



CITY OF RICHMOND

City Auditor's Office

DATE: February 08, 2023

TO: The Richmond City Council
The Richmond Audit Committee
Mr. Lincoln Saunders, Chief Administrative Officer

FROM: Louis Lassiter *LL*
City Auditor

SUBJECT: Richmond Ambulance Authority Financial & Operational Review

The City Administration, working with the City Auditor's Office, oversaw the completion of a Richmond Ambulance Authority (RAA) Financial and Operational Review. It was primarily overseen and funded by the Administration. Although limited time was spent by audit staff, this review was scheduled as a non-audit service on the FY2023 approved audit plan.

The review was conducted by Accenture and the Robert Bobb Group. This team of professionals analyzed a wide variety of areas for the Richmond Ambulance Authority and prioritized initiatives for improvement.

As required by Government Auditing Standards, we must communicate that our involvement in this work does not constitute an audit conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS). We would like to thank the Richmond Ambulance Authority and City staff that worked with the consultants and provided their assistance on this project. Please contact us if you have any questions.

Attachment

cc: Mayor Levar Stoney
Chip Decker, CEO of Richmond Ambulance Authority
Weet Baldwin, Chairman of RAA Board of Directors
Sabrina Joy-Hogg, DCAO Finance & Administration

RICHMOND AMBULANCE AUTHORITY FINANCIAL AND OPERATION REVIEW- FINAL REPORT

CITY OF RICHMOND
DECEMBER 2022

**RICHMOND
AMBULANCE**

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Executive Summary

- Through the RAA current state assessment, the project team identified **7 initiatives, broken down into 18 recommended activities**, to help the RAA achieve the following outcomes:
 - Improve performance for residents
 - Increase efficiency and sustainability
 - Drive structural, measurable and accountable change
- The Project team has evaluated each initiative on levels of difficulty and benefit to identify **near term improvement opportunities**, such as updating RAA response standards and **longer-term solutions**, such as a city-wide marketing and information EMS campaign.
- All initiatives have been sequenced onto an implementation roadmap.
 - **The “now” timeframe** will achieve meaningful ambulance improvements driving improved response times, cost efficiencies and improved collaboration
 - **The “near” timeframe** will improve billings and collections drive revenue and improve synergies with RAA Stakeholders
 - And **the “next” timeframe** will continue to drive improvements and improve the long-term financial health of the RAA
- To properly implement these initiatives, RAA must begin with **a review and update of their existing governance model** and **pursue meaningful business operation changes**.
- By **FY2025 Q1**, all initiatives identified could be implemented and RAA could be experience **significant financial and >operational improvements**.

Opportunity Prioritization

How Do We Define Recommendations?

Drive Performance and Results for Residents

Improve Performance for Residents

Opportunities should focus on **improving the overall performance** of the organization, both from an **ambulatory and financial perspective** and result in **better service for residents**.

Increase Efficiency and Sustainability

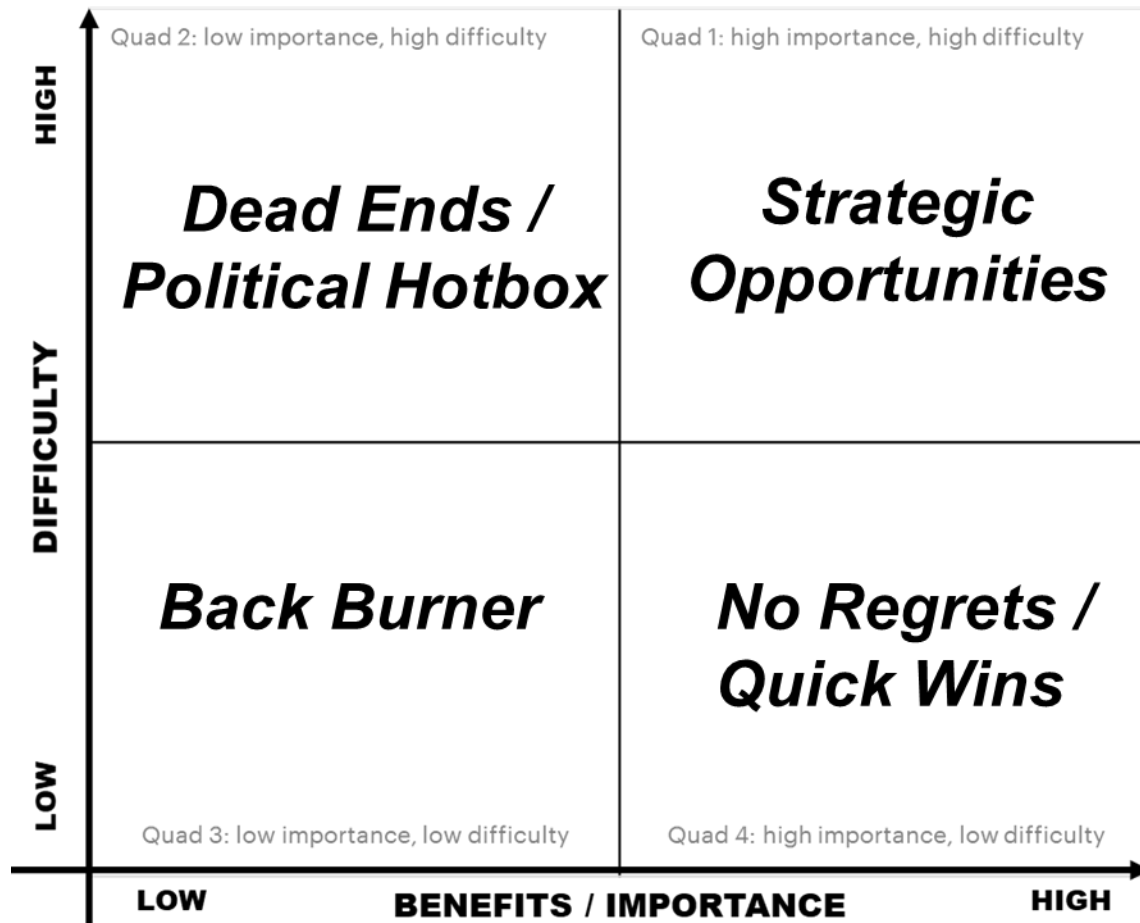
Opportunities should create efficiencies **in both delivery and costs**, drive **additional own source revenue** and set the RAA on a path **for a sustainable financial future**.

Drive Structural, Measurable and Accountable Change

Opportunities should make **lasting structural changes** within the RAA and Richmond Emergency Response that are **measurable and increase transparency and accountability**

Prioritization Criteria

The level of benefit / importance criteria and the level of difficulty criteria will provide a framework to prioritize recommendations.



Benefit Levels

- **Patient Outcomes:** improvement of the experience and outcomes for patients and alignment with industry leading practices in EMS service delivery.
- **Collaboration:** increase in collaboration, transparency and accountability, both within the RAA and with City and Community Stakeholders.
- **Revenue:** increase in total revenue for the RAA, increase in current billing/collections rates, and/or increase in long-term sustainability.
- **Cost:** decrease in overall costs to RAA, increase in efficiency for RAA and City partners, or shift costs to more cost-effective options.

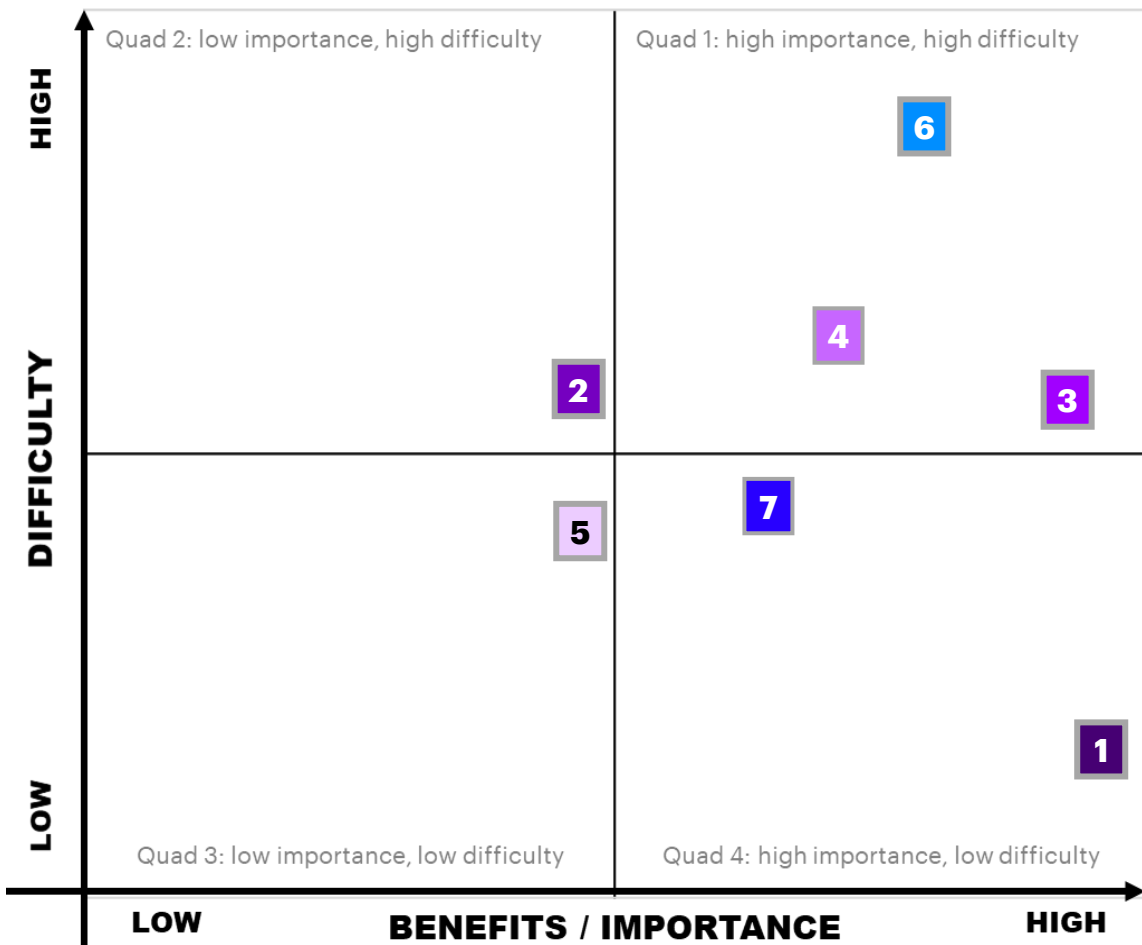
Difficulty Levels

- Resource Commitment Required
- Financial Investment Required
- Change Management Required
- Political Impact



Prioritized Initiatives & Recommendations

We identified opportunities and translated them into initiatives to be included on the roadmap. Each initiative has a different level of benefit and level of difficulty, which informs prioritization and sequencing.



#	Initiative	Recommended Activities
1	Re-invigorate Shared EMS Response	Pursue Memorandum of Understanding (MOUs) between the City and RAA Re-establish consistent meetings between the City and RAA Approach Richmond Community stakeholders as "one system" Public Safety Emergency Response Communication Campaign
2	Update RAA Governance Model	Re-Constitute a truly Independent RAA Board as intended by the PUM Review existing RAA Board memberships and Medical Protocols to ensure independence and pursue changes to make board more independent
3	Optimize Current Financial Model	Update and standardize existing charging polices Review and right size charging rates Update subscription model and non-emergency transports to maximize revenue
4	Modernize Billing and Collections Policies and Practices	Improve monthly and quarterly performance rates through updated polices, rigorous follow up and utilizing data Pursue further utilization of outside contractors/third-parties for both billing and collections with strong performance KPIs
5	Standardize Finance Polices across City and RAA	Update RAA internal finance polices to better align with City polices Fold RAA into the formal budget process
6	Pursue shared services and centralization to drive efficiency and performance	Formally pursue collaboration between DEC and RAA dispatch to better align response and improve patient outcomes. Pursue long-term solutions to co-locate and/or consolidate Pursue opportunities for collaboration and shared services in back-office functions like HR, Finance and IT to better align needs and resources
7	Align EMS Response Standards and Response Type to meet current needs	Pursue updates to RAA response standards to reflect industry best practice and patient outcomes Pursue MOUs with City agencies like Behavioral health, social services and homeless to pursue alternative response type models Review and adjust existing RAA/RFD/RPD response times to better align needs and response rates



Initiative Charters

1. Re-Invigorate Shared EMS Response

Description

Proactively bring RAA into the City umbrella response through MOUs that define collaboration, alternative response types, policies, data and performance across public safety. Approach stakeholders and challenges as one and role this new vision out through a Public Safety Emergency Response Campaign.

Activities & Key Steps

- Pursue Memorandum of Understanding (MOUs) between the City and RAA**
 - Formalize Public Safety Response Policies and Procedures, date and governance and performance standards through Memorandum of Understandings (MOUs) between the City and RAA.
- Re-establish consistent meetings between the City and RAA**
 - Host a set of consistent high-level and subject based monthly meetings between the City and RAA response to improve communication, collaboration and performance and communication.
- Approach Richmond Community stakeholders as "one system"**
 - Identify major communication issues and pursue solutions through a unified "One Richmond" approach. Issues includes hospitals and wait times, insurance companies and State Medicaid/Medicare and community-based programs like expanding "Stop the bleed".
- Public Safety Emergency Response Communication Campaign**
 - Coordinate a citywide EMS campaign, covering rules of the road/expectations for what EMS response should look like in Richmond and the role RAA and City will play in delivering high quality and efficient services. Potentially also look at previous public/private collaboration in Richmond as Model.

Primary Activity Owner: City of Richmond Department of Emergency Communications (DEC)

Value Drivers



Revenue



Cost



Improve
Collaboration



Better Patient
Outcomes

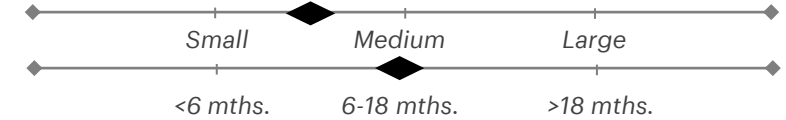
Investment/Effort

Investment (\$)

SMALL

Effort (Time)

<6 MONTHS



Benefits

- Improved patient outcomes
- Greater visibility and transparency with residents
- Improved safety for providers, patients and the public
- Reduced unnecessary demand on RAA

Assumptions

- All agencies will cooperate
- The community will understand and accept the changes
- The community will participate in the public campaign

Dependencies

- Ability to develop alternate response

Key Metrics

- # of RAA responses to selective cases
- Ambulance availability
- # of patients who receive alternate response

Stakeholders

- RAA
- RFD & DEC
- City of Richmond Administration
- The Public

2. Update RAA Governance Model

Description

The RAA has evolved from its original PUM model, and the governance structure is no longer keeping up with the original intent. Updating the RAA Governance Model allows the organization to prepare for and tackle future challenges effectively.

Activities & Key Steps

- 1. Adjust the existing Governance model to reflect the new RAA PUM model and pursue legislation to separate long term oversight from management**
 - a. Review the existing Board and Governance model and pursue an independent performance management sub committee to report to the existing RAA Board.
 - b. Identify what level of detail all board members should receive consistent and timely data reporting.
 - c. Pursue legislation to adjust the existing RAA Board, to remove the dual role as "regulator" and "regulated" to provide the oversight as initially intended when the modified PUM was enacted.
 - d. Review the board composition to ensure it reflects funding and major stakeholders, create separate subcommittees for major stakeholders who may have conflicts.
- 2. Review existing RAA Board memberships and Medical Protocols to ensure financial and oversight independence**
 - a. Pursue adjustments to medical protocols and Medical Director to ensure financial and oversight independence.
 - b. Ensure Board member represent the community and stakeholders and independently pursue best practices for the RAA.

Primary Activity Owner: Richmond Ambulance Authority, in conjunction with necessary legislative bodies and review to be done by Independent future PMO.

Value Drivers



Revenue



Cost



Improve
Collaboration



Better Patient
Outcomes

Investment/Effort

Investment (\$)

SMALL

Small

Medium

Large

Effort (Time)

<6 MONTHS

<6 mths.

6-18 mths.

>18 mths.

Benefits

- Long term financial health and stability
- Improved relationship with stakeholders
- Consistent data driven improvements standards
- Independence of RAA Board from operations

Assumptions

- The governance structure may require legislation to adjust governance and operating (PUM) model.

Dependencies

- Current RAA Board and the City Council – both would have to approve new model.

Key Metrics

- Comparative analysis of old and new model.

Stakeholders

- City of Richmond Administration
- RAA Leadership and Board
- City Council

3. Optimize Current Financial Model

Description

Reimagine current financial process with a collaborative (city inclusion) lens of improving efficiencies and leveraging transport operations. Build a financial subsidy model with the RAA that sets the annual process to allocate City funding based of need and demonstrated value for RAA and community

Activities & Key Steps

- 1. Update and standardize existing charging polices**
 - a. Pursue RAA board approval to adjust charging and fee policies to a full charge for all calls, emergency and non-emergency.
 - b. Adopt a proactive communication plan to ensure there is no confusion and wrap around support through RAA to assist those impacted.
- 2. Review and right size charging rates**
 - a. Pursue RAA board approval to increase and rightsized emergency and nonemergency transport and service fees to reflect current market rates and true cost of service.
- 3. Update subscription model and non-emergency transports to maximize revenue**
 - a. Update subscription model to charge to all service calls and pursue other revenue opportunities for non-emergency transportation and fees associated with wait times at hospitals.
- 4. Determine new Finance subsidy model agreement with City**
 - a) Develop an accountable and transparent financial model with City for annual City subsidy
 - b) See Appendix for sample Subsidy Agreement

Primary Activity Owner: Richmond Ambulance Authority, in conjunction with City of Richmond

Value Drivers



Revenue



Cost



Improve Collaboration



Better Patient Outcomes

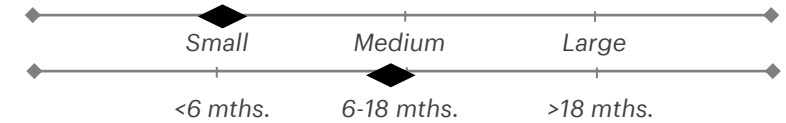
Investment/Effort

Investment (\$)

SMALL

Effort (Time)

<6 MONTHS



Benefits

- Increases financial efficiency and enhances utilization of resources
- Validates all tasks, eliminating redundant, time-consuming tasks
- Accurately tracks organization progress on key impactful metrics for effective resource planning and future strategies

Assumptions

- Requires sponsorship and commitment from RAA leadership
- Moderate change management required
- Updating the financial system will increase efficiency and sustainability. Operations results will be measurable and increase transparency and accountability.

Dependencies

- RAA leadership commitment to change management

Key Metrics

- Transport Rates; Revenue per Transport; Expenses per Transport
- Monthly Financial report actual vs budget

Stakeholders

- RAA
- Public

4A. Modernize Billings & Collections Policies and Practices

Description

Enhance current billing and collections policies and processes to increase revenue in order to maximize revenue from 3rd party payers to reduce public funding; improve monthly and quarterly performance fee structure through updated polices, rigorous follow up and utilizing data; and pursue further utilization of outside contractors/third-parties for both billing and collections with strong performance indicators.

Activities & Key Steps

- 1. Improve monthly and quarterly performance rates through updated polices, rigorous follow up and utilizing data**
 - a) Develop a standardized approach to billing and collecting and create a KPI dashboard of monthly accounts receivable rates, delinquency rates, bad debt write offs and other billing/collecting metrics.
 - b) Closely assess timeliness of bill generation
 - c) Closely assess accuracy of coding
 - d) Closely assess denial rates and reasons
- 2. Pursue further utilization of outside contractors/third-parties for both billing and collections with strong performance KPIs**
 - a) Issue RFP for outsourcing certain aspects of billing collection with KPI's and performance indicators. Pursue opportunities to outsource certain aspects based on price and performance. Conduct detailed assessment of all internal costs associated with billing & collections activity
 - b) Issue separate RFP for external billing services and company against internal costs, to include vendors' projected and assured collection rates
 - c) Implement outsourced (or maintain in-house) best billing and collections option based on ROI. An outsourced billing agency could potentially hire current billers. The typical model is that the billing agency takes 3.5-4.5% of cash collected as their fee.

Value Drivers



Revenue



Cost



Improve Collaboration



Better Patient Outcomes

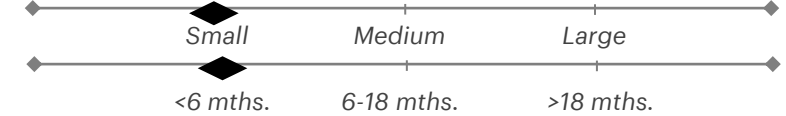
Investment/Effort

Investment (\$)

SMALL

Effort (Time)

<6 MONTHS



Benefits

- Additional revenue without significant increase in expenses.
- Reduce public funds necessary to maintain service levels.

Assumptions

- City administrators, Council and community understand and are willing to accept additional billing for previously unbilled activity by the RAA.
- Some insurance carriers will reimburse for non-transport services.
- Patients will pay for non-transport services.

Dependencies

- RAA Board and City Support.
- Improvements in processes can be made.
- Systems are compatible enough to be shared and effective.

Key Metrics

- Total billed charges of new categories
- Net revenue received from new charges

Stakeholders

- RAA
- City of Richmond Administration
- Patients
- Insurance Carriers



4B. Modernize Billing and Collections Policies and Practices (continued..)

Description

Enhance current billing and collections policies and processes to increase revenue in order to maximize revenue from 3rd party payers to reduce public funding; improve monthly and quarterly performance fee structure through updated polices, rigorous follow up and utilizing data; and pursue further utilization of outside contractors/third-parties for both billing and collections with strong performance indicators.

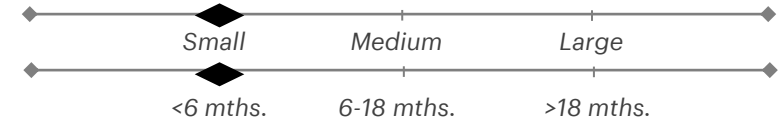
Activities & Key Steps

- 3. Revise ambulance fee schedule to at least 325% of Medicare Allowable.**
 - a) Current collection rates from commercial payers are close to 100%. An indication that the commercial payers would increase reimbursement if billed a higher rate.
 - b) Patients covered by Medicare and Medicaid would be unaffected by the rate change, since they have minimal to no out-of-pocket expense by rules of participation.
- 4. Create a policy to bill for Treat No Transport (TNT) services.**
 - a) For 1st or 2nd party calls in which the patient received enhanced assessment (i.e.: ECG, blood glucose test, etc.), or treatment (medication administration, etc.), but was not transported.
 - i. Should NOT apply to 3rd or 4th party callers in which no enhanced assessment or treatment administered.
- 5. Consider RFI/RFP for outside billing services.**
 - a) Evaluate potential for enhanced revenue for services provided.
 - i. Need to use caution as transitions to outsourced billing usually disrupts revenue stream for 12 – 18 months.
- 6. Establish process for RAA to access hospital face sheets to access patient insurance information.**
 - a) EMS providers often are unable to get accurate insurance info at the time of call, whereas hospitals have more time to obtain that information.
 - b) EMS providers often are unable to get accurate insurance info at the time of call, whereas hospitals have more time to obtain that information.
 - c) Information such as the patient’s insurance carrier, employer, next of kin, and eligibility for Medicaid are often determined during a hospital stay and are added to the patient’s face sheet until, or even post discharge.

Investment/Effort

Investment (\$) SMALL

Effort (Time) <6 MONTHS



Benefits

- Additional revenue without significant increase in expenses.
- Reduce public funds necessary to maintain service levels.

Assumptions

- Medicare and Medicaid allowable rates do not change.
- Commercial insurers have higher Usual and Customary Reimbursement (UCR) allowable.

Dependencies

- RAA Board and City Support.
- City may need to help convince hospitals to allow RAA access to face sheets.

Key Metrics

- Increase cash collected per patient encounter.

Stakeholders

- City of Richmond Administration
- Hospitals



4C. Modernize Billing and Collections Policies and Practices (continued..)

Description

Enhance current billing and collections policies and processes to increase revenue in order to maximize revenue from 3rd party payers to reduce public funding; improve monthly and quarterly performance fee structures through updated policies, rigorous follow up and utilizing data; and pursue further utilization of outside contractors/third-parties for both billing and collections with strong performance indicators.

Activities & Key Steps

7. Actively pursue Medicaid rate increase.

- a) Last rate increase -12 years ago, costs have escalated.
 - i. Many states have increased ambulance Medicaid rate to be in parity with Medicare allowable rate.

8. Actively pursue a Ground Emergency Medical Transport (GEMT) ambulance supplemental payment program.

- a) Used by many states to compensate public ambulance providers for low Medicaid reimbursement.
- b) Federal FMAP % dollars used to offset state expense.
- c) Given RAA's payer mix, this could significantly offset local subsidy by the City.

9. Consider investment in deductible monitoring process/agency to bill for ambulance services after the patient's deductible has been met.

- a) Reduces the amount that is attributable and payable by the patient.

Primary Activity Owner: Richmond Ambulance Authority

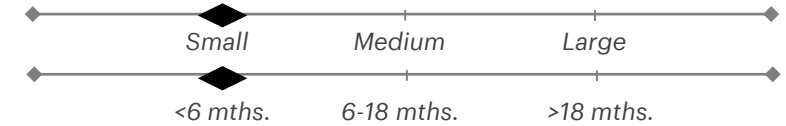
Investment/Effort

Investment (\$)

SMALL

Effort (Time)

<6 MONTHS



Benefits

- Additional revenue without significant increase in expenses.
- Reduce public funds necessary to maintain service levels.

Assumptions

- City advocacy with RAA at the state level, regulatory and legislative.

Dependencies

- RAA Board and City Support.
- City may need to help lobby for the GEMT program.

Key Metrics

- Increase cash collected per patient encounter.

Stakeholders

- City of Richmond Administration
- State Medicaid Office
- State Legislature.



5. Standardize Finance Policies across City and RAA

Description

Align RAA finance policies and procedures to those of the City, including financial reporting, budget controls, cash reserves and other best practices. Bring RAA budget and City subsidy request into the formal City budget process to align with Mayor budget submission.

Activities & Key Steps

1. Update RAA internal finance policies to better align with City policies

- a. Align RAA finance policies and procedures to those of the city, including around monthly variance and accounting reporting, budget controls, use of debt where appropriate, cash reserves and other best practices.
 - a. Complete implementation of reimagined financial system.
 - b. Coordinate RAA leadership request for meeting with City administrative leadership to formalize alignment of RAA financial and budget process with the city
 - c. Review the city budget process timelines and modify RAA budget process to be compatible with city budget process.

2. Fold RAA into the formal budget process

- a. Bring RAA into the formal City budget process earlier to align with Mayor budget submission.
- b. Align City Subsidy request with needs and transparency based on uncollectable bills and other services rendered that are otherwise not revenue generating.
 - a. Develop staff training on specific ways data is reported to support financial reporting and budget projections.
 - b. Research billing rates and establish a process to align ALS & BLS transport billing rates with EMS retail market
 - c. Develop a tiered collection process that is aligned to the transport types. There should be a process to maximize the Medicare and Medicaid reimbursements; a process to maximize commercial insurance and hospital collections.

Primary Activity Owner: RAA, with partnership from the Office of the Deputy Chief Administrative Officer (DCAO) for Finance and Administration

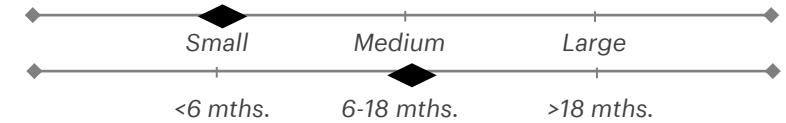
Investment/Effort

Investment (\$)

SMALL

Effort (Time)

<6 MONTHS



Benefits

- Enables employees to effectively utilize data driven decision-making and continuous service improvement
- Creates an accountable, open, and results-driven culture
- Promotes a dedicated, empowered, and skilled workforce

Assumptions

- Normalizing finance policies with the City will increase efficiency and sustainability.
- Operations results will be measurable and increase transparency and accountability.

Dependencies

- RAA and City Leadership commitment to change management.

Key Metrics

- Transport Rates; Revenue per Transport; Expenses per Transport
- Alignment with City's Adopted Budget

Stakeholders

- RAA
- Public
- City of Richmond Administration

6. Pursue shared services and centralization to drive efficiency and performance

Description

Seek out and review opportunities to improve efficiency & performance, especially through use of shared services.

- Formally pursue collaboration between DEC and RAA dispatch to better align response and improve patient outcomes. Pursue long-term solutions to co-locate and/or consolidate.
- Pursue opportunities to collaboration and shared services in back-office functions like HR, Finance and IT to better align needs and resources.

Activities & Key Steps

- Create a call distribution process from the moment of a 911 call to minimize the need to transfer 911 callers.**
 - When call hits the 911 switch, automated attendant tells caller to press 1 for PD, 2 for EMS, 3 for FD.
- Actively pursue call center/PSAP consolidation into single facility.**
 - Jointly operate PSAP with triple implementation of Priority Dispatch.
 - Emergency Police Dispatch (EPD).
 - Emergency Medical Dispatch (EMD).
 - Emergency Fire Dispatch (EFD).
 - Work to have call takers triple certified to prevent call transfers based on nature of the call.
- To the extent beneficial, consider functional alignment of services that can be shared/leveraged.**
 - City auditor already reviewed options for maintenance consolidation and recommended RAA do their own maintenance due to the expertise required.
 - RAA has outsourced most HR functions already.
 - RAA already has lower per gallon fuel expense than the City.
 - Other opportunities should be collaboratively explored, such as consolidation of the dispatch function.

Primary Activity Owner: DEC, with partnership from RAA

Value Drivers



Revenue



Cost



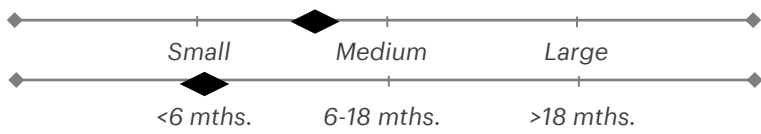
Improve Collaboration



Better Patient Outcomes

Investment/Effort

Investment (\$)	SMALL
Effort (Time)	<6 MONTHS



Benefits

- Reduction in administrative costs.
- Less demand on DEC, shortens call taking time, improves caller experience repeating information during call transfer.
- Standardized call taking process improves efficiency, effectiveness and quality.

Assumptions

- IT systems are compatible enough to be shareable. Necessary technologies can be linked efficiently.
- Processes for each entity (RAA, DEC & City) can be altered to take advantage of shared services.
- RAA and City are on the same 911 phone system to allow 1 button call distribution.
- RAA can bring city PD and/or FD onto a call if their assistance on the call is essential.

Dependencies

- Process functions needed by each entity (RAA, DEC & City) can be made compatible.
- RAA Board and City Support.
- Consolidated center achieves designation as an Accredited Center of Excellence by the International Academies of Emergency Dispatch (RAA already achieves this standard).

Key Metrics

- Call processing time (phone ring to unit dispatched).
- Cost to produce each service examined for sharing.
- Abandoned call rate.

Stakeholders

- RAA
- DEC
- City of Richmond Administration

7A. Align EMS Response Standards and Response Type to meet current needs

Description

Reconfigure response performance standards and type of EMS (RAA & RFD) assets sent to request.

Activities & Key Steps

- 1. Pursue updates to RAA response standards to reflect industry best practice and patient outcomes**
 - a. Update RAA response time standards and reporting to reflect desired patient outcomes and industry best practices. Adjust how calls are responded to, to reflect new performance metrics.
- 2. Pursue MOU's with City agencies like Behavioral health, social services and homeless to pursue alternative response type models**
 - a. Create new programs and MOU's with City to pilot various mental health, homeless and social service alternative response types for frequent callers, certain populations of callers and other opportunities to reduce EMS response. Establish monthly cadence to review success of pilots and adjust programs as needed.
- 3. Review and adjust existing RAA/RFD/RPD response times to better align needs and response rates**
 - a. Align RAA/RFD and RPD operations and response times to ensure best outcomes for patients. Hold a Community summit to better define the community's expectations for Emergency response and adjust long-term response and operating models to reflect new direction.

Value Drivers



Revenue



Cost



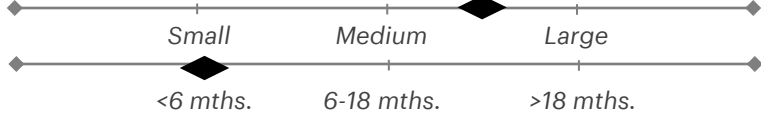
Improve Collaboration



Better Patient Outcomes

Investment/Effort

Investment (\$)	SMALL
Effort (Time)	<6 MONTHS



Benefits

- Substantial enhancement in availability of existing EMS resources (RAA & RFD), without significant increase in cost.
- Reduced expense for better performance per case.
- Improved safety for personnel, patients and the public through less emergency responses.
- Appropriately aligned expectations of City officials and the public = reduced dissatisfaction.

Assumptions

- Necessary public education will be performed.
- Adjusted response times will be acceptable to City officials and the public.

Dependencies

- Ability to identify rational response time standards.

Key Metrics

- Public satisfaction surveys
- RFD response volume and times
- RAA response volume and times

Stakeholders

- RAA
- RFD and RPD
- City of Richmond Administration
- The Public

7B. Align EMS Response Standards and Response Type to meet current needs, continued

Description

- Pursue updates to RAA response standards to reflect industry best practice and patient outcomes.
- Pursue MOUs with City agencies like Behavioral health, social services and homeless to pursue alternative response type models.

Activities & Key Steps

- 4. Review patient outcomes by Emergency Medical Dispatch (EMD) determinant to identify which determinants can be safely managed through alternate response models.**
 - a) Determinants that result in low % of ALS interventions, unstable vital signs, of HOT transports to the ED should be eligible for a BLS (dual EMT) ambulance response.
 - b) Determinants with low transport % (i.e.: < 30%), should be responded to by an RAA single resource Quick Response Vehicle (QRV) to assess and determine if transport resources are required.
- 5. Collaborate with community stakeholders and Medical Director to re-align response time goals with EMD determined presumptive clinical needs.**
 - a) Time-Life Sensitive responses (ECHO determinants) should receive highest priority response and shortest SYSTEM response time.
 - i. First Medical Contact (FMC) from time of call to FMC of < 7 minutes w/90% fractile reliability.
 - ii. FMC can be from a Medical First Response (MFR) unit (i.e.: fire engine).
 - b) Low-Acuity medical calls (OMEGA, ALPHA and BRAVO determinants) could have longer response time goals.
 - i. Some communities are revising these standards to < 60 minutes at the 90% fractile reliability factor.

Value Drivers



Revenue



Cost



Improve
Collaboration



Better Patient
Outcomes

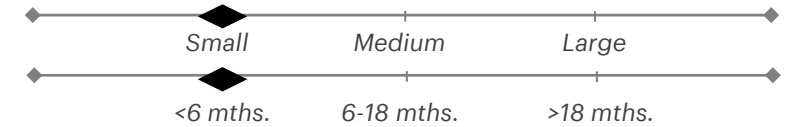
Investment/Effort

Investment (\$)

SMALL

Effort (Time)

<6 MONTHS



Benefits

- Less demand on transport capable ALS ambulances.
- Less demand on transport capable BLS resources.
- Reduced staffed ambulance unit hours to reduce costs and public fund offset

Assumptions

- RAA has clinical and dispatch data to support this analysis.
- RFD has capacity to facilitate a 7-minute, 90% reliability goal for ECHO calls.

Dependencies

- RAA Board and City Support
- RFD responds to only high acuity EMS calls (DELTA and ECHO) calls in which the presence of a MFR unit will likely have an impact on patient outcomes and not committed on responses that the presence of a MFR unit will likely NOT have an impact on patient outcomes.

Key Metrics

- Call processing time
- Abandoned call rate

Stakeholders

- City of Richmond Administration

7C. Align EMS Response Standards and Response Type to meet current needs, continued

Description

- Pursue MOUs with City agencies like Behavioral health, social services and homeless to pursue alternative response type models.
- Review and adjust existing RAA/RFD/RPD response times to better align needs and response rates

Activities & Key Steps

- 6. Review patient outcomes by Emergency Medical Dispatch (EMD) determinant to identify which determinants can be safely managed with a non-lights and siren (COLD) ambulance response.**
 - a) Determinants that result in **low % of ALS interventions, unstable vital signs, of HOT transports to the ED** should be eligible for a **COLD** ambulance response.
 - b) A national goal of a **lights and siren (HOT) response to < 30% of 911 EMS calls.**
- 7. Increase RFD response capacity for high-acuity medical calls.**
 - a) As part of the clinical data/EMD resource determination, limit RFD MFR activity to those calls in which the presence of a MFR unit is essential (ECHO calls).
 - b) Added benefit of reducing response volume demand for RFD.
- 8. Include RAA in the specialized response for behavioral health responses**
 - a) Community paramedics can be a valuable resource on scene to provide medical assessments to rule out medical causes for altered mental states.
 - b) Create an alternate destination facility for behavioral health and substance abuse patients.
 - c) RAA's ACE accredited medical dispatch center could be used to facilitate a caller with behavioral health or suicidal ideation with the regional '988' call center.
 - i. Preventing the need to send any response.

OWNER for the entirety of #7: RAA, with partnership from the Office of the Deputy Chief Administrative Officer (DCAO) for Human Services

Value Drivers



Revenue



Cost



Improve Collaboration



Better Patient Outcomes

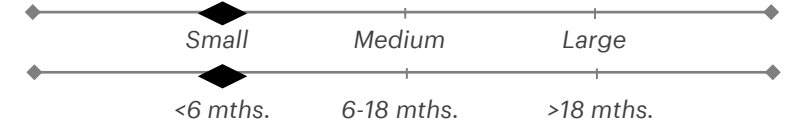
Investment/Effort

Investment (\$)

SMALL

Effort (Time)

<6 MONTHS



Benefits

- Improve community and provider safety.
- Reduce emergency medical vehicle crashes.
- Reduce "wake effect" crashes when vehicles move out of the way of EMS vehicles responding HOT.
- Assure MFR on-scene for ECHO calls in 7 minutes with 90% fractile reliability.

Assumptions

- RAA has clinical and dispatch data to support this analysis.
- RAA can connect with direct call transfer to the regional '988' center.
- Reduced RFD response volume enhances unit availability for time-life sensitive calls.

Dependencies

- RAA Board and city support.
- Behavioral professionals support.

Key Metrics

- HOT vs. COLD response %
- Calls managed by enhanced EMD in the call center.

Stakeholders

- City of Richmond Administration
- Behavioral health centers & personnel
- RFD

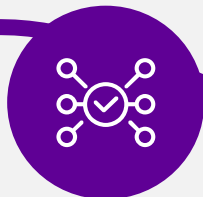


Implementation Roadmap

Immediate Next Steps

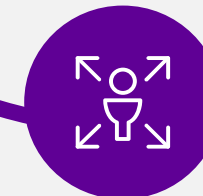
Next 30 Days

- Formalize initiative project management and governance.
 - RAA, RFD, DEC and City need to identify point people to work on the initiatives.
 - Create a project team.
 - Establish the role and responsibility of the committee and the reporting structure of the committee.
- Create a detailed project plan to address the initiatives.
- Identify all stakeholders and create a comprehensive communication strategy and plan to cascade recommendations.
- Schedule ongoing initiatives planning and status meetings.
- Seek buy in from key stakeholders.



Next 60 Days

- Start planning initiative budgets and seek approval for additional funds from appropriate channels as needed.
- Initiate review of existing policies and procedures and identify gaps to meet future state.
- Initiate discussions with City, including Behavioral Health, Social Services, RFD and DEC to develop MOUs and SLAs.
- Initiate review of RAA Board structure and member qualifications.



Implementation - Phase 1 Roadmap

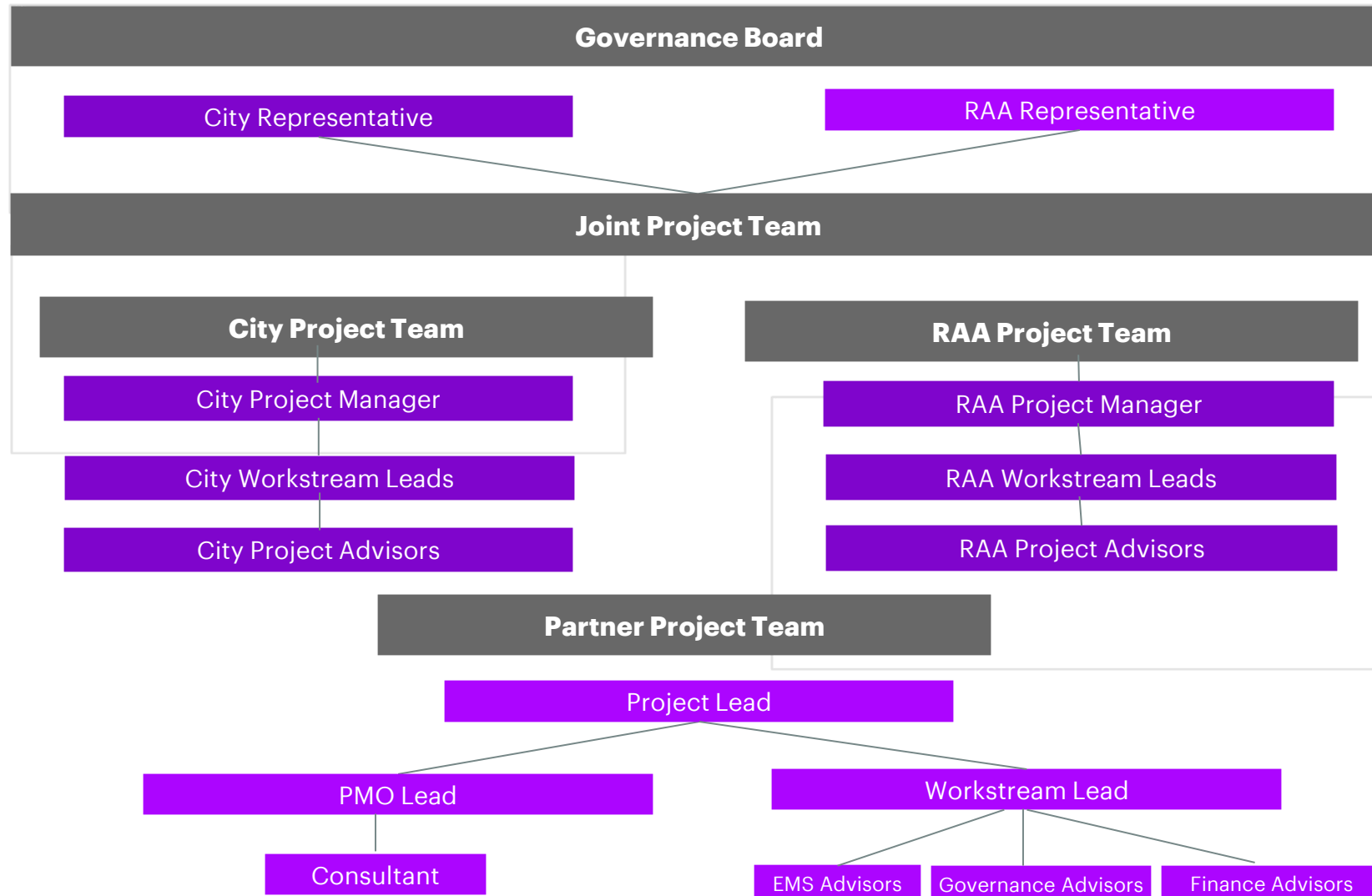
	Assessment Phase	Implementation - Phase 1		Implementation - Phase 2				Implementation - Phase 3	
	Implementation Approval	Quarter 1- 2023	Quarter 2- 2023	Quarter 3 - 2023	Quarter 4 - 2023	Quarter 1 - 2024	Quarter 2 - 2024	Quarter 3 - 2024	Quarter 4 - 2024
		Project Management							
Re-invigorate Shared EMS Response		Pursue Memorandum of Understanding (MOUs) between the City and RAA ★ Re-establish consistent meetings between the City and RAA		Approach Richmond Community stakeholders as "one system" ★		Public Safety Emergency Response Communication Campaign ★			
Update RAA Governance Model		Review existing RAA Board memberships and Medical Protocols and pursue changes to make board more independent ★		Adjust Governance Model ★					
Optimize Current Financial Model				Review and right size charging rates ★		Update and standardize existing charging polices ★		Update subscription model ★	
Modernize Billing and Collections Policies and Practices				Improve monthly and quarterly performance rates ★		Pursue further utilization of outside contractors/third-parties ★			
Standardize Finance Polices across City and RAA		Fold RAA into the formal budget process ★		Update RAA internal finance polices to better align with City polices ★					
Pursue shared services and centralization to drive efficiency and performance		Formally pursue collaboration between DEC and RAA. Pursue long-term solutions to co-locate and/or consolidate ★		Pursue opportunities for collaboration and shared services in back office functions like HR, Finance and IT ★					
Align EMS Response Standards and Response Type to meet current needs		Pursue MOU's with City agencies to pursue alternative response type models ★		Review and adjust existing RAA/RFD/RPD response times ★					
		Pursue updates to RAA response standards							

Implementation - Phase 1 Workstreams

Project Governance Structure

Workstream	Major Deliverables	Project Team
<p>Project Management Office</p> <ul style="list-style-type: none"> Establish PMO structure and staff PMO support Create Project Governance and Detailed Implementation plans Manage KPIs and other work stream deliverables 	<ul style="list-style-type: none"> ✓ Early establishment of robust project plan, a project manager and team, and KPI's to measure project success 	<p>★</p> <p>Owner- Governance Team Support- Project Team</p>
<p>Shared EMS Response</p> <ul style="list-style-type: none"> Drafting and defining RAA and City umbrella response through MOUs that define collaboration, alternative response types, policies, data and performance across public safety Coordinate Public Safety leadership and subject groups 	<ul style="list-style-type: none"> ✓ Deliver MOUs outlining new op model and response ✓ Support coordination and running of Public Safety Meetings 	<p>★</p> <p>Owner- City/DEC Support- Project Team</p>
<p>RAA Governance Model</p> <ul style="list-style-type: none"> Detailed Review of existing model and benchmark research into best-in-class governance models Collaborative visioning effort for future governance model with relevant stakeholders 	<ul style="list-style-type: none"> ✓ Detailed recommendations for adjustments to existing governance model and legislative, governance and op model steps needed 	<p>★</p> <p>Owner- Governance Team Support- Project Team</p>
<p>Finance and Billing</p> <ul style="list-style-type: none"> Support integration of RAA into formal City budget process and support throughout FY23 Budget process Identify near terms adjustments to billing and collecting process and finance model and implement changes 	<ul style="list-style-type: none"> ✓ Craft new City and RAA budget process and support RAA and City through FY23 Budget process ✓ Detailed implementation plans for finance quick wins 	<p>★</p> <p>Owner- City & RAA Finance Support- Project Team</p>
<p>Shared Services</p> <ul style="list-style-type: none"> Review opportunities for short-term adjustment to RAA and City emergency response model while considering planning for longer term alignment Review and select 3 opportunities for other shared service analysis 	<ul style="list-style-type: none"> ✓ Identify near term DEC/RAA alignment improvement opportunities and assist in implementation ✓ Three shared service opportunities assessment 	<p>★</p> <p>Owner- City/DEC Support- Project Team</p>
<p>EMS Response Standards and Response</p> <ul style="list-style-type: none"> Detailed Review of existing response model and identify opportunities for adjustment Assist in implementing changes needed to facilitate response change at RAA, Board and City 	<ul style="list-style-type: none"> ✓ Identified response model changes and implementation plans ✓ KPIs to help measure response adjustments and performance improvements 	<p>★</p> <p>Owner- RAA Support- Project Team</p>

RAA Joint Project Team





Thank you

Appendix

Sample City of Richmond and RAA Subsidy Model

City and RAA could pursue a long-term funding agreement that brings sustainability and consistency to annual subsidy funding

Key Observations/Analysis

- The City and RAA subsidy agreement will be based on the development of a mutually approved financial funding gap.
- The funding gap will be the difference between of the RAA budgeted revenue and budgeted expenses.
- The budget process will be aligned with the city's budget process. The RAA projected budget will include specific agreed upon revenue and expense amounts
- The initial projected budget be reviewed against the last audited financial statement. In addition, the financial performance of the RAA will be reviewed at the mid-year point using actual revenue and expense data. The mid-year review will determine if the subsidy agreement amount needs to be adjusted based on the results of the mid-year assessment.
- In addition, the RAA would pursue previously recommended Revenue changes, to increase Service revenue on an annual basis

City Subsidy Agreement	Example Annual Budget Amounts (Example using FY 2021 Audited Actuals)
Service Revenues:	
Medicare & Medicaid Patient Transport Collected Billings	\$ 8,934,762
Insurance Company Patient Transport Collected Billings	\$ 2,157,677
Hospital Contract (includes VA) Patient Transport Collected Billings	\$ 2,245,724
Patient Private Pay Patient Transport Collected Billings	\$ 895,831
Total Service Revenue	\$ 14,233,994
Operations Expenses:	
Operational Personnel	\$ 13,530,664
Operational Non-Personnel	\$ 4,869,411
Total Operational Expense	\$ 18,400,075
City Subsidy	\$ (4,166,081)

Executive Summary- Current State Recap

RAA Assessment Approach

This assessment is focused on developing a clear understanding RAA's current **ambulance and financial performance**, reviewing the **current operating model** and recommending **opportunities to improve** all three.

**1**

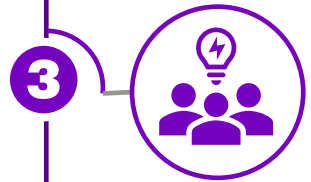
01 Current State Assessment

We have focused on assessing and documenting the current state of RAA's financial and operational performance and reviewing its current operating and governance model.

**2**

02 Prioritized Recommendations and Sustainable Financial Model- Draft Report

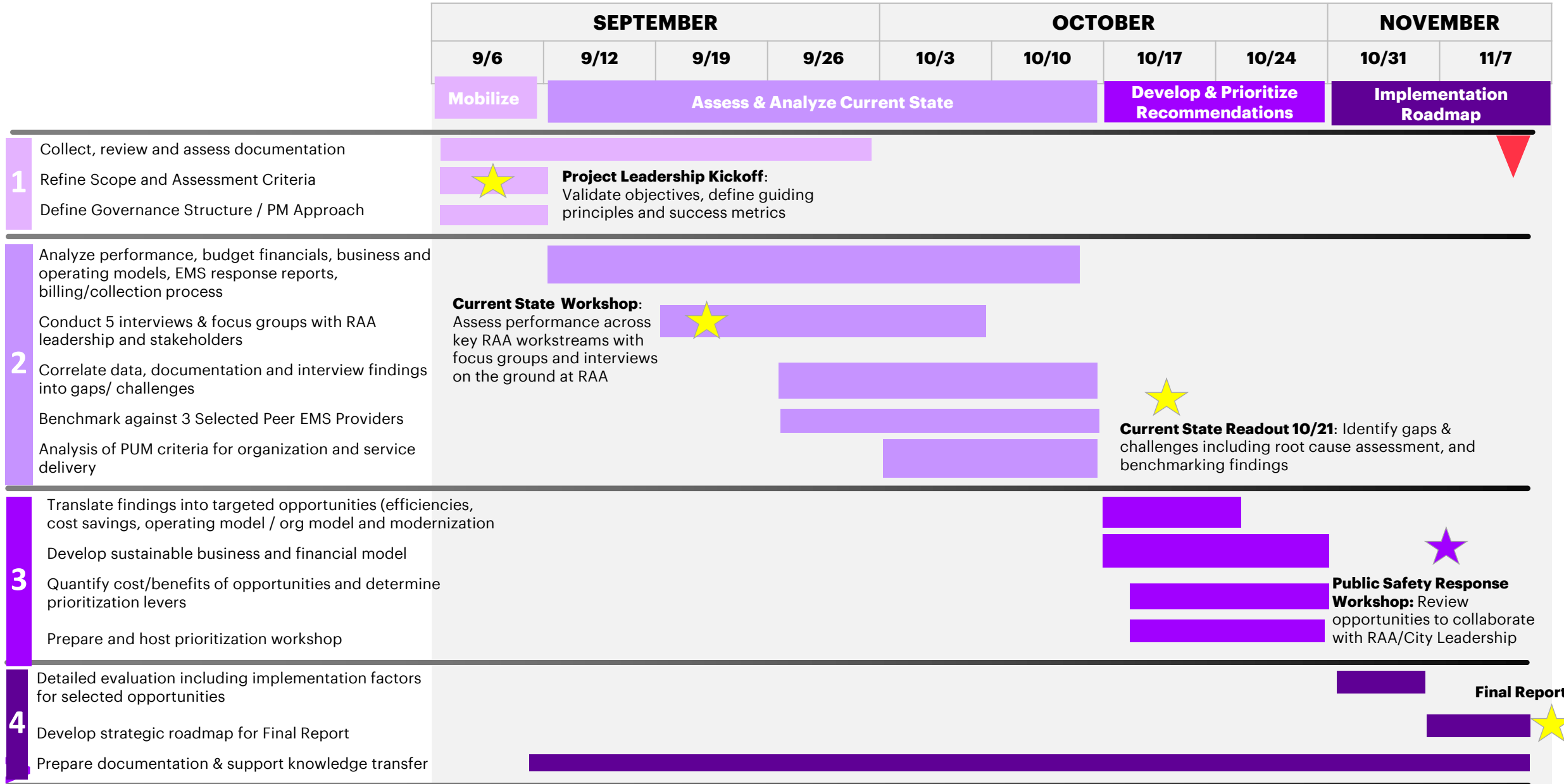
Based on our current state findings, we will translate findings into a draft of targeted opportunities (incl. efficiencies, cost savings, operating model / org model changes, or other automation or modernization approaches).

**3**

03 Final Report with Roadmap for Implementing Recommendations

In this deliverable, following the draft report, we will meet with Project Stakeholders to assess recommendations and refine them based on feedback. We will then work to prioritize and map final opportunities and provide the City and RAA with a roadmap to implement the proposed changes.

RAA Assessment Project Schedule



Current State Activities

In order to inform the Current State Assessment, the project team utilized a variety of **stakeholder interviews**, **deep dive workshops**, **document review** and analysis and **benchmarking**.



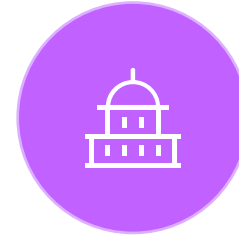
1 Stakeholder Interviews

- Met with a variety of **City department leaders** to review current state of RAA, including
 - CAO, DCAO
 - Fire Chief and Deputies
 - Finance Director
 - Police Chief
 - DEC Chief and Deputies
- Met with Various RAA Stakeholders including
 - RAA Board Chair
 - City Council Public Safety Chair
 - City Council Board Appointment



2 RAA Artifact Review

- Requested and **collected 100+ RAA documents** across a variety of categories
 - Board Metrics & Quality
 - EMS System Overall
 - Finance/Collection & Billing
 - Education and Training
 - Dispatch & Command Center
 - Legal, policies and Procedures
- Performed data clean up and validation for use in analysis and benchmarking
- Various non-RAA documents across City, stakeholders



3 RAA Workshop

- Held **three workshops over two day onsite** with **over 20 RAA Leadership Staff** covering. Workshops covered:
 - History, Operating Model, Leadership philosophy, current relationships with City and Stakeholder, and current pain points,
 - Finances, current and recent budget history and current collections/billing methodologies and performance
 - Ambulance Operations and Ambulance Performance, accountability, training and technology



4 Benchmarking Documents

- Identified **three peer EMS service organizations for comparison** to RAA
 - Regional Governmental Authority EMS agency in North Texas
 - County-based high performance EMS system in Central North Carolina
 - Regional Governmental Authority EMS agency in Northern Nevada
- Reviewed Financial, Billing/Collection, Governance model, Performance and accountability data.
- Collected best practices and methodology for comparison and potential recommendations for RAA improvements

Summary of Current State Strengths

The RAA remains a **respected organization** within the City of Richmond's public safety and emergency response ecosystem, **retaining national accreditations** and **high marks from customers** despite navigating an industry that has been severely impacted by COVID-19

Richmond Ambulance Authority

- **A national leader in EMS delivery**, maintaining accreditations from CAAS and IAED
- Current ambulance & financial performance **remains relatively high-functioning**
- **Commitment to data and quality improvement** has helped mitigate national trends in EMS landscape

Ambulance Performances

- **Appropriate Quality Assurance and Quality Improvement** procedures and policies
- Demonstrated **significant flexibility** in operating model and system design
- Leverages their system status management and call triage process to **improve efficacy and efficiency**

Finance Efficiency

- Demonstrates **good fiscal practices** around cost controls, revenue maximation and cash reserves
- Costs are **in line with trends for broader government** and EMS services, though lack predictability
- Billing/Collecting, generally in line with industry expectations and performance, with opportunities to improve

Staffing & Deployment

- Has proactively tried to **address recruitment and retention** issues in EMT ranks
- **Dynamic deployment allows** real time management of system
- Overhead positions are **appropriate for the size of the agency.**

Governance and Operating Model

- Governance and operations **remains reasonably stable**, with opportunities to improve
- Most stakeholders generally **feel responded to and heard**



Summary of Current State Challenges

Challenges do remain at the RAA with significant opportunities for improvement in **governance, ambulance response times, operational efficiencies and financial performance and sustainability**

Richmond Ambulance Authority

- Meets industry performance standards, but **consistently falls short of RAA performance metrics**
- **Deteriorated relationship** between RAA and City effecting operations and service to residents

Ambulance Performances

- Response times fall below 90% threshold for 8:59 minute Priority One calls **39% of the time.**
- **Significant inefficiency** amongst public safety response coordination in Richmond
- Still fails in responding to certain calls, including **NUA (No Units Available)** for certain high priority 1 calls.

Finance Efficiency

- Current budget costs are in line, but long term forecast for RAA is **unsustainable**
- Budget process **disconnected, and not transparent**
- Billing/Collecting **performance inconsistent** across payor types and regions

Staffing & Deployment

- **Understaffed** across both operations and Ambulance service
- Ecosystem issues remain around staffing levels, deployment and **“wall time”/Hospital delays**

Governance and Operating Model

- RAA is both **“regulator” and “regulated”**
- Board should be able to **drive meaningful change through Board action**
- Medical director policy **inconsistent with PUM model independence**



Current State Summary - Governance and Operating Model

The RAA has **evolved from its original PUM model**, and governance is no longer in keeping with best practice. Despite this, operations and feedback from stakeholders **remains positive and performance falls in line with industry standards**.

Key Observations/Analysis

- Since its authorization and establishment by State and City law over 30 years ago, the RAA has **evolved and deviated from the classic PUM model that was intended**.
- Based on its current state, the RAA can no longer be considered a classic PUM. The Authority is best described now as **a quasi-governmental, third-service EMS and MTS agency**.
- While legal, this construct is not in keeping with the original Richmond PUM or a classic PUM and calls into question the appropriateness of the **Authority's independence from external oversight**, its ability **to set fees and fines** for itself and **its self-policing power**.

Detailed Strengths:

- RAA has deviated from classic PUM model, but governance remains in place and operations remain steady with industry standards
- Most Stakeholders interviewed generally **feel responded to and heard**, including tangible improvements in operations over the past year
- Most Members of the Board report that **data is produced and disseminated** to the Board and that RAA staff **are responsive to requests and questions**

Detailed Challenges:

- RAA is **both "regulator" and "regulated"**, creating an appearance of a conflict.
- **All members** of the current Board should be able **to drive meaningful change through board action**.
- While consistent with industry standards, current **Medical Director policy inconsistent to PUM model independence**.
- Some board members expressed that **data was not shared** in a timely manor, especially around budget



Current State Summary - Ambulance Service Performance

Despite high-profile challenges and service disruptions over the past several years, the RAA's performance **remains in line with industry standards**, though **consistently below their own performance targets**

Key Observations/Analysis

- From an ambulance performance perspective, **the RAA is operating well**. Based on industry research, existing peer organization understanding, and scientific studies, the RAA **operates within the top 25% of operations nationally**.
- RAA has in place all the **appropriate procedures and policies** that provide good operations and management of an EMS agency. This includes a robust clinical quality review process.
- However, the RAA does have ongoing issues, that while not unique to the RAA, does still **hinder performance and collaboration with RAA stakeholders**.

Detailed Strengths:

- RAA has in place **appropriate Quality Assurance and Quality Improvement** procedures and policies including a robust clinical quality review process.
- They have demonstrated a **significant flexibility in operating model and system design**, translating to improved efficiencies and addressing some of call response issues.
- **Leverage their system status management and call triage process to a high degree** in order to improve efficacy and efficiency.

Detailed Challenges:

- **Response times fall below 90% threshold** for 8:59 minute Priority One calls **39%** of the time.
- **Significant disconnect amongst public safety response coordination** in Richmond, including around standard protocols, response times, emergency dispatch and data validation.
- The **RAA continues to fail in responding to certain calls**, including NUA (No Units Available) for certain high priority calls.



Current State Summary - Financial Management & Performance

Budget, financial management and billing/collecting performance **is in line with trends given COVID-19**, but **the long-term forecast for RAA is unsustainable**. RAA should pursue **changes to budgeting, revenue and billing and collections processes**.

Key Observations/Analysis

- Overall Financials performance for RAA is **in-line with expectations and industry benchmarks**, but **long-term sustainability questions remain**.
- Costs have grown **reasonably in recent years through staff wages** and other targeted spending, despite relatively stable number of transports and call volume.
- Revenue is flat or declining, and billing and collecting processes produce expected results for industry, **opportunities exist to better align, modernize and update revenue processes**.
- Overall relationship with City, a critical funding partner, needs to be improved to generate **more accountability and transparency**.

Detailed Strengths:

- Overall costs are in line with **trends for broader government and EMS services**.
- Generally, the RAA attempts to **maximize revenue**, operate **efficient and lean operations**, while maintaining relatively **stable cash on hand reserves**.
- Billing/Collecting, while some challenges, **generally in line with industry expectations and performance**

Detailed Challenges:

- Long term financial **projections create an unsustainable model**, needs to be addressed **now**.
- Overall budget process **disconnected, not transparent** with City and needs to be re-structured and re-designed.
- Insufficient **reporting and ongoing monitoring of budget** leads to large variances in the short and long-term.
- Billing/Collecting performance has vacillated up and down over recent years, **RAA performance inconsistent with policies and collections** across various payor types



Current State Summary – Staffing and Deployment

Staffing remains a challenge for RAA, despite **efforts to fill vacant positions** and maintain staffing levels through a nationwide trend of high turnover and competition at EMS organizations. **Deployment and operations are flexible enough** to help mitigate some of these challenges, but are **not enough to stem negative performance trends**

Key Observations/Analysis

- Overall vacancy rates, especially among **ambulance operation personnel (ALS/BLS) remains high**
- Operations and deployment model is **flexible and meets industry standards**
- RAA currently **uses predictive analytics** to determine staffing, which is supported with management input, knowledge of scheduled events such as festivals, weather conditions and budget.
- Post **COVID deployment and “wall time” issues linger**, creating sub optimization of resources, including longer than expected on assignment times.

Detailed Strengths:

- Operations and deployment model is **flexible and meets industry standards**
- Has proactively addressed recruitment and retention issues in EMT ranks, through improved compensation and benefits
- Overhead positions are appropriate for the size of the agency. **Neither lean, nor top-heavy.**

Detailed Challenges:

- Operations are **not staffed appropriately**, and overly relies on overtime creating operational inefficiencies and driving down performance
- **Turnover across the organization is high**, but consistent with industry trends post-covid 19 and relatively higher pay in other similar fields (hospitals, public safety)

