



THE GALLUP MOBILITY HUB

A Local Initiative to Help Drive
the Autonomous Vehicle Industry in New Mexico

FINAL REPORT

“The Gallup Mobility Hub”
A Virtual Economic Roundtable
February 11-12, 2021



The Roundtable convened over 55 participants highlighted by private sector experts from companies operating in the autonomous vehicle (AV) and logistics sectors, such as Zayo, Daimler Trucks, Pajarito Powder, Gatik, Kalmar, Waymo, and UPS. The participants also included elected officials and other representatives of local and New Mexico government, private companies in the City of Gallup with trucking and shipping interests, and representatives from the New Mexico Departments of Transportation (NMDOT) and Economic Development (NMEDD). Attendees were invited to the Roundtable based on their expertise and interest, to build consensus toward catalyzing the development of a new industry and employment cluster in Gallup based on AV research, testing, and production.

GGEDC anticipates that promoting local AV research and testing will lead to local manufacturing of vehicles and/or their technologies, and parts.



Ritchie Huang, Executive Manager – Advanced Safety Systems & Autonomous Driving, Daimler Trucks North America presents his views from the private sector in the first panel discussion.

As conceived, the Mobility “hub” will be an industrial AV research and testing park, to be located at the Gallup Municipal Airport. The “spokes” will include state-of-the-art logistics and transloading functions within a rail-served commercial industrial park, a trucking TransPortal, and AV testing facilities in and around the airport, at other locations near Gallup, and along a dedicated “autonomous corridor” on I-40 from Gallup to Albuquerque.

During the two-day event, GGEDC presented and facilitated speakers, panelists and breakout sessions in a fast-moving, information-rich, and engaging format. The first day was geared toward educating participants on autonomous vehicles and facilitating a dialogue with representatives of private companies operating in the Mobility sector. The design for Day 1 was geared toward providing a broad overview of autonomous vehicles and technologies, of autonomous developments in the state to this point, and to helping participants understand the urban and regional planning ramifications of the mobility “ecosystem” – from the need to reliably and safely move massive amounts of data to the need for electric charging stations and possibly dedicated AV lanes on Interstate highways in New Mexico.

The virtual roundtable design provided an innovative form of facilitation with opportunities for constant feedback and engagement utilizing the Zoom chat function and dedicated spaces for participants to interact with presenters and other participants. Polls and Padlet exercises were utilized to gauge among other things participants’ comfort level in developing economic

enterprises at the airport, and their willingness to participate in a Work Group to move the initiative forward and help designate an autonomous corridor on I-40.

Moving from the broad AV overview and New Mexico focus on the first day, the second day zeroed in on Gallup, New Mexico and the coordination needed to create the Gallup Mobility Hub. Following a panel with elected State representatives and the New Mexico Economic Development Department Cabinet Secretary on how to draft and enact effective and competitive AV enabling legislation, the focus shifted to planning efforts underway to integrate AV research and testing into the City of Gallup’s Comprehensive Transportation Plan and Airport Master Plan. Presenters also introduced the concept of a “Gallup Mobility Investment District” around the Gallup Municipal Airport. The special district would facilitate investment in specialized infrastructure and facilities needed for AV research and testing.



Figure 2: The anticipated “Gallup Mobility Investment District” will concentrate Mobility assets and investments, in the vicinity of the Gallup Municipal Airport “Hub”. The complex will benefit from close proximity to I-40, the proposed Truck Transportal facility, a Foreign Trade Zone, AV testing and research facilities, and office/lab space for private AV-related companies. Mobility-related investments and activities will also be drivers to support resumption of passenger air service to the Gallup Municipal Airport. The “spokes” will include the planned truck TransPortal, automated warehouse and transload facilities at the Gallup Energy Logistics Park, and additional external testing courses and facilities for autonomous vehicles.

Day 2 provided opportunities for participants to provide critical thinking and feedback into planning the Gallup Mobility Hub. The breakout groups addressed:

1. A 24-month action plan GGEDC developed to implement the Gallup Mobility Hub. GGEDC engaged the participants to stress test and provide critical input and feedback on the plan and strengthen it with their immediate and longer-term collaboration; and
2. Considerations involved in designating the Gallup to Albuquerque section of I-40 as an autonomous vehicle research & testing corridor and planning associated infrastructure.

Over the two days, participants expressed **interests and concerns** in areas such as:

- **AV Safety**, including how to assure vehicle safety, “driver” responsibility, mitigating loss of control in autonomous vehicles, process for reporting crashes, and ensuring that autonomous vehicles are sufficiently insured;
- **Environmental impact**, both related to vehicle production and mode of propulsion (hydrogen and electric);
- **Security**, protecting vehicles and networks from malicious hacks and providing security at the airport;
- **Infrastructure requirements**, ranging from 5G broadband needs to road striping, and installing electric charging stations in the highway right of way. Eventually, autonomous vehicles will require interactive communication with traffic control systems, such as traffic lights, rail crossing signals, etc.;
- **Financing AV use of highways and related infrastructure**. Participants encouraged utilizing AV fees and public taxation.

“Parking Lot” - Themes raised by participants for additional or continued consideration:

- **AV Energy Sources & Opportunities** – Fuel types (electric and hydrogen), mix, and how they will be deployed for autonomous vehicles, where the fuels will come from, and what requirements and opportunities that will entail. Can AV energy needs help sustain our oil and gas and coal industries? (those resources can be utilized to help produce hydrogen);
- **Jobs & Automation** – Anticipated number and types of AV-related jobs to be created;
- **Wireless, Fixed communications, and IT Needs** – Broadband and IT infrastructure Gallup will need to develop in the next 5 years to support the Mobility Hub;
- **Regional & Rural Transit Impacts** – Specific AV-related impacts to freight and human (transit) movement in urban, small urban and rural contexts; planning for AV in future transportation plans; Long-term community planning needs for reduced dependence on individual vehicles;

- **Building Greater Modal Equity between Freight and Rail Transporters** – Freight benefits from public infrastructure whereas rail infrastructure costs are borne exclusively by the rail companies. Railways seek a more level playing field; and
- **Status of AV deployment in New Mexico** – Number of AVs currently driving on interstate highways in New Mexico and number of AV-related companies operating in New Mexico

KEY RECOMMENDATIONS FROM ROUNDTABLE:

- **Create Autonomous Vehicle Working Group** as a platform to continue collaboration and engagement built around the Economic Roundtable;
- **Ensure a balanced, collaborative approach to Legislative and policy development** – Do not overregulate a fledging industry. Listen to the needs of companies operating in the Mobility sector;
- **Continue to engage and educate the public**
 - Legislators
 - NMDOT Commission
 - Local and State public and elected officials
 - Business community
 - Colleges and schools
 - Host future roundtable/s on Mobility
- **Build and support STEM-related workforce development and training opportunities;**
- **Extend the “hub and spoke” concept to Grants and Milan;**
- **State and City of Gallup need to be champions of the initiative**
 - **Generate resolutions of support in local governments and the Legislature;**
 - **Demonstrate to the world that we are a community that “gets it”** and that is ready to partner with private businesses in an industry that is ramping up and massively changing continuously
- **Turn the Gallup Airport into an enterprise,** utilizing opportunities presented with acreage at and around the airport;
- **Develop infrastructure, especially broadband** - with realistic, phased economic goals;
- **Continue having a strategic approach** - Roll AV plans out in phases without losing sight of the interrelatedness of the various components;
- **Support developing a “hydrogen corridor”** in New Mexico that can capture some of the activity in the oil and gas fields;
- **Integrate Autonomous and Intermodal with the building of rail innovation;**

NEXT STEPS

- **Finalize and begin implementing the Gallup Mobility Hub 24-Month Autonomous Action Plan**
- **Set up and coordinate an Autonomous Working Group** to support legislative efforts and the designation of a Gallup to Albuquerque autonomous corridor
- **Build and mobilize support for Autonomous legislation** in 2021 New Mexico Legislative Session
- **Develop Gallup Autonomous & Mobility Plan with Target Industry Analysis** for Mobility (Feb '21-Feb '22)
- **Plan and designate Gallup Mobility Investment District**
- **Develop Airport Business Plan** (Mar '21 – Mar '22)
- **Plan for infrastructure development** to support Gallup Mobility Investment District
- **Develop Gallup Transportation Master Plan** with AV considerations (May '21 – May '22)

Longer Term Steps

- **Develop opportunities for Gallup to serve as a terminus hub and depot** for an I-40 Gallup to Albuquerque autonomous testing corridor;
- **Pursue a Foreign Trade Zone (FTZ)** in Gallup; and
- **Secure and develop high-capacity uplink data transmission infrastructure**

CONCLUSION

For Gallup, the Mobility Hub presents an opening to continue the city’s 137 year tradition of creating economic development by building on transportation assets. The Gallup Mobility Hub will integrate rail, truck, and air assets into a true hub and spoke concept with the accompanying development of a new industrial cluster. Developed strategically, the hub has potential to provide long-term win-win opportunities for technical and automotive companies and their global supply chains to locate and do business in the Gallup region.

STAY INVOLVED!

The [2021 GGEDC Economic Roundtable - Mobility website](#) will remain available as a resource for engagement and for accessing materials related to Autonomous Vehicles and the Gallup Mobility Hub going forward. General information on the GGEDC and its other programs and activities is available on our main website at www.gallupedc.com.

THANK YOU!

GGEDC extends a heartfelt thank you to the people and organizations that helped make the 2021 GGEDC Economic Roundtable possible, especially:

- New Mexico Economic Development Department
- New Mexico Department of Transportation
- City of Gallup
- GLD Partners, LLC
- Kiely Consulting
- Various Senators and Representatives of the New Mexico Legislature
- The Gallup-McKinley County Chamber of Commerce

APPENDICES

1. [2021 Economic Roundtable - Mobility Agenda](#)
2. [Panelists & Speakers](#)
3. [List of Attendees](#)
4. [Gallup 24-Month Transportation & Autonomous Action Plan](#)
5. [GLD Partners – Mobility Roundtable Reflections](#)
6. [Participant Poll Responses – Day 2](#)
7. Participant Roundtable Evaluation Surveys – [Day 1](#) [Day 2](#)

