

Arab American Association of Engineers & Architects

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AAAEA NEWSLETTER

Volume 9, Issue 1 January 2007

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President's Message



AAAEA is celebrating its tenth anniversary throughout the year. We have a lot to celebrate, and a lot to be proud of. When our founders called several architects and engineers to a meeting 10 years ago, their goal was to make a difference in the Arab American community. They formed AAAEA, which stands for Arab American Association of Engineers and Architects. They wanted to help their fellow architects and engineers achieve success. That is

Jamal Grainawi, SE, PE

exactly what AAAEA did, and has been doing, for the past ten years.

We started this celebration during our four picnics this summer, to educate our community. The highlight of our celebration was during the 2006 Semi-Annual Meeting, which took place on Friday, November 10, 2006. This meeting was well attended with more than 240 attendees whom enjoyed a program that included an evening devoted to the presentation of the AAAEA experience and achievements, its future mission, and recognition of all executive board and board of trustees since inception of the AAAEA. We honored our first president, Mr. Bilal Almasri, during this meeting. Bilal has been a tremendous help to AAAEA and we honor him for all that he has accomplished for our association. A \$2,000 scholarship was awarded to an exceptional graduate student, Mr. Ayham Al-Banna. Then we concluded the program with Mr. Ayoub Talhami's key note speech on AAAEA 10 years and beyond. I wish to congratulate this year's recipients of the scholarship awards, the certificates of appreciation and our honoree. My special thanks to the exceptional officers and to all volunteers who were involved, in making our semi-annual meeting a success, and to all AAAEA members, friends, guests and sponsors – thanks for all of your support.

As I mentioned at the Semi-annual meeting this year, with the energetic and dedicated officers and volunteers, AAAEA will continue to promote professional development among its members; most especially through monthly seminars, the technical conferences, and the Engineering-in-Training (EIT) review courses. Deserving and dedicated students pursuing qualified degrees will continue to benefit from our scholarship programs too. We also support student outreach and participate in Engineers Week activities. We will participate in the Chicagoland E-Week Banquet on

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Welcome New AAAEA Members

Nabil Kabro Wafaa Gobba Hisham Said Nagwa Hussein Amro Amro Mohammad Alzoubi Souad Dehhak Nihad Albahrani Raid Alharithi Maged Almawri Ahmad Aburas Omar Mubaidin George Ghareeb Sadeddin Lambaz Emile Ghantous Anas Rabah Ahmed Khroub Riyadh Hindi Abdulla Nasr

AAAEA will be participating in IIT-DuPage E-week Expo on February 24th

Hall Display

At this years DuPage E-Week Expo, AAAEA Display provides you with the opportunity to learn about corrosion protection and how test for it are done, learn about Surveying and material testing equipment. you will be asked to participate in hands on activities involving these equipment. AAAEA will be showing a slideshow featuring the high school bridge contest and the winning entries from the essay/poster contest. Guests will have the opportunity to guess how much weight is needed to collapse a balsa wood tower during the AAAEA's final presentation at 2:00 PM. More information about AAAEA is available on their website, *http://www.aaaea.org*.

Room Presentation

AAAEA will have a PowerPoint presentation on careers in engineering, and will have a special, "Ask An Engineer" event, which involves a team of engineers from several field of engineering answering your questions. AAAEA will also do a load capacity test on a balsa wood tower structure. Students will be able to guess throughout the day on how many pounds the structure will be able to support. The tower will be tested at 2:00 PM.

Presentations at 11:00, 12:00 and 1:00

EDITOR'S NOTE

I would like to thank all members for their contributions to the Newsletter, especially Dr. Soliman Khudeira and the Executive Committee. We are always in need of articles for the Newsletter, so we strongly encourage you to send in material to us.

Ibrahim Shillo, Publication Commitee Chair aaaea@aaaea.org



CALENDAR OF EVENTS

January 2007

- **21st** Family Bowling
- **25th** EIT Review Classes Begin (see page 14)
- 31st Technical Seminar

February 2007

- 18-24th Engineers Week
- 23rd E-Week Banquet
- 24th IIT-DuPage E-Week Expo

28th – Technical Seminar

March 2007

- 24th SE Review Class
- 28th Technical Seminar
- 31st Annual Dinner Social

April 2007

25th – Technical Seminar

May 2007

19th – Elections

12th – Technical Conference

Roadway Planning and Design Topics – Part V: Cost Methodology of Roadway Projects

by Dr. Soliman Khudeira, SE, PE

This is the fifth article in a series of articles to follow that discuss various topics related to roadway planning and design topics. Each topic is discussed in limited detail and illustrated, as applicable, by citing a typical roadway project. Part I of this series discussed roadway classification, Part II discussed Needs Analysis, Part III discussed Value Engineering, and Part IV discussed Environmental Assessment and Project Scope. Part V discusses Cost Methodology. Other topics will be discussed in future issues include: Project Phases and duration, Maintenance of Roadways, Context Sensitive Solutions, Public Involvement Process, and Right-of-Way Acquisition Process.

COST METHODOLOGY OF TYPICAL PROJECTS

To adequately define the project scope and to ensure sufficient design and construction funds are available, cost estimate are required during the various stages of project development. As the project progresses, the estimates are refined to ensure the estimates are cost effective, sufficient funds are available for construction, and the contractors' bid price is reasonable. The various estimates are outlined below, which are: project initiation estimate, phase I estimate, phase II estimate, and engineer's estimate.

Project initiation estimate

Once a project has been included in the municipality's multi-year program, it may be several years before a Phase I study can be conducted. Consequently, the project initiation cost must be updated annually until the Phase I study has been conducted.

At the time of the project initiation, detailed project quantities have not yet been developed. The programmer will determine the project cost based on broad units (e.g., cost per mile, cost per square foot), and by reviewing similar, resent projects in the area. Project initiation cost estimate are generally determined according to the following:

- **1. Roadway projects:** For most roadway projects, a cost per mile per roadway width is used. This estimate includes the cost of earthwork, pavement, drainage, and other miscellaneous items.
- 2. Structure projects: for most structural projects,

a cost per square foot is used based on similar structure types and length.

- **3. Traffic signal projects:** traffic signal projects are estimated per intersection installation
- **4. Unit cost:** If sufficient quantities are available, use the quantities with the average weighted unit prices to develop the estimate. Around 10 to 20 percentage should be added to account for minor items.

In addition, the programmer should add the cost for any major futures which are beyond the basic assumption used to develop the estimate. For example, the cost of a noise wall should be added to the cost per mile estimate.

Additionally, The programmer should consider the following factors in preparing the estimate: Geographic location, inflation (adjustment of past prices), reliability of the recent data, materials price escalation, project size, schedule, and construction staging relative to the previous projects, required right-of-way, railroads, utilities, and environmental problems (e.g., hazardous wastes, wetland).

5. Cost per mile of roadway: *Exhibit 1* provides the construction cost per mile for typical roadways projects, it also provide other methods of estimating a project cost. The cost does not include other costs, e.g., engineering, right-of-way acquisition, and construction management. The range in the cost is based on various factors to be considered, e.g., project location (urban vs. rural or downtown vs. city periphery), environmental issues, etc.

Phase I cost estimate

Phase I study includes a preliminary estimate which is based on the quantities determined during this phase. If quantities are not available and cannot be estimated in a reasonable time frame, then the estimating procedure described above (e.g. cost

PROJECT TYPE	CONSTRUCTION COST PER MILE OF ROADWAY	CONSTRUCTION COST PER SQUARE FOOT OF ROADWAY	CONSTRUCTION COST (OTHER METHOD)	PROJECT SCOPE
Roadway Resurfacing (3P Projects)	\$375,000 TO \$400,000	\$1.70 to \$1.80		This cost is for 42 feet wide pavement: Remove (scarify) and replace bituminous material, adjust the utility structures, minor pavement patching (as needed), minor sidewalk and curb and gutter removal and replacement, no landscaping, no change in roadway dimensions.
Roadway Improvement (3R Projects)	\$4,000,000 to \$4,500,000	\$18.00 to \$20.30		This cost is for a 42 feet pavement: Partial removal and replacement of pavement, minor roadway widening, pavement resurfacing, street lighting, traffic signal modernization (three intersections), and landscaping
Roadway Reconstruction	\$6,000,000 to \$7,000,000	\$27.10 to \$31.60		This cost is for a 42 feet pavement: Full removal and replacement of pavement, minor roadway widening, street lighting, traffic signal modernization (three intersections), and landscaping
New Arterial Roadway	\$8,000,000 to \$9,000,000	\$30.10 to \$40.60		This cost is for a 42 feet wide new pavement: Sewer and water mains, earth excavation, pavement, curb and gutter and sidewalk, street lighting, landscaping, Traffic signals (3 intersections)
Roadway Enhancement	\$1,500,000 to \$2,000,000			Installation of: median planters, landscaping, irrigation system, minor utility adjustments, partial resurfacing of the roadway,
Grade Separation			\$17,000,000 to 19,000,000	Lower the road under the railroad tracks and build one railroad bridge, retaining walls, lighting, traffic signals, utility lines, landscaping,
Viaduct Clearance Improvement			\$1,500,000 to \$2,000,000	Remove and replace 900 feet of pavement and lower the roadway by an average of 2 feet, water and sewer lines, small retaining walls,
Bridges rehab		\$136.0 per square foot of the bridge		Work include: new pier and abutment caps, structural steel, bearings, 8" concrete deck, sidewalk, and new pedestrian railing and roadway. For a typical 28,000 square foot bridge (80 feet X 350 feet), the construction cost is \$4,000,000.
New bridge		\$215.0 per square foot of the bridge		Same dimensions given above. New bridge includes: substructure work. Either caissons or H-piles, concrete abutment, and piers. For a typical 28,000 square foot bridge (80 feet X 350 feet), the construction cost is \$6,000,000.
Traffic Signal Modernization			\$225,000 - to \$350,000	Modernization of traffic signals at one intersection. The \$225,000 is for a typical four-legs intersection, while the upper limit is for six legs intersection

Exhibit 1.	Project Cost based on the Scope of Work

per mile) could be used. In determining the Phase I estimate, the following need to be considered:

- **1. Major items:** the estimate should list the major items separately (e.g., bridges, interchanges) and clearly identify their location in the estimate.
- **2. Rehabilitation projects:** On rehabilitation projects, breakdown may be required for certain construction items because of the potential for specific items to become major project cost.
- **3. Two or more construction seasons:** On major projects that will require more than one construction season to complete, the project needs to be divided into individual segments which can be completed in one season.
- 4. Project funding: The phase I estimate needs to identify construction, right-of-way, utility adjustments, and Engineering fees separately to facilitate programming of these items. For a complex project, the Phase I cost estimate should be divided into categories (e.g., pavement, structures, environmental items, right-of-way, etc.). For a simple project, the estimate is less detailed since the project has standard industry items.

Exhibit 3 provides an actual Phase I cost estimate for a complex project (the 130th Street and Torrence Avenue realignment and grade separation project). This project include the realignment of Torrence Avenue / 130th Street / Brainard Avenue, creating the grade separation, construction of a total of six new bridges (two railroad steel girder bridges, one railroad 394 feet truss bridge, one mixed use bridge, one highway bridge, and one pedestrian bridge), underground water and sewer lines, underground detention chamber, storm water pumps and pump station, 9,000 lineal feet of retaining walls, pavements, lighting and traffic signals, and landscaping. **Exhibit 2** shows a computer rendering of the proposed realignment and grade separation of the project

The following are observations related to the cost estimate in *Exhibit 3*: a) the estimate is prepared in the year 2002 and assumes one construction contract (stage), however, the actual construction will occur at a later date and in stages, b) the estimate is based on a phase I engineering plans and many details are not available at that time, c) this estimate does not include the cost of Phase I Engineering, and d) the funds commitment will be based on line 17 "Total Project Cost", even though it is a preliminary estimate.



Exhibit 2. 130th Street / Torrence Ave. / Brainard Ave. Realignment and Grade Separation

COST ESTIMATE INFRASTRUCTURE IMPROVEMENT 130 TH STREET / TORRENCE AVENUE / BRAINARD AVENUE REALIGNMENT AND GRADE SEPARATION BASE YEAR 2002				
ITEM NO.		WORK CLASSIFICATION	ESTIMATED COST (As Percentage of total project cost)	
1		Clear and Grub: (minor Removals & demolition)	0.30%	
2		Earthwork	6.10%	
3		Pavement		
	3a	Mainline and Frontage roads	5.70%	
4		Grade Separation		
	4a	Railroad - (Structures)	27.20%	
	4b	Highway	0.70%	
	4c	Retaining walls	16.0%	
	4d	Pedestrian/Bicycle	1.00%	
5		Drainage & Municipal Utilities		
	5a	Pump Station & Detention	3.30%	
	5b	Drainage Collection Sewers	1.7%	
	5c	Water Main Adjustments	2.10%	
6		Miscellaneous		
	6a	Lighting	1.20%	
	6b	Traffic Signals	0.60%	
	6c	Signing & Striping	0.06%	
	6d	Railroad Improvements (not structures) - (NS Force Account)	2.80%	
7		Environmental Items		
	7a	Erosion Control	0.80%	
	7b	Landscaping	1.00%	
	7c	Wetland Mitigation	0.20%	
	7d	Special Waste Handling	2.30%	
8		Traffic Management/Staging	2.00%	
9		All other items (fences, aesthetic treatment, Engineer's office, Noise wall, etc.)	3.20%	
10		Subtotal Construction Cost (All Above items)	56.30%	
11		Contingencies (10%)	10.00%	
12		Total Construction Cost (Categories 10 + 11)	66.30%	
13		Right-of-way acquisition	3.20%	
14		Non-Municipal Utility Adjustments (by others)	0.10%	
15		Phase II Engineering (10% of Line 12)	8.00%	
16		Phase III Construction Engineering (9% of Line 12)	4.80%	
17		Total Project Cost (Line 12, 13, 14, 15, 16)	100%	

Exhibit 3. 130th Street and Torrence Avenue Phase I Estimate

It is recommended that for a standard project (e.g., minor underground work, minor roadway geometry changes, minor structural work, etc.), the contingency (line 11 in *Exhibit 3*) should be between 10% to 15%. However for a project that has substantial underground work, various structural items, etc., the contingency should be at least 30%. The 30% contingency will cover many items including price

escalation of certain items, unexpected items during phase II design which were not anticipated in phase I, and increase in the cost due to further coordination with other agencies (certain railroad companies, for example, has more strict requirements than the governing design codes, which certainly will increase the cost from the phase I estimate)

Phase II Cost Estimate

One or more cost estimate may be prepared during the Phase II project stage. These estimates may include the following:

- 1. Preliminary Plan Review: At the early stage, a revised cost estimate is generally developed to ensure that the program funding is still reasonable and appropriate. In this phase, the plans and major quantities are essentially complete. Therefore, the estimate can be prepared using the methodologies discussed earlier (i.e. based on unit prices).
- **2. Project Scope Change:** Whenever the scope of the project changes, a new construction cost estimate needs to be prepared.
- **3. Project Delay:** If there has been a significant delay in the project since it was originally designed and estimated, it may be necessary to update the cost estimate to reflect inflation, new materials, new equipment, contractor work load, etc.
- **4. Final Estimate:** A cost estimate prepared based on the final plans. This may be an update of an earlier cost estimate or, for a project without a Phase I report, this estimate will be the first detailed estimate for the project.
- **5. Engineer's Estimate:** This estimate is the official and final project cost estimate. The Engineer's Estimate provide the basis for evaluating the contractor's bids for construction and will allow the municipality to determine if the low bid price is fair and reasonable for the work involved. This estimate, plus the data used to generate the estimate, is considered confidential and is not for the general distribution. *Exhibit 4* shows a partial engineer's estimate which include line items and unit prices for each item.

Unit Cost Determination

The unit cost estimates is typically based on quantities and applicable unit prices. The unit prices are determined from historical data or detailed estimate.

- 1. Historic unit cost: The unit cost for minor work items is based on average prices of previous similar projects. The following work types are typically considered minor, i.e. lighting, traffic signals, manholes, catch basins, inlets, pavement marking, landscaping, sidewalk, fencing, etc.
- 2. Detailed unit cost: The unit cost for major work items should be calculated in details. The following are considered major work types for which a detailed cost estimate needs to be prepared: earth excavation, concrete or bituminous paving, traffic control, sewer mains, concrete structures, piling, structure removal, etc. The detailed unit cost estimate should be determined based on the following factors: production rates, equipment, labor, material, hauling, incidental, mobilization, overhead, profit, and bond.

PROJECT FINANCING OPTIONS

Various fund sources are available to fund municipal roadway improvements. A project could use a combination of those funds. Generally speaking, roadways are funded by vehicle related taxes including: motor fuel tax, licensing tax, decal tax, share of sale tax. Other sources include toll roads. The following is a representative projects fund which include city, state, federal, and private funds:

Federal funds

- FHWA Surface Transportation Program funds (STP)
- FHWA Highway Bridge Repair and Replacement Program (HBRRP)
- FHWA Congestion mitigation and air quality funds (CMAQ)

SAMPLE ENGINEER'S ESTIMATE								
LINE ITEM					TOTAL COST			
1	PORTLAND CEMENT CONCRETE PAVEMENT, 13-INCH	SQ YD	1712	\$36.00	\$61,632.00			
2	ROD AND CLEAN DUCT IN EXISTING CONDUIT SYSTEM	FOOT	5	\$5.00	\$25.00			
3	TRAINEES	HOURS	1000	\$0.80	\$800.00			

Exhibit 4. Typical Partial Engineer's Estimate of Project Cost

November 2006 Semi-Annual Meeting and Event

We are proud to announce that the November Semi Annual Event was a great success. Not only was it well attended despite the inclement weather, but the atmosphere surrounding the commemoration of our 10th Anniversary was very positive. We were happy to have a number of representatives from most of the out-of-state associations. The event was highlighted by presentations given by each of our past presidents covering the entire panorama of what the AAAEA is, and stands for, from our humble beginnings to our outlook and goals for the future. Bilal Al-Masri was our sole Honoree for this 10th Anniversary celebration, a



Opening - President Jamal Grainawi



Past President - Dr. Soliman Khudeira



Past President & Honoree - Bilal Almasri

special recognition for his tireless commitment to the AAAEA. Our keynote speaker Ayoub Talhami, whose insight and advice was well received by all members in attendance, provided an appropriate end to a wonderful evening. The AAAEA would like to thank all those who attended, and extend a special thanks to those who contributed in making it the success that it was. We look forward to your continued support and seeing you at our upcoming events.

Ibrahim Shillo Publication Committee Chair



Past President - Dr. Ahmad Hammad



Past President - Abder R. Ghouleh



Bilal accepting his award

November 2006 Semi-Annual Meeting and Event



Master of Ceremonies - Darlene Attiah



Universal School recognizes the AAAEA on its 10th Anniversary



Past AAAEA board members recognized



www.aaaea.org

Past AAAEA board members recognized



Scolarhip Award - Ayham Al-Banna

Keynote Speaker - Ayoub Talhami

Publication Committee

The Publication Committee is striving to make continuing improvements to not only the quality of the AAAEA's circulated documents, but the systems and methods used to generate and distribute them. As always, one of the main focuses of the Publication Committee is the quarterly Newsletter, which is a vital part of the Association. Not only does the Newsletter create a medium for our Executive Board to communicate to our members, but it is also symbolic of the success of the Association and a sense of pride for our members. I am pleased with the overall quality and content of the Newsletters that we have issued thus far, but the focus now is to streamline the process and work harder to keep a schedule. In addition to the Newsletter improvements one of the main priorities now is to create a brochure that can aid our Outreach Committee in their ongoing efforts that will eventually lead to a National Association. The Brochure will also serve as a simple way for all of our members to inform prospective on what the AAAEA is all about. Another responsibility of the Publication Committee is to generate and print the programs for our events, so there is never a shortage of things to do. If you are motivated to volunteer your time to the Association and find these goals interesting please contact me to find out how you can contribute to the Publication Committee.

Ibrahim Shillo - Publication Committee Chair

Membership Committee

The membership committee's primary function is to keep an up-to-date log of our members, as well as recruiting and encouraging new members to join our organization. Our membership is diverse and includes engineers, architects, and computer science majors. The membership committee also maintains and publishes a membership directory for all our active members. At the time of publication, we have 237 active members (out of 309 total members).

Your support of AAAEA, and your help to increase the membership base will be greatly appreciated. Our goal this year is to reach 300 active members, and your help in inviting new members to join is needed to achieve our goal. It is never too late to renew your membership for this year and enjoy the variety of activities and services we provide. We have tried contacting members by phone, e-mails and letters to remind them about renewing their membership. This is where your help will be greatly appreciated in supporting this organization by encouraging our fellow members to renew the membership, and by promoting AAAEA to other potential members.

Membership dues for 2007 are coming up soon, so show us your support and continue enjoying all the activities and services we provide with your timely renewal for 2007. Also, if you have not done so, please renew your membership for 2006 and become an active member again.

Finally, please make sure you update your contact information by filling out the appropriate form found on our AAAEA web site at www.aaaea.org. This will ensure that you will receive all the latest information and announcements in timely manner.

Nabeel Aldrees, PE – Membership Committee Chair

Activity Committee

The year 2006 was a great year for the AAAEA events and activities all were a great success. A events are as follows:

- The Bowling event was held on January 29th, from 2:30-5:00; we reserved 22 lanes, and lunch was provided. We had good showing of members and their families, and we all had fun.
- The Social Dinner (Hefleh) on March 18 at the Drury Lane Oak Brook was fantastic.
- We had 4 successful family picnics in 2006, they were held in multiple locations to satisfy all members coming from different areas. Picnics were done in June, July, August, and September.
- The Semi-Annual Meeting celebrating our 10th anniversary on November 10th, 2006 was a huge success. Thanks for our members and boards for this great event.

The following is a list of the activities we planned for next year (2007):

- Bowling event on January 21st.
- The Annual Social Dinner (Hafleh) on March 31st.
- Family picnics: dates and locations will be announced later in 2007.

Mohammed A. Khattab - Activity Committee Chair

IT Committee

Webmaster Mohammad Kleit has updated the site to reflect the postings of the Education Committee and Outreach Committee. Pictures of recent events including the Semi-Annual and outreach activities have been posted. The IT committee is currently reviewing methods for the Outreach Committee to be able to video conference interested sister societies during meetings.

Moosa Matariyeh - IT Committee Chair

National Outreach Committee Updates: Florida, Louisiana, Tennessee, Indiana, Wisconsin, and Peoria, IL

The National Outreach Committee has been approaching different cities and states around the country, and the committee has been successful in helping other cities and states starting their associations. In previous article, we talked about the associations established in Michigan, Texas, and Wisconsin. During the last few months, the committee was reaching the Arab engineers, Architects, and Computer Professionals in Florida, Louisiana, Indiana, and Tennessee.

As a results of these efforts, meetings with engineering and computer professional has been conducted in Fort Lauderdale, Orlando, and Tampa, FL; Baton Rouge, LA; Memphis, TN; Indianapolis, IN, and Peoria, IL.

Mr. Bilal Masri, member of the national outreach committee, has visited Fort Lauderdale, FL on November 16, 2006. He met with thirty-two professional and conducted the Chicago Experience Presentation. Many questions were asked by the attendees at this meeting, and were answered by Mr. Masri. The presentation was well received by the attendees. During the meeting, a steering committee was formed to be in Charge with South Florida area. The steering committee's tasks are to register the association in the state of Florida, create the by laws, create a database for engineering professionals, and arrange for elections. Dr. Fattoush Jafar chairs the steering committee.

A similar meeting was conducted in Orlando, FL on November 20, 2006, in which the Chicago Experience was presented. Twenty four professionals attended this meeting. Similar to South Florida, a steering committee was formed and assigned similar tasks that were discussed in a meeting after the Chicago Experience presentation. Mr. Alex Yasin chairs the steering committee in Orlando.

On November 21, 2006, the Chicago Experience Presentationwasconductedforagroupofprofessionals in Tampa; FL. Twelve professionals attended the presentation. High interest in the association was among students from University of South Florida who were interested in a student chapter of association supervised by Dr. Mahmoud Nachabe. Due to the low number of attendees, as the meeting was held in a weekday, it has been decided to hold a second meeting to form their steering committee.

The three branches of Florida are coordinating among themselves to form one association representing the state of Florida.

On November 25, 2006, Mr. Masri visited Baton Rouge, LA and presented the Chicago Experience at Louisiana State University. The presentation was well received by the attendees and a steering committee was formed. Dr. Luai Mohammad chairs the steering committee.

On November 25, 2006 also, Mr. Masri met with a group of engineers in Memphis, TN. Mr. Yuosef Saleh, who arranged for the meeting, and other engineers showed high interest in the association. Due to the small number of engineers in that area, this group decided to reach to other cities in Tennessee and plan for forming a steering committee in Tennessee in the near future.

Indiana engineers held their second meeting on December 2, 2006 and a steering committee was formed.

Mr. Jamal Grainawi, Dr. Hiba Abdalla, and Mr. Bilal Masri have visited Peoria, IL on December 8, 2006 and met with a group of engineers. They conducted the Chicago experience presentation and answered all questioned raised by Peoria group. The meeting was conducted in a professional manner and Peoria engineers will start working on their new chapter within the state of Illinois.

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National Outreach

Steering Committee formed to establish an AAAEA in Central Florida

Mr. Bilal Almasri from the board of trustees of the Arab American Association of Engineers and Architects (AAAEA)-Illinois-gave a power point presentation about the association on the 20th of November at the Holiday Inn Express Hotel in Orlando.

The presentation comes as part of AAAEA outreach to different major cities and colleges across the United States in order to elaborate on the ten-year success of the AAAEA. The presentation was attended by approximately thirty professional engineers from different fields; computer scientists, civil, architect, planners and other professionals.

The presentation was warmly welcomed by the attendees who hailed the positive achievements of this AAAEA non-political, non-religious and inclusive, not exclusive, association.

Mr. Almasri also touched upon some of the analogy and models of the association successful stories about helping its members succeed in their jobs by networking among each other through seminars and social activities.

Mr. Almasri noted that the association is open to all architects, engineers and computer scientists of Arab heritage by promoting and advancing the standing in their fields. He also added that the association though based in Illinois has active members in 12 states and has sister association in Michigan, Texas and Wisconsin.

He also noted that since inception of the AAAEA in 1996, the association granted more than 10 scholarships to student members, offered EIT review classes twice each year assisted approximately ninety members in job placement or career enhancement, offered seminars, technical conferences and programs that benefit the members and the community. For more information in this regard you can visit the web site *www.aaaea.org*.

The meeting was concluded by forming a steering committeeconsisting of Alex Yaseen as chairman, Dr. Issa Batarseh, Ibrahim Jerdaneh, Meen Alkuni, Dr. Jamal F. Nayfeh and Marwan Alsayed. The steering committee will establish an engineering sister association in central Florida, also in order to enhance the membership, prepare the stage for a wider election of committee and also to advance and formalize the association, so as to promote professional consciousness and fellowship through collective interdisciplinary activities, all in accordance with recognized and established engineering ethics and within existing applicable laws.

For further information concerning the new association of central Florida-Orlando contact Alex Yaseen at number 407-312-0313.



Indiana News Letter, December 2006

Several engineers from Arab origins met on Saturday December 2nd, 2006 in Indianapolis to discuss the possibility of establishing an AAAEA in Indiana. Dr. Bashar Haddad made a short presentation about achievements of AAAEA in Chicago and the benefits of having a similar association in Indiana. Dr. Haddad added that AAAEA is in the works of establishing several association nation-wide with the goal of becoming a national association in near future. The group was very excited about the idea. The following items were agreed upon at the meeting:

- To open membership to the association to Engineers, Architects and Scientists from Arab heritage.
- Asteering committee wasformed.Members of the steering committee include: Zuhair Izzy, Hatem Mekky, Muna Adhamy, and Bashar Haddad. The agenda of this committee is: Prepare by-laws, prepare for an event/activity to promote the idea in Indiana, help with registering the association with the State of Indiana, and prepare for the elections.
- A Registration sub-committee was formed to register with the State of Indiana. The committee is to investigate the State requirement to register a non-for-profit organization. Members of this sub-committee include: Zuhair Izzy, Muna Adhamy, and Thamer Mersho.
- Next meeting Friday December 29th at 5 PM. Location to be determined at a later time.

National Outreach

Peoria Outreach Trip

Friday, December 8th 2006 marked yet another milestone along the association's path. AAAEA Founder and Trustee, Mr. Bilal Masri, current President, Mr. Jamal Grainawi, and Vice President, Hiba Abdalla made the first trip to Peoria IL to meet with Arab American engineers and potential members. The meeting was organized by Dr. Mustafa Mahamid, National Outreach Committee chair, and it was kindly hosted by Mr. George Ghareeb at the offices of Terra Engineering in Peoria. A total of seventeen engineers took the time out of their busy schedules to attend the meeting.

After a brief introduction by Jamal Grainawi and Hiba Abdalla, Bilal Masri presented the "Chicago Experience" to the audience. This presentation has proven to be a powerful tool and a living document outlining the history of the association since its It demonstrated to the attendees beginnings. the value of belonging to an ethnic professional association that would address the specific needs of its members. The presentation emphasizes the fundamental principle underlying the success of the association which is its non-political and non-religious approach in conducting business. It provoked interaction and discussion with the attendees who expressed their interest and longing to such an association. By the end of the meeting, the group was already talking about forming a local chapter, and a plan for having their first kickoff meeting was being discussed.

Our first meeting in Peoria holds a promising future for a strong AAAEA presence. There is a good number of engineers there who showed enthusiasm for establishing the chapter. A few have joined the association after hearing about the benefits of membership and about what they can offer to help our profession and our community at large. It is certainly the hope that we keep the wheel turning until the goal of forming this chapter is achieved. This is an important step toward realizing the bigger vision of a national association with a reputable track.

Thanks are due to Mr. George Ghareeb and Terra Engineering for their hospitality, and to all who attended. Please be assured that the association will provide support and guidance for the Peoria chapter.

Louisiana First AAAEA Meeting

The first organizational meeting of the Association of the Arab American Engineers in Louisiana (AAAEL) was held On Saturday, November 25, 2006, at Louisiana State University campus in Baton Rouge, Louisiana. Twelve engineers were in attendance, which we found to be positive considering that it was held early morning on Saturday following the Thanksgiving Holiday. The meeting was called to order by Louay Mohammad, Professor of civil engineering at Louisiana State University. He expressed the need for constructive technical interaction among various engineering disciplines to enhance our professional development. Therefore, establishing AAAEL would serve as the vehicle to promote and advance our standing in the fields of engineering and technology with a vision of helping members to succeed in their professions through networking among each other, seminars, and social activities.

In addition, a founding Steering Committee for AAAEL was elected and consists of five members Louay Mohammad (Chair), Albert Wehbe (vice chair), Khalid Alshibli (treasurer), Munir Nazzal (secretary), and Menat Salem (state outreach and membership). The committee was charged, among other things, with developing a constitution and by-laws, registering the association with the state, developing a plan for election of officers, and organizing technical and social activities.

During this meeting, Bilal Almasri, past President, one of the founders, and member of the Board of Trustees of the AAAEA based in Chicago, presented "Chicago's Experience of the Arab American Association of Engineers and Architects in Illinois". He summarized lessons learned during the creation of the AAAEA, the ten years of achievements, and plans for nationalizing the AAAEA.



National Outreach Committee Updates, continued from page 11

The Wisconsin Arab Engineers & Architects Association (WAEAA) had their first elections on December 15th 2006. Aziz Aleiow was elected as a president, Emad Abu tabanjeh as a vice president, Eyad Ghani as secretary, Youri Abou Samra as treasurer, and Nader Jaber as IT officer. The WAEAA is had their first party on December 30th 2006. Congratulations to WAEAA on their first elected board. Meanwhile, the national outreach committee is talking to professionals in several cities and states including New Jersey- New York, Ohio (Cleveland, Columbus), California, Washington, Mississippi, and Kansas City.

Mustafa Mahamid, PhD, PE – National Outreach Committee Chair

EIT Review Course , AAAEA will offer the following EIT Classes. The classes will be held at the University of Illinois -Chicago (UIC) campus. The classes are designed to help you prepare for the April 22, 2007 Exam. Members are encouraged to register for the classes and the exams Classes will be held at: UIC campus, ERF Building 842 W. Taylor, First floor Chicago, IL 6:00 P.M. - 9:00 P.M. Date & Time: Thursdays (unless otherwise noted, see schedule below) January 25, 2007 - April 19, 2007 Cost: \$100 Members \$200 Non-members (does not include cost of books) For more info: Call: (312) 409-8560 (Voice Mail) or (708) 236-0900 (Work-HBM) Email: aaaea@aaaea.org Email Copy: moussa.issa@hbmengineering.com Email us your name and contact info (address, email, and To register: telephone number). 2006 Schedule: DATE 6:00 pm - 9:00 pm Instructor January 25, 2007 (Th) Mechanics of Materials I Dr. Khudeira, PE, SE February 01, 2007 (Th) Mechanics of Materials II Dr. Khudeira, PE, SE Dr. Omari & TBA February 08, 2007 (Th) Chemistry&Computer Science February 15, 2007 (Th) Thermodynamics Dr. Jody Mathematics Dr. Hammad, PE, SE February 22, 2007 (Th) March 01, 2007 (Th) **Mathematics**

April 12, 2007 (Th)Engineering EconomicsApril 19, 2007 (Th)Probability & Statistics

Dr. Omari & TBA Dr. Jody Dr. Hammad, PE, SE Dr. Kazkaz Mr. Grainawi, PE, SE Dr. Mahamid, PE Dr. Mahamid, PE Dr. Elqaq, PE Dr. Mahmoud Issa, PE Mr. Bou-Saab, PE Dr. Shuibi

All classes are held 6:00 pm - 9:00 pm

March 08, 2007 (Th)

March 15, 2007 (Th)

March 22, 2007 (Th)

March 29, 2007 (Th)

April 05, 2007 (Th)

Please give us your feedback after you complete the classes.

Statics

Dynamics

Dynamics II

Electrical Engineering

Fluid Mechanics

Announcements and News

Congratulations to Abdul Basrawi and family on the birth of their baby daughter Ream.

Congratulations to Mustafa Awwad (Abu-Awwad) on his marriage.

Congratulations to Dr. Mohamad Nagi on his new position overseas.

Congratulations to Nabeel Aldrees on his new position.

Condolences to Dr. Maher Abu-Mallouh and family on the loss of his father.

Condolences to Dr. Mustafa Mahamid and family on the loss of his father.

Condolences to to Mr. John Dasoqi and family on the loss of his father.

Special Thanks to Following for their contributions at the Semi-Annual Meeting:

\$1000 Scholarship Donors

Area Wide • Creative Design • Hatem Elagha • Dr. Kazkaz & ITW (total of \$1,600)

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If you have an annoucement on any member, please email it to us at aaaea@aaaea.org

President's Message, continued from page 1

February 23rd and the IIT-DuPage E-Week Expo on February 24th. To promote networking, unity, and friendship, social gatherings and sports events will be organized throughout the year.

On January 21st we will have our bowling event which is open to all members and their families. On March 31, 2007, we will have our Annual Social Dinner which will conclude our tenth anniversary celebration. I invite every one of you to attend and make it a success, and I hope you will be able to join us and support AAAEA in all future events.

The challenges for us are to engage in more member participation; increase our membership; and bring more technical people to the organization. We planned a big push in assisting other engineers to form sister associations. Our National Outreach Committee (NORC), members of our sisters associations and other engineers from several potential states attended the first national meeting on November 11, 2006. "History in the making," is how our honoree, Bilal Almasri, described our very special event on November 11, 2006.

NORC has been very successful since our last semiannual meeting by visiting several cities in Florida, Louisiana, and Tennessee, and contacting several engineers in other states to form a similar association. Please see articles from NORC on these meetings. We also planned on expanding our association within Illinois, by establishing chapters, such as our Peoria meeting on December 8th, 2006, with a very organized group of engineers and architects. We also are planning a visit to each of the major colleges and universities in Illinois to establish student chapters.

Whether you are President of a company or a student at college, whether you work in a small or big company, whether you are independent or part of a franchise, we need you to be in tune with our association. It is time for everyone – it's time for you to get involved. As Henry Ford said, "Coming together is a beginning; keeping together is progress; working together is success".

I look forward to seeing you at our bowling event and our Annual Social Dinner Party. HAPPY NEW YEAR!

Jamal Grainawi, P.E., S.E. AAAEA President AAAEA P.O. Box 1536 Chicago, IL 60690-1536

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