

# ANNUAL REPORT 2017-2018



## THE UNIVERSITY OF TEXAS AT EL PASO

INSTITUTE OF TRANSPORTATION ENGINEERS STUDENT CHAPTER

FEBRUARY 26, 2018

Report Submitted by:

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FACULTY ADVISOR

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## Letter from the President

As president of the University of Texas at El Paso (UTEP) Student Chapter of the Institute of Transportation Engineers (ITE), I am pleased to submit our *2017-2018 Student Chapter Annual Report*. We met the goals from last year of maximizing the learning experience in both transportation software and networking and increasing professional development. Below are some of the highlights of this last academic year:

- The chapter was (and will be) represented at both the fall 2017, and spring 2018 TexITE District Meetings in San Marcos and Keystone, Colorado, respectively.
- The chapter was represented at the 97<sup>th</sup> Annual Transportation Research Board (TRB) Annual Meeting in Washington D.C.
- The chapter took part to make our State of Texas more beautiful by cleaning-up trash for a two-mile section of highway in east El Paso, and served as science fair judges for Radford School.
- Professionals from the community spoke to the chapter regarding Microstation, VISSIM, what to expect after graduation, ongoing research at the Texas A&M Transportation Institute office in El Paso, and a resume/CV workshop.

As we have transitioned from past students to current students, the UTEP ITE student chapter looks ahead to a successful 2018 and 2019, as we continue to adapt and improve. Our chapter experienced the highest number of members in recent years. Furthermore, we completely changed our weekly meeting format during the winter break. Now we have a real-world term project for the spring, so the students can gain valuable experience with traffic simulation tools; we have more guest speakers than we have ever had in our chapter's history; we are offering a resume/CV workshop and a Fundamentals of Engineering (FE) Exam review, both of which are open to any civil engineering student; and we developed our own internal Traffic Bowl, with over 75 questions.

We understand that our chapter does not compare to the much larger chapters in the TexITE District; however, with our new meeting format, we are now doing things in our chapter that no other chapter has done before. With everything we have done as a chapter over this past academic year, and given our size, we believe we should be seriously considered as the Student Chapter of the Year for the TexITE District – something that no school other than UT Austin or Texas A&M has ever done before.



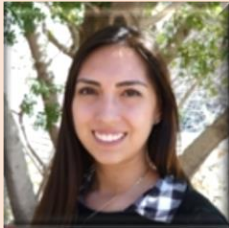


I would like to acknowledge and thank our faculty advisor, Dr. Kelvin Cheu, for his continued support and guidance. I would also like to thank UTEP ITE officers and members for their participation to make this chapter a success. Lastly, I would like to thank those who spoke and gave seminars to the chapter for their encouragement and time. The chapter strives to engage students' interest in transportation, bridge the gap between students and professionals in the community, and make a difference in our region.



**Matthew Vechione, E.I.T.**

**UTEP ITE Student Chapter President**

## Student Chapter Officers

	<p>PRESIDENT Civil Engineering Doctoral Student Matthew Vechione <a href="mailto:mmvechione@miners.utep.edu">mmvechione@miners.utep.edu</a></p>
	<p>VICE-PRESIDENT Civil Engineering Doctoral Student Okan Gurbuz <a href="mailto:ogurbuz@miners.utep.edu">ogurbuz@miners.utep.edu</a></p>
	<p>SECRETARY Civil Engineering Master's Student Ximena Jauregui de la Garza <a href="mailto:xjaureguidelagarza@miners.utep.edu">xjaureguidelagarza@miners.utep.edu</a></p>
	<p>TREASURER Civil Engineering Master's Student David Hoblik <a href="mailto:dhoblik@miners.utep.edu">dhoblik@miners.utep.edu</a></p>
	<p>WEBPAGE DESIGNER Civil Engineering Master's Student Raul Soto <a href="mailto:resotoarmen@miners.utep.edu">resotoarmen@miners.utep.edu</a></p>

## Student Chapter Membership

Number of Student Chapter Members: **15**

Number of Student Members of the Institute: **15**

Number of Student eligible to be a Student Member of the Institute: **15**

Number of Faculty Members who are current ITE Members: **1**

## Information on Transportation Engineering Enrollment

Number of Undergraduate Students (sophomore- senior year) in Academic Department: **348**

If not Civil Engineering, Specify Department: **N/A**

Does your curriculum allow an undergraduate student to major or minor in Transportation? **No**

Number of Graduate Students in Transportation: **8**

Full Time: **7**

Part Time: **1**

## ITE Weekly Meetings



The Institute of Transportation Engineers at the University of Texas at El Paso (UTEP) has always had weekly meetings, which included, but were not limited to, cultural and professional presentations, software workshops, and volunteer work. This was the format during the fall semester this year. Each member gave a technical or cultural presentation. The purpose of these presentations was to help the students with their presentation skills by assigning them all with a technical or cultural presentation that must be no shorter than 10 minutes. Students were



expected to practice their presentations and be ready to answer questions by peers. Critics were asked to evaluate the presenter and their presentation in regards to knowing their topic, good slides, good font size, interesting, tone of voice, and much more. The technical presentations helped to familiarize with the research topics that were taking place in the transportation research lab, and to increase our knowledge on transportation cutting-edge topics. The UTEP ITE student chapter is a multicultural chapter, which includes students with different backgrounds such as American, Mexican, Czechs, Turkish, and Persian. To get a better understanding of the different backgrounds, cultural presentations were held by students focusing on different aspects of transportation within their respective culture.

### **Fall 2017 Meetings (Original Meeting Format)**

The cultural presentations during the fall included the countries of Turkey, the Czech Republic, and Mexico. What's more, each cultural presenter provided a "treat" for the rest of the chapter. Our vice president, Okan Gurbuz, provided a hand-made famous Turkish dessert, baklava, for his presentation. Our treasurer, David Hoblik



from the Czech Republic, is also on the UTEP Men's Ice Hockey Team. During



his cultural presentation about the Czech Republic, he provided the chapter with free tickets to the remainder of their home game's during the fall. Lastly, three new undergraduate student members – Elizabeth Herrera, Gianna Aguirre, and Valeria Molina – gave a presentation about Mexico. They provided each member with a basket of famous Mexican candy.

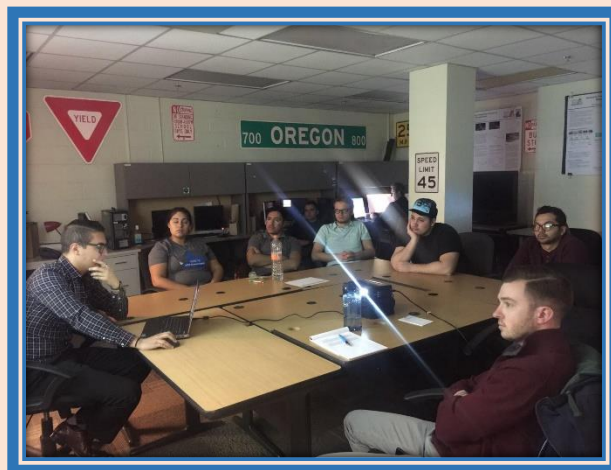
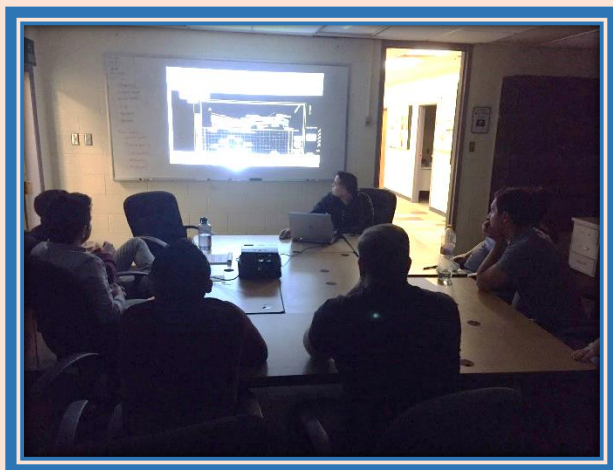
With the influx of many new members in the beginning of the fall semester, our chapter wanted to gain feedback as to what the new members enjoyed and did not enjoy about the chapter at the end of the fall semester. Our officers did not want members joining passively, simply to include ITE on their resume. After having only two guest speakers (during the same weekly meeting in November), a major suggestion was to have more guest speakers. In addition, many students did not enjoy the presentations and wanted more hands-on experience. Therefore, many changes were made in the spring semester.

## Spring 2018 Semester (New, Improved Meeting Format)

During the winter break, some of the chapter officers met numerous times to develop the new spring schedule, based on the feedback we received at the end of the fall semester. We completely transformed the format of our weekly meetings. For the first time in UTEP ITE student chapter history, we completely removed the mandatory presentations.

### Guest Speakers

After having only one weekly meeting in the fall with two guest speakers from Walter P. Moore who each gave a software workshop, one major suggestion was to have more guest speakers. Therefore, we invited two professional engineers from the community to come speak about how to get a job, what to expect after graduation, and how to conduct an interview.



### Term Project

Another major suggestion from the members is that they did not want to work on their presentation skills (for the cultural and technical presentations) as much as they wanted to gain hands-on experience with a real traffic problem using simulation software they have only had limited practice with from the classes they have taken. Therefore, our chapter has done something it has never done before – we have developed a spring term project.

Our president, Matthew Vechione, and vice-president, Okan Gurbuz, worked diligently during the winter break to develop a feasible spring project for the students – one that would not take time away from their coursework. The goal was to develop a project that allows the students to gain real-world experience using a traffic simulation software. This is important for every member, as it is great experience for them to include in their resumes.

For the project, we have divided the chapter into two teams, each team competing to model the best campus evacuation plan using CORSIM simulation software. We are assuming that there is an emergency during an event at our football stadium, the Sun Bowl. The members only have to model one parking lot, due to feasibility and time. Other vehicles enter the system (e.g. RV's from tailgating, etc.) and half of all the vehicles leave the campus to head to west El Paso, and the other half leave the campus to head to east El Paso. Our advisor, Dr. Kelvin Cheu, is part of the Center of Transportation, Environment, and Community Health (CTECH), a tier one university transportation center (UTC).

CTECH has donated \$600 to our ITE chapter. Therefore, we will award the winning team a monetary prize and plaque. Since CTECH is funding the project, the students must prove that their model is better than the other team's model with respect to:



- Transportation. The team with the better model/design, which has the last vehicle exiting the system in the least amount of time.
- Environment. The team with the model that has the least amount of CO<sub>2</sub> emissions.
- Community Health. The team that can prove their model is better than the other team's model with respect to community health.

Almost every weekly meeting during the spring semester, both teams are given time to work on their projects together. This was done because we did not want to give the members an overwhelming workload in addition to their current studies. The project description may be seen in Appendix A.

### **Traffic Bowl**

When planning the schedule during the fall break, we also wanted to further improve the morale of the members and serve them better. Therefore, we decided to have our own traffic bowl. Our chapter president, Matthew Vechione, and vice-president, Okan Gurbuz, worked diligently during the winter break to develop over 75 questions, based on the coursework from:

- Transportation Engineering (undergraduate level);
- Traffic Engineering (graduate level);



- Traffic Simulation (graduate level); and
- Urban Transportation Planning (graduate level).

These questions were designed so that any student who has taken transportation engineering (i.e. all of our members) could answer a majority of the questions, and the graduate level students would still have difficulty answering the challenging questions. Our traffic bowl occurred during our weekly meeting on February 8, and our chapter is more than willing to share our questions and templates with the TexITE district upon request for future Traffic Bowl usage.



Acronyms	Definitions	Equations/Relationships	Intersections	Roads/Simulation
100	100	100	100	100
200	200	200	200	200
300	300	300	300	300
400	400	400	400	400
500	500	500	500	500

### FE Review

In further efforts to retain the new undergraduate members in our chapter, we decided to also have our chapter officers give a Fundamentals of Engineering (FE) Exam review during one of our weekly meetings in March. All of our graduate student officers have already passed the FE Exam and the remaining members are comprised of undergraduate level seniors, about to take the FE.

This is also a valuable opportunity for our undergraduates to reach-out with other seniors who are about to take the FE Exam for: (i) potential increase in our chapter's enrollment; (ii) to serve as many engineering students as possible; and (iii) set our chapter apart from other engineering chapters, as no other chapter has offered a free FE Exam review, open to all students.

### Resume/CV Workshop

One of our guest speakers will also be conducting a resume workshop in March, where he, as a professional engineer in the community, will provide suggestions for each chapter member's resume. After Mr. Sergio Mendez of AIA Engineers, Ltd. discusses how to conduct an interview, he and our advisor, Dr. Kelvin Cheu will review each member's resume/CV. We have asked that each member bring copies of their resumes for Mr. Mendez and Dr. Cheu to provide redline comments. This is something we have not seen any other chapter on campus, or any other ITE chapter do to help their members. Furthermore, we have asked our undergraduate members to invite their friends who may not necessarily enjoy transportation as much as the other civil engineering disciplines for a free resume/CV workshop, open to all students.

## Professional Development

### 97<sup>th</sup> TRB Annual Meeting



The Transportation Research Board (TRB) 97<sup>th</sup> Annual Meeting was held in Washington, D.C., in January 2018. The conference attracted nearly 12,000 transportation professionals from around the world. The TRB Annual Meeting program covered all transportation modes, with more than 5,000 presentations in nearly 750 sessions and workshops addressing topics of interest to all attendees—policy makers, administrators, researchers, and representatives of government,

industry, and academic institutions. Current President, Matthew Vechione, and Past-President, Esmaeil Balal, attended the conference. The conference was very helpful in informing Matthew and Esmaeil of the newest information in transportation and provided them with a prospect to interact with researchers and create potential network for future projects and job opportunities.

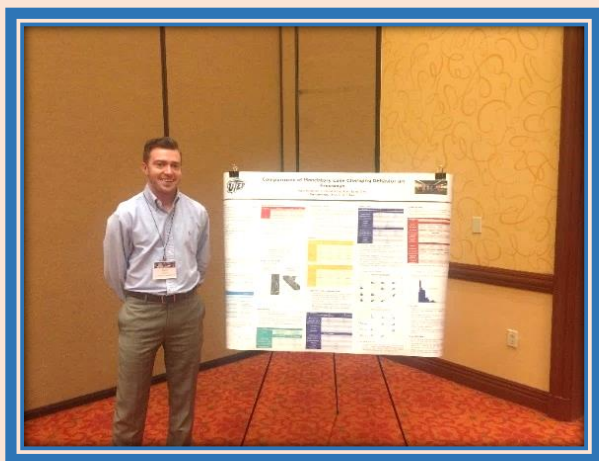
Matthew was awarded the Dwight David Eisenhower Fellowship at the conference. The Eisenhower Fellowship Program comprised of posters, presentations, and a reception with the award recipients. TRB was a valuable learning experience and will continue to be an annual trip that the members will be attending in the future.

### **TexITE Fall 2017 and Spring 2018 District Meetings**

The UTEP chapter was represented at the fall, 2017 TexITE District Meeting – which was held in San Marcos, Texas on September 6-8, 2017 by president, Matthew Vechione, vice-president, Okan Gurbuz, and past-president, Esmaeil Balal. Typically, during the conferences, UTEP students can participate in workshops, meetings, poster sessions, exhibit sections, and social events with professionals and other students around the state of Texas. Hundreds of professionals attend the conference and the students can network with many of them. The students can



talk to professionals and talk about potential employment in the future after graduation. Matthew gave a poster presentation over his research, “Comparisons of Mandatory Lane Changing Behavior on Freeways.”



The UTEP chapter will also be represented at the upcoming 2018 Spring Meeting, which is a joint meeting with the Western District – and will be held in Keystone, CO on June 24-27, 2018. Our chapter intends to send as many students as possible to this upcoming district meeting, as those members who have attended a district meeting often share their experiences and the benefits of such meetings. We are encouraging all

members to attend and for the workshops, meetings, social events, exhibit sections, and possibly, poster presentations.

UTEP and the ITE student chapter greatly benefit from these experiences because the students come back with new knowledge about the transportation field in Texas that they will share with other UTEP students. Topics discussed at the fall 2017 meeting included innovative intersection designs, new technologies in transportation, and connected and autonomous vehicles. With this great experience, Matthew, Okan, and Esmaeil recommended others to participate in this conference, and thus make it a regular activity so that UTEP could be represented every semester in the conference.

### **TSPE El Paso Chapter 2018 Engineer of the Year Banquet**

The El Paso office of Walter P. Moore helps financially sponsor our UTEP ITE chapter. On February 16, 2018, their office invited faculty advisor, Dr. Kelvin Cheu, and president, Matthew Vechione, to the Texas Society of Professional Engineers (TSPE) El Paso Chapter 2018 Engineer of the Year Banquet. This was a great opportunity for Matthew to network with local engineers. Moreover, it was a great learning experience, as Matthew was able to talk to engineers from other fields about transportation engineering and how it collaborates with their work.

### **Distinguished Guests & Technical Speakers**



#### **Daniel Carrera, P.E. | November 2017**

In November 2017, Daniel Carrera of Walter P. Moore gave a presentation to the ITE student chapter of the use of Bentley MicroStation software. Mr. Carrera shared his experience as a project engineer and projects using MicroStation.



#### **Jorge A. Martinez, P.E., PTOE, CNU-A | November 2017**

We had the pleasure of inviting Jorge Martinez, also from Walter P. Moore, to give a presentation about SYNCHRO. Mr. Martinez has recently been named as the 2018 TSPE El Paso District Young Engineer of the Year, and he gave a general description about how to use SYNCHRO, as well as a real example of signal coordination in downtown El Paso.





**Oswald F. Garcia, P.E. | February 2018**

In February 2018, Oswald Garcia of Moreno Cardenas, Inc. gave an insightful presentation on what to expect after graduation. Mr. Garcia shared his experiences as a project engineer before becoming a project manager.



**Rafael M. Aldrete, Ph.D. | March 2018**

Our chapter has invited Dr. Rafael Aldrete of the Texas A&M Transportation Institute (TTI) to speak about his latest research. Dr. Aldrete is a Senior Research Scientist at TTI with over 15 years of experience. The chapter, especially the graduate students, will gain valuable insight from Dr. Aldrete's visit in early March.



**Sergio R. Mendez, P.E. | March 2018**

Our chapter has also invited Mr. Sergio Mendez of AIA Engineers, Ltd to speak about the interview process and potential job openings in the El Paso area. After Mr. Mendez's presentation, he and our chapter advisor, Dr. Kelvin Cheu, will review the resumes (or CV's) of each member in the chapter.

**Field Trip | November 2017**

We went on one field trip as a chapter to the Texas Department of Transportation (TxDOT) Transvista Office in El Paso, Texas on November 17, 2017. The students were able to learn about the many traffic cameras that TxDOT has in El Paso. Furthermore, the students were also able to learn about how TxDOT mitigates traffic incidents in El Paso.





## TRB Webinar | November 2017

On November 7, 2017, our chapter teamed-up with the Transportation Leadership Council (TLC) Student Chapter at UTEP for a joint meeting to be a part of the TRB Webinar: Right-Sizing Roundabout Intersections for State Highways. Our chapter members learned, among others, how to integrate design operations into roundabout development, and how to communicate the final proposed model to all stakeholders. This webinar was a great opportunity, especially for the undergraduates planning to pursue a graduate degree about what TRB is and how important it is for graduate-level transportation engineers.



## Giving Back to the Community

### Adopt-a-Highway

Since the fall of 2012, UTEP ITE members have participated in the Adopt-a-Highway program, which is a Texas-born program developed in an effort to keep Texas highways clean. Our chapter has worked with the Chi Epsilon UTEP chapter tighter in the program. This year, we worked with not only Chi Epsilon, but also the American Society of Civil Engineers (ASCE), The American Society of General Contractors (AGC), and the Transportation Leadership Council (TLC). On Saturday, October 28, 2017, the ITE members, as well as other organizational members, met at the city of Socorro, which is located at the city limits on the east side region of El Paso, Texas, to pick up litter on a two-mile stretch of highway. UTEP ITE members have met at least once per semester at this location to help beautify the El Paso community.



## Radford School Science Fair

This year, our chapter went above-and-beyond to give back to our community. In addition to our typical community service programs (e.g. Adopt-a-Highway, Project Move, etc.), four of our members volunteered their time to serve as science fair judges for the Radford School. Radford is a very prestigious private school in El Paso, which has been recognized as the number one private school in El Paso by Niche.com. As a respected Pre-K-12 program, the teachers try to obtain the best and brightest minds of science in El Paso to serve as science fair judges. One teacher reached-out to president, Matthew Vechione, to gather volunteers from our chapter to serve as judges, as a majority of our chapter is in a graduate level engineering program.



## Scholarships

### Dwight David Eisenhower Transportation Fellowship Program



Our current chapter president, Matthew Vechione, was awarded the Dwight David Eisenhower Transportation Fellowship during the 97<sup>th</sup> TRB meeting at Washington D.C. This fellowship awards students pursuing degrees in transportation-related disciplines. In addition, the annual meeting provides an exceptional opportunity

to any person to be involved in the latest research and technology that other students and professors were developing around the country. This program advances the transportation

workforce by attracting the brightest minds to the field through education, research, and workforce development. Matthew was selected as one of only six Eisenhower fellows nationwide to give an oral presentation on his lane-changing research as part of the innovative doctoral research display. Matthew also gave a poster presentation at the TRB meeting for the same manuscript.

### **South Texas ITE Scholarship**

Our president, Matthew Vechione, also received a scholarship from the South Texas Institute of Transportation Engineers (STITE) Chapter for academic year 2017-2018. The South Texas ITE Chapter is committed to encourage civil engineering students to pursue and specialize in a career in transportation and traffic engineering. These scholarship funds are provided by their members through their fundraising events and by their generous sponsors.

### **Anita Mochen Loya Graduate Engineering Fellowship**



Our vice-president, Okan Gurbuz, was awarded the Anita Mochen Loya Graduate Engineering Fellowship by the UTEP College of Engineering for first-year Ph.D. students. As part of the fellowship, Okan was able to attend a banquet with other Ph.D. fellowship recipients in the College of Engineering as well as a Scholarship Donor Ceremony with graduate students from other engineering disciplines in UTEP.

## **Awards**

### **Daniel B. Fambro Student Paper Award**



This year, our chapter president, Matthew Vechione, was the first UTEP student to receive the Daniel B. Fambro Student Paper Award for his paper “Comparisons of Discretionary Lane Changing Behavior.” Although Matthew’s paper did not win the national competition, he received a plaque and monetary

prize during the TexITE 2017 Fall District Meeting in San Marcos. This was a historical event and turning point in our chapter’s history.

## C2SMART Student of the Year

Our chapter president, Matthew Vechione, was also named Student of the Year for the Center for Connected Cities for Smart Mobility towards Accessible and Resilient Transportation (C2SMART), a Tier 1 University Transportation Center (UTC). Matthew received the award, beating out students from New York University, Rutgers University, The City College of New York, and the University of Washington. Matthew received his award that the UTC Banquet during the 97<sup>th</sup> TRB Annual Meeting.



## Future Plans

The UTEP ITE student chapter will go forward with its traditional events such as Adopt-a-Highway, the TexITE meetings, the TRB meeting, and our weekly meetings. After noticing the improved morale of the members by changing the format of our weekly meetings this spring semester, we will continue with our new and improved format, which includes:

- A term project each semester so members can gain valuable experience before graduation.
- More guest speakers. We will try to invite not only professional engineers from the community, but also well-respected researchers for our members who plan to pursue academia after graduation. We have already asked professional engineers from the community to provide software workshops on popular software such as MicroStation and SYNCHRO. We are continuing to ask professional engineers from the community to discuss such things as how to do well in a job interview, what to expect after graduation, and how to look for a job. This is important because all of our members are at least seniors, who will be graduating soon.
- Our own Traffic Bowl with over 75 questions (i.e. three rounds) each semester.
- An FE review of transportation-type problems.
- A resume/CV workshop where our advisor, Dr. Kelvin Cheu and at least one professional engineer from the community provide comments and suggestions on how to improve each student's resume/CV.

New events have been discussed and we would like to implement these new plans in the near future. Many of the graduate members are currently working with different transportation and traffic simulation software such as Vissim, TRANUS, and even ArcGIS. We plan to hold more workshops, so these graduate students may teach others the software they are using.

We also plan to help consultants in El Paso with traffic counts as volunteer work or as a fundraising event for the chapter. We will continue to volunteer our time as science fair judges for Radford School, as those members who volunteered thoroughly enjoyed their time at Radford.

Another idea of ours is to get more involved at UTEP by participating in intramural sports such as basketball, volleyball, and dodgeball. Intramural sports like these not only allow ITE members to bond with each other and connect with other UTEP students, it also allows members to de-stress and get exercise throughout the academic school year. The UTEP ITE chapter has a bright future ahead and plans to grow and become an organization that brings pride to UTEP, the TexITE District, and ITE as a whole.



## Roster of Student Chapter Members

#	Name	ITE ID	Degree	Expected Graduated Date
1	Aguirre, Gianna	1069427	B.S.	Dec-18
2	Gamez, Andrea	1069585	B.S.	May-18
3	Garcia, Stephanie	1069565	B.S.	May-19
4	Gurbuz, Okan	1064320	Ph.D.	May-20
5	Herrera, Elizabeth	1069530	B.S.	Dec-18
6	Hoblik, David	1064269	M.S	May-18
7	Jauregui De La Garza, Ximena	1069306	M.S.	Dec-19
8	Molina, Valeria	1069531	B.S.	Dec-18
9	Ortega, Oscar	1069562	M.S	Dec-17
10	Salcedo, Karina	1069495	M.S.	Aug-18
11	Sierra, Luis	1069564	B.S.	May-19
12	Soto, Raul	1067952	M.S.	Dec-18
13	Uribe, Juan	1069641	B.S.	Dec-18
14	Valdez, Luis	1067972	M.S	Dec-18
15	Vechione, Matthew	1064269	Ph.D.	May-19

## Appendix A – Spring 2018 Project

### UTEP ITE Spring 2018 Project

February 15, 2018

#### Sunbowl Evacuation Plan for P5, P6, and P9

Overview/ Problem	During a football game at the Sunbowl, there is an emergency and everyone in the P9 (Glory Road 2) parking lot must evacuate. There are 531 vehicles. Assume all vehicles are passenger vehicles.
Description	All 531 passenger vehicles must exit P9 at the west exit and head towards the Glory Road roundabout. At the roundabout, there are 50 RV's which are coming from the Don Haskins Center parking area (from tailgating). Both traffic streams must travel down Sun Bowl Dr. to the Bookstore Roundabout. Along the way, 194 passenger vehicles from P5 (on Dawson) enter on Sun Bowl, as well as 190 passenger vehicles from P6 (only from north exit, south exit is restricted). No other vehicles are allowed on Sun Bowl Dr.
Task	<p>Design the network using CORSIM, from P9 exit on Glory Rd. Design the intersection at Glory Rd. and Sun Bowl for the 531 vehicles and 50 RV's (signalized, but bonus points if roundabout). Continue the model down Sun Bowl Dr., which includes the 194 vehicles from P5, and 190 vehicles from P6.</p> <p>Design the intersection where the Bookstore Roundabout is (bonus points if roundabout). 50% of vehicles turn right here and get on IH-10 westbound to head to the west side. 50% of vehicles continue through the intersection to Schuster/Sun Bowl intersection and turn right (assume no traffic from Schuster). This traffic then turns left and merges on IH-10 eastbound to head to the east side. The CORSIM model may be ended before merging on to IH-10.</p>



Deliverables	<p>Since the Center for Transportation, Environment, and Community Health (CTECH) is sponsoring this event, for a team to win, it must be related to Transportation, Environment, and Community Health.</p> <ol style="list-style-type: none"> <li>1. Transportation (50%) <p>The CORSIM model must run correctly, preferably with aerial imagery in the background. Each intersection must be modeled as a signalized intersection based on the traffic demand during the emergency evacuation (bonus points if roundabouts). Whichever model/design gets the last vehicle out of the system (and on IH-10) will get more points for this section.</p> </li> <li>2. Environment (30%) <p>The CORSIM model, which has the least amount of CO<sub>2</sub> emissions, will get more points for this section.</p> </li> <li>3. Community Health (20%) <p>The team which can relate their model to community health the best, or who can prove that their model has a better impact on community health will get more points for this section.</p> </li> </ol>	
Structure	Two teams. Matt will supervise one team. Okan will supervise another team.	
	<u>Matt's Team</u> David Luis Valdez Andrea Liz Valeria JJ	<u>Okan's Team</u> Ximena Raul Karina Luis Sierra Gianna
Competition	<p>During the last ITE weekly meeting (on April 12), both teams will show that their model works and that they met the criteria for transportation, environment, and community health. Dr. Cheu, Dr. Balal, and an industry expert from Walter P. Moore will be judges. The winning team will receive a certificate and a cash prize (sponsored by CTECH).</p>	



Dear UTEP Civil Engineering Student,

As a student enrolled in CE 4340 Transportation Engineering, you are eligible to join the UTEP Institute of Transportation Engineers (ITE) Student Chapter. As a Chapter Member, you will be able to vote, to hold office, and to help our chapter become more effective. We have a one-time nominal fee of only \$5.00 per year to join, which covers operation expenses (certificates and plaques for competitions and term projects).

As you participate in chapter activities and learn more about transportation engineering, we strongly encourage each and every one of our members to register online and become a Student Member of ITE. Most, if not all, of our chapter members belong to ITE. The ITE Student Member dues are \$10.00 per year; however, ITE is currently offering a complimentary first year of student member dues. Other benefits of being an ITE member include, but are not necessarily limited to:

- Subscription to *ITE Journal*;
- Becoming part of (and availing oneself of) a world-wide network of transportation professionals;
- Employment opportunities through the annual student resume program; and
- The opportunity to seek understanding of subdisciplines within the transportation field.

For this fall 2017 semester we have weekly meetings, and our first meeting is on October 5, 2017. We invite you to come by and learn more about the wonderful opportunities our chapter offers. We meet every Thursday from 12:00 to 1:00 PM in the Transportation Lab (E-215). This first week will be a general meeting to for everyone to introduce themselves and then we will discuss our schedule for this semester. We plan to have guest speakers from the industry, field trips, and technical or cultural presentations by each member. We hope you can attend this meeting.

If you have further questions about our chapter or ITE as a whole, please feel free to contact our vice-president, Okan Gurbuz at (915) 251-5063 or at [ogurbuz@miners.utep.edu](mailto:ogurbuz@miners.utep.edu). You can also contact me at (915) 443-3333 or by email at [mmvechione@miners.utep.edu](mailto:mmvechione@miners.utep.edu). For general ITE information, please check out the ITE Web site ([www.ite.org](http://www.ite.org)).

Respectfully,

A handwritten signature in blue ink, appearing to read "Matt Vechione".

Matthew Vechione, E.I.T.  
UTEP ITE Student Chapter President



# **Institute of Transportation Engineers**

**The University of Texas at El Paso  
Student Chapter**



# Institute of Transportation Engineers

- ❑ Founded in 1930, the Institute of Transportation Engineers (ITE) is an international organization of transportation professionals.
- ❑ ITE's membership represents both the public and private sectors with professionals whose backgrounds range from transportation and traffic engineering to transportation planning and safety engineering.
- ❑ As new technologies in communications and engineering emerge, the broad spectrum of member backgrounds continues to expand.
- ❑ Since its inception in 1930, ITE membership has grown to encompass more than 13,000 members.



# ITE Districts – Texas, US, & International

- ❑ There are 10 ITE districts
- ❑ The Texas District has 9 student chapters
  - Texas A&M University,
  - Texas A&M University-Kingsville,
  - Texas Southern University,
  - Texas Tech University
  - University of Texas at San Antonio,
  - University of Texas at Arlington,
  - University of Texas-Austin,
  - **University of Texas at El Paso**
  - Southern Methodist University.



# ITE Mission- UTEP Perspective

## Mission

- ❑ Promote the transportation engineering profession and encourage students to find out more about this field and about its great opportunities and interesting challenges.



# ITE UTEP Chapter Officers



Matt Vechione  
President



Luis Sierra  
Secretary



Okan Gurbuz  
Vice-President



David Hoblik  
Treasurer



Past-President  
Esmaeil Balal

# Student Chapter Activities

- ☐ Weekly Presentations (Thursday, 12:00 pm at E215)
- ☐ Conferences
- ☐ Workshops
- ☐ Field Trips
- ☐ Real world experience
- ☐ Community Service
- ☐ Scholarships and fellowships



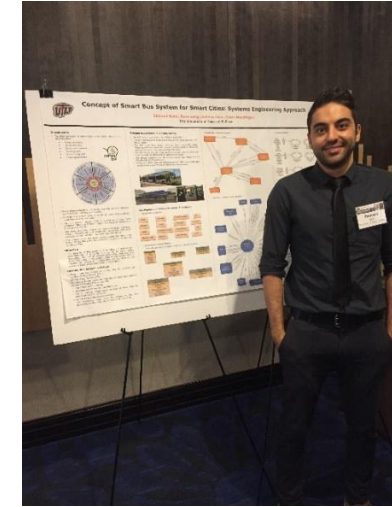
# Weekly Presentations

- ❑ Technical Presentation
  - ❑ Current Research
  - ❑ Thesis Topic
  - ❑ Cutting Edge Topics
- ❑ Cultural Presentation
  - ❑ Practice Presentations
- ❑ Guest Speakers Seminars
  - ❑ Professional Engineers
  - ❑ Alumni Students



# Tex-ITE Conference

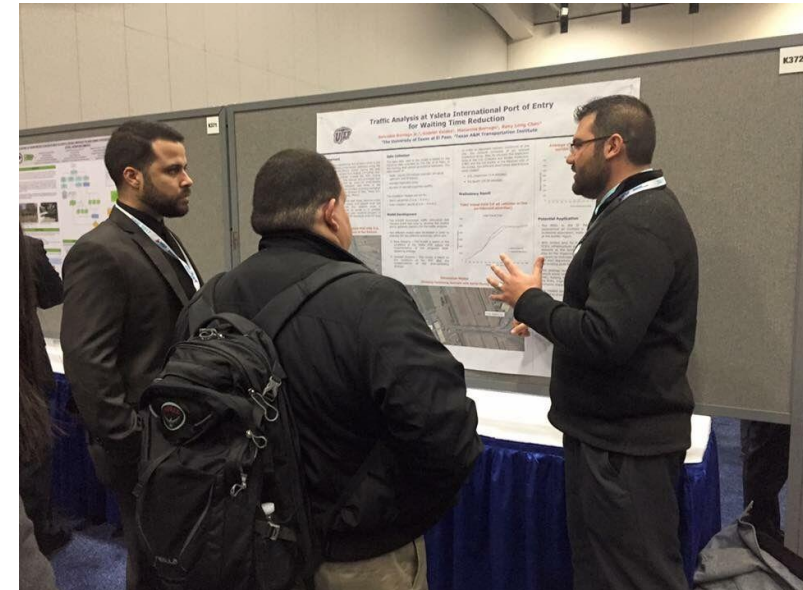
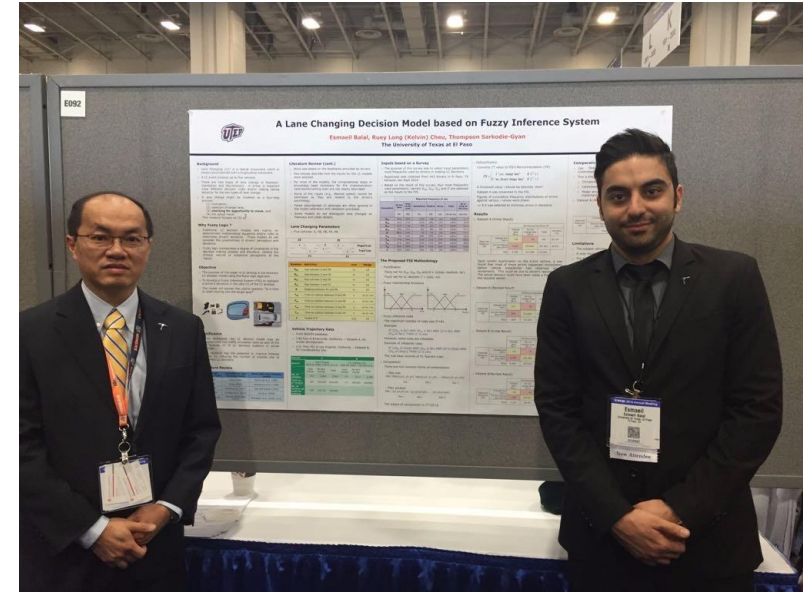
- Professional Chapter
- Networking
- Presentations-Feedback
- Traffic Bowl Competition





# TRB Conference

- ❑ Networking
- ❑ Covers all transportation modes
- ❑ More than 4,500 presentations
- ❑ Workshops addressing topics of interest to all attendees
- ❑ Policy makers, administrators, practitioners, researchers, and representatives of government, industry, and academic institutions.



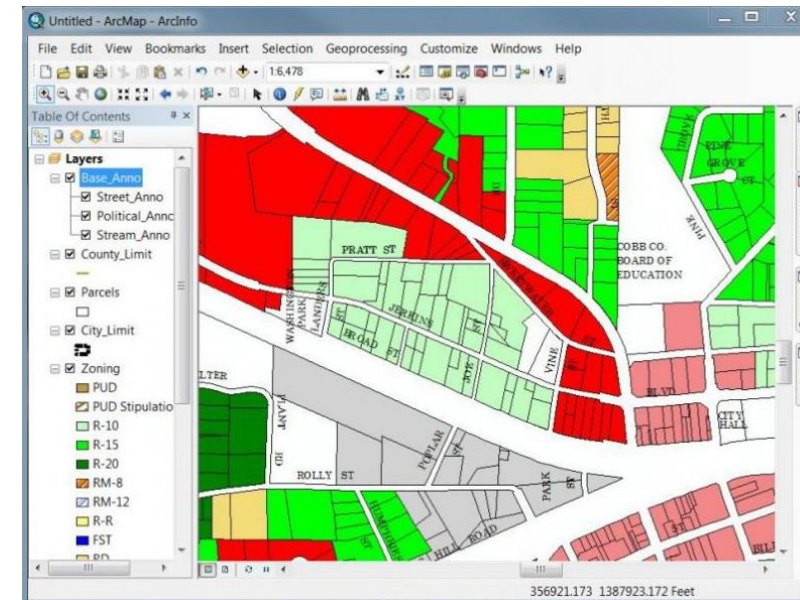
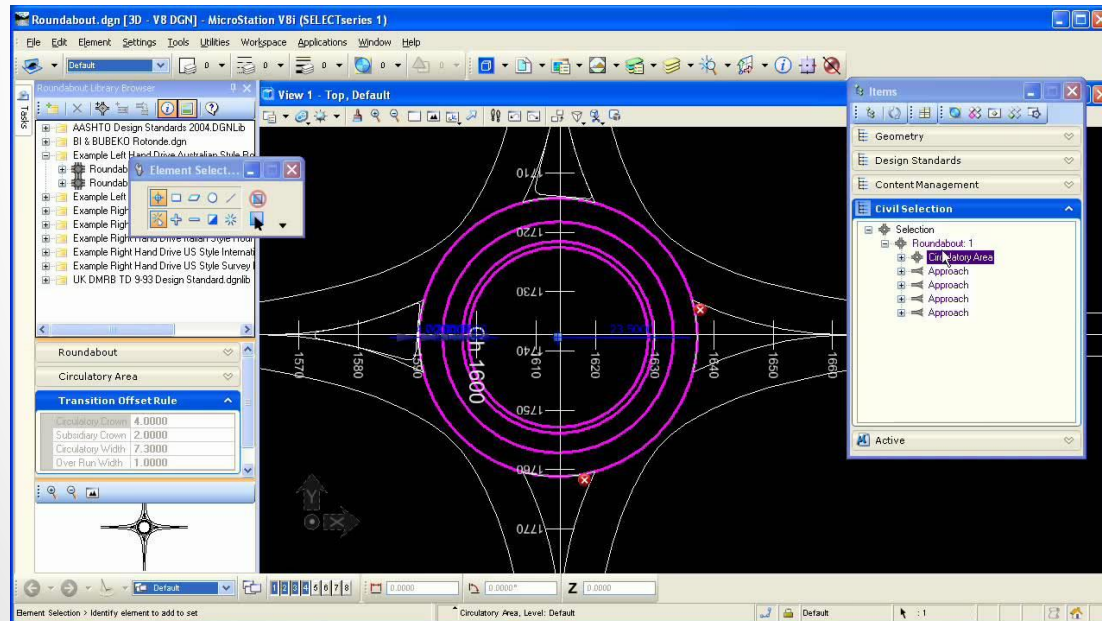
# Workshops

## Transportation Software

VISSIM

Arc-GIS

Microstation/AutoCAD





# Field Trips

## □ TransVista

□ Traffic Management System Center

□ El Paso District





# Real World Experience

- ☐ Technical Reports
- ☐ Research
- ☐ Traffic Counts
- ☐ Surveys



# Community Service

☐ Adopt-A-Highway



# Community Service (Cont.)

## Canstruction





# Community Service (Cont.)

## ProjectMOVE



# Scholarships, Fellowships, & Internships

## ☐ Scholarships

☐ STITE

## ☐ Eisenhower Fellowships

## ☐ Internships/Careers

☐ City of Frisco

☐ TTI

☐ TxDOT

☐ AIA

☐ Kimley Horn



**South Texas ITE**

Institute of Transportation Engineers



**Kimley»Horn**



# Upcoming Events

- ❑ Adopt a Highway

  - ❑ October, 2017

- ❑ Tex-ITE Meeting

  - ❑ June 2018

  - ❑ Keystone, Colorado

- ❑ Canstruction

  - ❑ Fall, 2017

# How to Join??

- ❑ Membership Application
  - ❑ \$5.00 (for BBQ at end of year)
- ❑ ITE meetings
  - ❑ Thursdays
  - ❑ 12:00PM-1:00PM
- ❑ UTEP ITE Student Chapter
  - ❑ BIG Lab (Engineering Building E-215)
  - ❑ [Ite.utep@gmail.com](mailto:Ite.utep@gmail.com)
  - ❑ (915) 747-8737



# Questions?



## **UTEP ITE Student Chapter Calendar**

For each month below, the general tasks performed by officers are listed.

### **August 2017**

- Organize and structure fall program
- Begin outreach to potential speakers
- Revise drive lecture and slides used to present to CE 4340 Transportation course
- Determine who will attend Fall TexITE District Meeting and who will be giving a poster presentation

### **September 2017**

- Coordinate with officers to determine schedule for best time to meet weekly
- Task each officer of their roles/responsibilities
- Present to CE 4340 Transportation course
- Attend Fall 2017 District Meeting in San Marcos
- Submit updated roster to TexITE

### **October 2017**

- First weekly meeting (now that new students have had approximately one month of transportation from the CE 4340 Transportation course)
- Create WhatsApp group for easy correspondence with all group members
- Assign who will attend each of four mandatory meetings that each UTEP student organization must attend each semester
- Coordinate with all members to have collared shirts with names and UTEP ITE logo
- Coordinate with Dr. Cheu on TxDOT field trip with his graduate-level Traffic Engineering course
- Adopt-a-Highway with ASCE, Chi Epsilon, AGC, and TLC on Saturday, October 28

### **November 2017**

- Guest speakers Daniel Carrera and Jorge Martinez, both PE's from Walter P. Moore visit our November 2 weekly meeting to host a workshop about MicroStation and SYNCHRO, respectively
- TRB Webinar: Sizing Roundabouts
  - Joint session with Transportation Leadership Council (TLC) on November 7.

## **December 2017**

- Gather feedback from all members, especially new members on what they like/dislike about the chapter
- During the winter break, while class is not in session, officers meet to discuss proposed changes based on feedback during last meeting

## **January 2018**

- Organize and structure spring program
- Begin outreaching to potential speakers
- Coordinate with officers to determine schedule for best time to meet weekly
- Assign who will attend each of four mandatory meetings that each UTEP student organization must attend each semester

## **February 2018**

- Meet with officers to determine tasks for annual report
- Let all members know during one of the weekly meetings of scholarship and award opportunities offered by TexITE and to apply by March 1
- Write annual report and submit by March 1
- Assign spring term project (UTEP evacuation plan) using CORSIM
- Prepare problems for FE review workshop during March 1 weekly meeting
- Guest speaker, Oswald Garcia, PE from Moreno Cardenas Inc, discusses how to get a job and what to expect after graduation during February 22 weekly meeting

## **March 2018**

- Begin preparing for TexITE district meeting by determining who will give a poster presentation, and plan travel arrangements accordingly
- Guest speaker, Rafael Aldrete, Ph.D. from Texas A&M Transportation Institute discusses his latest research
- Resume/CV workshop by Sergio Mendez, PE of AIA Engineers Ltd. during March 29 weekly meeting

## **April 2018**

- Both groups present their spring term projects (CORSIM) to Dr. Cheu and a representative from Walter P. Moore
- Host elections for next academic year's (2018-2019) officers



Institute of Transportation Engineers (ITE)  
STUDENT CHAPTER BYLAWS

ARTICLE I — ANNUAL FEES AND DUES

Sec. 1.1 — Annual dues and special assessments or fees shall be levied by a two-thirds vote of all Chapter Members.

ARTICLE II — GOVERNMENT

Sec. 2.1 — The appointed officers of the Chapter shall consist of a President, a Vice President of Membership and Registration, a Vice President of Social Activities, a Secretary, and a Treasurer. The appointed officers and the Student Chapter

advisor shall constitute an Executive Board, as required by the charter.

Sec. 2.2 — The terms of appointed officers shall be for not more than one academic year until succeeding officers have been duly elected.

Sec. 2.3 — Newly appointed officers shall take office at the first regular meeting following the election.

Sec. 2.4 — Nomination and appointment of officers shall take place as near as practicable to the end of the fall semester.

Sec. 2.5 — The appointment procedure shall be as follows: Nominations shall be made from the floor by members of the Chapter. Current officers of the Chapter will appoint officers from the list of nominees.

Sec. 2.6 — Should any elective office become vacant before the expiration of its term, the remaining officers shall appoint a new officer to fill the vacancy.

ARTICLE III — DUTIES OF THE OFFICERS

Sec. 3.1 — The President shall preside at all meetings of the Chapter and shall perform such other duties as are incumbent upon such office.

Sec. 3.2 — The Vice Presidents shall assist the President and shall assume the duties of the President when the latter is temporarily unable to discharge the duties of his or her office.

Sec. 3.3 — The Secretary shall keep a record of all transactions of the Chapter, attend to notification of meetings, conduct all essential correspondence for the Chapter, keep a roll of the members of the Chapter, and submit an annual report to the Institute of Transportation Engineers.

Sec. 3.4 — The Treasurer shall take charge of all funds belonging to the Chapter and shall be prepared to render an account of Chapter funds at each meeting.

ARTICLE IV — MEETINGS

Sec. 4.1 — At least three (3) meetings shall be held each semester on a day set by the President as most suitable to Chapter members, speakers, and guests. The President may call a special meeting when necessary.

Sec. 4.2 — A quorum must be present to conduct business, and a quorum shall be onehalf of the membership.

Sec. 4.3 — All meetings shall be conducted according to “Robert’s Rules of Order.”

## ARTICLE V— DISCRIMINATION

Sec. 5.1— The organization does not and shall not discriminate any member or non-member on the basis of race, color, religion, gender, gender expression age, national origin, disability, marital status, sexual orientation, or military status, in any of its activities or events.

## ARTICLE VI — AMENDMENTS

Sec. 6.1 — Proposals to amend these Bylaws may be made by the officers or by written petition signed by at least four members.

Sec. 6.2 — Any amendment to the Constitution or Bylaws shall be considered favored by an affirmative vote of two-thirds of the membership, and shall become effective upon notice of approval by the International Board of Direction of the Institute of Transportation Engineers.