



NEWSLETTER

Korean Transportation Association in America

Vol. 29, No. 1, January 2018

President's Message



Dear KOTAA members:

On behalf of all executive officers, I welcome all of you to 2018 KOTAA technical and annual meetings!

Happy New Year 2018 to all of you and your family members! Year 2017 has been truly a roller coaster ride with many big changes and challenges in both Korea and US. My little wish is that year 2018 is smoother, more predictable, and happier for all of us!

It is truly my great honor to give this Newsletter message as a President. If my memory is correct, my first participation in the KOTAA was 2003 as a PhD student who studied transportation infrastructure. My first KOTAA meeting was very grateful as one of KOTAA student travel award grantees. The KOTAA networking dinner was also awesome! - I could see many professionals and students who were in the similar areas of mine. Since then, I am sure I did not miss any KOTAA annual meetings. Interestingly, my role at the meeting has been changed with more and more responsibilities!

Since I have started my two-year presidency right after the last KOTAA annual meeting, I could take a chance to look into more details on this excellent organization. As you may see the attached "KOTAA History at a Glance" provided by Prof. Wayne Lee (our 3rd President), the first KOTAA meeting was in 1990 (which means that this organization is 28 years old). A number of former presidents and staffs have dedicated truly unconditional services to make our organization healthier and more professional. To just name a few highlights with my deep appreciation to a few former KOTAA presidents: Prof. Wayne Lee who contributed to practical founding of KOTAA, Prof. Hosin Lee who initiated our crucial business: the KOTAA travel grant program for students, and Prof. Youngsoo Kim who built our solid financial foundation

with several significant donations from many agencies including the KST (대한교통학회) and the KOSPE (한국도로학회). The KST has been our continuous donor since 2004. It is also important to note that we are an Associated Professional Society of the KSEA (재미과학협, Korean-American Scientists and Engineers Association), and the KSEA has been our strong financial supporter since 2011. On behalf of entire KOTAA members, I would express deep appreciation to those supporters and individual donors! We use those supports to recognize excellent students for their travel grants and our KOTAA annual meeting. Our annual meeting is the right place where you can find your mentors, friends, and collaborators. I would say this place should be your gold mine.

I am very glad to share with all of you three important reports: (1) we awarded total 32 travel grants, and we increased each grant from \$150 to \$190 (same as the TRB registration fee for students); (2) we upgraded our website (kotaa.org) which I believe, is much more organized and richer than before; (3) our financial status is sustainable (as you may see details later in this Newsletter).

In 2018, we all KOTAA staffs will work together to achieve several tasks. We will keep improving our webpage as an active place for networking, career development, collaboration, and promoting ourselves in the community. We will also work hard to make our financial status even stronger than now. This would be possible by many fundraisings, and one of our hopes is to see more individual donations from professionals. We will use your donations for students (e.g., travel grants). One more thing we would target in 2018 is to develop a few practically implementable programs for our members (e.g., mentoring and/or job searching).

I look forward to continuing to work with you and to enjoy fellowship in the coming years. Wishing you the very best for 2018 (Golden Dog year).

Yong-Rak Kim, Professor (U. Nebraska)
14th President of KOTAA (2018-2019)

KOTAA History at a Glance

By K. Wayne Lee

My first Transportation Research Board (TRB) conference was in January 1979 with graduate students of University of Texas (UT) at Austin. We rent two recreational vehicles (RVs) from Austin, Texas to the TRB Sheraton hotel, and joined UT faculty and other delegates. It was eye-popping experience, and continued participating all annual meetings thereafter. However, I could not meet (and/or identify) any Korean or Korean-American transportation professionals first several years. Fortunately, I met at least three senior transportation professionals in 1980s, i.e., Prof. Robert Bumjung Lee of New York Polytech U and New Jersey Institute of Technology (NJIT), Dr. Junho Byun of Federal Highway Administration (FHWA) and VP Myunghak Sung of Gannett Fleming, Inc. Naturally, we met in the Sheraton hotel (now Marriot) lobby and restaurants in front of the hotel with various topics. I remember some of stories, i.e., how Prof. Robert Lee started his junior faculty life, how he wrote a text book of "Traffic Engineering" with Prof. Pignataro and how he worked for Korea including bus operation management system etc.; How Dr. Byun married to younger sister of one of my classmate, Prof. Uewan Cho of University of Missouri at Columbia, and how meaning to work for US federal government etc; and how VP Sung explored his consulting works in Pennsylvania and the US, etc. Actually, I even visited Dr. Byun's beautiful house with my wife in Columbia, MD. Yes, so far it appears to be a kind of pre-KOTAA or history. Then, I met with one of my best friends, Prof. Myungsoon Chang of Texas A&M University and later Hanyang University, and he joined the above three seniors. Prof. Chang and I did not meet only for the meals in the restaurant but also drinking and lots of talks in my hotel room. We felt that we could have an official gathering mechanism and/or organization, i.e., later KOTAA. Sooner or later, more Korean and Korean-American transportation professionals participated in TRB conference, e.g., Prof. Kuyungwoo Kang of Hanyang University and Dr. Hosin David Lee of Washington State University later University of Utah. Actually, some of them went the second drink or third one which I could not join that late.

If my memory is correct, the first KOTAA meeting was in January 1990 and we elected Prof. Robert Lee as our founding President. Since we need some financial support at the beginning of any organization, he provided most of them which we really appreciated. Prof. Robert Lee served as President, Dr. Byun as VP and myself as Secretary/Treasurer for 4 years. Then, in 1994 Dr. Byun became the 2nd President, Mr. Sung as VP and myself as Secretary/Treasurer. Since VP Sung could not serve as President due to his personal reason, I became the 3rd President in 1997. I remember that the bylaw was revised, and established a foundation to further the cause of research in the transportation engineering field by providing fellowships to enable students to present scholarly papers at national meetings of transportation engineers, and to promote and encourage student participation in KOTAA and TRB activities. Actually, it was possible because of excellent staff, particularly, Secretary/Treasurer, Ms. Soojung Jung of University of Maryland. Because she was in Washington DC area, we had KOTAA annual meeting and dinner at the Korean-American Scientists and Engineers (KSEA) building, in Vienna, VA. She arranged tour bus from TRB Hotel to KSEA building, and Korean delegates for International Road Federation (IRF) led by Dr. Keunhan Kim were able to make special presentations and interaction with KOTAA members. This may be one of her superior contribution to KOTAA and Korean-American societies. I remember that she was not only excellent in managing KOTAA matters but also was very good in golfing. As a small token of our appreciation, I took her dinners several times and played golf in DC area a couple of times with my personal fund. However, I unfortunately learned that she changed her professional career path other than transportation some years later. We are missing her but wish her best success on whatever she pursues.

Although most senior members including VP Sung suggested leading KOTAA beyond 1998, I insisted for Mr. Sung to become the 4th President and Dr. Hosin Lee as VP in 1999 in accordance with the Bylaw, i.e., the term of officers would be 2 years. I trust that this will pave the way for the rest of KOTAA. In 2001, Prof. Hosin David Lee of University of Iowa became the 5th President and Prof. Youngsoo Richard Kim of North Carolina State University as VP. The rest of leaders would be as follows:

- 6th 2003-04 Prof. Youngsoo Richard Kim,
North Carolina State Univ.
- 7th 2005 Dr. Seongsoon Yun,
Gannett Fleming, Inc.
- 8th 2006-07 Prof. Byungkyu (Brian) Park,
University of Virginia
- 9th 2008-09 Prof. Eul-Bum (E.B.) Lee,
UC Berkeley and POSTECH
- 10th 2010-11 Prof. Jun-Seok Oh,
Western Michigan University
- 11th 2012-13 Prof. Hak-Chul Shin,
Louisiana State University
- 12th 2014-15 Dr. In-Kyu Lim,
Virginia DOT
- 13th 2016-17 Prof. Sang Soo Kim,
Ohio University

Since I agree with the request from the 13th KOTTA President, Prof. Sang Soo Kim, I drafted this history quickly. Since more and more of new young members are joining KOTAA, this may help KOTAA for the long-term sustainability. If there is any error, please feel to contact me, and we will revise it accordingly. Thank you and wish you a productive and prosperous New Year!

Kang-Won Wayne Lee, Ph.D., P.E., F. ASCE

President of Korean-American University Professors
Association (KAUPA)
Professor of Civil & Environmental Engineering
Director of Rhode Island Transportation Research
Center (RITRC),
The University of Rhode Island
Kingston, RI 02881, USA

2018 KOTAA Technical Meeting

Date/Time: January 7, 2018 5:30 PM - 7:00 PM

Location: Convention Center, 102B

2018 KOTAA Annual Meeting

Date/Time: January 7, 2018 7:00 PM - 8:30 PM

Location: Convention Center, 102B

2018 KOTAA Annual Banquet

Date/Time: January 7, 2018 8:30 PM - 10:00 PM

Location: Haad Thai Restaurant,
1100 New York Avenue, Washington, DC 20005



2017 KOTAA Participants Status

A total of 91 KOTAA members attended at the 28th KOTAA Annual Meeting in January, 2017.

Status	U.S.	Korea	Others*	Total
Professional	28	13	1	42
Student	32	16	1	49
Total	60	29	2	91
Status	U.S.	Korea	Others	Total
Professional	31%	14%	1%	46%
Student	35%	18%	1%	54%
Total	66%	32%	2%	100%

* Includes UAE and The Netherlands

2017 KOTAA Meeting Summary

Membership dues:

Professional (\$35/year), Student (\$15/year)

2017 KOTAA Membership Fee Report

	\$0	\$ 15	\$ 35	Total
Professional	0	0	42	42
Graduate	0	49	0	49
Total amount		\$735	\$1,470	\$2,205

2017 Travel Grant Expense Summary

Award	Number	Total
Travel Grant (\$150)	33	\$ 4,950.00

KOTAA Financial Status

1. General Financial Status

Fiscal Year of 2017

Revenue	15,224.88
Balance from FY 2016	12,638.57
2017 Membership	2,205.00
Web Domain Fee Discount	381.31
Expense	-2,642.17
2017 Newsletter	-174.47
Wire Transaction Fee	-32.00
Bank Service Fee	-14.00
Administration Expense *	-21.70
2017 KOTAA Annual Meeting	-2,400.00
Balance as of 12/31/17	12,582.71

* includes check-in for meeting belongings, certificates purchase

2. Travel Grant Financial Status

Fiscal Year of 2017

Revenue	39,026.84
Balance from FY2016	30,641.83
Revenue from CDs & Mutual Fund	693.57
Donations from Members	943.94
Donations from Institutions	6,747.50
Expense	-6,518.94
2017 Travel Grant (33 awardees)	-4,950.00
Membership Dues for KSEA	-1,390.00
Lodging (west coast awardees)	-178.94
Balance as of 12/31/17	32,507.90

To enhance KOTAA's financial status, KOTAA continued to invest in CDs and Mutual Fund through 2017, based on the decision made by executive officers. Following tables summarize the status of the investment in mutual fund in 2017.

2.1 Earning from the Investment

(1)	Dividend from the Mutual Fund	\$776.13
(2)	Credit interest	\$2.24
(3)	Earning from the Mutual Fund	-\$84.80
Total		\$693.57

(1) Dividend from the mutual fund (see Table 2.1.1)

(2) Annual credit interest (which obtained from the rest of money outside the investment)

(3) Earning from the mutual fund (Table 2.1.2)

2.1.1 Monthly Dividend from the Mutual Fund

Month/Year	Monthly Dividend
01/2017	\$72.08
02/2017	\$72.08
03/2017	\$72.08
04/2017	\$63.42
05/2017	\$63.42
06/2017	\$63.42
07/2017	\$63.42
08/2017	\$63.42
09/2017	\$63.42
10/2017	\$59.79
11/2017	\$59.79
12/2017	\$59.79
Total	\$776.13

2.1.2 Earning from the Mutual Fund Investment

Month/Date/Year	Mutual Fund Price
12/31/2016	\$ 8,988.80 (= \$ 8.48 x 1,060)
12/31/2017	\$ 8,904.00 (= \$ 8.40 x 1,060)
Total Earning	-\$84.80 (=\$8,904.00-\$8,988.80)

Note: As of 12/31/2017, we have 1,060 shares of a mutual fund with a unit price of \$8.40.

Donations to KOTAA in 2017

Donations from Institutions

Donation Level	Institution	Donation
Diamond	KST ¹	\$ 4,000.00
Diamond	KSEA ²	\$2,747.50
Total		\$ 6,747.50

¹ Korean Society of Transportation; ² Korean-American Scientists and Engineers Association

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Donations from Members

Donation Level	Name		Donation
	Last	First	
Platinum	Park	Byungkyu (Brian)	\$200.00
	Kim	Yong-Rak	\$165.00
	Kim	Sang-Soo	\$143.94
	Kwon	Eil	\$100.00
Gold	Lee	Chung-Won	\$65.00
	Lee	Hosin (David)	\$65.00
	Park	Seri	\$65.00
	Lee	Kang-Won (Wayne)	\$50.00
	Oh	Jun-Seok	\$50.00
Others	-		\$40.00
Total			\$943.94

Note: Only Members with donations more than \$50 are presented in the table.

KOTAA Travel Grant

Beginning from year 2002, KOTAA has awarded Travel Grants to Korean graduate students attending the TRB meeting from all over the world. Through this grant, KOTAA wishes to encourage Korean students for their study as well as to enhance technical understanding and relationships for their future career development. The students shown in the following are the year 2018 KOTAA Travel Grant recipients. Prizes of \$190 along with award certificates are presented at the 2018 KOTAA Technical Meeting.

2018 KOTAA Travel Grant Recipients

Excellent Student Paper Award

- Hyeonmi Kim**, University of Maryland-College Park, An arterial-based transit signal priority control system
- Seunggu Kang**, University of Illinois at Urbana-Champaign, Impact and Life-Cycle Assessment of New-Generation Wide-Base Tires in New Brunswick, Canada
- Ho-Chul Park**, Seoul National University, Bayesian Network for the Traffic State Prediction
- Shin-Hyung Cho**, Seoul National University, PATH SET GENERATION MODEL CONSIDERING INDIVIDUAL RISK PREFERENCE FOR TRAVEL TIME RELIABILITY
- Hyunjin Park**, Hanyang University, Real-time Estimation of Lane Change Risks based on the Analysis of Individual Vehicle Interactions
- Yong Je Kim**, University of Central Florida, A Methodology for Sinkhole Geohazard Modeling and Mapping of East Central Florida

- 7 **Seheon Kim**, Eindhoven University of Technology, Estimating Panel Effects in Probabilistic Representations of Dynamic Decision Trees Using Bayesian Generalized Linear Mixture
- 8 **Kyungwon Kang**, Virginia Tech, Modeling Driver Merging Behavior: A Repeated Game Theoretical Approach
- 9 **Eui-Jin Kim**, Seoul National University, Automated Framework For Vehicle Trajectory Extraction In Congested Traffic Using Unmanned Aerial Vehicles
- 10 **Yohan Chang**, University of Missouri - Columbia, Traffic Flow Modeling of Diverse Work Zone Activities
- 11 **Yujin Park**, Ohio State University, Who Is Interested in Carpooling and Why: The Importance of Individual Characteristics, Role Preferences and Carpool Markets
- 12 **Hongjae Jeon**, The University of Illinois at Urbana-Champaign, Divide and Conquer Model for Updating HCM Work Zone FFS Procedure
- 13 **Jaemin Hwang**, Seoul National University, A Design Model of Express Rail Line to Enhance Mobility and Relieve Congestion
- 14 **Kangjin Lee**, North Carolina State University, Optimization of the Laboratory Fabrication of Small Specimens for Asphalt Mixture Performance Testing: Improving the Reliability of Damage Characteristic Curves in the Simplified Viscoelastic Continuum Damage Model
- 15 **Sujae Lee**, Hongik University, Evaluation of accessibility on pedestrian network considering social path
- 16 **Sunghoon Jang**, Eindhoven University of Technology, Tolerance and Indifference Bands in Regret-Rejoice Choice Models: Asymmetric Impact of Perception of Attribute Differences
- 17 **Bumjoon Bae**, University of Tennessee, Knoxville, Short-term traffic speed prediction for a large-scale road network
- 18 **Sung Hoo Kim**, Georgia Institute of Technology, Investigating the Moderating Effects of Built Environment and Socio-demographics on Vehicle Ownership Using Latent Class Modeling
- 19 **Dong Yoon Song**, Purdue University, Psychological Effects of Real-Time Travel Information on Traveler Route Choice Behavior
- 20 **Youngmin Choi**, University of Maryland, College Park, Drone Deliveries Optimization with Battery Energy Constraints

- 21 **Whoibin Chung**, University of Central Florida, A comparative study between private-sector and automated vehicle identification system data through various travel time reliability measures
- 22 **Dongwoo Lee**, University of Illinois at Chicago, Comparison of Four Type of Artificial Neural Networks and a Multinomial Logit Model for Travel Mode Choice Modeling
- 23 **Hyoseuk Chang**, University of Maryland, A proposed generalized framework for the identification of contributing factors which affect hazardous traffic conditions on freeways
- 24 **Daisik Nam**, University of California, Irvine, Designing a Transit-Feeder System Using Multiple Sustainable Modes: P2P Ridesharing, Bike sharing, and Walking
- 25 **Lian Cui**, University of Virginia, Field evaluation of vehicle to infrastructure communication based eco-driving guidance and eco-signal system
- 26 **Haena Kim**, University of Washington, Delivery Process for an Office Building in the Seattle Central Business District
- 27 **Seongah Hong**, University of Virginia, Speed Harmonization using Optimal Control Algorithm under Mixed Traffic of Automated-Connected Vehicles and Human Driven Vehicles

Excellent Student Service Award

- 28 **Minha Lee**, University of Maryland, College Park, Secretary
- 29 **Youngeun Bae**, University of California, Irvine, Secretary
- 30 **Sunghi An**, University of California, Irvine, Secretary
- 31 **Daejin Kim**, Georgia Institute of Technology, Webmaster

Each grant recipient is asked to collect potential KOTAA member information and news in his/her areas and provide them to the KOTAA secretary.

Member News

Activities

- KOTAA President, Yong-Rak Kim serves the First Vice President of the KSEA (Korean-American Scientists and Engineers Association).
- Dr. Eun-Sug Park has been serving on the TRB Statistical Methodology Committee (ABJ80) since becoming a member in April 2017

Join in KSEA

KSEA was established in 1971 to help Korean-American Scientists and Engineers develop their full career potential. KOTAA, as an affiliation of KSEA, encourages its members to join in KSEA. Please refer to www.ksea.org.

Let's Use KOTAA Website!!!

Please visit our KOTAA website (www.kotaa.org). It has been upgraded! We welcome any ideas/comments to improve the website or postings of useful information. If you are interested in contributing to any part of the web contents, please feel free to contact the secretary (minhalee@umd.edu) and/or our webmaster (daejin.kim@gatech.edu).

[Linkedin.com](https://www.linkedin.com) is an on-line professional network. In addition to KOTAA website, [Linkedin.com](https://www.linkedin.com) will play a role to connect us and share information. Please visit the website and add you and invite people to connect.

Current KOTAA Executive Officers

President

Yong-Rak Kim (University of Nebraska)

Vice-Presidents

Seri Park (Villanova University)

Hyungjun Park (University of Virginia)

Auditors

Boo Hyun Nam (University of Central Florida)

Sung-Hee Sonny Kim (University of Georgia)

General Secretaries

Minha Lee (University of Maryland)

Youngeun Bae (University of California, Irvine)

Webmaster

Daejin Kim (Georgia Institute of Technology)

Send any comments or suggestions to our next general secretary, **Sunghi An**, at secretary@kotaa.org