



# THE GALLUP MOBILITY HUB

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

## WHITE PAPER

Prepared for the  
2021 Economic Roundtable:  
The Gallup Mobility Hub

Hosted by  
Greater Gallup Economic Development Corporation  
February 11-12, 2021



# GALLUP, NEW MEXICO: THE EVOLUTION OF A TRANSPORTATION HUB

Born as an outpost of the Southern Transcontinental Rail Route that traversed the region in 1880, the City of Gallup and its economy have remained married to the Southwest's primary east-west transportation corridors. The arrival of the trains of the Atchison and Pacific Railroad in Gallup revolutionized transportation. As one example of the monumental impact of rail travel, the Transcontinental reduced the time to cross the country from an average of six months via covered wagon to one week by train. The trip now takes two days via I-40. On average, 20,000 vehicles pass through Gallup on I-40 each day.

"The regions that understand this new industry and welcome the testing and development of the industry will have the ability to create new tech clusters and ecosystems, which will anchor these jobs to their area for decades to come."

- *New Mexico Mobility Strategy, 2020*

140 years after its founding as a railroad town, Gallup maintains its status as a strategic transportation and rail hub. The city is well-positioned not only to benefit from autonomous mobility, the next great global transportation revolution, but to help lead that transformation. By stepping boldly and rapidly into the driver seat of autonomous research and helping to accelerate testing, development, and production of the new driverless (autonomous) vehicles, the City of Gallup has an unparalleled opportunity to develop a regional mobility industrial sector,<sup>1</sup> and to become a critical hub in the emerging autonomous vehicle "super highway".

Together with its key economic development partner the Greater Gallup Economic Development Corporation (GGEDC), the City of Gallup has been building on its legacy to reinforce its status as a transportation hub. Recent strategic developments include the Gallup Energy Logistics Park (GELP), an industrial rail site certified by the Burlington Northern Santa Fe Railroad, and the Allison Road Interchange, which soon will become Gallup's fifth I-40 interchange. Recognizing Gallup as a strategic national location, Tesla Motors engaged GGEDC in 2013 to help site its first electric vehicle charging station in Gallup. Today, the City and GGEDC are prepared to catapult Gallup into the next era of transportation. Creating the "**Gallup Mobility Hub**" entails transitioning Gallup into a major mobility research, testing and development center. This mobility/autonomous vehicle

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<sup>1</sup> The "Mobility Industry" refers to the development of autonomous vehicles – vehicles that can sense and navigate (steer, accelerate and brake) without human input. Autonomous vehicles hold the promise to effect substantial improvements in road travel, logistics and cargo handling and delivery, and to provide innumerable additional benefits to businesses of all sizes and types. They represent an important opportunity to reduce carbon emissions up to 90% while bringing significant economic benefits through reduced traffic congestion and the near elimination of traffic accidents.

industrial sector has immense potential to provide numerous well-paid jobs and to contribute to the Gallup economy for many years to come.

The Gallup Mobility Hub will be located at the Gallup Municipal Airport, where it will provide state-of-the-art facilities and infrastructure that will underpin cutting edge high-technology research, development and production of autonomous vehicles and related transportation and communications technologies and services, including automated logistics, delivery services, and fulfillment center operations.

In anticipation of this rapidly approaching development, the GGEDC will hold its 2021 Economic Roundtable – “The Gallup Mobility Hub” – as a virtual event on February 11-12, 2021. The Roundtable will assert Gallup’s ability to champion the implementation of the *New Mexico Mobility Strategy*, a report prepared for the State of New Mexico Economic Development Department in June 2020. The report highlights important competitive advantages for New Mexico generally, and Gallup specifically, to strategically enter the autonomous industry market within a short timeframe. As research, testing and development investments start rolling in, an entire new “ecosystem” of supply chains, local enterprises and new investments can start to grow – bringing good-paying high-tech jobs and new wealth to the community. Since Gallup is so well-positioned to be the economic leader in delivering this vast new high-tech industry to New Mexico, we cannot sit and wait for the autonomous vehicle wave to hit us after-the-fact.

## Purpose of the Gallup Mobility Hub White Paper and Roundtable

“Mobility Industry” and “Autonomous Vehicles” are very short phrases that speak to huge changes in the 21<sup>st</sup> century economy. These terms are replacing what we have meant by “vehicles,” “transportation,” “transit,” “automotive,” “trucking,” and most other 20<sup>th</sup> century phrases we are accustomed to using to describe how we move ourselves, goods and services from place to place.

New Mexico has a place in this industrial shift, and the frontier town of Gallup is uniquely positioned to charge to the front of the wave. “The Gallup Mobility Hub” is the focus both of this paper and the 2021 Economic Roundtable. Its purpose is to demonstrate how the Gallup Mobility Hub will be rapidly organized and developed, providing a “roadmap” to guide the creation of the hub from 2021 through 2023. The virtual Roundtable program provides an opportunity for local and state stakeholders to interact with one another and with mobility industry experts to learn more about and to weigh in on the strategic plan for the Gallup Mobility Hub and to provide their critical input and recommendations. The Roundtable will also work to build public understanding, support for, and engagement in the Mobility Industry initiative.

The GGEDC 2021 virtual Economic Roundtable will immerse participants in the future of autonomous mobility with relevant education and expertise from practitioners in the field. It will engage experts and community leaders in a dynamic dialogue process to help vet the Gallup

Mobility Hub strategy – including its components, actions steps, and time frames – in order for Gallup to hit the road running and create Gallup’s new Mobility Industry sector.

## GGEDC

# CORE MISSION & MISSION SUPPORT

Since 2012, the GGEDC has single-mindedly pursued a strategic mission *“to drive economic growth through building on local assets and strategic partnering to target, attract and recruit business and industrial employers that provide economic-base jobs in the Gallup-McKinley County area.”* The GGEDC is a 501(c)(3) nonprofit economic development organization whose executive staff are certified economic developers (CEcD). GGEDC-driven strategic economic development initiatives have spearheaded the development of rail-side industrial parks, brought manufacturing and industrial facilities to Gallup, and launched innovative, industry-led workforce training. All these efforts have increased private investments and created jobs.

GGEDC is aware of the need to diversify the Gallup economy from its reliance on fossil fuels. Recent closures in rapid succession of two of McKinley County’s top industrial employers – Tri-State’s Escalante Generating Station and Marathon Petroleum’s Gallup Refinery – caused the loss of over 300 well-paid jobs. Deep losses in jobs and property taxes underscore the urgent need for local and State leaders to pivot to development of a new economic base rooted in new technologies. The Gallup Mobility Hub initiative offers an excellent opportunity to move toward realizing that goal. However, to do so we must move expeditiously to take advantage of a very narrow window of opportunity.

## Gallup & GGEDC

### Record of Transportation-Related Economic Development

GGEDC has substantial experience and involvement in successfully promoting and developing various transportation-related strategic economic development initiatives that will enhance and benefit from the mobility sector. These include:

- **Developing the Gallup Energy Logistics Park (GELP)** – GGEDC partnered with Gallup Land Partners to master plan and target investments into the Gallup Energy Logistics Park (GELP), a 2,500-acre rail-served industrial park, which in 2017 received Certified Site designation from the BNSF Railway
- **Four-Laning U.S. Highway 491 to Colorado** – GGEDC effectively advocated to fund and implement making the entirety of U.S. 491 a four-lane highway. The State of New Mexico invested \$79 million into the project to increase the highway’s commercial capacity and value

- **Building Carbon Coal Road** – GGEDC led a coalition of local partners to obtain funding commitments from the State of New Mexico to design and build Carbon Coal Road, a 5.1 mile road connecting GELP with US Highway 491. The State allocated \$23 million to the project
- **Developing a TransPortal Truck Super Center in Gallup** – GGEDC is working to develop a state-of-the-art “TransPortal” truck stop, with hotel, retail and entertainment facilities, logistics facilities, and all amenities interstate truckers require. Gallup is well suited to take advantage of the 11-hour rule which establishes the maximum number of hours a trucker can drive within a 14-hour time period before being required to take a hard break
- **U.S. Department of Commerce Economic Development Administration (EDA) Support** – The Economic Development Administration (EDA) in the U.S. Department of Commerce recently awarded \$600,000 to the City of Gallup through the CARES Act to underwrite the preparation of the Gallup Airport Master Plan and the Gallup Autonomous Mobility Plan
- **\$5 million Local Economic Development Act (LEDA) Grant** – GGEDC helped McKinley Paper to obtain a \$5M LEDA grant to continue its operations in McKinley County.
- **Attending leading industrial tradeshow featuring autonomous vehicles** – Since 2014, GGEDC staff members have attended the most important industrial annual and semi-annual trade shows which include heavy components of mobility and autonomous development:
  - Modex, the largest trade show for businesses to develop and refine their supply chains. Modex also showcases cutting-edge technologies and equipment
  - International Manufacturing Trade Show (IMTS), the largest manufacturing technology trade show in North America, features industrial machinery and advancement in technologies including welding, lubrication, and materials engineering
  - SelectUSA, a U.S. Department of Commerce’s International Trade Administration summit that is the largest trade show for foreign direct investment (FDI) into the United States

## GGEDC Economic Roundtables

GGEDC’s Economic Roundtables – nine of them since 2014 – have been an effective means of bringing together local leaders, State administrators and subject-matter experts to explore the many factors, trends and priorities in economic development as they impact the Greater Gallup community. The Roundtables have helped to expand the community’s knowledge base around core economic development principles and policies, as well as needs and strategies in specific sectors – such as energy, logistics, tourism, downtown development, retail, and workforce. The

Roundtables have also elevated Gallup’s presence and profile in the statewide economic development arena.

The GGEDC Economic Roundtables have had a direct impact on local economic development initiatives, for example:

- **Workforce Development** – Two Roundtables helped lay the foundation for design and creation of GGEDC’s own employer-led, nationally certified industrial workforce program
- **Retail** – Last year’s Roundtable demonstrated the opportunity and need for Gallup to claim a much larger share of the available retail pie each year
- **Industrial Recruitment** – A Recruitment Roundtable featured nationally known site selectors, who helped Gallup leaders understand the criteria site selectors rely upon when considering locating businesses in McKinley County

This chart details the themes and some outcomes from prior year roundtables.

## GGEDC Economic Roundtables & Associated Outcomes

Roundtable	Subject	Outcomes
<p><i><b>Gallup Retail Attraction &amp; Development</b></i></p> <p>January 2020 Santa Fe, NM</p>	<p><b>Retail</b></p>	<ul style="list-style-type: none"> <li>• Demonstrated Gallup’s trade area is much larger than commonly recognized</li> <li>• Demonstrated extensive opportunities for Gallup to expand its retail sales &amp; market</li> <li>• Provided detailed recommendations for revitalizing downtown and making businesses more welcoming</li> </ul>
<p><i><b>Bridging the Workforce Development Gap in McKinley County</b></i></p> <p>February 2019 Santa Fe, NM</p>	<p><b>Workforce</b></p>	<ul style="list-style-type: none"> <li>• Recommended how GGEDC should successfully design and implement its own comprehensive workforce development program</li> </ul>
<p><i><b>Building a Workforce Pipeline in Construction, Logistics and Manufacturing in Gallup and McKinley County</b></i></p> <p>January 2018 Santa Fe, NM</p>	<p><b>Workforce</b></p>	<ul style="list-style-type: none"> <li>• Action plan for the community of Gallup to improve opportunities it offered for workforce training and development</li> </ul>

<p><b>Workforce &amp; Housing</b></p> <p>May 2017 Gallup, NM</p>	<p><b>Workforce / Housing</b></p>	<ul style="list-style-type: none"> <li>• Sparked community to advance housing opportunities and to prepare the local workforce for a growing economy</li> <li>• Recommended establishing a certified workforce training program</li> </ul>
<p><b>Site Selectors Forum</b></p> <p>February 2017 Santa Fe, NM</p>	<p><b>Business Recruitment &amp; Site Selection</b></p>	<ul style="list-style-type: none"> <li>• Demonstrated data and approach local government should consider for “selling” Gallup to companies potentially interested in relocating to the area.</li> </ul>
<p><b>True Cost of Debt</b></p> <p>January 2016 Santa Fe, NM</p>	<p><b>Analysis of “Hold Harmless” Rule</b></p>	<ul style="list-style-type: none"> <li>• Examined the impacts to economic development from proposed New Mexico state tax increases related to phasing out the “Hold Harmless” Rule.</li> </ul>

# GGEDC

## The 2021 Economic Roundtable on Mobility

Spring-boarding off its considerable background and success in promoting and developing transportation to effect economic development in McKinley County, GGEDC is now stepping forward to champion the New Mexico Mobility initiative, as delineated in the *New Mexico Mobility Strategy*, and will play a lead role in implementing the strategy. The 2021 Economic Roundtable will serve to illuminate the knowledge, roles, and expectations that a successful launch of the Gallup Mobility Hub will require.


### Objectives

The objectives of the 2021 *Economic Roundtable* are to:

- Launch an initiative to create the Gallup Mobility Hub in coordination with the *New Mexico Mobility Strategy*
- Build local and state support and partnership in establishing the Gallup Mobility Hub, and
- Generate momentum in establishing the Gallup to Albuquerque section of I-40 as a premier Mobility Research and Testing Corridor in New Mexico

## Building the Gallup Mobility Hub

The concept of developing Gallup as a mobility hub for autonomous vehicle research, testing and development originated in a State of New Mexico initiative begun in 2017, when New Mexico Department of Transportation (NMDOT) staff noted that autonomous vehicles were already being developed and utilized to varying degrees in other states. Those states were drafting enabling legislation to govern the use of autonomous vehicles, but New Mexico had no such legislation in place. Recognizing that development and use of autonomous vehicles was “expected to grow rapidly”, the New Mexico Legislature passed Senate Joint Memorial 3 (SJM3) in 2018 calling for the creation of an Autonomous Vehicle Committee to:



“Those communities that can provide the necessary infrastructure for autonomous research, testing and development will be positioned to capitalize on this extensive new manufacturing sector. These factors include having clear access and connection to skilled labor and advanced centers for research, testing, and development.”

- *New Mexico Mobility Strategy, 2020*

- Review current and developing autonomous vehicle technology, operations, and regulations
- Review existing state policy and statutes relevant to autonomous vehicle operation
- Solicit input from a wide range of public and private stakeholders, and
- Report its findings and recommendations to the Legislature regarding changes to statutes and administrative policies needed to allow the sale of autonomous vehicles and their safe operation on New Mexico roads

The Autonomous Vehicle Committee (AVC) was formed later in 2018, with participants from seven New Mexico state agencies: the New Mexico Departments of Transportation; Tax and Revenue/Motor Vehicle Division; Public Safety/State Police; Economic Development; Office of the Superintendent of Insurance; Public Regulatory Commission; and Information Technology. GGEDC had a seat at the table, with its Executive Director Patty Lundstrom also serving on the committee.

At the end of 2018, the AVC presented its final report with various regulatory recommendations, which included a call for adopting the established national standard for automated driving systems (ADS) and highly autonomous vehicles (HAV) and specific definitions for terms related to driving automation systems for on-road motor vehicles. The AVC also recommended establishing the means by which the State government would be made aware of all ADS/HAV testing and operations occurring in New Mexico. A full list of the AVC’s recommendations is in Appendix 1.



In 2019, Senate Bill 332 sought to legislate specific legal definitions and rules related to autonomous vehicles based on the AVC's recommendations. However, the bill died in committee and to date, no autonomous vehicle enabling legislation has been enacted.

In 2020, the New Mexico State Economic Development Department commissioned GLD Partners, LLC to craft a Mobility Strategy for New Mexico. The strategy was based on various factors, including proximity to other states and Mexico, climate, and the presence of a highly qualified high-tech workforce in the state. It recommended that a "laboratory" be established in New Mexico to test and promote the development of autonomous vehicles and recognized Gallup as a highly suitable location for conducting research, testing, and developing autonomous vehicles.<sup>2</sup>

Building on these preliminary efforts, the *2021 Economic Roundtable* will address critical areas key to developing a successful mobility industry hub in Gallup, such as the need to:

- Draft and enact enabling legislation
- Demonstrate the economic development case for the Gallup mobility hub
- Target and recruit the autonomous researchers, companies, and technologies that will form the nucleus of the hub, and
- Conduct long- and short-term planning at the State and local government level to establish the Gallup mobility hub on the best and most sustainable footing.

## Legislative Requirements

The *New Mexico Mobility Strategy* recognizes that to move to Square One of the mobility initiative, New Mexico needs to adopt not only enabling legislation to allow and promote autonomous vehicle use and development; but it needs to take special care to make the regulations business friendly. Businesses seek to test their concepts and vehicles in states with minimally intrusive and less stringent regulations. The report provided a more detailed listing of regulations the state should adopt. It also recommended that the AVC be reinstated through Executive action to draft and adopt rules and regulations for testing and developing automated vehicle technologies on public roads in New Mexico. The *New Mexico Mobility Strategy* recommendations also are included in Appendix 1. Addressing appropriate regulatory and government roles will comprise one breakout session of the Roundtable.

## The Mobility Strategy

The *New Mexico Mobility Strategy* observed that the auto industry is undergoing the most significant transformation in its history as it makes a largescale shift to utilizing a complex

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<sup>2</sup> Link: [GLD Partners, New Mexico Mobility Strategy](#), June 2020.

technology platform. The rapid evolution of the new Mobility Sector focused on Autonomous Vehicle development has presaged a phenomenal amount of high intensity product development that is creating a new paradigm for the end-to-end supply chain in the sector. The enormous emphasis and reliance on technology in research and product development has created opportunities for places outside of the traditional automotive production food chain to support Mobility Sector needs related to testing and proofing vehicle technologies and capacities.

A key assumption of the Strategy is that companies “will likely collocate research and development and some production near to each other and in places that produce a valuable research product.” The report proposed a statewide, State-supported strategy to position New Mexico to enter the technology/mobility market within the next two to five years and to leverage and take advantage of the unique assets that can make the State and its partners competitive.

*The New Mexico Mobility Strategy* recommends developing Gallup as a mobility hub based on factors including its:

- Access to “a modest public road system in a small-sized rural urban/regional road system”
- Direct access to the I-40 transcontinental highway with connectivity to Arizona and Texas for long-range testing purposes
- Ability to serve as a terminus depot for an I-40 Albuquerque to Gallup testing corridor;
- Secure and high-capacity uplink data transmission infrastructure
- Ability to test and product-proof cargo mobility at the Gallup Energy Logistics Park, and
- Potential to serve as an inland port for transmodal shipping, distribution, warehousing, and logistics.

While a number of communities throughout the United States already are involved in researching and developing autonomous vehicles, *The New Mexico Mobility Strategy* observed specific niches, especially in the areas of autonomous testing and technology development, that New Mexico is uniquely situated to address. The report notes that to date, no state or entity has contemplated how to address the end-to-end requirements of the autonomous vehicle supply chain.

By bringing together public, private, non-profit, tribal, and academic leaders with the common goal of promoting economic development around the emerging mobility industrial sector in Gallup and New Mexico, the Economic Roundtable on Mobility makes it possible to “stress test” and begin implementing clear strategies to help Gallup rapidly embrace, engage and transition to a new industry sector that is global and has an unprecedented scope. Networking with regional leaders, public policy makers, mobility experts, and technological innovators that the virtual roundtable will facilitate also will help to propel and drive the Gallup Mobility Hub into existence.

## Autonomous Trucking and the Gallup Truck Mobility Center

Autonomous trucks, with their promise of increased safety, improved productivity, and lower cost have become the odds-on favorite as the first significant market for large-scale adoption of self-driving technology. These trucks are best suited to long-distance highway driving, while it is expected that humans will be needed to navigate freight carriers on local streets and handle non-driving tasks for some years to come. Many industry experts and technology developers expect that self-driving trucks will soon be deployed on the open highway, but that it will take far longer (perhaps several decades) before driverless trucks will be able to routinely navigate local streets packed with cars, pedestrians, cyclists, road work, and other unexpected challenges. Additionally, humans also will be needed to handle the many non-driving tasks that drivers currently perform, such as coupling tractors and trailers, fueling, inspections, paperwork, communicating with customers, loading and unloading, etc.

The most likely scenario for widespread truck autonomy adoption involves local human drivers bringing trailers from factories or warehouses to a truck mobility center (TMC) located on the outskirts of metropolitan regions near a major highway exit. Here, they will swap the trailers over to autonomous tractors for long stretches of open highway driving between major supply chain points. At the other end, the process will happen in reverse: a human driver will pick up the trailer at a TMC and take it to the final destination.

The TMC will have an operational element for autonomous truck and cargo throughput and be an anchor for adjoining or adjacent cross-dock, specialty warehouse and manufacturing investment. The function of the Gallup TMC could be a core product for Northwest New Mexico, supporting GGEDC's vision to develop inland port and modern truck support infrastructure. This could also support and expand on the ongoing plan for developing a TransPortal Truck Super Center in Gallup.

## Technology Drives the Development

The *New Mexico Mobility Strategy* emphasized that “Those communities that can provide the necessary infrastructure for autonomous research, testing and development will be positioned to capitalize on this extensive new manufacturing sector. These factors include having clear access and connection to skilled labor and advanced centers for research, testing, and development.”

Because technology is so critical to the development of autonomous vehicles, Silicon Valley is central to the development of the mobility sector. With its unparalleled research and labor assets, the San Francisco Bay region has become the global capital of the automotive mobility industry, according to the *New Mexico Mobility Strategy*. While Detroit is expected to continue playing a significant role (especially in terms of driving mass production in the General Motors and Ford plants), development of new production centers and associated supply chains are expected much closer in proximity to Silicon Valley. Located within an 11-hour drive of the Ports of Los Angeles and Long Beach, New Mexico and Gallup are well-positioned to benefit from Mexican and Asian components that will be integral to the autonomous vehicle supply chain.

## Targeting & Recruiting Autonomous Manufacturers

As such, the Economic Roundtable also will address how to target, recruit, and support autonomous vehicle manufacturers to help them meet their product testing and product development requirements in Gallup. The aim is to understand which sectors and companies to target and recruit. Gallup and the GGEDC will seek high quality firms and investors to support development of vehicle manufacturing, draw technology suppliers for autonomous development and propulsion, and to build out connected vehicles technologies. Businesses that manufacture components and sensors, whole-product manufacturers, and business model product delivery agents also will be targeted to deploy valuable research products in Gallup and New Mexico.

## Conclusion

The Economic Roundtable – The Gallup Mobility Hub is a call to action. Now is the time to roll up our sleeves, sharpen our pencils, and implement GGEDC’s largest plan yet. Creating the Gallup Mobility Hub will establish Gallup – and by extension, New Mexico - as a critical cog in the design, testing, and development of manufactured vehicles. Developed right, the hub will provide long-term win-win opportunities for technical and automotive companies and their global supply chains to locate in the Gallup region.

The rapidly emerging Mobility industry sector presents unique opportunities for Gallup and New Mexico. In order to successfully engage the opportunities, the state and Gallup need to advance a mobility strategy in short order that addresses several key challenges, including the need for:

1. The NM State Legislature to draft and enact enabling legislation that will effectively allow licensing, permitting and insuring autonomous vehicles and that will govern their safe operation on New Mexico Roads
2. The State to designate an Autonomous Corridor along I-40 between Albuquerque and Gallup, and
3. Planning for suitable infrastructure as required with public engagement and buy in to meet the research, development and testing needs for Autonomous Vehicles.

Building on an optimal geographical location and well established transportation assets, including ready access to I-40, budding logistics and transloading functions within a rail-served commercial industrial park, a trucking TransPortal in development, and a planned industrial/AV research and testing park at the Gallup Airport, Gallup is a strategic and advantageous location for an autonomous vehicle testing and development hub. Situated within a 2-hour drive of Albuquerque – along the proposed New Mexico Autonomous Corridor – and adjacent to Arizona also allows for multistate testing to be conducted within the same day. Gallup also benefits from the committed and highly effective engagement of GGEDC and its long-term focus on supporting and developing industries in the transportation, logistics, manufacturing, and communications sectors. Through

its own Greater Gallup Industrial Workforce Program, GGEDC also provides the opportunity to train the area workforce for specific jobs within the mobility sector.

The mobility industry is presenting a game-changing opportunity for Gallup and the State of New Mexico. All of GGEDC's hard work and planning to date have culminated in this critical moment of unprecedented opportunity. The 2021 Economic Roundtable offers a unique opportunity, especially for participants with mobility-related expertise and for community leaders to "stress test" the Gallup Mobility Hub components, actions steps, and timeframes so that Gallup can hit the road running with the best possible roadmap and action plan to establish a state-of-the-art Mobility industrial sector. The hub can deliver abundant high-end jobs and opportunities to Gallup and New Mexico, but only if we step on the gas ... or ... flip the switch.

Now ... with a call for your committed participation and support, GGEDC says, "Gentlemen, start your engine-less cars!"

# Appendix 1

## Senate Joint Memorial 3 (SJM3) & New Mexico Mobility Strategy Recommendations

### Autonomous Vehicle Committee (AVC) Regulatory Recommendations – from SJM3:

- Consider adopting the established national standard for automated driving systems (ADS) and highly autonomous vehicle (HAV) specific definitions established by SAE J3016 – Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles and include them in NM ST §66-1.4.21, Additional definitions.
- Establish a mechanism by which the state is made aware of any ADS/HAV testing and/or operations occurring in New Mexico. The registration process currently in place at the Dealers Licensing Bureau of the Motor Vehicle Division can be amended to accommodate this.
- That the above mechanism be consistently applied throughout the state without the potential of conflicts from restrictions applied by local governments.
- Based on the current trend of other states’ legislative actions be prepared for lobbying to allow for provisional CVO platooning.
- Have the AV Committee established by Senate Joint Memorial 3 remain in place to closely monitor the autonomous vehicle developments occurring elsewhere.
- Continue the dialogue with various public and private transportation stakeholders and subject matter experts regarding autonomous vehicle use on public roadways.
- Have the AV Committee prepare an annual report on the testing and operations of autonomous vehicles occurring in New Mexico over the previous year.

### The New Mexico Mobility Strategy - Specific Recommendations:

- Through Executive action, reengage the Autonomous Vehicle Committee that was established through SJM3 to adopt rules and regulations for the testing and development of automated vehicle technologies on public roads within the State.
- Enable the New Mexico Motor Vehicles Division to administer the program.
- Recommend that regulations should include:
  - A. An application process for permission to test on public roads
  - B. Identification of each vehicle to be used for testing, with VIN or serial number, vehicle type, and other unique identifiers such as the year, make, and model
  - C. Identification of each test operator, their driver’s license number, and the jurisdiction in which the operator is licensed
  - D. Agreement that test operators are to be responsible for following all traffic rules of the road, and responsibility of all traffic violations in the HAVs being tested

on roadways open to public travel, are that of the permit holder

- E. Self-certification that AV safety training has been provided to the employees, contractors, or other persons designated by the manufacturer or other entity as operators of the test vehicles
- F. Self-certification that each vehicle meets all applicable Federal Motor Vehicle Safety Standards or equivalent; or is the subject to an exemption from such standards by National Highway Traffic Safety Administration (NHTSA)
- G. Self-certification of a reasonable measure of previous testing of the technology in the test vehicles under controlled conditions that simulate the real-world conditions (various weather, types of roads, times of the day and night, etc.) to which the applicant intends to subject the vehicle on public roadways, prior to testing on roadways open to public travel
- H. Assurances from the manufacturer or entity of the safety and compliance plan for testing vehicles on roadways open to public travel, to include a copy of the Safety Assessment Letter (SAL) submitted to National Highway Traffic Safety Administration (NHTSA) for the vehicle(s) being tested
- I. Proposed test location(s) (areas or corridors)
  - All testing vehicles must carry the standard New Mexico motor vehicle insurance. The manufacturer or other entity permitted to test is the liable party for any of their vehicles and drivers / operators of their vehicles
  - Proof of an umbrella liability insurance policy for no less than \$5M per occurrence for damages from bodily injury, death, or property damage. This would not require \$5M to be paid to obtain and maintain the insurance, pay out would only occur in the case of an applicable incident. The experimental nature of AV testing and deployment at this stage helps justify a higher umbrella liability insurance requirement. The amount can be changed later when AVs mature
  - Plan for accident notification to the New Mexico Department of Public Safety
  - Preempt any local regulation of the AV industry to prevent unnecessary roadblocks to deployment of AVs
  - Provide guidance, information, and training to prepare the transportation workforce and the general public for the advent of autonomous vehicles