



April 8, 2011

TO: Board of Mayor and Aldermen

FROM: City Administrator Eric S. Stuckey

Assistant City Administrator Russell Truell

Fire Chief Rocky Garzarek

Purchasing Manager Brian Wilcox

SUBJECT: Consideration of contract award for emergency medical service consulting services for

the Fire Department (Purchasing Office Procurement Solicitation No. 2011-028; FY 2011 funding to be transferred from 110-82560-45900 to 110-82560-42200; FY 2012 funding

to be budgeted in 110-82560-42200)

Purpose

The purpose of this memorandum is to provide the Board of Mayor and Aldermen (BOMA) with information to consider the award of a contract to TriData Division of System Planning Corporation for consulting services related to the City of Franklin's emergency medical services delivery system.

Background

The purpose of this procurement is to retain the services of an outside consultant to conduct an in-depth study and analysis of emergency medical services including advanced life support and ambulance transport delivery systems. Effective and efficient care of the sick and injured are of paramount importance to the Franklin Fire Department. Uncertainty in the present economy, continued growth in both the overall population and the population of seniors in our community, and continued additions of assisted living and nursing facilities are all challenges that we face as a community. To promote the highest quality of life possible in Franklin, the City seeks to obtain an unbiased study that will provide a current assessment of whether the City should undertake to provide emergency medical transport services, and solid recommendations from which current and future decisions can be presented and implemented.

The City published on February 24, 2011 a Notice to Proposers in the *Williamson Herald* for emergency medical service consulting services. In addition, solicitation documents were sent on or about the same date directly to 21 potential proposers known or thought to be interested in this solicitation. Six (6) proposals were publicly opened at the submittal opening held on March 24. A tabulation of the proposals received for this solicitation is attached.

Financial Impact

The proposal ranked highest by the proposal evaluation team, from TriData Division of System Planning Corporation, of Arlington, VA, is in the amount of \$40,261.00 for the requested consulting services. If this award is approved, fiscal year 2011 funding would be transferred from the General Fund General Expenses cost center to the Fire Department budget to cover the fiscal year 2011 cost of the project, and fiscal year 2012 funding would be budgeted in the Fire Department budget.



MEMORANDUM

Options

In accordance with the solicitation documents, the City reserves the right to reject any and all proposals.

Recommendation

Staff recommends that the City accept the proposal ranked highest by the proposal evaluation team, from TriData Division of System Planning Corporation, of Arlington, VA, in the amount of \$40,261.00 for the requested consulting services. Purchasing Manager Brian Wilcox is of the opinion that the prepared solicitation documents as distributed allowed for competition among multiple vendors, and that the staff recommendation appears to be made in a fair and impartial manner based upon the proposals received.

City of Franklin, Tennessee <u>Tabulation of Proposals</u>*

2011-028 (em	ergency medical	service consul	ting services)			·····
2/24/11			,			
21 / 6						
3/24/11 2:00 1	PM					
	-	Franklin Fire	Department;	and Tiffany	Wilkins of the	City of
4/26/11						
Description of proposal:	Does the proposer take any exceptions to the City's procurement solicitation?	Total quoted proposed fees for services:	Proposal Evaluators' consensus scoring including for proposed fees for service (out of a possible 100 pts.):	Payment terms:	Estimated time of project completion after receipt of order:	Proposal price per unit is valid through:
emergency						
medical service consulting services	Proposer takes no exceptions	\$49,170.00	77.00	net 30 days	not indicated	9/24/2011
emergency						
medical service consulting	Proposer takes no exceptions	\$37,400.00	74.00	net 30 days	180 days	07/31/11
services						19711
emergency medical service consulting services	Proposer takes no exceptions	\$46,900.00	73.75	net 30 days	12 weeks	06/15/11
emergency				J		
medical service consulting services	Proposer takes no exceptions	\$69,000.00	69.75	net 30 days	20 weeks	9/30/2011
emergency						and MEREL SHAPE AND ADDRESS OF THE SHAPE AND A
medical service consulting services	Proposer takes no exceptions	\$32,650.00	74.25	net 30 days	21 weeks	05/31/11
medical service consulting services	Proposer takes no exceptions	\$40,261.00	87,75	monthly progress payments	not more than 6 months	06/30/11
	2/24/11 21 / 6 3/24/11 2:00 I Mike Culbers Franklin Pur 4/26/11 Description of proposal: emergency medical service consulting services emergency medical service consulting services	2/24/11 21 / 6 3/24/11 2:00 PM Mike Culberson of the City of Franklin Purchasing Office 4/26/11 Does the proposer take any exceptions to the City's procurement solicitation? emergency medical service consulting services emergency medical service consulting service takes no exceptions emergency medical service consulting services emergency medical service consulting services emergency medical service takes no exceptions emergency medical service consulting services emergency medical service takes no exceptions emergency medical service consulting services emergency medical service takes no exceptions exceptions	2/24/11 21 / 6 3/24/11 2:00 PM Mike Culberson of the City of Franklin Fire Franklin Purchasing Office 4/26/11 Does the proposer take any exceptions to the City's procurement solicitation? emergency medical service consulting services emergency medical service takes no exceptions service consulting services emergency medical service takes no exceptions emergency medical service consulting services emergency medical service takes no exceptions \$40,261.00	21/6 3/24/11 2:00 PM Mike Culberson of the City of Franklin Fire Department; Franklin Purchasing Office 4/26/11 Description of proposer take any exceptions to the City's procurement solicitation? Emergency medical service takes no exceptions services Emergency medical service takes no exceptions service takes no consulting services Emergency medical service takes no exceptions service takes no exceptions services Emergency medical service takes no exceptions service	2/24/11 21/6 3/24/11 2:00 PM Mike Culberson of the City of Franklin Fire Department; and Tiffany Franklin Purchasing Office 4/26/11 Does the proposer take any exceptions to the City's procurement for proposal: emergency medical services emergency medical service consulting services emergency medical service exceptions emergency medical services emergency medical services emergency medical service takes no exceptions service takes no exceptions services emergency medical service takes no exceptions services emergency medical service takes no exceptions services emergency medical services emergency medical service takes no exceptions services emergency medical service takes no exceptions services emergency medical service takes no exceptions services emergency medical Proposer takes no exceptions service takes no exceptions services emergency medical Proposer takes no exceptions services	2/24/11 21/ 6 3/24/11 2:00 PM Mike Culberson of the City of Franklin Fire Department; and Tiffany Wilkins of the Franklin Purchasing Office 4/26/11 Does the proposer take any exceptions to the City's proposed fees for service out of a possible 100 pts.) Estimated time of project consulting services Proposer takes no consulting services Emergency medical services Emergency medical service exceptions services Emergency medical service Saryices Estimated time of project consulting service out of a possible 100 pts.) From the City's proposer takes no exceptions Saryicon and the City's proposer takes no exceptions services Emergency medical service exceptions services Emergency medical service exceptions exceptions services Emergency medical service exceptions exceptions service axes no exceptions service axe

CITY OF FRANKLIN, TENNESSEE PROCUREMENT AGREEMENT

COF Contract #2011-0067

THIS PROCUREMENT AGREEMENT ("AGREEMENT") is by and between the City of Franklin, Tennessee ("CITY"), and <u>TriData Division of System Planning Corporation</u>, of Arlington, <u>VA</u> ("VENDOR"), who mutually agree as follows:

- 1. CITY issued Purchasing Office Solicitation No. <u>2011-028</u> on <u>March 2, 2011</u>, a solicitation for <u>emergency medical service consulting services</u> ("SOLICITATION"). SOLICITATION is attached hereto and hereby incorporated by reference as if fully set forth herein.
- 2. In response to CITY's SOLICITATION, VENDOR submitted a proposal dated <u>March 24, 2011</u> ("SUBMITTAL"). SUBMITTAL is attached hereto and hereby incorporated by reference as if fully set forth herein.
- 3. CITY awarded on <u>April 26, 2011</u> and now desires to retain VENDOR to provide <u>emergency medical service consulting services</u> pursuant to SOLICITATION and SUBMITTAL.
- 4. VENDOR has now also submitted an executed CITY's Indemnification Agreement; and an executed CITY's Notice of Confidentiality & Proprietary Rights, both of which are attached hereto and hereby incorporated by reference as if fully set forth herein.
- 5. In the event of a conflict between CITY's SOLICITATION and VENDOR'S SUBMITTAL, CITY'S SOLICITATION shall supersede conflicting terms and conditions found in VENDOR'S SUBMITTAL, except for any exceptions identified by VENDOR in its SUBMITTAL and accepted at the time of award by CITY.

EXECUTED THIS	DAY OF _	The state of the s	_20
For VENDOR:		For CITY:	
Philip Sharrow			
(signature of VENDOR's authorized repres	entative)	(signature	e of CITY's authorized representative)
TITLE: President, TriData Division	1	TITLE:	Mayor
		Approved as to	Form: In R Con
		Kristen L. Corn	. Staff Attorney

City of Franklin, Tennessee <u>Tabulation of Proposals</u>*

Purchasing Office Solicitation No.	. 2011 029 (om	organas madical	sorvice consul	ting corvious)	·····		
Purchasing Office Solicitation No. Notice to Proposers published in the		ergency medical	service consui	ting services)			
Williamson Herald on	12/24/11						
Number of vendors that were notified of							
that responded to this request for proposals	: 2170						
Date and time proposals due and publicly opened	3/24/11 2:00	PM					
Present at opening of proposals		son of the City of chasing Office	Franklin Fire	Department;	and Tiffany	Wilkins of the	City of
Target meeting of BOMA at which recommendation will be considered							
recommendation will be considered							
Proposals received from:	Description of proposal:	Does the proposer take any exceptions to the City's procurement solicitation?	Total quoted proposed fees for services:	Proposal Evaluators' consensus scoring including for proposed fees for service (out of a possible 100 pts.):	Payment terms:	Estimated time of project completion after receipt of order:	Proposal price per unit is valid through:
Fitch & Associates, LLC					1		
2901 Williamsburg Terrace	emergency	_					
Suite G, Box 170	medical	Proposer	640 170 00	77.00	net 30		0/24/2011
Platte City, MO 64079	service consulting	takes no exceptions	\$49,170.00	77.00	days	not indicated	9/24/2011
Joseph Fitch, PhD, President	services	exceptions					
816-431-2600	Scrvices						
Kramer & Associates	emergency						
9 Heritage Road	medical	Proposer					
Cincinnati, OH 45241	service	takes no	\$37,400.00	74.00	net 30 days	180 days	07/31/11
William Kramer, PhD., Owner	consulting	exceptions					
513-678-2279	services						
The Ludwig Group, LLC.	emergency						
109 N. Main, Suite 504	medical	Proposer					
Memphis, TN 38103	service	takes no	\$46,900.00	73.75	net 30 days	12 weeks	06/15/11
Gary Ludwig, Managing Director	consulting	exceptions					
636-789-5660	services						
Matrix Consulting Group	emergency						~
721 Colorado Ave, Ste. 101	medical	Proposer					
Palo Alto, CA 94303	service	takes no	\$69,000.00	69.75	net 30	20 weeks	9/30/2011
Richard Brady, President	consulting	exceptions			days		
650-858-0507	services						
McGrath Consulting Group, Inc.	emergency						
P.O. Box 190	medical	Proposer					
Wonder Lake, IL 60097	service	takes no	\$32,650.00	74.25	net 30 days	21 weeks	05/31/11
Dr. Tim McGrath, President	consulting	exceptions					
815-728-9111	services						
System Planning Corporation							
3601 Wilson Blvd.	emergency	_					
Arlington, VA 22201	medical	Proposer			monthly	not more than	0.00000
Philip Schaenman	service	takes no	\$40,261.00	87.75	progress	6 months	06/30/11
President, TriData Division	consulting	exceptions			payments		
	services						

NOTICE TO PROPOSERS

NOTICE IS HEREBY GIVEN that the City of Franklin, TN, will receive sealed written proposals in the City's Purchasing Office, City Hall, Suite 107, 109 Third Avenue South, Franklin, TN 37064, until **2:00 p.m.** Central Time on **March 24, 2011**, at which time and location they will be publicly opened, for the following procurement:

emergency medical service consulting services (Purchasing Office Solicitation No. 2011-028)

Proposals must be prepared and submitted in accordance with the City's request for proposals and other procurement documents pertaining to this solicitation, available at the Purchasing Office or upon electronic request made to purchasing@franklintn.gov (please reference the Purchasing Office solicitation number listed above). The City reserves the right to reject any and all proposals, and to waive formalities.

For additional information, contact the Purchasing Office, 615/550-6692.

{text below this line not to be published}

DATE OF PUBLICATION OF THIS NOTICE TO PROPOSERS: February 24, 2011

ORIGINAL

Proposal to City of Franklin, Tennessee

EMERGENCY MEDICAL SERVICES CONSULTING SERVICES

Purchasing Office Solicitation No. 2011-028

March 24, 2011







3601 Wilson Baulevard, Arlington, Virginia 22201-2362 • (703) 351-8300 • (703) 351-8383 fax • www.sysplan.com/TriData

March 23, 2011

Brian Wilcox, Purchasing Manager City of Franklin Purchasing Office Franklin City Hall, Suite 107 109 Third Avenue, South Franklin, TN 37064

Dear Mr. Wilcox:

TriData is pleased to respond to your Request for Proposal to study the EMS system in Franklin. We are a professional consulting firm with almost 30 years of experience in studying EMS, fire, and emergency management in North America and other nations. Our staff of approximately 14 professionals and over 40 consultants across the U.S. has significant experience in EMS and has helped us produce over 180 fire and EMS studies for local governments such as yours.

Our proposed project manager, Dr. Harold C. Cohen, has over 30 years of experience in EMS, including fire-based, commercial, hospital-based, and other EMS delivery systems. He has a Ph.D. in Health Services and is a Fellow of the American College of Healthcare Executives. He has a Master of Science in Emergency Health Services Administration and Management, and is a graduate of the Harvard University JFK School of Government Executive Program in State and Local Government. He has managed many EMS studies, most recently ones for the State of New Jersey; Orange County, FL; Key West, FL; Rochester, NY; Newburgh, NY; Anne Arundel County, MD; St. Petersburg, FL; Alameda, CA; and others.

Other key staff will include our GIS/CAD consultant, Robin Davis, who has a Master of Science degree in Public Administration, and is an experienced mapping professional. He has performed risk and demand studies for several Tribat studies throughout North America. Senior consultant Steven Cohen is currently the Chief of EMS for Cary. NC. He has extensive experience as an EMS educator, and has served as a paramedic in urban and suburban EMS systems for over 25 years.

TriData looks forward to working with the City of Franklin to provide a high quality, low cost EMS study to assist in planning for the future. If you have any questions, please contact me at (703) 351-8300 or Dr. Harold C. Cohen at (443) 829-8113.

Sincerely

Chilp Schaenman President, TriData Division

PROPOSAL

Emergency Medical Services Consulting Services Purchasing Office Solicitation No. 2011-028

Submitted to:

City of Franklin Purchasing Office Franklin City Hall, Suite 107 109 Third Avenue, South Franklin, TN 37064

Submitted by:

Philip Schaenman, President, TriData Division System Planning Corporation 3601 Wilson Boulevard, 5th Floor Arlington, VA 22201 (703) 351-8300, pschaenman@sysplan.com

> Due date / time: March 24, 2011 by 2:00 pm CST

Proposal Submittal Form

a form required of Bidders and Proposers on purchases of supplies, materials, equipment and services for the City of Franklin, Tennessee

Purchasing Office Solicitation No.: 2011-028

	SYSTEM PLANNING CORPORATION
	3601 WILSON BOULEVARD
Vendor's name, street address, and mailing address:	ARLINGTON, VA 22201
	PHILIP SCHAENMAN
Vendor's contact person's name (printed), title, and	PRESIDENT, TRIDATA DIVISION
telephone number:	(703) 351-8300
Does the proposer take any exceptions to the City's	Yes, see enclosed.
es the proposer take any exceptions to the City's procurement solicitation?	No, proposer takes no exceptions.
Are exceptions, if any, to the City's procurement solicitation	Yes, see enclosed.
listed separately, described, compared to the City's intention as expressed and implied by the City's	
solicitation documents and submitted?	No, proposer takes no exceptions.
Total quoted proposal price for EMS consulting services and	§\$40,261
required deliverables:	Φ
Are the City's preferred payment terms (net 30 days from	Yes.
date of delivery or date of invoice, whichever is later)	No, proposer requests the following
acceptable to proposer?	payment terms: We prefer monthly progress payments
Last date (no sooner than May 31, 2011) that proposal and	L 20 2044
associated pricing is valid and may be accepted by the	June 30, 2011
City:	

Proposal Submittal Form
a form required of Bidders and Proposers on purchases of supplies, materials, equipment and services for the
City of Franklin, Tennessee

Purchasing Office Solicitation No.: 2011-028

Are the following included with this Proposal Submittal Form in the submittal?	
 Detailed vendor-supplied description of proposed product(s) and/or service(s); 	
 Identification, listing and description of any exceptions to the procurement solicitation; 	Yes, see enclosed.
 Contact information for minimum of three references; 	Tes, see enclosed.
 Standard Procurement Terms and Conditions of the City of Franklin, with the vendor's contact information inserted; 	No, proposer chooses <u>not</u> to include the documents indicated.
 Vendor terms and conditions, if any, that are not inconsistent with the City's Standard Procurement Terms and Conditions; 	
 Affidavit of Non-Collusion, executed in full; and 	A-COCCO
 Affidavit of Title VI Compliance, executed in full. 	
Receipt acknowledged of any and all issued addenda to this solicitation:	Addenda Nos. received. No addenda received.
Signature of proposer's authorized representative: I have received and read, and do understand and consent, to all instructions, terms and conditions, including those imposed by reference, which apply to this procurement solicitation and compliance with which is required as a condition precedent to consideration of the proposal submitted herewith.	thily frham
Title of proposer's authorized representative:	PRESIDENT, TRIDATA DIVISION
Date of signature:	MARCH 23, 2011
	1

Page 2 of 2

Affidavit of Title VI Compliance a form required of Bidders and Proposers on purchases of services for the City of Franklin, Tennessee

) SS

State of Virginia

County of Arlington

Affian	t, Philip Schaenman	, deposes and makes oath that:
	(printed name of person signing Affida	vit)
1.	He or she is the President, TriData (Owner or Authorized Parts	Division of
••	(Owner or Authorized Part	ner, Officer, Representative or Agent of Owner)
	(legal name of entity	submitting bid or proposal)
	the Bidder or Proposer who has submitted to	he attached bid or proposal;
2.	The Bidder or Proposer is fully informed attached bid or proposal and of all per proposal;	respecting the preparation and content of the tinent circumstances respecting such bid or
3.	national origin or any other class protected statutory and/or case law shall be excluded	or disability, age, race, color, religion, sex, od by federal and/or Tennessee constitutional, from participation in, or denied benefits of, or in, the performance of the contract or in the
4.	The contractor shall, upon request, show p in conspicuous places, available to emidiscrimination; and	roof of such non-discrimination, and shall post ployees and job applicants, notices of non-
5.	This Affidavit is made on personal knowle	dge.
/.	buly fehrenn	President, TriData Division
	(signature of Affiant)	(title of Affiant)
La	n and subscribed to before me this 2250 de	My Commission Expires: 30,2012 LAUREEN D. OVERWAY Notory Public Commonwealin of Viriginia 718099 My Commission Expires Jun 30, 2012
(Sub)	mitted in response to City of Franklin Pur	chasing Office Solicitation No. 2011 - 628)

a form	requi	red of Bidders and Proposers on	vit of Non-C purchases of sup Franklin, I	pplies, materials, equipment and services for the
State of	Virg	ginia	The state of the s)
		rlington		
Affiant	Phi	lip Schaenman		, deposes and makes oath that:
1.	He or	she is the President, TriD	n signing Affidavit) ata Division	cer, Representative or Agent of Owner)
	Sys	tem Planning Corporat	ion	ting bid or proposal)
	the Bi	dder or Proposer who has submi	tted the attached	bid or proposal;
	propos	sal and of all pertinent circumsta	nces respecting s	
4.	Neither emplo agreed persor connection from confer or cos potent unlaw contra	yees, or parties in interest, inclu i, directly or indirectly, with an i, or potential or actual bidder ction with the contract for whis bidding or proposing indirectly cance with any other firm, person t element of the bid, quoted or ial or actual bidder or proposes ful agreement any advantage ag ct;	nor any of its of ding this Affiant, y official or ager or proposer to the attached by, or sought by a, or potential or a proposed price c, or to secure the ainst the City of	Ficers, partners, owners, agents, representatives, has in any way colluded, conspired, connived of to fit the City of Franklin or with any other firm submit a collusive or sham bid or proposal in did or proposal bas been submitted, or to refrair agreement, or collusion, or communication, on actual bidder or proposer to fix the price or prices or the bid, quoted or proposed price of any other to the proposer of
5.	collus	ion, conspiracy, connivance, or	unlawful agreeme	osal are fair and proper and are not tainted by a ent on the part of the Bidder or Proposer or any of its in interest, including this Affiant; and
6.	\$6-54 from leany co any fu	-107, prohibit any member of the being interested in any contract, outract in which any such person ands received by contractor to led by law.	e Board of Mayo or work of any k a shall have an in be returned in fu	5, of the City Charter of Franklin, and T.C.A r and Aldermen, or officer elected by said Board ind whatever, under its control and direction, and terest shall be void and unenforceable, subjecting ill to the City, in addition to any other penaltice.
Rl	ul	Gingun of A (Final)	P	resident, TriData Division (title of Affiant) , cc/\(\sigma\), 20\(\sigma\)
Sworn	and su	bscribed to before me this 23°	day of Mo	, 20 II
La	1 1 0 0 0	n. D. Ores in		Garagical Expires: June 30, 2012
	(Subr	nitted in response to City of F i	LAUREEN D. C Notary P Pan Harry Trans 71805 My Commission Expli	Overway June 30, 2012 DVERWAY JUNE DVERWAY
		. •	*****	
			ement Ter Franklin, T	ms and Conditions Fennessee
	1.	these Standard Procurement To prior written consent of the Conditions will be binding a respective successors and perm	erms and Condition other party. To apon and inure nitted assigns. Vesent of the City,	y assign any rights or obligations under ons or any Statement of Work without the chees Standard Procurement Terms and to the benefit of the parties and their endor may subcontract any portion of the but such subcontracting will not relieve rement Terms and Conditions.
	2.	Time of the Essence. The part the vendor's performance of al		ME IS OF THE ESSENCE with respect to is procurement.
	3.	incurred for products or servi copy of its Sales and Use Tax	ces. Upon reque Exemption Cert	not be responsible for sales or use taxes est, the City shall supply Vendor with a difficate. Vendor shall bear the burden of ity's tax exemption certificate and shall
		assume all liability for such tax	es, if any, that sh	ould be incurred.
	4.	Conditions, if specified to be it if by hand delivery, then upo deposit in the mail where send requested; (c) if by next day facsimile transmission or elect will be addressed to the parties document which these Standau	n writing, will be n receipt thereof ler is located, pos delivery service ronic mail, then s at the addresses d Procurement T	these Standard Procurement Terms and in writing and will be deemed given: (a) ; (b) if mailed, then three (3) days after stage prepaid, certified mail return receipt ;, then upon such delivery; or (d) if by upon confirmation of receipt. All notices set forth below (or set forth in such other rems and Conditions may accompany, or ure specify in writing to the other):
		In the case of the C	ity:	In the case of Vendor:
		City of Franklin		System Planning Corporation Philip Schaenman, President, TriData Division
		Attn: Purchasing Manager		Philip Schaenman, President, InData Division

In the case of Vendor:
System Planning Corporation
Philip Schaenman, President, TriData Division
Solicitation No. 2011 028
3601 Wilson Boulevard, 5th Floor
Arlington, VA 22201
(703) 351-8300; (703) 351-8383 fax
pschaenman@sysplan.com

Standard Procurement Terms and Conditions City of Franklin, Tennessee

- 5. Confidentiality and Proprietary rights. Vendor waives any right to confidentiality of any document, e-mail or file it fails to clearly mark on each page (or section as the case may be) as confidential or proprietary. Proprietary rights do not extend to the data created by the City's users of the System; all rights to that data (including derivative or hidden data such as metadata) shall vest solely in City at the moment of creation and City shall retain exclusive rights, title, and ownership of all data and images created therefrom at the moment of creation and utilization, through and including image creation. City may be required to disclose documents under state or federal law. City shall notify Vendor if a request for documents has been made and shall give Vendor a reasonable opportunity under the circumstances to respond to the request by redacting proprietary or other confidential information. In exchange, Vendor agrees to indemnify, defend, and hold harmless City for any claims by third parties relating thereto or arising out of (i) the City's failure to disclose's such documents or information required to be disclosed by law, or (ii) the City's release of documents as a result of City's reliance upon Vendor 's representation that materials supplied by Vendor (in full or redacted form) do not contain trade secrets or proprietary information, provided that the City impleads Vendor and Vendor assumes control over that claim.
- 6. <u>Derivative Works.</u> To the extent that the Agreement contains Vendor's reservation of rights, such definitions and limitations are superseded by the following: "Derivative Work" means a program that is based on or derived from one or more existing programs or components. If the original software is modified to create a new program, a derived work is created. If the original software was designed to accept plug-ins or drivers using a defined mechanism, such a driver or plug-in does not form a derived work. Linking to a library in the way it was designed to be interfaced with, does not constitute deriving a work. "Derivative work" is not the data that the Licensee inputs, manipulates, modifies or otherwise improves, nor the images resulting therefrom.
- Arbitration/Mediation. No arbitration shall be required as a condition precedent to filing
 any legal claim arising out of or relating to the Contract. No arbitration or mediation
 shall be binding.
- 8. Waiver. Neither party's failure or delay to exercise any of its rights or powers under these Standard Procurement Terms and Conditions will constitute or be deemed a waiver or of rightiure of those rights or powers. For a waiver of a right or power to be effective, it must be in writing signed by the waiving party. An effective waiver of a right or power shall not be construed as either (a) a future or continuing waiver of that same right or power, or (b) the waiver of any other right or power.
- 9. <u>Warranties/Limitation of Liability/Waiver.</u> City reserves all rights afforded to local governments under law for all general and implied warranties. The City does not waive any rights it may have to all remedies provided by law and therefore any attempt by Vendor to limit its liability shall be void and unenforceable.
- 10. Severability. If any term or provision of these Standard Procurement Terms and Conditions is held to be illegal or unenforceable, the validity or enforceability of the remainder of these Standard Procurement Terms and Conditions will not be affected.

Rev. 12/28/2010 Page 2 of 4

Standard Procurement Terms and Conditions City of Franklin, Tennessee

- 16. <u>Breach.</u> Upon deliberate breach of these Standard Procurement Terms and Conditions, or of any contract, agreement or other document which these Standard Procurement Terms and Conditions may accompany, by either party, the non-breaching party shall be entitled to terminate these Standard Procurement Terms and Conditions without notice, with all of the remedies it would have in the event of termination under section 10 ("Severability") above, and may also have such other remedies as it may be entitled to in law or in equity.
- 17. <u>Default.</u> If Vendor fails to perform or comply with any provision of these Standard Procurrement Terms and Conditions, or of any contract, agreement or other document which these Standard Procurrement Terms and Conditions may accompany, then the City (i) may cancel the purchase award and/or the accompanying contract or agreement or purchase order, in whole or in part, without penalty or protest by Vendor; (ii) may consider such failure to perform or comply as a breach of contract; (iii) reserves the right to purchase its requirements from the vendor that submitted the next lowest and best responsive and responsible bid, or the vendor that submitted the next best proposal, if that vendor will still honor that bid or proposal or to seek new bids or proposals, or to pursue one or more other options available to the City in compliance with its then current purchasing policy; and (iv) may hold the defaulting vendor liable for all damages provided by law, including cost of cover.
- 18. Entire Agreement. These Standard Procurement Terms and Conditions, including any contract, agreement or other document which these Standard Procurement Terms and Conditions may accompany, constitutes the entire agreement between the parties and supersedes any prior or contemporaneous communications, representations or agreements between the parties, whether oral or written, regarding the subject matter of these Standard Procurement Terms and Conditions. The terms and conditions of these Standard Procurement Terms and Conditions may not be changed except by an amendment expressly referencing these Standard Procurement Terms and Conditions by section number and signed by an authorized representative of each party.
- 19. <u>Survival</u>. These Standard Procurement Terms and Conditions shall survive the completion of or any termination of any contract, agreement or other document which these Standard Procurement Terms and Conditions may accompany.

Standard Procurement Terms and Conditions City of Franklin, Tennessee

- 11. <u>Precedence.</u> In the event of conflict between the provisions of these Standard Procurement Terms and Conditions and any contract, agreement or other document which these Standard Procurement Terms and Conditions may accompany, the provisions of these Standard Procurement Terms and Conditions will to the extent of such conflict take precedence unless such document expressly states that it is amending these Standard Procurement Terms and Conditions.
- 12. Indemnification. Vendor agrees to indemnify and hold City harmless from and against legal liability for all judgments, losses, damages, and expenses to the extent such judgments, losses, damages, or expenses are caused by Vendor's negligent act, error or omission in the performance of the services of this agreement. In the event judgments, losses, damages, or expenses are caused by the joint or concurrent negligence of Vendor and City, they shall be borne by each party in proportion to its own negligence. The terms and conditions of this paragraph shall survive completion of this services agreement.
- 13. Additions/Modifications. If seeking any addition or modification to the Contract, the parties agree to reference the specific paragraph number sought to be changed on any future document or purchase order issued in furtherance of the Contract, however, an omission of the reference to same shall not affect its applicability. In no event shall either party be bound by any terms contained in any purchase order, acknowledgement, or other writings unless: (a) such purchase order, acknowledgement, or other writings specifically refer to the Contract or to the specific clause they are intended to modify; (b) clearly indicate the intention of both parties to override and modify the Contract; and (c) such purchase order, acknowledgement, or other writings are signed, with specific material clauses separately initialed, by authorized representatives of both parties.
- 14. <u>Applicable Law; Choice of Forum/Venue.</u> These Standard Procurement Terms and Conditions are made under and will be construed in accordance with the laws of the State of Tennessee without giving effect to any state's choice-of-law rules. The choice of forum and venue shall be exclusively in the Courts of Williamson County, TN.
- 15. <u>Termination</u>. Either party may terminate these Standard Procurement Terms and Conditions, with or without cause, upon thirty (30) days' notice to the other. Upon termination by the vender, the City shall be entitled to retain ownership of any and all goods and equipment purchased. Upon termination by the City, the vendor shall be entitled to receive any amounts due as a result of goods and equipment already delivered and/or services already rendered; however, the City shall maintain ownership and control of any goods and equipment purchased. Upon termination of services, whether connected or unconnected to goods and equipment, such services shall be rendered until the conclusion of the 30th day as stated in the notice or until a contractual benchmark has been achieved, or as the parties may otherwise agree.

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Proposal to City of Franklin, TN

INTEGRICATION

TriData Division, System Planning Corporation Emergency Medical Services Consulting Services Purchasing Office Solicitation No. 2011-028

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INTRODUCTION

Emergency Medical Services Consulting Services Purchasing Office Solicitation No. 2011-028

The City of Franklin is seeking a professional EMS consulting firm to evaluate its EMS system. System Planning Corporation's TriData division has undertaken scores of similar EMS studies over the last 30 years, including many just in the last three years as EMS concerns have increased across the fire service.

We are highly motivated to undertake the study for Franklin. Our founder pioneered performance measurement of the fire service with the city of Nashville, and we later did comprehensive studies of fire and EMS services for Nashville/Davidson County. Franklin also was a pioneer in the use of TriData's Smokeblaster. We have had many good experiences in your area of Tennessee, and would very much like to assist Franklin in this study.

About TriData

TriData is generally considered to be one of the premier public safety consulting firms in North America. We specialize in performing research and management analysis studies in emergency medical services, fire protection, prevention and public education, emergency management, and homeland security. We are unique in the synergism between our local government studies, which bring ground truth to the research, and the research, which brings state-of-the-art information to our local government clients.

TriData has almost three decades of experience in meeting fire/rescue department and emergency preparedness challenges. We have completed studies of emergency services organizations in over 180 communities across the U.S. and Canada and excel in efficiency and effectiveness, analyzing fire/rescue and EMS departments, and developing strategic planning documents.

About half of TriData's work is management consulting for local government; the remainder is fire and EMS research on behalf of the Federal government. Our Federal level clients have included the United States Fire Administration; Federal Emergency Management Agency; CDC Center for Injury Prevention; U.S. Navy Fire and Emergency Services; U.S. Forest Service; Department of Justice; Department of Transportation; and the Department of Interior. Because we perform a wide range of fire and EMS research, TriData brings in-depth, state-of-the-art knowledge of virtually every aspect of fire and EMS management to each study.

TriData Organization

TriData is a division of System Planning Corporation (SPC), a corporation organized and existing under the laws of the State of Delaware. SPC was established in 1970 and is primarily focused on national security issues and high level systems engineering. TriData was established

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TriData's president, Philip Schaenman, is authorized to negotiate and contractually bind-TriData into any agreement with the city. The project manager, Dr. Harold C. Cohen, is available to answer questions on any of the technical information provided in our proposal.

> Philip Schaenman President, TriData Division (703) 351-8300 pschaenman@sysplan.com

Dr. Harold C. Cohen Senior Program Manager, TriData Division (443) 829-8113 hcohen@sysplan.com

GIS Canabilities

The application of geographic information systems (GIS) is central to our analytical process. It is field-tested and has proven to be a successful means for carrying out station location, apparatus deployment, and response time analyses and producing the deliverables required for this project. The process includes two phases.

We begin with the technical component, utilizing GIS software and related tools to develop, store, and analyze spatial information about the jurisdiction and its fire and EMS experience. We explore demand patterns in terms of where incidents have occurred in the past, identify locations of potential risk areas, and analyze response times. We also identify theoretical response areas and associated travel times from the existing system of stations. Separate analyses are performed based on call types (e.g., EMS, ALS, BLS, first responder, etc.) and responding unit types (e.g., BLS ambulances, ALS ambulances, chase vehicles, EMS Supervisors, etc.).

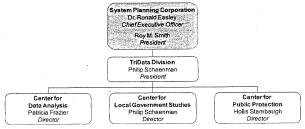
The GIS output is then analyzed by EMS experts with experience in static and dynamic EMS deployment and staffing, comprehensive management, EMS transport, risk and demand, and other related studies. This phase often leads to multiple analysis iterations, during which these industry experts work closely with our GIS team to evaluate station location alternatives.

Our statistical software, Statistical Package for the Social Scientist (SPSS 15), is a powerful database and analysis tool that can accommodate large databases such as the City of Franklin. Our team of analysts appreciates the theories associated with municipal and regional planning processes, and our analysis is designed to cater to the specific characteristics of and challenges faced by each department. Provided with the appropriate data, we can examine the effect of external factors (e.g., population, land use trends, development, terrain, or climate) on current and future response times, tailoring our analyses to the unique situation of each

in 1981 and is focused primarily on local public safety issues. TriData celebrated its 29th

TriData reports directly to SPC's President (see Figure 1), and has access to SPC's technical staff, computer facilities, graphics and design department, project accounting systems, telecommunications, and other resources. This study would be undertaken by TriData's Center for Local Government Studies

Figure 1: SPC/TriData Division Organization Chart



TriData's professional staff includes 14 full- and part-time employees located in the metropolitan Washington, DC area. Our staff includes former fire and EMS officers and fire/EMS data analysts who are nationally known for exactly the type of study requested by Franklin, TriData's in-house staff is augmented with a network of more than 40 public safety consultants across the nation, actively participating in our projects. Our organizational approach allows us to tap high-caliber, nationally recognized professionals for specific projects and reduce

Location of Offices and Contact Information

TriData is co-located with our parent company, SPC, in Arlington, VA, which is where most of the analysis for this study will be undertaken (i.e., review of background materials, conduct necessary analyses, development of draft and final reports, etc.). Our contact information is as follows

> TriData Division, System Planning Corporation 3601 Wilson Boulevard Arlington, VA 22209

(703) 351-8300 main (703) 351-8383 fax

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PROPOSED PROJECT TEAM

The proposed TriData team is highly qualified to study the EMS delivery in the City of Franklin. We offer a team of professionals experienced in the field of emergency medical services, fire, and rescue who have worked together on many studies, including developing EMS efficiency studies. Detailed resumes for each of the proposed team members can be found in the appendix

TriData's proposed project staff includes former EMS and fire service officials, leaders in the public management field, EMS data analysts, and technical and research specialists who have conducted studies involving fire-based, municipal service, hospital-based, and commercial-based EMS involving on-line and off-line medical oversight. These include a comprehensive study of New Jersey EMS, consolidations of local EMS systems, and evaluation of efficiency and effectiveness of all elements of EMS. Our EMS studies always include an evaluation and needs assessment for medical oversight.

Corporate Oversight

For each project, a senior executive is responsible for overseeing TriData's work in relation to our customer's needs and corporate mission. For SPC's TriData division, corporate oversight is the responsibility of TriData's president, Philip Schaenman.

Philip Schaenman, MIFireE, president and founder of TriData, has more than 28 years experience leading similar efficiency studies and performance audits of fire and EMS organizations and more than 31 years related research in fire protection, EMS, hazmat, and emergency management. He is an internationally known expert in prevention, public education, fire department analyses, and performance measurement. He has led or provided oversight to over 170 local fire department studies

Mr. Schaenman previously served as associate administrator of the U.S. Fire Administration in charge of the National Fire Data Center and the Fire Technology Program. (He was a charter member of the Senior Executive Service, Grade IV.) He holds advanced engineering degrees from Stanford University and Columbia University. He has testified before Congress both while in and out of government, and is frequently cited in media

Project Manager

The key to TriData's organizational approach is single-point responsibility and accountability. TriData project managers have the responsibility of planning, executing, and delivering all products and services requested in accordance with contract terms. As part of their management responsibilities, the project manager oversees all work ongoing under the contract, provides input on every aspect of the project, and coordinates the various study areas. The

project manager meets with team members on a regular (usually weekly) basis to discuss the technical, schedule, and cost status of work and related issues.

Dr. Harold C. Cohen, Senior Program Manager, will serve as the project manager for this effort. He has managed many TriData EMS studies, and EMS portions of comprehensive fire department studies, including some of high political sensitivity. He has extensive experience in, EMS management, training, and planning. He teaches EMS management at the National Fire Academy. He also has experience in fire operations, fire department communication operations, administration and management, and training. This includes 30 years of fire service experience, 22 of which were with a large metro fire department where he reached the rank of division chief.

Dr. Cohen earned a Ph.D. in Health Services and is board- certified in healthcare management. He is a graduate of the National Fire Academy Executive Fire Officer Program and is a national Chief Fire Officer Designate. In 2002, Dr. Cohen was selected by IAFC/NFPA as a Fellow to the Harvard University, JFK School of Government State and Local Government Executive Program. He is also an instructor for the National Fire Academy's Executive Fire Officer Program, as well as EMS courses.

Dr. Cohen has served as project manager or deputy project manager for TriData EMS studies for State of New Jersey, Department of Health and Senior Services (State of New Jersey EMS System Review); Orange County, FL; Cincinnati, OH; Pittshurgh, PA; Norfolk, VA; Oklahoma City, OK; Portland, OR; Key West, Florida; Alameda, California and others. This has given him knowledge of the many options in use nationwide for providing and funding EMS services for communities of various sizes.

Other Key Team Members

Our consulting team includes EMS data analysis and GIS specialists who use the most modern quantitative, qualitative, and mapping software.

Robin Davis is a GIS/Research Analyst for TriData. Mr. Davis' experience combines a knowledge and application of geographic information systems with a background in fire, emergency medical, and emergency management disciplines. Mr. Davis uses the latest GIS software to analyze station locations and response times and assist in the recommendation process for TriData studies. He has assisted small town GIS departments developing custom databases and produced maps used by the military for the National Geo-Spatial Intelligence Agency.

Mr. Davis served as a volunteer firefighter and EMT with the Falls Church Volunteer Fire Department and the Ariington-Falls Church Volunteer Rescue Squad where he was a Deputy Chief. Mr. Davis is currently an Emergency Management Specialist for Texas Children's Hospital in Houston, Texas. In this capacity he develops plans, policies, and exercises to ensure

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SCOPE OF WORK

Our Understanding of the Project

Determining how EMS should be provided is one of the most challenging and important public safety obligations faced by municipalities. Before entrusting a critical service to any organization, the municipality must be convinced that the chosen provider has the organizational foundation necessary to complete the mission. While this may appear obvious, healthcare mandates, decreasing government and private insurance reimbursement, and increased costs are limiting providers' ability to offer these services in an efficient manner.

The City of Franklin currently provides paramedic-level EMS first response, with transportation provided by a hospital-based ambulance service. Many EMS systems have reached a crossroad as to the best way to provide services. There is no single model that best works. To determine the direction the City should take going into the future, it must examine social, technological, environmental, economic, and political variables to consider the best, most cost-effective options.

Implementing Project Objectives

TriData will analyze each objective included in the Request for Proposal. The evaluation and analysis will occur during several tasks that are identified to better organize our report. Any recommendations will include our primary thoughts, and when possible alternatives that can be considered. Some recommendations may include multiple-step processes that include several decision points, where the City may decide whether to continue implementing the recommendation.

Each of our recommendations will include a plan, timeline, and cost analysis for each alternative. Regardless of which delivery model is chosen, we will assure that our recommendations will not negatively impact the service level of any organization providing other essential services.

Work Plan

TriData uses a task approach to complete the scope of work. The task approach allows us to divide the scope of work into manageable pieces, allowing for greater efficiency, and time management. The lead team member is indicated in italics.

Task 1: Kickoff Conference Call
Personnel: H. Cohen and S. Cohen

Our approach begins with a kickoff conference with the project team to confirm project objectives and goals, validate the program plan, finalize the project schedule (including

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readiness for one of the largest free-standing pediatric hospitals in the United States, including two hospitals, 5 health centers, and over 40 pediatric offices throughout the greater Houston area.

Mr. Davis holds a Bachelor's of Science from Stephen F. Austin State University and a Master's of Public Administration from the University of Texas at Arlington. Mr. Davis has completed over 30 fire station location analyses for TriData clients, and performed response analyses for cities such as Oklahoma City, OK and Norfolk, VA.

Steven Cohen, Senior Consultant, is the chief of EMS for Cary, NC and has over 25 years of EMS experience. He has considerable experience as an EMS instructor, quality manager, and paramedic in several EMS systems.

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milestones and deliverable target dates), review the expectations to validate stakeholder understanding and concurrence, and review background information requirements. We will also plan the tight schedule of meetings for the site visits by TriData.

The kickoff meeting should be conducted within seven working days after contract award and will include the TriData and the key project leaders including: the project manager, project representatives from the Borough, and others, as appropriate. If members of the project team are at remote locations, we can provide toll free 1-800 conference access. The kickoff call should last between no more than one and one-half hours. If desired, we also have video conferencing available.

Task 2: Collection and Review of Background Materials Personnel: Team

To the extent available, we would like to obtain a set of background data at the beginning of the study, in advance of our "triage" visit. We understand that some of the data may not be available or may take time to gather.

Initial data we would like to obtain includes:

- · Map of the entire service area
- Organization charts for each EMS and first responder agency
- Land use, zoning and demographic data, especially population projections and future land use plans
- Current EMS personnel deployment
- Several annual reports (if available)
- Expected major capital improvements that would present new risks or affect existing risks or travel times (e.g., major roads, seasonal roadways)
- Capital improvement and vehicle replacement programs used by each
- EMS, hazmat, and rescue, and trend data for the past 5-10 years
- Response time profiles for EMS calls, by each provider agency. Alternatively, a
 database from which this can be computed is satisfactory.
- EMS vehicles by station (age; manufacturer; type; last major refurbishment, if any), including front-line and reserve units
- · Mutual and automatic aid agreements

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tem Planning Corporation

- General information about the ambulance stations, e.g., size, year built, construction, number of bays, etc.
- · Information concerning aeromedical EMS provided within the Borough
- · Information on hospitals and specialty centers accessible by the Borough

For the response time analysis we will need:

- CAD data, to include incident number, date, address, call type, time received, time dispatched, units dispatched, en route times, arrival times, clear times, and in station times
- · NEMSIS data from EMS patient care reports, removing any patient identifiers.

Review of this above information serves as "homework" before the first series of meetings with project team members and city officials. It also tells us about data availability. Some of this data will be collected during the course of the study if not readily available at the triage visit.

Task 3: Initial Site Visit and Triage of Issues
Personnel: H. Cohen and S. Cohen

After reviewing the initial background information, we will conduct a three day visit to "triage" the EMS issues. The project team will meet first with the project leaders and emergency services officials, including key leaders from the City, Fire Chief, EMS medical directors, and other public safety officials. We would also like to meet with City planning officials to get a better idea of future expectations. Another important meeting should be held with EMS dispatch agencies, including CAD and GIS data managers.

We will tour the area to become more familiar with the risks, geography and locations of available land. All of the stakeholders should be given the opportunity to give input early in this study. We will visit EMS and fire stations to become familiar with its geographic setting, resources and issues. We will spend time with officers and personnel and if possible, ride-a-long on calls that may help us understand how the EMS system works.

We conclude our visit with a meeting between TriData's project team, and the City project team to debrief the visit and to verify any details concerning the project.

Task 4: Risk and Demand Analysis

Personnel: Davis

Based on the information gathered above, TriData will:

- Identify trends affecting EMS response in the area, including population growth, demographics, and risk.
- Analyze trends in the number and size of, EMS first responder, and other incidents in the past 5 years.
- Analyze incident reports or dispatch data to identify the run frequency by area and by EMS and first responder agency.

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TriData will also evaluate current automatic and mutual aid agreements. These agreements are important in determining where station locations and service will be needed. We will identify weak areas and suggest ways to improve cooperation as necessary.

Task 5: Evaluate Current Status of EMS in the City of Franklin

Personnel: H. Cohen and S. Cohen

We will evaluate the current status of EMS provision within the City that will include:

- · How is EMS delivered to the citizens and visitors?
- What compliance standards should the City be following and are they successfully doing so?
- What funding resources are used to fund EMS?
- How successful is the funding resource in adequately supporting the delivery profile.

All of our assessments begin with an evaluation of fire and EMS dispatch. Failing to start at step one often makes other findings questionable. When this valuable step is neglected, many organizations will make changes that are doomed to fail. Often, when reevaluating, organizations wonder why their plans are unsuccessful.

Our evaluation will examine how Franklin meets or exceeds the standards and guidelines espoused by national and local organizations including the International Association of Fire Chiefs, the Center for Public Safety Excellence, the American Ambulance Association, the Commission on the Accreditation of Ambulance Services (CAAS), CoEMSP, NFPA, and any state or local agency. Medical direction is an important variable to evaluate, and our process uses guidelines from the American College of Emergency Physicians (ACEP), the National Association EMS Physicians (NAEMSP), and other agencies. While we use these standards and guidelines, they are not absolutes, and we tailor or assessment and recommendations to the needs of our customers.

We will also analyze many administrative and operational elements within the City delivery profile that will include legal, educational, health and safety, staffing, and other operating costs. Another aspect includes a clinical evaluation of services provided. We draw on our extensive clinical skills database that allows us to provide a comparison of skills proficiency between the City and the United States.

Task 6: Administrative and Operational Recommendations
Personnel: H. Cohen and S. Cohen

Based on the above assessment, we will provide a series of recommendations for the future of EMS delivery in Franklin, TN. We will develop options for organization and management that may include the possibility of fire service, municipal, commercial, hospital-

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- Use statistical extrapolation and expert judgment regarding the factors of influence to develop projections of future demand for EMS incidents over the next 10 years
- . Convert the demand estimate to an estimate of workload for the area

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Demand for service is the product of "demand per capita" and "population served." One needs to consider both elements in projecting demand, not just increase in population. We estimate future demand in two ways to form an envelope of projections. The high estimate projects the trend in demand per capita, multiplied by the projected population for each year. The low estimate assumes that per capita demand will level off at about the current level, and thus any increase or decrease in EMS demand will be approximately proportional to population growth or decline.

We project trends by type of call. We disaggregate demand estimates by area of the township, where possible. The results of this analysis are compared to the existing capabilities to determine present unmet needs, and projections on when additional resources might be needed. The results of this task also will be used in the EMS station location, EMS unit, and staffing analysis

We will consider the degree to which demand for service needs vary throughout the township. We use township planning projections for growth in population, business, and any new risks expected to be introduced in the next decade in each area.

TriData will discuss with Franklin the current response time goals in light of national standards such as NFPA 1710, AAA, and the Commission on Ambulance Accreditation (CAAS). We will consider the desired goals but also what is feasible and affordable. Where appropriate we will indicate the costs to meet national standards, and any evidence in terms of EMS response and patient care.

Response times includes call processing and dispatch time, time to turnout, and the drive time. We will analyze the actual response data for up to the past 5 years. We will compute the average response times overall and by area of the township, and the cumulative frequency distribution of response times or fractile response times (i.e., the percent of calls responded to in 4 minutes, 6 minutes, 8 minutes, etc.). We review response times by area and by type of call (EMS first response). This is based on the existing fire response data, and assumes it is available in machine-readable format.

We consider not only response times for first-due units, but also second-in times and the time needed to assemble an adequate force for different types of risks. We consider simultaneity of calls and the availability of back-up resources. We consider how demand varies by area of the city, time of day, and day of week. This response time analysis is applied to the operational analyses where the alternatives are evaluated.

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based or joint oversight. We will also provide recommendations on delivery based on our risk and demand analysis explained above.

All of our recommendations will include a financial cost-benefit analysis of taking steps to implement change. We often use the STEEP (social, technological, educational, economic, and political) model to assure that we cover the range of variables presented.

Our recommendations place theory into practice, presenting a plan that is practical, measurable, and goal oriented. When appropriate, we also provide alternatives to our primary recommendations, especially when a rapidly changing environment changes the organizational landscape.

Examples of recommendations included:

- In Key West, FL, we showed how a \$725,000 stipend paid to a commercial provider was unnecessary, and helped procure a new service that agreed to a contract without a stipend.
- In the Town of Newburgh, NY, we helped determine how to maintain the integrity of a volunteer EMS system, while assuring that back-up coverage was available to guarantee 100% on-time response.
- In the cities of Houston and Chicago, we developed plans to reduce mean EMS response times by two minutes. In Houston it was through the innovative use of chase cars.
- In Cincinnati, we showed how using the same number of paramedics, the City could upgrade from 4 to 10 paramedic units, and place EMS supervisors in-service.

These are just a few examples of how our recommendations help EMS systems achieve high quality in a cost effective manner.

Financial recommendations are of universal concern in every study. One concerned to be addressed are legal ramifications involved in providing EMS. We will work with the City Attorney to assure that any change to the EMS delivery model or its financing will likely pass any legal challenges.

Task 7: Prepare and Submit Draft Report

Personnel: Team

After all data is compiled and evaluations and analyses are completed, we will submit a draft report to the city's project manager for review and comment. We suggest that the draft be circulated to key personnel for review and comment. Comments may include questions, corrections, or any additional information or data. The draft is submitted 30 days prior to the final report due date and we would ask that comments be returned to us within 2 weeks.

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Important assumptions in pricing this effort and keeping within budget are that review comments sent to us by the city will be collected and combined into one document by the city's project manager, which will allow us to quickly revise the draft report and prepare the final report. There will be one round of comments unless there are errors in the revised final report. Additional rounds of review will be undertaken at cost.

Task 8: Prepare and Submit Final Report; Final Presentation

Personnel: Team

After receiving comments on the draft report, TriData will make final changes, perform a final edit, and officially submit the final report. We will submit up to 10 hard copies and 1 soft copy in PDF format, so that more copies can be produced by the city, if desired.

At this time, we will also schedule a mutually agreeable date for a presentation of the results to whatever audience the city desires. The presentation can be made before or after the report is finalized. (Some clients prefer a presentation at the draft stage, others after the final report.) The presentation will include ample time for questions and answers with a PowerPoint presentation of the study, major findings, and recommendations. Additional presentations can be made at for the cost of travel, and at the same rates used here for other tasks.

On-time delivery of the final report is dependent on our receiving the city's comments within 2 weeks of delivery of the draft report. If the city needs more than 2 weeks to submit comments, then the final report will be ready within 2 weeks of our receiving comments on the draft

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REFERENCES

As requested in the RFP, following are three references for projects completed in the last

1. Volusia County (Halifax Area Civic League) - Possibilities of Fire and Rescue Services

Consolidation

ract Period:

February-August 2010

Contact Person:

Howard Tipton, Jr. 997 Mori Court Port Orange, FL 32127 (386) 314-9928 handgtipton@aol.com

Description of Services: TriData performed a consolidation study for fire and EMS services in Volusia County, FL assessing whether it would be operationally and financially feasible to consolidate fire services county-wide. We were able to determine that consolidation would lead to a \$2 million dollar savings and a centralized fire service.

2. City of Rochester, NY - Analysis of EMS Service Provision

Contract Period:

December 2009 - March 2010

Contact Person:

Sarah Ruekberg, Project Manager Office of Management and Budget

City of Rochester

30 Church Street, Room 200-A Rochester, NY 14614

(585) 428-8938

Ruekbers@CityofRochester.gov

Description of Services: The City of Rochester evaluates its EMS system every 10 years. For its 2009-2010 assessment, TriData was selected through competitive bid to complete the evaluation. Included in the scope of work was an assessment of the current status of EMS, evaluation of the relationship between the city and contract EMS transportation provider, and provide alternatives for the future. The study reviewed response times for the Rochester Fire Department (first-response) and Rural Metro Medical Services (EMS transport contractor) and determined that response times for Priority 1 and 2 (emergent) were good. For high priority patients, relationships between EMS organizations and EMS medical direction were also effective.

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RELEVANT PAST EXPERIENCE

In our 29 years of public safety consulting, TriData has completed over 180 studies for state and local government municipalities, including a management study and a facilities assessment for the Nashville Fire Department.

TriData's studies have had profound influence on national, state, and local EMS systems. Our EMS experience includes serving statewide, city-county, fire-based, municipal, commercial, hospital-based, volunteer, and combination delivery systems. Included are metro-sized cities of over one million, to rural communities of less than 1,000. Our studies have included system design, forecasting, merger and acquisition, and evaluation of EMS delivery.

Below is a list of EMS studies TriData has completed over the past five years, including comprehensive studies.

- 1. Linden, NJ Fire and EMS Assessment and Strategic Plan (Current)
- 2. Fairbanks North Star Borough, AK Comprehensive Review Of Emergency Medical Services (Current)
- 3. Palo Alto, CA EMS System Assessment and Plan (Current)
- 4. Nassau County, FL Fire and EMS Assessment and Strategic Plan (Current)
- 5. Woodbridge Township, NJ Study for Basic Life Support Services (Current)
- 6. Alameda, CA Review of Emergency Medical Services System (2010)
- 7. Key West, FL Consultant Services for the Development of an RFP for Ambulance Services (2010)
- Newburgh, NY Organizational, Effectiveness, Efficiency Review of the EMS System (2010)
- 9. Rochester, NY Analysis of EMS Service Provision (2010)
- 10. St. Petersburg, FL EMS Transportation (2010)
- Volusia County, FL (Halifax Area Civic League) Possibilities of Fire and Rescue Services Consolidation (2010)
- 12. Frederick County, MD Comprehensive Review and Master Plan (2008)
- 13. Muskego, WI Master Plan for Provision of Fire/Rescue Services (2007)
- Ocean City, NJ Assessment of Fire and Rescue Services for Ocean City Fire Department (2007)
- 15. Orange County, FL EMS Transport Study (2007)
- 16. Pike Township, IN Comprehensive Management Study (2007)
- 17. State of New Jersey, Department of Health and Senior Services EMS System Review (2007)

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The TriData team used a variety of qualitative and quantitative methods to perform a comprehensive assessment of the EMS system. After exploring several possible delivery options, none appeared better than the current model.

 Key West, FL – Consultant Services for the Development of an RFP for Ambulance Services

Services

Contract Period: January - March 2010

Contact Person:

Mark Z. Finigan, Assistant City Manager

City of Key West 525 Angela Street Key West, FL 33040 (305) 809-3877

mfinigan@keywestcity.com

Description of Services: TriData assisted the City in developing an RFP for Ambulance Services. Included was an evaluation of the current EMS system, development of an RFP, and solicitation and selection of a new vendor. TriData considered the City's remote location, diverse citizenry, and surges in population. We also considered the continuously evolving economic challenges facing the City and the notion that government accountability is being demanded by residents and business owners.

Project tasks included

- Reviewing current delivery methods to determine the quality, efficiency and cost effectiveness of this system.
- Providing an overview of the various EMS models that could be utilized in the Key West municipal boundaries and to provide a recommendation as to the system that best fits its needs.
- Assisting the City in developing an RFP process to determine the appropriate ambulance provider for the City. This included assisting the City in determining the standards of service needed to provide service.
- Assisting in evaluating the companies which submit proposals and recommend the
 ones that best meet the parameters established by the City.
- Assisting the City in negotiating the terms of the agreement/contract with the selected company and establish a recommended timeline for implementation.

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Task 1: Kickoff Conference Call

Task 2: Collection and Review of

Background Materials

Triage of Issues

Report
Task 8: Final Report

Task 3: Initial Site Visit and

Task 4: Risk and Demand Analysis

Task 5: Evaluate Current Status of EMS
Task 6: Administrative and Operational Recs.
Task 7: Prepare and Submit Draft

TIMELINE

The dates included assume a contract start date of May 1, 2011. We believe we can probably

finish the project well ahead of the deadline, by at least one month.

, S

The following timeline is proposed based on the six month requirement in the proposal.

1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 3 2 3 4 1 2 3

COST PROPOSAL

Our proposed firm, fixed price for this project is \$40,261, which includes labor, travel, and other direct charges necessary to conduct the study, produce a final written report, and present the results to whatever audience the city desires. Our proposed price is based on similar work we have done for other fire and EMS studies of similar size and scope. Should the city revise the scope of work presented here with adjustments to our proposed pricing, TriData would be happy to discuss this option.

TriData suggests equal monthly payments spread over the contract period, with 5 percent withheld until the final report is delivered. Monthly installments are due within 30 days of the city's receipt of the appropriate invoice.

We are flexible to increase or decrease the scope of the project.

LABOR Task 1: F

u	ickoff	Can	ference	Call

Proposal to City of Franklin, TN

Schaenman, Philip	Corporate Oversight	2	
Cohen, Harold	Program Manager	2	

Task 2: Collection and Review of Background Materials

Cohen, Harold	Program Manager	10	
Davis, Robin	Consultant	10	
Cohen, S.	Consultant	4	
Argabright, Maria	Project Support	4	

Task 3: Initial Site Visit and Triage of Issues

Cohen, Harold	Program Manager	30	
Cohen, S.	Consultant	30	

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Task 4: Risk and Demand Analysis

Cohen, Harold	Program Manager	2	
Davis, Robin	Consultant	60	
Argabright, Maria	Project Support	2	

ask 5: Evaluate Current Status of EMS in the City of Franklin

Name	Title	Hours	Price
Cohen, Harold	Program Manager	40	
Cohen, S.	Consultant	20	
Argabright, Maria	Project Support	4	
Subtotal		64	\$6,97

Task 6: Administrative and Operational Recommendations

Cohen, Harold	Program Manager	30	
Cohen, S.	Consultant	20	
Argabright, Maria	Project Support	4	

Task 7: Prepare and Submit Draft Report

Schaenman, Philip	Corporate Oversight	4	
Cohen, Harold	Program Manager	30	
Cohen, S.	Consultant	5	
Argabright, Maria	Project Support	10	

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Task 8: Prepare and Submit Final Report; Final Presentation

Subtotal		40	\$4,97
Argabright, Maria	Project Support	8	
Cohen, S.	Consultant	5	
Cohen, Harold	Program Manager	25	
Schaenman, Philip	Corporate Oversight	2	

TRAVEL AND OTHER DIRECT COSTS

Travel	
Airfare, hotel, per diem	\$2,807
Miscellaneous	
Copying, reproduction, shipping	\$425
Total Travel & ODCs	\$3,232

Total Cost \$40,261

APPENDIX: RESUMES OF KEY PERSONNEL

Dr. Harold C. Cohen Steven Coher Robin Davis Philip Schaenman

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our Fire-Rescue Academy and Station 57 into a new and combined building. Dr. Cohen was responsible for overseeing conversion to a paperless daily data ledger that was completed in January 2002.

Dr. Cohen oversaw the following projects

- Address/Hydrant Verification and Mapping-Precursor to GIS.
- · Updating of CAD system
- NFRIS 5.0 software purchase and program implementation.
- Marine Operations
- · Alcohol/Drug Abuse Control Program

He also served as a member of the department Fair Practices Committee.

Baltimore County Fire Department, Baltimore, Maryland, Battalion Chief, 1999-2001 Emergency Operations

> Dr. Cohen provided leadership, management, and oversight of EMS, fire suppression, hazmat operations, fire prevention, and public fire education for the Western Battalion. This included 8 career and 12 volunteer stations. His duties included administrative, human resources, incident command, emergency operations, oversight of EMS quality management, and public relations. He continued to chair both the Achievement Awards and Rules/SOP Committees. Dr. Cohen was senior advisor to the information systems team.

Baltimore County Fire Department, Baltimore, Maryland, Battalion Chief, 1998-1999 Chief of Logistical Services

> Dr. Cohen provided oversight and leadership for department Logistical Services. This included the Fire Maintenance Division and the Supply Division. He also served as Chair of the Department Achievement Awards Committee.

Dr. Cohen substituted as deputy fire chief for Special Services, including oversight of Investigative Services, Fire-Rescue Academy, and Safety Services to

He also served as a field battalion chief on an as needed basis. This included operational and administrative command of fire suppression, EMS, rescue, and emergency and non-emergency services within a designated area

Baltimore County Fire Department, Baltimore, Maryland, Battalion Chief, 1998 Chief Information Officer

> Dr. Cohen provided oversight for all internal information activities including. department LAN/WAN, database management, computerization of EMS medical reporting, national uniform fire incident reporting, records automation, and computer systems. He was also responsible for oversight of fire dispatch, medical priority dispatch, and capital projects.

DR. HAROLD COHEN

Education:

Doctor of Philosophy, Health Services, Walden University, Minneapolis, MN, 2000

M.S., Emergency Health Services Administration and Management, University of Maryland, more County, Maryland, 1989

B.S., Social Sciences, Towson State University, Towson, Maryland, 1980

Certificate, Senior Management of State and Local Government, Harvard University, JFK School of Government, 2002

Professional Experience:

2010-Present Harold C. Cohen, Ph.D., Alternative Dispute Resolution, Catonsville, MD

Dr. Cohen provides alternative dispute resolution services including: mediation, arbitration, fact finding, hearing officer, and group facilitation. He is a member of the American Health Lawyers Association panel for mediation and arbitration, the National Futures Association arbitration panel, and the FINRA (U.S Financial Regulatory Agency arbitration panel. He has also been approved as a mediator for the Maryland District Courts. Dr. Cohen's specialty areas include EMS, fire, labor/management, community facilitation, and other situations where non-legal problem solving solutions are superior to litigation.

2004-Present System Planning Corporation, TriData Division, Arlington, Virginia, Senior Analyst, Project Manager and Trainer

Dr. Cohen serves as a project manager for fire and EMS system studies that include master planning, strategic planning, and station/vehicle/staffing location planning. He evaluates and recommends action plans for fire, EMS, and homeland security programs in state and local governments. This includes extensive use of quantitative and qualitative measures, including GIS and other analytical tools. Dr. Cohen develops and conducts training programs in fire protection, emergency management, and homeland security and manages studies and training programs. He also manages EMS and fire consulting projects. Dr. Cohen is also active in investigating major incidents of national significance as part of our USFA major incident program and is spearheading an SPC project for alternative dispute resolution (ADR).

Baltimore County Fire Department, Baltimore, Maryland, Division Chief of 2001-2005 Emergency Operation:

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Dr. Cohen provided leadership, management, and oversight of EMS, fire suppression, hazmat operations, fire prevention, and public fire education for the Eastern Division. This included being the primary battalion commander for one shift and supervising the battalion chiefs on three other shifts. This included 9 career and 11 volunteer stations. Dr. Cohen's duties included administrative, human resources, incident command, emergency operations, oversight of EMS quality management, and public relations. He provided oversight for the move of

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Baltimore County Fire Department, Baltimore, Maryland, Battalion Chief, Emergency Medical Services (Chief Paramedic and Division Commander).

Between 1983 and 1995 he held the following positions:

- · EMS Shift Commander (Captain)
- EMS District Lieutenant
- EMS Instructor (Director of EMS Education)
 - Directed basic and advanced life support education for 350 advanced and 2,000 basic life support providers

EMS system of 42 transport units (41 ALS, 1 BLS, 8 supervisory personnel and up to 10 paramedic engines on at all times). 520 ALS providers, 2000 + BLS providers, 80,000 annual requests for emergency service

1981-1982 Frederick County ALS Planning Committee, Frederick County, Maryland, ALS Program Coordinator

Baltimore City Fire Department, Baltimore, Maryland, Paramedic 1981

Maryland Institute for Emergency Medical Services Systems, Baltimore, Maryland, Communications Operator (part time)

Teaching Experience:

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National Fire Academy, Executive Fire Officer Program, Management Sciences, EMS, and Fire

- Advanced Leadership Issues in EMS (2 week residency program)
- EMS Special Operations (2 week residency program)
- EMS Quality Management (6-day residency program) Executive Development (2 week Executive Fire Officer Seminar)
- Executive Leadership (2 week Executive Fire Officer Seminar)
- Strategic Management of Change (2 week Executive Fire Officer Seminar)
 Organizational Theory in Practice (2 week Management Science Seminar)
- Executive Analysis of Community Risk Reduction (2 week Executive Fire Officer
- Advanced Safety Operations and Management (6 day Safety Management Program)
- EMS Quality Management (6 day course on quality management techniques)
 Managing Strategies for Success (6 day Management Sciences Program).
- Managing and Leading Change (2 day Executive Seminar)
- Managing in a Changing Environment (2 day Management Seminar) Influencing (2 day Executive Seminar)
- Shaping the Future (2 day Management Seminar)
- Incident Command Systems for Emergency Medical Services (2 day seminar)

- Emergency Response to Terrorism: Considerations for Command Personnel (2 day
- Executive Fire Officer Program Applied Research Projects, Contract Grader, 2000-2009
- Served on the writing team for the updated Advanced Leadership Issues in EMS Program co-instructor for first pilot August 23-Sept 2, 1999. Also served on the writing team for Executive Analysis of Community Risk Reduction in 2006-2008.
- University of Baltimore Adjunct Professor, School of Public Affairs, 2002-Present. Teach Principle of Healthcare Management I and II for the Healthcare Management
- Capella University Adjunct Professor of Graduate and Undergraduate Studies in Emergency Management, New appointment
- American College of Pre-Hospital Medicine Professor of EMS Management and Sociology (1994-2004). Taught one upper division management course, one lower division management course, one research/statistics course and one introductory sociology course. Also served as principle course designer for a new research course (MTH 401) and a graduate biomedical ethics course.
- Andrew Jackson University Adjunct Professor of EMS and Research, (2004-Present), successor to ACPM.
- Field Instructor- University of Maryland, Maryland Fire and Rescue Institute.
- State Licensed/Certified Instructor Advanced Life Support
- Instructor CPR and AED
- Certified/Provider and previous Instructor in many BLS and ALS Disciplines (EMT-B, BCLS, ACLS, BTLS, PALS).
 Certified under NFPA Standards as: Firefighter II, Fire Officer IV, Instructor IV,
- Investigator I, Public Fire Educator I, and Fire Inspector I. National Registry of EMT's Paramedic
- Instructor Phi Theta Kappa/Institute for Public Safety Leadership and Ethics program on leadership
- Speaker at many National, State and Local EMS Conferences including JEMS (EMS Today), EMS Expo, FDIC, and others.

Professional Associations:

- Baltimore County Chief Fire Officer Association, President, 2001-2005
- Children and Adults with Attention Deficit Disorder, Baltimore Chapter, Board of Directors (Professional Advisory Board), 2000-Present
- Maryland Governor's Advisory Council on Attention Deficit/Hyperactivity Disorder, Member, 2000-2003
- Maryland Association of Healthcare Executives, Board of Directors, 2000-2002
- American College of Healthcare Executives, Regent Advisory Council Member, Maryland Regent, 2000-2002
- Maryland Program for Mediator Excellence Panel Mediator Maryland Mediation and Conflict Resolution Office Panel member
- American Health Lawyers Association Panel member for Arbitration and Mediation
- MergiNet, Columnist, 2000-2002
- Maryland EMS Protocol Task Force, Member, 1998-2001

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- SPC/TriData. (2009). <u>Assessment and Five-Year Plan for the Bonita Springs, FL Fire District</u>. Arlington, VA: SPC/TriData
- SPC/TriData. (2009). Research in Support of the National League of Cities Presumption Task Force on Cancer, Arlington, VA: SPC/TriData.
- SPC/TriData, (2009). Comprehensive Study of the Vancouver, BC Fire Rescue Department. Arlington, VA: SPC/TriData.
- SPC/TriData. (2008). Fire Services Deployment Study, Anne Arundel County, MD. Arlington,
- SPC/TriData. (2008). Pittsburgh Bureau of Emergency Medical Services: Administration and Operations. Arlington, VA: SPC/TriData
- United States Fire Administration. (2008). <u>1-35W Bridge Collapse and Response Minneapolis.</u> <u>MN.</u> USFA-TR-166/August 2007. Emmitsburg, MD: United States Fire Administration
- SPC/TriData. (2007). EMS Transport Study for Orange County, Florida. Arlington, VA:
- SPC/TriData. (2007). The State of New Jersey EMS System Review, DHSS, OEMS. Arlington,
- Virginia Tech Review Panel. (2007). Mass Shootings at Virginia Tech: Report of the Review Panel. Arlington, VA: SPC/TriData
- SPC/TriData. (2007). Master Plan Consulting Services for Norfolk, VA Fire and Paramedical Services. Arlington, VA: SPC/TriData
- SPC/TriData. (2007). <u>A Review of the Mizpah Hotel Fire</u>. Produced for the US Fire Administration: In press. Arlington, VA: SPC/TriData
- SPC/TriData. (2007). <u>Management Review of the Saint Paul</u>, MN Department of Fire and Safety <u>Services</u>. Arlington, VA: SPC/TriData
- SPC/TriData. (2006). Oklahoma City, OK Fire Station Location Study. Arlington, VA:
- SPC/TriData (2006). <u>Fire-EMS Department Station Location</u>, <u>Staffing and Operational Effectiveness Study for the Roanoke</u>, <u>VA Fire and EMS Department</u>. Arlington, VA: SPC/TriData
- SPC/TriData. (2006). <u>Staffing</u>, Accountability and <u>Station Location Study for the Alexandria</u>, <u>VA Fire Department</u>. Arlington, VA: SPC/TriData.
- SPC/TriData: (2006). Comprehensive Study of the Portland, OR Fire and Rescue Department. Arlington, VA: SPC/TriData.
- SPC/TriData. (2005). Comprehensive review of the Cincinnati, OH Fire Department. Arlington, VA: SPC/TriData Corporation.
- SPC/TriData. (2005). Fire department management and performance audit: Salt Lake City, UT Fire Department. Arlington, VA: SPC/TriData Corporation.
- SPC/TriData. (2005). "Anthrax" incidents in the national capital region: State and local government after action review. Arlington, VA: SPC/TriData Corporation

- Prehospital Care Research Forum, Member 1997-2006 (Abstract Committee Chairman,
- Maryland EMS Quality Leadership Council, Member, 1996-1999
- Maryland EMS Jurisdictional Advisory Council, Vice-Chairperson, 1997-1998
- Regional/Jurisdictional Quality Improvement Committee of the Maryland EMS QLC, Chairperson, 1996-1998
- Maryland Region III EMS Council, Government Representative, 1995-1998
 American College of Healthcare Executives, Fellow Board Certified in Healthcare
- Center for Public Safety Excellence, Chief Fire Officer Designate (Re-designated 2006,
- National Association of EMS Physicians, Professional Member
- National Association of EMS Educators, Member
- National Association of EMS Administrators, Member International Association of Fire Chiefs, Member
- International Association of Firefighters, Retired Active Member
- University of Baltimore Completed certification for online course development and instruction.

Federal Security Clearance:

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Top Secret (Active)

- SPC/TriData. (2010). Assessment of Emergency Medical Services in Key West, FL. Arlington,
- SPC/TriData. (2010). Halifax Business Group (Volusia County, FL). Consolidation of Fire and EMS Departments in Volusia County, FL. Arlington, VA. SPC/TriData.
- SPC/TriData. (2010). Saint Petersburg, FL. Assessment of EMS Provision (Full Report).
 Arlington, VA: SPC/TriData
- SPC/TriData. (2010). Assessment of Emergency Medical Services in Rochester, NY. Arlington,
- SPC/TriData. (2010). <u>Town of Newburgh Ambulance Corps Assessment of EMS Services</u>. Arlington, VA: SPC/TriData
- SPC/TriData. (2009). <u>Cooperative Services Consolidation and Feasibility Study: San Carlos Park, Estero, and Bonita Springs, FL Fire Districts.</u> Arlington, VA: SPC/TriData
- SPC/TriData. (2009). Saint Petersburg, FL Preliminary EMS Report. Arlington, VA:
- SPC/TriData. (2009). <u>Assessment and Five-Year Plan for the San Carlos Park</u>, FL Fire District. Arlington, VA: SPC/TriData SPC/TriData. (2009). Assessment and Five-Year Plan for the Estero, FL Fire District. Arlington,

VA: SPC/TriData

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- Cohen, H.C., (2001). <u>Injury rates between EMT/firefighters and civilians employed by a municipal government</u>. Poster session presented at the National Association of EMS Physicians 2001 Scientific Research Assembly, Sanibel Island, FL, January 18, 2001.
- Cohen, H. C. (2000). A gender-based assessment of AD/HD characteristics among men and women emergency medical services providers. Poster session presented at the CH.A.D.D. 2000 International Conference, Chicago, IL, November 2000.
- Cohen, H. C. (2000). Attention Deficit/Hyperactivity Disorder Characteristics Among EMTs and <u>Firefighters</u>. Doctoral Dissertation, Walden University, Dissertation Abstracts International, # 9968775.
- Cohen, H. C. & Bailer, B. (1999). Lazy, Crazy or Stupid? Fire Chief, 43(8), 74-76.
- Cohen, H. C. & Larmon, B. (1999). Inter-rater reliability of two separate groups of evaluators rating EMS abstracts. Presented at the 1999 Prehospital Care Research Forum Exhibition, Denver, CO, March 1999.
- Cohen, H.C. (1999). <u>Developing a standard for computer competencies among chief fire officers.</u>
 Emmitsburg, MD: National Emergency Training Center, Executive Fire Officer Program.
- Simon, M. K. & Cohen, H. C. (1998). <u>Analytical approaches to community fire and EMS planning</u>. Emmitsburg, MD: Federal Emergency Management Agency, National Fire Academy.
- Cohen, H. C. (1997). Is there a higher prevalence of attention deficit/ hyperactivity disorder among EMS and fire service personnel? Emmitsburg, MD: National Emergency Training Center, Executive Fire Officer Program.
- Spicer, R. L, et al. (1997). Emergency medical services officer, vols. 1-3. College Park, MD: Maryland Fire and Rescue Institute.
- Developmental Editor, Boesker, G. Et. al. (1996). The sixty-second EMT, 2nd ed. St. Louis, MO. Moshy
- Cohen, H.C.and Casani J.A.P.(1992). A <u>comparison of two end-tidal CO2 devices on patients in cardiopulmonary arrest.</u> Poster presentation at 1992 National Association of EMS Physicians Annual Meeting. Pittsburgh, PA: June, 1992.
- Cohen H.C. (1991). An assessment of emt-p medications used by baltimore county fire department ems supervisor/emt-ps. Prehosp Disas Med.5(1), 19-24
- Goldfarh B. and Cohen H.C.(1991). True colors: Measuring end tidal CO2, JEMS, 15,(6), 68-73. Crooks, J.E., Murphy, D.J.and Cohen, H.C. (1991). Implementing a disaster plan. Fire-Rescue
- Cohen, H.C.(1990) Transcutaneous pacing. Prehospital and Disaster Medicine. 4,(2), 123.
- Served as the prehospital representative for a National Institute of Health (NIH) Grant Proposal.

 This is a joint project between the University of Maryland Shock-Trauma Center and MIEMSS that is seeking a multi-million dollar grant to study the effects of different IV fluids in prehospital trauma resuscitation (2000-2001).

Community Activities:

- Pikesville Volunteer Fire Company Life Member, 1980-Present
- Bradley University Member, Parent Advisory Board, 2005-2006
- Catonsville Senior High School PTA member and volunteer adult chaperon for steel drum band, 2002-2005
- Children and Adults with Attention Deficit/Hyperactivity Disorder Baltimore Metro Chapter, Professional Board Member 2002-Present
- Maryland District Court Volunteer Mediator, 2010-present
- Maryland MACRO Member, 2010-present
- Maryland Program for Mediation Excellence Member 2010-present

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- · Paramedic Responsible for the advanced emergency care and transportation of the sick and injured. (1984 to 1989)
- EMT Responsible for the basic emergency care and transportation of the sick and injured. (1983 to 1984)

Education:

B.S., Emergency Medical Services Management, Halmemann University, Philadelphia,

Duke University Non Profit Management Certificate, 2003

Demonstrated Capabilities:

Coordination/Persuasive:

- · Served as the Chair Person of Wake County Local Emergency Planning Committee
- Served as Educational Coordinator and Committee Member for the American Heart Association Allegheny County "Save a Life Saurday," a one-a-year Mass CPR Training, where 1,500 citizens learn CPR over a two hour time period.
- Created 2.5-hour training program entitled "BLS Practical Scenarios," which was approved by the Pennsylvania Department of Health Continuing Education for EMTs and Paramedics.
- Developed and implemented a structured training program for Paramedics and EMTs, that provides all year round educational activities
- Promoted to Daily Operations Director for the largest private ambulance service in Philadelphia
- · Established four volunteer committees, which increased volunteer involvement in other organization activities by 35%.

Energy-Drive/Follow Through:

- · Created career ladder for officers at Cary Area EMS.
- · Developed Incident Command System at a field hospital in Haiti
- Served as Chairman of the Wake County Local Emergency Planning Committee
- Returned to college in 1989 while working a full and part-time job
- Graduated college in 1994 with 3.75 QPA and a Bachelors Degree in EMS
- Researched and evaluated three different Automatic External Defibrillators and helped in the decision-making process to select one AED for use on all 90 fire engines of the Philadelphia Fire Department.
- Applied and was hired for one of the first City of Pittsburgh's 35 EMT positions.

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Promoted as one of six EMTs out of 35 to Paramedic for the City of Pittsburgh within a one-year period.

STEVEN B. COHEN

Professional Experience:

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2001-Present CARY Area EMS, Inc., Cary, NC

Not for Profit ambulance Service, providing EMS service to 250,000 residents.

Chief. The Chief oversees all operations and is responsible for the financial aspects of the organization. This responsibility includes a \$2.3 million operating budget.

1995-2001 Medical Rescue Team South Authority, Pittsburgh, PA.

A Municipal Authority Ambulance Service and Primary EMS provider for six communities and over 75,000 residents. The organization has close to 100 employees and volunteers.

Director of Education. Responsible for all training and education activities of the EMTs and Paramedics, and includes supervisory, policy and other administrative duties. Responsible for the overall management, training, recruiting, policy creation and implementation of the volunteer program Responsible for community education and public relations for the

The Medical College Of Pennsylvania, Philadelphia, PA 1990-1994

The Medical College of Pennsylvania is a teaching hospital, trauma center and medical school.

· EMS Coordinator/Paramedic Instructor. Responsible for education, training, quality improvement activities, field evaluations, implementation and training of EMS equipment and investigations of medical incidents for the Philadelphia Fire Department.

U.S. Health Tec, Philadelphia, PA 1989-1990

The largest private ambulance service in Philadelphia, which employed over 300 employees in three sites

- · Daily Operations Supervisor. Responsible for all ambulance and nonambulance issues that included customer and human resources and educational activities. (1989 to 1990)
- Shift Supervisor. Responsible for all ambulance activities during the shift that included personnel and communication personnel. (1989)

City of Pittsburgh, Bureau of Emergency Medical Services, Pittsburgh, PA

A 160 employee provider of 24-hour emergency care and coverage to the residents and visitors of the city.

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- · Created and implemented an Assisted Medication Program for EMTs.
- Created training manual and provided the training for 8 new Ambulances and one Wheelchair Van for Medical Rescue Team South

Problem Solving/Persevering:

- Streamlined operations and budget procedures for Cary Area EMS.
- The Volunteer Program at Cary Area EMS has increased since my arrival.
- The volunteer program saved Medical Rescue Team South Authority approximately \$60,000 in wages during my three years as the Director.
- Revised a 16.5-hour course to educate EMTs to be Paramedic Assistants and developed an 8.5-hour course by revising and developing new curriculum, which improved the organization and presentation of the course
- Analyzed the Volunteer program and increased its volunteer membership with an average of three new volunteers per month during my current tenure
- Serve as a Quality Improvement Committee Member at Medical Rescue Team South
- Serve as the Computer Network Administrator, and solve computer problems in house, which has saved Medical Rescue Team South Authority financially.

Human Relations:

- · Developed and implemented a one hour volunteer orientation program for 36 new
- Developed and implemented a four hour new employee orientation program that oriented twenty new employees each year.
- Created and implemted disciplinary standard and policies for Cary Area EMS.
- Increased the moral of the organization with different company programs
- · Developed an appeal process for employees of Cary Area EMS

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- · Created the first EMS Citizens' Academy in Wake County
- Create the first Flu Clinic sponsored by an EMS agency in Wake County
- Creator and responsible for the Continuing Education Program for Medical Rescue
- Developed and implemented a sexual harassment policy for all new employees and volunteers who join Medical Rescue Team South Authority and Cary Area EMS.
- Creator and presenter of 12 international, local, and national medically related presentations to audiences numbering from 20 to over 200
- Chosen to be one of the first 16 Heartsaver AED Instructors trained in Pennsylvania.

- Created, edited and wrote a two page monthly newsletter for the Philadelphia Fire Department EMS division.
- · Graduated from Bartending School in 2004

Academic Awards and Honors:

- Who's Who Among Students in American Universities & Colleges, 1995
- Emergency Medical Services Baccalaureate Award
- National Honor Society for Allied Health Professionals

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Geographic Information System (GIS) Analysis.

2007-2008 LandWorks, Inc., Houston, TX, Systems Support Analyst

- Install and configure LandWorks software and ArcGIS extensions.
- · Troubleshoot software and database issues in the SQL Server environment.

Universal Ensco, Inc., Houston, TX, GIS Analyst 2007

- Map pipelines for various pipeline operators including land, transmission, and environmental data
- Prepare reports and maps for federal filings.
- Developed process flow for the transition of land acquisition deliverables from CAD to GIS platform.
- Instituted quality assurance and control program.
- Create process flow and standards for the Universal Ensco GIS group.

2003-2006

Boeing Autometric, Inc., Springfield, VA, Geoscientist I

- · Perform quality assurance on colleagues and subcontractors work for submission to NGA.
- Create presentations to outline rules and procedures for editing and quality assurance.
- Served as team lead for different regions to assist production leads.
- Analyze satellite imagery for global dataset.
- Performed data finishing on data sets to assure compliance with ISO-9001 standards.
- Edited Topo-Line Maps (TLM) using ESRI's Arc suite as a member of a
- Served as team lead for the Image City Map Production project.

2001-2002

HUES GIS Lab, Stephen F. Austin State University, Nacogdoches, TX, Student Assistant/GIS Analyst

- Developed Internet map service for Stephen F. Austin State University
- Headed the City of Nacogdoches Public Water GIS conversion project Performed analysis work for the Nacogdoches Fire Department in accordance
- with NFPA standards
 Developed a database and visualization model for emergency callbox
- locations and lighting assessment for the University Police Department.

 Trained students and colleagues in theory and application of GIS and GPS.
- Supervised crews in data collection for the City of Nacogdoches.

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Professional Training:

Emergency Medical Technician-Basic, Virginia Office of EMS

Firefighter I/II - Virginia Department of Fire Programs

Hazardous Materials Operations - Virginia Department of Fire Programs

ROBIN DAVIS

Master of Public Administration (Emphasis: Public Policy), University of Texas at Arlington, Arlington, TX, May 2009

Bachelor of Science, Geography, Stephen F. Austin State University, Nacogdoches, TX, December 2002

Employment History:

Emergency Management/Public Safety:

2008-Present Texas Children's Hospital, Houston, TX, Emergency Management Specialist

- Develop and implement plans and policies to ensure hospital emergency preparedness in accordance with Joint Commission standards
- Serve as Hospital Decontamination Team Lead and maintain team readiness
- Advise hospital leadership in emergency response and serve in Incident Command as requested
- Develop and deliver education on safety and emergency preparedness through several venues

2008 The O'Brien's Group, Houston, TX, Technology Coordinator

- Respond as part of incident management team to drills and emergency responses for events of local, state, national, and international significance.
- Assist in the development of emergency response plans and exercises
- Design and teach ICS automated software training program to coordinate with FEMA ICS courses.
- Develop, debug and support automated ICS software program.

2003-2007

Falls Church Volunteer Fire Department/Arlington-Falls Church Volunteer Rescue Squad, Arlington, VA, Firefighter, EMT-B, Officer

- Respond to all hazard emergencies
- Instruct candidates in fire suppression and emergency medical services
- Develop policies and qualification process for Arlington County volunteer
- Assist in the development and execution of training exercises
- Instruct Community Emergency Response Team (CERT) classes

System Planning Corporation, TriData Division, Arlington, VA, Research/GIS 2006-2007 Analyst

- Research federal codes and regulations for a major CBRNE study.
- Evaluate emergency service departments focusing on risks, response, and demand
- Performed a major response analysis for the United States Navy
- Create detailed response maps and recommend changes in service

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Instructor I - Virginia Department of Fire Programs

EEMA Emergency Management Institute

PEMA Emerger	icy wanagement institute
IS-00001	Emergency Manager: An Orientation to the Position
IS-00010	Animals in Disaster Module A: Awareness & Preparedness
IS-00011	Animals in Disaster Module B: Community Planning
IS-00100	Introduction to Incident Command System
IS-00100.HC	Introduction to Incident Command System for Healthcare/Hospitals
IS-00120.A	Introduction to Exercises
IS-00230	Exercise Evaluation and Improvement Planning
IS-00139*	Exercise Design
	Special Needs Planning Considerations for Service and Support
IS-00197.SP	Providers
IS-00200	ICS for Single Resources and Initial Action Incidents
IS-00200.HC	Applying ICS to Healthcare Organizations
IS-00230*	Principles of Emergency Management
IS-00235*	Emergency Planning
IS-00240*	Leadership and Influence
IS-00241*	Decision Making and Problem Solving
IS-00242*	Effective Communication
IS-00244*	Developing and Managing Volunteers

The EOC's Role in Community Preparedness, Response and Recovery Activities IS-00275

IS-00288 The Role of Voluntary Agencies in Emergency Management

IS-00300 IS-00317

Intermediate ICS Introduction to Community Emergency Response Teams IS-00393

Introduction to Hazard Mitigation Advanced ICS IS-00400

Continuity of Operations Awareness Introduction to Continuity of Operations IS-00546

IS-00547 15-00700 National Incident Management Systems: An Introduction

EOC Management and Operations IS-00800 National Response Plan, An Introduction National Response Framework, An Introduction

IS-00800.B Emergency Support Function #8 - Public Health and Medical Services IS-00808

PHILIP SCHAENMAN, MIFIREE

Emergency Medical Services Consulting Services Purchasing Office Solicitation No. 2011-028

Education:

- Professional Degree of Electrical Engineer, Columbia University, 1963. M.S., Electrical Engineering, Stanford University, 1962.
- B.S., Electrical Engineering, Columbia University, 1961.
- B.S., Engineering and Liberal Arts, Queens College, 1961, magna cum laude.

Phi Beta Kappa, Tau Beta Phi, and Eta Kappa Nu.

Security Clearance: Top Secret

Professional Experience:

1981-Present System Planning Corporation, TriData Division, Arlington, Virginia, President and Founder

> Mr. Schaenman founded TriData to undertake studies and research in local, state, and Federal government management of public safety functions, especially fire, EMS, and emergency management. TriData is now known nationally and internationally for its research and consulting.

Mr. Schaenman has personally undertaken a wide range of research in fire prevention, wildland firefighting, international concepts in fire protection, and performance measurement for public safety. He is widely published on fire and EMS issues and gives talks on TriData's research and management studies EMS ISSUES and gives tasks on ITLData's research and management studies directed by Mr. Schaenman include Chicago, IL; Houston, TX; Colorado Springs, CO; Washington, D.C.; Seattle, WA; Portland, OR; Nashville, TN; Omaha, NB; Des Moines, IA; Wake County, NC; Orange County, FL; and Fort Worth, TX.

He led landmark studies of wildland firefighter safety (Wildland Firefighter Safety Awareness Study, Phases I, II. and III) and cost containment of fire Safety Awareness Study, Phases 1, 11, and 111) and cost containment of me suppression (Prioritizing Widdland Fire Cost Containment Strategies), and participated in an independent panel to review large cost wildland fires (Large Fire Cost Review for FY2009) for the Department of Agriculture, Forest Service. He has led studies of various aspects of the Navy's fire and emergency services program worldwide: he has repeatedly broken new ground in how to analyze complex public safety issues quantitatively, and how to display results to busy

Among his other contributions are performance measurement methods for public safety and transportation services; fire department management and planning studies; design and implementation of national public fire education and EMSsuggest, design and implementation of national public fire education and EMS-related campaigns; managing major fire and emergency investigations for the U.S. Fire Administration. For the Governor of Virginia he led a study in 2005 on suspected anthrax incidents in Northern Virginia, and in 2007 was staff director for the Virginia Tech Shooting Review Panel. He has consulted for the fire

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1972-1976

The Urban Institute, Washington, DC, Senior Research Associate

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Mr. Schaenman was project manager for studies on measuring performance of several state and local government services, including fire, crime control, and transportation. He headed several project teams that focused on improving information for managing police crime control. He examined and improved the use of Uniform Crime Report data in local police department (e.g., Nashville, Tennessee, St. Petershurg, Florida, Arlington County, Virginia, Washington, D.C.) and worked with them to improve the usefulness of those data with supplemental data and additional analyses. Mr. Schaenman held seminars for local police officials on improving their management information systems and worked with the IACP on developing and disseminating the results of these projects. He also was project manager for studies of ways to measure impacts of land development and co-authored several books in these areas.

Bellcomm, Inc. (a systems engineering subsidiary of AT&T), Washington, DC, 1963-1972 Member of Technical Staff (1963-1966); Supervisor (1966-1972)

> From 1969-1972, Mr. Schaenman helped spearhead the conversion of this company from space program engineering support to corporate management science. He supervised groups involved in defining corporate-level information needs, developing analytical bases for corporate policy decisions, and developing quality of service measures. He directed the development of a computer model to optimize corporate depreciation policy, which was credited with saving AT&T a billion dollars in new capital.

> From 1966 to 1969, Mr. Schaenman supervised computer technology studies for the manned space flight program. He analyzed potential uses of spaceborne computers on advanced manned missions. He developed automated procedures for detecting solar flares using pattern recognition (now artificial intelligence) techniques, in-flight automated checkour schemes for spacecraft systems, and ways to use cockpit instrumentation for in-flight training on long missions. He also served on the NASA panel, formulating criteria for spacecraft computers and he developed forecasts of aerospace computer technology.

From 1963-1966, he was involved in a variety of studies in which he estimated From 1963-1966, he was involved in a variety of situates in which the estimated data flow from advanced satellites, applied Monte Carlo simulations to space vehicle countdowns, conceived of computerized displays for monitoring countdown status, studied launch window constraints for Apollo missions, and analyzed problems with fuel gauge instrumentation in the Saturn launch vehicle.

The Rand Corporation, Santa Monica, California, Consultant 1962

Mr. Schaenman analyzed Minuteman missile bases for communications vulnerability to missile attack. He also participated in an Air Force strategic weapons budget planning exercise and wargame (SAFE).

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problem of many industries, including the tobacco, petrochemical, electrical, hotel, home appliance, plastics, wood products, cigarette lighter, smoke detector, and door industries.

His particular emphasis in public service management studies is to develop ways to analyze and display hard data in support of planning and decisions. TriData's growth is a reflection of his ability to manage numbers of complex projects effectively and simultaneously, and to build a first-rate staff and select cadre of technical consultants, and to maintain the highest standards of quality control over client costs and deliverables.

Mr. Schaenman is frequently quoted in the news media on fire and everyday issues including NPR radio, the NBC Today Show, the New York Times, Washington Post, Chicago Tribune, LA Times, and World Book Encyclopedia. He has given testimony to Congress on many occasions.

U.S. Fire Administration, Washington, DC, Director, Analysis and Evaluation Division (1976), Senior Executive Service Level IV; Associate Administrator for 1976-1981 the National Fire Data Center (1976-1981)

> Mr. Schaenman directed the national system for fire data collection, analysis, and dissemination, major fires investigation, firefighter safety, and the development of new technologies for fire protection, including their transfer to state and local government and to private industry. He managed the growth of the first National Fire Incident Reporting System in the United States from 6 states to 40 states (9,000 local fire departments) with a compatible hierarchy of data systems. He developed an overall system design based on the criterion of compatibility with local and state agency participants, produced data collection and quality control manuals and training programs, and directed the development of a series of large, complex computer programs to implement the system. In addition, Mr. Schaemnan was responsible for the federal hardware system approach for collecting and analyzing the data, and determining how to divide the work between in-house staff and contractors.

> Mr. Schaenman was responsible for the U.S. Fire Administration's major fires investigations program, which resulted in the reports on the events and management of such major emergencies as the Beverly Hills Supper Club fire and the MGM Hotel fire. This program affected fire codes and other nations. programs to enhance fire protection in hotels, nursing homes, and other high-risk occupancies.

Mr. Schaenman supervised breakthrough developments in residential sprinkler technology, firefighter safety programs and protective outfits, and code

He also developed and taught the Data Collection and Analysis section of the Executive Development course for fire chiefs at the National Fire Academy, served as a federal spokesman on the fire problem, appeared on numerous TV and radio programs, and represented the U.S. internationally on fire data and fire technology.

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Hughes Research Laboratories, Malibu, California, Member of the Technical Staff (summer)

Mr. Schaenman performed a mathematical analysis for an experiment to determine thermal properties of freely supported ultra-thin films for aerospace

Bell Telephone Laboratories, Whippany, New Jersey, Technical Aide (summer) 1960

Mr. Schaenman performed traffic analysis for the worldwide communications network used in Project Mercury. He discovered and corrected a significant problem in the communications analysis that had been used.

Professional Memberships:

- Division of Mathematics and Natural Sciences, Queens College (member of Advisory Board), 2011-Present
- The Institution of Fire Engineers, 2001–Present International Association of Fire Chiefs, 1997–Present
- National Fire Protection Association, Fire Reporting Committee, 1982-Present
- IEEE, ACM, 1963-Present
- Northern Virginia Community College, Advisory Committee Member, 1996-2000
- National Association of State Fire Marshals, Advocacy Member, 1991–2000 U.S. Japan Natural Resources Panel on Fire Research and Safety, 1980–1986

Selected Bibliography:

Large Fire Cost Review for FY2009, Guidance Group, Inc. August 2010 (member of independent review pane!)

"Oh, Canada," Fire Chief. August 2009

Global Concepts In Residential Fire Safety Part 3 - Best Practices from Canada, Puerto Rico, Mexico, and Dominican Republic, System Planning Corporation, TriData Division. July 2009

Global Concepts In Residential Fire Safety Part 2 - Best Practices from Australia, New Zealand and Japan, System Planning Corporation, TriData Division. August 2008

"Nordic Tasks," Fire Chief. May 2008 (co-author)

"U.K. Prevention Works," Fire Chief. April 2008

"Actual Savings," Fire Chief, March 2008

Global Concepts In Residential Fire Safety Part 1 - Best Practices from England, Scotland, Sweden, and Norway, System Planning Corporation, TriData Division. October 2007

"The Sharp Point," Fire Chief. October 2006.

"First Class," Fire Chief. March 2006.

How Effective Are Your Community Services Procedures for Performance Measurement, 3rd edition. The Urban Institute and International City Management Association. 2006. (co-author)

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"Assessing Anthrax Detection Methods." Testimony before the Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform; U.S. House of Representatives. April 5, 2005.

"Wildland Firefighter Safety." Testimony before the Senate Committee on Energy and Natural Resources; Subcommittee on Public Lands and Forests. Washington, DC. November 14, 2001.

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Recruitment and Retention in the Volunteer Fire Service: Problems and Solutions, Federal Emergency Management Agency, National Volunteer Fire Council, and United States Fire Administration. December 1998. (co-author)

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Reaching the Hard-to-Reach, TriData Corporation. 1994. (co-author)

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A Guide to Funding Alternatives for Fire and EMS Departments, United States Fire Administration. December 1993. (co-author)

Retention and Recruitment in the Volunteer Fire Service, Federal Emergency Management Agency, August 1993. (co-author)

"International Concepts in Fire Prevention," Fire Engineers Journal. December 1991

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Statement before the House Subcommittee on Science, Research, and Technology - Hearings and the U.S. Fire Problem. March 21, 1985.

"From Tokyo to Down Under (Part II): Fire Department Training, Safety, and Organization," Fire Chief. January 1985. (co-author)

America's Burning, Why Isn't Europe?, Fire Overseas Supplement, Fire Protection Equipment and Safety Center of Japan, Volume 2. 1984. (co-author)

"From Tokyo to Down Under (Part 1): International Approaches to Fire Prevention," Fire Chief. December 1984. (co-author)

Improving Fire Safety: We Can Learn From Europe's Example, Legislative Policy. May/June 1984. (co-author)

Statement before the Civil Aeronautics Board, Washington, DC. February 14, 1984.

"Why Europe Isn't Burning," Fire Chief. September 1983

"International Concepts in Fire Protection - Ideas From Europe That Could Improve U.S. Fire Safety," Fire Engineering. August 1983.

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"The U.S. Fire Problem and What We Might Learn From Europe," House Subcommittee on Health and Environment, March 21, 1983.

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"International Concepts in Fire Protection: Ideas that Could Help U.S. Prevention," Journal of Burn Care and Rehabilitation. May/June 1988.

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Municipal Services. The Urban Institute and International City Management Association (wrote chapters on transportation, mass transit, and fire protection). November 1977. (co-author)

"Firefighter Health and Safety," Fourth Symposium on Occupational Health and Hazards of the Fire Service, John P. Redmond Memorial Fund, International Association of Fire Fighters and National Fire Prevention and Control Administration. Washington, DC. April 1977

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Measuring Effectiveness of Basic Municipal Services: Initial Report, The Urban Institute, chapters for fire, police and transportation services. 1974.

Measuring Impacts of Land Development: An Initial Approach, The Urban Institute. 1974.

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Measuring Police Effectiveness in Crime Control, National Science Foundation and The Urban

Measuring the Effectiveness of Local Transportation Services Provided by Local Government, National Science Foundation and The Urban Institute. 1974. 44

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Police Productivity Measurement: Initial Approaches and Practical Problems, Proceedings of the Criminal Justice Symposium Focusing on Police Productivity, National Commission on Productivity, Washington, DC. July 1974.

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Measurement and Evaluation, Part III: Measuring Crime Control Productivity, National Commission on Productivity. June 1972. (co-author)

"Functional Requirements for the Spaceborne Computer System of a mid-70s Space Station," presented at American Astronautical Society meeting on Space Technology and Earth Problems, Las Cruces, New Mexico. October 1969. (co-author)

"Role of Spaceborne Computers on Advanced Manned Missions," Proceedings of Fourth Space Congress, Cocoa Beach, Florida. April 1967. (co-author)

"Functional Requirements of Spaceborne Computers on Advanced Manned Missions," Spaceborne Multiprocessing Seminar, NASA Electronics Research Center, Cambridge, Massachusetts. October 1966. (co-author)

Indemnification Agreement

a form required of Bidders and Proposers on purchases of services for the **City of Franklin, Tennessee**

Philip Schaenman	
n behalf of Bidder/Proposer.	

(printed name of person signing Agreement)

He or she is the President, TriData Division

-:

(Owner or Authorized Partner, Officer, Representative or Agent of Owner)

ot

agrees that:

System Planning Corporation

(legal name of entity submitting bid or proposal)

the Bidder or Proposer who has submitted the attached bid or proposal;

- The Bidder or Proposer is fully informed respecting the preparation and content of the attached bid or proposal and of all pertinent circumstances respecting such bid or proposal;
- 3. The Bidder or Proposer agrees to indemnify and save the Government of Franklin, the City of Franklin and individual, on or off duty, officers, and employees of the City of Franklin, harmless from any and all losses, damages and expenses, including court costs and attorneys fees, by reason of any loss, whatsoever, arising out of or relating to or in consequence of the work done in connection with the contract of which this Agreement is a part, excepting only such losses as shall be occasioned solely by the negligence of the City of Franklin; and
- 4. This Agreement is made on personal knowledge.

Pulin Delran

President, TriData Division

(title of person whose printed name appears above)

(Submitted in response to City of Franklin Purchasing Office Solicitation No. 2011 - 62.8)
Form revised 02/25/2005

City of Franklin Notice of Confidentiality & Proprietary Rights Purchasing Office Solicitation No.: 2011-028

THE CONTENTS AND PURPOSE OF THE AGREEMENT AND ALL INFORMATION THAT MAY BE OBTAINED IN THE COURSE OF ITS PERFORMANCE ARE HIGHLY CONFIDENTIAL AND MAY SUBJECT ANYONE DISCLOSING SUCH INFORMATION TO CIVIL AND CRIMINAL PENALTIES IMPOSED BY LOCAL, STATE AND FEDERAL LAW.

The successful Vendor must necessarily be granted access to public and private information that may be confidential under the Tennessee Open Records Law and other privacy laws. Additionally, information contained in the City's information technology systems is extremely sensitive to the operational security of the City's information technology systems is extremely and all data, information, conditions, know-how, operational techniques, system analyses, intellectual property, findings, conclusions and recommendations discovered or developed as a result of this contract are to be held in strict confidence and shall not be disclosed by the Vendor, its agents, employees, related entities or assigns under any circumstances without the expressed written consent of the City Administrator of the City of Franklin.

Neither party shall disclose the procurement solicitation documents, submittals made in response thereto, contract documents, including any information they contain, or any information relating to the structure, layout, access and vulnerability of the city or its systems unless required under state or federal law. It a request for such documents or information has been made, each party agrees to protect and defend against such release. The parties agree that they shall be liable for all damages, costs and claims arising out of or relating to the unauthorized release of such documents or information and may be subject to fines or other penalties as provided by law. The parties agree to be responsible for limiting access to the documents and information and for keeping such documents and information and for equiring the same of its employees, agents and assigns all times.

CONFIDENTIAL INFORMATION

During the term of the Contract Agreement, the parties may provide each other with Confidential Information. For the purposes of this Agreement, "Confidential Information" is any information disclosed or discovered in written, graphic, verbal, or machine-recognizable form, whether or not clearly marked, designated, labeled or identified as such. Notwithstanding any other provisions of this Agreement, Confidential Information shall not include any information that:

- 1. is or becomes publicly known through no wrongful act of the receiving party;
- 2. is already known to the receiving party without restriction when it is disclosed;
- 3. is, or subsequently becomes, rightfully and without breach of this Agreement, in the receiving party's possession without any obligation restricting disclosure;
- 4. is independently developed by the receiving party without breach of this Agreement;
- 5. is explicitly approved for release by written authorization of the disclosing party; or

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City of Franklin Notice of Confidentiality & Proprietary Rights

Purchasing Office Solicitation No.: 2011-028

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is required to be disclosed under state or federal law.

Each party agrees to:

- maintain the confidentiality of the other party's Confidential Information and not disclose
 it to any third party, except as authorized by the disclosing party in writing or as required
 by state or federal law or by a court of competent jurisdiction;
- restrict disclosure of Confidential Information to its employees who have a "need to know" and not copy or reproduce such Confidential Information;
- . take necessary and appropriate precautions to guard the confidentiality of Confidential Information, including informing and requiring written acknowledgements from its employees who handle such Confidential Information that it is confidential and not to be disclosed to others, but such precautions shall be at least the same degree of care that the receiving party applies to its own confidential information and shall not be less than reasonable care; and
- use such Confidential Information only in furtherance of the performance of this Agreement.

Confidential Information is and shall at all times remain the property of the disclosing party, and no grant of any proprietary rights in the Confidential Information is hereby given or intended, including any express or implied license, other than the limited right of the Vendor to use the Confidential Information in the manner and to the extent permitted by the scope of work. Vendor agrees to indemnify, defend, and hold harmless City for any claims by third parties relating thereto or arrising out of Vendor's intentional, negligent, inadvertent or unintentional release of City documents or information.

PRESERVATION OF CITY'S PROPRIETARY RIGHTS, RIGHTS OF THIRD PARTIES

The City, including its contractors, agents, employees and any third party manufacturers of any equipment, and the copyright owner of any Non-Vendor Software shall own and retain all of their respective Proprietary Rights of Vendor, any copyright owner of Non-Vendor Software. Nothing in this Agreement is intended to restrict the Proprietary Rights of Vendor, any copyright owner of Non-Vendor Software, or any third party manufacturer of equipment. All intellectual property developed originated, or prepared by Vendor in connection with providing to City consulting services in connection with the evaluation of the City's equipment, software, or related systems and services connection with the evaluation of the City's and this Agreement does not grant to Vendor any shared development rights of intellectual property. Exclusive title to all data input, generated by or transferred into or out of the City's system by City shall remain vested in City.

Nothing in this Agreement will be deemed to grant, either directly or by implication, estoppel, or otherwise, any right, title or interest in Vendor's Proprietary Rights. City agrees not to modify, disassemble, peel components, decompile, otherwise reverse engineer or attempt to reverse

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engineer, derive source code or create derivative works from, adapt, translate, merge with other software, reproduce, distribute, sublicense, sell or export the Software, or permit or encourage any third party to do so. The preceding sentence shall not apply to Open Source Software which is governed by the standard license of the copyright owner.

I HAVE READ THE ABOVE TERMS, UNDERSTAND THEM AND AGREE TO ABIDE BY THEM UNDER PENALTY OF LAW.

SO ACKNOWLEDGED:

ignature of authorized representative of Vendor

1-69-1

Date

Employee's signature (to be signed by each employee at the time of commencement of services)

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