

**EMERGENCY MEDICAL SERVICES (EMS)**

**SCHEDULE A**

**GRANT DESCRIPTION**

**GRANT NO. EM1603**

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**1. PROBLEM STATEMENT**

Victims trapped as a result of traffic collisions are predominantly critical medical patients that require immediate medical treatment. Their survival is significantly affected by the time necessary to extricate, stabilize and transport to the receiving Hospital Emergency Room. Of these steps, the time necessary to stabilize and transport the victim are constant, with the variable being extrication time. Extrication time is significantly impacted by emerging trends in the automotive industry. In order for auto manufacturers to meet new safety standards and exceed their competition, they incorporate High Strength Low Alloy (HSLA) and Ultra High Strength Steel (UHSS) in their automotive body construction.

These new construction materials have quickly exceeded the capabilities of aging auto extrication tools used by first responders. Current National Fire Protection Association Standards (NFPA) address the capabilities of auto extrication tools to ensure new automotive body construction does not defeat first responders attempting to cut, spread or dismantle a deformed vehicle from around a trapped victim.

In order for aging auto extrication equipment to defeat late model automotive body construction, first responders are forced to remove trapped victims where the HSLA and UHSS is not. First responders are also forced to dismantle more of the vehicle to gain access and safely remove trapped victims. These strategies increase the time necessary to remove trapped victims.

Additional problems are connected to the use of HSLA and UHSS. Due to the extended extrication times and additional dismantling, vehicle stabilization becomes increasingly more important. Vehicles involved in traffic collisions requiring victim extrication pose significant safety issues to both first responders and victims. As the vehicle is removed from around a victim, it becomes more and more unstable and requires first responders to install stabilization equipment to maintain a predictable and safe environment throughout the entire extrication.

Related equipment used to extricate trapped victims as a result of traffic collisions include Heavy Lift Air Bag Systems. Per manufacturer standards, these Heavy Lift Air Bag Systems expire after a 10 year service life. Currently the Chula Vista Fire Department maintains three sets of Heavy Lift Air Bag Systems, of which all are beyond their 10 year service life.

Equipment being requested will have a significant impact to our region. Currently the City of Chula Vista, City of San Diego, National City, City of Imperial Beach and the Bonita/Sunnyside Fire Protection District participate in an Automatic Aid Agreement. This provides a boarder-drop between all agencies for the closest appropriate equipment to respond to varying calls for service. This area is detailed in the attached American Community Survey (ACS) and Next Generation Incident Command System Map and covers over 100 square miles with a total population of 472,000. With the acquisition of NFPA compliant auto extrication equipment and stabilization equipment will provide first responders with the best possible capability to reduce extrication time.

From 2011 to 2013 the region described above extricated 141 trapped victims from traffic collisions. Over this three year period, the average extrication time was 48 minutes from when the first unit arrived until the patient was transported.

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**A. Traffic Data Summary:**

**Regional Traffic Collision Experience Over the Past Three Years:**

- **Data:** Using local data (not OTS Rankings or SWITRS), complete the tables below. Include all data for each **agency/location** that will receive equipment from this grant.

Collision Type	2012		2013		2014	
	Collisions	Victims	Collisions	Victims	Collisions	Victims
Fatal	N/A	N/A	N/A	N/A		
Injury	479	630	543	946		

- For each station requesting equipment, explain the following under Problem Description: whether the station is located in a rural or urban area (list the community or city), the type of collisions (high speed, curvy roadway, over the side), and any section of highway(s) involved. Also indicate whether the station currently has extrication equipment and the age of the equipment. If the station doesn't have equipment, indicate the nearest equipment and estimated time of arrival.

**Station Name and Number: Fire Station 3 (US&R 53)**

**Problem Description:**

Chula Vista Fire Station 3 houses US&R 53 (Urban Search & Rescue), which is a California Office of Emergency Service (CAL OES) Type I US&R/Heavy Rescue.

This area is an urban area of the City of Chula Vista with collisions ranging from high speed, curvy road and over the side. This station is approximately ½ mile from Interstate 805, three miles from State Route 905, four miles from State Route 125, five miles from Interstate 5 and five miles from State Route 54 for a total of 70 miles of highway within an approximate 12 minute response time.

US&R 53 is staffed with one captain, one engineer and two firefighters daily. It carries a full set of hydraulic extrication equipment that was purchased in 2002 (13 years old).

STATISTICS	2011	2012	2013
Total Number Of Responses (All Calls For Service)	1373	1381	1714
Total Number Of Traffic Collision Related Calls	201	224	150
Number Of Traffic Collision Victims Requiring Extrication In Region	28	26	20
Number Of Victims Where Mutual Aid Extrication Services Were Provided To Other Jurisdictions	7	11	8
Average Response Time For Appropriate Equipment (Receipt Of Call To Arrival At Collision Site)	9:21	8:13	7:32
Average Extrication Time (Arrival At Site To Transport)	56:12	48:04	54:03

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**Station Name and Number: Fire Station 1 (Truck 51)**

**Problem Description:**

Chula Vista Fire Station 1 houses Engine 51, Truck 51 and Battalion 51.

This area is an urban area of the City of Chula Vista with high speed and over the side collisions. This station is approximately one mile from Interstate 5, one mile from State Route 54, two miles from interstate 805, six miles from State Route 125 and six miles from State Route 905 for a total of 70 miles of highway within an approximate 15 minute response time.

Truck 51 is staffed with one captain, one engineer and two firefighters daily. It carries a full set of hydraulic extrication equipment that was purchased in 2002 (13 years old).

STATISTICS	2011	2012	2013
Total Number Of Responses (All Calls For Service)	1209	1174	1572
Total Number Of Traffic Collision Related Calls	156	142	96
Number Of Traffic Collision Victims Requiring Extrication In Region	16	6	14
Number Of Victims Where Mutual Aid Extrication Services Were Provided To Other Jurisdictions	13	1	0
Average Response Time For Appropriate Equipment (Receipt Of Call To Arrival At Collision Site)	8:05	6:30	6:15
Average Extrication Time (Arrival At Site To Transport)	38:17	27:27	46:09

**Station Name and Number: Fire Station 7 (Truck 57)**

**Problem Description:**

Chula Vista Fire Station 7 houses Engine 57, Truck 57 and Battalion 57.

This area is an urban area of the City of Chula Vista with collisions ranging from high speed, curvy road and over the side. This station is approximately one mile from State Route 125, three miles from Interstate 805, six miles from State Route 905, seven miles from State Route 54 and eight miles from Interstate 5 for a total of 70 miles of highway within an approximate 15 minute response time.

Truck 57 is staffed with one captain, one engineer and two firefighters daily. It carries a full set of hydraulic extrication equipment that was purchased in 2003 (12 years old).

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STATISTICS	2011	2012	2013
Total Number Of Responses (All Calls For Service)	372	387	437
Total Number Of Traffic Collision Related Calls	48	57	21
Number Of Traffic Collision Victims Requiring Extrication In Region	12	9	10
Number Of Victims Where Mutual Aid Extrication Services Were Provided To Other Jurisdictions	0	1	2
Average Response Time For Appropriate Equipment (Receipt Of Call To Arrival At Collision Site)	13:54	9:40	6:19
Average Extrication Time (Arrival At Site To Transport)	51:46	55:13	54:57

**2. PERFORMANCE MEASURES**

**A. Goals:**

- 1) To reduce the extrication time of persons trapped from traffic collisions.
- 2) To increase safety for first responders and persons trapped from traffic collisions.

**B. Objectives:**

- 1) To purchase and replace 3 fully equipped extrication systems at Fire Station 3, Fire Station 1 and Fire Station 7
- 2) To purchase and place 3 auto extrication stabilization systems at Fire Station 3, Fire Station 1 and Fire Station 7.
- 3) To purchase and replace 3 heavy lift air bag systems at Fire Station 3, Fire Station 1 and Fire Station 7.
- 4) To train 116 firefighters in the use of the new equipment.
- 5) To decrease the average extrication time of trapped victims from 48:00 minutes to 43:00 minutes.
- 6) To display the OTS funded equipment 10 days during Public Safety Fairs, community festivals and or other Department or community events.
- 7) In the event grant funded equipment is used to save a life, OTS will be notified of the facts involving the incident.

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**3. METHOD OF PROCEDURE**

**A. Phase 1 - Program Preparation, Training and Implementation (1<sup>st</sup> Quarter of Grant Year)**

- Determine specific equipment requirements.
- Request equipment vendor price quotation for the required equipment per host agency requirement.
- Submit purchase orders to equipment vendors for purchase of the equipment.
- Prepare and execute Memorandums of Understanding (MOU) with recipient agencies.

**Media Requirements**

- Issue a press release announcing the kick-off of the grant by November 15. The kick-off press releases and media advisories, alerts, and materials must be emailed to the OTS Public Information Officer at [pio@ots.ca.gov](mailto:pio@ots.ca.gov), and copied to your OTS Coordinator, for approval 14 days prior to the issuance date of the release.

**B. Phase 2 - Program Operations (Throughout Grant Year)**

- Inventory the new equipment following delivery.
- Disperse equipment to identified recipient agencies.
- Plan a media event announcing the grant funded equipment.
- Recipient agencies will identify training needs and objectives and coordinate instructional staff to conduct a high quality training program for their respective agency.
- Recipient agencies will develop a preventive maintenance schedule for the new equipment following manufacturers' recommendations.

**Media Requirements**

- Send all grant-related activity press releases, media advisories, alerts and general public materials to the OTS Public Information Officer (PIO) at [pio@ots.ca.gov](mailto:pio@ots.ca.gov), with a copy to your OTS Coordinator.
  - a) If an OTS template-based press release is used, the OTS PIO and Coordinator should be copied when the release is distributed to the press. If an OTS template is not used, or is substantially

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changed, a draft press release shall be sent to the OTS PIO for approval. Optimum lead time would be 10-20 days prior to the release date to ensure adequate turn-around time.

- b) Press releases reporting the results of grant activities such as enforcement operations are exempt from the recommended advance approval process, but still should be copied to the OTS PIO and Coordinator when the release is distributed to the press.
  - c) Activities such as warrant service operations and court stings that could be compromised by advanced publicity are exempt from pre-publicity, but are encouraged to offer embargoed media coverage and to report the results.
- Use the following standard language in all press, media, and printed materials: Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.
  - Email the OTS PIO at [pio@ots.ca.gov](mailto:pio@ots.ca.gov) and copy your OTS Coordinator at least 30 days in advance, a short description of any significant grant-related traffic safety event or program so OTS has sufficient notice to arrange for attendance and/or participation in the event.
  - Submit a draft or rough-cut of all printed or recorded material (brochures, posters, scripts, artwork, trailer graphics, etc.) to the OTS PIO at [pio@ots.ca.gov](mailto:pio@ots.ca.gov) and copy your OTS Coordinator for approval 14 days prior to the production or duplication.
  - Include the OTS logo, space permitting, on grant-funded print materials; consult your OTS Coordinator for specifics.

**C. Phase 3 – Data Collection & Reporting (Throughout Grant Year)**

- Agencies are required to collect and report quarterly, appropriate data that supports the progress of goals and objectives.
- Statistical data relating to the grant goals and objectives will be collected, analyzed, and incorporated in Quarterly Performance Reports (QPRs). QPRs for the quarter ending September 30 will include year-to-date comparisons of goals and objectives. If required, a separate quarterly data reporting form will be completed each quarter and submitted as part of the QPR.
- Reports will compare actual grant accomplishments with the planned accomplishments. They will include information concerning changes made by the Grant Director in planning and guiding the grant efforts.
- Reports shall be completed and submitted in accordance with OTS requirements as specified in the Grant Program Manual.

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**4. METHOD OF EVALUATION**

Using the data compiled during the grant, the Grant Director will complete the “Final Evaluation” section in the fourth/final Quarterly Performance Report (QPR). The Final Evaluation should provide a brief summary of the grant’s accomplishments, challenges and significant activities. This narrative should also include whether goals and objectives were met, exceeded, or an explanation of why objectives were not completed.

**5. ADMINISTRATIVE SUPPORT**

This program has full support of the City of Chula Vista. Every effort will be made to continue the activities after the grant conclusion.