# Harris EMS and Jackson County Quarterly Meeting March 14, 2017

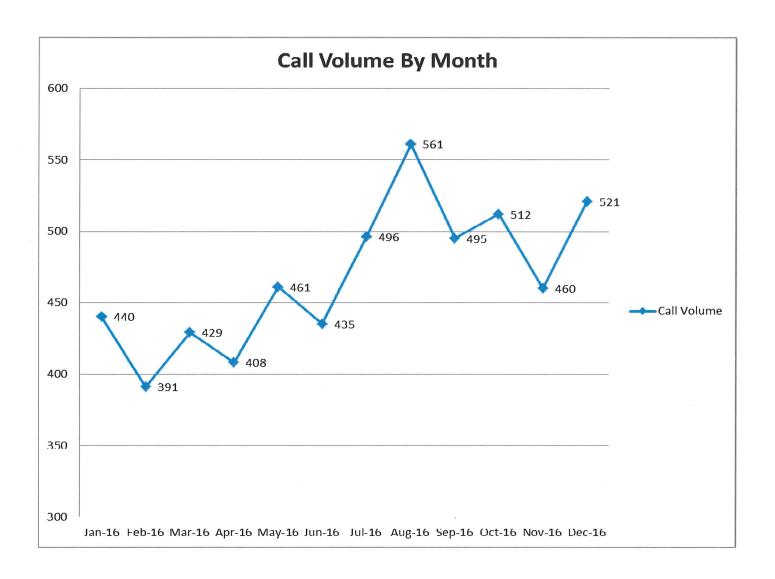








### Call Volume 01/01/2016-12/31/2016







## Calls By Unit Number

Unit	Count
MED1	130
MED12	96
MED13	28
MED3	2066
MED4	1872
MED5	1245
MED6	173
Total:	5610

MED1 = Supervisor QRV Staffed 0700-1900

MED3 = 24 Hour Truck in Sylva

MED4= 24 Hour Truck in Cullowhee

MED5= Prime Time Unit 0900-2100

MED6= Prime Time Unit 1000-2200

MED12= Back Up Crew or Extra Crew

MED13= Extra Crew for OOT Transports





## Dispatch by Medical Category (EMD Code)

Group	Count	Pct	
Abdominal Pain/Problems		110	2
Allergies/Hives		31	0.6
Animal Bites/Stings		6	0.1
Assult/Rape		45	0.8
Back Pain (Non-Traumatic)		61	1.1
Breathing Problems		256	4.6
Burns/Explosions		4	0.1
Carbon Monoxide/Inhalation/Hazmat		2	0
Cardiac/Respiratory Arrest		61	1.1
Chest Pain		220	3.9
Choking		5	0.1
Community Paramedicine		72	1.3
Convulsions/Seizures		129	2.3
Diabetic Problems		87	1.6
Drowining (Near)/Diving Accident		1	0
Electrocution		2	0
Eye Problems/Injuries		4	0.1
Falls/Back Injuries		493	8.8
Headache		26	0.5
Heart Problems		75	1.3
Heat/Cold Exposure		6	0.1
Hemorrhage/Lacerations		86	1.5



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# Dispatch by Medical Category (EMD Code) Continued

Overdose/Ingestion/Poisioning	75	1.3
Pregnacy/Childbirth/Miscarriage	22	0.4
Psychratric/Suicide Attempt	65	1.2
Public Assist/Lifeline	194	3.5
Scheduled Convalescent Transport	183	3.3
Scheduled EMS Standby	67	1.2
Scheduled Interfacility Transport	330	5.9
Sick Person (Specific Diagnosis)	843	15
Stab/Gunshot Wound	2	0
Stroke (CVA)	63	1.1
Traffic Accidents	576	10.3
Traumatic Injuries, Specific	112	2
Unknown Problems	109	1.9
Unknown Problems (Man Down)	42	0.7
Unscheduled Convalescent	255	4.5
Unscheduled EMS Standby	73	1.3
Unscheduled Interfacility Transport	632	11.3
WeaknessUnconscious/Fainting (Non-Traumatic)	185	3.3
Total:	5610	



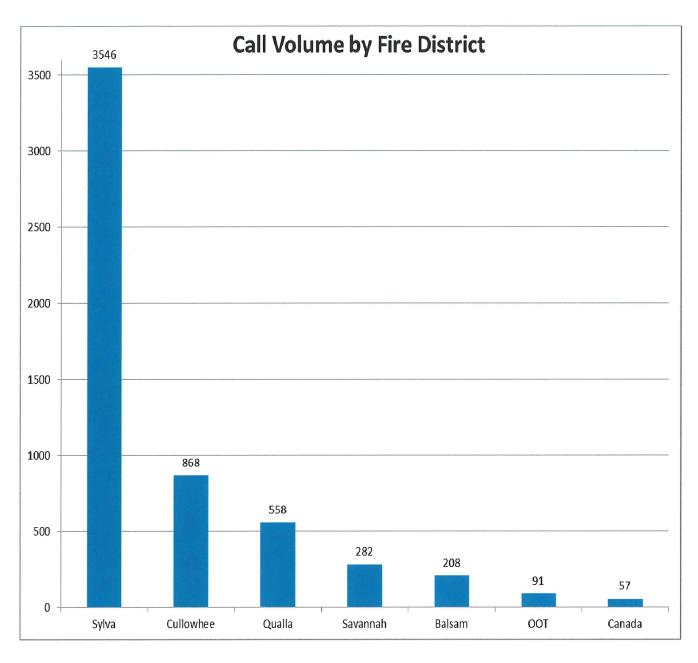


## All Calls by Response Code and Fire District

All Calls	Balsam	Canada	Cullowhee	ООТ	Qualla	Savannah	Sylva	Total
Alpha	71	18	349	84	202	79	2275	3078
Bravo	22	14	91	0	67	31	275	500
Charlie	36	11	204	4	126	66	472	919
Delta	78	13	220	3	154	99	511	1078
Echo	1	1	4	0	9	7	13	35
Total:	208	57	868	91	558	282	3546	5610







\*\* OOT refers to Out of Town pick up locations





## 911 and Standbys by Response Code and Fire District

Call Vol by District 911, Standby	Balsam	Canada	Cullowhee	ООТ	Qualla	Savannah	Sylva	Total
			222		4.50		070	1510
Alpha	71	18	333	6	168	66	978	1640
Bravo	22	14	91	0	67	31	274	499
Charlie	36	11	204	0	126	66	453	896
Delta	78	13	220	3	154	99	501	1068
Echo	1	1	4	0	9	7	13	35
Total:	208	57	852	9	524	269	2219	4138

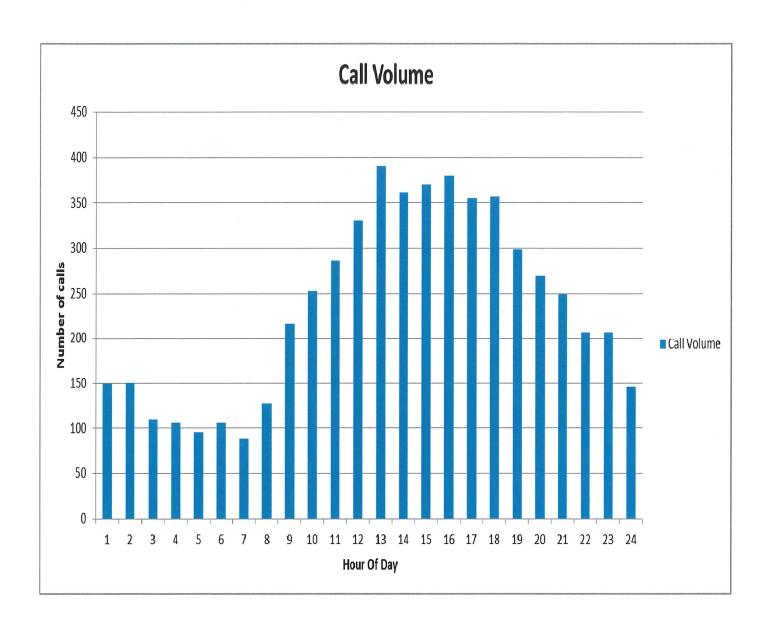




Call Volume by Fire District 911 and Standby Only 2500 2219 2000 1500 1000 852 524 500 269 208 57 9 Sylva Cullowhee Qualla Savannah Balsam Canada OOT





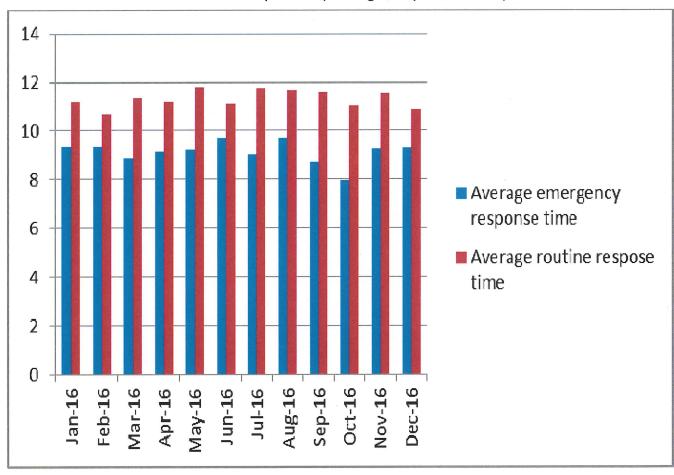






## Response Times 2016

Emergency Response (Charlie, Delta, Echo) Routine Response (Omega, Alpha, Bravo)



EMS goal is to have an average emergency response of less than 10 min and average routine response of less than 15 min





#### **Service Provided**

## Stand-bys and special events Harris EMS participated in 2016.

Stand-by for Fire Support 43 calls.

Stand-by for Law Enforcment 10 calls.

Stand-by for 8 WCU football games/scrimmages.

Stand-by for 6 SMHS Varsity football games.

Stand-by for 6 SMHS JV football games.

Sand-by for 4 Middle School games.

Stand-by for 5 Jackson County Youth Sports football games.

Coverage in downtown Sylva for annual 'Greening Up the Mountains".

Coverage at WCU during annual Mountain Heritage Day.

Coverage at Band Competition at WCU.





#### **Service Provided**

## Stand-bys and special events Harris EMS participated in 2016. (cont'd)

Coverage for New Years Day run.

Coverage during the 4th of July celebrations in downtown Sylva.

Coverage for NAACP event in downtown Sylva.

Participated in fire prevention at all elementary schools in our service area in addition to two private schools.

Participated in county wide disaster drill.

Our UTV was utilized during several wildfires as an asset donation in order to support fire suppression activities.





#### **New Units**

Harris EMS has taken possession of 5 new ambulances. The units are 2017 Ford F-450 Type I ambulances manufactured by AEV. The units are four wheel drives, and equipped with Stryker power stretchers. All units have been inspected by the NCOEMS and are currently in-service.





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## **Quality Improvement Projects**

Harris EMS has updated our treatment protocols to stay in line with NCOEMS current standards. Within these protocols we have submitted for approval, we have added a new medication to our formulary called Tranexamic acid (TXA), this medication is reserved for use in for the extremely critical trauma patients in order to help with shock. We have worked closely with our Medical Director Dr. Judson Garbarino, the NCOEMS, and the Trauma Services Coordinator RN at Mission Hospital in order to institute this medication. This medication along with our updated protocols is currently in the hands of the State Medical Director for final approval. Once approved by the NCOEMS the use of these protocols and medications will be available for both services in the Jackson EMS system.

Harris EMS has developed and submitted a sepsis protocol. Sepsis is responsible for about 260,000 deaths in the US each year. Sepsis has been identified by Centers for Medicare & Medicaid Services as a core measure. This means that all hospitals across the country have to screen all patients for sepsis and treat sepsis patients early and aggressively. This is a time sensitive emergency. Harris EMS has developed a protocol which gives the paramedics tools and memory aids to identify possible sepsis in the field. This leads to early activation of a sepsis alert. The sepsis alert allows nurses and physicians to be ready to receive the patient and start the life saving treatment that is required for this illness.





## First Responder Program

Harris EMS supports the effort of our local fire departments through the first responder program. Harris EMS has built a transition course for all state credentialed personnel. Any credentialed first responders are able to transition by using Harris EMS Educational Institution at no charge.





## Medic 6 Qualla Update

- We have noticed a substantial decrease in response times to the Qualla area since implementing this unit.
- Average 3<sup>rd</sup> Quarter Response Times (Before Medic 6)
  - 14.93 minutes for emergent calls (Qualla Area Only)
  - 16.25 minutes for non emergent calls (Qualla Area Only)
- Average 4<sup>th</sup> Quarter Response Times (With Medic 6)
  - 11.82 minutes for emergent calls (Qualla Area Only)
  - 13.95 minutes for non emergent calls (Qualla Area Only)
- The reason that we are not meeting our 10 minute average response time for emergent calls is because the unit is only operational from 1000-2200. We still have increased response times between the hours of 2200-1000 in this area.
- Medic 6 has ran 173 calls during the 4<sup>th</sup> quarter of 2016.





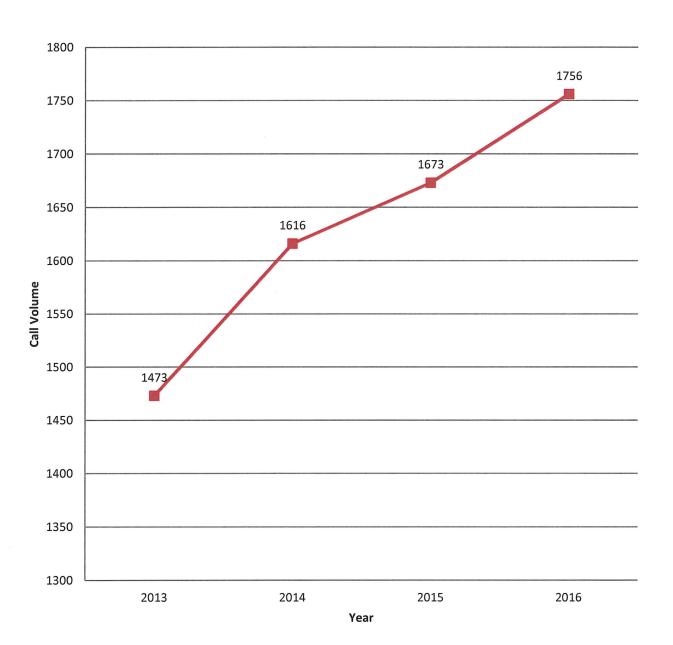
## Medic 6 24 Proposal

- Harris EMS has seen a substantial increase in call volumes over the past four years. In 2013 the service ran 4521 calls. In 2016 service ran 5610 calls. This is a 24% increase in call volume since 2013.
- In October 2015 we added a 12 hour ambulance between the hours of 1000 and 2200. This has off set the work load during our busiest times, however, between the hours of 2200 and 1000 we see call volumes that tax our service and often times exceed resources on hand.
- Overall call volumes have steadily increased between the hours of 2200 and 1000 over the past 4 years. In 2013 Harris EMS ran 1473 calls within these hours. In 2016 Harris EMS ran 1756 calls within these hours. This shows a 19% increase since 2013





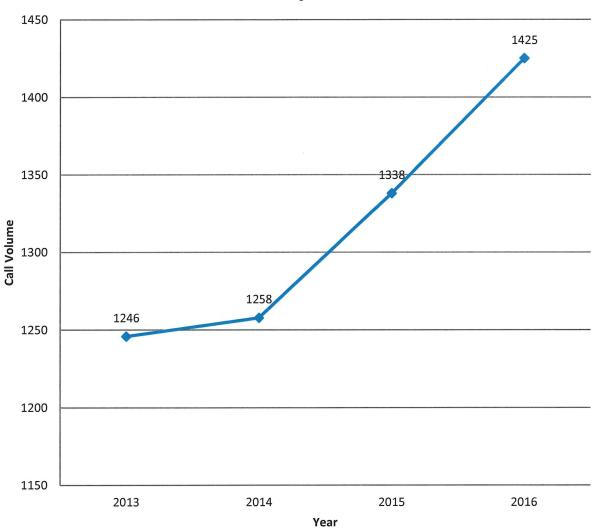
## 2200-1000 Calls 2013-2016







#### 911 & Standbys 2200-1000







## Medic 6 24 Proposal

- Harris Regional Hospital EMS proposes that we add an additional four FTEs to make the Medic 6 unit 24 hours. There will be no additional cost besides the FTEs because the infrastructure is in place.
- We propose that we continue to operate off of the current subsidy. If a
  loss or surplus is noted at the end of the year Jackson County and
  Harris Regional Hospital will settle in pursuant of the current true-up
  agreement outlined in the contract.
- Currently we have a crew on call at night from the hours of 2200-0700.
  The on call crew is needed because the volumes at night exceed the
  capabilities of two crews. The back up crew was activated 60 times in
  2016. This does not include times that all crews were on calls and
  there were no available ambulances.
- Very few services across the state have back up crews. It is difficult to find coverage for an on call crew for a variety of reasons.
- If approved to make Medic 6 to a 24 hour status we plan to eliminate the back up crew. However, one of the EMS administrators will still continue to be on call during these hours. In the event of all three units being busy this person would respond in a QRV until a transport unit is available to respond.
- Attached is the breakdown of costs for the additional FTEs.





## Proposal for EMS Schedule Change

- Harris EMS has struggled with recruitment and retention for many years. Over the past two years Harris EMS has lost 9 full time employees. These employees stated in their exit interviews that one of the main reasons for leaving to seek employment elsewhere is the current schedule that Harris EMS works. All of these employees left to work a 24/72 schedule.
- The current schedule was favored many years ago due to the ability of the staff to have a nine day break each month. However, due to the increasing work load many of the staff expressed concern with the current schedule. With the current schedule the staff is required to work a 24 hour shift which will be followed by a 12 hour night shift three times a month. Many of the staff members do not like the current configuration.
- The most popular schedule in present day EMS agencies is the 24/72 schedule. Currently we are unable to advertise this type of schedule and many potential applicants are turned away.
- Many of the current employees have asked for this schedule change over the past couple of years. Out of the employees that work the current schedule, 14 of 16 want to change to a 24/72 schedule.
- Harris EMS has noticed substantial turnover due to the schedule that
  we currently work. We estimate the cost to train and equip a new
  employee is over \$2000.00. With the amount of turn over that EMS has
  this is very expensive.





### Proposal for EMS Schedule Change

- EMS administration proposes that we change to a 24/72 schedule. This will improve morale, increase recruitment and retention and reduce the cost of turn over within our service.
- Harris EMS administration feels confident that this schedule change will pay for itself with the reduction of turnover.
- We propose that we continue to operate off of the current subsidy. If a
  loss or surplus is noted at the end of the year Jackson County and
  Harris Regional Hospital will settle in pursuant of the current true-up
  agreement outlined in the contract.
- Attached is the breakdown of the cost of the proposed schedule change.





# Questions?

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