Tom Bamonte opening remarks:

The North Central Texas Council of Governments (NCTCOG) is the Metropolitan Planning Organization (MPO) for the Dallas Fort Worth (DFW) region which is growing rapidly with great pressures on methods of Transportation. In 2018, the Regional Transportation Council (RTC) approved the Automated Vehicle (AV) Program 2.0 and associated policies.

The RTC recognized that AV offers the DFW region opportunities and challenges and strategized on how to best structure the planning process.

Tom mentioned that at this forum today we will be asking
- Who should be engaged in the planning process?
- Deliverables: what do you need from NCTCOG for successful plan?
- Take industry input & local partners then put into a Request for Proposals (RFP)
- RFP possible in the coming weeks

PRESENTERS:

Bobby Cottam
Burns and McDonnell

- How can private sector planning entities most effectively help NCTCOG and its regional partners prepare for future mobility scenarios as the transportation system becomes more highly automated?
- How can we help? Share experience and knowledge, develop and evaluate program alternatives, implement programs effectively
- What are the benefits? Determining the right plan for each organization, evaluation of ‘sales-pitch’ claims, early identification and avoidance of unintended consequences, policy evaluations to maximize return on investment, public outreach to increase awareness and adoption, and comprehensive data management.
- Key Takeaways: we can help provide insights to complicated topics, we can help evaluate options to increase return on investment, and we can help with program implementation, management and validation. Huge amounts of data, how to store? 3rd Party can help NCTCOG to narrow it down.

Kelly Coyner and Timothy Papandreou
Mobilitye3

- How can private section planning entities most effectively help NCTCOG and its regional partners prepare for future mobility scenarios as the transportation system becomes more highly automated?
- NCTCOG AV Help Desk: design thinking, smart infrastructure investing, partners and innovating, and mobility innovation ‘road app’
- Stages: Stage 1 – empathize research your users need, Stage 2 – define – state your users needs and priorities, Stage 3 – ideate – challenge assumptions and creativity, Stage 4 – prototype – start to create solutions, Stage 5 – Test – experiment and refine.
• Design thinking: user centered design workshop; next gen planning tools (scenario planning, big data, adaptive modeling, and remote engagement); Technology level set.
• Smart infrastructure investing: streets, curbs, lanes, system integration, curbside management, parking tech, mobility hubs, and electric charging.
• Partners 4 innovating: P1 – incubators, accelerators, and actuators, P2 – A2CES Mobility Tech Section, P3 – Data, Communications, P4 – funders and sponsors, P5 – landowners and employers.
• Mobility Innovation – Road App
• Help us help you!

Marcelle Jones – Stantec

• Preparing for future Mobility
• Stantec and Smart Mobility: Our take – the interconnection between technology, infrastructure, and vehicles, has the potential to enhance communities by creating economically vibrant, environmentally-friendly and socially equitable transportation networks that put people first
• How can we help? Start on the right foot:
  o Identify your needs and challenges
  o Define your opportunities and vision
  o Assess/modify existing policy/regulations
  o Assess/modify existing infrastructure
  o Understand government requirements
  o Engage an independent advisory
  o Evaluate the options
  o Find the right fit to achieve your vision
• Automation is ramping up and fast!
• A customized Client focus – experience, expertise, and partnerships
• Planning for automated vehicles
• Smart Mobility, smart vision start out on right foot. Automated vehicles are challenging. Need toolkit to ensure right solutions.

Corey w/Stantec – Firms can help base on experience. Firms that have been in this situation before – look at different modes, experience is the key- diverse and volume of experience.

Matt Smith w/Michael Baker International
Planning for Automated Vehicle

• Domains and Stakeholders
  o State: Freeways and Arterials
  o Municipal: Urban, Arterials, Smart Cities, Suburban, Transit
  o Campus Settings, educational, healthcare
  o Airports:
    o Diverse Stakeholders: public agencies, advocacy groups, employers, customers/citizens, economic/commercial partners, technology partners
    o Freight/Commercial: site circulation, delivery/transport
• How are communities planning for AV?
• Connectivity and Technology
  o Connected automation
  o Smart city applications
• Parting thoughts:
Humans in the Loop, for foreseeable future
Small chunks are gold
No one shoe size

Marcus Ashdown and Brian Burkhard Jacobs

- NCTCOG’s challenge
  - How can regional partners prepare for future mobility scenarios in the era of automation?
  - Many contributing factors including
    - MaaS
    - TNCs
    - Micromobility
    - FALM
    - Transit
- Possible work products and tools
  - Impact assessment – insight to regional transportation and capital improvement plans (i.e., Oregon ODT Emerging Technology Impact Assessment)
  - Invitations for Private Partnerships- private entities can pilot efforts while simultaneously addressing local mobility needs (i.e., Miami – Dade Smart Light Deployment)
  - Pilots – evaluate vendor offerings for consideration on future capital improvement plans (i.e, MILO pilot in Arlington)
  - Models – Tools to evaluate impact of automated and other mobility options (i.e. VISSIM, ATS Ridership Estimation Tools
- Recommendations:
  - Create a regional forum to cover emerging technology impacts to mobility (i.e., parking regs, curbside design, pavement markings)
  - Do not limit it to what we know
  - Consider newer innovations at their incubation
  - Bring the public along for the ride
  - Promote connecting the dots (door to door consideration), big picture mobility network
- How we can help our partner in this effort, robo taxis 1st mile/last mile.
- Possible work products, impact assessment & invitations for private partnerships/pilots and models.

Comments:

Kent Kacir,
Good comments and are spot on. Good expertise-- listen to local agencies that identify object and interest and appetite! Risk vs. reward

Tom B – what are the outer boundaries? Do you recommend including freight?

Kent – goes to listening, inland port (South Dallas), freight. Yes, freight is there. Also, Interstate Rails. What pieces are missing not sure on that. Needs & Objectives.
This process is dictated by private sector. Need to wait until technology is safe. 12-36 months focus on near term. Pilot projects focus on IT down quarterly deliverables. Great to see what products and services are needed in area.

Tom B – can you give example of short term transparent strategy.

Agnostic to solutions 12 now the process. Curbside mgmt., e lockers pilots.

Marcelle Jones – what are we planning for? Technology could have financial impact least amount of impact on agencies.

Clint asked if any callers had questions:
None

Kelley – add to Tim’s answer
Catastrophic blow COVID 19 has been to investments in infrastructure. Important questions are whatever technology is – we should be future proofing investments. AV providers realty we can use infrastructure to enhance our clean up infrastructure.

Brian Burkhard – one thought – board to address data, focus on data. Massive, how influx of data can be integrated into existing systems.

Tom B – what would be your dream team? Who is the core group?

Corey – need cyber security, universities, (tech assessments), transit agencies

Marcelle Jones – where deployment occurring, university reps, municipalities, planners, streets itself, public involvement, city officials, people who develop vehicles. Least financial impact, districts test city.

Corey – ITS, TTI, accessibility SME’s and advocates.

Kate Jack – end users of this technology, campuses, employers, examples disabilities, young moms w/young children w/child seats, difference rules on this for difference countries.

Kelly – strategic plan on framework.

Tom B – during this age of COVID 19 – is now the time to do this planning process?

Marcus Ashdown – now is the perfect time – never a more appropriate time. Get a plan together

Corey – 2nd that thought. Perfect time for this planning process. AV area is busier than ever! Technology ramped up not slowing down.

Yes – economic catalyst. New angle nice addition. Working with employers and outreach.

Kent Kacir – yes good time to develop long range TR plans proceeding where does AV fit? Look at goals and what pieces missing. Technology will come to table with solutions.

Tom B – Is telework more pressing than AV currently?
Tim Papandreou-- many companies 90% working from home. Maybe not in this scale they go hand in glove AV & telework.

Tom B – allocate resources to telework or AV planning, AV high.

Bud Melton – shock brought to us to accept tech and got with it. AV vehicles – how much has to change with public Right of Way (ROW). Moving forward on AV is critical.

Tom B – Internal calls with EV section whether & how to include coverage of EV’s. Will be significant part of AV future?

Marcus Ashdown – almost all AVs are Electric powered and should be considered together.

Tim P– Fleet eV’s heavy-duty side. Some sort of non fossil fuel will be baked in these AV’s . Embrace EV’s.

Closing Comments:
Bobby Cottam – implement what we know the goal to be. And what should solution look like.

Tom B – use challenges with COVID – 19 to inform discussion on AV.

Brian Burkhard: - Focus purely on AV would not address attitude of other things. EV, freight, work with regular partners to better understand.

Chris Klaus – truck activity , cars, alternative fuels, w/newer trucks how to integrate AV’s path forward for quicker success.

Tim –
Technology is agnostic (AV) if there is a wheel or engineer it will move it. How do we want boxes to move around?

Kelley – Business case is dramatically different across areas. Micromobility – developed electric bikes E cargo

How do we deal with 1st and last mile?

Trucks vs. non trucks – use cases difference / similar technology through

Empty vehicle mgmt. deadhead miles

James Green – TR required distracted by time of day once trip complete then what. Self-Park facilities.

Comments from Chat Box:

Kelley – need your clear feedback on what you want and/or are looking for a regional strategic plan or framework?

Policy issues: revenue, data governance, accessibility and equity are all things that should be engaged.

Burns & McDonnell -

Kelley – in this phase are you looking for planning of deployments or are you looking for a strategy or series of strategies that are perhaps phased?
AH3014 – ROW preservation would be critical to future connections.

Barry Einsig – Tom and Clint I think you need to include Technologist in the processes in order to ensure the necessary planning includes all technologies for today and tomorrow in the planning for infrastructure process.

Ah3014 – in concert with emerging federal guidance will be paramount

Dave DiAngelo – Broadband Infrastructure Vendors – how will the infrastructure be created to support the enormous data set being created/shared?

Nelson Nygaard – equity analysis

AH3014 – in short- there was never a more appropriate time!

Tim Papandreou – yes in these times this is the perfect time to plan. As the Economy recovers you will have the strategic framework, performance outcomes and then you can bring them in as they are ready. You don’t want to be surprised.

Also great to test pilots. You might not get conditions like this in a generation. So, it’s a great before and after analysis.
The Technology is milestone and use case driven, but the governance is sorely needed.

Kelley – to make it work for planning staff at this point means that remote, efficient approaches to engagement are key.

Corey Clothier – Great point on economic development

Tim Panadreou – great point articulates your pain points and give the opportunity to do joint partnerships

Kelly – will you post the participants in the meeting? Like you would a sign in?

Chris Klaus – Is technology generally being considered with or without EV’s in mind?

AH3014 – teleworking seems to be maturing very quickly – has been years in development. Most remaining focus is need to become familiar. AVs will require far more development of infrastructure than remains with teleworking.

Barry Einsig – Telework has been an exploitation of networks moving from voice to IP and data that already existed. I see the parallel with road networks moving from analogue to digital to anticipate all need vehicle technologies and business modesl.

Kelley – Embed teleworking, e commerce, revenue Challenges in your AV strategy

Tim P – It feels the market will figure out the work and govt needs to be part of it from a work policy. Av is the opposite it needs a lot of policy work to make it possible and viable.

Brian Burkhard – in the context of current change, social equity should always be a consideration especially as the digital divide becomes more visible.
Tim P – AV and EV will be intertwined from a maintenance perspective.

Kelley – Yes on EVS!

Tim P – for fleets

Corey C – Yes include EVs

Teshanker – Great point Tim but also thinking about an overall digital transpiration can helps support pushing the right policy incentives to get people to change behavior.

Tim P – Agree!

Marcelle Jones – It depends on the vehicle. EVs will require strategic placement of charging stations.

Brian Burkhard – Yes EVs will continue to impact how we pay for our roads. Road User Charging (RUC) is now looking to CAV work for solutions.

Robert Welch – Evs and AVs will definitely be closely linked going forward

AH3014 – Think of EVs as only one of many forms of fuels. All forms should be integral to any AV pursuit.

Chris K -is AV planning down a path of a comprehensive mindset or is there a philosophy that trucks should be separate from nontrucks? Which path for quicker success?

AH 3014 – Until literally every vehicle on infrastructure is automated – separate channels seem to need to be essential.

James Green – an issue that was not covered well today is empty vehicle management and the infrastructure related issues.

Brian Burkhard – thank you NCTCOG for this interesting forum.

Kent Kacir – will all announcements be in the Texas Register?