

*EMS System Valuation  
and Deployment Study  
for  
Oxnard Fire Department*

by  
AP Triton Consulting, LLC

October 22, 2020



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## **Executive Summary**

The Oxnard Fire Department is currently exploring options to maximize efficiencies and increase services. This includes, among other things, bringing ambulance services under direct control of the Fire Department. The Fire Department currently provides Advanced Life Support (ALS) via first response from engines; however, as health care and emergency medical services (EMS) continue to evolve in the new health care environment, the Fire Department is prudent to explore options that are more in line with those changes. Exploring emergency and non-emergency transport is one of those opportunities that will show benefit to the community's visitors, the City residents, and the surrounding fire agencies in the County.

Oxnard Fire is in a unique situation that offers opportunities with respect to 9-1-1 emergency ambulance transportation services within the County. The Department already provides the single most expensive components of the EMS system, which is first response. Those services include everything from the initial call requesting service response, the use of first responders, assistance with patient transport which includes initial patient assessment and treatment when indicated, gathering important patient information, and internal quality control. It is equally important to fully recognize that while today's ambulance transport is being facilitated by Gold Coast Ambulance, a GMR corporation, all other aspects other than the act of transports are currently available and provided by Oxnard Fire.

AP Triton Consulting was contracted to assess the value of the system and evaluate a deployment model that will bring an enhanced level of service over what is currently being provided and to do that in a financially sustainable manner. While there is more than one option for the delivery of services, each with corresponding advantages and disadvantages, the one thing that is clear is that the Fire Department has the ability to take full control of the ambulance deployment and enjoy a level of cost recovery that is not seen today.

What is the benefit to the Fire Department in changing the current ambulance delivery model? While there are many benefits to modifying the current delivery model, we will list a few of the

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more significant ones. First is the increased operational control. The current ambulance deployment to the City of Oxnard was coordinated by the County. This structure takes most of the ambulance control out of the hands of the City's leadership and places it with the County. The interesting aspect of this arrangement is that when the provider is not in compliance with the service requirements, such as delayed response, the ambulance provider is fined. These monies are then paid to the County and not the City, although it was the City that experienced a compromise in the service they deserve. Increasing the operational control of the service delivery allows the Fire Department to better staff the ambulance units and position them to best suit the Fire Department's needs, not the contractor's needs or the County LEMSA's needs. Modifying the current system to one that allows the Fire Department to fully manage not just the transports, but also the financial aspect of the service delivery, allows for a level of flexibility that may not be present today. In simpler terms, if the Fire Department were to have full control of the services as is allowed under Health & Safety Code 1797.201, it would also be in the position to set rates for services along with a billing and collection policy that could provide additional revenue to the Fire Department to enhance services to the residents and visitors of Oxnard. In turn, the system would also be in a more financially secure position, as they would now be able to enjoy a fixed rate of revenue to run their operations. And last, a change in the management structure will provide a level of transparency that is not currently enjoyed.

The State of California EMS Authority's March 2020 Emergency Ambulance Operating Zones document recognizes the City of Oxnard EOA #6 as an "*Exclusive Operating Area*" under 1797.224 non-competitive process (grandfathered). It is our opinion that this designation of the EOA is inaccurate and the City retains their 1797.201 operating rights and obligations.

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 patients. In many cases, this is easily accomplished, as the EOA is of moderate size and there is some 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. Those agencies deemed .201

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providers provide services to the geographic borders of their jurisdictions or historic service area. Therefore, the ability to create an area that is based on economics is not there. This is one of the reasons that .201 providers retain their administrative control, which includes the ability to establish their own rates for services as well as their billing policies. In the case of the City of Oxnard EOA, the payer mix revenue is relatively strong considering that the call volume is average for its size. As a result, the Fire Department can afford to provide ambulance services and, with some minor modifications to the rates and billing policy, generate positive cost recovery.

It is the opinion of this consulting firm that the potential for the EOA to support a Fire Department-based 9-1-1 Emergency Ambulance Transportation system managed by Oxnard Fire is not only feasible, but it will produce a level of cost recovery that offsets the cost of the service, supports the infrastructure, and generates additional revenue to help with the ever-increasing cost of service deployment in a sustainable manner. It is our recommendation that the City strongly consider modifying their 9-1-1 Emergency Ambulance Transportation service with the understanding that the exposure to risk is minimal, while the potential for system enhancements is much greater than is currently available. It is our further recommendation that the Fire Department utilize the revenue that can be gained from such an endeavor to enhance additional services that can reduce the impact on local emergency resources, such as adding additional resources in the City of Oxnard system. In doing so, the Fire Department will be able to provide the highest levels of service without incurring additional costs to the taxpayer.

Furthermore, should the City of Oxnard consider making this change, it is our recommendation that they move forward with selecting a billing subcontractor by simultaneously initiating a Request for Proposal (RFP) for a contractor to manage the billing and collection of revenue. Conducting this RFP at the same time will speed up the process and allow the Fire Department to enjoy the added revenue for this change in services delivery.

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## **Understanding Health Care Financing**

Understanding health care financing and the principles that go along with it can be a very daunting task. With the mixture of Medicare, Medicaid/Cal, private commercial insurance, second and third party payers, workers' compensation, private payers, auto insurance, travelers insurance, ACA, Covered California, co-pays, deductibles, and the \$100 Tylenol, it stands to reason that the average local government administrator may feel out of his/her comfort zone. Although the overall industry is extraordinarily complex, the actual processes for functioning within this system are not as complex as one may think. Remember, health care is the largest civilian industry in the United States. Every day, millions of dollars are billed and collected within the health care finance industry. A majority of the transactions taking place are from the small doctor offices and medical groups that serve most Americans' needs. Most of America's health care billing and collections are done "in-house" through these small offices and medical groups. Although smaller and often narrower in the billing categories compared to the larger medical groups or hospitals, these smaller health care providers use the same 68,000 billing codes and 70,000 treatment codes to complete the day-to-day billing process. Conversely, the ambulance industry typically uses less than ten codes to facilitate nearly 100% of billing needs.

Why is this background so important to the conversation of EMS and ambulance services? Simply stated, EMS and ambulance billing are some of the simplest health care billing processes in America's health care system. A common statement heard from many local government administrators is, *"you want to stay out of this and leave it to the private sector who are the experts."* Let us take a look at the validity of this statement. Unlike the general health care system that must categorize the service into one of 68,000 ICD-10 codes, ambulance billing under direction from the Centers for Medicare and Medicaid Services (CMS) uses a "bundled" billing process. When submitting a bill for services, it should contain only the broad services provided and not an itemized bill for services. When billing Medicare or Medicaid/Cal for services, only four items are generally accepted for reimbursement. When billing private or commercial insurance, a bundled bill is the accepted method as adopted by CMS. Another common statement that is often heard is, *"the private sector knows the in's and out's and have the connections."* Is this true? The reality is this could not be further from the truth. As large as the health care system is, emergency ambulance transports make up less than a fraction of 1%

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of the system cost. There are no *“in’s and out’s”* as the bundled billing system is the industry standard and very straight forward. Is it conceivable that as small as the emergency transport industry is to the overall system cost that the private sector has a “special” insider? Medicare, the largest provider in America, has an 800 number for providers to call for billing inquiries. The same applies to Medicaid, as well as the other large insurance providers. To think with the massive number of billing inquiries each day that a particular provider has an inside contact is not realistic. After a truly short time, even the novice employee can become an insurance expert in ambulance billing.

So how does one apply this newfound knowledge of health care financing? How do the facts that there are no secret in’s and out’s, no “special” contacts to get billing done better or faster, and no “special expertise” the private sector has over anyone else, apply to this situation? Although there are no secrets to the billing process, there is a certain degree of easily attainable knowledge of the rules and regulations associated with the billing process. There are many government agencies that conduct all billing services in-house. Remember, some of the largest providers of health care are local governments. County hospitals, clinics, mental health, and dental offices are all services that are provided in almost every county in the state. Local government provides ambulance service billing and collections every day across the country, at a collection rate on par with the private providers, and in some cases, with a higher collection rate. When an agency chooses not to provide billing in-house, the most logical choice is to use an outside billing company that specializes in billing EMS and ambulance services. There are numerous companies that provide this service for not just public providers, but also for private ambulance providers as well. The most common question is if there is really no difference or secrets in the billing process, why is there a difference in the collection rate? This is the most misunderstood part of the billing and collection process. The simple answer is “policy.” To the greatest degree, the provider’s billing and collection policy determines the reimbursement rate. As an example, two ambulance providers respond to the same patient and provide the same treatment and services. Both charge the county rate of \$1,600. Ambulance Provider A waives the co-pay and deductible of \$200 and collects the insurance payment of \$1,400 as payment in full. Ambulance Provider B accepts a compromise offer of \$150 for the co-pay and deductible and collects the \$1,400 insurance payment. Provider A has a collection rate of 87% of the

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billable amount while Provider B has a collection rate of 98%. Without knowing the billing policy, one could be led to believe Provider B has the better billing company because of the higher collection rate when, in reality, both providers have the same billing company but different collection policies.

### **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. There are no special or secret methods for collecting revenue from an EMS system. 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. Some agencies are better at procuring monies in these areas than other agencies. Often an agency bases its success on its collection rate, but this is about as accurate as asking how red your fire engines are. Collection rates are just one aspect of the 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. When a service is provided, there is an assumption that there will be a charge for that service. 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. There are, however, areas that do have a fixed rate attached 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 is that all the patients who request to be transported or whose medical condition requires it will be transported. There will be

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fluctuations in the call volume, but significant or seasonal changes in call volume are predictable. Based upon the last four years of transport data from the County, there is an expectation that there will likely be an increase in calls for service annually. This trend is expected to play out in City of Oxnard as well. Reimbursement for some services based upon the number of calls is relatively established and forecastable. It should be noted that an increase in call volume does not reflect a direct correlation to an increase in revenue. The areas of the billing policy which will determine revenue are collection policy, transport policy, documentation accuracy, billing contractor level of effort, and an understanding of the City of Oxnard payer mix.

### **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 those 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 policies. The reason for this disparity is simple: private ambulance companies are in the business of generating a profit. This includes “non-profit” providers as they need to have a reasonable margin to set aside for reserve funds during times of unexpected system changes such as COVID. For these companies, sending a patient to collections or placing them on a rigorous payment plan is standard operating procedure. While many providers, including Gold Coast, have a compassionate billing policy, they still must seek collections where possible. Conversely, in the public sector, there are political considerations and public relations concerns which must be addressed because most patients will also be taxpayers. 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.

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## **Transport Rates**

It has already been discussed that there is a fixed number of transports that will occur in each period of time, but there is a subsection of patients whose medical condition will not require immediate transport. Obviously, the percentage of transports has a direct impact on the revenue received. Fewer transports result in less revenue. 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 and, subsequently, their employment. When a patient is not transported due to the advice or insistence of the paramedic or EMT, there is a loss of revenue that results from these actions. As an example, if there are three units in the system that facilitate one non-transport for various reasons each shift, this equates to a total 1,095 non-transports per year. Using Medicare rates alone without the co-pay, this amounts to nearly \$500,000 per year in lost income. 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.

## **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 units in the documentation process that accurately reflects the actual assessment and treatment provided on scene. These actions will then capture the correct reimbursement rate. Reimbursement, particularly through Medicare and Medicaid/Cal, is based upon the patient's needs and not reimbursed simply because they called for transport. Simply stated, many calls that should be billed and paid at an 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.

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### **Billing Contractor's Level of Effort**

The billing contractor or billing office also 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 most significant 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 their 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 a large operation, such as providing an EOA-wide ambulance billing service, the issues include creating a whole separate business operation encompassing facilities, hardware, software, personnel, and training which requires a large capital outlay at least six to nine months in advance.

It should be understood that even though there is a fixed and finite amount of money that is available in the service area, 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 nearly irrelevant because it does not address all the facets of successful billing. Therefore, it is always in the best interest of the agency to review the billing and collection services on an annual basis to ensure that best business practices and policies are current whether using in house or third-party billing.

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## **Understanding the Payer Mix**

Reimbursement is based upon providing a service and billing the appropriate party responsible for the service provided. Within the health care industry, there are primarily four categories, or cost centers, for reimbursement: Medicare, which is the primary health care coverage for persons over the age of 65; Medicaid (also known as Medi-Cal in California), which is a component of the federal Medicaid program and is provided for certain qualified individuals and families (primarily low income at 138% of the federal poverty level); commercial insurance, most commonly associated with benefits provided by employers to their employees, but also may also be purchased independently; and lastly, private pay, which is the term generally applied to those without insurance. Within these categories are numerous sub-categories that are available and used for reimbursement but will not be discussed in this report. Sub-categories are predominantly workers' compensation, liability, and auto insurances.

Each community will see differences in how the payer mix influences health care financing and reimbursements. As we are discussing ambulance revenue in this document, we must also understand that City of Oxnard has many different economic and population subsets. In order to begin to create a possible reimbursement scenario, it is necessary to understand that different areas of the County will have different ratios of the payer mix demographic. This can be extremely complicated simply because an area of the community that has a large population over the age of 65 will historically have a large Medicare reimbursement. Due to health care issues that escalate with age, a corresponding increase in call volume would be expected. Conversely, an area with a high commercial insurance demographic is likely to have a higher reimbursement rate; however, if that area has an average population age of 30 to 50, that age group typically has fewer health care issues and thus fewer transports.

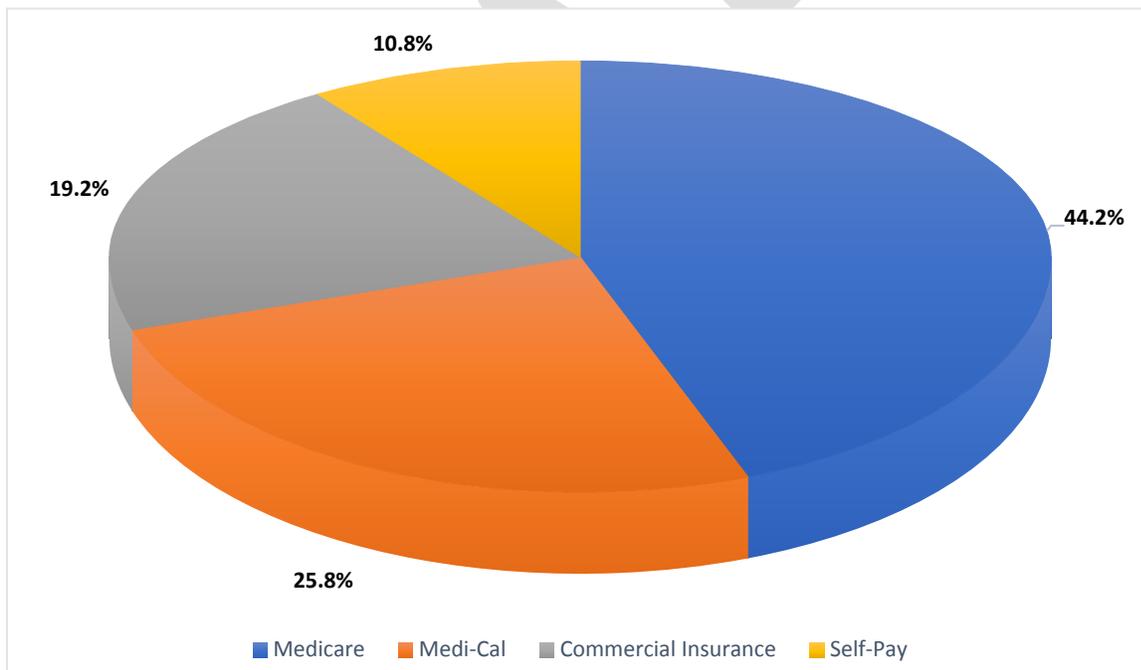
In reviewing the data collected for the County and provided by the Fire Department, we have created a payer mix. In order to create an estimate for the value of the City's EMS transport system, a comparison must be drawn between the population demographics of the known service area and the rest of the County and State. We compiled data from previous LEMSA documents, Covered California, U.S. Census, and current data published by the County's LEMSA contractor. While the estimate is based on known demographics, this estimate has a

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variable of +/- 5% based on numerous variables. The breakdown is based on the reported 2019 transports for Oxnard at 12,517.

**Payer Mix**

<u>Cost Center</u>	<u>Percentage of Transports</u>	<u>Total Transports</u>
<b>Medicare</b>	<b>44.2 %</b>	<b>5,533</b>
<b>Medi-Cal</b>	<b>25.8 %</b>	<b>3,229</b>
<b>Commercial Insurance</b>	<b>19.2 %</b>	<b>2,403</b>
<b>Private Pay</b>	<b>10.8 %</b>	<b>1,352</b>
<b>Totals</b>	<b>100 %</b>	<b>12,517</b>



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Applying the reimbursement formula to the payer mix also requires adjusting for collection rates. There are numerous ways to calculate the rate adjustment. This one uses a simple percentage to volume ratio. To a large degree, variations in collection percentages across the payer mix depend upon the stability of each cost center. The most stable would be Medicare, as there is less ambiguity in the eligibility requirements. Medicaid/Medi-Cal and private insurance tend to have slightly less stable enrollee numbers, as the situations that allow participation in these cost centers change by individual circumstances. The same will be seen in the private pay category as more and more individuals will receive coverage through the ACA. We typically find that within each category, there will be a percentage of charges that will be unbillable for a variety of reasons. The most common is that the patient is no longer covered or has not met the deductible. Our experience has shown that for each category in the following payer mix, the percentage of patients that are covered are outlined below (private pay trends to about 5% to 8% of the total payer mix pay the fee). Below we will illustrate the value of the system using the current rates as provided. The rate includes the ALS base rate, mileage at five miles per transport, and oxygen used 40% of the time. Combined, these come to a single rate of \$2,089.12 per transport. This calculation does not include co-pays or deductibles as this is determined by policy as discussed above. Commercial Insurance is calculated at 80% of billed rate.

**System Valuation**

**Payer Mix Reimbursement (EOA)**

<b><u>Cost Center</u></b>	<b><u>Number of Transports</u></b>	<b><u>Collection Rate</u></b>	<b><u>Revenue</u></b>
<b>Medicare</b>	<b>5,533</b>	<b>\$465</b>	<b>\$2,572,845</b>
<b>Medi-Cal</b>	<b>3,229</b>	<b>\$155</b>	<b>\$500,495</b>
<b>Commercial Insurance</b>	<b>2,403</b>	<b>\$1,671</b>	<b>\$4,015,413</b>
<b>Private Pay</b>	<b>1,352</b>	<b>\$167</b>	<b>\$225,784</b>
<b>Totals</b>	<b>12,517</b>	<b>-</b>	<b>\$7,314,537</b>

The above calculation shows an average per transport collection rate of \$584.37 which is well below the statewide average of \$760 by public providers. These figures do not include additional revenue from any of the Federal supplemental revenue programs. These programs will be discussed later.

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### **Deployment to Cost to Profit**

Reimbursement is only one factor to consider when evaluating a system. As the statistics show, and this consultant fully agrees with, the reimbursement must support the system and the system cannot exceed in cost what the revenue can support. The data provided by Gold Coast to Page Wolfberg & Wirth (PWW) in their EMS system evaluation in 2019 indicates they provide a total of 48,180 annual unit hours to EOA 6. This is broken down to five 24-hour units and one 12-hour unit each day. Further data from CAD shows the ambulance provider spends roughly 56 minutes per transport.

This consultant has had the opportunity to draft, administer, and negotiate ambulance contracts on behalf of counties, cities, and special districts. Our approach has always been to arrive at a unit hour cost as opposed to a system-wide bid. This result has provided a much more realistic evaluation of the true cost of the service that can be compared to the revenue projections. In the following, we will do just that using the data contained here.

In a recent negotiation with the nation's largest ambulance provider, they supplied a detailed unit hour cost for providing a fully-staffed paramedic ambulance. This cost included all roll-ups, overhead cost, maintenance, supervision/administration, and a guaranteed 10% profit margin. That unit hour cost came in at \$201.08 per unit hour. In comparison, the same company using the same operating cost in the above scenario just entered a contract in a neighboring California County for \$89 per unit hour. How is this possible? As recently as July 1, 2019 in Orange County, California, another ambulance provider entered a unit hour contract for \$83 per unit hour. Again, how can this be? Using the reported unit hours found in a recent PWW report for Ventura County, along with the reported revenue less profit, we can determine the unit hour cost claimed to provide the required service to that county.

- Life-Line Ambulance

Total annual unit hours: 30,660. Revenue less profit: \$5,772,252

$\$5,772,252 / 30,660 = \$188.26$  per unit hour

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- AMR

Total annual unit hours: 168,520. Revenue plus losses: \$26,780,624  
 $\$26,780,624 / 168,520 = \$158.92$  per unit hour

- Gold Coast Ambulance

Total annual unit hours: 48,180. Revenue less profit: \$13,225,805  
 $\$13,225,805 / 48,180 = \$274.51$  per unit hour.

As we are discussing the Oxnard deployment, we must examine the reported collections claimed by Gold Coast for EOA 6. Using the 2018 Ventura County EMS update, Gold Coast reported a total of 22,559 responses of which 15,568 were “emergency” response and a total of 6,991 “non-emergency” responses. Total transports were reported at 18,781 with 12,012 being “emergency” and 6,769 being “non-emergency”. Based on these numbers, it is clear that Gold Coast deployment for emergency response is directly tied to a significant (nearly 37%) “non-emergency IFT” business model. The inclusion of the “IFT” business explains the \$13 million in revenue claimed by Gold Coast. **Next, we will use simple cost inputs taken from an actual cost assessment of a large ambulance provider in California. The purpose of this calculation is not to provide an actual unit hour cost, but to allow us to contemplate the validity of the rates. The EMT/Paramedic hourly rate provided is the highest in the state for this provider and the overhead cost is actual to the hourly rate.**

- Paramedic \$25 / hr.
- EMT \$20 / hr.
- Roll-ups all-inclusive @ 37% \$16.65 / hr.
- Overhead cost @ 20% \$12.33 / hr.
- ICR @ 26% \$19.23 / hr.

- Ambulance depreciation + replacement \$7.53 / hr.
- Monitor / gurney depreciation + replacement \$3.54 / hr.
- Supplies / fuel / maintenance \$4.56 / hr.
- Misc. @ 15% \$16.32 / hr.
- 10% profit \$12.51 / hr.

**Total Unit Hour Cost \$137.67 / hr.**

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**Federal Supplemental Reimbursement Programs - GEMT / QAF / AB 1705**

In 2010, California began development of a federal reimbursement program known as Ground Emergency Medical Transport (GEMT). This program and similar programs are operating in several states and are in development in several more. These programs provide a substantial amount of money into government-based ambulance operations that are not realized by the private sector. Although these programs have been in existence and operating across the country for more than 30 years, it has only been recently that these programs have been utilized by the governmental ambulance providers. There was much discussion on the future of these programs with many rumors projecting they will be gone by 2017; the reality is there is no formal position from the federal government as to when these programs will, if ever, end. We are well into 2020 and the program is not only still intact but expanding with additional revenue on the table. CMS is actively starting new programs across the country for ambulance providers. It is unlikely that these programs will cease to exist overnight or without ample warning. As health care is undergoing changes with the introduction of the ACA, any discussions concerning the future of ambulance reimbursement should be viewed as mere speculation at this point. Although GEMT is an entitlement through the Social Security Act Title XIX, and is not likely to be terminated anytime in the near future, we strongly recommend, when considering undertaking ambulance services by the local government, that GEMT/IGT should **not** be considered part of the revenue stream for a stable system. The best and logical direction for providing ambulance services should be in creating a stable Fee for Service (FFS) delivery system without supplemental or subsidized payments to the providers. A system that can support itself internally is just sound business practice. In providing a realistic estimate of the current system as it exists today, GEMT/IGT must be recognized as these programs are in fact part of the system revenue under the governmental structure and should be collected by the County EMS if allowed. In order to qualify, the simplest understanding is that the provider of ambulance services must be a unit of government as defined under 42 CFR 433.5. In short, the government agency must have taxing authority to qualify. In its current form, none of the current ambulance providers would be able to participate in the GEMT program.

The second issue concerning the GEMT program is that the program is based on FFS. FFS are those beneficiaries that are not Managed Care HMO based. As the state and counties are actively moving towards a managed care system, there will always be a percentage of patients

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that will be Medi-Cal FFS patients. For this calculation, we will use 15% as the percentage for GEMT calculations. Although they amount to a very small percentage of the total call volume, the reimbursement is significant on an individual basis. As an example, if the cost of providing the transport services is \$1,500 per transport, the uncompensated cost is roughly \$1,365 per transport. The GEMT reimbursement would amount to \$683 for each Medi-Cal FFS patient that has been seen or transported.

### **QAF**

In 2017, SB523 was signed into law by the Governor. This bill created a Quality Assurance Fee (QAF), also known as a Provider Tax. It is applied to all ambulance providers in the state and charges a tax on certain classes of revenue. This is used to determine a statewide charge per provider for each transport. This per transport tax is then used to draw down additional dollars from the federal government to help offset the losses due to Medi-Cal. Many private ambulance providers include this supplemental reimbursement they receive from this program and show the combined Medi-Cal reimbursement of \$375 without disclosing the “tax” paid to receive this money. At the start of the program the tax was assessed on all emergency transports at \$25.35 per transport. However, in 2020 the State raised the tax by 40% to \$35 per transport. This amount must be backed out of the total reimbursement to reflect the actual reimbursement that can be provided by the program.

### **AB1705 (Bonta)**

AB1705 (Bonta) was signed by the Governor in 2019. This program will place GEMT into suspense and remove the public providers from the current QAF program, creating a new program that will include both Medi-Cal FFS and Managed Care into a single public program. The desire to revamp the current programs is to allow the public providers to have their own program that recognizes the full cost of providing the services which were discussed above. It is estimated that this new program will increase the federal reimbursement, which includes both GEMT and QAF, by three-fold. The program is currently under development with an implementation date of January 2022.

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**Treat No Transport (TNT)**

Implementing a Treat No Transport (TNT) fee to the general population would require establishing a rate for the fee. This concept is becoming more and more common across the country and is an accepted practice as many states reimburse for TNT under the Medicaid program. California is included in this practice. Commercial insurance has not challenged these charges as they are looked upon in the same manner as if a patient presented in the emergency department (ED) of a hospital and were evaluated and treated by the ED Physician. The insurance is billed for the services provided and reimbursement is not contingent upon the patient being admitted to the hospital. The same concept applies: if 9-1-1 has been summoned to the scene where a patient has been encountered, but not transported, a fee can be charged and is generally reimbursed by private commercial insurance. Current transport rates as reported are at 77%. This leaves 23%, or 3,600, non-transport. As pointed out in the data report, there is reimbursement from most insurance companies as well as State Medi-Cal at the Basic Life Support (BLS) rate. Assuming a modest 50% that would qualify between Medi-Cal and insurance, we could expect an additional \$174,592 to the transport revenue.

**Calculating Total Revenue**

<b><u>Cost Center</u></b>	<b><u>Number of Transports</u></b>	<b><u>Collection Rate</u></b>	<b><u>Revenue</u></b>
<b>Medicare</b>	<b>5,533</b>	<b>\$465</b>	<b>\$2,572,845</b>
<b>Medi-Cal</b>	<b>3,229</b>	<b>\$155</b>	<b>\$500,495</b>
<b>Commercial Insurance</b>	<b>2,403</b>	<b>\$1,671</b>	<b>\$4,015,413</b>
<b>Private Pay</b>	<b>1,352</b>	<b>\$167</b>	<b>\$225,784</b>
<b>GEMT/QAF *2021</b>			<b>\$504,605</b>
<b>PPIGT ** 2020</b>			<b>\$1,937,400</b>
<b>Non-Transport ***</b>			<b>\$174,592</b>
<b>Total Year 2022</b>	<b>12,517</b>		<b>\$9,426,529</b>

\*currently in place

\*\* begins 2022

\*\*\* this includes Treat No Transport for Medi-Cal and Commercial Insurance @50% collection at \$400 rate

**Deployment plan**

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A primary consideration for a transition into the transport line of services was based on a large part to return local control of all public safety services back to the City of Oxnard via the Fire Department. As stated above Gold Coast, the current provider, typically staffs five 24-hour units and a single 12-hour unit each day. This deployment includes their ability to take IFT calls for service. As we look at the deployment needed to meet system demand, we will look at only the “emergency” demand and not the IFT demand. This does not mean that the Oxnard Fire Department cannot participate in the “non-emergency” transport system, but that is typically not done via public safety providers.

### **Understanding Unit Hour Utilization (UHU)**

Unit Hour Utilization (UHU) is a misunderstood topic and is inundated with many myths. Many people believe that there is a hard number that must be followed in order to comply with “the standard.” The reality is there is no such standard. UHU was initially developed to aid in determining the number of units needed to meet the demand of a particular geographical area based on call volume. While there is no standard set by any regulating agency, a recognized industry best practice of .25 to .35 for UHU is a reasonable place to set initial deployment of units. In determining the needed units to service the system needs, we must look at the Unit Hour Utilization (UHU) and compare that to the Time On Task (TOT) that is spent on each incident based on transport volume. Using the reported number of transports provided by Oxnard Fire of 12,517, we can determine the static UHU ( $12,517 / 41,750 = .30$ ). This UHU is in the middle of the acceptable range. It is, however, the TOT that really determines the actual number of needed units per day to meet demand. Time On Task, or Workload UHU (WUHU) as AMR calls this, has an industry best practice of .41 - .48. We will use 72 minutes per transport. This 72-minute time includes calls that result in non-transport. Using the 72 minutes per transport brings total system hours to 15,020 hours worked on EMS incidents by the ambulance provider. To achieve a TOT of between .41 - .48, the Department will need to provide 34,250 yearly unit hours ( $15,020 / 34,250 = .44$ ). This equates to a total of 659 weekly unit hours or four 24-hr units.

### **Calculation of Cost / Cost Recovery**

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We have established the total number of transports using CAD data and cross-referenced with the County EMS Plan from 2018 and used the payer mix calculation as provided by Gold Coast for the County EMS study. We applied the current County ambulance rates excluding co-pays and deductibles and included the supplemental reimbursement schedule in place now and into 2022 to develop a conservative estimate of the value of the system. Now we must apply costs to the value to determine cost recovery to the City.

Before we discuss costs, we first need to understand the comparison between public ambulance providers and private ambulance providers. The most common comment from elected officials, as well as the general public, is “how can a government agency compete with the private sector?” This is a good question as the general consensus is that private sector is less expensive than government. The reality of public ambulance providers is not only can they compete but in almost every case, the public sector can do it significantly cheaper than the private sector. Private providers of ambulance services must establish their entire infrastructure which includes offices, station locations, maintenance shops, training facilities, and management - which also includes HR, finance, operations, etc. In addition to the above infrastructure, private sector providers must also pay fuel tax, registration, and insurance. And last, in addition to the costs, they must also maintain a profit margin to ensure sustainability. Conversely, the Fire Department already has the majority of this infrastructure in place. The addition of four units to the system should not require any additional administrative support to operate the system for Oxnard. The Department currently has an EMS Division, administrative support, HR, Finance, etc. In addition to the infrastructure, public ambulance providers do not pay fuel tax, registration, or most insurance that is required by private providers. The most important is that public providers can not generate a profit. The last component to the cost comparison is the compensation between public and private employees. While many assume public employees are paid significantly higher than private employees, the fact is that with pension reform, the cost has significantly narrowed that margin. Hourly rates in some cases are lower in the public sector than private. Couple that with lower costs for retirement and benefit packages the difference between public ambulance providers and private are often not more than 10%. However, when comparing total cost of a single unit, both AMR and Falck USA have recently bid a system in California with an annual cost per ambulance of \$1.7 million.

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The following calculation uses actual costs of Oxnard Fire employees and current equipment and ambulance costs along with a capital replacement plan and operating costs.

<b>Total Revenue from Transports</b>	<b>\$9,426,529</b>
• EMS Division costs	Already encumbered in deployment
• Support staff (mechanics, logistics, etc.)	Already encumbered in deployment
• Field personnel (supervisors, EMTs, EMT/P)	
○ 4 units require 24 employees	
○ 12 FF/EMTs @	\$1,460,448
○ 12 FF/Paramedics	\$1,891,956
<b>Total personnel costs</b>	<b>\$3,352,404</b>
• Rolling stock (ambulances, gurneys, ECG)	
○ 7 ambulances @ \$175,000*	\$306,250
○ 7 power cots @ \$31,000**	\$43,400
○ 7 cardiac monitors @ \$36,000***	\$50,400
<b>Total cost of rolling stock</b>	<b>\$400,050</b>
<b>Capital replacement plan + 10%</b>	<b>\$440,055</b>
• Maintenance/fuel/etc.	\$88,000
• EMS billing outside contractor @ 3.5%	\$332,500
• Total operating cost	\$4,613,009
<b>Total Net Cost Recovery</b>	<b>\$4,813,520</b>

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- Unit Hour Cost \$140.54/UH
- Cost per unit \$1,231,136.79
- Total revenue per unit hour \$275.22

\*depreciated over 4 years

\*\*depreciated over 6 years

\*\*depreciated over 5 years

### **Exploring Additional Areas for System Revenue**

Throughout the development of a study, items such as policies or concepts come to light that provide opportunities that may prove to be beneficial to the system. Although the following items are routinely implemented, changed, or eliminated, it is still in the best interest of the system to at least bring them forward for discussion, understanding that many may be political philosophy rather than business decisions.

### **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 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 fees aid in cost recovery of providing such services. The concept of charging for the response to Pre-Hospital Emergency Medical Services (PHEMS) is not as common. Most cities, counties, and special districts routinely collect taxes for the fire services agencies. Generally, those 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. Because fire stations are located throughout the community, they provide a strategically located pool of trained personnel equipped and are well-suited to provide response to PHEMS. Firefighters at the BLS and ALS levels have proven to

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be the cornerstone of EMS in cities, counties, and throughout the nation. Providing these strategically based firefighters who are trained EMTs and Paramedics comes with a cost, which is commonly referred to as the cost of readiness. 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. Even today, the Act does not mandate that the request for services includes ambulances or that firefighters provide medical services. 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 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 though, and in some cases required (precedence for fire service is the Fire District Act of 1987), to consider cost recovery for those services that are not provided for, or supported by, the tax dollar. The taxpayer is not responsible for the use of the fire agency for medical care.

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 both the direct cost of services and the indirect costs of services. Direct costs are those costs that are directly related to providing the services. These include the

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firefighters dispatched, along with the 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 comes new opportunities for supporting and increasing services to the community being served. These opportunities can range from increased staffing, purchase of new equipment, expanded training, increased salaries, bonuses, or educational incentives for higher levels, or expanded licensure such as moving from BLS services to ALS services. 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 LEMSA approval. The following agencies are just some of those which have established FRF within their jurisdictions:

- Montclair, La Habra Heights, Corona, Pine Valley, Loma Linda, Kirkwood, San Bernardino, Sacramento Metro, Sacramento City, Sunshine Summit, San Ramon, Folsom, San Rafael, Sanger, Novato, Albany, Beverly Hills, Glendale, Burbank, Cosumnes, Moraga Orinda, Huntington Beach, Anaheim, Costa Mesa, Fountain Valley, Contra Costa

These agencies have instituted fees that range from between \$100 to \$425 per response, with many additional agencies considering the implementation of FRF within the coming year.

Applying an estimated FRF of \$400 for each medical incident to the percentage of commercial

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insurance calls only for the estimated 2,403 EMS calls (estimate for 20/21), we can assess the value at \$768,960 annually bringing total annual revenue to **\$10,195,489 and total cost recovery to \$5,582,480.**

### **Summary of Findings**

Located along some of the most beautiful sections of California, the EOA has both some of the highest and most expensive costs of living. At the same time, the City of Oxnard has their share of lower economic sections in the state. This higher standard of living has provided a higher than normal revenue for ambulance services than much of the state due to a robust commercial insurance demographic. As a result, the ambulance system in the Oxnard EOA is a very stable system because of the balance between payers and non-payers. As different as the area is from other parts of California, they are also very much alike. As with every other county in the state, the County has the absolute operational and financial responsibility to provide for ambulance services. However, in the case of Oxnard Fire they assume the responsibility for the County as a H&S Code 1797.201 provider. EMS, and in particular ambulance services, are a consumer based public safety system, unlike police and fire. Being consumer based, our elected officials are in a quandary in establishing the lowest rates possible for their residents, creating a living wage for the employees (who may also be residents), and ensuring a stable and sustainable system for the ambulance provider (profit). The current system in the Oxnard EOA is the same as every other system in the state to the extent that reimbursement, for the most part, is transport based and a non-subsidized fee for service system. This is because by regulations and statutes, paramedics are restricted from advising against transport and required to provide transport to every patient that requests it. This is counter-productive to the direction of the ACA and the triple aim of health care. Although there are regulations for the transport of patients, there are still ways to modify the system to reduce costs of services and at the same time, provide better options for the patient other than transport to the ED.

The ambulance transport system across California has remained virtually unchanged for nearly 50 years; the City of Oxnard is no exception. It is still an FFS-based system that relies on response times to validate the services. The Oxnard Fire Department is acting in a very

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competent manner by evaluating their system and hopefully, will actually bring the system into the 21<sup>st</sup> century and be poised to adapt to future changes in health care.

As part of the evaluation workbook, there is a section that asks what the key factors or objectives are with the study. The Fire Chief and his staff developed the following objectives that they feel should be part of the system drivers:

- 1) *Improve service delivery***
- 2) *Innovate services***
- 3) *Expand services***
- 4) *Local control over EMS system in our city***

Using the Chief's vision, the following list of items can be brought into the system in a sustainable manner.

- A system that is driven more by providing the highest level of service possible within the confines of the resources (revenue) of the system.
- Enhanced operational control – i.e., system status management, additional units based on actual needs (peak hours), an ability to better control or assure total response times, better data collection, for better patient care.
- Employees provided with a livable wage and a career path that leads to long term employees / employment in the EOA.
- A system that is financially stable due to the commitment to patients, quality of care, standardized billing practices, as well as compassionate billing practices.

As we can see, the fire service objectives are solely centered on creating the best system that can be delivered within the confines of the system's ability to pay with cost recovery reinvested back into the system to facilitate constant improvements.