	SOLICITATION, OFFER AND AWARD			WARD	THIS CONTRACT IS ORDER UNDER DE	S A RATED PAS (15 CFR	RATING PAGE OF PAGE			PAGES				
	TRACTIN				3 SOLICITATION NUMBE		- <u>-</u>	4 TYPE OF SOLICITATION 5 D			1 52			
					DTNH22-12-R-			1					JRCHASE NU	IMBER
									ALED BID (IFB) GOTIATED (RFP)	05/03/:	2012 12-000)23		
7. ISSU	ED BY		CODE	NPO-32	20	8.	ADDRES		R TO (If other than Ite					·
Off	ice (Of Acquis	ition Mana	gement						•				
DOT,	/NHT	SA/NPO-32	0											
		v Jersey .	Avenue, SE											
W51-														
Wasi	ungt	ion, DC 2	0590											
NOTE: I	in sealed	bid solicitations "of	fer" and "offeror" mea	n "bid" and "bi	dder".									
						SOLIC	OITATIO	V						
9. Seale	d offers in	original and			copies	for furnishing	the suppl	lies or ser	vices in the Schedule	will be received at th	e place specified in the	m 9 or	if hand souled	
depo	sitory loc	ated in							until 17	00 00	ocal time	511 O, OI 1	i nanu cameu	i, in the
CAU	TION: LA	TE Submissions, Mo	odifications, and Withdr	awals: See Se	ction L, Provision No. 52.21	4.7 or 52 215	1 11 060						(Date)	
1	0. FOR					4-7 01 32.213-	B. T	ELEPHO	DIECT TO All Terms and DNE (NO COLLECT C	conditions contained	in this solicitation. C. E-MAIL ADDRE			
	ORMATIC	1				AREA CO		NUMBE		EXT.	Lionel.Johr		CTDGAS+	~~~
	OALL.	LIONI	EL JOHNSON			20)2	3	66-0498		mionei.oom	15011.	CIREGOL.	.gov
		1				11. TABLE	OF CON	TENTS		L				
(X)	SEC.	DESCRIPTION				PAGE(S)	(X)	SEC.	DESCRIPTION		·········			PAGE(S)
	PART I	THE SCHEDULE						PART II	- CONTRACT CLAUS	SES				1(-,
¦X.	A	SOLICITATION/C	ONTRACT FORM			1-2	X	Ti	CONTRACT CLAI					731 3
\X,	В	SUPPLIES OR SE	ERVICES AND PRICES	S/COSTS		3	1	PART III	<u> </u>	NTS, EXHIBITS AND	OTHER ATTACH			31-3
X	С		PECS./WORK STATEM	MENT		4-12	ΙX	J	LIST OF ATTACH					36
!Xi	D	PACKAGING AND				13-14		PART IV	- REPRESENTATIO	NS AND INSTRUCTION	ONS			120
;X	E	INSPECTION ANI				15	X _I	К	REPRESENTATION	ONS, CERTIFICATION	WS AND			1
:X	F	DELIVERIES OR				16-20			OTHER STATEM	ENTS OF OFFERORS	5			37-42
X X	G		INISTRATION DATA			21-25	Ϋ́	L	INSTRS., CONDS	, AND NOTICES TO	OFFERORS			43-49
	Н	SPECIAL CONTR	ACT REQUIREMENTS	S		26-30	!X	M	EVALUATION FAC	CTORS FOR AWARD)			50-52
NOTE: Ite	em 12 dos	es not apply if the ex	nlicitation in aluda a sta		OFFER (#	Must be fully	complet	ted by o	fferor)					-1
12. In con	npliance v	with the above, the un	ndersioned agrees if the	provisions at a	52.214-16, Minimum Bid Acoted within	ceptance Per	iod.							
by th	e offeror)	from the date for rec	eipt of offers specified	above, to furnis	h any or all items upon whic	_ calendar day	rs (60 cale	endar day	s unless a different pe	eriod is inserted				
desig	mateu po	irit(s), within the time	specified in the schedi	ule.	,	m prices are o	noieu at ti	ne price s	ei opposite each item	i, delivered at the				
		R PROMPT PAYME		10 CALEN	IDAR DAYS (%)	20 CALEN	NDAR DA	YS (%)	30 C	ALENDAR DAYS (%)) CA	ALENDA	R DAYS (%)	
		Clause No. 52.232.	<u> </u>											
4. ACKN	OWLEDG	EMENT OF AMEND knowledges receipt o	MENTS		AMENDMENT NO	D.		DA	TE .	AMENDME	ENT NO.	T	DA ⁻	TF
		the SOLICITATION												·
and n	elated do	cuments numbered a										-		
5A. NAM ANI		CODE			FACILITY		<u> </u>	16	NAME AND TITLE	OF PERSON AUTHO	RIZED TO SIGN OFFE	ER L		
AD!	DRESS]				(Type or print)					
OF OF	EROR													
		B. TELEPHONE NU	JMBER	15C. CH	ECK IF REMITTANCE ADD	DRESS		17	SIGNATURE				40.05555	
REA COL	DE N	UMBER	EXT.	E	ERENT FROM ABOVE - EN	TER			<u>-</u>				18. OFFER D.	ATE
			L	SUCH A	DDRESS IN SCHEDULE							Ì		
. ACCEP	TED AS	TO ITEMS NUMBER	ED	20. AM		To be comp								
						1	21. AUCO	UNTING	AND APPROPRIATION	ON				
			HAN FULL AND OPEN	COMPETITION	1:		23. SUB M	IT INVOI	CES TO ADDRESS S	HOWN IN	■ ITEM			
	2304 (0			41 U.S.C. 253	(c) ()	(4 сор	ies unles:	s otherwise specified)	**) in Em			
. ADMINI	STERED	BY (If other than Item	m 7)	CODE		2	25. PAY M I	ENT WILE	BE MADE BY		CODE			
NAME	OF COLT	DACTING OFFICE	\/ *					-						
		RACTING OFFICER	₹ (Type or print)			2	27. UNITE	DSTATE	S OF AMERICA			- 72	28. AWARD DA	ATE
.OSS	JEFF	RIES												
PORTAN	T - Award	will be made on this	Form, or on Standard	Form 26, or by	other authorized official writt	ten notice		(Signature of Contract	ing Officer)				
JTHORIZI	ED FOR I	OCAL REPRODUC	TION		dunionized official WITH	teri notice.								

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE 0	F
TOTAL TOTAL CONTENT	DTNH22-12-R-00534	2	52
VAME OF OFFEDOR OR COURS.	0.7.0.0		

NAME OF OFFEROR OR CONTRACTOR

(T)	SUPPLIES/SERVICES	QUANTITY	TINU	UNIT PRICE	AMOUNT
(A)	(B)	(C)	(D)	(E)	(F)
	TITLE: ADVANCED ADAPTIVE RESTRAINT PROGRAM This Solicitation is to develop a specific Test Plan to evaluate the performance of the baseline Advanced Adaptive Restraint Program (AARP) that addresses the following requirements: The test plan should include conditions to evaluate safety performance for a 35 mph crash of current vehicles and anticipated crash conditions for future light weight vehicle designs. The test conditions may include three different adult size dummies and a range of occupant seating positions. The testing may include a mixture of sled, component, and simulation runs. Additional testing may be required to evaluate occupant position sensing systems before and/or during the frontal crash. The crash configurations should include frontal, frontal offset, and frontal oblique crash conditions. Delivery: 1 Days After Award Delivery Location Code: SHIP TO (1) DOT/NHTSA/ 1200 New Jersey Avenue, SE Washington DC 20590 FOB: Destination Advanced Adaptive Restraint Program (AARP)			(E)	(F)
	ſ		- 1	ī	

PARTI-THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1. SUPPLIES/SERVICES

Under this contract, the contractor shall provide all the necessary qualified personnel, facilities, material, supplies, equipment, and services to perform a Cost Reimbursement, Cost-sharing Contract entitled "Advanced Adaptive Restraint Program". Work shall be performed in accordance with this Contract's Statement of Work, Section C, and other terms and conditions of this Contract.

B.2. DEFINITIONS

B.2.1.	Total Estimated Amount
	The total estimated cost for the performance of this contract is \$
B.2.2	Total NHTSA Funding
	NHTSA will obligate and reimburse the contractor up to \$to cover costs associated with the contract. This amount equates to% of the Total Estimated Amount cited in B.2.1 above.
B.2.3.	Total Contractor Contribution/Cost Share
	The Contractor agrees as a condition of this contract, to contribute up to \$ to cover costs associated with this contract effort. This contribution equates to% of the Total Estimated Amount cited in B.2.1 above.
. FUND	S AVAII ARTE

Of the Total NHTSA Funding of this contract (as cited in sub-paragraph B.2.2 above), funds in the amount of \$____are currently available.

PART I - THE SCHEDULE

SECTION C - DESCRIPTION, SPECIFICATION, WORK STATEMENT

C.1. BACKGROUND

The report entitled "Fatalities in Frontal Crashes Despite Seat Belts and Air Bags – Review of All CDS Cases – Model and Calendar Years 2000-2007-122 Fatalities" concluded that aside from the exceedingly severe crashes, the main contributor to fatality was poor structural engagement between the vehicle and its collision partner. Examples of this poor structural engagement include corner impacts, oblique crashes, and impacts with narrow objects. By contrast, few if any of the fatal crashes were full-frontal or offset-frontal impacts with good structural engagement, unless the crashes were of extreme severity or the occupants exceptionally vulnerable.

In real-world crashes, the exact location and posture of the occupant is unknown before or during the crash. When the occupant is out of the optimum position (out-of-position) during the crash, it is unknown how this may influence injury outcome. The objective of this project is to investigate the opportunities to reduce injury to out-of-position occupants by adapting the restraint system to the occupant position of the occupant before and/or during the crash.

This type of research is particularly important given that NHTSA is evaluating fuel economy requirements for model years 2017 to 2025, and that these requirements may lead to increased use of light-weight vehicles in the American automotive fleet. This change in design of vehicles may decrease occupant space and stiffen the vehicle structure, especially in the occupant compartment. With a smaller occupant space and stiffer vehicle structures, more demand will be placed on the restraint system to manage the energy of the occupant. These vehicle design changes may also result in stiffer structures and higher decelerations in frontal crashes. In addition, NHTSA is researching how to quantify the role of age in relation to occupant safety given that preliminary study results have shown that the risk of injury to occupants increases with age.

NHTSA also has recently completed a multi-year study with the Crash Avoidance Metrics Partnership (CAMP) to study the safety potential for occupant restraint systems that could adapt using precrash warning systems. This effort is intended to complement the CAMP study by evaluating adaptive restraint systems that can sense and adapt to occupant position before and/or during the crash, adapt to the size and the weight of the occupant, adapt to vulnerable occupants, and lastly adapt to the severity of the crash.

C.2. OBJECTIVE

The objective of this contract is to demonstrate an adaptive occupant restraint system, for both the driver and front right passenger that may provide an opportunity to reduce the societal harm to occupants resulting from frontal motor vehicle crashes in the US light vehicle fleet. More specifically, the objective of this contract is to:

Identify, design, optimize, fabricate, and demonstrate an interactive prototype adaptive occupant protection system. The demonstration should include a range of occupant sizes or conditions to emphasize the adaptability of the prototype restraint system in multiple frontal high speed crash pulses. This project should establish the baseline performance of non-adaptable systems and show the occupant

safety improvements using occupant sensing and adaptive restraints.

Any interactive prototype adaptive occupant protection system shall take into account the following:

- a. Pre-programming of restraint systems (airbag deployment times, retractor load limits, etc.) to occupant conditions (height, weight, dynamic position) and crash pulse is not desired.
- b. It is understood that some occupant conditions such as age and gender may be linked to operator identification rather than direct sensing. Thus, any adaptability features proposed for age and gender should be able to be pre-programmed during testing.

C.3 SPECIFIC REQUIREMENTS

C.3.1—<u>Task Descriptions</u>

C.3.1.1 - Kick-Off Meeting

The contractor shall hold a kickoff meeting, at NHTSA headquarters, within two weeks after contract award. The purpose of this meeting is to 1) discuss the administration of the Contract, 2) to discuss the overall project objectives, and 3) to provide for discussion purposes a draft copy of the technical plan. The contractor shall include personnel in the meeting that are able to discuss the technical details of the contractor's plans to meet all contract requirements. At the kick-off meeting, the Contractor and NHTSA also will discuss the identification of the vehicle, the soft and hard sled pulses and the general plan for testing. The people attending from NHSTA will be the CO, COTR and other interested NHTSA personnel.

C.3.1.2 - Technical Plan

The technical plan shall describe the contractor's methods for demonstrating an adaptive occupant restraint system, for both the driver and front right passenger that may provide an opportunity to reduce the societal harm to occupants resulting from frontal motor vehicle crashes in the US light vehicle fleet. The technical plan shall include test conditions to evaluate safety performance for a 35 mph crash of current vehicles (soft pulse) and anticipated crash conditions for future light weight vehicle designs (stiff pulse). The test conditions shall include three different adult size dummies and a range of occupant seating positions. The testing may include a mixture of sled, component, and simulation runs. Additional testing may be required to evaluate occupant position sensing systems before and/or during the frontal crash. The crash configurations should include frontal and frontal oblique crash conditions. At minimum, the technical plan shall include the tasks listed in section C.3.1.3 through C.3.1.7. As part of drafting the technical plan, the contractor is allowed to propose additional tasks or the modification of the current tasks if the contractor feels it is necessary to meet contract objectives and requirements. These changes will be reviewed by the NHTSA COTR, in consultation with the NHTSA CO. Depending on the changes, written modification to the contract may be required before the NHTSA COTR provides final approval of the technical plan. The contractor's technical plan submitted with in response to the solicitation may provide the basis for draft technical plan required under this task.

Within four (4) weeks after contract award, the Contractor shall submit a draft of a final Technical Plan incorporating any changes into the technical plan requested by NHTSA as a result

of the kick-off meeting. Within one (1) week after receipt of the draft of the final Technical Plan, the COTR will either approve the plan or request further modifications.

The Contractor shall not make changes to the Final Technical Plan without receiving express written approval from the COTR. If additional changes are requested to the Final Technical Plan, the changes must be submitted to the COTR for review. The COTR, in consultation with the NHTSA Contracting Officer, will review the additional changes and provide approval or disapproval of the requested changes within one week after receipt of the requested changes.

The Contractor shall not begin testing until receipt of approval of the Final Technical Plan.

C.3.1.3- Baseline Tests

The Contractor shall brief, via web meeting, the COTR and other NHTSA staff on baseline test results within eighteen (18) weeks after contract award. The contractor shall also provide a summary report of baseline test results within seventeen (17) weeks after contract award.

C.3.1.3.1—Baseline Out-of-Position Testing

The contractor shall perform test procedures and out-of-position tests/simulations listed in the final technical plan. The contractor shall document testing by pictures and high-speed video. The contractor shall use high-speed cameras to document the kinematics of the dummies. Specifically, the contractor shall track the position of the head of the occupant in x, y, and z coordinates. For baseline out-of-position testing, the contractor shall record all dummy instrument channels specified in section 3.5 ATD Instrumentation and calculate dummy Injury Assessment Values (IAV's). NHTSA will provide the IAV's.

C.3.1.3.2—Baseline In-Position Testing

The contractor shall perform baseline sled tests of a sled buck representing a current compact vehicle. Table C.1 summarizes the test conditions applicable to the in-position tests. The contractor shall develop the sled buck such that it can be easily modified with adaptive restraints. The contractor shall also record the sled acceleration.

The contractor shall document testing by pictures and high-speed video. The contractor shall use enough high-speed cameras to document the kinematics of the dummies. Specifically, the contractor shall track the position of the head of the occupant in x, y, and z coordinates. For baseline in-position testing, the contractor shall record all dummy instrument channels specified in section C.3.5 ATD Instrumentation. NHTSA will provide the IAV's.

Table C.1: Sled test for baseline restraint system in-position tests

Sled Tests Number	Sled Angle (degrees)	Sled Pulse	Driver	Right Front Passenger
001	0	Soft	THOR	HIII 5th
002	0	Severe	THOR	HIII 5th

Sled Tests Number	Sled Angle (degrees)	Sled Pulse	Driver	Right Front Passenger
003	0	Soft	HIII 5th	THOR
004	0	Severe	HIII 5th	THOR
005	0	Soft	HIII 95th	TBD
006	0	Severe	HIII 95th	TBD
007	0	Soft	TBD	HIII 95th
008	0	Severe	TBD	HIII 95th
009	15	Soft	THOR	HIII 5th
010	15	Severe	THOR	HIII 5th
011	15	Soft	HIII 5th	THOR
012	15	Severe	HIII 5th	THOR
013	15	Soft	HIII 95th	TBD
014	15	Severe	HIII 95th	TBD
015	15	Soft	TBD	HIII 95th
016	15	Severe	TBD	HIII 95th
017	TBD	TBD	TBD	TBD
018	TBD	TBD	TBD	TBD

C.3.1.4—Development and Validation Baseline Models and Components

The contractor shall build a finite element (FE) and/or rigid body model of the buck and validate the model to the baseline sled tests in section C.3.1.3 Baseline Tests. The contractor shall validate different components of the baseline restraint system and its response or adaptation to different occupants, positions and/or conditions. The complete model shall be validated to the following (The COTR reserves the right to change these validation criteria):

- 1. Head center of gravity (CG), chest, and pelvis X and Y accelerations.
- 2. Head CG angular acceleration and angular velocity in the X, Y and Z directions.
- 3. Chest displacement
- 4. Femur loads

The Contractor shall brief, via web meeting, the COTR and other NHTSA staff on validation results, within thirty (30) weeks after award. The contractor shall also provide a summary report of validation results within twenty nine (29) weeks after award.

C.3.1.5—Proposed Adaptive Restraint System

The contractor shall propose the components of the adaptive restraint system and its approach to adapting the system to the different conditions required to meet contract objectives and requirements. The contractor does not have to provide details of component design, but shall provide a brief description of each component and a description of the intended benefits of each component.

The Contractor shall brief, at NHTSA headquarters, the COTR and other NHTSA staff on proposed adaptive restraint system within thirty six (36) weeks after award of the contract. The contractor shall also provide a summary report of the proposed system within thirty five (35) weeks after award.

The Contractor shall not begin testing or development of the prototype system until COTR approval.

C.3.1.6—Develop, Optimization and Validation of Proposed Adaptive Restraint Systems

The contractor shall validate each proposed component for both in-position and out-of-position systems before integrating them into the final system. Once each component is validated, a Design of Experiments (DOE) analysis shall be performed on the entire proposed adaptive restraint system.

The Contractor shall brief, via web meeting, the COTR and other NHTSA staff on development, optimization and validation of the proposed adaptive restraint system, within sixty two (62) weeks after award of the contract. The contractor shall also provide a summary report of the proposed restraint system within sixty one (61) weeks after award.

The Contractor shall not begin testing or fabrication of the proposed system until COTR approval.

C.3.1.7—Fabrication of Proposed Systems Suitable for Testing

The contractor shall add the adaptive restraint system to the generic sled buck and tested in the same conditions specified in section C.3.1.3.2 Baseline In-Position Testing and the final approved out-of-position test specified in section C.3.1.3.1 Baseline Out-of-Position Testing. The contractor shall use these results to quantify the improvement in performance metrics. Inevitably, some components will not perform as anticipated and new components will need to be developed in combination with test plans.

The contractor shall perform analysis of the results compared to baseline results. NHTSA will work with the contractor on the best way to present these results.

The Contractor shall brief, via web meeting, the COTR and other NHTSA staff on development, results of testing the proposed system, within one hundred and eight (108) weeks after award of the contract. The contractor shall also provide a summary report of the testing of the proposed system within one hundred and seven (107) weeks after award.

C.3.2— Monthly Progress Reports and Conference Calls

The Contractor shall submit a Monthly Report no later than the 10th day of each month. Monthly Reports shall be furnished electronically and distributed as indicated below. Each Report

shall: (1) thoroughly describe accomplishments during the month, (2) include a brief description of the activities that took place and activities that are planned for the upcoming month. Any problems or delays the Contractor has experienced or encountered shall be brought to the COTR's attention within one (1) week. These problems or delays shall be included in the monthly report, including the Contractor's recommendations of any action required by NHTSA. The Contractor shall provide a funding status sheet by cost element, the current month's obligations, and cumulative obligations and funds remaining. It is not necessary for the actual monthly invoice to accompany the monthly report. After the monthly report is submitted, the contractor shall have a conference call with NHTSA within one week of submitting the monthly report.

C.3.3--Draft Final Report and Presentation

The contractor shall provide a draft final report that summarizes the work activities undertaken to complete each task of the project and also provides the overall results from the testing, within one hundred and thirteen (113) weeks after contract award. The contractor shall also give a final presentation at NHTSA, in Washington DC, within one hundred and seventeen (117) weeks after contract award. NHTSA will provide the contractor with comments to the draft final report, within one hundred and twenty-six (126) weeks after award.

C.3.4—Final Report

The contractor shall provide a final report within one hundred and thirty (130) weeks after contract award. This report shall include all requested edits and respond to all comments from NHTSA.

C.3.5 - ATD Instrumentation

C.3.5.1 - THOR-NT with Mod kit 50th Percentile Male

The table below shows the required dummy instrumentation for the THOR-NT with mod kit (THOR). NHTSA will provide the contractor with the assessment calculations for this dummy. The COTR reserves the right to change the instrumentation on the dummy.

Table: THOR-NT with mod kit

Body Region	Instrumentation	THOR-NT mod kit Data Channels
Head	Head CG Accelerometer: X, Y and Z	3
	Angular Rate Sensors: X,Y, and Z	3
Neck	Occipital Condyle Rotation	1
	Upper Neck Load Cell	
	- Forces: Fx, Fy, Fz	3
	- Moments: Mx, My, Mz	3
	Lower Neck Load Cell	
	- Forces: Fx, Fy, Fz	3
	- Moments: Mx, My, Mz	3
	Front and Rear Neck Spring	2

Body Region	Instrumentation	THOR-NT mod kit Data Channels
Head	Head CG Accelerometer: X, Y and Z	3
	Angular Rate Sensors: X,Y, and Z	3
	3D IR-TRACC Chest Deflection	12
	Measurement (upper/lower, left/right)	
	Spine T1 Triaxial Accelerometer	3
	Chest CG Accelerometer	3
~ 1	Spine T12 Triaxial Accelerometer	3
Chest	Mid-sternum Accelerometer	1
	Thoracic Spine Load Cell	
	- Forces: Fx, Fy, Fz	3
	- Moments: Mx, My	2
	Clavicle Load Cell (inner/outer, left/right)	
A T T	- Forces: Fx, Fz	8
Abdomen	3D IR-TRACC Lower Abdomen Deflection	6
	(left and right)	
Pelvis	Acetabular Load Cell (left and right)	
	-Forces: Fx, Fy, Fz	6
	Triaxial Accelerometer (CG)	3
	ASIS Load Cell (left and right)	
	- Forces: Fx	2
	- Moments: My	2
Femurs	Femur Load Cell (left and right)	101=(tr)27;27:28:20
	- Forces: Fx, Fy, Fz	6
	- Moments: Mx, My, Mz	6
Knees	Knee Shear Displacement (left and right)	2
Lower Legs	Upper Tibia Load Cell (left and right)	AND
(THOR Lx/FLx)	- Forces: Fx,Fy,Fz	6
	- Moments: Mx, My	4
	Lower Tibia Load Cell (left and right)	
	- Forces: Fx,Fy,Fz	6
	- Moments: Mx, My	4
	Tibia mid-shaft Ax, Ay (left and right)	4
	Mid-Foot Ax, Ay, Az (left and right)	6
20.000 to 10.000 to	Ankle Rotations Rx, Ry, Rz (left and right)	6
	TOTAL (per dummy)	125

C.3.5.2 – HIII 5th Percentile Female Dummy

The table below shows the required dummy instrumentation for the 5th percentile female Hybrid III ATD. NHTSA will provide the contractor with the assessment calculations for this dummy. The COTR reserves the right to change the instrumentation on the dummy.

Table: HIII 5th Percentile female

Body Region	Instrumentation	Hybrid III Data Channels
Head	Triaxial Accelerometer (CG)	3
	ARS: X, Y, and Z	3
Neck	Upper Neck Load Cell	
	- Forces, Fx, Fy, Fz	3
	- Moments, Mx, My, Mz	3
	Lower Neck Load Cell	_
	- Forces, Fx, Fy, Fz	3
	- Moments, Mx, My, Mz	3
Chest	Triaxial Accelerometer	6 (Redundant)
	Sternum Deflection Potentiometer	1
Pelvis	Triaxial Accelerometer (CG)	3
Femurs	Femur Load Cell (left and right)	
	- Forces, Fz	2
Lower Legs	Upper Tibia Load Cell (left and right)	
(THOR Lx/FLx)	- Forces: Fx,Fy,Fz	6
	- Moments: Mx, My	4
	Lower Tibia Load Cell (left and right)	
	- Forces: Fx,Fy,Fz	6
	- Moments: Mx, My	4
	Tibia mid-shaft Ax, Ay (left and right)	4
	Mid-Foot Ax, Ay, Az (left and right)	6
	Ankle Rotations Rx, Ry, Rz (left and right)	6
	TOTAL (per dummy)	66

C.3.5.3 – HIII 95th Percentile Male Dummy

The table below shows the required dummy instrumentation for the 95th percentile Hybrid III ATD. NHTSA will provide the contractor with the assessment calculations for this dummy. The COTR reserves the right to change the instrumentation on the dummy.

Table 3: HIII 95th Percentile male

Body Region	Instrumentation	Hybrid III Data Channels
Head	Triaxial Accelerometer (CG) Nine Accelerometer Array	3 (Redundant)
Neck	Upper Neck Load Cell - Forces, Fx, Fy, Fz - Moments, Mx, My, Mz	3 3
	Lower Neck Load Cell - Forces, Fx, Fy, Fz - Moments, Mx, My, Mz	3 3

Chest	Triaxial Accelerometer Sternum Deflection Potentiometer	6 (Redundant)
Pelvis	Triaxial Accelerometer (CG)	3
Femurs	Femur Load Cell (left and right) - Forces, Fz	2
	TOTAL (per dummy)	36

PARTI-THE SCHEDULE

SECTION D - PACKAGING AND MARKING

D.1. GENERAL INSTRUCTIONS

Preservation and packaging of all shipments or mailing of all work delivered under this contract shall be done in accordance with good commercial practices and to insure acceptance by common carrier (if applicable) and safe transportation at the most economical rate(s).

Any deliverables required by this contract shall be submitted to the applicable personnel identified in Section F of this contract. Due to security concerns, deliverables transmitted via regular U.S. Mail experience significant delay in reaching an intended destination and, as part of the screening process, may be damaged. For these reasons, the U.S. Mail should not be used to transmit deliverables. Rather, the contractor is encouraged to use electronic mail to the maximum extent possible.

D.2. FORMATTING TEXT AND IMAGE DELIVERABLES (JUN 2009)

For those deliverables submitted electronically as text or image files, the following specifications apply.

D.2.1 <u>Text</u>

Text files shall be delivered in Microsoft WORD 2010 format. Font type of Times New Roman with a font size of 12 shall be used throughout the document. The contractor shall minimize additional formatting as much as possible e.g. avoid use of columns) Avoid using any design/layout elements (however, see D.2.2, D.2.3, and D.2.4 below.)

D.2.2 Charts and Graphs

The contractor shall develop charts or graphs using Microsoft EXCEL 2010 and shall insert these in the appropriate places within the text document. The contractor shall also provide the Microsoft EXCEL source file from which charts or graphs were developed.

D.2.3 Illustrations

NHTSA's Office of Communication Services is responsible for developing or acquiring most illustrations found in NHTSA publications. These illustrations can take two forms:

- a. **Graphics** In the majority of cases, the Office of Communication Services will develop any needed graphics in collaboration with the COTR. The Contractor shall provide text, graphs, and charts following the guidelines stipulated in D.2.1 and D.2.2 above. In some cases, the contractor may be required to develop graphics. In these cases, the Contractor shall use only software approved by the U.S. Government Printing Office (e.g. Adobe Illustrator)
- b. **Photographs** When photos are used in Agency publications, the Office of Communication Services typically uses existing photos or photos purchased through royalty-free sources. In the event the Contractor must supply photos for use in a publication, the photos must be high

resolution images at least 300 dpi at the size used in the publication. Photos shall be supplied on a CD or DVD in either .tif format (for scanned images) or .jpg (for images downloaded to the CD or DVD directly from the digital camera.). **NOTE:** If a photograph is supplied by an outside source (contractor, grantee, national organization, etc.), a release form must accompany the photo indicating that the human subjects in the photo authorize NHTSA to use the photo in its publications and on its Internet site. The contractor is responsible for ensuring that the necessary arrangements have been made with the photographer and the subjects in the photo to ensure that NHTSA has unlimited rights to use the images in print and on the web. The Contractor shall obtain, and provide to NHTSA, a written statement indicating that NHTSA has unlimited, unrestricted rights to the use of the photos.

D.2.4 Web-based Images

Occasionally, web-based images may be used in NHTSA publications. The Contractor is cautioned that copyright laws restrict use of many of these images even if this is not expressly indicated at the website. Additionally, the resolution of most web-based images is not high enough to provide a clear image when published. For these reasons, web-based images should not be used.

PARTI-THE SCHEDULE

SECTION E - INSPECTION AND ACCEPTANCE

E.1. 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

The contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address (es): www.arnet.gov/far.

NOTE: Those clauses marked with an "X" are hereby incorporated by reference. [X]

52.246-5 Inspection – Cost Reimbursement (APR 1984)

E.2. <u>INSPECTION AND/OR ACCEPTANCE</u>

The Contracting Officer's Technical Representative (COTR), as designated in the resultant contract, shall be responsible for performing the inspection of all supplies or services rendered under the resultant contract and for recommending acceptance or replacement/correction of services or materials that fail to meet the contract requirements to the Contracting Officer

The COTR shall also be responsible to the Contracting Officer for recommending acceptance or replacement/correction of nonconforming supplies or services that fail to meet the contract requirements.

Rejection of a deliverable will delay payment due and may be grounds for termination or for default.

PARTI-THE SCHEDULE

SECTION F - DELIVERIES OR PERFORMANCE

F.1. 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

The contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address (es): www.arnet.gov/far

NOTE: Those clauses marked with an "X" are hereby incorporated by reference.

[X] 52.242-15 Stop Work Order (AUG 1989)

[X] Alternate I (APR 1984)

[X] 52.247-35 F.O.B. Destination, Within Consignee's Premises (APR 1984)

F.2. PERIOD OF PERFORMANCE

All work required hereunder, including preparation, submission, review of any and all reports, shall be completed within the **thirty (30) months** after the effective date of the resultant Contract.

F.3. DELIVERABLES / MILESTONES

The following performance milestones and deliverables shall apply to this Contract and are considered critical to the successful completion of the project. Milestones and deliverables dates may be revised based on initial project plan and discussion at the kick-off meeting:

F.3.1. Deliverables/Milestone Schedule:

All deliverables shall be delivered in accordance with Section C. Statement of Work identified under this solicitation.

Item #	Contract Reference	Milestone (M) / Deliverable (D) Description	Due Date
1	C.3.1.1	(M) Kick-Off Meeting	Within two (2) weeks of contract award
2	C.3.1.2	(D) Contractor submits Draft Final Technical Plan	Within four (4) weeks of contract award.
3	C.3.1.2	(M) COTR reviews and approves / comments on Draft Final Technical Plan and returns to contractor.	Within five (5) weeks of contract award.
4	C.3.1.3	(D) Summary report of Baseline Test.	Within seventeen (17) weeks of contract award.

5	C.3.1.3	(M) Contractor presents Baseline Test, via web meeting	Within eighteen (18) weeks of contract award.	
6	C.3.1.4	(D) Summary report of the Development and Validation Baseline Models and Components.	Within twenty nine (29) weeks of contract award.	
7	C.3.1.4	(M) Contractor presents the Development and Validation Baseline Models and Components, via web meeting	Within thirty (30) weeks of contract award.	
8	C.3.1.5	(D) Summary report of the Proposed Adaptive Restraint System.	Within thirty five (35) weeks of contract award.	
9	C.3.1.5	(M) Contractor presents Proposed Adaptive Restraint System, at NHTSA headquarters	Within thirty six (36) weeks of contract award.	
- 10	C.3.1.6	(D) Summary report of the Development, Optimization and Validation of Proposed Adaptive Restraint Systems.	Within sixty one (61) weeks of contract award.	
11	C.3.1.6	(M) Contractor presents Development, Optimization and Validation of Proposed Adaptive Restraint Systems, via web meeting Within sixty two weeks of contractor presents Development, weeks of contractor presents Development, weeks of contractor presents Development,		
12	C.3.1.7	(D) Summary report of Fabrication of Proposed Systems Suitable for Testing	Within one hundred and seven (107) weeks of contract award.	
13	C.3.1.7	(M) Contractor presents Fabrication of Proposed Systems Suitable for Testing, via web meeting	of Within one hundred and	
14	C.3.3	(D) Draft Final Report. Within one hundre thirteen (113) wee contract award.		
15	C.3.3	(M) Contractor presents final presentation of activities undertaken to complete each task and overall results of the contract, at NHTSA Headquarters Within one hund seventeen (117) contract award.		
16	C.3.3	(M) NHTSA provides contractor with comments to draft final report Within one hundre twenty-six (126) we contract award.		
17	C.3.4	(D) Contract submits final report	Within one hundred and thirty (130) weeks of contract award.	
18	C.3.2; F.3.4	(D) Monthly Progress Reports	No later than the 10 th day of each month	

F.3.2 Place of Delivery
Unless otherwise specified, deliverables shall be furnished, electronically, to the following addresses:

Item No.	<u>Address</u>
2, 4, 6, 8, 10,	U.S. DOT
12, 14, 17, 18	National Highway Traffic

	Safety Administration		
	1200 New Jersey Avenue, S.E., W51-117		
	Washington, D.C. 20590		
	Office of Vehicle Safety Research Attention:		
	E-mail: TBD		
	U.S. DOT		
	National Highway Traffic		
	Safety Administration		
18	1200 New Jersey Avenue, S.E., W51-117		
	Washington, D.C. 20590		
	Office of Acquisition Management (OAM)		
	Attention: Ross Jeffries, Contracting Officer		
	E-mail: Ross.Jeffries@dot.gov		

F.3.3 Summary Reports

Summary reports required under this contract shall use the following basic format:

- Title Page
- Table of Contents
- Executive Summary
- Introduction
- Results
- Conclusions

F.3.4 Monthly Progress Reports:

By no later than the 10th day of each month, the contractor shall provide a written status report to the COTR and Contracting Officer that, in addition to the information specified in Section C.3.2., addresses the following:

- Accomplishments during the month being reported.
- Planned actions for the following month.
- Any problems or delays encountered;
- Any actions taken to resolve or mitigate problems or delays;
- Any NHTSA actions that the contractor is requesting.

F.4. SPECIFICATION FOR ELECTRONIC FILES

Electronic files containing final test reports required under the resultant contract shall be provided in accordance with the following:

Specifications:

a. <u>Electronic Master File</u>: An electronic version of the final report shall be used as the "Master" report final copy. All hard-copy reports shall be generated from this electronic master file. A copy of the electronic master file shall be provided to NHTSA.

b. Report Format:

- 1. Font: 12 point Arial font shall be used throughout the report.
- 2. Page Margins: Top, Right, and Bottom shall be ½ inch. Left margin shall be 1 inch. To insure correct formatting of the report regardless of which Hewlett-Packard LaserJet printer model is used (see printer specifications below), it is suggested that two blank spaces, followed by a "hard page" [CNTRL-ENTER] be used at the bottom of each page of the report.
- 3. Page Numbering: Upper right hand corner, using bold Arial 12 point font.

System Compatibility:

All electronic files submitted must be compatible with the Windows 7 Personal Computer (PC) system. For the base period of this contract, and any option periods unless otherwise specified, the following requirements apply:

- 1. <u>Software Application</u>: The software application used to store the electronic file version of the final report (the Master File) shall be compatible with Microsoft Word 2010, currently in use at NHTSA, i.e., the file must be able to be opened and viewed in Microsoft Word 2010.
- 2. <u>Printer</u>: The report must print in the correct format, i.e. correct pagination, adequate test and image quality, etc., when printed using any Hewlett-Packard (HP) LaserJet Printer model.
- 3. <u>Storage Medium</u>: All electronic report copies shall be submitted on a ZIP disc, a compact disc (CD), or sent electronically as an e-mail attachment or posted on a secure website for downloading. Reports can be zipped, i.e. compressed, to save memory space as required. The discs or e-mail attachments may contain a single report or multiple reports.
- 4. <u>Image Formats</u>: All images (photographs, charts, graphs, etc.) contained within a test report shall be imbedded in the report in a JPEG, TIFF, or a compatible Microsoft Office program (Excel, PowerPoint, and Outlook) file format. Photographs and plots should not be provided separately.

For any of the option years exercised under the resultant Contract, NHTSA reserves the right to change the hardware and software requirements stated above.

F.5. SECTION 508 COMPLIANCE

All electronic and information technology procured, developed or delivered under this contract shall meet applicable accessibility standards, as specified in 36 CFR Part 1194. 36 CFR Part 1194 implements Section 508 of the Rehabilitation Act of 1973, as amended, and is viewable at http://www.section508.gov.

All contract deliverables covered by Section 508 shall be accessible to people with disabilities. Reports and other deliverables provided in electronic media, including web-based intranet and internet format shall conform to applicable accessibility standards, including at a minimum, the following provisions:

- 1194.21, Software Applications and Operating Systems
- 1194.22, Web-Based Intranet and Internet Information and Applications

- 1194.24, Video and Multimedia Products
- 1194.31, Functional Performance Criteria
- 1194.41, Information, Documentation, and Support

This standard is available for viewing at the Access Board web site at http://www.access-board.gov/sec508/standards.htm and guides for specific sections are available at http://www.access-board.gov/sec508/guide/.

PART I - THE SCHEDULE

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 SUBMISSION OF INVOICES

All contract expenditures reported to the Accounts Payable Branch for reimbursement shall be submitted on Standard Form 1034, "Public Voucher for Purchases and Services other than Personal" (Continuation sheet 1035 will be attached, if needed), or other suitable voucher considered to be acceptable by the NHTSA Contracting Officer.

G.1.1 Designated Billing Office

The contractor shall submit one (1) original copy to the following address:

DOT/National Highway Traffic Safety Administration Mike Monroney Aero Center Accounts Payable Branch, AMZ-150 P.O. Box 268911 Oklahoma City, OK 73126

Alternatively, invoices can be transmitted, via e-mail to the following address:

9-AMC-AMZ-NHTSA-Invoices@faa.gov

G.1.2 Required Invoice Information

a. In order to be considered a "proper invoice," the following information must be included:

- (1) Name of the business concern and the submission date.
- (2) Contract number, or other authorization for delivery of property or services.
- (3) Description, price, and quantity of property and services actually delivered or rendered.
- (4) Shipping and payment terms, if applicable.
- (5) Name, title, phone number, and complete mailing address of responsible official to whom payment is to be sent.
- (6) Name, title, phone number, and mailing address of person to be notified in the event of a defective invoice.
- (7) Name of the NHTSA COTR, phone number and email address

- (8) Name of the NHTSA CO or Contract Specialist (CS), phone number and email address
- (9) Contractor's TIN
- (10) Contractor's DUNS
- (11) Invoice Number
- (12) Other substantiating documentation or information as required by the NHTSA Contracting Officer. Vouchers/invoices must include, as a minimum, the following information in support of all costs claimed:
- (a) The period of performance for the costs claimed.
- (b) The <u>current and cumulative amounts</u> of the following items of cost:
- i. <u>Direct Labor</u> with breakdown by labor category, and show the applicable rates, number of hours, and dollar extensions;
- ii. <u>Direct Labor Overhead</u> show the rate, the base amount to which it is applied, and dollar extensions;
- iii. <u>Direct Material</u> itemize if over \$100; equipment costs shall be segregated from material costs;
- iv. <u>Direct Material Overhead</u> (if applicable) show the rate, the base amount to which it is applied, and dollar extensions;
- v. <u>Travel Costs</u> itemize, including names of travelers, origin and destination of trips, and dates of travel;
- vi. <u>Consultant Costs</u> show the name, applicable rate, and number of hours, with dollar extensions.
- vii. <u>Subcontracts</u> show the costs identified by firm;
- viii. Other Direct Costs itemize if over \$100.00
- ix. <u>G&A</u> show the rate, the base amount to which it is applied, and dollar extensions;
- x. <u>Total Amount Claimed</u> (current and cumulative). In doing so, the invoice shall clearly show that portion of the total cost to be paid by NHTSA and that portion contributed by the contractor. The ratio of NHTSA/Contractor's share of the total cost shall be the same as indicated in Section B.2 of this contract.
- (13) A statement signed by an authorized company representative certifying that the costs

proposed in the invoice are true and accurate.

(14) Contractor failure to properly designate a financial institution or to provide appropriate payee bank account information may delay payments of amounts otherwise properly due.

G.2 INDIRECT COST RATES

Pending the establishment of final indirect cost rates which shall be negotiated based on audit of actual costs as provided in FAR Subpart 42.7, Indirect Cost Rates, the Contractor shall be reimbursed for allowable indirect costs hereunder at the rates established below.

G.2.1 Fringe Benefit

The fringe benefit rate(s) applicable to this contract is/are as follows:

<u>RATE TYPE RATE BASE EFFECTIVE PERIOD</u>

G.2.2 Overhead

The overhead rate(s) applicable to this contract is/are as follows:

RATE TYPE RATE BASE EFFECTIVE PERIOD

G.2.3 General and Administrative (G&A)

The G&A rates applicable to this contract are as follows:

RATE TYPE RATE BASE EFFECTIVE PERIOD

G.3 TRAVEL COSTS

Travel costs will be reimbursed in accordance with Far Part 31.

G.4. GOVERNMENT PERSONNEL

G.4.1 Contracting Officer's Technical Representative (COTR)

The performance of the work required under the contract shall be subject to the technical review of the NHTSA COTR.

The following individual has been designated as the NHTSA COTR:

[To Be Provided At time of Contract Award]

a. The Contracting Officer will designate a technical representative to assist in monitoring the work under the resultant contract. The COTR serves as the technical liaison with the contractor. The COTR is *not* authorized to change the scope of work or specifications as stated in the contract, to make any commitments or otherwise obligate the Government, or to authorize any changes which affect the contract price, delivery schedule, period of performance or other terms or conditions.

- b. In the event any technical direction offered by the COTR is interpreted by the contractor to be outside of this contract, the contractor shall not implement such direction, but shall notify the Contracting Officer in writing of such interpretation within five (5) calendar days after the contractor's receipt of such direction. Such notice shall include: (1) the reasons upon which the contractor bases its belief that the technical direction falls within the purview of the "Changes" clause; and (2) the contractor's draft revisions to the terms of the contract that it thinks are necessary to implement the technical direction.
- c. The Contracting Officer is the only individual who can legally commit or obligate the Government for the expenditure of public funds. The technical administration of the resultant contract shall not be construed to authorize the revision of the terms and conditions of this contract. Any such revision shall be authorized only in writing by the Contracting Officer.

G.4.2 Alternate COTR

Designation of "Alternate" COTR (ACOTR). In the event that the NHTSA COTR of record (identified in G.4.1 above) is unavailable for a period of time during which the contractor requires technical guidance or during which other COTR duties must be fulfilled, then the person identified below has been designated by the NHTSA Contracting Officer to perform those duties as the Alternate COTR.

[To be Provided at Time of Contract Award]

G.5 CONTRACTOR PERSONNEL

G.5.1 Project Manager

- a. The contractor shall appoint a Project Manager who will be the contractor's authorized supervisor for technical and administrative work performed under the resultant contract. The Project Manager shall act as the single point of contact between the contractor and the NHTSA COTR or other duly authorized of the Government representative under the contract.
- b. The Project Manager shall receive and execute, on behalf of the contractor, such technical assignment directives as the COTR, or his duly authorized representative, may issue within the terms and conditions of the contract.

G.5.2 1252.237-73 KEY PERSONNEL (APR 2005)

- a. The personnel as specified below are considered essential to the work being performed under this contract and may, with the consent of the contracting parties, be changed from time to time during the course of the contract by adding or deleting personnel, as appropriate.
- b. Before removing, replacing, or diverting any of the specified individuals, the Contractor shall notify the contracting officer, in writing, before the change becomes effective. The Contractor shall submit information to support the proposed action to enable the contracting officer to evaluate the potential impact of the change on the contract. The Contractor shall not remove or replace personnel under this contract until the Contracting Officer approves the change.

The Key Personnel under this Contract are:

To be identified at Contract Award

PARTI-THE SCHEDULE

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.I. SPECIAL DATA RIGHTS PROVISIONS

H.1.1. Confidentiality of Reports and Other Data

Neither the Contractor, nor any affiliate, subsidiary, consultant, subcontractor, or personnel thereof, shall divulge to any third party any information concerning deliverables produced, work performed, results obtained, or any information provided by the Government in connection with this Contract without the prior written approval of the Contracting Officer. The provisions of this clause shall survive the expiration of the Contract.

H.1.2. NHTSA Review of Announcements or Publishing

Neither the Contractor, nor any affiliate, subsidiary, consultant, subcontractor, or personnel thereof, shall make public releases of information or any matter pertaining to this Contract, including, but not limited to, advertising in any medium, or presentation before technical, scientific, or industry groups, without the prior written approval of the Contracting Officer. The provisions of this clause shall survive the expiration of the Contract.

H.1.3. Proprietary Rights in Reports

All proprietary rights, including publication rights, in any report produced by the Contractor in connection with the work provided for in this Contract shall vest in the Government. The Contractor shall not publish any of the results of the work provided for in the Contract without the prior written approval of the Contracting Officer.

H.1.4. Computer Programs/Databases/Printer Layouts and Logic Tables

a. General

All computer programs, data files, tables and associated documentation developed under the Contract are the property of the Federal Government and shall be delivered by the Contractor, as mutually agreed upon with the NHTSA COTR before the due date, in accordance with the following paragraphs. All computer programs and data bases developed without Federal funds, and used in performance of the Contract remain the property of the Contractor. If any programs or data bases are modified, however, and used in performance of the resultant Contract, title to the modified portion shall vest in the Government.

b. Computer Programs

For each computer program developed or modified under the Contract, the following items and/or information shall be provided:

- 1. A general or "overview" flowchart which references the <u>main</u> program and each called subprogram and operation of the system.
- 2. Detailed flowcharts for each section or subroutine of the system. These shall include reference to labels or addresses actually used in the program.
- 3. A brief narrative description of each flowchart.
- 4. A listing of all program source code. Sufficient comments to identify important

- procedures shall be included in the listing.
- 5. The source code itself on tape or disk, as appropriate.
- 6. Running instructions for the computer operator, including an explanation of all possible messages other than those provided by the computer manufacturer.
- 7. Running instructions for the user, including a full description of user "prompting" by the replies to the executive or command module in the case of a user-friendly program.

c. Data Bases

For data developed or modified under this contract, the following items and/or information shall be provided:

- 1. A copy of the data base.
- 2. Each data element (field) shall be defined as to format content, length, type of characters or numbers, and what must be present in the full case.
- 3. Each record and its format shall be defined completely, including all control symbols and fields.
- 4. Blocking shall be specified unambiguously.
- 5. Labels, sentinels, headers, tape marks and similar structures shall be specified.
- 6. Density, number of tracks, character codes and any special symbols shall be defined.

d. Printer Layouts and Logic Tables

Copies of the forms actually used shall be provided. These forms may be reproduced, if necessary, for clarity.

H.2 GOVERNMENT FURNISHED EQUIPMENT

The Contractor shall be furnished with Government Owned Equipment (GFE) under this Contract.

All test dummies shall be furnished by the Government. This includes, but is not limited to, the Hybrid III 5th percentile female, THOR with mode kit, and the Hybrid III 95th percentile male.

H.3. INFORMATION TECHNOLOGY (JUN 2009)

H.3.1 SECURITY AND PRIVACY PROTECTION

All deliverables and services rendered under this contract/agreement must comply with Federal and DOT security and privacy protection policies and requirements. DOT policies are available for viewing at http://communities.dot.gov/ia/iapolicies.htm. NHTSA reserves the right to monitor network activity apart from and independent of the services under the SOW and may require access and rights to install and operate Government-furnished monitoring equipment at any contractor location operating NHTSA equipment or with access to NHTSA systems.

H.3.2 ACQUISITION OF INFORMATION TECHNOLOGY

Any acquisition of information technology in support of this contract/agreement, including but not limited to hardware, software, and telecommunications, must be reviewed and approved by the Office of the Chief Information Officer prior to the acquisition. NHTSA reserves the right to

require that existing Federal or Federally-acquired resources be utilized in lieu of a proposed IT acquisition.

H.3.3 IPv6 COMPLIANCE

Any IT solution, including but not limited to hardware, software, firmware, and telecommunications, proposed to meet the requirements must support both IPv4 and IPv6, in accordance with the October 2005 DOT memorandum, "DOT's Transition Planning for Internet Protocol Version 6" and OMB Memorandum M-05-22, "Transition Planning for Internet Protocol Version 6 (IPv6)," dated August 2, 2005.

H.3.4 PROTECTION OF INFORMATION

Any IT solution, including but not limited to hardware, software, firmware, and telecommunications, and all IT services proposed to meet the requirements must comply with the requirements of OMB Memorandum M-06-16, "Protection of Sensitive Agency Information" and "DOT Information Technology and Information Assurance Policy Number 2006-22: Implementation of DOT's Protection of Personally Identifiable Information (PII)."

H.3.5 FDCC COMPLIANCE

Any IT solution, including but not limited to hardware, software, firmware, and telecommunications, proposed to meet the requirements must be accessible and usable from desktops compliant with OMB Memorandum M-07-11, "Implementation of Commonly Accepted Security Configurations for Windows Operating Systems" (Federal Desktop Core Configuration – FDCC).

H.3.6 HSPD-12 COMPLIANCE

Any IT solution, including but not limited to hardware, software, firmware, and telecommunications, proposed to meet the requirements must be compliant with Homeland Security Presidential Directive/HSPD-12, "Policy for a Common Identification Standard for Federal Employees and Contractors," OMB Memorandum M-05-24, "Implementation of Homeland Security Presidential Directive 12," OMB Memorandum M-06-18, "Acquisition of Products and Services for Implementation of HSPD-12," and the HSPD-12 implementation at the Department of Transportation.

H.4 ETHICS AND STANDARDS OF CONDUCT (JUN 2009)

H.4.1 Disclosure of Conflicts of Interest

- **a.** It is the National Highway Traffic Safety Administration's (NHTSA) policy not to award contracts to offerors whose objectivity may be impaired because of any related past, present or currently planned interest, financial or otherwise, in organizations regulated by NHTSA or in organizations whose interests may be substantially affected by NHTSA activities. Based on this policy:
- b. The offeror shall provide a statement in its technical proposal which describes in a concise manner all past, present or currently planned organizational, financial, contractual or other interest(s) with an organization regulated by NHTSA or with an organization whose interests may be substantially affected by NHTSA activities, and which is related to the work under the request. The interest(s) described shall include those of the offeror, its affiliates,

proposed consultants, proposed subcontractors and key personnel of any of the above. Past interest shall be limited to within one year of the date of the offeror's technical proposal. Affected organizations shall include, but are not limited to, the insurance industry. Key personnel shall include any person owning more than a 20% interest in the offering firm, and the offeror's corporate officers, its senior managers and any employee who is responsible for making a decision or taking an action on this contract where the decision or action can have an economic or other impact on the interests of a regulated or affected organization.

- c. The offeror shall describe in detail why it believes, in light of the interest(s) identified in (a) above, that performance of the proposed contract can be accomplished in an impartial and objective manner.
- d. In the absence of any relevant interest identified in (a) above, the offeror shall submit in its technical proposal a statement certifying that to its best knowledge and belief, no affiliation exists relevant to possible conflicts of interest. The offeror must obtain the same information from potential subcontractors prior to award of a subcontract.
- e. The Contracting Officer will review the statement submitted and may require additional relevant information from the offeror. All such information and any other relevant information known to NHTSA will be used to determine whether an award to the offeror may create a conflict of interest. If such conflict of interest is found to exist, the Contracting Officer may (a) disqualify the offeror, or (b) determine that it is otherwise in the best interest of the United States to contract with the offeror and include appropriate provisions to mitigate or avoid such conflict in the contract awarded.
- f. The refusal to provide the disclosure or representation, or any additional information as required may result in disqualification of the offeror for award. If nondisclosure or misrepresentation is discovered after award, the resulting contract may be terminated. If after award, the Contractor discovers a conflict of interest; an immediate and full disclosure shall be made in writing to the Contracting Officer. The disclosure shall include a description of the action which the Contractor has taken or proposes to take, to avoid or mitigate such conflict. The Contracting Officer may, however, determine that it is necessary to terminate the contract.

H.4.2 Access to Sensitive Information

Work under this contract may involve access to sensitive information* which shall not be disclosed by the contractor unless authorized by the contracting officer. To protect sensitive information, the contractor shall provide training to any contractor employee authorized access to sensitive information and, upon request of the Government, provide information as to an individual's suitability to have such authorization. Contractor employees found by the Government to be un-suitable or whose employment is deemed contrary to the public interest or inconsistent with the best interest of national security, may be prevented from performing work under the particular contract when requested by the contracting officer.

The contractor shall ensure that contractor employees are citizens of the United States of America or an alien who has been lawfully admitted for permanent residence or employment (indicated by immigration status) as evidenced by investigations in accordance with DOT Order 1632.20, Personnel Security Management. The contractor shall include the above requirements

in any subcontract awarded involving access to Government facilities, sensitive information, and/or resources.

*Sensitive Information is proprietary data or other information that, if subject to unauthorized access, modification, loss or misuse could adversely affect national interest, conduct of Federal programs, or privacy of individuals specified in the Privacy Act, but has not been specifically authorized to be kept secret in the interest of national defense or foreign policy under an Executive Order or Act of Congress.

H.4.3 Contractor Identification

All contractor personnel using DOT information technology and communications systems (including the DOT email system), attending internal or external meetings, answering Government telephones, and working in other situations where their contractor status is not obvious to third parties are required to identify themselves as such to avoid creating an impression in the minds of Government employees, other contractor personnel or members of the public that they are Government officials, unless, in the judgment of the agency, no harm can come from failing to identify themselves. Among other things, contractor personnel must include the following signature block in all email communications, internal or external, and in all internal written documents.

Contractor Employee Name Contractor Employee Title Name of Contractor Include the following statement "On assignment to NHTSA."

For example: John Doe

Project Manager

ABC, Inc.

On assignment at NHTSA

Contractor employees also must ensure that all documents or reports produced by contractors are suitably marked as contractor products or that contractor participation is appropriately disclosed.

Under no circumstances shall contractor personnel sign letters or make other external communications on NHTSA letterhead, nor shall contractor personnel use the NHTSA or DOT logos or seals in letterhead, business cards, correspondence, emails, reports, documents or other communications.

H.5 SLED BUCK/RESTRAINT SYSTEMS/DATA OWNERSHIP

The Government will retain ownership of the final report under this contract. The contractor will retain ownership of the models generated, sled buck, test data, videos, photos and any restraint system added to the sled buck.

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1. 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

The contract incorporates the following clauses (as indicated by an "X") by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make the full text available. Also, the full text of a clause may be accessed electronically at this/these address (es): http://www.arnet.gov/far.

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

NOTE: Those clauses marked with an "X" are hereby incorporated by reference.

Applicable "X"	FAR Clause Number	FAR Clause Title (Thru FAC 2005-58)	
X	52.202-1	Definitions (JAN 2012)	
X	52.203-3	Gratuities (APR 1984)	
X	52.203-5	Covenant Against Contingent Fees (SEPT 2006)	
X	52.203-6	Restrictions on Subcontractor Sales to the Government (SEP 2006)	
X	52.203-7	Anti-Kickback Procedures (OCT 2010)	
X	52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (JAN 1997)	
X	52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (JAN 1997)	
X	52.203-12	Limitation on Payments to Influence Certain Federal Transactions (OCT 2010)	
X	52.204-4	Printed or Copied Double-Sided on Recycled Paper (MAY 2011)	
X	52.204-7	Central Contractor Registration (FEB 2012)	
X	52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards (FEB 2012)	
X	52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (DEC 2010)	
X	52.209-10	Prohibition on Contracting with Inverted Domestic Corporations (MAY 2012)	

Applicable "X"	FAR Clause Number	FAR Clause Title (Thru FAC 2005-58)	
X	52.215-2	Audit and Records—Negotiation (OCT2010)	
X	52.215-8	Order of Precedence—Uniform Contract Format (OCT 1997)	
X	52.215-12	Subcontractor Cost or Pricing Data (OCT 2010)	
X	52.215-14	Integrity of Unit Prices (OCT 2010)	
X	52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing- Modifications (OCT 2010)	
X	52.216-7	Allowable Cost and Payment (JUN 2011)	
X	52.216-12	Cost Sharing Contract No Fee (APR 1984)	
X	52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 2011)	
X	52.219-8	Utilization of Small Business Concerns (JAN 2011)	
X	52.219-9	Small Business Subcontracting Plan (JAN 2011)	
X	52.219-16	Liquidated Damages—Subcontracting Plan (JAN 1999)	
X	52.222-2	Payment for Overtime Premiums (JUL 1990)	
X	52.222-3	Convict Labor (JUN 2003)	
X	52.222-21	Prohibition of Segregated Facilities (FEB 1999)	
X	52.222-22	Previous Contracts and Compliance Reports (FEB 1999)	
X	52.222-26	Equal Opportunity (MAR 2007)	
X	52.222-35	Equal Opportunity for Veterans (SEP 2010)	
X	52.222-36	Affirmative Action for Workers with Disabilities (OCT 2010)	
X	52.222-37	Employment Reports on Veterans (SEP 2010)	
X	52.222-40	Notification of Employee Rights Under the National Labor Relations Act (DEC 2010)	
X	52.222-50	Combating Trafficking in Persons (FEB 2009)	
X	52.222-54	Employment Eligibility Verification (JAN 2009)	
X	52.223-6	Drug-Free Workplace (MAY 2001)	
X	52.225-5	Trade Agreements (MAR 2012)	
X	52.225-13	Restrictions on Certain Foreign Purchases (JUN 2008)	

Applicable "X"	FAR Clause Number	FAR Clause Title (Thru FAC 2005-58)	
X	52.225-25	Prohibition on Engaging in Sanctioned Activities Relating to Iran-Certification (NOV 2011)	
X	52.227-1	Authorization and Consent (DEC 2007)	
X	52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement (DEC 2007)	
X	52.227-14	Rights in Data—General (DEC 2007)	
X	52.232-9	Limitation on Withholding Payments (APR 1984)	
X	52.232-17	Interest (OCT 2010)	
X	52.232-22	Limitation of Funds (APR 1984)	
X	52.232-23	Assignment of Claims (JAN 1986)	
X	52.232-25	Prompt Payment (OCT 2008)	
X	52.232-33	Payment by Electronic Funds Transfer – Central Contractor Registration (OCT 2003)	
X	52.233-1	Disputes (JULY 2002) X Alternate I (DEC 1991)	
X	52.233-3	Protest After Award (AUG 1996) X Alternate I (JUN 1985)	
X	52.233-4	Applicable Law for Breach of Contract Claim (OCT 2004)	
X	52.237-3	Continuity of Services (JAN 1991)	
X	52.242-1	Notice of Intent to Disallow Costs (APR 1984)	
X	52.242-3	Penalties for Unallowable Costs (MAY 2001)	
X	52.242-13	Bankruptcy (JUL 1995)	
X	52.243-2	Changes—Cost Reimbursement (AUG 1987)	
X	52.244-2	Subcontracts (OCT 2010) Alternate I (JUN 2007)	
X	52.244-5	Competition in Subcontracting (DEC 1996)	
X	52.244-6	Subcontracts for Commercial Items (DEC 2010)	
X	52.245-1	Government Property (APR 2012)	
X	52.246-23	Limitation of Liability (FEB 1997)	
X	52.246-25	Limitation of Liability—Services (FEB 1997)	

Applicable "X"	FAR Clause Number	FAR Clause Title (Thru FAC 2005-58)	
X	52.248-1	Value Engineering (OCT 2010)	
X	52-249-6	Termination (Cost-Reimbursement) (May 2004)	
X	52.249-14	Excusable delays (APR 1984)	

1.2. DEPARTMENT OF TRANSPORTATION (DOT) CLAUSES INCORPORATED BY REFERENCE

The resultant contract incorporates the following Transportation Acquisition Regulation clauses (TAR) by reference (as indicated by an "X"), with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make the full text available.

Applicable "X"	TAR Clause Number	TAR Clause Title (Thru APR 2009)
X	1252.223-73	Seat Belt Use Policies and Programs (APR 2005)
X	1252.237.70	Qualifications of Contractor Personnel (APR 2005)
X	1252.242-71	Contractor Testimony (OCT 1994)
X	1252.242-72	Dissemination of Contract Information (OCT 1994)
X	1252.245-70	Government Property Reports (OCT 1994)

1.3 FEDERAL ACQUISITION REGULATION (FAR) CLAUSES PROVIDED IN FULL TEXT

This Contract incorporate the following Federal Acquisition Regulation Clauses provided in full text.

I.3.1 52.204-1 Approval of Contract (DEC 1989)

This contract is subject to the written approval of the Director, National Highway Traffic Safety Administration, Office of Acquisition Management and shall not be binding until so approved. (End of clause)

I.3.2 52.223-18 Contractor Policy to Ban Text Messaging While Driving (Aug 2011)

- (a) Definitions. As used in this clause
- -- "Driving"—
- (1) Means operating a motor vehicle on an active roadway with the motor running,

- including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.
- (2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

"Text messaging" means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

- (b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging while driving, dated October 1, 2009.
- (c) The Contractor should—
- (1) Adopt and enforce policies that ban text messaging while driving—
- (i) Company-owned or -rented vehicles or Government-owned vehicles; or
- (ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.
- (2) Conduct initiatives in a manner commensurate with the size of the business, such as—
- (i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and
- (ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.
- (d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold.

END OF CLAUSE

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTCHMENTS

Attachment

<u>Title</u>

Number of Pages

PART IV - REPRESENTATIONS AND INSTUCTIONS

SECTION K -- REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF BIDDERS

K.1. 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (MAY 2012)

- (a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 541330.
 - (2) The small business size standard is **\$4.5 Million**.
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b)(1) If the clause at <u>52.204-7</u>, Central Contractor Registration, is included in this solicitation, paragraph (d) of this provision applies.
- (2) If the clause at <u>52.204-7</u> is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:
 - [] (i) Paragraph (d) applies.
- [] (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.
- (c)(1) The following representations or certifications in ORCA are applicable to this solicitation as indicated:
- (i) <u>52.203-2</u>, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—
 - (A) The acquisition is to be made under the simplified acquisition procedures in Part 13;
- (B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or
 - (C) The solicitation is for utility services for which rates are set by law or regulation.
- (ii) <u>52.203-11</u>, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.
- (iii) $\underline{52.204-3}$, Taxpayer Identification. This provision applies to solicitations that do not include the clause at $\underline{52.204-7}$, Central Contractor Registration.
- (iv) <u>52.204-5</u>, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—
 - (A) Are not set aside for small business concerns;
 - (B) Exceed the simplified acquisition threshold; and
 - (C) Are for contracts that will be performed in the United States or its outlying areas.

- (v) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations—Representation. This provision applies to solicitations using funds appropriated in fiscal years 2008, 2009, or 2010.
- (vi) <u>52.209-5</u>, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.
- (vii) <u>52.214-14</u>, Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.
- (viii) <u>52.215-6</u>, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.
- (ix) <u>52.219-1</u>, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.
- (A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.
- (B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.
- (x) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.
- (xi) <u>52.222-22</u>, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at <u>52.222-26</u>, Equal Opportunity.
- (xii) <u>52.222-25</u>, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at <u>52.222-26</u>, Equal Opportunity.
- (xiii) <u>52.222-38</u>, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.
- (xiv) <u>52.223-1</u>, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA–designated items; or include the clause at <u>52.223-2</u>, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.
- (xv) <u>52.223-4</u>, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA-designated items.
- (xvi) $\underline{52.225-2}$, Buy American Act Certificate. This provision applies to solicitations containing the clause at $\underline{52.225-1}$.
- (xvii) <u>52.225-4</u>, Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternate I, and Alternate II) This provision applies to solicitations containing the clause at 52.225-3.
 - (A) If the acquisition value is less than \$25,000, the basic provision applies.
- (B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.
- (C) If the acquisition value is \$50,000 or more but is less than \$77,494, the provision with its Alternate II applies.
- (xviii) <u>52.225-6</u>, Trade Agreements Certificate. This provision applies to solicitations containing the clause at <u>52.225-5</u>.

- (xix) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan—Certification. This provision applies to all solicitations.
- (xx) 52.225-25, Prohibition on Contracting with Entities Engaging in Sanctioned Activities Relating to Iran—Representation and Certification. This provision applies to all solicitations.
- (xxi) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to—
- (A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and
- (B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.
 - (2) The following certifications are applicable as indicated by the Contracting Officer:

the contracting officer.
[Contracting Officer check as appropriate.]
(i) 52.219-22, Small Disadvantaged Business Status.
(A) Basic.
(B) Alternate I.
(ii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.
(iii) 52.222-48, Exemption from Application of the Service Contract Act to Contracts for
Maintenance, Calibration, or Repair of Certain Equipment Certification.
(iv) 52.222-52, Exemption from Application of the Service Contract Act to Contracts for Certain
Services-Certification.
(v) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for
EPA-Designated Products (Alternate I only).
(vi) <u>52.227-6</u> , Royalty Information.
(A) Basic.
(B) Alternate I.
(vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.
(d) The offerer has completed the applied representations and contifications above in the contract of the cont

(d) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website accessed through https://www.acquisition.gov. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR CLAUSE#	TITLE	DATE	CHANGE

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of provision)

K.2. 52.230-1 COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION (MAY 2012)

Note: This notice does not apply to small businesses or foreign governments. This notice is in three parts, identified by Roman numerals I through III.

Offerors shall examine each part and provide the requested information in order to determine Cost Accounting Standards (CAS) requirements applicable to any resultant contract.

If the offeror is an educational institution, Part II does not apply unless the contemplated contract will be subject to full or modified CAS coverage pursuant to 48 CFR 9903.201-2(c)(5) or 9903.201-2(c)(6), respectively.

I. DISCLOSURE STATEMENT—COST ACCOUNTING PRACTICES AND CERTIFICATION

- (a) Any contract in excess of \$700,000 resulting from this solicitation will be subject to the requirements of the Cost Accounting Standards Board (48 CFR Chapter 99), except for those contracts which are exempt as specified in 48 CFR 9903.201-1.
- (b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of 48 CFR Chapter 99 must, as a condition of contracting, submit a Disclosure Statement as required by 48 CFR 9903.202. When required, the Disclosure Statement must be submitted as a part of the offeror's proposal under this solicitation unless the offeror has already submitted a Disclosure Statement disclosing the practices used in connection with the pricing of this proposal. If an applicable Disclosure Statement has already been submitted, the offeror may satisfy the requirement for submission by providing the information requested in paragraph (c) of Part I of this provision.

Caution: In the absence of specific regulations or agreement, a practice disclosed in a Disclosure Statement shall not, by virtue of such disclosure, be deemed to be a proper, approved, or agreed-to practice for pricing proposals or accumulating and reporting contract performance cost data.

(c) Check the appropriate box below:

- [] (1) Certificate of Concurrent Submission of Disclosure Statement. The offeror hereby certifies that, as a part of the offer, copies of the Disclosure Statement have been submitted as follows:
- (i) Original and one copy to the cognizant Administrative Contracting Officer (ACO) or cognizant Federal agency official authorized to act in that capacity (Federal official), as applicable; and
 - (ii) One copy to the cognizant Federal auditor.

from the cognizant ACO or Federal official and/or from the loose-leaf version of the Federal Acquisition Regulation.)
Date of Disclosure Statement:
Name and Address of Cognizant ACO or Federal Official Where Filed:
The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement.
[] (2) Certificate of Previously Submitted Disclosure Statement. The offeror hereby certifies that the required Disclosure Statement was filed as follows:
Date of Disclosure Statement:
Name and Address of Cognizant ACO or Federal Official Where Filed:
The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the applicable Disclosure Statement. [] (3) Certificate of Monetary Exemption. The offeror hereby certifies that the offeror, together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated prime contracts and subcontracts subject to CAS totaling \$50 million or more in the cost accounting period immediately preceding the period in which this proposal was submitted. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.
[] (4) Certificate of Interim Exemption. The offeror hereby certifies that (i) the offeror first exceeded

(Disclosure must be on Form No. CASB DS-1 or CASB DS-2, as applicable. Forms may be obtained

the monetary exemption for disclosure, as defined in (3) of this subsection, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 48 CFR 9903.202-1, the offeror is not yet required to submit a Disclosure Statement. The offeror further certifies that if an award resulting from this proposal has not been made within 90 days after the end of that period, the offeror will immediately submit a revised certificate to the Contracting Officer, in the form specified under paragraph (c)(1) or (c)(2) of Part I of this provision, as appropriate, to verify submission of a completed Disclosure Statement.

Caution: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of \$50 million or more in the current cost accounting period may not claim this exemption (4). Further, the exemption applies only in connection with proposals submitted before expiration of the 90-day period following the cost accounting period in which the monetary exemption was exceeded.

II. COST ACCOUNTING STANDARDS—ELIGIBILITY FOR MODIFIED CONTRACT COVERAGE

If the offeror is eligible to use the modified provisions of 48 CFR 9903.201-2(b) and elects to do so, the offeror shall indicate by checking the box below. Checking the box below shall mean that the resultant contract is subject to the Disclosure and Consistency of Cost Accounting Practices clause in lieu of the Cost Accounting Standards clause.

o The offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 48 CFR 9903.201-2(b) and certifies that the offeror is eligible for use of the Disclosure and Consistency of Cost Accounting Practices clause because during the cost accounting period immediately preceding the period in which this proposal was submitted, the offeror received less than \$50 million in awards of CAS-covered prime contracts and subcontracts. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

Caution: An offeror may not claim the above eligibility for modified contract coverage if this proposal is expected to result in the award of a CAS-covered contract of \$50 million or more or if, during its current cost accounting period, the offeror has been awarded a single CAS-covered prime contract or subcontract of \$50 million or more.

III. ADDITIONAL COST ACCOUNTING STANDARDS APPLICABLE TO EXISTING CONTRACTS

The offeror shall indicate below whether award of the contemplated contract would, in accordance with paragraph (a)(3) of the Cost Accounting Standards clause, require a change in established cost accounting practices affecting existing contracts and subcontracts.

[] Yes	[] No
(End of pr	ovision)

K.3 TECHNICAL DATA CERTIFICATION

f 1 Mana

The offeror certifies	that any technical d	ata provided in it	s offeror has no	ot also been	delivered, o	or is
obligated to deliver to the	Government under	another contract	or subcontract	except as s	set forth belo	ow:

[] Contract No. (and Subcontract No., if applicable):
Agency Name and Place of Delivery:

PART IV - REPRESENTATIONS AND INSTRUCTIONS

SECTION L - INSTRUCTIONS CONDITIONS AND NOTICES TO BIDDERS

L.1 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make the full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es): www.arnet.gov/far

NOTE: Those clauses marked with an "X" are hereby incorporated by reference.

[X] 52.215-16

Facilities Capital Cost of Money (JUN 2003)

L.2 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Cost Reimbursement, Cost-sharing contract from this Solicitation.

L.3 52.233-2 SERVICE OF PROTEST (SEPT 2006)

a. Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Ross S. Jeffries
Director, Office of Acquisition Management
Department of Transportation/NHTSA/NPO-320
Office of Acquisition Management
1200 New Jersey Avenue, SE, W51-306
Washington, DC 20590

b. The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

L.4 SPECIAL NOTICES

Questions to this solicitation must be submitted in writing via e-mail to Mr. Ross Jeffries at nhtsaoam@dot.gov, no later than 2:00pm, 6, July, 2012. Please ensure your subject line includes the following: "RFP Number DTNH22-12-R-00534; Attention Mr. Ross Jeffries. Questions and answers

- will be available on website <u>www.fedbizopps.gov</u>, entitled: "Questions and Answers", by no later than 3:00pm, **13**, **July**, **2012**. No inquiries by telephone, please.
- 2. Offerors shall acknowledge receipt of amendments, if any, to the Solicitation. Accordingly, offerors should pay attention to Block 14, Acknowledgement of Amendments, of Standard Form 33, Offer and Award, for guidance in complying with this requirement.

L.5 DEMONSTRATION TESTS

The Government may require the offeror to conduct a demonstration test at the offeror's expense using the same facilities, techniques and personnel that the offeror will use in the performance of the contract. The offeror shall perform the demonstration test and provide all test equipment and test items, at no cost to the Government. The offeror's test facility shall be fully operational with all necessary equipment, at the time of offer submission, in order to conduct a demonstration test.

L.6 GENERAL INFORMATION

1. Small Business Set-Aside

- (1) This requirement [__] is [X] not a 100 percent small business set-aside.
- (2) For the purpose of this solicitation, the small business size standard is \$4.5 Million. (3) The North American Industry Classification System (NAICS) is 541330.

2. Award Notice

No communication by the Government, either written or oral, prior to award, shall be interpreted as a promise that an award will be made.

3. Incurrence of Costs

Until a formal notice of award is issued, no communication by the Government either written or oral shall be interpreted as a promise that an award will be made.

The NHTSA Contracting Officer is the only individual who can legally commit or obligate the Government to the expenditure of public funds. No costs chargeable to the proposed contract can be incurred before the contract is awarded or specific written authorization from the NHTSA Contracting Officer is provided.

L.6 TECHNICAL PROPOSAL

- a. The Technical Proposal shall be limited to no more than 25 pages and included on 5 CDs. Technical Proposal are to be submitted in PDF, Microsoft Word, EXCEL or a combination of these formats.
- **b.** The Offeror must submit the following documents in hardcopy format: One (1) originally signed copy of the Standard Form 33; One (1) completed copy (with original signature) of this solicitation's Section K "Representations, Certifications, and other statements of Offerors.
- **c.** Waiver of Price Evaluation Adjustments/Preferences If, in Section K, (FAR provision 52.219-1), the Offeror has represented itself as a HUBZone Small Business Concern or a joint venture that complies with the requirements of 13 CFR part 126 and the Offeror elects to waive the evaluation

adjustment provided by this RFP's FAR 52.219-4, the Offeror must indicate so in its Business Management Proposal.

- **d.** One (1) disclosure of conflict of interest statement submitted in accordance with Section H.
- **e.** Pre-Award Survey The Government reserves the right to conduct a pre-award survey or to require other evidence of technical, managerial, financial, and similar abilities to perform the work described in this solicitation prior to the award of a contract.
- f. All documents must be received at the address identified on this RFP's SF-33 block 7 and 8 by the time and date prescribed. The Offeror is solely responsible for the timely submission of the proposal materials discussed in this RFP. All proposals are due to Mr. Ross Jeffries, Contracting Officer, no later than 3:00 P.M. ET 19, July, 2012. Since it is the sole responsibility of the Offeror to submit timely proposals, it is suggested that a delivery method, other than USPS, be used. Submit paper proposals to the address listed below:

Department of Transportation National Highway Traffic Safety Administration Office of Acquisition Management (NPO-320) Attn: Ross Jeffries, Contracting Officer 1200 New Jersey Avenue, SE, W51-306 Washington, DC 20590

L.8 TABLE OF CONTENTS

Offerors shall identify the authors of their proposals and specify those sections for which the writers had major responsibility. The technical proposal shall consist of the following major sections: (a) Table of Contents, (b) Technical Plan; (c) Facilities and Equipment; and (d) Experience and Past Performance

(a) Table of Contents

The Table of Contents shall provide the reader a means to easily identify major points of discussion. Further, the Offeror shall not deviate from any major headings indicated in this section. Reference material found in properly identified appendices, figures, charts, photographs or schematics will be considered.

(b) Technical Plan (See M.3.1)

The offeror shall provide a technical plan that describes how it intends to meet contract requirements. This includes how the offeror plans to identify, design, optimize, fabricate, and demonstrate an adaptive restraint protection system that allows for the testing required to contract requirements. The demonstration should include a range of occupant sizes or conditions to emphasize the adaptability of the restraint system in multiple frontal high speed crash pulses. The plan should explain how to establish the baseline performance of non-adaptable systems and also explain how to achieve occupant safety improvements using occupant sensing and adaptive restraints.

As part of its technical plan, the contractor shall:

- 1. Explain the proposed technologies of the adaptive restraint system and how each technology will be used to sense and adapt to occupant position during a crash, adapt to the size and the weight of the occupant, adapt to vulnerable occupants, or adapt to the severity of the crash.
- 2. Explain how each proposed technology will be integrated into one unit to evaluate safety performance of the adaptive restraint system and how the unit will be used to sense and adapt to occupant position during the crash, adapt to the size and the weight of the occupant, adapt to vulnerable occupants, or adapt to the severity of the crash.
- 3. Explain the proposed methodology to evaluate the performance of the out-of-position technology compared to the baseline technology and how many positions and tests will be needed to evaluate the out-of-position performance.
- 4. Explain the procedures used to design, optimize, and build an adaptive restraint system.

(c) Facilities and Equipment (see M.3.2)

At the time of proposal submission, offerors shall have all of the facilities, equipment and test devices necessary to perform the work

The Offeror shall provide information about its laboratory facility and equipment, including a description of the equipment and its current condition (e.g., new or used). Testing facility should be functional at the proposed start of this contract. The offeror's access to the following equipment should be described in this section.

- Validated model(s) of a compact vehicle (please describe if vehicle is available for use to meet contract requirements).
- Dummy configuration and performance verification lab with storage facilities in conditioned environment
- Photographic capabilities
- Temperature/humidity-controlled preparation area
- Test data acquisition, reduction, and processing equipment
- Sled testing equipment
- Data acquisition system(s) with capability to record at least 120 channels of data for minimum test duration of 300 ms according to the specifications of SAE J211/MAR95.
- Provide data plot(s) that show 300 ms of data from time zero for an actual test.
- Describe procedures used to eliminate electromagnetic interference and static charge control.
- High speed digital video cameras capable of recording at 1000 frames per second.
- Provide a collective photograph of the high-speed digital video cameras. Provide a CD with test
 videos from a recent barrier crash test. The digital videos must be lighted and in focus such that the
 kinematics of the dummies in the vehicle can be seen and evaluated. It must also demonstrate the
 capability to record at 1000 frames per second.
- Dummy calibration equipment for Part 572, Subpart E, N, O, P, and R dummies. Must show all certified calibration fixtures in support of the frontal test and for associated dummies specified in the solicitation. Additional information for this requirement can be found in the test procedure.
- Facilities to fabricate adaptive restraint components

(d) Experience and Past Performance (see M.3.3)

The offeror shall provide a list of recent projects completed that were similar to the effort described in this solicitation. The information should focus on the offeror's last three restraint programs, in particular any involving automobile manufacturers, providing a narrative description of the experience and including a brief description of the objectives, tasks, and key deliverables for the programs.

The information also shall include the required start and completion dates compared to the actual start and completion dates for the last three restraint programs. Documents that show the actual schedule requirements should be provided. A description of past scheduling problems and how they were remedied should be included. Please also include the causes for the problems and actions taken to prevent them from reoccurring in future test programs. The offeror also shall include a copy of the latest final report written for a testing contract effort.

The offeror also shall provide at least three (3) references that have received services from the offeror, which are comparable to those described in this solicitation. References should include: (1) name of agency or organization receiving the service; (2) name of reference's point of contact, phone number, and e-mail address; (3) dates services were provided; (4) applicable contract number; (5) title, and (6) brief description of services provided.

Offerors also shall provide information regarding any contracts that were terminated for default or convenience of the Government within the past three years. The offeror shall provide explanations of the circumstances in each case.

L.9 BUSINESS MANAGEMENT PROPOSAL

I. Cost Proposal General Information

In submitting cost proposals, offerors shall provide a detailed itemization of all costs associated with each Task specified under Section C.3 "Specific Requirements." In doing so, the offeror shall provide the following information

- a) A statement as to whether the accounting system of the Offeror and any proposed Teaming Partners is currently deemed adequate by the Defense Contract Audit Agency (DCAA) for determining costs applicable to a "Cost Reimbursement" contract.
- b) An explanation by Offerors of their labor and burden estimating practices (e.g., how individual rates are established; what makes up the overhead and burden; whether average rates per labor category are utilized; how standard costs/rates, with variances or another generally accepted method, are established; and any deviations from standard estimating system practices existing in the proposal).
- c) Anticipated other direct costs.
- d) The average labor and burden rate increases/decreases of Offerors for each of the last three (3) fiscal years (along with supporting rationale for the increase/decrease).

- e) Prime and Subcontractor Agreements. Offerors who intend to use teaming agreements in performance of this contract shall provide a copy of the agreement. If proposing a joint venture, Offerors shall provide a copy of the joint venture plan/agreement.
- f) Business System Information
 - i. Name and location of the company and all its divisions, highlighting the division(s) expected to perform the effort.
 - ii. Other pertinent information on financial resources available to the company.
 - iii. Approval of Business System. The Government desires that the successful Offeror have business systems that are currently approved without conditions.
 - a. Offerors **shall** state whether all of the Offeror's systems requiring Government approval, such as purchasing, estimating, and property administration, are currently approved without condition.
 - b. If not, Offerors **shall** explain, for each system that has not been approved or has received conditional approval:
 - Why the system is not approved or unconditionally approved.
 - What actions the Offeror has taken to obtain approval.
 - The status of the approval; and,
 - The estimated time frame in which the Offeror expects to receive approval.
- g) Cost proposals shall be fully supported by data adequate to establish the reasonableness of the proposed amount. Offerors shall furnish a cost breakdown with supporting data, including a breakdown of direct labor cost estimates by major functional areas, including number of hours and applicable actual hourly rates. The cost proposal shall represent the Offeror's best estimate to meet all work requirements described in the Statement of Work Section C.
- h) The cost/price proposal shall be consistent with and support the other sections of the proposal. All commitments in the technical proposal that affect the Offeror's cost proposal shall be discussed and quantified in the cost proposal.

II. Direct Labor Rates

Offerors shall propose a direct labor rate for each labor category proposed by the Offeror. The direct labor rate shall include the estimate of rates required to attract and retain qualified personnel under the proposed award. The proposal shall include:

- a) The data upon which the judgment or estimate was made (e.g., company payroll records, salary survey).
- b) A list of the Offeror's skill categories, and a description of the skill requirements for each.
- c) The rates or, if applicable, the rate ranges of the skill categories.

III. Fringe Benefits

Provide fringe benefit rate information and supporting documentation.

IV. Overhead and General and Administration (G&A)

Offerors shall explain the basis for any corporate labor overhead and general administrative (G&A) charges anticipated. Offerors shall provide detailed background data identifying the cost elements included in the overhead, G&A, or indirect pool, and a statement that such treatment is in accordance with the Offeror's established accounting practice and represents equitable distribution.

V. Cost Sharing

The offeror shall propose at least 20% of cost sharing in support of this contract. The offeror shall indicate how this cost-sharing arrangement will be effected (e.g. reduction in indirect cost rates, contribution of direct labor, etc.)

VI. Requirement for submission of Small Business Subcontracting Plan with initial offer.

Note: The Contracting Officer has determined that sub-contracting opportunities exist for this procurement. Accordingly, this provision and its associated FAR Clauses 52.219-9 Small Business Subcontracting Plan and 52.219-16 Liquidated Damages—Subcontracting Plan apply.

NHTSA advocates small business participation in all of its contracts. NHTSA's current small business goals (based upon total contract value) are as follows:

- Small Businesses 55%
- Small Disadvantaged Businesses 18%
- Woman Owned Businesses 14%
- Historically Underutilized Business Zones 3%
- Service Disabled Veteran Owned Business 3%

In developing its Small Business Plan, offerors shall consider the goals listed above and shall refer to the requirements prescribed in Part 19.704 "Subcontracting Plan Requirements" of the Federal Acquisition Regulation. The prospective successful offeror must submit an acceptable Small Business Subcontracting Plan prior to award of this contract. The plan shall be negotiated prior to contract award and will become part of the awarded contract. Failure to submit and negotiate, in good faith, an acceptable subcontracting plan will make the offeror ineligible for award.

PART IV - REPRESENTATIONS AND INSTRUCTIONS

SECTION M - EVALUATION FACTORS FOR AWARD

M.I. <u>EVALUATION, NEGOTIATIONS AND AWARD PROCESS:</u>

The evaluation process designed for this procurement will be of a two-phased nature.

a. PHASE ONE, Technical Merit— The offeror's technical proposal will be evaluated for technical merit according to the criteria set forth in M.2, EVALUATION FACTORS.

b. PHASE TWO, Evaluation of Cost Proposals-

- a. The Government will evaluate the offeror's proposed costs as set forth in M.3., COST EVALUATION. The review of the offeror's costs will be made independently of the technical review.
- b. Negotiations may be conducted with those offerors whose responsive and technically acceptable proposals, combined with their cost proposals, place them in the competitive range. Negotiations will be conducted to the extent deemed necessary by the Government. However, offerors are cautioned to submit proposals on the most favorable basis since the government reserves the right to make an award without discussion, in accordance with FAR 52.215-1, instructions to offerors-competitive acquisition.
- c. The Evaluation Factors set forth in M.2 will be used in evaluating technical proposals. Technical considerations are primary. Costs will not be accorded any specific numerical rating. If there are no significant technical proposal differences, cost may be the determining factor for source selection. An offeror whose cost is higher may be accepted if technical considerations make the offer most advantageous to the Government.
- d. Any contract resulting from this solicitation will be awarded to that responsible offeror whose offer, conforming to the solicitation, represents the best value to the government. Best value will take into account the evaluated technical proposal, amount of cost sharing, and the total cost of the project.

The Evaluation Factors when combined, are more important than cost. The factors appearing in Section M.2 are listed in descending order of importance (where the first factor is the most important and the third factor is the least.).

M.2 - EVALUATION FACTORS

- 1 Technical Plan
- 2 Facilities and Equipment
- 3 Experience and Past Performance

(a) TECHNICAL PLAN

The offeror will be evaluated on its understanding of the work required in this solicitation. This includes providing a sound technical plan that meets all contract requirements including the ability to provide results for all required testing. The offeror also will be evaluated on the technologies proposed for the adaptive restraint system, the reasonableness of its plan to integrate these technologies into one system, and its general approach to designing, building, and optimizing the proposed adaptive restraint system.

(b) FACILITIES AND EQUIPMENT

The offeror's proposal will be evaluated on its access to all facilities and equipment necessary to conduct restraint development under the contract. This includes an accurate description (where requested) and/or complete photographic evidence (where requested) of all facilities and equipment it intends to use. The descriptions and photographic evidence make it clear that the offeror has access to and is proposing to use state-of-the-art facilities and equipment for the testing program.

(c) EXPERIENCE AND PAST PERFORMANCE

The offeror will be evaluated on its ability to demonstrate one or more years of experience conducting work similar to that required in this solicitation. The offeror also will be evaluated on its performance under similar efforts, including whether it has a history of meeting schedule and deliverable deadlines. Specifically, schedules under other contracts were met as indicated by the actual and required start and completion dates; and if problems were noted, the offeror indicates an ability to find solutions and improve overall contract performance. The sample test report provided is of high quality and completeness. In addition, the offeror will be evaluated on whether it has received reports indicating a high level of satisfaction from its past clients.

An offeror that has no record of past performance will be evaluated only on experience for this factor. An offeror that has a record of past performance, and that record is poor, will received an overall rating of "technically unacceptable" for this evaluation factor

M.3 - COST EVALUATION

(a) GENERAL

The cost evaluation will include cost completeness and accuracy, cost realism, cost reasonableness, and total price to the Government.

(b) COST EVALUATION FACTORS

1. Cost Completeness and Accuracy

The Government will review the cost for completeness and accuracy. The Offeror's cost calculations will be verified.

2. Cost Realism

The Offeror is placed on notice that any proposal that is unrealistic in terms of technical commitment or unrealistically low in cost will be deemed reflective of an inherent lack of technical competence or indicative of failure to comprehend the complexity and risk of contract requirements, and may be grounds for rejection of the proposal.