





RICHMOND AMBULANCE AUTHORITY

W O R L D C L A S S E M S

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LETTER FROM THE BOARD OF DIRECTORS

The Board of Directors is proud to be a part of another successful year for the Richmond Ambulance Authority (RAA). With over 25 years of delivering the best possible patient care to the Richmond community, RAA has earned its reputation as a world-class organization and 2017 was another great year.

In January of 2017, our City welcomed a new Mayor, The Honorable Levar Stoney, as well as newly-elected Councilmembers - one of which we are fortunate to have joined our Board, Councilwoman Kristen Larson, Southwest 4th Voter District. The Board is comprised of eleven members; all who serve on a voluntary basis and bring a multitude of professional backgrounds to the table. What is unvarying amongst this group of individuals is the shared, core mission that has remained constant since the Authority's creation back in 1991 — supporting the RAA staff with its delivery of second-to-none patient care through foresight and critical planning, while maintaining our commitment to economic efficiency and providing oversight to assure the Authority's financial soundness.

Throughout 2017, RAA has worked diligently to position itself as our country's healthcare system continues to undergo rapid change. The future of EMS includes Mobile Integrated Healthcare (MIH) which, in its simplest form, is the provision of healthcare using patient-centered, mobile resources in the out-of-hospital environment. In keeping with RAA's reputation as a high-performing, cutting-edge EMS agency, 2018 will see our organization offering specialized resources to provide the proper care at the proper place for the patients in our community.

Together, the RAA Board and management team continue to make it our priority to focus on community outreach and education and 2017 demonstrated just how committed we are to these initiatives. RAA continued its strong presence at numerous community events citywide, using the opportunities to showcase the Authority as well as provide appropriate EMS support to help educate the public on our services and programs. In addition, RAA maintains an ongoing CPR instructional program (available in English and Spanish). In a long-standing partnership with the Richmond Redevelopment & Housing Authority, RAA attends every new tenant orientation session to teach, "Hands Only CPR," to all future residents over the age of 18. In 2017, we attended 24 sessions and instructed over 700 residents in this life-saving skill. Overall in 2017, 40 classes were held with 1,300 Richmond citizens trained in CPR. In a project to raise grant funding that began in 2016, RAA teamed up with VCU to provide 35 of Richmond's Public Schools with Bleeding Control (BCON) supplies to control bleeding and hemorrhaging in the event of an 'Active Shooter,' situation. The supplies, as prescribed by the national Stop the Bleed campaign, contains tourniquets, bandages and specially-treated gauze dressings; all designed to assist with the clotting and control of bleeding before professional help arrives.

While 2017 proved to be a very busy year, it was certainly a rewarding one. The foundation of RAA's success lies with the dedication of its staff, its CEO, Chip Decker, the clinical oversight of its Operational Medical Director, Dr. Joseph Ornato, the shared commitment of our Board of Directors and the ongoing support of Richmond City Council and City Administration. Together, we can all be very proud of our accomplishments in 2017 as we prepare for yet another great year in 2018.



The 2017 Richmond Ambulance Authority Board of Directors:

- Elizabeth Matish, Chairperson
- Jeffrey Odell, Vice Chairman
- Matthew A. Conrad, Treasurer
- Richard Bennett, M.D., Secretary
- Joseph Boatwright III, M.D., Director
- Selena Cuffee-Glenn, Director
- Terone B. Green, Director
- Councilwoman Kristen Larson, Director
- J. Stephen Lord, Director
- Susangeline Strickland, M.D., Director
- John Wack, Director

OPERATIONAL MEDICAL DIRECTOR'S REPORT



SELF-REPORTING PATIENT SAFETY INITIATIVE

This year, I'd like to provide a more in-depth summary of our industry-leading self-reporting system that has proven to be a cornerstone our culture of safety as it approaches its 10-year implementation anniversary. Patterned after NASA's Aviation Safety Reporting System (ASRS), our prehospital providers are encouraged to self-report errors, near-misses, and system issues in a non-punitive environment. This EMS industry-leading safety initiative provides valuable insight into human factors and systems issues that help us find ways to make our patient care more consistent, reliable, and safe.

RAA personnel collectively submit an average of one self-report a week since the program began in early 2008 – giving us 50 opportunities a year to make improvements that other EMS systems haven't even identified as potential problems! The most common

self-reports relate to medication, procedural, and systems issues. A substantial number of cases represent near-misses in which EMS providers were in a situation that could have resulted in a patient treatment error but, by identifying a potential problem, changed course with no harm to their patient. In other EMS programs, most such instances would go unnoticed since no error was actually committed, but our innovative system, widely accepted by our prehospital providers and strongly supported by RAA administration, identifies opportunities for preventing and mitigating the consequence of simple human error, and identifying systems issues that can be altered to protect our patients.

A good example comes from the nationwide shortage of critical drugs that has been affecting hospitals and prehospital systems for several years. ODEMSA drug boxes are restocked at multiple receiving hospital pharmacies with no standardization of the particular brand (and, hence, packaging appearance) of a given medication. This problem has been exacerbated by the ever-changing, huge list of critical drug shortages in the United States. As of this writing, there are currently 94 medications that are either unavailable or in critically short supply. A constantly updated list is on the following website:

When one of our paramedics discovers that he or she has picked up the wrong drug out of their just-opened drug box because its packaging looks like the drug they intended to administer, they put the wrong drug back in the box and give the correct one. However, such an encounter will trigger a self-report of a near-miss drug administration, allowing our clinical team to alert all providers to be on the lookout for the two "look-alike" drugs – potentially preventing a future wrong drug administration. In this example, grabbing the "wrong" drug doesn't constitute an action of a below-standard provider. Rather, identifying the "look-alike" drug before someone may mistakenly give it – and the willingness as well as confidence to self-report the potential error – is a strong testament to the superb skill and character of our providers and their commitment to safety.

UPDATE ON CARDIAC ARREST THERAPEUTIC HYPOTHERMIA PROJECT

Therapeutic hypothermia (controlled cooling of the body and the brain) after cardiac arrest can improve survival and neurological outcome. Richmond Ambulance Authority was one of the first EMS agencies in the United States to begin using this procedure in 2008. New studies continue to confirm the benefits of cooling but suggest that the previous standard rapid infusion of iced saline in the field following restoration of the patient's pulse may not be the most effective technique to starting cooling before emergency department arrival because the benefits of cooling appear to be neutralized by the extra work imposed on the heart when large volumes of IV fluid are given rapidly.

Dr. Ornato and the RAA clinical staff continue to work with a research and engineering team from Johns Hopkins University that has developed an alternative technology that can cool the body without the need for IV fluids or drugs. The device simply streams dehumidified room air through a mask into the nose of cardiac arrest patients with intermittent small puffs of sterile salt water. As the saline mist evaporates, it quickly cools the tissues in the back of the nose and mouth, including the brain. We continue to work on a proposal for RAA to potentially conduct a small pilot trial that can provide preliminary data to guide design of a large, multicenter clinical trial. If successful in improving survival and neurological outcomes after cardiac arrest, the device has the potential to also benefit patients with other forms of brain injury such as stroke or massive head injury. The VCU IRB has approved the next phase of the project which is under way consisting of numerous meetings with community members to measure the degree of citizen support for the pilot project in Richmond.

JOSEPH P. ORNATO, MD, FACP, FACC, FACEP OPERATIONAL MEDICAL DIRECTOR

CHIEF EXECUTIVE OFFICER'S REPORT



The Richmond Ambulance Authority (RAA) has seen its share of successes and accomplishments over the years, and 2017 proved to be no different. We continue to uphold the reputation as a leading EMS agency with a commitment to clinical and operational excellence. Richmond's 9-1-1 system remains one of the busiest per capita, with RAA responding to over 68,000 calls for service in 2017 (over 54,000 of which were life-threatening emergencies). In spite of this volume, getting to our patient's side during a life-threatening emergency is a top priority, with our medics on scene, on average, in five minutes and 30 seconds!

The unfortunate reality of the opioid epidemic, along with its adverse consequences, is that a definitive solution has yet to be found. With our field staff at the forefront of emergency patient care, RAA has seen first-hand the effects of this growing crisis. In 2017 alone, RAA administered Narcan®, the opioid antagonist, over 700 times. We continue to have a major voice on both City and regional task forces, designed to help combat this epidemic by providing insight from the frontline. In addition, RAA's long-standing relationship with the Richmond Police Department has allowed us to work together to respond to this crisis, regularly sharing information we have to help our organizations anticipate and react to any spikes in calls for assistance.

In May, the construction project to expand our parking lot was completed. Thanks to the planning efforts and project oversight by the City of Richmond's Department of Public Works, RAA received an additional 56 much-needed spaces to alleviate the shortage and accommodate all of our employees and visitors. In September, RAA stood ready, alongside the City and its area public safety partners, to respond to any unrest that may have resulted from the protests at the Robert E. Lee Monument. Other than a few small scuffles, the day proved to be uneventful, which can be attributed to the manner in which our City and its public safety agencies and partners seamlessly worked together to coordinate Richmond's preparedness in response to any possible aggression that may have occurred.

I take great pride in the recognition our agency receives, with 2017 proving to be another great year for RAA. At the start of the year, we retained the services of the Baldridge Group, an outside customer satisfaction and engagement firm, to help assess our community's perception of our services. RAA had jumped to "the top in both patient engagement and loyalty results, achieving the highest scores for both ever recorded among clients in their database." In November 2016, RAA received the prestigious Governor's Award for "Outstanding EMS Agency," and a house joint resolution from patrons represented by both the House of Delegates and Senate commending RAA for receiving this honor was presented in February. RAA won the Virginia Municipal League's (VML's) Risk Management Performance Award for 2017 for our EVOC (Emergency Vehicle Operator Course). Then in March, RAA's dispatch center received ACE (Accredited Center of Excellence) reaccreditation. This is RAA's sixth, consecutive accreditation, making RAA the second center in the world (and the first in the US) to achieve this). In August, RAA won the 2017 Mission Lifeline Gold Level Recognition Award, sponsored by the American Heart Association. The award recognizes EMS providers who contribute to the overall success of "Mission Lifeline STEMI Systems of Care" (ST-Elevation Myocardial Infarction).

RAA ended 2017 having learned we had received CAAS (Commission on Accreditation of Ambulance Services) reaccreditation for three years; the maximum extension allowed! RAA is one of only two agencies accredited in Virginia and one of 27 in the US accredited by BOTH CAAS and the National Academies of Emergency Dispatch.

RAA's total number of employees in 2017 was 281. Together, our team continued to maintain our reputation, both nationally and internationally, for our consistent level of service, use of cutting-edge technology and data analyses, research initiatives for the improvement of patient outcomes, and impactful public education programs. With the continued hard work and dedication of our most important asset, our employees, leadership and oversight of our Board of Directors, the clinical expertise of our Operational Medical Director, Dr. Joseph Ornato, and the support of City Administration and City Council, I am confident 2018 will prove to be yet another successful year for the Richmond Ambulance Authority

CHIP DECKER
CHIEF EXECUTIVE OFFICER

2017 NEWS AND EVENTS





JANUARY

No sooner had the year begun, we promoted Paramedic Tiffany Samuels to Lieutenant, and celebrated her promotion at the top of City Hall. We also welcomed new Board Member and Councilwoman Kristen N Larson.

The first snowfall of the year arrived and our 6-wheel drive, all-terrain, ASAP vehicles again earned their keep. We also received recognition from City Council for our 2016 State "EMS Agency of the Year Award."



FEBRUARY

In February, we pushed hard and fast with CPR classes in English and Spanish. Our Communications Center became only the second center in the world to achieve the Accredited Center of Excellence (ACE) qualification for a record breaking sixth time.

We launched the February New Employee Orientation team members into their field placements and welcomed Dr. Paula Ferrada in for Grand Rounds.



MARCH

In March, we welcomed international visitors from Taiwan's Kaohsiung Medical University (KMU) in what has become an annual event. We also hosted recently elected Mayor Levar Stoney for a briefing on RAA and our operation.

RAA's 2017 Leadership Academy completed their first group assignments – book reviews on selected leadership topics. We also opened the RAA garden for the season!

APRIL

We sprinted into April by covering the Monument Ave 10K and saving a runner in cardiac arrest at the finish line. South African visitor, Rene Grobler, and Jackie King from the UK's National Ambulance Response Unit (NARU), also joined us.

A RAA group attended 'EMS on the Hill Day' to meet our elected officials and promote EMS and essential legislation.
Communications Supervisor, Becca Szeles, graduated her Communication Center Managers (CCM) course, and Medic Julie Anderson was named an AAA "Star of Life."



2017 NEWS AND EVENTS





MAY



We had a very busy May having celebrated National EMS Week, and our annual awards were given to recognize our outstanding employees.

We received a Virginia Municipal League Insurance Programs (VMLIP) Risk Management Performance Award for 2017, and also received an Active RVA Certified Award for 2016 – 2017.

We also welcomed a visit from the German Police, based in the State of Hessen.

JUNE

In June, we had a Chain of Survival reunion with survivor Mr. Jeff Stover, who made a great recovery after his cardiac arrest at the Monument Ave 10K. Another of our survivors, Mr. Curtis Monk, presented us with the Gold recognition award for the AHA's Mission: Lifeline® EMS program for the second year running. He traveled to Washington, DC, to surprise AAA Star of Life winner, Julie Anderson (his life-saving medic).

Italian visitors from the University of Rome Medical School spent time at RAA, and we welcomed Summer Interns, VCU Medical Students, Jessica Patton and Daniel Critchfield.



JULY



In July, we welcomed new RFD Chief, Melvin Carter, back to the city. We also welcomed international visitors Stephanie Palacios, 6th year medical student from the Universidad San Martin des Porres of Lima, Peru.

We all smiled on receipt of a box full of 'Be Happy' bouquets given to us as part of 'Make Someone Smile Week,' and made our first foray into public broadcasting as we delivered our first ever episode of #RAATV from the Comcast Studios in Richmond.

AUGUST

Continuing our 2017 review, the highlight of every August is always National Night Out, as we sent a number of teams out all over the City to deliver Hands Only CPR. We also pushed hard and fast in a visit from the Greater Fulton Civic Association Youth Academy.





2017 NEWS AND EVENTS





SEPTEMBER

At the annual 9/11 ceremony, we conducted CPR training, assisted by 'The Voice' Semi Finalist, Tsoul. We demonstrated our 'Stop the Bleed' equipment at the Altria Companies Employee Community Fund (ACECF) open day.

Continuing to push hard and fast, we joined our public safety partners at the RVA Preparedness Day, and took part in the festival, Hispanoamericano de la Academia Deportiva Hispana (H.A.S.A).



OCTOBER



October was another month full of activities, starting with the reopening of our refurbished Little Free Library. We presented Richmond Public Schools with Bleeding Control (BCON) equipment and attended the Children's Hospital of Richmond (CHOR) Foundation, Fire Prevention Day. We held RAA night at the RPD Latino Citizens' Academy and practiced our story telling skills at the Richmond FRIENDS Association for Children at their 'Leaders are Readers' day.

We also welcomed German Paramedics from Kassel, Germany, and Juan Figueroa of the Universidad del Azuay in Cuenca, Ecuador.

NOVEMBER



We wished a Happy 140th Birthday to HCA Retreat Doctors Hospital, and trained another class of IPMBA-qualified bike medics. And, in a major milestone, we completed the roll out of 'Stop the Bleed' kits to Richmond Public Schools.



In December, with only three days left in the year, we earned our three-year re-accreditation - the maximum allowed by CAAS! We made our annual appearance at the Dominion Christmas Parade. We graduated the 2017 class of the Richmond Ambulance Authority Leadership Academy (RAALA), and concluded the year with a Christmas lunch for our work family

DECEMBER

International visitors from two continents arrived; Dr. Menelas Nkeshimana and Ms. Christine Uwineza from the University Teaching Hospital-Kigali, Rwanda, Africa, as well as Pan American Trauma Society Observer Dr. Marcela Vidal from Universidad del Valle in Cali, Columbia.

on duty during the holiday.



MEMORABLE MOMENTS FROM 2017

























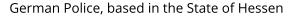




OUR VISITORS







Paramedic Students from Australian Catholic University, based in Canberra, Australia

Stephanie Palacios, medical student from the Universidad San Martin des Porres of Lima, Peru

MBA students from Taiwan's Kaohsiung Medical University

Michael Rigo, Director of Clinical Services for Ambulance Service Australia

Pan American Trauma Fellow Dr. Carolina Pellegrino, from Sao Paulo, Brazil

German Paramedics from Kassel, Germany

Pan American Trauma Fellow Dr. Juan Figueroa of the Universidad del Azuay in Cuenca, Ecuador

Pan American Trauma Fellows Dr. Cecibel Cevellos and Medical Student Daniel Sacoto, from Ecuador

Dr. Menelas Nkeshimana and Ms. Christine Uwineza, from the University Teaching Hospital-Kigali, Rwanda, Africa

Pan American Trauma Society Fellow Dr. Marcela Vidal, from Universidad del Valle in Cali, Columbia

South African visitor Rene Grobler and Jackie King, from the UK's National Ambulance Response Unit (NARU)

Pan American Trauma Society Fellow Medical Student Debora Cardial, from São Paulo, Brazil.

Visitors from the University of Rome Medical School

















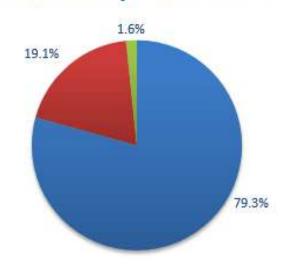








2017 RAA System Demand



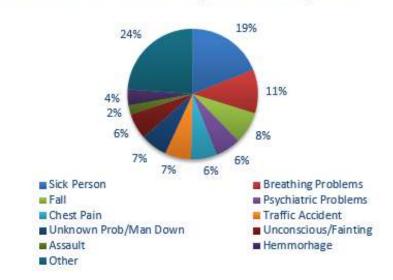
■ Emergency ■ Non-Emerg ■ Critical Care

	Emergency	Non Emergency	Total	
Responses	54,104	14,256	68,360	
Transports	36,140	13,579	49,719	

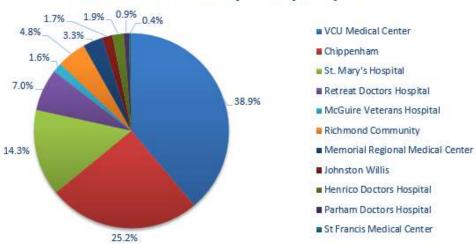
2017 RAA 9-1-1 Calls by Chief Complaint



	.OH		
911 Compliance			
Priority 1	91.77%		
Priority 2	96.20%		
Priority 3	97.74%		
Overall	93.90%		



2017 RAA 9-1-1 Transports by Hospital









FLEET COMPOSITION



In 2017, RAA trucks traveled 1,323,221 miles. That's the equivalent of:

122,465 trips around Richmond (in square miles)
53.14 trips around the world
2.78 trips to the moon and back

Our fleet:

- 29 Ford Type III gasoline chassis ambulances
- 8 Ford Type II gasoline van style ambulances
- 1 Freightliner diesel Critical Care Transport
- 1 International diesel Critical Care Transport
- 3 Ford gasoline Expeditions
- 2 Chevy gasoline Tahoes
- 1 Ford gasoline F-150 resource vehicle
- 1 Ford gasoline F-250 Tow vehicle
- 2 Polaris gasoline ASAP specialty vehicles
- 2 ASAP Trailers
- 1 mass casualty trailer

STATEMENT OF NET ASSETS

Years Ended June 30, 2017 and 2016

	2017	2016
ASSETS		
Current Assets:		
Cash	\$ 2,342,828	\$ 2,161,406
Short-term investments	1,250,000	1,250,000
Total cash and short-term investments	3,592,828	3,411,406
Receivables:	-	-
Service accounts receivables, net of allowance for contractual		
adjustments and doubtful accounts	1,964,193	1,672,615
Reusable supplies	256,779	257,115
Other current assets	373,526	373,388
Total Current Assets	6,187,326	5,714,524
Long-Term Investments	2,000,000	1,000,000
Capital Assets, net:		
Vehicles and ambulances	5,948,847	6,059,198
Building and improvements	612,311	587,350
Communications center	1,627,285	1,622,335
Communications equipment	926,961	980,792
Medical equipment	2,791,460	2,979,892
Office furniture and equipment	1,186,571	1,051,084
Shop equipment	90,726	90,726
Less accumulated depreciation	(8,822,375)	(7,691,810)
Total Capital Assets, net	4,361,786	5,679,567
Total Assets	12,549,112	12,394,091
LIABILITIES		
Current Liabilities:		2004/00/00/00
Accounts payable and accrued expenses	616,388	699,240
Accrued payroll	393,757	365,156
Current installments of obligations under capital lease	6,590	5,854
Total Current Liabilities	1,016,735	1,070,250
Noncurrent Liabilities: Obligations under capital lease, excluding current installments	18,234	
Total Liabilities	1,034,969	1,070,250
DEFERRED INFLOWS OF RESOURCES		
Membership fees received in advance	14,429	18,659
NET POSITION	00 12 13 92 1 13 12 15 15 15 15 15 15 15 15 15 15 15 15 15	
Net Investment in Capital Assets	4,336,962	5,673,713
Unrestricted	7,162,752	5,631,469
Total Net Position	\$ 11,499,714	\$ 11,305,182

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET ASSETS

Years Ended June 30, 2017 and 2016

		2017		2016	
Operating Revenues: Service revenues	\$	30,990,912	s	30,040,864	
Provision for contractual adjustments and doubtful accounts	Ψ	(15,829,401)		(15,589,943)	
Net Operating Revenues		15,161,511		14,450,921	
Operating Expenses:					
Salaries and related benefits		12,477,844		12,316,226	
Health insurance		1,482,175		1,539,544	
Worker's compensation		307,197		387,116	
Depreciation and amortization		1,646,493		1,590,666	
Professional services		299,035		340,572	
Collection expenses		51,211		25,773	
Marketing and advertising		40,222		24,130	
Office expenses		419,330		409,767	
Telephone		171,266		162,007	
Communications		67,010		79,529	
Public information		26,860		38,531	
Postage and shipping		41,376		40,740	
Occupancy		189,402		199,640	
Other		106,752		99,147	
Insurance		167,084		168,141	
Printing and artwork		4,744		9,739	
Travel		83,807		85,178	
Medical supplies and equipment		714,701		729,883	
Recruiting and background investigations		73,870		50,653	
Vehicle fuel and tolls		456,490		404,585	
Vehicle repairs and maintenance		432,011		357,439	
Uniforms and laundry	a	112,053		113,521	
Total Operating Expenses	7	19,370,933	_	19,172,527	
Operating Loss		(4,209,422)	_	(4,721,606)	
Non-Operating Revenues (Expenses):					
City of Richmond subsidy		4,155,500		4,590,500	
Interest Income		31,453		24,954	
Grant revenues		133,233		64,553	
Miscellaneous revenues (expenses), net		83,768		(23,213)	
Total Non-Operating Revenues, net	10	4,403,954		4,656,794	
Change in net position	100	194,532		(64,812)	
Net position at beginning of year	<u> </u>	11,305,182		11,369,994	
Net position at end of year	\$	11,499,714	\$	11,305,182	

AWARDS AND RECOGNITION

RAA AWARDS

Mission: Lifeline Gold Award

Active RVA Certified Award for 2016 - 2017

Virginia Municipal League Insurance Programs (VMLIP) Risk Management

Performance Award for 2017

RAA ANNUAL EMPLOYEE AWARDS

Operations Employee of the Year, Chris Stanton

Paramedic of the Year, Scott Kiniry

EMT of the Year, Jacob Flickinger

Support Employee of the Year, Katie Moody

Administrative Employee of the Year, Charles Brown

INDUSTRY-WIDE RECOGNITION

American Ambulance Association 'AAA Stars of Life' Award, Julie Anderson VCU Level 1 Trauma Center challenge coin, Paramedic Matt Miller

















AGENCY INFORMATION



OUR MISSION

To deliver patient centered care through measurable clinical and operational excellence with efficiency, outstanding customer service and employee engagement.

OUR VISION

The Richmond Ambulance Authority is an industry leader, providing World Class mobile integrated healthcare.
HISTORY

In 1990, the City Manager and the City Council of Richmond, Virginia recognized that fundamental changes were needed in the Emergency Medical Services (EMS) system and worked to implement an innovative system design that would provide for the unified provision of EMS services for the city. On March 20, 1991 the Virginia General Assembly created the Richmond Ambulance Authority and on September 23, 1991 the City of Richmond granted the franchise to the Richmond Ambulance Authority to provide EMS services to the City of Richmond.

Since its inception, the goal for the Richmond Ambulance Authority (RAA) has been to provide its community with clinical excellence, while ensuring response time reliability and fiscal responsibility. Although it has the highest call volume per capita in the United States, RAA has gained a national and international reputation as a premiere, high performing EMS system. RAA is one of only 23 systems in the United States that has received accreditation from both the National Commission on Accreditation of Ambulance Services (CAAS) and the National Academies of Emergency Dispatch (NAED). These accreditations are considered the "gold standard" for ambulance services, certifying distinction for quality patient care and ambulance operations.







RICHMOND AMBULANCE AUTHORITY

W O R L D C L A S S E M S

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