

# INSTITUTE OF TRANSPORTATION ENGINEERS SOUTHERN CALIFORNIA SECTION

# NEWSLETTER

2022, Issue No. 2

Second Quarter 2022

#### President's Message Dina Saleh, LA Metro



Hello ITE Southern California Members,

The first quarter of 2022 has been rewarding for ITE SoCal. The Section has been busy hosting many events that I'm proud to highlight.

In April, the Section hosted an in-person Technical Tour at the City of Pasadena TMC that showcased their

operations for events and daily activities. The tour was followed by a Happy Hour at Kings Row Gastropub in Old Town Pasadena. Thank you to KOA for sponsoring the event.

I want to give a large thank you to our Student Liaisons, Emilio Murga

and Joceline Suhaimi, for a lively Student Presentation Night in May. The coveted Student Presentation Night was held in-person and cohosted by OCTEC and ITE SoCal. The night featured five local ITE Student Chapters: USC, UC Irvine, CSU Fullerton, Cal Poly Pomona and UCLA. Congratulations to the Cal Poly Pomona Student Chapter on their firstplace presentation! The SoCal Section awarded \$9,250 to local Student Chapters during this event. These funds will be used by the Student Chapters for attending ITE and other transportation organization events. I would like to also thank our sponsor for the event, I teris and HNTB. We look forward to continuing our support for the local Student Chapters. Inside This Issue Brief Look Ahead – *Pg. 3* Newsletter Schedule– *Pg. 3* Social Media Discussion Questions – *Pg. 3* City of Pasadena TMC Tour – *Pg. 3* SoCal ITE/OCTEC – Student Presentation Night Joint Meeting – *Pg. 4* SoCal ITE/ITS CA– Joint Meeting – *Pg. 5* Cal State Fullerton (CSUF) ITE at the ITE Western District Annual Meeting – *Pg. 5* ITE SoCal – Award Winning Section! – *Pg. 6* Legislative Analysis – *Pg. 7* SB 743 and Logistics/Delivery Networks – *Pg. 9* 

At the end of June, the Section co-hosted an in-person luncheon meeting with ITSCA. The meeting had around 80 attendees and featured a panel on "Managing Corridors & Special Events Together." Speakers included George Cunningham (COO, Rose Bowl Stadium), Jackie Kawa (Senior Traffic Engineer, Kimley-Horn and Associates, Inc.), Ed Alegre (Senior Director ITS, LA Metro), and Ernesto Chavez (Senior Executive Officer, LA Metro). I would like to thank Econolite for their sponsorship of the June meeting.

I want to thank the membership for your continued participation and engagement with the ITE SoCal Section. I would also like to formally recognize our Chairs for working behind the scenes and making sure our programs, training, and events kept moving. You are what kept this Section going, and your work has not gone unnoticed at the District and International level. I am honored to announce that ITE SoCal Section received the Section Momentum Award and Section Communications Award at the Western District Meeting in Palm Springs, CA. Additionally, the Section also received the Section Momentum Award at the International ITE Annual Meeting in New Orleans, LA. These accolades would not have happened without all your dedication and commitment to the Section!

Lastly, thank you to our Newsletter sponsors for this issue: EtherWAN, Iteris, CDM Smith, Econolite, HNTB, KOA, and Western Systems. Your sponsorship helps our Section continue to provide worthwhile content. Please take a look at the calendar for the remaining events of this year. Have a joyful summer and continue to stay safe and healthy.

Regards, Dina Saleh, ITE SoCal President

#### Second Quarter 2022

#### 2022, Issue No. 2

#### **2022 ITE Southern California Board**



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#### Second Quarter 2022

#### Brief Look Ahead

- Thursday, November 3 and Friday November 4, International Conference on Traffic Engineering and Control: <u>Information</u>
- Sunday, September 18 to Thursday, September 22, ITS World Congress: <u>Information</u>

Newsletter Schedule Angelo Pastelin, EIT, Co-Newsletter Editor (Kimley-Horn & Associates)

The Quarterly Newsletter is an excellent opportunity to expand and showcase your technical knowledge before a large audience of top-notch Transportation Planning & Engineering professions. To submit articles or offer suggestions on article topics, please email Saly Heng at <u>sheng0589@gmail.com</u>, Angelo Pastelin at <u>angelo.pastelin@kimley-horn.com</u>, or David Schwegel at <u>davidmschwegel1@gmail.com</u>. Please be sure to provide your content by the content deadline.

Here is the projected schedule (subject to change) for the rest of Calendar Year 2022:

Quarter	Content Deadline	Approximate Publication Date
3	Friday, Sept 23, 11:59 pm	Thurs Sept 29
4	Friday Dec 9, 11:59 pm	Thurs Dec 15

For all other inquires such as Section activities, webinar topics, etc, please email the SoCal Section at <u>itesocal@gmail.com</u>.

#### Social Media Discussion Questions

**Editor's Note:** To make our quarterly Section Newsletters more interactive and encourage more **participation on the Section's LinkedIn page,** here are the discussion questions for this issue. Section Members are encouraged to weigh in on these and other discussions.

- 1. What has been your favorite ITE student chapter night presentation?
- 2. If you were asked to plan an event for a student chapter, what would it be?
- 3. If you were asked to choose a location for the ITE Western District Annual Meeting, where would you choose?
- 4. What emerging transportation technology/trend are you most excited about (Connected/Autonomous

vehicles, electric vehicles, SB743/VMT)

5. What innovative and unique traffic equipment have you seen that should be implemented more frequently?

#### City of Pasadena TMC Tour – Apr 2022 Bryan Luong, PE

ITE SoCal's April technical tour was held on Friday, April 29, at the City of Pasadena's Traffic Management Center (TMC). The event was sponsored by KOA, the tour was limited to 25 attendees, and a happy hour social followed the event.

Mr. David Phan and Mr. Victor Koo, Assistant Engineer and Associate Engineer with the City of Pasadena's Department of Transportation respectively, were the gracious hosts of the tour. They provided an overview of the City's Transparity and Sydney Coordinated Adaptive Traffic System (SCATS) traffic signal management systems: Transparity manages a majority of the traffic signals across the City and SCATS manages signals at intersections along the Metro Gold Line. The SCATS system runs independently from Transparity and operates timings with no transitions and is based on traffic demand and vehicle detection. The City's vehicle detection system uses a combination of inductive loops, video cameras, or a combination of both to detect vehicles at an intersection to place calls to the traffic signal controller. The City is aiming for full actuation of their 370+ traffic signals in the near future.



The City of Pasadena's TMC (Photo Credit: Bryan Luong)

Mr. Phan and Mr. Koo are not the only staff present at the TMC. In addition to two other TMC staff, the City of Pasadena gets help from a team with Iteris to assist with traffic management during special events, such as UCLA football games at the Rose Bowl, the annual New Year's

Rose Parade, and the Pasadena Half Marathon. The City has a robust CCTV system with locations at over 50 locations to facilitate traffic flow and management at major corridors throughout the City and ingress/egress to the Rose Bowl for events. Eight changeable message signs are also present throughout the City to provide real-time traffic or safety messages to people traveling on Pasadena's roads. To enable the use of all of these devices for traffic management and transmit data quickly, the City utilizes a fiber optic system. This allows TMC staff to monitor the status of traffic signals, cameras, and changeable message signs on a daily basis and report and fix issues as soon as they occur.

Thank you again to Mr. David Phan, Mr. Victor Koo, and the City of Pasadena for hosting this technical tour!



Group Photo of Attendees and City Staff at the City of Pasadena's TMC (Photo Credit: Bryan Luong)

SoCal ITE/OCTEC – Student Presentation Night Joint Meeting (May 2022) Jonathan Delgado, PE (Advantec Consulting Engineers)

The Joint SoCal ITE/OCTEC Student Presentation Night **Meeting was held on Thursday, May 12, at the Knott's** Berry Farm Hotel. The event was sponsored by both HNTB and Iteris.

Five schools attended and participated in the meeting including Cal State University, Fullerton, USC, UCLA, Cal Poly Pomona, and UC Irvine. Per the host and SoCal ITE Student Liaison, Joceline Suhaimi, each presentation should be eight minutes long, with an additional two minutes for questions. SoCal ITE and OCTEC made a split contribution total of \$18,500, which was then awarded to the student chapters. The amount that a school would receive depended on their placement at the end of the student night.

The first school to give a presentation was Cal State University, Fullerton. Titled "Prediction of Compressive Strength from Maturity and Surface Resistivity", it was presented by Abril Herrera, Carlos De La Sancha, Gerardo Alvarez, and Christian Dambeanu. For asphalt and concrete design in roadways, their objective was to prove that the maturity method can replace destructive testing that usually takes place. The second school to give a presentation was USC. Presented by James Huang, Tim Labounko, and Arlo Fischer, their presentation "Crafting the Future Transportation Engineer" detailed how they wanted to create a framework and curriculum design based on how different forms of transportation interact with each other. They worked with students at a local school to teach them about careers in transportation, and the environmental impacts of traffic and congestion.

During the brief meeting break, both the meeting sponsors gave five-minute presentations on their companies. Both HNTB and Iteris spoke about the type of engineering services that they provide, as well as current projects that they are working on. After, UCLA gave their presentation titled "Intermodal Transportation Center at San Diego International Airport". Oliver Long, Justin Lue, and Nathan Vardas detailed their trip generation methodology, results, and transportation analysis of the new project that will be taking place at the San Diego International Airport. The fourth school to give a presentation was Cal Poly Pomona. Their presentation was called "California Interstate 10 Corridor Study", and was presented by Dung Nguyen, Edgar Ennis, Fareen Masum, and Daniel Uyematsu. They detailed the analysis and engineering that went into their freeway project, including environmental and traffic analysis, project alternatives, and the project study report.

The fifth school to give a presentation was UC Irvine. Presented by Matthews Cribioli, Patricia Lipana, and Joseph Faria-**Poynter, their presentation "Dilemma Zone" detailed the dilemma zones that are part of new** video detection cameras and systems. After the final presentation, the judges deliberated to determine which school would win first place, as well as the other winners. Meanwhile, Olga Polunin from OCTEC spoke about the upcoming monthly luncheon in June, encouraging people to sign up and attend. After, Carlos Ortiz from ITS California spoke about the upcoming SoCal ITE conference that would be held in June in Palm Springs, detailing the speakers that will be there and events that will be taking place.

At the end of the night, the judges determine that first place went to Cal Poly Pomona, with UCLA taking second

ITE Southern California Section

4

#### Second Quarter 2022

place and UC Irvine taking third. Both USC and Cal State University, Fullerton, also did well and should be proud of the presentations that they gave.



These were some of the presenters at the SoCal ITE/OCTEC Joint Student Presentation Night. (Photo Credit: Jonathan Delgado)

SoCal ITE/ITS CA–Joint Meeting (June 2022) Angelo Pastelin, EIT (Kimley-Horn & Associates, Inc)

The Joint SoCal ITE/OCTEC Student Presentation Night Meeting was held on Wednesday, June 22, at the Almansor Court in Alhambra, CA. The event consisted of lunch and three presentations by Ed Alegre (LA Metro), Jackie Kawa (Kimley-Horn and Associates, Inc), and Ernesto Chaves (LA Metro).

Ed Alegre was the first of the three presentations and presented on NextGen Integrated Corridor Management **(ICM), showcasing LA Metro's efforts and local projects** to achieve connected corridors. The presentation described how ICM, mainly along freeways such as the I-710, will rely on user connectivity through smart phones and GPS based navigation software and less on the installation of new equipment such as changeable message signs. Overall, the information presented was informative and described the ongoing effort to integrate one of the most heavily used truck routes corridors in the nation and provide safety and equity from the start of projects.

Jackie Kawa was the next speaker, presenting on the efforts that were made in planning and dealing with traffic operations for Super Bowl LII in Atlanta, Georgia. Jackie described the significant coordination efforts between various entities that included Georgia's Department of Transportation, local police, and highprofile Super Bowl attendees. She explained that through planning for the unexpected, constant coordination, and support from many public and private staff members, traffic operations for the day of the Superbowl did not face major issues.

Lastly, Ernesto Chaves spoke on the planning and programs that LA Metro is working on in preparation for the 2028 Olympics in Los Angeles. He spoke on the various committees and funding efforts within Metro that are in progress. Ernesto highlighted that although the plans for the Olympics are ambitious, there are heavy efforts to complete the local transportation projects to put the City and its infrastructure in the best position as possible.

At the end of the presentations, the audience asked questions to each of the speakers and the event concluded.



This is one of the presentations at the SoCal ITE/ITS CA Joint Meeting. (Photo Credit: Angelo Pastelin)

Cal State Fullerton (CSUF) ITE at the ITE Western District Annual Meeting Gerardo Alvarez & Thu Vu (CSUF ITE)

During the Western ITE Annual Meeting, we met many great students and professionals. It was held in person for the first time in 3 years, and for many of us students, it was our first time attending. The conference helped us connect with like-minded students and professionals and acquire a more in-depth understanding of the transportation industry, such as traffic data collection. We volunteered for the event by checking in attendees, organizing name badges and swag bags, and guiding people around the conference. ITE Treasurer Doug Smith, along with Gianfranco Laurie from RSBITE and a

few others, did a wonderful job leading and showing us how to greet and interact with the attendees. One of our favorite activities at the Western ITE Annual Meeting was the Traffic Bowl. The students' and professionals' competitions occurred on Tuesday afternoon of the event. We recognized a few teams from the SoCal ITE Section, like UCLA and Cal Poly Pomona. Every team poured their hearts out into the game, and it was a thriller! Congratulations to SoCal ITE for winning second place, and to Oregon State University and NorCal region for winning their respective Traffic Bowl competition.

Overall, this was a wonderful experience and we are grateful to have been a part of it. For anyone interested in transportation/traffic engineering, this is a great opportunity as it exposes us to real world scenarios and practical solutions that have a significant impact in our everyday lives.



Group Photo of CSUF ITE at the ITE Western District Annual Meeting

#### ITE SoCal – Award Winning Section! Saly Heng, PE, TE, PTOE

ITE Western District and ITE International presented our Southern California Section as winners of the Section Momentum Award. This award was established in 2020 and recognizes the section that experienced the greatest momentum (or most improvement) in the past year. This could not have been accomplished without the help and enthusiasm of our section chairs. Using what we learned during 2020, ITE SoCal hit the **ground running in 2021's "new normal" with a series of** virtual meetings, networking socials and technical tours to keep professionals engaged as they transitioned into hybrid working environments in the office.



*Pictured is ITE SoCal's Section Representative and Past President, Edward Alegre accepting the Section Momentum Award at the ITE International Meeting held in New Orleans, LA.* 

In addition to the Momentum Awards, ITE SoCal was presented the Section Communication Award at the district level, and our 2nd past president, Sowmya Chandrasekhar was recognized for her completion of LeadershipITE, a leadership program built for working transportation professional. We hope to continue engaging with our members and we are excited to see Sowmya further her involvement with ITE in the years to come!



Pictured is Sowmya accepting her Leadership ITE Certificate of Completion at ITE International.



The legislative analysis describes several of the most relevant and/or impactful transportation-related bills in the current legislative session. As the 2021-2022 Legislative Session continues, bills continue to reflect the priorities of California and its increased focus on issues central to the environment and equity. Numerous bills attempt to better tie together the State and it's localities' multiple overlapping planning and funding legislation, ensuring projects address issues comprehensively and fit within existing and new planning frameworks.

Information provided on each bill includes its author(s), subject of focus, and its status (introduced, engrossed, enrolled, passed, vetoed), as well as the last action taken on the bill. The California Legislative Information website uses the following terminology to illustrate each bill's status:

- 1st First Reading on Chamber Floor
- Cmt Delegated to Relevant Committee
- 2nd Second Reading on Chamber Floor after passage by First Committee (this can occur more than once if re-referred with amendments from the Appropriations Committee)
- Cmt Delegated to Appropriations Committee
- 3rd Third and Final Reading on the Chamber Floor before the bill is put up for Floor Vote
- Pass Bill Passes Floor Vote in First Chamber
- 1st First Reading on Second Chamber Floor
- Cmt Delegated to Relevant Committee in Second Chamber
- 2nd Second Reading on Chamber Floor after passage by First Committee in Second Chamber.

#### Second Quarter 2022

- Cmt Delegated to Appropriations Committee in Second Chamber
- 3rd Third and Final Reading on the Second Chamber Floor before the bill is put up for Floor Vote.
- Pass Bill Passes Floor Vote in Second Chamber
- ✤ Approved Bill is Ratified by Governor
- Chaptered Bill is Chaptered by Secretary of State

AB-2237 Transportation planning: regional transportation improvement plan: sustainable **communities'** strategies: alternative planning strategy: state transportation funding (Friedman):

This bill would require that projects and programs included in each regional transportation planning agency or county transportation commission's 5-year transportation improvement program are consistent with the Sustainable Communities Strategy (SCS) adopted by that region's respective metropolitan transportation organization (MPO) or an accepted alternate planning strategy that meets State and federal air quality standards. The bill would prohibit any funds generated from local tax measures collected or intended for use after January 1st, 2023, from being used for any projects not explicitly listed in the SCS or alternate planning strategy. The bill would also prohibit State funds from being used for any project that increases single-occupancy vehicle capacity unless that project was listed in an SCS or alternate planning strategy and sufficient enforcement mitigation can be provided to ensure it does not increase greenhouse gas (GHG) emissions.

Status: Senate Transportation Committee – last action 6/12/2022

#### <u>AB-2438 Transportation funding: guidelines and plans</u> (Friedman):

This bill would require that any programs funding improvement to the State Highway System require that their guidelines no later than January 1, 2024, include strategies from the established in the Climate Action Plan for Transportation Infrastructure adopted by the respective transportation agency. These programs include the Interregional Transportation Improvement Program (TIP), the state highway and operation Protection Program (SHOPP), the Solutions for Congested Corridors Program (SCCP), the Trade Corridor Enhancement Program, and the SB1 Local Partnership Program. The bill would also require that relevant State agencies develop guidelines to establish transparency and accountability for the funding programs they administer and their project selection process. The bill would also require projects seeking funds from the SCCP program to be part of an adopted comprehensive multimodal corridor plan as opposed to just a comprehensive corridor plan.

#### Second Quarter 2022

Status: Referred to Senate Appropriations Committee – last action 6/29/2022

#### <u>AB-2514 State Highway System Management Plan:</u> <u>underserved rural communities. (Dahle):</u>

This bill would require that the annually produced State Highway System Management Plan, consisting of a 10year State Highway Rehabilitation Plan and a 5-year maintenance plan, to include a comprehensive evaluation of the current state of transportation in underserved rural communities and a transportation needs assessment of the cost to operate, maintain, and provide for the transportation system in underserved rural communities, as specified.

Status: Senate Transportation Committee – last action 6/29/2022

#### SB-1049 Transportation Resilience Program. (Dodd):

This bill would establish the Transportation Resilience Program within the Department of Transportation to provide for funds for climate adaptation planning and resilience improvements that address or mitigate the risk of recurring damage to, or closures of, the state highway system or other federal-aid roads, public transit facilities, and other surface transportation assets from extreme weather events, sea level rise, or other climate change-fueled natural hazards. The bill would establish specified eligibility criteria for projects to receive funding under the program and would require the commission to prioritize projects that meet certain criteria.

Status: Assembly Transportation Committee – last action 6/2/2022

### <u>SB-1121 State and local transportation system: needs</u> assessment. (Gonzalez):

This bill would require the CTC to prepare a needs assessment of the cost to operate, maintain, and provide for the necessary future growth of the state and local transportation system for the next decade. As part of the needs assessment, the bill would require the commission to forecast the expected revenue to pay for the cost identified in the needs assessment, any shortfall in revenue to cover the cost, and recommendations on how any shortfall should be addressed. The bill would require the commission to submit the needs assessment to the Legislature on or before January 1, 2024, and biennially thereafter.

Status: Assembly Appropriations Committee – last action 6/21/2022

<u>AB-2716</u> Transportation network companies: participating drivers: safety courses. (Grayson): This bill would require a transportation network company (TNC) such as Uber or Lyft, on and after July 1, 2023, to require a participating driver, at no cost to the driver, to complete a safety course that includes specified components once every 2 years as a condition of using the TNC's online-enabled application or platform to connect with passengers. The bill would also require a TNC to require a vehicle to satisfy the vehicle inspection requirements established by the commission before allowing a participating driver to operate the vehicle as part of its service. Because a violation of this requirement under the act would be a crime, the bill would impose a state-mandated local program. The bill would require a TNC to compensate a participating driver for completing the safety course.

Status: Senate Appropriations Committee – last action 6/30/2022

#### SB-1169 Toll road projects: study. (Hueso):

This bill would require the commission to conduct a **study on the State's toll roads regarding their** impacts on toll users and nearby communities. The bill would require the study to be conducted in consultation with the authorized regional transportation agency and impacted local agencies. The bill would require the study to be submitted to the Senate Transportation Committee and the Assembly Transportation Committee on or before January 1, 2025.

Status: Assembly Appropriations Committee – last action 6/29/2022

#### <u>AB-2432 Neighborhood electric vehicles: County of Los</u> <u>Angeles. (Muratsuchi/Valladares):</u>

This bill would authorize the County of Los Angeles or any city within the County to establish a neighborhood electric vehicle (NEV) plan upon consultation with the Southern California Association of Governments (SCAG) and relevant law enforcement agencies. Existing law **defines NEVs as "low-speed vehicles", or motor vehicle** with 4 wheels that are capable of a minimum speed of 20 miles per hour and a maximum speed of 25 miles per hour on a paved level surface and a gross vehicle weight rating of less than 3,000 pounds. Existing law imposes certain restrictions on the use of low-speed vehicles on public streets and highways, prompting NEV plans to outline routes currently capable of supporting NEVs and crafting recommendations for an NEV network within the respective municipality or region.

Status: Passed Senate Appropriations Committee, referred back to Assembly to ratify amendments – last action 6/30/2022

#### SB 743 and Logistics/Delivery Networks *Michael Schmitt (Kimley-Horn and Associates, Inc)*

The Governor's Office of Planning and Research (OPR) Vehicle Miles Traveled (VMT) guidance has been interpreted and applied in different ways by jurisdictions throughout the state due to the wide array of contexts each jurisdiction finds itself in. This has resulted in a patchwork of methodologies for evaluating VMT impacts across the state. Differences in VMT analysis methodologies amongst jurisdictions are most pronounced when the land use being evaluated is outside of the most common land uses of residential. office, and retail for which the OPR guidance has provided the most clarity. Although this has allowed local jurisdictions to tailor their approaches to best fit local contexts and considerations, it has also, under some circumstances, resulted in a situation where methodology selection may be the fundamental driver in terms of the resultant CEQA findings. This article focuses on the evaluation of logistics/distribution networks, which are a good example of a complex land use that, depending on the selected methodology, can have significantly different findings amongst jurisdictions.

With complex land uses that are integrated into a larger system, such as those associated with a logistic/delivery network, site-only VMT analysis can overlook the VMTreducing benefits of a new facility being added to a network. A common VMT analysis approach for employment related land uses that may lead to this type of outcome is the use of employee commute as the sole basis of VMT analysis. This narrow approach can result in the exclusion of the VMT reducing benefits that often result from a large distribution and delivery network building out its network and/or locating its facilities closer to its customers. An employee commute-only approach can also be viewed as being contradictory to the guidance for SB 743 analysis as deliveries are often the primary source of VMT for many of these facilities.

Further complicating the challenge of these types of analyses is that the ideal location to increase proximity to customers may not be the ideal location for employee commutes, so when viewed through the lens of an employee commute-only approach, a new logistics/distribution facility may appear to not support the goals of SB 743 while in the aggregate it may. While the research on distribution and delivery networks is still evolving, research specific to E-Commerce sites has noted the following benefits that can result from a wellfunctioning distribution and delivery network:

• Built-out logistics networks can result in 50% fewer transportation-related emissions

• E-Commerce can result in 36% fewer emissions than in-store shopping

• An ideal "circular route" (delivery) can reduce transportation emissions by 90%

• More than 100 car trips can be replaced by a full standard delivery van

With these potential benefits in mind, the need to consider the VMT impacts of expanding distribution and delivery networks in a more complex light becomes apparent. A potentially easier way to consider the expansion of distribution and delivery networks when constructing a new logistics/distribution facility that fits within the collective SB 743 understanding is to think of it in the same light as local-serving retail. Many jurisdictions, consistent with OPR guidance, have included a presumption in their SB 743 guidance that a retail land use does not have a significant transportation impact if it is less than 50,000 square-feet and is localserving. The following illustration visually depicts how the addition of a new local-serving retail store (e.g., grocery store, drug store, or similar) has the net effect of reducing a customer's VMT by virtue of shortening the length of the shopping trip, resulting in a net reduction in region-wide VMT. If instead we replace the store with a new logistics/distribution facility, the same basic premise applies with the primary difference being that the store is coming to the customer rather than the customer going to the store.



When a new logistics/distribution facility is first proposed to be constructed in a jurisdiction that has not dealt with evaluating the VMT impact of this type of land use before, several concerns often need to be addressed, including:

• Travel demand models do not, as typically applied, lend themselves easily to evaluating the VMT impact of this type of land use. When a jurisdiction needs to use a different tool or method that is not commonly applied to VMT analyses this can be a cause of concern. However, there are valid alternative evaluation approaches that utilize either Geographical Information System (GIS) methodologies or routing analysis features such as those included in the TransCAD software package that can easily facilitate this type of analysis.

• SB 743 guidance only directly considers automobile VMT (specifically cars and light duty trucks) attributable to a project, and as such, does not require the accounting of benefits that might result from other vehicle types. For logistics/distribution facilities that may rely on passenger sized vans or other smaller trucks, this is not necessarily an issue as they should be accounted for under SB 743. However, this can lead to a bit of a short-sighted approach to VMT analysis for facilities that primarily rely on larger commercial vehicles even though their introduction as a new facility may again benefit the overall network by lowering regionwide VMT and GHG.

• VMT attributable to employee commutes do not necessarily need to be excluded from the analysis at the expense of taking a broader view of these facilities. One approach to resolving the discrepancy between using a net change metric (absolute VMT value) and an efficiency metric (VMT/employee) is to simply combine the two. This can be completed by first multiplying the delta between the project's VMT/employee and the significance threshold by the number of employees and then adding the product to the net change in VMT attributable to the delivery vehicles. The resulting expectation would be that the reduction in regionwide VMT from deliveries, given improved customer proximity, would offset the VMT increase attributable to the increase in employee commute distance. A hypothetical example showing how this approach can be implemented and how the inclusion of delivery vehicles may change the outcome is shown in the table below.

		SCENARIO 1	SCENARIO 2
		No Delivery Vehicle Analysis	Delivery Vehicle Analysis
Employees	Number of employees	100	100
	Per employee	18 VMT/employee	18 VMT/employee
	Per employee threshold	17 VMT/employee	17 VMT/employee
	Regional VMT change	+100 VMT	+100 VMT
Delivery Vehicles	Regional VMT change	n/a	-1.000 VMT
Total	Regional VMT	+100 VMT	-900 VMT
Outcome	Significant Impact?	Yes	No

• Another concern that can result from the introduction of a new facility is that it may increase overall E-Commerce demand (essentially inducing additional online shopping that results in more trips) or alter trips to other shopping facilities, eliminating the benefit of shorter delivery trips that may result from the facility's introduction. However, the research and the nature of E-Commerce suggests that this is not the case. Research indicates that E-commerce shoppers are not overly sensitive to their proximity to brick-and-mortar stores and that their shopping behaviors are more impacted by the nature of item (household items vs groceries, etc.) and their personal socio-economic situation. Also, with the proliferation of free delivery, there is little reason to think that the extent or form of the network would incentivize demand.

In general, the research and the experience of many agencies across California with implementing SB 743 for logistics/distribution facilities suggests the following:

• There is a clear need for more guidance/research on best practices for analyzing land uses outside of residential, retail, and office. In particular, attention should be given to uses that have complex off-site transportation implications.

• Research indicates that expanding the supply chain, given that it does not typically drive demand, reduces VMT and GHG. This important finding suggests that in general, VMT and GHG can be lowered by supporting the continued expansion of logistic/delivery networks.

• Although, travel demand models have an important role in many SB 743 analyses, they also have significant limitations which do not make them the right analysis tool for all circumstances.

• Care needs to be taken to implement methodologies that holistically capture the majority of VMT from a land use to ensure that methodology selection is not the fundamental driver in terms of the resultant CEQA findings

### **2022 MEETING CALENDAR**

INSTITUTE OF TRANSPORTATION ENGINEERS

SOUTHERN CALIFORNIA SECTION



<b>JANUARY</b> ADA Technologies Virtual Training Jan 19, 2022 11:30 AM Virtual	FEBRUARY ITE SoCal Student Traffic Bowl Feb 26, 2022 11:00 AM Hosted by USC Virtual	<b>MARCH</b> "Spaces and Places" Joint Meeting with RSBITE, ITE San Diego, & ITE Central Coast March 23, 2022 12:00 PM Virtual
APRIL	MAY	JUNE
Pasadena TMC Tour & Happy Hour April 29, 2022 2:00PM	Student Night with OCTEC May 12, 2022 5:30 PM	Joint Meeting with ITS-CA June 22, 2022 12:00 PM
Pasadena City Hall	Knott's Berry Farm Hotel Buena Park, CA	Almansor Court Alhambra, CA
JULY	AUGUST	SEPTEMBER
No Events Mid-Year Board Meeting	Summer Mixer August 25, 2022 6:00 PM	Section Meeting Equity Series September 21, 2022 12:00 PM
	Rock & Brews Buena Park, CA	To Be Determined
OCTOBER	NOVEMBER	DECEMBER
Joint Meeting with OCTEC October 27, 2022 12:00 PM	Section Business Meeting November 16, 2022 12:00 PM	Holiday Mixer with OCTEC and ITS-CA December 8, 2022 5:00 PM
To Be Determined	To Be Determined	In-Person

NOTE: Locations and information is subject to change. Last Updated – 7/1/2022.

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Traffic operations **simplified**.

Signal maintenance required

UNUSUAL CONGESTION: This route 10% slower than previous month



Improve Arrivals on Green by 10% with offset optimization



BOTTLENECK DETECTED: Construction causing 3.5 mile queue

6

INCIDENT: Minor Crash 12:15pm ausing 10 Mins of Delay

CONSTRUCTION DETOUR ROUTE: 15 mins of delay



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