

## Autonomous and Connected Vehicle (ACV) Task Force Outcomes and Products Definition | Compiled Task Force Inputs

**Average Rank:**

1. Policy Guidance Framework Outline - 2.083
2. ITS-Connected Vehicle Integration - 2.167
3. Education and Outreach - 2.417
4. Scenario Planning - 3.333

Outcomes Category	Name	Priority Rank	Why?	Best next step(s) for this Task Force?	Suggested changes to this Outcome/Product?
Policy Guidance Framework Outline	Michelle Nance	4	This information will come to us as it is developed. I don't think this committee will have solid influence on this issue.		This objective is not clear to me. Are we assessing gaps in current policy or educating about local (land use or other) policies that should be in place to best prep for ACV?
Policy Guidance Framework Outline	Bob Cook	2	In my view, this is a logical next step after conducting education and outreach. However, as the education and outreach will likely inform the outline, work on it should be undertaken on a parallel path.	1. Use ACV Task Force to identify the major issues. 2. Use knowledge accumulated during the three workshops.	
Policy Guidance Framework Outline	Alan Kathman	2	Policy decisions are complex and interrelated. Economic development vs public safety vs equity discussion needs a regional framework.	Big job!	
Policy Guidance Framework Outline	RFATS	3	In terms of sequencing, Policy development should occur after ITS and Scenario Planning.	Develop policies that are consistent for all planning partners. Consult with NC Fully AV Committee.	
Policy Guidance Framework Outline	Loretta Barren	2	I must say, I'm having difficulty deciding which comes first the policy or the ITS integration. I think that after conducting education/outreach we'll be better able to draft a policy framework that can be supported and move forward to other implementation/action items.	After the framework is developed and action plan/implementation plan should be developed and it should include updating the ITS plan to address AC./ACVs, address funding, infrastructure needs, time frames, etc.	
Policy Guidance Framework Outline	Sushil Nepal	2	Policy guidance and framework is needed to implement ACVs related task/activities	Best practices research on ACV policies and draw upon them to craft our regional policy guidance Create model policy language for local governments to assist them in updating their ordinances	
Policy Guidance Framework Outline	Debbie Collins	1	Can't be left behind	Maybe to integrate with complete streets	
Policy Guidance Framework Outline	Mayor Herron	2	Policy guidance framework outline would inform scenario planning.		
Policy Guidance Framework Outline	Tony Tagliaferri	2	The private sector is driving a lot of what's happening. Instead of clashing with them, we need to be ready and nimble to adapt and legislate around what works best.	Develop and endorse an outline of the key components that such a framework should cover, both topically and mechanically. A lot of this will be determined by the Fully AV committee but anything we can do to be with them (or participate as hopefully I will!) will help.	
Policy Guidance Framework Outline	Anna Gallup	2	Policies need to be established ahead of ACVs – proactively not reactively. We need to assess where we are before we decide the direction we need to be going - "take inventory".	Data sharing should be addressed as part of this.	Where appropriate ID / address rural versus urban differences.
Policy Guidance Framework Outline	Andy Bailey	2	After education, member governments and groups will be able to identify potentially unforeseen or overlooked policies that need to be in place.	Using the NC ACV policy framework, adapt policy level guidance for the Greater Charlotte area	Updated policy guidance based on update knowledge of ACV info
Policy Guidance Framework Outline	Larry Kopf	1	The private sector will mostly drive the AV CV revolution, and government should not proscribe the outcome. But government should create policies that result in an environment in support of the private sector.	The Task Force can identify areas where policy will be affected.	

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ITS-Connected Vehicle Integration	Michelle Nance	1	MPOs have deemed this the top regional project to work on stemming from the freight plan. CV elements should be added to the scope that will help the MPOs and other transportation organizations (DOTs). This integration makes that possible.	Definitely need an expert here. Perhaps review ITS scopes from other regions to see what ACV elements are included.	
ITS-Connected Vehicle Integration	Bob Cook	3	This may be an easy way to discuss ACV-related infrastructure because ITS tools are familiar to most people. In addition, doing so can serve to educate decision makers and the public about ACVs.	Use the education and outreach campaign to help decision makers and the public to understand the link between what they already know (ITS) and what they don't know (ACVs).	
ITS-Connected Vehicle Integration	Alan Kathman	1	Smart ITS infrastructure decisions now have big ROI.	Public expert and 1-2 private sector experts.	
ITS-Connected Vehicle Integration	RFATS	1	Internally oriented tasks should be taken on first. This task should be addressed first as the region works on updating the ITS Plan.	The steps noted above and correspond with SCDOT, NCDOT, and CDOT on addressing these topics in the ITS Plan.	
ITS-Connected Vehicle Integration	Loretta Barren	3	I ranked this one 3 <sup>rd</sup> , because it might be premature to integrate CV/ACV in the ITS plan prior to garnering support and knowing how localities want to proceed. I think it is important, but the ITS components can proceed without it in the plan initially.	Get the update to the ITS Plan scheduled.	
ITS-Connected Vehicle Integration	Sushil Nepal	3	I believe current Regional ITS is outdated, needs to be updated and make sure it is relevant to work done by MPOs/RPOs/Local Org.	Understand the current status of ITS for the region and evaluate needed changes. Integrate Connected Vehicles into the regional ITS and identify implementation roles and responsibilities Integrate ITS/ACVs into regional planning into MPO and RPO, discuss how?	
ITS-Connected Vehicle Integration	Debbie Collins	2	ITS plans are just a small part of this picture. Much of the data will not flow through ITS infrastructure as private infrastructures are usually not included		
ITS-Connected Vehicle Integration	Mayor Herron	1	Defining the scope of elements to be included in the future ITS plan would guide the decisions in all of the other products.		
ITS-Connected Vehicle Integration	Tony Tagliaferri	1	The infrastructure or at least the design of the infrastructure will have to come first.	Invite expert to share current thinking, and/or Brainstorm high level list of key topics that an ITS Plan Scope should address. Both of these sound good – brainstorming first and then bringing in experts related to brainstormed ideas probably works best.	
ITS-Connected Vehicle Integration	Anna Gallup	4	I'm not sure whether jumping ahead of NCDOT on this is good, bad, or indifferent. I also think we need to know more about what Charlotte is or isn't doing on this topic before diving in too deep.	I'll defer to those with more expertise in this area.	Collection / sharing of data needs to be rolled into this. If possible given timing, connect this effort to both the Infrastructure and Operations Working Groups of NC's Fully Autonomous Vehicle Committee.
ITS-Connected Vehicle Integration	Andy Bailey	3	Connecting the existing and future ACV fleet (in all its various forms and functions) with an overall ITS for the region will allow ACV to be used to their maximum ability.	Coordinate with NCDOT ITS for opportunities to update the Greater Charlotte ITS Plan	Updated Greater Charlotte ITS plan that integrates ACV
ITS-Connected Vehicle Integration	Larry Kopf	3	The Task Force can tackle this in a general way.	Specifically, get an expert to explain how new CV vehicles will interact with the existing vehicles that don't have the technology.	

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Education and Outreach	Michelle Nance	2	Attendees at the ACV workshops are fairly informed on these issues, but education and outreach is needed for local government staff (planners especially), appointed officials, and elected officials.	Develop educational materials for local governments and agencies including one pagers, a PPT, sample social media posts. Continue to hold ACV workshops/forums for audiences identified.	
Education and Outreach	Bob Cook	1	I believe many decision makers do not understand the issues associated with ACVs. Thus, before we do anything else as a region, we must educate decision makers (and the public) about the major issues.	1. Develop a key issues list. 2 Prepare a FAQ document. 3. Conduct education presentations to area MPOs, RPOs and other relevant organizations.	
Education and Outreach	Alan Kathman	4	Private sector and lead users have huge \$ for education. We need wise policy to moderate.		
Education and Outreach	RFATS	4	Education and outreach is an additional external task that can be addressed last after policy guidance has been established.	Create a clear and consistent message for elected officials, citizens, and civic organizations. Confer with members of these parties on what topics are most important.	
Education and Outreach	Loretta Barren	1	It's important to educate the public, elected officials, business/industry before you have to ask for their support, funding, etc. They need to understand the breath of the situation. Garnering support from numerous stakeholders improves the success of the project.	Identify audiences/stakeholders. Develop and engagement plan, maybe several depending on the audience. It may also need to be done in phases.	
Education and Outreach	Sushil Nepal	1	New topic, education and outreach along with continued engagement is necessary before we roll out policies or talked about integrating ACVs into planning documents/processes.	Prepare materials/handouts and distribute through existing COG network and to local communities. Organize quarterly webinars targeting local elected and staff to educate them on ACVs and challenges/opportunities presented by them for local level governance.	Education, Outreach and Engagement
Education and Outreach	Debbie Collins	4			
Education and Outreach	Mayor Herron	4	With the audience to be determined, this seems to be follow up outreach after the other products have been completed.		I'm not sure where to offer this comment, but the products listed seem deeply interwoven. The development of each individually may not be able to proceed linearly, because development of one may require alterations to preceding ones which would interplay back and forth across the products.
Education and Outreach	Tony Tagliaferri	4	This will inevitably be the last piece to the puzzle – we can't outreach or educate on what we don't completely understand yet.	Generate list of important information, by key audience(s) and prioritize. This example sounds good.	
Education and Outreach	Anna Gallup	1	Education and outreach in any planning process is key to acceptance and implementation. The need to engage stakeholders of all varieties at the beginning of the process as well as transparency is a lesson learned the hard way (I-77 ML). ACV's have the potential to be much more impactful than ML.		I think this should include research as well – maybe pulling from the findings of NC's Fully Autonomous Vehicle Committee's Research Working Group. Develop a guidebook / action plan?
Education and Outreach	Andy Bailey	1	There is much misunderstanding and misinformation regarding ACV. Education of key groups (elected or otherwise) may clear the way for the integration of ACV to be relatively painless	Generate list of key questions (and answers) from the general public regarding ACV	Easy to understand information to the public delivered through a variety of media.
Education and Outreach	Larry Kopf	2	The Task Force should try to tap into the wisdom of the crowd, so to speak, to help the Task Force to come up with the best recommendations possible.	The Task Force can try to help develop the format for any public meeting, and can help with key issues that can be proposed to the public, in an effort to get their feedback.	

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Scenario Planning	Michelle Nance	3	This is not that interesting to most (modeling is so technical), HOWEVER, the MPOs that have addressed ACVs have done so through scenario planning. Therefore, this might be the ACV implementation that MPOs desire.	Invite expert to future TF meeting to provide overview of Scenario Planning and what other regions are doing.	
Scenario Planning	Bob Cook	4	The likely ramp up period for this activity makes it a logical choice for the last to be implemented.	1. Engage the MRM staff to help establish a scope for a scenario planning exercise. 2. Determine if/how this scenario planning exercise can be incorporated into the planned CRTPO scenario planning exercise.	
Scenario Planning	Alan Kathman	3	Scenario models are critical support elements for 1 and 2 as well as long-term planning.		
Scenario Planning	RFATS	2	Scenario Planning will be needed to develop the modeling process which then assists in developing policies and considering what approach will be best for education and outreach.	Discuss scenarios with both public and private sector for this region.	
Scenario Planning	Loretta Barren	4		I really think this should be a part of the Implementation plan. Invite expert to future TF meeting to provide overview of Scenario Planning and what other regions are doing.	
Scenario Planning	Sushil Nepal	4	This is critical but can come last once we educate and establish a framework on how to proceed forward.	Explore the pros and cons and ramifications of ACVs integration into Scenario Planning model Integrate impacts of ACVs into scenario planning as part of the MPO modelling process	
Scenario Planning	Debbie Collins	3			
Scenario Planning	Mayor Herron	3	Modeling based on the policy guidance framework outline would help to answer question needed to do the final education outreach.		
Scenario Planning	Tony Tagliaferri	3	Only third because 1 and 2 are so important – could be 1a, 1b, 1c.	Invite expert to future TF meeting to provide overview of Scenario Planning and what other regions are doing. This is probably the best approach, get a state-of-the-practice for us to utilize moving forward.	
Scenario Planning	Anna Gallup	3	We need to establish direction on this as a region ahead of the development of the 2050 MTPs. That time is now. I ranked it 3 <sup>rd</sup> , because this might be something we could address through CRAFT as well.	In addition, invite staff from peer regions that are attempting to address this - the end user of this not just the consultants doing the fun☺ part.	I think the RPO and all MPOs in the region need to be a part of this discussion, in addition to the State DOTs, FHWA, and FTA.
Scenario Planning	Andy Bailey	4	While much is theorized about the integration of ACV into a mixed fleet environment, there is little data available today to support scenario planning. Awaiting better data will allow for more realistic scenario planning.	Gather real world data for use in modeling the effect of ACV in a mixed fleet environment	Data/tables/etc. regarding effects of ACV in mixed fleet environment for modeling/scenario planning
Scenario Planning	Larry Kopf	4	I don't think the Task Force has the capacity or expertise in this area. I know we have modelers on the Task Force, but this is too detailed in my mind to tackle to any great degree.		