In this Issue:

Estimating Traffic Volumes under COVID-19 Pandemic Conditions

Everything Changes Everything: Connecticut Chapter Virtual Annual Meeting

Virtual Public Meeting: Kelley Square Intersection
Dear NEITE Members:

Let’s face it, 2020 is unlike any of us would have predicted. Across New England and the world, the COVID-19 pandemic has profoundly changed our daily lives, shifting traffic patterns and continuing to change how the general public gets around safely.

In light of the current events, the Section extends our congratulations to CT ITE for a very successful online meeting hosted last Monday, May 4, 2020. With nearly 100 participants, the Chapter heard from students on their research, conducted their business meeting, and hosted an inspiring discussion of transportation in the era of COVID all in one virtual room.

The CT Chapter and Section formally welcomed our newest Student Chapter, The University of Hartford. Greetings and appreciation are due to the Chapter Leadership, District and University for supporting ITE’s newest collegiate expansion. Following the celebration, a panel led by past NEITE Board member and current ITE advocacy committee chair, Jason Degray, P.E., PTOE, discussed with ITE Executive Director Jeff Paniati the ITE response and newest available resources to the membership.

With panelists Robert Arnold, FHWA Director, and Mayuresh Khare of AECOM, the dialogue shifted to what might be the “new normal,” what strategies communities are employing to invest in public health, and the pandemic’s possible long-term impact to how we all get around. Considering the challenges of meeting, we look forward to continuing these creative ways to connect with all of our members.

Additionally, ITE headquarters has created a clearinghouse of transportation resources and information on the impact to travel, resources for companies, and how to keep your family safe. ITE is also hosting virtual drop-in sessions weekly with short presentations from industry experts on Tuesdays and Thursdays. For more information or to participate, please check out: https://www.ite.org/about-ite/covid-19-resources/.

The 2020 New England ITE Annual Meeting remains in a planning stage and we look to build upon last year’s meeting to bring valued resources and professional development to the Section. Given the uncertainty about the timeline for physical distancing, the planning committee is considering all options as we continue towards the fall. We know this meeting is the celebration of our Section, and we continue to think creatively to craft a meeting that is beneficial and highly participatory.

The Section Executive Board is grateful for the ability to meet virtually, and we last met on April 1st. The Board approved the annual budget and advanced many other upcoming Section initiatives. The Bylaws and Charter committee has reviewed the new ITE Section Model Charter and Bylaws from the District and anticipates bringing recommendations for Board consideration at our next meeting on May 21, 2020. As always, anyone is open to attend our Board Meetings and we hope you join us. Please contact me for a link to the virtual meeting (imckinnon@hshassoc.com).

The New England Section continues to plan technical meetings and provide professional resources for its members. Stay tuned for more information on events this year as we all remain optimistic about once again gathering face to face.

Wishing you, your team, and families the best of health and safety.

With gratitude,

Ian A McKinnon, P.E., PTOE, RSP ITE New England Section President

Cover Photo: Connecticut/Massachusetts State Line - T. Schwartz
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Hello New England Chapter:

I hope you and your families are doing well during this time. The world has certainly transformed over the past few months, with many of us working from home while managing our children’s education. Traffic volumes have changed, as has the way we do business.

Our staff meetings now include some furry friends, planning and zoning meetings are held via Zoom, and we gather for virtual happy hours from home.

In this time of uncertainty I’m inspired by the empathy and compassion I see in the community and the innovative ways colleagues are finding to stay connected and get the job done. I’m excited to share some of the ways our members are overcoming the challenges we’re all facing.

This special COVID19 issue of the New England Chronicle includes a white paper from Kittleson Associates on estimating traffic volumes during the COVID19 pandemic. Matt Skelly, PE, PTOE, the president of CT ITE, authored an article on the virtual annual meeting held by the Connecticut chapter on May 4, 2020.

Also in this issue, Nate Cabral-Curtis, Manager of Public Involvement at Howard Stein Hudson, describes a recent public meeting held virtually via Zoom.

I encourage all of you to use this challenge as momentum for growth. ITE is supporting its members during this time with lower costs for online learning and a dedicated webpage with resources for members at https://www.ite.org/about-ite/covid-19-resources/.

I’ll look forward to seeing you all in person again soon, but until then, stay home and stay safe!

Theresa Schwartz, PE, PTOE
New England Chronicle Editor

Welcome to our Newest Members!

Taylor Dennerlein (Toole Design Group)
Amir Gozali Kasin (Gazi University)
Emily Hennessy (University of Massachusetts Amherst)
Rana Eslamifard (University of Massachusetts Amherst)
Robert Brisson
Maximilian Pavlov (University of Massachusetts Lowell)
Courtney Worhunsky (Massachusetts Highway Department)
Matthew McCarthy (University of Connecticut)
That "retirement" date, which was threatened several times over the past 15 years, finally arrived. As of May 1, I am among those many who are over 70 and on Social Security and Medicare, but I remain on-call with VHB. In these times of moving between employers, I feel fortunate to have been employed by only two firms since graduating from Northeastern University in 1972 – Alan M. Voorhees & Associates, my late junior and senior years co-op employer, and then in 1979 moving to what is now VHB. And some of the folks I worked with at AMV are the founding partners at VHB. This two-employer career seems strange for someone who has spent a lot of time talking about the need for change in our profession over the past 10 years, the need to be more inclusive, the need to better understand how this profession will be impacted by the change in-vehicle technology and the need to adapt.

So much has changed in both our profession and the Institute. Capacity analysis procedures went from hand calculations and the 21 nomographs developed by Jack Leisch and the Northwestern University Traffic Institute that were based on a mid-1960’s edition of the Highway Capacity Manual, to the Critical Lane Volume analysis procedure, to multiple software packages. The focus has changed from vehicles and safety to complete streets including pedestrians and bicycles and now aspects of micro-mobility, with safety remaining paramount. ITE has grown from several thousand members to more than 16,000 today. Within the New England Section, we have grown significantly, but that growth is not readily evident as increased attendance at Section meetings, because of the Chapters that have been established in each state. And there has been a change in the people and skills who are now part of ITE.

I can recall one of my first Section Meetings. This one was in New Haven Connecticut in the mid-1970s. I was a bit overwhelmed when I walked in, knowing very few personally but knowing many by professional reputation. Almost all are long removed from Institute activities at this point but their legacy lives on. As I continued to attend Section meetings (just about everyone except for the annual winter dinner-dance in Sturbridge) and serve as an elected officer in the mid-90s I found that I knew most of those there. This changed with the introduction of the Chapter format, where members and non-members started to limit travel in favor of attending with their local group, gathering annually as a Section in Rhode Island the first Monday in December. But even that is changing. One bit of advice – get involved, stay involved, and move outside of that comfort zone to become more involved in the Section, District, and International levels. And while you are doing that, bring someone along with you.

Happy Retirement to John Kennedy, PE, PTOE!
Introduction: There’s No Traffic!

We recently shared our view that the progression of transportation projects should not be stymied by an inability to collect field data representative of normal conditions. We offered broad ideas responding to a question on the minds of many practitioners: How can important projects that rely on field collected volume data continue?

How can important projects that rely on field-collected volume data continue?

This white paper expands on the themes and ideas shared in that article, identifying tools, resources, and methods for practitioners to consider in developing reasonable estimates of existing and future travel demand.

While important to slow the spread of the COVID-19 pandemic, a prolonged period of social distancing gives rise to several challenges for transportation professionals:

Important field-based data collection activities such as road tube counts, intersection turning movement counts, and origin-destination surveys will not yield usable estimates of non-pandemic traffic conditions during this period of disruption.

At least some amount of permanent travel demand/pattern change seems likely to remain after the pandemic has run its course. Both individuals and institutions have opportunities and incentives to learn from the distance learning and remote work experiences that have been forced upon them by the pandemic. Both groups can be expected to try to minimize their future risks by implementing some permanent behavioral changes with respect to when, where, why, and how they travel. Initial anecdotal commentary seems to support this prediction.

The pandemic has already been so disruptive to the national and world economies that a recession of some duration is expected. Recessions as well as overheated economies probably have little effect on 20-year forecasts, but they can significantly affect travel demand forecasts within the 0-5 year timeframe.

Despite these issues, compelling safety, health, and economic reasons remain for transportation agencies to continue moving forward on planning, design and operations projects to every extent possible. Even where “shelter in place” and “stay at home” orders have been issued, transportation is recognized as an essential service that must be maintained. Thus, continuing forward progress is necessary even on projects that rely on field-collected volume data and short-term volume forecasts.

Credible and reproducible methods and procedures are needed that will allow transportation professional to achieve this objective. When time is of the essence, the innovative use of already-available tools and resources is usually the most effective path to achieve such an objective. This approach is also a hallmark of how the transportation profession has addressed unexpected issues in the past. It therefore represents an opportunity to once again meet community and public needs in a timely manner.

4 Steps to Developing Proxy Volume Estimates

The following sections present guidance and some example methods for developing proxy estimates of existing and short-term future demand projections in an environment of pandemic-related disruptions.

The initial guidance provided here will result in reasonable demand projections that can be verified or fine-tuned under post-pandemic conditions. Additional modifications and enhancements to this guidance are likely to improve its veracity. Such suggestions are encouraged from every corner of the profession, because it is through this level of collaboration that the knowledge and expertise contained within the profession becomes greater than the sum of its individual parts.

Step 1: Establish Project Context and Data Needs

The answers to these initial questions will facilitate the identification of the most appropriate tools and resources for each individual project.

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WHAT TYPE OF ANALYSIS IS BEING CONDUCTED?

The type of analysis being conducted is a critical determinant for the type of data that will be needed. Six types of roadway system elements have been defined in the Highway Capacity Manual, each of which is associated with its own set of data needs:

- Points
- Segments
- Facilities
- Corridors
- Areas
- Systems

WHAT MODAL CONSIDERATIONS NEED TO BE ADDRESSED?

Motor vehicles, transit, freight, pedestrians, and bicycles are all integral to an efficient and effective transportation system and most projects should be assessing the deficiencies and needs associated with each of these travel modes.

WHAT TYPE OF DATA IS NEEDED?

Most traffic analyses need to take account of the physical, demand, supply, and operational/control characteristics of the roadway elements being analyzed. It is the demand-related data that is most significantly affected by the current pandemic. There are several different types of demand data that could be needed for a project analysis, each of which might also be sub-stratified by travel mode:

- Directional demand (for example, link volumes)
- Travel patterns (for example, trip distribution characteristics)
- Turning demand (for example, intersection turning movements by approach)
- Traffic stream composition (for example, truck percentages as well as demand distributions across all travel modes)
- Demand generating characteristics (for example, the trip generating characteristics of particular land use types, such as resort/holiday)

WHAT ARE THE CRITICAL ANALYSIS TIME PERIODS?

Demand characteristics are known to have important variations according to season of the year, day of the week, hour of the day, and 15-minute periods within each hour. Rules of thumb already exist for converting demand data from one time period into another but it is still important to be mindful of these differences in the context of the data resources available to a particular project.

Step 2: Coordinate with Appropriate Agencies

Perhaps now more than ever, coordination with impacted agency partners is essential to secure acceptance of the methods to be used to develop proxy demand projections. In addition to setting up a successful project outcome, new information may be discovered through the coordination process. Up-front actions that can be taken during an early coordination phase include:

- Develop a scope-of-work to secure agency consensus with the process before performing analyses (case-by-case).
- Identify example case studies or validation of other data collection efforts to establish confidence and partnership in the project review and approval process.

It will be important to explore all available resources with agency partners during the scoping process. Some agencies may collect and disseminate data through different staff or departments so all avenues should be explored as data sharing opportunities may not be fully understood internal to a given partner agency.

Step 3: Identify Available Data Resources

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These days, it can be hard to focus on anything other than immediate need. Each day brings staggering data and we, as a community, as a country, and as a world united by crisis, make decisions based on that data in the short-term – until that data inevitably changes the following day. So how do we, as transportation professionals, even begin to think about next week, next month, next year, and the general future of our industry? The best we can do is at least begin the conversation – and that’s what a panel of transportation professionals did on May 4, 2020.

At this year’s CT ITE Annual Meeting, we invited panelists Jeff Pania (Executive Director and CEO, ITE), Mayuresh Khare (Associate VP, AECOM), Robert Arnold (Director of Field Services – North, FHWA) and moderator Jason DeGray (Boston Office Director, Toole Design) to hypothesize and discuss the future of our industry. Members of our Chapter had the opportunity to ask a series of questions about how our industry is currently affected and the changes that may or may not occur as a result of the pandemic.

We first discussed what transportation professionals should be doing in response to the pandemic. Transportation and infrastructure are secondary concerns right now, and rightfully so. The health and safety of our loved ones comes first. Staying home and staying safe is the priority. This staying home has visually changed our roads and highways. What were once rush hour parking lots are now empty lanes. This change in usage especially applies to mass transit, as social distancing requires appropriate space not typically available on buses and subways. Parks and multi-use trails are also impacted by social distancing rules, yet they become places of refuge as they offer the appearance of freedom. And there are emerging and unexpected concerns, including pedestrian signal operation. Four months ago no one would have thought twice about pushing a crosswalk button, but now this button brings with it the chance of infection. Like everything else, these concerns are ever-evolving, and the “new normal” has yet to be determined. It is likely that, until there is a vaccine, travel will be inherently different than what we are used to. Which means that we cannot make any major decisions about how we design without full knowledge of what that new normal looks like. We need to think about stop gaps, not upending the entire system.

This led nicely into our next topic of discussion: ensuring that economic recovery (i.e., the return to work and opening of businesses, which will put people back on the roads) is addressed in a manner that protects the safety and welfare of those using public transit. Currently, most states are discussing phased implementation of economic return. This phasing will need to be mirrored in regard to public transportation. Our existing transportation systems are typically designed for maximum capacity, but that can no longer be permitted. The number of people using a particular vehicle will have to be determined by the amount of space that vehicle provides. Simply put, to ensure safe transit, the number of people permitted at a time will have to be reduced. This decision will be left to the transit organizations, but will be easier to implement if people returning to work happens in a phased approach. The usage of public transportation will have to change as well. Exiting and entering will have to be staggered (picture the taped floors of grocery stores), operators require proper PPE, and payment options may need to be modified, or fares eliminated altogether, to reduce human interaction.

The conversation progressed into a dialog on better physical separation of transportation modes and how we, as transportation professionals, would change to meet those needs. Given that every

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state has its own plan to recovery, it is likely that there is no singular answer to this question. Each state, and each city and town within that state, may have different needs. It is important that those needs be considered and that priorities be developed based on those needs before permanent changes are implemented. We need to help government officials identify and prioritize based on the best available information. In the short-term, telecommuting will likely be the norm, not the exception. This will mean that volume will not likely return to pre-crisis numbers immediately. However, carpooling will no longer be encouraged and public transit usage may decrease, so we must also consider that the number of single-occupancy vehicles will likely increase. And though we live in New England where the weather is less-than-predictable, there may be newly improved opportunities to advance complete streets projects and pedestrian/cyclist-friendly environments. Alternate forms of transportation could show increased demand. We may need to plan for short-term capacity, but we will have to monitor trends and behaviors as the “new normal” begins to emerge.

The most difficult question we tackled was predicting what our industry would look like 10 years from now. While we can only guess, we all agree that it will likely be different. We anticipate that these are not short-term challenges and that they will shape long-term changes. We will have to monitor, analyze, and make decisions accordingly. It is possible that train travel could increase because it is easier to social distance on a train than on an airplane. We are seeing a lot more people biking and walking; it is possible that this reconnection to self-propelled transportation could reduce the number of cars on the road or increase the need for more inclusive roadways. We need to recognize that, even though it is our job to have the answers, there are no answers right now as we have barely begun to formulate the questions. We need to be mindful that change is constant and we must be flexible in response. Change is usually so slow that it is almost imperceptible. Perhaps one of the silver linings is that we will be a rare generation that not only gets to witness rapid progression, but also one that gets to influence positive change.
A variety of historical data resources is potentially available to a project, some or all of which may be useful to achieving a reasonable demand projection. This includes “externally-observed” data obtained from traditional roadside data collection tools and techniques such as manual turning movement counts, embedded roadway sensors and video data analytics. It also includes “user-generated” data that is increasingly available from emerging technologies such as connected vehicles (CVs). These data sources can be used, independently or in combination, to produce reasonable traffic volume estimates under a normal design time period (i.e., non-pandemic environment). Depending on the age, type, and location of the data it can be converted into reasonable estimates of baseline traffic demand through the considered use of historic growth rates, scaling factors, seasonal adjustments, directional or peak hour splits, and turn movement and origin-destination patterns.

DISCOVERING EXTERNALLY-OBSERVED DATA

There is a wealth of historical data available from standard resources that can be used to predict demand levels and patterns under non-pandemic conditions:

Traffic Data Collection Companies are present or active in virtually all communities throughout the U.S. These companies collect and reduce transportation data using video surveillance cameras, road tubes, manual counters, and even drones. Traffic data is typically collected for public and private sector projects, so discovering if data is accessible may take some consultation with these end-users. Some data providers make their historic data available through web-based formats (see an example from Quality Counts here: https://data.qualitycounts.net/). If you are a data provider, read to the end of this white paper for an opportunity to add your database to our online toolkit.

Public Agencies often operate their own independent traffic count programs with databases accessible to the public via the web. For example, the Oregon State Department of Transportation (ODOT) posts online records of annual traffic volumes and growth trends along all highways in the state, including freeways and ramp terminals, as well as vehicle classification reports and permanent automatic traffic recorder station information that can identify unique seasonal patterns: https://www.oregon.gov/odot/Data/Pages/Traffic-Counting.aspx. Other agencies like the California Department of Transportation (Caltrans) provide similar resources, plus real-time data on travel time, vehicle hours delay, and vehicle-miles-traveled (VMT) on the state system: http://pems.dot.ca.gov/

Much traffic count data is contained in published transportation studies, however, it may be sitting idly on a shelf or digital file within a public agency or private firm. Discovering this data may take some effort. Potential resources include but are not limited to:

Long-Range Transportation Plans (LRTP)/Transportation System Plans (TSP) are prepared or updated about every 5 years for many large cities and counties throughout the U.S. These plans typically rely on the collection of traffic counts along roadways or at major intersections (collector level or higher) to prepare long-range travel demand forecasts and operations analyses. Raw traffic count data may even be documented in a TSP report appendix placed online, or available by request through the public agency or private consulting firm.

Some agencies have integrated this data with GIS databases that can be queried (for example, see the transportation data layers available at https://www.portlandmaps.com).

Corridor Plans and Capital Improvement Design Plans typically document the collection and analysis of traffic count data. Depending on the project, the base traffic data may or may not be readily available (technical project details may not be well publicized but perhaps can be secured through the preparing agency or project manager).

Transportation Impact Studies (TIS) that accompany many land development applications often include a treasure trove of local information. These studies routinely contain traffic count data and may be kept on file at public agencies, through a web-based query search, or available by request through the study author.

Advanced Traffic Controllers (ATCs) are able to collect many metrics including demand-related information as detailed as lane-by-lane approach volumes. Older traffic signal controllers are not always able to provide this type of demand-related data and so the availability of such information is dependent on location.

DISCOVERING USER-GENERATED DATA

Emerging technologies are developing quickly and the data that can be accumulated from CV’s, Bluetooth readers, and probes is already providing much value to practicing professionals.

Traffic data aggregators (such as StreetLight, Moonshadow, Wejo and Inrix) collect these types of data from numerous different sources, combine them with externally-observed data as it might be available, and then sell the results in various easy-to-use for-
The Kelley Square Intersection Improvement Project is in the process of reconfiguring Worcester’s proverbially difficult-to-navigate Kelley Square as a roundabout. The project includes new bicycle and pedestrian facilities and targets both the Square itself and the area surrounding it with safety and mobility improvements for all modes.

One of the biggest changes associated with the project is the permanent reversal of Harding and Millbury Streets. This operation took place overnight between May 5-6, 2020. Under normal circumstances, information about the reversal would have been conveyed to members of the public through a public information meeting. Due to the Commonwealth’s response to COVID-19, gatherings of over 10 persons are banned and as such, this type of meeting would not have been possible.

To ensure that all members of the Worcester community had an adequate opportunity to learn about the upcoming changes, HSH conducted a virtual meeting on April 16, 2020. The virtual meeting was presented in real time and gave the over 40 attendees an opportunity to ask questions and make comments just as they would at a physical meeting.

HSH is proud to have had the opportunity to have assisted MassDOT in bringing this critical information to the Kelley Square neighborhood during a uniquely challenging time. The successful virtual meeting has been praised by both Highway Division Administrator, Jonathan Gulliver and MassDOT Secretary and CEO, Stephanie Pollack.
When using these data sources it is important to distinguish the components that make up a particular set of observations so that it aligns appropriately with the project needs. Recent expansions have allowed this data to work in smaller areas. For example, data from probes such as cell phones is typically collected at time intervals of a minute or more; this can be quite adequate for estimating travel patterns but may not be sufficient resolution to estimate approach volumes at an intersection.

User-generated data is increasingly available from emerging technologies such as connected vehicles.

**Step 4: Develop Proxy Volume Estimates**

The ability to develop proxy volume estimates will be driven by the specific project characteristics and data availability as described above. Multiple methods and tools are available to develop reasonable demand projections from these resources, two of which can be described as follows:

**METHOD 1: ADJUSTMENTS TO OBSERVED DATA**

Historical demand data that has been collected at the same location over multiple time intervals or years can be extrapolated to the desired timeframe on the basis of observed trendlines. The results can be further refined through the application of accepted and/or historically observed adjustment factors that account for seasonal, daily, and hourly variations. This approach is usually not applicable to situations where trip distribution patterns are required.

Reasonable demand projections can also be produced even when only a single historical observation is recently collected it can be used without any further modification beyond the seasonal, daily, and hourly variations noted above. When this is not the case then general trend data obtainable from nearby locations can be assumed to apply. This approach is applicable to all the types of demand data identified earlier.

**METHOD 2: ADJUSTMENTS TO USER-GENERATED DATA**

Historical data obtainable from third party aggregators can be used to estimate travel patterns and trip distributions but almost always requires the use of scaling factors when demand levels are required. This is because the aggregated data usually represents just a sampling of the underlying demand. Appropriate scaling factors can be obtained from nearby locations where observed and user-generated data were collected at the same time (for example, at a permanent count station, in the vicinity of an ATC controller, or wherever a manual count was conducted). This approach is applicable to all types of demand data identified earlier.

There may be a need to supplement the two methods described above to reflect localized land use considerations.

There may be a need to supplement the two methods described above to reflect localized land use considerations. For example, development activities that have occurred since historic counts were completed and/or unique local land uses not in operation at the time of historic traffic counts (e.g. closed schools, churches, event centers, or other establishments) may need to be accounted for. In such instances, volume adjustments can be made following the traditional four-step modeling process and using trip generation estimates developed for
the dormant land use(s) with data from resources such as the Trip Generation Manual published by the Institute of Transportation Engineers.

FURTHER CONSIDERATIONS

It was noted in the introduction that the ongoing disruptions are likely to result in long-term changes to pre-pandemic travel patterns and demand levels. Some of these changes will be temporary (for example, the effects of an anticipated recession) while others are likely to be permanent (for example, a higher proportion of distance learning and work-at-home activities). In both cases the effects are expected to have a dampening effect on pre-pandemic vehicular and transit demand levels. The estimation methods described above are therefore believed to be conservative; that is, they are more likely to overestimate than to underestimate post-pandemic and short-term demand levels. Because of this, it will be desirable wherever possible to incorporate into each project a post-pandemic data collection and assessment component so the analysis results, findings and recommendations can be adjusted and fine-tuned as appropriate.

It is still unclear what the short-term and long-term effects of the current disruption will be on pedestrian and bicycle demand levels. It is not expected that any changes will be so significant as to challenge the capacity of individual facilities or eliminate the need for previously-identified investments. Even so, continued close monitoring of these travel modes will be an important part of any post-pandemic assessment.

Conclusion

While the current health and economic situation is in many ways unprecedented, the transportation industry has long relied on sound engineering judgment, a look to the past, and creative technology applications to chart new paths forward. Application of historic data, adjustment factors, and safety factors has proven effective in the past and, combined with availability of recent innovations in available network database information, presents a powerful tool for moving transportation projects ahead in uncertain times.

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Reduced Pricing on ITE Webinars for the Months of April - June

All webinars for the months of April-June will be offered at one low price of $49 members/$99 non-members regardless of the type of webinar, with the exception of our webinar series. Anyone who has already registered for one of the higher-priced webinars will receive a promo code enabling you to register for free for an upcoming webinar through June.

Virtual Drop-Ins

ITE is hosting Virtual Drop-In sessions as a way for members to engage on a specific topic. These sessions are largely unstructured and begin with a short presentation by a member followed by an online conversation by participants, led by the presenter. The sessions are recorded and are posted for playback in the ITE Library and ITE Member Forum. There is a limit of 25 participants per webinar. Sessions take place on Tuesdays and Thursdays. Visit www.ite.org to access recorded sessions. To convene a Drop-In session, send your idea to pgoodell@ite.org.
CDM Smith provides lasting and integrated solutions in water, environment, transportation, energy and facilities to public and private clients worldwide. As a full-service consulting, engineering, construction, and operations firm, we deliver exceptional client service, quality results and enduring value across the entire project life cycle.

JOB DESCRIPTION

As a member of this team, you would contribute to CDM Smith’s mission by:

- Supporting senior Traffic Engineers in New England providing traffic analysis and simulation, traffic signal design, traffic planning, safety analysis, maintenance and protection of traffic plan development, and other traffic engineering support services including but not limited to peer reviews and traffic impact studies.

- Developing skills as a leader by mentoring and overseeing traffic work of entry-level traffic engineers.

MINIMUM QUALIFICATIONS

Bachelor’s degree in Civil, transportation, or Structural Engineering or related discipline.

- Certification as an Engineer in Training (EIT) or passing the Fundamentals of Engineering (FE) exam in states where an EIT is not obtainable (within 18 months of hire or promotion or transfer).
- 5 years of related experience.
- Domestic and/or international travel may be required. The frequency of travel is contingent on specific duties, responsibilities, and the essential functions of the position, which may vary depending on workload and project demands.

PREFERRED QUALIFICATIONS

- EIT and/or IMSA certifications.
- Prior experience in traffic signal design, traffic analysis and simulation modeling, traffic impact studies, safety analysis, and maintenance and protection of traffic.
- Prior experience in preparation of technical reports, letters and peer reviews.
- Knowledge of crash modification factors, Interactive Highway Safety Design Model (IHSDM), and the Highway Safety Manual.
- Experience with software programs including AutoCAD, Microstation, Synchro/SimTraffic, SIDRA, VISSIM, and IHSDM and Microsoft Office.

*To apply please visit: https://bit.ly/34UJSH4
Traffic Engineering Services Division of the Department of Public Works. Provides professional engineering planning, evaluation, design, advice, and assistance to City Departments and outside agencies regarding a variety of projects involving traffic. Acts as the City’s Traffic Engineer. Schedules, assigns, coordinates and supervises the work of all units in the Traffic Engineering Services Division in the evaluation, design, specification preparation and cost estimating of the construction of all public works projects involving traffic, including but not limited to, streetscapes, traffic calming measures, traffic signalization, street signs and line striping. Confers with City officials, agencies, commissioners and the public to provide advice on traffic engineering matters. Reviews and comments on Traffic Management Plans submitted by Developers and other departments. Provides support and assistance to colleagues with Public Works permit, involving traffic-related issues. Supervises all traffic data collection, studies or research relating to traffic, including but not limited to traffic counts, traffic patterns and speed studies. Directs the compilation and analysis of data and findings from traffic studies, field studies, traffic plans, drawings, etc to generate reports relating to traffic-related issues. Analyzes data, reports, and recommends changes or adjustments in signage, signalization and road markings to the Local Traffic Authority of the City. Prepares proposed traffic regulations for submittal to the Local Traffic Authority of the City. Responds to inquiries from residents, and attends NRZ and other traffic-related meetings as needed. May be required to perform additional related duties. This is a HMEA union position. The hours of work for this position are 40 hours per week. The above salary includes 5% in lieu of overtime.

QUALIFICATIONS:
Open to all applicants who meet the following qualifications:
Graduation from an accredited college or university with a Bachelor’s Degree in an engineering field and five (5) years of increasingly responsible experience involving design, construction and contract administration for major municipal public works projects related to traffic engineering. Two (2) of the five (5) years of experience must have been in a supervisory capacity.
A Master’s Degree in an engineering field may be substituted for a year of experience at the supervisory level.

LICENSES, CERTIFICATIONS, AND SPECIAL REQUIREMENTS:
Completion of the Local Traffic Authority Program offered through Connecticut Technology Transfer Center or similar organization preferred.
Possession of a license as a Professional Engineer as issued by the State of Connecticut preferred.
Membership in Professional Organizations representing Transportation and Traffic Engineering. (ITE, ITS, and similar organizations) preferred.
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Typically short articles would consist of 1,000 to 2,500 words and feature articles would consist of 2,000 to 4,000 words. Each article should include a head shot and bio of all participating authors. Further details for each article submission can be given upon request.

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