The purpose of this study was to evaluate the various options available for the efficient and cost effective delivery of 9-1-1 Emergency Ambulance Transportation services for the Cities of Brea and Fullerton.

Brea Fullerton EMS Study

A.P. Triton LLC

Fire Chief
W. Knabe
Fullerton and Brea Fire Department
Fullerton and Brea, CA

Chief Knabe,

A.P. Triton LLC is pleased to provide you with the following feasibility study for consideration of providing ambulance transport service for the Cities of Brea and Fullerton. In the preparation of this document, we took numerous factors into consideration, the most important being the collaboration between our company, you and your staff. The intent of the study is to provide you with pertinent and applicable information which will allow you to make the best possible decision for how to proceed in this matter. We feel that our knowledge in this arena is such that it will provide you will a full spectrum of ideas from which to choose. We look forward to continuing this process, assisting you with the selection of the best option for you and your agency, as well as implementing your selection in the near future.

Sincerely,

A.P. Triton LLC©

Section 1: Executive Summary

The Cities of Brea and Fullerton, specifically the Fire Department, are currently exploring options for ways to maximize efficiencies and where possible merge services between the two cities for fire protection. While one consulting firm is focused on the intricacies of merging the two agencies, AP Triton is working on the possibilities of merging the EMS delivery of service as well as the possibilities of assuming the role of ambulance transport provider. Currently both agencies provide Advanced Life Support services "ALS", while transport services are provided by a private ambulance provider. This arrangement has served both cities well and all parties have enjoyed a good relationship over the years.

The Cities of Brea and Fullerton are in a unique situation that offers both entities opportunities with respect to 9-1-1 Emergency Ambulance Transportation services. The City of Fullerton is a clearly recognized Health and Safety Code Sec. 1797.201 provider and retains not only the right to provide the ambulance service but the statutory obligation as well. This is because the City has either directly provided or contracted for ambulance services since 1980 and is ultimately legally responsible for both the financial and operational provisions of ambulance services within their jurisdiction. This obligation, under California Health & Safety Code §1797.201 (.201), allows the City to administer and operate their ambulance services independently from the rest of the County unless the City has transferred this obligation to the County, which the City has not.

The City of Brea's position is not as clear in this regard. The City of Brea is recognized within the State of California EMS Authority's April 2016 Emergency ambulance operating

zones document as an 'exclusive ambulance zone awarded without a competitive process under H&S Code 1797.224.' However, it lists "Emergency Ambulance Services" (EAS) as the recognized provider not the City of Brea. The provision of Emergency Medical Services (EMS) is best described as a pyramid with the State EMS Authority (EMSA) at the top. EMSA has, among other things, the responsibility to insure there is a plan for ambulance coverage for all areas of the State. Beneath EMSA on this pyramid are the Local Emergency Medical Services Administrations (LEMSA) that oversee the administration of and approve the operations for that County or geographic area of the State. Within each LEMSA's area may reside one or more Emergency Operating Areas EOA's for ambulance services. Beneath the LEMSAs are the providers, both those who transport and those who do not transport but who directly provide EMS services. Fullerton has been designated as Ambulance Zone OA-7 and Brea is listed as EOA-2 within the County of Orange EMS Operating Plan. The purpose of an EOA, in broader terms, is to construct a geographical area that creates a market share combining high, medium, and low payer mixes in order to maintain financial stability to support the ambulance provider. This creates enough total paying transports to offset the losses from transporting low or non-paying transports. In many cases this is easily accomplished, as the EOA is fairly large and there is an economy of scale with larger operations. As the EOA becomes smaller and/or the payer mix revenue potential declines, the ability to recover costs, or make a profit, becomes more difficult. In the case of both Fullerton and Brea, the payer mix revenue is relatively strong with a call volume that is average for their size. Should the cities consider a merger of services the increase in service area could lend itself to a greater economy of scale that would increase system capacity, promote efficiencies, and possibly decrease cost.

As we move forward through this document there are three questions that must be addressed by both the Cities of Brea and Fullerton:

- Is it in each City's best interest to continue the provision of 9-1-1 Emergency Ambulance Transportation services with a private contractor?

- Should each City consider moving into providing the 9-1-1 Emergency Ambulance Transportation services themselves and if so, how does the City best do this?

- Should both cities consider a merger of EMS transport services either through a fire department merger or formation of a JPA for the provision of transport services?

The purpose of this study is to evaluate the various options available for the efficient and cost effective delivery of 9-1-1 Emergency Ambulance Transportation services for the Cities of Brea and Fullerton. The objective was to determine the key factors that are important for each City in providing these services and determine the most appropriate delivery system to meet these objectives. It is the opinion of this consulting firm that the potential for both EOA's to support a Fire Department based 9-1-1 Emergency Ambulance Transportation system managed by the Fullerton and Brea Fire Department is not only feasible, but may produce a level of cost recovery that offsets the cost of the service, supports the infrastructure and possibly generates additional revenue. Due to the challenges with regard to call volume, transports per year and resident population, the system delivery model for Brea is much more limited than in larger systems, but there are still several options available. It is our recommendation that the Cities of Brea and Fullerton strongly consider moving into the 9-1-1 Emergency Ambulance Transportation service understanding the exposure to risk is minimal.

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Section 2: Cities of Brea and Fullerton Fire Department Formal Feasibility Study

The Cities of Brea and Fullerton Fire Departments, also referred to as the Department or Fullerton/Brea Fire, contracted with A.P. Triton LLC© to provide a feasibility study for the assessment of 9-1-1 Emergency Ambulance Transportation operations. The scope of work was to determine the economic value of the system available for 9-1-1 Emergency Ambulance Transportation operations within each of the City limits, recommend the best method for Fullerton/Brea to provide 9-1-1 Emergency Ambulance Transportation service, and determine the availability of additional reimbursement options. To provide 9-1-1 Emergency Ambulance service, Fullerton/Brea has several options. The first possibility is for the Department to provide 100% of the ambulance service using Firefighter/EMT's (Newport Beach and Orange) the second alternative includes providing 100% of the ambulance service using a new rank of employees identified as Single Role Emergency Medical Technicians or Ambulance Operators (AO) who would be classified as non-safety personnel (Huntington Beach). A third option would be to create a public-private partnership with a private ambulance provider and the Department. This partnership could have the Department provide a limited number of ambulances and the private ambulance company provides the remainder of units (San Clemente). Or the Department could

Fullerton/Brea: Has several options to choose from when considering whether or not to assume operational and administrative control of the city's ambulance services.

- Provide 100% of the ambulance service using cross-trained Firefighters
- Provide 100% of the service with Single Role EMT's or Ambulance Operators
- Partner with a private ambulance company and share transport responsibilities
- Partner with a private ambulance company and provide no transporting units but maintain EOA control

consider contracting out 100% of the ambulance service to a private contractor with the Department retaining control of the service (Santa Ana/Contra Costa). Another option would be the formation of an ambulance JPA or public utility model that is operated by both cities with revenue distributed to each city. Finally, the Department could continue the way they operate today with a private provider under contract with the City. Within these possible deployment models are numerous sub models that can be created with multiple staffing options and cost structures.

With each scenario, this study will define a financial breakdown which will include: cost of development, cost of infrastructure, startup costs, overhead costs, revenue received and profits to be gained. With the information provided in this report each Department will have the information needed make a sound and objective decision as to whether a merging of and/or assumption of ambulance services is in the best interest of their City, citizens, and visitors to Brea and Fullerton.

When determining whether or not to provide 9-1-1 Emergency Ambulance Transportation services, perhaps the most difficult aspect is determining what criteria to use for evaluation. For the private sector, the decision is relatively simple; the goal is to provide the best patient care possible at the lowest cost in order to extract the maximum amount of profit, or, at the very least, maintain a profit margin that sustains the operation. This formula is not necessarily concurrent with the goals of the public sector provider. In order to determine the best model for the provision of 9-1-1 Emergency Ambulance Transportation services, the Department must first determine their objectives or reasons why they are looking to provide the service. Reasons for moving into the ambulance transport service can include: increasing the number of

firefighters on-duty each day by adding cross-trained Firefighters, expanding the types of services already being provided, generating new revenue sources, enhancing the level of patient care that is currently being provided, or creating stability (local control) in a system. While each of these goals is not mutually exclusive, and several of them may even be combined, each example necessitates a very different deployment strategy and thus a very different infrastructure, startup and operational cost. Determination of success is not always determined by the revenue received but rather by whether or not the objective(s) are met. If the objectives are to deliver a better level of patient care, shorter response times, and lower unit hour utilization than what is currently being delivered, and it is ascertained that the selected deployment model meets or exceeds all of these objectives, the program would be considered a success regardless of cost.

Although the fiscal impact is not the sole reflection of success in today's fire service, the rising cost of providing service is a reality, and revenue must be considered a factor. Service related industries rely on providing a needed service at a cost the public is willing or able to pay and maintaining a profit margin in order to be successful even if that profit is then reinvested into the business. The level of success is evaluated by how closely the end result is to meeting the needs and goals which were determined prior to the outcome and comparing this to the fiscal impact.

There is a misconception that private industry is able to provide services at a lower cost than local government. This myth is particularly prevalent when it comes to the emergency ambulance industry. Private industry claims that the high employee cost of Firefighter personnel staffing ambulances is not cost efficient and increases the cost to the taxpayer. Comparisons of costs do show that when comparing the cost of public sector employees against private sector employees the public sector cost can be higher. However, when factoring in the operational cost, infrastructure and profit, the overall system costs are extremely close, if not swinging towards the public sector, as being more cost effective. As we have seen in other systems where fire departments have employed non-suppression Ambulance Operator's "AO's" the cost per unit hour between the public and private sector are nearly the same. This concept will become even more of an equalizing factor as the state moves forward with the mandated increase in the minimum wage. At present one Orange County ambulance provider has stated that the industry standard for profit margin is between 3%-7% (*although our experience is showing 10-15%*) with hourly wages being at or near the current minimum wage of $10.00 per hour. As the minimum wage will increase by 50% over the next five years the differential in public vs. private wages will likely swing even further toward public entities being the more cost efficient. Should the private sector continue with the 10-15% profit margin this will further swing the efficiency towards the public sector. What private ambulance companies fail to acknowledge is the cost of the entire EMS system and its components, and this is where the misconception lies. This is a critical error, as the actual transportation of the patient is the last and least expensive component of the entire EMS system.

Fire departments like Fullerton and Brea are already staffed, equipped, trained, and currently responding to and providing the most crucial and expensive part of the EMS delivery system.

9-1-1 Emergency Ambulance Transportation has often been referred to as the most expensive taxi ride in the State. Again, reality shows that it is actually the cost of readiness, dispatching of resources, training and on-scene treatment provided by the system (Fullerton/Brea) where the most significant cost is incurred. The act of driving the patient to the hospital amounts to mere pennies on the dollar compared to the cost of the system as a whole. Virtually all urban 9-1-1 EMS/ambulance systems depend on local fire agencies to begin the initial patient assessment and provide the critical first response to initiate immediate life-saving measures. This is even more apparent in Orange County as most of the ALS services are provided by the Fire departments. In almost every urban EMS system, the number of available fire department EMS vehicles, such as engines and trucks, far outnumber the transporting medical units in that system. Often the fire department arrives well ahead of the transporting ambulance. Most local EMS agencies fail to fully understand the significance of that First Responder service and the cost associated with providing first response. Fire departments like Fullerton/Brea are already staffed, equipped, trained, and currently responding to and providing the most crucial and expensive part of the EMS delivery system. These critical first components include: taking the initial emergency 9-1-1 call, emergency dispatch triage, providing pre-arrival instructions to the caller, the dispatching of the closest and most appropriate units for that emergency response, and providing the medical interventions which are needed in the first few minutes to save lives and impact future quality of life. Without understanding this in detail, most LEMSAs only recognize that local fire agencies provide these services with above average response times and at no cost to the county. LEMSAs endorse this system of relying on those fire-based first responders by allowing ambulance response times to exceed those of first responders, since medical evaluation and treatment begins prior to the transport unit's arrival. The Orange County EMS Agency allows the minimum

response time for ambulances in all of their response zones of 10 minutes for Code 3 (lights and sirens) and 15 minutes for Code 2 (no lights or sirens) responses. Fullerton and Brea Fire maintain response times that are almost half of the time permitted for a private ambulance. This is common throughout the country as most fire departments try to structure their response time standards to meet or exceed national standards (National Fire Protection Association Standard 1710). These shorter response times allow for immediate lifesaving intervention prior to ambulance arrival, allow for reasonable time frames to initiate transport of the patient and maintain reasonable profitability for the ambulance provider.

Section 3: EMSA Ambulance Zone OA-7 Fullerton and Brea EOA-2

City of Fullerton

The State of California EMS Authority (EMSA), in collaboration with the LEMSAs, has created statewide ambulance zones for each Local EMS Agency (LEMSA). Within the Orange County area, the Cities of Fullerton and Brea have been designated "Emergency Operating Area OA-7 City of Fullerton and EOA-2 City of Brea as listed in the latest EMSA plan approved September 2016. OA-7 City of Fullerton is listed as "non-exclusive". The listing of non-exclusive has two major implications. Firstly, the zone is served by a public provider, in this case the City of Fullerton, who is claiming H&S Code §1797.201 status, meaning the City has continued to provide the same level of service either directly or through contract since 1980. Commonly referred to as .201 providers, the State must recognize the City's statutory authority to provide this service without entering into a contract with the County LEMSA to provide ambulance services. As a .201 provider, the City is required by statute to adhere to Medical Control established by the County but retains administrative control of their ambulance and EMS services. There are two significant issues with this status of .201. The first is the State EMSA does not recognize any level of exclusivity associated with a .201 provider. This means that even when recognized by EMSA as the public provider authorized to provide ambulance services, EMSA does not believe the City is entitled to the exclusive right to provide those services. Therefore, even when providing emergency ambulance services under the authority of .201, the County may allow and overlay duplicate ambulance services within that EOA when requested by another provider. The State EMSA has taken the position and given direction to the

LEMSA's that they shall allow any ambulance provider requesting to provide services within a non-exclusive EOA to be permitted to do so and be included in the call rotation. In short .201 requires the City to continue to provide ambulance services, but the LEMSA may allow additional ambulance providers to also provide services in the same area.

1797".201". Upon the request of a city or fire Department that contracted for or provided, as of June 1, 1980, prehospital emergency medical services, a county shall enter into a written agreement with the city or fire Department regarding the provision of prehospital emergency medical services for that city or fire Department. Until such time that an agreement is reached, prehospital emergency medical services shall be continued at not less than the existing level, and the administration of prehospital EMS by cities and fire Departments presently providing such services shall be retained by those cities and fire Departments, except the level of prehospital EMS may be reduced where the city council, or the governing body of a fire Department, pursuant to a public hearing, determines that the reduction is necessary.

The second most significant issue concerning .201 is that there is no clear process or procedure for either the EMSA or the LEMSA to identify if an agency is or is not an actual .201 qualified provider and in reality there is little benefit as there is no designation for .201 in the current state EMS plan. Current practice to secure exclusivity for an EOA is for the County LEMSA to provide a state approved document that states the City has been providing the ambulance service as the historic provider since 1981. Upon receiving this document from the LEMSA the state then classifies the EOA as "exclusive non-competitive process" under H&S Code 1797.224. This designation does not reflect the actual status or position of the city claiming .201 status and in fact many LEMSA's simply provide the documentation to the state in order to keep the status quo of the local systems and their public providers. Should a LEMSA take the designation of a claim of .201 status seriously the challenge is that there is no clear direction or regulation from the state that provides direction as to what level, type or amount of documentation is needed to prove a claim of .201 recognition. Based upon the fact that the City of Fullerton is a public provider that has an ambulance zone assigned and carries the designation

as “non-exclusive” the presumption that Fullerton is a 1797.201 provider should go without saying. The City Attorney has reviewed the Department’s claim that it has .201 rights and obligations with respect to exclusivity and has stated that the City has the right to provide 9-1-1 Emergency Ambulance Transportation services within the city of Fullerton.

City of Brea

The City of Brea EOA-2 is listed in the latest EMSA ambulance zone document as “Exclusive without a competitive process”. This designation indicates that a provider has been the exclusive historic provider of services since 1981. Also known as “grandfathering” it implies that the provider, in this case Emergency Ambulance Services Inc. “EAS” has been the exclusive provider of services since 1981 and thus is entitled to be allowed the exclusive operating area without undergoing a competitive bid for the rights to provide services for that area.

While the Fullerton operating area is much clearer with respect to who has the authority to provide services, the Brea operating is less so. EOA-2 is listed in the state EMS plan as an exclusive operating area without a competitive process under Health and Safety Code 1797.224. While this classification can apply to both public and private providers there exists some question as to how this designation was given to EAS as the grandfathered provider for the Brea EOA.

The single most significant question concerning “EOA-2 Brea” is who actually is entitled to be considered the historic provider of service since 1981. The City has provided numerous documents providing insight as to the history of ambulance services for Brea as well as the opinion of the City Attorney. After extensive review of the supporting documentation it appears that the City under direction of the City Council entered into an agreement with EAS to provide

ambulance services on behalf of the City of Brea. There appears to be no evidence that the City relinquished their rights to provide ambulance services. As this took place prior to 1981 it is possible that when reviewing the documentation by the LEMSA for approving "grandfathered" EOA's it would show that EAS was providing exclusive service prior to the cutoff date in 1981. Under this scenario it is plausible that the LEMSA could have mistakenly identified EAS as the historic provider without knowing the circumstances that placed them in the position of providing exclusive services to Brea. As discussed above H&S Code Sec. 1797.201 allows a city to directly provide for or contract for ambulance services without losing their rights and obligations under the section. Records provided by Brea indicate that the City Council took measures to insure that there was a provision for ambulance services but that it was done under contract with EAS on their behalf not in place of the City's obligations. Further records support that as early as 1978 the City took measures to permit ambulance providers operating within the city and granted the Fire Chief the authority to revoke or suspend those permits. In preparation of this report the City did not produce any documents that would indicate that the City at any time took action(s) that would diminish or relinquish the city's rights and obligations to provide ambulance services under H&S Code Sec. 1797.201. In order to remove any question at to the correct status of the City of Brea the County LEMSA should be requested to provide the documentation they have justifying the designation placed on the EOA-2 and how EAS was determined to be the rightful provider. At the request of AP Triton LLC the Brea Fire Chief

. In order to remove any question at to the correct status of the City of Brea the County LEMSA should be requested to provide the documentation they have justifying the designation placed on the EOA-2 and how EAS was determined to be the rightful provider.

request the said documentation however, none was provided other that the standard one page form indicating EAS was the historic provider. This scenario clearly demonstrates how the lack of clear guidance and or regulation from the state EMS Authority can create confusion when designating providers under the non-competitive 1797.224 criteria.

Conclusions for the City of Fullerton

Based upon the April 2016 EMSA Ambulance Zones, Orange County ambulance zone OA-7 Fullerton is listed as a non-exclusive. When applied to public providers and when only listing one public provider it most often means the provider is recognized as a 1797.201 provider by the LEMSA. As the State EMSA does not recognize .201 as having any expectation of exclusivity the state only provides the designation of non-exclusive in this designation. Based on our opinion**, and the opinion of the City Attorney,** the city of Fullerton enjoys H&S Code 1797.201 status and retains the rights and obligations that go with it. This includes providing ambulance services either directly or through contract as well as the administration of those services at their pleasure.

Conclusions for the City of Brea

Based upon the April 2016 EMSA Ambulance Zones, Orange County ambulance zone EOA-2 Brea is listed as a 1797.224 exclusive operating area without competitive process and has identified Emergency Ambulance Services "EAS" as the exclusive provider. We believe based on the documentation provided that this listing is inaccurate and does not reflect the actual historical evidence for the provision of service delivery. We would further assert that based on the documentation provided that the City of Brea may in fact be more correctly identified as a .201 provider unless the County LEMSA can provide documentation that the City has entered into a prehospital administration agreement as conceived under 1797.201. If the County is

unable to provide documentation that reflects the City's execution of a prehospital administration agreement then it is likely a misidentification of the true status of EOA-2. The same can be said for EAS with respect to providing documentation that would suggest that the City of Brea chose to vacate their rights and obligations prior to 1981 and transfer them to EAS prior to the adoption of the EMS Act. In the absence of either of the above two references taking place it must be concluded and is our opinion as **well as the opinion of the City Attorney** that the City of Brea is in fact a .201 provider and would enjoy the same rights and obligations as the City of Fullerton including the provision of ambulance services either directly or through contract as well as the administration of those services at their pleasure.

Section 4: Minimum Requirements

Currently Care Ambulance provides three (3) units within the City of Fullerton located at stations 1, 3 and 6. The City of Brea has a single ambulance stationed within the City. Both providers staff each unit with two (2) EMT's. The minimum requirements established by staff for this report are three (3) units within Fullerton and one (1) unit in Brea. This coverage level should be considered the baseline as it is consistent with the current deployment. As the various deployment models are considered and their related costs are analyzed additional units can be factored in should increases in coverage be desired.

Section 5: Determination of Objectives

As with all feasibility studies conducted by A.P. Triton LLC, a primary goal is to reach a consensus by the agency team members as to the reasons they wish to explore engaging in this venture. It is based upon these objectives that we develop Key Elements by which each of the deployment models are measured.

Initial meetings with the Fire Chief and City staff took place to determine if there was consensus amongst the team members as to what the objectives were in going forward with ensuring the provider of emergency ambulance transportation services for the EOA met the City's requirements. These objectives were then classified as the program key elements. It was established that unless there was consensus among all the parties on at least the majority of these key elements, there was little sense in moving forward with this review of 9-1-1 Emergency Ambulance Transportation services in the City. Key elements that were identified as having consensus with all parties from both cities were as follows:

Determining how each one of these key elements will be or can be met will aid in the selection of the best model by the two agencies to use in moving forward. Because there were four key elements identified, each has its own operational, financial, and administrative needs that must be shared with all of the system needs.

Items identified as Key Elements by Fullerton/Brea for the consideration of assumption of Ambulance services

At the initial meeting with Department and City staff, there were four (4) Key Elements that were identified as priorities in providing 9-1-1 Emergency Ambulance Transportation services. These key elements will be the foundation for determining which ambulance system, as well as the delivery model(s) selected, will best service the Department and most importantly serve the residents, businesses and visitors.

Efficiency of Services

System efficiency can have many meanings. To some it means operating in a manner that yields the most revenue at the lowest cost. It can also mean deploying resources to provide the maximum service levels that the city can afford to pay for. It may mean providing the most transports possible with the fewest number of units. Each of these examples is accurate in defining an efficient EMS transport system however they represent very different models of efficiency. In discussions with staff it was determined that each city desired to provide the best possible level of service that the system could afford based on the revenue that could be realized.

As a participant in the system a provider can have input into making the system better, but unless the participant is also the 9-1-1 Emergency Ambulance Transportation provider, they have little ability to make changes in the system. As the ambulance provider they have access to the required data to formulate changes when needed and in a timely fashion. As a .201 provider they also have the ability to facilitate change with little chance of impacting their LEMSA obligations. In this case, both Cities have the ability to effect change with the contractor but only to the extent of the contracts terms. If the Department is the direct transport provider, then they

will own all aspects of patient care, from initial contact with the EMS system, through the emergency call, to patient outcome at the hospital, through the continuous quality improvement (CQI) process.

As much as first responders believe they are an integral part of the EMS system, the agency that transports the patient is the agency that has the most control of the delivery model. Thus the best way to have an impact on the transport component of the system is to become the provider.

Deployment

Deployment of resources was identified as a major role in considering the transition to ambulance transport for both cities. In the current arrangement for ambulance transport within the two cities the fire departments have little ability to dictate the deployment of units. Again as discussed above, each city has a different provider. With different providers there is the possibility that coordination of resources may be difficult or impossible as revenue is a major consideration for private providers. As Brea and Fullerton explore the possibilities of merger or consolidation the possibility of developing a well-coordinated EMS ambulance delivery system and improved deployment plan is a distinct possibility as well. This system could see a greater number of units serving both cities in a manner that deploys resources based upon need and not jurisdiction or revenue. Even in the event that a fire department merger may not come to be, the possibilities exist for both cities to create a single unified ambulance delivery model that benefits both communities.

There are numerous deployment models that can be utilized and integrated into each department's operational needs. Each has its own positives and negatives and must be balanced

with the key elements. In terms of efficient and effective deployment within the context of this report means that both city's must meet all of the operational needs to support the transport functions and take into consideration that each department must also be able to manage the non-EMS needs that fall under their mission. In addition to meeting those requirements, the system chosen must also be operated in a fiscally sound manner, not just in the short term but the long term as well. These needs must be in the forefront should the agencies choose to merge or not.

Create a new influx of revenue into the system

Healthcare financing is relatively simple in that there are four primary payer mixes. A common misconception is that the private sector ambulance providers have an advantage over public ambulance providers in collecting revenue from billing. The reality is there are no special secrets that the private industry has in obtaining maximum collection over public providers. No provider has an advantage over another in their potential ability to collect the existing revenue for the system. Within California, the majority of public providers use the services of third party billing companies for their ambulance and EMS services with collection rates competitive to the private ambulance industry. Simply stated there is a finite amount of money that exists in the Exclusive Operating Area (EOA) regardless of who the provider is.

Additional new revenue strategies should be utilized to enhance the current EMS infrastructure. There are avenues available to public providers for revenue enhancement that are not available to the public providers. Should Brea and Fullerton choose to reorganize the structure of their ambulance services they should take advantage of all opportunities available to them.

If there is a private ambulance provider, including a non-profit ambulance provider doing business within an urban area, there is revenue to be made. If there was not profit/revenue to be derived in the system, there would be no competition among private providers. Thus, there would be no reason to create a request for proposal (RFP) for 9-1-1 Emergency Ambulance Transportation services. Ambulance companies are in the business of providing a service that makes money like any business. The EMS industry in California has created a competitive system that encourages the submission of low, often ***unsustainable*** bids to secure ambulance EOA's. Local recent examples of this include ambulance services in the Cities of Westminster and Mission Viejo as well as the counties of Alameda and Santa Clara. Historical examples suggest that both the State EMSA and the LEMSA play a significant role in creating and approving unrealistic RFP's in which local government has had to step in with subsidies in order to continue to provide citizens with ambulance services. With this being stated, it should be understood that an EOA has a fixed financial capacity, or cap, regardless of who is providing the ambulance service. If every provider operated in the same manner and had the same revenue generating options available, then every agency would generate the same amount of profit and pay the same amount of operational costs. However, since each agency operates uniquely, the amount of revenue that can be realized is determined by a host of items that impact collections for service. The largest item is the cost of personnel and the number of unit hours provided. It should also be stated that depending upon the billing and collection policies of the provider, the amount of revenue pulled from a system can vary greatly. Through multiple delivery models, the departments can evaluate the cost of service, the revenue over and above the cost of the transport component of the system and consider the additional revenue that can be returned back into the EMS system or City as a whole. There are multiple fire agencies in California

successfully doing just that. In addition to collecting revenue from the transport of patients, there is additional revenue that is available through Ground Emergency Medical Transport (GEMT) and Inter-Governmental Transfers (IGT's) for transport of Medi-Cal fee for service and managed care patients. These programs will be discussed in detail later in this document.

Customer Service

Each agency expressed a desire to provide quality customer service. As this may sound simple and something that every provider should aspire to, it is only within the control of the provider's own employees. Even when a contractor is providing services to a public entity the contract agency still may only have limited ability to influence the service delivery of their contractor. Customer service entails much more than just being friendly and courteous to your patients. Customer service should include a solid sound quality assurance program. The ability to measure the quality of a system is determinant upon developing a solid Continuous Quality Improvement/Continuous Quality Assurance (CQI/CQA) program. This requires collection and interpretation of the data and the reporting of findings in order to make positive changes in the system in order to provide better services to your patients. All of this takes money to support these functions. Creating a system that generates positive revenue allows the agency to undertake steps that will greatly affect customer service in a positive manner.

Section 6: Determining the Value of the System

There are numerous factors that impact the value of an EMS system. The monetary value of the system essentially refers to how much money, in terms of revenue, can be garnered from the system. The fact of the matter is that there is no special or secret method for collecting revenue from an EMS system. In reality there is a fixed amount of money available to all providers regardless of their public or private status; this is often referred to as the cap. The reason there is disparity in the revenue collected amongst various providers is attributable to two main areas, **billing** and **collections**. The fact remains that some agencies are better at procuring monies in these areas than other agencies. Often times an agency's success is measured by its collection rate, but this is about as accurate as asking how red are your fire engines? Collection rates are just one key in successful management of a system. The key factors affecting the success of billing and collections are: billing policy, collection policy, transport rates, documentation, billing contractor's level of effort, and understanding the payer mix.

Billing Policy

Establishing a billing policy is one of the primary steps a provider needs to accomplish in order to get the most monetary value from the system. There are numerous factors that will determine what is included in the patient billing policy. The more aggressive the billing policy, the more potential there is to collect. However, there are areas that do have a fixed rate of reimbursement, and this alone will create a fixed cap on the maximum potential collections that are available within the system. There will also be a set number of calls for service in a given time period. Therefore, adding additional ambulances in the system does not equate to being

able to run more calls and transport more patients. The expectation of the state EMSA is that all patients who request to be transported or whose medical condition requires it will be transported. There will be fluctuations in the call volume, but significant or seasonal changes in call volume are fairly predictable. Thus, the reimbursement for some services based upon the number of calls is relatively established. The areas of the billing policy which will determine revenue are: collection policy, transport policy, documentation accuracy, billing contractor level of effort, and understanding the Orange County payer mix specific to the cities of Brea and Fullerton.

Collection Policy

The collection policy is the most significant aspect of the collection process affecting the revenue stream. Federal regulations, which control billing, require that every patient receive a bill for services rendered in order to prevent what is known as cherry picking, where only specific groups of patients are billed. How aggressive a company is with the collection of bills is a matter of business philosophy. Most private ambulance companies, and hospitals for that matter, have very aggressive collection policies, while many public ambulance providers have much less aggressive collection policies. The reason for this disparity is simple; private ambulance companies are in the business of generating profit. For these companies, sending a patient to collections or placing them on a rigorous payment plan is standard operating procedure and frankly considered best business practices. Conversely, in the public sector, there are political considerations and public relations concerns which must be addressed because of those patients that may also be taxpayers. It is common to find fire departments who have taken the position of not using hard collections because of the concern that it will create a negative public image. A simple formula to consider is this: once the effort of collection reaches a point where

the return in either money or political consequences is less than the monetary gain, then the collection process should cease.

Transport Rates

It has already been discussed that there is a fixed number of transports that will occur in a given period of time, but there is a subsection of patients whose medical condition will not require immediate transport. Obviously that percentage of transports has a direct impact on the revenue received; fewer transports results in less revenue. Transport should be based not only on the patient's needs but the patient's request. State law does not allow paramedics to recommend the non-transport of a patient. In the private sector, it is in the employees' best interest to maintain an acceptable transport rate since it is directly related to the success of their employer. There will always be a percentage of calls that will not result in a transport due to circumstances, this is to be expected and can be projected as a percentage of the overall call volume. However, when a patient chooses to not be transported, there is a cost for that assessment and evaluation performed by the fire department. As a result, the state authorizes the billing for those services to their Medi-Cal beneficiaries and commercial insurance also readily pays for those services. This will be further discussed in this report as a First Responder Fee.

Documentation

Documentation provided by a paramedic on the Patient Care Report (PCR) also plays a significant role in the collection rate achieved by the provider. One area that is often overlooked is proper training of field personnel in the documentation process that accurately reflects the actual assessment and treatment provided on scene. Appropriate documentation will capture the correct reimbursement rate. Reimbursement, particularly through Medicare and Medi-Cal, is based upon the patient's needs and not reimbursed because they simply called for transport.

Simply stated, many calls that should be billed and paid at an advanced life support (ALS) rate are often reimbursed at the basic life support (BLS) rate, while some that should have been collected at either the ALS or BLS rates are not found to meet any reimbursement criteria and are left unpaid. Accurate documentation can result in a substantial increase in revenue in an area where the service is already being provided.

Billing Contractor's Level of Effort

The billing contractor, or billing office, plays a major role in the collection rate. The level of effort demonstrated by the billing provider displays a direct correlation to the collections received. There are two common ways public providers conduct billing for ambulance services. The first is to use an outside third party billing company that conducts all billing on behalf of the provider. Their ability to collect depends on several factors, the largest being the billing policy. A relaxed or vague billing and collection policy will result in less collection of revenue. Most billing companies base their fees on a percentage of the amount they collect. If the provider has a billing and collection policy that allows a reduced amount to be collected, then the biller will likely charge a higher percentage rate in order to meet the profit margin. Another method of billing and collections is to conduct all billing in-house. There are the same challenges with doing billing in-house as with using third party billers. The single largest obstacle in establishing in-house billing services is setting up the infrastructure. When considering an internal ambulance billing process, a provider must include: facilities (office space), hardware, software, personnel, and training which could require capital outlay and time to set up prior to implementing an ambulance service.

It should be understood that even though there is a fixed and finite amount of money that is available in the EOA, there are numerous variables that influence a provider's ability to collect

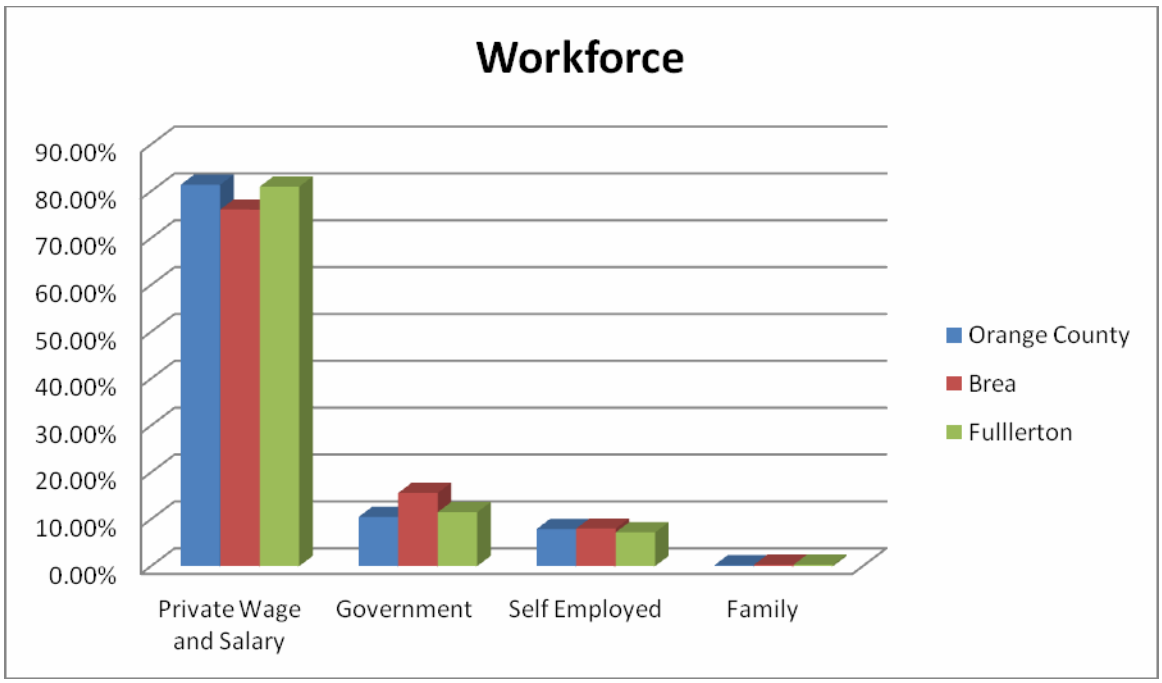
that revenue. Establishing policies, training of personnel, and close monitoring of the delivery system will pay forward in the collection of revenue. The advertised percentage of collections by billing companies is irrelevant because it does not address all the facets of successful billing.

Understanding Payer Mix

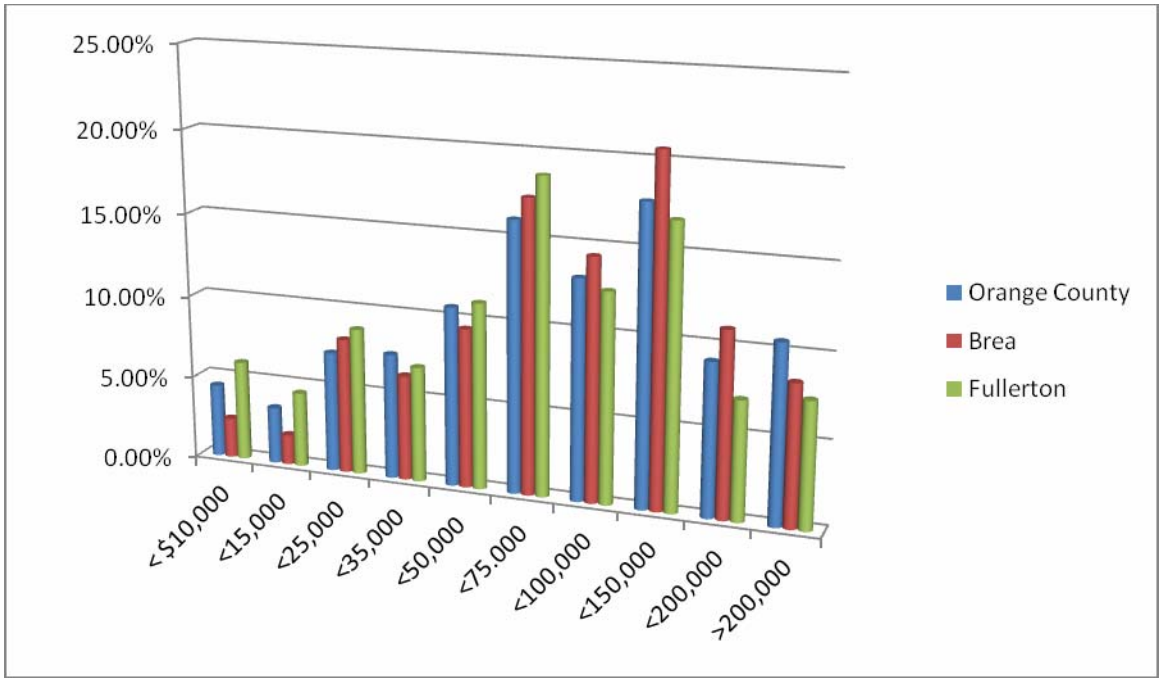
When billing for services in the healthcare arena, there are four categories of payers; this is often referred to as the payer mix or payable cost centers. These cost centers consist of Medicare, Medi-Cal (both fee for service and managed care), private pay (uninsured), and commercial insurance. Sub-categories of these groups consist of patients covered under workers compensation and medical coverage under an automobile policy are most common. An EOA's percentage of each of these categories varies widely depending on the demographics of that EOA. An EOA with a very high percentage of working age adults and higher percentage of larger businesses will typically have a higher percentage of commercial insurance, while an area consisting of a large population of seniors will have a higher rate of Medicare coverage. It should be noted that the percentage of transports for each payer mix is not directly related to the percentage of that population. For example, even though senior citizens may only represent 20% of the EOA population. However, their use of medical services increases with age and results in a higher usage of the EMS system compared to those working age adults with commercial insurance who may represent a larger percentage of the EOA population but due to less health issues use the system less.

Taking into account everything previously stated, understanding the demographic of the region, population, income, housing costs, education, and industry will provide the reader with a solid understanding as to how the area compares to the rest of the County and the State. This in turn will provide a snapshot of how strong or how weak the EOA's may be.

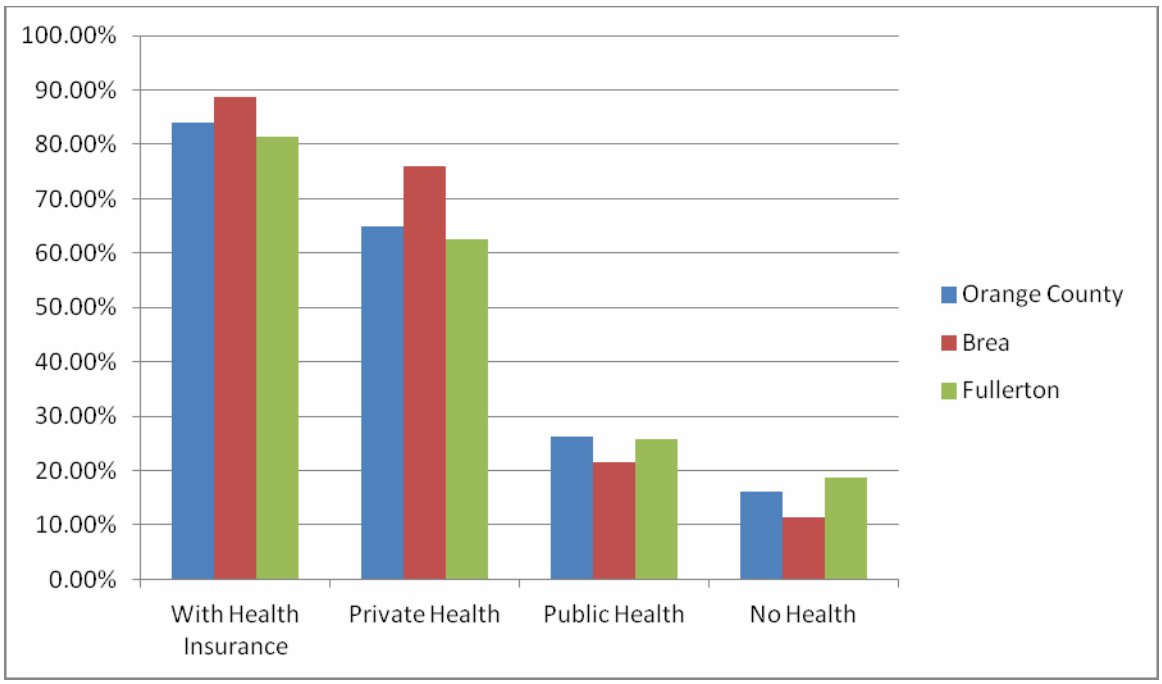
Workforce by Type Orange County/California



Household Income Orange County/ California



Health Insurance



Payer Mix

Using data provided for 2015, and reviewing the dispatch trends for the last several years there is a noted increase in call volume for Fullerton of 11% and a call volume increase in Brea of 4%. As we move forward with determining that value of the system we will use a projection based on only 50% of the trending percentages as a way to build in a +/- factor of what may actually be seen. With that being said we have developed the following breakdown for each payer category. This breakdown is based on 10,936 EMS calls for the City of Fullerton and 3,252 calls for the City of Brea with percentages rounded to the nearest whole number. As the demographics for both cities is nearly identical the difference between each cities numbers were averaged as consideration is being given to merging operations.

Percentage by Payer Mix

					Fullerton	Brea
• Medicare/Medicare HMO	-	36%	-		3,937	1,171
• Medi-Cal/Medi-Cal HMO	-	26%	-		2,843	846
• Commercially Insured	-	19%	-	2078	618	
• Private Pay/non-insured/other	-	18%	-	1968	585	

Collection Percentage – based off of the national average

					Fullerton	Brea
• Medicare/Medicare HMO	-	95%	-		3,740	1,112
• Medi-Cal/Medi-Cal HMO	-	92%	-		2,616	778
• Commercially Insured	-	93%	-	1,933	575	

- Private Pay/non-insured/other- 5% - 98 29

The following estimation of the system value is based on the data provided above using an average of the Orange County BLS and ALS base rates.

		Fullerton	Brea
• Medicare/Medicare HMO	$480.00	= $1,795,200	$ 533,760
• Medi-Cal/Medi-Cal HMO	$145.00	= $ 379,320	$ 112,810
• Commercially Insured	$1,025.00	= $ 1,981,325	$ 589,375
• Private Pay/non-insured/other*	$1,025.00	= $ 100,450	$ 29,725
Transports subtotal		$4,256,295	$ 965,670
Combined total system value			**$ 5,221,965**

The above system value calculations are determined by calculating the maximum payments from Medicare/Medicare HMO less co-pays ($480.00) and Medi-Cal/Medi-Cal HMO at ($145.00). Patients with insurance and private pay/non-insured were calculated at paying the entire invoiced amount. This numeric value of the system is used to determine the maximum revenue that could be collected for the system based upon call volume. It is important to understand that this number is nearly, if not absolutely impossible to reach as 100% transport rates are impractical. However, this amount (value) is provided as the maximum potential value of the system. As varying influences discussed under payer mix come into play the revenue/cost recovery will begin to drop from the total value.

Based upon these rates for service, an estimate of the value of the system can be determined. The following estimate was made without including additional County approved charges for mileage, oxygen or expendable medical supplies. This system revenue estimate does not include co-pays or out of pocket expenses by the patient in this calculation. Combining transport revenue from both Brea and Fullerton bring the system value to $5.2 million dollars. Again this estimate of the value of the system represents maximum collection potential of all EMS responses and will likely not be seen by the department(s) if they entered into the ambulance transport system. The final value of the system can only be determined once the City has adopted a rate for service and a billing and collection policy. Until that is determined, and based only upon the combined 14,188 transports, the City could expect reasonable collections to range from $4 million to $4.5 million annually +/- 10%.

Figure 1

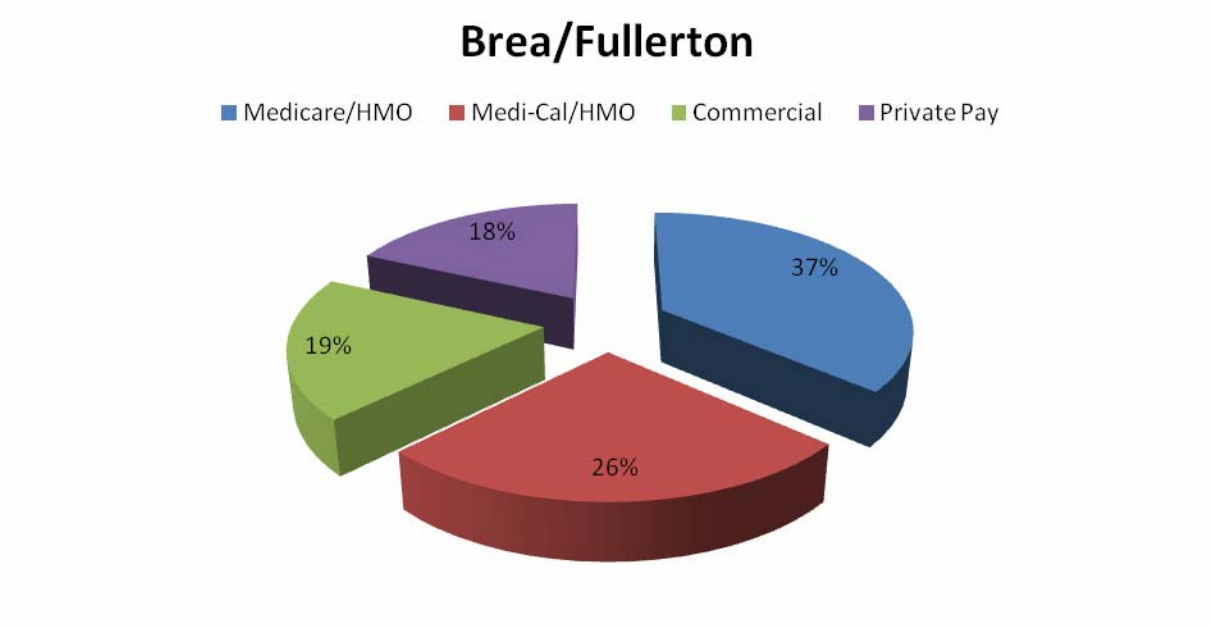
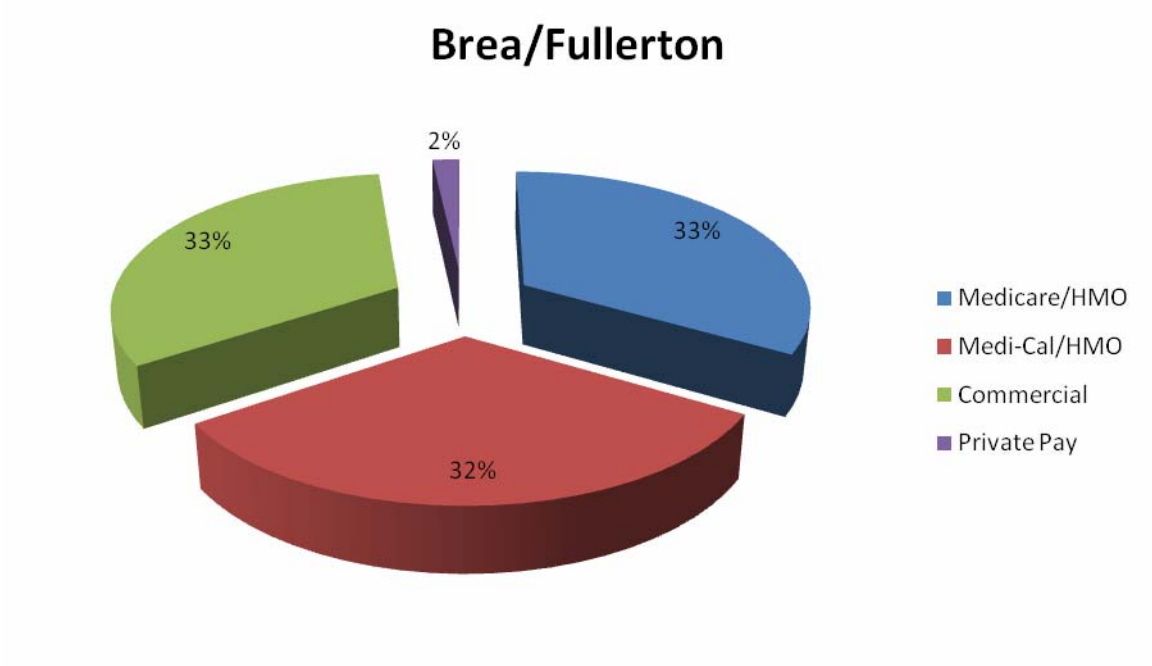


Figure 2



With a clear estimate of the value of the EOA, it is possible to determine if City participation in the system is feasible or practical and explore the various options for participation models. Again, it should be noted that the above estimate, although very realistic, is based upon an aggressive billing and collection model based upon the Orange County ambulance rates (average of $1,025) and does not include additional approved billing items. For the purposes of this document, the Orange County base rate will be used when comparing cost vs. cost recovery. *However it should be noted that the Orange County Supervisors acknowledged in 2015 that the current rate structure is not sustainable and a rate increase is inevitable particularly with the state adopting a new minimum wage structure that will increase 50% over the next five years. (See RATE STRUCTURE Sustainable Rate)

Assuming both Cities enjoy .201 status, neither one is required to adopt the rate structure approved by the Orange County Board of Supervisors. As .201 providers they have the statutory

ability, under their .201 rights, to set their own rate structure as part of maintaining administrative control of their systems. If each City approved a higher rate structure, then the value of the system would increase with the rate increase but at a disproportional rate. Based upon like counties for similar population and census demographics, as well as the statewide average reimbursement for commercial insurance to public ambulance providers, a base rate of $1,650 would not be unreasonable. When developing the rate structure a bundled billing schedule which includes the base rate, Advanced Life Support Fee, and medical supplies should be considered and would be consistent with Medicare billing policy. First Responders Fees, oxygen and mileage would still be itemized separately. (Note: The current ambulance provider is charging at the current rate)

RATE STRUCTURE	**Current**	***Sustainable Rate**
• Base rate =	$904.61	$1,650.00
• Advanced Life Support =	$387.35	included
• Medical Supplies =	$ 32.66	included
• Standby Time =	$ 40.83	excluded
• Mileage charge =	$ 16.87 per mile	$ 16.87 per mile
• Oxygen charge =	$ 82.74	$ 82.74

The current base rate including ALS and medical supplies equals $1,324.62. Using a bundled billing methodology and being proactive with the County Board of Supervisors position that the current rate structure is not sustainable for the future; the new rate would be consistent with Medicare billing recommendations and would result in a less than 25% increase in the overall

rate. The overall impact of this change in rate structure has the potential to increase the overall revenue to nearly $7 million dollars annually.

Section 7: Supplemental Revenue from Federal Reimbursement Programs

Two factors which have not yet been addressed are the availability of Federal Supplemental Reimbursement programs and the additional money that is available only to public providers (not private) for offsetting the unreimbursed cost of providing transport and services to the State's Medi-Cal recipients. The Ground Emergency Medical Transportation (GEMT) program and the currently operating Inter-Governmental Transfer (IGT) program have the ability to bring in additional amounts of money for what would normally be one of the lowest paying groups in the payer mix. The GEMT program is entering its sixth year of reimbursements, and contracts with participants have just been completed for the next three years. The GEMT program utilizes a federally approved cost report specific to the program to establish a cost for transporting Medi-Cal fee for service patients. The cost report subtracts the state reimbursement from the calculated cost of transport which leaves an uncompensated cost for service. This uncompensated cost is then split 50/50 between the provider (the Department in this case) and the Federal Medicaid program.

The Rate Range Inter-Governmental Transfer program (IGT) is in its second year of funding for public ambulance providers and does not contain a sunset clause. The Rate Range IGT program in Orange County is administered and managed through CalOptima. This program functions very similar to the GEMT program in that it reimburses for the cost of providing services to the Medi-Cal beneficiary but on the managed care side. Unlike the GEMT program that uses a fixed cost vs. reimbursement methodology, this program uses a rate range to

determine the amount that will be reimbursed. Typically the rate range utilized is between the cost for service and the amount that is charged for service. In 2016 the rate was based on up to 125% of charges. As some public agencies maintain charges that are well below costs, others maintain charges that are well above costs. The allowable amount that can be claimed is up to 125% of the IGT determinant with each county having the ability to tailor the program to their needs. The amount of funds that are available depends on the cost of the delivery model chosen.

GEMT funding is part of the Medicaid entitlement program under the Social Security Act, Title XIX, and has no claiming limit, while IGT funding is limited to the available funds in each county. Each county has been provided a fixed amount of funds for the Rate Range IGT. Funds that have not been utilized in the previous year are available to be claimed in the current year. These funds are known as Head Room. Currently in Orange County there exists head room that is available for the upcoming 2016 IGT. Head Room will continue to exist until the available funds have been claimed. Once a provider claims an IGT amount, they will likely continue to receive that amount of funding for the duration of the program. Many agencies have relatively high Medi-Cal percentages and low commercial insurance percentages. As a result, it is often found that when GEMT/IGT is added to the Medi-Cal reimbursement, the Medi-Cal demographic becomes the single highest payer mix. By comparison, the Cities of Brea and Fullerton have relatively average Medi-Cal percentages compared to other cities in Orange County and see similar ratios of commercial insurance as well. Therefore, GEMT/IGT will play a significant role in the overall reimbursement for both cities.

Example of reimbursement methodology

GEMT:	Cost of Service	= $1,200
	Medi-Cal reimbursement	= $145
	Uncompensated cost	= $1,055
	50% reimbursement	= $527.50
IGT:	Charges for service	= $1,650
	IGT amount	= $ 825
	IGT reimbursement	= $412.50

Estimated GEMT and IGT revenue for the Cities of Brea and Fullerton annually:

- $750,000 - $1,000,000

Section 8: First Responder Fee Background

The concept of charging fees for services that are provided to the public but are not considered part of the services paid for by the tax base is nothing new for the fire service. Fire agencies typically charge for services such as plan checks for new or remodeled buildings, sprinkler systems and the inspections associated with these types of services. The fee aids in cost recovery of providing such services. However, the concept of charging for the response to Pre-Hospital Emergency Medical Services, or PHEMS, is not as commonly known. Most cities, counties and special districts routinely collect taxes for the fire services agencies. Generally those fees or taxes are collected to provide for the prevention, mitigation and control of nuisance and out of control fires that threaten the community, but do not cover PHEMS. However, because fire stations are located throughout the community, they provide a strategically located pool of trained personnel equipped and well suited to provide response to PHEMS. Firefighters at either the Basic Life Support (BLS) and/or Advanced Life Support (ALS) level have proven to be the cornerstone of EMS in the City, county, and throughout the nation. Providing these strategically based firefighters that are trained EMT's and Paramedics comes with a cost, which is commonly referred to as the cost of readiness. However, as the cost of readiness has been determined to be the most expensive component of providing EMS, the ability of the ambulance provider, either public or private, to provide 100% of the PHEMS response is not a cost effective approach to the EMS system. On the other hand, a well-developed, robust EMS system, which includes the transport component, will enhance the overall delivery of PHEMS to the community and improve patient outcomes. Providing this added-value service has often been assumed to be

part of the services provided by the fire department. The Warren 9-1-1 Act (AB 424) requires that when a person calls 9-1-1 they are able to request police, fire and rescue services. As a result police officers and firefighters are required to be trained in CPR. However, even today the Act does not mandate that the request for services includes ambulances or that firefighters provide medical services, even though multiple studies have cited quick medical intervention saves lives and improves quality of life for many patients.

As discussed above, the tax dollar allocated to fire agencies is for the prevention, control and mitigation of out of control and nuisance fires that threaten the community. When an individual develops a medical condition that requires the use of the 9-1-1 or the PHEMS system, the likelihood that the condition will threaten the well-being of the community, as a whole, is minimal. As such, the response to the person requesting PHEMS is at the cost to all taxpayers and is actually a service for which those tax dollars were not intended. The impact to the taxpayer for the response to the PHEMS call has now impacted resources for the core mission of protecting the community. However, it is neither practical, nor logical, nor morally responsible for the fire department to cease response to PHEMS calls. This is particularly true when recognizing the benefit to the overall well-being of the common good of the community. It is practical, however, and in some cases required (Fire Department Act of 1987) to consider cost recovery for those services that are not provided for or supported by the tax dollar.

Because PHEMS is not usually considered part of the services provided from the collection of tax dollars, it is acceptable and legal to charge for those PHEMS services on a cost recovery basis. Governmental entities are allowed to conduct cost recovery programs and allowed under Federal and State regulations to include those costs associated with providing

those services. Those associated costs include the direct cost of services and indirect costs of services. Direct costs are those cost that are directly related to providing the services. These include the firefighters, dispatching, apparatus and supplies used to provide the services. Indirect costs are those costs associated with supporting those services such as: supervision, maintenance, finance, human resources, training, etc. Many of these indirect costs are internal services which are shared services between divisions within the fire department or the local government, if the fire department is a department within the local government structure. In either circumstance, the costs associated for providing these services must be calculated in a manner that justifies the charges. These charges are not intended to create a profit margin; they are intended to create a cost recovery system for supporting the EMS system.

The benefits of initiating a First Responder Fee (FRF) are numerous, with the most obvious being the rapid influx of revenue. With new revenue come new opportunities for supporting and increasing services to the community being served. These opportunities can range from: increased staffing, purchase of new equipment, expanding training, increased salaries, bonuses or educational incentives for higher levels, or expanded licensure such as expanding from BLS services to ALS services, just to name a few. It should be noted that all of this new revenue comes with little to no change in the current delivery of services. In other words the current delivery model will likely not require any changes. There may be some administrative changes or modifications in order to initiate an FRF, but those changes would be considered a direct cost of providing the services and thus be included in the charges for cost recovery.

There are numerous agencies across the state that have implemented First Responder Fees for service. There is no requirement to be an ALS provider, nor is there any requirement to be an ambulance transporter. First Responder Fees are not subject to the Local EMS agency (LEMSA) approval. The following agencies have approved FRF within their jurisdictions:

Montclair, La Habra Heights, Corona, Pine Valley, Loma Linda, Kirkwood, San Bernardino, Sunshine Summit, San Ramon, Folsom, San Rafael, Sanger, Novato, Albany, Beverly Hills, Glendale, Burbank, Sacramento Metro, Cosumnes, Moraga Orinda and Contra Costa.

Fees which have been implemented range from $100 -$425 per response, with many additional agencies considering the implementation of FRF within the coming fiscal year.

Authority for FRF (First Responder Fees)

Fire Protection District Law of 1987 Health & Safety Code §13800, et seq. 13862. *A Department shall have the power to provide the following services:*
(a) Fire protection services.
(b) Rescue services.
(c) Emergency medical services.
(d) Hazardous material emergency response services.
€ Ambulance services, pursuant to Division 2.5 (commencing with Section 1797).
(f) Any other services relating to the protection of lives and property.

§13892. If the Department board determines that the amount of revenue for the coming fiscal year will be inadequate to meet the amount of expenditures needed to protect life and property, the preliminary budget shall propose methods of raising adequate revenues or reducing services.

- City of Orange ALS = $508 BLS = $450
- Huntington Beach ALS = $450 BLS = $350
- Costa Mesa ALS = $300 BLS = $275

- Newport Beach ALS = $450 BLS = $350 (proposed)

Section 9: Providing PHEMS as an Added Value to the System

Once calculated, the actual cost of providing PHEMS as an added value to the system can be startling, especially when considering that tax dollars do not cover the cost of providing this service. When considering that the private transport provider (ambulance service) cannot provide enough ambulances to meet the transport, and the first responder (firefighters at the fire stations) needs, it becomes clear that to meet system demands this "added value," which is provided by the fire department at the taxpayers' expense, is actually subsidizing the private ambulance transport provider. As discussed above, the significantly larger number of first response units (fire engines) with shorter response times are able to arrive at the scene almost always prior to the arrival of the ambulance. This immediate response allows for longer response times for the ambulance arrival.

Currently, the ambulance provider transports the patient and charges a basic life support (BLS) rate for service. When advanced life support (ALS) services are provided, the ambulance provider charges an ALS fee in addition to the BLS rate. This ALS fee is then passed on to the Fire Department for providing those ALS services. As a result, the Department responds to all EMS incidents but only receives ALS reimbursement when ALS services were provided. This practice of only receiving ALS fees when ALS services have been provided is only encountered in the EMS system. Healthcare generally reimburses at the licensure level of the practitioner providing the service. Simply stated, when a patient is seen in the Emergency Department by a physician the charge is based upon the medical doctor (MD) rates. The same applies to nurse

practitioners (NP) as those charges are based upon NP rates. When a patient has been evaluated by an MD, and the patient's condition has been determined to not need the services of an MD, that patient may be handed off to a NP for treatment. However, the MD is reimbursed at the MD rate not the NP rate. This scenario is nearly identical to the EMS system. The Fire Department responds to all EMS incidents. Upon arrival the patient is assessed by firefighters at the ALS (Paramedic) level. Paramedics are able to determine if ALS intervention is needed and if so, then ALS care is provided. If the patient is assessed by the paramedics and the patient is determined to not need ALS intervention, the patient has still received an ALS level of assessment and the Firefighters still receives his/her paramedic incentive pay. The result is that the cost of sending ALS first response services is incurred regardless of the patient's condition, but the ALS cost is not reimbursed To the Fire Department

Currently there are four agencies identified within Orange County that have both ALS and BLS first responder fees. The average rate is $391.62 per call, while the Department's cost for a first responder fee maybe higher per call, we will use the average for a calculation for the value of a FRF. As presented previously, all patients are assessed at the ALS level to determine the severity and appropriate treatment level. Therefore, we recommend that the implementation of a first responder fee be applied to all patient encounters. The City should adopt a fair and liberal waiver policy that allows the City to waive any out of pocket expenses that are associated with the fee or that have a negative impact their residents.

Based on the commercial insurance rate alone the impact of a FRF applied to both cities would be estimated at $500-$750,000 annually. Combined with the reimbursement estimates

above including the recommended rate increase the total maximum system value is nearly $9 million dollars annually.

Section 10: Deployment Models

Deployment Models

There are several deployment models for the 9-1-1 Emergency Ambulance Transportation program that should be evaluated for operation in the Cities of Brea and Fullerton. This section will look at five (5) alternatives to the current delivery model. Each option is also based on the cost of providing one (1) fully staffed ambulance in the City of Brea and three (3) fully staffed ambulances in the City of Fullerton. This deployment model we feel should adequately handle system needs as it is currently in place. All of the proposals meet the current ambulance and paramedic standards as established by the Orange County Emergency Medical Services Agency (OCEMSA).

In looking at each model, it is important to have an understanding of several terms used in these options:

- Unit Hours: Unit hours are based on deployment calculations for one week, which is equal to 168 unit hours (1 ambulance x 24 hours x 7 days = 168 hours)
- Unit Hour Utilization; UHU is the number of transports divided by the total unit hours as a percentage.
- Unit Hour Cost; is the fully encumbered hourly cost of providing the service
- Firefighter/EMT: A sworn safety member of the Fire Department

- Ambulance Operator (AO): A non-sworn member of the Fire Department trained to only Emergency Medical Technician (EMT) Level; has no firefighting responsibility. An EMT is the minimum skill level that can staff an ambulance.

Deployment Model A

With this deployment model, each department would be expected to provide the required number of 24-hour ambulances staffed with two firefighter/EMT's from existing fire stations that are strategically located throughout the City. Newport Beach Fire Department is currently using this model as well as the City of Orange. However, it is important to note that both cities operate three (3) person engine companies while Fullerton operates some four (4) person engine companies. It is important to identify that both jurisdictions also have a single paramedic on each of their engine companies (Paramedic Assessment Units or PAU's) that complement the overall delivery system.

For the City of Fullerton this deployment model would require a total of 18 Firefighters to achieve minimum staffing of those units without consideration of covering the cost of back fill for sick leave and vacation. The same would apply to the City of Brea, although the total number of firefighters would be 6 and would come with the same considerations as Fullerton.

The positive aspects of this model are that it provides for cross trained firefighters on each ambulance that are capable of providing all risk services to the City every day. This plan does not require the need to create a new class of employee. It places both departments in a position to control all aspects of the transport delivery system and would be considered an increase in the level of service currently being provided. This model would meet all of the key elements determined by the team members. In addition to the positive aspects that have been presented, this plan also provides for a positive cost recovery in the first year and if carried out through the entire six (6) step salary including benefits provided to firefighters would remain

positive in year six but to a lesser degree. However, the likelihood that the entire ambulance personnel would remain assigned to ambulance duty for six years is highly unlikely due to retirement and promotions.

Deployment Model (A) Staffing costs (year one)

Total staffing cost for one unit (6 Firefighter/EMT's)	=	$659,736
Additional overtime costs at 10%	=	$65,973
Total program costs for personnel only (1 ambulance)	=	$725,709

Deployment Model (A) Staffing costs (year six)

Total staffing cost for one unit (6 Firefighter/EMT's)	=	$808,278
Additional overtime costs at 10%	=	$80,828
Total program costs for personnel only (1 ambulance)	=	$889,109

Deployment Model (A) Staffing costs (four units)

Total staffing cost for year one (4 units x $725,709)	=	$2,902,836
Total staffing cost for year six (4 units x $889,109)	=	$3,556,436

*Based upon the current paramedic incentive pay of $1,000 per month, staffing the ambulance units with a single Firefighter/Paramedic would increase the cost of each unit by $36,000 per year.

Creating a New Class of Employee

As previously discussed two of the key elements were to create revenue and provide quality customer service. Customer service has been identified as providing quality care which includes the ability to provide a higher level of services than what is currently being provided. As both cities have a desire to increase the number of units over what is currently being provided the cost of providing those units must be kept as low as possible to insure financial stability within the system. The single biggest cost associated with providing ambulance services is the cost of personnel. Therefore, in order to provide the desired outcomes it is essential that a new class of employee be given strong consideration allowing for maximum cost recovery while still providing a competitive wage and benefit package. The creation of a non-safety employee would be a positive move in meeting all the desired key elements.

In creating a cost estimate for this new employee a wage and benefit package must also be created. As neither city currently has this class of employee a cost estimate must be made to compare the various deployment models. Recently both the City of Costa Mesa and the City of Laguna Beach have taken under consideration the provision of ambulance services. Both also considered the use of Ambulance Operators or AO's. Using an average of both of those cities and then comparing that average rate to other providers around California a fully encumbered yearly employee cost of $67,500 per employee would be reasonable. Based upon a standard 24 hour work schedule that is utilized with the fire department the fully encumbered cost per hour is $23.18 per hour. This amounts to better than minimum wage and when including salary and benefits will typically exceed the private sector. However, this cost could change depending on the salary selected and the amount and type of benefits assigned. It should be noted that as

PERS employees have worked 960 hours they are entitled to the same benefits as other city employees within the same classification.

For the purposes of evaluating the various deployment models a total of four (4) units will be utilized between both cities. This represents the current deployment model.

Deployment Model B

With this deployment model, each department would be expected to provide the required number of 24-hour ambulances staffed with two Ambulance Operators (new employee and a new classification) from existing fire stations that are strategically located throughout the City. Commonly referred to as Single Role EMT's, the Ambulance Operators are considered non-safety and have no fire suppression or inspection duties. They do, however, fall under the Fair Labor Standards Act (FLSA) rules which require overtime pay after 40 hours worked per week. The City of Huntington Beach is currently using this delivery model; other agencies that use this deployment model are Glendale, San Bernardino and Sacramento Metro Fire. While there are multiple shift schedules that can accommodate this position, the study only considers a schedule that mirrors that of the current Fire Department schedule (24 hour shifts). The rationale for only looking at one schedule can be traced back to the key elements provided by City staff in the initial meeting primarily in efficiency. Having personnel living at the fire stations, and working different schedules does not provide the same level of continuity and stability that is desired. In addition, the cost difference between other schedules although lower cost than 24 hour shifts is not dramatically different when comparing the different shift schedules. This model uses a $67,500 step one (1) with a 5% step increase for six (6) steps total.

Deployment Model B Staffing costs (year one)

Total staffing cost for one unit (6 Ambulance Operators)	=	$405,000
Additional overtime costs at 10%	=	$40,500
Total program costs for personnel only (1 ambulance)	=	$445,500

Deployment Model B Staffing costs (four units)

Total staffing cost for year one (4 units x $445,500)	=	$1,782,000
Total staffing cost for year six (4 units x $568,503)	=	$2,274,012

The positive facets of this model are that it fulfills all four of the key elements proposed by City staff. In addition, it creates new employment opportunities as well as potential new pathways for future employment into the Department as a firefighter. Many EMT's and paramedics use entry level positions in the ambulance industry as their pathway to gain employment into the fire service. AO personnel would be observed working for the City in a non-safety role before participating in a recruitment process for a full-time firefighter position. This "preview" would allow the departments to have valuable insight into future employees and attract larger, more diverse groups for these entry level jobs.

This model maintains the number of ambulances available in both Cities. It places the Department in a position to control all aspects of the transport delivery system and would be considered an increase in the level of service currently being provided. Based upon the revenue estimate previously provided, this program will generate complete cost recovery for the new positions.

Deployment Model B.1

This deployment model is based upon a hybrid of the previous two systems. Within this model each ambulance is staffed with one firefighter/EMT and one Ambulance Operator. This deployment model shares some of the benefits of both model A and B. It provides for an entry level position into the fire department through AO program and provides a mentor in the form of a Firefighter/EMT to the AO. This model also allows the ability to provide additional career development for the firefighter/EMT in the form of assuming a leadership role as the supervisor of the ambulance and limited supervision of the AO.

Deployment Model B.1 Staffing costs (four units)

Total staffing cost for year one (4 units x $585,605)	=	$2,342,420
Total staffing cost for year six (4 units x $728,806)	=	$2,915,224

Ability to Provide Services under Deployment Model A, B and B.1

Both Deployment Model A and Model B including the hybrid model B.1 rely on the Fire Department providing all of the 9-1-1 Emergency Ambulance Transportation services for both EOA's. Although each of the deployment models maintains the current total number of unit hours it must be noted that no system can achieve 100% self-sustaining service when factoring in the potential for large scale emergencies. With this in mind, agreements should be made with neighboring providers to insure surge capacity when needed. Each model was measured against the key elements identified by the City team members. The use of all risk firefighters on duty every day in Model A and B.1 provides a presumed added benefit but comes at a significant cost over model B. The presumed added value of firefighter staffed ambulances must be viewed realistically. While it is assumed that these extra firefighters will be a benefit on the fire ground or rescue, they are only a benefit if they are first available to respond, and then be committed to the incident. In each model, consideration of an additional extra ambulance provides for greater flexibility for Fire Department operations. When an engine company is out of quarters for extended periods of time (training or on incidents), fire department ambulances can be moved to that open station and provide medical coverage and thus maintain outstanding EMS response times. Dispatching would be centralized with the Fire Department resulting in a decrease in response time. Training and mentoring of the Ambulance Operators would be coordinated by the Fire Department on the shift schedule and the personnel would work together as a team.

However, when comparing each of the three fire based deployment models each model meets the four key elements identified with varying degrees of cost recovery.

Deployment Model C

With this deployment model, the City would develop a public-private partnership between the Department and a private ambulance provider to provide the required number of ambulances desired within each city. The relationship of public-private partnerships has existed in a number of different forms throughout the country, most of which involve a comingling of resources. This model explores the concept of the Department and a private contractor sharing the deployment of resources.

In working through this deployment strategy, its functionality must meet all of the key elements. Two primary elements identified by the Department were to provide a higher level of service and have more local control. Although the contractor is accountable to the City, they still retain control of their employees. As much as everyone would like to think they work as a team, the reality is individuals who are not employed by the same employer experience a degree of separation. Even employees who work for the same agency have some degree of separation. Simply stated, even Fullerton and Brea Police Officers have a degree of separation from Fullerton and Brea Firefighters who are likely more comfortable working with Fullerton and Brea PD than the CHP. This concept applies to the private ambulance employees as well. As much as employees from differing agencies get along, almost everyone prefers to work with people from their own agency. Establishing two providers of ambulance services as is the current practice would be less desirable than selecting a single provider of service for both cities. Utilizing a single provider of service would promote more efficiencies than using two providers, one for each city. With that said, it is still a viable option that should be considered.

Model C Staffing costs

Without a bid for services from a private contractor, it is mere speculation what a contractor would charge per unit hour of service. In a recent discussion with a large ambulance provider in Southern California, that provider stated that due to their low operating cost and purchasing power they are able to provide a fully staffed BLS unit for under $600,000 per year including profit. This yearly rate equates to a low $68 per unit hour. However, in recent discussions with another Southern California provider, they indicated their unit hourly cost was well over $100 per unit hour. The $100 per unit hour includes not only the personnel costs but also includes the overhead and profit margin as well. Using the $100 unit hour cost as a base line for contracted services, the department can now consider several deployment models as sub models under this category. Although the number of combinations could be extensive and include not just fixed unit hours but also the ability to purchase unit hours by day of the week or even by seasonal needs we will focus on providing like services and the same number of weekly unit hours in order to draw a comparison for the cost of services.

Below is a simple calculation using a public private shared model:

Two 24hr AO staffed ambulances (1 Fullerton, 1 Brea)	= $ 1,518,337
Two 24hr private ambulances (2 Fullerton)	= $1,752,000
Total cost of a shared system	= $3,270,337

The City of San Clemente is currently in a partnership similar to the one described above. Fire protection and paramedic services are provided by the Orange County Fire Authority, the City of San Clemente staffs one 24-hour ambulance that responses from a fire station, and a private provider staffs one 24-hour EMT ambulance that responds from another fire station in the City. The positive points of this plan are that it meets some but not all of the four key elements requested by the departments and the cost recovery could come at the slightest of margins. The negative points of this deployment model are; the Department exercises less control than if both units were staffed with Department employees, and although this model has the potential to function and generate some degree of cost recovery, it should be approached with some level of caution. Model C also requires the City to be completely responsible for all billing and collection services so that they could collect both GEMT and IGT.

Deployment Model D

With this deployment model, each City would contract out for ambulance services through a request for proposal process and conduct the billing and collection services in house or through the use of a third party billing company. This model is based on the Contra Costa public private partnership and is different than the current arrangement for ambulance services in Brea and Fullerton. In this model the City purchases unit hours from a private ambulance contractor along with specific contractual conditions. These contractual conditions could include response time requirements, posting locations, mutual/automatic aid and surge protection as examples. As discussed above, the current deployment model relies on the ambulance provider to manage most aspects of coverage and deployment in-house. The single biggest advantage of this model over the current delivery system is that the department will determine the number of contractor ambulances that will be stationed in the zone, the hours of operation and much more administrative oversight for those units.

The ambulance contractor is responsible for all aspects of providing the service to the City as a turnkey provision of services for the bid cost. The City/Department would be responsible for the billing of services and the collection of the money from the transport services. In this scenario the City/Department assumes the full risk for paying the contractor's cost of service regardless of the revenue collected. However, as the contractor now has eliminated the risk of non-payment for services, they are able to operate on a much lower profit margin and would likely pass that on to the City/Department. If the City/Department collects more than the annual cost of service, then the City/Department enjoys a potentially lucrative cost recovery program. However, if the City/Department collects less than the annual cost of service, then the

City/Department must meet their financial obligation, likely subsidizing from the general fund. This form of public/private partnership, i.e., government provider/private subcontractor, is very effective and can yield cost recovery to the governmental agency. However, due to an economy of scale, this arrangement becomes much riskier when applied to smaller low call volume providers.

Model D Operating costs

- Four (4) 24-hour contract units $100 an hour = $ 3,504,000
- AMR unit hour cost in Contra Costa County ($139) = $ 4,870,560

The advantage of this plan is that it provides a fixed yearly cost by the contractor for providing ambulance service for the system. Another advantage to this type of arrangement is it allows the Department to fully participate in the GEMT/IGT programs. In addition to the above, it relieves the City of the need to hire additional employees to staff Department ambulances and at the same time relieves the City of the need to purchase and maintain ambulances.

A primary concern with this type of deployment model is the stability of the ambulance contractor. Recently this became an issue with one of the largest ambulance providers in the country. Labor issues and increases in operating costs such as insurance and fuel can greatly increase the cost of operation and threatened their ability to provide the service at the cost that was negotiated. In one community AMR has provided notice that they will be leaving the county as labor costs have outpaced system revenue. If the contractor is operating on a fine profit margin, (and the same applies to the City due to the higher costs of contracting for services), the slightest fluctuation in costs can take what seems like a stable system and create an

unstable situation. Also, if the agreement calls for the ambulances to be housed at the fire stations, conflict can occur between City employees and the contracted employees sharing the same living spaces. In Orange County, the City of Santa Ana is currently utilizing this deployment model; however, the contractor is required to house the ambulances and employees at facilities other than city fire stations.

Deployment Model E

The study is being drafted concurrently with another study exploring a possible merger between the cities of Brea and Fullerton. As that study is independent of this study we are not privy to the contents or feasibility of that scope of work. With one possible outcome of the merger study being that a merger of the fire departments is not in the best interest of either city, the provision of ambulance services may not be reliant on a merged fire department. As discussed above we believe as well as legal counsel that both cities retain their status as .201 providers and as such enjoy the ability to have administrative oversight of the ambulance transport system. Therefore, as each city fire department is independent of each other they share command and other resources in common with each other. The same can apply to a common EMS transport system under a JPA structure that benefits both providers. Each City can invest in either a JPA or public utility model to provide services that benefit both jurisdictions with revenue and cost recovery shared by both.

An advantage of this deployment model is that it allows for all of the benefits that would be seen should the two agencies merge but is not reliant one a merger taking place.

Infrastructure Supporting Transport Services

Should the departments undertake the provision of providing 9-1-1 Emergency Ambulance Transportation services, it is unrealistic to consider supporting a new type of service without considering providing additional support structures for that service. Although the departments have staff who have oversight for EMS, the additional needs of supporting ambulance services require duties that would not normally be provided by a person of this rank or position, is it also not likely that person has unencumbered time to assume these new duties. The most logical solution is the creation of a new position to support the needs of an ambulance transport provider. Appropriate titles for this position could be listed as EMS Supervisor, EMS Coordinator, Ambulance Coordinator, etc.

This newly created position would either be non-safety, Captain, or another rank that meets the needs. Suggested duties for this position, although not all inconclusive, could be as follows:

- Schedule employees
- Order and maintain medical supplies
- Order and maintain medical equipment
- Review EPCR (CQI and CQA)
- Assist with hiring, training and recruitment
- Coordinate continuing education
- Assist with budget preparation for ambulance program
- Response to incidents that require EMS supervision

Moving into the 9-1-1 Emergency Ambulance Transportation service without a support infrastructure is a recipe for disaster. Creating a reasonable support system in the beginning will save time and energy and cannot be overstated. Each department must consider the best role and level of responsibility for this position and will need to determine the appropriate compensation and fully encumbered cost that goes along with that.

Should the departments move forward with deployment models that include hiring new employees (Ambulance Operators), they must recognize that there will be hiring costs for the new positions. Minimum staffing would require fifteen to thirty new employees depending upon the model selected. The City should include costs to be allocated for the hiring and equipping of the new employees, which includes hiring costs, medical exams, background checks, uniforms, training and equipment.

Fleet and Supply Costs

Ambulance Cost Breakdown

Industry best practices recommend that providers maintain a fleet of 120% of the total number of front line units. However the smaller the fleet the more units should be required. With four (4) units operating it would not be unimaginable that two units could be out of service at any given time. Therefore in this scenario a fleet consisting of 150% of front line units would not be unreasonable for a total of six (6) units.

Recently (within the last 60 days) this consultant has completed a feasibility study for a similar agency also considering the provision of ambulance transport services for their city. In doing so, staff has taken the steps to develop an ambulance specification that meets their needs. After reviewing the design specification, we believe the units will meet or exceed the mission for which you are considering. The following cost breakdown for rolling stock represents real numbers and cost for ambulances and gurneys.

- Six (6) type III gas powered V10 ambulances with lettering and paint:
  ($150,420 x 6) = $902,520

- Additional equipment that will be required:

  Recommend six (6) power cots including charging systems
  ($19,000 x 6) = $114,000

- Additional equipment that is suggested:

  Six (6) stair chairs ($3,500 x 6) = $ 21,000

Total Fleet and Supply Start-up Costs = **$1,037,520**

Average service life of ambulance units, including gurneys, is four years in a busy system with most systems requiring replacement at five years. For the calculation of annual cost of ownership, this study will use six (6) years as the department could extend the lifespan of the vehicles by rotating the six new vehicles equally into frontline service. This would then require the total replacement of the entire fleet every six years. Ambulance operational and maintenance costs include fuel, tires, brakes and system service using an annual cost. Power cot service and maintenance is based on annual cost.

- Ambulance annual cost of ownership (including amortization) = $172,920
- Ambulance operational/maintenance cost = $ 50,550
- Power cot annual cost of ownership = $ 22,167
- Power cot annual service = $ 1,700
- Capitol replacement plan (hourly cost for complete replacement) = $247,337
- Total annual cost of rolling stock = **$ 494,674**
- **Unit hour cost** **= $ 14.12/hr.**

Analysis of Deployment Models

Deployment Model A

The Department would be expected to deliver 100% of the emergency ambulance services using Firefighter/Safety personnel working the standard 24hr shift schedule. The cost analysis is based on 672 unit hours per week or 35,040 unit hours per year.

Cost of Service

Program personnel costs for four (4) ambulances	$2,902,836*
Rolling stock (includes capitol replacement cost)	$494,674
EMS supplies	$300,000
Ambulance Coordinator (top step)	$160,000 estimated
Billing cost (6%)	$300,000
Total cost four (4) 24hr unit2	**$4,157,510**
Unit hour cost	$118.65
Cost Recovery based on proposed rate structure	**Positive**
Value of the Brea/Fullerton ambulance zone	**$5,000,000**
Net cost recovery	**$842,490**

Pro's	**Con's**
Meets all of the key elements	Depends on maximum cost recovery
Does not require a new class of employee	Limits the ability to increase unit hours
Provides a substantial increase in FF per day	Likely will depend on GEMT/IGT for sustainability

*Credit through Citygate redeployment **$1,088,563.50** (net revenue gain **$1,931,053.50**)

** AP Triton LLC does not recommend redeployment due to reduction in Engine Company staffing

Deployment Model B

The Department would be expected to deliver 100% of the emergency ambulance services using non-safety personnel working the standard 24-hour shift schedule and staffing four (4) Fire Department ambulances.

Cost of Service

Program personnel costs for four (4) ambulances	$1,782,000
Rolling stock (includes capitol replacement cost)	$494,674
EMS supplies	$300,000
Ambulance Coordinator (top step)	$160,000 estimated
Billing cost (6%)	$300,000
Total cost four (4) 24hr unit2	**$3,036,674**
Unit hour cost	**$86.66hr**

Cost Recovery based on proposed rate structure	**Positive**
Value of the ambulance zone is *approximately*	**$5,000,000**
Net cost Recovery	**$1,963,326**

Pro's	**Con's**
Meets all of the key elements	Requires new class of employee
Provides substantial cost recovery	Potential for high employee turnover
Is not dependent on GEMT or IGT	
Does not depend on maximum cost recovery	

Increases existing units for the City

Generates revenue for City/Department

Deployment Model B.1

The Department would be expected to deliver 100% of the emergency ambulance services using a combination of one Firefighter/EMT and one A/O working the standard 24-hour shift schedule and staffing four (4) Fire Department ambulances.

Cost of Service

Program personnel costs for four (4) ambulances	$2,342,418*
Rolling stock (includes capitol replacement cost)	$494,674
EMS supplies	$300,000
Ambulance Coordinator (top step)	$160,000 estimated
Billing cost (6%)	$300,000
Total cost four (4) 24hr unit2	**$3,597,092**
Unit hour cost	**$93.52**
Cost Recovery based on proposed rate structure	**Positive**
Value of the Brea/Fullerton ambulance zone	**$5,000,000**
Net cost recovery	**$1,402.908**

Pro's	**Con's**
Meets all of the key elements	Requires new class of employee
Provides substantial cost recovery	Potential for high employee turnover
Is not dependent on GEMT or IGT	
Does not depend on maximum cost recovery	
Increases existing units for the City	
Generates revenue for City/Department	

*Credit through Citygate redeployment **$1,088,563.50** (net revenue gain **$2,491,471.5**)

** AP Triton LLC does not recommend redeployment due to reduction in Engine Company staffing

Deployment Model C

Deployment Model C involves developing a public-private partnership between the Department and a private ambulance provider. This deployment model will use the concept of the Department and a private contractor sharing the deployment of resources, with the Department providing services using Model B.

Cost of Service

Cost for four (4) Public/private units range from	$3.1 -3.3 million
Rolling stock	$52,816 - $158,448
(Capitol replacement + 10% cost inc.)	$58,000 - $174,293
Ambulance Coordinator (top step)	$160,000
Billing Cost (6%)	$300,000
Total cost for (5) ambulances	**$3,932,741**
Unit hour cost	**$89.78hr**

Cost Recovery based on proposed rate structure	**Positive**
Value of the ambulance zone is *approximately*	**$5,000,000**
Net cost recovery	**$1,067.259**

Pro's	**Con's**
Meets all of the key elements	Requires new class of employee
Provides substantial cost recovery	Potential for high employee turnover
Is not dependent on GEMT or IGT	Dependence on Private

Does not depend on maximum cost recovery

Increases existing units for the City

Deployment Model D

In this deployment model the City will subcontract for ambulance services through an RFP process and conduct all billing and collection for those services. Within this arrangement the Fullerton/Brea controls all deployment and operations of the contracted units. As stated, prior costs are assumed until an RFP for services is provided.

Cost of Service

Contractor four (4) 24-hour ambulances	$3.5 - $4.8 million
Billing Costs	$300,000
Total cost to provide services	**$5.3 million**
Unit hour cost	**$108.44 - $147.56hr**

Cost Recovery	**Neutral to positive**
Value of the ambulance zone is *approximately*	**$5,000,000**
Net cost recovery	**Up to $1,200,000**

Pro's	**Con's**
Provides for cost recovery	No significant increase in revenue
Allows for additional unit hours	Fragmented system
Potential for surge capacity	Questionable long term stability
Increases existing units in City	

Deployment Model E

This deployment model is based upon the possibility of using a JPA or Public Utility model in the event that a fire department merger is not able to be realized by the two cities. The benefits of this system are the same as discussed above for each model B. Costs as well as revenue would be the same. The difference with this model would be how the initial startup costs would be prorated with the same applying to how cost recovery/revenue would be distributed.

Cost of Service

Program personnel costs for four (4) ambulances	$1,782,000
Rolling stock (includes capitol replacement cost)	$494,674
EMS supplies	$300,000
Ambulance Coordinator (top step)	$160,000 estimated
Billing cost (6%)	$300,000
Total cost four (4) 24hr unit2	**$3,036,674**
Unit hour cost	**$86.66hr**

Cost Recovery based on proposed rate structure	**Positive**
Value of the ambulance zone is *approximately*	**$5,000,000**
Net cost Recovery	**$1,963,326**

Recommendations

We believe the cities of Brea and Fullerton each have the potential to provide ambulance services in a sustainable manner that would benefit not only the cities but the citizens as well with an increase in the services provided. While each city has the potential to provide this service we feel that combining the delivery of service facilitates a certain economy of scale that makes the system stronger for both cities. With the assumption of services both cities would be able to participate in GEMT/IGT that would bring additional revenue and stability to the ambulance system that is not currently enjoyed. If Brea and Fullerton consider the assumption of ambulance services we recommend the following;

- The Cities enter into the 9-1-1 Emergency Ambulance Transportation service utilizing Deployment Model B. This deployment model meets or exceeds all of the key objectives identified by staff and the Department. This model is currently being used throughout California with a proven successful track record, including locally in Huntington Beach.

- The approval of the proposed rate which has the largest profit margin and creates a significant buffer to reduce risk.

- Exercise their H&S Code §1797.201 status in the administration of their ambulance services.

- Understanding that there should be a rate increase, the City should adopt a billing and collection policy that waives out of pocket costs when determined appropriate. This will still yield an increase in cost recovery without a direct impact to the citizens.

- Staff six (6) 24-hour units to provide service in both cities as needed without concern for borders.
- Each city should adopt a realistic treat and non-transport fee, and first responder fee, that insurance and Medi-Cal currently pays, while at the same time adopt a policy to waive all out of pocket costs when determined appropriate.
- Each city should enter into automatic and mutual aid agreements with surrounding agencies for surge protection for ambulance services.
- Each city should create policy for routine and scheduled rate adjustments based on a healthcare cost index.

If the Cities of Brea and Fullerton choose to select Deployment Model B, as well as implement the recommendations above, they will be able to meet all of the objectives City staff and the Department set out to accomplish and at no additional cost to the residents. The implementation of a Fire based 9-1-1 Emergency Ambulance Transportation system would be sustainable in the long-term and would generate cost recovery that could cover potential future employees and expansion of the EMS division.