

T E S L A

# **TESLA'S K-12 INVESTMENT IN NEVADA WORKFORCE DEVELOPMENT & EDUCATION PROGRAMS**

## **2021 Investment Review**

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## Investment Summary and Background

As part of Senate Bill 1 in the 2014 Special Session of the Nevada Legislature, Tesla committed to investing \$37,500,000 into K-12 education through the Nevada Department of Education's Education Gift Fund. The investment began in 2018, with investments adding up to \$7,500,000 annually. To date, Tesla has invested \$22,500,000 in K-12 Education in Nevada through 30 local and national entities, with plans to invest an additional \$15,000,000 through 2023.

This funding has supported projects that developed innovative and long-term programs, furthered training opportunities and resources for teachers, built STEAM specific educational facilities, and created pathways to employment following high school graduation. Not only has Tesla made substantial investments in these four areas, but many of the associated projects have leveraged Tesla's funding and support to build partnerships with additional employers and organizations across Nevada and the nation.

### Investment Highlights:

- 4,100+ students currently participating on an after-school robotics team, with thousands more participating in robotics in-class learning via electives and vocational training.
- 13 Tesla Robotics Labs complete or near completion, with 9 more in development.
- \$132,000 in saved energy costs for Nevada schools through student led sustainability projects.
- 2,500 teachers trained in computer science by Code.org, with over \$225,000 in stipends for Nevada teachers.
- 1,200 sq. ft. open-source, bilingual museum exhibit in development to highlight the future of sustainable energy.
- 30+ teacher externships hosted across multiple employers, with additional support for teachers interested in licensure in automation and robotics via the Tesla Externship Program.
- National expansion of Nevada based organizations such as Envirolution.

In addition to its K-12 education investment, Tesla's capital investments in Nevada have totaled over \$6 Billion and the Gigafactory continues to exceed initial forecasts from 2014. Since opening, Gigafactory Nevada has produced over 1 Million Battery Packs, 2 Million Drive Units, and 3GWh of residential and commercial energy storage. A 2018 economic impact study commissioned by the Governor's Office of Economic Development (GOED) highlighted the direct and indirect benefits of the project stating that "Tesla's major investment in Nevada has permanently changed the economic landscape of the area" and increased the region's capacity for additional economic development projects. Tesla's statewide partnerships and programs seek a similar outcome when it comes to the advancement of STEAM education opportunities for Nevada's students and teachers.

Tesla's mission is to accelerate the world's transition to sustainable energy, and this mission serves as a lens for every activity in which the company engages. Ahead of making any investments, we started evaluating how Tesla could best contribute to education in the State of Nevada in a way that was most impactful for the community and authentic to this mission in three key ways.

First, it was critical to understand the larger picture of job growth in the state to make sure our programs and investments could help develop a workforce for the industries Nevada is moving toward. Growth in Science, Technology, Engineering, Arts, and Mathematics (STEAM) careers are projected to be significantly higher than in non-STEAM jobs between 2014–2024, with Nevada specifically projected at a 40% higher growth in STEAM-specific fields, according to the Governor's Office of Workforce Innovation (GOWINN). Additionally, Nevada's Department of Employment, Training and Rehabilitation has cited that 48% of new job openings will be middle-skill roles from 2014-2024, with a current gap of 28K jobs [middle-skill being defined as those that generally require significant education and training beyond high school but less than a bachelor's degree].

Second, we felt it was important to engage in program development with our school districts first-hand to better understand the mechanics of what it takes to bring a solution to life in our education system. As a result of this collaboration, we started a suite of workforce development programs in partnership with our school districts that greatly informed how we could best work together (see Appendix A – Workforce Development Initiatives at Gigafactory Nevada).

Third, we wanted to make sure we were in close alignment with the overall education goals of the state, to help amplify its mission as well as ours without creating divergent paths to get to the same solution. Within the Department of Education, there is a clear statewide focus to make Nevada the fastest improving state in the nation for K-12 Education. In support of this, there have been key pieces of forward-thinking state legislation passed in Nevada related to new Nevada industries that were important for us to understand, including:

- Computer Science Requirement for all high schools & K-12 standards
- Dual enrollment & work-based learning initiatives to double post-secondary credentials
- K-3 Literacy standards for all students to read by grade 3
- Nevada Promise Scholarship to enable free Community College

These areas of research and program development became a strong foundation to give us direction on investments that have an opportunity to touch the 30,000+ seniors graduating high school in Nevada every year throughout their K-12 academic career.

## 2018-2020 Advisory Committee

While the statute governing The Education Gift Fund (NRS 385.083) states that “the money available in the Education Gift Fund must be used only for the purpose specified by the donor, within the scope of the State Board's powers and duties,” Tesla recognized that this needed to be a collaborative investment, and proactively set up an advisory committee to incorporate a series of diverse viewpoints. This committee is composed of leaders in various industries, education administrators, teachers, and state legislators to review potential investments and to offer insightful feedback and recommendations.

#### 2018-2020 Advisory Committee:

- Steve Canavero, State Superintendent, Nevada Department of Education
- Mark Newburn, VP, Nevada State Board of Education
- Brian Mitchell, Director, Governor's Office of Science, Innovation and Technology
- Kerry Larnerd, Director, Career and Technical Education, Clark County School District
- Josh Hartzog, Director of Career and Technical Education, Washoe County School District
- Jason Geddes, Energy Conservation and Sustainability Program Manager, Washoe County School District
- Todd Hess, Storey County Superintendent
- Kristi Overgaard, Chief Awesomeness Officer, Switch Inc.
- Bryan Klein, Site Director, Apple Inc.
- Tony Slonim, President and CEO, Renown Health
- Rebecca Darling, Director of Corporate Social Responsibility, Barrick
- Ben Nguyen, CTE Manufacturing and STEAM Robotics, Sunrise Mountain High School

This initial group provided continued feedback on potential investments, and informed the path for our investments starting in 2018. From 2020 onward, we have been working directly with the Department of Education and School District CTE leadership on the execution of existing investments. In 2022 and 2023, we are reconvening the advisory committee to support the execution of future funding.

## Investment Plan

From our research, program development, and discussions with leaders in our community, we distilled the focus of our investment plan as follows:

Tesla's investment is directed at initiatives that support the acceleration of robotics, STEAM, and sustainability programming within Nevada's K-12 education system. We are focused on directly supporting the development of future engineers in Nevada.

Within this focus, Tesla will make investments in four categories:

1. **Innovative Programs** – We are committed to partnering with local non-profits doing incredible work in these areas, as well as collaborating with some of the most impactful organizations in these areas worldwide to have a permanent footprint in Nevada long-term.
2. **Teacher Development** – Empowering teachers to have the confidence and ability to lead programs in these emerging areas requires significant investment in teacher development, and we aim to develop programs that will help them succeed.
3. **Infrastructure** – We must have spaces in our schools and communities dedicated to STEAM, robotics, and sustainability learning, and we aim to develop and renovate several spaces in our communities across the state to foster this.
4. **Pathways to Employment** – Truly impactful programs in education help students understand how the content they are learning today can be applied to a career, and then help them get access to that career. We aim to create workforce development pipelines that give students opportunities across all in-demand industries in the new Nevada.

## Measures of Success

Tesla and the Department of Education are committed to jointly measure the success and impact of this investment over time in four key areas:

1. Number of stable robotics, STEAM & sustainability programs kickstarted by Tesla's investment at elementary, middle, and high schools.\*
2. Number of Teacher development opportunities that empower them to lead programs that drive students to new industries.
3. Diversity of programs established in underserved communities across the state when able to be shared.
4. Greater Department of Education state rankings & recognition when available (graduation rates, STEAM career readiness, etc.)

*\*Note: 1 initiative at 180 schools would count as 180 programs, not 1 program. This is so that we don't try to implement too many different STEAM programs per school, but instead focus on expanding the best ones to as many schools as possible and going into significant levels of detail per program.*

## Employee Engagement

Even with advisers, strategy, and substantial funding, schools face many entrenched problems that cannot be addressed without sustained local engagement. With thousands of employees across the state, Tesla has a unique opportunity to create an internal volunteer infrastructure that complements our financial investment. This effort can help increase the percentage of success in these investments, while also empowering our employees to give back into their community in a way that directly aligns with Tesla's mission. Along with every major investment, a component of employee volunteer opportunities will be developed. Since 2018, Tesla employees have volunteered in classrooms, become robotics coaches/mentors, hosted tours for thousands of students at Gigafactory Nevada, and participated in national events resulting from this funding. More detail on this is shared in the individual investment summaries below.

## Investment Timing

To give each program necessary focus for sustained impact, Tesla will plan to continue to make directed investments into the Education Gift Fund on a quarterly basis (including both sustained funding for existing investments and new organizations). This will also allow investments to stack on top of one another and evolve over time as we see gaps that arise in program implementation within our schools.

## Open Source

As we continue to develop content and curriculum, Tesla's aim is to make our work in K-12 education accessible and available to teachers around the state and beyond. This investment will enable Nevada to be the first to implement these new programs in partnership with Tesla, and then serve as an example over the longer term as we hope to partner with other regions on workforce and education initiatives.

A recent example of this is the work being done with the Terry Lee Wells Nevada Discovery Museum. The exhibit highlighting a sustainable energy future that Tesla is supporting will be fully open source, enabling Tesla to also support this exhibit at other museums in Nevada, and enabling anyone to launch this exhibit at a museum at a fraction of the traditional exhibition design and fabrication cost.

## **Sourcing New Potential Investments**

Tesla does not have a fixed application timeline for investments, and will continue evaluating new potential partnerships that align with the vision of this investment. Local teachers, our investment advisory committee, and state legislators have all been active in recommending programs, input which has already directly impacted our program investment portfolio.

We have created an email address, [educationprograms@tesla.com](mailto:educationprograms@tesla.com), for any interested entity to reach out to us with a short summary of their program, and how they envision bringing it to life in Nevada.

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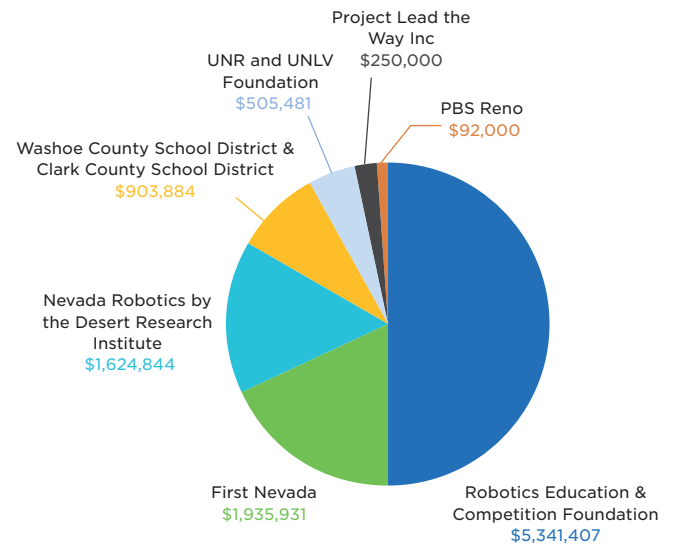
# Tesla's Current Investments



## Table of the Entity Funding

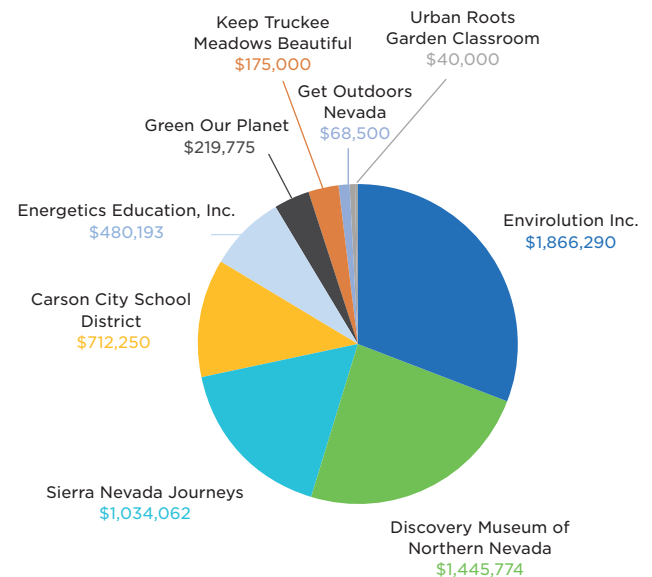
### Focus Area : Robotics

Entity	2018-2021 Disbursements	% of Total Investment
Robotics Education & Competition Foundation	\$5,341,407	24%
First Nevada	\$1,935,931	9%
Nevada Robotics by the Desert Research Institute	\$1,624,844	7%
Washoe County School District & Clark County School District	\$903,884	4%
UNR and UNLV Foundation	\$505,481	2%
Project Lead the Way Inc	\$250,000	1%
PBS Reno	\$92,000	0%
<b>Total Robotics Related Investments</b>	<b>\$10,653,547</b>	<b>47%</b>



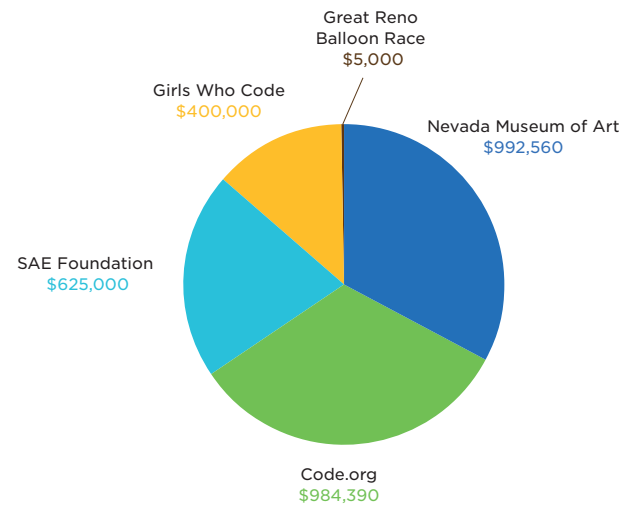
### Focus Area : Sustainability

Entity	2018-2021 Disbursements	% of Total Investment
Envirolution Inc.	\$1,866,290	8%
Discovery Museum of Northern Nevada	\$1,445,774	6%
Sierra Nevada Journeys	\$1,034,062	5%
Carson City School District (Green Schools National Network)	\$712,250	3%
Energetics Education, Inc. (Solar Rollers)	\$480,193	2%
Green Our Planet	\$219,775	1%
Keep Truckee Meadows Beautiful	\$175,000	1%
Get Outdoors Nevada	\$68,500	0%
Urban Roots Garden Classroom	\$40,000	0%
<b>Total Sustainability Related Investments</b>	<b>\$6,041,844</b>	<b>27%</b>



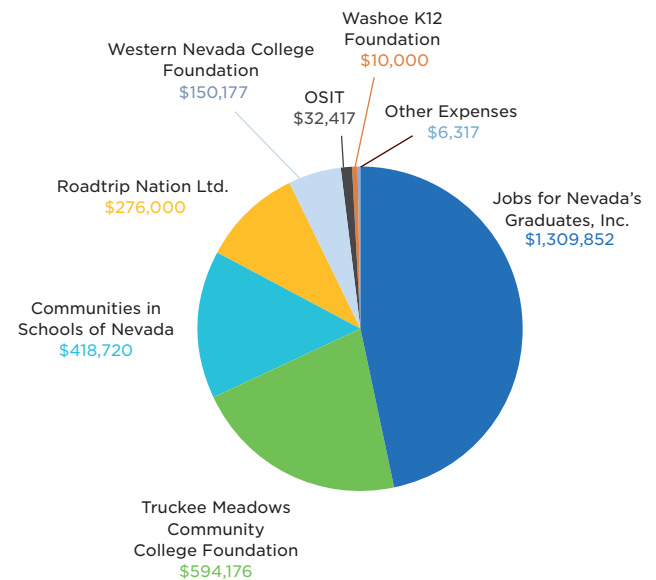
## Focus Area : STEAM Programming

Entity	2018-2021 Disbursements	% of Total Investment
Nevada Museum of Art	\$992,560	4%
Code.org	\$984,390	4%
SAE Foundation	\$625,000	3%
Girls Who Code	\$400,000	2%
Great Reno Balloon Race	\$5,000	0%
<b>Total STEAM Programming Related Investments</b>	<b>\$3,006,950</b>	<b>13%</b>



## Focus Area : Workforce Development

Entity	2018-2021 Disbursements	% of Total Investment
Jobs for Nevada's Graduates, Inc.	\$1,309,852	6%
Truckee Meadows Community College Foundation	\$594,176	3%
Communities in Schools of Nevada	\$418,720	2%
Roadtrip Nation Ltd.	\$276,000	1%
Western Nevada College Foundation	\$150,177	1%
Governor's Office of Science, Innovation, and Technology (OSIT)	\$32,417	0%
Washoe K12 Foundation	\$10,000	0%
Other Expenses	\$6,317	0%
<b>Total Workforce Development Related Investments</b>	<b>\$2,797,659</b>	<b>12%</b>



<b>Total Investments</b>	<b>\$22,500,000</b>
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## **Robotics Education and (REC) Competition Foundation**

The Robotics Education and Competition (REC) Foundation's global mission is to provide educators with hands-on, student-led competition programs and educational resources to prepare future innovators for a diverse and inclusive STEM workforce.

This is done through three main programmatic focuses; competitive robotics, education, and workforce development.

### **Key Metrics for 2021-2022:**

- \$5,341,407 invested to date
- 275 Active Robotics Teams (~2,000 students)
- 179 of the 275 teams from Title One Schools
- 51 Active Event Partners hosting small to large scale in-person events and/or Live Remote Tournaments.
- 18 qualifying events held, with 41 teams from Nevada qualified and registered for the 2022 VEX Robotics World Championship that will be held in Dallas, Texas from May 3-12.
- Began paperwork procedures to establish the state of Nevada with a VEX Robotics TSA
- Trained ~120 teachers via remote training support for VEX Robotics Programs.
- Hosted one Tesla Externship that trained 13 CTE teachers who all earned 15 credits towards licensure and renewal.
- Completed or close to completing 13 Robotics Labs, with preparation underway for 9 more.

The investment made with Tesla and through the Nevada Department of Education aligned to similar programmatic support in three key areas described in more detail below:

- Innovative Programs - VEX Robotics Teams
- Teacher Development - Tesla Externship and Teacher Trainings
- Infrastructure and Workforce Development - Tesla Robotics Labs

### **Innovative Programs - VEX Robotics Teams**

In 2018 Tesla partnered with the Robotics Education and Competition program on establishing new VEX robotics teams in elementary (ES), middle (MS) and high schools (HS) across the State of Nevada. Tesla provided grants for public schools that did not have existing robotics programs to apply for multi-year funding support to start and sustain a robotics team. For the VEX IQ Competition (VIQC) for ES and MS, schools could receive; VIQC competition kit, teacher/coach stipend, and team registration. For the VEX Robotics Competition (VRC) for MS and HS, schools could receive; VRC competition kit, teacher/coach stipend, and team registration.

The REC Foundation started working with key stakeholders from local school districts, higher education, and the Nevada Department of Education to establish a Technology Student Association (TSA) in Nevada. TSA's are student run and lead associations founded to enhance the personal development, leadership, and career opportunities in science, technology, engineering, and math (STEM) for students. These are typically aligned to CTE focuses and can be supported through state allocations of funding as well. This model will also help CTE teachers teach VEX Robotics during their courses and could provide additional support and funding for team travel as part of the TSA state and regional championships. The TSA chapter paperwork is being finalized this 2021-2022 season in hope for launch in the 2022-2023 season.

### **Teacher Development - Tesla Externships and Teacher Trainings**

A cross-cutting focus for the robotic competition teams and Tesla Robotics Labs are teacher training and professional development to support both activities throughout the state. In 2018, the REC Foundation in partnership with the Desert Research Institute (DRI), designed and held multiple small to large in-person teacher trainings for robotics competitions across the state.

Due to COVID-19 impacts, the REC Foundation received outside grant support and focused on remote summer trainings in Nevada with the support of Tesla team grants, allowing teachers to receive robotics kits at their personal homes and train remotely. This ensured they were prepared to start teams in the 2020-2021 season.

In 2020-2021, the REC Foundation was also asked to coordinate the efforts of the Tesla Externship in partnership with the Nevada Department of Education and Western Nevada College. This training was then designed to include the hands-on training necessary for the equipment that would be included in the Tesla Robotics Labs. The training also offered credits for those existing CTE teachers utilizing the Tesla Robotics Labs and focused on the CTE alignment of automation and manufacturing. Teachers also went to the Tesla facility where they were able to walk the line and talk to Tesla staff about the necessary skills needed for an advanced manufacturing workforce. Teachers concluded the training by preparing a final report analyzing the current CTE standards, the needs of the current workforce and areas that were missing or needed further development in order to better prepare their students for the current workforce.

These partnerships have since grown to include Truckee Meadows Community College and the College of Southern Nevada. Teachers from the previous Tesla Externship can now do a level up in their training and become master teachers as the REC Foundation trains a new group of teachers that will be utilizing the Tesla Robotics Labs or already have their own lab space. The REC Foundation has also been working closely with the Nevada Department of Education to provide more approved trainings and opportunities for approved credits for CTE teachers to utilize for licensure.

### **Infrastructure and Workforce Development - Tesla Robotics Labs**

In 2018, Tesla along with the REC Foundation, Nevada State Education Department, and in coordination with local school districts began small scale development of Robotics Labs in public schools and one location at the University of Nevada, Reno. These Robotics Labs were developed to be multifunctional spaces that could be utilized as either Career Technology Education (CTE) manufacturing or automation labs or as VEX Robotics or FIRST Robotics team competition spaces.

For long term sustainability and to align with the priorities of the Nevada Department of Education, these public school locations would receive capital improvements and standardized equipment that align to the CTE standards in their labs. Each school location was designed with the local school district's CTE department or school administration to meet their individual needs, but from a standardized list of equipment to streamline future trainings and equipment maintenance.

In late 2019, Tesla included Fusion IRX, a construction management company, to streamline the expansion of these labs across Nevada to more than 20 different locations. With delays of equipment, shipping, construction, and school closures due to COVID-19, a priority list was made to focus on the CTE focused labs in public schools, then secondary on spaces that were utilized primarily as robotics team spaces.

## **Complete or soon to be completed Tesla Robotics Labs**

### **Southern Nevada**

- Cimarron Memorial HS
- Legacy HS
- Sierra Vista HS
- Sunrise Mountain HS
- SECTA
- Lied MS

### **Northern Nevada**

- McQueen HS
- AACT
- ACE Charter School
- Sparks HS
- Reed HS
- Reno HS
- Southside School with UNR

### **Future Labs in Development**

- Damonte Ranch
- Hug High School
- Virginia City High School
- Elko High School
- Douglas County High School
- Dayton High School
- Fernley High School
- Carson City High School
- Yerington High School

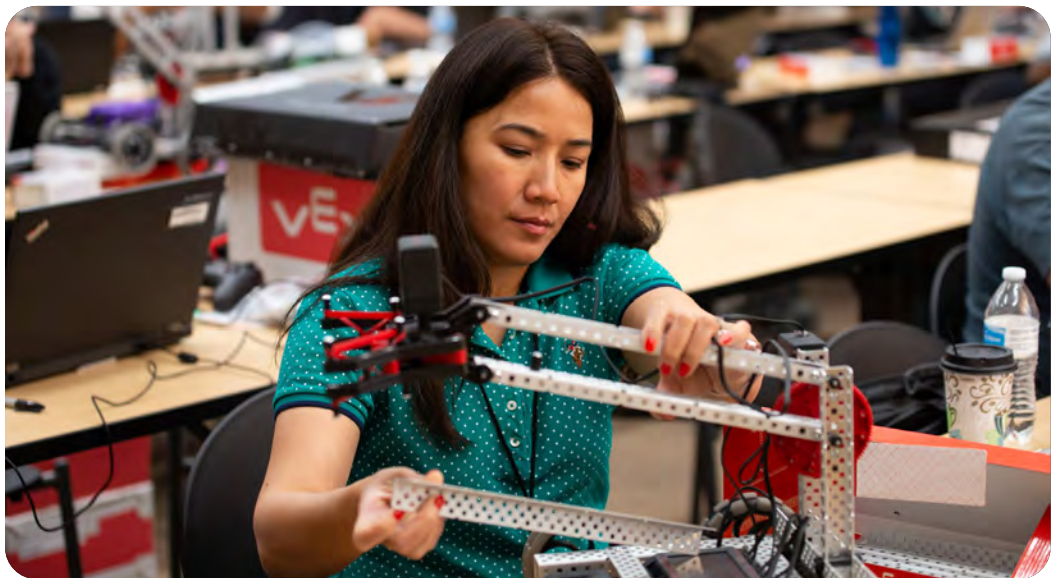
### **Upcoming Initiatives**

The REC Foundation will continue to partner with local educational stakeholders and focus on sustaining current teams and re-engaging teams lost during COVID-19. This will be done by focusing on recruiting and training more Event Partners, especially in strategic locations that need more localized events.

Goals for the 2022-2023 season are:

- Finish Development of 22 Tesla Robotics labs
- Increase teams by 25% through re-engagement or new team growth
- Host Event Partner Summits to recruit and train 10 additional Event Partners
- Add two more cities to event locations (Elko as a main focus)
- Finalize TSA procedures for Nevada State Chapter acceptance
- Present and participate in the NACTE conference in summer of 2022 and 2023 to showcase Tesla Robotics Labs and recruit additional school locations.
- Host Tesla Externships: Advanced Manufacturing Robotics Lab Training (Reno Summers of 2022 and 2023)
- Participate in the three Robotics Academy of Nevada trainings summer of 2022 (Elko, Reno, and Las Vegas) training an estimated 150 teachers.
- Work with Nevada Department of Education, University of Nevada, Las Vegas and other higher education and workforce development organizations to create a more credit opportunities for pathways to CTE licensure.





FIRST Nevada is a 501(c)(3) non-profit organization promoting FIRST® robotics programs and STEAM education initiatives in Nevada. We provide PreK-12 grade robotics programs throughout Nevada. Our mission is to inspire young people to become science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

In July of 2018, Tesla announced its partnership with FIRST Nevada on a multi-year investment to establish a robotics program in every school in Nevada. This multi-year funding provides robotics kits/parts, covers program registration/season fees, tools, teacher stipends, training workshops, and resources needed to form successful and sustainable robotics teams in every public/charter school in Nevada.

### Key Metrics for 2021-2022

- \$1,935,931 invested to date
- 220 Active Robotics Teams (~2,160 students)
- Achieved 50% of Nevada school districts hosting FIRST Robotics teams
- 500+ workshops and events held, with over \$427,000 given to teachers and coaches
- 657 teachers and coaches involved
- \$566,000 in equipment and registration fees provided to schools

### Upcoming Initiatives

FIRST Nevada's focus for the 21/22 school-year was on team retention to build back the momentum lost due to COVID and the inner personal connection restrictions in place this past school year. The primary focus was on rebuilding the robotics programs/teams that were lost during the pandemic along with growing the program and participation statewide.

- **Team Growth.** For the 22/23 school-year, FIRST Nevada has an aggressive growth plan to increase numbers by 50% or more by offering the following to schools:
  - Additional equipment, robotics kits
  - Teacher and student hands-on training, resources
  - New FIRST Nevada infrastructure support through the opening of 3 new positions in Nevada
- **Teacher Development.** FIRST Nevada is partnering with Desert Research Institute, Nevada Robotics, Clark County School District and Washoe County School District to plan this summer's RAN (Robotics Academy of Nevada) hands on training in Reno, Las Vegas, and Elko. This is part of the Tesla education investment training.
- **Teacher Pipeline.** FIRST Nevada is working with the UNLV College of Education department to explore a robotics micro credential option for pre-service teachers. This is a pilot project starting in April 2022 with plans to expand to include both pre-service and in-service teachers.









## Nevada Robotics by The Desert Research Institute

The Desert Research Institute's Nevada Robotics was established in 2018 to support the growth of robotics programs in every school across the state. Nevada Robotics is the leader in Teacher Development and offers training and on-going support. Our workshops provide educators with the necessary skills, confidence, and equipment to implement STEM and robotics for K-12 Nevada students.

Our three core programs include:

1. **Teacher Development** - Robotics Academy of Nevada (RAN)- year-round robotics teacher training events for pre-service teachers, in-service teachers, and youth-serving professionals. We also provide Robotics Outreach Coaches to support emerging school programs.
2. **Robot Lending Library (RLL)** - We lend out free classroom sets of robots to robot-ready / trained teachers
3. **Robotics Outreach** - field trips, Family STEM/Robotics Nights, robotics competition event support (judging, referees), STEM and robotics career resources, etc.

### Key Metrics for 2021-2022:

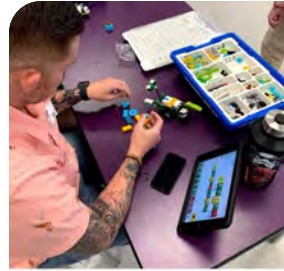
- Total investment to date: \$1,624,844
- Teacher Development
  - Tesla's investment in DRI's Nevada Robotics has supported 26 hands-on robotics teacher trainings since 2018 (both in person and virtual) and reached 900 educators across the state.
  - Over 70% work at Title I Schools and 20% return for multiple trainings.
  - Trained teachers at 14 out of 17 school districts and reached close to 40% of Nevada's schools.
  - 1 in 4 Title I schools has a Nevada Robotics trained teacher
- Innovative Programs
  - Robot Lending Library provides equitable access to robotics by lending over 130+ robots to underserved students
  - 654 students have engaged with our robots' multiple times for a total of 6,142 robot experiences
  - Student Demographics
    - 50.4% non-white
    - 56.5% male students
    - 43.5% female students
  - Student Use data
    - 68.8% of robot experiences were in Title I schools
    - 40.8% of robot experiences were in rural schools
    - 54.9% of students benefiting from the Robot Lending Library are in rural schools
    - 74.6% of students benefiting from the Robot Lending Library are in Title I schools
- K-12 Robotics Center Field Trips
  - In spring of 2022, Nevada Robotics hosted 10 field trips at the K-12 Robotics Center serving 5 Title I Redfield schools.
  - The goal of the experience was to teach 2nd - 5th grade students about robotics, engineering careers, and engage with hands-on robotics activities.
  - The Robotics Round Up Field Trip experience has reached 276 students, 15 teachers, and 41 parents.

### Upcoming Initiatives

Nevada Robotics will continue with the Robotics Academy of Nevada (RAN) events to lead the way with year-round robotics educator training for teachers, school staff, youth serving leaders, and pre-service teachers across Nevada. This summer we are offering our first RAN in Elko, as well as Reno and Las Vegas.

Nevada Robotics will continue to lend out classroom robot sets to support the sustainability of the STEM workforce pipeline.

Nevada Robotics will continue to build statewide K-12 robotics programs and will focus on equitable access to hands-on robotics by working with teachers in rural, underrepresented, and low-income schools.



**Washoe County School District  
& Clark County School District**

In 2017, Tesla and the Nevada Department of Education aligned on the need for additional administrative support to accelerate robotics programs to every school in Nevada. Tesla worked with the 2 largest school districts to each open a Regional Robotics Lead position, that would be a part of each of the respective school districts, but support Northern and Southern Nevada directly. Since establishing these roles, Tesla has funded \$903,884 since 2018 and will continue to support through 2023.

Dale Payne and Nikki Meador have been in those positions throughout the investment and partner closely across the organizations in support of this mission. Nikki shared the below testimonial regarding her role:

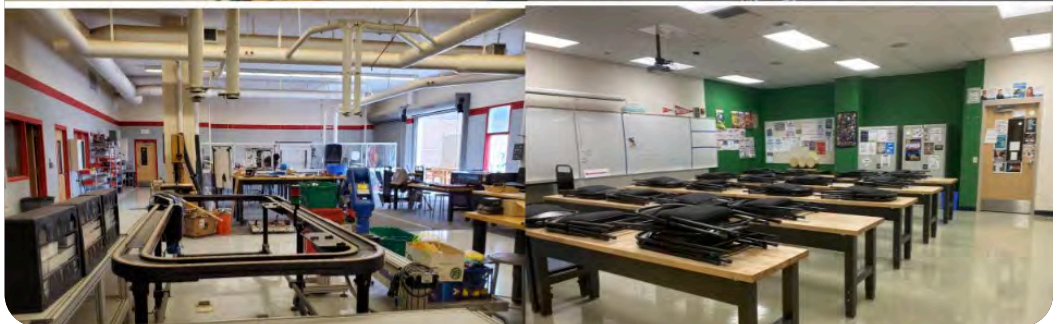
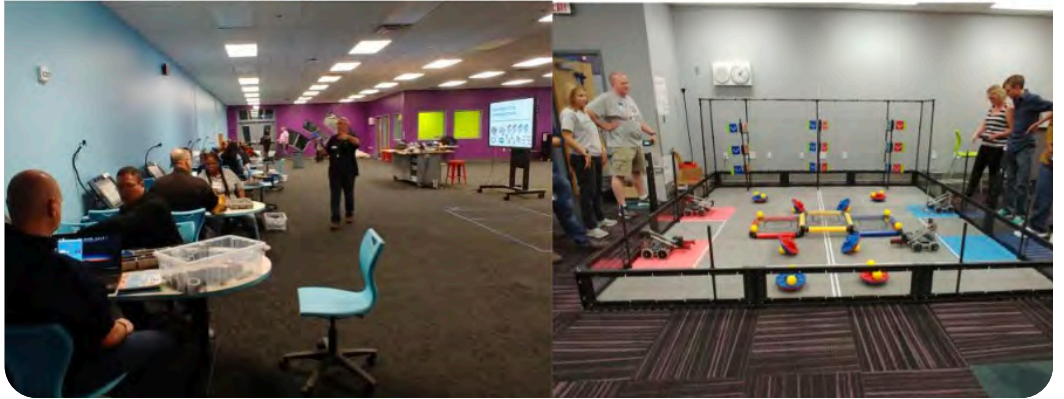
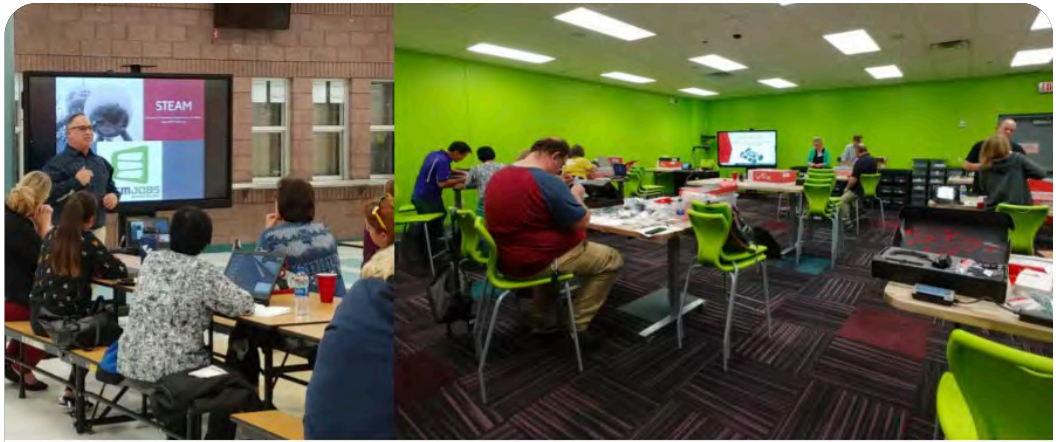
*My name is Nikki Meador, I work for the Clark County School District (CCSD) in the Career and Tech Ed Department (CTE). I never thought I would leave the classroom but five years ago, I was offered a position in the CTE office to help increase STEM in the middle schools in a forward-thinking approach that CTE would move into the middle school level. However, my position became so much more than that. I supported CTE Skilled and Technical Trades and Agriculture pathways, worked with Tesla Manufacturing Development Program (MDP) to get students employed after graduation, helped establish Robotics Academy of Nevada with Desert Research Institute (DRI), collaborated with both Robotics Education Competition Foundation (REC) and First Nevada (Robotics) to put on training and support teachers in CCSD and Southern Nevada.*

*I would like to say thank you to Tesla for all of their support because with that support we have been able to continue to grow K-12 robotics. In FY18, we had 270 robotic teams in NV and by FY20, that number had grown to 701 robotics teams. It has dropped to 477 since the pandemic however, with Tesla, DRI, REC, & First support, we are continuing to grow robotics across Nevada through hosting training and providing support for teachers. This year, there are 41 Nevada Robotics teams invited to attend VEX Worlds in Houston and nine to First worlds. These team numbers do not include the numerous teachers that teach robotics as part of a class. With Tesla support, CCSD CTE has also been able to remodel three high school shop classes for Automated Technology and one middle school shop with another middle school in the works.*

*How has Tesla support impacted the STEM, CTE and Tesla workforce pipeline? By FY20, in CCSD there was a 91% increase in middle schools that offered STEM activities, a 66% increase of female students participating in STEM activities, a 29.2% increase in female students participating in STEM related CTE programs of study, and a 37.2% increase in students entering CTE program of study. In FY17, we had nine CCSD students participate in MDP. In FY22, we have the largest group yet with 34 students applying for the Tesla Manufacturing Development Program. I am happy to say three of them were my former middle school robotics students.*

*Nikki Meador  
Project Facilitator  
Career and Tech Ed Department  
Clark County School District*





In 2019, Tesla partnered with the Desert Research Institute and the UNLV and UNR Foundations to host the first Tesla Robotics Academy of Nevada for educators. This multi-day summit trained 177 teachers across 10 school districts, bringing together experienced robotics coaches with first-time teachers to learn from each other and participate in the shared mission of bringing robotics to every school in the state.

This was a total investment of \$505,481. From 2020 onward, this investment has been transitioned into Nevada Robotics by the Desert Research Institute, who has partnered with UNLV and UNR since on continuing this tradition.

# TESLA

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## ROBOTICS ACADEMY OF NEVADA

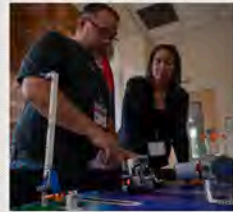
### Tesla Partners with UNLV to Provide Las Vegas Valley K-12 Teachers Robotics Training

NEVADA UNIVERSITY COLLABORATION LOOKS TO BUILD THE NEXT WAVE OF ROBOTICS EXPERTS

There is no doubt that the need for STEM professionals continues to grow in Las Vegas and throughout the United States. Recognizing the importance of STEM-based learning at all educational levels, the College of Engineering has long been involved in programs that engage K-12 students in hands-on STEM activities, either at their own school campuses or through special events at UNLV. Now, through this latest endeavor, teachers are being included as well.

The Robotics Academy of Nevada is a true collaboration, funded by Tesla, and facilitated by the Desert Research Institute, the University of Nevada, Las Vegas, and the University of Nevada, Reno. Tesla, which is building and operating the largest lithium-ion battery plant in the world in Northern Nevada, is committed to investing \$37.5 million in K-12 education in the state, focused specifically on programs that encourage students of all backgrounds to consider a career in STEM or sustainability.

More than 130 K-12 teachers across Las Vegas participated in this first training.



Robotics Academy of Nevada participants test the robot they just built.

**"Having a background knowledge in engineering and understanding how things work is definitely a good life skill."**  
Wayne Davies, Southwest Career and Technical Academy

#### ROBOTICISTS OF THE FUTURE

Working with FIRST Nevada and the Robotics Education and Competition Foundation (REC Foundation), the main goal of the Robotics Academy is to bring quality robotics programs to every school in Nevada over the next four years.

"As a longtime FIRST robotics mentor and coach, I've experienced first-hand how robotics programs prepare students to solve challenging problems and strengthen the school-to-STEM career pipeline by inspiring students to explore science, engineering and technology careers," said Brendan O'Toole, chair of the College's medical engineering department and UNLV lead on the Robotics Academy project.

The camp commenced with several workshops designed to teach students the basics in robotics from UNLV engineering students and faculty. Participants gained hands-on experience using industry-standard methods and programs. From building a model made out of LEGOs to building a working robot, teachers gained valuable insight in encouraging STEM education.

"We had a session on how UNLV faculty teach their engineering courses. I can take those methods and apply them in my robotics classes to stress what college is going to be like. The session will help me set up my curriculum and make students successful in college," said Boulder City High School teacher, Garth Schulz.

Engaging core engineering principles, teachers learned the systematic approach to solving complex problems, how to code, and were introduced to various CAD programs including



Teachers learn basic engineering design processes with hands-on activities before building their FIRST and UNLV robots.

SolidWorks—the industry standard design program for mechanical engineers.

The hope is that participants, in being given the fundamental engineering skills, knowledge, and resources during the academy, will be able to coach a robotics team at their own campuses during the next school year.

#### FUELING THE PIPELINE

Fresh out of a week of final exams, participating teachers delved head-first into a rigorous camp. The benefits? Opportunity.

For many, participating in the Robotics Academy was a chance to propel their students forward. Wayne Davies, a teacher at Southwest Career and Technical Academy said, "Having a background knowledge in engineering helps students become a well-rounded person. Understanding how things work and why they do what they do is definitely a good life skill."

Aside from the mechanical skills, experience in robotics has been shown to help students develop soft skills and boost their confidence. After a few days of participating in the Robotics Academy, teachers also found their confidence boosted.

"Yesterday I spent two hours working on a motor and attaching it with ribbons. That's something I never thought I could do. When we hooked it up to the battery pack...it worked! All the work, time, effort, and headache comes together," said Carolyn Lina, a teacher at Spring Valley High School.

The Robotics Academy also allowed teachers the opportunity to build a network of peers to lean on. With only a number of faculty teaching robotics, many teachers found themselves sharing their experiences with other instructors.

"My favorite memory has been reminiscing about students we've had and the funny and great things they've gone to do. It's more about how we can affect a student's life. I get to see my students go to do great things and know I had a small impact in that," said Schulz.

In hosting the Robotics Academy, the College hopes to have increased that impact two-fold.

**LINKS:**  
Learn more online: [firstnevada.org](http://firstnevada.org)  
[roboticseducation.org](http://roboticseducation.org)



## Project Lead the Way

Project Lead The Way (PLTW) is a nonprofit organization that provides a transformative learning experience for PreK-12 students and teachers across the U.S. by creating an engaging classroom environment unlike any other. We empower students to develop and apply in-demand, transportable skills by exploring real-world challenges through our pathways in computer science, engineering, and biomedical science. PLTW students not only learn technical skills, but also learn to solve problems, think critically and creatively, communicate, and collaborate.

In 2019, Tesla and the Nevada Department of Education awarded \$250,000 to PLTW to support the implementation of the PLTW Gateway programs in middle schools throughout the state. The purpose for this award was to increase access to hands-on learning experiences through PLTW Gateway's Automation and Robotics unit for middle school teachers and students. Automation and Robotics is one of 10 units offered in the PLTW Gateway program for students in grades 6-8. In this unit, students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. PLTW Gateway is offered during the school day and is available in English and Spanish.

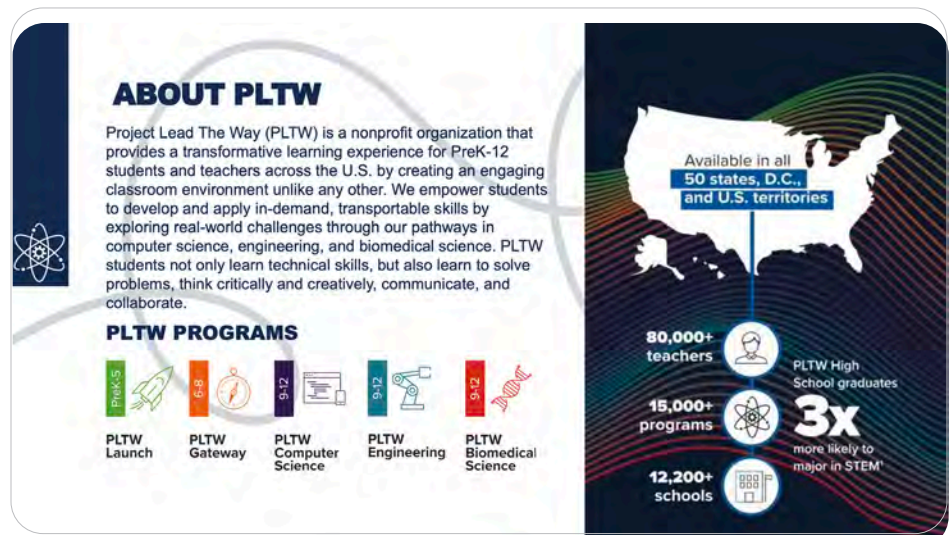
### Key Metrics for 2021-2022:

- Total investment to date: \$250,000
- Over 1,600 middle school students engaged, with 72% economically disadvantaged
- 19 Middle Schools have been awarded PLTW Gateway Grants
- 23 Teachers have been certified in PLTW programs through this initial grant

### Upcoming Initiatives

Thirteen of the PLTW Gateway programs funded in 2019-2020 remain active in the 2021-2022 school year. Each year of continued program activity provides access to an additional class of students participating in the program. The number of students benefiting from this funding continues to grow year after year.

PLTW is grateful for the partnership with Tesla and the Nevada Department of Education, as well as the investment made in teachers and students. We welcome the opportunity to continue our partnership through additional grant funds made available for PLTW Gateway program implementations and expansions in Nevada. Nevada is a strategic area of growth for PLTW, and we will continue to encourage schools to utilize funding available from the Nevada Department of Education to expand their PLTW offerings.



## Testimonial from Helen C Cannon Junior High School


*"Our new PLTW Robotics and Automation program has directly led to our school's involvement in building a strong competitive robotics program at our school and be able to give our student opportunities to engage in rigorous STEM programming."*

*We now have three competitive teams registered in Vex and Lego First. We have expanded our Self-Contained Robotics Programming by providing opportunities for students with significant learning issues to build skills in robotics and basic programming. This program was recognized as a model program for students with special needs by the Assistive Technology Services, and Student Services Division.*

*Our team that consists 100% of students with special needs earned the Judge's Award at the regional Lego First Competition. Their top score got them ranked in the top 15% of the teams who competed in Southern Nevada and they required no special accommodations to compete alongside their non-disabled peers."*

### Partnership Overview

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### PLTW Grants Supported by Tesla and the Nevada Department of Education

Grades 6-8 Students Enrolled  
**1,600+ (Yr 1)**

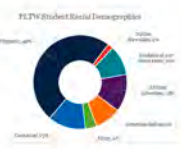
Economically Disadvantaged Students  
**72%**

Total Invested  
**\$250,000**

Middle Schools Awarded PLTW Gateway Grants  
**19**

Teachers Trained  
**23**

PLTW Student Social Demographics



PLTW

### Upcoming Initiatives

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### Success Stories

Helen C Cannon Junior High School

"Our new PLTW Robotics and Automation program has directly led to our school's involvement in building a strong competitive robotics program at our school and the ability to give our students opportunities to engage in rigorous STEM programming. We now have three competitive teams registered in Vex and Lego First. We have expanded our Self-Contained Robotics Programming by providing opportunities for students with significant learning issues to build skills in robotics and basic programming. This program was recognized as a model program for students with special needs by the Assistive Technology Services, and Student Services Division. Our team that consists 100% of students with special needs earned the Judge's Award at the regional Lego First Competition. Their top score got them ranked in the top 15% of the teams who competed in Southern Nevada and they required no special accommodations to compete alongside their non-disabled peers."

Water Academy of Nevada



"Teachers are able to act more as Facilitators, guiding students along, while the students have accountability for their own learning. We have observed higher student engagement, and students are excited to learn and move through their lessons. Through PLTW, we are providing STEM opportunities to students who would otherwise have had none."

"My PLTW Automation and Robotics class just won the curriculum. A great big great satisfaction as a teacher when the students say that this is their favorite class. The PLTW curriculum is a learning environment where the students must learn to work together as a team in order to solve hands-on problems. This style of collaborative learning is better preparing our students in solving real world problems for when they grow up. The students have understood how robots really work and have developed knowledge in using the skills to solve problems with robots. I could not be prouder of my students' growth in their understanding of Robotics this year."



### PLTW Gateway Images

Images Download: [Dropbox Link](#)



The PBS Reno Ready To Learn program offers free children's STEM Literacy workshops in classrooms throughout our region specifically developed for PreK through 4th grade students. Each workshop incorporates an engaging video from PBS content, a read-aloud book, and a fun hands on activity that teach and reinforce the educational topic, which could include math, reading, science, technology, engineering, robotics health, nutrition, financial literacy, arts and more. Our trained facilitators visit elementary classrooms, Head Start locations, and community organizations across northern Nevada. PBS Reno has an established presence and provides Ready To Learn workshops to over 110 schools in six counties: Washoe, Elko, Carson, Douglas, Lyon, and Humboldt.

In October 2021, PBS Reno & Tesla partnered on a 3 year, \$300,000 investment to expand access to PreK-4th grade STEM workshops with a focus on the engaging and rigorous robotics/coding workshops for our youngest learners (PreK-4th graders) that directly prepare students for a future in STEM careers.

**Key Metrics for 2021-2022:**

- Total investment to date: \$92,000
- Tesla's investment in PBS Reno supported 400 workshops (over 1,800 Ready To Learn workshops have been provided through February of this school year) across northern Nevada, impacting 26,011 student participants. 260 of those workshops were robotics.
- PBS Reno workshops are presented in low SES classrooms, indigenous communities, Head Start preschool classrooms and rural communities with populations that face the challenges of accessing educational resources.
- The PBS Reno Ready To Learn program meets the Nevada Department of Education's priority of enhancing services and support for students with the highest needs by providing supplemental academic instruction and in-person enrichment opportunities.

**Upcoming Initiatives**

In the 2021-2022 school year, Tesla's investment in PBS Reno will support 500 robotics workshops and an additional 400 Ready To Learn STEM workshops. In the 2022-2023 school year this will increase to 600 robotics workshops and an additional 400 Ready To Learn STEM Workshops.

By 2023-2024 school year, Tesla's investment in PBS Reno will support 700 robotics workshops and an additional 400 Ready To Learn STEM workshop.





## Envirolution

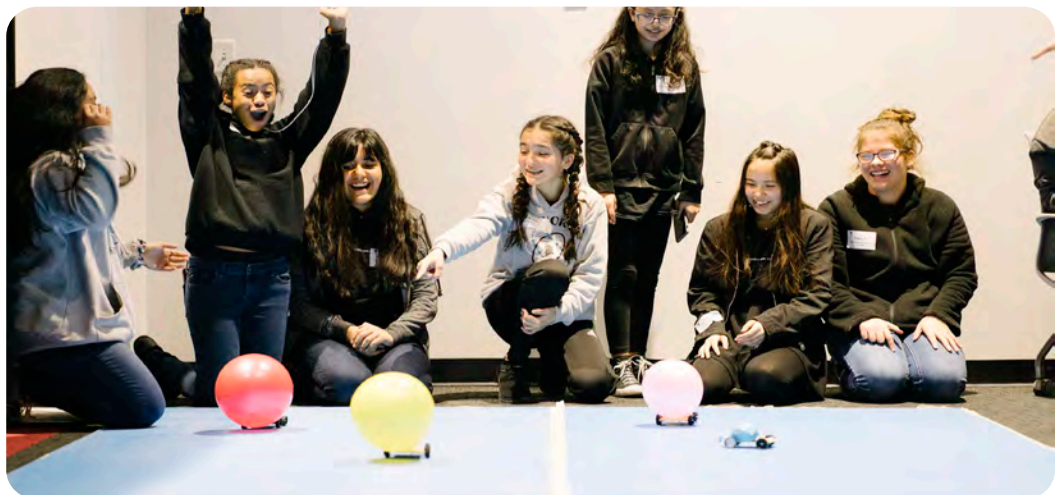
Envirolution is a Nevada-based non-profit that provides teachers, students, and industry partners with classroom resources, professional development, a sustainability-focused STEAM curriculum, and unique community engagement opportunities. The programs Project ReCharge, Career Quest, Sustainability Expedition, and Introduce a Girl to Engineering Day work together to inspire and empower the next generation in sustainability, energy efficiency, and STEAM career exploration.

### Key Metrics for 2021-2022:

- Total investment to date: \$1,866,290
- Tesla's investment in Envirolution has helped create 87 new Project ReCharge programs across the State while supporting the 27 existing programs. Two brand new initiatives: Career Quest and Introduce a Girl to Engineering Day, were also established with funding, totaling another 79 programs in schools across Nevada.
- Over the last 4 years, 146 new teachers have engaged in 37 unique training sessions resulting in 4,200 cumulative hours of high-quality professional learning experiences. A total of 248 teachers have been supported with over \$185,000 in classroom materials and access to the 22+ standards-based STEAM lessons, resulting in student-driven projects that have saved in just 4 years a total of \$132,000 in energy costs for Nevada schools.
- In the last four years, over 28,500 students have been impacted by Project ReCharge, Career Quest, and the Sustainability Expedition. 45% of these students are from underrepresented ethnic groups, and 62% of students are eligible for free and reduced lunch. 880 middle school girls, non-binary, and genderqueer students from Nevada have participated in our Introduce A Girl to Engineering Day events in partnership with Tesla. 74% of these student participants were from underrepresented ethnic groups.

### Upcoming Initiatives

In 2022 and 2023, Envirolution will continue expanding Project ReCharge programs in every district in the state, focusing on middle schools in rural and southern Nevada. New lessons focused on renewable energy and emerging technologies like electric vehicles will continue to be developed and integrated into Nevada classrooms. We will continue to grow new industry partnerships with Career Quest by providing another 1,500 students with engaging STEAM career exploration opportunities to increase student interest in STEAM careers by at least 30%. Current national expansion plans are also underway for Project ReCharge with support from Apple, directly resulting from the successful partnership with Tesla.







## The Terry Lee Wells Nevada Discovery Museum

The Terry Lee Wells Nevada Discovery Museum (The Discovery) is a 501(c)3 nonprofit science center located in Reno, Nevada. The museum's mission is to inspire by being the place to experience science. In August 2020, Tesla invested \$1.45 million to partner with The Discovery to create a 1,200 sq. ft. open-source, bilingual exhibition called Energy/Energía. The exhibit explores sustainability concepts and empowers museum visitors to understand their energy footprint and pursue careers in the sustainability sector.


### Key Metrics for 2021-2022:

- Total investment to date: \$1,445,774
- Tesla's investment supported the development of an open-source exhibition that will inspire nearly 200,000 annual visitors to learn more about sustainability and energy consumption.
- Tesla's investment supports our efforts to reach about 15,000 students and 3,000 teachers/caregivers annually through our Field Trip Program, increasing interest in STEAM concepts and awareness of careers in related industries.
- Tesla's investment contributes to The Discovery's vision to reach more people in more ways by strengthening partnerships Tesla has made possible through other initiatives around Nevada.

### Upcoming Initiatives

The Discovery anticipates opening Energy/Energía in May 2022. We expect the exhibition to be incredibly popular with the nearly 200,000 visitors we see every year, including about 15,000 students from schools throughout the Northern Nevada region. This exhibition will provide a platform to improve the community's knowledge of energy and sustainability and serve as a model for other learning institutions to reproduce. The Discovery is already receiving interest from other institutions in the state. We anticipate that interest will continue, amplifying Tesla's support of our institution and others throughout Northern Nevada.

**ENERGY / ENERGÍA**  
*Opening May 21, 2022 at The Discovery (Reno, NV)*



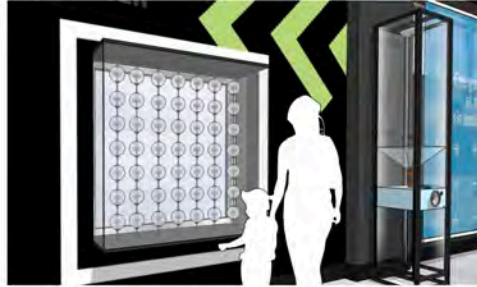
**EXPLORE FOUNDATIONAL ENERGY CONCEPTS, LEARN WHAT IT TAKES TO SOLVE BIG PROBLEMS, AND LEAVE INSPIRED!**

- » 1,200 square feet of new exhibits
- » Bilingual, interactive, STEM activities
- » Reaching 200,000 visitors a year
- » Open-source design able to be replicated nationwide
- » Realized through an ongoing collaboration between The Discovery and Tesla

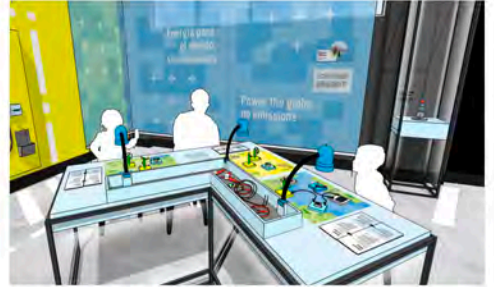
  
THE DISCOVERY CENTER

## ENERGY / ENERGÍA

Opening May 21, 2022 at The Discovery (Reno, NV)



Expanding public understanding of energy



Accessible, hands-on, STEM learning



Diverse voices, locally relevant stories



Inspiring the next generation of innovators

**Discovery**  
The Official Museum of the Tesla Model S

Sierra Nevada Journeys is a nonprofit dedicated to increasing the quality and sustainability of STEM education and student achievement across northern Nevada by providing high-impact programs with demonstrated results to students and teachers. In June of 2018, Sierra Nevada Journeys and Tesla started a multi-year partnership with an over \$1M investment to provide “Girls in STEM” Engineering Camps for underrepresented young women, Classrooms Unleashed STEM Education program for schools, Outdoor STEM Camps for fifth and grade students and Next Generation Science Standards Bootcamp for teacher training and development to build student STEM performance.

### Key Metrics for 2021-2022:

- Total investment to date: \$1,034,062
- Girls in STEM – 420 young women from Title 1 schools have participated in the Girls in STEM Camps since 2018
- Classrooms Unleashed – 4,000 students from Northern Nevada schools, at least 50% qualifying for the school lunch program, since 2018
- STEM Camps – 2,500 scholarships provided for Overnight Outdoor STEM camps for Northern Nevada students since 2018
- NGSS Bootcamp – 250 teachers trained through high-quality STEM “Boot Camp” program Over 7,000 individuals served since 2018!

### Measures of Success:

- Diversity of programs established in underserved communities across the state:
  - 55% of students served are on Free and Reduced Lunch
  - 60% of students served are youth of color
  - 15% of students served are youth living with disabilities
- Girls in STEM program specifically designed to promote career success in students with low STEM career representation
- External Evaluation shows State Science Score impacts:
  - SNJ programs evaluated by UNR to show 5% more students scoring proficient or higher in state science standard tests in schools working with SNJ when compared to schools not working with SNJ
- Statistically significant growth as seen from pre/post surveys from Girls in STEM program participants on these indicators:
  - I am planning on majoring in a STEM field at a college/university/tech school
  - I am aware of STEM career options.
  - I think learning STEM is important.
  - I believe I have the ability to complete a STEM major in college/university/tech school
  - I feel confident about succeeding in STEM classes this year.
  - I am comfortable working with people different from me.
  - I am comfortable working on a team.

### Upcoming Initiatives

In 2022 and 2023, Sierra Nevada Journeys will build on recent successes, such as the purchase of Grizzly Creek Ranch, the completion of a Community Needs Assessment and increasing the reach of our programs and services to those students and families that have been historically excluded from high-quality STEM programming, and those with financial barriers. We look forward to building our next Strategic Plan to memorialize this vision, and look forward to continued partnership with Tesla, the Department of Education, local education agencies and other community partners.





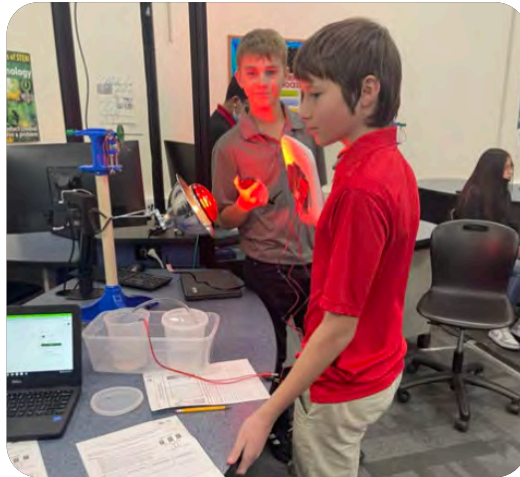


**Carson City School District –  
Green Schools National Network**

Carson City School District (CCSD) has a historical commitment to sustainability education and practices. Over the last two years, CCSD has deepened its commitment to sustainability, thanks to support from the Tesla Nevada Educational Fund. Working in partnership with Green Schools National Network (GSNN), Envirolution, and other partners, the CCSD team is strategically connecting district goals with school initiatives. These efforts are helping students, teachers, and staff develop a better understanding of sustainability, the emerging opportunities and career pathways that support a more just and sustainable world.

**Key Metrics for 2021-2022:**

- Total investment to date: \$712,250
- Whole School Transformation at Empire Elementary School and Eagle Valley Middle School
- Project ReCharge Curriculum Integration
- Green Technology and Emerging Market Work-Based Learning Ecosystem Mapping Project



## Energetics Education (Solar Rollers)

As part of Energetics Education (EE), The Solar Rollers energy education program challenges high school teams to design, build and race sophisticated solar-powered radio-controlled cars. The organization helps teams to hand-build, test and optimize their own clean energy systems, which can hit 25+mph on the racetrack. Solar Rollers has held high-profile race events in Denver, Dallas and Dubai, and hosted a competition in the middle of downtown Reno in 2019. Solar Rollers is not currently active in Nevada, and paused operations during the pandemic and after the initial races in 2019.

### Key Metrics for 2021-2022:

- \$480,193 invested to date
- Developed an initial pilot program for the establishment of 12 competitive Solar Rollers high school teams in the Reno-Sparks area.
- Facilitated teacher workshops in partnership with the Desert Research Institute for the initial 12+ team leaders.
- Worked with coaches to maintain a minimum team size of 8 students throughout the season.
- Provided complete cutting-edge materials kits to the Reno-Sparks Solar Rollers teams in January of 2019.
- Implemented refreshed online curriculum for students and coaches and provide technical support to teams remotely throughout the spring semester build season.
- Developed and hosted a flagship spring competition for the 12 pilot teams in Reno-Sparks.
- Administered stipends for team coaches for 2018-2019 school year following their successful participation in the competition.





Green Our Planet is a Nevada based nonprofit that teaches students to love and care for our planet through school garden and hydroponics programs. In their work over the past 9 years, they have created the largest school garden and hydroponics program in the United States. They've built 344 outdoor and indoor gardens at schools in 16 states reaching from above the Arctic Circle in Alaska to Brooklyn, New York, serving over 160,000 students and with a waiting list of 2,000 schools spread across the U.S.

Green Our Planet started working with Tesla in 2019, with Tesla supporting the Green Our Planet Hydroponics Program in 21 schools across Nevada from Reno to Sparks and Las Vegas to Dayton, impacting over 9,500 students and 151 teachers. The partnership has focused particularly on working with rural schools that have little access to STEM, nutrition and conservation programming. The goal of the hydroponics program is to engage students in STEM, nutrition, entrepreneurship and conservation experiential learning so that these students serve will become the next generation of scientists, engineers, farmers, chefs and entrepreneurs.

### Key Metrics for 2021-2022:

- \$219,775 invested to date
- 21 Hydroponics STEM Programs have been implemented at Nevada elementary and middle schools.
- 151 teachers have been trained on using hydroponics as hands-on STEM learning tools to empower students to pursue STEM careers through 16 teacher workshops and four 15-hour PDE accredited training sessions.
- 76% of the schools served through Tesla's support are Title I schools that serve underprivileged and under-resourced students.
- 9,500 students have been trained on how to turn their hydroponics systems into a business and are increasing access to fresh food in their communities.
- Implemented refreshed online curriculum for students and coaches and provide technical support to teams remotely throughout the spring semester build season.
- Developed and hosted a flagship spring competition for the 12 pilot teams in Reno-Sparks.
- Administered stipends for team coaches for 2018-2019 school year following their successful participation in the competition.

### Upcoming Initiatives

In 2022 and 2023, Green Our Planet will focus on scaling its programming to reach more Nevada students, especially those in rural or underserved communities, with experiential STEM education through hydroponics laboratories. Green Our Planet recently received a sizable grant to provide the hydroponics program to 100 schools across Nevada, and Tesla is further exploring matching grants to accelerate these expansions. This growth in new school will allow Green Our Planet to reach 50,000+ students and train over 700 teachers. Additionally, this expansion aligns with the Nevada Department of Education's mission to train students in entrepreneurship with school-grown veggies sold at student-run farmers markets all across the state.

## THE SCHOOLS



6

TESLA brought experiential STEM education through Green Our Planet's HydroConnect Program to 6 Nevada schools:

- McGill Elementary in McGill, NV
- Ann Lynch Elementary in Las Vegas, NV
- Seeliger Elementary in Carson City, NV
- Laughlin Junior and Senior High School in Laughlin, NV
- Van Gorder Elementary in Sparks, NV
- Empire Elementary in Carson City, NV

## THE TEACHERS



21

21 teachers were trained through 7 workshops between September 2019 and March 2020. 7 teachers took a 15-hour PDE teacher training on hydroponics in November 2019 and February 2020.

## THE STUDENTS



3,300+

Using Green Our Planet's Hydroponics STEM curriculum, 3,300+ students have become scientists and engineers since September 2019 as they engineer and build their hydroponic kits and then learn chemistry by experimenting with nutrient solutions, use math to determine how many seeds to plant and discover biology by examining the life cycle of plants.



**Keep Truckee Meadows Beautiful** Keep Truckee Meadows Beautiful (KTMB) is a 501(c)3 nonprofit dedicated to creating a more sustainable and beautiful region through waste reduction, education, and active community involvement. In May of 2019, Tesla Motors Inc. partnered with KTMB to support a multi-year investment project designed to support and increase the services provided by KTMB's Youth Education Program. Tesla provided an initial investment of \$95,000 in year one and a second investment of \$80,000 in year two. Tesla's partnership with KTMB has provided enhanced opportunities for K-12 teachers and students in the Washoe County School District (WCSD). Utilizing KTMB's "Waste, Weed and Watershed Warriors" lessons, students have realized an increase in the quality, quantity, and accessibility of environmental STEAM education for K-12 students and teachers in the WCSD.

**Key Metrics for 2021-2022:**

- Total investment to date: \$175,000
- As a result of Tesla's investment, and in spite of difficulties created by the pandemic, KTMB accomplished the following in the last two years:
  - Led 94 Environmental Education programs in the community from May 2019-June 30, 2021, teaching nearly 2,486 K-12 students.
  - Facilitated 1,344 hours worth of professional development training with 56 K-12 educators from May 2019-June 30, 2021.
  - Reached 46% of Title I schools in Washoe County School District (21 out of 46) and 49% of all schools in the District (52 out of 107).
  - Developed pre-and-post assessments with support from the Nevada Center for Surveys, Evaluation, and Statistics (CSES) to measure the efficacy of programs. Test results from 567 students indicated that, on average, KTMB lessons increased students' comprehension of sustainability and environmental science concepts related to waste reduction, weed mitigation, and watershed protection by 79.68%.

**Upcoming Initiatives**

In 2022 and 2023, KTMB will utilize Tesla's continued financial support to finish expanding Waste, Weed, and Watershed Warriors lessons from banded modules for grades K-2 and 3-5 to individualized modules for grades K, 1, 2, 3, 4, and 5. KTMB also anticipates increasing the number of WCSD Title I schools and elementary schools served. KTMB also established and will continue to recruit members for a Youth Education Committee comprised of local teachers and administrators. The committee supports KTMB's Youth Education program by enhancing lessons to complement the science and literacy standards of the curricula adopted by WCSD; provides networking and connections to increase the program's visibility, and; identifies needs and develops initiatives that support all students by making environmental education meaningful and accessible. Finally, KTMB will continue to improve and expand the Youth Education program by promoting sustainability through interdisciplinary service-learning, creating modules for middle and high school students, and adding Spanish language resources.









Get Outdoors Nevada (GON) is dedicated to connecting people of all backgrounds and ages to Nevada's diverse outdoor places through education, service, and community engagement. GON strives to foster and support a community that discovers, experiences and connects to our state's many natural environments, from wild landscapes and recreational areas to urban trails and parks. Tesla does not currently have an active investment with Get Outdoors Nevada, but will be continuing the conversation with GON on opportunities for 2022-2023.

### Key Metrics for 2021-2022:

- \$68,500 invested to date
- With consideration for our volunteers and team members, GON updated safety protocols so that we could partner with local jurisdictions and public land management agencies to provide 59 outdoor service events for residents, community groups and businesses, generating over 4,000 volunteer hours. Since the beginning of our service programs, GON has led 551 volunteer events with almost 19,000 people donating 46,832 hours of volunteer support for our community. During times of statewide restrictions, we offered virtual volunteering opportunities that sent in over 400 letters of appreciation for jurisdictions caring for our public outdoor spaces.
- GON education programs also adapted. Our robust efforts totaled 132 in-person programs prior to COVID-19 restrictions; we conducted 228 virtual programs and 12 virtual teacher trainings during the remainder of 2020. A total of 69 programs/field trips were updated to the virtual world. A brand new program, Nevada Nature Kits, created and distributed 606 science boxes to youth in southern Nevada. We also expanded our reach online and in social media, drawing on the benefits of time spent outdoors to help our audiences weather the pandemic.



Through student engagement and teacher development, Urban Roots' in-school and farm-based programs increase student academic achievement, inspire healthy behaviors, and ignite a passion for environmental stewardship. In 2017, Urban Roots created the Reno-based Urban Teaching Farm (UTF), a Renown-Health supported resource providing fieldtrips, day camp programs, and homeschool workshops for youth ages 5-15. Since opening the UTF, Urban Roots has received national recognition through USDA Farm to School grant funding, created partnerships with tribal agencies including the Reno Sparks Indian Colony and Nevada Urban Indians, Inc., and established solid footing with healthcare advocates including Washoe County Health District and the 5-2-1-0 Healthy Washoe Initiative.

In 2019, Tesla invested \$40,000 to support Urban Roots efforts in the below:

- Enhance the infrastructure of the UTF, adding restrooms and a teaching kitchen.
  - Through these additions, thousands more of children per annum can visit the UTF.
  - With the addition of a kitchen, and entirely new series of educational opportunities will be provided, including family-based learning.
- Create and deliver new curriculum with lessons focused specifically on seed-to-table experiential learning.
  - New curriculum will seamlessly integrate STEAM and nutrition education
  - Curriculum will also create awareness of family-supporting careers while making occupational connections that introduce students to a myriad of vocational and college opportunities including agriculture and food science, environmental engineering, plant and soil science, grounds maintenance, forestry, food services, and more.
  - Evaluate new programming to assess student Attitude, Skills, and Knowledge (A.S.K.) gained through UTF-based program participation.

In 2020, Urban Roots pivoted to provide nearly 2,000 "Home Activity Kits" (73% or 689 of which were given to essential workers with children or low-income schools), and provided 556 "Summer Camp in a Box" resources, which were a virtual option to visiting the site itself. These boxes included everything mentioned in Home Activity Kits (but more activities) as well as links to virtual lessons with our educators and camp t-shirts. Thanks to support from the Pennington Foundation, 75% or 416 of these boxes were scholarships and provided completely free to low-income children. Tesla does not currently have an active investment with Urban Roots, but will be exploring opportunities to support students and teachers through the organization's programs in 2022-2023.



## The Nevada Museum of Art

The Nevada Museum of Art and Tesla entered into a multi-year education partnership in 2020. Now in its third year, because of Tesla's support, the museum has made tremendous statewide impacts on innovative STEAM programs and teacher development. Tesla's unique partnership supports multiple education initiatives at the museum including our annual NV STEAM Conference, our monthly Educator Evenings program for K-12 teachers, our legacy School Tour Program, and overall annual support of all STEAM-focused programs and exhibitions at the museum.

### Key Metrics for 2021-2022:

- Total investment to date: \$992,560
- Professional Development for Teachers at Annual NV STEAM conferences (educator participation)
  - 2019 - 300 K-12 educators
  - 2020 - 300 K-12 educators
  - 2021 - 600 K-12 educators
  - 2022 - 650 K-12 educators
- Educator Evenings (educator participation)
  - The museum holds 10 programs per year
  - Attendance has grown to 1,500 K-12 educators annually (from 1000 in 2019)
- STEAM-focused School Tour Program Note: Numbers below reflect covid impacted numbers. In-person School Tours were reinstated in March 2022. Additionally, more than 50% of students served are from Title 1 schools.
  - 2019 - 8,000 K-12 students
  - 2020 - 4,000 K-12 students
  - 2021 - 3,000 K-12 students
  - 2022 - 6,000 K-12 students

### Upcoming Initiatives

Given the population growth in Nevada, our work has never been more crucial to the social, cultural, and economic vibrancy of our state. With Tesla's support, the museum intends to further push the boundaries of STEAM education, inspiring creativity and curiosity in both educators and students alike. These pioneering classroom practices, fostering student creativity, is what we believe will build Nevada's future.





Code.org is a nonprofit dedicated to expanding access to computer science in schools and increasing participation by young women and students from other underrepresented groups. In September of 2019, Code.org & Tesla partnered on a \$1M, multi-year investment to expand access to K-12 computer science education with a focus on providing professional development for Nevada teachers.

**Key Metrics for 2021-2022:**

- Total investment to date: \$984,390
- Tesla's investment in Code.org has supported 182 teacher trainings for nearly 2,500 teachers
- 58% of enrolled students are from underrepresented racial/ethnic groups, and there are over 137,783 NV students with active Code.org accounts.
- These efforts have helped drive the state to see 83% of Nevada high schools offering computer science (top 5 in the U.S.)

**Upcoming Initiatives**

In 2022 and 2023, Code.org will focus on training and implementation in rural school districts, expanding training into administrative roles, and launching support for Code.org's new AP Computer Science A program. In addition, Code.org has set a goal with Tesla and the Department of Education to host training for all 28,000 elementary schools, while continuing to maintain the existing calendar of teacher workshops for middle and high school teachers.





The SAE Foundation is a nonprofit dedicated to providing equitable access to STEM education for students from PreK through university and giving teachers the training and tools to effectively teach STEM. In January 2020, the SAE Foundation and Tesla partnered on a \$1.5M, multi-year investment to expand access to K-8 STEM programming, including professional development for Nevada teachers.

### Key Metrics for 2021-2022:

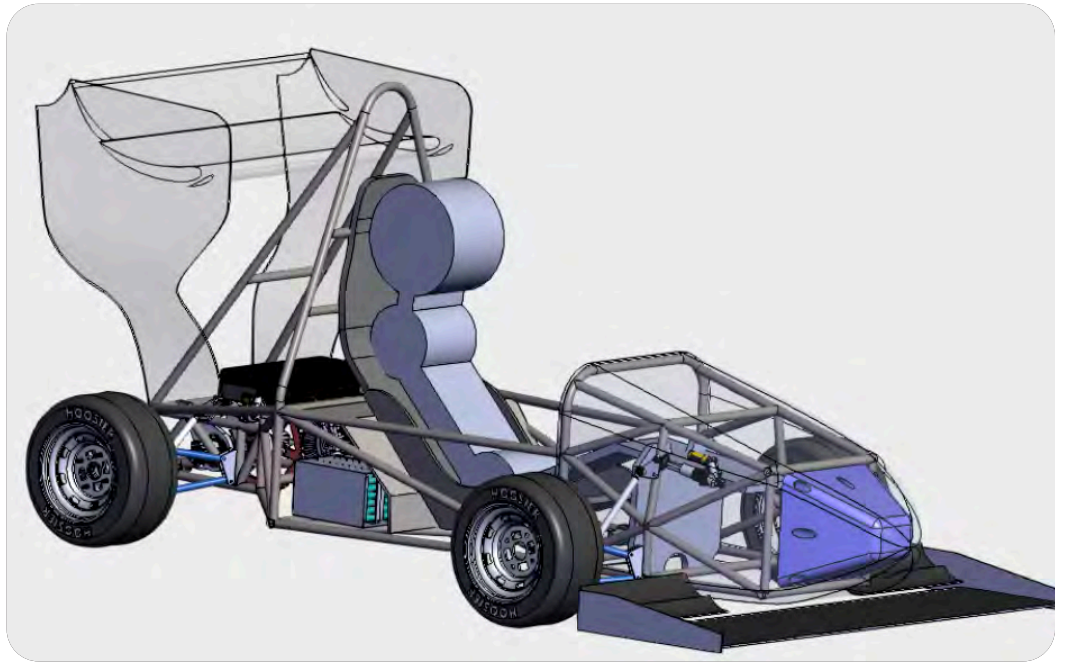
- Total investment to date: \$625,000
- Tesla's investment in the SAE Foundation in these first two years has provided hands-on STEM programming to more than 8,550 students in 2021 alone, exceeding goals by 67%. Since the first investment, Tesla and SAE have impacted over 500 classrooms (14,700 students).
- SAE has provided professional development to more than 130 Nevada K-8 teachers.
- Through SAE programs delivered across the state of Nevada, Tesla's efforts provided greater STEM education opportunities in underserved communities with diverse student populations. Of 482,400 students enrolled:
  - 43% Hispanic
  - 30% White
  - 12% Black
  - 7% Two or more races
  - 6% Asian
  - 1% Pacific Islander
  - 1% American Indian
- This programming elevates students' interest in STEM and improves essential 21st century skills that are critical to STEAM career readiness. Teachers report an 80% increase in students' awareness of, or interest in, an engineering career. They also observe greater interest in exploring math and science concepts in 94% of students. 72% of students participating in SAE STEM programs demonstrate a significant increase in their math and/or science scores, and 84% become more excited and less intimidated about learning science.
- By reaching classrooms across the grade bands, these positive impacts can help reverse the decrease in math proficiency between elementary (28.7%), middle (24.2%), and high school (22.6%) across the state. These results may also help increase the 82% graduation rate reported by the Nevada Department of Education.

### Upcoming Initiatives

SAE STEM programs provide engaging automotive and aerospace curricula to many of the participating Nevada classrooms. Classrooms are also engaging with SAE's award-winning computer science programs, which not only helps set a strong foundation for key technical concepts, but also help teach students about effective and positive engagement with technology, including how to prevent, respond, and report cyberbullying. In 2021, Nevada schools reported 180 instances of bullying and cyberbullying that resulted in suspension, 6 of which resulted in expulsions. When every child matters, the knowledge and skill sets gained through SAE digital citizenship curriculum can be invaluable, and the program is continuing to invest in the development of additional programming that will be available for Nevada students in both elementary and middle school.

In 2022 and 2023, SAE will continue supporting current participating classrooms while growing to reach up to 9,000 students each year. By providing direct support to Nevada's Northeast and Northwest Regional Professional Development coordinators, SAE and Tesla will deliver engaging training and learning opportunities for over 150 teachers annually.

In addition, participating students will benefit from near-peer mentorship as UNLV and UNR students participating in the LearnTwice initiative will contribute over 90 combined hours volunteering in classrooms each year.



## Girls Who Code

Girls Who Code is an international nonprofit dedicated to closing the gender gap in technology and to changing the image of what a programmer looks like and does. In our 10 years, we have served 500,000 girls and young women. In 2019, Tesla partnered with Girls Who Code on a \$200K investment to make Girls Who Code programming available to students in the Great Plains with a focus on the Nevada area. A portion of the grant also supported our work with college-aged alumni. Following a pause in 2020, Tesla reinvested in Girls Who Code's work with a second \$200K investment in December 2021, in support of our Clubs program in Nevada.

### Key Metrics for 2021-2022:

- \$400,000 invested to date
- Girls Who Code has been able to maintain middle and high school after school Clubs in Nevada, even during the pandemic. Across the country, our Clubs facilitators and community partners faced unique challenges such as closed schools for remote and hybrid learning, budget cuts to after school programs, reduced staffing, and zoom fatigue. As a result, numbers in Nevada dipped from a high of 91 Clubs in the 2019/2020 academic year to 52 Clubs in the 2021/2022 academic year. 2022/2023 plans include expansion, supports and growth to reach 8,000 Clubs across the country.
- Girls Who Code Clubs have hosted multiple visits to Tesla facilities, including to Tesla's Fremont Factory as part of Introduce a Girl to Engineering Day.
- Girls Who Code has served approximately 624 students through the Clubs program in the academic year 2021/2022, and 50% of the students that Girls Who Code serves come from historically underrepresented groups.

### Upcoming Initiatives

In 2022, Girls Who Code will be focusing on supporting the volunteer facilitators who run our Clubs, whether in-person or virtual, and will offer new curriculum, new Women in Tech Spotlights, and new opportunities to engage with corporate partners. Our aim is to expand our Clubs footprint, and in particular to reach communities that are historically underrepresented.







**Great Reno Balloon Race**

In 2019, Tesla supported all STEM activities held as part of the annual Great Reno Balloon Race in the community. Tesla’s \$5,000 investment supported the Tissue Paper Balloon launch, where students constructed a model hot-air balloon, competing against hundreds of local students and learning physics fundamentals along the way. Tesla does not currently have an active investment with the Great Reno Balloon Race.



**Jobs for Nevada's Graduates, Inc.** J4NG is a nonprofit created by the State of Nevada to help students vulnerable to high school dropout to rise out of poverty through graduation and workforce entry in Nevada communities large and small. In 2018, Tesla made a \$1.5 million, five-year commitment to expand the number of youth served, and to place more recent graduates into career pathways in key Nevada industries that pay a living wage or higher and have upward mobility. Hundreds of J4NG youth have traveled to the Gigafactory and interviewed for Tesla's **Manufacturing Development Program** (MDP) apprenticeship, and each year, up to 25 students have entered the program.

**Key Metrics for 2021-2022:**

- Total investment to date: \$1,309,852
- 559 additional new students served by J4NG
- 9 new schools added
- 151 visits to pathway employers
- 4,346 youth connected with employment and training opportunities
- 76 companies and training provided served via Education to Employment visits

**Upcoming Initiatives**

J4NG will continue expanding its Education to Employment initiatives through Tesla's investment, supporting students from across 59 programs in 50 schools in securing employment opportunities or full-time, post-secondary education. To ease the financial stress and anxiety that many participants face after graduation as they prepare to enter a career pathway, Tesla is exploring opportunities to support J4NG students and recent graduates in securing much needed upfront funding for housing and relocation.





Truckee Meadows Community College provides students with excellent technical training and education to build a skilled workforce in Nevada. In 2020, TMCC was the recipient of a \$324,000 investment from Tesla to build on TMCC's partnership with ACE High School, a tuition free Career and Technical Education Charter High School in Reno.

**Key Metrics for 2021-2022:**

- Total investment to date: \$594,176
- Through Tesla's investment, ACE has contracted with My Ride to Work to provide morning transportation to 40% or 85 students who are riding the bus to school each morning. Students are picked up by four separate buses at 10 different bus stops in the Reno/Sparks area and taken to ACE High School. The program is a success! Based on initial applications from incoming freshman for the 2022-2023 school year, 75% of students have an interest in taking the bus.
- Dual credit tuition allowed ACE students to take course offerings at TMCC in a number of programs, including: Heating, Ventilation, AC/Refrigeration (HVAC/R), Energy Technology, CAD Technician, Industrial Electricity, Programmable Logic Controllers, Welding, Advanced Manufacturing Automation and Industrial Maintenance, to name a few. As a result of budget cuts during COVID-19, this financial assistance was instrumental in providing access to these courses for ACE students.
- The Machining Program benefitted from having additional Instructional Assistants, textbooks and materials. This support allowed the program to educate a full class of students during COVID. The program is growing and the support provided has been critical for its expansion.

**Upcoming Initiatives**

In 2022 and 2023, TMCC is building on current programs and expanding into new areas as outlined below:

- ACE High School: Transportation is a critical component for ACE students. The morning My Ride to Work bus service has been successful and we look forward to expanding transportation for students from ACE's campus to TMCC's William N. Pennington Applied Technology Center. Enrollment at ACE continues to grow and additional transportation is a tremendous need. In addition, tuition funding allows ACE students to take courses in the Middle College and in all programs offered at the Applied Technology Center.
- Machining Program: Continuation of Instructional Assistants and operational support are important as the program grows.
- EastView Project: TMCC is embarking on an innovative project that includes a new building on the Dandini Campus that promotes innovation and integration. The heart of the building will include the ActionLink Center that focuses on students pursuing careers in engineering, robotics and coding. ActionLink includes a presentation floor to be used for competitions as well as coding labs, engineering spaces and a robotics maker's lab. The College is currently working on lab development for robotics that involves additional hands-on lab work for more advanced robotics that will be integrated into EastView.
- Program Development & Student Preparation: TMCC continues to collaborate with Tesla to prepare students for the SMART program in both manufacturing and automotive service, as well as development of Tool and Die curriculum to complement the Machining curriculum.



**Communities In Schools of Nevada (CIS of Nevada)**

CIS of Nevada is a nonprofit with a mission to surround students with a community of support, empowering them to stay in school and achieve in life. Tesla's three-year, \$687,580 investment supports CIS of Nevada services at Hug and Sparks High Schools in Washoe County from 2020-2023. CIS of Nevada's program is unique because we implement an Integrated Student Supports (ISS) program to improve academic performance and meet students' and families' social-emotional and basic needs. This may include social-emotional learning opportunities, hunger prevention, mental and physical health services, before and after school tutoring, mentoring, and college and career readiness programs.

**Key Metrics for 2021-2022:**

- Total investment to date: \$418,720
- Tesla's contribution provided 2,789 students with school-wide services and moderate and intensive case management to 104 students at Hug and Sparks High Schools
- 87% of case managed students identify as students of color
- 93% of students graduated from high school, compared to 81% statewide and 82% in Washoe County.
- Four CIS students have applied to the Manufacturing Development Program and an additional 24 are interested in applying.

**Upcoming Initiatives**

During the 2022-2023 school year, our Site Coordinators at Hug and Sparks High Schools will continue working with students to prepare them to apply for Tesla's Manufacturing Development Program (MDP) in the fall and spring. Some of our anticipated events include presentations to introduce students to Tesla and the MDP, career fairs, tours of Tesla's Gigafactory, tours of Truckee Meadows Community College, and interview preparation assistance.





Roadtrip Nation is a nonprofit that humanizes career exploration through story and empowers individuals to connect their interests to fulfilling lives and careers. In 2019, Roadtrip Nation, Tesla, the Nevada Governor's Office of Economic Development, and Strada Education Network partnered on a \$550,000, multi-year investment to create more awareness around and interest in the exciting STEAM career opportunities available in Nevada. Three Nevada students traveled across the state on the green Roadtrip Nation RV, and sat down with a total of 17 professionals from businesses and institutions, such as UNR, Nevada Gold Mines, Tesla, and even Governor Sisolak himself. The "[All In](#)" film documents their road trip and conversations with these leaders, which resulted in 100+ additional short-form video assets for educational purposes.

### Key Metrics for 2021-2022:

- Total investment to date: \$276,000
- Tesla's investment in Roadtrip Nation supported live events with 1,200+ students in attendance to promote career exploration and CTE programs at 3 selected high schools in Nevada: Yerington High School, Sunrise Mountain High School, and Elko High School
- 82% of students surveyed at Elko high school agreed or strongly agreed to being more aware of career opportunities available in Nevada after the Roadtrip Nation event, and 78% agreed or strongly agreed to feeling more in charge of creating their own career pathway
- 63% of surveyed students at Elko High School are from underrepresented racial/ethnic groups, and approximately 55,000 students at public high schools in Nevada have access to Roadtrip Nation content
- To further engagement with the "[All In](#)" documentary content, Roadtrip Nation produced a [viewing guide](#) for educators, parents, and mentors to continue the conversation about career exploration and Nevada-specific opportunities with students

### Upcoming Initiatives

While there is no active project with Roadtrip Nation in 2022, the [content from the film and related videos](#) remain available to all Nevada students. To keep up the momentum of the screening events, the Department of Education continues to promote the viewing guide and related resources to all high school teachers across the state.

Roadtrip Nation hopes to continue their partnership with Tesla to bring career exploration content and resources to even more Nevada students, educators, and parents.







Together with Tesla and the Pennington Foundation, Western Nevada College launched the Tech Express Mobile Manufacturing Lab in 2019. The Automation and Industrial Technology Mobile Lab is the next phase of WNC's vision to expand the outreach and engagement of our high-tech and hands-on offerings for students. The lab supports instructional delivery of the WNC AIT Manufacturing Technician program and our internationally recognized Siemens Mechatronics. The certifications attainable with a mobile lab are in high demand with local aerospace, mining, manufacturing and technology employers. This project increases access to the training required for underemployed and low-income workers to gain the skills necessary to excel in their careers. Tesla does not currently have an active investment with the Western Nevada College Foundation, as the program is now fully supported by the college and neighboring school districts.

#### Key Metrics for 2021-2022:

- Total investment to date: \$150,177
- Tesla's investment supported the equipment in the mobile classroom.
- Tesla's investment supports our efforts to reach rural K-12 students who may not have access to education. Most recently, the mobile classroom is being used April 2022 to provide instruction to Oasis Academy students in Fallon who otherwise would not have access to this training.
- Tesla's investment contributes to WNC's mission to provide professional and applied tech programs throughout its service area.

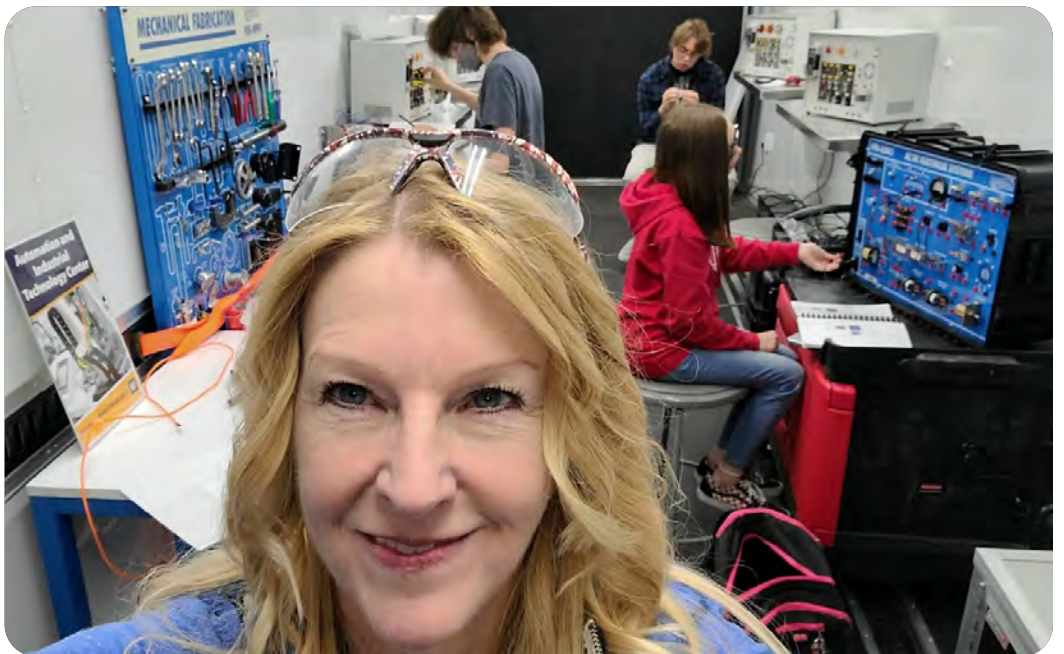
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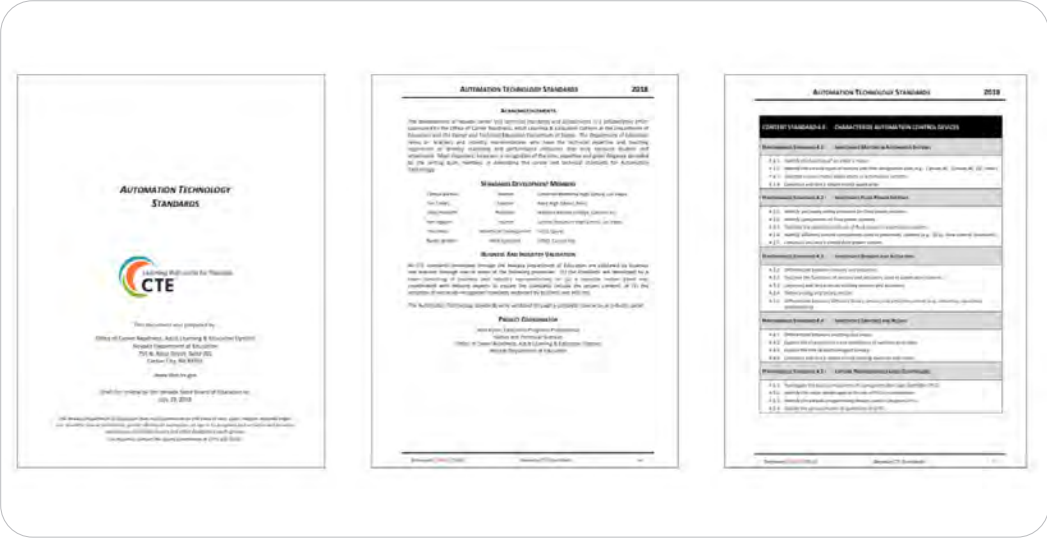


The mission of OSIT is to coordinate, support, and align efforts by K-12 and higher education, workforce development and employers to improve science, technology, engineering, and mathematics education and STEM workforce development, so that Nevada’s workforce can meet the demands of its growing economy.

OSIT received \$32,417 in investment funding from Tesla to help develop the curriculum for Nevada’s new Automation Technology Career and Tech Education K-12 State Standards via a student and teacher fellowship. The curriculum developed during this fellowship is currently open and available to all schools in Nevada, and has been implemented in several school districts across the state. The below individuals were a part of leading this curriculum development through this fellowship:

- Clinton Barnes, Automation Instructor, Cimarron-Memorial High School, Las Vegas
- Hollister Holiday, STEAM educator, Legacy High School, North Las Vegas
- Scott Weiler, aerospace engineering instructor, Rancho High School, Las Vegas
- Rizalito Nicolas, engineering instructor, Southwest Career & Technical Academy, Las Vegas
- Aspen Anderson, mechanical engineering student at the University of Nevada, Las Vegas

OSIT and Tesla also partnered on the distribution of robotics kits with FIRST Nevada throughout the state. Tesla does not currently have an active investment with OSIT.



## Washoe County K12 Education Foundation

The Washoe K-12 Education Foundation is a private foundation focused on raising and leveraging private and public resources to directly support essential Washoe County School District initiatives, which otherwise would not be fully realized. All Washoe K-12 Education Foundation-supported programs contribute and be evaluated in relation to goals set forth in the self-imposed WCSD strategic plan. In 2019, Tesla supported the Washoe County K12 Education Foundation in providing a \$10,000 grant to support increasing visibility on vocational opportunities in the school district through their annual programming, and will be investing an additional \$10,000 in 2022.





Workforce Development Programs at Gigafactory Nevada

Workforce Development

As workforce needs in the state continue to grow, Tesla has developed a long-term strategy to address future workforce needs across all levels of manufacturing.

- **Production Associates:** With 30,000+ seniors graduating from NV high schools every year, Tesla built a high school graduate apprenticeship called the [Manufacturing Development Program](#) that also includes continuing education in higher level Robotics & Automation at our community colleges while working. Over the last 5 years, Tesla has hired over 150 graduates to start full-time careers at Tesla through this program.
- **Technicians:** In 2019, Tesla established a [Technician Internship Program](#) for university and college students in the state to get hands-on work experience as Technicians at Gigafactory Nevada. In 2022, Tesla launched the START Manufacturing program in Nevada. START Manufacturing is a 12-16 week paid technician training program designed to provide students the skills necessary for job placement as a Maintenance Technician at Tesla facilities across North America. Students will develop technical expertise through in-class theory, hands-on labs, and self-paced learning. After program completion, graduates will be considered for placement directly at Gigafactory Nevada.
- **Engineers:** Tesla has supported the establishment of 2 minors at the local University of Nevada, Reno: Energy Storage Technologies and Manufacturing Quality, and is actively recruiting from those minors.
- In 2021, 177 individuals were hired from the University of Nevada, Reno to Gigafactory Nevada.

Gigafactory Nevada Original Estimated Headcount Breakdown

