

Perception, Awareness, and Importance of Preparing for Connected and Automated Vehicle (CAV) Technologies: A Survey of Louisiana Organizations

Christopher Melson¹ and Jiaqi Ma²

¹Louisiana Local Technical Assistance Program, Louisiana Transportation Research Center, 4099 Gourrier Avenue, Baton Rouge, LA 70808; e-mail: cmelson1@lsu.edu

²Department of Civil and Architectural Engineering and Construction Management, University of Cincinnati, 765 Baldwin Hall, Cincinnati, OH 45221; e-mail: jiaqi.ma@uc.edu

ABSTRACT

There is an immense amount of activity surrounding connected and automated vehicle (CAV) technology deployment. This paper briefly reviews the main research, administrative, and legislative initiatives Louisiana has taken in preparation of these technologies. To encourage wider participation in these activities, a brief electronic survey was developed and disseminated to 273 Louisiana organizations. The purpose of the survey was to initially engage these organizations under the context of CAV planning and gauge their awareness, perception, and viewed importance of planning for CAV technologies. 117 participants completed the survey. Low awareness and perception by economic development, freight, and transit organizations – coupled with low levels of perceived importance of planning by freight and transit operators – indicate areas of concern. Wide variability in which organizations are currently preparing for CAV technologies – including the low percentage reported by state agencies (21.1%), local agencies (15.8%), and nonprofits (8.3%) – is also a potential concern.

INTRODUCTION

Connected and automated vehicle (CAV) technologies offer potentially transformative and far-reaching impacts to the Louisiana transportation system – and other associated, reliant fields. This may include impacts to: public safety, congestion, personal mobility, land use, pollution and the environment, socio-economic characteristics, and the economy. For example, deployment of CAV technologies may impact industries such as freight hauling, automotive and liability insurance, vehicle maintenance, law enforcement, health care, and others. CAVs may impact economic opportunities for businesses, provide a more efficient supply chain, greater mobility to individuals, and greater access to effective transportation, job opportunities, and goods. However, realized benefits will be directly tied to how well public agencies prepare for these emerging technologies, including their ability to involve and coordinate across disciplines and governing bodies.

Although there is a vast amount of CAV deployment activities nationally and internationally – including many directly involving state departments of transportation (DOTs), there are still many state DOTs that have not conducted deployments nor other CAV planning initiatives. In one aspect, these state DOTs can be viewed as “late majority” or “laggards” on a standard technology adoption curve – such as the highly referenced curve developed by Rogers (2010). However, the interaction of internal and external forces, organizational culture, and resource allocation – and their influence in the decision for public agencies to promote specific technologies and procedures – is extremely complex. These agencies can still greatly benefit from continued research and other efforts that assist in the successful deployment of CAV technology.

This paper briefly reviews how the State of Louisiana is preparing for CAV technologies and identifies potential areas of improvement. One such area could be involving a wider group of agencies and organizations (whom may be impacted by the technology) in current CAV preparatory activities. In this context, this paper also presents the development, results, and selected analysis of an electronic survey distributed to varied Louisiana organizations gauging their awareness, perception, and how important preparing for CAV technologies is to their organizations’ purview. Specific recommended actions are identified from the survey results. A deeper and more comprehensive analysis of the survey results will be reported in a future publication (anticipated).

BACKGROUND

The main CAV planning actions taken by Louisiana entities are summarized in Figure 1 and can be categorized by affiliation: research, administrative, and legislative. Although several actions have been conducted in isolation, arrows in Figure 1 depict high-level relationships between initiatives. As shown and discussed below, efforts have mainly been initiated through legislative direction. This includes the main state-associated research effort by Wilmot and Greensword (2016), “LTRC: 15-3SS” in Figure 1, which was prepared at the request of the Louisiana State Legislature. The report included a synopsis of AV legislation across the U.S., summarized current issues involving legislation, and recommended legislative actions to be taken by Louisiana. The synopsis included detailed recommendations, such as: distinctly demarking an AV from other vehicles (via license plate or other marking), requiring \$5 M of liability insurance, limiting AV operation to testing, limiting AV operation during fair weather, and several other safety-related requirements.

The one other CAV-related research project, “LTRC: 15-2SA” in Figure 1, directly associated with the State of Louisiana developed a test bed for CV applications using the driving simulator at the Louisiana State University (LSU). The study developed a mechanism for the driver to receive in-vehicle warning messages based on the time-to-collision (TTC) between the virtual and simulator vehicle (Sherif et al. 2018). The mechanism was tested through a series of participant studies: identifying the optimal warning message, its in-vehicle location, TTC

threshold, and driving population in which the warning system may be most effective in influencing behavior. To date, the developed CV environment has not been utilized in further research – and results have not been used in administrative nor legislative actions.

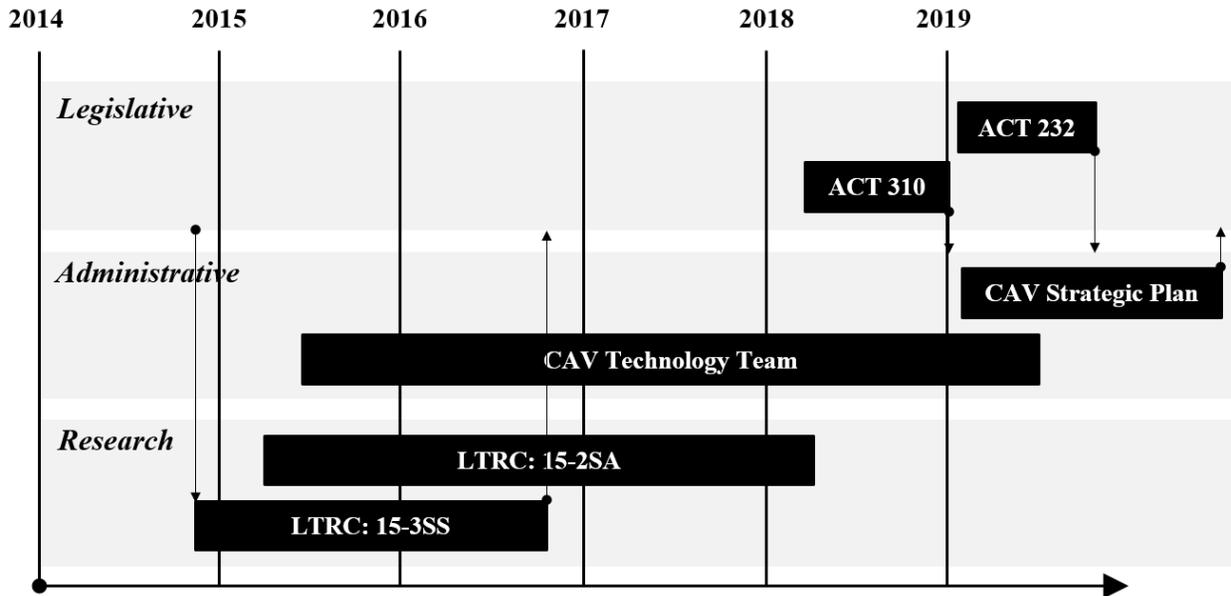


Figure 1. Main CAV-related preparatory actions in Louisiana.

The administrative agency leading Louisiana in preparation of CAV technologies is the Louisiana Department of Transportation and Development (LaDOTD). In mid-2015, LaDOTD created an internal, multidisciplinary task force, the “CAV Technology Team”, with the mission to: develop and maintain working knowledge of CAV technology, determine state and local transportation agency roles, formulate LaDOTD policy, and identify CAV applications to adopt (Chauhan 2018). The Team consists of 30 members across 25 sections and districts, whose main actions are facilitated through a contract/consulting firm. The Team has conducted regular educational meetings and internal, developmental workshops. In early 2019, the Team retained services to develop an initial CAV Strategic Plan for the LaDOTD. To date, development of the CAV Strategic Plan has mainly involved LaDOTD staff – with limited input from local DOTs, metropolitan planning organizations (MPOs), or other local and state agencies.

The Louisiana House of Representatives passed two significant bills regarding CAVs: Act No. 310 of the 2018 Regular Session and Act. No. 232 of the 2019 Regular Session. Act No. 310 allows for operation of V2V-based platooning on Louisiana roadways (L.A. Legis. Assemb. 2018). The Act also defines several requirements: having an operational plan approved prior to deployment, defining 400 ft as the minimum following distance for motor trucks, and prohibits platooning on two-lane highways. The Act became effective January 1, 2019. Act No. 232 allows operation of autonomous commercial motor vehicles without a driver present that meet specific criteria (L.A. Legis. Assemb. 2019). The criteria includes: having the vehicle properly registered and titled, \$2 M in liability coverage, the vehicle is capable of minimal risk if system

failure occurs, among others. The Act became effective August 1, 2019. LaDOTD has been designated as the main agency to administer and enforce both of these Acts.

MOTIVATION AND FOCUS

High-level, recommended strategies for public agencies to encourage CAV deployment are listed in Table 1 (NGA 2018). Through the two legislative Acts discussed above, Louisiana is making progress in modernizing regulations to encourage CAV deployment on its roadways (Recommendation 2). However, there is a clear need to financially support deployment and fund necessary updates to the ITS infrastructure and possible pilot programs (Recommendations 3 and 4). Likewise, there is a need to develop partnerships with academic institutions, private industry, and other interested parties – leveraging their unique capabilities to support implementation (Recommendations 1, 4, and 6).

Table 1. General recommendations to encourage CAV deployment (NGA 2018).

ID	Recommendation
1	Supporting technology innovation through universities and partnerships with the private sector
2	Modernizing legislation and regulations to eliminate unnecessary deployment barriers
3	Providing own financing mechanisms to drive deployment
4	Working with educational institutions to ensure related training programs are available
5	Updating ITS and communication networks
6	Educating the public on deployment benefits/impacts

One foundational step to encourage partnership building is to involve other agencies and organizations (whom may be impacted by the technology) in current preparatory actions to better address their concerns and future needs – especially in the development of the CAV Strategic Plan. This may also involve educating these organizations on the potential benefits/impacts of these technologies (Recommendation 6). This is particularly important, as past studies have shown individuals have more positive attitudes to CAV technologies when more properly informed and aware (e.g., Pettigrew et al. 2018).

To assist outreach to these agencies and guide eventual strategic involvement, a survey was developed and disseminated to a diverse group of Louisiana organizations whose purview may be impacted by CAV technologies – and whom have not been involved in previous or current preparatory actions. The purpose of the survey is threefold: (1) initially engage these organizations under the context of CAV planning, (2) gauge their awareness and perception of CAV technologies, likelihood of impacts, and importance in preparing for such technologies, and (3) identify areas requiring further action (e.g., identifying organizations to be involved in State preparatory initiatives, identifying organizations where education is warranted, etc.).

METHODOLOGY

The following subsections detail the development and dissemination of the electronic survey. Surveys were disseminated October – December 2019.

Development of Survey. Since the survey was to be disseminated to a variety of organizations who may be non-technical and unfamiliar with CAV technologies, it was designed to be brief, easily understood, and general. The survey was also designed to be comparable to portions of a more detailed survey completed by the CAV Technology Team in June 2017. An eight-question survey (with an average completion time of 3 minutes) was developed comprising of the main, substantive questions listed in Table 2. Minor, additional questions were also posed to participants; the fully survey is included in Appendix A.

Table 2. Main questions asked in the survey.

ID	Survey Statement	Possible Response
1	Please rate your organization's overall awareness of CAV technologies and their potential impacts	Very aware Somewhat aware Neither aware nor unaware Somewhat unaware Very unaware
2	Please rate your organization's overall perception of CAV technologies and their potential impacts	Very positive Somewhat positive Neither positive nor negative Somewhat negative Very negative
3	Please rank the top three (3) topical areas you believe will be most impacted by CAV technologies (in Louisiana)	Public safety Congestion Personal mobility Land use Pollution and the environment Socio-economic characteristics Economy
4	Please rate how likely you believe CAV technologies will provide a meaningful impact to your organization's (or your division's) purview	Very likely Somewhat likely Neither likely or unlikely Somewhat unlikely Very unlikely
5	Is your organization (or division) currently planning or preparing for CAV technologies and their potential impacts?	Yes No
6	Please rate how important it is for your organization (or division) to plan and prepare for CAV technologies and their potential impacts	Very important Somewhat important Neither important or unimportant Somewhat unimportant Very unimportant

Each of the topical areas listed in the survey (Table 2) was accompanied by a short summary of potential, related impacts (Appendix A). This list of topical areas and accompanying statements were developed from a variety of references, but specifically drawn from Smith et al. (2018), Kockelman et al. (2016), and Walker (2018). Due to limited funding and staff resources, an internet-based survey was pursued over paper- or phone-based methods. The survey was developed and disseminated using the Qualtrics XM Platform™ software due to its availability, ability for wide dissemination, easy tracking, and ease of exporting data. However, similar software programs are fully capable of successfully implementing the survey for the research purpose.

Dissemination of Survey. In total, the electronic survey was disseminated to 165 local agency, 27 state agency, 6 federal agency, 59 nonprofit, and 16 private industry contacts. These contacts may include members of the same organization but in different departments. For example, 4 of these contacts are from the Capital Region Planning Commission – but in charge of different programs: operations, safety, land use planning, and economic development, respectively. The survey was individually e-mailed to these contacts using unique links for tracking and reporting. The contacts were asked to complete the survey on behalf of their organization or department within the organization. E-mail addresses were obtained from their organization’s public webpage. If an e-mail address was not readily available, the organization was contacted (via a phone call) to obtain the appropriate contact and e-mail address.

Participants can generally be grouped in the following functional categories: aging communities, advocacy groups (related to socio-economic equity), disadvantaged (disabled) groups, economic development, environmental quality, freight, planning, public safety, traffic operations, and transit. These groups are summarized below and in Table 3. The complete list of contacted organizations is included in Appendix B.

Table 3. Distribution of contacted survey participants.

Functional Category	Local Agency	State Agency	Federal Agency	Nonprofit	Private Industry	Total
Aging Communities	67	2	1	0	0	70
Advocacy Groups	0	0	0	12	0	12
Disadvantaged Groups	0	5	0	27	0	32
Economic Development	16	4	0	3	0	23
Environmental Quality	11	4	1	5	0	21
Freight	28	2	0	2	9	41
Planning	11	2	1	10	0	24
Public Safety	9	5	1	0	0	15
Traffic Operations	10	2	1	0	7	20
Transit	13	1	1	0	0	15
	165	27	6	59	16	273

Aging communities comprise of organizations providing care and other services to the elderly. Those contacted included each parish (64 in total) council on aging (COA), other area-specific COAs, and the Governor’s Office of Elderly Affairs. COAs provide critical

transportation services to the elderly in Louisiana. Contacted advocacy groups consisted of local and state-wide nonprofit organizations with a focus on building more equitable communities – most with the aim of solving economic inequity (versus gender or race inequality).

Contacted disadvantaged groups mainly comprised of local Arc associations – who provide services to those with intellectual and developmental disabilities. Together with transit systems and COAs, Arc associations provide a critical public transportation service in Louisiana. City chambers of commerce, regional economic alliances, and regional planning commissions were contacted as part of the economic development category. City environmental services, environmental quality regional offices, and other state government environmental agencies were also contacted.

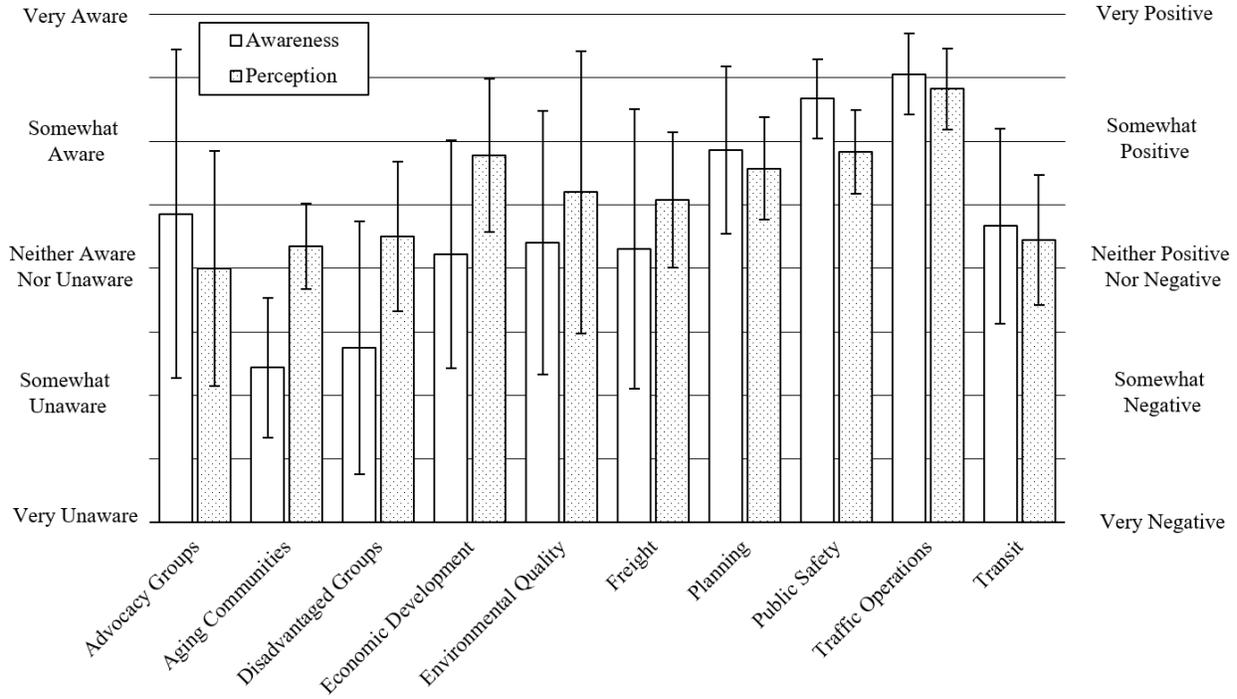
The freight category involved each airport in Louisiana providing commercial services (7), each port (22), and the ten largest trucking companies operating in Louisiana, among others. Contacted planning agencies comprised of city planning commissions, regional planning commissions, and several nonprofits aimed at improving planning practices in Louisiana. Contacted safety organizations included each established regional safety coalition and several safety-related programs within LaDOTD. Traffic operation groups comprised of city traffic engineering departments, metropolitan planning organizations, and several ITS-related consultants working in Louisiana. Lastly, each transit provider (13) in Louisiana was also contacted.

RESULTS

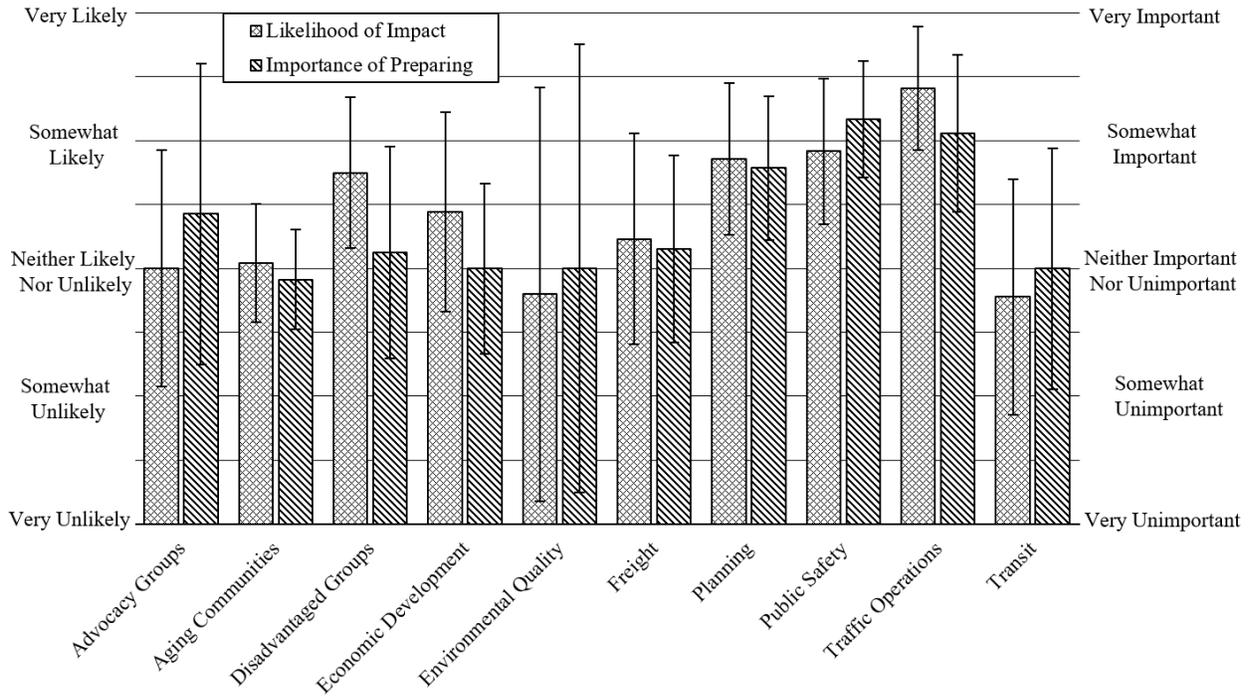
Results of the survey are shown below. For deeper analysis, responses were coded as numerical values and assumed to have a cardinal relationship (versus ordinal ranking) with one unit of separation between each possible consecutive response. In total, 117 participants completed the survey, including representatives from 57 local agencies, 19 state agencies, 5 federal agencies, 24 nonprofits, and 12 private companies. Please note additional responses are expected and will be reported in an upcoming publication (anticipated). Breakdown of the completion rate of those contacted (from highest to lowest) by functional category is as follows: traffic operations (85%), public safety (80%), transit (60%), advocacy groups (58%), planning (58%), economic development (39%), aging communities (33%), freight (32%), disadvantaged groups (25%), and environmental quality (24%). Participants of the latter two organizations may not be representative.

Figure 2 summarizes responses to Questions 1 (“Awareness”), 2 (“Perception”), 4 (“Likelihood of Impact”), and 6 (“Importance of Preparation”), respectively. Please see Table 2 for reference. Please note the two axes: the left denoting response options to the first listed question, the right denoting response options related to the second listed question. Figure 2 denotes the average response by functional category with error bars representing the 95% confidence interval on the population mean assuming a normal distribution ($\bar{x} - t_{\frac{\alpha}{2}, n-1} \frac{s}{\sqrt{n}} \leq \mu \leq$

$\bar{x} + t_{\frac{\alpha}{2}, n-1} \frac{s}{\sqrt{n}}$).



(a)



(b)

Figure 2. Average participant response by functional category to questions related to (a) awareness and perception of CAV technologies and (b) likelihood of them impacting organizational purview and importance of planning.

Visually, it appears that overall awareness and perception have a linear relationship. This was statistically tested through a linear regression analysis utilizing all individual responses and a corresponding hypothesis test ($\alpha = 0.05$, $R^2 = 0.250$, $\rho = 3.00 \times 10^{-7}$). The test showed a statistically significant relationship between the two variables. This indicates that educational initiatives may improve the perception of CAV technologies to these organizations (Recommendation 6 in Table 1). Generally, the levels of awareness by each organizational category is as expected (e.g., low awareness of CAV technologies by aging communities and advocacy groups, high awareness by public safety and traffic operations officials, etc.). However, the low awareness and perception by economic development, freight, and transit groups identify potential areas of concern. One recommendation may involve LaDOTD focusing educational efforts to these groups (Recommendation 6), then utilizing these efforts as the basis to form CAV-related partnerships, especially with economic development and freight entities (Recommendation 1).

This area of concern is further compounded by the low levels of perceived impact and importance of CAV planning by freight and transit operators. Freight and the efficient movement of freight is a critical component to the Louisiana economy. Louisiana contains one of the largest freight distribution hubs (New Orleans, LA) and most valuable truck corridors in the U.S. (Interstate 10) (FHWA 2018) – which may be significantly impacted by CAV technologies. The large gap between the perceived high likelihood of impact and low importance of planning by economic development groups also indicate an area of concern.

Figure 3 shows the relationship between survey Questions 5 (“Percent Preparing”) and 6 (“Importance of Preparation”) by organization type. Error bars represent the average normalized by functional category, such that results are not skewed by an overrepresentation of agencies from a particular functional category within each organization type. Figure 3 also lists the number of responses per category type (n) and as a percentage of those contacted to participate. As shown, despite the relatively consistent response between these organizations (“Somewhat Important” for their organization to prepare for CAV technologies), there is wide variability in which organizations are preparing currently; while all surveyed federal agencies are preparing (in some form), only a small portion of local and state agencies, and especially nonprofits, are preparing. This also indicates an area of concern. Perhaps it would be of benefit to include these organizations in current preparatory actions – or to provide them existing, educational resources (e.g., NACo (2019), NGA (2018), and Hallmark et al. (2019), to name a few). Likewise, it may be possible for these organizations to partner with private companies who are currently preparing (in some form) for CAV technologies (Recommendation 1).

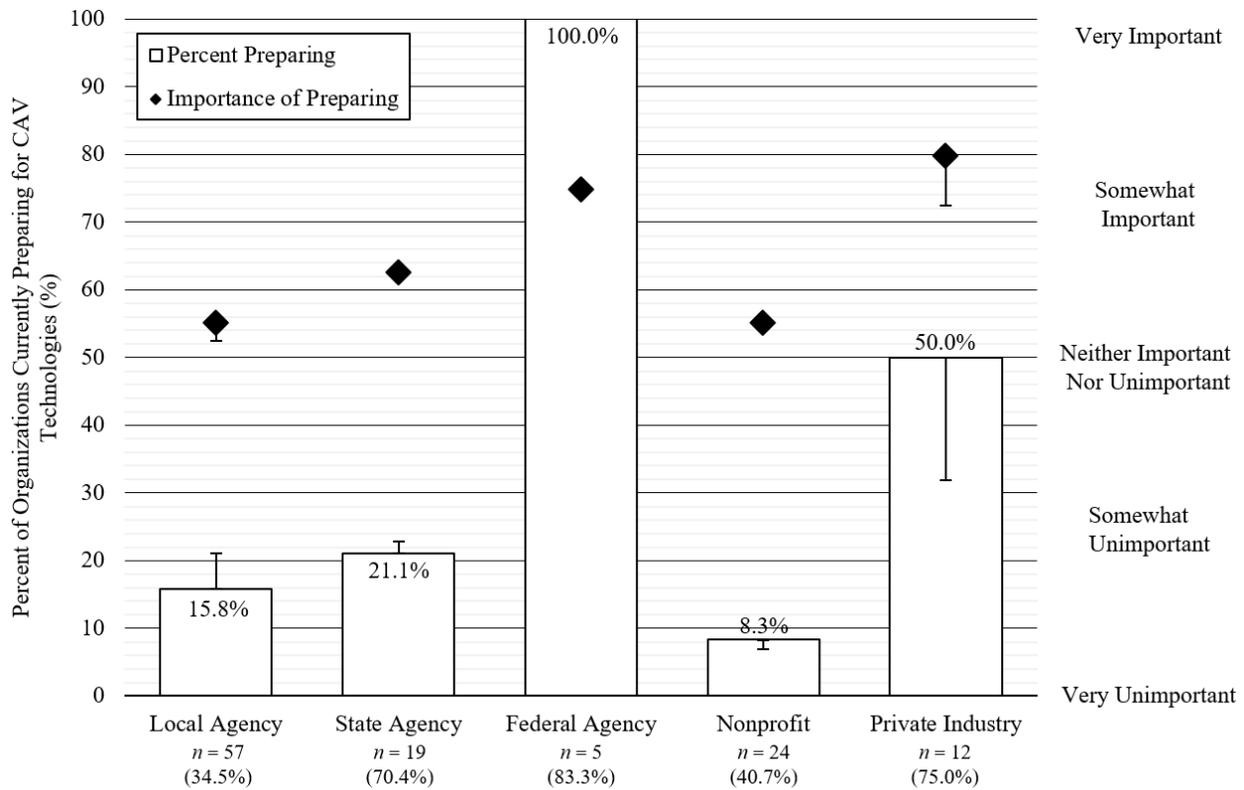


Figure 3. Percentage of respondents currently preparing for CAV technologies (left axis) and average response to the importance of CAV planning (right axis) by organization type.

Another purpose of the survey was to identify the topical area viewed to be the most impacted by CAV technologies in Louisiana (Question 3). This information will inform a current research effort by Melson (2019), assisting in the identification of CAV case studies to model in the State of Louisiana. Figure 4 shows the percentage of respondents who selected each topical area as their top three areas to be most impacted. Responses were normalized by functional category. As shown, personal mobility (18.8%) and economy (17.2%) were selected as the top fields, followed by public safety (17.5%) and congestion (16.0%). Overall, organizations tended to select their organizational purview as being the most impacted (e.g., most of aging communities elected personal mobility, economic development groups selected economy, advocacy groups selected socio-economic characteristics, etc.).

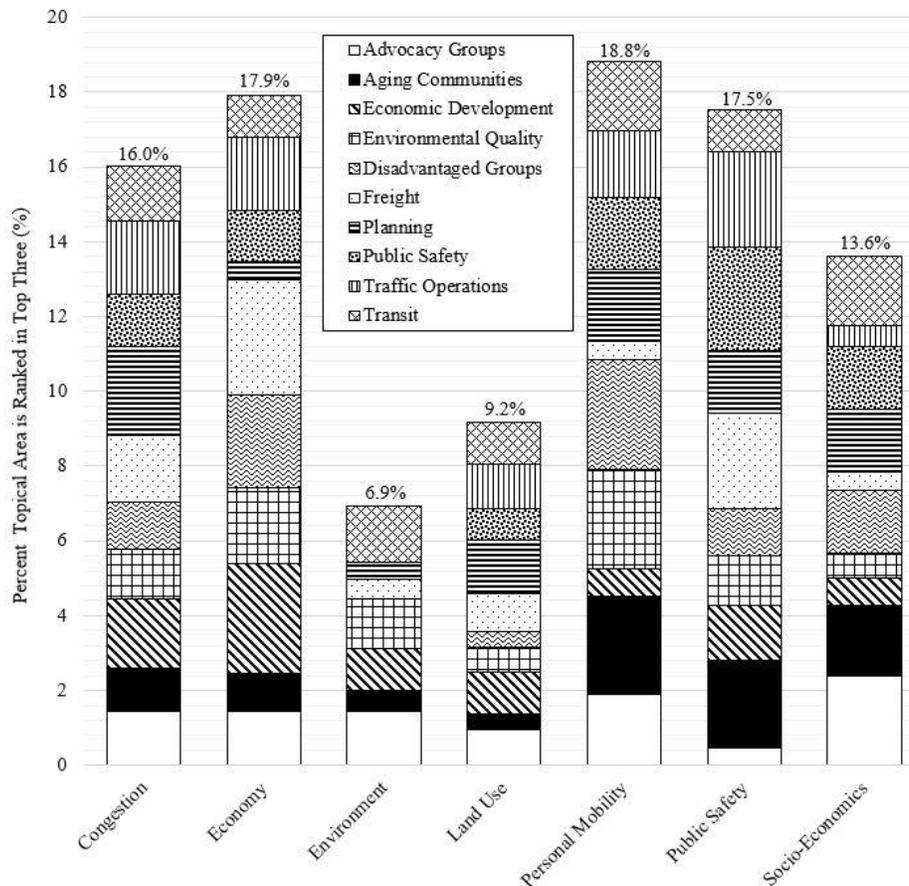


Figure 4. Percent each topical area was selected by respondents as the area to be most impacted by CAV technologies organized by functional category.

CONCLUSION

Deployment of CAV technologies have the potential to significantly impact Louisiana’s transportation system, including a wide-range of associated fields: freight movement, sectors of the economy, land use planning, socio-economic equity, etc. This study reviewed the primary ways Louisiana is currently planning for CAV technologies. Administratively, this is through LaDOTD’s internal task force, the “CAV Technology Team”, which is currently preparing a CAV Strategic Plan with consultant support. To further involve external agencies/organizations in CAV-related preparatory initiatives, a brief electronic survey was developed and disseminated to 273 Louisiana organizations. The main purpose of the survey was to: (1) initially engage these organizations, (2) gauge their current awareness, perception, and viewed importance of planning for CAV technologies, and (3) identify areas of concern.

In total, 117 participants completed the survey, including representatives from 57 local agencies, 19 state agencies, 5 federal agencies, 24 nonprofits, and 12 private companies. Participants were organized by functional category: advocacy groups, aging communities, disadvantaged groups, economic development, environmental quality, freight, planning, public

safety, traffic operations, and transit. Overall, there was a statistically significant relationship between the level of awareness and perception of CAV technologies (i.e., higher awareness leads to a more positive perception of CAV technologies). Low awareness and perception by economic development, freight, and transit organizations may be an area of concern – especially considering the low levels of perceived impact and importance of planning by freight and transit operators. There is wide variability in which organizations are currently preparing for CAV technologies: 100% of responded federal agencies are, 50% of private companies, 21.1% of state agencies, 15.8% of local agencies, and 8.3% of nonprofits.

The survey is part of a larger research effort by Melson (2019) and will aid in the selection of CAV-related and Louisiana-specific case studies to be modeled and investigated. Although brief and with limitations, it is also hoped results will be utilized in current and future preparatory actions taken by the State. For example, 60% of respondents were interested in keeping abreast of the research project and results. This high interest may indicate their willingness to participate, contribute to, and be leveraged in future CAV-related planning initiatives.

ACKNOWLEDGEMENTS

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APPENDIX A

The electronic survey is provided in full below. Text within brackets were not shown to participants and is meant to provide further context to the question.

Connected and automated vehicle (CAV) technologies offer potentially transformative and far-reaching impacts to the Louisiana transportation system – and other associated, reliant fields. This may include impacts to: public safety, congestion, personal mobility, land use, pollution and the environment, socio-economic characteristics, and the economy.

Please rate your organization's overall **awareness** of CAV technologies and their potential impacts:

- Very aware
- Somewhat aware
- Neither aware nor unaware
- Somewhat unaware
- Very unaware

Please rate your organization's overall **perception** of CAV technologies and their potential impacts:

- Very positive
- Somewhat positive
- Neither positive nor negative
- Somewhat negative
- Very negative

Please rank the top three (3) topical areas you believe will be **most impacted** by CAV technologies (in Louisiana): [Order of options were randomized]

- **PUBLIC SAFETY:** CAVs have the potential to reduce crashes caused by human error (such as distracted and impaired driving).
- **CONGESTION:** CAVs have the potential to increase traffic operational efficiency and lessen congestion (through select, specific deployment applications). However, vehicle miles traveled (VMT) may also increase during deployment of CAVs (potentially partially offsetting this benefit).
- **PERSONAL MOBILITY:** CAVs have the potential to increase mobility among non-driving populations (youth, elderly, and disabled) – and create new models of car sharing, ride-hailing, and other mobility-on-demand services.
- **LAND USE:** CAVs have the potential to impact the use of land for transportation functions (e.g., parking areas and road geometry) as well as longer term land use changes to community planning, location and density of housing, recreation areas, and others.

- **POLLUTION AND THE ENVIRONMENT:** CAVs have the potential to directly impact the environment through land use changes, reduction in transportation emissions, and others. The net impact to emissions and the environment is currently uncertain and will depend on adoption practices, policies, specific deployments, and other factors.
- **SOCIO-ECONOMIC CHARACTERISTICS:** Deployment of CAV technologies may be unevenly distributed geographically, socially, and economically. Although the technologies themselves may offer better access and inclusivity, their deployment may warrant oversight by policy makers to ensure equal distribution and access.
- **ECONOMY:** Deployment of CAV technologies may impact industries such as freight hauling, automotive and liability insurance, vehicle maintenance, law enforcement, health care, and others. It may require a new type of workforce: new jobs, skills, and training requirements. CAVs may impact economic opportunities for businesses, provide a more efficient supply chain, greater mobility to individuals, and greater access to effective transportation, job opportunities, and goods.

Please select the topical area that is **most related** to your organization's (or your division's) purview: [Order of options were randomized]

- Public safety
- Congestion
- Personal mobility
- Land use
- Pollution and the environment
- Socio-economic characteristics
- Economy

Please rate how likely you believe CAV technologies will provide a **meaningful impact** to your organization's (or your division's) purview:

- Very likely
- Somewhat likely
- Neither likely or unlikely
- Somewhat unlikely
- Very unlikely

Please estimate the **most likely timeframe** in which these meaningful impacts will occur: [Shown if response to the previous was "Very Likely" or "Somewhat Likely"]

- Long-term: beyond 10 years from now
- Mid-term: 4-10 years from now
- Short-term: 0-4 years from now

Is your organization (or division) currently planning or preparing for CAV technologies and their potential impacts?

- Yes
- No

Please rate **how important** it is for your organization (or division) to plan and prepare for CAV technologies and their potential impacts:

- Very important
- Somewhat important
- Neither important or unimportant
- Somewhat unimportant
- Very unimportant

Please indicate your organization's type: [Depicted as a dropdown list]

- Academic institution
- Government agency (local)
- Government agency (regional)
- Government agency (state)
- Government agency (federal)
- Nonprofit
- Private industry

(Optional) Are you interested in learning more about this research project and keeping abreast of its progress? [Optional question]

- Yes
- No

(Optional) Please enter your e-mail address. You may receive pertinent information or periodic status updates regarding this project. *Note: your e-mail address will only be used for this purpose and kept confidential. Your survey responses will remain anonymous.* [Optional question; shown if response to the previous was "Yes"]

Thank you for completing the survey. Please feel free to contact the Principal Investigator, Christopher Melson, at cmelson1@lsu.edu with any inquiries – or if you would like to provide more detailed feedback. You may also visit melsatron.com for additional project information.

APPENDIX B

The complete list of organizations that were contacted for the survey is shown in Table 4.

Table 4. Each agency contacted to complete the survey.

Functional Category	Organizations	
Aging Communities	Acadian Council on Aging ^L Allen Council on Aging ^L Ascension Council on Aging ^L Assumption Council on Aging ^L Avoyelles Council on Aging ^L Beauregard Council on Aging ^L Bienville Council on Aging ^L Bossier Council on Aging ^L Caddo Council on Aging ^L CAJUN Area Agency on Aging ^L Calcasieu Council on Aging ^L Caldwell Council on Aging ^L Cameron Council on Aging ^L Catahoula Council on Aging ^L CENLA Area Aging ^L Claiborne Council on Aging ^L Concordia Council on Aging ^L Corporation for National and Community Service: Louisiana ^F Capital Area Agency on Aging ^L DeSoto Council on Aging ^L East Baton Rouge Council on Aging ^L East Carrol Council on Aging ^L East Feliciana Council on Aging ^L Evangeline Council on Aging ^L Franklin Council on Aging ^L Grant Council on Aging ^L Governor’s Office of Elderly Affairs ^S Iberia Council on Aging ^L Iberville Council on Aging ^L Jackson Council on Aging ^L Jefferson Council on Aging, Inc. ^L Jefferson Davis Council on Aging ^L Lafayette Council on Aging ^L LaSalle Council on Aging ^L Lincoln Council on Aging ^L	Livingston Council on Aging ^L Louisiana Department of Health: Office of Aging and Adult Service ^S Madison Council on Aging, Inc. ^L Morehouse Council on Aging, Inc. ^L Natchitoches Council on Aging, Inc. ^L New Orleans Council on Aging, Inc. ^L North Delta Regional Planning & Development District ^L Ouachita Council on Aging ^L Pointe Coupee Council on Aging ^L Rapides Council on Aging ^L Red River Council on Aging, Inc. ^L Richland Council on Aging, Inc. ^L Sabine Council on Aging, Inc. ^L St. Bernard Council on Aging, Inc. ^L St. Charles Council on Aging ^L St. Helena Council on Aging ^L St. James Area Council on Aging ^L St. John Council on Aging, Inc. ^L St. Landry Council on Aging ^L St. Martin Council on Aging ^L St. Mary Council on Aging ^L St. Tammany Council on Aging, Inc. ^L Tangipahoa Voluntary Council on Aging ^L Tensas Council on Aging, Inc. ^L Terrebonne Council on Aging, Inc. ^L Union Council on Aging ^L Vermilion Council on Aging ^L Vernon Council on Aging ^L Washington Council on Aging ^L Webster Council on Aging, Inc. ^L West Baton Rouge Council on Aging ^L West Carroll Council on Aging, Inc. ^L West Feliciana Council on Aging ^L Winn Council on Aging ^L
Advocacy Groups	Beloved Community ^N Bike Easy ^N Foundation for Louisiana ^N Huey and Angelina Wilson Foundation ^N Louisiana Association of Business and Industry ^N	Louisiana Association of United Ways ^N Louisiana Budget Project ^N Middlebury Institute ^N Power Coalition for Equity and Justice ^N The Bridge Agency ^N Together Louisiana ^N Urban League of Louisiana ^N
Disadvantaged Groups	Advocacy Center of Louisiana ^N Arc Baton Rouge ^N Assumption Arc ^N Beauregard Arc ^N Catahoula Arc ^N	St. James Arc ^N St. John Arc ^N St. Mary Arc ^N Statewide Independent Living Council Terrebonne Arc ^N

Functional Category	Organizations	
	<p>Donaldsonville Area Arc^N Governor’s Office of Disability Affairs^S Lafource Arc^N LARC, Inc.^N Lighthouse Louisiana^N Louisiana Commission for the Deaf^S Louisiana Department of Health: Office of Citizens with Developmental Disabilities^S Louisiana Developmental Disabilities Council^S People First of Louisiana^N</p>	<p>The Arc: Caddo-Bossier^N The Arc: Iberville and West Baton Rouge^N The Arc of Acadiana^N The Arc of Greater New Orleans^N The Arc of Louisiana^N The Arc of Morehouse^N The Arc of Ouachita^N The Arc of Sabine^N The arc of St. Charles^N The Arc of St. Martin^N The Arc of Vermillion^N The Arc of Rapides^N</p>
Economic Development	<p>Acadiana Planning Commission^L Baton Rouge Area Chamber^L Capital Region Planning Commission^L Central Louisiana Economic Development Alliance^L Committee of 100 for Economic Development, Inc.^N Greater New Orleans Business Alliance^L Greater New Orleans, Inc.^L Greater Shreveport Chamber^L Lafayette Economic Development Authority^L Louisiana Economic Development: Department of State Economic Competitiveness^S</p>	<p>Louisiana Economic Development: Automotive Group^S Louisiana Industrial Development Executives Association^N Louisiana Public Facilities Authority^S Louisiana Workforce Commission: Office of Workforce Development^S New Orleans Chamber^L North Louisiana Economic Partnership^L One Acadiana^L Public Affairs Research Council of Louisiana^N Regional Planning Commission^L South Louisiana Economic Council^L Southwest Louisiana Economic Development Alliance^L St. Tammany Corporation^L</p>
Environmental Quality	<p>Baton Rouge Environmental Services^L Federal Highway Administration^F Greater New Orleans Foundation^N Keep Greater Lake Charles Beautiful^L Lafayette Environmental Quality Division^L Louisiana Association of Business and Industry^N Louisiana Association of Environmental Professionals^N Louisiana Department of Environmental Quality: Acadiana Regional Office^L Louisiana Department of Environmental Quality: Capital Regional Office^L Louisiana Department of Environmental Quality: Division of Air Planning and Assessment^S</p>	<p>Louisiana Department of Environmental Quality: Northeast Regional Office^L Louisiana Department of Environmental Quality: Northwest Regional Office^L Louisiana Department of Environmental Quality: Southeast Regional Office^L Louisiana Department of Environmental Quality: Southwest Regional Office^L Louisiana Department of Health: Environmental Public Health Tracking^S Louisiana Environmental Action Network^N Louisiana Environmental Health Association^N Louisiana Natural Resources Conservation Service^S Shreveport Environmental Services^L</p>
Freight	<p>Acme Trucking Line, Inc.^I Alexandria International Airport^L Baton Rouge Metropolitan Airport^L Berard Trucking^I Dedicated Transportation, LLC^I Gentry Trucking^I Grand Isle Port Commission^L</p>	<p>Plaquemines Port^L Point of Terrebonne^L Port NOLA^L Port of Delcambre^L Port of Iberia^L Port of Krotz Springs^L Port of Lake Charles^L</p>

Functional Category	Organizations	
	Greater Lafource Port Commission ^L J.H. Walker ^L Jensen Companies ^L LA-1 Coalition ^N Lafayette Regional Airport ^L Lake Charles Regional Airport ^L Louisiana Department of Transportation and Development: Commercial Trucking Program ^S Louisiana Motor Transportation Association ^N Louisiana Public Service Commission ^S Monroe Regional Airport ^L Natchitoches Parish Port ^L Ouachita Terminals ^L	Port of Lake Providence ^L Port of Morgan City ^L Port of South Louisiana ^L Port of Vermillion ^L Port of Vidalia ^L Port of Vinton ^L Porto of West St. Mary ^L Regional Planning Commission ^L Shreveport Regional Airport ^L St. Bernard Port, Harbor, & Terminal District ^L Starsky Robotics ^L Statewide Transport, Inc. ^L The Port Caddo-Bossier ^L United Vision Logistics ^L West Calcasieu Port ^L
Planning	Acadiana Planning Commission ^L American Planning Association: Acadiana Section ^N American Planning Association: Capital Section ^N American Planning Association: Louisiana ^N American Planning Association: Metro New Orleans Section ^N American Planning Association: North Louisiana Section ^N Baton Rouge Planning Commission ^L Capital Region Planning Commission ^L Coordinating & Development Corporation ^L Downtown Development District New Orleans ^N Federal Highway Administration ^F	Imperial Calcasieu Regional Planning & Development Commission ^L Kisatchie-Delta Regional Planning & Development Commission ^L Lafayette Planning Commission ^L Lake Charles Planning Development ^L Louisiana Department of Transportation and Development: Transportation Planning Group ^S Louisiana Division of Administration: Office of Community Development ^S Louisiana Municipal Association ^N MidCity Redevelopment Alliance, Inc. ^N New Orleans Planning Commission ^L Regional Planning Commission ^L Shreveport Community Development ^L Urban Land Institute Louisiana ^N
Public Safety	Acadian Regional Transportation Safety Coalition ^L Capital Region Transportation Safety Coalition ^L CenLA Highway Safety Coalition ^L Federal Highway Administration ^F Louisiana Center for Transportation Safety ^S Louisiana Department of Transportation and Development: Highway Safety Section ^S Louisiana Highway Safety Commission ^S	Louisiana Highway Safety Research Group ^S Louisiana Local Road Safety Program ^S New Orleans Regional Traffic Safety Coalition ^L North Shore Regional Safety Coalition ^L Northeast LA Highway Safety Partnership ^L Northwest LA Transportation Safety Coalition ^L South Central Regional Safety Coalition ^L Southwest LA Regional Safety Coalition ^L
Traffic Operations	Acadiana Planning Commission ^L Arcadis ^L Capital Region Planning Commission ^L City of Baton Rouge ^L City of Lafayette ^L City of Lake Charles ^L City of New Orleans ^L City of Shreveport ^L	ITS Answers ^L Louisiana Department of Transportation and Development: Traffic Engineering Division ^S Neel-Schaffer ^L North Delta Regional Planning & Development District ^L Rapides Area Planning Commission ^L

Functional Category	Organizations	
	Federal Highway Administration ^F Gresham Smith ^L Houma-Thibodaux MPO ^L	Serco ^L Urban Systems ^L Vectura ^L WSP ^L
Transit	Alexandria Transit (ATRANS) ^L Capital Area Transit Systems (CATS) ^L City of Lake Charles Transit ^L Federal Highway Administration ^F Good Earth Transit ^L Jefferson Transit ^L Louisiana Department of Transportation and Development: Public Transportation Program ^S	Lafayette Transit System ^L LSU Tiger Trails Transit System ^L Monroe Transit ^L New Orleans Regional Transit Authority ^L River Parish Transit Authority ^L Shreveport Area Transit System ^L St. Bernard Urban Rapid Transit ^L West Ouachita Public Transit ^L

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