

<b><u>Line #</u></b>	<b><u>Question from Sli.do</u></b>	<b><u>Presentation</u></b>	<b><u>Presenter</u></b>	<b><u>Answer</u></b>
2	With the 5% extra weight is that on all roads including I95 or just VDOT and county roads	Bridge ratings, posting, and signing	Chris Williams	The 5% overweight permit is valid only on Virginia state roads and is not valid on the Interstate System.
3	Is there a website contractors can use to identify posted structures prior to beginning paving operations?	Bridge ratings, posting, and signing	Chris Williams	Yes. VDOT has a webpage for Virginia Trucking Resources here: <a href="http://www.virginiadot.org/info/trucking-main.asp">http://www.virginiadot.org/info/trucking-main.asp</a> . There is a section on this page titled "Find restricted bridges" that has a link to download a spreadsheet that contains all weight restricted bridges in the state. The spreadsheet is updated nightly. A map of state-maintained bridges with restrictions is available upon request from vdotmapfiles. This map is updated bi-annually.
4	Why not put the burden on VDOT in preparing the proposals that have weight limits on the routes? Now the responsibility is on the bidder.	Bridge ratings, posting, and signing	Chris Williams	As discussed in the two previous questions above, VDOT publishes spreadsheets and maps that contain posted structure information. Per Code of Virginia 46.2-1130 and 46.2-1131 it is illegal for trucks to cross weight restricted bridges if in excess of posted gross vehicle weights. Such violations are subject to penalties. VDOT will not attempt to contemplate/direct routing to projects - that is a contractor responsibility. Note: VDOT does reserve the right to maintain their roadways when needed - so there can be changes to limits/restrictions during a project due to VDOT activity.

5	<b>What do contractors need to purchase to get up and running in e-construction? (edited)</b>	e-Construction	Dakota Clifford	Contractors have several options in regards to eConstruction. Starting in the late spring of 2020, all VDOT projects will be using PlanGrid as a tool for viewing plans and reference documents and completing field reports on the iPad. If a contractor would like access to a project in PlanGrid, they may purchase PlanGrid licenses and iPads and request that the ACE give them access to the project. These projects are already set-up in PlanGrid by the Department and will allow the Contractor to view plans and reference documentation readily. Contractors may also elect to use eTicketing solutions on their jobs at their own expense. Headlight is being piloted across the state and several Paving Contractors have used it to complete their quality assurance testing. Any other technological solutions the contractor would like to use are welcome. If you or the VDOT project team need support implementing a solution or getting approval, you may reach out to our team at <a href="mailto:eConstruction@vdot.virginia.gov">eConstruction@vdot.virginia.gov</a>
6	<b>When will Headlight start to be used on VDOT projects?</b>	e-Construction	Dakota Clifford	Headlight is currently about to kick-off Phase 3 of the pilot, and will be expanding to several dozen more projects this spring and summer. We are looking to deploy statewide in late 2021 or early 2022.
7	<b>Do we need TL-102 if we are using e-tickets?</b>	e-Construction	Dakota Clifford	eTicketing does not eliminate the need for other forms at this point in time. The eTicketing spec is written to allow for the digital transfer of tickets through an eTicketing system. That being said, if your system can provide the information on a TL-102 in a way that satisfies the ACE and District Materials engineer, you may work with them to modify the requirement for the form.
8	<b>What is recommendation for compaction on variable depth? Should it be penalized?</b>	Paving Inspection Points	Bryan Smith	The standard roller pattern and control strip method would not be applicable. Depending on the situation, either a minimum number of roller passes or the patching density requirements (Table III-5) could be applicable.
9	<b>What is VDOT and VAA's recommendations for paving a BM mix on top of clean stone that easily displaces under construction traffic? Can density be achieved?</b>	Paving Inspection Points	Bryan Smith	Overall, VDOT has seen good density results when using base mixes and would expect it be possible for density to be achieved in this type of case.

10	I see a lot of segregation, should we go back to using MTV!	Paving Inspection Points	Bryan Smith	Contractors have used MTVs even on secondary/neighborhood streets recently which can help reduce segregation. Segregation can still occur at the paver so MTV may not be a catch-all.
11	What adjustments would you make to the screed to correct that issue?	Paving Inspection Points	Bryan Smith	The augers on the paver may need to be adjusted to ensure the mix is evenly distributed along the length of the screed. Auger extensions may be needed (most manufacturers recommend having the augers within 18" of the endgate). The augers should also rotate smoothly and consistently so not throwing mix or allowing too much build-up.
12	Clarification: Who is actually responsible for performing the tack plate test? VDOT or the Contractor?	Paving Inspection Points	Bryan Smith	The VDOT representative, inspector, is responsible for performing the plate test at least once per route. Contractors should work with district materials to demonstrate the distributor can spray the appropriate tack application rate at the beginning of each season.
13	Would VDOT consider lowering Lab compaction temps for WMA?	Paving Inspection Points	Bryan Smith	VDOT has not considered adjusting lab compaction temperatures for warm mixes. There are a range of warm mix methods and temperature ranges so it could be difficult to specify lower ranges. The field density is an important to verify compaction is achieved with the temperature and warm mix being used
14	If a Control Strip is a separate lot why is it not bonus eligible?	Method A & B Density and Price Adjustments	Todd Rorrer	The short answer is that the special provision does not call for it - the Control Strip (CS) is accepted or rejected and assigned a payfactor before the Test Sections begin. Expanding on that, the RP and CS is not randomly tested - it is selectively tested and cores are selected by first reviewing the nuclear testing locations in a small 300 ft section. To have the same confidence level as a test section, cores would also have to be randomly selected from the entire length of paving that is placed before beginning the first Test Section Lot.

15	Tons that qualify for bonus as measured don't matter as the spec states that bonuses are based on the tonnages in contract.	Method A & B Density and Price Adjustments	Todd Rorrer	<p>The Special Provision specifically says to calculate the tonnage based on the measured dimensions and to increase the unit bid price by 5% for that lot: <i>Section 315.05(e)3 Density Acceptance &amp; Payment is inserted as follows:</i>  <i>Density Acceptance &amp; Payment</i>  <i>a. Method 'A' (plugs or cores)</i>  <i>Paragraphs 7 and 8</i>  <i>The tonnage of each lot will be based on the lot's width and length and the mixture application rate as designated in the Contract or as revised by the Engineer.</i>  <i>Payment will be made in accordance with the requirements of Table III-4A.</i></p> <p><i>If a minimum of 80% of each lot's core/plug samples is no lower than 92.5% of TMD for Surface Mixes and 92.2% of TMD for Intermediate and Base Mixes and the lot average results in 100% payment, then the Engineer will increase the unit bid price for AC mixture by five (5) percent.</i></p>
16	If the narrow shoulder is paved with the adjacent travel lane, should it be included in the calculations for the test lots?	Method A & B Density and Price Adjustments	Todd Rorrer	Not necessarily, it is itemized in the contract separately, so there is no application rate, the shoulders typically have a different structure than the mainline and therefore don't get the same number of passes as the mainline and is not tested for density the same as the mainline, we are not taking cores from the narrow shoulder and therefore do not apply bonus or penalty for those areas.
17	Can I use electronic gauge to test method B on Method A route?	Method A & B Density and Price Adjustments	Todd Rorrer	No, VDOT specifications require a thin lift nuclear gauge for acceptance
18	If control strip is its own lot, why can't it be incentivized? There is disincentive if it fails...	Method A & B Density and Price Adjustments	Todd Rorrer	The short answer is that the special provision does not call for it - the Control Strip (CS) is accepted or rejected and assigned a payfactor before the Test Sections begin. Expanding on that, the RP and CS is not randomly tested - it is selectively tested and cores are selected by first reviewing the nuclear testing locations in a small 300 ft section. To have the same confidence level as a test section, cores would also have to be randomly selected from the entire length of paving that is placed before beginning the first Test Section Lot.

19	Method A If the shoulder is part of the mainline application pull, shouldn't it be included in the Bonus calculation? The shoulder wasn't pulled separately.	Method A & B Density and Price Adjustments	Todd Rorrer	Not necessarily, it is itemized in the contract separately, so there is no application rate, the shoulders typically have a different structure than the mainline and therefore don't get the same number of passes as the mainline and is not tested for density the same as the mainline, we are not taking cores from the narrow shoulder and therefore do not apply bonus or penalty for those areas.
20	Can we get away from testing method B and Method A on a method A route?	Method A & B Density and Price Adjustments	Todd Rorrer	Not at this time, the nuclear testing is still valid and gives real time monitoring, where the cores can take longer to test and respond to. Also we need more coverage than 1 test per 1000 feet to have appropriate confidence levels on the acceptance data. This is also QC requirement that FHWA requires for Fed fund project.
21	Isn't the control strip included in the bonus?	Method A & B Density and Price Adjustments	Todd Rorrer	Not by the way the SP reads: <i>Section 315.05(e)1a Control Strip is amended to replace the last paragraph with the following:</i> <i>The control strip shall be considered a lot . If the control strip density conforms to the requirements specified in Table III-3, the Engineer will consider the control strip to be acceptable and the control strip density shall become the target control strip density. So, it is accepted or rejected and assigned a payfactor prior to beginning the Test Sections.</i>
22	When will VDOT move away from nuclear testing when testing a Method A job. Initially after the blueprint, a core every thousand feet was an approved method	Method A & B Density and Price Adjustments	Todd Rorrer	Not at this time, the nuclear testing is still valid and gives real time monitoring, where the cores can take longer to test and respond to. Also we need more coverage than 1 test per 1000 feet to have appropriate confidence levels on the acceptance data. This is also QC requirement that FHWA requires for Fed fund project.
23	Basis for the comment "doesn't apply to secondaries?" Can't see that the spec differentiates between primary and secondary routes.	Method A & B Density and Price Adjustments	Todd Rorrer	I appologize if I mis-spoke, I never intended to say that Method A does not apply to secondaries. It does apply automatically to All Interstae and Limited Accesss Primaries regardless of Traffic and Width. The Width and Traffic thresholds only apply to all other routes (Secondaries and non-limited access primaries) those routes must be at least 20 feet wide and Traffic Group X and higher to be accepted based on Method A. Per Table III-2A

24	Can we push the department to choose between a Method A or Method B testing instead of both simultaneously.	Method A & B Density and Price Adjustments	Todd Rorrer	Not at this time, the nuclear testing is still valid and gives real time monitoring, where the cores can take longer to test and respond to. Also we need more coverage than 1 test per 1000 feet to have appropriate confidence levels on the acceptance data. This is also QC requirement that FHWA requires for Fed fund project.
25	How are the PTRS to be utilized with a flagger that is constantly moving up to stay with a moving operation (i.e. paving train, shoulder stone, patching etc..) ?	Construction - 2020 Work Schedule	Mike Coffey	For mobile flagging operations, the PTRS are set along with the first set of warning signs and left in place as shown in TTC-24.2. The PTRS would not be reset until operations began again on the next day.
26	For payment on a two-lane flagging operations, will 2 arrays be paid? 3 bumps on the north side and 3 bumps on the south side, be paid as 2 arrays?	Construction - 2020 Work Schedule	Mike Coffey	Yes, each array consist of three PTRS, so 2 arrays would be paid for for each day at a location.
27	Can the fixed completion dates for Plant Mix contracts be extended further into December, considering the trend for warmer temperatures in recent years?	Construction - 2020 Work Schedule	Mike Coffey	No
28	Will time be added to contracts with limited contractors available if work is not completed	Construction - 2020 Work Schedule	Mike Coffey	No
29	Portable Rumble strips required with paving operations where the flagging Personnel is "Not" stationary for a 3-hour period? Do they have to move with flaggers.	Construction - 2020 Work Schedule	Mike Coffey	The PTRS are not required to be reset in mobile flagging operations. The PTRS are set along with the first set of warning signs and left in place as shown in TTC-24.2. The PTRS would not be reset until operations began again on the next day.
30	Are portable rumble strips required on latex/slurry and surface treatment schedules?	Construction - 2020 Work Schedule	Mike Coffey	For this year's existing latex/slurry and surface treatment schedules, PTRS will not be required. Guidance for implementation on next year's latex/slurry and surface treatment schedules will be issued soon for incorporation into next year's SS/LM and ST schedules.
31	Rob- PTRS become a topic at the SS/LM precon's. I hope there is still a discussion. The SS/LM contractors have an email from David Rush indicating not required	Construction - 2020 Work Schedule	Mike Coffey	For this year's existing SS/LM and ST projects PTRS will not be required. Guidance for implementation on next year's SS/LM and ST projects will be issued soon for incorporation into next year's SS/LM and ST projects.

32	<b>What is the minimum length of safety edge that should be installed to provide a safe distance to return to the roadway?</b>	1 - Pavement Safety Wedge	Mark Cole	The pavement shoulder wedge should be placed anywhere possible in accordance with the specification. If there are sections that don't require the wedge (bridges, driveways, barriers) that have less than 20 feet between them, the wedge may be omitted.
33	<b>Safety wedge, will density test requirements be changed to testing not be required within 12" of the break point rather than EP?</b>	1 - Pavement Safety Wedge	Mark Cole	The edge would be considered the break point. We recommend not to change the current requirements. The wedge does not require density testing since the wedge device attached to the screed of the paver confines the material at the end gate and extrudes the asphalt material in such a way that results in a compacted wedge shape pavement edge to form the 30 degree wedge
34	<b>Contract calls for seeding every day when you have to disturb the shoulder while clipping shoulder. How contractor will be paid.</b>	1 -Pavement Safety Wedge	Mark Cole	There's not enough detail to give a good answer. If the questioner is referring to Section 303.03, the requirement is to stabilize the disturbed area of the shoulder, not to seed it, and this would be included in the cost of shoulder prep. If there is a Contract that actually (specifically) requires seeding, we have several pay items for that (and incidental activities) that are all defined by Section 603.
35	<b>How is the testing of the speed shoulder? Any difficulties?</b>	Pavement Safety Wedge	Mark Cole	VDOT doesn't understand this question. See the response in Line #33 for possible help here.
36	<b>How is the safety edge affecting the price of asphalt in the 2020 schedules?</b>	Pavement Safety Wedge	Mark Cole	To date, for 2020 contracts, we haven't seen an impact to the overall Asphalt Unit Prices directly attributable to the Safety Edge. Asphalt Prices appear to be consistent or lower for the most part than previous data so far this year. It seems that the additional cost, if any, is being included in the Shoulder Prep item. However, without any real historical data on the Shoulder Prep, we are only speculating as we are seeing prices varying from pennies to \$3+/LF for that item.

37	<b>When clipping the high shoulder do you only cut 1ft off the shoulder?</b>	Pavement Safety Wedge	Mark Cole	Generally speaking, remove the built-up material within 1 ft (up to 2 ft) as shown on Figures 2 and 4 of the Special Provisions. Grading further from the edge of pavement may be needed, unrelated to the pavement shoulder wedge, to address stormwater issues caused by high shoulders.
38	<b>Does the safety wedge extend into the shoulder past the asphalt edge line of pavement?</b>	Pavement Safety Wedge	Mark Cole	The pavement shoulder wedge can be placed entirely over the existing pavement or, the preferred method is to start the wedge placement over the edge of pavement and let the sloped part of the wedge extend over the unpaved shoulder material. When the safety edge is placed to extend over the unpaved shoulder (as shown in Fig 3 of the special provision), the asphalt fills the low shoulder area and graded shoulder material is then placed, abutting the shoulder wedge, to the final shoulder elevation.
39	<b>In a mill &amp; pave situation, where the pavement elevation is not being raised &amp; there will be no shoulder drop off, why does stone back up have to be installed?</b>	Pavement Safety Wedge	Mark Cole	Often, there are rutted shoulders even on roads that are milled and filled. As a result, if milling and paving to the edge of the existing pavement, then pavement wedge should be installed. Existing or new shoulder material can be used to smoothly tie the graded shoulder edge elevation to the adjoining elevation of the final pavement top surface (over the wedge shape).
40	<b>Frank mentioned you'll have to wait for the edge to cool down before rolling, does that affect compaction?</b>	Pavement Safety Wedge	Mark Cole	Experience shared by FHWA recommends rolling 'as normal', and then adjusting if desired results are not being achieved.
41	<b>What is the difference between no shoulder at all and an unpaved shoulder?</b>	Pavement Safety Wedge	Mark Cole	Roads with no shoulder immediately slope from the edge of pavement into the ditch, whereas roads with a shoulder have an area outside the edge of pavement that is relatively flat and traversible by a vehicle before the slope increased to the ditch. Unpaved shoulder means a shoulder composed of any material other than asphalt or concrete.
42	<b>Does the safety wedge help with durability of the edge of pavement?</b>	Pavement Safety Wedge	Mark Cole	Yes. When installed appropriately, the wedge will protect and preserve the structural stability of the pavement even during construction while exposed before the shoulder is graded.

43	<b>Will you have to roll the safety wedge?</b>	Pavement Safety Wedge	Mark Cole	No, the wedge device attached to the screed of the paver confines the material at the end gate and extrudes the asphalt material in such a way that results in a consolidated wedge shape pavement edge to form the 30 degree wedge.
44	<b>What is the maximum and minimum wedge width?</b>	Pavement Safety Wedge	Mark Cole	The width depends on the thickness of the overlay = (overlay thickness/tangent 30) Example: for 1.5" thick overlay, the width of wedge would be 2.6", for 2" thick overlay, the width of wedge would be 3.46", and so on
45	<b>Is safety edge required on divided roads?</b>	Pavement Safety Wedge	Mark Cole	Yes. A vehicle can leave the road on divided and undivided roadway so pavement shoulder wedge should be installed regardless of whether the road is divided or not.
46	<b>Will PIM's have to be removed prior to milling?</b>	Plastic Inlaid Markers	Marc Lipschultz	TBD. The milling machine may be able to chew through the PIM and associated epoxy very easily (unlike with cast iron RPMs). A related question - answer TBD - is whether this minor amount of plastic/epoxy would adversely impact pavement performance on contracts with recycled asphalt.
47	<b>Why not delete PIMS on contracts. Write separate contracts for PIMS so marking companies can be busy in the winter and production is not slowed for markings</b>	Plastic Inlaid Markers	Marc Lipschultz	VDOT does not have any plans to separate PIMs from paving schedule contracts. In years past when VDOT tried to separate markings from paving schedules, there were too many scheduling complexities and disputes about fault for pavement marking failures.
48	<b>Any advantages using the PIMS in the type of surface, Asphalt and concrete</b>	Plastic Inlaid Markers	Marc Lipschultz	SRPMs have historically always been paid for as two separate items, one for asphalt installation and one for concrete installation, in recognition of the increased complexity and duration of installation in concrete. VDOT intends to continue to apply the same philosophy to PIMs.
49	<b>Putting templates down on the double yellow lines puts our workers at a greater risk of getting hit, just to seal the groove.</b>	Plastic Inlaid Markers	Marc Lipschultz	The statement is understood, and VDOT will always look to minimize safety hazards whenever possible
50	<b>Is there a concern with water getting in the grooves and freezing during the winter months?</b>	Plastic Inlaid Markers	Marc Lipschultz	Based on the research in KY and discussions we've had with other states, this does not appear to be a significant concern. PIMs are still visible even with a little bit of water/ice in the groove, as long as the PIM's reflective surface isn't completely covered.

51	<b>What is the maximum tire pressure the plastic Inlaid can withstand?</b>	Plastic Inlaid Markers	Marc Lipschultz	Exact pressure threshold is unknown, but PIMs performed very well when tested for three years on the NTPEP test deck on a major Ohio Interstate.
52	<b>Is there a reason why the sealing of the PIM groove is needed since some Districts do not seal the rumble strips?</b>	Plastic Inlaid Markers	Marc Lipschultz	Needs can be different, for varying reasons - to include weather, snow plow damage, and differing materials.
53	<b>Are there issues of the patch "popping" out for LM/slurry schedules when placing the new PIMs?</b>	Plastic Inlaid Markers	Marc Lipschultz	VDOT very limited experience with placement of the new PIM's, except for a trial section on I-295 and one or two other locations. VDOT is unaware of significant problems with patching to-date. VDOT will monitor.
54	<b>1.5" asphalt costs about \$7-\$8 per SY. Does it worth spending \$30 to seal the groove?</b>	Plastic Inlaid Markers	Marc Lipschultz	VDOT will monitor for appropriate costs, as with all materials.
55	<b>When installing PIM's on gore/ramp areas, will the markers be installed on both sides of the pavement marking or changed to only one side?</b>	Plastic Inlaid Markers	Marc Lipschultz	PIMs must be installed on both sides of the gore line as per Standard Drawing PM-8, and same as how VDOT has historically installed SRPMs at gore areas.
56	<b>What is the definition of a sharp curve for spacing of PIMS?</b>	Plastic Inlaid Markers	Marc Lipschultz	This is left to the Engineer's judgment. Defining an exact threshold based on factors like degree of curvature is impossible since those factors are difficult or impossible to ascertain in the field. In general, groove length shortening should be limited to situations where using the standard 7ft groove will result in the groove "eating into" the adjacent pavement marking line by more than 0.25" (approx.).
57	<b>Can the length of the plunge cut be defined in the standard drawing? It would be a lot faster to do a quick check if a minimum length was present.</b>	Plastic Inlaid Markers	Marc Lipschultz	Agree, this is a good idea. We will add this to the standard drawings. Length is 6.5".
58	<b>Has the plastic casing markers (plastic equivalent to cast iron markers) been considered? Why not keep the process and just change the product?</b>	Plastic Inlaid Markers	Marc Lipschultz	Yes those were considered, however some other states have experienced premature failure of the metal rubbing rail that is on top of the plastic casting. Additionally these devices weigh 1.3 lbs - less than the 5.5 lb cast iron SRPM but more than the 3-oz PIM.

59	<b>What is the benefit of Installing of plastic inlaid markers for self-drive cars technology?.</b>	Plastic Inlaid Markers	Marc Lipschultz	Connected and Autonomous Vehicles, and the Lane Keep Assist/Lane Departure Avoidance systems currently available on the market, do not extensively rely on markers (whether PIM or SRPM). However markers do provide substantial benefit for drivers relying on human vision.
60	<b>When doing temp paint on LM projects on interstate on/off ramps. Should the temp paint be wider at gore areas. Since you have to install the PIMS before perm.</b>	Plastic Inlaid Markers	Marc Lipschultz	The SP704 requires temporary markings to be 75% the width of the permanent line width when temp paint is applied to the final surface. VDOT Standards now require 12" permanent gore lines so temp lines must be 9" wide. It is the Contractor's responsibility to place the PIMs so they don't get obscured by the subsequent application of the permanent marking.
61	<b>Are there other designs for the markers?</b>	Plastic Inlaid Markers	Marc Lipschultz	VDOT considered other alternatives to cast iron SRPMs. The PIM was found to be the best product that had gone through the full NTPEP 3-year evaluation with positive results, and had been successfully implemented in other states. VDOT remains open to other solutions that will provide comparable durable benefits to drivers during wet night conditions.
62	<b>Can PIM's at gore areas be installed with one directional lenses and half length slots? If so, is there a detail that can be used in contracts?</b>	Plastic Inlaid Markers	Marc Lipschultz	This is a good suggestion that VDOT will consider. The only downside would be less visibility for the red reflectors on the backside. (on directional lenses, we should have the groove in one direction only)
63	<b>Can you replace the lenses on plastic markers without breaking the housing?</b>	Plastic Inlaid Markers	Marc Lipschultz	Yes.
64	<b>What about tabs breaking off and ending up in bay</b>	Plastic Inlaid Markers	Marc Lipschultz	This is an inevitable byproduct of the PIM design. The leveling tabs are critical to ensure the PIM is properly installed. After installation, it is impractical to require Contractors to break off the tabs (they cannot be broken off immediately after installation; the Contractor would have to wait until the epoxy had hardened, thus requiring a separate site visit with new MOT operation, and accompanying safety risks). Note that each breakaway tab is about the size of a nickel, so most roads would only result in nominal amounts of plastic detritus.

65	Has VDOT considered what to do about all the tabs building up on the side of the road and even in storm water structures?	Plastic Inlaid Markers	Marc Lipschultz	See previous response.
66	Can field inspectors access PLAID for TL 102's? Why not?	2019 MITS, Density, Spec Changes	Sungho Kim	District Materials Engineer can approve read-only access for inspectors in his district.
67	Materials Spec: Why are the materials penalties on gradation based on the whole number average while the JMF tolerances set at a tenth decimal?	2019 MITS, Density, Spec Changes	Sungho Kim	Reporting JMF (MD) % passing as a whole number except for #200 Per AASHTO T-30 and Section 211. Average (of whole numbers) will be tenth to compare with tolerance.
68	Part B JMF policy: Is there a rational for this limitation?	2019 MITS, Density, Spec Changes	Sungho Kim	There are not specific requirements for how to accept Part B. Although each District may have slightly different way to make decision, they are generally looking at volumetric requirements, field density result, not too much changes in gradation/AC, or etc.
69	Part B JMF policy: should be allowed regardless of tonnage. The current policy discourages producer changes that would benefit the mix at the cost of producer.	2019 MITS, Density, Spec Changes	Sungho Kim	The purpose of Part B is to approve the reasonable difference between the design JMF and beginning of the production through Part B design. Part B is not to accept all changes during production. If producer find a big difference of the source in the middle of season (production), then still can go through a new MD approval since original MD cannot apply to current MD at all. Best benefit to the agency is for producer to produce a designed mix, consistently.
70	Part B JMF policy: Why should that idea change if less than the full 4000 tons are produced. If all design requirements are met the Part B gradation & AC should	2019 MITS, Density, Spec Changes	Sungho Kim	Producer can submit a new MD if needed. Part B is for a small adjustment through the intial production. VDOT has more than 400 MD approved every year, that meet our design requirements. This doesn't mean all 400 MDs are same.
71	Part B JMF policy: Current design process is very hypothetical. First lot is intended to determine what changes are needed to actually produce target volumetric	2019 MITS, Density, Spec Changes	Sungho Kim	See answer in line # 70

72	<b>Follow-up on Split Sample conflicts. What if the sample conflicts itself- known correlations a sample should have (high AC indicates Low Gmm &amp; vice versa) or...</b>	2019 MITS, Density, Spec Changes	Sungho Kim	<p>Agree. All volumetrics are calculated from tested value such as Gmm, Gmb, Gsb. Therefore, if there is difference in volumetrics, it means differences in measurements such as AC%, Gmm, etc. That is why Districts and producers need to discuss (or investigate) the source of difference if needed or there is any trend.</p> <p>However, even between producers' results from split and non-split, non-split sample failure rate is even lower than split sample failure rate.</p>
73	<b>Could the problem be the turn-around time in the running of the split samples?</b>	2019 MITS, Density, Spec Changes	Sungho Kim	<p>The intent of 24hr turnaround time is to adjust/resolve the issues as quickly as possible, regardless of split samples or not.</p>
74	<b>Would VDOT consider including its Materials Labs in a contractor/VDOT round robin to potentially identify &amp; understand discrepancies in test results?</b>	2019 MITS, Density, Spec Changes	Sungho Kim	<p>All the VDOT labs are AASHTO Resource certified labs and ran PSP samples to be compared with all nationwide labs. One time round-robin test cannot address the specific comparison issue that is different each time with different testers (producer). Round-robin is more to set up tolerance and see the big picture of test procedure.</p> <p>That is why we recommend all the potential comparison issues need to be handled individually unless there is a systematic issue affecting all the labs.</p> <p>You may be able to discuss with District to do some split testing if needed.</p>
75	<b>Why doesn't VDOT allow contractors more availability to their own data within the PLAID system. (Instead of having to go through the districts)</b>	2019 MITS, Density, Spec Changes	Sungho Kim	<p>Contractors can view control charts and a 'sample dump' in PLAID for any one of their job mixes.</p> <p>We can help to show how to get a sample dump if needed.</p>
76	<b>We are having high densities and low ride numbers, rough pavement numbers in some of the districts. Any correlation</b>	2019 MITS, Density, Spec Changes	Sungho Kim	<p>Ride is the number reflecting many things on final surface such as density, segregation, etc.. However they are in no way mutually exclusive, VDOT fully expects both low ride and appropriately high densities, both are critical to achieving optimum life cycle or our riding surfaces.</p>

77	<b>What is VDOT's lab policy when their volumetric results don't quite make sense?</b>	2019 MITS, Density, Spec Changes	Sungho Kim	VDOT doesn't have any specific policy language, beyond the contract language that calls for an investigation to be performed". For most of the District labs, they do perform some double-checking by re-running another sample and at times sending a split sample to a third, independent lab for further comparison. NOTE - when either party chooses to <i>re-run</i> a specimen from the original sample they still must report the original specimen results, and add the re-run as a note or as a check sample in MITs and PLAID as coordinated with the DME.
78	<b>Does VDOT ever consider retesting split samples that conflict with producer results? Esp. if there's discrepancy within a sample (i.e. AC to Gmm relationship).</b>	2019 MITS, Density, Spec Changes	Sungho Kim	See answer in line #77
79	<b>Are there any trends for volumetric failures? Are failures above or below volumetric specification? What about mix type surface vs base?</b>	2019 MITS, Density, Spec Changes	Sungho Kim	I am sorry but we don't have specific analysis yet. We hope we can come up with this analysis later when possible. Thank you for recommendation.
80	<b>Something looks wrong with the numbers? They do not compare? What does that mean?</b>	2019 MITS, Density, Spec Changes	Sungho Kim	If every is random, which could happen especially in testing, then we expect 50:50 between VDOT and Producer failure, eventually comes to similar failure rate even if barely failed. However, numbers showed that VDOT failure rate is much higher than producer failure rate from split sample testing.
81	<b>Material Tracking- what does LT and CT mean and is there an outline of what needs to be submitted for them? Info needed by VDOT on each job isn't consistent</b>	2019 MITS, Density, Spec Changes	Sungho Kim	LT is Locality Tracking number and CT is Certification Tracking number. See the LAP Manual. CT is to accept material by certification, and LT is by locality contract. See the MOI chapter 7.
82	<b>How many of the VFA failures are on IM 19.0 mm?</b>	2019 MITS, Density, Spec Changes	Sungho Kim	I am sorry but we don't have specific analysis yet. We hope we can come up with this analysis later when possible.
83	<b>Follow-up on Split Sample conflicts. High AC with tight pills or wet looking, etc. Producers usually retest to confirm a result makes sense or is what it is.</b>	Balanced Mix Design update	Sungho Kim	See response on line #72

84	<b>Our IDEAL testing so far shows when we age loose asphalt for 2 hours we match production and when 4 hours we do not. Any changes coming with the spec.</b>	Balanced Mix Design update	Sungho Kim	We are currently under research on this and long-term aging.
85	<b>Is VDOT going to require binder producers to report the Delta TC?</b>	Balanced Mix Design update	Sungho Kim	We are considering but haven't decided on anything yet. Delta Tc requires additional time, effort, and maybe equipment needed for VDOT to check.
86	<b>Do you believe contractors will have CT Index, APA Wheel, and Cantabro testing equipment in their labs?</b>	Balanced Mix Design update	Sungho Kim	Answered at the seminar. We currently expect that contractors need CT Index test for sure. Not sure for Cantabro. Probably not for APA until finding a better and simpler method.
87	<b>Follow-up on Split Sample conflicts. Elko retests a sample if it falls outside the D2S range. Is there a policy for other District labs to follow? What if...</b>	Balanced Mix Design update	Sungho Kim	See response on line #72. Each statistic flag is investigated on a case by case basis, and discussions should be held locally on how to handle testing discrepancies.
88	<b>Which CT machine would you equip your lab with?</b>	Balanced Mix Design update	Sungho Kim	CO Materials Division doesn't currently own one, but expects to order a servo-hydraulic loadframe for both CO and all district labs in Summer 2020
89	<b>Has VDOT considered the impact of storing and reheating asphalt samples stored in cloth bags which absorb liquid asphalt?</b>	Balanced Mix Design update	Sungho Kim	We did small internal study to compare between bag and box samples, and didn't find significant difference on that specific mix. But may possible depending on which bags and boxes.
90	<b>Is VDOT going to come up with pay adjustment system for volume metric test failure's</b>	Balanced Mix Design update	Sungho Kim	VDOT is working toward implementation of Balanced Mix Design (BMD) in 2023. Part of the work plan for BMD implementation is to develop new and appropriate acceptance and payment contract language under the new BMD mix design and testing requirements that are adopted. Work on that part of BMD implementation is not expected to begin until later in 2020, at the earliest - but will need to be in place in time to meet VDOT's current implementation target of 2023. It is unknown at this time whether or not volumetrics will be used as part of calculation of pay factors.