices, wind, construction materials, open fires near dunes, fireworks, etc.

    ii. Pedestrian and vehicular safety with an emphasis on seasonal employees.

    iii. Renter safety issues with an emphasis to elevator dangers and pool safety, specifically with respect to young children.

    iv. Dangers of illegal fireworks, sky lanterns, etc., again with an emphasis on the beach environment and adjacent properties.

    v. Lightning awareness and storm preparedness.

GOAL #2:

- Formalize programs to communicate issues to the Corolla community through presentations and discussions with various HOA's, employers and other public gatherings of both residents and visitors.

GOAL #3:

- Formalize programs to communicate issues through presentations and discussions with the students and teachers at Corolla's Water's Edge Village School.

    i. With the assistance of school personnel, develop fire safety programs including regular fire drills, fire awareness and home safety issues.

    ii. Provide print materials and/or demonstrations of fire safety equipment and techniques. An example would be the use of a standard fire extinguisher.

GOAL #4:

- Formalize programs to communicate issues through other avenues. Possibilities might include vehicles such as brochures, posters, web-site design, YouTube channels, open 'Zoom' meetings, Facebook, Twitter and any similar – non-traditional means.

RECOMMENDED CHAMPIONS:

The CFR Cares manager and volunteers assisting in CFR Cares efforts, the Boards of Directors of CFRS, Inc., and CFR Cares, Inc.

RECOMMENDED TIME FRAME:

Ongoing and continuing for fiscal years 2022-27 and annually thereafter.

APPENDICES

APPENDIX "A"	**Apparatus Inventory and Descriptions**
APPENDIX "B"	**Review of 2016-22 Strategic Planning Process**
APPENDIX "C"	**Review of the Major Assumptions of the 2016-22 Strategic Plan**
APPENDIX "D"	**Demographics and Data Sources**
APPENDIX "E"	**History of Corolla Fire and Rescue, Inc.**
APPENDIX "F"	**Charts and Illustrations**

APPENDIX "A"

FIREFIGHTING VEHICLE INVENTORY
OCT 2021

1986: Engine 64;

E-One GMC Pumper
VIN: 1GDM7D2G0GV538902
750 gpm Hale pump
500-gallon tank



1990: Platform 61;

Grumman/KME Aerial Cat
VIN: 1G9ACHDT7LR088081
102 Ft. Steel Ladder/Bucket
1,500 gpm Waterous pump
145-gallon tank



1999: Rehab 62;

Ford E-350 Ambulance
VIN: 1FDWE30F0XHA71725
Personnel Rehabilitation
Vehicle



FIREFIGHTING VEHICLE INVENTORY
(Continued)

2006: Engine 66;

Pierce Enforcer Pumper/Tanker
VIN: 4P1CE01A96A006282
1,510 gpm pump
670-gallon tank



2006: Brush 61:

Ford F-350 Super Duty Pickup
VIN: 1FDSX35P46E69893
60 gpm pump
500-gallon tank



2007: Engine 61:

Pierce Defender Pumper/Tanker
VIN: 4P1CC01T27A006875
1,500 gpm pump
1,250-gallon tank



FIREFIGHTING VEHICLE INVENTORY
(Continued)

2008: Brush 62:

Ford F-250 Pickup
VIN:1FTWF31R98ED06510
60 gpm pump
225-gallon tank



2009: Engine 65:

International 4x4 Pumper
VIN:1HTWEAZN89J108277
1,250 gpm pump
850-gallon tank
Pump and Roll Capable



2017 Tanker 62:

International/Rosenbauer 4x4 Tanker
VIN: 3HDWESTRXHL461332
1,250 gpm pump
2,000-gallon tank



APPENDIX "B"

Review of 2016-22 Strategic Planning:

Process VALUES IDENTIFICATION: (How the organization will conduct itself?)

A values statement should articulate how the organization will conduct itself. The statement should answer the question, "how do we want to treat others, and how do we want to be treated ourselves"?

Note that an organization's values are most obvious in how it does things and with whom it does them, not in what it does. Note also that the key values may not be good values. (Examples of desirable values: honesty, integrity, caring, trust, and respect.)

Original focus group participants were asked:

1. "What do you consider to be your organization's key values in practice *at the present time*?" Note that values actually practiced are not necessarily *positive* values.
2. "What other values *would you like to see* your organization adopt to guide the conduct of its business and its relationships with key stakeholders?"
3. "Having identified both current values (desirable as well as inappropriate) and values you would like to see adopted, what are the 8 to 10 values that you see as being the most important for the organization to embrace?"

The most prevalent responses reflected the following:

CORE VALUES:

Commitment to the Community

Dedicated Volunteer Members

Focus on Training

Teamwork; Focused on Immediate Objectives

Effective Response to Emergencies

Honesty and Integrity

Cooperative Support of One Another

IDENTIFICATION OF MANDATES:

Before an organization can accurately define its mission, it should know exactly what it is required to do and by whom. In our case, we are charged with complying with the current contract with Currituck County. Contract requirements should also be consistent with the purpose(s) recited in our Articles of Incorporation.

Focus group participants were asked to review both documents for consistency and to suggest any modifications to CFRS' charter which would better define our organizational mandate(s).

Our mandates were identified specifically as depicted in our articles of incorporation and the contract for fire services in place with Currituck County. The

group found no inconsistency, believing our central mandate was to provide fire suppression and prevention services as stated in both documents.

However, another item was consistently cited: That an additional mandate of the organization should be in developing and delivering educational programs and materials, not only with respect to fire prevention, but also prevention of wildfires/brushfires, vehicular safety, pedestrian safety, and other similar issues.

STAKEHOLDER IDENTIFICATION[5]:

A stakeholder analysis is the means for identifying who the organization's internal and external stakeholders are, how they evaluate the organization, how they influence the organization, what the organization needs from them, and how important they are. A stakeholder analysis is particularly useful in providing valuable information about the political situation facing the organization. Focus group participants were asked to identify Internal (i.e., internal to the organization) and External (i.e., outside the immediate organization) stakeholders. The following were consistently identified by the group:

INTERNAL STAKEHOLDERS:

- Board of Directors/Officers (responsible for planning & review)
- Volunteer Members (participants, issues identification)

[5] A stakeholder is any person, group, or organization that can place a claim on the organization's resources, attention, or output or is affected by its output.

EXTERNAL STAKEHOLDERS:

- Board of Commissioners (financial & resource supports/relies on the services)
- County Staff Organizations (resource supports)
- Property Owners ("clients"/taxpayers funding services)
- Visitors to Corolla OBX (support tourist economy and pay Occupancy Taxes)
- County EMS/Firefighters (support volunteers/housed at stations)

The relationships and interactions between Corolla Fire and county medical / firefighting personnel are critical to our operation. We are literally dependent upon one another and our ability and/or willingness to work together is crucial to both groups.

S.W.O.T. Analysis: Strengths, Weaknesses, Opportunities & Threats

The S.W.O.T. analysis is a key prelude to identifying and framing strategic issues. There is often a tendency to jump straight to strategic issues without really understanding the context of the issues. As a result, strategic issues are often misidentified which, in turn, means that the strategies developed fail to address the real issues. Solving the wrong problem is a classic mistake that can be prevented by good S.W.O.T. and Stakeholder analyses. An in depth S.W.O.T. analysis also brings to the surface clues about the probable contours of effective strategies, because every successful strategy builds on strengths and takes advantage of opportunities while developing action plans to overcome or minimize the effects of weaknesses and challenges.

STRENGTHS:

"Strengths" are resources or capabilities that help an organization accomplish its mandates or mission and create public value. (Examples: highly skilled staff, good morale, adequate resources, well-connected board, excellent information technology system, effective performance management system, effective communications system.) Focus group participants identified the following strengths:

1. **Equipment**. Equipment, including well maintained and capable fire apparatus, as wells as state-of-the-art radio communications and other technologies. Corolla Fire has put in place an interactive system called "Active 911" which allows Member access to dispatched fire calls along with description of event, location address and detailed mapping. First line fire apparatus has also been equipped with iPads to permit the same capabilities at a fire scene. Significant efforts have been made to upload to Active 911 hydrant location and water supply information, pre-plan documents for commercial businesses in our service area, a listing of responding and available personnel and many other elements. This capability stems from goals established in Corolla Fire's previous strategic plan.

2. **Dedicated and knowledgeable members.** Dedication, not only with respect to firefighting training, but also skills and knowledge acquired in previous varied and impressive careers. The majority of our membership is made up of retired executives and leaders in their respective fields who bring varied credentials, education, knowledge and skills to the tasks at hand.

3. **Commitment – Active within the Department**. The key is to utilize member skills to benefit the Department and the community for the betterment of all concerned. The greatest levels of knowledge and skills is of little value unless they are used. Like many other volunteer agencies, we can encourage, but not require, member participation. Our challenge is to create an atmosphere where members participate in multiple aspects of our operation.

WEAKNESSES:

Weaknesses are deficiencies in internal resources or capabilities that hinder an organization's ability to meet its mandates, fulfill its mission, and create public value. For example, poor internal and/or external communications, unclear mission or vision, low morale or inadequate resources. Many of the same aspects/elements identified as strengths also show up as weaknesses. This phenomenon reflects the “flip side” of the equation.

1. **Equipment**. Even though our equipment is very well maintained, it is aging. The level of maintenance is a testament to the members’ commitment and dedication. For instance, Engine #64 was built in 1986, making it a thirty (30) year old vehicle. Technically this should be well past its life expectancy but has been well maintained and used sparingly over its years of service. The Platform truck (P-61) was placed in service in 1990 and comes in at 26 years old. Like Engine 64, it also has been well maintained. Platform 61 has been more frequently used in recent years due to the increased number of structure fires in Corolla and the tendency to larger structures. It was almost completely rebuilt in 2008-2009 by its original manufacturer (KME Fire) but is still quite old in fire service terms.

Our newest "first out" engine is Engine 61, a 2007 Pierce pumper. which is approaching ten (10) years of age. It's counterpart at Pine Island Station is Engine 62, which dates to 1997 and is approaching twenty (20) years of use.

2. **Personnel**. Personnel was cited as a strength, and it indeed is exactly that. However, the qualities that make our personnel a strength also contributes to its inclusion as a weakness. As noted, our average age is 65 years old. The challenge is that there are circumstances that make it difficult to recruit from the limited local base of young adults. The most likely scenario for the future is that we will not be able to lower this age profile. However, the undeniable implication is that the worsening of our age profile will ultimately be self-correcting through attrition.

3. **Training**. Although we have made dramatic strides in training during the last couple of years, it continues to be a weakness. CFR now offers more training than ever before. However, senior-aged volunteers can only tolerate so much at one time and simply cannot accomplish the more rigorous firefighter training.

4. **Member Inactivity**. Unfortunately, the amount of time that can be allocated to Fire Department activity is dependent on each member's schedule and other obligations. Because members are volunteers, the organization can only encourage, but not demand, participation.

5. Finally, **Communication** was also cited as a weakness. Once again, the level of communication is dependent upon the individual. By its very nature, communication should be a two-way exchange, but one must be relatively "active" to avail themselves of opportunities for communications.

Communication can always be improved, and we can look to enhance the modes and avenues for communication. It is all too easy to fall into a trap where communication is taken for granted.

OPPORTUNITIES:

1. The most frequently mentioned "Opportunity" focused on general public, community and visitor education. Fire prevention education is becoming increasingly important within our communities, i.e., in prior years we have experienced high levels of "fireworks" related incidents. In more recent years, the fire department and our individual communities have made effective efforts to post local regulations citing the illegality and dangers associated with the use of fireworks. Additionally, the Sheriff's Department has heard us and is actively pursuing and issuing citations to those caught with illegal fireworks. As a result, fireworks incidents have decreased and are much less of a threat than several years ago.

More recently, there have been several vehicular incidents involving bicycles and pedestrians in Corolla. Reducing these accidents through educational efforts is currently a focus of not only Corolla Fire and CFR Cares, but also the community, local businesses and the County.

2. The prospect for a "Mid-Currituck" bridge connecting Corolla with Mainland Currituck has been a topic of frequent speculation. Focus group participants identified the Mid-Currituck Bridge as an opportunity (albeit undefined) as we move into the future.

3. Finally, enhanced assistance from Currituck County, both through increased financial support and support from County staff hired to work in the areas of Fire and EMS, was cited as a potential opportunity. There was near unanimity that we should work hard to develop the case for additional funding of new apparatus and equipment in future budget submissions and to find ways to get this need across to BOC members throughout the year so that the first time they hear of it is not the budget submission. As noted, our main line fire apparatus is aging and cannot last indefinitely, no matter how outstanding the maintenance program. The County's current approach to funding approach will not be sufficient to meet the replacement needs. The current approach is similar to a Homeowners Association that neglects to do Reserve Studies and bases its annual dues solely on what is needed for annual operations. We will need to develop a process to identify remaining useful life and replacement costs as well as the number and type of apparatus that will be needed in future years and use this as a basis for establishing workable guidelines that will provide the resources necessary to meet our Mandates.

THREATS:

As with "strengths" and "weaknesses", some of the "opportunities" cited above were also cited as "threats." Both the Mid-County Bridge and public/community/visitor education were cited as threats as well as opportunities.

1. Ever Increasing Visitor Population. The concern centers on sheer numbers. We already experience up to sixty thousand (60,000) visitors in any given week during the season. The prospect of greater numbers that will come along with additional development (and the fact that visitors are continually stuffing more people into rental homes) will sorely tax our ability to keep pace.

2. Aging Properties. Homes built in the mid-90's development boom are showing their age. This coupled with the use of wood and vinyl siding, the corrosive salt air environment, wind, heavy seasonal usage, and absentee owners, may result in greater numbers of fire and fire related emergencies.

3. Failure of Infrastructure to Keep Pace with Development. In addition to fire suppression equipment internal to the Fire Department, it will be necessary that the County ensures that available water supply and volume keeps pace with development and that fire hydrants are properly maintained. It is incumbent on Corolla Fire to ensure that any infrastructure issues that are crucial to its ability to successfully fight fires are kept in front of the County Manager and the BOC.

APPENDIX "C"

Review of the Major Assumptions of the 2016-22 Strategic Plan:

To develop the 2016-2022 Strategic Plan, Focus Groups were recruited from the Membership of Corolla Fire. The Focus Groups were asked to reply to the following questions in a "crystal ball" exercise:

- How would you describe Corolla in the years following 2022?

  1. if the Mid-Currituck bridge is built and,

  2. if the bridge is not built?

- Which of the two scenarios do you think is more likely?

- How do you think CFR would need to change to continue as an effective fire department in the years following 2022?

- In your view, what is the most important "goal or objective" for CFR to include in its strategic planning?

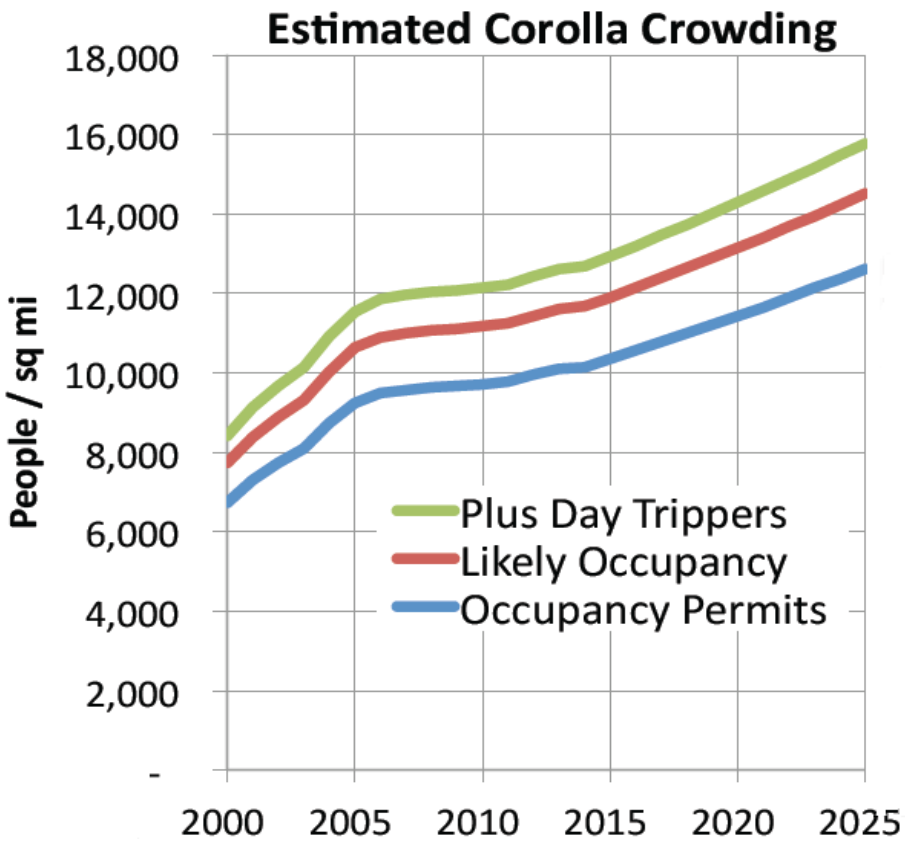
The responses to each question were analyzed and supported the Objectives and Goals reflected in that edition. Ironically many of those questions are still relevant today and will certainly impact the new edition of Corolla Fire's Strategic Plan as well.

IN 2016 WE ASKED.

1. How would you describe Corolla in the years following 2022, assuming that "the bridge" is built?

The consensus opinion was that regardless of whether the bridge was built, 'population' density would likely increase, either comprised of additional residents or a greater number of visitors, but more likely a combination of both groups. The significant differences of opinion centered on the timing and rates of growth. Clearly, most thought that the rate of increase would be higher if the bridge was built. As a completed bridge was beyond the five-year horizon of this Strategic Plan cycle, it did not have a material impact on the development of that Plan's goals and strategies. Nonetheless, it would have been naive to develop those goals and strategies without an eye to the possibility of a bridge during the next strategic planning cycle. We should also be alert to any impacts that bridge construction might bring during the upcoming five-year period.

Seasonal 'tourist' densities have been increasing at relatively consistent rates for several years. By estimates of the tourism department and real estate management companies, the numbers of visitors staying in Corolla during 2015 were just over ten thousand (10,000) per square mile, which equates to up to 60,000 people in Corolla during the summer season. If "day-trippers" are added into the count, that number approaches 13,000 per square mile or nearly 75,000 persons in Corolla at any given time during the summer season. Independent estimates based on per-capita water usage levels support these numbers. These sources projected these numbers to increase to 78,000 and 85,000, respectively, by 2020. We may well have reached those levels, not as a result of the bridge, but for other, unforeseen reasons.



Presentation Dr. Ed Cornet, by permission

Interestingly, there are differences of opinion regarding the effect of 'the bridge' on full time residents in Corolla. There are varied points of view supporting each scenario. First, full time residents will increase due to the improved access to and from the mainland and better access to health care. On the other hand, full-time residents will decrease due to increasing congestion, the influx of day-trippers, and the general loss of the "Corolla" identity. Many current residents came to Corolla for the solitude and the rural nature of the community. they 'tolerate' the three summer months but have little interest in an expanded tourist season or accelerated development.

2. How would you describe Corolla in the years following 2022, assuming that "the bridge" <u>is</u> <u>not</u> built?

Many of the issues identified in the previous section were also cited using the assumption that 'the bridge' will not be built, at least within the foreseeable time frame. the significant differences were consistently simply a matter of timeframe. The bridge would just accelerate those elements.

However, there were some substantive differences. With a slowing of both residential and commercial development, relative to the 'with the bridge' scenario, the aging of existing structures would become the more significant contributor to increases in fire and fire emergencies. As it is, fires in the 'off season' can go undetected for longer periods, thus growing in magnitude before the dispatch of emergency crews. Structures will continue to age and deteriorate from the elements making them even more susceptible to fire. As one task force member put it; "we are one match away from disaster."

The implications for CFR will become more critical. As has been stated repeatedly, our membership is heavily weighted to 'senior' status. The resident population of Corolla is predominantly 'retirement age.' If Corolla of the future emulates Corolla of the present, this dynamic is not likely to change. We were approaching a situation where our volunteer membership would simply be physically unable to function in the manner needed to support a functional volunteer fire department. Hard as it was to say, our volunteer membership roster has declined due to resignations, relocations, death, or serious health problems as we projected.

3. Of the two choices discussed above, which scenario is most likely?

Although the opinions were nearly split equally, the most likely scenario, in the opinions of our focus group, is **"the bridge will be built"** even though we have been hearing that for 30 years. The group was unanimously of the view that completion and

opening of the bridge would be beyond our current five-year time frame. They have been proven correct. Based on everything we have found in researching the question today, it will likely be beyond the next five-year time frame as well – if at all.

4. How will Corolla Fire need to change as we approach and then pass the Year 2022?

This question spawned a great deal of discussion and a thorough examination of the assumptions, projections, and data incorporated herein. In the unanimous opinion of our focus group, the active, participating volunteer membership of Corolla Fire would become overwhelmed prior to 2022. That projection proved to be correct. The consensus was that we should continue to grow our Community Outreach programs to emphasize fire awareness and prevention programs within our communities. CFR now regularly participates in various Homeowner Association meetings and covers topics including fire-prevention, safety, awareness, etc. We also will continue to try and recruit members from full and part-time residents in each of these HOA's. We must recognize however, that those residents tend to mirror our current membership dynamics, although there is always the hope to attract the newly retired.

The bottom line was clear to our task group: the only viable solution is to augment our volunteer fire membership with the addition of paid, full-time, qualified firefighters and to look to implement this augmentation as soon as practicable. We have been fortunate that we were successful in garnering community support for our current, full time professional firefighters at both Corolla Fire stations.

APPENDIX "D"

Demographic and Data Resources:

Access NC, North Carolina Economic Data and Site Information, North Carolina Department of Commerce, 2019-2021.

Corolla Fire and Rescue Squad, Inc., Strategic Plan 2016-2022.

Currituck County Department of Economic Development, https://www.thinkcurrituck.com.

Currituck County Department of Travel and Tourism, https://www.visitcurrituck.com.

Edward Cornet, PhD, Corolla Land Use Study 2017; https://www.Currituck2030.com.

North Carolina Gazetteer, Home Town Locator, Corolla Profile, 2021

North Carolina State University, Andrew Moore and Whitney Knollenberg, Sustainable Future for the Outer Banks…, Feb 2021.

Point2 Blog, Corolla Demographics, 2021.

The Virginian Pilot, A Decade of Growth on the Outer Banks…, Lane DeGregory.

United States Census Bureau, Quick Facts, Currituck County, North Carolina, 2019.

United States Census Bureau, OnTheMap Application, https://onthemap.ces.census.gov, 2018.

Uphomes, Ryan Fitzgerald, Living in the Outer Banks (OBX), posted Feb 2021.

Wikipedia, Corolla, North Carolina, last edited May 2021.

WRAL, Keely Arthur, "…Coronavirus NC Rebound…," posted July 2020.

APPENDIX "E"

THE HISTORY OF COROLLA FIRE and RESCUE SQUAD, INC.

(Updated June 2021)

During the decade of the 1970s and into the early 1980s, Corolla was a true fledgling community, with few paved roads and relatively few homes and residents. Fire protection was difficult and fire responses, to the extent necessary, were provided by the lower Currituck volunteer fire department from facilities on the mainland.

Corolla Fire & Rescue Squad, Inc. (Corolla Fire) was established July 1, 1983, as a non-profit volunteer organization funded by Currituck County and the generous donations from our many supporters. The first vehicle was a 1968 Military Jeep Kaiser Brush truck donated by Lower Currituck Volunteer Fire Department. In 1983, a new 4-wheel drive Ford ambulance was placed in service, and Corolla became a North Carolina Certified Basic EMT (Emergency Medical Technician) provider. A three-bay garage and meeting room was soon built on Whalehead Drive, primarily with volunteer labor. A Grumman pumper/tanker and Grumman tanker was placed in service in 1984. In 1986, an Emergency One GMC all-wheel drive pumper was added to provide a water source from remote ponds as well as the Currituck Sound. During the remainder of the decade, Corolla Fire responded to fewer than a dozen fire calls annually.

In the summer of 1989, several squad members received rigorous training and testing. As a result, Corolla Rescue (the EMT section) became one of the first EMT-D (Defibrillation) rated squads in Northeastern North Carolina.

With membership and training constantly increasing, Corolla Fire and Rescue Squad became rated by the North Caroline Fire Commission as a Level 9 fire station in December 1989. Becoming a “rated” company resulted in lower insurance rates for property owners within our fire district.

Throughout the winter of 1989 some members received extensive classroom, clinical, and preceptor supervised field training. In the spring of 1990, Corolla Rescue became state certified as an Advanced Life Support EMT Intermediate Squad. Approved techniques included certain medications and intravenous fluid therapy.

A second Advanced Life Support ambulance was added in early summer 1990. Currituck County Emergency Services supplied two EMT’s to staff Corolla Station who were paid 50% through the County Occupancy Tax, and 50% by the General Fund. Equipment and procedures were the responsibility of Corolla Fire and Rescue.

Water Rescue operations were also added during the summer of 1990 with the purchase of a 1990 Yamaha 650 Jet Ski and related equipment. The volunteer Water Rescue Team was called into action eleven times that year. During the summer of 1991, we began daily paid beach patrols from 9:00 a.m. to 5:00 p.m. Funding was being provided primarily by donations. Volunteers were called upon to back up this operation for water rescue.

In late 1990, the station was enlarged to seven bays and a new 102-foot Grumman Aerial Platform truck was placed in service. This truck would not only be used in single/multiple story structure fires, but also for the removal of patients from upper floors, where patient immobilization might be required. The station was further expanded to ten bays in 1995 and to its current eleven bays in 1996. By that time, the development of the Corolla Outer Banks began to accelerate exponentially. Fire call

volume in 1995 had increase to an annual level of ninety-four (94), up from the previous average of less than fifteen (15) calls per year.

Corolla added a Pierce Sabre Pumper in 1998. The new engine 62 is equipped with one thousand (1,000) feet of five (5) inch hose, a twelve hundred and fifty (1,250) gallon water tank and a fifteen hundred (1,500) gallons per minute (gpm) Waterous single stage pump.

Equipment included:

A 500-gpm deck gun

Two (2) discharges other than pre-connects

Five (5) attack hose pre-connects

One (1) 1" hose reel with 150 feet of hose

In mid-2007, Corolla Fire added a second facility located at roughly mile post 4.7 on Ocean Trail. The Pine Island station boosts another six vehicle bays, and additional sleeping quarters for personnel. We also added our second Pierce pumper, similarly, equipped as the first, allowing one “first out” engine at each station. The addition of the Pine Island station, and dedicated efforts of our volunteers, resulted in an improvement of our insurance rating to a Level 6. A Level 6 rating was the best in all of Currituck County. An ISO rating of 6 greatly benefited property owners in Corolla through dramatic reductions in insurance costs.

By 2007, Corolla Fire was experiencing an annual call volume of 190+. That was twice the level experienced in the 1994-5-time frame. Our volunteers were being asked to do much more and continued training and practice were necessitated.

The year 2007 was also a transition point away from EMS activities. During the later portion of the year, Currituck County assumed full responsibility for Emergency Medical Services in Corolla. Corolla Fire and Rescue would now concentrate on fire and fire related activities.

In 2012 we responded to 355 fire calls, nearly double again from only five (5) years earlier. Our service area is nearly fourteen (14) miles in length, from the Dare County line to the beach strands, but an average of only one half (1/2) mile in width. Our call volume annually was now more than 35 times what it was in the earliest years. When you consider we were staffed by only 46 certified volunteers, this becomes a truly amazing undertaking by a small number of dedicated residents.

In 2012 we took delivery of a second four wheeled (4X4) engine. Engine 65 is a 2009 (built in 2011) four-wheel drive (4x4) international chassis, manufactured by OBX Firetech. It is equipped with one thousand (1,000) feet of three (3) inch hose, an eight hundred and fifty (850) gallon water tank, and a twelve hundred and fifty (1,250) gpm Waterous single stage pump driven by a separate, stand-alone diesel engine.

In early 2013, Corolla Ocean Rescue, Inc. (COR) was independently incorporated into a separate entity. Corolla Ocean Rescue was an elite lifesaving service focused on providing the safest beach environment possible through public education, observation, and interaction. The organization employed a seasonal staff of over forty (40) athletes who effected between one and two hundred rescues every summer. The group hosted several different kids' ocean safety program, and regularly competed in local and regional competition, routinely placing in the top three finishers.

As the contracting entity for the ocean rescue contract, Currituck County elected not to renew the contract with Corolla Ocean Rescue for the 2015 season. A four (4) year contract was awarded to another company, thereby ending the ocean rescue services formerly performed by Corolla Ocean Rescue, Inc. Corolla Ocean Rescue will be re-tasked as an educational organization and will hence forth do business as CFR Cares.

In 2015, Corolla Fire responded to 430 fire calls, from the Dare County line to the beach strands. Our call volume annually is now nearly 40 times what it was in the earliest years. Corolla Fire is staffed by 51 certified volunteers.

In the Fall of 2016, the name of the former Corolla Ocean Rescue was formally changed to CFR Cares, Inc. The purpose of CFR CARES, will be to develop and provide educational programs and other tools designed to promote safe practices in various fields of public safety, including water safety, fire prevention and traffic safety. The organization will apply its resources to identify safety risks within the community and formulate preventive programs and techniques to mitigate against or eliminate those safety risks. At a more granular level, programs would address water safety for ocean swimmers and surfers, boating safety, safe fishing practices where swimmers are nearby, traffic and vehicular safety, such as wearing reflective gear while walking or biking along heavily travelled roads, Firewise® program development, and fire prevention education (including risks associated with fireworks, Chinese lanterns, common electrical issues, and cooking with propane grills). The organization would seek grants from charitable and governmental entities to further its programs to fund the development of educational programs as well as the purchase of safety supplies to be distributed within the community, particularly to foreign students who come on short-term visas to work in Corolla's tourist industry during the summer months. It is expected that funds would also be provided by Corolla Fire and Rescue Foundation, a section 501(c) (9) "supporting" organization.

Also, in the Fall of 2016, Corolla Fire took delivery of a new Tanker, T-62, designed to supplement our firefighting capabilities within both along hard surfaced roads and off-road including beach access only areas. Tanker 62 is a 2016 Rosenbauer four-wheel drive side mount tanker on an International chassis. The tanker has a 2,000-gallon capacity.

In accordance with Objective #1; Goal #2 of the 2016-2022 Strategic Plan, Corolla Fire and Currituck County initiated the research and documentation to support the need and timeline of full-time, paid firefighting personnel in Corolla. In the Fall of 2016, we began the process by polling all Corolla property owners regarding their support, or non-support, of the proposal. The research and dialog would continue throughout the following year.

In 2016, Corolla Fire responded to 391 fire calls, from the Dare County line to the beach strands. As anticipated, our member roster declined, primarily due to age and health issues. At the end of 2016, Corolla Fire had 35 certified volunteer members.

The year 2017 saw several significant events within the department. The efforts to secure a full-time paid staff continued in earnest. The results of the mail polling of Corolla property owners overwhelmingly supported the proposal. Over 90% of responses were in favor of a professional contingent at both stations.

Corolla Fire also welcomed a new Fire Chief. After many dedicated years of service, Chief Richard Galganski elected to retire. The Corolla Fire Board announced that Richard Shortway would become the new Fire Chief, effective in July 2017.

Currituck County, in conjunction with other volunteer companies in the County, established a new “Tanker Task Force”. This provided protocols for available tankers from one district to assist other districts when the needs dictate. Tanker 62 was included in the resource fleet and has been called upon several times to assist mainland stations.

In 2017, Corolla Fire responded to 406 fire calls, from the Dare County line to the beach strands. Our member roster further declined, and by the end of 2017, Corolla Fire had 30 certified volunteer members.

2018 began with a full and comprehensive inspection by the North Carolina Department of Insurance, colloquially know as an ISO inspection. The North Carolina Response Rating System (NCRRS) inspect fire districts for proper staffing levels, sufficient equipment, proper maintenance practices, communications capabilities, availability of adequate water sources and community education and risk reduction programs. The NCRRS rating system rates each department using a scoring range from one (1) - the highest rating, to ten (10) - indicating a department is not recognized as a certified department by the state.

Within the context of the 2018 inspection, 105.5 total points were available. Corolla Fire received a total score of 58.44, which resulted in a rating of Five (5), an improvement from the former Six (6) rating previously achieved. It should be noted that the score of 58.44 was only 1.56 points from a rating of Four (4), a level achieved by fewer than 80 departments in the state.[6]

[6] From the NCDOI website, July 2019

Six (6) total-bay air ventilation units were installed at the Whalehead station to provide much needed ventilation and exhaust gases removal. These units continuously detect gas levels and start automatically.

Corolla Fire achieved a milestone in May of 2018. Having successfully garnered community support and the approval of the Currituck County Board of Commissioners, we 'effectively' became a "combination", volunteer/professional, fire department with the addition of thirty-nine (39) full-time paid firefighters. It is important to recognize that technically we continue to be a volunteer organization. However, by virtue of a permanent Automatic Aid agreement with Currituck County Fire and EMS, we are now supported by paid, professional firefighting personnel. Each station, Whalehead and Pine Island, is staffed by a full four-person fire crew (an engine company) and two-person EMS crew twenty-four hours a day – seven days a week. The county organization includes three (3) shift captains and six (6) lieutenant positions. Active volunteers continue to supplement the county staff and respond to fire incidents, in other apparatus including Platform 61, Tanker 62, Engines 64 & 65, Brush trucks and REHAB 62 and SRV 61.

In 2018, Corolla Fire responded to 331 fire calls, from the Dare County line to the beach strands. Our volunteer member roster further declined and at the end of 2018, Corolla Fire had 28 certified volunteer members, but we effectively added 39 full time paid personnel.

Beginning in 2019, and through the leadership of CFR Cares, Inc., Corolla Fire was awarded a two (2) mile stretch of Route 12 to be designated as our "Adopt-A-Highway" section. Two (2) signs were erected in memory of pedestrians who lost their lives walking along NC 12. Roadside liter pickup is required four times per year. Volunteers from Corolla Fire, CFR Cares, county paid crews and international students will participate in these efforts.

Pool Safety initiatives, including print materials and educational efforts, were introduced by CFR Cares to counter annual pool drownings by guests and visitors to the area. These efforts will continue in coming years.

Finally, Corolla Fire, through the leadership of Chief Shortway, proposed the concept of a dedicated Training Center complex to the County Board of Commissioners. The Training Center would be located behind the Pine Island Station and would provide firsthand structural fire training, not only to our professional firefighters, and to volunteers. This effort will become paramount during the following year(s).

In 2019, Corolla Fire responded to 319 fire calls, from the Dare County line to the beach strands. Our volunteer member roster recovered due to the efforts of members, staff and particularly Chief Shortway. At the end of 2019, Corolla Fire had 34 certified volunteer members, but more importantly – our average member age decreased from 65 in 2016 to 63.1 by the end of 2019.

In 2020, we would see the most unusual challenges yet faced. In the first quarter of 2020, we began to experience a global pandemic known as The Coronavirus or COVID 19. The Outer Banks, like many other locations, was effectively isolated from the rest of the country. No visitors, in fact no one other than permanent residents, were permitted access to Corolla for nearly two (2) months. Forecasts of severe economic impacts were thought to be a given and the traditional vacation season thought to be a thing of the past.

But the Fire Department continued, operating with the now common place “social distancing and contact restrictions” initiated in response to COVID 19. By the end of May, travel and visitation restrictions began to ease. And, despite limits on staffing, inside access to restaurants, continued mandates on social distancing, etc., visitation and rentals rebounded and actually increased from prior years.

We acquired two (2) firefighting vehicles; Brush truck 61, a 2006 Ford F-350 (old Brush 61 a was redesignated Brush 62) and Engine 66, a 2006 Pierce Enforcer. Engine 62 was retired after twenty-three (23) years of service.

Corolla Fire also upgraded our Whalehead Station based cascade system to a higher-pressure system needed to support new SCBA breathing air packs and bottles introduced by Currituck County.

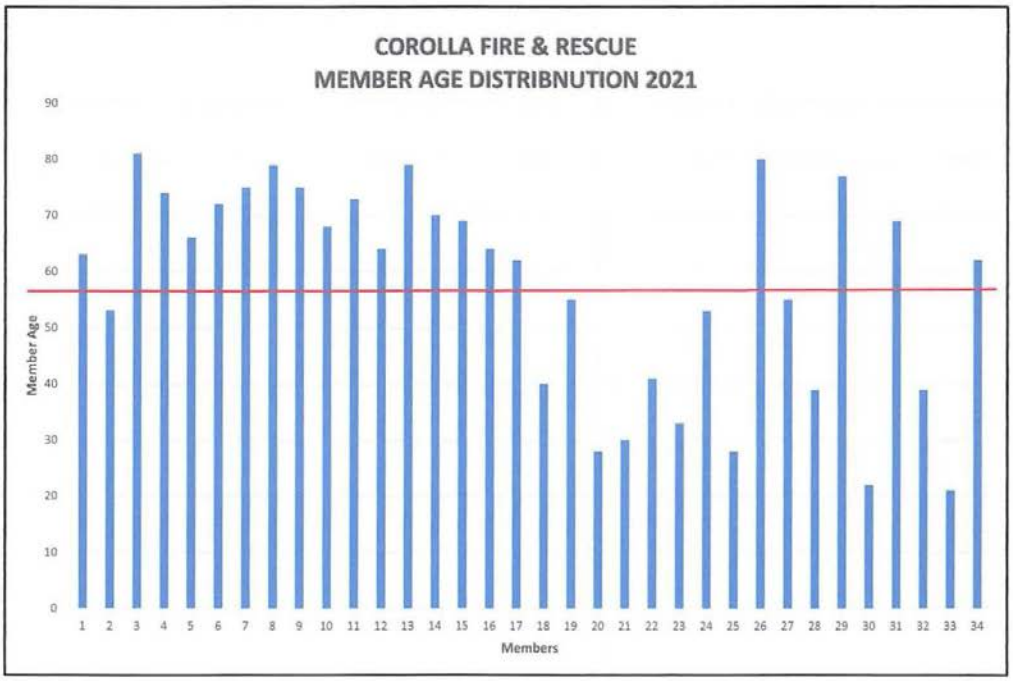
In 2020, Corolla Fire responded to 413 fire calls, from the Dare County line to the beach strands. Our volunteer member roster remained relatively stable. At the end of 2020, Corolla Fire had 29 certified volunteer members, but more importantly – our average member age dramatically decreased from a high of 65 in 2016 to 58.7 by the end of 2020. This is in large part due to recruitment efforts targeting younger personnel, but also reflects the loss or retirement of a significant number of older members.

Today Corolla boasts over four thousand (4,000) homes and businesses. The total structures property tax value is estimated at over three billion ($3,200,000,000) dollars, with market values considerably higher. Although the numbers of properties have grown, our year-round, permanent population is still fewer than one thousand (1000), and probably closer to five to six hundred (500 - 600). Incredibly, summer visitors can balloon our weekly population to over sixty (60,000). This “resort community” phenomenon poses many challenges for our volunteers.

Corolla Fire is a multi-faceted organization serving the citizens and visitors of Currituck County. We effectively became a combination fire department in 2018 and are made up of about 34 volunteer members, certified by the North Carolina State Firefighters’ Association, and 39 county paid fire and EMS personnel. We operate from

two stations with two standard class “A” pumper engines, two four-wheel drive class ‘A’ pumper engines, a 102-foot aerial platform truck, a four-wheel drive tanker truck, two four-wheel drive “brush” trucks and various other specialized fire apparatus.

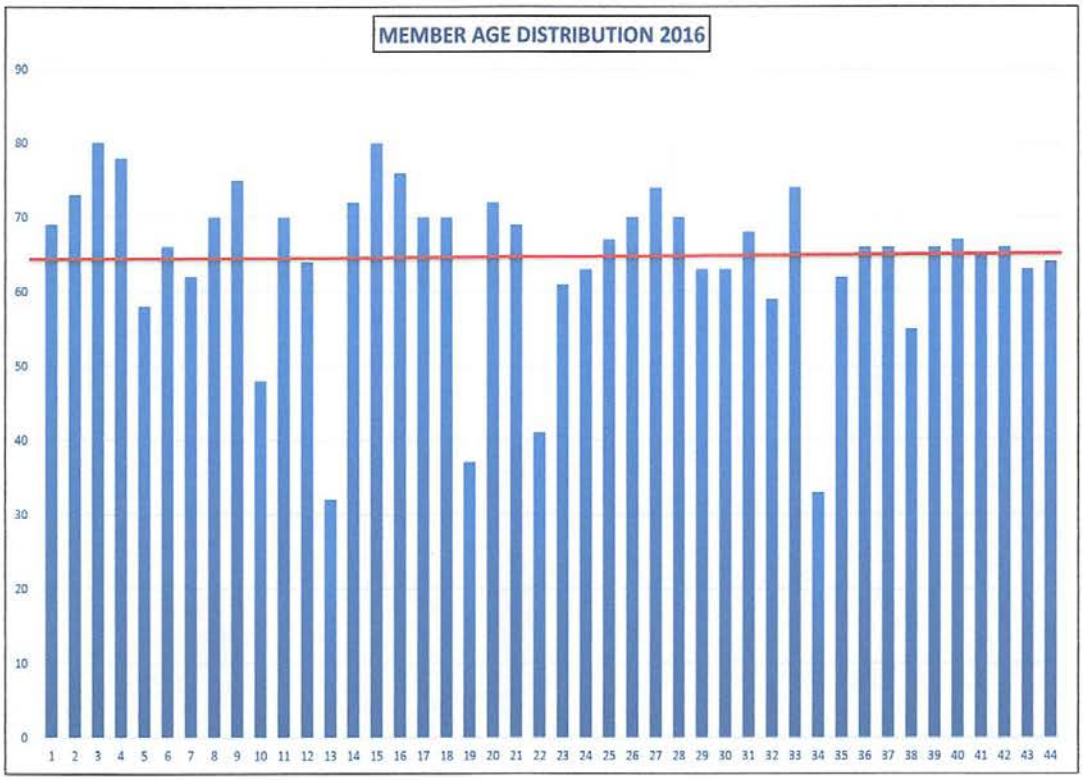
APPENDIX "F"



Average Age = 57.6 Years
Bars correspond to Members; Longest Service to Newest

MEMBERS BY AGE GROUPS:	(YEAR END 2021)
AGES 20 -- 29 =	4
AGES 30 -- 39 =	4
AGES 40 -- 49 =	2
AGES 50 -- 59 =	4
AGES 60 -- 69 =	9
AGES 70 -- 79 =	9
AGES 80 -- 89 =	2
	34

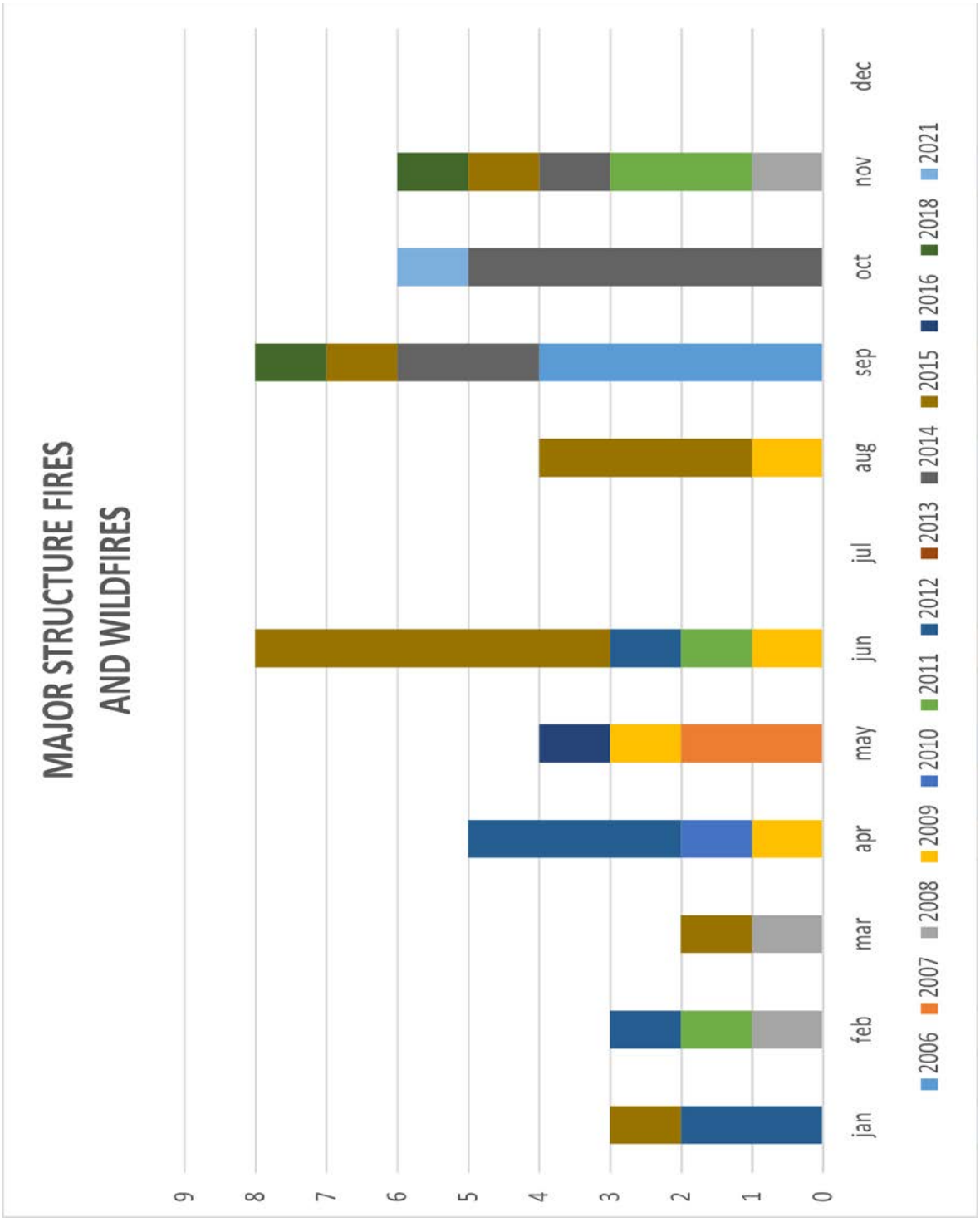
AVERAGE MEMBER AGE = 58

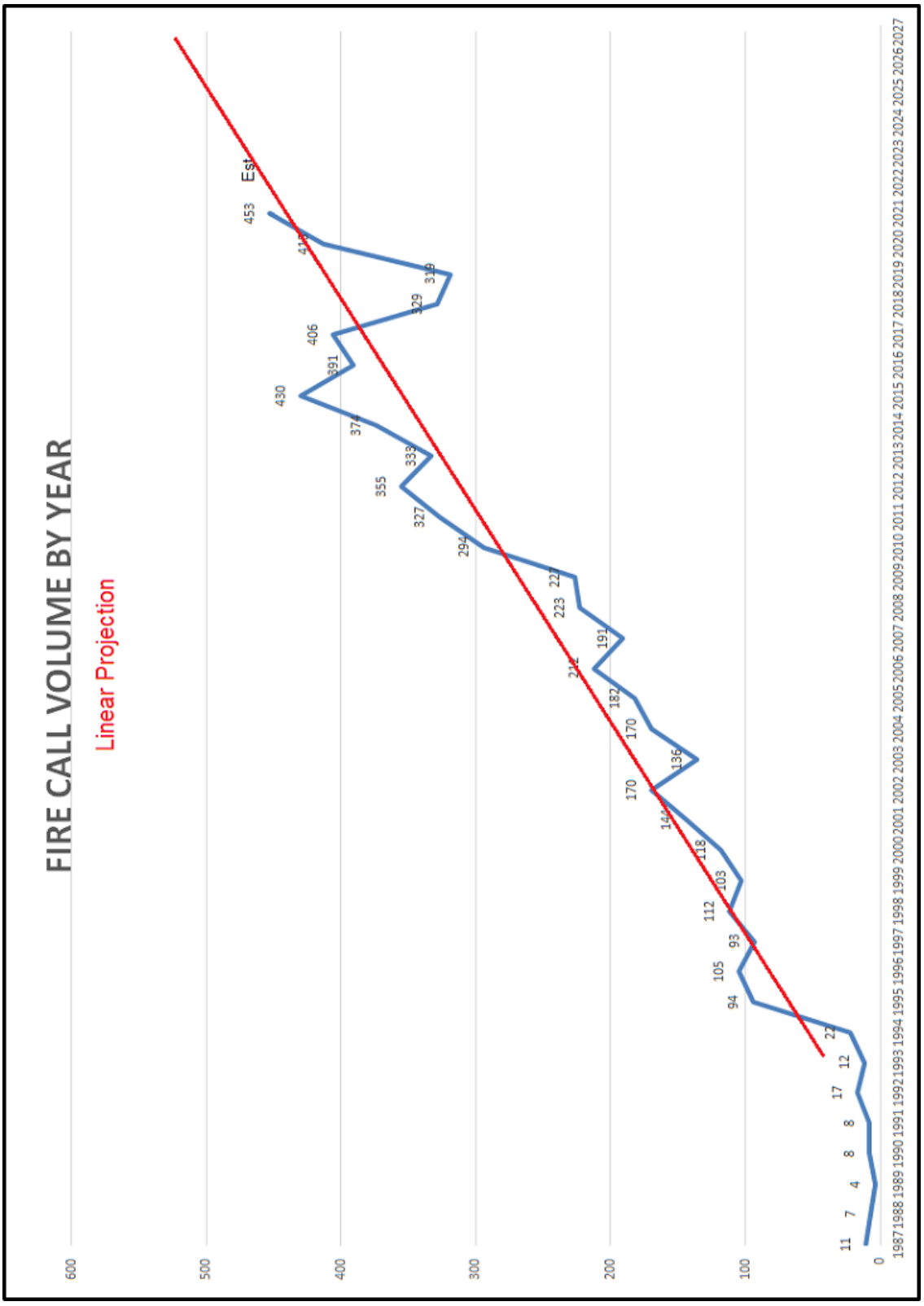


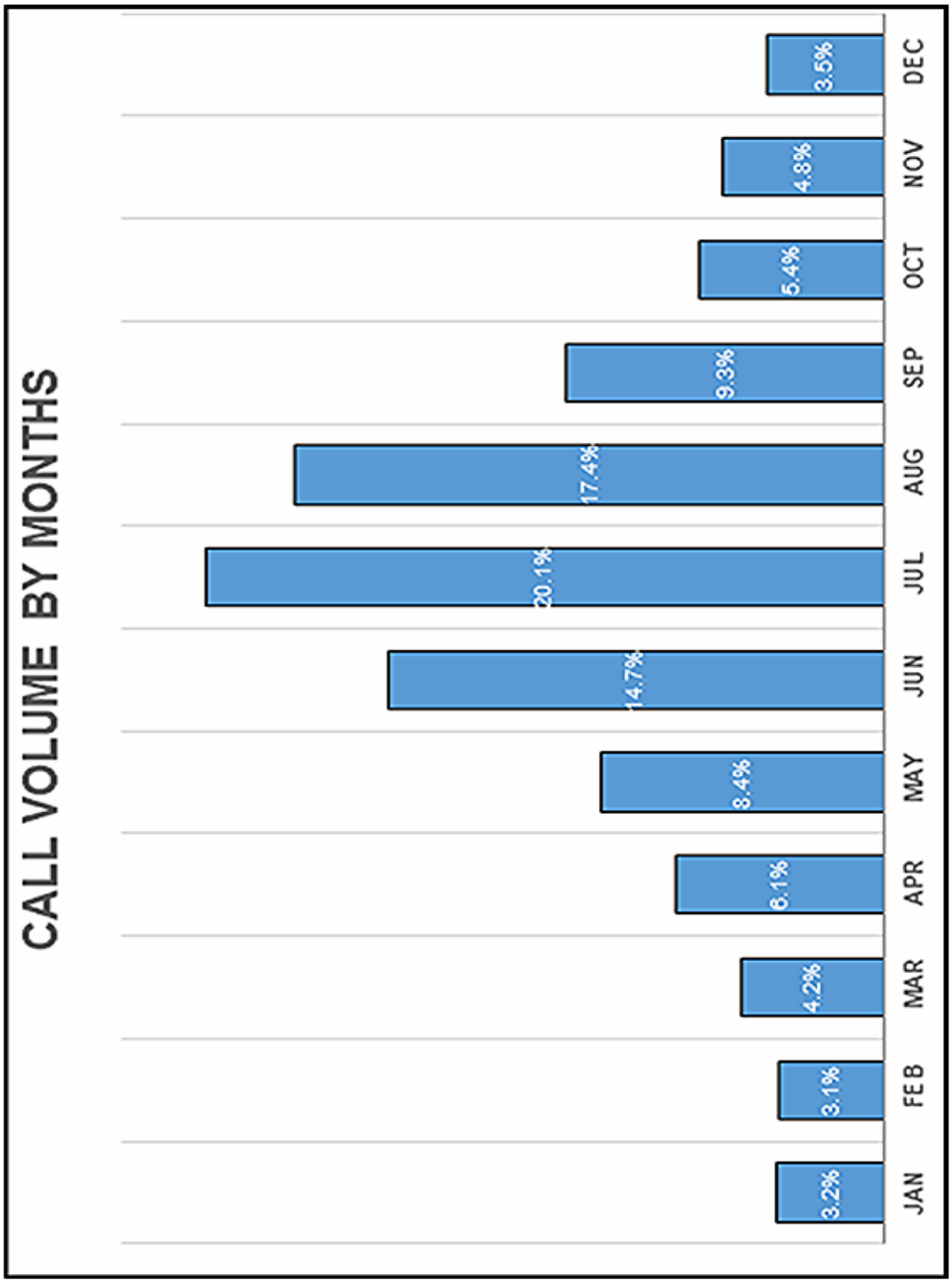
MEMBERS BY AGE GROUPS: **(YEAR END 2016)**

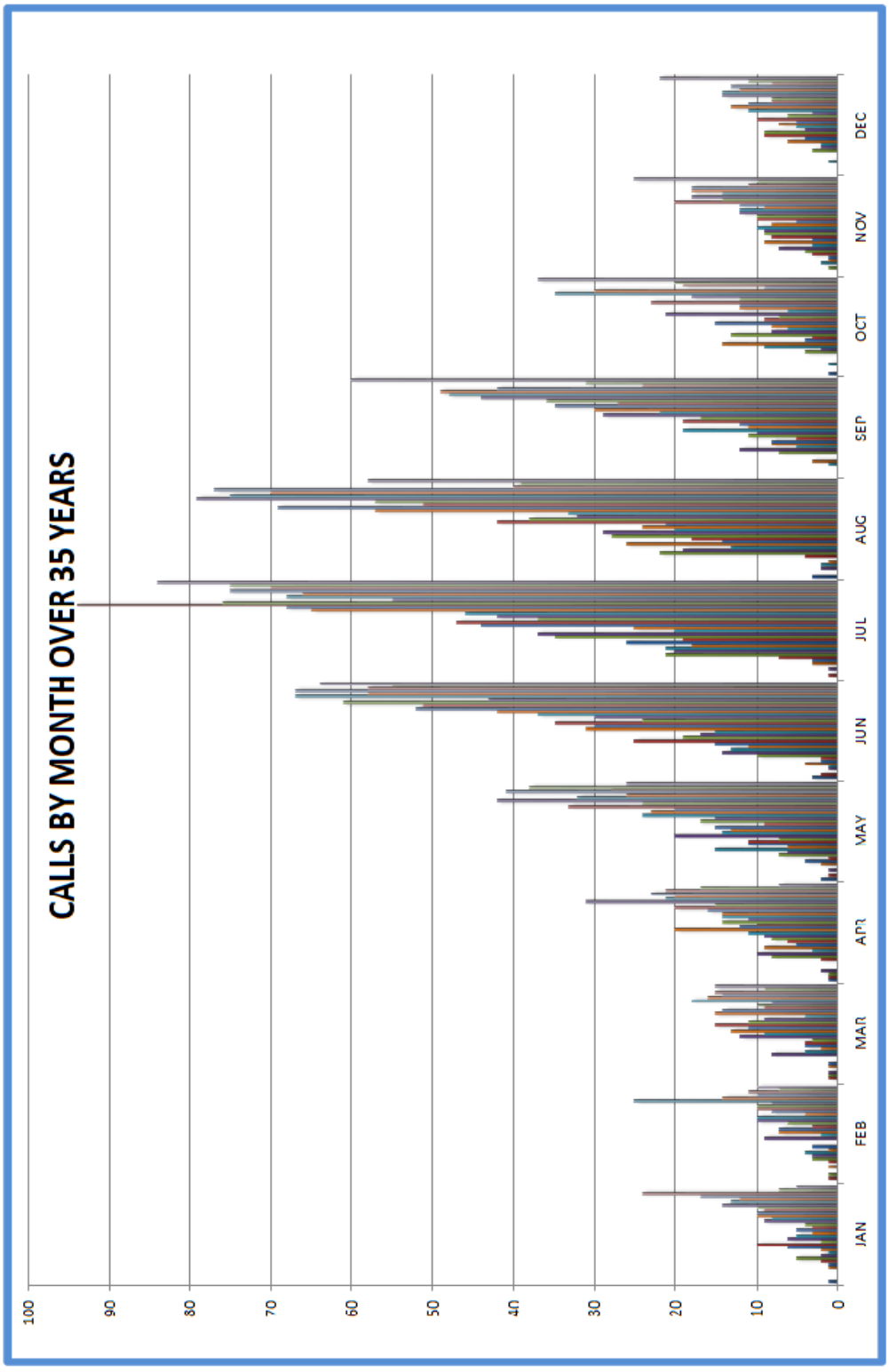
AGES 20 -- 29 =	0
AGES 30 -- 39 =	3
AGES 40 -- 49 =	2
AGES 50 -- 59 =	3
AGES 60 -- 69 =	20
AGES 70 -- 79 =	14
AGES 80 -- 89 =	2
	44

AVERAGE MEMBER AGE = 65


MAJOR STRUCTURE FIRES
AND WILDFIRES
0
1
2
3
4
5
6
7
8
9
jan
feb
mar
apr
may
jun
jul
aug
sep
oct
nov
dec
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2018
2021


FIRE CALL VOLUME BY YEAR
Linear Projection
Est
453
430
406
391
377
355
338
327
294
223
191
182
170
170
136
112
105
94
93
103
118
144
17
12
8
8
4
7
11
0
100
200
300
400
500
600
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027


CALL VOLUME BY MONTHS
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
3.2%
3.1%
4.2%
6.1%
8.4%
14.7%
20.1%
17.4%
9.3%
5.4%
4.8%
3.5%


CALLS BY MONTH OVER 35 YEARS
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
0
10
20
30
40
50
60
70
80
90
100