Priority 1: **Quality and Scope**			
Goal 1: Improve the quality and quantity of STEM education in Nevada schools			
Metrics: [Improved STEM education in Nevada schools is addressed in the Nevada STEM definition and STEM goals.]			
1. **Takeaways:** Increased test scores of underrepresented demographic groups ~~and female students~~ 2. Increased number of underrepresented demographic groups ~~and female students~~ completing calculus, physics, and other STEM courses, STEM-focused AP and IB exams, and CTE pathways in STEM fields 3. Increased number of underrepresented demographic groups ~~and female students~~ completing postsecondary STEM degrees and/or industry-recognized certificates 4. Increased number of schools with a STEM-specific charter, have received a Governor's STEM School Designation, or are progressing toward a Governor's STEM School Designation			
Strategies	**Equity/Access Focus**	**Primary Stakeholders**	**Driving Stakeholders**
Increase the use of hands-on, experiential STEM learning in all grades, with particular emphasis in grades 1-5	Collaborate with family engagement coordinators at the state and district levels to develop a family engagement plan targeting students from underrepresented populations.	District superintendents, state superintendent, NDE, OSIT	District Curriculum Instruction (CI) Regional Professional Development Program (RPDP) Standards and Instructional Support (SIS)
Increase the percentage of elementary schools that teach science three plus hours per week	Increase the number of informal/after school STEM learning and programs	State Board of Education (SBE), district superintendents, state superintendent	
Increase the percentage of high schools that require three years of science and four years of mathematics	Increase the opportunities for applied learning, internships and apprenticeships in STEM disciplines Provide technical assistance/resources for STEM school development	SBE, district superintendents, state superintendent	

Increase the percentage of students taking pre-calculus and calculus in high school	Increase dual enrollment programs within STEM disciplines	SBE, district superintendents, state superintendent	
Increase the number of internships, job shadowing, and summer research programs, and expand partnerships with local industry	Increase dual enrollment programs within STEM disciplines Increase the opportunities for applied learning, internships and apprenticeships in STEM disciplines	NDE, district superintendents, state superintendent, OSIT, Business, Regional Development Authorities (RDAs), DETR	
Restrict the use of state funds (College and Career Readiness Grants) to evidence-based, proven programs and curriculum	Identify schools and programs with a proven track record of engaging ~~females and~~ underrepresented demographic groups ~~minorities~~ in STEM, identify best practices involved, and disseminate information across the STEM community Develop a coalition to identify and apply for federal grants that fund the development and scale of STEM programs that seek to increase equity	SBE, district superintendents, state superintendent, Legislature, OSIT	
Develop and promote the creativity in STEM via STEAM and design		SAC, OSIT, Business, non-profit	
Goal 2: Increase the quality and quantity of STEM professional development opportunities for teachers and administrators			

Metrics: [Use the Nevada STEM definition and STEM goals to address these matrices.]

Takeaways:

1. Increased number of students participating in high-quality STEM programs P-12
2. Increased number of students taking calculus, physics, and other STEM-related AP exams, IB math and science exams
3. Increased number of students completing CTE pathways in STEM-related fields
4. Increased number of students enrolling in and completing postsecondary STEM degrees and industry-recognized certificates
5. Increased interest in STEM as reported on the ACT questionnaire
6. Website/social media traffic on STEMHub website

Strategies	Equity/Access Focus	Primary Stakeholders	Driving Stakeholders
Offer a certificate or endorsement for STEM	Increase the opportunities for applied learning, internships and apprenticeships in STEM disciplines	Commission on Professional Standards, district superintendents, state superintendent, NSHE, NDE	SIS, RPDP
Restrict the use of state funds (Great Teaching and Leading Fund) to evidence-based, proven programs and curriculum	Identify schools and programs with a proven track record of engaging ~~females and~~ underrepresented demographic groups ~~minorities~~ in STEM, identify best practices involved, and disseminate information across the STEM community Develop a coalition to identify and apply for federal grants that fund the development and scale of STEM programs that seek to increase equity	SBE, district superintendents, state superintendent, Legislature, OSIT	
Increase the number of teachers receiving STEM high-quality and	Increase the opportunities for applied learning, internships	District superintendents, state superintendent, Regional	RPDP

researched-based professional development	and apprenticeships in STEM disciplines	Professional Development Programs (RPDP), NSHE, SBE, Legislature, OSIT	
Ensure opportunities for all students to be taught by teachers and administrators that are well-versed in STEM and three-dimensional learning	Increase the opportunities for applied learning, internships and apprenticeships in STEM disciplines	District superintendents, state superintendent, NDE, SBE, NSHE	K-12 District Science Leads SIS RPDP Site administrators
Provide greater support to pre-service teachers and administrators studying STEM	Increase STEM mentorship, particularly targeting underrepresented *demographic groups* ~~minorities and females~~	NSHE, SBE	
Continue Teach Nevada funding for students pursuing initial licensure in STEM fields	Increase dual enrollment programs within STEM disciplines	Legislature, SBE	
Expand the Nevada Teach program to UNLV	Develop a coalition to identify and apply for federal grants that fund the development and scale of STEM programs that seek to increase equity	NSHE	
Provide externship opportunities for teachers at STEM businesses that give real-world context to teachers and count towards requirements for professional development.	Increase STEM mentorship, particularly targeting *teachers who serve* underrepresented *demographic groups* ~~minorities and females~~	NDE, RPDP, district superintendents, state superintendent,	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Goal 3: Identify and scale best practices			
Metrics: [Use the Nevada STEM definition and STEM goals to address these matrices.]			

Takeaways:			
Strategies	**Equity/Access Focus**	**Primary Stakeholders**	**Driving Stakeholders**
Promote STEM Academies and STEM-designated schools	Identify schools and programs with a proven track record of engaging ~~females and~~ underrepresented demographic groups ~~minorities~~ in STEM, identify best practices involved, and disseminate information across the STEM community	OSIT, NDE, district superintendents, state superintendent, SAC	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Increase the number of schools that receive the Governor's STEM School Designation each year	Increase the number of informal/after school STEM learning and programs	SAC, OSIT, district superintendents, state superintendent,	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Goal 4: Increase scope			
Metrics: [Use the Nevada STEM definition and STEM goals to address these matrices.]			
Takeaways (Metrics): 1. Increased number of students completing postsecondary degrees and/or credentials in STEM disciplines. 2. Increased number of teachers completing initial licensure in STEM fields. 3. Increased number of teachers completing STEM-related, evidenced-based professional development. 4. Proficiency on assessments in 5th and 8th grades, and the ACT will improve. 5. Increased number of schools with a STEM-specific charter, have received a Governor's STEM School Designation, or are progressing toward a Governor's STEM School Designation 6. Increased percentage of schools that require 3 years of science/4 years of math, science in elementary school, computer science and engineering, and students taking math and physics in high school.			
Strategies	**Equity/Access Focus**	**Primary Stakeholders**	**Driving Stakeholders**

Integrate STEAM and Computer Science programs, activities and curricula into STEM, both during the school day and after school.	Provide technical assistance/resources for STEM school development Increase the number of informal/after school STEM learning and programs	SBE, NDE, district superintendents, state superintendent, Business/Industry and *non-profit stakeholders (should be called out)*	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction Informal Education
Develop and adopt computer science standards for K-12 using K-12 computer science framework	Group must strive to represent the diversity of NV's population and develop a long-term strategic plan to support educators' and student learning in collaboration with state, districts, schools, and educators themselves.	NDE, SBE	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Allow advanced/rigorous Computer Science courses (AP CS A and CS III) to count as science requirement for graduation, NSHE admission and Millennium Scholarship	Use multiple sources of data (e.g. testing data, course selection, hours of instruction, state report cards, etc.) to develop this course list	NDE, SBE	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction

Priority 2: **Alignment and Engagement**			
Goal 1: Align curriculum and programs with the skills required by STEM employers			
Metrics:			
Takeaways: [What does…look like?]			
Strategies	**Equity/Access Focus**	**Primary Stakeholders**	**Driving Stakeholders**
Promote the delivery and quantity of STEM education that aligns with Nevada's industry and workforce needs		OSIT, GOED, OWINN, Sector Councils, Governor's Workforce Development Board	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Align secondary and postsecondary STEM content and programs with workforce and economic needs		NDE, district superintendents, state superintendent, NSHE, GOED, OSIT, SBE	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Use NPWR and/or GOED data to identify workforce needs and gaps in the educational pipeline, and allocate resources to effective programs in K-12/higher education that lead to skills in targeted industry sectors		OWINN, GOED, NSHE, OSIT	
Invest in programs that provide education and training for targeted occupations		Legislature, OSIT, Governor, district superintendents, state superintendent,	
Align STEM degree and certificate attainment with industry needs		NSHE, district superintendents, state superintendent, Governor	

Increase training and educational opportunities at the worksite		Business, district superintendents, state superintendent, NSHE	
Goal 2: Increase STEM education, workforce development and economic development coordination and cooperation amongst state and local government, higher and K-12 education, businesses, and other stakeholders			
Metrics:			
Takeaways:			
Strategies	**Equity/Access Focus**	**Primary Stakeholders**	**Driving Stakeholders**
Increase communication and cooperation among government, business, and non-profit STEM actors and advocates in order to align efforts and avoid duplication and waste, using the STEM Advisory Council as a central hub for communication and coordination			
Expand the STEM Coalition's STEM Ambassador program and increase mentorship opportunities	PD leaders create opportunities for on-going individual and staff self-reflection to improve overall school, district, and state goals	STEM Coalition, district superintendents, state superintendent, Business/Industry, OSIT	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Encourage the establishment of university presidents/K-12 superintendents' presences in the business community;		SAC, OSIT, Business/Industry, NSHE ~~Higher education~~	

incentivize faculty to engage in partnerships			
Encourage the establishment of educational liaisons from business to formalize relationships with schools		SAC, OSIT, district superintendents, state superintendent, Business/Industry	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Promote local chambers' and regional economic development organizations' engagement by assisting with brokering and maintaining industry-school/university partnerships		SAC, OSIT, GOED	
Develop and promote teacher summer externships at New Nevada businesses	This professional growth is goal-oriented revolving around the needs of the student community (access/equity needs, data-identified, etc.)	SBE, NDE, Legislature, Business/Industry, district superintendents, state superintendent, OSIT	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Increase opportunities for internships and apprenticeships	This professional growth is goal-oriented revolving around the needs of the student community (access/equity needs, data-identified, etc.)	District superintendents, state superintendent, Business, DETR	K-12 District Science Leads SIS RPDP Site administrators District Curriculum & Instruction
Goal 3: Promote the effective leveraging of state and federal funding such as funding found in the Every Student Succeed Act (ESSA)			
Metrics:			
Takeaways:			

1. Increased investment in programs that provide training for occupations that are aligned with the state's economic development plan.
2. Reduction in workforce shortages in targeted occupations.
3. Increase in the number of schools reporting ~~a~~ collaboration with a business.
4. Increase in the number of classroom visits by STEM professionals
5. Increase in the number of STEM field trips
6. Increase in the number of internships/apprenticeships/externships

Strategies	Equity/Access Focus	Primary Stakeholders	Driving Stakeholders
Include STEM as a main component of the state's Every Student Succeed Act (ESSA) plan		State superintendent, State Board of Education, Governor	NDE

Priority 3: **Interest and Awareness**			
Goal 1: Increase student, parent, and teacher interest in and awareness of STEM			
Metrics:			
Takeaways: [What does increased student, parent and teacher interest in and awareness of STEM look like?]			
Strategies		**Primary Stakeholders**	**Driving Stakeholders**
Develop an ongoing, robust STEM marketing campaign targeting students, parents, teachers, business, and other community leaders	Gather data using a variety of qualitative and quantitative tools such as surveys and assessments to equitably evaluate and determine on-going professional development needs	Office of Science, Innovation and Technology (OSIT), STEM Advisory Council (SAC)	
Develop and increase awareness of STEM career pathways		Nevada Department of Education (NDE), Office of Workforce Innovation (OWINN)	K-12 District Science Leads Career Technical Education (CTE) Standards and Instructional Support (SIS)
Develop and promote a dedicated STEM website based on STEM/NPWR data as a one-stop integrated resource for students, parents, job seekers and employers		OSIT	
Increase STEM outreach to students, parents, and other stakeholders regarding		NSHE, district superintendents, state superintendent, OSIT, NDE	Parental Involvement and Family Engagement (NDE) K-12 District Science Leads Standards and Instructional Support (SIS)

opportunities to learn about STEM and for STEM careers			
Develop and administer a survey to establish a baseline and measure results	Use individual student and school-wide data to identify groups of students that are "at-risk" or "special needs" and differentiate instruction to meet the varying their needs	OSIT	
Goal 2: The creation of a citizenry that recognizes the importance of STEM education in creating a vibrant economy			
Takeaways (Metrics): 1. Increased number of students participating in high-quality STEM programs P-12 2. Increased number of students taking calculus, physics, and other STEM-related AP exams, IB math and science exams 3. Increased number of students completing CTE pathways in STEM-related fields 4. Increased number of students enrolling in and completing postsecondary STEM degrees and industry-recognized certificates 5. Increased interest in STEM as reported on the ACT questionnaire 6. Website/social media traffic on STEMHub website			
Strategies		**Primary Stakeholders**	**Driving Stakeholders**
Educate stakeholders about the STEM strategic plan		OSIT, SAC	
Work with local governments to incorporate STEM into urban and regional agendas		OSIT, SAC, NSHE, district superintendents	
Increase corporate philanthropy in STEM to scale evidence-based, effective and coordinated programs		Business/Industry	