



MINUTES
Board of County Commissioners Meeting
Monday, October 18, 2021 4:00 PM
Hampstead Annex

MEMBERS PRESENT: George Brown
Fred McCoy
Jacqueline A. Newton
David Piepmeyer

MEMBERS ABSENT: David Williams

OTHERS PRESENT: Chad McEwen, County Manager
Trey Thurman, County Attorney
Tera Cline, Clerk to the Board
Doug Shipley, Assistant County Manager
Allen Vann, Assistant County Manager
Other Staff and Members of the Press and Public.

Page

1 CALL TO ORDER

Chairman Brown called the meeting to order at 4:04 PM

2 INVOCATION

Commissioner Newton presented the invocation.

3 PLEDGE OF ALLEGIANCE

Commissioner Piepmeyer led the pledge of allegiance.

4 ADOPTION OF AGENDA

4.1 Motion to excuse Commissioner David Williams from the meeting.

Moved by Jacqueline A. Newton, seconded by Fred McCoy

Motion Approved

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			

Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

- 4.2 Motion to adopt agenda with the removal of agenda item 21.2 public hearing.

Moved by Fred McCoy, seconded by David Piepmeyer

Motion Approved

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

5 PUBLIC HEARING

6 PUBLIC INFORMATION

6.1 Pender County Fire and EMS System Review

19 - 87

Chad McEwen, introduced Dr. Steve Knight and Dr. Bruce Moeller with Finch and Associates. Dr. Steve Knight presented an overview of the fire and ems study that was done for Pender County. The study and presentation is attached. He gave an overview that this system evaluation, from a high-level perspective, considers all current providers in the system – including fire districts & towns providing services with career personnel, volunteers, and through the use of Pender EMS & Fire, a 501(c)3. We objectively measured performance with a number of statistical analyses and considered deployment alternatives employing GIS modeling. We further assessed the current administrative and financial practices of the system. Each of these were considered in the development of alternative, implementable opportunities for operational and organizational efficiency, effectiveness, improvement, and long-term sustainability based on modern best practices and the unique

characteristics within the County. The report is constructed with four components. Section 1 is this executive summary, intended to provide a high-level overview of significant observations and findings from which specific recommendations and alternative system designs are based. Section 2 is a summary PowerPoint which compliments the Section 1 executive summary. Section 3 is the detailed statistical analysis of data reflecting system workload and performance measures, while Section 4 offers a GIS perspective on fire and EMS demand, demographics information, and alternative deployment options based on desired levels of performance.

Commissioner Piepmeyer requested to know if any public comment had been noted since the study was published on line. Doug Shipley, Assistant County Manager, stated not the the county has been made aware of.

The board thanked Finch and Associates for their diligence with this project. They also thanked all of the county volunteers for their continued service to the county.

[Pender County Summary Report to Client 8-24-21 Fire Study](#)

7 PUBLIC COMMENT

8 CONSENT AGENDA

- 8.1 Approval of a Purchase Order to Courthouse Computer Systems for Recording Software FY 21/22 \$40,000.00
- 8.2 Acknowledge Introduction to the PCU Emergency Response Plan
- 8.3 Approval of Purchase Order to Dell Financial Services in the Amount of \$46,200.00 for the Lease Purchase of Computer Hardware.
- 8.4 Approval of the Board of Commissioner Meeting Minutes October 04, 2021

Moved by Fred McCoy, seconded by David Piepmeyer

Motion to approve consent agenda

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x

	4	0	0	1
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CARRIED.

9 APPROVALS AND RESOLUTIONS

- 9.1 Resolution in appreciation of Wilmington Area Rebuilding Ministry WARM 89

Tom Burns, Director of Construction with WARM, spoke briefly about celebrating 25 years and what the Wilmington Area Rebuilding Ministry does and how much it means to the volunteers.

Commissioner Newton requested to read the resolution to the public thanking WARM for their continued service to Pender County. Resolution is attached.

[WARM](#)

- 9.2 Settlement and Order of Collections

Justian Pound, Tax Director, presented information for approval . After the tax receipts are created the governing board must adopt an order charging the tax collector with the obligation to collect the taxes included in those receipts. This order also extends to uncollected taxes of previous years not to exceed ten years. This "order of collection" has the same effect as a court judgment against the jurisdiction's taxpayers, meaning tax collectors may use collection remedies against personal property, such as attachment and garnishment, and levy without additional involvement by the courts.

Moved by David Piepmeyer, seconded by Fred McCoy

Motion Approved

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

9.3 Approval of Contract with Wood Engineering for Management of Demolition, Decommissioning Former BASF/TAKEDA Property

Chad McEwen, County Manager, gave a brief overview of the RFQ received from Wood Environment and Infrastructure Solutions, INC. Pender desires to expand the park to include the residual BASF property which contains several remaining buildings, 2 warehouses, a wastewater and water plant, and other ancillary structures. Consistent with it's redevelopment plan for the BASF site, Pender has selected Wood to provide project management and support services for the demolition and decommissioning of all structures, equipment, apparatus, piping, fencing, infrastructure, asphalt, and concrete present on the property. This also includes locating, mapping and overseeing the decommissioning of all subsurface utilities present on the subject site. He stated even though this is just the RFQ, Wood sent in a bid as well in the amount of \$187,350.00. This price is strictly for the decommissioning and demolition of the site.

Commissioner Newton asked if this was the only bid that came in. Mr. McEwen stated they had received two RFQ's one was from Wood and the other was from McKim McCree. It was determined after review that Wood was well more diverse with the sight due to being part of the decommissioning of the Takeda Plant. Wood has also completed the abonnement well project on the property. Mr. McEwen explained that RFQ was just a request for qualifications not a price. He also explained that McKim McCree had experience with utility construction but not very much on demolition.

Commissioner McCoy stated that he has worked with Wood in the past and was very impressed with their work.

Moved by David Piepmeyer, seconded by Fred McCoy

Motion Approved

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

9.4 Approval of Moseley Architectural P.C. contract for Pender County Law Enforcement Center

Chad McEwen, County Manager, presented the results from an RFQ that was placed in regards to construction of the Pender County Jail/Law Enforcement Center. He stated that Moseley Architectural P.C. had previously completed the space and feasibility project for the building. After determining they were most qualified they entered into the bid negotiation process for the project. The draft contract was provided and reviewed internally as well as by the County Attorney. He stated they had reached out to other counties who had recently completed similar projects and asks them to provide us with some of their bid sheets related to professional services. The contract that was received back from Moseley for 40 million dollar construction included their services for 3.25 million. The original proposal did not include some services that we felt crucial to the success of the project, mainly, working with the county, working with USDA to help with a complete funding package. Also working with us and coordinating with the Town Of Burgaw in regards to public utilities. These services were added into the contract. Chad stated he did some research on trying to find some soft cost estimates on market rates, soft cost on estimates related to engineering and architecture. He found that the industry standard could be anywhere from 5 to 20 percent based on the complexity of the project. For this project the Moseley proposal is 8 percent. Meaning that the 3.25 million price of the project is their percentage cost.

Commissioner Piepmeyer asked what that buys us? Chad stated that buys us initially, the first step is them working with USDA for complete funding. Second will be full bid design of the building architecturally and then submitting it for review by the state and county. Will be submitting to the town for annexation in order to receive town water and sewer rates. DOT permitting, then turning it around for board approval and bid package. Commissioner Piepmeyer requested to know how many months/years will this take to be fulfilled and invoiced? Mr. McEwen stated that will depend on the timeline securing funding and construction time. The board asked if there was a provision to keep us from over running the allocated money, performing a bunch of work, and preliminary work and the not having enough at the end to get the final project done. There is a breakdown of the phasing of the cost in compensation, there is also a schedule of hourly billing rates. Mr. McEwen stated the board would receive periodic status reports as requested. Chad stated that he would ask Moseley to provide a GANT Chart that reflects the percent complete.

Commissioner Newton stated that the contract states that Moseley will be providing the civil engineering component of this project, is that included on this fee schedule? Chad stated that a lot of the civil has been done, and is included in the fee schedule.

Attorney Thurman stated there was a provision in the contract that stated if the project drags on beyond a certain time period stated in the contract and it is deemed not their fault they start to get additional fees.

Moved by David Piepmeyer, seconded by Jacqueline A. Newton

Motion to approve

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

- 9.5 Approval of Purchase Order to Motorola Solutions, Inc. in the Amount of \$105,778.20 for the Lease Purchase of Portable and Mobile Radios.

Sherriff Cutler explained, Pender County Public Safety agencies uses two-way radios to communicate on the N.C. Department of Public Safety VIPER system. This allows interoperability between Pender public safety officials and other public safety officials across the State. This is the first payment of five, in the amount of \$105,778.20. These funds were budgeted for in FY 21-22. The funds for the purchase order and lease payments will be coming from 510-404500.

Moved by David Piepmeyer, seconded by Jacqueline A. Newton

Motion to Approve

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

- 9.6 Approval of a Purchase Order to Calgon Carbon for \$123,446 for the replacement of Granular Activated Carbon (GAC) in contactors #1 and #2 at the Pender County Water Treatment Plant.

Anthony Colon, Assistant Director of Utilities, gave a presentation in regards to the the Pender County Water Treatment Plant located on Hwy. 421 being equipped with four Granular Activated Carbon (GAC) Contactors, that are to enhance water quality and assist in the removal of Total Organic Carbon (TOC), thus reducing the formation of Disinfection - by - Products (DBP) and removing a great portion of Perfluoroalkyl Substances (PFAS). The manufacturer requires for the media to be regenerated once it loses the ability to adsorb organics, this is done by cooking the media at high temperatures destroying the organics that sits on its surface. Two out of four vessels are maintained yearly, one during the Fall months, and another one in the Spring. We have budgeted for FY22, to exchange vessels #1 and #2. Calgon Carbon Corporation was the lowest quote obtained at \$60,778.00 per vessel out of three companies recommended by the manufacturer and neighbor utilities. A higher quote of \$70,500 per vessel was obtained by Cabot North America, and an email from Colin Jack, Sales Associate at JACOBI Group who declined to bid due to domestically Sourced Requirement (not being able to meet media specifications). Funding is available and provided in FY22: 77-403372 Supplies - Chemicals.

The board requested to know why it was being done in the same fiscal year. Mr. Colon stated that they wanted to get it replaced due to the possibility of prices going up.

Moved by Jacqueline A. Newton, seconded by Fred McCoy

Motion to approve

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

10 DISCUSSION

11 APPOINTMENTS

11.1 Approval of an Appointment to the Pender County Tourism Development Authority

Charles Strickland II approved for reappointment to the PC Tourism Development Authority.

Moved by David Piepmeyer, seconded by Fred McCoy

Motion Approved

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

11.2 Approval of an Appointment to the Pender County Advisory Board of Health

Elizabeth Caveness approved for appointment to the PC Advisory Board of Health to fulfil the pharmacist position.

Moved by Jacqueline A. Newton, seconded by Fred McCoy

Motion Approved

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

12 MAPLE HILL WATER AND SEWER DISTRICT

13 ROCKY POINT WATER AND SEWER DISTRICT

14 SCOTTS HILL WATER AND SEWER DISTRICT

15 MOORES CREEK WATER AND SEWER DISTRICT

16 CENTRAL PENDER WATER AND SEWER DISTRICT

17 PENDER COUNTY BOARD OF HEALTH

18 SOCIAL SERVICES BOARD

**19 ITEMS FROM THE COUNTY ATTORNEY, COUNTY MANAGER,
ASSISTANT COUNTY MANAGERS, & COUNTY COMMISSIONERS**

19.1 Trey Thurman, County Attorney, stated that closed session items were as followed:

Item 3: Attorney Client- Estate of Stringfield vs Pender County 7-20-CV-145 EDNC and Evolve Lawsuit, Evolve vs Pender County 21-CVS-999

Item 4: Economic Development

Item 5: Potential Purchase of Real Property

Item 6: Personnel

- Chad McEwen-County Manager, Shared with the board an invitation for the first Pender County State of Education and Economy Program scheduled for October 21, 2021. Chairman Brown acknowledged Manager McEwen for his work with the NAACP and Mr. Lloyd and PCD to help Mr. Lloyd get a new home and repairs due to Hurricane Florence.

- Commissioner Newton, Announced that Tommy Batson was voted as a local health care hero. Commissioner Newton also noted regards to the community police relations meeting that she attended and encouraged citizens to attend the future meetings.

Moved by Jacqueline A. Newton, seconded by David Piepmeyer

Motion to go into closed session

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x

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CARRIED.

20 CLOSED SESSION (IF APPLICABLE).

- 20.1 Motion to go into closed session made at 5:14 P.M. Motion to enter into closed session pursuant to G.S. 143-318.11: 3) To consult with an attorney employed or retained by the public body in order to preserve the attorney-client privilege between the attorney and the public body, which privilege is hereby acknowledged. General policy matters may not be discussed in a closed session and nothing herein shall be construed to permit a public body to close a meeting that otherwise would be open merely because an attorney employed or retained by the public body is a participant. The public body may consider and give instructions to an attorney concerning the handling or settlement of a claim, judicial action, mediation, arbitration, or administrative procedure. If the public body has approved or considered a settlement, other than a malpractice settlement by or on behalf of a hospital, in closed session, the terms of that settlement shall be reported to the public body and entered into its minutes as soon as possible within a reasonable time after the settlement is concluded; The action approving the signing of an economic development contract or commitment, or the action authorizing the payment of economic development expenditures, shall be taken in an open session; 5) To establish, or to instruct the public body's staff or negotiating agents concerning the position to be taken by or on behalf of the public body in negotiating (i) the price and other material terms of a contract or proposed contract for the acquisition of real property by purchase, option, exchange, or lease; or (ii) the amount of compensation and other material terms of an employment contract or proposed employment contract; and 6) To consider the qualifications, competence, performance, character, fitness, conditions of appointment, or conditions of initial employment of an individual public officer or employee or prospective public officer or employee; or to hear or investigate a complaint, charge, or grievance by or against an individual public officer or employee. General personnel policy matters may not be considered in a closed session. A public body may not consider the qualifications, competence, performance, character, fitness, appointment, or removal of a member of the public body or another body and may not consider or fill a vacancy among its own membership except in an open meeting. Final action making an appointment or discharge or removal by a public body having final authority for the appointment or discharge or removal shall be taken in an open meeting. The Board exited closed session at approximately 7.04 PM.

**21 7PM PUBLIC HEARINGS: SPECIAL USE PERMITS/ZONING MAP
AMENDMENTS/ RESOLUTIONS**

- 21.1 Resolution Requesting Approval of a Zoning Map Amendment from RA, Residential Agricultural to RP, Residential Performance. 91 - 105

Greg Feldman, Planner I, presented on behalf of Elloyd McIntire, applicant and owner, who is requesting approval of a Zoning Map Amendment to rezone one tract of land totaling approximately 69.67 acres from RA, Rural Agricultural zoning district to RP, Residential Performance zoning district. The subject property is located at the terminus of Pine Village Drive, approximately one-half mile southwest of the intersection of Pine Village Drive and NC HWY 210 in the Rocky Point Township and may be further identified by Pender County PIN 3204-87-6373- 0000.

Chairman asked what the vote was from the Planning Board. Mr. Feldman stated it was denied unanimously due to access to the property and road conditions.

Elloyd McIntire, applicant, read to the board a statement that is attached to the minutes. The statement gave a brief overview of his history with this development and his history with the county.

Commissioner Newton asked Mr. McIntire what the name of phase one of the Grand Oaks development. Mr. McIntire stated the name of phase one was Pine Village. He explained that Pine Village was already developed as a mobile home park many years ago. Mr. McIntire stated that phase two of the project was Oak Ridge and Oak Ridge II. He stated the third phase would be called Acorn Heights. He stated that he was currently the owner of the land that Acorn Heights would be developed on. Commissioner Newton also asked how many acres were included in this rezoning request out of the original 69.67 acres and Mr. McIntire stated all 69.67.

Chairman stated to Mr. McIntire that he acknowledges his right but everyone is here tonight to discuss the rezoning. The board confirmed who the original owner of Grand Oaks was and confirmed no golf course was ever built and determined that there is a homeowners associations.

Manley Carr, PO Box 133, Land Surveyor who Mr. McIntire hired to help start phase III of Grand Oaks. He shared a soil study that is attached to these minutes. Mr. Carr shared the different zoning surrounding this area.

Chairman requested to know from staff what the original zoning of the property was when it was first developed. Travis Henley, Planning director, stated he would need to do more digging to find out what phase 1 Pine Village was zoned in 1996. He also noted that he could not confirm at this time if property was zoned a certain way then changed. Mr. Henley did confirm that when the UDO was adopted in 2010, all of these surrounding properties were zoned something called rural transition. Which is a zoning district that does not exist anymore. The board asked what the lot size was originally. Mr. Henley, confirmed they were approximately 1/2 acre. He explained that what the county did not want to do is make any parcel non conforming. Therefore in 2010 any lot under 1 acre in this area was zoned RP to not create non-conformities.

Attorney Thurman, stated that RP did not exist in 1996 so it was most likely RA at that time and was updated in 2010 when the UDO was written.

Commissioner Newton asked when the UDO was written were the lots in Grand Oaks already drawn out in the Master plan? Travis Henley, stated that for the are that currently exist as lots yes, he is not aware of any entitlement from a master plan that covers the 69.67 acres.

Mr. Carr stated that the recorded maps for Grand Oaks all the lots are less than one acre. He stated that since the first phase of Grand Oaks were smaller lots they zoned them RP. He stated that by looking at the soil map there is no way you could ever develop 69 acres into R-15 lots because of soil conditions. Mr. Carr stated that 50% of this property would most likely not be suitable to build on.

Chairman, acknowledged what was said. But noted that if this property was rezoned RP that other things beside a residential home could be place there. Travis Henley confirmed yes RP does allow for non residential uses but RA actually offers more. But most will always require a Special Use Permit. No apartments or town homes, and very minimal commercial uses.

Nancy Kurul, 431 Pine Village Dr., Stated that she is requesting even after learning a lot at tonight's meeting that the board rule against the rezoning. She requested that no future development plans be accepted until a new entrance and exit are completed for Grand Oaks. She expressed concern over the road conditions of Pine Village Drive and Grand Oaks Blvd. as well as the capacity of the storm water system to support a higher density area. She stated that when they moved in, in

2007 that they were told that a golf course was being built but never was. Mr. Kurul, stated that there are currently no amenities for the residents all. She gave a brief history of road ownership was changed and approximately how much has been spent, and is expected to be spent to maintain the roads. They also have a lot of green open space that would be deeded and would have to paying and maintain this space and the roads.

Tammy Hinkle, 230 Pine Village Dr., addressed the board in regards to her concerns of road repair and access to more lots. She stated that she feels like it would negativity effect house values, and increase the owners cost to maintain additional infrastructure.

Commissioner Newton wanted to confirm how many roads existed in Grand Oaks and how far the roads went. Mr. Manley Carr, surveyor, stated that Pine Village drive does connect to Grand Oaks Blvd. and this carries through all the phases.

Chairman closed the public hearing and stated that this proposal is in his district therefore he would not make a motion or second a motion because he is the chairman. But he did state he does not support this rezoning.

Commissioner Newton made a motion to deny the Zoning Map Amendment and to make a finding of denial because although the proposal is consistent with the Pender 2.0 Comprehensive Land Use Plan, said denial is reasonable and in the public interest and does not further the goals of the Pender 2.0 Comprehensive Land Use Plan because of the burden that is being place on the current habitants of that developments as well as traffic and drainage conditions. Commissioner Piepmeyer seconded the motion for denial.

Moved by Jacqueline A. Newton, seconded by David Piepmeyer

Motion to Deny

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			

David Williams				x
	4	0	0	1

CARRIED.

[Applicant and Homeowner Coorespondance](#)
[Soil Map Grand Oaks](#)

- 21.2 Resolution Requesting Approval for a Special Use Permit for a Family Dollar Store

Tabled until future meeting.

- 21.3 Resolution Requesting Approval of a Special Use Permit for Cottage Occupation/Artisan Manufacturing

Attorney Thurman, swore in all parties involved with this request for a special use permit.

Carlene Shaw, Planner I, presented on behalf of the applicant seeking to obtain a Cottage Occupation/Artisan Manufacturing Special Use Permit in order to place an approximately 384 square foot accessory structure on the subject property in the RP, Residential Performance zoning district. The applicant is proposing to use the accessory structure to manufacture mead (meadery).

She reviewed the site plan and gave a brief history and plan for the business. Ms. Shaw confirmed that the proposed use has been approved by the current HOA.

Michael Fields, applicant, gave a brief overview of the history of mead and what it consist of. Also explained to the board what himself and the other two owners envision for the future of Retro Meadery. He noted that just manufacturing would happen on this property. No additional lights will be used and no traffic impact will happen. He confirmed that the three owners would deliver the product and or ship it. Also confirmed there would be no smell to the fermentation process and no signs located on the property. The alcohol content for mead can range for 6.8 to 18 percent alcohol. Mr. Fields confirmed that all federal (TTB) and state (ABC) licenses would be obtained and filed before manufacturing would take place. He confirmed that as part of the TTB federal license process they have to show a property address and that equipment has been purchased. He also explained that the bees would not be part of the process (Flow Hives) until future land is purchase for bigger production. No bees will be kept at this property.

The planning staff confirmed that notice was given to surrounding neighbors and the community and no complaints or concerns were received.

Matt Clemmons, 2 Greensboro Rd, introduced himself as co-owner.

Commissioner Newton, stated that if this is passed that it is contingent on proper approval and licenses/permits from the state and federal requirements. Also that copies of all the information be submitted to the Pender County Planning Department for record.

Moved by Fred McCoy, seconded by David Piepmeyer

Motion to approve Special Use permit contingent upon proper licenses and permits received and filed with Pender County Planning from the State and Federal levels.

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

[Staff Presentation BOCC 10.18.2021](#)

21.4 Pender County Collector Street Plan 2021 Update

Travis Henley, Planning Director, gave a brief overview of the Pender County 2021 Collector Street plan that was presented at the October 4, 2021 meeting.

Commissioner Piepmeyer, requested that any revisions that are done in a document should be highlighted or noted as to what has changed. He also stated that he supports collector streets and always will. Due to increase safety and creating road structure that is needed at no expense to the citizens. He requested to know how to enforce this plan from planning. Travis Henley, planning director, stated the first step in enforcement is by reviewing new development projects that come forward and making the expectations of the collector street very clear.

There will be a sweep of ordinance changes as well that will help with enforcement. This plan gives flexibility to developers and citizens in regards to the collector street locations and connections.

Moved by David Piepmeyer, seconded by Jacqueline A. Newton

Motion to approve

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

22 ADJOURNMENT

22.1 Motion to Adjourn at 8:42 P.M.

Moved by David Piepmeyer, seconded by Fred McCoy

Motion Approved

	For	Against	Abstained	Absent
George Brown	x			
Fred McCoy	x			
Jacqueline A. Newton	x			
David Piepmeyer	x			
David Williams				x
	4	0	0	1

CARRIED.

August 2021

Summary Report



Pender County Fire and EMS System Review Pender County, NC

Prepared by:



FITCH & ASSOCIATES, LLC

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CONSULTANT REPORT

PENDER COUNTY, NORTH CAROLINA FIRE & EMS SYSTEM EVALUATION

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As previously discussed, the County must receive, and review budgets created by Pender EMS & Fire, levy the needed taxes, and account for their receipt and expenditure. As it stands, the County maintains very little control over the budget presented and administered by PEF. Concurrently, Pender EMS & Fire employs their own accounting for receipt and expenditure of funds, handle their own payroll, purchases their own commodities, etc. Given the nature of the current system where public dollars are levied and provided to a private contractor, it would be advisable for the County to assume greater control over the budget process to ensure the efficacy and validity of public fund expenditures. Further, this annual process should be rooted in a performance-based contract that provides for annual cost escalation caps. This would ensure the County is able to maintain long range financial planning related to its contractor costs.	56
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SECTION 1: EXECUTIVE SUMMARY

Executive Summary of Observations and Recommendations

Overall, the Pender County fire and emergency medical services system is performing well. It is clear that the system has dedicated and talented people and organizations providing the services. The study did not find any specific service-related challenges that are not typically observed in other similarly situated rural county operations. The level of investment in the service delivery programs is robust to many comparators. This is illustrative of the maturity of the system as a whole and the Pender County governing board's commitment to emergency services.

Pender County is experiencing a natural evolutionary moment, or growing pain, in the maturation of the system as costs are rapidly escalating from a historically volunteer system to staffed models. The need and/or desire to have enhanced transparency and accountability of the public funds is necessary at this stage of the system evolution in order to ensure long-term sustainability. Therefore, much of the overarching themes in this report is intended to provide greater accountability and transparency for the County.

Pender EMS and Fire, Inc. has provided excellent services, and through organic evolution, has assumed fire suppression responsibilities when requested. Today, all of the EMS services and the majority of the fire suppression provision is provided by Pender EMS and Fire, Inc. However, this historical and organic system growth has benefited from a blending of restricted funds to where EMS is subsidizing fire suppression services. To be clear, this report does not suggest any criticism in the operations of Pender EMS and Fire, but rather that the blending of restricted dollars is not well-aligned with legal interpretations on the use of restricted funds. Therefore, a recommendation for a county-wide taxing strategy that would address concerns of restricted funds, permit increased policy alternatives for Pender County, and provide greater fiscal efficiency is posited.

Another natural progression of a collective of independent fire districts, fire departments, and an EMS department has created excess capital facilities and apparatus when examined through the aggregated county lens. Therefore, recommendations are offered to provide an enhanced regional approach to sharing resources, reserves apparatus, and the encouragement of separate governing bodies to collaborate on facilities where appropriate in the future.

Operational recommendations were offered to incrementally realign resource allocation decisions to areas of the greatest need. For example, it was recommended that an additional ambulance is placed in service to incrementally improve response time and better manage EMS workload.

An assessment of the option of the County assuming services from Pender EMS and Fire, Inc. was evaluated. At a high level, the County is well positioned to assume services under any one of three configurations from status quo to a lean option that reduces the fire suppression

subsidy challenge. The County could provide the services with savings between approximately \$100k and \$1.3m annually.

If the County elects to maintain the current configuration, it is recommended that a performance-based contract is executed with Pender EMS and Fire, Inc. as well as the integration of much of the administrative support functions within County governance. This will assist in providing seamless policy and process oversight with all other county support functions such as human resources, payroll, accounting, budget processes, debt management, etc.

In all potential alternatives, it is recommended that the County continue with a blended service provision with Fire and EMS resources combined. The combination of the large geography and relatively low demand for services disproportionally shifts costs to readiness. Providing both EMS (highest demand) and Fire Suppression (lowest demand) introduces some efficiencies on combining missions, personnel, and capital assets.

Introduction

Pender County engaged Fitch and Associates (*FITCH*) to objectively assess and benchmark the performance of the county's fire and emergency medical services (EMS) programs. This system evaluation, from a high-level perspective, considers all current providers in the system – including fire districts & towns providing services with career personnel, volunteers, and through the use of Pender EMS & Fire, a 501(c)3. We objectively measured performance with a number of statistical analyses and considered deployment alternatives employing GIS modeling. We further assessed the current administrative and financial practices of the system.

Each of these were considered in the development of alternative, implementable opportunities for operational and organizational efficiency, effectiveness, improvement, and long-term sustainability based on modern best practices and the unique characteristics within the County.

The report is constructed with four components. Section 1 is this executive summary, intended to provide a high-level overview of significant observations and findings from which specific recommendations and alternative system designs are based. Section 2 is a summary PowerPoint which compliments the Section 1 executive summary. Section 3 is the detailed statistical analysis of data reflecting system workload and performance measures, while Section 4 offers a GIS perspective on fire and EMS demand, demographics information, and alternative deployment options based on desired levels of performance.

System Description

Pender County is the 5th largest county in North Carolina, based on its total land area of approximately 870 sq. mi. The County is overwhelmingly rural and unincorporated, with only 2.2% of the land area covered within municipal corporate limits. The unincorporated nature is further reflected in the total estimated population as of 2020 is 63,203¹. The peak seasonal population is estimated to include 26,590 overnight and 13,500-day trip visitors. In essence, this reflects a potential total service population 98,031 during peak tourist season. Future growth is expected to be significant over the next 3 decades with a projected growth of 61.9% to 93,846 by 2045. The County's housing stock is largely single family detached units (58.8%), followed by manufactured homes (35.2%) and the only a small percentage multi-unit housing (4.5%). With twice the number of workers than jobs, almost 2:1 commute outside Pender County for their work.²

The County provides centralized fire marshal services that undertake preconstruction fire plan reviews, inspections of specialized occupancies, and issues various permits as required. This function is handled under the Emergency Management Department of the County. Beyond

¹ U.S. Census. Quick Facts 2020 Census retrieved from <https://www.census.gov/quickfacts/fact/table/pendercountynorthcarolina/PST045219>.

² Derived from *Pender 2.0: Comprehensive Land Use Plan*. (2018). Accessed at <https://www.pendercountync.gov/pcd/documents-base/2018-08-20-pender-2-0-adopted-lup/> on February 22, 2021

these centralized functions, other administrative tasks are left to be handled by individual fire and EMS service providers – including procurement of capital equipment, apparatus, and determination of fire station locations. With the exception of potential fire station locations, it was also noted that there was little to no centralized, coordinated effort towards strategic planning or training from a regional perspective. Overall, this lack of centralized administrative support functions introduces inefficiencies into the current system.

EMS services are provided on a countywide basis through a 501(c)(3) called Pender EMS & Fire, Inc. that provides all EMS transport services within the geographic county as well as specialized services including hazardous materials, swift water rescue, dive team, tactical medic services, and a medical assistance team. Pender EMS & Fire is the sole provider of emergency transport services.

Pender EMS & Fire Inc. is additionally the largest provider of fire suppression services in the county. As such they have purchased and currently pay debt service for capital equipment, including apparatus, as well as undertaking current planning efforts toward secure financing for new fire station construction. While admirable in their support for the direct provision on emergency services, this framework where a non-governmental provider increasingly appears to own essential capital equipment and facilities is a bit unusual – especially since the County provides the financial support through ad valorem taxation. This arrangement arguably injects risk into the overall efforts of Pender County to ensure ongoing provision of essential emergency services in an effective and efficient manner. An example of that increased risk became apparent during this project. Requests for certain information had to be re-directed to Pender EMS & Fire, as the County had limited information or understanding on some details. In addition, as Pender EMS & Fire is responsible for all payroll, procurement, and other administrative support themselves, Pender County is not able to directly access transactional information. With the use of public funding for provision of these services, the lack of transparency is an issue that should be addressed.

Pender EMS & Fire works closely with other agencies within the County. This includes the Union Volunteer Rescue Squad with whom Pender EMS & Fire provides paramedic staff and equipment; Surf City Fire and Rocky Point Fire both of whom respond to the most medically acute EMS calls within their respective areas. Pender EMS & Fire provides services in both Maple Hill and Penderlea as well. In addition, Pender EMS & Fire partners with the Sheriff's Office to provide tactical medics for their special response team.

Pender EMS & Fire operates from various stations located throughout the county. Some are staffed with only EMS related units, either advanced life support (ALS) transport vehicles or with quick response vehicles (QRVs). At other stations Pender EMS & Fire provides staffing for fire suppression units as well. This includes engines, tankers, and brush trucks; one which also has ALS capabilities. Stations, staffing, and associated capabilities of Pender EMS & Fire are reflected in the table below.

Table 1: Pender EMS & Fire Stations

Station Number	Staffing	Capability/Apparatus
1	4	Administration/ALS Transport/ Heavy Rescue
4	2	ALS Transport
5	2	ALS Transport
7	3	ALS Transport/ALS Supervisor QRV
8	3	3-person ALS Engine QRV
9	2	ALS Transport
14	5	3-person BLS Engine/ALS Transport
16	6	4-person BLS Engine/Ladder/Heavy Rescue/ALS Transport
17	3	3-person BLS Engine
18	3	3-person BLS Engine
21	4	4-person Fire Engine
23	2	ALS Transport
28	4	3-person Engine/Fire-BLS Supervisor QRV
29	3	2-person Engine/Ladder/ALS QRV

While Pender EMS & Fire does provide EMS service for the entire geographic area of Pender County, they may not operate from certain stations of various towns or fire districts. The following table reflects other stations within Pender County not utilized by Pender EMS & Fire.

Table 2: Non-Pender EMS & Fire Stations

Station Number	Town / Fire District	Staffing
15	Burgaw	3 daytime/1 night + volunteers
11	Atkinson	2 daytime M-F + volunteers
19	Shiloh	2 daytime + Volunteers
25	Surf City	3-person Engines 24/7 + volunteers
22	Rocky Point	3 daytime/1 night + volunteers
23	Surf City	3-person Engine 24/7 + volunteers
13	Maple Hill	All Volunteer
n/a	Topsail	1 24/7, Fire Chief, + volunteers

Current Workload & Performance

The following discussion highlights high level workload and performance of the entire system based on data from July 1, 2018 through June 30, 2019. CAD data used for this analysis was problematic, and a more detailed discussion of methodology and more extensive analyses of data can be found in Section 3 of this report. Specific issues were found with the manner in which CAD data is captured – compartmentalizing agency data in such a manner as to result in a significant number of duplicate records which had to be identified and removed from statical analysis. In addition, a significant number of CAD records were missing essential timestamps, thereby reducing the reliability of certain reported performance. This further resulted in EMS reports missing essential timestamps. Overall, these issue result in challenges for the County to assess performance in the system. A recommendation related to 911 dispatch and CAD records is made elsewhere in this report.

We utilize two distinct measures in this report—call volume and workload. Number of requests for service are defined as “incidents” or “calls” (i.e., call volume). Call volume reflects the number of times a distinct incident was created involving one or more Pender County units, and/or calls received in Pender County’s jurisdiction. “Responses” are the number of times that an individual unit (or units) responded to a call (i.e., workload). Overall, the system had 11,359 incidents in 2018-2019. This included 8,736 EMS incidents, and 2,454 fire related incidents. The remainder were related to hazardous materials and specialized rescue calls. A more detailed breakdown is reflected in the table below.

Table 3: Number of Incidents by Call Category

Within Pender County Jurisdiction			
Call Category ¹	Number of Calls	Average Calls per Day	Call Percentage
Agency Assist - EMS	271	0.7	2.4
Cardiac and Stroke	1,164	3.2	10.2
Difficulty Breathing	862	2.4	7.6
Fall and Injury	1,763	4.8	15.5
Illness and Other	2,428	6.7	21.4
Mutual Aid	22	0.1	0.2
MVA	976	2.7	8.6
Overdose and Psychiatric	397	1.1	3.5
Seizure and Unconsciousness	748	2	6.6
Standby	19	0.1	0.2
Transfer	86	0.2	0.8
EMS Total	8,736	23.9	76.9
Agency Assist - Fire	45	0.1	0.4
Agency Assist - Law	541	1.5	4.8
Agency Assist - Other	8	< 0.1	0.1
Fire Alarm	365	1	3.2
Fire Other	609	1.7	5.4
Mutual Aid	73	0.2	0.6
Outside Fire	256	0.7	2.3
Service Call	304	0.8	2.7
Standby	2	< 0.1	< 0.1
Structure Fire	187	0.5	1.6
Vehicle Fire	64	0.2	0.6
Fire Total	2,454	6.7	21.6
Hazmat Total	62	0.2	0.5
Rescue Total	107	0.3	0.9
Total	11,359	31.1	100

As reflected in the table below, the number of responses (or individual vehicle movements) equal 21,476. Overall, an average of 1.9 vehicles were assigned to each individual incident. Specific analysis of this is reflected in the table below.

Table 4: Response Volume by Program – Pender County Units

Jurisdiction	Program	Number of Calls	Number of Responses	Average Responses per Call	Average Calls per Day	Average Responses per Day
Within Pender County	EMS	8,711	16,179	1.9	23.9	44.3
	Fire	2,388	4,862	2.0	6.5	13.3
	Hazmat	62	92	1.5	0.2	0.3
	Rescue	106	343	3.2	0.3	0.9
	Total	11,267	21,476	1.9	30.9	58.8

When evaluating response time in fire and EMS systems, it is standard to undertake such analysis employing an analysis of the 90th percentile. This statistical technique reflects that 90 times out of 100 the agency will perform at or better than the reported 90th percentile performance. The table below takes overall response time and reports it based on constituent parts, by program area.

Table 5: 90th Percentile Performance Times by Program – First Arriving Pender County Units³

Jurisdiction	Program	Dispatch Time (Minutes)	Turnout Time (Minutes)	Travel Time (Minutes)	Response Time (Minutes)	Sample Size ¹
Within Pender County	EMS	3.6	4	12.2	16.7	8,103
	Fire	7.9	3.3	11.6	17.3	2,031
	Hazmat	11.6	2.9	9.5	20.5	56
	Rescue	21.2	3.6	17.6	29.4	79
	Total	4.3	3.9	12.1	16.8	10,269

Dispatch Considerations

It is recognized that dispatch services for fire and EMS are provided jointly with the county sheriff's department. However, in assessing performance, it is important to note the significant differences in requirements for dispatching law enforcement and those of the other public safety services. Most prominent, is that a much higher percentage of a fire and EMS responses require an urgent sensitivity to time. Law enforcement typically does not have the same emphasis for a timely dispatch of a call for service, except in a very small number of circumstances. Based on this difference between law enforcement versus fire and EMS services, and more specifically the performance reported in the table above, any evaluation of fire and EMS services must carefully consider dispatch and turnout performance. Dispatch time – that component from when the 911 call is received until an appropriate unit is dispatched – have national recommendations that suggest dispatching fire and EMS units within 60

³ Sample sizes reflect the number responses made by first arriving primary front-line units assigned to Pender County; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

seconds.⁴ However, numerous studies typically suggest most agencies maintain a 90th percentile performance in the range of 1:30 to 1:45. The County current performance does not align well with either the recommended target of 60-seconds or the experience seen in comparable systems elsewhere.

Turnout Time Considerations

Turnout time – that component between when a unit is dispatched, and that unit then begins moving to the emergency incident location – also reflects variance from both national recommendations and actual performance seen elsewhere. NFPA 1710 suggest that personnel at *staffed* facilities should be enroute to the incident scene within 60 seconds for EMS calls and 80 seconds for all other call types.⁵ With the current system design, it is somewhat unexpected to report turnout times of 4 minutes for EMS related incidents, especially since most of these responses are with career personnel responding from fixed stations. Similar to above, actual performance seen in comparable systems utilizing career staff often reflect turnout times close to 1:45 at the 90th percentile. In systems utilizing volunteer personnel, turnout times are often elongated as volunteers must respond from home or work to the fire station, assemble a crew for the appropriate vehicle, and then begin their response. The fact that the reported turnout time is shorter for fire related incidents than EMS calls does raise questions on the processes being used or how the data is being captured.

It is unclear whether the reported 4.3 minutes for dispatch time and 3.9 minutes for turnout time accurately reflect current performance, or if system process issues within the dispatch center may be artificially inflating either, or both, of these components. With reported performance of 8.2 minutes for dispatch and turnout times combined, and a reasonable assumption of 2 minutes for each, or 4 minutes total as a target, a detailed study of the dispatch system would likely offer valuable information to improve performance in these two areas. When considered in the context that time saved is getting units responding to emergency calls allows a community to make smaller investments in the number of stations and units, the value of improving dispatch and turnout performance would be arguably considerable. Accordingly, the County should undertake a detailed review of the dispatch and turnout processes to better identify opportunities for improvement including the identification of limits of system components such as the CAD. Notwithstanding these first two components, the use of combination and volunteer staffing, protecting a largely rural area, the overall travel time component – the interval from when a unit begins response until arrival at the emergency location – aligns well with the national experience and recommendations.

⁴ National Fire Protection Association. (2020). NFPA 1710: Standard for the Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. Quincy, MA: National Fire Protection Association.

⁵ Ibid

RECOMMENDATION: Pender County should carefully examine reported call-processing times, and turnout times related primarily to EMS and staffed fire facilities.

RECOMMENDATION: Pender County should consider a full study of the 911 and dispatch system related to Fire and EMS. This should include identifying processes for achieving a target for maximum call-processing times of 2-minutes at the 90th percentile, and maximum 2-minutes at the 90th percentile for turnout times for career staffed Fire and EMS units. A review of the current CAD and its configuration related to fire and EMS records should also be included in this recommended study.

Travel Time Considerations - Comparison to National References

There are three notable references for travel time available to the fire service – National Fire Protection Association (NFPA) 1710⁶ related to career fire departments; NFPA 1720⁷ which covers volunteer and combination departments; and the Commission on Fire Accreditation International (CFAI)⁸.

NFPA 1710 suggests a 4-minute travel time at the 90th percentile for first due arrival of Basic Life Support (BLS) and fire incidents. NFPA 1720 suggests travel times based on population density, with 8 minutes for urban densities, 9 minutes for suburban areas, and 13 minutes for rural areas. Finally, CFAI recommends a 5 minute and 12 seconds travel time for first due arrival in an urban/suburban population density and 13-minutes in a rural population density. The arrival of an Advanced Life Support (ALS) unit is recommended at 8 minutes travel time by NFPA 1710. It is important to note that the latest edition (9th edition) of the CFAI guidelines have de-emphasized response time and only reference the legacy standards with a separately provided companion document⁹. Given the existing overall 90th percentile travel time of 12.1 minutes, we modeled system performance at the existing 12-minute travel time.

Based on the above discussion, the County should consider articulating a specific performance target for travel time. Using a 13-minute travel time consistent with NFPA 1720 and CFAI, or 12 minutes as the system currently performs are both reasonable. The choice of performance

⁶ National Fire Protection Association. (2010). NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*. Boston, MA: National Fire Protection Association.

⁷ National Fire Protection Association. (2020). NFPA 1720 - *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments*. Boston, MA: National Fire Protection Association.

⁸ CFAI. (2009). *Fire & emergency service self-assessment manual*, (8th ed.). Chantilly, Virginia: Author. (page 71)

⁹ CFAI. (2016). *Fire & emergency service self-assessment manual*, (9th ed.). Chantilly, Virginia: Author.

targets, which are clearly a policy decision of the County, will allow clarity in the planning assumption to address future growth and performance.

RECOMMENDATION: The County should consider articulating a specific response time goal for use in system evaluation and planning.

Geographic Distribution of Calls and Modeling of Alternatives

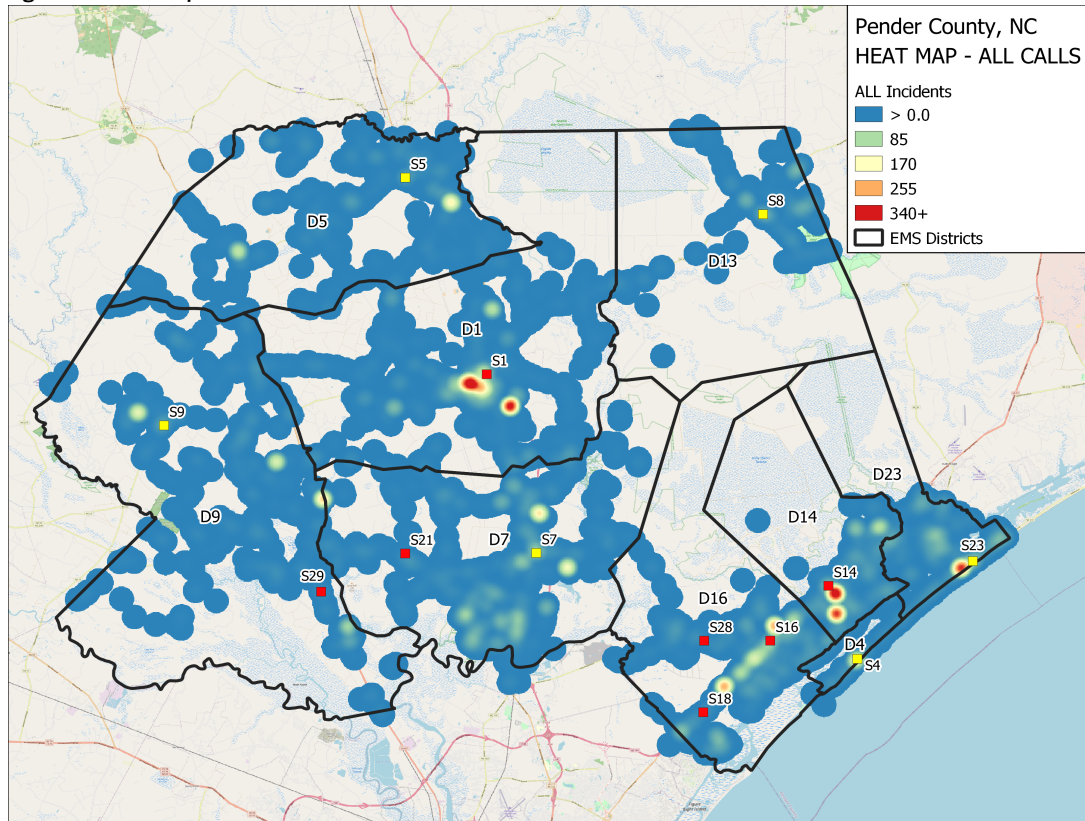
A summary of GIS information is presented in this section. A more detailed and robust assessment and modeling of the system can be found in Section 4 of this report.

Distribution of Demand by Program Areas

The system as a whole, has a relatively low demand as judged from the number of resources available. In large part, this is representative of the mostly rural nature of the county.

Heat maps were created to identify the concentration of the historic demand for services overall and by program area (i.e., EMS, fire, hazmat, and rescue). The following map reflects overall demand for all types of incidents across all service providers. The blue areas have the lowest concentration of demand, while the dark red areas have the highest concentration of demand – reflecting greater than 340 calls per year.

Figure 1: Heat Map for All Calls



Understanding the current geographic distribution of calls, the first step in modeling of alternatives is an analysis employing historical performance to validate the planning analyses utilized by the GIS system. Given the overall 90th percentile travel time of 12.1 minutes, a 12.2-minute travel time at the 90th percentile for EMS related incidents, and an 11.6-minute travel time at the 90th percentile for fire related incidents, a 12-minute travel time was used to reflect the current countywide performance.

12-Minute Travel Time

The planning assessments estimated 90.82% risk coverage by the current 19 stations within 12 minutes travel time, although two of the stations would not cover any additional risk at that travel time. Thirteen stations could cover 90.14% of the risk for all calls at a 12-minute travel time. This reflects that under the current station locations, the last 6 stations add little value to meeting the 12-minute travel time target – only contributing less than 1%. Overall, this assessment reflects a strong alignment between historical performance and the GIS analysis. In addition, it highlights opportunities for a more effective and efficient deployment when evaluating the current location of calls and fire and EMS units compared to the table below.

Table 6: Marginal Station Contribution for 12-Minute Travel Time – All Calls

Rank	Station	Station Capture	Total Capture	Percent Capture
1	S14	2,978	2,978	27.02%
2	S15	2,721	5,699	51.71%
3	S21	1,135	6,834	62.00%
4	S23	693	7,527	68.29%
5	S17	490	8,017	72.74%
6	S13	372	8,389	76.11%
7	S16	345	8,734	79.24%
8	S11	328	9,062	82.22%
9	S4	239	9,301	84.39%
10	S29	236	9,537	86.53%
11	S7	234	9,771	88.65%
12	S18	119	9,890	89.73%
13	S19	45	9,935	90.14%
14	S25	31	9,966	90.42%
15	S5	26	9,992	90.66%
16	S28	10	10,002	90.75%
17	S1	8	10,010	90.82%
18	S22	0	10,010	90.82%
19	S9	0	10,010	90.82%

When evaluating geographic dispersal of calls against resource locations, there is a generally strong degree of alignment. Nonetheless, based on the marginal utility model above, some adjusted resource deployments are presented within the Alternative Delivery Models presented below.

Financial Analysis

Fire services in Pender County are provided through a variety of different sources and methods. Some communities (e.g., Surf City, Topsail Beach, and Burgaw) each have their own fire departments, with a concurrent level of funding handled by those towns. Pender County government employs 12 separate taxing districts for the special purpose of funding fire services – mostly in unincorporated areas of the County. Of these 12 fire districts, Pender EMS & Fire directly provides fire services for four of the fire taxing districts through agreement with Pender County government. In addition, they also provide supplemental staffing to two other fire districts. Three of the taxing fire districts provide funding to Burgaw Fire, Surf City Fire, or Wallace Fire (in Duplin County) to provide coverage to adjacent unincorporated areas. The remaining three fire districts rely solely on volunteer personnel. While these fire taxing districts provide the majority of funding, the County does provide General Fund transfers to four fire districts to facilitate daytime staffing for these areas. The following table summarizes this information.

Table 7: Tax Districts, Rates, and Revenues

Fire Districts	Tax Rate / \$100 Valuation	Total 2020 Estimate Tax Base	Budgeted Tax Revenues	County GF Transfer
Pender Central ¹⁰	\$ 0.0900	\$ 365,699,229	\$ 306,630	
Sloop Point ¹¹	\$ 0.0950	\$ 1,760,843,497	\$ 1,604,782	
Maple Hill ¹²	\$ 0.0700	\$ 109,583,168	\$ 68,249	\$ 175,000
Rocky Point	\$ 0.0875	\$ 632,462,659	\$ 524,417	
Long Creek Grady ¹³	\$ 0.1100	\$ 398,323,511	\$ 408,628	
Shiloh	\$ 0.1000	\$ 151,792,344	\$ 139,218	\$ 125,000
Penderlea ¹⁴	\$ 0.1000	\$ 286,652,889	\$ 263,135	\$ 318,548
Atkinson ¹⁵	\$ 0.0700	\$ 229,969,176	\$ 143,024	\$ 125,000
Hampstead ¹⁶	\$ 0.0950	\$ 961,423,621	\$ 878,400	
Scotts Hill ¹⁷	\$ 0.0950	\$ 248,210,086	\$ 228,578	
Northeast Pender ¹⁸	\$ 0.1000	\$ 286,108,790	\$ 265,385	
Penderlea Duplin ¹⁹	\$ 0.0470	\$ 27,444,108	\$ 11,535	
Total		\$ 5,458,513,078	\$ 4,841,981	\$ 743,548²⁰

¹⁰ Paid to Burgaw FD for covering adjacent unincorporated area in Pender County

¹¹ Served by Pender EMS & Fire

¹² Supplemental staffing provided thru Pender EMS & Fire

¹³ Served by Pender EMS & Fire

¹⁴ 1) Supplemental staffing provided thru Pender EMS & Fire. 2) Budget document reflected \$240,553 transfer from GF - updated per Meg Blue

¹⁵ Budget document reflected \$15,000 transfer from GF - updated per Meg Blue

¹⁶ Served by Pender EMS & Fire

¹⁷ Served by Pender EMS & Fire

¹⁸ Paid to Surf City for covering adjacent unincorporated area in Pender County

¹⁹ Paid to Wallace FD in Duplin County for covering adjacent unincorporated area in Pender

²⁰ The transfers to fire district equate to a tax rate of 0.00995227

Pender EMS & Fire

Pender EMS & Fire is the de facto fire and EMS service provider for Pender County government. It has a workforce of 101 personnel assigned to Fire operations and 60 assigned to EMS operations. The remaining 21 positions are allocated to administration, logistics and other support functions. Recently, Pender EMS & Fire received a SAFER grant to fund additional full-time positions, which are partially funded from these Federal funds. SAFER grants typically have a three-year term, and accordingly it is anticipated these positions will require 100% local funding within the next couple years.

Revenues and expenses for Pender EMS & Fire are summarized by major functions in the two following tables. Of specific note is the apparent use of EMS revenues to balance fire related expenditures. There are several concerns raised by this analysis. Even if all administrative and other support functions were defined as EMS expenditures, at least \$2.3 million of EMS revenues are used to balance fire related expenditures. Additionally, the apparent aggregation of all rural fire protection district tax revenues to provide services throughout the county is seemingly in conflict with the basic tenant of special district funding where tax revenues raised within a special district for a specific purpose must be used within that district for the legislatively authorized purpose.²¹ In totality, the mingling of special revenue funds between EMS and fire, and the inability to account for fire district tax dollars by district reflect a need to address the overall funding model used for service provision within Pender County.

Table 8: Pender EMS & Fire Revenues by Major Division

Source	EMS	Fire Services	Total
4202-10 · Penderlea Fire Revenue		\$ 318,548	\$ 318,548
4202-6 · Pender County Sheriff		\$ 5,000	\$ 5,000
4202-5 · Pender County Maple Hill		\$ 175,000	\$ 175,000
4202-1 · Pender County Fire Tax		\$ 3,194,619	\$ 3,194,619
4201-11 · Pender Schools 800 Mhz Radios	\$ 172,000		\$ 172,000
4201-1 · Pender County Tax Collections	\$ 7,086,354	\$ -	\$ 7,086,354
4201-4 · Patient Fees - Rescue Services	\$ 1,960,000	\$ -	\$ 1,960,000
4201-2 · Pender County Fund Balance	\$ 555,000	\$ -	\$ 555,000
4201-3 · Town of Surf City	\$ 72,000	\$ -	\$ 72,000
Total Revenues	\$ 9,845,354	\$ 3,693,167	\$ 13,538,521

²¹ See Millonzi, Kara. (2011). County Funding for Fire Services in North Carolina. UNC Chapel Hill Local Finance Bulletin No. 43

Table 9: Pender EMS & Fire Expenditures by Major Division

Category	EMS	Fire	Admin & Other	Total
Total 9805D · LEASE EXPENSE	\$ 662,058	\$ 454,577	\$ 25,000	\$ 1,141,635
Total 5300 · UNIFORMS	\$ 67,500	\$ 67,500		\$ 135,000
Total 7030 · SUPPLIES EMS & FIRE	\$ 18,750	\$ 18,750		\$ 37,500
Total 7020 · UTILITIES	\$ 48,300	\$ 48,300		\$ 96,600
Total 7010 · RENT	\$ 61,000	\$ 4,200		\$ 65,200
Total 9800D · DEBT SERVICE EXPENSE	\$ 441,970	\$ 641,138	\$ 171,454	\$ 1,254,562
Total 9955 · VOLUNTEER EXPENSES	\$ 3,500	\$ 3,500		\$ 7,000
Total 7100 · SPECIAL OPERATIONS EXP		\$ 40,000		\$ 40,000
Total 9500 · MOBILE COMMUNICATION	\$ 89,400	\$ 38,100		\$ 127,500
Total 9990 · HUMAN RESOURCES	\$ 4,325	\$ 4,325		\$ 8,650
Total 9700-01 · FIRE EQUIPMENT		\$ 10,000		\$ 10,000
Total 9960 · TRAINING & EDUCATION	\$ 23,500	\$ 32,500		\$ 56,000
Total 9970 · PUBLIC RELATIONS	\$ -		\$ 11,350	\$ 11,350
Total 9980 · PUBLIC SAFETY	\$ 7,500	\$ 30,000		\$ 37,500
<i>Payroll Costs</i>	\$ 3,706,428	\$ 3,705,834		\$ 7,412,261
<i>Other Personnel Costs</i>	\$ 380,919	\$ 386,419		\$ 767,338
<i>Group Insurance</i>	\$ 423,028	\$ 423,028		\$ 846,055
Total 5000 · PERSONNEL COSTS	\$ 4,510,374	\$ 4,515,280		\$ 9,025,654
Total 6000 · MEDICAL SUPPORT	\$ 209,800	\$ 36,050		\$ 245,850
Total 7000 · FACILITY COSTS	\$ 181,159	\$ 140,159		\$ 321,318
Total 8000 · VEHICLE R&M	\$ 106,000	\$ 159,000		\$ 265,000
Total 8049 · VEHICLE FUEL TOTAL	\$ 121,000	\$ 50,000	\$ 4,000	\$ 175,000
Total 9000 · ADMINISTRATIVE	\$ 101,490	\$ 63,550	\$ 131,400	\$ 296,440
Total 9100 · CONTRACT SERVICES	\$ 180,761			\$ 180,761
Total Expenses	\$ 6,838,388	\$ 6,356,929	\$ 343,204	\$ 13,538,521

As reflected above, Pender EMS & Fire's budget reflect total debt service costs of \$1,254,562, reflecting 9.3% of the overall budget (Category 9800D – Debt Service Expenses) and lease expenses of \$1,141,635 reflecting 8.4% of the overall budget (Category 9805D – Lease Expense). Together, this represents an impact of \$2.4 million in expenses and 17.7% of the total budget. The County may desire to address several issues related to these costs. First, it is unclear who holds title for specialized apparatus through this debt service – is it the County or Pender EMS & Fire itself? The most recent agreement between Pender EMS & Fire and Pender County dated August 2013 appears to indicate that upon dissolution of the Pender EMS & Fire or termination of the agreement, “any and all equipment and other assets acquired by the use

of fire district tax funding (in whole or in part) will revert to Pender County.”²² In the context of tax revenue being used to pay for capital equipment, the proper accounting of the assets themselves is an important question. Second, the significant value of lease payments indicating a deficit of facilities to provide services under the agreement, raises question regarding the long-term plans for EMS and fire facilities. In addition, the County may wish to consider alternative funding methods – both for existing and future capital expenditures – to evaluate if lower lending, lease, or other recurring costs can be achieved.

In this review, it is noted that some level of duplication exists with regard to financial records. The County must receive, and review budgets created by Pender EMS & Fire, levy the needed taxes, and account for their receipt and expenditure. Concurrently, Pender EMS & Fire employs their own accounting for receipt and expenditure of funds, handle their own payroll, purchase their own commodities, etc. These duplicative processes are inherently inefficient – and the County’s governmental structure already accomplishes these same tasks for other County departments. Economies of scale theory suggest the County’s existing systems can be leveraged to achieve greater efficiency and transparency in these administrative support functions.

RECOMMENDATION: The County should review its EMS and fire district revenues and expenditures, in light of the above analysis, to ensure compliance with applicable statutory, regulatory, or other applicable financial guidelines.

RECOMMENDATION: The County should assume direct responsibility of support functions related operation of Pender EMS & Fire. This includes County provision of services including payroll, human resources, budgeting, procurement, etc. Additional resources for the County should be secured with a charge back or cost allocation methodology to the fire and EMS tax revenue funds. This method can be expected to increase both transparency and accountability, while simultaneously costing less than existing stand-alone mechanisms.

RECOMMENDATION: The County should evaluate the legal framework, ownership, and long-term strategies regarding capital assets purchased for the provision of EMS & Fire services.

²² Fire Department Funding Agreement and Automatic Aid Agreement between Pender County and Pender EMS and Fire Inc. dated August 19, 2013.

Capital Equipment Planning

As noted previously, Pender County's growth is anticipated to exceed 60% over the next several decades. To best achieve this in a fiscally responsible manner, County leaders should ensure a framework is in place to responsibly manage future public safety needs – especially fire and EMS services.

Capital apparatus and equipment needs are handled at the department level. Each agency specifies and selects that equipment they consider most appropriate. The challenge in such a system is that little attention is paid to the effectiveness or efficiency that may be achieved from a more regional perspective. One example is the need for spare or reserve apparatus. Having a system where a station anywhere in the county could make use of reserve apparatus from a regional pool when needed, for example when a brush truck or engine requires repairs, can reduce the overall fiscal burden from having too many resources. In addition, specifying certain types of equipment or apparatus from the same vendor or with similar components will assist personnel in remaining competent to operate such specialized equipment.

There were 16 engines found in the data distributed across 11 stations – reflecting almost 1.5 engines per station. Of these, 7 engines had only single digit (9 or less) noted responses. There were 11 tankers identified distributed among 8 stations. Of these, 5 were only assigned to a single incident during the year and 2 were only assigned to 2 incidents. Only Tanker 22 was assigned to more than 5 incidents. Similarly, there were 13 brush trucks assigned to 9 stations, with 5 only being assigned to either 1 or 2 incidents during the year.

Fiscal efficacies suggest that, from a countywide perspective, opportunities exist to adjust the overall number of apparatus in order to best meet the needs of their community by assuming a regional coordination/cooperation for apparatus procurement, maintenance, and replacement. Additionally, a cooperative purchasing arrangement may find additional cost saving opportunities.

Depending on the performance target for travel time adopted by the County, opportunities also exist with regard to the required number of fire stations. While there is no recommendation to reduce existing facilities, the County should consider a regional perspective in the planning a future capital needs related to stations and apparatus. A regional perspective should consider a single set of facilities that can accommodate both fire and EMS units – regardless of provider. From a public policy perspective, taxpayers must fund capital infrastructure. When separate entities that provide services, in this analysis fire and EMS services, coordination between providers in design, construction and operations of facilities that can accommodate both is good public policy – and reduces the tax burden for citizens. Several specific examples of where these opportunities exist are reflected below when discussing the GIS analysis related to a 12-minute travel time for all call types. For existing capital facilities designed as fixed locations for fire and/or EMS units, the County's long-term perspective should include achieving direct ownership of the needed existing facilities.

The following offers more specific guidance in these two areas.

- The County should not fund any additional fire or EMS stations unless they are determined to provide the sufficient benefit in meeting adopted turnout time and travel time performance targets.
- The County should strive to increase consistency of apparatus and major equipment (i.e., self-contained breathing apparatus, bunker gear, hose, and associated appliances) to facilitate sharing reserve apparatus and equipment as may be required from time to time.
 - One method for accomplishing this goal is for the County to retain funds for capital purchases. The agency would make a request for a capital purchase to the County. The County would be able ensure consistency in specifications and conduct a competitive bidding process. If the purchase is approved, the County would execute the purchase and lease the asset to the agency.
 - Furthermore, the County could also enact a policy that any purchase over a set amount requires County approval (e.g., \$10,000) and/or an annual line-item budget approval.
 - Caution should be exercised in the issuance of new debt. Approximately 17% of the agency's budget is allocated to debt service, with a significant amount of new debt contributed to new apparatus and equipment. Cash funding when possible, will provide for greater fiscal agility in the future.
 - An inventory should be conducted annually and randomly audited by the County.
- Overall, the replacement of apparatus should consider a combination of age, mileage, and historic operational costs.
 - A recommended goal should be to have pumpers, tankers, service, and brush trucks replaced between:
 - 17-20 years old if the mileage exceeds 75,000; or
 - 20-25 years if mileage remains below 75,000; or
 - 25-30 years if mileage remains below 50,000.
 - Light apparatus replaced between 100,000 and 120,000 miles. Specialty apparatus such as command vehicles, hazardous materials units, etc. should be evaluated on a case-by-case basis and included in the capital replacement plan (CIP) as necessary. In many cases these specialized vehicles will have low use and low mileage enabling them to be safely utilized well beyond 25 years.
 - Routine preventative maintenance can safely extend the lifespans of apparatus and especially supporting vehicles, trailers, and marine vessels.
 - The County should establish an appropriate number of reserve (non-primary) apparatus for each category. For engines and ambulances, a ratio between 1:3 and 1:5 is recommended for reserve to frontline. The ratio for specialty reserve apparatus should be reduced.
 - The County may wish to consider rotating apparatus between busier and less busy stations in order to lessen the mileage impact on any one apparatus and thereby prolong its in-service life.

RECOMMENDATION: The County should engage in capital replacement planning, ensuring a regional perspective is employed to permit an effective and efficient plan for fire and EMS capital needs.

RECOMMENDATION: The County should explore options, including assumption of mortgage liabilities, in order to transfer ownership of needed fire and EMS capital facilities to the County and thereby assume direct control of this essential infrastructure.

Alternate Funding Options

The existing collage of tax districts and fire service providers introduces inefficiencies from a countywide perspective. By keeping the focus on individual tax districts – and their associated fire agency – the system requires administrative redundancies; allows duplicative efforts regarding apparatus, equipment, and training; and encourages a ‘silo’ mentality that inhibits a strategic vision for Pender County and its fire services.

Notwithstanding the above, the system has organically developed several features of a regional system – these include a single consolidated dispatch and specialty teams related to hazardous materials and other specialized technical rescue services. Such regional efforts often reflect a best practice, especially in regional or countywide systems protected by a number of fire departments. However, the ability of the County Commission to establish regional services for fire protection services is limited – in large part because of separate taxing districts which must be used separately to achieve a common objective. A better mechanism is for a single countywide tax district which would, from a practical perspective, eliminate the need for the current fire protection taxing districts.

A number of counties have increasingly elected to create a fire special district for purposes of funding services from a countywide perspective. This approach has the advantage of allowing the county to establish a strategic plan for fire services, while concurrently advance opportunities for regional shared services to be funded as best determined by the County. Existing examples of the regional shared services include 911 dispatch and the provision of specialized hazardous materials and technical rescue services.

While the County has a number of options to synchronize tax rates for provision of fire services, in the shorter-term the most advantageous would be to create a single special district for fire services pursuant to North Carolina General Statutes (G.S.).²³ How this is best legislatively handled will require legal review, however a good summary of alternatives are outlined in a

²³ County special districts are governed by G.S. Chapter 153A, Article 16.

UNC School of Government publication from 2011.²⁴ Most important, the existing collage of tax districts and fire service providers introduces inefficiencies from a countywide perspective.

As an example of an alternative special district, the table below assumes a single overall special district tax rate of 0.0935. At this rate, total revenues would approximate those generated now from the 12 separate tax districts, which would be eliminated. In this analysis, five of the existing fire taxing districts would see slight increases totaling \$158,747, while the remaining seven districts would see a decrease total \$152,204.

This analysis does not consider the current General Fund transfer of \$743,548 dollars earmarked for specific districts. A slight adjustment to the tax rate below could generate additional funding to ensure continuation of those additional services contemplated in the transfers. In addition, the County could consider funding of specialized services described above through the use of the special district alternative presented here, or through transfers from the General Fund. Each of these alternatives is a policy question for the County to consider.

Table 10: Optional Single Special District for Fire

Fire Districts	Current		Alternative		Variance from Current Budgeted
	Tax Rate / \$100 Valuation	Budgeted Tax Revenues	New Special District Rate	Estimated New Tax Revenues	
Pender Central	0.0900	\$ 306,630	0.0935	\$ 324,832	\$ 18,202
Sloop Point	0.0950	\$ 1,604,782	0.0935	\$ 1,564,069	\$ (40,713)
Maple Hill	0.0700	\$ 68,249	0.0935	\$ 97,337	\$ 29,088
Rocky Point	0.0875	\$ 524,417	0.0935	\$ 561,785	\$ 37,368
Long Creek Grady	0.1100	\$ 408,628	0.0935	\$ 353,811	\$ (54,817)
Shiloh	0.1000	\$ 139,218	0.0935	\$ 134,830	\$ (4,388)
Penderlea	0.1000	\$ 263,135	0.0935	\$ 254,619	\$ (8,516)
Atkinson	0.0700	\$ 143,024	0.0935	\$ 204,270	\$ 61,246
Hampstead	0.0950	\$ 878,400	0.0935	\$ 853,985	\$ (24,415)
Scotts Hill	0.0950	\$ 228,578	0.0935	\$ 220,473	\$ (8,105)
Northeast Pender	0.1000	\$ 265,385	0.0935	\$ 254,136	\$ (11,249)
Penderlea Duplin	0.0470	\$ 11,535	0.0935	\$ 24,377	\$ 12,842
Totals		\$ 4,841,981		\$ 4,848,524	\$ 6,543

RECOMMENDATION: The County should implement a single special fire district for ad valorem taxes to replace the current 12 separate tax districts.

²⁴ See Millinzi, K. (2011). *County Funding for Fire Services in North Carolina* accessed at <https://www.sog.unc.edu/sites/www.sog.unc.edu/files/reports/lfb43.pdf> on February 26, 2021.

RECOMMENDATION: The County should consider delineating specialized regional services related to fire, and fund those separately through the use of General Fund dollars.

While the previous countywide alternative ad valorem revenue would replicate the current net revenues, the following analyses tested the theoretical and political construct of maximizing each of the fire districts to the rate of 0.15. The aggregated revenue would be much more realistically aligned to cover the totality of fire related expenditures and the cost allocation within the services provided by Pender EMS & Fire.

Table 11: Optional Single Special District for Fire

Fire Districts	Current		Alternative		Variance from Current Budgeted
	Tax Rate / \$100 Valuation	Budgeted Tax Revenues	New Special District Rate	Estimated New Tax Revenues	
Pender Central Fire	0.0900	\$ 306,630	0.1500	\$ 521,121	\$ 214,491
Sloop Point Fire	0.0950	\$ 1,604,782	0.1500	\$ 2,509,202	\$ 904,420
Maple Hill Fire	0.0700	\$ 68,249	0.1500	\$ 156,156	\$ 87,907
Rocky Point Fire	0.0875	\$ 524,417	0.1500	\$ 901,259	\$ 376,842
Long Creek Fire	0.1100	\$ 408,628	0.1500	\$ 567,611	\$ 158,983
Shiloh Fire	0.1000	\$ 139,218	0.1500	\$ 216,304	\$ 77,086
Penderlea Fire	0.1000	\$ 263,135	0.1500	\$ 408,480	\$ 145,345
Atkinson Fire	0.0700	\$ 143,024	0.1500	\$ 327,706	\$ 184,682
Hampstead Fire	0.0950	\$ 878,400	0.1500	\$ 1,370,029	\$ 491,629
Scotts Hill Fire	0.0950	\$ 228,578	0.1500	\$ 353,699	\$ 125,121
Northeast Pender Fire	0.1000	\$ 265,385	0.1500	\$ 407,705	\$ 142,320
Penderlea Duplin Fire	0.0470	\$ 11,535	0.1500	\$ 39,108	\$ 27,573
Totals		\$ 4,841,981		\$ 7,778,381	\$ 2,936,400

OBSERVATION: If the county elected to fund the totality of the current fire suppression services, excluding municipalities, then a universal rate of 0.15 would be more realistically aligned.

OPERATIONAL ALTERNATIVES AND ASSESSMENTS

FITCH considered alternative models for the future delivery of fire and EMS services. These included: (1) Transitioning the current deployment model and operation to a County department; (2) Enhance the existing 501(c)3 structure and model; (3) Deploying the enhanced model as a County operated Fire and EMS system.

In both alternatives 1 and 2 above, which encompass continued use of Pender EMS & Fire for at least the short-term, the current agreement should be replaced with a performance-based contract. As reflected above, the County's assumption of administrative support functions will permit unencumbered access to essential records that will ensure fiscal accountability. From a performance perspective, the County should articulate specific targets, including certain levels of response time performance to fire and EMS incidents, minimum staffing levels of EMS and fire units with concurrent levels of certification, and monthly reporting on these metrics as well as quality assurance measures.

These alternatives are not necessarily mutually exclusive – that is, certain components outlined below may be appropriate under any of the various delivery models. For example, taking a regional perspective in the specifications and procurement of vehicles and certain capital equipment would be appropriate under any scenarios defined below.

Each of the alternative delivery models defined here are a policy choice for Pender County to decide – there is no one single 'best answer'. The common theme running through these options is the need for Pender County to begin assuming a more regional and coordinated approach to the provision of emergency services. How quickly this occurs will be influenced by budgetary constraints and community expectations.

RECOMMENDATION: Pender County should establish a new performance-based agreement with Pender EMS & Fire, Inc. The agreement should include County provision of administrative support functions, articulation of performance-based metrics at the 90th percentile, and requirements for monthly reporting of key performance indicators.

Pender County Optimized Services – Fire and EMS Combined (All Providers except Topsail)

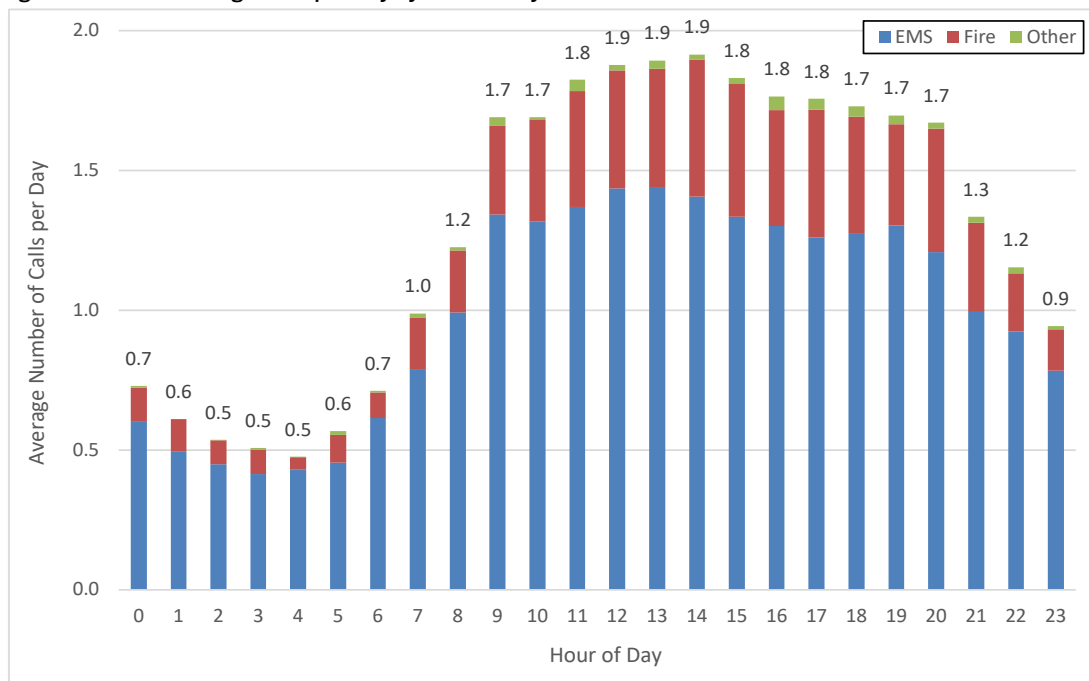
This alternative contemplates an optimized delivery model through a wholistic Pender County lens and maintains a fully integrated Fire Suppression (Fire) and Emergency Medical Services (EMS) model. The County system has two primary challenges in finding the most efficient, or

optimized, delivery model: (1) the daily demand for services and, (2) the large geographic expanse of 870 square miles.

Daily Service Demands

To provide a more granular understanding of the community’s demand for services, this temporal analysis included the average number of calls per hour. In other words, when referring to the Figure below, the busiest hour was at 1400 with 699 calls occurring during that hour in 2018-19. The average number of calls per hour is a daily average for those 699 calls if they were distributed equally across the year (i.e., $699/365 = 1.9$). Consistent with nearly every community there is a distinct “peak” period of the day. In the County it appears between 9am and 9 pm and varies between 1.7 and 1.9 calls per hour on average. In other words, approximately two unique incidents will occur each hour throughout the peak period.

Figure 2: Overall: Average Calls per Day by Hour of Day



The demand for EMS services is the predominant requests for service from the community at approximately 1.4 incident per hour. At the peak, Fire related incidents occurred at a rate of 0.5 incidents per hour. In other words, Fire related activity would occur every other day in any specific hour in question. During the traditional “sleeping” hours, there is less than one call per hour throughout the entirety of the county.

Geographic Challenges in Relation to Desired Performance

The first step in completing GIS planning analyses is to establish the desired performance parameters. Measures of total response time can be significantly influenced by both internal and external influences. For example, the dispatch time, defined as the time from call creation at the 911-center to the dispatching of units, contributes to the customer's overall response time experience. Another element in the total response time continuum is the turnout time, defined as the time from when the units are notified of the incident until they are actually responding. Turnout time can have a significant impact on the overall response time for the customer and is generally considered under management's control. However, the travel time, defined as the period from when the units are actually responding until arrival at the incident is a factor of the number of fire stations, the ability to travel unimpeded on the road network, the existing road network's ability to navigate the community, and the availability of the units. Largely, travel time is the most stable variable to utilize in system design regarding response time performance.

Therefore, these GIS planning analyses will focus on travel time capability as the unit of measure. Performance for travel time of first arriving Pender County units to calls within Pender County's jurisdiction by program during the 2018-19 reporting period (i.e., July 1, 2018 to June 30, 2019; hereinafter referred to as 2018-19) is provided below. Overall, travel time was 12.1 minutes or less for 90% of the incidents. EMS related incidents had a travel time performance of 12.2 minutes or less for 90% of the incidents, and fire related incidents had a travel time performance of 11.6 minutes or less for 90% of the incidents.

Table 12: 90th Percentile Dispatch, Turnout, Travel, and Response Times by Program – First Arriving Units

Jurisdiction	Program	Dispatch Time (Minutes)	Turnout Time (Minutes)	Travel Time (Minutes)	Response Time (Minutes)	Sample Size ¹
Within Pender County	EMS	3.6	4	12.2	16.7	8,103
	Fire	7.9	3.3	11.6	17.3	2,031
	Hazmat	11.6	2.9	9.5	20.5	56
	Rescue	21.2	3.6	17.6	29.4	79
	Total	4.3	3.9	12.1	16.8	10,269

¹Sample sizes reflect the number responses made by first arriving primary front-line units assigned to Pender County; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

Given the overall 90th percentile travel time of 12.1 minutes, a 12.2-minute travel time at the 90th percentile for EMS related incidents, and an 11.6-minute travel time at the 90th percentile for fire related incidents, a 12-minute travel time was used to reflect the current countywide performance.

When referring to the marginal utility analyses provided in the tables on the following pages, ascending rank order is the station's capability to cover risk (incidents) for all calls in relation to the total historical call volume of the sample period (2018-19). Station is the identifier for the current Pender County station; station capture is the number of calls the station would capture

within the specified travel time parameter; total capture is the cumulative number of calls captured with the addition of each station; and percent capture is the cumulative percentage of risk covered with the addition of each station. The goal would be to achieve at least 90% capture. Figures depict drive time mapping.

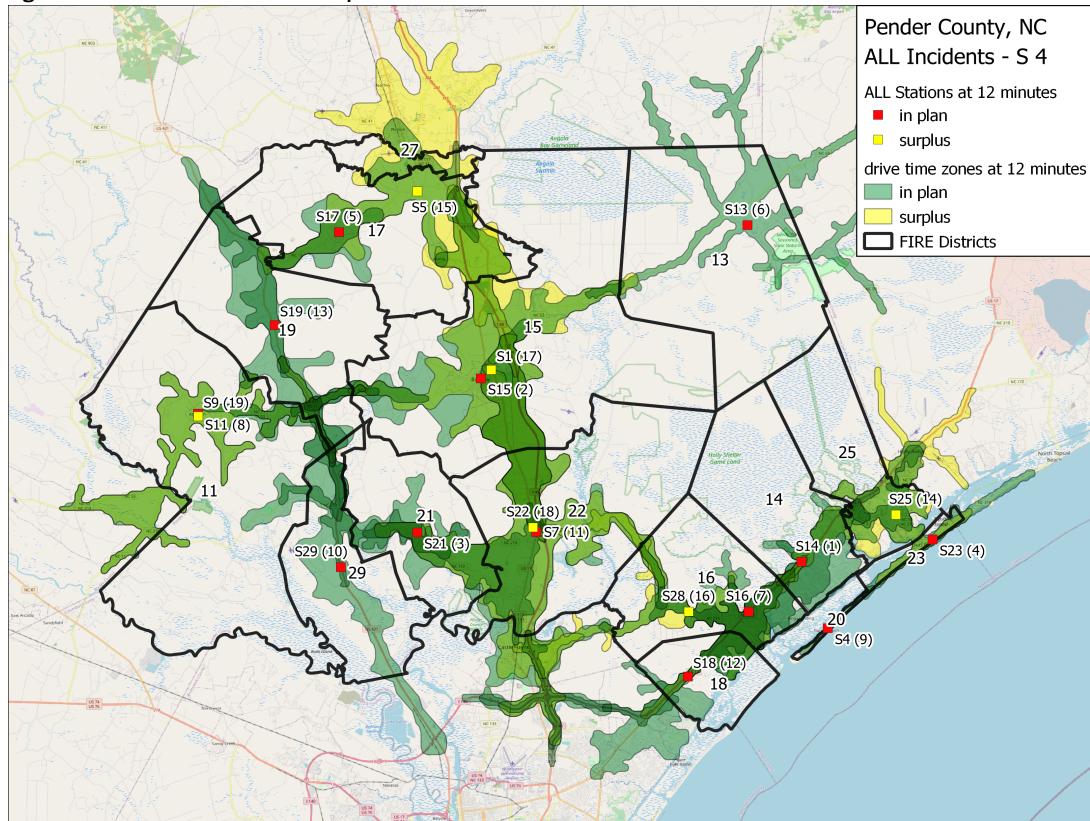
12-Minute Travel Time

Results suggest that with all current 19 stations, 90.82% of all calls could be responded to within 12 minutes or less travel time, although two of the stations would not cover any additional risk at that travel time. Thirteen stations could cover 90.14% of the risk for all calls at a 12-minute travel time. This analysis includes all Fire and EMS station locations and all combined community demand, with the exception of Topsail Beach.

Table 13: Marginal Station Contribution for 12-Minute Travel Time – All Calls

Rank	Station	Station Capture	Total Capture	Percent Capture
1	S14	2,978	2,978	27.02%
2	S15	2,721	5,699	51.71%
3	S21	1,135	6,834	62.00%
4	S23	693	7,527	68.29%
5	S17	490	8,017	72.74%
6	S13	372	8,389	76.11%
7	S16	345	8,734	79.24%
8	S11	328	9,062	82.22%
9	S4	239	9,301	84.39%
10	S29	236	9,537	86.53%
11	S7	234	9,771	88.65%
12	S18	119	9,890	89.73%
13	S19	45	9,935	90.14%
14	S25	31	9,966	90.42%
15	S5	26	9,992	90.66%
16	S28	10	10,002	90.75%
17	S1	8	10,010	90.82%
18	S22	0	10,010	90.82%
19	S9	0	10,010	90.82%

Figure 3: Current Station Bleed Map for 12-Minute Travel Time – All Calls



Results demonstrate that 90% of the of the incidents could be covered with 13 geographic locations. The mapping above illustrates the relative coverage. For example, the green shaded areas are representative of the 12-minute travel time by the 13 stations and the yellow shading are the additional 12-minute travel time polygons from the remaining 6 stations. Not surprisingly, much of the yellow shading from the 6 remaining stations is outside the county boundaries. For example, see the areas adjacent to Station 5 and Station 25.

As referenced earlier, there are opportunities for political leaders to coordinate the design, construction and operation of fixed capital facilities in order to lessen the burden on taxpayers. Examples include Station 1 & Station 15 in Burgaw, Station 9 & Station 11 in Atkinson, and Stations 7 and 22 in Rocky Point. As reflected above, each of these three combinations include 1 facility needed for the 12-minute travel time performance and 1 facility not required. Evaluation of existing facilities, and discussion among the relevant governmental entities, should explore opportunities for sharing of a single facility to house both functions – even when the fire and EMS providers are different agencies.

Considering both the geography and the community demands per hour, the “system” would require at least 15 staffed resources within the county for both Fire and EMS.

Table 14 on the following page provides a comprehensive look at the available resources, as they are currently distributed, within an optimized County system. Resources shown in blue are City assets within Pender County. Resources shown in red represent personnel who are ultimately funded with County dollars. All other resources belong to Pender EMS and Fire. The “zones” reflect the rank order of the marginal utility analysis. Several resources within the system deploy from individual facilities that are located very closely together. As such, the resources were combined into singular response zones.

Understanding all of the nuances of the Pender County system, these analyses suggest that Station 28-Island Creek is not operationally required to meet a minimum of 90% of the incidents within 12-minutes in a fully integrated system. Station 28 provides less than 1% additional coverage. Additionally, Station 28 is staffed with nine (9) SAFER grant positions that were initiated in FY21. At the conclusion of the 36-month performance period, these positions will need to be fully funded with local resources. Should the community experience fiscal shortfalls at the conclusion of the SAFER grant performance period, this analysis should inform policy makers as they work to close the budget gaps. However, Station 28 is brand new and may be well situated to manage growth in the system and their reasonable proximation to one of the busiest areas in Hampstead.

Station 25 is independently operated by Surf City and is established for the City’s response expectations. Stations 1, 5, 9, and 22 would be considered highly duplicative from the perspective of coverage area, but the separation of Fire and EMS drives any future considerations only towards the capital management. In other words, there may be an opportunity to combine the capital footprints in these areas when major refurbishment or replacement is required in the future.

RECOMMENDATION: Pender County should consider opportunities for combining capital facilities when major refurbishments, relocations, or replacements are required.

RECOMMENDATION: Pender County should work with other local governments to establish shared capital facilities in order to reduce tax burden on residents.

Table 14: Current Deployment within Optimized Fire/EMS System Combined

Zone	Station	Engine-Fire		Engine-BLS		Engine-ALS		Truck		Heavy Rescue		Ambulance-ALS		QRV/EMS_Fire Supervisor		Minimum Daily Staffing		County Funded
		FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	AM	PM	
14	Sta 14_PEF Sloop Point			3	26280							2	17520			5.0	5.0	5.0
15	Sta 15_Burgaw	1	8760													1.0	1.0	
		0.5	4380													1.0	0.0	
		0.5	4380													1.0	0.0	
	Sta 1_PEF Burgaw									2	17520	2	17520			4.0	4.0	4.0
21	Sta 21_PEF Rockypoint	3	26280													3.0	3.0	3.0
23	Sta 23_Surf City			3	26280							2	17520			5.0	5.0	2.0
17	Sta 17_PEF Penderlea			3	26280											3.0	3.0	3.0
	Sta 5_PEF Union											2	17520			2.0	1.0	1.5
13	Sta 13_Maple Hill															0.0		
	Sta 8_PEF Maple Hill					3	26280									3.0	2.0	2.5
16	Sta 16_PEF Hampstead			4	35040			X-staff		X-staff		2	17520			6.0	6.0	6.0
11	Sta 11_Atkinson	0.3	2600													0.3		0.3
		0.3	2600													0.3		0.3
	Sta 9_PEF Atkinson											2	17520			2.0	2.0	2.0
4	Sta 4_PEF Topsail											2	17520			2.0	2.0	2.0
29	Sta 29_PEF Currie			4.0	35040.0			X-staff						1	8760	5.0	5.0	5.0
7	Sta 7_PEF Rockypoint											2	17520	1	8760	3.0	3.0	3.0
	Sta 22_Rockypoint			0.5	4380											1.0	0.0	0.5
				0.5	4380											1.0	0.0	0.5
				0.5	4380											1.0	0.0	0.5
				0.5	4380											0	1.0	0.5
18	Sta 18_PEF Scotts Hill			3	26280											3.0	3.0	3.0
19	Sta 19_Shiloh	0.5	4380													0.5		0.5
		0.5	4380													0.5		0.5
25	Sta 25_Surf City			3	26280			X-Staff								3.0	3.0	
17	S5																	
28	Sta 28_PEF Hampstead			3	26280									1	8760	4.0	4.0	4.0
15	S1																	
7	S22																	
11	S9																	

Optimized Staffing

Adequate staffing is essential in providing consistent service to the community while at the same time ensuring that the workforce is not too “heavy” or too “lean.” Staffing is the single largest financial investment that any community will make. Understanding appropriate staffing levels and the influencers that impact it allows policymakers to appropriately adjust where needed and balance the community’s expectation of a well-staffed department within budgetary boundaries and constraints.

Currently, the County provides full-time staffing through Pender EMS and Fire at 14 stations and part-time staffing at three additional stations. The staffing analysis focused on full-time staffing provided by Pender EMS and Fire (PEF). Currently, PEF staffs eight engines with 3 to 4 personnel, one heavy rescue with 2 personnel, eight ALS transport units with 2 personnel and 3 QRV vehicles with 1 person each. Two units, the Maple Hill ALS engine and Union ambulance, staff one more position during the daytime than they do the night. The nighttime staffing of these units is supplemented with volunteers. Thus, PEF has an AM and PM count for daily staffing. To ensure deployment of all primary emergency response resources, filling all required seats, the agency maintains a daily minimum staffing of 46 personnel averaged across each 24hr period. In other words, the AM staffing count is 47 and the PM staffing count is 45.

Staffing optimization was determined by mathematical formula based upon the required number of seats, the hours to be covered, and the normalized use of scheduled and unscheduled leave. The resulting “Staffing Multiplier” indicates the minimum personnel needed to staff each seat in the deployment model. For PEF, their current 3/4 Kelly schedule on an average 56hr work week would require 3.32 full time employees (FTEs) per seat. By applying the 3.32 staffing multiplier to the daily averaged minimum seat count of 46, we can establish that 153 FTEs are required to maintain the current deployment while avoiding exorbitant overtime liabilities (Table 16 – Table 18).

Table 15: Current Countywide Daily Minimum Staffing Seats

Current - Daily Minimum Staffing Seats			
Category	AM	PM	24hr Seats
Pender EMS and Fire	47	45	46.0
County Funded (vol)	7	1	4
City Depts.	9	7	8
System Wide	63	53	58

Table 16: Optimized FTE Count for Current PEF Deployment Model

Current Staffing and Unit Count	
Minimum Personnel Per Shift	46.0
Total FTE Count	153

Table 17: Baseline - Current PEF Daily Minimum Staffing by Unit Type and Position

Baseline Current - PEF Daily Minimum Staffing by Unit Type								
Unit	BC Fire	Lt.	Dr.	FF/PM	FF	BC EMS	Medic	A-EMT
Engine/Heavy		8	9	0.5	10			
Ambulance							8	7.5
QRV	1					1	1	

The current budgeted shift (line) positions for PEF equate to 157 FTEs. The agency's current staffing levels reveal a staffing multiplier of 3.41 which when compared to the daily minimum and schedule, would indicate some excess capacity. Thus, the department is currently budgeted for four (4) more FTEs than the staffing multiplier would indicate.

Optimized staffing levels should be balanced with overtime liabilities. Due to the nature of Fire and EMS service schedules and the need to provide continual coverage, personnel in this profession often work more than 40 hours per work on average. Thus, the Fair Labor Standards Act (FLSA) allows for special exceptions when calculating overtime liabilities for Fire and EMS field personnel. The foremost exception is referred to as a 7k exemption where the hours worked can be calculated within a 7 to 28-day work cycle and overtime is not earned until personnel exceed 53 hours of work. However, the 7k exemption is only available to public employers and therefore not applicable for PEF.

To maintain cost containment, PEF currently uses a Fluctuating Work Week (FWW) method of calculating overtime for employees as permitted under the FLSA. Under this provision, the agency has established a weekly salary rate for each employee, regardless of actual hours worked. Each employee's weekly salary rate is then divided by the hours they worked within a seven-day cycle to establish their hourly rate for the week. In other words, each employee's hourly rate changes weekly to align the hours worked with their agreed upon salary. This provision enables PEF to compensate any hours over 40 in a seven-day cycle at the half-time rate only. Thus, the agency is able to avoid the substantial overtime liabilities despite its exclusion from the FLSA 7K exemptions offered to public agencies. Conversely, the FWW provision is not available for use by public employers.

Comparing the personnel cost of staffing a 56hr work week with FWW provisions versus 7k exemptions reveals about a 3% increase in cost per employee with the 7k exemption being the more costly approach. Thus, several considerations must inform decisions about moving personnel cost from private to public entities. For instance, while the 7k exemption may not provide the same savings currently realized with the FWW, it would allow the County to reduce the workweek to 53hrs and subsequently avoid paying FLSA overtime. However, as demonstrated in the table below, a workweek reduction to 53hrs would require ten more FTEs than the 56hr workweek.

The following table provides a comparison of the required staffing levels for field personnel by the scheduled average work week in comparison with current PEF staffing levels.

Table 18: Current FTE Count by Minimum Staffing and Average Work Week

Current - FTE Count by: Min Staffing/Avg Workweek									
Division	Current Counts FY21			Counts by Avg Workweek					
	All	Support	Line	Line	47.8	Line	52.9	Line	56.2
Fire	100	2	98	111		99		93	
EMS	60	1	59	71		64		60	
Logistics	6	6							
Administration	15	15							
PRN & Seasonal	63								
Total	244	24	157	182		163		153	
Difference				25		6		-4	
Current Multiplier	3.41								

Despite the increase in FTEs associated with a 53hr work week, under the County's employment, the FLSA overtime would be eliminated. These savings are significant enough to more than cover the cost of the extra FTEs. Depending on the configuration and pension benefit cost, transitioning the current field deployment to the County on a 53hr workweek could produce savings from 3 to 9% over current costs (Tables 19 and 20). It should be noted that the reduction in FLSA overtime does reduce the take-home salary experience of the employees. Thus, the County could utilize the realized savings to provide a commensurate GWI, effectively creating a cost neutral transition.

Table 19: Line Costs as County Department – Current Pay and Burden Rates

Cost of Line Personnel by Plan and Multiplier - w/FLSA 7k/Current Burden Rate				
Plan	Current Multiplier		53hr Wk Multiplier	
	Line Costs	Diff. from Baseline	Line Cost	Diff. from Baseline
Current	\$10,096,499	\$306,051	\$8,920,540	-\$869,907
Configuration 1	\$9,999,277	\$208,829	\$9,110,814	-\$679,633
Configuration 2	\$7,742,538	-\$2,047,910	\$7,979,424	-\$1,811,023

Table 20: Line Costs as County Department - Current Pay Rates w/Increased Burden Rate for NC Pension

Cost of Line Personnel by Plan and Multiplier - w/FLSA 7k/Increased Burden Rate				
Plan	Current Multiplier		53hr Wk Multiplier	
	Line Costs	Diff. from Baseline	Line Cost	Diff. from Baseline ²⁵
Current	\$10,723,028	\$932,581	\$9,474,096	-\$316,351
Configuration 1	\$10,619,773	\$829,325	\$9,676,178	-\$114,270
Configuration 2	\$8,222,994	-\$1,567,453	\$8,474,580	-\$1,315,867

²⁵ Calculations do not include the four FTE savings associated with the staffing multiplier.

Evaluation of Fire Distribution Individually – 14 Fire zones

This part of the evaluation contemplated fire stations and fire related activity. Therefore, fourteen fire stations were included in the analysis. Overall, the assessment found a high degree of station reliability to respond to their own calls and a relatively low workload. While the responsibility to provide for appropriate fire suppression service capabilities are not diminished, this assessment reinforces that the majority of community driven requests for services are for emergency medical services.

Consistent with previous analyses, an opportunity exists to more efficiently and effectively utilize some cross-staffed and cross-trained Fire and EMS personnel that can take the appropriate apparatus type that best aligns with the risk. In this manner, the personnel can provide both EMS and Fire related responses with the same human resource investment.

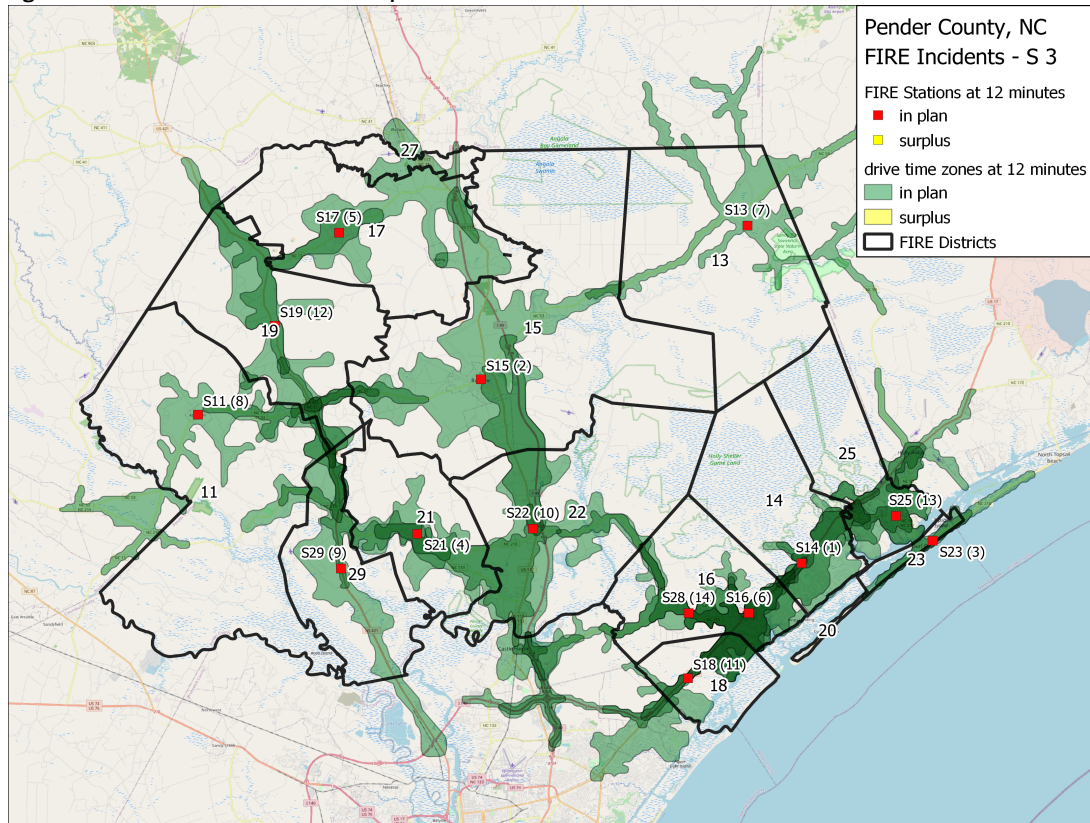
12-Minute Travel Time

Results suggest that with the current 14 fire stations that staff fire units, 88.55% of fire calls could be responded to within 12 minutes or less travel time. However, there is a diminishing return after 85% coverage as the remaining 5-stations cumulatively provide less than 4% improvement.

Table 21: Marginal Fire Station Contribution for 12-Minute Travel Time – Fire Calls

Rank	Station	Station Capture	Total Capture	Percent Capture
1	S14	588	588	25.50%
2	S15	503	1,091	47.31%
3	S23	225	1,316	57.07%
4	S21	222	1,538	66.70%
5	S17	114	1,652	71.64%
6	S16	105	1,757	76.19%
7	S13	103	1,860	80.66%
8	S11	55	1,915	83.04%
9	S29	48	1,963	85.13%
10	S22	42	2,005	86.95%
11	S18	20	2,025	87.81%
12	S19	12	2,037	88.33%
13	S25	3	2,040	88.46%
14	S28	2	2,042	88.55%

Figure 4: Current Fire Station Bleed Map for 12-Minute Travel Time – Fire Calls



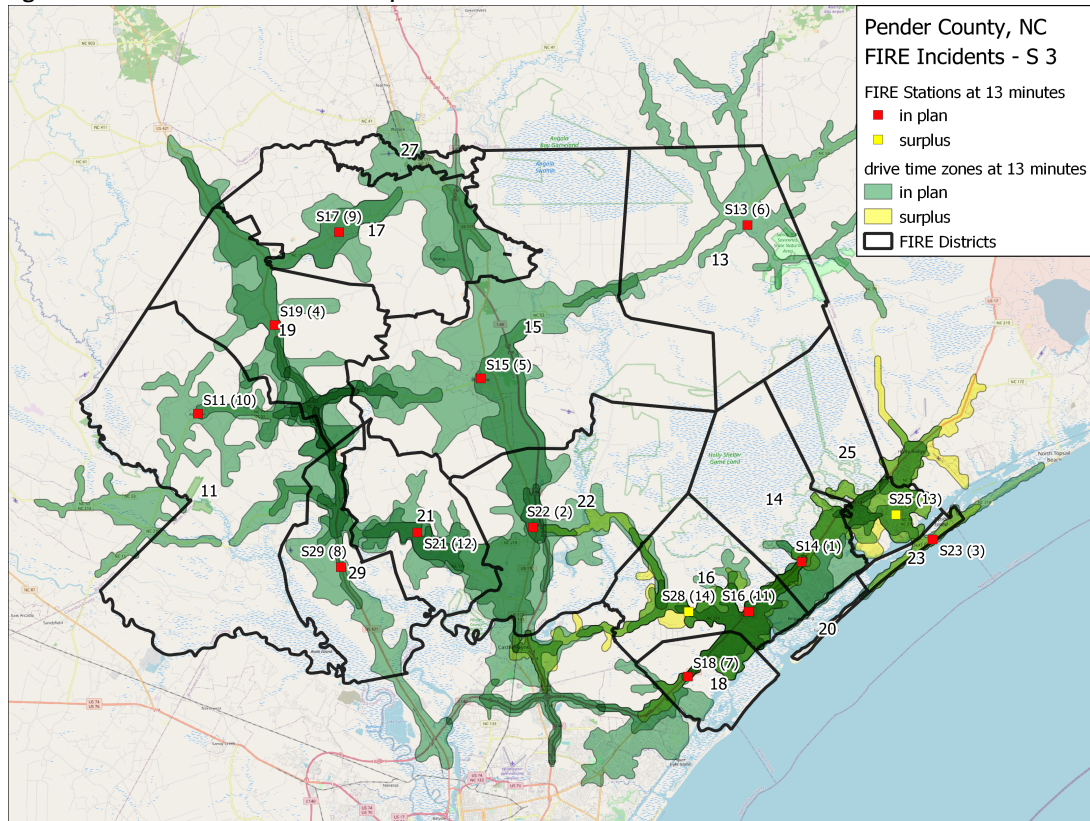
13-Minute Travel Time

Results suggest that with the current 14 stations that staff fire units, 90.59% of fire calls could be responded to within 13 minutes or less travel time. For context, the 13-minute travel time is an acceptable rural travel time objective with the Commission on Fire Accreditation International (CFAI). Similar to the results from the 12-minute analyses, there is a diminishing return from the 8th station to the 14th a station that represents approximately 5%.

Table 22: Marginal Fire Station Contribution for 13-Minute Travel Time – Fire Calls

Rank	Station	Station Capture	Total Capture	Percent Capture
1	S14	638	638	27.67%
2	S22	584	1,222	52.99%
3	S23	213	1,435	62.23%
4	S19	174	1,609	69.77%
5	S15	144	1,753	76.02%
6	S13	101	1,854	80.40%
7	S18	60	1,914	83.00%
8	S29	53	1,967	85.30%
9	S17	53	2,020	87.60%
10	S11	37	2,057	89.20%
11	S16	17	2,074	89.94%
12	S21	10	2,084	90.37%
13	S25	3	2,087	90.50%
14	S28	2	2,089	90.59%

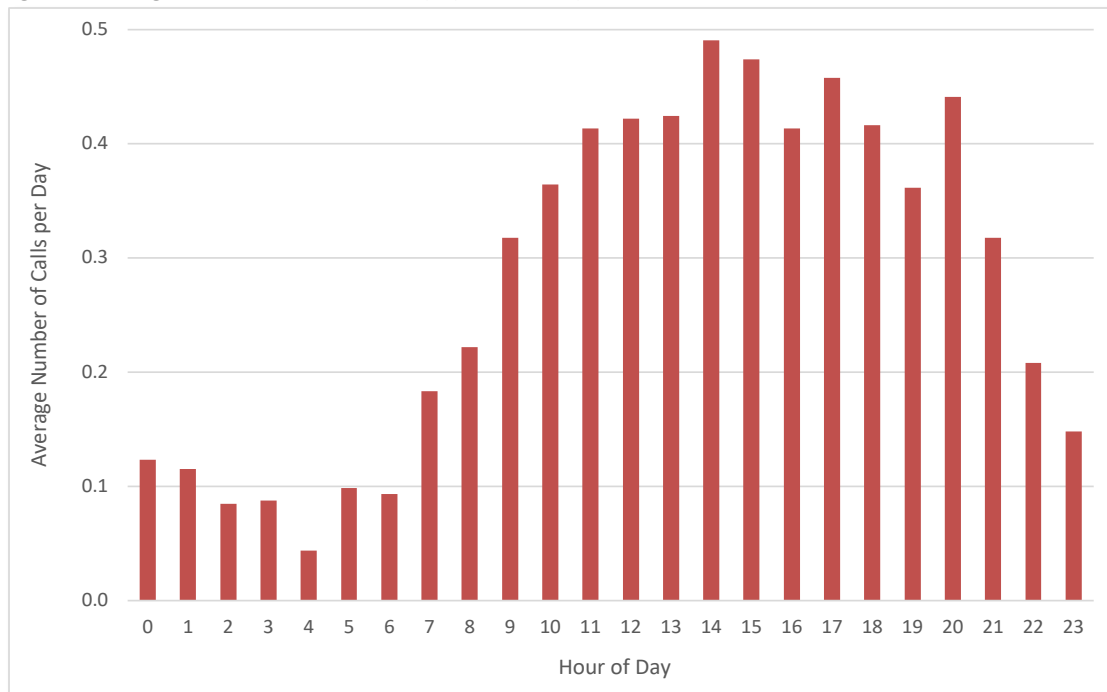
Figure 5: Current Fire Station Bleed Map for 13-Minute Travel Time – Fire Calls



Hourly Demand for Fire Services

When evaluating the community level demand for fire related services by the hourly demand for services, the fire related activity is occurring at a rate of 0.5 calls per hour per day at the peak of the demand curve. In other words, throughout the peak of the day there would be a call either every other day or every third day within a given hour. During the traditional “sleeping” hours, there is less than 0.2 calls per hour throughout the entirety of the county. Results are provided below.

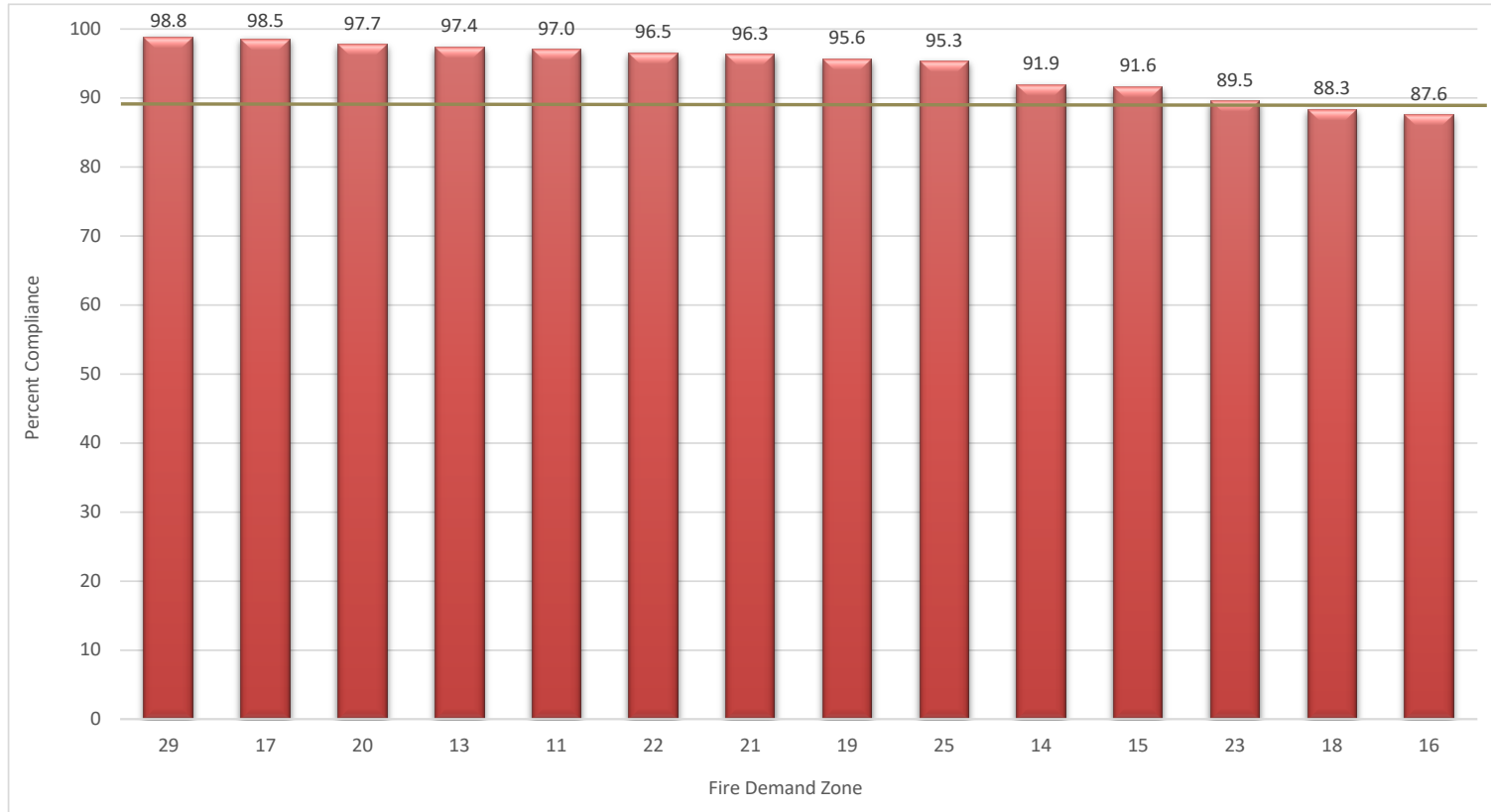
Figure 6: Average Fire Related Calls per Day by Hour of Day



Reliability – Fire Stations

Reliability is representative of the percentage of time that a call occurred within a stations' first due district and the station within that district was available to respond to the incident. When evaluating the relative station reliability for each of the 14 fire stations, the results found that there is a high degree of reliability for the fire suppression program. Eleven of the stations had greater than 90% reliability and 3 stations were at or above 87%. Overall, this supports a robust response system within the county where the station that should mitigate the incident available and responding. However, reliability does not contemplate the performance associated with the response. Results are provided below.

Figure 7: Percentage of First Due Compliance of Fire Units by Fire Demand Zone



Evaluation of EMS Distribution Individually – 10 EMS Zones

This part of the evaluation contemplated the 10 locations that provided an Advanced Life Support (ALS) unit. To varying degrees, these were all staffed and/or provided by Pender EMS and Fire. A total of 10 geographic locations were included in the analysis with eight ALS transport unit locations and two were ALS Engines. Overall, the assessment found a high degree of station reliability to respond to their own calls.

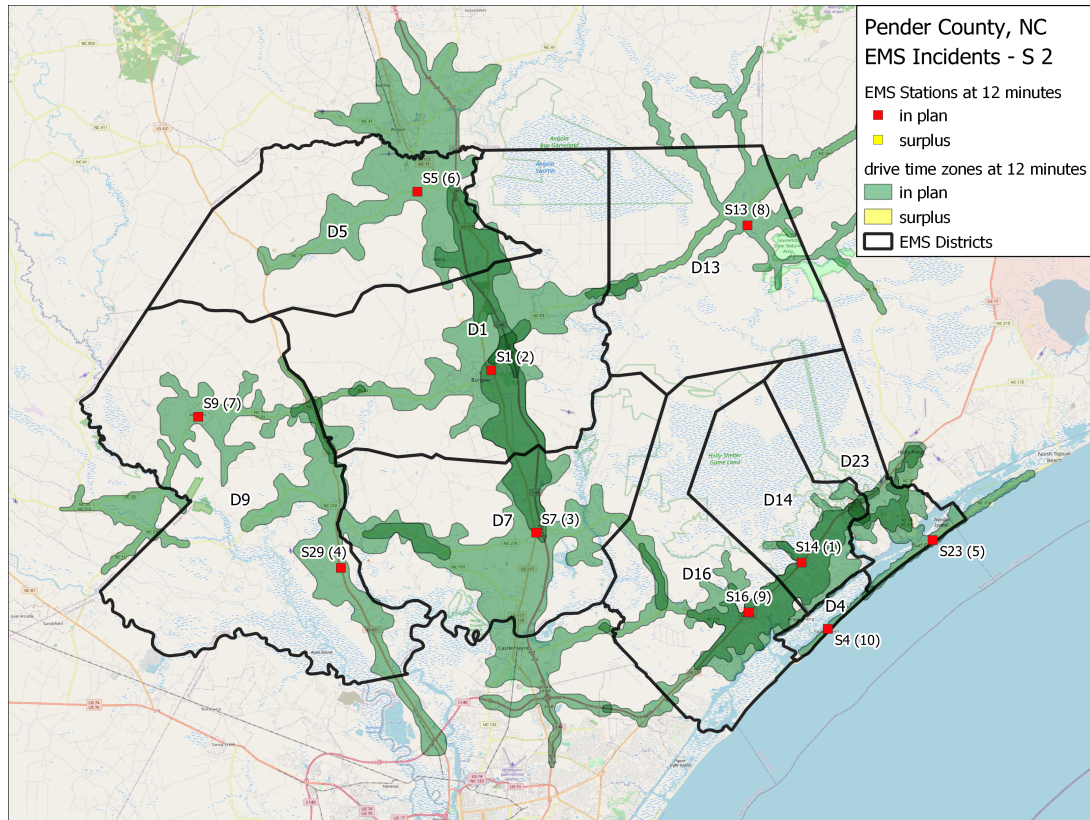
12-Minute Travel Time

Results suggest that with the current ten stations that staff ALS engines or transport units, 87.20% of EMS calls could be responded to within 12 minutes or less travel time. The actual 90th percentile performance for first arriving ALS units is 13.4 minutes.

Table 23: Marginal EMS ALS Engine and Transport Unit Station Contribution for 12-Minute Travel Time – EMS Calls

Rank	Station	Station Capture	Total Capture	Percent Capture
1	S14	2,369	2,369	27.71%
2	S1	2,166	4,535	53.05%
3	S7	784	5,319	62.22%
4	S29	453	5,772	67.52%
5	S23	434	6,206	72.59%
6	S5	353	6,559	76.72%
7	S9	269	6,828	79.87%
8	S13	254	7,082	82.84%
9	S16	207	7,289	85.26%
10	S4	166	7,455	87.20%

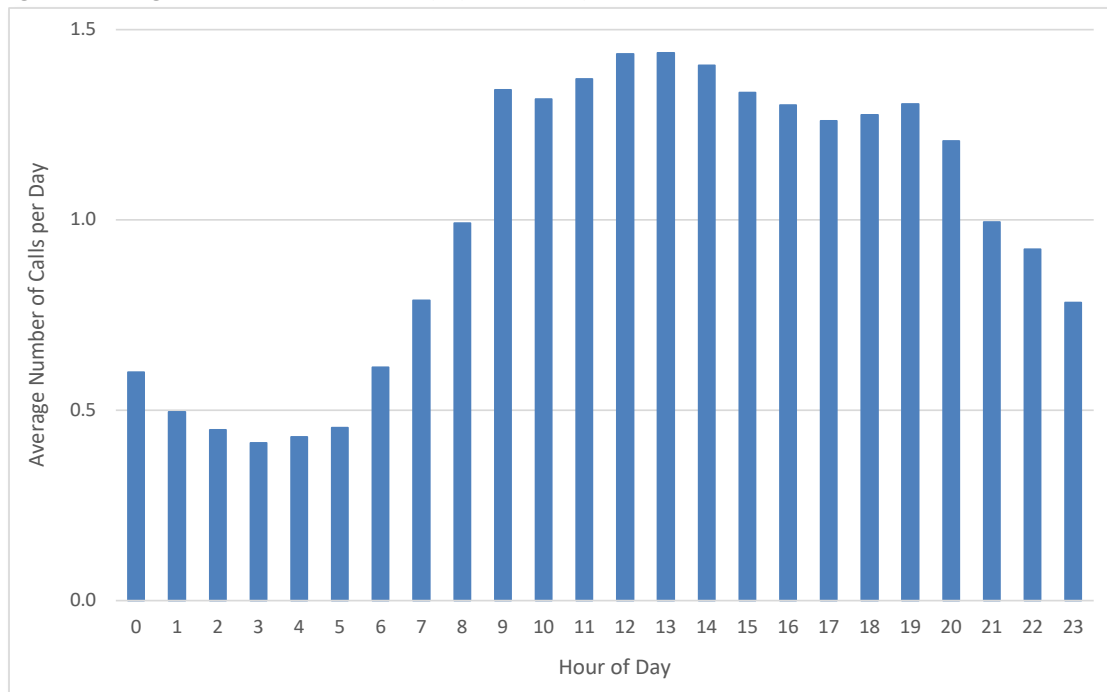
Figure 8: Current EMS ALS Engine and Transport Unit Station Bleed Map for 12-Minute Travel Time – EMS Calls



Hourly Demand for EMS Services

EMS related calls were also evaluated by hour of the day. Some variability exists in the time of day that requests for EMS related services were received. The hours from 0200 to 0400 had the lowest demands, when average number of calls per day for each of those hours was 0.4. The highest demand for EMS related services occurred at 1300, when average number of calls per day during that hour was 1.4. In other words, on average, there will be 1 to 2 of the EMS units on a call each hour that has a residual ALS contingency of approximately 8 resources throughout the peak of the day.

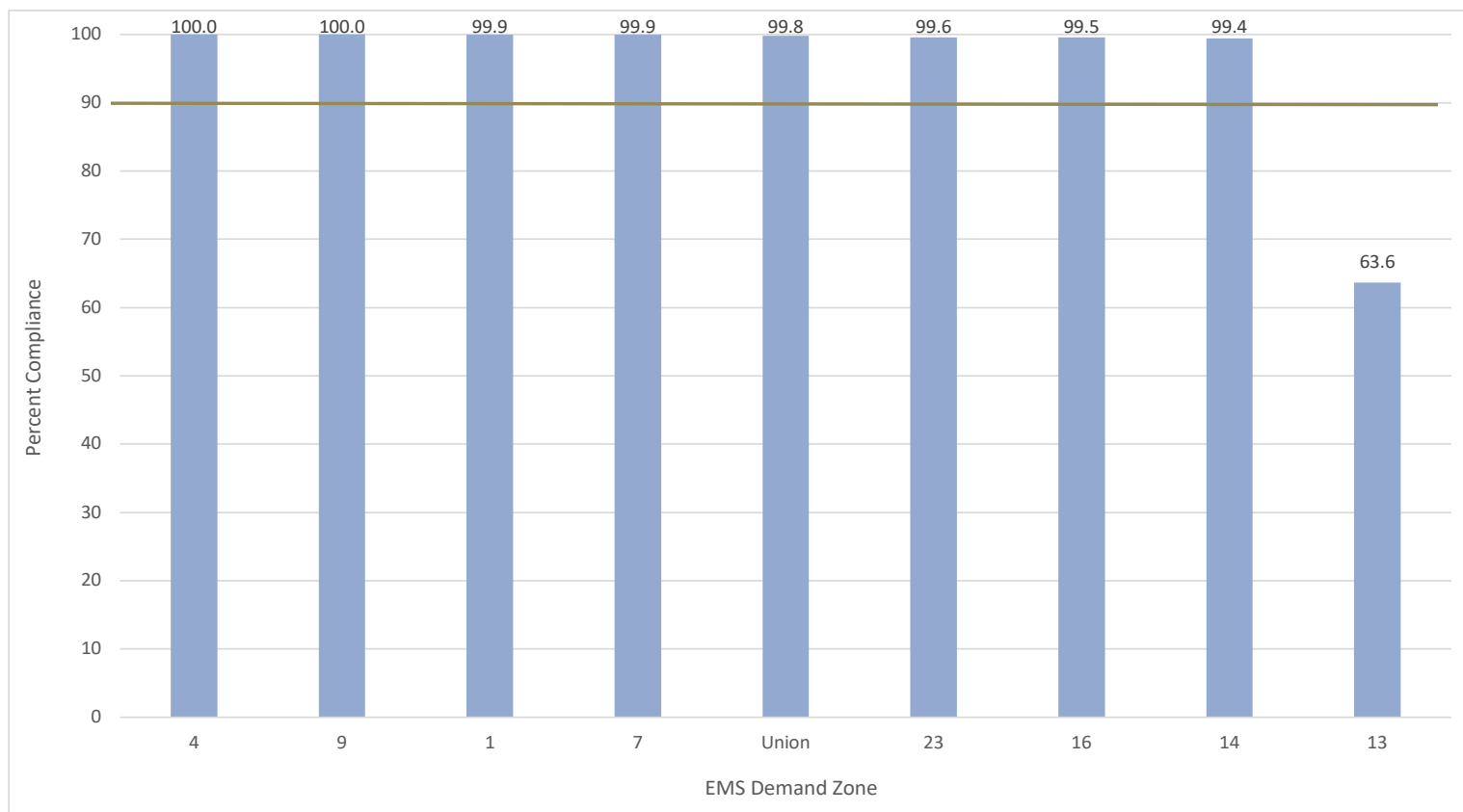
Figure 9: Average EMS Related Calls per Day by Hour of Day



Reliability – ALS Stations

Reliability is representative of the percentage of time that a call occurred within a stations' first due district and the station within that district was available to respond to the incident. When evaluating the relative station reliability for each of the 10 ALS stations, the results found that there is a high degree of reliability for the EMS program. Nine of the stations had greater than 99% reliability and Station 13 (ALS non-transport) was at approximately 67%. Overall, this supports a robust response system within the county where the station that should mitigate the incident available and responding. However, reliability does not contemplate the performance associated with the response. Results are provided below.

Figure 10: Percentage of First Due Compliance of EMS Units by EMS Demand Zone



Unit Hour Utilization

Another measure, time on task, is necessary to evaluate best practices in efficient system delivery and consider the impact workload has on personnel. Unit Hour Utilization (UHU) values represent the proportion of the work period (e.g., 24 hours) that is utilized responding to requests for service.

Historically, the International Association of Fire Fighters (IAFF) has recommended that 24-hour units utilize 0.30, or 30% workload as an upper threshold.²⁶ In other words, this recommendation would have personnel spend no more than 7.2 hours per day on emergency incidents. These thresholds take into consideration the necessity to accomplish non-emergency activities such as training, health and wellness, public education, and fire inspections. The 4th edition of the IAFF EMS Guidebook no longer specifically identifies an upper threshold. However, *FITCH* recommends that an upper unit utilization threshold of approximately 0.30, or 30%, would be considered best practice. In other words, units and personnel should not exceed 30%, or 7.2 hours, of their workday responding to calls. These recommendations are also validated in the literature. For example, in their review of the City of Rolling Meadows, the Illinois Fire Chiefs Association utilized a UHU threshold of 0.30 as an indication to add additional resources.²⁷ Similarly, in a standards of cover study facilitated by the Center for Public Safety Excellence, the Castle Rock Fire and Rescue Department utilizes a UHU of 0.30 as the upper limit in their standards of cover due to the necessity to accomplish other non-emergency activities.²⁸

UHU analyses included units designated by the Pender County leadership team as 24-hour per day units (Table 28; Figure 15, only units with UHU values > 0.01 are displayed in the figure). All units had estimated UHU values < 0.30. The busiest units across the department included EMS1 (UHU = 0.25), EMS7 (UHU = 0.22), EMS14 (UHU = 0.20), EMS16 (UHU = 0.18), EMS9 (UHU = 0.17), EMS23 (UHU = 0.15), and EMS5 (UHU = 0.13).

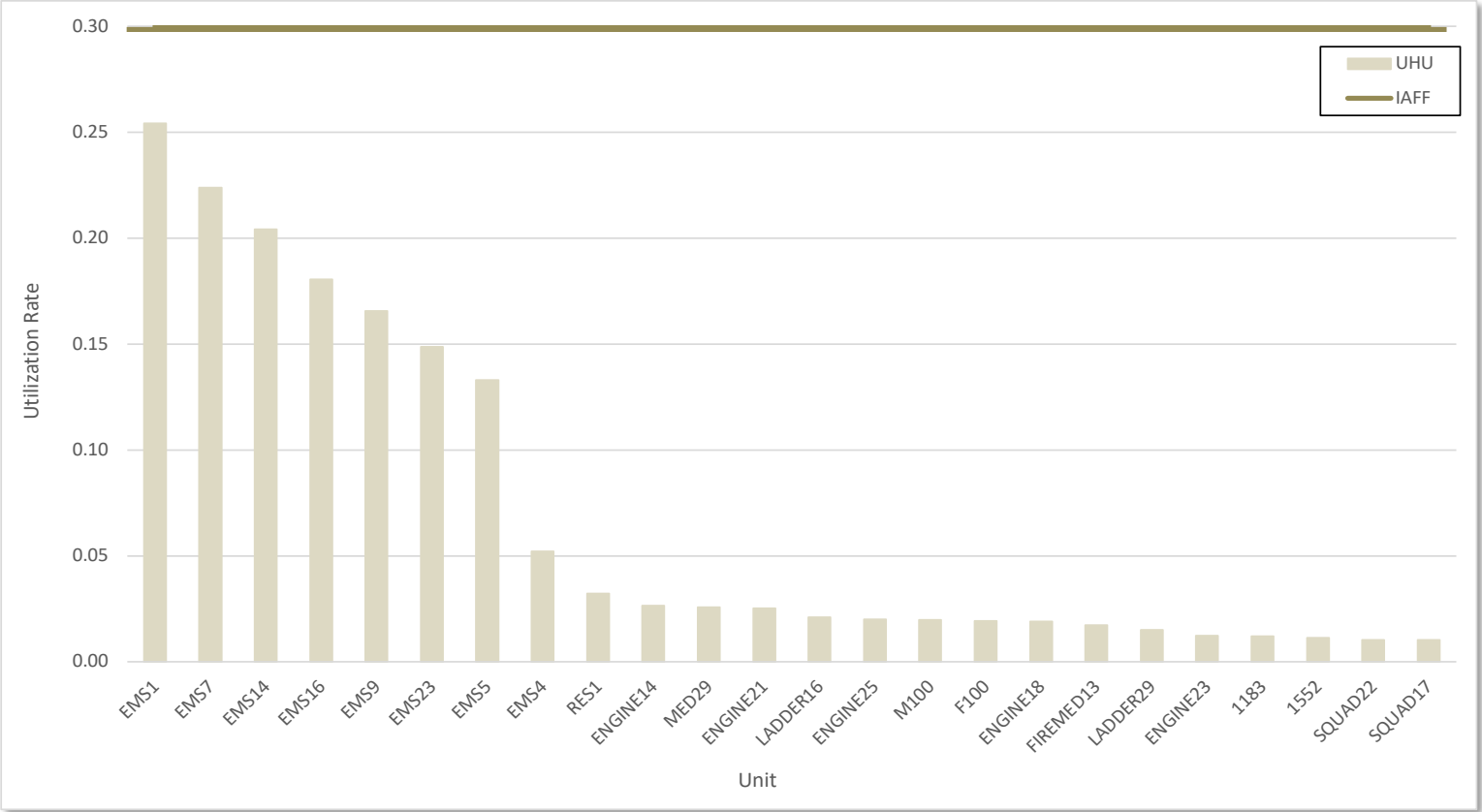
RECOMMENDATION: The EMS system should place one additional ambulance in service for workload management and incremental response time improvement.

²⁶ International Association of Firefighters. (1995). *Emergency Medical Services: A Guidebook for Fire-Based Systems*. Washington, DC: Author. (p. 11)

²⁷ Illinois Fire Chiefs Association. (2012). *An Assessment of Deployment and Station Location: Rolling Meadows Fire Department*. Rolling Meadows, Illinois: Author. (pp. 54-55)

²⁸ Castle Rock Fire and Rescue Department. (2011). *Community Risk Analysis and Standards of Cover*. Castle Rock, Colorado: Author. (p. 58)

Figure 11: Unit Hour Utilization Estimated – 24-Hour Pender County Units in Pender County Jurisdiction



Configuration 1 - Optimization of the Current Model

The following analysis suggests the optimized strategies applied to the existing deployment profiles. Overall, the system remains very stable and preserves much of the status quo from the expertise that has been built and institutionalized within Pender County. However, the incremental adjustments that may be considered include the following:

- Expanded strategy of cross staffing units due to geographic challenges with low levels of community demand.
- Increase PM PEF staffing from 2 to 3 and add an additional resource for ALS transport at Station 8 that is cross staffed with the Engine Company. In this manner, the transport unit from the busiest area can remain available for other calls and the closest transport unit available provides a higher level of service for the citizens in Maple Hill.
- Add an additional resource for ALS transport at Station 29 that is crossed staffed between the Engine Company and the ALS QRV and integrated into an overall move-up strategy.
- Reduce the staffing on engines at Station 16 and Station 29 to 3-person and use the FTEs to put an additional ALS transport unit in service at Station 21. This would enhance geographic coverage. However, consideration might also be given to adding this resource at Station 28 since it may provide a more robust road network and access to backfill for busiest area at Station 1.

Table 24 represents these changes in the County wide resource deployment. The proposed adjustments only require an addition 0.5 FTE over the 24hr period due to the redistribution of existing resources. Therefore, the daily minimum staffing increases to 46.5 with a transfer of two FTEs to the EMS division as shown in the following tables.

Table 24: Configuration 1 - Countywide Daily Minimum Staffing Seats

Proposed Config 1 - Daily Minimum Staffing Seats			
Category	AM	PM	24hr Seats
Pender EMS and Fire	47	46	46.5
County Funded (vol)	7	1	4
City Depts.	9	7	8
System Wide	63	54	58.5

Table 25: Configuration 1 - Daily Minimum Staffing by Program Area

PEF Min. Staffing by Program	
EMS Minimum	20.5
Fire Minimum	26

Table 27 : Configuration 1 - PEF Daily Minimum Staffing by Unit Type and Position

Proposed Configuration 1 - PEF Daily Minimum Staffing by Unit Type								
Unit	BC Fire	Lt.	Dr.	FF/PM	FF	BC EMS	Medic	A-EMT
Engine/Heavy		8	9	1	8			
Ambulance							9	8.5
QRV	1					1	1	

Table 26: Configuration 1 - FTE Count by Minimum Staffing and Average Work Week

Proposed Configuration 1 - FTE Count by: Min Staffing/Avg Workweek									
Division	Current Counts FY21			Counts by Avg Workweek					
	All	Support	Line	Line	47.8	Line	52.9	Line	56.2
Fire	100	2	98	103		92		86	
EMS	60	1	59	81		73		68	
Total	244	24	157	184		165		154	
Difference				27		8		-3	

Table 27: Configuration 1 - Alternative Deployment within Optimized Fire/EMS System Combined

Zone	Station	Engine-Fire		Engine-BLS		Engine-ALS		Truck		Heavy Rescue		Ambulance-ALS		QRV/EMS_Fire		Minimum Daily		County Funded
		FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	AM	PM	
14	Sta 14_PEF Sloop Point			3	26280							2	17520			5.0	5.0	5.0
15	Sta 15_Burgaw	1	0													1.0	1.0	
		0.5	4380													1.0	0.0	
		0.5	4380													1.0	0.0	
	Sta 1_PEF Burgaw									2	17520	2	17520			4.0	4.0	4.0
21	Sta 21_PEF Rockypoint	3	26280									2	17520			5.0	5.0	5.0
23	Sta 23_Surf City			3	26280							2	17520			5.0	5.0	2.0
	Sta 17_PEF Penderlea			3	26280											3.0	3.0	3.0
17	Sta 5_PEF Union											2	17520			2.0	1.0	1.5
	Sta 13_Maple Hill																	
13	Sta 8_PEF Maple Hill					3	26280					X-staff				3.0	3.0	3.0
16	Sta 16_PEF Hampstead			3	26280			X-staff		X-staff		2	17520			5.0	5.0	5.0
11	Sta 11_Atkinson	0.3	2600													0.3		0.3
		0.3	2600													0.3		0.3
	Sta 9_PEF Atkinson											2	17520			2.0	2.0	2.0
4	Sta 4_PEF Topsail											2	17520			2.0	2.0	2.0
29	Sta 29_PEF Currie			3	26280			X-staff				X-Staff		1	8760	4.0	4.0	4.0
	Sta 7_PEF Rockypoint											2	17520	1	8760	3.0	3.0	3.0
7	Sta 22_Rockypoint			0.5	4380											1.0	0.0	0.5
				0.5	4380											1.0	0.0	0.5
				0.5	4380											1.0	0.0	0.5
				0.5	4380											0	1.0	1.0
18	Sta 18_PEF Scotts Hill			3	26280											3.0	3.0	3.0
19	Sta 19_Shiloh	0.5	4380													0.5		0.5
		0.5	4380													0.5		0.5
25	Sta 25_Surf City			3	26280			X-Staff								3.0	3.0	
17	S5																	
28	Sta 28_PEF Hampstead			3	26280									1	8760	4.0	4.0	4.0
15	S1																	
7	S22																	
11	S9																	

Configuration 2 - Realignment of Resources to Program Revenues

The following analysis seeks to help realign the systems program resources with their individual revenue streams. As discussed, a large portion of the EMS ad-valorem revenue is redirected to cover the cost of the suppression program. In other words, the size of the fire suppression program has outpaced its level of funding. While strategies for increasing suppression program revenue are providing in the financial section of this report, this analysis offers staffing adjustments to help reduce the cost of the fire program.

This configuration maintains all of the adjustments proposed with Configuration 1 and reduces Engine staffing levels to 2-personnel for Fire and BLS units and 3-personnel for ALS units. The practice of staffing 2-personnel to an Engine is a common and practical approach for largely rural County systems. This adjustment would establish a new daily minimum staffing level of 39.5 and subsequently reduce the FTE demand by 22 positions under the currently used multiplier and 26 FTEs by the calculated multiplier.

Table 28: Configuration 2 - Countywide Daily Minimum Staffing Seats

Proposed Config 2 - Daily Minimum Staffing Seats			
Category	AM	PM	24hr Seats
Pender EMS and Fire	40.0	39.0	39.5
County Funded (vol)	7	1	4
City Depts.	9	7	8
System Wide	56	47	51.5

Table 29: Configuration 2 - Daily Minimum Staffing by Program Area

PEF Min. Staffing by Program	
EMS Minimum	20.5
Fire Minimum	19

Table 30: Configuration 2 - Daily Minimum Staffing by Unit Type and Position

Proposed Configuration 2 - PEF Daily Minimum Staffing by Unit Type								
Unit	BC Fire	Lt.	Dr.	FF/PM	FF	BC EMS	Medic	A-EMT
Engine/Heavy		8	9	1	1			
Ambulance							9	8.5
QRV	1					1	1	

Table 31: Configuration 2 - FTE Count by Minimum Staffing and Average Work Week

Proposed Configuration 2 - FTE Count by: Min Staffing/Avg Workweek									
Division	Current Counts FY21			Counts by Avg Workweek					
	All	Support	Line	Line	47.8	Line	52.9	Line	56.2
Fire	100	2	98	75		67		63	
EMS	60	1	59	81		73		68	
Total	244	24	157	157		140		131	
Difference				0		-17		-26	

The following table represents these changes in the County wide resource deployment

Table 32: Configuration 2 – Alternative Deployment within Optimized Fire/EMS System Combined

Zone	Station	Engine-Fire		Engine-BLS		Engine-ALS		Truck		Heavy Rescue		Ambulance-ALS		QRV/EMS_Fire		Minimum Daily		County Funded
		FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	FTE Seat Count	Annual Hours	AM	PM	
14	Sta 14_PEF Sloop Point			2	17520							2	17520			4.0	4.0	4.0
15	Sta 15_Burgaw	1	0													1.0	1.0	
		0.5	4380													1.0	0.0	
		0.5	4380													1.0	0.0	
	Sta 1_PEF Burgaw									2	17520	2	17520			4.0	4.0	4.0
21	Sta 21_PEF Rockypoint	2	17520									2	17520			4.0	4.0	4.0
23	Sta 23_Surf City			3	26280											5.0	5.0	2.0
17	Sta 17_PEF Penderlea			2	17520											2.0	2.0	2.0
	Sta 5_PEF Union											2	17520			2.0	1.0	1.5
13	Sta 13_Maple Hill																	
	Sta 8_PEF Maple Hill					3	26280					X-staff				3.0	3.0	3.0
16	Sta 16_PEF Hampstead			2	17520			X-staff		X-staff		2	17520			4.0	4.0	4.0
11	Sta 11_Atkinson	0.3	2600													0.3		0.3
		0.3	2600													0.3		0.3
	Sta 9_PEF Atkinson											2	17520			2.0	2.0	2.0
4	Sta 4_PEF Topsail											2	17520			2.0	2.0	2.0
29	Sta 29_PEF Currie			2	17520			X-staff				X-staff		1	8760	3.0	3.0	3.0
7	Sta 7_PEF Rockypoint											2	17520	1	8760	3.0	3.0	3.0
	Sta 22_Rockypoint			0.5	4380											1.0	0.0	0.5
				0.5	4380											1.0	0.0	0.5
				0.5	4380											1.0	0.0	0.5
				0.5	4380											0	1.0	1.0
18	Sta 18_PEF Scotts Hill			2	17520											2.0	2.0	2.0
19	Sta 19_Shiloh	0.5	4380													0.5		0.5
		0.5	4380													0.5		0.5
25	Sta 25_Surf City			3	26280			X-Staff								3.0	3.0	
17	S5																	
28	Sta 28_PEF Hampstead			2	17520									1	8760	3.0	3.0	3.0
15	S1																	
7	S22																	
11	S9																	

Financial Impacts of Alternative Considerations

The fiscal impact of the alternatives presented focused primarily on the cost of field personnel. This approach represents the largest financial liability of any emergency service agency. Considerations for administrative cost are included in specific analyses. The valuation of the deployment model utilizes the total compensation cost of each rank position by the midrange value. This is established using the defined salary rate inclusive of the FWW multiplied by PEF's current burden rate of 27% (Table 33). All other alternatives were based upon an established baseline using these parameters. This approach enables a true apples-to-apples comparison across proposed models. Thus, the relative value created by each alternative can be reliably applied to establish an expectation for the percentage of cost variations from model to model.

Table 33: PEF FY21 Payroll and Burden Rate Costs

Payroll with Burden Rate FY21	
Payroll Costs	\$6,931,936
Pension Cost	\$250,000
Other Pers. Costs	\$767,338
Group Insur.	\$846,055
Total Fringe	\$1,863,393
Burden Rate	27%

The following tables demonstrate the fiscal impact of the proposed models, inclusive of changes to the staffing multipliers, scheduled average workweek, and consolidation of administrative functions. The baseline value is highlighted in blue and represents the current staffing levels provided by the agency, at their current cost, utilizing the mid-range salary value for each position. This is inclusive of all the current practices described above. From this baseline, each subsequent change from the current is displayed as the monetary difference from the baseline.

OBSERVATION: Pender County could assume service provision from Pender EMS and Fire, Inc. for marginal savings under the current configuration or Configuration 1.

OBSERVATION: Pender County could assume service provision from Pender EMS and Fire, Inc. for approximately \$1.3 m savings in the leanest option of Configuration 2 and reduce the required fire service subsidies.

Table 34: Cost of Line Personnel by Plan, Workweek, and Multiplier - w/Current FWW and Burden Rate

Cost of Line Personnel by Plan and Multiplier - w/FWW/Current Burden Rate						
Plan	Current Multiplier		56hr Wk Multiplier		53hr Wk Multiplier	
	Line Costs	Diff. from Baseline	Line Cost	Diff. from Baseline	Line Cost	Diff. from Baseline
Current	\$9,790,447	\$0	\$9,510,420	-\$280,027	\$10,089,990	\$299,543
Configuration 1	\$9,999,277	\$208,829	\$9,713,276	-\$77,171	\$10,305,209	\$514,761
Configuration 2	\$8,757,556	-\$1,032,891	\$8,507,072	-\$1,283,376	\$9,025,497	-\$764,950

Table 35: Cost of Line Personnel by Plan, Workweek, and Multiplier - w/FLSA 7k and Current Burden Rate

Cost of Line Personnel by Plan and Multiplier - w/FLSA 7k/Current Burden Rate						
Plan	Current Multiplier		56hr Wk Multiplier		53hr Wk Multiplier	
	Line Costs	Diff. from Baseline	Line Cost	Diff. from Baseline	Line Cost	Diff. from Baseline
Current	\$10,096,499	\$306,051	\$9,807,718	\$17,270	\$8,920,540	-\$869,907
Configuration 1	\$9,999,277	\$208,829	\$9,713,276	-\$77,171	\$9,110,814	-\$679,633
Configuration 2	\$7,742,538	-\$2,047,910	\$7,521,085	-\$2,269,362	\$7,979,424	-\$1,811,023

Table 36: Cost of Line Personnel by Plan, Workweek, and Multiplier - w/FLSA 7k and Increased Burden Rate for NC Pension

Cost of Line Personnel by Plan and Multiplier - w/FLSA 7k/Increased Burden Rate						
Plan	Current Multiplier		56hr Wk Multiplier		53hr Wk Multiplier	
	Line Costs	Diff. from Baseline	Line Cost	Diff. from Baseline	Line Cost	Diff. from Baseline
Current	\$10,723,028	\$932,581	\$10,416,327	\$625,880	\$9,474,096	-\$316,351
Configuration 1	\$10,619,773	\$829,325	\$10,316,025	\$525,578	\$9,676,178	-\$114,270
Configuration 2	\$8,222,994	-\$1,567,453	\$7,987,799	-\$1,802,648	\$8,474,580	-\$1,315,867

The final table considers the impact of administrative efficiencies should the County assume control of the emergency services delivery. As a private entity, PEF must maintain essential business functions independently. These functions would already exist within the County government and could reasonably assume the work associate with Fire and EMS services. The Emergency Services department

would still need to maintain administrative oversight and command positions. Thus, only the positions that could be absorbed into existing County functions were considered. Table 37 provides a breakdown of the positions proposed for consolidation. It would be beneficial to leverage the savings realized with the 53hr workweek and administrative consolidation to provide a more competitive compensation plan for providers.

Table 37: Proposed Positions for Administration Consolidation into County Departments

PEF Admin Position/Title	Status	Salary/Wage	Total Comp.	FTE Count
Director Human Resources	Full-Time	\$84,000	\$106,580.28	1
Payroll/Acct. Payable Mgr.	Full-Time	\$75,333	\$95,583.99	1
Financial Officer	Full-Time	\$90,000	\$114,193.16	1
Director I.T.	Full-Time	\$75,147	\$95,347.67	1
Purchasing Clerk	Full-Time	\$45,698	\$57,982.21	1
Human Resources/Benefits Assistant	Full-Time	\$44,450	\$56,398.73	1
Purchasing Manager	Full-Time	\$59,700	\$75,748.13	1
I.T. System Administrator	Full-Time	\$46,352	\$58,812.01	2
Total:		\$520,681	\$660,646.17	9

Table 38: Cost of Line Personnel by Plan, Workweek, and Multiplier - w/FLSA 7k, Increased Burden Rate for NC Pension, and Admin Consolidation

Cost of Line Personnel by Plan and Multiplier - w/FLSA 7k/Increased Burden Rate/Admin Consolidation						
Savings from Administrative Consolidation:			\$660,646			
Plan	Current Multiplier		56hr Wk Multiplier		53hr Wk Multiplier	
	Line Costs	Diff. from Baseline	Line Cost	Diff. from Baseline	Line Cost	Diff. from Baseline ²⁹
Current	\$10,723,028	\$271,934	\$10,416,327	-\$34,767	\$9,474,096	-\$976,997
Configuration 1	\$10,619,773	\$168,679	\$10,316,025	-\$135,069	\$9,676,178	-\$774,916
Configuration 2	\$8,222,994	-\$2,228,099	\$7,987,799	-\$2,463,294	\$8,474,580	-\$1,976,514

²⁹ Assumes full value of the of administrative consolidation. It is understood that the county may need some or all of the positions to maintain continuity and manage workload.

OBSERVATION: If Pender County also absorbed the administrative consolidation, additional savings of up to \$660,646 could be realized depending on needs for continuity of operations and current county capacity.

Proposed Annual Budget Development Process

As previously discussed, the County must receive, and review budgets created by Pender EMS & Fire, levy the needed taxes, and account for their receipt and expenditure. As it stands, the County maintains very little control over the budget presented and administered by PEF. Concurrently, Pender EMS & Fire employs their own accounting for receipt and expenditure of funds, handle their own payroll, purchases their own commodities, etc. Given the nature of the current system where public dollars are levied and provided to a private contractor, it would be advisable for the County to assume greater control over the budget process to ensure the efficacy and validity of public fund expenditures. Further, this annual process should be rooted in a performance-based contract that provides for annual cost escalation caps. This would ensure the County is able to maintain long range financial planning related to its contractor costs.

The annual budget development process should be based upon several tenets. First, the County should establish an approved number of units by type and locale needed to deliver its adopted performance standard. These units should then have an associated approved staffing level as the minimum baseline required to meet the County's adopted deployment plan. Next, the process should require a cost detail for each employee approved in the overall head count. This would enable the County to monitor FTE counts, potential GWI considerations, and any potential impacts resulting from grant funding such as the SAFER. Finally, the County should establish an approved list of cost exceptions that can be provided for in the budget. These would typically represent standard overhead and support services. This approach ensures that public funds are being used solely for the public benefit. An Annual Budget Development tool is provided in Appendix A as an example of how this process could be structured and what information would be gathered.

APPENDIX A

Figure 12: Example - Summary Page of Annual Budget Request Form

[illegible]

Figure 13: Example - Units and Position Details of Annual Budget Request Form

Emergency Services Provider Program					
FORM 1 - UNITS AND RELIEF STAFFING MULTIPLIER FY20-21					
ENTER AGENCY NAME HERE					
AUTHORITY FUNDED UNITS	FY19-20 Unit Id	FY19-20 Positions	FY20-21 Unit Id	FY20-21 Positions	Increase (Decrease)
Enter "2 or 3" for 24/7 Engine/Truck/Heavy		0		0	0
Enter "2" for 24/7 Ambulance Unit		0		0	0
Enter "1" for 12/7 Peak Ambulance Unit		0		0	0
		0		0	0
		0		0	0
		0		0	0
		0		0	0
Add Additional Lines as needed		0		0	0
TOTAL POSITIONS FUNDED		0		0	0
TOTAL REGULAR FTEs FOR FORM 2A		0		0	0
CONTRACTOR FUNDED UNITS					
Enter "2 or 3" for 24/7 Engine/Truck/Heavy		0		0	0
Enter "2" for 24/7 Ambulance Unit		0		0	0
Enter "1" for 12/7 Peak Ambulance Unit		0		0	0
		0		0	0
Add Additional Lines as needed		0		0	0
TOTAL POSITIONS FUNDED		0		0	0
Note:					
Enter Units Once - Not For Each Shift - The Staffing Multiplier accounts for the Three Shifts					
RELIEF STAFFING MULTIPLIER					
TOTAL HOURS PER FTE BASED UPON A/B/C SHIFT	2,920				
ANNUAL PAID TIME OFF (average)					
Vacation					
Sick					
Kelly Day					
Holiday					
TOTAL HOURS	0				
Total Coverage	8,760				
Hours Worked per FTE	2,920				
RELIEF STAFFING MULTIPLIER	0.00				
Authority Funded Positions	0.00				
Average Firefighter/Paramedic Salary	#DIV/0!				
Average Firefighter/Paramedic Benefits	#DIV/0!				
Calculated Benefit Percentage	#DIV/0!				
RELIEF STAFFING	#DIV/0!				

Figure 14: Example - Account Summary Personnel Services/Operating/Capital of Annual Budget Request Form

Emergency Services Provider Program				
FORM 2 - PERSONAL SERVICES/OPERATING/CAPITAL SUMMARY FY20-21				
ENTER AGENCY NAME HERE				
ACCOUNT NAME AND NUMBER	FY 19-20 Contract Funding	FY 20-21 Contract Funding	Increase (Decrease)	% Increase (Decrease)
5110100 Executive Salaries		\$0	\$0	#DIV/0!
5120100 Regular Salaries & Wages		\$0	\$0	#DIV/0!
5120200 Relief Staffing		#DIV/0!	#DIV/0!	#DIV/0!
5150000 Special Pay		\$0	\$0	#DIV/0!
5210100 FICA		\$0	\$0	#DIV/0!
5220100 Retirement Contributions		\$0	\$0	#DIV/0!
5230100 Group Life Insurance		\$0	\$0	#DIV/0!
5231000 Group Health Insurance		\$0	\$0	#DIV/0!
5233000 Weekly Income Benefits		\$0	\$0	#DIV/0!
5240100 Workers' Compensation Insurance		\$0	\$0	#DIV/0!
5250100 Unemployment Comp Fund		\$0	\$0	#DIV/0!
TOTAL PERSONAL SERVICES	\$0	#DIV/0!	#DIV/0!	#DIV/0!
ACCOUNT NAME AND NUMBER				
5310000 Medical Services (Physicals)			\$0	#DIV/0!
5321000 Accounting & Auditing			\$0	#DIV/0!
5451000 Insurance - Vehicles			\$0	#DIV/0!
5452000 Insurance - Professional Liability			\$0	#DIV/0!
5464100 EMS & Support Vehicle - Repair & Maintenance			\$0	#DIV/0!
5464300 Fire & Support Vehicle - Repair & Maintenance			\$0	#DIV/0!
5464200 Fuel			\$0	#DIV/0!
5525000 Uniforms and Protective Equipment			\$0	#DIV/0!
5527000 State EMS License and Vehicle Permits			\$0	#DIV/0!
5528000 Personnel - State, ACLS, ITLS Certification			\$0	#DIV/0!
5600100 Capital - Response Vehicle Acquisition			\$0	#DIV/0!
5601000 Capital - Supervisor or Support Vehicle Acquisition			\$0	#DIV/0!
6000000 Allowable Cost Exceptions (See itemized list)	\$0	\$0	\$0	#DIV/0!
TOTAL OPERATING AND CAPITAL	\$0	\$0	\$0	#DIV/0!

Figure 15: Example – Line-Item Cost Exceptions of Annual Budget Request Form

Emergency Services Provider Program					
COST EXCEPTIONS SUMMARY FY20-21					
Pender EMS and Fire, Inc.					
ACCOUNT NAME AND NUMBER					
		FY 19-20 Budget Request	FY 20-21 Budget Request	Increase (Decrease)	% Increase (Decrease)
5310110	Consulting	-	-	-	#DIV/0!
5310120	Engineering	-	-	-	#DIV/0!
5320110	Advertising	-	-	-	#DIV/0!
5320210	Janitorial	-	-	-	#DIV/0!
5320410	Laundry and Dry Cleaning	-	-	-	#DIV/0!
5320510	Other Services	-	-	-	#DIV/0!
5320610	Pest	-	-	-	#DIV/0!
5320910	Security Services	-	-	-	#DIV/0!
5330110	Mileage Reimbursement	-	-	-	#DIV/0!
5330120	Tuition Reimbursement	-	-	-	#DIV/0!
5330310	Travel - County Business	-	-	-	#DIV/0!
5330310	Training and Conference - Travel	-	-	-	#DIV/0!
5330320	Training Fees	-	-	-	#DIV/0!
5340110	Internet Services	-	-	-	#DIV/0!
5340210	Telephone	-	-	-	#DIV/0!
5340311	Data Processing	-	-	-	#DIV/0!
5340321	Technology Replacement	-	-	-	#DIV/0!
5340710	Postage	-	-	-	#DIV/0!
5350110	Electric	-	-	-	#DIV/0!
5350120	Water	-	-	-	#DIV/0!
5350130	Sewer	-	-	-	#DIV/0!
5350140	Refuse	-	-	-	#DIV/0!
5350150	Gas	-	-	-	#DIV/0!
5350160	Stormwater	-	-	-	#DIV/0!
5350170	Reclaimed Water	-	-	-	#DIV/0!
5360310	Rent - Other Equipment	-	-	-	#DIV/0!
5380110	RM Facility Repairs	-	-	-	#DIV/0!
5380210	Groundskeeping	-	-	-	#DIV/0!
5380410	RM Materials Equipment - External	-	-	-	#DIV/0!
5380420	RM Equipment Maintenance	-	-	-	#DIV/0!
5380510	RM Radios	-	-	-	#DIV/0!
5390110	Copy Machine	-	-	-	#DIV/0!
5390120	Office Supplies	-	-	-	#DIV/0!
5390210	Small Equipment	-	-	-	#DIV/0!
5400210	EMS Commodities	-	-	-	#DIV/0!
5400410	Food and Ice	-	-	-	#DIV/0!
5400610	Janitorial Supplies	-	-	-	#DIV/0!
5400630	Medical Supplies	-	-	-	#DIV/0!
5400640	Operating Supplies	-	-	-	#DIV/0!
5400660	Fitness Equipment	-	-	-	#DIV/0!
5400710	Small Tools	-	-	-	#DIV/0!
5400810	Clothing Allowance	-	-	-	#DIV/0!
5400820	Personal Protective Equipment	-	-	-	#DIV/0!
5410110	Road Materials and Supplies	-	-	-	#DIV/0!
5420110	Memberships	-	-	-	#DIV/0!
5420120	Reference Materials	-	-	-	#DIV/0!
5650110	Equipment	-	-	-	#DIV/0!
Total Cost Exceptions:		\$0.00	\$0.00	\$0.00	#DIV/0!

Figure 16: Example - Personnel Services Detail of Annual Budget Approval Form

Emergency Services Provider Program FORM 2A - PERSONAL SERVICES DETAIL FY20-21												
ENTER AGENCY NAME HERE												
JOB TITLE (Administrative)	COUNT	Employee ID		EXECUTIVE SALARIES	REGULAR SALARIES	FICA	RETIREMENT CONTRIBUTIONS	GROUP LIFE INSURANCE	GROUP HEALTH INSURANCE	WEEKLY INCOME BENEFITS	WORKERS COMP INSUR	UNEMP
Fire Chief	1			\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0
add lines as needed	2			\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL				\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0
JOB TITLE (Line Personnel)	COUNT	Employee ID	UNIT/SHIFT	EXECUTIVE SALARIES	REGULAR SALARIES	FICA	RETIREMENT CONTRIBUTIONS	GROUP LIFE INSURANCE	GROUP HEALTH INSURANCE	WEEKLY INCOME BENEFITS	WORKERS COMP INSUR	UNEMP
LIEUTENANT	1				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BATTALION CHIEF	2				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIREFIGHTER	3				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIREFIGHTER	4				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIREFIGHTER/PARAMEDIC	5				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PARAMEDIC	6				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PARAMEDIC	7				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PARAMEDIC	8				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PARAMEDIC	9				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
add lines as needed					\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL					\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Line Personnel Benefits					\$0							
Total Line Personnel Salary					\$0							
Calculated Benefit Percentage					#DIV/0!							

SECTION 2 – PRESENTATION BODY

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SECTION 3 – QUANTITATIVE DATA REPORT

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SECTION 4 – GEOSPATIAL ANALYSES REPORT

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Board of Commissioners

*George R. Brown, Jr., Chairman
Archibald "Fred" McCoy, Vice Chairman
Jaqueline A. (Jackie) Newton
David A. Piepmeyer
J. David Williams, Jr.*



County Manager

Chad McEwen

County Attorney

Carl W. "Trey" Thurman, III

Clerk to The Board

Tera Cline

RESOLUTION RECOGNIZING WARM – Celebrating 25 Years

WHEREAS, be it resolved that in 2021 WARM (the Wilmington Area Rebuilding Ministry) is celebrating 25 years of service to lower-income families in Southeastern North Carolina.

WHEREAS, WARM grew out of the United Methodist Church's response to Hurricane Fran in 1996. Twenty-five years later, WARM volunteers, founders and staff members are still making critical repairs and accessibility upgrades that help families and individuals remain in their own homes and communities.

WHEREAS, WARM has been essential to the citizens in Pender County in the aftermath of numerous storms and continues to help Pender County citizens rebuild and restore their homes.

WHEREAS, in 25 years WARM has rebuilt over 1600 homes in seven NC counties, addressing threats to health and safety as well as helping to preserve our state's affordable housing stock.

WHEREAS, the average monthly income of a WARM family in 2021 is only \$1,542. Fifty-eight percent of WARM homeowners are over 60 years old and 66% have no mortgage.

WHEREAS, the WARM model uses volunteer labor with knowledgeable supervisors, and funding from government, corporations, and individuals to make necessary home repairs, allowing many of these people to live out their golden years in a safe and stable home environment.

NOW, THEREFORE BE IT RESOLVED, that the Pender County Board of Commissioners would like to publicly thank and congratulate WARM on celebrating 25 years of rebuilding homes and lives. Thank you and job well done.

Adopted this the 18th day of October 2021.

George R. Brown, Chairman
Pender County Board of Commissioners

ATTEST:

Tera Cline
Clerk to the Board



Opening Statement

Mr. Chairman and members of the board

Before I get started I will be using my hearing amplifier tonight because when I was here on September 1, 2021 I was not able to hear clearly what some of the Planning Board members were saying at the distance that you are sitting, for 23 years I worked on the Aircraft flight line and in the sheet metal shop and have some hearing loss when listening at a distance.

My Name is Elloyd E. McIntire, I am the owner of the Grand Oaks Development Company, LLC. and the Developer of the Pine Village and the Grand Oaks Communities, on NC Hwy 210 in Rocky Point, NC 28457.

I started developing property in Pender County in 1966 with the approval of a permit from this body For a Mobile Home Park when, Mr. Mc jet was the Planning Director. At the time Carver Boat Company was moving into the area. The only available housing in the area was the Hitching Post Mobile Home Park. near Paul's Place on NC Hwy 133. The permit was approved by the Board of Commissioners and the development of Pine Village Mobile Home Park begin. The Mobile Home Park was completed and opened in 1988

In 1996 I applied for a permit to start development of the Grand Oaks Community property. This area consisting of 83 acres to be developed in Three (3) phases. The approval of a permit was approved by the Planning Committee and this body when, Mrs. Angela Faison was the Planning Director, I have a copy of that approval here with me tonight The first phase of the development which is the Oak Ridge Sub-Division I started clearing the land during the time that I was working at cherry Point, I drove back and forth getting the land ready until I was ready to retire, I Built my home in 1998 in the newly cleared section I then secured a permit to develop the Oak ridge sub-Division from Pender County on the rest of the cleared property the Oak Ridge sub-Division is built on. The Sub-Division was completed and opened in June 2000.

In 2007 I applied for a permit to start development of phase Two (2) of the Grand Oaks Community, which was the Oak Ridge II Sub-Division, which was completed and opened for sales in 2008. At that time I had also submitted a set of plans and they were approved for the Grand Oaks Office Complex to be located on lots 1 & 2 on NC Hwy 210 at the entrance to Pine village Drive. The Building Inspections would not give me a copy of the approved plans unless I brought the Building Contractor along with me to provide the cost of building the Office Complex, and that I had to pay for

the permit before they would provide me with a signed Copy. I tried for five (5) years to get a copy but never could, that was during the economic down-turn and not a good time to build, finally I was told that the plans were thrown away. I was only able to sell one (1) house and two (2) lots during that period of 5 years until 2013

The remaining lots in Oak Ridge II Sub-Division was sold to Tioga LLC Construction Inc. in two parts one in 2020 and the balance of the lots this year 2021 with, the exception of lot # 19. A part of the sales agreement was for Tioga LLC Construction to Install the water system that my Engineer Design and put in the turning Lane which my Engineer Designed when the State required it, the cost was deducted from the total sale price. So in the past two (2) years. I have invested about! One-half million dollars that is going to benefit the Grand Oaks community and Pender County for the future.

I am here tonight requesting a zone change of the balance of the original plat of 69.67 acres, from RA to RP that will make all the lots throughout the Grand Oaks Community equal in size. if approved, will allow me to begin phase three (3) the last and final phase of Grand Oaks. \

There are a few Homeowners that will appear before the board hear tonight expressing their opposition and concerns to the rezoning of my remaining property they have a right to express their opinion but what they do not have is the right to infringe on my rights as the Developer to complete a Project that was approved by the Pender County Board of Commissioners of 83 Acres for a three (3) Phase Development including a Golf Course.in 1996 .I had planned to ask Mrs. Faison to be here tonight but because of Death in her Family so I did not ask her to be here. It is my belief that the homeowners speaking here tonight is trying to use this Board and Pender County to get around the Governing Documents of the Grand Oaks Homeowners Association, and the other three Sub-Divisions In order to discredit me and my family and to undermine my project. My family have lived within ¼ mile of the entrance to Pine Village for more than 250 years and I was born here nearly 85 years ago. I am not going to let anyone move into my community and disrupt it if I can prevent it. If the sign in sheet were collected for each time that I appeared before this Board I believe that you would find the same names mostly of the same concern homeowners, with some sort of complaint about Grand Oaks.

Those Governing Documents clearly states the rights of the developer, which reads as follows.

ARTICLE V
RIGHTS OF DEVELOPER

The Declarant Shall have, and there is hereby reserved to the Declarant, the special Declarant rights as herein defined and the following rights, powers and privileges which shall be in addition to the special Declarant rights an any other rights, powers and privileges reserved to the declarant herein.

SECTION 1. The Architectural Control Committee. All duties and responsibilities conferred upon the Architectural Control Committee By this Declaration or Bylaws of the Association shall be exercised and performed by the declarant or its designee, so long as Declarant shall own any lot within the property or any Additional property.

SECTION 2 Plan of Planned Community. The right to change ,Alter or designate the allocated planned, Plotted, or recorded use or designation of any of the lands constituting the planned Community including, but not limited to, the right to change ,alter or redesignate roads ,utility and drainage facilities and easements and to change, alter or redesignate such present and proposed amenities or facilities as may in the sole judgment and discretion of Declarant be necessary or desirable The declarant hereby expressly reserves unto its self ,its successors and assigns the right to re-plat any one (1) or more lots shown on the plat of any Sub-Division of the property or Additional property in order to create 1 or more modified lots to create a larger tract, to eliminate from this declaration lots that are not buildable.

SECTION 3. Amendment of Declaration by the Declarant. This Declaration may be amended Without the approval of lot owners by the Declarant, or the Board of the Association, as the case may be, as follows; and it go on to list the conditions.

ARTICLE VI

USE RESTRICTIONS, ARCHITECTURAL CONTROL COMMITTEE AND
MAINTENANCE

SECTION I APPROVAL OF PLANS FOR BUILDING AND THE SITE IMPROVEMENTS

This information is gleaned from the Oak Ridge HOA Declaration or Bylaws, the Planning Board have copies of the documents.

I Thank you in advance.

Sincerely yours
Elloyd E. McIntire Sr.
Developer Grand Oaks Community

- According to the Pender 2.0 Comprehensive Land Use Plan, currently there are nearly 7,000 acres of suitable land zoned Residential Performance that would allow for the construction of approximately 15,000 housing units.
- RP zoning would permit high density housing, mobile homes, townhomes, apartments, etc. There is already ample land available zoned RP without having to do so inside an existing development where all other properties are zoned RA.
- Mr. Greg Feldman stated in an email that no development plan is associated with the application submitted by Mr. McIntire, but I would argue that by requesting rezoning from RA to RP he is, by default, intent on significantly increasing development in our community from its current status.
- The additional traffic that will come from rezoning from RA to RP will have a severe and significant impact on our current road. Pine Village Drive sustained substantial damage due to logging operations Mr. McIntire undertook a few years back, which caused a drain pipe to collapse. This collapse required a total replacement of the drain pipe. The replacement work was not done properly, and has resulted in the repaired drain to begin to fail. Increased construction traffic resulting from rezoning would not only exacerbate the problem and result in another complete failure of the the drain pipe, but it would also impose another costly repair on the current HOA homeowners.
- We are a small, quiet community, and we would like to keep it that way. We all chose to build far away from town, and the hustle and bustle of in order to raise our families and live in a quiet, peaceful community.
- Before we purchased our property I asked Mr. McIntire on four separate occasions about control of Oak Ridge, and each time he stated that once 70% of the lots were sold Oak Ridge HOA would have total control. Not until the first Oak Ridge/Pine Village HOA meeting were we told about the Grand Oaks HOA, an overarching HOA controlled solely by Mr. McIntire and his family.

- From Day One, Mr. McIntire has lied and mislead my family as well as our entire community. He sold this development as a gated, fenced, single-family community with a golf course proposed at a later date. However, the gate has never been operational, the golf course was never built, the roads were never brought to NC DOT standards, and the dilapidated mobile home (with squatters that have had to be removed repeatedly) that he going to have removed before we "broke ground" is still there. To say we were lied to and misled is a complete understatement. Mr. McIntire has demonstrated over the years that he is completely self-serving, and the man has no integrity whatsoever.

- Through the years Mr. McIntire has preached to the Pender County Commissioners, the Planning board, and anyone else that might listen about how much of a community man he is, and what all he has done for our development. If that was truly the case then the question begs to be asked...why then did he specifically exclude his own property from Grand Oaks and Oak Ridge HOA's? These are not the actions of a community-minded individual. These are the motivations of controlling and dictatorial-minded individual/family. By taking these premeditated steps Mr. McIntire is not governed by the Bylaws and CCR's of Oak Ridge HOA, and over the years he has stored an assortment of broken down useless vehicles, heavy equipment, trailers, etc.

- In conclusion, I would like to state that our community strongly opposes this rezoning request, and would like to see land that is already zoned Rural Performance be utilized before you start destroying existing single-family communities like ours.

- submitted by Todd Bryant via email

- TH

In 2007 my husband retired and I semi-retired found a home in Grand Oaks development which was advertised as a golf course/gated community. Gate has never worked which will be lot owner's responsibility and the fence was paid (\$8,000.00) by lot owners due to Elloyd McIntire over charging us for yearly dues and then used the money to purchase the materials. He and his two children were on the Grand Oaks Board for years which was over Pine Village, Oak Ridge and Oak Ridge II HOA. About 2 years ago they finally stepped down, so we now have lot owners as board members of Grand Oaks. As far as the golf course that never happened and from what I read in Elloyd's statements that was never the intent to build. So, I guess you could say he falsely advertising.

When I was an Oak Ridge Officer in 2007, we found out through searching the county records that the roads had been turned over to the HOA which were in poor condition and not up to DOT standards. Other areas were turned over without letting us know or turning over the documents. I had called DOT and they stated that development roads are not usually turned over to the HOA until all constructions is completed. We currently have 25 homes built and 29 that have not been built yet. Some current construction has done some major damage to our roads. I am currently the treasurer of the Grand Oaks board and the balance of our Capital account is \$11,724.74 which will not put a dent in the cost to repair/upgrade our main road Pine Village Dr.

Recently we had to have 3 speed humps installed due to speeding. Most of the people speeding were customers of Elloyd's driving range. That cost us \$3,320.00. The driving range has never made donations or contributed to the Grand Oaks. We are currently spending lots of our HOA funds on drainage which some should have been done by Elloyd due to initial installation and he owns big equipment to do the job. Adding 69 acres would create more stress and cost on our current weak drainage system.

I am extremely against rezoning of the land located next to our area and my home. This will cause more damage to our one main road Pine Village Dr. We do not have sidewalks so people walking, kids riding their bikes walking their dogs etc would make it extremely unsafe. It's already getting busy with traffic and we still have 29 more lots to build homes! If the 69 acres is approved, you are talking at least 2 vehicles per lot owner! Elloyd is not taking our safety and all the expenses we have paid and to be paid into consideration, so I hope the County Commissioners do care. I have attached two letters that we received from Elloyd which I basically feel he was threatening us about the rezoning. See highlighted areas.

Thank you so much for your time!
Janet and Michael Badger
366 Pine Village Dr.
Rocky Point, NC 28457
910-471-8550

From: Elloyd E. McIntire Sr. <emcintyre2@ec.rr.com>
ARC, Member/ Developer
309 Pine Village Drive
Rocky Point, NC 28457
Sent: Friday, September 10, 2021 at 1:30 am
To: Billie Jo & Benjamin Harrison billiemeseler@yahoo.com; <
benjaminaharrison@yahoo.com>; Mark Donaldson mdrealtyinc@gmail.com;
[Nancy Kurul, <nancy@nkurul.com>](mailto:NancyKurul@nancy@nkurul.com), Pine Village Residents
<pinevillageresidents@gmail.com>, Janet Badger mijab12@gmail.com;
Subject: Re: Swimming Pool, Trailers & Boats

On may 28, 2021 I responded to the Grand Oaks Homeowners Association Request for action request, sent via email to Billie Jo. And Benjamin Harrison and it read as in the quotations below.

((Dear Ben and Billie

When the original review on the pool was done, it did not include review for a section of decking/beams higher than the fence level. If it had been included, they would not have been approved. There also appear to be recent additions to the structure that were not part of the original submitted.

Please remove all the beams \above the fence Prior to July 1.2021.

Sincerely,

GOHOA Architectural Review Committee.
Elloyd E. McIntire Sr.

3. on 9-19-2013, I designed a storage facility and tennis court to serve the Grand Oaks community that could build on one section of the Open space located in the Oak Ridge section that would resolve a problem that we had with Boats & Trailers. The homeowners did not want to pay for the facility, so I had my surveyor layout the plan own my property down at the Driving Range and was going to pay for it. I applied for a special use permit with-Pender County, and the present Grand Oaks Board of Directors along with Homeowners from both Pine Village and Oak Ridge HOA'S appeared at the Pender County Board of Directors meeting that December complaining and it was Denied, so here we go again with the same Homeowners.

4. I had a meeting with Mark Donaldson on August 20 2021 in which I thought that I made it clear that I was not going to put up going forward with things that I put up in the pass. Evidently it did not register so I am stating it again in this e-mail, I am not going to put up going forward with things that I put up in the pass. There is evidence that there are those in the Grand Oaks community that have been trying to pick a fight with me the Development and the McIntyre Family for a long time, well I say bring it on, I am ready for that fight. I will not let no one interfere with my rights which is Clear in (Article VI - Section 1), RIGHTS AND DUTIES OF DEVELOPER, and be sure that I will do whatever it takes to complete phase three (3) of the Grand Oak community as I originally planned. There seem to be a pattern of some homeowners in the Grand Oak community that try to use the Pender County Government to get around the Grand Oak HOA Governing Documents, well I am not going to let that happen anymore so expect a legal-Challenge

If that is tried.

Now back to the Harrison's pool and Boat I asked Mark to setup a meeting between him, Nancy, and myself to resolve that problem well he never did so I am telling you Billie Jo. & Benjamin Harrison to remove everything from the pool that was not approved by the Grand Oaks HOA Architectural Review Committee also the Boat. Now to Mark & Nancy, when I was Chair of the Architectural Review Committee I made the hard decisions when needed, so as members of the Committee you need to do the job that you were elected for and join me in resolving this problem.

I am requesting that Grand Oak HOA Board send you a letter outlining the penalties for violations of the Grand Oaks HOA Covenants, Rules & Regulations

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Sincerely

Elloyd E. McIntire Sr.

the Architectural Review Committee/member/ Developer

**Board of Directors/Architectural Committee
Grand Oaks Homeowners' Association
Mark Donaldson / President:
428 Pine Village Drive
Rocky Point, NC 28457**

HAND CARRIED TO NANCY

Subject: Upcoming Meeting and Present GOHOA Board and Architectural Committee Performance

Date: September 25, 2021.

**From: Elloyd E. McIntire Sr.
Member/ GOHOA Board and Architectural Committee.
309 Pine Village Drive
Rocky Point NC 28457**

It is with deep regret that I have got to write this email, but I feel compelled to do so, because of the present Atmos fear here in the Grand Oaks Community.

The recent emails and minutes sent out by the GOHOA Board secretary contains, some misinformation as to what I have said or have done or have not done. I believe that was no accident but an attempt to portray me in an unfavorable light. or to discredit me.

I know that many of you don't really know me because we have not engaged much in conversations sense you have been a member of the Grand Oaks Community, so let me give you a brief history of myself.

I was born. with-in one quarter (1/4) mile and grew-up about three (3) thousand Yards from the entrance of Pine Village Drive. I attended School in Rocky Point, on NC Hwy 117. As a youth and a young adult, I gathered firewood all over the property which is now the Grand Oaks Community. Note I did not come here from out of county or out of State I was born here, so Grand Oaks is an intricate part of who I am.

A few days after graduating from High School in May 1955 I entered the US Air Force, to make a long story short I will only account for the last six and a half (6 ½) years of my 22 years of Air Force service. In the latter part of 1971 I was assigned to Instructor duty at Chanute Air Force Base in Illinois, School of Aero Space Applied sciences, as an instructor in the Advance Courses of Aircraft Structural Repairs. I server as an Instructor there for there (3) years, and then was transferred to McGuire AFB 436 Air Lift Wing as the Assistant Shop Supervisor in the base Shops, I was Responsible for all Structural repairs on all assigned Aircraft and transit Aircraft assigned to McGuire Air Force Base for a period of eighteen months. After the eighteen-month tour of duty was complete, and my 20 years of service was complete, an attempt to get me to reenlist there at McGuire AFB by Base Personnel, I agreed to reenlist if and only if they would get me resigned back to Chanute Air Force Base in Illinois where I had left my wife and children, both my children were still in High School.

At that time. I did reenlist and was reassigned back to Chanute Air Force Base in Illinois as Instructor Supervisor in the Advance Aircraft Structural Courses for two (2) additional years before I retired. In those last two (2) years of service I in rolled in the Building Construction Technology Program at Parkland Junior College in Champaign Illinois. I completed the program in May of 1978 with an associate Degree in construction. I then applied for acceptance to the Engineering program at both Bradley University in Illinois and Purdue University in Indianan and was accepted by both. I chose Purdue in Indiana. I attended Purdue for one and half years and withdrew from the program. My reason for doing so was because my son Elloyd Jr. graduated from High School that year and entered College, my daughter Yvonne was already in college and my wife Edna started Nursing School. Someone had to work so that had to be me. I applied for a civil service job here in North Carolina and receive an offer right away from the Naval Aviation Depot at Cherry Point NC.

I started work at the Naval Aviation Depot at Cherry Point NC. In October 1980 as a worker on the CH46 helicopter Modification assembly line and worked in that position for about eighteen months. I was promoted to Apprentice Instructor for Aircraft repairs for the Maintenance Department and assigned to the Training Branch in February of 1983 I took the Swine flu shot and got a negative reaction from it and was left Paralyzed from the waist up for about ten (10) months. It took me about six (6) more months of rehab before I was able to return to Cherry Point. God truly blessed me because my Wife Edna had completed Nursing School and had moved here in a Mobile home that I had purchased and placed on lot #1 in what is now Pine Village. The blessings came from the fact that Edna was a great nurse she would not let the Doctors send me to a Rehab Center or nursing home but brought me home here and took super great care of me for all that time. God blessed me further because a position was left open for eighteen months until I came back for duty.

When I returned to Cherry Point, I had to go through the North Carolina Rehab placement center for replacement testing and reevaluation for my new assignment. The results from my testing Qualified me for a supervisory position, that recommendation was sent to the Naval Aviation Depot at Cherry Point NC. for my reassignment. I was assigned to the Naval Aviation Depots Training Division which consisted of two Branches, the inhouse Training Branch and the Fleet training Branch. I was assigned the position of Branch Head for the. the inhouse Training Branch which was comprised of Three Thousand (3000) civilians' and one (1000) Thousand Military personnel. My responsibility was to develop and maintain the training records for all inhouse personnel even the Depot Commander. I performed the duties of Branch Head in training for five (5) years. After five years in training I wanted to get into the field that I had gone to college for, so I lateralled into the engineering Department. My first assignment in Engineering at was assignment as supervisor of the Facilities Equipment Inventory for the new Incoming Commander, which was a requirement at change of Command. I completed Inventory in about seven months and had it signed by the New Commander. I was then reassigned as a procurement Tech. for three Departments of the Naval

Aviation Depot. (1) the Production Department, (2) Administration Department and, (3) The Security Department. I served in that position until I retired in June of 1998.

I started developing property in Pender County in 1966 with the approval of a permit from the County for a Mobile Home Park when, Mr. Mc Jet was the Planning Director. At the time Carver Boat Company was moving into the area. The only available housing in the area was the Hitching Post Mobile Home Park, near Paul's Place on NC HWY 117. The permit was approved by the Board of Commissioners and the development of Pine Village Mobile Home Park began. The Mobile Home Park was completed and opened in 1988.

In 1996 I applied for a permit to start development of the Grand Oaks Community property. This area consisting of 63 acres to be developed in Three (3) phases. The approval of a permit was approved by the body when, Mrs. Angela Faison was the Planning Director and approved by the Board of Commissioners. The first phase of the development which was the Oak Ridge Sub-Division was started, was completed and opened in 2000.

In 2007 I applied for a permit to start development of phase Two (2) of the Grand Oaks Community which was which was the Oak Ridge II Sub-Division, completed and opened for sales in 2008. The remaining lots in Oak Ridge II Sub-Division was sold to Tioga LLC Construction Inc. in part in 2020 and the balance of the lots this year 2021 with, the exception of lot # 19.

This brings us up to the upcoming rezoning hearing by the Pender County Board of Commissioners. If for reason the zoning is not changed by the Board of Commissioners the Case will be appealed to Raleigh and to the courts.

Now let me take time to introduce you to my Wife Edna. Edna was also born here in Pender County; she was not born here in Rocky Point but in Watha NC. We did not go to the same School, but fate brought us together, and she became my High School Sweetheart. We married in February of 1967 and purchased this property which is now the Grand Oaks community. Edna was the love of my life and played a significant roll in who I am today. As I mentioned earlier she was a great person, she cared about everybody, in addition of caring for me during my illness she was a nurse at Pender Memorial Hospital in Burgaw for 26 years, caring for whoever came, and she loved her job. But the most amazing thing about her was that she would work an 8-hour shift at the hospital, and come home, change clothes and work in the development until dark nearly

(e) Janet is part of the reason that we have the problem on lot #7 in Pine Village with the Boat, and Pool. In December of 2013 I applied for a permit to build a storage area for boats and trailers on my property down at the Driving range, she along with others went to that Pender County Board of Commissioner's and spoke against that request and it was denied. That to was also an infringement on my rights as the Developer. I could go on and on, but I will stop here for now.

Now I want to talk a little bit about Nancy Kurul, Nancy was also a party to the December 2013 Pender County Board of Commissioner's hearing, she stated that the storage facility would be in full view from her home and would be a eyesore for her. She never mentioned that a home built on lot #29 would block any view of the facility from her home She also told the Commissioner's that I pulled my home out of the HOA. that was not true it never was part of the HOA. My home was built in 1998 long before there was an HOA.

- (a) I sent an email to Nancy and Mark to setup a meeting to resolve the problem of the pool and boat on lot #7, No response
- (b) Nancy has written in some of he emails and minutes things that are not true, I will address those things in a follow up email to her for corrections to the minutes.

Now let's get Mark Donaldson into the picture. I have had numerous meetings with mark in order to keep him updated on what was going on in grand Oaks I tried not to keep him in the dark things were not going right and my feelings about them, I really thought mark would take charge of the board of Directors and the Architectural Review Committee but I was wrong, my observation of how things are going throughout the community is that Mark is allowing others on the board and committee to run the show, In my opinion I don't think he is taking his job as president seriously and I will not support him for reelection as president.

- (a) On at least on two (2) occasions I requested that the board call an in person meeting with all the members of the Grand Oaks HOA Community to address the many concerns that homeowners had and wanted to express, but he never scheduled any of the meetings that I requested.

(b) Mark was also a part of the delegation of homeowners that appeared before the Pender County Board of Commissioner's for the denial of the storage facility. Permit.

- (b) Mark was part of the Oak Ridge HOA Board when they spent as I understand it, \$5000.00 for a lawyer to send me a letter requesting that I open my business Books to them.

© Mark have been President for the past year, and have not had one face to face meeting with members of the Grand Oaks HOA community I know that Covet-9 is being used for the reason .but the mast wearing and social distancing is permitted indoors and members of the Board of Directors

attended the Pender County Planning Board Zoning hearing on September 1, 2021 so if it was safe for them there with people from all over Pender county, then they can have a face to face with the Home owners that they represent.

There is additional information I could add to this story, but I must get this information to Nancy so that she can read it into her minutes tonight. I know for a fact that there are some in the Community that want to do financial damage to me and my family, well you cannot anymore , because I have sold all of mine and my family's lots with the exception of one Lot #19 in Oak Ridge II-The only Person you can really hurt now is Scott of Tioga LLC, he now have all the lots to build and sell as well as putting in the turning Lane and water so all of the pressure is off me now. I will do all that I can to help Scott to be successful because his success is my success.

I know there are questions as to why I did not take Action before now, Well there are three main Reason,

1. I had a sick wife to provide care for.
 2. I had 32 lots that I needed to sell and
 3. A turning lane and to be installed
- Well I don't have any of this to worry about any more

Nancy please read this correspondence into the records as part of the Grand Oaks Homeowners Associations History.

Humbly Submitted.

Elloyd E. McIntire Sr./Board Member/Developer

