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MESSAGE FROM THE PRESIDENT

ITS Texas Members and Friends,

I hope that everyone is staying healthy and finding new ways to stay in touch as we all adjust to the new normal.

The ITS Texas Board has been busy the last few months planning our first ever ITS Texas Virtual Annual Meeting for November 10, 2020. We'll miss being together in person but look forward to an exciting and productive Annual Meeting. In addition to our opening and afternoon technical sessions, we plan to announce our ITS Texas Awards in the morning and conduct our business meeting over lunch. We hope that everyone will consider joining this free event.



As we do every fall, the Board will be soliciting for nominations for our Annual ITS Texas Awards Program, new ITS Texas Board members, and student scholarships. Please read on in this newsletter for additional information about how to participate in these programs.

One highlight from our last Board meeting I would like to note is that the Board voted to extend the membership of all current ITS Texas members through the end of 2021. Members include anyone that attended our 2019 ITS Texas Annual Meeting, as well as anyone that has paid for a membership this year. If you are not currently a member, please consider joining by going to our [ITS Texas Membership](#) webpage. Your membership will be good through the end of 2021.

Please stay safe and healthy and we look forward to seeing everyone at this year's ITS Texas Virtual Annual Meeting.

Tom Fowler
ITS Texas President



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2020 ITS TEXAS ANNUAL MEETING UPDATE AND PRELIMINARY AGENDA

The ITS Texas Board of Directors decided in early summer to cancel the in-person 2020 ITS Texas Meeting planned for San Marcos due to the COVID-19 pandemic. Instead, the Board will host an abbreviated virtual version of the 2020 ITS Texas Annual Meeting on Tuesday, November 10, 10AM-3PM. The preliminary agenda for this year's meeting includes:

- **Welcome and ITS Texas Awards Announcements**
- **Keynote Speaker** – Shailen Bhatt, President and CEO, ITS America
- **ITS and Safety** – Michael Chacon, Division Director, TxDOT Traffic Safety Division
- **Impacts of COVID-19 on Transportation** – Ted Trepanier, Senior Director – Public Sector Services, INRIX
- **Business Luncheon** (lunch on your own during program)
- **TxDOT Ransomware Attack Lessons Learned** – Steven Pryor, Chief Information Security Officer, TxDOT Information Technology Division
- **Transportation Systems Management and Operations** – Patrick Son, Managing Director, National Operations Center of Excellence
- **Texas Connected Freight Corridor** – Kristie Chin, CTR

ITS Texas recognizes that travel and professional development budgets have been cut or decreased significantly in the wake of COVID-19 at a lot of cities and municipalities. Thus, it was decided to make this year's annual meeting free and to extend current memberships for another year (2021). However, ITS Texas encourages consultants and vendors to consider sponsoring the meeting/sessions to help us offset fees and costs, and get your name in front of more than 900 professionals in our members and friends distribution lists.

You can register and/or find the latest information about the 2020 ITS Texas Annual Meeting [here](#).

2020 ITS TEXAS AWARD NOMINATIONS

Is there a person or project you think is especially deserving of an ITS Texas award? We'd like to hear about it!

ITS Texas invites you to submit nominations for the 2020 ITS Texas Annual Awards Program. The awards program was created to recognize an individual or group (e.g., a city, agency or company) for a project or other contribution in the fields of ITS policy, planning, design, deployment, research or education.

The nomination should identify and include contact information for the individual or group being nominated (name and agency), and should describe the unique innovation, distinctive service or outstanding leadership making the nominee worthy of statewide recognition. Please also include contact information for the nominator and limit nominations to 300 words or less, but applicable photos and graphics are welcome.

Please submit your nominations to thomas.fowler@kimley-horn.com by Friday, October 16, 2020 with "Invitation to Nominate for ITS Texas Award" in the Subject Line. The Awards Committee will evaluate all nominations and select award winners. Submission of a nomination is not a guarantee of selection.

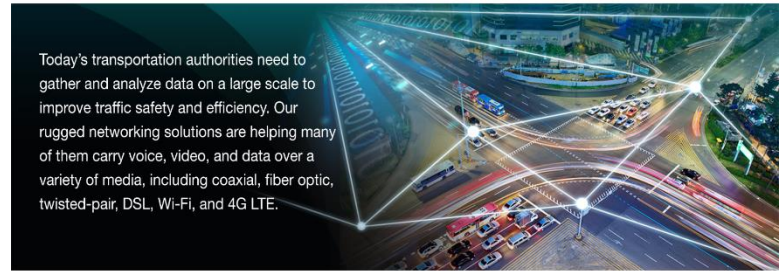
Awards will be presented at the ITS Texas Virtual Annual Meeting during the Opening Session on Tuesday, November 10, 2020.

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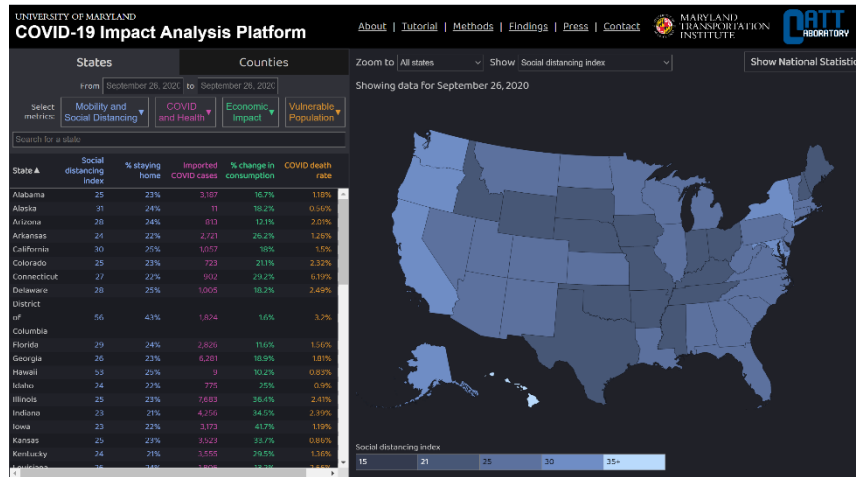
— — — Traffic Systems

2020 ANNUAL SUMMER TRAINING

ITS Texas held its first annual summer training virtually on Wednesday, September 9th. We set a new training record with 83 attendees!

This year's training featured speakers from Information Logistics/INRIX and CATT Laboratory. Information Logistics/INRIX presented how the new HELP platform expands the way DOTs/cities can reach the traveling public beyond the conventional methods of ITS. The tool allows for a real-time traveler information and interactive outreach to the public for the more severe highway shut down events. Then CATT Lab presented various new tools and

dashboards that can be used to show and measure the new "normal" of 2020. One of the dashboards shown can track 39 metrics related to COVID-19 impacts at <https://data.covid.umd.edu/>.



For those who missed it, a video recording of the training can be viewed at <https://tti-tamu.webex.com/tti-tamu/lsr.php?RCID=b9f153f6008a42f4b7b7e3ea871bc7a1>.

THE BATTLE OVER THE 5.9 GHZ SPECTRUM

If you've been designing or building Texas roads in recent years, you are probably familiar with the anticipated safety benefits of connected vehicles (CVs) and the technology that will be required to make them work. You probably know that in order for CVs to communicate with one another and with nearby infrastructure, they need space in the radio spectrum for their signals to travel, and that 20 years ago, the Federal Communications Commission (FCC) allocated 75 MHz of the 5.9-GHz band for this purpose.

What you may not know is that this allocation is being reconsidered. This fall, as early as October, the FCC will take up a proposed rule change that would reallocate the lower 45 MHz of the 5.9-GHz spectrum for use by unlicensed Wi-Fi users, particularly the cable industry.¹ When the FCC reserved the entire 75 MHz of that band for transportation safety uses, it was to be used by licensed users of dedicated short-range communications (DSRC). DSRC is an intelligent transportation systems technology that enables vehicle-related communications and is expected to support safety-based messaging



Gretchen Stoeltje, J.D.
Assistant Research Scientist
Texas A&M Transportation Institute

¹ John Eggerton, "Hill Chill with FCC 5.9 GHz Review," Next TV, June 20, 2019, <https://www.nexttv.com/news/hill-chill-with-fcc-5-9-ghz-review>.

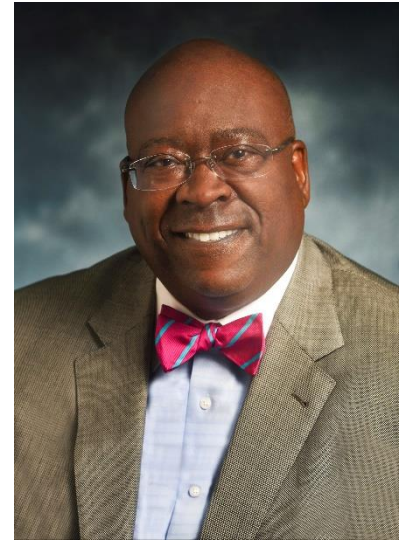
between vehicles and other vehicles (V2V), and between vehicles and infrastructure (V2I).² The full range of V2V, V2I and vehicle communications to other elements is collectively referred to as V2X.

Licensed users of the 5.9-GHz spectrum are members of the automotive industry who are developing V2X-instrumented vehicles in reliance on the unimpeded, allocated area of the spectrum in question. However, vehicles equipped to talk to infrastructure have nothing to talk to if the infrastructure is not also equipped. Accordingly, several state DOTs have undertaken pilot programs and demonstration sites to instrument roads with roadside units and other technologies that would allow the V2I communication that can best maximize the safety potential of a fully connected future.³

Despite the fact that DSRC has been implemented on a pilot basis across much of the country, the FCC, pointing to what it characterizes as the slow evolution of V2X technologies, now proposes to repurpose the lower 45 MHz of the band for unlicensed operations like Wi-Fi.⁴ Other emerging technologies, such as cellular-V2X, have shown promise for supporting safety messaging but are still in development.⁵

What does this mean? According to the International Transportation Society of America (ITSA) and others, this could dramatically change the course of vehicle safety, for a number of reasons. First, as ITSA notes in its February 2020 white paper,⁶ U.S. Department of Transportation research shows that currently there is not sufficient evidence to show that if unlicensed users were operating in the lower 45 MHz of the 5.9-GHz band, V2X technologies could function without interference. The FCC itself had committed to three testing phases to determine whether unlicensed use of the lower 45-MHz band of the 5.9-GHz spectrum would interfere with licensed safety uses of the upper 30 MHz. However, the FCC has completed only the first phase of that testing, and its published results were inconclusive.⁷

Second, V2X technologies could not work together in those remaining 30 MHz. These technologies are designed to function in the full 75 MHz of the dedicated range and cannot compress to function in less. What this could mean in practical terms is that safety applications like crash avoidance, vehicle-to-pedestrian applications, and coordinated intersection protocols could fail; automated truck platooning could end; road weather warnings and other system efficiencies could be compromised or sabotaged; or cool-factor



Greg Winfree, J.D.
Director
Texas A&M Transportation Institute

² Greg Winfree, "5.9 GHz Spectrum Is Critical for Safe Roads and Should Be Protected," Technology Today.com, January 20, 2020, <https://www.traffictechnologytoday.com/opinion/winfree-dsrc-is-critical-for-safe-roads-and-must-be-protected-at-all-costs.html>.

³ U.S. Department of Transportation Intelligent Transportation Systems Joint Program Office, "CV Pilots Take Advantage of Multiple Communication Media," https://www.its.dot.gov/pilots/cvp_media.htm.

⁴ Federal Communications Commission, Notice of Proposed Rulemaking, In the Matter of Use of the 5.850-5.925 GHz Band, ET Docket No. 19-138, November 21, 2019, <https://docs.fcc.gov/public/attachments/DOC-360940A1.pdf>.

⁵ Greg Winfree and Larry Head, "Safer Roads or Faster Movie Downloads? Let's Choose Wisely," Automotive Technology, November 4, 2019, <https://www.autonews.com/commentary/safer-roads-or-faster-movie-downloads-lets-choose-wisely>.

⁶ ITS America, *5.9 GHz Band: Myths vs Facts*, February 2020, <https://itsa.org/wp-content/uploads/2020/04/V2X-Myth-Vs-Fact-Sheet.pdf>.

⁷ Federal Communications Commission, Public Notice, ET Docket No. 13-49, Pages 10-11, 2016. <https://docs.fcc.gov/public/attachments/FCC-16-68A1.pdf>; Federal Communications Commission, Notice of Proposed Rulemaking, In the Matter of Use of the 5.850-5.925 GHz Band, ET Docket No. 19-138, November 21, 2019, <https://docs.fcc.gov/public/attachments/DOC-360940A1.pdf>.

applications in the transportation ecosystem like edge computing, artificial intelligence, and machine-to-machine communications could be stalled.⁸

And what would we gain with this rule change? Enhanced entertainment features (think uninterrupted movie streaming into your vehicle) and a potential \$60 billion to \$106 billion annual bump to the U.S. gross domestic product could result, according to a 2018 RAND Corporation study.⁹ That sounds impressive, but compare it to the \$800 billion in annual losses that the National Highway Traffic Safety Administration estimates the United States suffers from car crashes, measured in medical costs and lost productivity,¹⁰ and the boost hardly seems worth it, especially if V2X technology was given the chance to fulfill its projected capability of reducing car crashes by 80 percent.¹¹

In an effort to outpace the FCC's rulemaking process, the automotive industry is acting quickly. Automakers, including Toyota and Lexus, announced plans to bring V2X-equipped cars to market (though Toyota has since changed course due to the uncertainty created by the FCC's pending decision),¹² and a coalition of automakers recently pledged to deploy at least 5 million V2X radios on vehicles and roadway infrastructure within the next five years.¹³ This urgency could aid in spurring public demand for the technology, and could pressure the FCC to reverse course or suffer the consequences of denying the public a coveted automotive technology.

If car manufacturers succeed in moving the spectrum battle from the policy arena to the marketplace, it may be up to U.S. car buyers to determine our country's collective level of interest in roadway safety.

WRITE AN ARTICLE FOR THE NEWSLETTER!

The ITS Texas newsletter is a great way for you as an ITS professional to **share your projects, plans, initiatives or other ITS related items with the ITS community**. If you would like to share something with the ITS Texas members through the newsletter, please contact any of your ITS Texas Board members. They are listed at the end of the newsletter and you can send an email to any by simply clicking on their name.

ITS TEXAS STUDENT SCHOLARSHIPS

ITS Texas provided to five student scholarships totaling \$7500 at the 2019 Annual Meeting in Irving. Any student pursuing a graduate degree at an accredited Texas university was eligible to apply. Past winners have

⁸ ITS America, *5.9 GHz Band: Myths vs Facts*, February 2020, <https://itsa.org/wp-content/uploads/2020/04/V2X-Myth-Vs-Fact-Sheet.pdf>.

⁹ Diana Gehlhaus, Nicholas Martin, Marjory S. Blumenthal, Philip Armour, and Jesse Lastunen, "The Potential Economic Value of Unlicensed Spectrum in the 5.9 GHz Frequency Band: Insights for Future Spectrum Allocation Policy," RAND Corporation, 2018, https://www.rand.org/pubs/research_reports/RR2720.html.

¹⁰ Greg Winfree and Larry Head, "Safer Roads or Faster Movie Downloads? Let's Choose Wisely," *Automotive Technology*, November, 4, 2019, <https://www.autonews.com/commentary/safer-roads-or-faster-movie-downloads-lets-choose-wisely>.

¹¹ National Highway Traffic Safety Administration, "Press Release: Proposed Rule Would Mandate Vehicle-to-Vehicle (V2V) Communication on Light Vehicles," December 13, 2016, https://one.nhtsa.gov/About-NHTSA/Press-Releases/ci.nhtsa_v2v_proposed_rule_12132016.print.

¹² Greg Winfree, "5.9 GHz Spectrum Is Critical for Safe Roads and Should Be Protected," *Technology Today.com*, January 20, 2020, <https://www.traffictechnologytoday.com/opinion/winfree-dsrc-is-critical-for-safe-roads-and-must-be-protected-at-all-costs.html>.

¹³ Alliance for Automotive Innovation, "Auto Industry Unites Behind Safety Technology by Committing at least 5 Million V2X Radios and Devices by the End of 2025," April 23, 2020, <https://www.autosinnovate.org/press-release/auto-industry-unites-behind-safety-technology-by-committing-at-least-5-million-v2x-radios-and-devices-by-the-end-of-2025/>.

been from University of Texas at Austin, University of Texas at Arlington, Texas A&M University, and Texas Southern University.

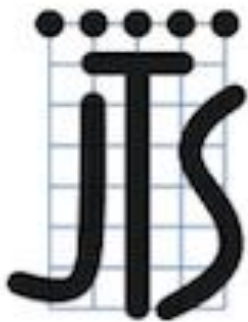
Don't miss this year's opportunity to nominate a worthy student starting October 8th at <https://www.itstexas.org/>. All student nominations need to be submitted by November 2.

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2021 AND BEYOND - ITSA COMING TO TEXAS!

ITS Texas is already busy making plans for 2021 and beyond. Hopefully, it will be more back to 'business as usual'. We are very excited to offer our second ITS Texas/TextITE Joint Meeting in the fall of 2021 in the Dallas-Fort Worth Metroplex. We had great reviews from both ITS Texas and TextITE members on the first joint meeting in Houston in 2018, and we look forward to gathering in person with everyone next year.

And as mentioned before, ITS Texas looks forward to holding the ITS Texas Annual Meeting back in San Marcos in 2022.

And last but certainly not least, ITS America will be bringing their Annual Meeting to Texas in the Spring of 2023. This event will be held at the Gaylord Texan Resort and Conference Center. More details to come!



INTERESTED IN SERVING ON THE ITS TEXAS BOARD OF DIRECTORS?

If you are interested in serving on the Board of Directors of ITS Texas (or know someone who is), please email contact information to Tom Fowler at thomas.fowler@kimley-horn.com by Monday, October 12, 2020. A nominating committee will consider all interested parties in developing a slate of candidates to run for election. The results of the election will be announced at our ITS Texas Virtual Annual Meeting on November 10, 2020.

Please note that our election this year will be done electronically. All current members of ITS Texas are eligible to vote. If you are not currently a member but are interested in joining, please go to the [ITS Texas Membership](#) webpage for more information on joining. Membership is just \$25 and will be good through 2021, and will provide you with healthy discounts on registration for the 2021 annual meeting!



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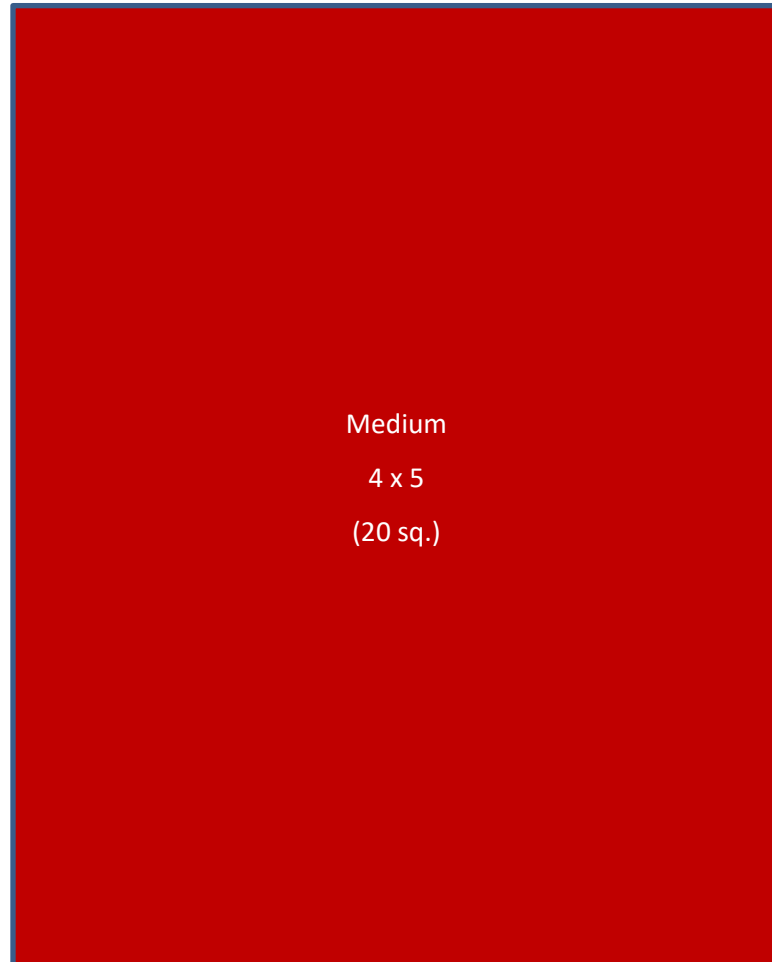
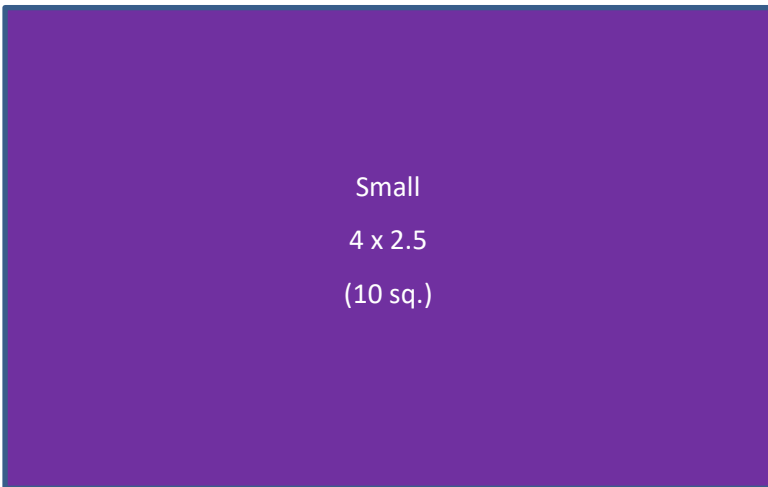
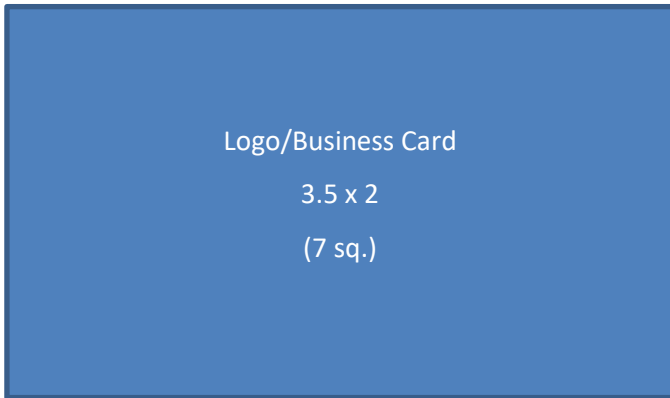
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NEW 2021 SPONSOR AD FEE OPTIONS

The ITS Texas newsletter and website are great forums for advertising your company and products. In the past, ITS Texas has had a flat fee of \$200 for advertisements in our newsletter or website. However, we would like to offer our sponsors more choices recognizing that sponsors have different marketing strategies and needs. The new fee structure starting in 2021 is shown in the table below. This structure is aimed at providing options as well as savings when different advertisement options are packaged together. For example, "Website" means the sponsor's logo will be advertised on the website for 12 months or "Newsletter" means a sponsor's ad will be published in the newsletter at least three times per year and distributed to 900+ ITS Texas members and friends. An "Email Blast" is the newsletter email notification that is sent out to the same 900+ members and friends. And "All" means the logo ad size (3.5"x2") is applicable to all venue options.

Venue	Material	W x H	Annual \$	+ Web \$	+ Email Blast \$	+ Web + Email Blast \$
Website	Logo	3.5"x2"	\$100	NA	\$175	NA
Email Blast	Logo		\$100	\$175	NA	NA
All	Logo		\$50	\$125	\$125	\$200
Newsletter	Ad-Small	4"x2.5"	\$100	\$175	\$175	\$250
	Ad-Medium	4"x5"	\$200	\$275	\$275	\$350
	Ad-Large	7"x4.5"	\$400	\$475	\$475	\$550

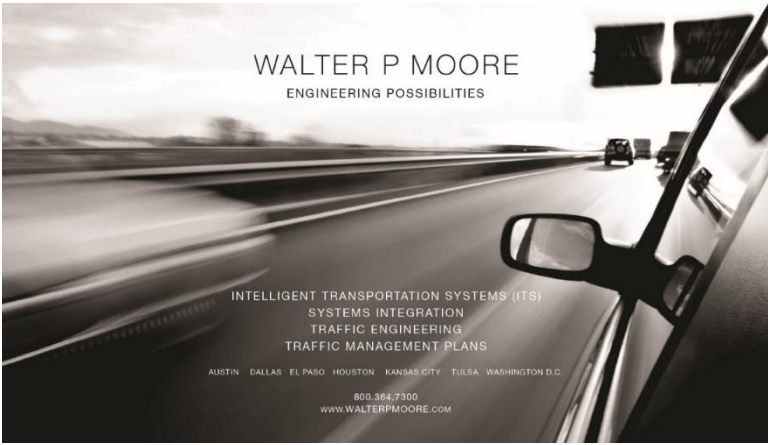


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