Question and Answer Summary

NOTE: Results from the Polling Questions asked during the webinar are provided at the end of this document.

DelDOT Presentation:

Q: **Denise Markow (I-95CC): Within the system engineering process, where are you? Do you have a ConOps? Are you in a high-level or detailed design phase of the project yet?**

A: Gene Donaldson (Delaware DOT): Through our consultants, we still have to do system design and architecture, and an evaluation – all of that is in the process of being developed.

Q: **Denise Markow (I-95CC): As you go through the grant step by step, can you share those documents, like the ConOps in particular?**

A: Gene Donaldson (Delaware DOT): Yes, we have consultant staff that can share those documents.

Q: **Denise Markow (I-95CC): When you talk about automated decision making from a TMC, do you envision a change in workforce and position types?**

A: Gene Donaldson (Delaware DOT): We do have the pool of people in the US to support what we're talking about at all levels. Discussions in AASHTO about what transportation agency should be for the future. It has to change. I can't hire the people that have the skillsets for this since we're government side. We're really stressing to academia and federal side that we need to create the next generation of transportation professionals like engineers, technicians and planners that better understand transportation management and the application of these technologies.

Q: **Jan-Mou Li (MWCOG): Did ITS architecture have a role on the project?**

A: Gene Donaldson (Delaware DOT): We have that as part of the program. The major parts of the program are the strategic plan, vision, engineering phase, implementation phase, operations considerations, maintenance considerations, and training. Once you have your vision and implement it, then you have an operating system. That's the process we follow.

Q: **Denise Markow (I-95CC): Corridor-wide, is this the only AI project?**

A: Gene Donaldson (Delaware DOT): This is one of the few nationwide.

Breaking Ground: Toward a National ICM Strategy – Showcasing: I-210 Connected Corridors in California:

Q: **Justin Ferri (KMJ Consulting): I'm curious as to why you chose Mongo over another database product.**

A: Joe Butler (UC Berkeley): In our opinion, Mongo was more flexible, scalable and allowed easier mods of schemas than other choices.

Q: **Jim Hunt (FHWA):** What baseline performance information is being captured to evaluate and validate the 210 deployment?

A: Nick Compin (Caltrans): Any of the data that comes in – all of the detection and signal data can be used to determine performance. Delay, reliability, incident reduction numbers, we're looking at how we can determine the impact on all types of incidents and safety improvements. VMT estimation is something we're looking at closely in California. In addition to things like throughput, we'll need core metrics like delay, reliability, and safety. We're interested in new metrics we haven't thought about previously.

A: Joe Butler (UC Berkeley): The scorecard was interesting because it told us what people were interested in - things like queue reduction, on and off ramp measurement. We're not sure exactly what we'll be reporting. We're looking at probe data – Bluetooth data and travel times, we're bringing in a lot of different datatypes and possible metrics to find what is best at measuring success.

Q: **Denise Markow (I-95CC): Challenges of public-sector web services? Getting data in the cloud. How difficult was getting that moving in the public sector?**

A: Nick Compin (Caltrans): Excellent question – 5-10 years ago were told no. We thought about it and decided to do it. They key was bringing your IT folks along. We had Amazon train our IT folks. Now IT is excited to be on the project. There's also the idea of scalability and replicability. If you tried to do this on your own servers, it's going to take you forever and they'll be out of date by the time you get them. Using AWS helps with that problem, but AWS also has tools that can help us analyze data. Buying all of that infrastructure is not compelling over 25 corridors throughout the state, nor is it cost effective. We also worked to standardize the interface between the cloud and the TMC.

A: Joe Butler (UC Berkeley): We make sure we brought in software engineers to talk to IT personnel, not traffic engineers. It made a huge difference in communication between teams. Just make sure you have the right people in the room. Everybody in IT wants to go to the cloud sooner or later, but they're a little frightened at first.

Q: **Jeevanjot Singh (VDOT/VTRC): Do you have the IT staff for your agency on your agency payroll?**

A: Nick Compin (Caltrans): Yes, we have a number of IT divisions.

Question and Answer Summary

Polling Results:

1 - Has your agency implemented ICM?

Option	Value
0. Currently implementing ICM	13
1. Thinking about implementing ICM	11
2. Not currently planning on implementing ICM	0

2 - Is your agency interested in participating in Open Source?

Option	Value
0. My agency is interested in participating	14
1. My agency is not yet interested in participating	0
2. I am not sure if my agency is interested but we would like some more information about it	11