

## State DOT COVID-19 Response: Use of Transportation Data and Information for Decision Makers (4/27/2020)

### I. Executive Summary

The 2019 Novel Coronavirus Disease (COVID-19) is a crisis felt worldwide with conditions and consequences continuing to evolve daily. It has come to AASHTO's attention that many state Departments of Transportation (DOTs) were being asked for a variety of transportation data to assist in understanding recent changes to travel resulting from the COVID-19 pandemic. Some states were being asked to provide data to assist in understanding the movements of people and goods in response to changes in public policies (such as stay at home, shelter in place, etc.).

Members of the AASHTO Committee on Performance Based Management and AASHTO Committee on Planning were asked to provide information on what their state is doing with transportation data and information during this ongoing crisis. It was proposed that this information would be collated and shared with state DOTs to share what others are doing to respond to the crisis as well as help in preventing and slowing the spread of COVID-19. Survey results were collected from March 25 through April 27, 2020. Voluntary responses were received from DOTs (or equivalents) and Metropolitan Planning Organizations from the following states: Alaska, Alabama, California, Colorado, Connecticut, Delaware, District of Columbia, Georgia, Idaho, Indiana, Illinois, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, North Carolina, North Dakota, Nebraska, New Hampshire, New Jersey, New Mexico, Nevada, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Vermont, Washington, West Virginia, and Wyoming.

Most state DOTs respondents are using transportation data to inform community and department decision makers about changes in travel patterns including traffic volume, speed, and classification. Respondents indicated that this data can assist with the measurement of government stay-at-home order compliance, adjustment of road construction times, forecasting revenue effects, and the allocation of first responders. Twenty-one of thirty-five respondents indicated that their state is considering, anticipating, and/or approving modified lane closure hours allowed and duration based on changes to traffic volume data. Such changes are made affecting individual projects, and are not yet indicative of blanket policy changes made at the state level.

Several states indicated that they are not (or cannot due to lack of sufficient data) observing changes to truck traffic on their transportation system. Of those states that are observing changes to truck traffic, half are reporting no change or slight increases. States reporting decreased truck traffic are mostly with low percentages. Indiana appears to be an outlier with a significant negative change in heavy truck volume on its system.

States appear split as to whether their data needs are being met to address current challenges. Many respondents expressed that they have the mechanisms to capture, process, and/or analyze data quickly to provide the information currently needed. Based on responses gathered, process improvements and technology investments would assist state DOTs gather and synthesize needed real time data.

## II. Survey Results

### 1. Is your transportation data being used to inform decision-makers about changes in travel patterns?

State	Entity	Response
AK	DOT&PF	Yes
AL	DOT	Yes
DC	DOT	Yes
KS	DOT	Yes – We were asked to track the decline in traffic/VMT.
MI	DOT	Some regions are looking at volume and possibly probe data to look at work zone hours. Currently not aware that any adjustment have been made yet. Some regions interested if this keeps going, how the seasonal traffic patterns change.
MO	DOT	Yes
MT	DOT	Yes
ND	DOT	Yes
NJ	DOT	Yes. See 1a & 1b for details.
NM	DOT	No
TN	DOT	We have been asked what data could we provide to paint a picture of the impact to travel patterns due to Covid-19
TX	DOT	Data are being collected to respond to media requests and to disseminate to headquarters and district personnel.
VT	AOT	Other than the work on identifying potential projects for potential stimulus money, we have not had any specific asks for transportation data related to COVID19. Folks may be using the data we provide externally through VTransparency and the Open Geodata Portal to do analyses – we wouldn't have any idea of who is using that data and how they are using it.


#### 1a. What type of data?


Example: Types of data may include: Volume, speed, classification, O/D; Source of Data? (highway operations, continuous count/traffic monitoring, advance traffic signals, 3rd party traffic data provider); Data time period: real-time or near real-time or historic

State	Entity	Response
AK	DOT&PF	Volume, Class, Speed, Turning Movements Sources: CCS, Short Term, Video-Turning Movements, Loops Data Time Period: Near Real-time (Two weeks at the most)
AL	DOT	Primarily Volume and Speed data. This data is provided by roadside count stations or traffic signals within our Operations and Planning sections; as well as, HERE probe data.
CA	DOT	Caltrans is utilizing our Performance Monitoring System (PeMS) which captures and analyze the data from the state owned vehicle detection systems on the State Highway System. The data is comprised of average speed, vehicle miles traveled,

		and vehicle hours traveled, which can be utilized to calculate volumes and average daily traffic. The data can be viewed near-real time and historically for comparative purposes.
<b>CO</b>	DOT	We are working on using our ATR data for this, and looking into some other data sources such as INRIX (we have a contract with them)
<b>CT</b>	DOT	Primarily volume data from our continuous count stations as compared to history; one request for truck percentage changes; we expect the National Performance Management Research Data Set (NPMRDS) travel time data will be of interest when the March data becomes available. Our offices have not had any requests for speed data as of yet. Transcom has also provided snapshots of travel speed changes on March 23 vs March 9 <sup>th</sup> for Southwestern CT to our Bureau of Highway Operations.
<b>DC</b>	DOT	Volume from microwave sensors, travel times from probe vehicle data (INRIX)
<b>DE</b>	DOT	To date, daily and peak hour traffic data. Sources are state-owned detection systems, including radar detectors and traffic signal system inductive loops. We are reviewing real-time data and comparing to historical data. Classification data has not yet been reviewed. Typically, we review toll plaza classification data monthly, and we also get a report from State Police on truck traffic through the various weigh stations. We have not reviewed/received either of these reports for March 2020 yet.
<b>GA</b>	DOT	Yes, GDOT’s data is being used to inform our executive management and others about travel pattern changes. Data provided includes speeds and volumes throughout the state. The data originates from continuous count stations (sites selected to address our more rural routes, both freeways & surface), freeway management system DOT(Navigator) detection (for metro Atlanta freeways), traffic signal system data and metrics (ATSPM – for metro Atlanta arterials), and 3 <sup>rd</sup> party data. We are furnishing data for AM & PM peak periods from Navigator, other data sources for the prior 24 hour period.
<b>IA</b>	DOT	Iowa is utilizing its continuous count Automatic Traffic Recorders and Weigh-in-Motion sites to generate daily reports posted around mid-day at this weblink: <a href="https://iowadot.gov/maps/Data/AUTOMATIC-TRAFFIC-RECORDER-REPORTS">https://iowadot.gov/maps/Data/AUTOMATIC-TRAFFIC-RECORDER-REPORTS</a> These reports detail the percentage of change for the total volume of traffic and for single trailer 5-axle trucks.
<b>ID</b>	TD	Idaho Transportation Department (ITD) is currently setting up an easy-to-read Operations Dashboard, which will be publicly available, which will use continuous count devices already deployed to display traffic volume trends. While this dashboard is primarily to show trends in traffic volume changes, the Roadway Data unit is also looking at commercial counts (also using continuous count devices) over the last few weeks to see what impact this pandemic has had on commercial vehicle flow in Idaho. We currently have INRIX data that the department purchased earlier in the year, which may be used as a travel time resource. And should the need arise for speed information, that will be available via the continuous count devices in the state. The Operations Dashboard should be

		updated daily with prior day data (once it is operational – and that is anticipated to be Monday).
<b>IL</b>	DOT	We are utilizing current CCS locations and interstate sensor data in Chicago region to monitor the volume and truck information. This information is to compare certain locations related to the national numbers being shown by MS2. We are also using the RITIS tools to review probe data: HERE real-time traffic and the NPMRDS data as it becomes available. The probe data is providing updated TTI and speed reviews. Working on developing an updated TDM and currently building out Replica COVID-19 tool. Some are near real time options.
<b>IN</b>	DOT	Coverage & continuous traffic volume count data
<b>KS</b>	DOT	We are using our ATR data (historic volume & speed) to determine how much traffic has declined (ADT/VMT). Kansas Turnpike trip data also gives us an idea of travel by size of vehicle. We are also evaluating other sources of data from 3 <sup>rd</sup> parties such as Google, CATT, Unacast (mobile phone location data).
<b>MD</b>	DOT	<ul style="list-style-type: none"> <li>• Data Type: Volume, classification, speed, incident</li> <li>• Data Source: Permanent Continuous Counters (ATRs); 3<sup>rd</sup> Party Traffic providers, operations</li> <li>• Date time period: near real-time, historic (for comparison)</li> </ul>
<b>ME</b>	DOT	We are using data from our permanent count (64 locations) and classification sites (9 locations)
<b>MI</b>	DOT	Volume(PTRs) and Probe Data.
<b>MN</b>	DOT	<p>MnDOT has three sources of traffic data that are being used in COVID-19 planning:</p> <ul style="list-style-type: none"> <li>- Regional Transportation Management Center (RTMC) metro freeway traffic data             <ul style="list-style-type: none"> <li>o The RTMC has about 400 miles of metro freeways covered with traffic sensors. The sensors are every ½ mile and record volume and speed data every 30-seconds.</li> </ul> </li> <li>- Traffic Data Analysis (TDA) statewide traffic data from ATR stations             <ul style="list-style-type: none"> <li>o TDA has traffic sensors across the state.</li> </ul> </li> <li>- StreetLight Origin/Destination data             <ul style="list-style-type: none"> <li>o MnDOT has purchased probe data through StreetLight to show origin/destination patterns. This data normally has about a one-month latency but StreetLight has reached out to use saying they are getting this down to 2-weeks.</li> </ul> </li> </ul> <p>Also reviewing pedestrian and bicycle counts/volumes from statewide index sites, and possible portable counter locations.</p>
<b>MO</b>	DOT	Volume, speed, congestion, classification. Sources include permanent count stations (radar, Bluetooth, loop) and 3 <sup>rd</sup> party probe data. Time period is 5 years of historical data and continuous near real-time feeds.
<b>MS</b>	DOT	Traffic volumes

<b>MT</b>	DOT	 DTVT Methodology-03292 MS2 (See attached)
<b>NC</b>	DOT	Mainly traffic volume data and how it compares to before the virus. Some request for the classification volumes, primarily truck volumes. We retrieving the data from multiple sources. We are using traffic signal data, 3 <sup>rd</sup> party data, ramp meter data, Permanent traffic count data sites, and toll gantries. Some data are daily, some we are reporting weekly.
<b>ND</b>	DOT	ATR volume data, only for roads with speed limits of 55 mph and greater, for now.
<b>NE</b>	DOT	We are being asked by elected officials and media for traffic volumes and vehicle miles traveled (VMT Info). The data we provide is obtained for automatic traffic recorders (24/7 data collection) at +60 sites across the state. At the end of the week, we compile data for that week according to certain roadways classifications (e.g. urban interstate, rural highway, etc.). We also have compiled a 5-year average from previous years to demonstrate the reduction in traffic caused by the pandemic. We then push out to our partners each Tuesday.
<b>NH</b>	DOT	We are collecting/reporting data in a couple forms. First, we have daily traffic data from our five barrier toll locations that includes volume and classification). We also have one permanent count location that we can poll remotely where we are collecting/reporting volume data only. We also have real time traffic data captured through roadside devices and probe data through our TSMO resources, but that data has not been included in the specific requests due to COVID 19.
<b>NJ</b>	DOT	<p>NJDOT collects volume &amp; classification data, as well as Weigh-in-Motion (WIM) data. WIM &amp; Traffic Volume are available in various time formats, including continuous &amp; short term (48 hours and 7 days).</p> <p>NJDOT also has substantial data in its Data Warehouse, which is a database of available Management System data for the entire state highway system, broken down into 0.1 mile segments.</p> <p>In addition, NJDOT also receives travel time comparison reports per rush hour from its partner at Transcom. This information is provided to Communications as well as NJDOT's lane closure management group to support analysis of construction projects and allowable lane closure hours. These reports analyze and compile multiple probe data sets into one data set and compare historical travel time delays vs current travel time delays on the State's road network. Attached is the 3/25/20 report for the morning rush hour. In the first graphic of the document, Route 80 EB end to end shows 68 miles of coverage by the data. For 3/25/20, the average travel time was 68 minutes (indication of free flow), compared to the average travel time of 78 minutes from a similar Wednesday in</p>

		<p>March from 2019. That shows a 13% decrease in delays for this stretch.</p>  <p>TRANSCOM NJDOT        TT Comparison Rep</p>
<b>NV</b>	DOT	Currently gathering freeway and arterial volume data, comparing March 2019 to March 2020. Plan on looking at travel times and crash data, but focus is on volumes.
<b>OK</b>	DOT	We are currently using our permanent Automatic Vehicle Classification (AVC) devices that collect 24 hour traffic volume to look at the trend that COVID-19 has had on highway usage.
<b>PA</b>	DOT	We have been utilizing speed data in various forms (travel times, user delay cost calculations), traffic count data from adaptive traffic signals, and comparing live traffic counts taken via CCTV to historical data from nearby permanent count stations
<b>SC</b>	DOT	Yes, we are tracking volume reductions, and speed increases.
<b>TN</b>	DOT	We have begun processing data for volumes and truck percentage. We are comparing from the start of the impact through the most recent day to the same time in 2019.
<b>TX</b>	DOT	<p>The specific questions media outlets have asked include:</p> <ul style="list-style-type: none"> <li>• What impact has COVID-19 had on traffic or crash patterns in the state?</li> <li>• What areas of the state have seen the greatest impact? The least?</li> <li>• When (daypart, day of week) are the areas of greatest differential between typical patterns?</li> <li>• Are there any new/surprising/unexpected traffic/crash patterns emerging?</li> <li>• Are you seeing (or do you chart) any specific differences in commercial traffic—increase, decrease, shift in patterns?</li> </ul>
<b>UT</b>	DOT	<p>Using point data (radar units and loop detectors) to:</p> <ul style="list-style-type: none"> <li>• Gathering speed and volume data on I-15 (major N/S route) to compare current volumes and speeds to the last several months (seeing a steady reduction down to approximately 50-60% of normal for volumes. Speeds are essentially free flow.</li> <li>• Gathering volumes near major recreation sites (Cottonwood Canyons, Moab, and Zion). We are seeing approximately 30% of normal traffic in these locations.</li> <li>• Gathering volumes at state entry points – Seeing significant reductions in passenger car volumes and significant increases in truck volumes.</li> <li>• All of this information is available in this dashboard: <a href="#">UDOT COVID Traffic Dashboard</a></li> </ul>
<b>WA</b>	DOT	Primarily volumes from our continuous count stations (1-day lag) are compared to historic data from same locations as well as ridership information from Washington State Ferries, Amtrak Cascades, and other transit agencies.
<b>WV</b>	DOT	WVDOT is using traffic data (volume and class) retrieved from the <i>Continuous Counts Sites</i> (permanent stations statewide)

<b>WY</b>	DOT	WYDOT is only asking for weekly traffic counts updates, broken out by Interstate, Non-Interstate NHS, and Non-NHS, and also by combination truck, single unit, and automobile.
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*1b. What are these data used for?*

Example: In many states, traffic volume data are being used to inform public officials on changes to roadway use. Other purposes?

State	Entity	Response
<b>AK</b>	DOT	Support selection and prioritization of highway improvement projects; support maintenance prioritizing
<b>AL</b>	DOT	Spot information is analyzed to advise ALDOT leadership of pattern changes against 2019 data for the same time periods. Primarily adjusting hours of the day for construction.
<b>CA</b>	DOT	The data is being used to examine the changes to the state highway system as a result of local and state stay-at-home orders and social distancing measures.
<b>CO</b>	DOT	Our engineers are looking into shifting construction closers to day time rather than night time. Our public affairs office also wants to put out such data, just as a means of keeping people informed.
<b>CT</b>	DOT	To inform officials and public to the use changes. The truck data was requested by a planning firm doing work related to FEMA's grocery supply chain tracking "for high-level decision making."
<b>DC</b>	DOT	Reversible lane operations, determining appropriate construction work hours, understanding trends in behavior, response to media inquiries
<b>DE</b>	DOT	General information for leadership. Specific information to make decisions about lane closure restrictions/timeframes for active construction projects. Toll data related to revenues. Weigh station data related to truck enforcement.
<b>GA</b>	DOT	This data is being communicated to GDOT's executive staff, other transport agency executives, elected officials, and the Georgia governor's office
<b>IA</b>	DOT	To date this travel data has been used for the following variety of purposes: use by Governor Reynolds to inform her daily press conference discussions; provided to the public through the Iowa DOT Frequently asked Questions weblink <a href="https://iowadot.gov/covid-19/Public-Response">https://iowadot.gov/covid-19/Public-Response</a> ; help inform the decision to allow changes for days of the week and time of day for road construction projects. Future uses may include activities such as forecasting revenue impacts.
<b>ID</b>	TD	First and foremost, it is important to inform the public and decision-makers as to what is occurring and the impact of changes in roadway use. Second, we want to monitor long-term changes in traffic patterns and habits. We also want to know whether or not there are changes in commercial volumes as they may feed short and long-term economic impact models. Right now, one of our questions is, when Social Distancing ends, will traffic patterns go back to what they were? And if so, will that follow by a significant downturn in traffic movement overall because of the state of the economy? (In short, will there be another 2008?) I have heard

		many states will not be performing portable counts. Idaho will perform portable counts as scheduled. However, they may not be used for year-end analysis, particularly during the Stay at Home order issued by Governor Little on March 25th, and for a time after.
<b>IL</b>	DOT	The data is being used by Illinois Emergency Management Agency, National Guard and for discussions with public officials and external communications. It appears they are most concerned now with understanding how people are going to move when certain parts of the economy open back up.
<b>IN</b>	DOT	They're being collected, reduced, and reported out daily to executive leadership for general awareness, and for among other purposes to estimate impact of changes (reductions) in vehicle-miles of travel for various vehicle classes to gasoline & diesel fuel tax revenue.
<b>KS</b>	DOT	The data provides the state insight into how traffic is changing on our roadways so we can make operational changes if needed. The data also provides us information important to determining how stay at home orders effect traffic and insight into how MFT might be affected.
<b>MD</b>	DOT	Used to inform public officials on changes to roadway use
<b>ME</b>	DOT	General information and potential allowance of scaled back requirements on some projects
<b>MN</b>	DOT	<p>MnDOT is working with our partners at Minnesota Management and Budget (MMB) Department and the Metropolitan Council (MPO for the Twin Cities) to track changes in traffic volumes to inform public officials on changes to roadway use and compliance to "stay at home" recommendations. Minnesota will be in a shelter-in-place order after Friday so the data will continue to be tracked to measure compliance of that order.</p> <p>The information collected is being used to inform the Governor in his decision making processes. The state's COVID response team is using this data to understand the impact of past and potential future social distancing policies. The data also informs state estimates of future disease transmission (and its tertiary impacts) on Minnesotans.</p> <p>Metro Transit is also looking at transit ridership data and boardings to see where transit use has changed.</p> <p>Informing MnDOT and partners how behaviors have changed related to pedestrian and bicycle travel, which can lead to more effective messaging regarding safe social distancing when traveling outdoors by walking and bicycling.</p>
<b>MO</b>	DOT	Inform public officials of changes to roadway use, evaluate the effectiveness of shelter in place orders, resource allocation strategies.
<b>MS</b>	DOT	Reduced traffic volumes are being evaluated to determine if lane restrictions on construction contracts can be adjusted allowing contractors more time to work.
<b>MT</b>	DOT	State revenues currently



<b>NC</b>	DOT	Primarily forecasting revenue, and determination of effectiveness of reduce travel orders. We are also using the data to determine if we have flexibility in some signal operation flexibility such as placing more signals on pedestrian recall to reduce the number of ped activations i.e. touching the push button.
<b>ND</b>	DOT	Informing COVID-19 spread forecast models; Informing Highway Patrol resource allocation decisions (possibly moving patrol troopers from patrol to COVID-19 and/or flood-fight preparation duties); Informing revenue forecast models; Informing public officials on how well citizens are complying with voluntary social-distancing requests.
<b>NE</b>	DOT	It is unclear at this point. I believe it is being used as a surrogate measure for “how normal are things”. I.e. What is normal and when will we return to normal?
<b>NH</b>	DOT	Our Executive Office is using the data to make operational decisions and to project revenue reductions (toll revenue and fuel tax revenue)
<b>NJ</b>	DOT	The New Jersey Department of Treasury requested data to conduct an analysis of traffic volumes before and during the COVID 19 Pandemic. The New Jersey Department of Environmental Protection (NJDEP) requested similar data for their own analysis. In addition, NJDEP was interested in truck volumes to gauge the impact of COVID-19 on light and heavy duty vehicle travel. The latter NJDEP request was on behalf of NESCAUM (Northeast States for Coordinated Air Use Management, an association of AQ agencies for NJ, NY & all New England states) NJDOT shared February classification reports and advised the March truck data will be available in mid-April.
<b>NV</b>	DOT	Currently we are looking at the changes in traffic volumes along the interstates and major arterials. Noted congestion points have moved from the freeways to near health care facilities/hospitals and grocery stores.
<b>OK</b>	DOT	Currently we are using volume and class to understand how COVID-19 is affecting traffic patterns
<b>PA</b>	DOT	To date, this data is being used to inform our leadership, traffic management personnel, as well as the public via requests from the press, about the impact that the escalating COVID-19 responses are having on traffic volumes
<b>SC</b>	DOT	They are being reported to our Secretary of Transportation to brief other state decision makers.
<b>TN</b>	DOT	We have just begun to gather the data and have not made policy decisions on the results at this time. We anticipate using the data to make decisions about allowing daytime lane closures.
<b>TX</b>	DOT	We have begun analyses of the continuous volume data to respond to media requests.
<b>UT</b>	DOT	<ul style="list-style-type: none"> <li>• Using point data to modify MOT restrictions for current/upcoming construction projects               <ul style="list-style-type: none"> <li>○ For each construction project we provide construction/lane open windows. Many of our projects are restricted to night work to limit traffic impacts. Because we have seen such a reduction in traffic, the Resident Engineers are requesting modification to</li> </ul> </li> </ul>

		<p>construction windows (allowing more day time work and more lane closures).</p> <ul style="list-style-type: none"> <li>Using to inform Region Staff, Directors, Control Room in change of volumes for various efforts. Control room can use to staffing purposes.</li> <li>Using to modify signal timing and ramp meters (stopped using ramp meters)</li> </ul>
<b>WA</b>	DOT	This information tells executive leadership and agency operations personnel about the impact COVID-19 responses are having on travel behavior trends.
<b>WV</b>	DOT	The data is being used to monitor traffic change during this unusual traffic conditions with focus on trucks movement as requested by the DOT leadership to inform their decisions during this unique situation.
<b>WY</b>	DOT	While Planning was asked to speculate on some reasons why, the primary reason is to anticipate funding decrease due to the reduction in fuel tax.

**2. Is your state modifying lane closures hours allowed (night to day) and duration based on changes to traffic volume data?**

State	Entity	Response
<b>AK</b>	DOT&PF	No, we are not modifying highway usage.
<b>AL</b>	DOT	Several changes from nighttime to day time.
<b>CA</b>	DOT	Yes. Where feasible, we are allowing lane closures to occur during what would normally be peak travel periods and are permitting contractors to move to daytime work. Changes are being looked at on a case by case basis. Traffic delays cannot exceed 20 minutes and a contingency plan should be in place to address traffic delays exceeding 20 minutes. These changes will only be permitted while the Governor's executive order directing people to stay at home remains in effect.
<b>CO</b>	DOT	Considering it
<b>CT</b>	DOT	No current modification of patterns. CTDOT is still working on construction projects, maintenance, and emergency roadwork.
<b>DC</b>	DOT	Not overarching but we are moving some of our paving activities from nighttime to daytime work
<b>DE</b>	DOT	Yes
<b>GA</b>	DOT	Georgia DOT is only modifying lane closure hours allowed on an ad hoc basis. This is a conclusion we arrived at after some good, and virtual, discussion. Our conclusion was to NOT institute any programmatic changes due in no small part to uncertainty about the duration of this current COVID-19 response. But data is being used to evaluate requests for modifications to lane closures on a case by case basis, with a situational decision tree to guide that evaluation.
<b>IA</b>	DOT	The Iowa DOT is considering the change in total traffic volumes as well as large truck volumes for modifications to lane closure requirements.
<b>ID</b>	TD	That is currently under consideration for some projects.
<b>IN</b>	DOT	We just sent out a policy directive today that allows us to analyze our interstate lane closure approvals based on a straight 25% assumed reduction in traffic

		volumes. This should allow more availability to our maintenance and construction groups to allow work during additional hours of the day without creating queues. We will continue to monitor traffic data such that we will be able to know when the time to return to our more traditional process to approve lane closure times.
<b>KS</b>	DOT	Yes. On a few of our projects on high volume highways we changed the restrictions to allow daytime work instead of just nights due to lower traffic volumes. We also allowed complete closures of interstate through lanes and allowed a project phase shift during the week that we would have only allowed on a weekend under normal conditions.
<b>MD</b>	DOT	<ul style="list-style-type: none"> <li>• This varies by District and on a case by case basis.</li> <li>• Generally, there have been minimal night to day changes; (1 reported)</li> <li>• Some districts are extending daytime permits and (hour in AM and PM)</li> </ul>
<b>ME</b>	DOT	Yes on a temporary basis on certain projects to be rescinded when the counts get back towards normal
<b>MN</b>	DOT	<p>Yes, we've seen some metro freeways drop by 40-50% which is allowing us to extend lane closure times into what would have normally been peak periods. This has been on a case-by-case basis and we use the RTMC traffic sensor data to confirm that lane closures are allowed.</p> <p>Communities are closing roadways to give the higher volumes of people biking an walking more room to do so while maintaining social distances</p>
<b>MO</b>	DOT	Yes, if the data supports longer lane closure hours they are being allowed. These are temporary and continually evaluated for changes in traffic patterns.
<b>MS</b>	DOT	See # 1. This is being evaluated by each district. Several identified projects where they are going to try relaxing some lane closure restrictions. If it is successful they will continue, if not, revert back to the restrictions in place in the contract.
<b>MT</b>	DOT	No
<b>NC</b>	DOT	Some discussions have started, no statewide directives as of yet.
<b>ND</b>	DOT	No
<b>NE</b>	DOT	Not aware of anything
<b>NH</b>	DOT	Not at this time, construction season is just getting under way.
<b>NJ</b>	DOT	NJDOT is permitting additional lane closures hours (one hour early start and one hour at the end of the original closure time). Some projects are evaluating changes from night work to daytime work.
<b>NM</b>	DOT	No
<b>NV</b>	DOT	NDOT along with some local agencies are allowing traffic control limitations to be relaxed for construction projects and permits. This includes allowing additional lane closures and relaxing time restrictions. Some maintenance activities (e.g. striping) are being accomplished in urban interstate areas during daylight hours, instead of nighttime. Currently construction projects and construction work is continuing with strict social distancing and disinfecting of equipment standards being adhered to.

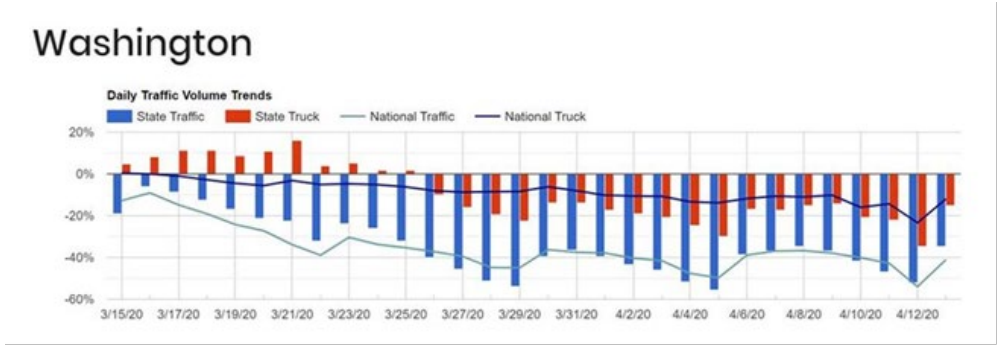
<b>OK</b>	DOT	No
<b>PA</b>	DOT	Currently, all normal construction and maintenance has been halted as a work safety response. No other DOT lane closure adjustments have been made in regards to the reduction in traffic volume
<b>SC</b>	DOT	Yes, but only as requested by Contractors on a case by case basis.
<b>TN</b>	DOT	It is anticipated that lane closure hours may change based on the data.
<b>TX</b>	DOT	Field operations are continuing. Some contractors appear to be accelerating some aspects of construction to take advantage of reduced traffic but this is being done on a project-by-project basis.
<b>VT</b>	AOT	Not aware of lane closures.
<b>UT</b>	DOT	See answer to question 1B
<b>WA</b>	DOT	No. However most major construction and non-essential maintenance is currently halted due to the Governor’s “Stay Home, Stay Healthy” order.
<b>WV</b>	DOT	Not yet
<b>WY</b>	DOT	N/A in Wyoming, however close coordination with contractors are ongoing. For example, several contractors had to suspend operations due to lack of specific crews (traffic control).

**3. What type of changes to truck traffic are you seeing? (increases, routing, other)**

State	Entity	Response
<b>AK</b>	DOT&PF	No changes to truck traffic have been noted at this time. Highways remain open to truck traffic. This is still early to tell as Alaska is just entering hunker down restrictions in March. The data may show that truck percent is higher than normal but only due to less vehicles traveling overall.
<b>AL</b>	DOT	We are not currently analyzing classification data. However; our five (5) RTMCs have visually observed no change or a slight increase in CMV volumes. We are developing a report to track changes in truck traffic.
<b>CA</b>	DOT	On major freight routes, we have seen an increase in truck traffic especially during the traditional AM and PM peak periods. On non-traditional freight routes, we have seen little to no increase in truck traffic.
<b>CO</b>	DOT	Haven’t looked in to this yet
<b>CT</b>	DOT	The data we provided for the FEMA work showed that on certain roadways truck traffic has increased or hasn’t changed (we do not collect a lot of classification data and the data we collect is done so with piezo type 2)
<b>DC</b>	DOT	Vehicle classification is not available through the data we’re looking at
<b>DE</b>	DOT	We have not reviewed truck data to date.
<b>GA</b>	DOT	Generally, truck traffic is either flat (that is, essentially the same when compared with truck traffic during a “normal” pre-COVID-19 time, or in some cases, increase of truck traffic.
<b>IA</b>	DOT	Since March 13th, Iowa’s WIM sites are indicating a slight (5% or less) increase in single trailer 5-axle trucks (most prevalent in Iowa) over the previous four-week period.

<b>ID</b>	TD	Because Idaho is a few weeks behind other states, we won't be able to gauge that until we have more data points. Overall volumes are substantially down (in some cases over 40% on our urban interstate).																														
<b>IL</b>	DOT	we are experiencing similar decreases as being shown on the MS2 website. 35-40% decrease overall traffic but only about 10% decrease in truck traffic.																														
<b>IN</b>	DOT	Striking reductions! See chart below. <table border="1" data-bbox="518 577 1320 1671" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Date</th> <th style="text-align: center;">Change in Heavy Truck Volume vs Same Day of Week in Base Period March 2—8, 2020</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Monday, March 09, 2020</td> <td style="text-align: center; background-color: #d9ead3;">+0.7%</td> </tr> <tr> <td style="text-align: center;">Tuesday, March 10, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-1.2%</td> </tr> <tr> <td style="text-align: center;">Wednesday, March 11, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-1.0%</td> </tr> <tr> <td style="text-align: center;">Thursday, March 12, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-1.6%</td> </tr> <tr> <td style="text-align: center;">Friday, March 13, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-3.4%</td> </tr> <tr> <td style="text-align: center;">Saturday, March 14, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-18.9%</td> </tr> <tr> <td style="text-align: center;">Sunday, March 15, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-15.8%</td> </tr> <tr> <td style="text-align: center;">Monday, March 16, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-6.9%</td> </tr> <tr> <td style="text-align: center;">Tuesday, March 17, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-10.9%</td> </tr> <tr> <td style="text-align: center;">Wednesday, March 18, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-17.1%</td> </tr> <tr> <td style="text-align: center;">Thursday, March 19, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-20.5%</td> </tr> <tr> <td style="text-align: center;">Friday, March 20, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-21.8%</td> </tr> <tr> <td style="text-align: center;">Saturday, March 21, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-34.3%</td> </tr> <tr> <td style="text-align: center;">Sunday, March 22, 2020</td> <td style="text-align: center; background-color: #f4cccc;">-42.7%</td> </tr> </tbody> </table>	Date	Change in Heavy Truck Volume vs Same Day of Week in Base Period March 2—8, 2020	Monday, March 09, 2020	+0.7%	Tuesday, March 10, 2020	-1.2%	Wednesday, March 11, 2020	-1.0%	Thursday, March 12, 2020	-1.6%	Friday, March 13, 2020	-3.4%	Saturday, March 14, 2020	-18.9%	Sunday, March 15, 2020	-15.8%	Monday, March 16, 2020	-6.9%	Tuesday, March 17, 2020	-10.9%	Wednesday, March 18, 2020	-17.1%	Thursday, March 19, 2020	-20.5%	Friday, March 20, 2020	-21.8%	Saturday, March 21, 2020	-34.3%	Sunday, March 22, 2020	-42.7%
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<b>KS</b>	DOT	FHWA-DC is assembling data from selected continuous classification sites to build a national picture of truck travel changes. We will be participating, but we don't have any results to share right now. Anecdotally, the permanent counter data is triggering data QC checks because the truck percentage is far higher than 'normal'; i.e. the passenger traffic is decreased much more than truck traffic.																														
<b>MD</b>	DOT	Tractor Trailer volumes increase																														

<b>ME</b>	DOT	minor decreases 1 to 2%
<b>MN</b>	DOT	We are starting to analyze truck volumes at our ATRs, WIMs, and Wavetronix sites. We will have more information on truck volumes soon.
<b>MO</b>	DOT	Slight decrease of 7-8%
<b>MS</b>	DOT	Increase
<b>MT</b>	DOT	Data currently being analyzed
<b>NC</b>	DOT	Truck traffic has stayed strong and slightly increased.
<b>ND</b>	DOT	We don't have specific truck information summarized, at this time; overall traffic is down 18-20% (day-of-week to day-of-week) since March 1.
<b>NE</b>	DOT	No significant changes so far.
<b>NH</b>	DOT	We only have data at the barrier toll plazas and it appears that in the past week, we have seen a 3-5% decrease in truck traffic at those locations, with a much higher (40-50%) reduction in passenger vehicles.
<b>NJ</b>	DOT	From a truck permits perspective three days in late March of 2020 (3/20, 3/23, 3/24), were compared with similar days in March of 2019. By comparison, the Oversize/Overweight truck permits issued on the days in 2020 were down 36%, 29%, and 31% respectively compared with the corresponding days in 2019. Permit revenue is also down.
<b>NM</b>	DOT	No
<b>NV</b>	DOT	Decrease in local delivery trucks (Las Vegas strip and all casinos are shut down)
<b>OK</b>	DOT	Oklahoma has seen an average reduction in statewide traffic of about 25%, and an average reduction in statewide truck traffic of about 14%. Oklahoma has seen an average reduction in interstate traffic of about 28%, and an average reduction in interstate truck traffic of about 6%.
<b>PA</b>	DOT	We've conducted small scale studies on interstates in one of our Districts that show truck volume has seen a minor decrease from historical (for the week of 3/20). We suspect to see this impact increase for the week of 3/23 due to further COVID-19 responses to businesses, and plan to investigate further this week.
<b>SC</b>	DOT	Not tracking that data in traffic engineering, but our road data services could do it if requested.
<b>TN</b>	DOT	We have only a weeks' worth of truck volume data at this time, but there has been no noticeable change yet.
<b>TX</b>	DOT	We have only just begun analysis of recently collected traffic data, so we do not yet have data-supported observations regarding truck traffic at this time. There is some broad indication that long-distance trucking has not changed significantly.
<b>VT</b>	AOT	No awareness of changes in truck traffic, but I'd bet they are running into a lot less congestion.
<b>UT</b>	DOT	<ul style="list-style-type: none"> <li>We are seeing a significant increase in truck traffic on our southern border (I-15). Seeing some increase on I-15 on Idaho border. See Truck tab on dashboard: <a href="#">UDOT COVID Traffic Dashboard</a></li> <li>We do not have meaningful O-D data readily available. We have been brainstorming options, but have not made a decision.</li> </ul>

WA	DOT	<p>Initially, truck traffic appeared to be up in some places compared to normal, but those gains have been lost. See the red bar in the snapshot from <a href="https://www.ms2soft.com/traffic-dashboard/">https://www.ms2soft.com/traffic-dashboard/</a> below.</p> 
WV	DOT	<p>We are seeing an increase in trucks traffic especially Sundays and Mondays as compared to the normal truck traffic condition during the same time last year. Last Sunday showed an 11% decrease (first weekend after stay at home order issued in WV).</p>
WY	DOT	<p>Combination trucks are down about 10% across the board (decrease in manufacturing?) but single unit trucks (more local delivery?) seems to be flat.</p>

**4. Have you identified data needs (more real-time, more locations, other) needed to respond to questions regarding this crisis? (i.e., Is there an interest to seek expansion of current data sets to answer policy questions?)**

State	Entity	Response
AK	DOT&PF	So far the requests have been minimal (AASHTO Reps). Department heads or Legislators have not made formal requests yet.
AL	DOT	Yes. This is an area of interest we have been addressing since mid-2018 following the mass evacuation in 2017 due to Hurricane Irma. There are concerns over how this will impact revenue. It may be worth noting that the “crisis” has resulted in a positive impact to traffic operations. Less congestion, improved reliability for the on-time delivery of goods, etc.... Our data needs to respond to questions regarding this crisis are less critical when the impact is positive in nature than when the impact is negative (such as; an evacuation where congestion is dramatically increased)
CA	DOT	Yes. We are seeing a need for increased ground truth data as well as enhanced ability to hybridize with probe data.
CT	DOT	More continuous count data, locations; we need to identify and implement a solution to more easily gather data from our smart traffic controllers, and more real time data solutions.

<b>CO</b>	DOT	I haven't seen this come my way yet. I could touch base with our traffic folks and see if they are getting requests that they haven't shared with us yet.
<b>DC</b>	DOT	There is other data that we have available but are hoping to better track through dashboards and analysis – parking transactions, pick-up/drop-off zone usage, applications for new food delivery permit, crashes, bus ridership, micromobility use, 311 service requests, public space permit applications, etc.
<b>GA</b>	DOT	No other data needs have been identified to date; the data we are furnishing is received with appreciation – and appears to fit the situation well. The ability to automate the production of the reports GDOT develops is important.
<b>ID</b>	TD	We do have the expertise and the data to capture information for expected questions, although because most personnel were in the middle of finalizing the annual AADT numbers, it has meant switching gears in the last few days. We also have a Data Analytics unit in the wings should we need anything quickly and do not have the bandwidth in the Roadway Data unit, which oversees traffic monitoring for ITD. The most notable thing we have been able to do is to quickly set up an Operations Dashboard, coordinate with the Communications team, and prep it to go live in a matter of days. It will be available by Monday or Tuesday, with plans to update daily. We did notice an immediate trend begin, with reduced volumes in many areas of the state after the first case of COVID-19 was diagnosed in the state of Idaho. We also noticed a rather large spike of vehicles on I-15, while other roads were declining. The I-15 corridor increased by almost couple thousand vehicles a day for several days. After speaking with multiple people in the two eastern districts, it was determined this was due to Canadians heading home in fear the US-Canadian border would be closed.
<b>IL</b>	DOT	Getting a better understanding of the volume of the data being captured in the probe data sets would be beneficial. This has been discussed with the NPMRDS and we support that request.
<b>KS</b>	DOT	Yes – We have looked at some reports of personal distance traveled based on cell phone data.
<b>MD</b>	DOT	<ul style="list-style-type: none"> <li>• Additional permanent counters located throughout the state would help respond to this type of question.</li> <li>• SHA is working closely with University of Maryland's (UMD) CATT lab, who are using traffic count and vehicle classification data from our permanent continuous counters along with probe data to provide analysis.</li> </ul>
<b>ME</b>	DOT	no I think we have enough data with permanent count sites and supplementing with probe data and street light data
<b>MI</b>	DOT	O/D data has been something many areas of the department would like get. It would be nice to know if this will permanently change traffic patterns.
<b>MN</b>	DOT	Our existing data has been adequate. Coverage on Metro Freeways is good but detectors are more sparse on arterial roadways. We are able to track overall trends but that limits us in seeing unique areas where activity may be different.



		Have explored deploying portable count equipment throughout state to support numbers seen with permanent index site counters for walking and bicycling.
<b>MO</b>	DOT	More real-time volume, classification, and O-D data is needed for all of the requests. It is unclear whether there interest to fund expanded data sets.
<b>MT</b>	DOT	No
<b>NC</b>	DOT	We have a limited number of sites across the state, but sufficient to make a good inference of the traffic. I would not recommend spending the money to expand just to answer these questions. More data is always desirable, but considering the cost to implement, will we get a return? Knowing that traffic has dropped 27.3% really is not better than 25% or even 20-30% because the 27.3 will vary depending on time of day, location, and development.
<b>ND</b>	DOT	Yes, the demand is for more real-time data and more refinement of geographic differences.
<b>NE</b>	DOT	Not at this time.
<b>NH</b>	DOT	The most glaring need/desire is one that we were already aware of. As noted above, we only have remote connectivity with one permanent count location. If we had that resource with all of our permanent count locations, including direct integration into our MS2 platform, we could paint a much broader picture of the impact across the state.
<b>NM</b>	DOT	No
<b>TN</b>	DOT	We have realized the need to increase the number of locations for (1) continuous count stations and (2) expedite the implementation process of Weigh-In-Motion (WIM) stations. We are currently utilizing radar detection stations (approximately 1000 units total) that are limited in location to the 4 major urban areas in Tennessee (Nashville, Memphis, Knoxville, & Chattanooga). The RDS units allow for the daily reporting of traffic volume changes.
<b>VT</b>	AOT	No additional data needs have been presented at this time.
<b>WA</b>	DOT	Yes, broadening access to WSDOT's existing ITS/data collection devices has been a priority as well as setting up the mechanisms for continuous reporting. More data sets are desired, but consistency is important.
<b>WV</b>	DOT	So far, we could respond to the questions with the available information provided by our Traffic Monitoring Program.
<b>WY</b>	DOT	So far there hasn't been any additional requests beyond what can be gathered through our ATR.

*4a. Does your state have mechanisms (staff, expertise, contracts) to capture, process or analyze the data quickly to provide the information needed?*




State	Entity	Response
<b>AK</b>	DOT&PF	"Quickly" is the key word- we do have mechanisms to capture our CCS monthly data and prepare online maps, but this will take a few days to set up a mapping environment. Once set up, we could continually post volume and class data as it


		comes in every two weeks. We are not set up for real time data capture and reporting.
<b>AL</b>	DOT	Yes, but the merger of the various data sets by multiple owners has created challenges to complete. Our leadership is advised of the limiting factors and we are awaiting an opportunity to discuss further post-COVID-19. Depends on the data. Traffic volumes – yes, Revenue - no
<b>CA</b>	DOT	The Department has the necessary staff and expertise to performing these tasks.
<b>CO</b>	DOT	Yes, we are well equipped to do this fast
<b>CT</b>	DOT	Contract with Midwestern Software Solutions (MS2) for continuous count autopolling and reporting; can access smart workzone data to monitor and track changes in speeds; use the NPMRDS travel time data tools; We have a new Section within Policy and Planning that specialize in GIS (we are now ESRI-based) and big data analysis.
<b>DC</b>	DOT	Yes, our Performance Management Division is dedicating staff time to build dashboards for analyzing data
<b>DE</b>	DOT	We have very good data collection systems in place. We have limited staff/resources to deeply analyze this data.
<b>IA</b>	DOT	The Iowa DOT has very experienced in-house staff to quickly process this data and can work remotely if necessary.
<b>IL</b>	DOT	The CCS sites are getting reviewed and summarized twice a week. We are still working through the process of how best to represent the probe data in a meaningful format utilizing the RITIS tools.
<b>KS</b>	DOT	Yes, we have experienced staff that are able to work remotely and process the data fairly quickly.
<b>MD</b>	DOT	Yes – internal staff and onsite consultants, along with strong GIS staff and assistance from UMD CATT Lab.
<b>ME</b>	DOT	Yes
<b>MI</b>	DOT	In some regards we do have the staff and mechanisms to provide some of this information fast. We have not been asked for anything specifically so it is hard to know for sure.
<b>MN</b>	DOT	Yes, in working with our partners at MMB and the Met Council, we have been able to process and analyze the data quickly to meet current needs.  MnDOT’s Office of Transit and Active Transportation have identified staff to support deploying, processing and analyzing pedestrian and bicycle counter data.
<b>MO</b>	DOT	Staff – No; Expertise – Somewhat; Contracts – No
<b>MS</b>	DOT	We do have the mechanisms but there have been no extraordinary requests.
<b>MT</b>	DOT	Yes
<b>ND</b>	DOT	No, our data systems and processes have been setup for monthly and annual reporting. Our antiquated data systems have made this current, daily reporting task extremely difficult.
<b>NE</b>	DOT	Currently, for what is being requested, yes.
<b>NH</b>	DOT	Not necessarily in one location, but yes.

<b>NJ</b>	DOT	Underway. NJDOT is implementing new software to process data faster, and the system will be ready in July 2020. NJDOT plans to expand continuous data volume collection locations in 2021 utilizing radar based technologies.
<b>PA</b>	DOT	This effort has brought to light we lack permanent traffic count stations in a number of areas that would be very useful in looking at traffic trends. In addition, we have uncovered that this counter information is compiled on a monthly basis, and are working through getting access to the more real time data. We also have many detectors deployed in the Philadelphia area that record volume, but currently do not have a comprehensive way to analyze the data in our current analysis platform.
<b>SC</b>	DOT	Yes
<b>TN</b>	DOT	No
<b>TX</b>	DOT	We do not have the mechanisms to process and analyze the data to provide information as “quickly” as expected. Our traffic data collection program, and its supporting business processes, is primarily used to monitor statewide travel trends on an annual basis. The program has not been designed to satisfy ‘near ‘real-time’ data analyses. However, see b below.
<b>UT</b>	DOT	<ul style="list-style-type: none"> <li>• More real time data needed from some border locations. Working to install temporary counters at those locations.</li> <li>• Working to get a data analyst on contract to automate our data reporting and add additional locations.</li> <li>• Wanting to get some O-D data on state, county, and city level to see if the restriction of movement is occurring and having an impact on slowing the spread.</li> </ul>
<b>WA</b>	DOT	WSDOT staff across many divisions are responding to enhance the reporting of the data we have access to. There is a lot of capacity in house but at the cost of other ongoing duties.
<b>WV</b>	DOT	Yes, we do have staff and expertise to analyze the data.

*4b. Do you have any of the following to share: innovative methods, notable findings or examples?*


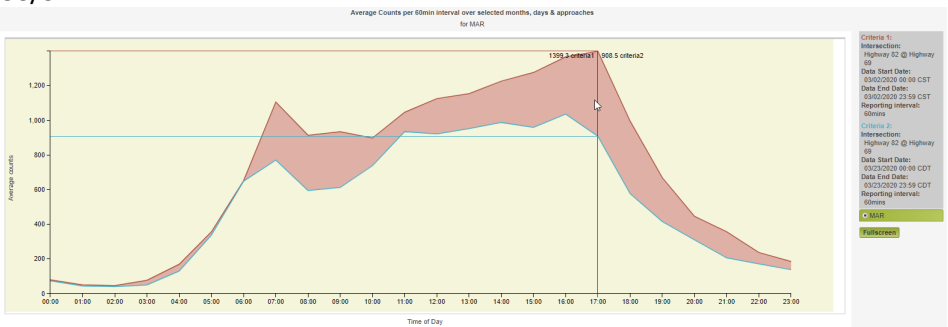

State	Entity	Response
<b>AK</b>	DOT&PF	No
<b>AL</b>	DOT	Not at this time. Possibly after the completion of 4a. Also, the beaches in Alabama were closed so we have been able to assess the impact of beach traffic on certain routes.
<b>CA</b>	DOT	While there are significant decreases in volumes on major routes and during the AM/PM peak periods, the minimal decrease on other routes is producing a lesser decrease in volumes statewide.
<b>CT</b>	DOT	Not at this time

<b>DC</b>	DOT	See attached for a screengrab of an interactive dashboard on congestion impacts. We're working on standing up a more all-encompassing dashboard on transportation impacts that I'm happy to share once it's available.
		 COVID Congestion Overview.pdf
<b>DE</b>	DOT	<div style="display: flex; justify-content: center; gap: 20px;">  Traffic Data 2.xlsx            Traffic Data.xlsx         </div> <p>See attached</p>
<b>IA</b>	DOT	The update of our website daily (noted above) is working well to inform those entities interested in this data.
<b>IL</b>	DOT	Replica is being used by New York and soon Illinois, hopefully.
<b>KS</b>	DOT	No
<b>MD</b>	DOT	UMD CATT Lab provided traffic analysis Impacts of Covid-19 in Maryland using Probe and Permanent Count data for internal use
<b>ME</b>	DOT	Nothing significant
<b>MI</b>	DOT	Preliminary findings in the Detroit area, on average, the whole freeway system is now reliable. We have seen a 10 mph increase in speeds during the peak periods.
<b>MN</b>	DOT	<p>We've been seeing about a 25-30% drop in traffic volumes as of March 25<sup>th</sup>. Some high volume metro freeway corridors have been upwards of a 50% drop.</p> <p>Identifying how pedestrian and bicycle travel has changed as a result of declaration of a peace time emergency order (as of 3/13/20), and an executive order to stay at home (effective 3/28.20). Information can support appropriate messages regarding watching out for more people walking and bicycling in their communities, and encourage safer driver behaviors. Additionally, aligning messaging with safe bicycle operations and family activities with no school.</p>
<b>MO</b>	DOT	Nothing that I can share at this time.
<b>MT</b>	DOT	Not at this time
<b>ND</b>	DOT	Not beyond the 18-20% drop, noted in question 3.
<b>NE</b>	DOT	No
<b>NH</b>	DOT	No
<b>NJ</b>	DOT	NJDOT submitted its weigh in motion (WIM) website as an innovation for last year's AASHTO awards.
<b>NV</b>	DOT	Definite drop in traffic volumes – in many areas over 40% and up to over 60% on portions of the interstate that were main ingress and egress points for tourism.
<b>OK</b>	DOT	No
<b>PA</b>	DOT	As mentioned above, we have used traffic counts from our networked adaptive signals to give us volume trends on arterials where otherwise we would not have access to count data.
<b>SC</b>	DOT	For ATRs on interstate routes near state lines on average volumes are down approximately 40% in SC this week. However, volumes on I-95 NB were up significantly last week, and slightly yesterday.


<b>TN</b>	DOT	Not at this time. Our current volume trends are matching what we are seeing from around the country.
<b>TX</b>	DOT	Our Traffic Data Systems vendor MS2 has created a dashboard to provide statewide-level differences in traffic (see: <a href="https://www.ms2soft.com/traffic-dashboard/">https://www.ms2soft.com/traffic-dashboard/</a> ) for all states that utilize their software. In addition, INRIX has begun a rich analysis of travel trends using their trip path data; they have begun to publish a weekly newsletter that provides high-level summaries of national and state-by-state travel trends.
<b>UT</b>	DOT	Our dashboard has been very effective in communicating changes in volumes, speeds, classification, etc. In some instances, we compare to Jan-Feb (urban) and some cases we compare to the same time period last year (2019). For instance, our recreational areas tend to see significantly higher traffic in March than Jan and Feb, so it makes sense to compare those to last year than Jan Feb. For urban areas. We have been comparing to the previous couple of months for several reasons. We have had major construction projects on I-15 that added lanes (past and ongoing), ramp meters, etc. so it would not be comparing apples to apples and we are seeing a significant drop in the volumes and reduced congestion compared to Jan and Feb.
<b>WV</b>	DOT	Please find attached Summary of traffic conditions on the Continuous Counts Sites in West Virginia( Permanent sites)  WVDOT-TrafficReportSummary-03-2020

### 5. Anything else interesting to add or share?


State	Entity	Response
<b>AK</b>	DOT&PF	Anchorage mayor has emphasized to the public that goods are still flowing into the state. Our Airports and Ferries have seen impacts that include requests from State Government to track passengers arriving in state from CONUS and Overseas. We do not have a Transportation Operations Center (TOC) in Alaska where real time data is shared and used to respond to traffic incidents. The closest we can come to collecting real time is via our 7 weigh in motion (WIM) sites where data is reporting daily, and from our CCS stations where it could be bi-monthly at best until we've had a chance to upload, QC and publish. We are moving to a new traffic data system in the next few months (Drakewell's C2 Cloud) and will have the ability to publish CCS station data closer to real-time (within days as opposed to weeks).
<b>AL</b>	DOT	Attached are two samples of spot analysis compiled by our staff. One is of side-fire radar data along the interstate. The other is of traffic signal detector data along a

		 <p>3_24_20 Traffic Trends Charts.pdf                  US/SR.</p> 
DC	DOT	See attached for an additional dashboard showing traffic volume impacts on our  <p>COVID Traffic Volumes.pdf                  freeways.</p>
IA	DOT	Likely more uses to discuss in the future.
ID	TD	ITD is continuing the portable count program during the Stay at Home order, as well as the rest of our remaining season. While we may put these numbers on the hold (and not ever use them for decision making), we acknowledge that the majority of the continuous count sites are on the state highway system. It's important to capture other federal aid roads during this period, as they tell an important story as well.
IN	DOT	Also tracking variations in motor vehicle crash frequency day to day—in relation to reduction in traffic volume and psychological /behavioral impacts of ongoing pandemic, among other influences.
MA	PVPC	I am using data from the Massachusetts DOT (MassDOT) to monitor usage on shared use paths. Massachusetts is currently under a "stay at home" order. Our region has a popular shared use path/ that parallels a high volume transit route. Our region's bike share will need to make decisions about opening soon and this data will be helpful. I have a DOT contact that set up and counters if this information is useful. <a href="https://www.mass.gov/lists/masstrails-bicyclepedestrian-counts-pilot-program">https://www.mass.gov/lists/masstrails-bicyclepedestrian-counts-pilot-program</a> <a href="https://app.powerbigov.us/view?r=eyJrIjojNjlyYWQxNzMtMzZhZS00MTI5LWFiZTYtZWU3NmIwNjAzYTM0liwidCI6IjNlODYxZDE2LTQ4YjctNGEwZS05ODA2LThjMGRkOUI2IyYSJ9">https://app.powerbigov.us/view?r=eyJrIjojNjlyYWQxNzMtMzZhZS00MTI5LWFiZTYtZWU3NmIwNjAzYTM0liwidCI6IjNlODYxZDE2LTQ4YjctNGEwZS05ODA2LThjMGRkOUI2IyYSJ9</a>
MI	DOT	This is creating an issue for traffic analysis with volumes dropping 40-50%. Attached: Michigan DOT Average speed map Detroit Metro Region – before and after side by side, on average, speeds are free flow are about 10 mph increase after (map based on traffic probe data provider and RITIS program).

		<p>Michigan DOT Daily &amp; Weekly Traffic Volume</p> <p>Road classes 2 and 1 in 3 counties in Michigan (2358 XDIs) Speed Performance Charts for March 02, 2020 through March 12, 2020 (Every weekday) and March 16, 2020 through April 03, 2020 (Every weekday)</p>
<p><b>MN</b></p>	<p>DOT</p>	<p>MnDOT is going to look at the data from our bike and pedestrian continuous counting sites to see changes in volumes.</p> <p>Increases in walking and bicycling statewide. Typical morning and afternoon rush times appear to have some decreases, along with areas near high employment centers like central business districts. Overall, Minnesota has seen an increase of nearly 20% statewide in walking and bicycling.</p>
<p><b>MO</b></p>	<p>DOT</p>	<p>3<sup>rd</sup> party data providers have been much more willing to share data due to the emergency. Their assistance has made a huge difference.</p>
<p><b>NC</b></p>	<p>DOT</p>	<p>It would be interesting to know what other sources people are using. I think the use of our signal data, and ramp meter data was effective and not normally used for this purpose. Not all our signal systems that we are using for this data have the advanced high resolution traffic data modules.</p>
<p><b>NE</b></p>	<p>DOT</p>	<p>Real time freight data would be nice to have. I believe it would give us a better sense of supply chain resiliency, supply chain opportunities, and overall problems that need help. I'm not sure anybody but private companies have this data.</p>
<p><b>NJ</b></p>	<p>DOT</p>	<p>Yes. NJDOT will observe the trends in traffic volume reduction due to COVID-19. This reduction period may need to be excluded from the normal analysis. There might be ongoing lingering reduction in traffic volumes, ridership in public transportation and private carriers (Uber and Lyft) as a wave of future "Working from Home" continues and may be offered by more companies.</p> <p>It is possible to compare traffic volume trends by comparing January 2018 and 2019 with January 2020; February 2018 and 2019 with February 2020; March 2018 and 2019 with March 2020, and so on, until this crisis is over and traffic pattern normalizes.</p>

		<p>We would have to consider the effect of this time period and get guidance from FHWA on how to handle MAP-21 4-year targets adjustment.</p> <p>For the System Performance targets adjustment due on October 1, 2020, using 2019 Travel Time data should be ok, but setting future targets (4-years) based partly on 2020 data will need guidance from the FHWA. Also, note that the 2-year targets (October 1, 2020) will be a baseline for next 4-year performance period and the next 4-year performance period will include the current COVID-19 pandemic.</p> <p>In addition, upcoming Safety targets will rely on projected VMT for 2020 and 2021.</p> <p>Considering that many states are observing this major reduction in traffic volumes and transit ridership, it would be helpful to obtain guidance from FHWA &amp; FTA on how performance based planning in general, and target setting in particular, should factor in these unprecedented impacts on travel.</p>
<b>NM</b>	DOT	I would be very interested to learn if anyone is collecting data on bicycle trips. Are there more or fewer people traveling by bicycle during COVID.
<b>NM</b>	MRCOG	<p>we at MRCOG are under partial lockdown, working from home as possible. I manage our traffic monitoring program for the AMPA, and we count all roadways (3000+, on a 3 yr random cycle, 48 hr avg'd AWDT) on the federal system and transmit to the NMDOT for HPMS submittal.</p> <p>I have taken this opportunity to count specific locations, approx 20 per week using the following criteria:</p> <ul style="list-style-type: none"> <li>- location was counted recently, w/in the past year</li> <li>-near an activity center</li> <li>-try to get Veh Class where possible</li> </ul> <p>Once I get the region covered, I'll either go back to the regular random schedule, or may pursue additional special counts. I'll also discuss w/NMDOT. Also, will be seeking federal guidance on how to proceed for the remainder of the year.</p> <p>I will generate a summary report afterward to ascertain the impacts.</p>
<b>NV</b>	DOT	While possible actively working with utility companies to see if we can accelerate permitting to advance their projects.
<b>OH</b>	DOT	<ul style="list-style-type: none"> <li>• We pulled our perm count data from our perm count database to compare last March (2019) to this March (2020) for data. We pulled hourly volume, summed it up and dumped into excel. We then used pivot tables to compare by major urban areas and rural area and a statewide average. (See attached)</li> </ul> <div style="text-align: center;">  <p>COVID-19Map.03.2 6.2020.pdf</p> </div>



		<ul style="list-style-type: none"> <li>We have distributed – last Friday a summary of impacts from high level – see attached pdf. This has been shared to various entities – not 100% sure where all it has ‘floated to.’</li> <li>On March 20, 2020 our roadway engineering office adopted a reduction of 25% volume in urban areas and 20% in rural areas to be applied to our lane closure volumes. Then again on March 27, 2020 they reduced total volumes by 35%.</li> <li>We also helped MS2 test/give feedback on a dashboard that shows changes compared to historical data – pretty interesting to see different states % of change. <a href="https://www.ms2soft.com/traffic-dashboard/">https://www.ms2soft.com/traffic-dashboard/</a></li> <li>Just starting to work with our GIS team to use our perm data and create a visual update that is more automated. We have committed to having this out weekly (at a minimum).</li> <li>It is taking longer to review and approve the data from our continuous count stations because they are all failing our normal QA/QC checks, especially being different in volumes from the past.</li> </ul> <p>We have not correlated the results directly to what went into place on what dates. In general, in Ohio most restrictions closing began within a very short time frame. We are interested in also looking at truck %. How much of the change in volume is across the board or just passenger cars.</p>
PA	DOT	<p>To date, we are finding user delay costs via the RITIS PDA Suite to be our best method of understanding the impact of the decrease in traffic volumes. We’ve been able to uncover that the Governor’s declaration of closing non-essential business alleviated all interstate recurring congestion, and overall all Pennsylvania roads saw user delay decrease by approximately 50% (when compared to the</p>  <p>COVID-19 Response Traffic Imp      week of 3/10).</p>
SC	DOT	<p>We are now getting questions from engineering consultants about guidance to progress/complete traffic counts to be included in Traffic Impact Studies (TIS’s) for major developments and schools. If counts were to be performed currently they could not be utilized in a TIS to guide decisions for turn lanes, signalization, or SPaT changes. Right now we are advising them to hold off until schools return to normal operations, but if schools don’t return this year it could delay those studies by 5-6 months.</p>
UT	DOT	<ul style="list-style-type: none"> <li>OD data for Strava (Trip volumes and users are up 28-31% in the last two weeks)</li> <li>Pedestrian Actuations (USU running preliminary analysis of volumes in suburban/urban locations)</li> <li>AT Counters on Trail Facilities in Utah and Salt Lake County.</li> <li>Scooter/Shared Mobility Data (i.e. Lime usage was down 96% and they ceased operations, some companies are still operational)</li> </ul>

<b>WA</b>	DOT	WSDOT is about to publish a data website to push out this kind of information. More will be shared at a later date.
<b>WY</b>	DOT	Trying to pin the decision makers down on what decisions are being made is always an issue.