

**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON GROWTH AND INFRASTRUCTURE**

**Eighty-First Session
April 8, 2021**

The Committee on Growth and Infrastructure was called to order by Chair Daniele Monroe-Moreno at 1:28 p.m. on Thursday, April 8, 2021, Online. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/App/NELIS/REL/81st2021.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Daniele Monroe-Moreno, Chair
Assemblyman Howard Watts, Vice Chair
Assemblywoman Tracy Brown-May
Assemblyman John Ellison
Assemblyman Glen Leavitt
Assemblyman C.H. Miller
Assemblywoman Sarah Peters
Assemblyman Tom Roberts
Assemblywoman Shondra Summers-Armstrong
Assemblyman Jim Wheeler
Assemblyman Steve Yeager

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

Assemblywoman Bea Duran, Assembly District No. 11

STAFF MEMBERS PRESENT:

Katie Siemon, Committee Policy Analyst
Jessica Dummer, Committee Counsel
Devon Kajatt, Committee Manager
Joan Waldock, Committee Secretary
Trinity Thom, Committee Assistant



OTHERS PRESENT:

Alexis Motarex, Manager, Government Affairs, Associated General Contractors, Nevada Chapter
Angela Castro, Senior Director, Government Affairs, Media Relations and Marketing, Regional Transportation Commission of Southern Nevada
Dylan Keith, Policy Analyst, Vegas Chamber
Misty Grimmer, representing Nevada Resort Association; and Cox Communications
Amanda Brazeau, American Council of Engineering Companies, Nevada Chapter
Sondra Rosenberg, P.T.P., Assistant Director, Planning, Department of Transportation
Sean Sever, Administrator, Division of Management Services and Programs, Department of Motor Vehicles
Michael Alonso, representing Turo, Inc.
Ethan Wilson, Manager, Government Relations, Turo, Inc.
Alisa Nave-Worth, representing Enterprise Holdings; and New Fuels Alliance
Joseph (J. D.) Decker, Administrator, Division of Compliance Enforcement, Department of Motor Vehicles
Kyle Davis, representing Fluid Truck
Joanna Jacob, Government Affairs Manager, Clark County
Matthew Sharp, representing Nevada Justice Association
Debrea Terwilliger, Senior Staff Counsel, Regulatory Operations, Public Utilities Commission of Nevada
David Dazlich, Director, Government Affairs, Vegas Chamber
Brian Mitchell, Director, Office of Science, Innovation and Technology, Office of the Governor
Jared Luke, Director, Government Affairs, City of North Las Vegas
Brooke Coleman, Executive Director, Advanced Biofuels Business Council
Cadence Matijevich, Administrator, Division of Consumer Equitability, State Department of Agriculture
Greg Lovato, Administrator, Division of Environmental Protection, State Department of Conservation and Natural Resources
Piper Overstreet, representing Nuro, Inc.
Matthew Lipka, Federal Public Policy Lead, Nuro, Inc.
James Humm, Director, Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor
Christopher Anderson, representing Zoox

Chair Monroe-Moreno:

[Roll was taken. Committee rules and protocol were reviewed.] Today, we hope to hear the following measures, presented in this order: Assembly Bill 413, Assembly Bill 429, Assembly Bill 377, and Assembly Bill 388. We must recess today because everyone on our Committee has a 4 p.m. meeting to attend. We will reconvene at the call of the Chair. It is my hope that we will reconvene by 7 p.m. At that time, we will hear Assembly Bill 411 and Assembly Bill 412. Tomorrow [April 9, 2021], although it is not our regular meeting day,

we will meet at the call of the Chair. At that time, we will hear Assembly Bill 223 and Assembly Bill 444. Immediately following those hearings, we will hold a work session on a number of measures.

As we did at our Tuesday meeting to accommodate the most testimony possible for each measure, we will limit the comments and testimony for support, opposition, and neutral to 15 minutes each. All callers will be limited to two minutes but are encouraged to submit their testimony in writing to be included in the record and uploaded to the Nevada Electronic Legislative Information System. We will go to our first bill.

[Assemblyman Watts assumed the Chair.]

Vice Chair Watts:

I will now open the hearing on Assembly Bill 413.

Assembly Bill 413: Requires the Department of Transportation to establish an Advisory Working Group to Study Certain Issues Related to Transportation during the 2021-2022 interim. (BDR S-458)

Assemblywoman Daniele Monroe-Moreno, Assembly District No. 1:

I am here to present Assembly Bill 413 which requires the Department of Transportation (NDOT) to establish the Advisory Working Group to Study Certain Issues Related to Transportation to study the sustainability and equitability of funding solutions for the state's transportation system. Last interim, I had the honor of serving as chair of the Legislative Committee on Energy. Senate Concurrent Resolution 3 of the 80th Session directed the committee to consider alternative solutions for the transportation system funding, the benefits of using electric vehicles, and the cost of transportation-related pollution—including greenhouse gas emissions.

Throughout the interim, I worked with a group of stakeholders representing local and state transportation agencies, labor organizations, clean energy, environmental agencies and organizations, the Nevada Trucking Association, and many other interested parties. We began identifying goals and outcomes for a fiscally and environmentally sustainable transportation system. During our discussions it became apparent that in addition to maintaining our existing transportation infrastructure, we need to fund transit, bike, and walking and use smarter land-use planning as well as consider how to best use clean energy and reduce greenhouse gas emissions.

We know the traditional funding model is not keeping up with the cost of maintaining our infrastructure. New vehicle technologies are affecting our gas tax revenue and the sustainability of our State Highway Fund. During the interim we reviewed alternate funding models that included how electric vehicle owners can equitably apply and pay for our roads. However, the stakeholders noted that more time should be given to analyzing these models and considering the benefits of electric vehicles and the cost of transportation-related pollution before any recommendations can be made to the Legislature.

During the interim, the Energy Committee also received information about the state's transportation system, current and future funding needs, and transportation-related pollution as well as recommendations to fix Nevada's gas tax. The Department of Transportation, the State Department of Conservation and Natural Resources, the Department of Motor Vehicles, and the Office of Energy within the Office of the Governor noted it would be prudent to focus their collective efforts on bringing together and educating individuals, communities, and organizations from across the state on these issues to ensure they are understood. In addition, the options and solutions that are pursued by the state should be properly analyzed, vetted, and shared with the broader community. Based on this recommendation, the Energy Committee voted unanimously to require NDOT to establish a working group beginning in July 2021 and ending in December 2022.

The bill summary for [A.B. 413](#) sets forth the membership of the Advisory Working Group. It includes representatives of the metropolitan planning organizations; environmental organizations and agencies; clean energy; local, county, tribal, state, and federal agencies with expertise in transportation and clean energy; chairs of the Senate and Assembly Standing Committees on Growth and Infrastructure; labor organizations; and other interested persons and entities. In addition, the Advisory Working Group must have a representative who is an expert in tax policy. A Chair and Vice Chair will be elected by the Advisory Working Group at its first meeting. The Advisory Working Group must study the needs of all users of different modes of transportation including bicyclists, pedestrians, motor vehicle drivers, and public transit users. In addition, the group must consider social and user transportation equity, the reduction of greenhouse gas emissions, the sustainability of the State Highway Fund, and the role of land-use and smart-growth strategies in reducing transportation emissions and improving system efficiencies and equity. The Advisory Working Group must collect, maintain, and monitor data related to and develop preliminary plans for sustainable transportation funding. The Department of Transportation must submit a report to the Director of the Legislative Counsel Bureau for transmittal to the 2023 Legislature on or before December 31, 2022, with details of the Advisory Working Group's activities, findings, conclusions, and recommendations.

There are two proposed amendments. I am proposing to amend and delete section 1, subsections 7 and 8 of the bill, which require the compensation of the legislative members of the Advisory Working Group and travel expenses and per diem allowances for all members of the Advisory Working Group. At a time when our state is faced with funding our transportation system, I believe the members of the Advisory Working Group will be willing to serve without compensation. There was another amendment proposed earlier today by the Vegas Chamber asking to add a person from the business community and the resort community to the Advisory Working Group [[Exhibit C](#)]. I view this as a friendly amendment.

In conclusion, as a state we must make a bold approach to our long-term issues associated with funding our transportation system. The time to begin is now.

Vice Chair Watts:

Are there questions from members?

Assemblywoman Peters:

I was curious about section 1, subsections 7 and 8, related to salaries, per diem, and compensation. From my experience working in our rural communities and sometimes in our urban communities as well, I know that having people come to the table from a variety of backgrounds—not just professional backgrounds—can be limited by having to miss a day of work or not having access to transportation to get to where meetings are held. Would this Advisory Working Group be open to having digital meetings? Would that be considered outside of recovery from the pandemic as we move forward to help address that potential need from some stakeholders who may be included in this Advisory Working Group?

Assemblywoman Monroe-Moreno:

Yes. Our stakeholder meetings started out in person. We held seven or eight stakeholder meetings discussing the subject matter. We started with meetings in person with groups in the north and the south. We used Zoom long before we had to. Once the pandemic hit, all our meetings were conducted by Zoom. Because of the adjustment of removing the pay, I feel that continuing in this platform is necessary for this group to do the work they need to get done to make sure that we properly fund our highways.

Vice Chair Watts:

Do we have any other questions from members? [There were none.] We will move on to testimony in support.

Alexis Motarex, Manager, Government Affairs, Associated General Contractors, Nevada Chapter:

We represent the commercial construction industry in northern Nevada. We are here in support of A.B. 413. The association has been an advocate for equitable and sustainable highway funding for years. We participated in the S.C.R. 3 of the 80th Session committee during the interim. Although we would like to have seen something come of the committee other than another study, we would rather continue the conversation than risk the issue being ignored further. We respectfully ask that a representative of the contracting community be listed as one of the NDOT appointees. Our association has been a long-time advocate for sustainable highway funding and can bring that historical knowledge and an unbiased perspective on construction.

Angela Castro, Senior Director, Government Affairs, Media Relations and Marketing, Regional Transportation Commission of Southern Nevada:

As the public transportation provider and the metropolitan planning organization for southern Nevada, the Regional Transportation Commission is in support of Assembly Bill 413, which will continue to study our state's mobility needs that include long-term funding, equity, and sustainability priorities. We look forward to participating in these discussions.

Dylan Keith, Policy Analyst, Vegas Chamber:

The Vegas Chamber is in support of A.B. 413 and would like to thank the Committee Chair for bringing this bill forward. As you heard today, this bill will allow the creation of an advisory working group. We believe the proposed list of members is a good combination of experts and stakeholders. We also believe this working group will be a valuable resource as we continue to work together on transportation needs in our community.

The Chamber has a long history of supporting a multimodal and intermodal transportation system that promotes regional connectivity, increases productivity, and reduces congestion. We also have strong working relationships with the Department of Transportation and the Regional Transportation Commission and have collaborated over the years supporting a strong and reliable transportation system. From our perspective, this means economic stability, job creation, and business growth for southern Nevada.

Misty Grimmer, representing Nevada Resort Association:

We are in support of A.B. 413. I will not repeat what other callers have said about the importance of transportation, but we are in support of the bill. We appreciate the Chair's accepting the amendment proposed by the Vegas Chamber that would include the Nevada Resort Association and the Chamber in the study group.

Amanda Brazeau, American Council of Engineering Companies, Nevada Chapter:

We support Assembly Bill 413 because of the need to modernize how we fund our highways as increasing mileage standards and advancing technology have continued to eat away at our existing funding model, making it unsustainable for the long term. We support the continuation of the study commenced after the last session in order to bring a comprehensive solution to the Legislature in 2023.

Vice Chair Watts:

We will go on to the next caller in support. [There was no one.] Is there any testimony in opposition of Assembly Bill 413? [There was none.] Is there testimony in the neutral position on the phone line? [There was none.] Is there anyone to testify as neutral from our agencies?

Sondra Rosenberg, P.T.P., Assistant Director, Planning, Department of Transportation:

We are neutral on this bill. We look forward to continuing this analysis and conversation. Obviously, we are interested in a sustainable transportation funding source. We have minor concerns in the bill as currently written. Primarily, the number of members on the committee is not specified. Also, some of the terminology is a bit broad, so we would like to provide language to address that as well as the extensive scope of this bill and the timeline. We hope it would be amenable to this Committee to move the land-use and sustainable development conversation to a future phase of this analysis. We know it is critical to this conversation. We look forward to doing the analysis, but we are concerned about the timeline given in

addressing the funding shortfall and mechanisms first, and then going on to the land-use piece. Regardless of whether that is acceptable, we look forward to working on this and whatever this bill includes. We are happy to dig in and get into this analysis and come back next session with an excellent solution for sustainable transportation funding.

Vice Chair Watts:

Does Mr. Sever wish to provide testimony?

**Sean Sever, Administrator, Division of Management Services and Programs,
Department of Motor Vehicles:**

No. Thank you.

Vice Chair Watts:

Is there anyone else who would like to provide neutral testimony? [There was no one.] Are there any closing remarks?

Assemblywoman Monroe-Moreno:

The only thing I would like to add is that we have a responsibility to work with everyone together as we come to a sustainable and equitable solution of how to fund our highways. We have heard in numerous testimonies in this Committee and others of how we are falling behind in doing what we need to do for infrastructure, especially for our highways. I encourage your support of this piece of legislation. During the interim, we had lengthy discussions with all of the stakeholders mentioned. We had up to 42 individuals at some of our virtual meetings. It is a very important topic as we move forward in the state of Nevada.

[A letter in support of A.B. 413 was submitted by the Southwest Energy Efficiency Project, [Exhibit D](#).]

Vice Chair Watts:

I will close the hearing on Assembly Bill 413.

[Assemblywoman Monroe-Moreno reassumed the Chair.]

Chair Monroe-Moreno:

We will now move to the second item on our agenda, Assembly Bill 429. The presenters for the bill will be Mr. Michael Alonso and a few others.

Assembly Bill 429: Establishes provisions governing peer-to-peer car sharing programs. (BDR 43-861)

Michael Alonso, representing Turo, Inc.:

Turo, Inc. is a peer-to-peer platform company. I want to introduce Ethan Wilson, who is with Turo. Thank you, Chair Monroe-Moreno, for bringing forward Assembly Bill 429 to create a regulatory framework for peer-to-peer car sharing in the state. As you know, we have all spent a lot of time with stakeholders on putting this framework together. Mr. Wilson

will walk the Committee through the bill. We have submitted an amendment that can be found on the Nevada Electronic Legislative Information System (NELIS) [[Exhibit E](#)]. It is intended to address drafting issues that came out of the bill.

Ethan Wilson, Manager, Government Relations, Turo, Inc.:

I am a proud Nevadan and a resident of Washoe County. I am here on behalf of Turo, an Internet-based, peer-to-peer car sharing platform. Thank you for the opportunity to appear before you today to help present Assembly Bill 429. More than just supporting A.B. 429, I am here to express our support for smart, tailored, and consumer-minded regulation of peer-to-peer car sharing. I want to take this opportunity to thank Chair Monroe-Moreno and everyone who has worked on this piece of legislation in a deliberate and collaborative process.

Turo is a peer-to-peer car sharing platform that connects car owners with those in need of transportation—neighbors, families, students, workers, travelers, anyone with the need for mobility. Before I dive into the bill, I want to stress that on the Turo platform, personal car owners, or hosts, have 100 percent pricing power over their vehicles. They earn extra income to help cover the rising cost of car ownership and student loans while allowing for more and more drivers, or guests, to forego car ownership altogether. Guests can choose from hundreds of makes, models, and price points to find the perfect car for their specific needs.

I will run through an outline of the bill at a high level. I will be working off the amendment available on NELIS [[Exhibit E](#)]. The amendment was designed to fix a couple of things and bring it back in line with language our coalition and stakeholders had initially been working off of. I will be as efficient as possible, hitting on major issues and themes within the bill. Please let me know if there are any questions you may have.

Sections 3 through 12 in the amended version [pages 5-7, [Exhibit E](#)] define the car sharing period, the start time, the termination time, and definitions that ensure there are no gaps in insurance coverage. They clearly dictate insurance coverage that is applicable during the car sharing period. Section 14 is predominantly insurance provisions [page 7], although there are many sections that deal with insurance in the bill. Section 14 establishes insurance requirements and mandates that a peer-to-peer car sharing program or company assumes the liability of a shared vehicle owner. I want to stress that all the insurance requirements as laid out in the bill meet current Nevada requirements. Section 14, subsection 4, states, "A peer-to-peer car sharing program shall ensure that, during each car sharing period, both the shared vehicle owner and the shared vehicle driver are insured under a motor vehicle liability insurance policy" meeting all requirements as set forth in *Nevada Revised Statutes* [page 8].

In the name of efficiency and brevity, I will move on from the insurance pieces, but I want to stress that the insurance framework is a product of years of dialogue and debate among stakeholders. It was officially adopted by the National Council of Insurance Legislators at their annual meeting in December 2019. Section 17 deals with records retention [page 11]. It requires peer-to-peer car sharing programs collect, retain, and provide access under certain

conditions to transaction records including the exact times, locations, and fees paid applicable to any peer-to-peer car sharing transaction. Sections 21 to 25 deal with licensure and regulation by the Department of Motor Vehicles (DMV) [pages 14-17, [Exhibit E](#)]. These sections include requirements necessary to apply for and receive a license to operate peer-to-peer car sharing programs in Nevada. Section 22 also includes grounds for refusal, suspension, and revocation of a peer-to-peer car sharing program license.

Section 26 relates to disclosures, specifically requiring a peer-to-peer car sharing program to disclose to program participants—shared vehicle owners and shared vehicle drivers—the daily rates, fees, and any insurance or protection package costs that are charged to the shared vehicle owner or the shared vehicle driver as well as provide disclosures for emergency roadside assistance phone numbers [pages 19 and 20]. Section 27 deals with driver licensure [page 20]. It states that a peer-to-peer car sharing program may not enter into a car sharing program agreement with a shared vehicle driver unless that person possesses a valid license issued by Nevada's Department of Motor Vehicles or a valid license issued by the person's home state. It also requires a peer-to-peer car sharing program maintain a record of the name and address of each shared vehicle driver, the driver's license number of each person who will operate the shared vehicle, and the date of issuance of each driver's license.

Section 30, subsection 2, pertains to airports [page 23]. It clarifies that nothing in the bill prohibits or restricts an airport's ability to set terms and conditions, including fees, of agreements entered into with peer-to-peer car sharing programs. We are currently working with airport representatives on further language adding the terminology of "the shared vehicle driver" to that provision. I want to thank the representatives from both major Nevada airports for playing an active role in developing [A.B. 429](#)'s framework. We will continue to work with those representatives to fine-tune some of this language. I am confident we will reach an agreement that works for both parties.

The framework and requirements set forth in [A.B. 429](#) provide both legal clarity and robust protection for Nevadans participating in peer-to-peer car sharing. We stress the importance of smart, tiered regulation of peer-to-peer car sharing. We want to make sure everyone—vehicle owners and drivers—feels safe and protected while sharing his or her car or while driving a shared vehicle. With passage and enactment of [A.B. 429](#), we are confident that peer-to-peer car sharing will continue to provide safe and affordable transportation options to Nevadans across the state.

We are thankful for the opportunity to provide input during this process and for the awesome group of stakeholders involved. We can ensure the safety, efficiency, and accessibility of peer-to-peer car sharing in Nevada for years to come. We at Turo view Nevada as our partner in increasing mobility options within the state and our partner in a new area of connected sharing.

Michael Alonso:

There is a companion bill to this, [Senate Bill 389](#), which is the revenue side. That bill would require that peer-to-peer car sharing platforms collect and remit the 10 percent government

services charge on the gross receipt of the sharing of revenue. There is a 2 percent charge that goes to Clark County. It is primarily used to fund the Smith Center for the Performing Arts. There is a 2 percent charge in Washoe County that funds the minor league baseball stadium. That creates parity with the rental car side that is collecting and remitting those same taxes.

Chair Monroe-Moreno:

Yes, Senator Dina Neal is carrying the companion bill on the Senate side.

Alisa Nave-Worth, representing Enterprise Holdings:

We are here today in support of Assembly Bill 429 regarding the regulatory contract for peer-to-peer car sharing as a companion to Senate Bill 389, which provides for the taxation framework for peer-to-peer car sharing. The basis of Assembly Bill 429 codifies the concepts of the model peer-to-peer car sharing legislation created by the National Council of Insurance Legislators (NCOIL). Enterprise Holdings participated in those negotiations and has participated in conversations across the nation as state after state works on this important issue. We want to thank Chair Monroe-Moreno for her leadership throughout the interim on this legislation. We also want to thank Senator Neal for her leadership on Senate Bill 389. We want to thank our partners at Turo for the many conversations we had which have culminated in an appropriate response.

In every state of the nation, at the table, and at NCOIL, Enterprise has supported the NCOIL insurance model as companion legislation to taxation legislation as Enterprise believes peer-to-peer car sharing fundamentally competes with traditional car rental providers. We believe there should be regulatory and tax parity across all stakeholders. Accordingly, the substance of Assembly Bill 429 is one-half the solution to the lack of regulation oversight on peer-to-peer car sharing platforms. When considered with Senate Bill 389, we believe this is a positive step forward for appropriate regulation and taxation here in Nevada. I want to thank Chair Monroe-Moreno, Mike Alonso, and Ethan Wilson for their professionalism throughout this process. We look forward to working together to get this bill passed.

Chair Monroe-Moreno:

Does this conclude your presentation?

Michael Alonso:

Yes, it does.

Chair Monroe-Moreno:

Members, are there any questions?

Assemblyman Leavitt:

I would like you to clarify something. In section 13, subsections 5 through 11 of the bill, insurance for the peer-to-peer car when it is rented out is covered. Would this insurance

policy be above and beyond whatever the insurance on the car is? When the person who owns the vehicle is driving it, he has to have insurance. Is this a separate insurance policy on top of that?

Ethan Wilson:

Yes, that is exactly correct. Within peer-to-peer car sharing, you could look at insurance with two different lenses. You can look at insurance through the shared vehicle owner's lens. That is to your point—the owner is not actually driving that car when it is being shared. You can also look at insurance through the shared vehicle driver lens. This is the individual who will be sharing the car during the peer-to-peer car sharing period. When these events are triggered at the beginning of the car sharing period, which is defined in this bill, we operate under the assumption the owner's car's policy is not covering. At that moment, there is no gap. This insurance policy covers that. Either the policy of the individual who is driving the car will cover it, or the policy that is provided by the peer-to-peer car sharing program will cover it. At no time is there a gap in insurance coverage.

Assemblyman Leavitt:

I will call this the "extra" insurance policy for the person who is renting the vehicle. It will depend on the driver whether he uses his own insurance policy. If he cannot use his own insurance policy, who picks up the tab for the extra insurance policy? The owner's insurance on the vehicle will not be stopped when the car is shared. Who is responsible for that insurance policy when the second peer is driving the vehicle?

Ethan Wilson:

Insurance is included in the pricing through the transaction. That insurance policy which meets all requirements in *Nevada Revised Statutes* (NRS) is at no added cost. The policy you are talking about takes the place of the owner's policy and is part of the trip fee, the cost of the transaction. It is not waivable—the policy will always be there. The individual who is driving the car can increase coverage if he chooses and increase damage coverage for that vehicle. At no point will an individual be able to waive the insurance coverage that satisfies all the requirements of NRS for which there is no extra charge. It is part of the trip fee the individual driving the car would pay as a part of that transaction.

Assemblyman Leavitt:

The insurance is essentially built into the fee for renting the car for that period of time.

Ethan Wilson:

Yes. That is correct.

Assemblyman Leavitt:

If they use their personal insurance policy, do they still pay the fee?

Ethan Wilson:

Yes. There is no delineation of the policy that covers that transaction, no matter what.

Assemblyman Wheeler:

In section 27, subsection 1, paragraph (b), subparagraph (2), of the amendment [page 20], it says the peer-to-peer car sharing program will keep a record of the name and address of each shared driver and the number of the driver's license of each shared vehicle driver and any other person who will operate the vehicle. Where are those records kept? How are they kept? To whom are they available?

Ethan Wilson:

As a platform, Turo complies with any applicable state privacy laws. Those laws would dictate when the information is available. The information is collected and maintained through the Turo platform.

Assemblyman Wheeler:

Thank you.

Assemblywoman Summers-Armstrong:

I have a question regarding licensing. In section 21 of the amendment, it identifies that a person shall hold "a valid license issued by the Department pursuant to this chapter" [page 14, [Exhibit E](#)]. My question relates to the license and what that means. Do I need to apply to the Office of the Secretary of State to become a small business and have a business license? Is this a special license that is only issued by the DMV related to peer-to-peer car sharing?

Ethan Wilson:

It is more the latter. This license is designed to be specifically for peer-to-peer car sharing through the Department of Motor Vehicles. The Department of Motor Vehicles has regulatory authority and rulemaking capacity to promulgate rules that flesh out the specific application requirements for this license.

Assemblywoman Brown-May:

I would be interested to hear from the DMV relative to what workload this will put on them. Is this a new license, or is this something they already are managing in a different way?

**Joseph (J.D.) Decker, Administrator, Division of Compliance Enforcement,
Department of Motor Vehicles:**

This establishes a new license subject to the jurisdiction of the Department. We spent the last three years working with Mr. Alonso on the requirements and the regulatory ability we need in order to regulate peer-to-peer car sharing business because an applicable license does not yet exist in law. We currently have dealer licenses and short-term lessor licenses. This business model does not fit neatly into either of those. This would establish the Department's jurisdiction and a new license type. We are prepared to execute that on behalf of the state.

Chair Monroe-Moreno:

Is there anyone else wishing to ask a question? [There was no one.] We will open the lines for callers wishing to testify in support. I will remind you that you have two minutes. We will be hearing testimony 15 minutes for support, opposition, and neutral.

Kyle Davis, representing Fluid Truck:

Fluid Truck is a truck sharing platform focused on connecting small businesses with the right size truck for their needs and to give them access to electric trucks. We are a member of the coalition that has worked on this bill. We appreciate the efforts of Chair Monroe-Moreno and everyone who has been a part of putting this legislation together. We are in support of the legislation and urge its passage.

Chair Monroe-Moreno:

May we have the next caller in support? [There was no one.] Do we have callers in the queue who wish to testify in opposition? [There were none.] Do we have any callers in the queue who wish to testify in the neutral position?

Joanna Jacob, Government Affairs Manager, Clark County:

I am testifying in neutral. As Mr. Wilson and Mr. Alonso stated, we have been participating in the discussions on this bill on behalf of Clark County Department of Aviation under which McCarran International Airport operates. It is important for the airport to regulate the safety of access to the airport grounds. We appreciate the flexibility that Mr. Alonso and Mr. Wilson have given us in the amended version and Mr. Wilson's acknowledgement that we are continuing to work on section 30 [pages 22 and 23, [Exhibit E](#)]. We think the amendment is very important to the airport and wanted to put that on the record today. We will continue to work with them as this bill moves forward. Thank you, Madam Chair, for making sure the Clark County Department of Aviation is at the table and that our concerns are heard.

Chair Monroe-Moreno:

May we have the next caller?

Matthew Sharp, representing Nevada Justice Association:

We are speaking in a neutral position. My colleague, Alison Brasier, may deal with other substantive issues. My primary issue is in relation to the insurance aspect. I want to be clear that once the owner of the vehicle rents the vehicle over the platform, his personal automobile insurance policy on that vehicle will not provide coverage. You do not get coverage under your personal auto policy for engaging in a business-type transaction. In addition, there is federal immunity that is provided to the owner of the vehicle. The point is to increase the insurance to 50/100 for the provider of the service, such as Turo. When the sponsors talk about double insurance, there is no such thing in this context.

Chair Monroe-Moreno:

Your testimony was in opposition to the bill since you were asking for changes to the bill. I will move to the next caller. [There was no one.] Do the presenters of the bill have any closing statements?

Michael Alonso:

We are having discussions with Nevada Justice Association and will continue to have those discussions on the issues Mr. Sharp raised. We have also had discussions with Alison Brasier. I would like to state something for the record. It is technical insurance stuff, so I may need help. I do not think Mr. Wilson was saying the owner's policy is covering at the same time. I think what he was talking about in response to a question was if the platform's policy and/or the driver's policy will be there all the time. We understand the issues with the owner's policy, but this is intended to make sure there is not a gap so that either the platform's policy or the driver's policy is covering at all times. I want to thank you again, Chair Monroe-Moreno. We will continue to work with Clark County and the Nevada Justice Association and get back to you. We appreciate all your efforts on this bill. I want to thank Alisa Nave-Worth. I appreciate her team and all the work they did and their professionalism in working with us.

[A letter in support of Assembly Bill 429 was submitted by Philip Mike, Private Citizen, Henderson, Nevada, [Exhibit F](#).]

Chair Monroe-Moreno:

I will close the hearing on Assembly Bill 429 and open the hearing on Assembly Bill 377.

**Assembly Bill 377: Revises provisions governing access to broadband services.
(BDR 58-208)**

Assemblywoman Bea Duran, Assembly District No. 11:

I am pleased to introduce Assembly Bill 377 for your consideration. Assembly Bill 377 helps low-income households with their monthly broadband bills. If the wage earners in those households have been furloughed or laid off, paying their Internet bill is a big problem and upgrading services may be out of the question.

The Federal Communications Commission (FCC) administers a program known as Lifeline that reduces the cost of telephone service for low-income households to ensure they have reliable access, and Nevada has its own Lifeline program that complements the FCC's. Here is how Lifeline works:

- Telecom carriers pay a quarterly assessment to the Public Utilities Commission of Nevada (PUCN) based on a percentage of their in-state revenues.
- The assessments are placed in a fund to maintain the availability of telephone service.
- The carrier gives low-income customers a reduced rate.

- The carrier is then reimbursed from the fund for the revenue they would have made otherwise.

Several federal stimulus measures have recently allowed the FCC to expand the Lifeline program to support access to broadband services. Assembly Bill 377 would do the same thing for Nevada's Lifeline program.

In 2003, the Legislature deregulated broadband service in Nevada. The Public Utilities Commission of Nevada is prohibited from imposing any requirements related to the rates and availability of broadband, although the Commission retains some authority over providers that are public utilities. In conversations following the introduction of A.B. 377, PUCN staff offered alternative language that recognizes deregulation while still carrying out the intent of the bill. I have submitted that language as an amendment, and it is posted on Nevada Electronic Legislative Information System [[Exhibit G](#)].

Joining us today is Debrea Terwilliger, Assistant General Counsel at the PUCN, who will discuss the sections of the amended bill. Before I turn things over to her, I want to highlight a few points.

In section 3 of the amendment [page 1, [Exhibit G](#)], a new definition of "broadband service" is offered, as the existing definition adopted in 2003 is obsolete. The new definition of "broadband service," for the purposes of the Lifeline program, is a two-way service capable of transmitting information at minimum speeds that the PUCN will determine annually. Section 2 of the amendment introduces a new category of telecommunication providers to be known as "Lifeline broadband service provider," and specifies in section 5 that they are not public utilities. This section is necessary because of deregulation. Finally, section 13 [page 9] of the amendment directs the PUCN to consider several things when they revise the rules for the Lifeline program. In addition to the amount of support available from the federal Universal Service Fund, the PUCN must consider both the number of persons in the household that need broadband service and the type of online activity people in the household need to do. Every family's needs are different. A household may have several school-age children and adults working remotely, or it may have one person working out of the home who needs minimum Internet connectivity to send emails and schedule appointments. For some, basic services may be sufficient while other households require faster speeds. The amendment directs the PUCN to consider these factors.

At this point I would like to ask Ms. Terwilliger to explain the various sections of the amendment, and then we are happy to take questions from the Committee. I believe there are several other PUCN staff joining this meeting to assist with questions also.

Debrea Terwilliger, Senior Staff Counsel, Regulatory Operations, Public Utilities Commission of Nevada:

I will walk through the proposed amendment section by section. Section 2 defines "Lifeline broadband service provider" [page 1, [Exhibit G](#)]. The intent of this is to ensure broadband providers can become eligible to provide Lifeline discounts to their customers and be

included in receiving Nevada Universal Service Fund (NUSF) support. Section 3 defines "broadband service." As Assemblywoman Duran mentioned, the current definition is outdated. This definition will require the PUCN to annually revisit minimum speeds for broadband. The speeds might be different for wired or wireless service. In section 4, we rename and update Nevada's universal service fund to be the fund to maintain the availability of telecommunication or broadband service. Section 5 clarifies that a Lifeline broadband service provider is not a public utility, as Assemblywoman Duran mentioned. It accomplishes a lighter-touch regulation for these types of providers, although we will require some oversight since they will be receiving funds from the NUSF.

The proposed modifications to section 6 [page 2, [Exhibit G](#)] make it clear that Lifeline broadband service providers are not subject to the mill assessment and instead pay an annual registration fee like the wireless or commercial mobile radio service (CMRS) providers do. It also requires that Lifeline broadband service providers register with the PUCN.

Section 7, subsection 5, modifies the language to conform with the new name for the NUSF [page 3]. It also requires that Lifeline broadband service providers contribute to the NUSF. Subsection 6 is a clean-up item in the sense that right now Lifeline eligibility is determined at the federal level by the Lifeline National Eligibility Verifier, which is the Universal Service Administrative Company. As such, Nevada no longer employs an administrator to determine Lifeline eligibility. Subsection 7 of that section confirms the deletion of subsection 6 regarding the national verifier and eligibility for Lifeline.

Section 8 [page 4] states that the PUCN does not regulate broadband services with some exceptions. In subsection 2, paragraph (e), the language provides a new exception to the general rule that the PUCN does not regulate broadband service. It would permit the PUCN to regulate broadband services for the purpose of ensuring the Lifeline program can be used to reduce broadband rates for eligible customers. In subsection 4 of section 8, the language deletes the prior definition of broadband service which had an outdated minimum speed threshold.

Section 9 [page 5] has changes similar to those in section 8. This section ensures the PUCN has the appropriate regulatory authority over Internet protocol-enabled service as it concerns Lifeline discounts.

Section 10 [page 6] requires the PUCN to adopt regulations for eligibility for a broadband discount from the Lifeline program. Other changes to this section ensure that the NUSF has a couple of components. In addition to providing Lifeline support, it will also provide high-cost support and ensure that the high-cost fund can only be utilized for voice services at this time. That is to ensure the rural providers that get high-cost support can maintain the support they are currently getting through the fund.

In section 11 [page 7], the changes to *Nevada Revised Statutes* (NRS) 704.68867 are meant to establish new reporting requirements that will assist the PUCN in determining the broadband speed annually. This will also help the PUCN provide additional data to the

Legislature as to the availability of broadband in Nevada and the reach of the Lifeline funding in terms of providing broadband service to eligible customers.

Section 12 [page 8, [Exhibit G](#)] begins some changes to NRS 707.440. The changes are meant to conform with the changes in NRS Chapter 704 which would permit Lifeline broadband service providers to receive funds from the NUSF. There is also a cleanup item in that we are adding CMRS to the list of providers that are eligible for funds from the Nevada Universal Service Fund.

Changes to section 13 [page 8] were mentioned by Assemblywoman Duran. The modifications to this section require the PUCN to establish a formula for providing Lifeline discounts to the NUSF that takes into account a variety of factors. One of those factors is available federal funding for any particular eligible Lifeline provider. As Assemblywoman Duran mentioned, there is a federal subsidy going on right now. It is called the Emergency Broadband Benefit. For eligible customers, that will be up to \$50 per household on nontribal lands and up to \$75 per household on tribal lands. The intent of this section is that the PUCN will take into account the federal discount that is available, as well as the number of persons in the household and how they are using their broadband service. The last provision in section 13 makes it clear that Lifeline broadband service providers are only eligible to receive funding from the NUSF for the purposes of broadband service. In other words, Lifeline broadband service providers are not eligible for any Nevada Universal Service funding to support voice or high-cost service.

That is the section-by-section walk-through of the bill. I am available to answer any questions that might come up.

Chair Monroe-Moreno:

Assemblywoman Duran, do you have anything to add before we go to questions from the Committee?

Assemblywoman Duran:

No. We wanted to make sure our low-income families can get broadband services based on the number of people in the household. We are ready for questions.

Assemblyman Leavitt:

As the Lifeline program exists, how is it currently funded?

Debrea Terwilliger:

There is a federal assessment that shows up on customers' bills for a variety of providers—telecommunications, Voice over Internet Protocol, wireless, and CMRS. For the NUSF, we do an assessment rate that sometimes gets passed on to customers. That assessment on intrastate revenues shows up on customers' bills.

Assemblyman Leavitt:

Is it federally funded?

Debrea Terwilliger:

It is mixed. The federal Lifeline program is federally funded. The Nevada Universal Service Fund is funded through the assessment on intrastate revenue on carriers who provide service in Nevada.

Assemblyman Leavitt:

Who funds it? How is it funded locally?

Debrea Terwilliger:

The carriers who currently fund the Nevada Universal Service Fund are competitive suppliers. These include AT&T; CenturyLink; small-scale providers of last resort, which are the rural providers; Rural Telecom Inc.; and Humboldt Telephone Company. The wireless carriers, such as Verizon and T-Mobile, are not currently assessed. Because we do not regulate broadband, we do not assess broadband providers, and they do not pay into the Nevada Universal Service Fund. The proposed amendment would assess any Lifeline broadband service providers receiving a discount for their customers. It would not assess all broadband providers, only those who become Lifeline broadband service providers.

Assemblyman Leavitt:

I am still a bit confused. Do the broadband service providers that fund the Lifeline program discounts opt in to this, or are they required to do it? If they decide they want to seek federal grants they are eligible for, would that potentially eliminate their burden to fund the Lifeline program locally?

Debrea Terwilliger:

I will try to answer both questions. A broadband provider would only have to contribute to the Nevada Universal Service Fund if they voluntarily became a Lifeline broadband service provider. Broadband providers generally are not required to contribute to the fund, but if they became Lifeline broadband service providers, they would have to contribute to the fund based on the amendment.

Your second question was about the FCC benefit. The way the FCC has structured its emergency broadband benefits is that the carriers that are eligible to give discounts to their customers can be designated by the states as eligible telecommunications carriers. We have designated several carriers as eligible telecommunications carriers. Or they can get the FCC's approval to provide the emergency broadband benefit and provide the discount to their customers. I was on the FCC's website earlier. I think there are about ten Nevada companies eligible to provide the \$50 emergency broadband benefit to their customers currently, and the list is growing each day.

Assemblyman Roberts:

I would assume there is a limited amount of money in the Nevada Universal Service Fund. There is a federal subsidy, and now you are changing to include other providers. What happens if the fund runs out of money? Would those getting 911 service lose it, or is the fund made up in another way?

Debrea Terwilliger:

By including Lifeline broadband service providers in the fund, if via the Commission's regulations an additional benefit for broadband service is provided to eligible customers, we would need to increase the amount of the state's intrastate assessment for purposes of the Nevada Universal Service Fund. We reset that intrastate rate each year. The administrator for the Nevada Universal Service Fund, Solix, Inc., makes a filing once a year and tells us how much money they need for the high-cost fund and for Lifeline. We divide that by the intrastate revenues we are expecting in order to determine the assessment rate. With the passage of the proposed amendment, if customers got an additional benefit for broadband service from the Nevada Universal Service Fund, the assessment rate would necessarily increase to make sure we have enough money to cover all of the Nevada Universal Service Fund.

Assemblyman Roberts:

Would it be the choice of the provider to either pass that cost to the consumer or absorb it themselves?

Debrea Terwilliger:

Yes. The assessment is done on the carriers themselves. Oftentimes, the assessment is passed on to the customers. If you look at your wireless phone bill, for example, it might be lumped in with government fees. It can be lumped in with other fees, like for the Federal Universal Service Program, 911 fees, or for other fees that are assessed such as the TDD [telecommunications device for the deaf] fee. It is hard for the customer to cull out what specifically has increased in the bill. The carrier would decide whether to pass the cost on to the customer.

Assemblyman Ellison:

Most of my questions have been asked. Would any kind of utility fall under this—power, gas, telephone, television?

Debrea Terwilliger:

For the purposes of the Nevada Universal Service Fund, the only carriers assessed are telecommunication carriers, which includes wireless carriers like CenturyLink, AT&T, Humboldt Telephone, Verizon, and T-Mobile. It is not assessed on natural gas utilities or electric utilities.

Assemblyman Ellison:

In some cases, phones are being provided for free. Is this assessed on landline telephones?

Debrea Terwilliger:

Are you asking what kind of broadband service would be supported?

Assemblyman Ellison:

That is correct.

Debrea Terwilliger:

The FCC is also including wireless broadband providers. Sometimes a fixed wireless product, which is a little bit different than your mobile phone, is available for the discount. This is something the Commission would take up in a rulemaking. There are some areas where wireless is the best or only option and it depends on if it is fast enough to meet the minimum speed threshold to provide broadband. That depends on the type of wireless service available. It may not just be landline, but cable or DSL [digital subscriber line] service.

Chair Monroe-Moreno:

Are there any more questions? [There were none.] Do we have anyone wishing to testify in support of Assembly Bill 377? [There was no one.] Do we have callers wishing to testify in opposition?

Misty Grimmer, representing Cox Communications:

Cox Communications is very supportive of the goal of making sure all low-income families have high-speed Internet access. Our actions throughout the pandemic and for well over a decade have proven this. During the pandemic, Cox was instrumental in the design and implementation of the Connecting Kids program that came through Governor Steve Sisolak's COVID-19 Response, Relief and Recovery Task Force. As many of you know, that is a partnership of Cox, T-Mobile, the school districts, and the business community to sign up all families who need assistance with high-speed Internet access. In just two months last year, Cox helped ensure that every student in Clark County had access to high-speed Internet; over 15,000 families are receiving that service for free. Cox has also taken steps and will be partnering with the federal government in the rollout of an emergency broadband system recently enacted by the Biden Administration. This will provide subsidies to Internet providers for households that qualify for their Internet service bill. However, Cox did not need a pandemic to make low-income access to high-speed broadband their priority. For well over a decade, Cox has been offering our Connect2Compete program for \$10 a month with no cost for equipment or connections. It offers high-speed Internet service to any family that qualifies for free and reduced-price lunch.

I say this, Chair and Committee members, to make the case that A.B. 377, though well-intentioned, is not necessary. I know other providers have similar programs in their territories. The industry has stepped up to the plate throughout this crisis, but was already doing so beforehand as well. Broadband is a competitive service, which is part of the reason the federal government has stipulated that it can only be very minimally regulated at the state level, and it cannot be taxed at the state or local level. This would put broadband under the jurisdiction of the PUCN in ways we do not believe are necessary. For all these reasons, we respectfully request that the Committee not process A.B. 377.

Chair Monroe-Moreno:

May we have the next caller?

David Dazlich, Director, Government Affairs, Vegas Chamber:

You just heard from our colleague from Cox. We are in opposition to A.B. 377. I would like to echo the concerns she brought forward.

Chair Monroe-Moreno:

May we have the next caller? [There was no one.] Do we have callers wishing to provide testimony in the neutral position? [There were none.] Assemblywoman Duran, do you have any final comments?

Assemblywoman Duran:

Thank you for allowing me to present A.B. 377. The issue is not whether these companies are providing service, it is the amount of service needed per household. That is my goal. I appreciate these providers helping our low-income families, but as you know each household does not have the same number of members or the same need. I hope we can support this bill because it is not just my district, it is every district across the state where service needs should be based on the number of people in the household. I want to ensure Nevada is on the road to getting our broadband up to speed and providing access for our low-income families.

[[Exhibit H](#) and [Exhibit I](#) were submitted but not discussed and are included as exhibits of the hearing.]

Chair Monroe-Moreno:

We will close the hearing on Assembly Bill 377 and open the hearing on Assembly Bill 388.

**Assembly Bill 388: Revises provisions governing access to broadband services.
(BDR 58-790)**

Assemblyman C.H. Miller, Assembly District No. 7:

I am here to present Assembly Bill 388. I have previously spoken to this Committee regarding how the COVID-19 pandemic has brought into clarity the stark differences between Nevada's sectors of society. Broadband is no different. Last year, when schools had to hold classes strictly online, the pandemic showed us just how large that divide was in our state. The "digital divide" can be defined as the gulf between those who have ready access to computers and the Internet and those who do not, essentially the haves and the have-nots. We know that in the Information Age—also known as the "Digital Age," where we live today—access to reliable high-speed Internet service is no longer optional; it is as essential as any other utility we use—water, electricity, natural gas, and now Internet. Furthermore, households that do not have ready access to reliable Internet may suffer economic and educational setbacks like those that have been highlighted throughout the pandemic. Communities without the proper infrastructure to accommodate high-speed Internet may be economically left behind.

As our state makes bold moves to advance our standing as a leader in technological advancements, we must do our best to ensure that no Nevadan is left behind due to a lack of

adequate Internet accessibility, especially our youth whose future will be increasingly dependent upon reliable, high-quality, high-speed Internet in their homes. This is not only a problem for students who are negatively impacted by issues with slow Internet, but many individuals working from home must make a schedule for who uses the Internet and when—like back in the days when people had just one television set. This forces families to make a schedule to not see interruptions or extreme lag times when accessing telehealth services, safely attending worship services remotely, or even just socializing with family and friends. Many have been prevented from fully participating in remote activities that are routine for those who have decent Internet connectivity. This was even more of a problem in our historically economically challenged neighborhoods where infrastructure does not always support the best Internet access available. In Nevada's more rural areas, the infrastructure required for broadband simply may not be available yet, or it could require a large capital investment to purchase rights-of-way, dig trenches, and do what is necessary for line installation.

Nevada made progress to improve its infrastructure and ensure more people could experience the benefits of reliable Internet access, even throughout this pandemic. We went from nearly one in four students not being connected to confirming that all Nevada students were connected in January. That is progress, but we still have a long way to go. What we hope will come out of the federal government in the future will get us much closer to a totally connected Nevada, but we cannot wait on them. Our time to act is now. We Nevadans must ensure that we have our own mechanism in place that is forward-thinking, can build on what we have done, and will further supplement what we expect to receive with a goal of not just closing the digital divide, but keeping it closed.

The amended version of Assembly Bill 388 [\[Exhibit J\]](#) seeks to do exactly that by inviting all Nevadans to take care of our own and ensure equitable, reliable Internet access is available to all Nevadans regardless of their ZIP Code, their neighborhood, or how close they are to a population center. In short, the amendment repeals the definition of "broadband" previously proposed in my bill. That is captured, as you have heard, in Assemblywoman Duran's bill, Assembly Bill 377. Our bills were intended to complement each other, not to be one or the other or to be duplicative.

This amendment further clarifies that the program proposed in the amended version of A.B. 388 may be funded through voluntary contributions from broadband and commercial mobile radio customers, our wireless providers. These funds will be submitted through customers' monthly bills on an opt-in voluntary basis, what I call a "round up" program. Our wireless and broadband providers will opt in to this program, which will allow their customers to opt in and round up their bills to the nearest dollar, knowing their goodwill donations are going into the Nevada Universal Service Fund and are earmarked to expand and maintain the availability of reliable broadband service for those who have the most difficulty accessing it around our state. These earmarked funds will then be distributed to the Office of Science, Innovation and Technology (OSIT) within the Office of the Governor. It will be used for infrastructure grants for broadband development in historically low-income and rural communities across Nevada.

Additionally, the amendment would require OSIT to map the state to determine locations of Internet service that do not meet the definition of broadband and to provide a report biennially to the government and Legislature that summarizes broadband availability throughout the state, identifies communities with broadband service that meet the state's statutory definition of broadband service and those that do not, and provides recommendations for the deployment of broadband infrastructure to underserved communities.

The measure also requires OSIT to develop a Broadband Ready! Communities Certification program to encourage our local governments to adopt policies that increase broadband infrastructure deployment. There is a model ordinance that has been used in other states and local jurisdictions. Director Brian Mitchell from OSIT is on the line to answer questions related to that.

I thank you for your time today. I urge you to support this measure to ensure Nevada continues to close the digital divide and to ensure equitable access to the benefits of broadband for every Nevadan, regardless of socioeconomic status or ZIP Code. I was able to work closely with Director Mitchell from the Office of Science, Innovation and Technology within the Office of the Governor and with Debrea Terwilliger, counsel for the Public Utilities Commission of Nevada, to develop the amended language. They are both available to answer technical questions. I also worked with our broadband and wireless stakeholders on clarifying the voluntary nature of the program.

Chair Monroe-Moreno:

Will those you mentioned be adding to testimony, or are they here to answer questions?

Assemblyman Miller:

In the interest of time, they will not make additional remarks. They will be available to answer questions. If they have thoughts they would like to add, they can work those around the questions they answer.

Chair Monroe-Moreno:

We will move to questions.

Assemblyman Leavitt:

Is funding contingent upon current customers' willingness to round up their bill? If they do not receive enough through that effort, how do you choose who gets the higher Internet rate and who does not? If there is not enough funding to serve everyone who requests it, how will you choose? Assuming that customers would be willing to contribute, how do you choose who would get the service and who would not?

Assemblyman Miller:

This bill does not deal with direct payments or discounts on bills. It deals directly with creating grants for broadband infrastructure. In areas where there are lag times due to an infrastructure issue, or in rural areas that do not have the right infrastructure to get the best

speeds, providers would be able to apply to OSIT to receive a grant to support their efforts to bring broadband infrastructure to those areas. If greater or smaller amounts of money are in the account, grants can be determined based on the funds available so we do not have more requests than what is available.

Assemblyman Leavitt:

Would it be on a first come, first served basis by the provider?

Assemblyman Miller:

That would be determined in the grant program OSIT would develop. I would imagine, like any other grant program, they will set parameters providers have to meet, then there will be an evaluation to determine which projects would get those grants.

Assemblyman Watts:

I think the Office of Economic Development within the Office of the Governor recently did a broadband study. What do we currently know about the needs for this infrastructure? How would the report and evaluation in this legislation support that?

Brian Mitchell, Director, Office of Science, Innovation and Technology, Office of the Governor:

We maintain a list of projects and needs throughout the state based on our work with telecommunications providers and communities. We regularly work with communities to determine what the needs are for broadband infrastructure. As demands for data and faster Internet speeds continue to grow, infrastructure that was sufficient years ago needs to be expanded into becoming more scalable to the needs of the future. The mapping effort proposed as part of this bill is a part of a federal effort to understand needs throughout the state, so OSIT would join the federal effort to provide better data to inform our infrastructure development projects. To be clear, we would not be requesting information from providers beyond what is going into the federal mapping project. Understanding the needs throughout the state would be very important to help us understand where to best deploy new infrastructure. If there was ever another shelter-in-place event such as the COVID-19 pandemic, it would also allow us to be able to know in the moment where to deploy emergency infrastructure in order to ensure vulnerable communities remain connected to the Internet.

Assemblyman Watts:

Along the lines of the federal project that is underway, we know some federal funds have already been approved. Would this voluntary grant program to support infrastructure be able to support or help leverage additional federal dollars to complete some of these projects and close the digital divide in the state?

Assemblyman Miller:

Would you clarify what you are addressing? It sounded to me as if you were addressing two different things. If you are referring to the mapping and the data collected from that, I would need to point you to Director Mitchell.

Assemblyman Watts:

How would the voluntary program to gather additional resources to support broadband infrastructure projects in the state work in tandem with or leverage additional federal resources targeted for improving broadband service?

Assemblyman Miller:

It is my intent the program would be in addition to and would supplement what the federal government provides. I imagine the data from the mapping alone would qualify us for more grants they develop.

Brian Mitchell:

You hit the nail on the head. The funding that would come into this account would support the state broadband development and infrastructure deployment plan. While the funding that is coming from the federal government through the Biden Administration's COVID-19 relief bill [American Rescue Plan Act of 2021] does not require a match, there are other federal grant programs for broadband that do require matching funds. If we look into the distant future, this funding could possibly be used as a match for those programs. In the short term, we would use the fund to supplement other investments that we make. Any funding that comes in through this project would be prioritized for underserved communities. That is a big priority and an overarching priority of the state's broadband plan. We would make sure the funding is directed in that way.

Assemblyman Watts:

Thank you for the clarification. I wanted to get that on the record. We struggle with being able to generate matching funds to pull down significant additional federal resources to meet the state's needs. I want to applaud Assemblyman Miller for his innovative approach, using a voluntary program that can help us bring in resources and multiply them by potentially bringing in federal support to meet some of the needs our existing resources cannot.

Chair Monroe-Moreno:

When you talk about grants, funding, and resources coming into our state, you are singing my heart song. This Committee sponsored a grants overhaul bill that plays right into what we are trying to do as a state.

Assemblywoman Summers-Armstrong:

Thank you for this outside-the-box thinking. In my other life, we received dollars through the Department of Motor Vehicles for the Complete Streets Initiative. The funds were disbursed throughout southern Nevada to communities trying to implement projects to widen sidewalks, extend sidewalks, and improve the life of our citizens. This gives Nevadans an opportunity to contribute. We see these types of projects through our utilities. For many years, I participated in a voluntary donation of \$1 a month to help seniors keep their costs down. It helped numerous people. This is a way for us to begin, a way for us to receive grant dollars, and a way to have money for matching funds.

Has there been any discussion with the Department of Transportation (NDOT)? Is it part of NDOT's highway projects, especially in rural areas, to lay new conduit so when money comes and we can pay for the expansion of broadband, it is in place for the lines?

Assemblyman Miller:

I have not had those conversations. I think they would be advantageous.

Brian Mitchell:

The comment you made was music to my ears. In 2017, we proposed and the Legislature enacted Senate Bill 53 of the 79th Session. It gave the Department of Transportation the authority when doing road projects to lay extra conduit that could be used for private providers when they have roads dug up. The concept of joint trenching is one that is already on the books here in Nevada and is being used to great success in many of our rural areas.

Chair Monroe-Moreno:

Are there any other questions?

Assemblyman Ellison:

I know that NDOT has been working on Interstate 80 across the state. They are doing a great job. Rural areas like Ely and Jackpot are having a hard time getting high-speed Internet. Could they apply for a grant to run services into their communities?

Assemblyman Miller:

Yes, that would be the goal. The providers putting the infrastructure in place would be able to apply for grants for those very rural communities.

Chair Monroe-Moreno:

I see no other members with questions. Do we have anyone in the queue wishing to provide testimony in support of Assembly Bill 388?

Jared Luke, Director, Government Affairs, City of North Las Vegas:

I want to give a round of applause to Assemblyman Miller for bringing this bill. I could go on and on about what North Las Vegas has seen and done in this area, but in the interest of time, I will share a quick story. During the height of the pandemic when the Clark County School District went to a distance learning model, there was a broadband bus parked across the street from the office in the Smith's parking lot. Every day I came to work, I would look out the window, and I would see kids sitting on the asphalt or the curb. There were no tables; there was no umbrella or anything like that. That was the only access they had to Internet to be involved in their schooling. This is a textbook example of systemic inequity. I commend Assemblyman Miller for bringing this bill and starting this conversation. I hope some of the other conversations that are going on right now about grants and things like that can point towards doing something about the systemic inequities we are facing.

Chair Monroe-Moreno:

Thank you for sharing a true vision of why this bill is necessary at this time. May we have the next caller?

Misty Grimmer, representing Cox Communications:

We appreciate the multiple conversations we had with Assemblyman Miller working on the details of this bill. Cox Communications is in support of A.B. 388 as amended. In the interest of time, I will not repeat my testimony from the previous hearing about what Cox has done and continues to do for the expansion of high-speed Internet access for low-income families, but many of those details are relevant to A.B. 388 as well. This bill sets up a mechanism for long-term funding assistance to occur in a voluntary manner that is cognizant of the ways the private industry is also helping solve this challenge. We also support the portions of this bill that recognize the efforts of local governments to support the expansion and buildout of systems for high-speed Internet access. We encourage passage of this bill.

Chair Monroe-Moreno:

May we have the next caller? [There was no one.] Do we have any callers wishing to provide testimony in opposition? [There were none.] Do we have any callers wishing to provide testimony in the position of neutral?

David Dazlich, Director, Government Affairs, Vegas Chamber:

I would like to thank the bill sponsor for his constant work with the stakeholders and for addressing the concerns of the broadband members of the Vegas Chamber. We appreciate the work that was done and the amendments that were made to A.B. 388 which mitigate the concerns we had. We would like to be recorded as neutral.

Chair Monroe-Moreno:

May we have the next caller? [There was no one.] Assemblyman Miller, do you have any final remarks?

Assemblyman Miller:

I would like to thank you for taking the time to hear the bill. I would also like to thank Director Mitchell, Ms. Terwilliger, and the stakeholders I was able to speak with to get things as close as we possibly could to get this bill moving. I urge your support.

[Additional exhibits include a letter in neutral from Jake Lestock, [Exhibit K](#), and a letter in support from Christine Saunders, [Exhibit L](#).]

Chair Monroe-Moreno:

We will close the hearing on Assembly Bill 388. This meeting is in recess [at 3:22 p.m.].

The meeting will come back to order [at 7:05 p.m.]. I will remind participants that comments during public comment or testimony on the two bills we will hear are limited to two minutes each. We will give 15 minutes for testimony in support, opposition, and neutral.

Assembly Bill 411: Makes changes to provisions governing fuel. (BDR 51-1022)

Assemblywoman Tracy Brown-May, Assembly District No. 42:

Assembly Bill 411 would allow Nevada's gasoline retailers the option of selling gasoline containing ethanol to a higher percentage. We are looking at increasing the current 10 percent ethanol (E10) cap to 15 percent ethanol by volume (E15). We have heard from several presenters before this Committee about the State Climate Strategy and how gas combustion engines used in the transportation sector are significant contributors to Nevada's greenhouse gas emissions. For approximately 20 years, there have been studies on greenhouse gases and the reductions that can be realized with the addition of biofuels, such as ethanol, to gasoline. Many of you are probably familiar with the findings from a research study conducted by the Environmental Protection Agency (EPA) in 2010 that projected that by 2022 the emissions profile of corn to ethanol from a new refinery would be 21 percent lower than that of an energy-equivalent quantity of gasoline. Now that America is ten years from that study, researchers from the U.S. Department of Agriculture reanalyzed the data to find out that actually corn ethanol's current greenhouse gas profile is 39 percent to 43 percent lower than gasoline, which is nearly twice the original estimate offered in the 2010 study. The same study created two different projected scenarios. It found there are opportunities to produce ethanol with emissions that are 47 percent to 70 percent lower than gasoline, and a reduction of one-half to two-thirds of emissions from motor vehicles could result in a substantial step toward meeting Nevada's Climate Strategy goals.

In addition to environmental benefits, there are also consumer benefits. Compared to E10 fuel, which is currently available for purchase across Nevada and many other states, E15 fuel costs an average of from 5 cents to 15 cents less per gallon. For many Nevadans that could have a good economic impact, especially following the COVID-19 pandemic. Having the option to switch to E15 fuel may save money needed for other basic necessities. Since 2011, the EPA has approved the use of E15 fuel for light-duty and passenger vehicles under the Clean Air Act waiver request. It is currently available for sale in 30 states and approximately 2,000 filling stations nationwide. Studies show no evidence of increased damage to vehicle parts or reduced vehicle performance associated with switching from E10 to E15 fuels in light-duty vehicles made after 2001, so the model year is important.

There is one proposed amendment to Assembly Bill 411 that would move the effective date of this bill from January 1, 2022, to June 1, 2022 [[Exhibit M](#)]. This was requested by a number of stakeholders that were involved. We spent a great deal of time talking to the Division of Environmental Protection within the State Department of Conservation and Natural Resources; the State Department of Agriculture, which would regulate much of this; and some of the key suppliers to make sure that everyone was on board.

Assembly Bill 411 makes a change to *Nevada Revised Statutes* 590.070 to require the State Board of Agriculture of the State Department of Agriculture to allow by regulation the sale of fuel containing up to 15 percent ethanol by volume. It does not mandate or otherwise require any fuel retailer to sell E15. It is not a mandate on anyone who is already selling gas,

and it does not require the purchase of E15 fuel, or require any vehicle dealer to make any modification to any vehicle that is marketed for sale in Nevada. It simply allows an option for the sale and purchase of E15 fuels, providing additional choices to all our stakeholders, meaning everyone who purchases gas anywhere. There are a number of items that would not use E15 fuel, so it would be specific only to retailers who wanted to carry it.

Joining me today for this presentation is Mr. Brooke Coleman, the executive director of the Advanced Biofuels Business Council. He is here to provide additional remarks relative to this issue. Once he finishes his remarks, I will come back with closing remarks.

Brooke Coleman, Executive Director, Advanced Biofuels Business Council:

We represent leaders in the effort to commercialize advanced low-carbon biofuels across the United States. Assembly Bill 411 is commonsense legislation that will bring Nevada in alignment with the vast majority of the rest of the country. We want to thank the Committee and Assemblywoman Brown-May for leadership in this important matter.

I am here to testify on Nevada's readiness to use E15 and the viability of E15 in Nevada. As Assemblywoman Brown-May noted, E15 is already offered to consumers in more than 30 states without issue. It is legal for use in more than 45 states. That is where our bill is focused [[Exhibit N](#)]. This is a road-tested product that has many benefits and has not had any safety or compatibility incidents across the country. American drivers have logged more than 17 billion miles on E15 without issue. This is a well-tested product; there are no vehicle or fuel equipment issues with E15. As noted, 2001 and newer vehicles—which account for more than 95 percent of the cars and trucks on the road today—are certified by the EPA to use E15 without modification. Most existing fuel dispensers and underground storage tanks are compatible with E15. Even though this bill does not require gas stations to offer it, it would merely allow them to do so. The bottom line is Assembly Bill 411 will bring Nevada into alignment with most of the country and open the door for a cleaner and cheaper fuel blend.

I would like to thank the Committee for the time to present this measure which could be an important step in helping Nevada reach its stated climate change goals. We have spoken with many stakeholders and are pleased to have achieved agreement on this measure. Members of key state departments, the Division of Environmental Protection, and the State Department of Agriculture are expected to be available to assist with any questions the Committee may have.

Assemblywoman Brown-May:

We want to extend our sincere gratitude for the opportunity to present this. I would like to extend my sincere appreciation to Assemblyman Watts for the opportunity to learn about E15 fuel and its impact and how we can help Nevadans. I also want to thank Greg Lovato, administrator from the Division of Environmental Protection. He was able to teach us about the impacts and some of the concerns we were able to mitigate, along with Director Jennifer Ott from the State Department of Agriculture and Ms. Cadence Matijevich.

Chair Monroe-Moreno:

A few members have questions.

Assemblyman Ellison:

You said there is no problem with ethanol, but there is on older motorcycles, older cars, and lawn mowers. Ethanol will gum them up and cause severe problems. To clean them out, you have to use a white fuel or use chemicals.

Assemblywoman Brown-May:

You are correct. This type of fuel is not intended for use in lawn mowers. It can have an adverse effect, which is why E15 would be one option at the pump and would be labeled appropriately. It is an option for vehicles, and it has been determined safe in other ways. In the same way that diesel fuel is appropriately labeled at the pump and can only be used for certain engines, a fuel with an increased ethanol percentage would be rolled out that way, too. The State Department of Agriculture already has a plan to roll out fuel with an increased ethanol content so we can see that is happening. Current statutes do not allow us to do that, so this is simply enabling language. The EPA is also working on regulations. There are also places across Nevada currently selling fuel with an ethanol content of 85 percent. This would be only one option for motor vehicles, if you so choose. There are typically notices on newer cars that will tell you what type of fuel you can use, but I would not recommend E15 fuel for your lawn mower.

Assemblyman Ellison:

I drive across Interstate 80 twice a week. I have been looking at the ethanol content at the pump and have been watching the signs. I recommend that everybody who owns an older car purchase the white fuel. Very few stations have it, but it will save you a lot of money in the long run. The newer cars are running fine with ethanol.

Assemblyman Leavitt:

Are there statutes or regulations that prohibit stations from distributing E15 fuel?

Assemblywoman Brown-May:

It is my understanding that in Nevada we are only allowed to have fuel up to 10 percent ethanol. This would enable the increase to 15 percent. It is also something the Department of Agriculture is working on and would be rolled out through their regulations within the coming 12 to 18 months. This enables the Department to move on those expected regulations earlier, and it shows the retailers they can plan for 15 percent ethanol.

Chair Monroe-Moreno:

Members, are there any other questions for our presenter? [There were none.] We will move to testimony in support of Assembly Bill 411.

Alisa Nave-Worth, representing New Fuels Alliance:

We support this, but we are here to answer questions because we have been working on this issue for the last 18 months.

Chair Monroe-Moreno:

Do we have anyone on the line who wishes to testify in support of Assembly Bill 411? [There was no one.] Is there anyone wishing to testify in opposition of Assembly Bill 411? [There was no one.] Is there anyone who wishes to testify in the neutral position?

Cadence Matijevich, Administrator, Division of Consumer Equitability, State Department of Agriculture:

The Department of Agriculture is neutral on Assembly Bill 411. Should the bill pass and be signed by Governor Steve Sisolak, the Department of Agriculture will support the Board of Agriculture in the promulgation of regulations necessary to carry out the provisions of the bill. We expect there will be considerable engagement from industry and from other governmental agencies on these regulations. We are committed to completing the necessary due diligence to complete the administrative rulemaking process. However, given that the Board of Agriculture and the Department of Agriculture do not control all components of the regulation-making process, it may be challenging to complete the adoption of these regulations by the effective date included in the bill as introduced. We are appreciative of Assemblywoman Brown-May's conceptual amendment that will allow additional time to complete the administrative rulemaking process. Additionally, we would like to go on record concerning our understanding that the intent of the bill is not to prohibit the sale of certain motor vehicle fuels containing more than 15 percent ethanol by volume, despite language at line 5 of page 2 of the bill which states ". . . not more than 15 percent ethanol by volume." We feel this clarification is important, given that existing regulations allow for the sale of ethanol flex fuel, also known as E85, which contains 51 percent to 83 percent ethanol.

Chair Monroe-Moreno:

Thank you for getting that clarification on the record.

Greg Lovato, Administrator, Division of Environmental Protection, State Department of Conservation and Natural Resources:

As originally drafted, A.B. 411 may have unintended, but potentially significant, consequences that we think can be addressed by allowing more time for enactment of regulations. We think allowing an effective date of January 2023 would provide adequate time to make sure outreach and communication on fuel compatibility with all underground storage tank systems will be assured so we could remove our fiscal note.

I will talk about air quality and water quality concerns. Related to air quality, we know that E15 is not an appropriate fuel for pre-2000 motor vehicles and nonroad engines, and that use of E15 in this equipment could result in impairment of engine emissions controls and increased pollutant emissions. Recent data from the Department of Motor Vehicles indicates that there are more than 280,000 pre-2000 vehicles registered in Nevada. Labeling to make consumers aware of the compatibility limitation of E15 will be critical. As echoed from the Department of Agriculture, we want to make sure not to prohibit use of fuels up to E85.

Pertaining to water quality, E15 is not compatible with certain underground fuel tank system components. It may increase the frequency of leaks in tanks that have components or tank

systems that are not resistant to these higher concentrations of ethanol. Owners of existing underground storage tanks will need to evaluate and potentially replace some equipment to comply with compatibility requirements and may encounter issues with seals, gaskets, and adhesive that are currently being used, especially those installed with equipment prior to 2011. We will need to work with underground storage tank owners to ensure compatibility issues are addressed to limit potential for corrosion and increased leaks. As a result, we are submitting a fiscal note to adjust workload.

Chair Monroe-Moreno:

I would encourage you to reach out to Assemblywoman Brown-May first thing in the morning to discuss the items of the bill you are in opposition with to see if you can come to some resolution. If this bill is going to move, it will move through our Committee tomorrow during our work session, which will be at the call of the Chair. Please submit your written comments. I believe we are at the end of those joining us for neutral testimony.

Assemblywoman Brown-May:

I look forward to working through the fiscal note issue, which is a surprise to me at this late hour.

[[Exhibit O](#) was submitted but not discussed and is included as an exhibit of the hearing.]

Chair Monroe-Moreno:

I will close the hearing for Assembly Bill 411. We will move to the next item on our agenda, which is the hearing for Assembly Bill 412.

Assembly Bill 412: Revises provisions governing motor vehicles. (BDR 43-1050)

Piper Overstreet, representing Nuro, Inc.:

Mr. Lipka will take you through a brief slide deck, which has been supplied to you as an exhibit [[Exhibit P](#)]. The intent of the bill is to update sections of *Nevada Revised Statutes* Chapter 484 to reflect advancement in the autonomous vehicle technology industry, specifically autonomous vehicles designed for transporting goods as opposed to people.

Matthew Lipka, Federal Public Policy Lead, Nuro, Inc.:

Nuro, Inc., is an autonomous delivery company [page 2, [Exhibit P](#)]. We are building an on-road vehicle that operates fully autonomously for local goods delivery of items like groceries and medicine. We have a custom-designed vehicle that has no space for any human occupant. The vehicle, the software, and the operations are all done in-house at Nuro. We have been operating a service commercially since 2018—first in Arizona and now also in Texas—to do deliveries in partnership with The Kroger Co., which is branded Smith's in Nevada, and with CVS Pharmacy and other partners. You can go online and choose milk, eggs, and cheese for today. Our vehicle will go to the store. It will be loaded by an employee there. It will then come to your home. You will get a text to meet us at the curb. You will enter your PIN [personal identification number] code. The door will open, you will grab your stuff, tap "done," and it drives away autonomously.

One of the big advantages of this service is we are able to lower the price and provide a more affordable service. In addition, we have seen an increased need for contactless delivery over the past year, and we have seen increased demand for the grocery and CVS services. We have also partnered to do mass food bank deliveries for those in need from food banks in three different states. We have also partnered with two California emergency service hospitals to transport medical supplies and food into the patient areas. We plan to resume our work with local school groups and robotics clubs where we help them learn about robotics when it is safe to do so.

We have plans to open a testing facility in Clark County which we anticipate initially will have 60 employees, with a little over \$1 million investment in the first year growing to \$4 million over time. We view this as the first step in entering the state and are looking forward to operating a commercial service and potentially other operations facilities. This testing facility, I should note, is a closed-course testing facility.

This is R2, our custom vehicle, in action. [He played a video of the vehicle traveling on city streets.] I will explain how we prioritize safety. We have designed software that is able to avoid any of the human causes of car crashes. The vehicle has cameras, lidar and radar sensors, as well as other sensors that enable it to see 360 degrees. One of the key parts of our approach is to build this custom vehicle that has no space for human occupants. That, of course, reduces the number of people on the road, but it also means we can build a vehicle that is narrower, of lighter weight, and designed to protect those outside the vehicle over those inside since there are no occupants. From the operations point of view, we put a lot of emphasis on operational safety. We thoroughly train our operators. We have fleet teams that are based locally wherever we operate. They can respond if there is ever an issue. We can remotely monitor the vehicle, having it come to a safe stop. The vehicle itself also has that capability if it detects any issue. We have an excellent safety record. We have not caused any crashes, and we have had no serious safety incidents.

We believe the benefits of this technology are significant. You can see statistics from a recent report [page 4, [Exhibit P](#)] that the Steer Group, a transportation economist firm, put out about how from 2025 to 2035 the category of delivery autonomous vehicles like Nuro could create jobs in stores because people need to pick and pack items. These vehicle services could stimulate the economy, reduce crashes, and decrease emissions. Nuro's vehicle is battery-electric, and we view 100 percent electric vehicles as the future here.

One other benefit I want to highlight is providing access to those in food deserts. During the pandemic, we partnered with the Houston Food Bank to deliver to those in need. That took us from the radius immediately around the store into Houston's Third Ward, which is an important and historically Black community that is a food desert. After finding how our technology could help people in this community, we conducted an analysis of how many people nationwide are in similar situations and how many people could benefit from this technology. We found there were 20 million people nationwide who are low-income and live in food deserts. If our technology is allowed to travel on 45-mile-per-hour roads, it could reach 70 percent of them. In the Las Vegas metropolitan area, there are

125,000 low-income people in food deserts. Our technology could reach 86 percent of those people, which is a little over 100,000.

Assembly Bill 412 would do two things. The first is to update vehicle equipment requirements [page 5, [Exhibit P](#)]. This vehicle is operated by machine vision, so it does not need to have side-view mirrors or windshield wipers. In addition, it has machine control. There is a requirement for a beam indicator that shows when a vehicle has its high beams on. There are some regulations requiring a brake pedal. Because our vehicle has no human in it, these regulations do not apply, and there is no case where they have a safety purpose.

The second thing this bill would do is enable Nuro to serve people and companies [page 6]. Nuro's vehicle is a low-speed vehicle, initially classified as such and limited to operating at 25 miles per hour. This bill would define "neighborhood occupantless vehicles" [section 3, subsection 4], which are vehicles that are low-speed, but not intended, designed, or marketed for human occupancy. It would allow, subject to several safety restrictions, some limited operation on 45-mile-per-hour roads. This is important for enabling us to reach suburban or rural areas and people who live in food deserts. One example of that is in Las Vegas at West Flamingo Road and South Durango Drive [page 7]. Both are 45-mile-per-hour roads. There is an Albertsons store on that corner. There is no way to reach the community streets and neighborhood streets without going on a 45-mile-per-hour road. It is about half a mile total on those roads, so it is not a long distance, but it is the only way to reach them.

Why is this needed now? Nevada is the first state in the nation to pass a law on autonomous vehicles and has been a leader, updating that bill several times over the last several years. This is needed now because new vehicle types are emerging, including Nuro's R2 [page 8]. Last year, Nuro became the first company to receive an exemption from federal requirements for an autonomous vehicle. We got an exemption from side-view mirrors and a windshield, which corresponds to Nevada's windshield wiper provision. In addition, we are seeing updates underway at the federal level for vehicles that are designed without manual controls that will require corresponding updates in state vehicle codes.

James Humm, Director, Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor:

In speaking on this bill, I will reference the *Nevada's Plan for Recovery & Resilience* from the Office of Economic Development, Office of the Governor, that outlines Nevada's goals for the future beyond the pandemic and strategy for job growth and economic diversification. Within this report, several key factors are listed, but two are in line with this legislation as we continue to work to restore Nevada's economy and continue to grow it. The first is the state of Nevada's desire to recruit automation and digital technology firms, and the second is to work towards the transition to a low-carbon and low-emission economy. This initiative assists in accomplishing both of those goals as exciting new technology firms, like Nuro, are developing driverless and occupantless vehicles and want to be here in this growing environment of technological change. At the same time, these vehicles in development are also low-carbon, low-emission vehicles. In Nuro's case, they are completely electric. With forward-thinking legislation like this, we can attract similar companies that can capitalize on

the opportunities provided in Nevada to develop, foster, and test these new systems. We are in support of this legislation [[Exhibit Q](#)].

Chair Monroe-Moreno:

Are there any other presenters? [There were none.]

Piper Overstreet:

In the interest of brevity, we submitted everything in writing.

Chair Monroe-Moreno:

We have a few questions from members.

Assemblyman Ellison:

How will you contribute to road expenses? Your vehicles do not use gas, so you will not be contributing fuel taxes for road maintenance. Will you pay a percentage of your income into road taxes?

Matthew Lipka:

We would pay registration fees and related sales tax from the business. The items ordered would also pay sales tax. In our experience so far, having an affordable delivery service can help grow sales for retailers. As we grow beyond our initial partners to small businesses, it could help them increase sales.

Assemblyman Ellison:

Sales taxes do not pay for road tax. I know we are working on ways for electric vehicle owners to pay road tax. I hope the Office of the Governor can help figure this out. With the growing cost of road maintenance and loss of taxes from fuel, we need to look at everything we can look at to pay for road use.

Chair Monroe-Moreno:

We heard a bill earlier today [[Assembly Bill 413](#)] about a working group that will be working on different ways we can fund our highways. I am sure this will be part of their conversation.

Assemblywoman Peters:

I was listening to National Public Radio earlier this week. They did a segment on autonomous vehicles, their design, and why windows were important. After you said they do not have windshield wipers, I realized that in Nevada the windows will get very dirty especially in the summer when we get the intermittent rain and dust.

I have a question about the sensors and how they react to some of our neighborhoods' broken roads and broken curbs. How will the vehicle navigate in communities that have not had roadway repair in a while?

Matthew Lipka:

We do not have any windows; the vehicle is designed to look familiar to other road users. What looks like a windshield is just a piece of plastic on the front. We have sensor-cleaning technology that allows the sensors that enable us to see. We have operated in Arizona, and if there is a giant dust storm, we pull over.

Autonomous vehicles benefit from the same infrastructure improvements as other road users. Before we operate in an area, we map the roads. As we go out, we use the information from our autonomous vehicles to update those maps. For example, if there are potholes, we are able to identify them and can consider them in our routing decisions or navigate on the roadway. We recognize the importance of improving that infrastructure.

Assemblywoman Peters:

I do not want to add work, but I know that local governments want us to report potholes. It would be great to have you guys share your data proactively if you are already out there mapping.

I have been curious about how the sensors developed because previously there were models that just followed the lines on the road, which is not effective in areas where there are no lines on the road. How do they decide on curbs? I know the technology has advanced exponentially in the last few years with modeling and being able to use 3D or 4D technology. How advanced is that today? What do these vehicles use to drive on the road, to sense the road as they are moving?

Matthew Lipka:

We have reported potholes in Houston, Texas. There is only a certain number they can fix, so there is a limit to how many they want to hear about.

How does the sensing work? Nuro's vehicle has more than five different kinds of sensors on it. It has cameras and thermal cameras, lidar, radar, ultrasonic, and audio sensors. We use this technology to see the world around us dynamically. Before we put our vehicle on the road, we have a human-driven vehicle that maps things like curbs so there is a high-definition map loaded onto the computer before the R2 drives down that road so it can focus the sensors on what is happening around it. Cameras are good at identifying what other objects are, whether that is a pedestrian, a cyclist, or a car. The lidar is a power sensor that can also measure distance and velocity of other objects and lets us create predictions of what is going to happen if there are other actors on the roadway so we can plan our movements accordingly. Radar is useful for understanding the speed and direction and provides redundancy with lidar. When we first launched Nuro we did not think we were going to have all these different sensors on it, but as we learned, there is an advantage in redundancy and having some sensors that are good at some things and others that are good at others. When you combine them and use machine learning, that input can give a richer understanding of what is happening around the vehicle than relying on just one sensor, like a camera.

Assemblywoman Summers-Armstrong:

In the video, you showed the door lifted on one side of the vehicle. Is each compartment individually locked? Are there also compartments on the other side? Are there four compartments so you can make four deliveries within a community?

Matthew Lipka:

No, it is limited to two compartments, although they are customizable. We could subdivide them and have each subdivision locked, depending on the item. For example, we partnered with Domino's Pizza. A pizza takes up much less room than ten grocery bags.

Assemblywoman Summers-Armstrong:

I was hoping you were going to say four deliveries could be made with one vehicle. Even though the vehicles are using electricity, the number of trips will contribute to congestion on the road. What types of jobs are you going to bring in Clark County? Would you talk about the types of jobs and the wages you anticipate paying based on what you are doing in Arizona and Texas?

Matthew Lipka:

Our first entry is the testing facility. Aside from the construction jobs, that facility will be staffed by operations personnel who will be robot operators. They will be responsible for testing the vehicle and designing tests. They will have a configurable space so they can test at higher speed stretches at 25 miles per hour. They will do simulations that mock up challenging situations, like a ball rolling in front of the vehicle. They will create potholes and drive over them to test durability. The second type of employee will maintain the vehicles as a member of the fleet team. Those make up the initial piece. I have an estimate of the average hourly wage. I will pull that up and share it with you.

The next step for us is there could be other facilities. We are considering a final assembly facility in the state as well as a potential teleoperations facility. Employees at the final assembly facility would do things like installing the sensors as part of the manufacturing process. Those would be light manufacturing jobs. The second would be teleoperations. These would be people who could supervise the work remotely. It takes a lot of training to be able to understand the systems of this technology. It is not like a call center job; it is a very demanding profession. The third step we anticipate is for commercial service. In Houston, we employ those involved in running that service. We have product people who work with Kroger or CVS; we have robot operators who supervise the vehicles on a day to day basis; and we have the fleet team who cleans, maintains, and charges these vehicles.

I mentioned earlier that our partners will hire new people to do picking and packing of the goods. If I go to the grocery store today, I drive my own car, pick out my own things, and drive home. The robot will drive, but someone needs to be hired to choose the items. In California, the wage is \$17 an hour for a picker/packer. I am not sure what the wage is in Nevada. That is just the example from Kroger. That is a little bit about the jobs that would be created. There is a huge range of skill levels. Sometimes a technology company says they will create a bunch of jobs, but you need a Ph.D. to do them. There are certainly those

jobs, but there is also manufacturing, remote operation and supervision, and testing a sophisticated robot for durability and its autonomy system. I will pull up the average wage for the initial facility and put it in the chat.

Assemblywoman Summers-Armstrong:

Instead of putting the numbers in the chat, would you please put it on the record? I think it is important for us to know.

Chair Monroe-Moreno:

Assemblywoman Brown-May, do you still have a question?

Assemblywoman Brown-May:

My question was answered.

Chair Monroe-Moreno:

You said you were going to start in Clark County. In what area of Clark County are you planning to set up shop?

Matthew Lipka:

It is in Las Vegas. We have signed a lease, but the lease has not been signed by the owner. I cannot give the exact location until the lease is fully executed. We are in the final stages of a lease in the northern part of Las Vegas.

In answer to Assemblywoman Summers-Armstrong's question, we estimate the average wage at that facility to be \$28.80 an hour.

Chair Monroe-Moreno:

Thank you for that information. Are there any other questions? [There were none.] Is there any testimony in support of Assembly Bill 412?

Christopher Anderson, representing Zoox:

Zoox is an autonomous vehicle developer with testing operations in Las Vegas. We have been testing here since 2019. We appreciate this commonsense update of the vehicle code that reflects advancements in the autonomous vehicle (AV) industry. We agree that this bill will streamline the AV regulatory structure in Nevada and enhance broad economic development in the state. We encourage you to support this bill.

Chair Monroe-Moreno:

May we have the next caller? [There was no one.] Do we have callers in opposition? [There were none.] Are there callers who wish to testify as neutral? [There were none.] Do the presenters have any final comments?

Piper Overstreet:

We do not. Thank you for your time.

[Letters in support of A.B. 412 were submitted but not mentioned and will become part of the record, [Exhibit R](#) and [Exhibit S](#).]

Chair Monroe-Moreno:

That will close the hearing on Assembly Bill 412. We will move to public comment. Is there anyone waiting to make public comment? [There was no one.] Members, we will meet tomorrow, April 9, 2021, at the call of the Chair. We will hear one bill and have a work session. This meeting is adjourned [at 7:58 p.m.].

RESPECTFULLY SUBMITTED:

Joan Waldock
Committee Secretary

APPROVED BY:

Assemblywoman Daniele Monroe-Moreno, Chair

DATE: _____

EXHIBITS

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is a proposed amendment to [Assembly Bill 413](#), presented by Assemblywoman Daniele Monroe-Moreno, Assembly District No. 1.

[Exhibit D](#) is a letter, dated April 5, 2021, submitted by the Southwest Energy Efficiency Project, in support of [Assembly Bill 413](#).

[Exhibit E](#) is a proposed amendment to [Assembly Bill 429](#), submitted by Michael Alonso, representing Turo, Inc.

[Exhibit F](#) is a letter, submitted by Philip Mike, Private Citizen, Henderson, Nevada, in support of [Assembly Bill 429](#).

[Exhibit G](#) is a proposed amendment to [Assembly Bill 377](#), dated April 6, 2021, presented by Assemblywoman Bea Duran, Assembly District No. 11.

[Exhibit H](#) is a letter, dated April 8, 2021, submitted by Christine Saunders, Policy Director, Progressive Leadership Alliance of Nevada, in support of [Assembly Bill 377](#).

[Exhibit I](#) is written testimony, dated April 8, 2021, submitted by Randy J. Brown, Director, Regulatory and Legislative Affairs, AT&T Nevada, in opposition of [Assembly Bill 377](#).

[Exhibit J](#) is a proposed conceptual amendment to [Assembly Bill 388](#) presented by Assemblyman C.H. Miller, Assembly District No. 7.

[Exhibit K](#) is a letter, dated April 5, 2021, submitted by Jake Lestock, Senior Manager, State Legislative Affairs, CTIA, neutral on [Assembly Bill 388](#).

[Exhibit L](#) is a letter, dated April 6, 2021, submitted by Christine Saunders, Policy Director, Progressive Leadership Alliance of Nevada, in support of [Assembly Bill 388](#).

[Exhibit M](#) is a proposed conceptual amendment to [Assembly Bill 411](#), presented by Assemblywoman Tracy Brown-May, Assembly District No. 42.

[Exhibit N](#) is a map of the United States depicting which states restrict the sale of 15 percent ethanol fuel, submitted by Assemblywoman Tracy Brown-May, Assembly District No. 42.

[Exhibit O](#) is a letter, dated April 5, 2021, submitted by Gene Harrington, Director, State Government Affairs, Food and Agriculture, Biotechnology Innovation Organization, in support of [Assembly Bill 411](#).

[Exhibit P](#) is a copy of a PowerPoint presentation titled "[AB 412: Presentation from Nuro](#)," presented by Matthew Lipka, Federal Public Policy Lead, Nuro, Inc.

[Exhibit Q](#) is written testimony dated April 8, 2021, presented by James Humm, Director, Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor, in support of [Assembly Bill 412](#).

[Exhibit R](#) is a letter, dated April 7, 2021, submitted by Aubriana Martindale, Division Corporate Affairs Manager, Smith's Food and Drug Stores, in support of [Assembly Bill 412](#).

[Exhibit S](#) is a letter, dated April 7, 2021, submitted by Paul Escobar, Senior Public Policy and Safety Strategy Manager, Zoxx, in support of [Assembly Bill 412](#).