Date of Meeting: July 17, 2013

#15h

BOARD OF SUPERVISORS
ACTION ITEM

SUBJECT: FINANCE/GOVERNMENT SERVICES AND OPERATIONS COMMITTEE REPORT: Emergency Medical Services Transport Billing Program

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: January 1, 2014

STAFF CONTACTS: John Sandy, Assistant County Administrator
Ben Mays, CFO, Management and Financial Services
Jason Cournoyer, Management and Financial Services
Keith Brower, Chief, Fire, Rescue and Emergency Management
Doug Rambo, Loudoun County Fire and Rescue Commission
Jose Salazar, Deputy Chief-EMS, Fire, Rescue and Emergency Management

RECOMMENDATIONS:

Committee: On July 9, 2013 the Finance/ Government Services and Operations (FGSO) Committee voted 4-0-1 (York absent for the vote) to recommend that the Board of Supervisors direct staff to a) proceed with the initial part of the public education and outreach campaign to the Combined Fire and Rescue System and other stakeholders; b) prepare a proposed draft ordinance that will allow for the implementation of an Emergency Medical Services (EMS) Transport Billing Program that uses a medium billing approach, a fee structure based on the current market but not to exceed 10 percent over the highest comparable neighboring jurisdiction; and includes a revenue component among Fire/EMS system participants, which would be managed by the county government; and c) begin the implementation steps, including submitting required forms and applications to the U.S. Department of Health and Human Services for Medicaid enrollment and to obtain a National Provider Identifier.

Staff: Staff recommends that the Board of Supervisors direct staff to undertake a public education and outreach campaign, as well as prepare a draft proposed ordinance for consideration that implements an EMS Transport Billing Program.

**** Implementation of an EMS Transport Billing Program has **no** impact on the emergency medical services provided to citizens and visitors of Loudoun County. EMS will continue to be provided at the same high quality with no person ever being denied service.*

BACKGROUND: On October 3, 2012, the Board of Supervisors directed the County Administrator to proceed with a Request for Proposal (RFP) for the purpose of studying the feasibility and policy options of implementing an Emergency Medical Service (EMS) Transport Billing Program (Attachment 2). A budget adjustment was approved to hire a consultant and the RFP was issued.

The preliminary findings of this study were presented to the FGSO Committee at their July 9, 2013 meeting; the Action FGSO Item and the preliminary report are provided in Attachment 1 and 4 respectively. Representatives of the Ludwig Group, LLC, Gary Ludwig and Richard Hamilton, presented their preliminary findings and recommendations to the FGSO Committee and addressed several questions from Committee Board members on their methodologies. The FGSO Committee voted 4-0-1 (York absent for the vote) to recommend that the Board of Supervisors direct staff to proceed with Phase 2 of the implementation process and identified the key elements to be included in the proposed ordinance, as described in the Issues section below.

ISSUES: The FGSO Committee approved several of the Ludwig Group's recommendations on instituting an EMS billing program, including:

- Proceeding with the public outreach campaign for the Combined Fire and Rescue System and other stakeholders.
- Proceeding with enrolling as a Medicaid approver provider and obtaining a National Provider Identifier.
- Drafting a proposed ordinance that includes the recommended revenue sharing model.

However, the FGSO Committee included 2 key elements of the proposed ordinance in their recommendation for the Board that differs from the Ludwig Group's recommendations. These are the Billing/ Collection Program Model and the EMS Billing Rates.

Billing and Collection Efforts Program Model

Included in Ludwig Group's preliminary findings were four "standard" types of EMS Billing program models, which are currently deployed by many different agencies across the United States:

1. Insurance Reimbursement (insurance only)
   - Invoices sent only to insurance carriers
   - Hardship waivers available for "self-pay" patients
   - No billing for Medicare's 20% co-pay or other insurance co-pays
2. EMS Billing and Collections (Soft Billing efforts)— Consultant Recommended
   - Co-pays are pursued
   - Three notices / invoices sent out to patients; 30, 60, & 90 days
3. **EMS Billing and Collections (medium efforts)— FGSO Committee Recommended**
   - **Accounts receive same treatment from billing vendor ("Soft")**
   - **However, at the 180 day mark, unpaid invoices are sent to Loudoun County Treasurer's Office for collection, as with other County debts**
4. EMS Billing and Collections (Hard billing and collections efforts)
   - Accounts receive same treatment from billing vendor ("Soft" and "Medium")
   - If no payment received at the 270 day mark, the account will be reported to credit bureau as a "bad debt"

The Ludwig Group, LLC recommended the deployment of the Soft Billing and Collection Efforts Model (#2), as this model generates more revenue than billing insurance companies only and would still minimize most, if not all, issues related to more aggressive billing models. According to the consultants' experience, the more aggressive models, Medium (#3) and Hard (#4), can result in an increased level of citizen complaints. The trade-off of more complaints is an increase in overall revenues.

The FGSO Committee voted to recommend that the Board of Supervisors direct staff to include a Medium Billing and Collection Efforts Model (#3) in the draft proposed ordinance. The Medium Model differs from the Ludwig Group recommended Soft Model in that after 180 days, all outstanding invoices will be sent to the County's Treasurer's Office for collection. This is the same process used for all other unpaid County debts. It should be noted that these collection efforts will have an impact on the Treasurer's Office and may require additional staff resources. Staff is working with Ludwig Group to identify the level of effort and the workload for implementing the Medium Model. These costs will be provided for the Board's consideration in September. The program costs already identified by the Ludwig Group are included in Attachment 4, page 17 of 23.

EMS Billing Fee Rate Structure

The Ludwig Group recommended that market driven rates be used by the County for setting the fee structure for the EMS billing program, which includes the appropriate fees for BLS, ALS 1, ALS 2, and mileage reimbursement. The consultants' recommended fee structure was derived through researching and analyzing:

- Current private sector transport agencies rates;
- Averages rates of other states and jurisdictions outside the immediate region;
- The Consumer Price Index (CPI) increases over the last seven years; and
- National surveys of the top 200 cities.

The following table was presented by Ludwig Group at the FGSO Committee and lists some of the data used in developing the recommended billing fee schedule.

Factoring "Market-Driven" Rates	All Data Elements Considered
An Analysis of Private Sector Transport Agencies	➢ **AMR (Conn) - $1,100.00** ➢ **Rural-Metro (Fulton County, GA) - $1,050.00** ➢ **TransCare (NY) – $1,350.00**
Transport Averages / Specific Base Rates on West and East Coasts	➢ **Average in CA - $1,486.00** ➢ **State of Utah – BLS-$785.00 & ALS-$1,148.00** ➢ **Philadelphia, PA– BLS-$900.00 & ALS-$1,100.00**
Average CPI in the Last Seven Years	➢ **2005 – 3.4% 2008 – 3.8% 2011 – 3.2%** ➢ **2006 – 3.2% 2009 – (0.04)% 2012 – 2.1%** ➢ **2007 – 2.8% 2010 – 1.6%** ➢ **Average: 2.51%**
JEMS Survey of Top 200 Cities – 2012	➢ **Average BLS Emergency – $640.77** ➢ **Average ALS 1 – $773.28** ➢ **Average ALS 2 - $906.05**

The fee schedule recommended by the Ludwig Group is higher than local jurisdictions included in the following table. In light of this, the FGSO Committee recommended that the fee structure not exceed 10% over regional, comparable jurisdictions. The following table reflects Ludwig Group's recommended fee rates and the calculated fee rate schedule based on the FGSO Committee's approved recommendation.

The preliminary findings of the Ludwig Group included the EMS transport fee schedules for neighboring and other comparable jurisdictions (Attachment 4, page 8 of 23). The FGSO requested that additional jurisdictions be included for the Board of Supervisors consideration at their July 17, 2013 meeting. As such, the following table includes the requested additions of other comparable jurisdictions,

including Arlington and Montgomery Counties, the City of Alexandria and the District of Columbia.

Comparison of EMS Transport Fees and Recommendations for Loudoun County					
	Locality Adoption	Basic Life Support (BLS)	Advanced Life Support 1 (ALS 1)	Advanced Life Support 2 (ALS 2)	Mileage
Alexandria, VA (City of)	1997	$400	$500	$675	$10
Arlington Co. VA	1999	$400	$500	$675	$10
Chesterfield Co. VA	2002	$394	$468	$677	$10
District of Columbia	1995	$425	$565	$700	$10
Fairfax Co., VA	2007	$400	$500	$675	$10
Frederick Co., MD	2003	$420	$600	$700	$10
Prince William Co., VA	2011	$400	$500	$700	$10
Loudoun County (Ludwig Group recommended)		**$565**	**$725**	**$840**	**$12**
Loudoun County (FGSO Committee recommended)		**$467**	**$660**	**$880**	**$11**
Montgomery Co., MD	2012	$400	$600	$800	$10
Stafford Co., VA	2006	$400	$500	$675	$10

Note: Jurisdiction rates used to calculate the FGSO Committee's recommendation of 10% over the highest in the region are highlighted in the table. Attachment 7 includes EMS Billing rate schedules for other localities not included in the table, including the cities of Fairfax, Manassas, and Manassas Park and the Metropolitan Washington Airport Authority (MWAA).

EMS Billing Revenue Preliminary Revenue Projections

There are several factors other than the fee schedule that impact the revenue of an EMS Transport Billing Program. These factors include: types of EMS responses, the payment sources of payers, and the billing and collection efforts. Ludwig Group analyzed each of these elements in calculating the projected revenue estimates for the EMS Billing Program. The following is a summation of some of their preliminary findings.

EMS Responses

Loudoun County responded to 13,986 medical emergencies last year. Each response is categorized as a Basic Life Support (BLS), Advance Life Support (ALS) or Advanced Life Support 2 (ALS-2) for which each type is recommended to be billed at a different rate due to the progressive levels of medical care provided (ALS-2 being the highest level of care). Of these three categories of medical services provided during an EMS transport, ALS is the most common and reflects 70% of the total EMS responses or 9,790 responses last year. The highest level of medical support, ALS-2, which is proposed to be charged the highest rate, only represents approximately 2% of the total EMS responses last year.

Medical Support of EMS Transports in Loudoun County	Total Number of Calls	Percentage of Total EMS responses
BLS	28%	3,916
ALS	70%	9,790
ALS-2	2%	280
TOTAL	100%	13,986

EMS Transport Payment Sources

Payments for EMS transport are anticipated to derive from varying avenues including Medicaid and Medicare reimbursements, insurance and co-pays, and direct payments from those who are uninsured. The proportional make-up of these varying sources of payments has an impact on the anticipated revenue for the EMS Transport Billing Program. Ludwig Group analyzed those that were admitted to the hospital within Loudoun County in identifying the potential mixture of payment methods that could be anticipated in Loudoun to calculate the estimated revenue projections for each billing model. Their research found that Loudoun County is expected to receive payment for the EMS Transport Billing Program from the following sources with estimated associated revenue for each payment method.

Payment Sources in Loudoun County	Percentage of Anticipated Payment Sources	Revenue Estimate/ % of Total Market Rate Fee Schedule (Consultant Recommendation)	Revenue Estimate/ % of Total FGSO Committee Recommended Fee Schedule	Variances/ % between Fee Schedules (FGSO Committee/ Ludwig)
Medicaid	32%	$1,466,000 (24%)	$1,466,000 (23%)	$0 (0%)
Medicare	5%	$114,000 (2%)	$114,000 (2%)	$0 (0%)
Insurance/ Co-Pay	54%	$4,354,000 (73%)	$4,520,000 (71%)	$166,000 (4%)
Direct Payment	9%	$54,000 (1%)	$318,000 (4%)	$264,000 (480%)
Total Sources	**100%**	**$5,988,000 (100%)**	**$6,418,000 (100%)**	**$430,000 (7%)**

Note: Medicaid and Medicare payments are pre-determined and are currently below the immediate region's average EMS transport fee. Furthermore, the total revenue from Medicaid and Medicare reimbursements remains the same amount regardless of the fee schedule implemented. The following table includes the Medicaid and Medicare reimbursement rates for 2012.

BLS Emergency (A0429) Medicare / Medicaid Reimbursements	ALS 1 Emergency (A0427) Medicare / Medicaid Reimbursements	ALS 2 Emergency (A0433) Medicare / Medicaid Reimbursements	Mileage Medicare / Medicaid Reimbursements
Medicare Allowable: $350.54	Medicare Allowable: $416.27	Medicare Allowable: $602.50	Medicare Allowable: $7.09
Medicaid Payment: $125.00	Medicaid Payment: $125.00	Medicaid Payment: $125.00	Medicaid Payment: $7.09

Billing and Collection Efforts Model

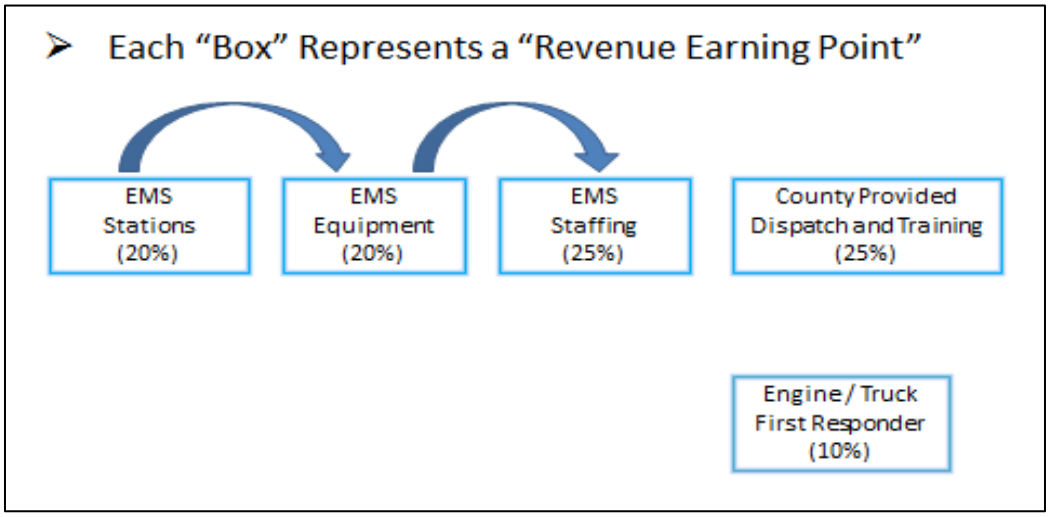
Attachment 4 (page 10 of 23) provides the consultants' estimates on the revenue potential of billing approaches in Loudoun County, based on analysis of EMS transport activities and based on the market rate fee schedule. Estimated revenues, prior to deduction of expenses for administration and collection costs of a third party billing vendor, are approximately $6 million. Ludwig Group presented the FGSO Committee with a revenue projection, prior to deduction of expenses for administration and collection costs of a third party billing vendor, of approximately $6 million based on their recommended soft billing program model and the recommended market rate fee schedule.

Based on the FGSO Committee's approved recommendations to implement the Medium billing model program and the revised fee schedule (not to exceed 10% over the regional jurisdictions), the Ludwig Group projects the revised revenue to be approximately $6.42 million. The following table includes Ludwig Group's projected revenue estimates for each of the billing models based on their recommended market rate fee schedule as well as the FGSO Committee's recommended schedule along with the variances between the revenue projections for each fee schedule.

Type of Billing Programs Implemented	Ludwig Recommended Market Rate Fee Schedule	FGSO Committee Recommended Fee Schedule	Fee Schedule Variances
1.) Insurance Reimbursement (Only) Billing	**$4.71 M**	**$4.05 M**	**($660,000)**
2.) "Soft" Billing and Collections	**$5.98 M**	**$5.38 M**	**($600,000)**
3.) "Medium" Billing and Collection	**$6.87 M**	**$6.42 M**	**($457,000)**
4.) "Hard" Billing and Collections	**$7.77 M**	**$7.12 M**	**($650,000)**

Revenue Allocation Model

The FGSO Committee has recommended the revenue sharing arrangement for EMS billing program revenues that Ludwig Group presented. This recommendation is based on stakeholder interviews and the fact that all system participants contribute resources in response to emergency medical call responses. The consultant diligently reviewed call response data and took into consideration the following factors ("*Revenue Earning Points*"):



- Stations**:** The station that provides the ALS/BLS Units, people and material.

- Equipment/Apparatus Used in Transports**:** The units that provide the medical care and hospital transportation services.
- Staffing**:** The persons who provide the direct medical care services that are the revenue generating service elements with the Advanced Life Support (ALS) or Basic Life Support (BLS).
- County Provided Dispatch and Training**:** County infrastructure and FREM resources necessary to support the system, such as: emergency communications systems and services, CAD data and radio systems, and centralized training support.
- Engine/Truck First Responders**:** Fire or EMS units (i.e., volunteer or career providers) that respond to the call to rescue and stabilize in support of the transport unit.

Details demonstrating how revenue would be calculated, the revenue generated per run and assorted distribution scenarios are provided in Attachment 4, pages 12-14.

FISCAL IMPACT: There is no fiscal impact associated with the adoption of the motions in this item. Existing staff resources will be used to manage the continued work of the consultant and any future tasks required to implement Phase 2 including conducting the first part of the public education and outreach campaign (i.e. with the LC-CFRS and pertinent stakeholders). This item merely requests approval to allow the EMS Transport Fee Billing Workgroup to continue its work with Ludwig Group, LLC to prepare a proposed ordinance based upon the policy considerations outlined in this item and any associated tasks. Please note that adoption of the draft motions in this item does not implement EMS Transport Billing Program in Loudoun County at this time.

ALTERNATIVES:

1. Do not direct staff to continue work on EMS Transport Billing Program including: the preparation of a proposed ordinance for consideration in September 2013; community outreach, resource and staffing plans; concurrent procurement process for a third-party billing vendor; and other tasks as required and identified.
2. Change or modify any one of the five consultant and/or the FGSO Committee recommended elements for the proposed EMS Transport Fee ordinance with regard to the EMS Billing Model, the Fee Structure, the Revenue Sharing model, and other implementation tasks, such as filing of federal forms and applications.

As stated in the Action Item presented to the FGSO Committee, according to Ludwig Group, LLC it is imperative that the County enroll as a Medicaid approver provider and obtain a National Provider Identifier prior to January 1, 2014 in order to avoid any future adverse impacts on any future EMS transport billing efforts associated with Affordable Healthcare Act.

Regardless of whether or not an EMS Transport Billing Program is eventually implemented, EMS service is not impacted and no person will ever be denied medical service.

DRAFT MOTION:

1. I move the recommendation of the Finance/Government Services and Operations Committee that the Board of Supervisors direct staff to:
    a. proceed with the first part of the public outreach campaign to the Combined Fire and Rescue System and other stakeholders;
    b. prepare a proposed draft ordinance that will allow for the implementation an Emergency Medical Services Transport Billing Program that uses a medium billing approach; a fee structure based on current market, not to exceed 10 percent of the highest comparable neighboring jurisdiction; and uses a revenue sharing component among fire/EMS system participants that would be managed by the county government; and
    c. begin the implementation steps, including submitting the required forms and applications to the U.S. Department of Health and Human Services for Medicare Enrollment and to obtain a National Provider Identifier.

OR

2. I move an alternate motion.

ATTACHMENTS:

1. July 9, 2013 FGSO Committee Action Item #12
2. FY 2014 Preliminary Fiscal Guidance-Copy Teste
3. EMS Transport Billing Program Timeline and Key Milestones
4. The Ludwig Group, LLC – Preliminary Findings and Recommendations
5. Preliminary Revenue Forecast Findings As Presented to FGSO Committee
6. Ludwig Group's FGSO Committee EMS Transport Billing PowerPoint Presentation
7. Other Jurisdiction EMS Billing Program Rate Schedules (Not included in Analysis)

Date of Meeting: July 9, 2013

#12

BOARD OF SUPERVISORS
FINANCE/GOVERNMENT SERVICES AND OPERATIONS COMMITTEE
ACTION ITEM

SUBJECT: Emergency Medical Services (EMS) Transport Billing Program

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: January 1, 2014

STAFF CONTACT: John Sandy, Assistant County Administrator
Ben Mays, CFO, Management and Financial Services
Jason Cournoyer, Management and Financial Services
Keith Brower, Chief, Department of Fire, Rescue and Emergency Management
Doug Rambo, Loudoun County Fire and Rescue Commission
Jose Salazar, Deputy Chief-EMS, Department of Fire, Rescue and Emergency Management

RECOMMENDATION:

Staff: Staff recommends that the Finance/Government Services and Operations (FGSO) Committee recommend that the Board of Supervisors direct staff to undertake a public education and outreach campaign, as well as prepare a draft proposed ordinance for consideration that implements an Emergency Medical Services (EMS) Transport Billing Program. The key design elements of the proposed ordinance would implement a soft billing program, a fee structure based upon the current market conditions, and a revenue sharing component among Fire/EMS system participants which would be managed by the county government. Staff further recommends that the Department of Fire, Rescue and Emergency Management (DFREM) be authorized to submit required forms and applications to the US Department of Health and Human Services (DHHS) for Medicare Enrollment and to obtain a National Provider Identifier prior to January 1, 2014, as recommended by Ludwig Group, LLC.

**** Implementation of an EMS Transport Billing Program has **no** impact on the emergency medical services provided to citizens and visitors of Loudoun County. EMS will continue to be provided at the same high quality with no person ever being denied service.*

BACKGROUND: On October 3, 2012, the Board of Supervisors directed the County Administrator to proceed with a Request for Proposal (RFP) for the purpose of studying the feasibility and policy options of implementing an Emergency Medical Service (EMS) Transport Billing Program. A budget adjustment was approved to hire a consultant and the RFP was issued. Attachment 1 contains the copy teste from the FY 2014 fiscal guidance when the project was approved.

Feasibility Study and Future Implementation—An EMS Transport Billing Proposal Analysis Group (PAG), consisting of staff from Department of Fire, Rescue and Emergency Management (DFREM), the Department of Management and Financial Services (MFS), County Administration, and an

appointed EMS Commissioner from the Loudoun County Fire-Rescue Commission (LC-FRC), assisted with development of the RFP, subsequently analyzed proposals and selected the Ludwig Group, LLC. The PAG became the Project Steering Committee based upon the group's subject matter expertise in both the operational and financial aspects of a potential EMS Billing Program. Ludwig Group, LLC has been working on the feasibility study since April 2013. The study is grouped into the three phases, as illustrated in the diagram below and described in the subsequent sub-sections. More detailed information is included in Attachment 2.

Phase 1: April- July 2013
- **Data Gathering and Analysis (April-June 2013)**
- **Preliminary Findings and Recommendations (June 2013)**
- **FGSOC and Board Policy Direction (July 2013)**

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Phase 2: July- September 2013
- **Initial LC-CFRS and Stakeholders Outreach Campaign**
- **Draft Ordinance**

↓

Phase 3 (Implementation): September 2013 – April 2014
- **FGSOC & Board Public Hearing Process (September- November 2013)**
- **Final Adoption and Policy Decision (December 2013)**
- **Comprehensive Public Education and Outreach**
- **Procurement of Services and Implementation of Program (January – April 2014)**

Phase 1: Preliminary findings by the Ludwig Group, LLC

The primary basis for this action item are the Ludwig Group, LLC findings (Attachment 3), which are founded on extensive data collection and analysis. Board action on this item will provide staff and the consultant direction for drafting most major elements of the proposed ordinance to be considered in September 2013, with eventual adoption by the Board targeted for the end of 2013.

The consultant team will be in attendance to present their findings and recommendations. Their efforts, findings and recommendations from Phase 1 will also be integrated into the final report that will be presented with the proposed ordinance during the program adoption process commencing in September 2013.

Phase 2: Outreach Campaign, Draft Proposed Ordinance and Initial Implementation Activities

Phase 2 will involve: outreach to the LC-CFRS and other pertinent stakeholders; drafting an ordinance according to the Board's direction on the billing model, rates, and revenue sharing; and beginning necessary implementation activities. It is anticipated that this phase would begin in July. Implementation activities during Phase 2 will require significant staff effort. These activities include: a detailed technology review to activate the billing module within the current medical reporting program; discussions and presentations from existing third party billing contractors to determine if riding existing contracts is feasible; and submitting DFREM applications to the Department of Health and Human Services including collecting licenses and other data. Phase 2 will conclude with the consultant drafting the ordinance and the Board making final adjustments.

According to Ludwig Group, LLC, the uncertainties and unknown policy implications surrounding

the anticipated implementation of the Affordable Healthcare Act beginning January 1, 2014 make it imperative that the County submit the required forms and applications to be enrolled as a Medicare approved service provider and to obtain a National Provider Identifier prior to January 1, 2014. *Please note that submitting these forms does not compel the County to implement an EMS Transport Billing Program.*

Phase 3: Implementation

The Implementation Phase is to follow Phase 2 (potentially commencing in September 2013). It is expected to be completed by Spring 2014, assuming that there are no issues with the draft ordinance, the procurement process, or the implementation plans. The Implementation Phase is to include the process for public hearing(s) on the proposed ordinance, eventually the Board's adoption of the ordinance and implementation of the EMS Transport Billing Program. Revenue is projected to be collected by the last quarter of FY 2014.

Ludwig Group, LLC has included a comprehensive list of costs associated with implementing the EMS Transport Billing Program as part of their preliminary findings (see Attachment 3, pages 17-20). These costs include: the cost of public education and outreach; technology costs (hardware and software licensing); staff and operational resources; banking fees; medical supplies; and the contractual costs for the third party vendor. These costs are contingent on the details of the Board adopted EMS Transport Billing Program. As such, staff will continue to identify, evaluate and calculate the costs to be provided to the Board for consideration as part of this Implementation Phase. These programmatic costs are to be covered by the revenue proceeds from the EMS Transport Billing Program.

ISSUES: The project is currently in Phase 1-Data Gathering and Analysis and Board Policy Direction on Key Design Elements. This Phase is divided into two major parts (1) stakeholder interviews and findings; and (2) benchmarking, policy considerations and analysis. The subsections below summarize the work completed to date and the consultant's recommendations for each part.

Phase 1- Part 1: Stakeholder Interviews and Analysis

As part of the RFP and resulting contract, the Ludwig Group, LLC was required to meet and interview all major stakeholders who would be involved with an EMS transport billing program in Loudoun County. As a result, they facilitated a series of individual and group interviews and focus groups to assist in the identification of any potential impacts to Loudoun's combination fire-rescue system and/or other stakeholders. The following stakeholders were given the opportunity to meet and provide feedback to the consultant:

- Loudoun County Fire-Rescue Commission and representatives;
- Volunteer EMS company chiefs;
- Volunteer fire company chiefs;
- Volunteer company presidents
- Loudoun County Combined Fire and Rescue System Medical Director;
- EMS Council, Incorporated and Chair;
- DFREM Chief and Deputy Chiefs of EMS and Emergency Communications;
- INOVA Loudoun Hospital Administration;
- County Treasurer;
- Department of Management and Financial Services staff; and
- County Administrator and his staff;

Multiple trips were made to Loudoun County to complete these efforts. A summary of the stakeholder

meetings conducted are provided in Attachment 3, Section 1 (page 4 and 5).

Consultant Recommendations Resulting from Stakeholders' Input: As a result of this stakeholders' input, the Ludwig Group, LLC recommends the following two actions.

1) *Perform Public Education and Outreach*—Upon deciding to move forward, the Board of Supervisors and the county government should undertake an education and outreach campaign to provide factual information and to help educate the public about the EMS Transport Billing Program, and as well as provide direction to staff and the Ludwig Group to create a draft ordinance for the EMS Transport Billing Program. A second comprehensive public education and outreach effort is recommended for stakeholders and residents prior to and after such an ordinance is adopted and the third-party billing company is employed. Ludwig Group, LLC has preliminarily recommended that a comprehensive public education outreach campaign be conducted to educate the public, system members and all stakeholders of the details of the program after the Board has adopted an ordinance and implemented the EMS Transport Billing Program.

   The first part of this campaign would involve a new stage of outreach to the LC-CFRS and other pertinent stakeholders, prior to the proposed ordinance considerations. The second part of the campaign would begin once the draft ordinance is considered by the Board and is recommended to include media outlets, publications, outreach events and other means to successfully acclimate all stakeholders with the program. It should be noted that the costs for the second part of the campaign are proposed to be covered by EMS Transport Billing Program revenue proceeds and Ludwig Group, LLC has included these costs as part of their preliminary findings in Attachment 3, List of Possible Program Costs Table, page 17.

2) *Use a Revenue Sharing Model*—Based upon stakeholder concerns with regard to who does the work and how the EMS transport billing revenue would be distributed, the EMS Billing Program should include a "revenue sharing feature" for fire/EMS system providers (DFREM and the volunteer fire and EMS companies). Details of the revenue sharing model are provided in Attachment 3, pages 12-14.

Phase 1- Part 2: Benchmarking, Policy Considerations and Analysis

The Ludwig Group, LLC, as part of the second part of Phase 1 performed benchmarking analysis on how other jurisdictions have designed their programs; identified policy considerations and performed preliminary revenue forecast associated with these same options (e.g., types of billing programs and rates to be charged); and created of a recommended revenue sharing model among system participants based upon stakeholders' input. The following are the major policy considerations that need to be weighed by the Board of Supervisors which are associated with an EMS Transport Billing program.

Policy Consideration: What Type of EMS Billing Model Should be Deployed? Based upon the consultant's review of best practices and a survey of area governments, the consultant identified four "standard" types of EMS billing program models that are currently deployed by many different agencies across the United States:

1. Insurance Reimbursement (insurance only)
   - Only invoices sent to insurance carriers
   - Hardship waivers available for "self-pay" patients
   - No billing for Medicare's 20% co-pay or other insurance co-pays
2. **EMS Billing and Collections (Soft Billing efforts)—Recommended**
   - Co-pays are pursued

- Three notices / invoices sent out to patients; 30, 60, & 90 days

3. EMS Billing and Collections (medium efforts)
   - Accounts receive same treatment from billing vendor (as listed above)
   - However, at the 180 day mark, unpaid invoices are sent to Treasurer's Office for collection efforts, as with other County debts

4. EMS Billing and Collections (Hard billing and collections efforts)
   - Accounts receive same treatment from billing vendor (as listed above)
   - If no payment received at the 270 day mark, the account will be reported to credit bureau as a "bad debt"

Consultant Recommendation: Soft Billing and Collections Model (#2) Should be Deployed. Ludwig Group, LLC recommends deployment of the Soft Billing and Collection Efforts Model (#2 above). Of the four models provided, this model generates more revenue than billing insurance companies only. However, it will still minimize most, if not all, issues related to more aggressive billing models, such as the Medium Effort Model (#3) and the Hard Billing Model (#4). According to the consultants' experience, the more aggressive models #3 and #4 can result in an increased level of citizen complaints. The trade-off of more complaints is an increase in overall revenues. The estimated variance in revenues generated between the four models is projected to range from approximately 15 to 20 percent between each additional level. Of the five jurisdictions surveyed, two use the soft billing model; while three use the insurance reimbursement only approach, as shown in Attachment 3, Table 1, page 6.

Policy Consideration: What Fee Schedule Should Loudoun Use? The consultant researched neighboring and other comparable jurisdictions fee schedules (Attachment 3, page 8), shown in the table below. As discussed in Attachment 3, once an ordinance with billing rates is adopted by a given jurisdiction, it was found that these localities are reluctant to update rates to reflect market conditions.

Comparison of EMS Transport Fees and Recommendation for Loudoun County					
	Locality Adoption	Basic Life Support (BLS)	Advanced Life Support 1 (ALS 1)	Advanced Life Support 2 (ALS 2)	Mileage
Chesterfield Co. VA	2002	$394	$468	$677	$10
Fairfax Co., VA	2007	$400	$500	$675	$10
Frederick Co., MD	2003	$420	$600	$700	$10
Prince William Co., VA	2011	$400	$500	$700	$10
Loudoun (recommended)		**$565**	**$725**	**$840**	**$12**
Stafford Co., VA	2006	$400	$500	$675	$10

Consultant Recommendation: Utilize Market Driven Rates for Loudoun Fee Structure—Ludwig Group, LLC believes that market driven rates should be used by the county for setting the fee structure for the EMS billing program. This includes the appropriate fees for BLS, ALS 1, ALS 2, and mileage reimbursement. As evidenced in Attachment 3, Table 2, page 8, most of the localities adopted their ordinances several years ago (i.e., ranging from 2002 to 2011). Many of these localities have never increased such fees since the adoption of their respective ordinances. Therefore, it is recommended that Loudoun use current market rates, as opposed to rate comparable to these other jurisdictions.

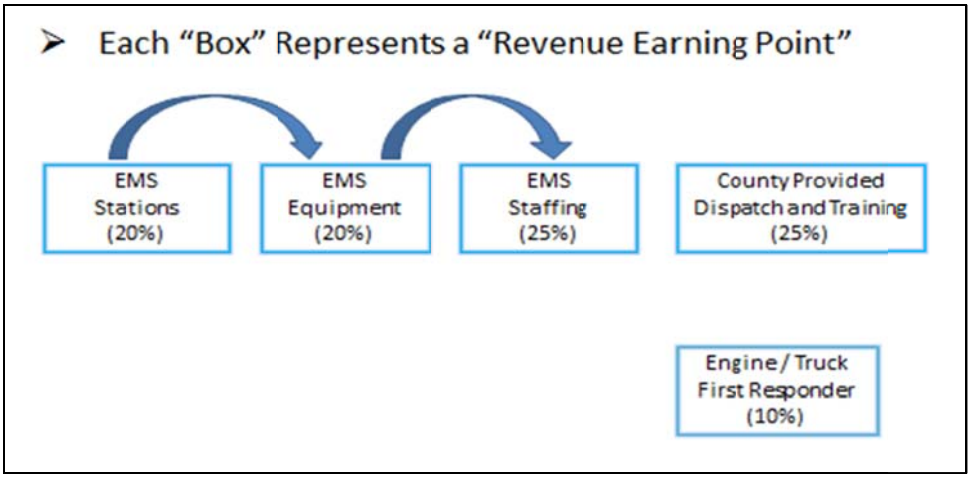
The estimated gross revenue of Soft Billing and Market Driven Rates is approximately $6 Million per annum and is likely to increase over time. Attachment 3 (pages 9-11) provide the consultant's estimates the revenue potential of billing approaches in Loudoun County, based on analysis of EMS transport activities. Estimated revenues, prior to deduction of expenses for administration and collection costs of a

third party billing vendor, are approximately $6 million. Each identified billing model results in differing levels of estimated revenues, primarily due to the level of collections efforts for each varying model. For example, Ludwig Group, LLC estimates that there is a 20% loss of revenue or $1.2 million if an insurance reimbursement only approach (Model #1) was implemented. Similarly, revenue would increase based on the increase level of collection efforts in the two other identified models (Models #3 and #4) Attachment 4 includes the estimated revenue projections for each of the four billing models identified.

Policy Consideration: How Should the EMS Transport Fees be Shared? Ludwig Group, LLC and county staff recommend that a revenue sharing arrangement be included in the EMS billing program. This recommendation is based on stakeholder interviews and the fact that all system participants contribute resources in response to emergency medical call responses. The consultant diligently reviewed call response data and took into consideration the following factors ("*Revenue Earning Points*"):

- **Stations:** The station that provides the ALS/BLS Units, people and material.
- **Equipment/Apparatus Used in Transports:** The units that provide the medical care and hospital transportation services.
- **Staffing:** The persons who provide the direct medical care services that are the revenue generating service elements with the Advanced Life Support (ALS) or Basic Life Support (BLS).
- **County Provided Dispatch and Training:** County infrastructure and FREM resources necessary to support the system, such as: emergency communications systems and services, CAD data and radio systems, and centralized training support.

First Responders: Fire or EMS units (i.e., volunteer or career providers) that respond to the call to rescue and stabilize in support of the transport unit. *Consultant Recommendation: Revenue Allocation Model Based On Infrastructure/Apparatus Ownership, Affiliation of First Responders, and Fiduciary Responsibility for System-wide Communication and Training*—Ludwig Group, LLC recommends the following revenue sharing distribution model and percentages are shown in the graphic below.



Details demonstrating how revenue would be calculated, the revenue generated per run and assorted distribution scenarios are provided in Attachment 3, pages 12-14.

FISCAL IMPACT: There is no fiscal impact associated with the adoption of the motions in this item. Existing staff resources will b used to manage the continued work of the consultant and any future tasks required to implement Phase 2 including conducting the first part of the public education and outreach campaign (i.e. with the LC-CFRS and pertinent stakeholders). This item merely requests approval to allow the EMS Transport Fee Billing Workgroup to continue its work with Ludwig Group, LLC to prepare a proposed ordinance based upon the policy considerations outlined in this item and any associated tasks. Please note that adoption of the draft motions in this item does not implement EMS Transport Billing Program in Loudoun County at this juncture.

ALTERNATIVES:

1. Do not recommend to the Board of Supervisors that staff continue work on EMS Transport Billing Program including: the preparation of a proposed ordinance for consideration in September 2013; community outreach, resource and staffing plans; concurrent procurement process for a third-party billing vendor; and other tasks as required and identified.
2. Change or modify any one of the five consultant recommended elements for the proposed EMS Transport Fee ordinance with regard to the EMS Billing Model, the Fee Structure, the Revenue Sharing model, and other implementation tasks such as filing of federal forms and applications. As stated in this item, according to Ludwig Group, LLC it is imperative that the County enroll as a Medicaid approver provider and obtain a National Provider Identifier prior to January 1, 2014 in order to avoid any future adverse impacts on any future EMS transport billing efforts associated with Affordable Healthcare Act.

Regardless of whether or not an EMS Transport Billing Program is eventually implemented, EMS service is not impacted and no person will ever be denied medical service.

DRAFT MOTION:

1. I move that the Finance/Government Services and Operations Committee recommend that the Board of Supervisors direct staff to:
    a. proceed with a first part of the public outreach campaign to the Combined Fire and Rescue System and other stakeholders;
    b. prepare a proposed draft ordinance that will allow for the implementation an Emergency Medical Services Transport Billing Program that uses a soft billing approach, a fee structure based on the current market; and a revenue sharing component among fire/EMS system participants that would be managed by the county government.
    c. begin the implementation steps, including submitting the required forms and applications to the U.S. Department of Health and Human Services for Medicare Enrollment and to obtain a National Provider Identifier.

OR

2. I move an alternate motion.

ATTACHMENTS:

1. Attachment 1—FY 2014 Preliminary Fiscal Guidance-Copy Teste
2. Attachment 2—EMS Transport Billing Program Timeline and Key Milestones
3. Attachment 3—The Ludwig Group, LLC – Preliminary Findings and Recommendations
4. Attachment 4—Preliminary Revenue Forecast Findings (By Billing Model)

Loudoun County, Virginia
www.loudoun.gov
Office of the County Administrator
1 Harrison Street, S.E., 5th Floor, P.O. Box 7000, Leesburg, VA 20177-7000
Telephone (703) 777-0200 • Fax (703) 777-0325

At a business meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Government Center, Board of Supervisors' Meeting Room, 1 Harrison St., S.E., Leesburg, Virginia, on Wednesday, October 3, 2012 at 9:00 a.m.

IN RE: FINANCE/GOVERNMENT SERVICES AND OPERATIONS COMMITTEE REPORT: FY2014 PRELIMINARY FISCAL GUIDANCE

Mr. Buona moved that the Board of Supervisors approve the recommendation of the Finance/Government Services and Operations Committee to direct the County Administrator to prepare a Proposed FY 2014 Fiscal Plan with a General Government budget assuming the equalized tax rate and to provide guidance to the Loudoun County Public Schools (LCPS) that would lower the local transfer amount to LCPS in order to provide an additional tax reduction of three cents ($0.03) below the equalized tax rate based solely upon LCPS budget reductions.

Mr. Buona further moved that the County Administrator be directed to proceed with a Request for Proposal for the purpose of studying the feasibility and policy options of implementing emergency medical service transport fees and that budget adjustment (BA-130920) in an amount not to exceed $75,000 be approved for this study.

Seconded by Mr. Reid.

Mr. Buona accepted Mr. York's friendly amendment that further direction be given to the County Administrator that as he prepares this budget, that he show two cents ($.02) of the tax rate be dedicated for transportation purposes.

Seconded by Mr. Letourneau.

Voting on Mr. York's Friendly Amendment: Supervisors Buona, Clarke, Higgins, Letourneau, Reid, Volpe, Williams and York – Yes; Supervisor Delgaudio –No.

Mrs. Clarke moved a substitute motion that the Board remove Scenario #3 from the budget scenarios that were put forth in Item #17 by the Finance/Government Services and Operations Committee on their September 10, 2012 meeting. Scenario #3 states that the County General Government Fund be prepared at the equalized tax rate same absolute dollar numbers in Scenario #1. The Loudoun County Public Schools' (LCPS) budget be prepared at the equalized tax rate in Scenario #1 minus three cents ($.03) off the equalized tax rate.

Mrs. Clarke further moved to consult with the school board and replace Scenario #3 with one that the Joint Board and School Board agrees would be feasible.

Seconded by Mr. Higgins.

Voting on Mrs. Clarke's *FAILED* Substitute Motion: Supervisors Clarke and Higgins – Yes; Supervisors Buona, Delgaudio, Letourneau, Reid, Williams, Volpe and York - No.

Mr. Letourneau moved a substitute motion to the first section of Mr. Buona's original motion as follows:

Mr. Letourneau moved a substitute motion that the Board of Supervisors direct the County Administrator to prepare a Proposed FY 2014 Fiscal Plan with a base budget at the equalized tax rate (which is Alternative 1-Scenario #1 in Attachment 1.)

Seconded by Mrs. Clarke.

Mr. Letourneau accepted Mr. York's friendly amendment that in this proposal that the County Administrator prepare his budget reflecting two cents ($.02) of the tax rate dedicated for transportation.

Mr. Letourneau amended his substitute motion to include that County Administrator be directed to proceed with a Request for Proposal for the purpose of studying the feasibility and policy options of implementing emergency medical service transport fees and that budget adjustment (BA-130920) in an amount not to exceed $75,000 be approved for this study.

Voting on Mr. Letourneau's Substitute FAILED Motion, As Amended: Supervisors Clarke, Higgins, Letourneau and York – Yes; Supervisors Buona, Delgaudio, Reid, Volpe and Williams –No.

Voting on Mr. Buona's Original Motion, As Amended: Supervisors Buona, Delgaudio, Reid, Volpe, Williams and York – Yes; Supervisors Clarke, Higgins and Letourneau - No.

Ben Mays, Management & Financial Services, received confirmation that one option staff could bring to the Board would be to leverage the two cents ($.02) for transportation into two cents ($.02) in the debt service fund and to see what kind of debt that could leverage.

A COPY TESTE:

Jeanette Gilbert
DEPUTY CLERK FOR THE LOUDOUN
COUNTY BOARD OF SUPERVISORS

(10d-FY2014 Fiscal Guidance)

EMS Transport Billing Program - Projected Timeline

(As Projected on July 9, 2013)

Phase 1.—Data Gathering, Analysis and Preliminary Findings	
July 9, 2013	• Ludwig Group, LLC provides Preliminary Findings and Recommendations and Work Plan to the Finance/Government Services and Operations (FGSO) Committee
July 17, 2013	• FGSO Recommendations Presented to the Board of Supervisors
Phase 2.—Draft Ordinance, Plans Preparation, and Part 1 of Public Education and Outreach	
July 18 – September 3, 2013	• Proposed Ordinance Drafted Reflecting Board Action on FGSO Recommendations • Additional Outreach to the Combined Fire and Rescue System and Stakeholders *(to be concurrent with CFRSG Reform Recommendations, if adopted)* • Preparation of US Department of Health and Human Services (DHHS) Forms/Applications for Medicare Enrollment and to obtain a National Provider Identifier (NPI). ***(Recommended prior to January 1, 2014)*** • Preparation of Resource Requirements Plan • Preparation of Part 2 of Public Education and Outreach Plan • Preparation of Technology Plan
September 9, 2013	• Proposed EMS Transport Billing Program Ordinance and Resource Requirements, Part 2 of the Public Education and Outreach and Tech Plans provided to FGSOC
September 18, 2013	• FGSOC Recommendations on Ordinance & Plans Presented to the Board • Board Sends Ordinance to November 13, Public Hearing
September 19, 2013	• DHSS Forms/Applications filed for Medicare Program and NPI. • Part 2 of the Public Outreach and Education Plan Begins
September 19- November 12, 2013	• Board approved EMS Transport Billing Ordinance advertised for Public Comment.
Phase 3.— Public Hearing, Ordinance Adoption, Third Party Billing Vendor Procured and Other Implementation Activities	
November 13, 2013	• Board EMS Transport Billing Ordinance Public Hearing
November 13, 2013, November 20, 2013, or December 4, 2013	• Board enacts EMS Transport Billing Ordinance and approves Major Appropriations for Resource Plan • Staff begins Implementation Phase and Implements Resource Plan.
November 21, 2013- January 2014	• Procurement Process for Third-Party Vendor
February 2014	• County Administrator Presents FY 2015 Proposed Fiscal Plan *(includes EMS transport billing program projected revenue)*
February – March 2014	• Third-Party Vendor Selected • Required HIPPA Training to LC-CFRS EMS providers • Other Required Training (including technology, protocols etc.)
April 2, 2014	• Board Adopts FY 2015 Fiscal Plan *(includes full fiscal year of EMS transport billing program revenue)*
April 2014	• EMS Transport Billing Program Operational and Transport Fees Begin (best case)

Note: These are preliminary targeted dates for the major milestones associated with EMS Transport Billing as of the date of this item and are subject to change due to a variety of factors including but not limited to Board direction.

ATTACHMENT 4

The Ludwig Group, LLC

Loudoun County EMS Transport Fee

Preliminary Findings

July 9, 2013

The Ludwig Group, LLC

Reference: **BOARD OF SUPERVISORS FINANCE/GOVERNMENT SERVICES AND OPERATIONS COMMITTEE ACTION ITEM**

Date: **July 9, 2013**

The Firm

The firm has been involved in more than 150 consultations representing a diverse client base. The EMS organizations that The Ludwig Group have consulted for includes career fire departments, third service EMS systems, volunteer fire departments, combination fire departments, labor unions, hospital-based EMS systems, ambulance districts, and communication centers.

Some of the EMS systems The Ludwig Group has consulted for include systems as large as Memphis, Chicago, Fairfax County, Virginia, Phoenix, and Philadelphia, and as small as the Kirkwood Fire Department.

Some of these projects have been a comprehensive and complete analysis of the customer's entire system with a compilation of numerous recommendations for improving the system. Other projects have included multiple agencies and providers who are integrated into one system, the development of Master Plans, or the development of specifications for apparatus. Additional projects have been minor in nature and may include a simple review of a report, oral presentation to a City/County Council or City/County Manager on behalf of the system.

Introductions

Gary Ludwig – Principal Consultant and Subject Matter Expert

Gary Ludwig is a nationally-recognized fire and EMS expert who has successfully managed two major urban EMS systems (St. Louis and Memphis). He has pioneered many concepts which are now standard practice in fire and EMS systems today. Chief Ludwig has over 35 years of fire, rescue and EMS experience – and has over 32 years of experience as a paramedic.

Chief Ludwig currently serves as a deputy fire chief on the senior command staff for the Memphis Fire Department (Tennessee). The Memphis Fire Department is a 1,987 person fire department, operating from 57 fire stations, a $163 million budget, and last year responded on approximately 145,000 alarms. The EMS budget is over $33 million.

Chief Ludwig is responsible for all EMS operations of the Memphis Fire Department including operations, EMT and paramedic training, CEU training, quality improvement, and administrative support services.

Richard Hamilton – Project Manager and Subject Matter Expert

Richard Hamilton is a leading national expert in the EMS profession on the subject of EMS billing and reimbursement.

Richard Hamilton is an expert in the field of Emergency Medical Services (EMS) billing and collection efforts; having worked at the Xerox Services' group for the last eleven years. Xerox provides EMS billing and collection services to large Fire Departments, like the City of Houston, Philadelphia, New Orleans, Cincinnati, and DeKalb County. This resulted in annual billing and collections for over 750,000 runs annually. He was the Director of Operations for this group; with a staff of fifty people (including seven direct reports), he led all revenue cycle generation efforts for contracted clients.

Prior to starting work at Xerox; he formed his own consulting firm and spent six years working as a lobbyist and political consultant within the State of California, mostly on healthcare delivery and reimbursement issues.

As a consultant, Mr. Hamilton has worked advising organization like the California Fire Chiefs Association on EMS reimbursement legislation at the State level. He was instrumental in drafting and lobbying for the passage of Assemble Bill 984. This bill mandated the reimbursement of ambulance transports from Health Maintenance Organizations (HMOs), based on a "prudent layperson" standard.

Additionally, he provided consulting support to ProCare Medical Provider Group and Benefit Management Systems—which was a California Medicaid HMO and software company that marketed medical billing systems to Independent Practice Associations.

Mr. Hamilton was a former Police Reserve Officer, Emergency Medical Technician / Paramedic, and enlisted member of the United States Marine Corps (Reserve). He has more than twenty years of work experience in the public safety field. He currently uses all of this past government experiences and knowledge to provide consulting services to agencies at the local government level.

We have submitted for review our preliminary set of finding for Phase 1 of our efforts with Loudoun County, VA on this EMS Billing Study. We are looking forward to discussing them with the Broad and moving on towards the completion of Phase 2 of the project.

Sincerely,

Gary Ludwig
Managing Director
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Phone: 636-789-5660
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Website: http://garyludwig.com/

Phase (1)—Data Gathering and Analysis

It is important to note that this document is a set of preliminary "findings" and even though the recommendations and / or assertions are based on an extensive amount of data gathering, research and analysis, they are still only in "draft" form. They have been provided to the County as a guide for policy direction(s), at this juncture—for the completion of Phase 1 of our efforts for the County. The "final" report will be provided—with all associated detail(s) in Phase 2 of our efforts for the County.

Section (1)—Stakeholder Interviews and Analysis

In an effort to involve all of the existing stakeholders in this process, the Ludwig Group (with the County's assistance), conducted a series of meetings in Loudoun County, VA. Our goal was to collect as much input, feedback, and data elements from these various groups, which would then be used to formulating our recommendations and policy guidelines for the County. These series of meetings were held on the following dates with the listed individuals and / or groups listed:

1.) On February 27th – "Kick-off" meeting with Loudoun County Staff
   - W. Keith Brower, Fire Chief
   - Jose Salazar, EMS Deputy Chief
   - Mary Maguire, Assistant to Fire Chief / Public Affairs Officer
   - Mark Lauzier, Budget Director
   - Douglas Rambo, Chair of the Fire Commission
   - John Sandy, Assistant County Administrator

2.) March 8th - Continued meetings with Loudoun County Staff
   - Tim Hemstreet, County Administrator
   - Ben Mays, Director / Chief Financial Officer

3.) March 14th thru 18th
   - Meeting with H. Roger Zurn, Jr., County Treasurer and Staff
     - ✓ Kathryn Tidgewell, Chief Deputy Treasurer
   - Meeting with John Morgan, MD, Medical Director
   - Meetings with eleven (11) Volunteer Fire / EMS Companies

4.) April 4th thru 7th
   - Meeting with Director of IT and Selection Committee for County's new Computer Aided Dispatch (CAD) system
   - Follow-up meetings with Fire Department Staff
     - ✓ Fire Chief and EMS Deputy Chief
     - ✓ Mary Maguire, Assistant to Fire Chief / Public Affairs Officer
     - ✓ Karen McQuaid, Volunteer Program Division Manager
   - Meetings with four (5) Volunteer Fire / EMS Companies

We created two (2) hour blocks of time for each meeting session, and there were approximately two (2) or three (3) sessions per day. We spent approximately one hour of the session's following a detailed agenda, where we introduced the firm, discussed the purpose of our efforts, and the overall goals of the

study. We then spent approximately one hour of each session, answering questions and receiving feedback on our first hour of discussion.

Section (2)—Benchmarking, Policy Considerations and Analysis

Here is the list of four "standard" EMS billing and collection models that are currently deployed by many different agencies—across the United States:

1.) Insurance Reimbursement (only)
- Only invoices sent to insurance carriers
- Hardship waivers available for "self-pay" patients
- No billing or collection efforts for Medicare's 20% co-pay or other insurance co-pays

2.) EMS Billing & Collections (soft billing efforts)
- ***Co-pays are pursued***
- ***Three notices / invoices sent out to patients; 30, 60, & 90 days***

3.) EMS Billing & Collections (medium efforts)
- Accounts receive same treatment from billing vendor (as listed above)
- However, at the 180 day mark, instead of being written-off, they are sent to treasurer for collection efforts, as with other County debts

4.) EMS Billing & Collections (Hard billing and collections efforts)
- Patients will receive three notices / invoices
- At the 180 day mark, will receive a series of "dunning letters" asking for payment
- If no payment received at the 270 day mark, the account will be reported to credit bureau as a "bad debt"

The Ludwig Group is recommending that Loudoun County, VA deploy #2 from the list above. Of the four listed above, it will generate more revenue that #1, but will still minimize most, if not all of the controversy—as it relates to #3 or #4 with a "harder" collections path. Those efforts both deploy more aggressive billing and collections techniques and can result in an increased level of citizen complaints. The "trade-off" for more "possible" complaints, is an increase in overall revenues from these additional efforts. The variance in revenues generated will range roughly—from 15 to 20 percent, for each additional level and the more aggressive billing & collection efforts that is associated with it. And, conversely, there will be a loss of 20 percent for less effort—with the "insurance reimbursement only" plan. For example; with EMS billing and collection efforts listed in #2, and we use a hypothetical number of $1 million collected per year with that program; if #1 was deployed, we would expect them to be 20 percent less—or $800K in total collections; and if #3 was used, we would expect it to be approximately 15 percent more, or $1.15 million in total collections. If #4 was implemented, we would expect it to be approximately 30 percent more than #2, or $1.30 million in total collections.

a.) Assessment of Comparative Program Findings

In the course of this study, the Ludwig Group has collected detailed data from five different jurisdictions. They are all listed in the table below. All five of these Fire Rescue Departments share many similarities with Loudoun County. These similarities are as follows:

1.) Most of the departments are a combination of volunteer and career staffing models
2.) They are of the same type(s) of geography; e.g. urban to semi-urban / semi-rural to rural
3.) They are of quite similar payor mix / insurance type demographics
4.) They have deployed either an "Insurance Reimbursement Only" of "Soft" EMS billing and collections program
5.) All of them use a "third-party" EMS billing and collections agent, under "performance-based" contracts (Our recommendation would be for Loudoun County – to do the same).

Table #1 – Comparative Findings

Agency and program start date	Transport Volumes and Call Types in 2012	Fees Charged	Payor Mix	Type of Program and Revenue Generated in 2012
Chesterfield County, VA (Program started in 2002)	BLS – 8,383 ALS1 – 16,875 ALS2 – 558 Total – 25,816	BLS – $394.00 ALS1 – $468.00 ALS2 - $677.00	Medicare – 39% Medicaid – 11% Third-Party Ins. – 37% Self-Pay – 13%	"Insurance Reimbursement Only" and $5,086,000.00
Fairfax County, VA (Program started in 2007)	BLS – 12,087 ALS1 -33,935 ALS2 – 465 Total – 46,487	BLS – $400.00 ALS1 – $500.00 ALS2 - $675.00	Medicare – 43% Medicaid – 1% Third-Party Ins. – 42% Self-Pay- 14%	"Soft" billing and collection efforts and $16,891,119.00
Prince William County, VA (Program started in 2011)	BLS – 5,273 ALS1 – 13,184 ALS2 – 377 Total – 18,834	BLS – $400.00 ALS1 – $500.00 ALS2 - $700.00	Medicare – 39% Medicaid – 9% Third-Party Ins. – 41% Self-Pay – 11%	"Insurance Reimbursement Only" and $3,176,000.00
Stafford County, VA (Program started in 2006)	BLS – 2,108 ALS1 – 5,270 ALS2 – 151 Total – 7,529	BLS – $400.00 ALS1 – $500.00 ALS2 – $675.00	Medicare -37% Medicaid – 9% Third-Party Ins. – 45% Self-Pay – 9%	"Insurance Reimbursement Only" and $2,563,628.00
Fredrick County, MD (Program started in 2003)	BLS – 9,830 ALS1 – 14,880 ALS2 – 504 Total – 25,214	BLS – $420.00 ALS1 – $600.00 ALS2 - $700.00	Medicare – 52% Medicaid – 10% Third-Party Ins. – 32% Self-Pay – 6%	'Soft" billing and collection efforts and $4,750,000.00

In the tables listed below, concerning the data contained within the "Comparative Fees Data and Proposed Fees," and the "Third-Party Reimbursement Data" for Loudoun County, VA., there are some specific things of note:

1.) The listed fees are higher than the ones listed for each agency in the comparative study findings and the reasoning for this is three-fold; 1.) most of the fees for the other agencies were set at least two (2) years ago, if not as far back, as eleven (11) years ago. The average age of these programs is 7.2 years. As far as we can tell, none of them have been increased since they were introduced—via legislation in each of these Counties. The reason this is important; Medicare implements annual increase of approximately 1.5 to 2.5 percent (CPI, plus a "factor") each year. We have set the fees with this aspect in mind, 2.) we also have looked at prevailing rates within the private sector; e.g. Rural-Metro, AMR, and other local ambulance transport services. Their fees in the local region and "up and down" the east coast—range from approximately $900.00 to $1,100.00 for "base-rates" for either BLS or ALS transport capability, 3.) with the uncertainty surrounding the Affordable Care Act, we believe that the County should protect itself from any possible reimbursement reductions and set the fees at a slightly higher rate, which is completely justified, given the first two facts listed above.

2.) Due to Medicare and Medicaid being "fixed" fee schedules, in terms of reimbursement rate, the allowable reimburses the same amount on each transport, regardless of how high the fees are set at by the County. The only variance in reimbursement amount is related to the level of services / treatment provided to each patient during transport.

3.) And, because most of the County's revenue will come from the "Third-Party Insurance" category, this overall fee structure should be higher. Insurance companies will pay approximately 100 percent of "customary and reason" charges, minus any co-pays and / or deductibles the plan enrollee might be responsible for under their plan(s).

Table #2 – Comparison of Existing and Proposed Loudoun Fees

Agency and program start date	BLS Emergency (A0429)	ALS 1 Emergency (A0427)	ALS 2 Emergency (A0433)	Mileage
Loudoun County, VA Proposed fees	***$565.00***	***$725.00***	***$840.00***	***$12.00***
Chesterfield County, VA 2002	$394.00	$468.00	$677.00	$10.00
Fairfax County, VA 2007	$400.00	$500.00	$675.00	$10.00
Prince William County, VA 2011	$400.00	$500.00	$700.00	$10.00
Stafford County, VA 2006	$400.00	$500.00	$675.00	$10.00
Fredrick County, MD 2003	$420.00	$600.00	$700.00	$10.00

Table #3 – Third-Party Reimbursement Data

BLS Emergency (A0429) Medicare / Medicaid Reimbursements	ALS 1 Emergency (A0427) Medicare / Medicaid Reimbursements	ALS 2 Emergency (A0433) Medicare / Medicaid Reimbursements	Mileage Medicare / Medicaid Reimbursements
Medicare Allowable: $350.54	Medicare Allowable: $416.27	Medicare Allowable: $602.50	Medicare Allowable: $7.09
Medicaid Payment: $125.00	Medicaid Payment: $125.00	Medicaid Payment: $125.00	Medicaid Payment: $7.09
Insurance Payment: 100% of "customary and reasonable"	Insurance Payment: 100% of "customary and reasonable"	Insurance Payment: 100% of "customary and reasonable"	Insurance Payment: 100% of "customary and reasonable"

b.) Revenue Projection Findings

The Ludwig Group has projected that when Loudoun County, VA implements an EMS billing and collections effort (as detailed in Section 2, Number 2, page 2), approximately $5.986 million will be collected. We have based this estimated projection on a detailed analysis of the following data points and /or use of certain tools (as highlighted in Table #4 below):

1.) Total annual transport volumes within these categories; Basic Life Support – Emergency (BLS), Advanced Life Support -1 (ALS1), and Advanced Life Support – 2 (ALS2),
2.) An "EMS Revenue" calculation spread sheet,
3.) Estimated fee schedule amounts (per our recommendations),
4.) Estimated "payor mix" within Loudoun County (researched from local-area hospital).

Table #4 – Estimated Total Projected Results

Agency	Transport Volumes and Call Types	Fees Charged	Payor Mix	Type of Program and Revenue Generated in 2012
Loudoun County, VA	BLS – 3,916 ALS1 – 9,790 ALS2 – 280 Total – 13,986	BLS – $565.00 ALS1 – $725.00 ALS2 - $840.00 Mileage: $12.00	Medicare – 32% Medicaid – 5% Third-Party Ins. – 54% Self-Pay – 9%	"Soft" EMS billing and collections and $5,986,008.00

In the Table #5 below, we have inserted the transport call types and the annual volumes within each of these types. These volumes were based on Computer Aided Dispatch (CAD) run report numbers received from the Loudoun County Fire / Rescue Department. We have used the revenue-per-run number from the EMS Revenue calculation spread sheet associated with this attachment.

This spread sheet calculates calls based on type and at a set percentage above the National Medicare rates. It also includes mileage within the final "revenue-per-run" number. This is based on an average of five (5) miles per trip. In the County's case, mileage results could be higher, but it will only account for a few additional "thousands" in terms of the final revenue collected.

(For reference purposes, we have attached a copy of the spread sheet – it is Attachment 2A)

Table #5 – Estimated Revenue Projections

Transport Call Types	Annual Volumes	Revenue Per Run	Revenue Totals
ALS 1	9,790	*$428*	*$4,190,120*
BLS Emergency	3,916	*$428*	*$1,676,048*
ALS 2	280	*$428*	*$119,840*
Totals—	*13,986*		$5,986,008

It is also important to note that the revenue numbers listed above are predicated on the County adopting the "recommended level" of EMS billing and collection efforts within the overall program. We are recommending that the County adopt a "soft" billing and collections approach. This would mean that a series of notices / invoices would go out at regular intervals, requesting payment of any remaining co-pays or deductibles from patients. It would also mean that anyone without a form of healthcare insurance (the "Self-Pay" category) would receive a bill for the total amount due, based on level of services / treatment provided at the time of transport and payment would be required.

A minimum of at least three notices / invoices would be mailed out, but it they were ignored, no further collection efforts would occur. This also means here would be no dunning letters, phone calls, or the reporting of the "uncollected" or "unpaid" balances / amounts to a credit bureau.

The table below reflects the current "payor mix" within Loudoun County. This data was obtained based on admissions to emergency rooms (ER) at local-area hospitals for patients within one calendar year. The data was provide by the County's Medical Director and was highlighted in the "internal" study completed by the EMS Steering Committee in June of 2010.

Additionally, this data was compared against payor mix results that were received from each of the five municipal fire departments, which were surveyed as part of this study; as detailed above in Table #1. This effort was undertaken to reassure ourselves that even though, the Loudoun County payor mix data was from ER admissions, it could be used to reflect an accurate and relevant set of estimates—overall. We believe that it is reflective of the final results that will be experienced by the County; once this program is implemented and underway.

Table #6 – Payor Mix Projections

Payor Types	Percentages within Loudoun County
Medicare	*32%*
Medicaid	*5%*
Third-Party Insurance	*54%*
Self-Pay / Patient	*9%*

We also believe that with the implementation of the Patient Protection and Affordable Care Act (PPACA) or commonly referred to as the Affordable Care Act, in early 2014, these numbers (in terms of the percentages of "insured"), could improve substantially. However, there is much uncertainty regarding how this legislation will be implemented; for example, it could mean an improvement in the total, overall number of insured population, but it also might mean that benefits could be removed from plans or the amounts reimbursed for existing benefits could be reduced. No one can say for sure—at this point—exactly what will happen regarding final application of the legislation and implementation of it.

c.) Revenue Sharing Ideas and Approaches

One of the major tasks with this consulting engagement was to develop a "revenue sharing" model for this new EMS billing and collections program. As we met with all of the stakeholders, and given the inherent complexities of Loudoun County's EMS delivery system, we had some challenges to overcome in creating the recommended model for revenue sharing amongst all of the Volunteer Fire and Rescue Companies and the County.

The other objective of our meetings with the Volunteer Fire and Rescue Companies was to completely understand how they operate on a daily basis. This was achieved by asking them a series of questions about each company and their respective operations. This includes overall structure, station locations, number of volunteers, type of ambulances utilized, etc. We then worked with them to explain how an EMS billing and collections program might work and what the expected revenues would be from such a program. And finally, we then moved into developing a set of data elements / information regarding the details of their operations, so we could proceed with the creation of a revenue sharing model.
Here are some of the facts / details that were collected from those discussions:

1.) There are sixteen (16) volunteer Fire and Rescue Companies
    a. Of these, ten (10) of them provide EMS transport services
    b. Within those ten (10), there are three (3) companies that only delivery EMS transport services and do not response to Fire incidents with any firefighting capability
    c. Six companies of the total—sixteen (16) do not provide transport services, and only respond to Fire incidents or "First Response" rescue efforts with EMS type responses
    d. There are approximately 1,500 volunteers—system wide

2.) Each of these Volunteer Fire and Rescue Companies are configured differently—in terms of staffing schedules, station locations / ownership, and equipment use / ownership

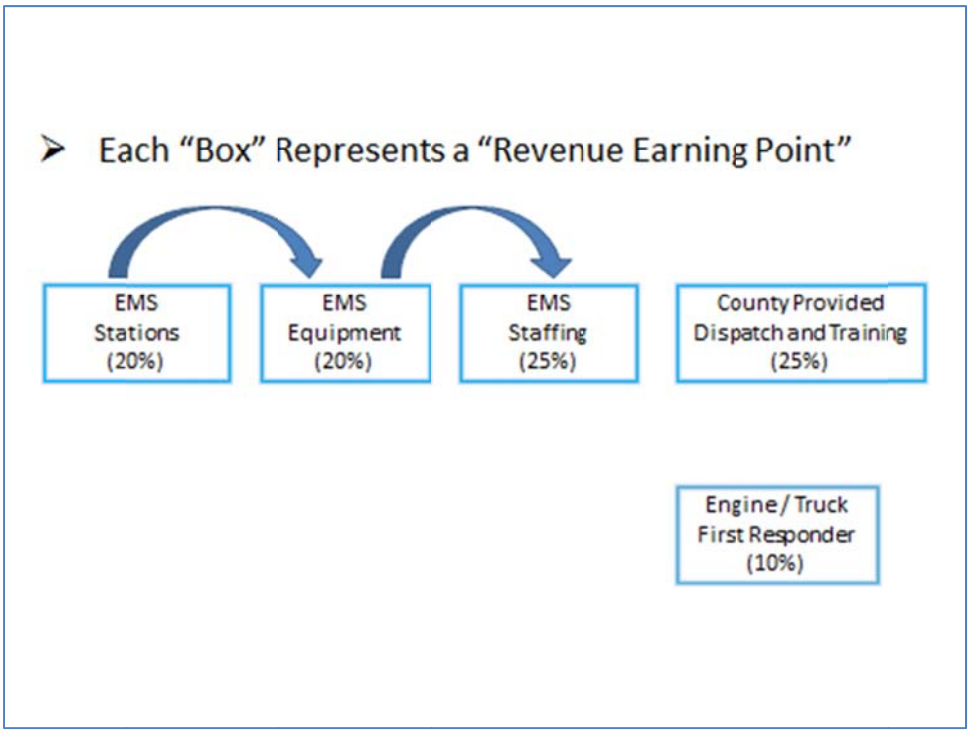
3.) They are all 501–C (3) in terms of Federal / IRS Tax-Exempt Status

4.) They all receive some form of financial support from the County, based on their size and overall mission / purpose

5.) Each of them covers different parts of the County and provides different levels of services depending on location(s) and size(s)

We also learned from Staff of the other direct, but "non-financial" contributions that are made by the County to support its public safety mission and these Volunteer Fire Rescue Companies; these are for career staffing personnel, training and the training facility, technology delivery, and the CAD system / dispatching services. Given all of these varying aspects, we have designed what we believe is a simple to understand, but fair revenue sharing plan. It is highlighted below in Table #6. This is our recommended revenue sharing plan. We will also illustrate how it will work with a number of "hypothetical" examples.

Table #6 – Proposed Revenue Sharing Model



First, we will define each "box" and then provide the examples mentioned above. The "EMS Stations" box represents the facilities that are controlled or owned by each of the Volunteer Fire Rescue Companies or the County. The "EMS Equipment" box represents the act of a Volunteer Fire Rescue Company using its own ambulance to transport a patient on a response. The "EMS Staffing" box represents the use of either Volunteer or Career personnel on an ambulance to treat a patient during a response. The "County Provided Dispatch / Training" box represents the services the County provides to dispatch units on responses and the training that the Volunteer Fire Rescue Companies and Career staff receives on an on-going basis from County personnel. The last box is for "Engine / Truck First Response" and this represents the support provided on EMS responses to the crews of the transporting ambulances by either the six (6) Volunteer Fire (only) Companies, Career units, and / or the combined Volunteer Fire Rescue Companies.

The percentages listed below each box represents the amounts that each "whole unit" of revenue will be divided by and / or added together to create sub-total of the "whole unit" and then distributed according to "ownership" of each box type.

One final data point is necessary to create the examples of revenue sharing / distribution to the Volunteer Fire Rescue Companies; and that is the amount of "revenue-per-run" from each transport. The way we are recommending this process to be implemented is as follows:

1.) The total "quarterly" revenues are collected and accounted for every three months by the County's "third-party" billing agent
2.) The total number of transports are tracked for each quarter
3.) The total number of responding units are tracked and associated with each individual call that occurs each quarter
4.) This tracking is accomplished through the use of the County's electronic patient care reporting (ePCR) system; (e.g. ***ImageTrend)*** and by the use of CAD reports that will depict units assigned to each of the 911 / EMS transport calls

And, so a calculation to achieve a "revenue-per-run" number would occur as follows:

1.) Quarterly revenues attained in Q1 was - $1,475,000.00
2.) Total number of transports in Q1 was – 3,496
    a. Total number of transports in Q1 by "*Volunteer EMS*" was 874
    b. Total number of "Engine / Truck First Response" calls by "*Volunteer Fire*" in Q1 was - 659
1.) Revenue-per-run in Q1 was - $1,475,000.00 / 3,496 = $421.00

In the first example, an ambulance from "*Volunteer EMS*" is dispatched on a response and a Fire (only) unit from "*Volunteer Fire*" is sent as a "first responder" on the 911 / EMS call. Under the revenue sharing model we have recommended above; "*Volunteer EMS*" would receive the following amount for each of the 874 calls they responded to, where a patient was transported: $273.65. "*Volunteer Fire*" would receive a total of $42.10 for each of the 659 responses they provided in Q1—in support of "*Volunteer EMS*." Here is how the mathematical calculations are performed:

1.) "*Volunteer EMS*" always provides their own equipment, staff, and stations—so this would total 65 percent of the "whole unit." So it would be $421 * .65 percent = $273.65
2.) "*Volunteer Fire*" would always receive 10 percent for providing "Engine / Truck First Response" support and so it would be $421 * .10 percent = $42.10
3.) Then using these final calculation (of the revenue-per-run of $421 multiplied by the "whole unit" number percentage), and their quarterly totals for transports and / or first responses
    a. "*Volunteer EMS*" would have a earned a quarterly total of $239,170.10; or as follows—$273.65 * 874 transports = $239,170.10
    b. "*Volunteer Fire*" would have $27,743.90; or as follows—$42.10 * 659 first responses = $27,743.90
4.) In this example, for all of the 874 transports that were performed by "*Volunteer EMS*" the County would collect 25 percent of the revenue-per-run number of $421 for the "County Provided Dispatch / Training" box, or as follows—$105.25

a. As the County's percentage / revenue amount of the "whole unit" it would receive in Q1 for all of "*Volunteer EMS*" transports $91,988.50, or as follows—$105.25 * 874 = $91,988.50

In another example, we will use "Volunteer Fire Rescue Company X" and it is our understanding that they have volunteers staffing for approximately 50 percent of each twenty-four (24) hour period and County Career staffing for the other 50 percent of each twenty-four (24) hour period. They own their ambulances and station. And as such, if the ambulances were staffed with volunteers, then the percentage of the "whole unit" would be 65 percent; if the staffing was provided by County Career personnel, then the percentage would be 40 percent of the "whole unit." The first case, the County would only receive the 25 percent for the "whole unit" for "County Provided Dispatch / Training" box. In the second case the County would receive 50 percent of the "whole unit" due to the "EMS Staffing" box being added.

If we assume the Q1 revenue-per-run number remains the same ($421); in all of the situations listed for Company X, the final calculations would depend on: 1.) the above listed percentages (65 and / or 40), of the "whole unit," 2.) the total number of transports performed in Q1 (3,496), and 3.) the total number on transports performed by Company #9's ambulances in Q1 (349). Their revenue(s) calculations would look like this—$421 * .65 percent = $273.65 * 349 = $95,503.85 or $421 * .40 percent = $168.40 * 349 = $58,771.60. The County would receive either $421 * .25 percent = 105.25 * 349 = $36,732.25 or $421 * .50 percent = $210.50 * 349 = $73,464.50. And, again any first responding Fire units for these calls would receive $42.10 or 10 percent of the $421.00 multiplied by the number of responses they performed.

If there are no assigned "Engine / Truck First Response" units for an EMS transport, then the 10 percent stays "unassigned" within a "distribution pool" fund—until the end of the year. At that point, any excess in this unassigned distribution pool fund—is then assigned to all Volunteer Fire Rescue Companies in equal shares. So if there is approximately $92,500, if would be divided into 1 / 16 shares and then assigned to each of the Companies and a "year-end distribution." So in this case; $92,500 / 16 = $5,781.25. Each Volunteer Fire Rescue Company would receive this amount.

d.) Legal Considerations and Initial Implementation

In the first phase of this process, the Ludwig Group has focused on a number of items that will assist the County in moving forward with this program. They are as follows:

1.) Exploring all of the legal considerations for this project
    a. Applying for a National Provider Identifier (NPI) number
    b. Completing the Medicare 855B forms, which is the application to become a "Medicare" approved provider
    c. Establishing the ability to have a "source" of drugs and / or medical supplies
        i. This is one of the "legal" requirements of Medicare
2.) Drafting legislation that can be discussed, voted on and passed, then implemented by the Board of Supervisors
3.) Providing the fixed and "one-time" or "on-going" costs associated with this project

a. Hiring a group to professionally conduct a "public education" effort, once the legislation passes
b. Hiring a vendor to supply the County with drugs and medical supplies
c. Hiring a "Third-party" EMS billing and collection vendor / agent
d. On-boarding additional staffing to assist with implementation and running the program
e. Contracting with a bank to provide "lock-box" services, for the Treasurer's efforts to collect revenue and redistribute to Volunteer Fire Rescue Companies
f. Identifying technological costs for data collection systems and associated hardware for ambulances in the field

As part of this process, we will provide the necessary details on each of the items listed above. We will also discuss the responsibilities of any "proposed" vendor, the County, and which departments should be involved and / or take the lead on the project.

Applying for a National Provider Identifier (NPI) number

The National Provider Identifier (NPI) is the standard unique health identifier for health care providers and is assigned by the National Plan and Provider Enumeration System (NPPES). **As a Medicare health supplier, you must obtain an NPI prior to enrolling in Medicare or before submitting a change for your existing Medicare enrollment information.** Applying for an NPI is a process separate from Medicare enrollment.

(For "informational" purposes, we have attached copy of the required form(s) – it is Attachment D-1))

Completing the Medicare 855B forms, this is the application to become a "Medicare" approved provider

The County is to be the sole authorized biller with centralized activities for all aspects of the program. A single Medicare Provider Application will need to be submitted, and there are several items of information that must be gathered from each Volunteer Fire and Rescue Company;

1.) Vehicle Identification Number (VIN) – As a centralized billing point, the County would be the enrolled provider, and all EMS transport units (career and volunteer) would be listed by VIN numbers on the Medicare application. A copy of the State license, along with the make, model, and year of each vehicle must also be included.
2.) Medical Certification / Licensure Verification - A copy of each providers State / County EMS certification / licensure to provide treatment to patients must be submitted with the application
3.) Medical Director's Individual Licensure and Pharmaceutical License – copies of these must be submitted with application
4.) Record Location – A location must be listed in the application of where copies of all of the records (detailed above), are kept by the County. These records must also be kept "updated" and in the same place, during the time period the County is billing and collecting revenues from Medicare under their assigned NPI.
5.) Adverse Legal Action - The Medicare application must also include a "signed statement" attesting as to whether or not the organization (i.e. the County) has ever had any "adverse legal action" imposed upon it (as defined by Medicare).

(For "informational" purposes, we have attached copy of the required form(s) – it is Attachment D-2)

Establishing the ability to have a "source" of drugs and / or medical supplies

When the County begins to implements EMS billing and collection efforts, Medicare requires certain changes to the existing program. These are as follows:

1.) The County can no longer resupply from local-area hospital, in terms of drugs and medical "disposable" items
    a. Under the current program, these items given to the paramedic ambulances within the County—as a "one-to-one" exchange; then these items are billed to the patient by the hospitals under Medicare "part B" upon their admission to the emergency room or hospital as an in-patient.
2.) The County will have to create a "supply train" and a storage system (within the existing warehouse of equipment for the Fire Rescue Department) for drugs and supplies; these items can be obtained by hiring vendor(s) to provide them under contract to the County (e.g. ***Bound Tree or Moore Medical***, etc.)

Provide legislation that can be discussed, voted on and passed, then implemented by the Board of Supervisors

In Phase #2 of our contract with the County, we will create a draft of the legislation that will allow the County to discuss, voted on and pass, and then implement it. We have identified a couple of models (from other similar jurisdictions), which could be used as a basis for the final ordnance. Any draft will be presented to County Council for legal review, prior to submission to the Board.

The fixed and "one-time" or the "on-going" costs associated with this project

In the table below, the Ludwig Group has provided recommendation and guidance on what we believe are the range of costs associated with this project. Some of them will be "one-time" and fixed costs; other with be "on-going" cost that will have to be part of the overall budget for this program.

Table #7 – List of Possible Program Costs

Fixed, initial Start Up Costs for Program	On-going Costs for Program	Other Considerations for Program	Projected Program Revenue for 2014	Projected "Net" Revenues for Program in 2014
Public Education Efforts <$200,000>	~	~	$5,986,008	$5,786,008
~	Third-Party EMS Billing Agent; Fees of 5% to 7% <$419,202>	~	$5,786,008	$5,336,987
Technology Costs for Software and Hardware <$400,000>	~	~	$5,336,987	$4,966,987
~	~	Banking Lock-Box Fees <$60,000>	$4,966,987	$4,906,987
~	Additional FTEs for Program Management & Administration <$300,000>	~	$4,906,987	$4,606,987
~	~	Drugs and Medical Supplies <$100,000>	$4,606,987	$4,506,987

We will detail each of the proposed / recommended costs listed above and provide their relevance and justification to the overall success program—when implemented. Some of the justification will revolve around the fact(s) that it is a regulatory requirement and thus completely necessary; in other cases it may just be that the implementation of a specific item with dramatically improve revenue results or create efficiencies that are critical to program success.

1.) Public Education Campaign –

With this effort, we believe that overall acceptance of the program by all parties and in the interest of reducing Citizen Complaints, will be greatly improved if a comprehensive public education campaign is undertaken by the County. A firm / team should be hired to conduct this process under a "short-term" engagement. Based on previous effort, like in Anne Arundel County, MD and the City of Columbus, OH, these types of efforts have been very successful when faced with a "billing start-up" process. A campaign should include the following:

a. Creation of press releases
    i. Public relations follow-up
b. Creation of a County website, specific to this purpose
    i. Development of video PSAs for use on the website
    ii. Provide FAQ and load it on the website
c. Develop informational collateral for dissemination to public and / or interested parties
d. Make a "311" type of phone bank available to public for Q & A
e. Conduct a series of "town-hall" meetings for all interested parties over a four (4) week period, with events scheduled at least twice each week.
    i. Make "team" available to perform presentations to individual groups—of at least 20+ people, upon request, during engagement.

2.) Third-Party Billing Vendor –

The County can conduct a quick and efficient search for a vendor that can provide this type of service for a reasonable set of fees. The usual range is from 5% to 7% for "straight billing and collections" effort. These fees are calculated based on the "net collections" and paid on the total amount deposited / collected each month. Our recommendation (barring any County Purchasing prohibition against the practice), is to "piggy-back" off an existing local-area contract; either in the States of Virginia, Maryland, and / or the District of Columbia. This will give the County a wide range of vendors and contracts to choose from in this process. We can directly assist the County in this selection process, possessing an in-depth knowledge of the 'best" set of vendors in this Industry.

3.) Technology Solution Deployment –

The County currently uses a software solution from a company called "ImageTrend" to perform "field data capture" of patient information, while on emergency responses. The formal name of this type of system that is used by the County is called electronic patient care reporting or ePCR. The use of this system greatly improves the revenue results of an EMS billing and collections effort. However, there are a number of issues of with the current the system that has been deployed. They are as follows:

a. Not completely implemented to all County units
b. None of the currently deployed "hand-held" computers are "on" the County's network
c. No "wireless" CAD interface for electronic receipt of 911 call data
d. Programmatically changes will need to be made to existing software solution for capture of more complete patient and insurance demographics for billing purposes

There are a couple of options to address these issues; spend the recommended amount (in table #7 above) to upgrade the system or hire an EMS "billing and collections" vendor that provides these types of systems, as part of their services contract. They will charge a slightly higher "contingency

fee" for the inclusion of these additional components, but it usually is not more than 10%, depending on the final configuration of solution and software / hardware equipment used/ required.

4.) Banking Lock-Box –

The use of a banking "lock-box" will allow the Treasurer to quickly reconcile amounts that come in from the billing vendor's efforts and allow for easy redistribution of revenues to the Volunteer Fire Rescue Companies through the adopted "revenue-sharing" model. The bank will "scan" images of checks and explanation of benefit (EOB) documents it receives, through the use of optical character recognition (OCR) software and then create electronic files of data that can be used to reconcile accounts. The fees for these services can be approximately $5,000.00 per month, depending on the amount of checks and documents processed. Bank of America is the largest vendor or is this space, with more than 50% of the medical lock-box processing accounts.

This account reconciliation will be done by the County's EMS billing and collections vendor. They will apply payments received on accounts and send out invoices for any remaining "applicable" balances due the County for services. They also will file claims to "secondary" insurance carriers, once the primary payment is received and applied.

5.) Additional FTEs for Program Management and Administration –

We believe that at least three new FTEs will be required to manage and administer this project. The people are as follows:

a. *Contract Administrator* for the EMS billing and collection efforts. This person will be directly responsible to overseeing all efforts of the third-party billing vendor and will be the County's principle manager of the program. This person needs to be appointed at a "Director" level, report to the Fire Chief, and have the ability to make decisions accordingly. He / she should have combination of the following skill sets; accounting / finance / EMS billing and collections back-ground / experience working with the public safety sector / and / or knowledge of the Fire Services.
b. *EMS Data / Quality Assurance Analyst* for "deep-dives" into all collected data via the ePCR system. This person would be responsible for developing reports that will assist with providing the required data to conduct the revenue distribution to the Volunteer Fire Rescue Companies, while working in combination with the EMS billing and collections vendor, the County's Contract's Administrator, and the Treasurer's Office.
c. *Warehouse Manager / Clerk* for administration of the County's drugs and medical supplies that will be necessary (per Medicare Regulations) to obtain initially and then maintain a constant supply of materials for crews to resupply and use as necessary. (See the next item in this list for specific detail of the "warehouse" concept, etc.)

6.) Creating the Capability to Acquire for Drugs and Medical Supplies –

We recommend that the County contract with a vendor like Bound Tree or Moore Medical, or a combination of similar type companies. This will create the ability to have a constant supply of drugs and medical supplies for use in the field by paramedic ambulance crews within the County. It should be a "managed, centralized" warehouse that is resupplied on a weekly or month basis, under

contract to the vendors we mentioned above. This resupply ordering effort will be managed by the newly hire County personnel. He / she will also be responsible for receive requests and fulfilling them on a daily basis by ambulance crews throughout the County (Volunteer and Career).

e.) FREQUENTLY ASKED QUESTIONS AND ANSWERS

ESTABLISHMENT OF AN EMS BILLING PROGRAM WITHIN
LOUDOUN COUNTY, VIRGINIA

1. ***Why should Loudoun County bill for EMS services?***

Billing for EMS transport and medical services associated with emergency care makes financial sense for the combined career and volunteer EMS system. The majority of citizens and visitors in Loudoun County have already paid for these benefits through their health insurance premiums or federal taxes. For those who have private medical insurance, this benefit is a part of their health insurance premium through their employer or workers' association. For those who are Medicare eligible, they have paid for this benefit through payroll deduction into the Medicare fund.

By billing for EMS transport services, the County's EMS service providers will be able to recover existing funds for EMS operations—thus infusing additional revenue into the operational needs of the expanding combined career and volunteer fire and rescue system, all while not raising taxes.

2. ***But if you bill for ambulance service, those who least can afford an ambulance bill (retired, unemployed, uninsured, and the poor), will bear the brunt of this plan.***

This is untrue! Many of those who are retired have existing healthcare plans or Medicare that pay for ambulance transport. Many who are unemployed, uninsured, or poor are eligible for Medicaid. Medicaid programs in each state provide reimbursement for ambulance transport.

The following graph from the Center for Medicare and Medicaid Services reflects that those who are lower income, disabled and retired receive Medicare benefits.

Percentage of Medicare beneficiaries by Income

Below $25,000	78%
$25,000- $50,000	18
More than $50,000	5

3. ***But won't health care premiums, for those that have health insurance plan coverage be increased to cover these ambulances fees.***

This misleading notion is untrue. Many government agencies, seeing the benefits of seeking reimbursement for EMS transport in their communities through the 1990s and 2000s have not seen significant increases in health insurance premiums for ambulance transports for the citizens in their community. Additionally, each year the Center for Medicare and Medicaid Services (the government agency that oversees Medicare / Medicaid programs) has a specific budgeted dollar amount dedicated for ambulance reimbursement.

Finally, many insurance companies have already factored the ambulance reimbursement cost into their actuary tables for their plan enrollees. The cost for ambulance reimbursement transport for many insurance companies is an extremely small percentage of their overall expenditures. The vast majority of expenditures that an insurance company experiences each year are for hospitalization and hospital procedures/operations for their membership. With EMS transport billing being a very common practice in the region, Loudoun residents continue to subsidize the health care system by not recouping eligible reimbursement payments from insured patients.

In the United States, the percentage of dollars spent of the Gross National Product (GNP) for healthcare in 2012 was more than $2.5 trillion. Ambulance transport reimbursement for 911 responses was only $17 billion dollars of this amount. This equates to less than one-tenth of one percent.

The charts and graphs that follow show the expenditure categories for total U.S. Health Care spending in 2012. As evident, the vast majority of health dollars are spent for hospital stays and physician services.

4. ***Some fire departments, especially volunteer departments, get donations from the public. Won't charging for ambulance service decrease these donations?***

Most solicitation programs operated by fire departments are established to help defray the cost of capital expenditure items such as fire trucks or fire stations. It has been the general experience of those communities who seek monetary solicitation from the general public, and then begin billing for ambulance service coupled with a proper education program, that donations have not decreased. Coincidentally, in some cases, donations have increased because of the public education campaign.

5. ***Can starting up an EMS billing program be the first step toward privatizing the ambulance service?***

Absolutely not! Billing for ambulance transport and privatizing ambulance services are completely unrelated issues. Many government agencies over the last ten years have made the decision to begin seeking reimbursement for ambulance transport and there is not one documented case of a government EMS agency becoming privatized as a result of starting up an EMS billing program.

6. ***Will citizens be reluctant to call for an ambulance (via 911) if they know they will receive a billing for the service?***

Empirical evidence does not support such a claim. EMS services are traditionally used by individuals that are having an acute or emergent situation and there is no evidence that billing for EMS services plays a role in the decision to call 911. Most patients that are having a medical issue are not the person who calls 911; it is a family member, a friend, or citizen by-stander. This is especially true when residents have a clear understanding of EMS billing.

Many jurisdictions have found it helpful to initiate a public education campaign that explains the facts about EMS billing to their residents prior to implementing a billing program. These programs allow the public to understand the jurisdiction's rationale for implementing a billing program and for government officials to emphasize the fact that that anyone who calls 911 will never be denied treatment or transport to a hospital because they lack healthcare insurance.

The table on the following page is a list of large counties and cities and ranks some large metropolitan areas by the number of EMS calls per 1,000 residents per year. As is shown in the table, although all areas on the list except for Loudoun County bill for EMS services, virtually every area on the list has a higher number of calls per 1,000 residents than Loudoun County.

Number of EMS Calls per 1,000 Residents in Selected Jurisdictions

City/Jurisdiction	Population	Annual Number of EMS Calls	EMS Calls Per 1,000 Residents	Bill for EMS for EMS Services
Washington DC	572,000	103,000	180	Yes
Baltimore, MD	651,000	116,000	178	Yes
Miami, FL	362,000	60,000	166	Yes
Philadelphia, PA	1,500,000	212,000	141	Yes
Columbus, OH	711,000	95,000	134	Yes
New York, NY	8,000,000	1,065,000	133	Yes
Houston, TX	1,950,000	197,000	101	Yes
Las Vegas, NV	478,000	46,000	96	Yes
Chicago, IL	2,900,000	254,000	88	Yes
Alexandria, VA	128,283	11,000	85	Yes
New Orleans, LA	484,000	40,000	83	Yes
Arlington County, VA	189,453	15,700	82	Yes
Los Angeles, CA	3,694,000	251,000	68	Yes
Loudoun County, VA	328,533	14,729	45	No

Attachment 5—Estimated / Projected Revenues by Program Type

Please refer to Attachment 3, Section 2 (page 2), for details on the billing and collections efforts associated with each of the listed program and how the revenue is calculated for each category—overall. Additional calculation(s) data / methodology in Attachment 3, Section 2, subsection b., (page 6).

Type of Billing and Collections Programs Implemented	Estimated / Projected Revenues
1.) Insurance Reimbursement (Only) Billing	$4.71 M
2.) “Soft” Billing and Collections Efforts	$5.98M
3.) “Medium” Billing and Collection Efforts	$6.87M
4.) “Hard” Billing and Collections Efforts	$7.77M

Loudoun County VIRGINIA
WHERE TRADITION MEETS INNOVATION

EMS Transport Billing Program Study Phase 1 of 2: Policy Decisions and Participation Opportunities

Presented to the Finance / Government Services & Operations Committee (FGSO)

Tuesday, July 9, 2013

EMS BILLING STUDY PHASE 1 OBJECTIVES >

Phase 1 Goal: Program Design Concepts and Preliminary Revenue Projections:

1. STAKEHOLDER INTERVIEWS AND ANALYSIS
2. COMPARATIVE REVIEW OF AREA SYSTEMS
3. PRELIMINARY POLICY RECOMMENDATIONS FOR FUTURE BOARD REVIEW / APPROVAL
4. PROVIDE EMS TRANSPORT REVENUE ESTIMATES
5. DESIGN A REVENUE SHARING PLAN
6. IDENTIFY PROGRAM DESIGN CONSIDERATIONS FOR PHASE 2

TODAY'S PRESENTATION TOPICS >

- **Delivery of Preliminary Findings and Policy Recommendations:**

1. **Select EMS Billing Program Type**
2. **Set EMS Billing Rates for Three Types of Transport Services: BLS Emergency, ALS-1, and ALS-2**
3. **Provide Estimated Revenues from Program Based on Program Type and Set Fees**
4. **Decide System Provider Revenue Sharing Opportunities**
5. **Approve Moving Forward with Specific Program Design Considerations; Federal Billing Application, etc.**

Comparative Programs and Practices >

Agency and program start date	Transport Volumes and Call Types in 2012	Fees Charged	Payor Mix	Type of Program and Revenue Generated in 2012
Chesterfield County, VA (Program started in 2002)	BLS – 8,383 ALS1 – 16,875 ALS2 – 558 Total – 25,816	BLS – $394.00 ALS1 – $468.00 ALS2 - $677.00	Medicare – 39% Medicaid – 11% Third-Party Ins. – 37% Self-Pay – 13%	"Insurance Reimbursement Only" and $5,086,000.00
Fairfax County, VA (Program started in 2007)	BLS – 12,087 ALS1 -33,935 ALS2 – 465 Total – 46,487	BLS – $400.00 ALS1 – $500.00 ALS2 - $675.00	Medicare – 43% Medicaid – 1% Third-Party Ins. – 42% Self-Pay- 14%	"Soft" billing and collection efforts and $16,891,119.00
Prince William County, VA (Program started in 2011)	BLS – 5,273 ALS1 – 13,184 ALS2 – 377 Total – 18,834	BLS – $400.00 ALS1 – $500.00 ALS2 - $700.00	Medicare – 39% Medicaid – 9% Third-Party Ins. – 41% Self-Pay – 11%	"Insurance Reimbursement Only" and $3,176,000.00
Stafford County, VA (Program started in 2006)	BLS – 2,108 ALS1 – 5,270 ALS2 – 151 Total – 7,529	BLS – $400.00 ALS1 – $500.00 ALS2 – $675.00	Medicare -37% Medicaid – 9% Third-Party Ins. – 45% Self-Pay – 9%	"Insurance Reimbursement Only" and $2,563,628.00
Fredrick County, MD (Program started in 2003)	BLS – 9,830 ALS1 – 14,880 ALS2 – 504 Total – 25,214	BLS – $420.00 ALS1 – $600.00 ALS2 - $700.00	Medicare – 52% Medicaid – 10% Third-Party Ins. – 32% Self-Pay – 6%	'Soft" billing and collection efforts and $4,750,000.00

EMS BILLING PROGRAM TYPES >

Major Types of EMS Billing and Collections Programs	Aspects of Each of these Programs
1.) Insurance Reimbursement (Only)	➢ Only invoices sent to insurance carriers ➢ Hardship waivers available for "self-pay" patients ➢ No billing or collection efforts for co-pays
2.) "Soft"	➢ *Co-pays are pursued* ➢ *Three notices / invoices sent out; 30, 60, & 90 days*
3.) "Medium"	➢ Accounts receive same treatment from billing vendor (as listed above) ➢ However, at the 180 day mark, sent to treasurer for collection efforts, as with other County debts
4.) "Hard"	➢ Patients will receive three notices / invoices ➢ At the 180 day mark, series of "Dunning Letters" sent ➢ If no payment at the 270 day mark, the account will be reported to credit bureau as a "bad debt"

Preliminary Findings and Recommendations >
Billing Program Types and Policy Considerations

- **SUPPORTING ANALYSIS COMPLETED:**

Survey and Agency Contacts →Comparative Analysis of Area Programs and Practices

KEY FINDING(S):

1. **Agencies very similar in type and payor mix use either an "Insurance Reimbursement Only" or "Soft Billing" Approach**
2. **ALL agencies use a 3rd Party Billing contractual provider**
3. **Insurance only programs leave some revenue uncollected**
4. **About an equal split between insurance only and soft billing systems**

KEY POLICY RECOMMENDATION:

Use a middle of the road, "Soft billing" program model – Bills will be sent to insurers, co-pays are pursued via 30, 60, 90 day notices/invoices, accounts are written off if no payment after 3rd notice, no turnover to collections

Preliminary Findings and Recommendations >

Billing Rates

- **SUPPORTING ANALYSIS COMPLETED:**

Transports Data Analysis → Loudoun County Revenue Projection based on Call Types → Rate Comparison with Area Jurisdictions, Private transport Agencies, National Rates

KEY FINDING(S):

1. **Total Annual Transports in 2012 – 13,986; ALS2 (2%) = 280; ALS1 (70%) = 9,790; and BLS Emergency (28%) = 3,916**
2. **Revenue Projection based on middle of the road, soft billing approach = Approximately $6 million**
3. **Third-Party Insurance Payor Mix is 54 percent**
4. **Medicare Payor Mix is 32 percent and "allowables" are as follows: $602.50, $416.27, and $350.54**
5. **Self-Pay Payor Mix is 9 percent**

Preliminary Findings and Recommendations >
Billing Rates

KEY FINDINGS (CONTINUED):

6. Medicaid Payor Mix is 5 percent and the reimbursement is a "flat" rate of $125.00, regardless of class of treatment

7. Rates for Area Jurisdictions have not been Updated for CPI and none of the programs have increased fees since program inception (7.2 year average)

KEY POLICY RECOMMENDATION(S):

1. **Set fee schedule rates well above Medicare allowables and well above Medicaid "flat" reimbursement rate**
2. **Adopt of fee schedule with "cumulative" CPI calculations included (2.5%/year @ 7.2 years)**
3. **Fee Schedule: Set Loudoun County ambulance transports fees for ALS2, ALS1, BLS Emergency at the following rates: $840.00, $725.00, and $565.00 and $12.00 per loaded mile (Comparative rate schedule table to be provided)**

EMS BILLING RATES>

Comparative Billing Rates and Considerations

Factoring "Market-Driven" Rates	All Data Elements Considered
An Analysis of Private Sector Transport Agencies	➢ AMR (Conn) - $1,100.00 ➢ Rural-Metro (Fulton County, GA) - $1,050.00 ➢ TransCare (NY) – $1,350.00
Transport Averages / Specific Base Rates on West and East Coasts	➢ Average in CA - $1,486.00 ➢ State of Utah – BLS - $785.00 & ALS - $1,148.00 ➢ Philadelphia, PA – BLS - $900.00 & ALS - $1,100.00
Average CPI in the Last Seven Years	➢ 2005 – 3.4% 2008 – 3.8% 2011 – 3.2% ➢ 2006 – 3.2% 2009 – (0.04)% 2012 – 2.1% ➢ 2007 – 2.8% 2010 – 1.6% Average: 2.51%
JEMS Survey of Top 200 Cities – 2012	➢ Average BLS Emergency – $640.77 ➢ Average ALS 1 – $773.28 ➢ Average ALS 2 - $906.05

Preliminary Findings and Recommendations >

Setting EMS Transport Fee Schedule

Agency and program start date	BLS Emergency (A0429)	ALS 1 Emergency (A0427)	ALS 2 Emergency (A0433)	Mileage
Loudoun County, VA Proposed fees	***$565.00***	***$725.00***	***$840.00***	***$12.00***
Chesterfield County, VA 2002	$394.00	$468.00	$677.00	$10.00
Fairfax County, VA 2007	$400.00	$500.00	$675.00	$10.00
Prince William County, VA 2011	$400.00	$500.00	$700.00	$10.00
Stafford County, VA 2006	$400.00	$500.00	$675.00	$10.00
Fredrick County, MD 2003	$420.00	$600.00	$700.00	$10.00

Estimated Annual Transport Revenues>

Estimated Revenues Based on 2012 ALS & BLS Transport Activity Levels

Type of Billing Programs Implemented	Estimated / Projected Revenues
1.) Insurance Reimbursement (Only) Billing	$4.71 M
2.) "Soft" Billing and Collections Efforts	$5.98M
3.) "Medium" Billing and Collection Efforts	$6.87M
4.) "Hard" Billing and Collections Efforts	$7.77M

Preliminary Findings and Recommendations>

Fire-EMS System Revenue Sharing Opportunities

SUPPORTING ANALYSIS COMPLETED:

Stakeholder interviews → Data Request → Conceptual Discussion of Revenue Sharing Among System Participants

KEY FINDING(S):

1. **Many different service model and support configurations in the blended volunteer/career system**
2. **System providers participation is mutually beneficial and all system participants should benefit from the additional revenue to the system**
3. **EMS Billing program and 3rd Party billing contract would be managed exclusively by Loudoun County FREM**

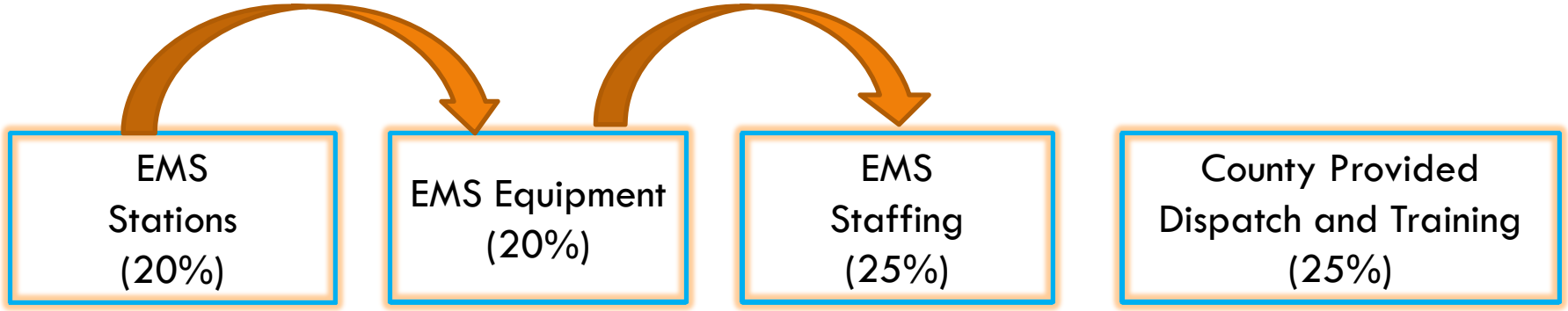
REVENUE SHARING FORMULA>

- **Key Finding: Complex system design; mix of Volunteer and Career Fire Companies**

1. **Recommendation: Revenue sharing based on contribution "boxes" and assigned percentages**
   a. **Boxes Include: 1.) EMS Stations, 2.) EMS Equipment, 3.) EMS Staffing and 4.) Engine / Truck First Response**
   b. **Number of transports / first responses performed each year**
   c. **County receives a "fixed" percentage of every call for "County Provided Dispatch / Training" box that is also part of overall revenue sharing plan**

REVENUE SHARING FORMULA>

- Each "Box" Represents a "Revenue Earning Point"



Additional Policy Decision Items >

- Moving forward with Federal applications for the following items:

1. Form for National Provider Identifier number (NPI)
2. Form 855B Medicare

- ✓ Consultant's recommendation file applications ASAP, and will support this effort.

NEXT STEPS: EMS BILLING STUDY PHASE 2 >

Upcoming 60 Days

1. FILE FEDERAL APLICATIONS FOR BILLING EFFORT; NPI AND 855B
2. OUTREACH AND MARKETING CONSIDERATIONS
3. COMPLETE DRAFT ORDINANCE, PARTICIPATION AGREEMENT, AND FINAL REPORT
4. DETERMINE PROGRAM IMPLEMENTATION STEPS AND REQUIRED ASSISTANCE

QUESTIONS? >

ADDITIONAL COMPARATORS FROM NATIONAL CAPITAL REGION
As of 3/19/2013

City of Fairfax

BLS: $561.00 (highest in the National Capital Region)
ALS1: $663.00 (highest in the National Capital Region)
ALS2: $765.00
Transport - $10/mile

City of Manassas

BLS Emergency	$300.00
ALS1 Emergency	$450.00
ALS2 Emergency	$550.00
ALS Mileage	$7.50/mile
BLS Mileage	$7.50/mile

City of Manassas Park

ALS 1: $475.00
ALS 2: $575.00
BLS: $325.00
Mileage: 8.50

Metropolitan Washington Airports Authority (Dulles and Reagan)

BLS - $450.00
ALS - $550.00
ALS2 - $775.00
Mileage - $9.50/mile

NOTE: These additional National Capital Region jurisdictions (excluding Prince Georges County, MD) were not included in the revised comparison (FGSO Recommendation) simply because they were not mentioned. However, if the Board of Supervisors directed staff to include these other jurisdictions in the analysis and comparison, the City of Fairfax's BLS and ALS1 rates would be the highest in the Region. If the Board agrees with the FGSO recommendation -AND- chooses to use these other jurisdictions as comparators, staff would use the 10% rule for the City of Fairfax's BLS and ALS1 rate in addition to the Montgomery County, MD AL2 rate to determine a new projection.

Source: Ludwig Group, LLC