

**CITY OF EL PASO, TEXAS**  
**AGENDA ITEM DEPARTMENT HEAD'S SUMMARY FORM**

**DEPARTMENT:** CITY MANAGER'S OFFICE

**AGENDA DATE:** November 11, 2014

**CONTACT PERSON/PHONE:** TOMMY GONZALEZ, 212-0023

**DISTRICT (S) AFFECTED:**

**SUBJECT:**

Authorize City Manager's Office to enter into an \$80,000 agreement with the University of Texas at Arlington, through Texas Manufacturing Assistance Center (TMAC), to provide Lean Six Sigma training.

**BACKGROUND / DISCUSSION:**

Two (2) classes are scheduled between December 8, 2014 and December 31, 2015. A total of 30 employees will be trained. Lean Six Sigma is a set of techniques and tools for process improvement.

**SELECTION SUMMARY:**

City Manager selection.

**PRIOR COUNCIL ACTION:**

None.

**AMOUNT AND SOURCE OF FUNDING:**

Department: 209  
Total Estimated Amount: \$80,000  
Accounts: 544120  
Division: 99999  
Fund Source: 1000

**BOARD / COMMISSION ACTION:**

N/A

\*\*\*\*\*REQUIRED AUTHORIZATION\*\*\*\*\*

**DEPARTMENT HEAD:** \_\_\_\_\_

Name

*Mark Orter*

Signature

*11/14/14*

Date

*for City Manager, Tommy Gonzalez*

**COUNCIL PROJECT FORM**

\*\*\*\*\***POSTING LANGUAGE BELOW**\*\*\*\*\*

Please place the following item on the **CONSENT** agenda for the Council Meeting of **NOVEMBER 11, 2014**.

That the City Manager be authorized to sign the Contract for Assistance between the City of El Paso (“City”) and The University of Texas at Arlington (“UTA”), under which UTA, through its research center known as TMAC, will provide the City with Lean Six Sigma Program training, for a period beginning on November 11, 2014 and continuing through December 31, 2015, or until the agreed upon services have been fully provided, for a fixed fee of \$80,000.00, which will be funded through the City Manager’s Office.

\*\*\*\*\***ADDITIONAL INFO BELOW**\*\*\*\*\*

CITY CLERK DEPT. RESOLUTION

2014 NOV -5 PM 3:27

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

That the City Manager be authorized to sign the Contract for Assistance between the City of El Paso ("City") and The University of Texas at Arlington ("UTA"), under which UTA, through its research center known as TMAC, will provide the City with Lean Six Sigma Program training, for a period beginning on November 11, 2014 and continuing through December 31, 2015, or until the agreed upon services have been fully provided, for a fixed fee of \$80,000.00, which will be funded through the City Manager's Office.

Adopted this \_\_\_\_\_ day of November, 2014.

CITY OF EL PASO:

\_\_\_\_\_  
Oscar Leeser, Mayor

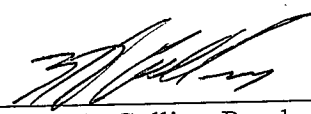
ATTEST:

\_\_\_\_\_  
Richarda Duffy Momsen, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Elizabeth M. Ruhmann

APPROVED AS TO CONTENT:

  
\_\_\_\_\_  
Bruce D. Collins, Purchasing Director  
Purchasing & Strategic Sourcing  
Department

**I. CONTRACTING PARTIES**

This Contract for Assistance is entered into by and between The University of Texas at Arlington (hereinafter "UTA"), a State Institution of Higher Education established under the laws of the State of Texas as an institution of The University of Texas System (hereinafter "System"), with a business address at 701 S. Nedderman, Box 19145, Arlington, TX 76019-0145, and The City of El Paso (hereinafter "Customer"), whose principal address is 300 N. Campbell, El Paso, TX 79901. UTA and Customer are sometimes each a "Party" and together "Parties".

Whereas, TMAC is a major research center at UTA, a member of the Manufacturing Extension Partnership Network operated by the National Institute of Standards & Technology of the United States Department of Commerce (hereinafter "NIST"), and will provide services in accordance with the following terms and conditions.

**II. PROJECT TITLE**

Lean Six Sigma Program

**III. PROJECT SCOPE OF WORK: RESEARCH, ANALYZE, IMPLEMENT**

Both UTA and Customer agree to the Project Scope of Work as outlined below and described in the attached proposal. The primary objective of this project is to develop and install new processes, or to improve significantly those already installed. The work will draw on existing knowledge gained from experience and research, and will be performed by TMAC unless otherwise mutually agreed to by both Parties. Any decision regarding use or disposition, applicability, marketability, or effectiveness for any purpose, of any work or outcome obtained or deliverable delivered, shall be the sole responsibility of Customer and/or its assigns and licensees.

TASK	MILESTONE	RESPONSIBILITY
<b>Phase 1</b> – Conduct research to fully understand the problem and the uncertainties of the current operating environment. <ul style="list-style-type: none"> <li>• <i>Task A: Assess current state of Continuous Improvement Program</i></li> <li>• <i>Task B: Meet LSS Green Belt candidates to develop understanding of their projects</i></li> </ul>	NOV 14, 2014	TMAC/Customer
<b>Phase 2</b> – Design and develop a unique solution to the problem. <ul style="list-style-type: none"> <li>• <i>Task A: Prepare LSS Overview</i></li> <li>• <i>Task B: Prepare Lean Six Sigma Green Belt</i></li> </ul>	DEC 7, 2014	TMAC
<b>Phase 3</b> – Install new processes or implement improvements to existing processes. <ul style="list-style-type: none"> <li>• <i>Task A: Deliver LSS Overview</i></li> <li>• <i>Task B: Deliver LSS Green Belt #1 for a group of fifteen (15)</i></li> <li>• <i>Task C: Deliver LSS Green Belt #2 for a group of fifteen (15)</i></li> </ul>	DEC 31, 2015	TMAC

#### **IV. EXPECTED BENEFITS**

This project will allow City of El Paso to begin the implementation of their Continuous Improvement Program by developing a critical mass of staff with knowledge of LSS Green Belt tools and methods. City of El Paso will also benefit from the associated project work in which the Green Belts will apply LSS methods to solve real-world problems.

The deliverables will be:

- 1) LSS Overview for each LSS Green Belt group
- 2) Project coaching for LSS Green Belt candidates as outlined in the attachment
- 3) LSS Green Belt for two groups as outlined in the attachment

#### **V. TERM AND TERMINATION**

This Agreement shall be effective for work performed during the period of November 11, 2014 through December 31, 2015. The Agreement may be terminated by either party prior to scheduled termination with thirty days written notice to the other party.

#### **VI. CONTRACT AMOUNT AND PAYMENT**

UTA will perform the project scope of work described in Sections I to III of this Contract for the fixed price of eighty-thousand (\$80,000) dollars.

An initial payment of ten-thousand dollars (\$10,000) dollars shall be due upon acceptance of this Agreement. Customer shall make subsequent payments on the basis of monthly invoices submitted to Customer by TMAC, The University of Texas at Arlington, 202 E. Border Street, Suite 323, Arlington, TX 76010. All payments shall be made to The University of Texas at Arlington.

#### **VII. CUSTOMER RESPONSIBILITIES**

Customer responsibilities under this agreement are as follows:

- A. Ensure employees are available to provide information at the agreed upon times.
- B. Provide TMAC adequate facilities and access to information as required to carry out described tasks.
- C. Appoint a company point of contact who will be responsible for A and B above and any other coordination of project activities that may be required.
- D. Upon TMAC's request, complete customer satisfaction survey to be provided by TMAC and participate in a survey conducted by a third party on behalf of NIST. The approximate timing of the latter survey is nine months after completion of this Agreement.

CITY CLERK DEPT.

2014 NOV -6 AM 8:15

**VIII. INDEMNITY**

To the extent permitted by law, Customer agrees to indemnify and hold UTA, TMAC, System, and their Regents, officers, agents and employees harmless from any liability, loss or damage claimed or suffered from or arising out of the activities and obligations of this Agreement, including but not limited to the use, commercialization, or distribution by Customer of any results obtained in whole or in part from activities performed under this Agreement; provided, however, that the following is excluded from Customer's obligation to indemnify and hold harmless: i. the negligent failure of UTA to substantially comply with any applicable governmental requirements; or ii. the negligence or willful malfeasance of any Regent, officer, agent or employee of UTA or System.

**IX. GENERAL**

A. This Agreement constitutes the entire and only agreement between the Parties relating to the subject matter hereof, and all prior negotiations, representations, agreements and understandings are superseded hereby on the Effective Date hereof. No agreements altering or supplementing the terms hereof may be made except by means of a written document signed by the duly authorized representatives of the Parties.

B. This Agreement shall be governed by, construed, and enforced in accordance with the internal laws of the State of Texas, without regard to its principles of conflict of laws.

IN WITNESS WHEREOF, the duly authorized representatives of the parties have executed this Agreement as of the day, month and year shown.

The University of Texas at Arlington

The City of El Paso

\_\_\_\_\_  
Jeremy Forsberg  
Asst. Vice President for Research

\_\_\_\_\_  
Tommy Gonzalez  
City Manager


Date: \_\_\_\_\_

Date: \_\_\_\_\_

APPROVED AS TO CONTENT.

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Mark Sessumes, Director  
TMAC-Metroplex  
Principal Investigator

  
\_\_\_\_\_  
Elizabeth Ruhmann  
Assistant City Attorney

ATTACHMENT:

**THE UNIVERSITY OF TEXAS AT ARLINGTON**  
**202 East Border Street**  
**Arlington, TX 76010**

**Lean Six Sigma Deployment**

**PROPOSAL**

**Prepared for**

**The City of El Paso**

**El Paso, TX**

**Updated: NOV 2014**

## Introduction

The University of Texas at Arlington (UTA) in partnership with TMAC is pleased to submit the following proposal to The City of El Paso. The proposed work is for deployment of a Lean Six Sigma Program.

The objectives of the proposed work are as follows:

### **Green Belt Training (2 weeks)**

- Develop knowledge of basic problem solving tools, from both Lean and Statistical methods
- Develop knowledge of project management through the DMAIC process

## Benefits

All training will develop a base level of knowledge of the Lean Six Sigma DMAIC process, plus the expected impact of LSS on a business enterprise. The proposed work is critical to making Lean Six Sigma a successful strategic initiative at The City of El Paso.

Based on projects submitted for certification to TMAC from a variety of industries, the average payback for a **Green Belt project is ~\$60,000 ( 18:1 payback on training )**. Actual benefits depend on a number of factors, and can exceed \$250k per project.

## Statement of Work

TMAC instructors will prepare and present all training materials. The training materials used will be those developed by George Group (now a division of Accenture). The Green Belt (GB) training will be 2 weeks in length with a break of about 3-4 weeks between sessions.

**Workshop Format** - The Lean Six Sigma training materials will be presented based on an understanding of the needs of The City of El Paso (i.e., instructors will emphasize the tools and methods most likely to be used by your staff). Our LSS training includes a combination of lecture, discussion, and an in-depth, interactive business simulation in which the DMAIC process will be used to effect multiple process improvements on a fictional service company. Participants will also be required to perform pre-work, encompassing reading assignments.

**Computer Hardware & Software** – Participants in the Green Belt (GB) classes will be expected to provide their own laptop computers. The students in the GB course will receive a copy of Sigma XL statistical software. This software is an add-in for Microsoft Excel, and is included in the price of the training course.

**Location** – The training may be done at The City of El Paso facilities for a dedicated class OR at a mutually agreed-upon location. Another option is for TMAC to host the training at our offices at The University of Texas at El Paso. *NOTE: For a dedicated class TMAC requires a minimum of 10 students.*

**Projects** – It is recommended that all Green Belts work on a project in conjunction with their LSS training. TMAC will work with The City of El Paso management team to select appropriate projects for the GB candidates. If desired, TMAC will provide support in the preparation of draft project charters. Individuals in the Green Belt classes are expected to have a project assigned to them **prior** to the beginning of class.

**Coaching – Our experience is that coaching greatly improves the chances of success for new Green Belts.** That is, individuals who are coached are much more likely to (a) complete their projects in a timely manner and (b) achieve the goals established in their project charters. Such coaching may include technical support, team facilitation support, assistance in data collection, etc. As needed, TMAC will also provide coaching for members of the management team to assist them in implementation of the LSS Program.

Coaching For a Class: Prior to the start of each GB course an **LSS Orientation Session** is held followed by one-on-one coaching sessions with each Green Belt. The Orientation Session serves to educate the Green Belt students on the basics of the DMAIC process and especially the key activities and deliverables of the Define Phase. It is recommended that members of the management team also participate in this session, which typically lasts 1.5 – 2 hours.

Immediately after the LSS Orientation Session a member of the TMAC staff provides one-on-one project coaching with each Green Belt. These sessions typically lasts 30 – 45 minutes. It is recommended that the Project Sponsor participate in these coaching sessions. During this review the TMAC staff will provide feedback and guidance on the project problem statement, goals, scope, etc. Additional feedback may include recommended measures, data collection or mapping ideas, and any ‘red flags’ to success.

In addition to this pre-class session, coaching is provided by TMAC instructors for the Green Belt students *during* each week of training. The course instructors provide feedback to each student after receiving an update on their project. Finally, between weeks of training TMAC will provide an additional project coaching session for each GB. This coaching is included in the price of the class. A member of the staff at The City of El Paso is responsible for coordinating the schedule of the onsite coaching sessions. Coaching may also be conducted via email and/or phone. NOTE: All of the coaching held prior to and during the period of the training course itself is included in the price of the class.

Post Class Coaching: Once the LSS Green Belt course is completed on-going project coaching is recommended. There will be a charge for this additional coaching at standard daily rates. If the TMAC staff person providing coaching is from the UTEP office, there would be no travel charge. However, if the TMAC staff person providing coaching is from the UTA office, then travel charges would be extra. We recommend on-going coaching until each GB completes his / her first project. NOTE: The City of El Paso will only be charged for the amount of coaching hours provided per month.

**Certification** – There are two types of certificates given for Lean Six Sigma.

A) **Training** – A certificate for successful completion of the LSS Green Belt course is given for individuals who attend all class sessions, complete any assigned homework, and pass a final exam with a score of 80+%.

- *Example: John Smith has successfully completed the LSS Black Belt Course*

B) **Practitioner** – A 2<sup>nd</sup> certificate is given for completing one (for GBs) full DMAIC projects *within one year of completing the training*. Belts may also submit two kaizen events in place of one full DMAIC project. The individual must submit proof of completing the project work (typically via a PowerPoint file) along with a letter of support from the project sponsor. NOTE: There is no charge for project review required for certification.

- *Example: John Smith is a certified LSS Black Belt*

### **Deliverables**

- Assistance for Management Team in selecting projects and preparation of project charters (Problem Statement, Goal Statement, Scope, etc.)
- Green Belt Training (10 days)
- Coaching / Onsite Support – *optional after class is complete*
- Each student will receive the following items:
  - Sigma XL statistical software
  - Course binder for each week of training
  - Textbooks: Varies by class, but will include
    - *Lean Six Sigma Pocket Toolbook* by George, et al (both GB and BB)
    - *Understanding Variation* by Wheeler (both GB and BB)

### **Schedules & Milestones**

TMAC will work with The City of El Paso management to determine training dates that are mutually acceptable. TMAC instructors are available starting in December 2014.

Our recommendation is that LSS training sequence should be as follows:

- 1) Members of management team (Champion & Sponsor Workshop)
- 2) Select individuals in methods to solve difficult problems (Black Belt)
  - a. These individuals can attend BB training at UT-Arlington
- 3) Additional individuals in methods to solve basic problems (Green Belt)

Assuming the goal is to train a total of 30 LSS Green Belts, our recommendation is you consider either:

- Green Belt #1:
  - Week 1: DEC 8-12, 2014
  - Week 2: JAN 12-16, 2015
- Green Belt #2: Dates TBD, with a completion date by the end of 2015

The specific course dates would need to be worked out based on availability of the Green Belt candidates and TMAC instructors. It is also important to note these schedules are just for training and do not consider project selection, coaching, or other LSS workshops.

**Project Scope and Assumptions**

- Number of Course Participants: 15 people per Green Belt
- While at The City of El Paso, TMAC/UTA staff will be provided with basic office amenities, including access to telephones, fax machines, copiers, and meeting / work space.
- If training is done onsite, or at a facility chosen by The City of El Paso, then a fairly large training room (at least 1,000 sq ft) is available for use, and course materials, paperwork, textbooks, etc. can be left there overnight.
- If training is conducted onsite, The City of El Paso will provide lunch, refreshments and snacks during the LSS classes
  - The City of El Paso managers/staff will **participate fully** in the Lean Six Sigma workshops

**Resources**

TMAC will provide professional staff with the expertise to perform all training from our engineers at TMAC-Metroplex (UT-Arlington) and / or TMAC-Paso del Norte (UT-El Paso). These individuals may also provide project coaching for the Green Belts students. The TMAC staff qualified to provide training / coaching include but is not limited to:

TMAC-Metroplex Staff	TMAC-Paso del Norte Staff
Russ Aikman	Hilario Gamez
Alberto Yanez	Jesus Reverol
Chris Meeks	
Diana Martinez	
Satya Kudapa	

Our plan is to have the GB class taught using a two-instructor model.

**Terms and Conditions of Payment**

The price will depend on which the classes / workshops are chosen, the number of students, and the number of days of coaching.

Deliverable	Total	Comment
<b>Green Belt Group</b> <i>(price assumes 15 participants)</i>	\$40,000	This price is <i>per Green Belt group</i> . The assumption is the plan is to provide two Green Belts within the scope of this contract.

<b>Onsite Coaching</b> <i>(optional)</i>	\$18,000	10 days at \$1,800; customer will only be charged for actual coaching time ; <i>price is per day</i>
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- **Travel expenses of TMAC-Metroplex staff will be in addition to the prices shown above**
- **If TMAC hosts the training at The University of Texas at El Paso there will be additional charges to cover the cost of food, snacks, etc.**
- An invoice for each class will be billed after each week of training
- Coaching will be invoiced on a monthly basis as coaching hours are consumed