

**TOWN OF MOUNT PLEASANT, SOUTH CAROLINA
FIRE COMMITTEE
Tuesday, September 4, 2018
Municipal Complex, Committee Meeting Room, 3rd Floor
100 Ann Edwards Lane, Mount Pleasant, SC 29464**

MINUTES

Members Present: Bob Brimmer, Chair; Jim Owens and Kevin Cunnane
Members Absent: Tom O'Rourke
Staff Present: Eric DeMoura, Town Administrator; and Mike Mixon,
Fire Chief

Mr. Brimmer called the meeting to order at 10:22 a.m.

1. Approval of Minutes from the [July 2, 2018](#) meeting

Mr. Owens moved for approval; seconded by Mr. Cunnane. All present voted in favor.

2. Public Comments

[None]

3. Employee years of service recognition

Chief Mixon recognized Brandon Smiley for five years of service. He stated that Mr. Smiley came to the Town from Charleston County EMS where he was a paramedic prior to joining the Town. He stated that in five years, Mr. Smiley has accomplished much. He was recently promoted to Engineer. Chief Mixon stated that Mr. Smiley has great writing skills and has assumed the Fire Department's public information for the Facebook page.

4. Update on the strategic planning process –

Chief Mixon stated that the Fire Department is still going through this process. He stated that this is a brief update.

STRATEGIC PLANNING UPDATE

- 2017 ANNUAL COMPLIANCE REPORT (ACR) WILL BE COMPLETED
- ESTABLISHED STRATEGIC PLAN FORMAT
- COMPLETED AN INTERNAL SAFETY SURVEY THROUGH DREXEL UNIVERSITY
- DEVELOPED THREE COMMUNITY STAKEHOLDER SURVEYS (COMMUNITY, BUSINESS, AND CUSTOMER)
- HELD ROUNDTABLE SESSIONS WITH ALL SHIFTS AND STATIONS
- SWOT ASSESSMENTS (STRENGTH, WEAKNESS, OPPORTUNITY, AND THREAT)
- WORKING WITH GIS TO CREATE ANALYTIC ANALYSIS
- DEVELOPING INTERNAL STAKEHOLDER INTERVIEWS

Chief Mixon stated that they have completed their Compliance Report for accreditation, which has been submitted. He stated that this will be sent to the Board for approval. He said they have established their Strategic Plan format and have started to pull the information from the rough draft. He stated that they completed their Internal Safety Survey through Drexel University, but have not yet received it, and it may not be ready prior to when the Strategic Plan is ready. However, they can continue to use it in the future once Drexel University sends it. He said that they developed three community surveys and the final survey is currently out, which is more of a business geared survey of the service the Fire Department provides to business owners and people that work in the local community. He said there have been many round table discussions internally through the stations on how this shapes up and what the Fire Department looks like in the next five years and beyond. He said the SWOT Assessments were completed with the assistance of Lauren Sims,

Community and Government Affairs Chief. He said they are also working with GIS to create maps and analytical pieces to help the Fire Department see the broad picture of what is going on in the community. He said the final item, which he hopes Council will participate in is the internal stakeholders survey. He stated that their goal is to have the Strategic Plan for Council at the November Committee meeting.

Mr. Cunnane said that he sees all the input that has been received from businesses and asked what type of input they are receiving from the fire service, such as people outside of the department who know the business.

Chief Mixon said that they have had discussions with several local departments about their deployment models and what has worked for them and what has not. He said regarding outside individuals in the fire service, he said they have not reached out to them. He said they are open to receive any and all input.

Mr. Cunnane stated that approximately 2/3 of the input is coming from individuals that are quick to praise the Fire Department but is not sure they know what they are praising. He said that they do not know a response time difference of two minutes could save or lose a life or that better staffing can create better outcomes. He said that he would urge the Chief to build this in. He said he understands that accreditation does bring in departments that value accreditation but does not bring in a broad spectrum of the fire service. He said it is only certain types of departments that really values accreditation which is usually departments with City Managers, which is a bureaucracy centered measurement. He said it is not necessarily the whole fire service, but a piece of certain types of governments, usually.

Mr. DeMoura stated that he is not speaking for Chief Mixon; however, asked if Mr. Cunnane, Committee members, Mayor or other council members could provide a list of names of people to reach out to that could provide information or a different perspective that would be valuable information.

Mr. Cunnane stated that there are a number of Fire Fighter retirees that live in the Town. He said there are probably 30 New York firefighters that live in the Town of Mount Pleasant and another 30 from all over the country. He said he also knows active firefighters from Charlotte that live in the Town. He said these individuals have a vested interest here, because their families live here. He said they would be willing to step up and offer their input. He said having fire service input would be another piece of information that may be helpful.

Mr. DeMoura stated that he spoke with a retired fire officer that Mr. Cunnane facilitated, who had good perspective. He said this would be an individual worth speaking with about the survey.

Mr. Cunnane stated that anyone who has been a firefighter for a period of time will be open to assisting with fire service improvements where they live with their families and fellow firefighters.

Mr. Owens stated that in reference to working with GIS to create analytic analysis, he asked Chief Mixon to elaborate.

Chief Mixon stated that some of this will be reviewed in the engine readiness discussion. He said it is where the hot zones are located, where most of the calls originate from, what types of calls are in that area, distances, and attempting to predict future areas where call growth will continue to grow.

Mr. Owens asked if there is anything being analyzed on arrival times.

Chief Mixon responded in the affirmative and stated that this was part of the Annual Compliance Report that was just completed which will be brought to the Fire Committee next month and will show response times. He said this is part of the accreditation model.

Mr. Brimmer asked if the Town's Emergency Manager, Amada Knight, is involved in this process in terms of the larger scale responses that would take place.

Chief Mixon responded in the affirmative and said there was an internal stakeholder group that Ms. Knight was a part of. He said Ms. Knight not

only has the fire department perspective, but the whole broad Town emergency operations.

Mr. Brimmer stated that it is one thing to respond to a house or structure fire, however, it is another when responding to a large-scale event to ensure the fire department has equipment and personnel to respond.

Chief Mixon stated that this is true, because a large-scale event would take Public Services with heavy equipment, Police Department coordination, as well as the fire department.

Mr. Brimmer asked if the plan is for the Strategic Plan to be completed in time so if there are budget implications requiring more resources that this would be accomplished in time for Council to incorporate this into the budget cycle for next year.

Chief Mixon responded in the affirmative, as well as the five-year plan that Chief Financial Officer, Marcy Cotov, is also working closely on with the Fire Department.

Mr. DeMoura stated that Council appropriated additional funding for staffing on July 1st therefore when this comes before Council in November, then by January 1st those individuals will be deployed to positions that are needed most. He said discussions may then take place about additional resources at budget time.

Mr. Brimmer stated that what may have been a priority six months ago, through this process, there may be a greater need that needs to be addressed so he would like to have that flexibility to address whatever the priority may be.

5. Discussion on engine readiness

Mr. Cunnane stated that when he was first elected as a Council member, he understood there was a process on how funding was allocated. He stated that the Fire Committee was only meeting every other month, which appears to be how it has been done historically. He said the issue is trying to build the case between now and January and review where we are. He said when he looks at the trend line of population and fire

apparatus, with the population going up significantly and fire apparatus either flat or declining, it is very troubling for anyone who is familiar with what is necessary to put a fire out. He has requested the Chairman of this committee to do a monthly meeting for the next four months to show what is needed and where we are currently. He asked how it is even possible for the Town with increasing population to see fire apparatus decrease. He said that staffing also went flat with a slight increase; however, not in keeping with the population increase. He said the engines are the most versatile portion of the fire service, as they are able to do everything and with the proper engine placement and proper crews, there are great outcomes. He added that the way the Town is currently structured, two engines are required for the basics of firefighting to secure a water source, stretch a hose line and operate it safely. He said when he looks at the closest engine to his own residence, it is nine minutes away and the second engine is fifteen to seventeen minutes away, which is a very long response time. He does not believe it is unique to where he resides, but in many areas of the Town. He said this is why he would like to address this to find out where the Town is and how to improve this, as it is very troubling to him.

Chief Mixon stated that Mr. Cunnane requested the following information.

ENGINE/PUMPER FLEET

- Number of Engines
- Location and Distance
- Age and Reliability of Fleet

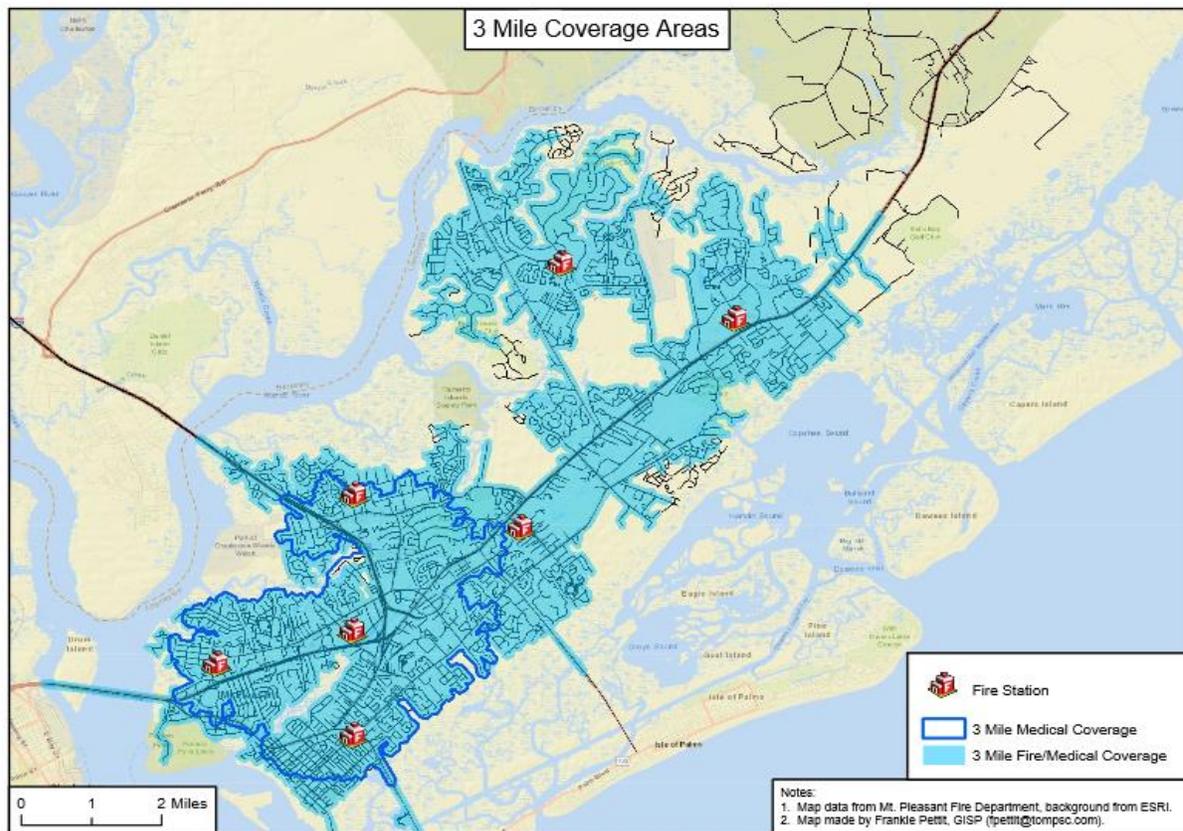
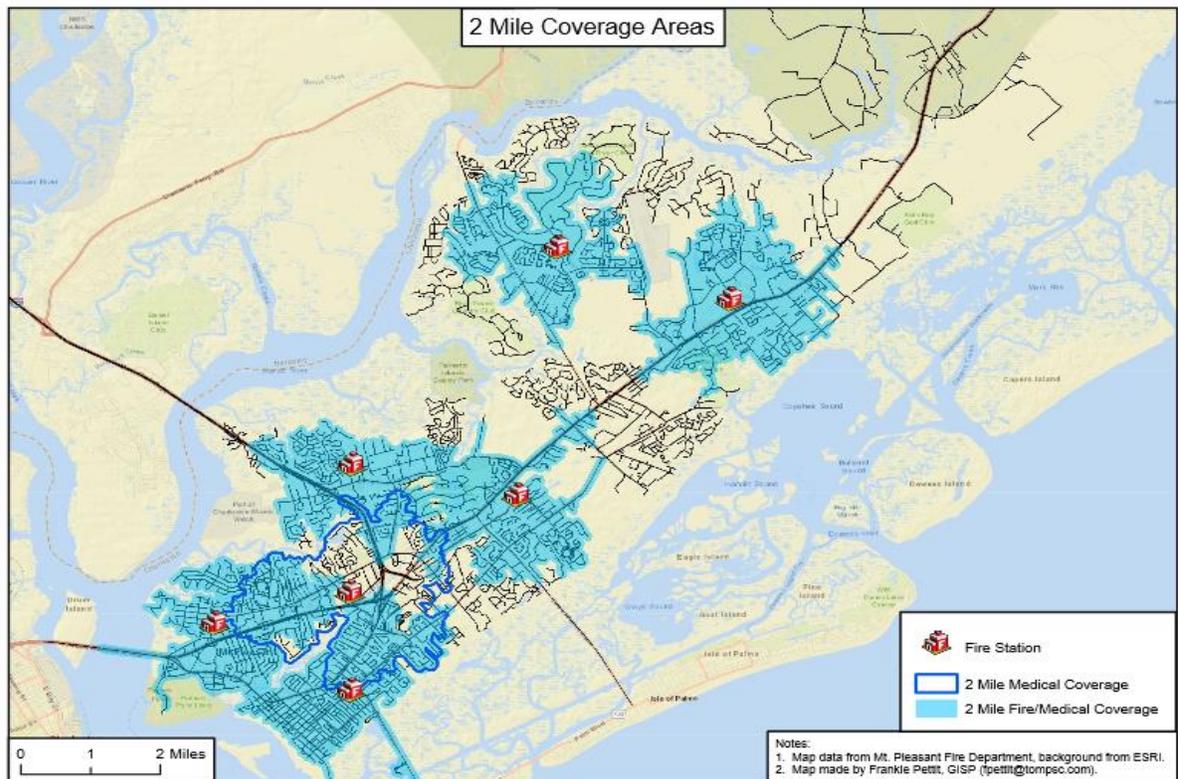
Chief Mixon stated that these were split into two sections; the first discussion will be on the fleet first, then operational improvements.

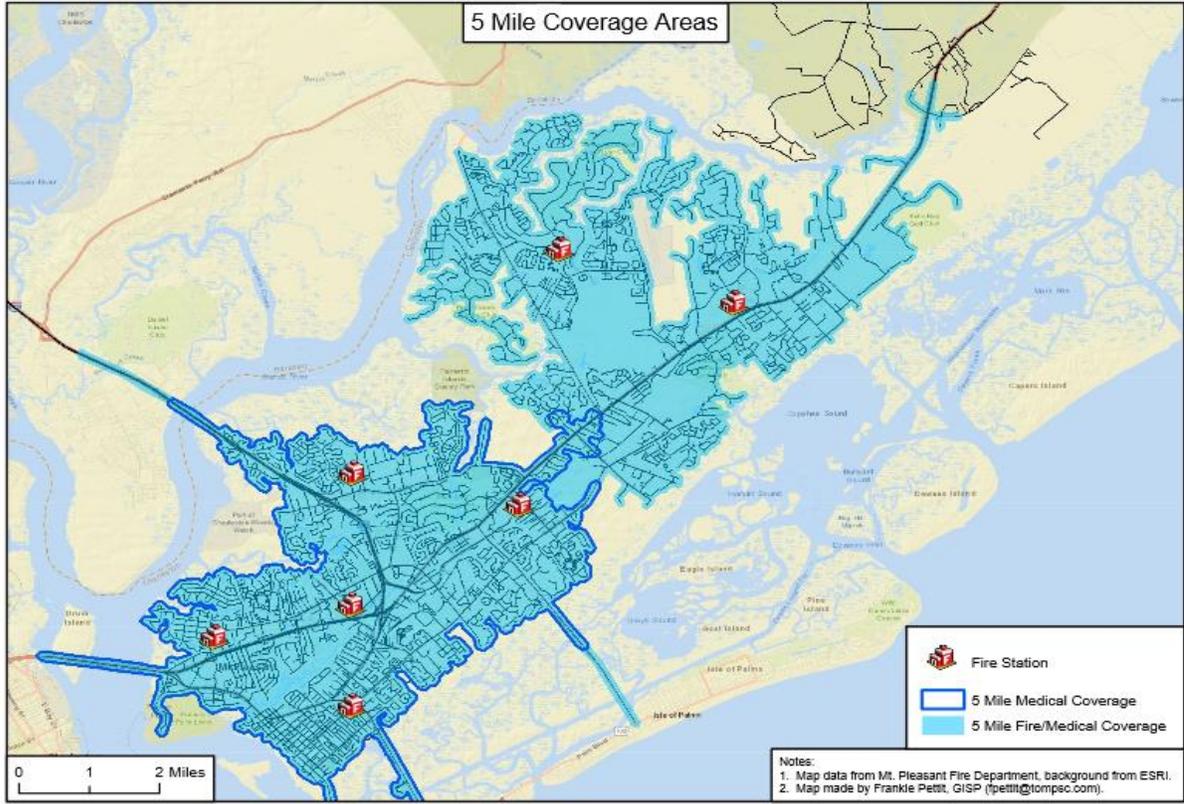
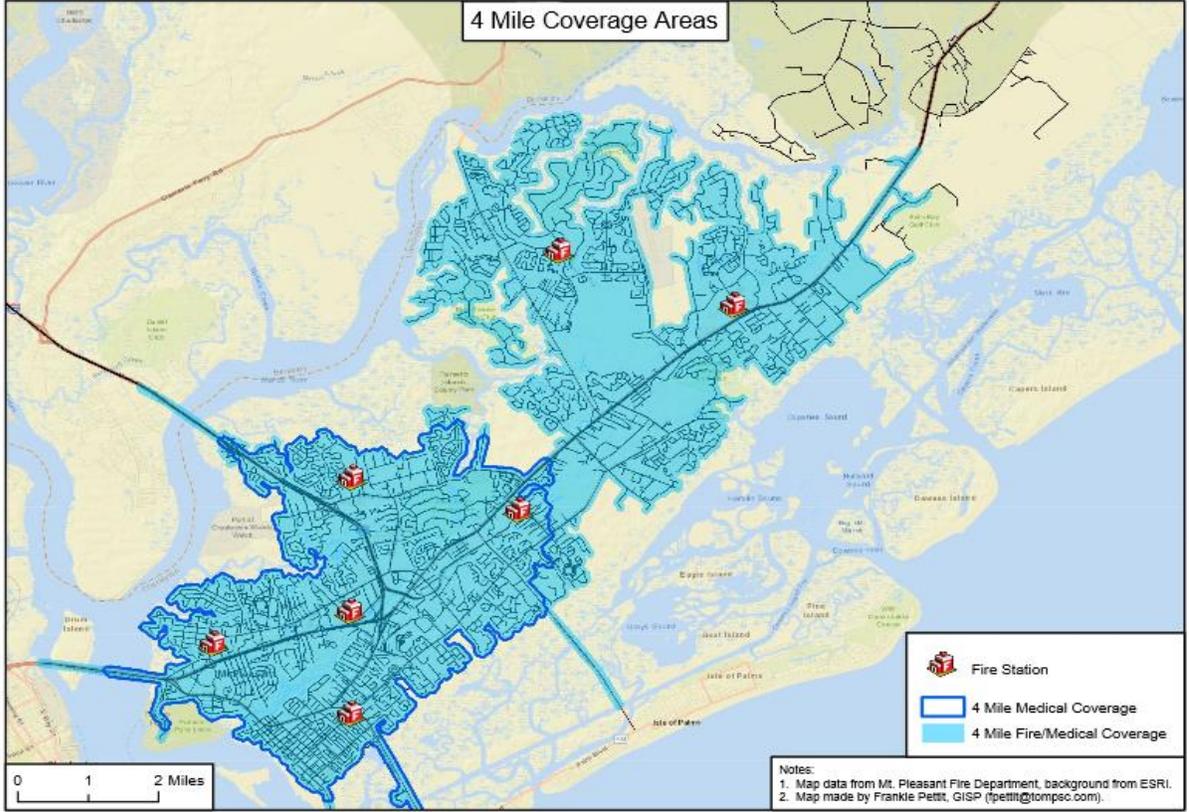
ENGINE/PUMPER FLEET

Unit	Year	Manufactuer	Pump GPM
Engine 501	2012	Pierce	1500
Engine 502	2011	Pierce	1500
Engine 503	2006	Ferrara	1500
Rescue 504	2014	Pierce	1500
Engine 505	2014	Pierce	1500
Engine 506	2018	Pierce	1500
Engine 505 R	2004	Ferrara	1250
Engine 509 R	2001	Pierce	1500
Engine 510 R	2001	Pierce	1500
Hazmat 502	2008	Ferrara	1500

He stated that they currently run six front line engines every day. He said that the Town's fleet is a relatively new fleet, with the exception of Engine 503 which is scheduled to be replaced in the next few years. He said the department has moved towards one manufacturer because they have provided a good product through the bid process. He said the reserve apparatus is shown at the bottom, and there are currently three that are utilized full time, as needed when trucks are in the shop. He said there is a dedicated Hazmat unit; however, it is an older engine and can be used as an engine if needed. He said as far as reliability, the department is moving towards a software that will assist with daily checkoffs of the trucks and equipment. He said this software will track medical equipment, expiration dates, and how many days a truck was out of service, why it was out of service, and to help the department streamline the process.

Chief Mixon stated that the following illustrations are the coverage maps. He said this indicates the two, three, four and five-mile coverage areas.





Chief Mixon stated that as you get to the three-mile map, everything fills in quickly. He said the four and five-mile coverage maps fill in.

Mr. Owens asked if the department plans to utilize engine #503 as a reserve engine and then replace one of the other reserves.

Chief Mixon stated that the department would utilize one or possibly both of those older units. He stated that this is how it has typically been done in the past; as an engine gets replaced, bring the newer engine as a reserve and deadline on the older engine.

Mr. Cunnane asked if the department keeps track of how often the reserves are in service.

Chief Mixon stated that they do not and have not in the past.

Mr. Cunnane stated that he drives by Station #5 each day and they have had the troubling 2004 engine and did not know they were that old, which is concerning to him. He said there are firefighter fatalities that have happened because an engine fitting blew off the engine. He said if you look at the five-mile map, Station 5 has a large portion of the area where they are the only one that can respond. He said if they have an engine that "hopefully" works, this is troubling.

Chief Mixon stated that they are older; however, they pump test annually and those at the stations keep a good eye on them and check the functionality of them every day. He said that Mr. Cunnane is correct as this is not a function they have traditionally tracked. He said they have not done the data.

Mr. Cunnane stated that he does not believe people realize how temperamental those units can be. He said these reserve units end up being front line many times, so when he sees a 17-year-old apparatus as the first one rolling up to a fire, he is troubled by this.

Mr. Brimmer asked what the criteria is for determining the age of the units. Is it mileage, number of times the unit is used or the age of the unit.

Chief Mixon stated that with a diesel engine and the way the pumps are made, it would likely be hours on the engine and number of miles. He said there could be a ten-year-old engine that was rarely used or one that has a high-volume use, and both are two totally different units.

Mr. Brimmer asked Mr. DeMoura if there is an established schedule for fire truck replacement every few years or is it a matter of condition.

Mr. DeMoura stated that the Town has made significant advances on heavy equipment replacements, not just in Fire, but in Public Services. He said working with Fleet Maintenance and Procurement, the Town tracks and measures the use of the vehicles and when it reaches a level where it is too costly to keep maintaining, then it is replaced. He said the one engine that is older is scheduled for replacement; however, fire apparatus is competing for other resources and these are expensive pieces of equipment. He stated that the Town keeps track of the equipment and knows when it is time, which is when Council will see the list of vehicles and heavy equipment during the Capital Replacement Schedule in January or February. He said last month, the lease purchase was approved for the five-year heavy equipment. He added that no fire equipment was listed at this time but will likely see this next year.

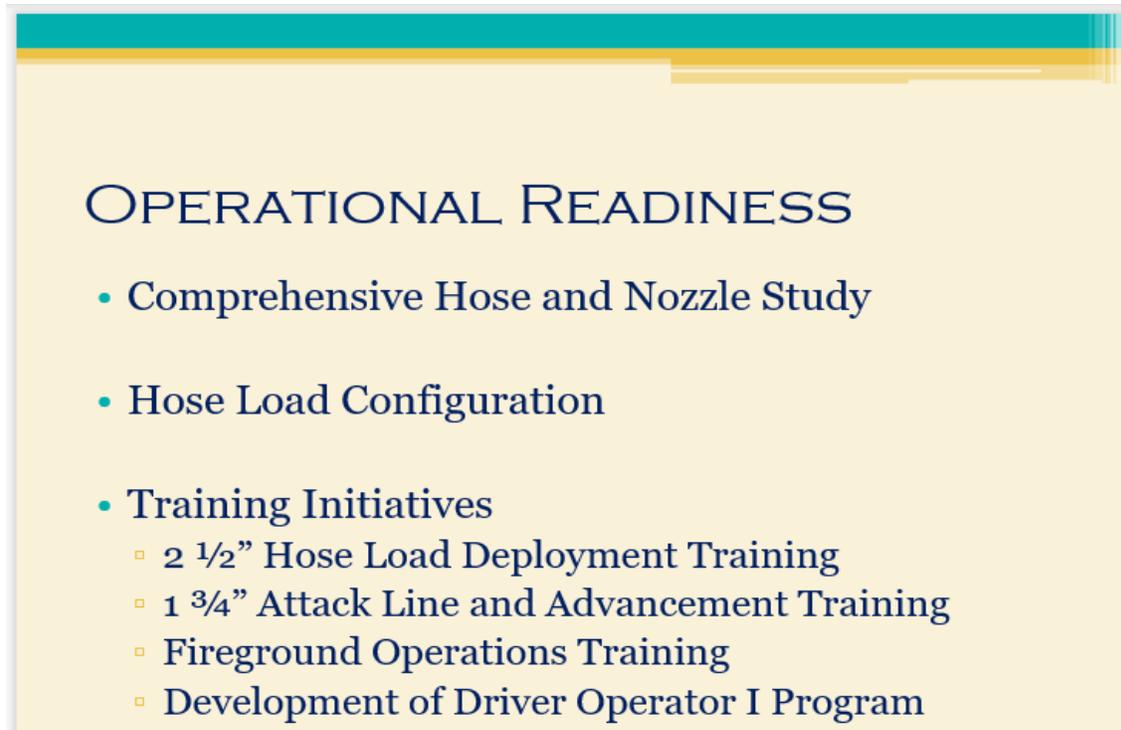
Mr. Cunnane said they have the mileage and how often the equipment is pumped and if you do not pump it enough, it deteriorates. He said if it sits for ten years, then it has ten years of corrosion, regardless of the mileage on the unit.

Mr. Owens stated that he is sure there is a preventative maintenance program that run the pumps even if the unit is not being utilized to determine what efficiencies remain on each engine. He said whether it is the number of miles on the unit or if the pumps are operating in an efficient capacity, this is being tracked.

Chief Mixon responded in the affirmative and said they are being tracked on the First Vehicle side, and the Fire Department would like the ability simply for planning. He said the pump checks are done once a day on the front-line apparatus, but there is also a yearly very intensive pump check.

He stated that he is very confident in the fleet and over the past several years, the Town has made great strides to obtain a newer fleet. He added that most of the fleet is less than five or six years old. He said the Town has a new fleet and he is happy with the equipment the department has, especially in comparison to other local areas.

Chief Mixon stated that the second portion is Operational Readiness.



The slide features a teal header bar at the top. Below it, the title 'OPERATIONAL READINESS' is centered in a dark blue, serif font. The main content area is a light yellow background with a list of bullet points in a dark blue, sans-serif font. The first three items are primary bullets, and the last one is a sub-bullet under 'Training Initiatives'.

- Comprehensive Hose and Nozzle Study
- Hose Load Configuration
- Training Initiatives
 - 2 1/2" Hose Load Deployment Training
 - 1 3/4" Attack Line and Advancement Training
 - Fireground Operations Training
 - Development of Driver Operator I Program

He said over the past four months with the training division, they have looked at ways to improve internally. He reviewed how the department can improve their Standard Operating Guidelines, make them clearer, and when they are on the scene, have one clear mission. He said they have this now but are reinventing everything and looking at it from all sides. He said that over the past four months, the department has done a comprehensive hose and nozzle study to determine if they are flowing effectively the gallons per minute. He said they have made a switch to a different type of nozzle and hose after this study, to put the recommended gallons per minute on the fire. He said it also reduces the nozzle reaction so those inside fighting the fire do not feel as much pull back but are still putting more water on the fire. He said if the fire goes

out, the problem goes away and through this hose and nozzle study, they have found a way to do this. He added that they have used a couple of standard hose loads for years; however, looking at deployment and the current models, there have been changes to allow the firefighters to get the hose on the ground quicker with fewer people. He reviewed the training initiatives with Committee and said that they are utilizing the 2 ½ inch hoses on larger fires. He said with the stand 1 ¾ inch hose, how can they use this more effectively as well. He stated that they are trying to bring all shifts back to center. He said they all do a great job currently; however, they are going to make their jobs easier by providing a standard set of guidelines where the department is all on one page. He said some may be pre-designated assignments where each truck knows what they are doing. He said they are also working on the development of a driver operator program. With the recent promotions of Captains and Engineers, many of the drivers have moved up in rank. How does the department get more drivers and train them properly so that the succession plan continues to work, so if there are more promotions and additional drivers are needed, that they are available?

Mr. Owens asked if the Fire Department is working with Mount Pleasant Waterworks on HFT (hydro flow test) all around the Town. He said there have been reports where valves that directly affect the hydrants are sometimes throttled down or closed when they do preventative maintenance. He asked if the Fire Department is working in tandem with Mount Pleasant Waterworks to ensure that the HFT exceeds what is needed by the Fire Department.

Chief Mixon stated that the department goes out twice a year and conducts two types of tests; a flow test and a static pressure test. He said the department works closely with MPW and provides them with all the data. He said MPW has also started feeding data back to the Fire Department on when they are performing work in areas and shutting off even one hydrant which is then communicated to the shift and station it affects. He said as part of the ISO process, they have started looking at MPW's modeling because they have a very extensive computer model

that they are working on, and how this aligns with the Fire Department's test in the field.

Mr. Owens asked if the trucks have a hydrant wrench or is MPW called.

Chief Mixon stated that there are multiple hydrant wrenches on every firefighting apparatus. He stated the trucks do not have a hydrant valve which is a six-foot wrench. He said it is part of their protocol that when they get to a certain residual pressure, they call MPW who will boost the pumps in that area.

Mr. Owens asked what would happen if the valves have been throttled down where the firefighters are not getting the flows out of the hydrant. He said in other areas (not Mount Pleasant), houses have had severe damage because the valves were shut.

Chief Mixon stated that to his knowledge, the Town has not experienced this; however, they would go to another hydrant. He said MPW is very responsive.

Mr. Cunnane asked where the Chief gets the staffing to do this. He said that the first two engines are the first attack line and if a supply line needs to be stretched, which is a five-inch hose, where does the staffing come from at that point.

Chief Mixon stated that it would be all hands-on deck from the Mount Pleasant side and then backfill from the mutual aid agencies.

Mr. Cunnane asked if the department is relying on backfill from other mutual aid agencies if there is a water loss.

Chief Mixon stated that it would depend on the size of the fire. The department would get as many of the Mount Pleasant units there to address the problem at hand and backfill with mutual aid or call them to the scene.

Mr. Cunnane stated that the stretch could be significant and need two engines to work the hose line if they have to define the other active hydrant.

Chief Mixon stated that typically the hydrants are 300 feet apart, but to hit another branch it may be 1,000 to 1,200 feet.

Mr. Cunnane stated that it may be easier to draft, but it is a labor-intensive operation and the Town does not have the labor. He said drafting is pulling water from a pond.

Mr. Owens stated that going back to the GIS, does the GIS provide the Fire Department with data of where the hydrants are located.

Chief Mixon responded in the affirmative and said that their GIS does receive that data from MPW and is available in a paper map book with each location, as well as the digital mobile data terminal in the truck.

Mr. Brimmer suggested that prior to the plan coming back to Committee, that it go through MPW to see if there is anything that requires coordination.

Chief Mixon stated that regarding improvements in water delivery methods, the next illustration are the new color-coded hoses that the Town has implemented to make it as simple as possible.



He said color coding the nozzle to the hose helps ensure that more water is delivered to the fire.

Chief Mixon stated that this is the 2 ½ inch flat load discussed earlier, which is what they have been running. He said the flat load is more of a supply line and what is used for the five-inch hose. He said it feeds off the truck nicely in single sections, but to actually shoulder this and take it upstairs in a multi-story apartment building or if it is needed on a dock, is difficult, because the whole hose-bed would need to be dragged out with a flat load. He said since they have gone to the modified minute man, it provides a modular approach as to how to deploy this. He said if a 2 ½ inch hose is needed on the third floor of a hotel, one firefighter could shoulder that load bundled together with Velcro with the nozzle and head up the stairs. Or in the two middle sections, if they need to connect to the building and supply the sprinkler system or the standpipe system, the engineer can grab the two middle sections and deploy with these. He said they are looking at ways to increase effectiveness and have things bundled together so that it is modular and can be deployed as quickly as possible.



Mr. Cunnane stated that with a 2 ½ inch hose line stretched to the third floor, this takes two firefighters.

Chief Mixon stated that if they hit the standpipe on the third floor, one firefighter could get the bundle up, and once charged and deployed, it would take three to four firefighters.

Mr. Cunnane stated that the standpipe operation requires someone at the water source hydrant, the engineer at the apparatus who also has to hook up to the standpipe outside, so if there are only three firefighters on an engine, they cannot flow water at a hotel fire with a single engine. He asked if this was an accurate statement.

Chief Mixon responded in the affirmative. He stated that he would argue that with a single engine, it would not matter if there were four or five firefighters, it would be dangerous to enter a third-floor hallway with only four or five people on the scene. He stated that it would take multiple units to handle something such as this.

Mr. Cunnane said he cannot understand how three firefighters are expected to hook up to a standpipe and actually even begin an operation. He said this structure is very troubling to him for the size of the Town and it is unfair and unsafe to the firefighters here in the Town. He said he would like to see more emphasis place on acquiring someone else on the trucks for that reason. He said it is next to impossible to send two firefighters up with one length of hose line each. He asked if one firefighter carrying 200 feet of hose up three flights is still going to operate.

Chief Mixon stated that they will not be expected to hook up the hose, charge it and go down the hall, but they are doing the initial setup, waiting on the arrival of other companies.

Mr. Cunnane stated that a second length of 2 ½ inch hose will put a firefighter out of commission after a flight or two of stairs. He said it all comes back to staffing.

Mr. Brimmer stated that when there was discussion of allocating more funding, the initial thought was that this was the area that funding would

be used for, to increase staffing on the engines, if the department determined that this was the need. He said we do want to make sure that those trucks are staffed safely and appropriately, which is why the funding is sitting there waiting for a plan to move forward.

Mr. Cunnane stated that he would like to note that he has received some incoming from political realms about asking these questions. He added that one of Council's responsibilities is to investigate departments, which is listed in the State law. He said these are difficult questions that Committee is asking, with difficult answers that expensive to solve. He said to not ask them, which has been going on for a number of years, is a recipe for disaster in his opinion.

Mr. Brimmer stated that he does not know that he has heard from anyone that these questions should not be asked. He feels that it is appropriate, and the fire department has shown that they are open to these discussions. He added that the big challenge is how to address these issues and what the timeline is. He stated that he has learned a lot today and appreciates Mr. Cunnane asking the questions. He stated that he is sure everyone would like to be able to improve these shortcomings, which is why we are here.

Mr. Cunnane asked Chief Mixon what staffing he would prefer on the engine companies.

Chief Mixon stated that if there was significant funding, he would request five people per engine; however, asked if it is responsible.

Mr. Cunnane stated that money aside, professionally, as a Fire Chief, where would he like to see the fire department in five years.

Chief Mixon stated that this is why this strategic plan is coming out. He said they would like to look at all options. He said it is possible that they do need more firefighters on the scene, but maybe there is something the department is able to do that does not necessarily put four on a truck or perhaps it does. He said they are close to formulating that plan now. He stated that the National Center says four firefighters per truck, but also with that standard, there are challenges. He said you would need a

billion-dollar budget to fully meet the NFPA. He is not saying that the four on a truck is not appropriate or that it is; however, they want to look at the full picture. What is fiscally responsible in five years that is going to improve their operations, but also ties everything together for an overall improvement. He said they are close to a recommendation and will review this with Committee in November. He said they are making changes now to get in line with more effective operations.

Mr. Cunnane asked the Chief how he views the number of engines currently in service and if this is something that needs to be reviewed. He said if you put five firefighters on every engine, it improves the capacity to deliver water to a fire and could do the same thing with two additional engines with four firefighters.

Chief Mixon stated that there are different ways to look at it.

Mr. Brimmer stated that Mr. DeMoura, Chief Mixon and all the department heads work really hard to make sure these priorities are reviewed. He said that he knows the Chief and his team would do whatever possible if they thought it was unsafe. He appreciates Mr. Cunnane pushing to put the Fire Department as a priority, because perhaps in the past, this should have been looked at. He said the next plan is how to move forward with this need.

6. Approval of the automatic aid and operational agreement between the Mount Pleasant Fire Department and Awendaw Fire Department

Chief Mixon stated that he is not requesting a vote on this today. He said it felt rushed, especially with the strategic plan process and the teardown and rebuild of Station #4. He said there were a number of unanswered questions and did not want to move forward too quickly. He said they will continue to work with the Awendaw Fire Department Chief and discuss options and will bring this back in a few months.

Mr. Brimmer said he sent the Chief some questions to address in this process and welcomes any questions from his fellow Committee members.

7. Update on the award of the Assistance to Firefighters grant for self-contained breathing apparatus

Chief Mixon stated that this is an update that would have been brought to the Finance Committee; however, since they did not meet this month, this item will go to full Council next week. He stated that the department was awarded \$220,000 for the replacement of self-contained breathing apparatus, which are the packs they wear to breath to go into fire and hazardous areas. He said their grant-writer, Captain Brian Tuohy, was able to secure the grant for them and it provides a jump start to move towards some newer technology.

Mr. Brimmer asked what the match will be.

Chief Mixon stated that it is a 10% match and was set aside by the Finance Department at the beginning of the process. He said Finance was involved in the process with the Fire Department and the funding is available and reserved, if approved by full Council.

Mr. DeMoura stated that this will be on the Council agenda for acceptance of the grant.

8. Adjourn

There being no further business, meeting adjourned at 11:03 a.m.

Respectfully submitted,
Barbara Ashe
September 4, 2018