



# August 2019 Newsletter

## Annual General Meeting Highlights

The GTPF Annual General Meeting was held on January 15th, 2019, during the Transportation Research Board (TRB) 98th Annual Meeting in Washington, DC. There were over 40 members in attendance, including students, professors, industry professionals, and delegates from Ghana. We were honored to have Ing. Magnus Quarshie as our guest speaker. Pictures from the meeting are available on Page 5 of this newsletter and the meeting minutes are available at <http://ghanatransportationprofessionalsforum.org/minutes-of-meetings/>

## Video Data Collection with Deep Learning

Dr. Yaw Adu-Gyamfi, an Assistant Professor in the Civil Engineering department at the University of Missouri-Columbia (UMC) was the speaker for our first webinar series in 2019. His research focus areas are traffic operations, intelligent transportation systems, civil infrastructure systems, Big Data Analytics and artificial intelligence.



In his presentation entitled “Video Data Collection With Deep Learning”, Dr Adu-Gyamfi highlighted the importance of the application of Deep learning to the transportation sector including traffic surveillance, intersection turning movement counts, vehicle classification, traffic sign inventory, red light crossing, self-driving vehicles, and pavement condition analysis. He gave a brief history about deep learning, the techniques involved and the tools needed to perform high computational analysis. He shared examples of his work in conducting traffic surveillance in the State of Missouri and Ghana. For members who missed the webinar, please [click here](#) for the detailed presentation.



## Inside this issue

Message from the Executives

Member Spotlight—  
Alexander Apea, Ph.D., P.E.

2019 Annual Meeting Photos

White Paper Series

Infographic: Fatality Rates in  
Ghana—A Comparison

## Membership Information

Please remember to pay your dues to help maintain our organization and implement our initiatives for the year. Dues are \$20 for students and \$100 for professionals. You can pay through:

**PayPal:** use the link on the GTPF website (<http://gtpf.org>)

**Mailed Check:** Make checks out to “Ghana Transportation Professionals Forum” and mail to our treasurer Dr. Stephanie Amoaning-Yankson at 3101 Wilson Boulevard, Suite 900, #6146, Arlington, VA 22201.

Bank Deposit: send an email request to [gtpforumna@gmail.com](mailto:gtpforumna@gmail.com) for bank account information.

**Dues for 2019 will be accepted until December 31, 2019.**

Thanks to all who paid their dues at the annual meeting in Washington, DC.

## Message from the Executives

*“Your pride for your country should not come after your country becomes great; your country becomes great because of your pride in it.” - Idowu Koyenikan*

Greetings GTPF members!

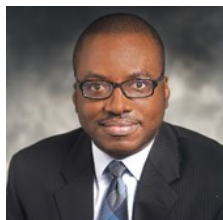
We are excited and humbled to serve again as the 2019 GTPF executive officers. We thank you all for the trust you have in us in serving you. Our agenda for 2019, though ambitious, is on course. Through the collective effort, hard work, and determination of our splendid group of volunteers, we’ve made significant strides in the last six months.

We welcomed some new members during our 2019 Annual Meeting in Washington D.C., and we look forward to engaging with them through our programs. To date, we have promoted our transportation profession and provided multiple opportunities for networking, technical enrichment and workforce development through our webinar and our WhatsApp social media platform. This has been all possible through the volunteering efforts of some of our members. We appreciate all your services to the organization. Thank you all for your dedication and we look forward to what's in store for the rest of 2019!

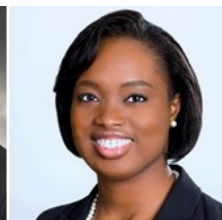
Borrowing the words of Idowu Koyenikan, a thought leader and author, “Your pride for your country should not come after your country becomes great; your country becomes great because of your pride in it.” We should take pride in building our nation Ghana. This comes with collective efforts and volunteering spirit. The future of our country is in our hands, we as professionals can either stay silent doing nothing about the transportation infrastructural problems it faces or take up the challenge, invest our time and efforts in being part of the solution. As a professional organization, our objective has been to provide leadership to in-

fluence national policy discussions, that will improve public safety, protect the environment, and strengthen security and the economy. We seek to encourage members from the private/public sectors to actively engage in research and professional practice that will yield innovations to solve some of the infrastructure problems in Ghana. Let’s take pride in building our country. We should all seek to contribute our “delta” to ensure the change we seek to have in our beloved country, Ghana. Let us stay strong and work towards the GTPF vision!!

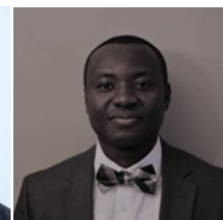
Our active number of participants on the GTPF WhatsApp group is about 100, and our mailing list reaches over 200 individuals across the globe. There are many opportunities to be involved in GTPF, and we need your help. Please don’t hesitate to contact any of the executives concerning how you would like to assist, either financially or by volunteering your time. Dr. Stephanie Amoaning-Yankson, GTPF Treasurer, keeps track of our membership dues which helps fund our initiatives. I encourage members to either pay online or contact her about payment options. For more information on GTPF, I encourage you to visit our website at <http://gtpf.org>.



Dan P. Seedah, Ph.D., P.E.  
President



Margaret-Avis Akofio-Sowah, Ph.D.  
Vice President



Kwaku Boakye, Ph.D.  
Secretary



Stephanie Amoaning-Yankson, Ph.D.  
Treasurer



Alexander Appea, Ph.D., P.E.

## Member Spotlight

### Educational Background

I attended Saint Peter's Secondary School in Ghana. I studied Civil Engineering at Kwame Nkrumah University of Science and Technology for my bachelors. I received my Masters and Doctoral degrees in Civil Engineering from Virginia Polytechnic Institute and State University in Blacksburg, Virginia.

### Role at Current Job

I currently work for the Virginia Department of Transportation as a Senior Materials Engineer. I serve as the Supervisor working with the Preliminary Engineering programs and also provide Quality Assurance leadership to the construction program.

### Favorite Project Worked On and Accomplishment

One of the favorite projects I have worked on is the Interstate 95 (I-95) widening project between the Quantico Base area and the Fredericksburg area. The project involves the construction of express lanes in the median and widening of the existing lanes from four (4) lanes to six (6) lanes in both directions and construction of new bridges on that I-95 corridor. Design-Build bidding process was used to select the contractors. People who commute between Northern Virginia and Richmond on I-95 experience excessive traffic delays on I-95 stretch during peak hour periods. When construction is completed, the project is anticipated to increase capacity, consequently, reducing traffic congestion and delay. Additionally, existing bridges that are structurally deficient will be replaced with new structures. The project is scheduled to be completed in 2022.

### Benefit of Being a GTPF Member

I have enjoyed so many benefits joining GTPF as a member. The unparalleled networking opportunities has allowed me to meet other senior colleagues, counterparts and young engineers (from the U.S. and Ghana), all with specialization in different transportation areas including rail, highway, planning, etc. They have been resourceful and I have tapped into their expertise. I have also been impressed with the high sense of professionalism at our annual meetings.

### What one thing are you excited about for this year?

I am excited about the commitment of our GTPF members who are willing to share their knowledge and provide mentoring to the younger generation back home and here in the U.S.

## Membership Database

We are compiling an up-to-date record of all our members. Please click [here](#) to complete our membership database form. The information you provide will assist us in staying in touch with you and will support networking opportunities. If you've filled out the form before, no need to complete it again, unless you would like to update your information.

# 2019 Annual Meeting Photos



# White Paper Series: Year 2020 — State of Ghana's Transportation Infrastructure

## Objectives

- To foster collaboration opportunities between GTPF members and transportation engineers in Ghana.
- To make design standards, manuals, and data more accessible.
- To assist in documenting needs and develop roadmaps to help address those needs.



## Subject Areas

- |   |                                     |
|---|-------------------------------------|
| 1. Asset Management   | 15. Materials and Specifications    |
| 2. Autonomous Vehicle Technology  | 16. Pavement Design                 |
| 3. Aviation Engineering   | 17. Policy & Planning               |
| 4. Bike & Pedestrian Facilities   | 18. Project Management              |
| 5. Bridge & Structures  | 19. Public Transportation           |
| 6. Drainage   | 20. Railroad Engineering            |
| 7. Energy Use & Environmental Planning                                  | 21. Roadside Design                 |
| 8. Freight and Commodity Flows  | 22. Roadway Geometry Design         |
| 9. Geotechnical for Transport Infrastructure                            | 23. Roadway and Transport Safety    |
| 10. GIS-Survey-Mapping  | 24. Rural Transport Services        |
| 11. Incident Management   | 25. Rural Roads Planning and Design |
| 12. Inclusive Design and Transport<br>for Persons With Disability (PWD) | 26. Signs & Markings                |
| 13. Intelligent Transportation Systems                                  | 27. Traffic Analysis & Operations   |
| 14. Maritime and Inland Waterways                                       | 28. Work Zones                      |

## Suggested Content for Authors

1. What is the current state of practice in Ghana of the subject area?
2. How do we compare to the rest of the world?
3. Who or which entities are responsible for overseeing this subject area in Ghana?
4. What resources (manuals, guidelines, data) currently exists for this subject area in Ghana?
5. What are some existing needs, if any, and how do we go about resolving those needs?

For more information, questions, or interest in participating in this effort, please contact:

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Julius Codjoe, Ph.D., P.E. at [julius.codjoe@louisiana.edu](mailto:julius.codjoe@louisiana.edu)

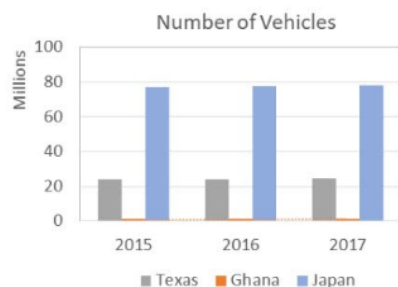
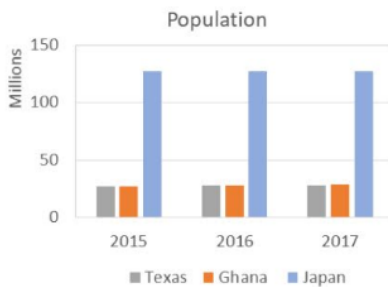
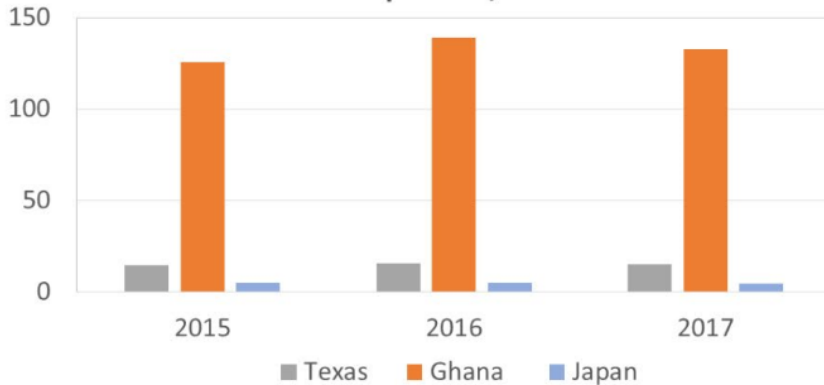
# Fatality Rates in Ghana — A Comparison



## Ghana, how are we doing?

The graphs tell the story of places around the world with much more vehicles on the road but less road related deaths in comparison to Ghana. The phrase “..., how are we doing?” is a call to action. It is to ask ourselves 3 questions: **Are we doing enough? Have we exhausted all our options? Can we do better?** We should not be discouraged. Others have reduced their death rates over the years and so can we.

Deaths per 100,000 Vehicles



Public Data Sources: National Road Safety Commission, Statistica.com JAMA; MLIT, Texas DOT Crash Data, Estimate of Vehicle Registration data from Hesse et al. (2014).

### Road Safety Recommendations

1. Engineering,
2. Legislation,
3. Education,
4. Enforcement, and
5. Emergency Response Planning.

In addition, there is a need for performance and best practice benchmarking of the above components on a frequent basis.

### Systemic Recommendations

1. Consistent and enforced design guidelines and manuals,
2. Research products implementation,
3. Collaboration between decision-makers and professionals,
4. Ethical accountability,
5. Young professionals training and retainment,
6. Coordinated transportation and land use planning, and
7. Finance infrastructure augmentation

Source: Summary of Key Issues and Recommendations from the 2018 Ghana Infrastructure Conference

### Ghana Transportation Professionals Forum

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GTPF is a registered, private, non-profit group of multi-disciplinary professionals with a mission to promote innovative and sustainable developments in transportation infrastructure planning and related systems via research, professional practice, policy development, and implementation.