

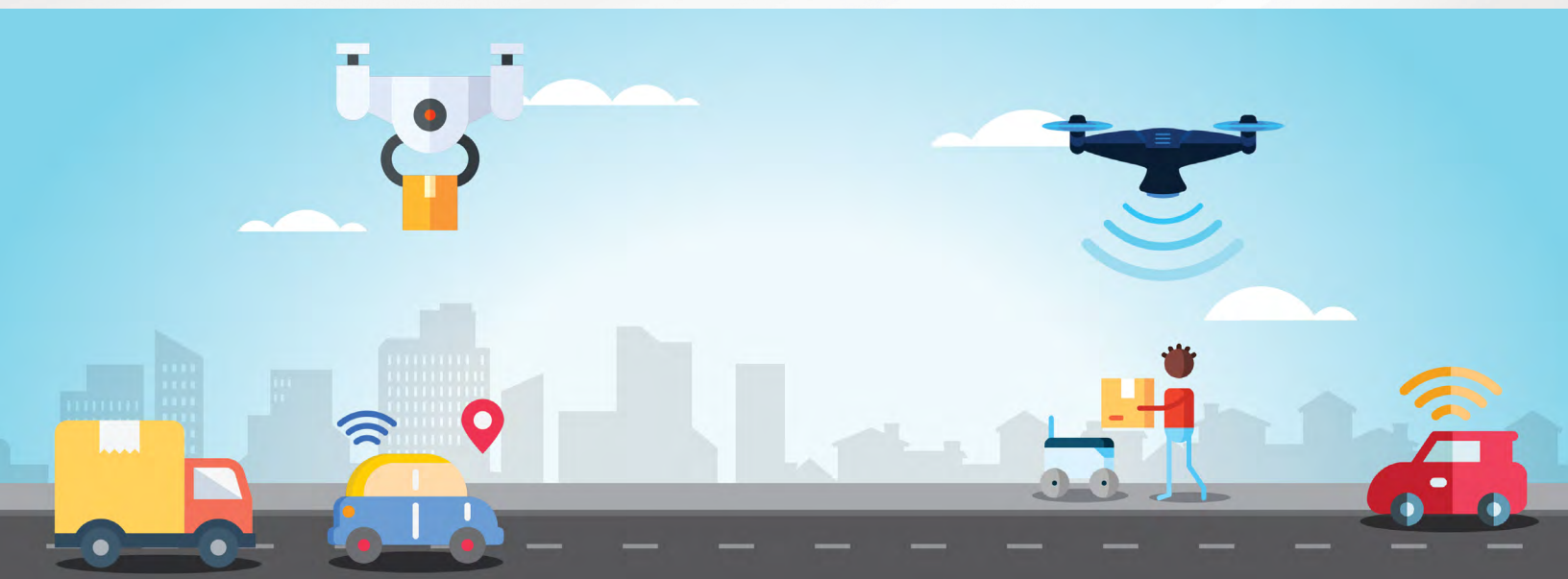


Connecting **North Texas** Communities
with Emerging Transportation Technologies

AV2.1

Engagement Phase 1 Summary Report

The North Central Council of Governments (NCTCOG)
October 2021



North Central Texas
Council of Governments



KITTELSON
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Hummingbird



I. Engagement Phase 1 Overview

The North Central Texas Council of Governments' (NCTCOG) Automated Vehicles 2.0 (AV2.0) program is underway. The AV2.0 program includes three projects: AV2.1, AV2.2, AV2.3. This particular study, AV2.1, is "Connecting North Texas Communities with Emerging Transportation Technologies" and will provide short- and long-term planning support to local governments. A key part of this planning effort is engagement - ensuring that stakeholders and the public have the opportunity to participate in the future visioning of emerging transportation technologies in the region.

The Engagement Team consists of Kittelson and Associates (project management), Consumer and Market Insights LLC (survey and focus groups), Hummingbird Firm (digital/virtual engagement), and Public Information Associates (stakeholder engagement). A key and ongoing aspect of engagement has been the Project Advisory Committee (PAC) meetings and workshops, which started in June 2021. The official public launch of the project took place in August 2021. This report details the engagement activities, including outreach and events, that took place since the public launch, through the middle of October 2021 (Engagement Phase 1).

In addition to the PAC meetings and workshops, the Engagement Team has developed a project website, designed and conducted a survey, planned for and hosted a virtual public meeting, and created educational and outreach materials that have been shared in print and in digital form throughout the North Texas region. As we close out Engagement Phase 1 and move into Engagement Phase 2, the Engagement Team is conducting focus groups and continuing outreach activities.

II. Planning

At the end of February, the Engagement Team started meeting on a regular basis to prepare for the stakeholder and public engagement associated with the AV2.1 project. These meetings provided an opportunity for the Engagement Team to share updates, strategize, and assign tasks to be carried out outside of the meetings. Among other topics discussed and tasks completed during the planning stages (pre-project launch), this period of time was dedicated to:

- Meeting with NCTCOG staff to establish points of contact and expectations
- Developing stakeholder categories
- Setting up the Project Advisory Committee (PAC)
- Drafting Timelines
- Creating the Public Engagement Plan
- Carrying out demographic analyses
- Creating materials (logo, website content, flyers, etc.) needed for the project launch

The Public Engagement Plan (PEP) summarizes the engagement activities that are planned for each phase of the project and describes how the activities connect to the overall project schedule and tasks. The PEP consists of: a project overview; engagement objectives; community profiles and stakeholder groups; public engagement activities; and appendices (including specific contacts and local media). The section on the public engagement activities, in particular, was written to reflect a menu of options, some of which are the baseline (definite) engagement and some that are supplementary (optional), for engaging, informing, and hearing from the public.

Iterations of the PEP came about after getting feedback from NCTCOG, and then from the PAC. In particular, we relied on feedback from NCTCOG and the PAC to decide if there needed to be any shifts in the baseline and supplementary activities. The chart below shows a summary of the engagement activities by phase.

		Phase 1	Phase 2	Phase 3
Information	Project website	●	●	●
	Social media	●	●	●
	Emails	●	●	●
	Digital flyers	●	●	●
	Printed flyers	●	●	●
	Yard Signs	●	●	●
	Newspaper ads	●	●	●
	Radio ads	●	●	●
	Message boards	●	●	●
	Infographics	●	●	●
	Explainer videos	●	●	
Feedback & Input	Digital survey	●	●	
	Gamified survey		●	
	Phone survey	●	●	
	Interactive Mapping	●		
	Digital Idea Walls		●	
Events	Virtual public meetings	●	●	●
	Focus groups	●	●	●
	Interviews	●	●	
	Listening sessions	●	●	
	Pop-ups	●	●	
	Student/Employee workshops	●	●	
Outreach	Meeting in a bag	●	●	●
	Local governments	●	●	●
	Neighborhood groups	●	●	●
	Churches	●	●	●
	Schools	●	●	●
	Plain language translation	●	●	●
	Translation	●	●	●
	Interpretation	●	●	●
Incentives	Gift cards	●	●	●

● Baseline activity

● Supplementary activity

In conjunction with developing the PEP, the Engagement Team brainstormed metrics with NCTCOG for the different components, with emphasis on the public meeting and the survey.

III. Project Launch and Outreach

We had to complete a checklist of items before the public engagement could be launched. The most pressing of these items were the project website and survey (discussed in more detail in the following sections). Launching the project website required significant coordination with NCTCOG's Transportation, Public Involvement, and Research & Information Services (RIS) teams.

In addition to setting up the website and the survey, the Engagement Team drafted social media posts, created digital flyers (in English and Spanish), drafted email blast text, and drafted press release text. All draft materials were shared with NCTCOG before being finalized.

- **Press Release** - The [press release](#), which went out on Friday, August 6, 2021, marked the launch of the project. The press release was posted to NCTCOG's website and shared with NCTCOG's media contacts, such as Dallas Innovates, Community Impact Newspaper, Fort Worth Star-Telegram, La Estrella, and the Dallas Examiner.
- **Social Media Posts** - The project flyers were posted on Facebook, Twitter, and LinkedIn. The Engagement Team provided a social media schedule to the NCTCOG staff member responsible for posting; this schedule indicated what should be posted and when, from the project launch to the virtual public meeting.
- **Newspaper Ads** - The Engagement Team placed advertisements in a couple of local print and online newspapers ([Community Impact](#) and the [Dallas Examiner](#)) in order to add a printed (non-digital) component to the outreach materials.
- **Email Announcement** - An announcement about the project launch was included in an email that went out on Monday, August 9, 2021. The email went out to representatives from local government agencies, chambers of commerce, transportation-related organizations, advocacy organizations, churches, social service agencies, and higher education and workforce development contacts.

It was important to the team to have the survey ready when the project launched, so as to not miss out (in terms of survey responses) on those who visit the website.

IV. Project Website

In order to create the website, the Engagement Team worked closely with RIS. The Engagement Team reviewed NCTCOG's other websites and used them as templates when creating a layout of the AV2.1 website. In addition to creating the content, the Engagement Team created a layout and shared it with RIS. The iterative process of staging the website took about a month. Once the Engagement Team was happy with the product, the RIS team put the website in production phase, with the understanding that the Engagement Team would be responsible for simpler, regular updates while RIS could make coding changes, as necessary, throughout the project.

Alongside creating the website, the Engagement Team worked with NCTCOG staff and the PAC to determine a project name and, subsequently, a website URL. The project name "Connecting North Texas Communities with Emerging Transportation Technologies" was arrived at by polling on what was most important to convey in the title and then putting together options to choose from. The Engagement Team wanted to have a title that clearly explained what the project is about. The website URL that was arrived at was connectNTxFutures.org.

The project website is the public's central information hub for the project. The project website consists of five pages and includes background information and a timeline of engagement activities by phase, materials for the public to learn more about emerging transportation technologies, information on how to get involved (e.g., survey, virtual public meetings, PAC workshops, focus groups), and resources that highlight some of the adjacent efforts locally and nationally.



The project website is regularly updated to reflect recent, current, and upcoming activities and information.

V. Public Survey

About the Survey

The purpose of the survey, titled “Your Technology Now and in the Future,” was to gather information from North Texas residents and employees surrounding their current transportation modes, familiarity and use of current transportation-related technologies, and perspectives on emerging transportation technologies. An English and a Spanish version of the survey were created.

The survey was divided into five parts:

- Introduction
- “Your Transportation Now” (current forms of transportation)
- “Current Transportation Technologies”
- “Emerging Transportation Technologies”
- “General Information” (demographics)

The survey was 15 questions long and was estimated to take approximately five to seven minutes to complete. The questions were close-ended, but most included follow-up questions to allow respondents to indicate answers that were not provided as options.

1. What **forms of transportation** do you currently use to travel in the Dallas-Fort Worth area?
2. What do you **LIKE** about the **forms of transportation** in the Dallas-Fort Worth area?
3. What do you **DISLIKE** about the **forms of transportation** in the Dallas-Fort Worth area?
4. How do you feel about **advanced driver-assistance systems (ADAS) and related technologies**?
5. How often do you use the following **transportation-related apps**?
6. Would you and your household consider using the following **technologies** to support your travel needs **AROUND the Dallas-Fort Worth area**?
7. Would you and your household consider using the following **technologies** to travel **BETWEEN the Dallas-Fort Worth area and other Texas cities**?
8. Which of the following **BENEFITS** do you believe will come with **emerging transportation technologies**?
9. Which of the following **CONCERNS** do you have with **emerging transportation technologies**?
10. Select the **option** that best applies for each **transportation statement**.
11. What **county** do you live in? (The answer choices were based on the 12-county region but provided a place for respondents to specify "Other" and type in their county.)
12. What is your **age range**?
13. How would you **best describe your ethnicity**?
14. Are you of **Hispanic** or **Latinx** origin?
15. Which of these describes your **household income** during a typical year?

Outreach

A significant portion of the outreach in Phase 1 was centered around the public survey. Outreach for the survey included:

- email blasts (via NCTCOG's Constant Contact),
- directed and targeted emails,
- phone calls,
- newspaper ads (these were the project launch ads, which directed readers to the website where they could access the survey),
- physical flyer postings,
- partnerships with community organizations, and
- incentives.

The audiences that were targeted throughout the survey period included:

- Cities and counties
- Chambers of Commerce and Business Associations
- Transportation and Planning Groups
- Transit, Mobility, and Freight and Logistics entities (public and private)
- Professional Organizations
- K-12 School Systems
- Higher Education and Workforce Development (including college organizations)
- Libraries
- Churches
- Advocacy Organizations
- Social Service Agencies
- Community Organizations
- NCTCOG personnel

The survey was initially planned to be open for three weeks. Given that the number of responses was low (below the minimum required to have a statistically significant survey) at the three-week mark, the Engagement Team decided to keep the survey open through the end of September.

Most of the responses seemed to have come as a result of NCTCOG's email blasts, City and County emails and social media posts, outreach to Chambers of Commerce, and a combination of incentives and outreach to organizations. Incentives in the form of Visa gift cards were used among the target equity groups to encourage participation.

Below is a table that shows the organizations that received incentives (totaling \$550). Over 20 organizations were offered incentives, but only the ones below made use of the incentives.

Organization	Number of Responses
National Society of Black Engineers (NSBE) Collegiate Chapters	5
Mi Escuelita (English survey)	7
Mi Escuelita (Spanish survey)	1
Society of Hispanic Engineers (SHPE) Collegiate Chapters	3
Empowering the Masses (English survey)	47
Empowering the Masses (Spanish survey)	2

Most notably, Empowering the Masses helped by getting nearly 50 responses. The organization, which is located in South Dallas, provides skills development and training and hosts soup kitchens. The push by the organization was critical in getting more responses from low-income, Black, and Hispanic residents. The Team recognizes Empowering the Masses as a trusted organization, and a community amplifier, boosting the Team's efforts by directly connecting with individuals in the community.

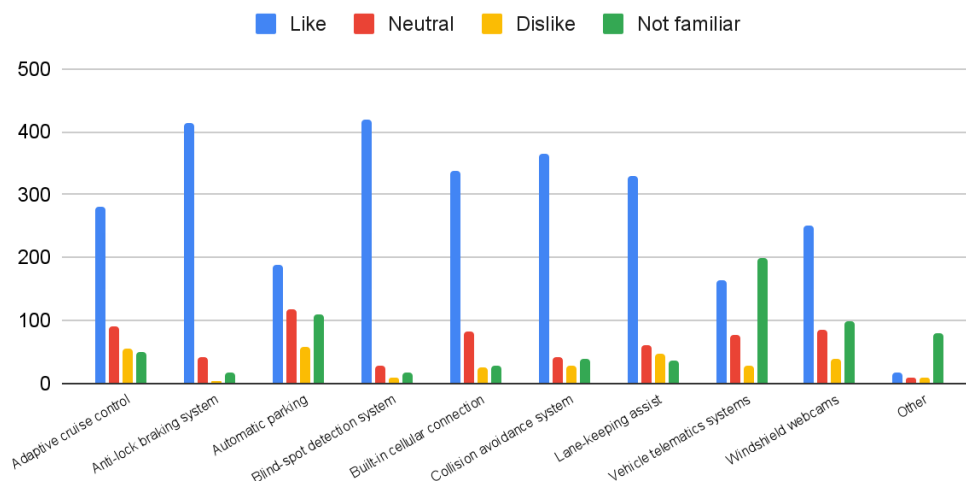
It should also be noted that some responses came from library staff; at least one of the eight library systems contacted (Burleson Public Library) posted the flyer to a physical bulletin board. The Team placed emphasis on reaching out to all of the counties (considering the 16-county region) and ensuring that there were also non-digital methods of learning about the survey.

Results

We received a total of 483 survey responses. The results are summarized in the AV2.1 Public Survey Results Report. Some of the highlights of the findings are summarized below:

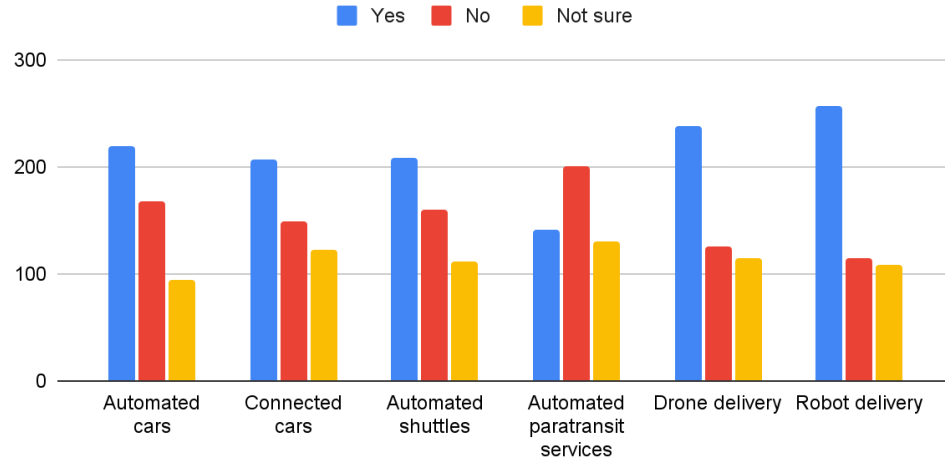
- Most of the advanced driver-assistance systems (ADAS) and related technologies were viewed favorably by respondents. As illustrated in the bar graph below, the majority of the respondents indicated that they “Like” the following technologies: adaptive cruise control (59%), anti-lock braking system (86%), blind spot detection system (87%), built-in cellular connection (71%), collision avoidance system (76%), lane-keeping assist (69%), and windshield webcams (52%).

Q4. How do you feel about advanced driver-assistance systems (ADAS) and related technologies?



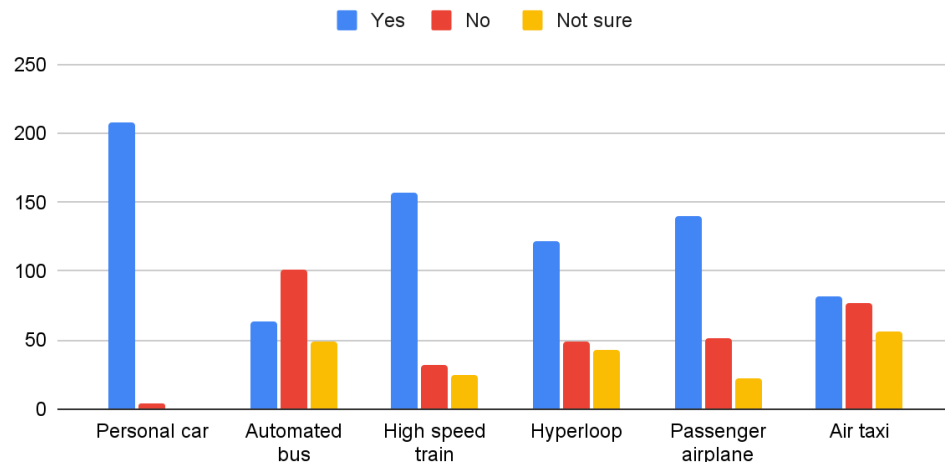
- When asked how often they use various transportation-related apps, 43% of respondents said they use ride-hailing apps several times a year. For other ride-hailing apps, most respondents answered “Never”.
- When asked which technologies they would use to support their travel needs around the Dallas-Fort Worth area, respondents could select “Yes,” “No,” or “Not Sure” for each technology. With the exception of automated paratransit services, between 43% and 54% of respondents answered “Yes” to the question for the technologies. Only 30% of respondents answered “Yes” to using automated paratransit services; this lower percentage could be due to many respondents not having a need for such services.

Q6. Would you and your household consider using the following technologies to support your travel needs around the Dallas-Fort



- With regard to which technologies the respondents would use to support their travel needs between the Dallas-Fort Worth area and other Texas cities, the personal car (no technology specified) was by far the most accepted option (97% of respondents said "Yes"). Specifying technologies associated with the personal car would have likely had a significant impact on the responses (e.g., if the personal car was automated or connected, fewer respondents would have selected "Yes"). Following personal cars, the technologies that respondents said "Yes" to the most were high-speed train (77%), passenger airplane (67%), and the Hyperloop (61%).

Q7. Would you and your household consider using the following technologies to travel between the Dallas-Fort Worth area and



- To get more insight into people's general thoughts on the technologies, we asked about potential benefits and concerns. About 61% of respondents believed that emerging transportation technologies would increase safety. In contrast, 44% said that the emerging transportation technologies would be less safe. Accordingly, some of the respondents indicated that the technologies would both increase safety and be less safe. This suggests that respondents may be considering multiple aspects of safety or may have varying opinions on safety depending on the specific technologies. A little over a third of respondents (36%) felt that the technologies would be more expensive.

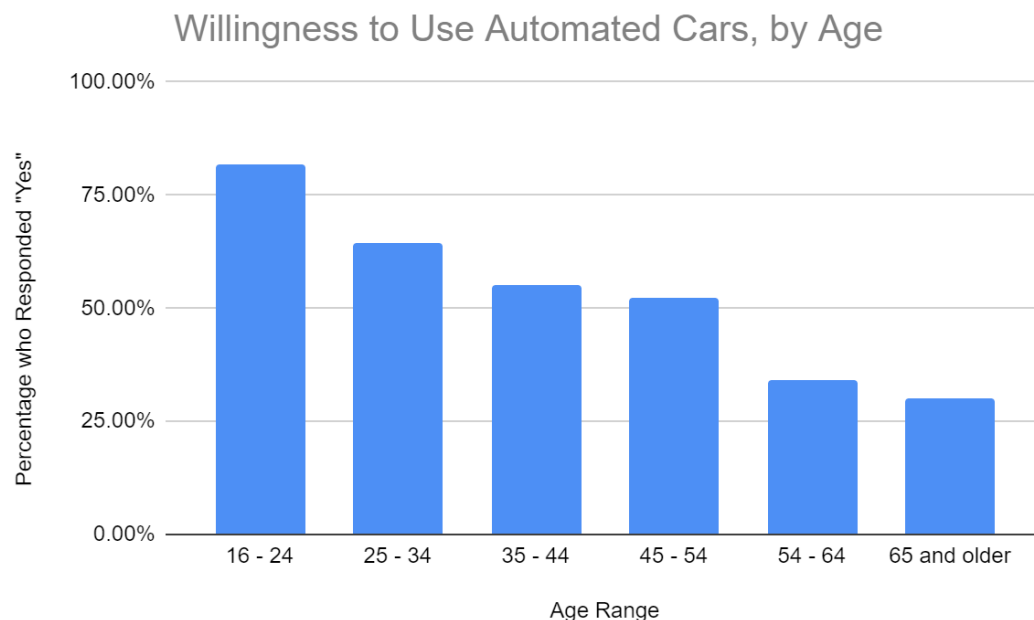
Demographic Information

Over 90% of the responses came from residents of five counties: Dallas, Collin, Ellis, Tarrant, and Denton Counties. Nearly 70% of the respondents who completed the survey were 45 or older. In line with the demographics of the region, the majority of respondents (about 72%) were White or Caucasian. We also received responses from those who identify as American Indian or Alaska Native (slightly less than 1%), Asian (5%), Black or African American (12%), and other or multiple ethnicities (10%). Over 70% of respondents had an annual household income of \$75,000 or more.

Demographic Stratified Analysis

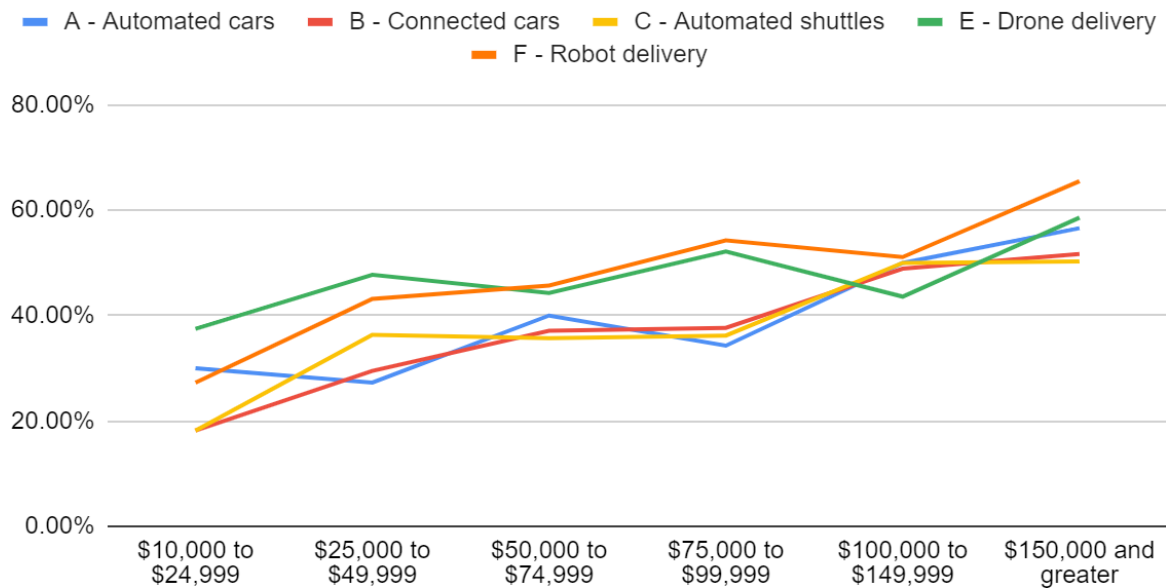
In order to assess the potential impact of demographics on how people responded to questions, a stratified analysis was run on Question 6, "Would you and your household consider using the following technologies to support your travel needs around the Dallas-Fort Worth area?". Respondents from Collin, Denton, and Tarrant counties (three of the four counties with the greatest number of responses) were the most likely to answer "Yes" to using the various technologies.

Age was a significant factor in the responses. The bar graph below shows an inverse relationship between age and willingness to use automated cars. For the most part (not considering those "Under 16" - the age group for which there were only two responses), this trend was generally consistent for all of the technologies. This supports the notion that younger people are more willing to consider using the technologies.



There was also a trend with income and willingness to use the technologies. When responses from those with a household income of \$10,000 and under and automated paratransit services are removed from the data, a trend (increase in willingness to use technology with an increase in household income) becomes clearer.

"Yes" to Considering Using Technologies, by Household Income (No "under \$10K" and no "paratransit")

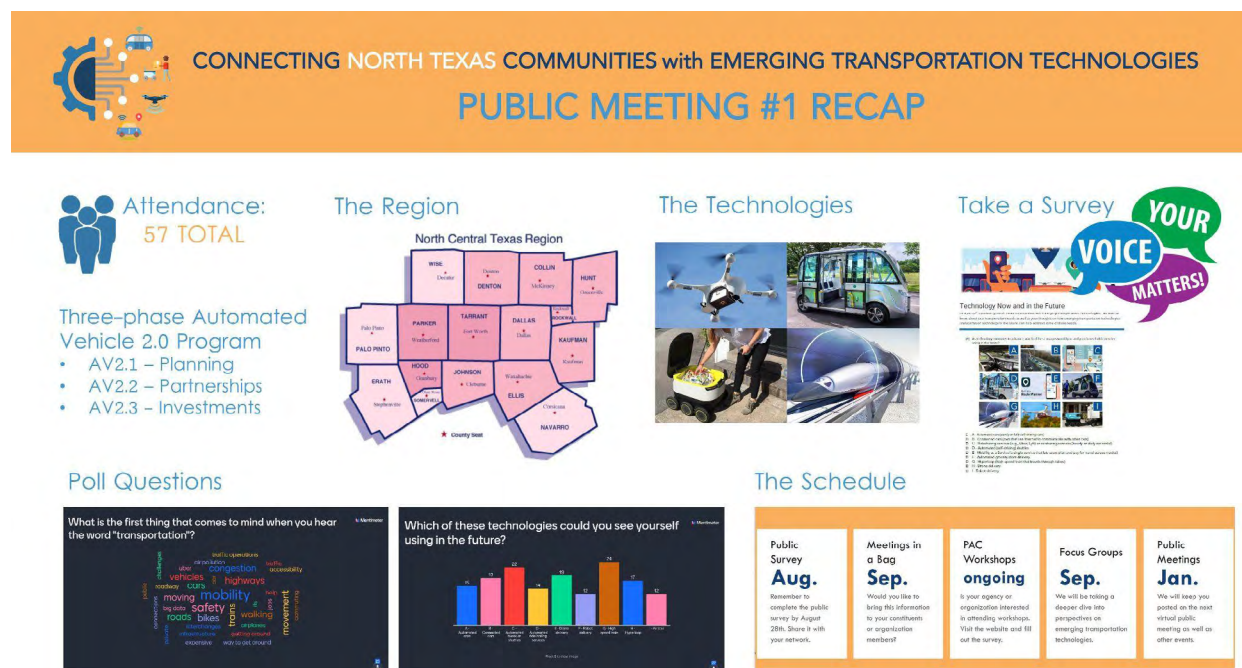


VI. Phase 1 Virtual Public Meeting

On Tuesday, August 24th, the North Central Texas Council of Governments hosted its first public meeting for the “Connecting North Texas Communities with Emerging Transportation Technologies” project. The meeting, which was held on Zoom, allowed the public a chance to hear from project team members, to learn about these “emerging transportation technologies,” and to share their thoughts and ask questions about the technologies. More specifically, the presentation included:

- An overview of the project and the project schedule, as well as the need for the study and the need for public input
- A video highlighting emerging transportation technologies throughout the region
- A call to participate in the public survey as well as a snapshot of responses so far
- The sharing of existing needs findings for the region (related to population, congestion, and safety)
- Polling questions on Mentimeter
- A question and answer session

The infographic below shows a recap of the public meeting. There were a total of 57 attendees, including NCTCOG staff and the consulting team. Among those who attended, the level of participation and engagement was very high. This was mostly demonstrated through the responsiveness in the polling questions and the number of thoughtful questions.



Polling Questions on Mentimeter

The polling questions were successful and engaging. The questions are listed below:

1. Where are you joining us from?
2. What is the first thing that comes to mind when you hear the word "transportation"?
3. Which of these technologies and services do you currently use?
4. Which of these technologies could you see yourself using in the future?
5. What excites you about emerging transportation technologies?
6. What concerns you about emerging transportation technologies?
7. What topics would you like to learn more about?
8. How did you find out about this meeting?

[View the Mentimeter results.](#)

Question and Answer Session

The questions asked during the meeting are listed below. All of the questions were answered live, with some questions also receiving written feedback. The questions and answers are also posted on the website, along with the meeting recording.

1. Will there be any discussion regarding having better use of existing infrastructure (ex. Use of rapid transit in urban centers over continuing sprawl)?
2. Will this exacerbate a disparity in wealth and prosperity across the region by creating levels of connection across the region?
3. How will we establish priorities of technologies and implementations?
4. What is your plan to make sure that low-income communities have access to these technologies?
5. If it is true that fewer and fewer people are using public transit, is this likely to play out in the advanced technology arena, as well?
6. How has the area of big data or has big data changed the way planners think about the strategies of implementing these technologies?
7. How can the technology prevent and reverse economic stratification by encouraging job site centralization (i.e., central business district) rather than job site diversification?
8. Is there an opportunity to address "culture" with respect to transportation to help us all adopt and adapt more easily?

VII. Focus Groups

To supplement the information gleaned from the public survey, the Engagement Team is using focus groups as a way to gain a deeper insight into the public's perspective on current and emerging transportation technologies. Most of the planning for focus groups was completed in Engagement Phase 1. A brief overview of the focus group project plan is included below:

The focus groups will be used to gain insight into the public's:

1. Interests, needs, and challenges as it relates to current technology
2. Preferences, behavior trends, and perceptions as it relates to emerging and new technologies

Specific areas of interest, which are aligned with the survey questions, include:

- Current Technology
 - What technologies does the public currently use daily?
 - How accessible and reliable are these technologies?
 - What other challenges does the public face with these technologies?
 - How does the public perceive these challenges?
- Emerging and New Technologies
 - What is the public's perspective on future technologies?
 - What future technologies are they familiar with?
 - How would these technologies make their lives easier?

The plan includes the 12-County Dallas-Fort Worth metropolitan planning areas to ensure representation from the entire DFW region. This approach incorporates unique differences of the counties including transportation system operations and jurisdictions, and traditional characteristics (age, ethnicity, gender, etc.).

Focus Group Phase I - Design and Preparation (September - October 2021)

The first phase of the focus group included:

- Confirming goals and objectives
- Creating a logistics plan
- Developing/modifying focus group questions
- Creating a moderator's guide
- Developing a screener
- Recruiting focus group participants
- Scheduling focus group locations
- Preparing focus group materials

Focus Group Phase II - Focus Group Execution (October - November 2021)

With all of the design and preparation complete, the Engagement Team is conducting 12 focus groups at designated sites throughout the region.

Focus Group Phase III - Analysis & Reporting (November - December 2021)

After the focus groups are complete, the team will analyze the results. The team will present the report to NCTCOG and the PAC.

VIII. Future Engagement Activities

Engagement Phase 1 Activities

As we wrap up Engagement Phase 1, the Engagement Team is conducting focus groups and reaching out to organizations and agencies that may be interested in hosting meetings-in-a-bag. The Engagement Team is also considering opportunities to get on the agendas of existing public meetings to discuss the project and even get input. These activities will continue into Engagement Phase 2.

Engagement Phase 2 Activities

For Engagement Phase 2, the Engagement Team is planning for the following engagement activities:

- Virtual Public Meeting #2
- Infographics [to present the future technology scenarios]
- Idea wall or survey [to get feedback on the technology scenarios]
- Student art contest [in which K-12 students will create artwork that illustrates how emerging transportation technologies can be used to improve the region]
- Workforce training and skills development
- Meetings-in-a-bag

In terms of outreach and marketing, the Engagement Team will aim to maximize the use of:

- Social media posts
- Email blasts
- Digital and print flyers
- Community amplifiers
- City and County governments

To supplement the other aspects of engagement in this phase, the Engagement Team is considering:

- Yard signs
- Interviews/listening sessions
- Media interviews (the Engagement Team did reach out to News Channel 8, WFAA, by sharing a story idea, but did not receive a response)
- Educational materials