



14th Annual TFI Technology Conference Sponsors



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Join us for our **14th Annual TFI Technology Conference**, Jan 24-25, 2019, as industry leaders and professionals gather once again to share the latest trends and developments impacting communications and asset valuation. We will be meeting again in exciting downtown Austin.

2019 Main Theme: 5G and its Business and Valuation Implications

Iain Gillott, wireless expert extraordinaire, returns to TFI for the fourth time. This time Iain will lead us through a deeper look into this technology and its impacts on broadband, cable, video, and other asset-intensive industries. He will be joined by other wireless experts, including **Dr. Robert Heath**, Professor of Electrical and Computer Engineering, The University of Texas at Austin.

Our policy keynote this year is former FCC commissioner **Mignon Clyburn** who will address key topics relevant to communications infrastructure such as broadband deployment, network neutrality, spectrum allocation, and telephony service obligations.

For 2019, we are re-introducing tax and valuation-specific segments to the conference to reinforce the relevance of technology change to asset valuation. We hope you'll join your colleagues in what promises to be another interesting and important event!

Gain Background, Insights, and Forecasts:

- Wireless Communications, including 5G
- Broadband & Video, including Gigabit networks and OTT
- Network Technologies
- Cutting-edge technologies such as virtual and augmented reality

Stay Relevant and Timely:

- High level review of top communications trends
- Informative presentations on key technologies
- Illuminating discussions of current and emerging issues facing the communications industry
- Important insights on the impact of these changes on asset valuation
- Multiple opportunities to connect and reconnect with community and thought-leaders

You Should Attend If:

- You have a business or policy interest in the communications network's future, or
- You are involved with the valuation of communications assets, or
- You are impacted by changes in the telecom, wireless, and cable television networks, or
- You are active in the IoT, AI, VR or other up and coming communication technologies, and
- You value learning, sharing, and collaborating with industry leaders and professionals

2019 Keynotes and Conference Speakers

Mignon Clyburn

Former Commissioner,
FCC



Great news! Former FCC commissioner Mignon Clyburn will be our policy keynote. With the changes in Congress, January is a great time to talk about what's in the air in Washington, especially as it involves communications infrastructure. Mignon will address topics such as infrastructure development, broadband deployment, network neutrality, spectrum allocation, and telephony service obligations. Having served as an FCC commissioner from August 2009 to June 2018, Mignon will provide us perspective on what to expect in these interesting times.

Robert Heath, Ph.D.

Professor of Electrical
and Computer
Engineering, The
University of Texas



We are excited to announce that Dr. Heath, will lead the panel "**Coloring in the 5G Triangle: Super High Bandwidth, Massive IoT, and Ultra High Reliability**" with featured technology specialists in 5G delivery. Professor Heath spoke to us in 2016 about millimeter wave technology and cars communicating. This year he will give a special Keynote presentation on his current research interests "**Connected Aerial Vehicles and Machine Learning for Communications.**"

Iain Gillott

President & Founder, iGR
(iGillottResearch, Inc.)



We are pleased to have Iain joining us once again as our 2019 special **Wireless Keynote Speaker**. Iain joined us in 2018, 2017 and 2015 to awesome reviews. We are extremely happy to have him back in 2019! Iain will be the moderator of the **5G Triangle Panel** and will introduce our 2019 main theme: **5G and its Business and Valuation Implications**, where we take a deeper look into 5G technology and its impacts on broadband, cable, video, and other asset-intensive industries.

Lawrence K. Vanston

Ph.D., Conference
Director, President, TFI



Dr. Vanston directs the annual **TFI Technology Conference** which he launched in 2006. He is an internationally recognized authority on technology forecasting for the communications industry. As president of Technology Futures, Inc., he has conducted and managed future-looking studies for the communications and other high-tech industries for over thirty years. His current research interests include broadband, wireless, video, and emerging technologies.

Past attendees include those from:

- Communications Policy
- Finance, Asset Valuation and Property Tax
- Strategic Forecasting
- Market Strategy
- Network Planning
- Legal and Regulatory
- Depreciation and Asset Lives
- New Technology Startups and Developers

Some Previous Attendees:

- 3M
- Advantax
- American Appraisal
- AT&T
- AT&T Mobility
- AUS Consultants
- Arizona Attorney
- General Office
- Baker Donelson
- Bexar Appraisal
- BCRI
- Blankenship Resources
- Capitol Appraisal Group
- CenturyLink
- CHR Solutions
- Clearwire
- Collin County Appraisal
- Comcast
- Cricket Communications
- FMV Opinions
- CostQuest Associates
- Dallas Central Appraisal
- Deloitte
- Duff & Phelps
- Embarq
- Ernst & Young
- FTTH
- Grant Thornton
- GVTC Communications
- Hiscock & Barclay, LLP
- Hawley Troxell Ennis & Hawley LLP
- Hill Ward Henderson Law Firm
- KPMG
- Law Offices of Peter Michaels
- Level 3 Communications
- Millinium Marketing
- Qwest
- Revenue Wisconsin
- Satai Network
- SC&H Group, LLC
- Sprint/Nextel
- State of California Board of Equalization
- Tarrant County Appraisal
- Tax Compliance Inc.
- Thompson Reuters
- Time Warner Cable
- T-Mobile
- TRCI
- Texas Comptroller of Public Accounts
- UHY Advisors
- Verizon
- Washington State Univ.

2019 Conference Speakers (Continued)

Salam Akoum, Ph.D.,
Principal Member of
Technical Staff, AT&T
Labs



Jeffrey Binkley,
Assessment Valuation
Advisors (Moderator)



Randy Cook,
Sales, Affirmed
Networks



Robert Daniels, Ph.D.,
Vice President,
PHAZR



Brian Goemmer,
President, Allnet Insights
& Analytics



**August (Augie) Grant,
Ph.D.**, Professor, School
of Journalism and Mass
Communications,
University of South
Carolina; Co-
Editor, *Communications
Technology Update and
Fundamentals*



Carl Hoemke, Partner,
Valentiam



Ray Hodges, Senior
Consultant, Technology
Futures, Inc.



Kim Houser, Assistant
Professor, Oklahoma
State University



Ruben Miranda, Director,
Tax Services, Duff &
Phelps



John Reed, Sr. Director -
Property Tax, Charter
Communications



Jim Stegeman,
CostQuest Associates,
Inc.



Peggy Wardlaw, Founder,
Wardlaw Appraisal
Group, LC.



Gary Wiggins, ASA, CAE,
Executive Director -
Property Tax, AT&T



Stephen Yergeau,
Director, Property Taxes,
T-Mobile



Carrie Vanston,
The Energy Accelerator



Conference Schedule:

WEDNESDAY, JANUARY 23, 2019

6:15–7:15 pm - **Pre-Conference Reception Meet & Greet**
Rooftop (Gatehouse if cold or rainy)

THURSDAY, JANUARY 24, 2019 Conference Day One (8:30 am - 6:00 pm, Rio Grande Ballroom)

8:30 am **Introductions and Welcome**

- **Lawrence Vanston**, President, Technology Futures, Inc. (TFI)

8:45 am **TFI Industry Forecast Overview**

- **Lawrence Vanston**, President, TFI
- **Ray Hodges**, Senior Consultant, TFI

9:45 am *Break*

5G WIRELESS

10:00 am **5G: The Big Picture**

- **Iain Gillott**, President and Founder, IGR (IGillottResearch, Inc.)

10:45 am **5G Equipment: What on Earth does this Stuff Look Like?**

- **Robert Daniels**, Vice President, PHAZR

11:00 am *Break*

11:15 am **Coloring in the 5G Triangle: Super High Bandwidth, Massive IoT, and Ultra High Reliability**
- Panel Discussion

- **Robert Heath**, Professor of Electrical and Computer Engineering, University of Texas, Austin
- **Salam Akoum**, Principal Member of Technical Staff, AT&T Labs
- **Robert Daniels**, Vice President, PHAZR
- **Iain Gillott**, President and Founder, IGR

12:30 pm **Lunch Break** - Gatehouse

1:15 pm **Wireless Futures Research - Connected Aerial Vehicles and Machine Learning for Communications**

- **Robert Heath**, Professor of Electrical & Computer Engineering, University of Texas, Austin

1:45 pm **Computing on the Edge: 5G Data Fast: Fiber Optics and Edge Computing** - Panel discussion

- **Randy Cook**, Sales, Affirmed Networks
- **Jim Stegeman**, President, CostQuest Associates, Inc.
- **Iain Gillott**, President and Founder, IGR (Moderator)

2:30 pm *Break*

2:45 pm **The 5G Spectrum Puzzle**

- **Brian Goemmer**, President, Allnet Insights & Analytics

3:15 pm **The 4G to 5G Transition**

- **Iain Gillott**, President and Founder, IGR



- 3:45 pm **Wireless vs Wireline**
- **Lawrence Vanston**, President, TFI
 - **Iain Gillott**, President and Founder, IGR
- 4:00 pm *Break*
- 4:15 pm **Why Does It Matter? And How? A Tax/Valuation Perspective I**
- **Ruben Miranda**, Director, Tax Services, Duff & Phelps
 - **Gary Wiggins**, Executive Director, Property Tax, AT&T
 - **Stephen Yergeau**, Director, Property Taxes, T-Mobile
- 5:00 pm **The IRS and the Data Mess**
- **Kim Houser**, Assistant Professor, Oklahoma State University
- 5:30 pm *Day End*
- 6:00 pm **Conference Reception** - Rooftop (Gatehouse if cold or rainy)

FRIDAY, JANUARY 25, 2019 Conference Day Two (8:30 am - 1:30 pm, Rio Grande Ballroom)

BROADBAND & VIDEO

- 8:30 am **Communications Technology Update**
- **August (Augie) Grant**, Professor, School of Journalism & Mass Communications, Univ. of South Carolina; Co-Editor, *Communications Technology Update & Fundamentals*
- 9:15 am **Fiber Deep: Broadband Industry Risks and Economics**
- **Jim Stegeman**, President, CostQuest Associates, Inc.
- 10:00 am *Break*
- 10:15 am **Policy Fireside Chat**
- **Mignon Clyburn**, Former Commissioner, FCC
 - **Jim Stegeman**, CostQuest Associates, Inc. (Moderator)
- 11:15 am *Break*
- 11:30 am **Why Does It Matter? And How? A Tax/Valuation Perspective II**
- **Jeffrey Binkley**, CEO, Assessment Valuation Advisors (Moderator)
 - **Carl Hoemke**, Partner, Valentiam Group
 - **John Reed**, Sr. Director - Property Tax, Charter Communications
- 12:15 pm **Last Word: The Assessor Perspective**
- **Peggy Wardlaw**, Founder, Wardlaw Appraisal Group, LC.
- 12:30 pm *Break*
- 12:35 pm **Box Lunch Discussion** - Rio Grande Ballroom
- Getting out of the Aligator Pit and Moving Forward**
- **Carrie Vanston**, The Energy Accelerator
- 1:25 pm *Conference Ends*

What Attendees Say:

"Great program... information is timely and program ties together well. Good for attendees with various background and interests. I highly recommend it." —Jeffery S. Binkley, CEO, Assessment Valuation Advisors

"...a unique learning experience to be had via the lectures and interaction with the audience and TFI." —Robert G. Strong, Tax Director, AT&T

"Practical information from industry insiders provided me insight I haven't found anywhere else." —Augie Grant, Professor, University of South Carolina

"Great conference as always! Too many excellent speakers to list. Particularly remember 5G presentation." —Dmitriy Matsyshen, Sr. Tax Manager, T-Mobile

"5 Stars! Informative sessions with dedicated speakers." —Paul Tucker, Independent Appraiser

"Nice update on technology. ..."
—Charles Burkhardt, Senior Consultant, CostQuest

"Great range of topics & speakers that were both fascinating and provocative." —Jim Dombrowski, Property Tax Manager, Verizon

"Based on TFI's knowledge, skills and experience, I strongly recommend this conference to anyone who is involved in assessing telecommunications equipment or anyone involved with telecommunications in some form or another." —Raul Reyes, Business Personal Property Supervisor, Dallas Central Appraisal District

"...Proper valuation must take into account technological externalities that will diminish the value of the existing assets. The technological innovations are having a such an impact that keeping up is essential. This conference keeps me up to date." —Roger Grabowski, Managing Director, Duff & Phelps

"Great conference for all of those who want an update on trends in the communications industry and the technologies impacting it. As an academic, I found it especially valuable in providing me ideas of what I need to be looking out for in my own areas of interest." —Kim Houser, Business Law Professor, Washington State University

Registration Information:

General Registration: \$995
Assessor/Academic/Government: \$95*
*Special rate for assessors, government, or academia

Please register on our conference site:

<https://www.eventbrite.com/e/tfi-technology-conference-jan-24-25-2019-tickets-50498925646>

Or go to www.TFI.com and red click conference icon.

Location/Accommodations:



Courtyard Marriott Downtown

300 E. 4th Street., Austin, TX, 512-236-8008 or 844-473-3959. Our special room block rate has ended, but contact the Marriott at 844-473-3959 to see if they still have available rooms.

The hotel is in walking distance to Austin's best live music venues and restaurants and near the Texas State Capitol, the University of Texas, and other popular Austin sites. This is a non-smoking facility with complimentary high-speed Internet and wireless access throughout the hotel. (photo source: Marriott)

For more information about Austin, visit www.austin360.com or Austin Chamber of Commerce.

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