Cornerstones of Science
awakening curiosity, enriching lives

Strategic Plan
2015 - 2018

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1. Executive Summary

Cornerstones of Science (CoS) was founded in 1999 on the belief that, in this rapidly changing world, all members of our communities need to understand the impacts that scientific and technological advances have on their daily lives and the world around them. In 2009, CoS became a 501(c) 3 non-profit organization with a 22 library partner network in five states. CoS works directly with public library directors, their staff, and other partners such as the Maine State Library to implement programs that enhance the abilities of public libraries to connect people with science and technology in ways that stimulate lifelong learning within their communities. Our vision is that children, teens, and adults in Cornerstones of Science communities share a passion for science and are inquisitive about the world around them.

Cornerstones of Science Guiding Principles:

1. All direct services and training to public libraries are free.
2. We operate with all interested libraries nationwide.
3. All programs, training and services fall into two major themes and/ areas of effort for achieving our mission: **Work With Public Libraries to Build Sustainable Science Literacy Capacities** and **Re-envision Public Libraries as Community Science Resource Centers**

The Cornerstones programs, services and other initiatives and the three goals they support include:

Goal #1 - CoS library partners deliver effective Science, Technology, Engineering and Math (STEM) programs and materials. Individuals that participate in Cornerstones of Science sponsored programs have a growing understanding of STEM principles and have a greater appreciation of the world around them. They use scientific ways of thinking in personal decision-making and apply their scientific knowledge in economic, civic, and cultural pursuits.

Rationale - There is a regional and national sense of urgency for our citizens to be scientifically and technologically literate. Libraries have the opportunity to further enhance their patron and community connection to current STEM issues.

Goal #1 activities address the libraries' need and ability to connect people with hands-on STEM experiences, programs, resources in an effective and efficient manner; build library capacities to improve and enhance their abilities to serve as the community science center; and, serve as a conduit for the promotion and increased awareness of the value of STEM.

Programs:

1. Science Trunks
2. Loanable Science Tools and Mentoring (Telescope and Microscope)
3. Healthy Citizens, Healthy Communities
4. Science Provider Network
5. Library STEM Resource Clearinghouse
6. Libraries As Science Resource Centers (Microscopes, 3D Printers, Exhibits, Book

Kiosks)

Goal #2 - CoS and its partners have the methods, tools and services they need to be successful. CoS partners work collaboratively to develop, implement and evaluate the programs and services they need to achieve the CoS mission and vision.

Rationale - Public libraries have demonstrated their ability to effectively and efficiently disseminate STEM materials to its patrons.

Goal #2 activities will accelerate this process by providing CoS public library partners with a user-friendly, collaborative environment where informal science education materials and their best practices are shared. This will support the leveraging of resources between libraries and extend the impact of CoS efforts.

Programs:

1. Library Partner Summit
2. Library Extension and Advisory Development System (Building Library Capacity for Sustaining Their Own Science Literacy Efforts)
3. Community STEM Organization Partnership Development
4. Librarian Professional Development Training

Goal #3 - Develop and support CoS core infrastructure. CoS has the people and organizational infrastructure to achieve its mission.

Rationale - CoS needs to develop and sustain the basic core infrastructure (e.g., people, policies and plans) to achieve its mission and to work effectively with its partners.

Goal #3 activities strengthen the capacity of CoS to effectively engage with public libraries; to measure, assess and report on the qualitative and quantitative results of CoS programs; and to increase science literacy in the communities served by CoS.

Programs:

1. Strategic Partnerships
2. Grant-writing
3. Corporate Fund Development
4. Board Development

3. Cornerstones of Science and its library partners

A. About Cornerstones of Science

Cornerstones of Science (CoS) began in 1999, as a result of the vision of Dr. Lee Grodzins, Physics Professor Emeritus at MIT, co-founder of the Union of Concerned Scientists, inventor and enthusiastic supporter of increasing science literacy in partnership with public libraries. CoS was founded on the belief that, in this rapidly changing world, all members of our communities need to understand the impacts that scientific and technological advances have on their daily lives and the world around them. In partnership with Steve Podgajny, then Director of the Curtis Memorial Library in Brunswick, Maine CoS was formed as a library program and grew from there. For the past decade, CoS has offered programs and resources to partner libraries that they use to engage their patrons and communities.

In 2009, CoS became a 501(c) 3 non-profit organization with a 22 library partner network in five states. CoS works directly with public library directors and their staff to implement effective programs that enhance the abilities of public libraries to connect people with science and technology in ways that stimulate lifelong learning within their communities. This strategic plan serves as our road map for the next three years.

B. Public Libraries in Maine

Public libraries provide educational materials; advance our competitiveness in the global economy; provide resources, job training and Internet access for job seekers; and support higher education and lifelong learning to mention but a few purposes.

A public library is an entity established under state law to serve a community. It provides the following:
(1) an organized collection of printed and other library materials; (2) paid staff that assist patrons; (3) an established schedule of services that are available to the public; (4) the facilities necessary to support such a collection, staff, and schedule; and (5) is supported in whole or in part with public funds.

Users (or library patrons) include tots to seniors from all walks of life. Public libraries provide access to reading, Talking Books (blind and disabled), and digital materials, materials; high speed computer access for people seeking jobs including retraining programs among other purposes; support inter-library loans; answer questions, for example, students working on projects and research; support community networking; offer community programs such as literacy volunteers helping with basic reading and writing skills; and provide video conferencing services to mention but a few services.

In Maine there are 269 public libraries. In 2010 they served nearly 400,000 families with children's programming, employed over 1200 staff, and checked out over nine million items.

I've used the library to look for work, buy a car, find an apartment, research candidates and issues before an election, keep in touch with family … *Quote from Maine patron*

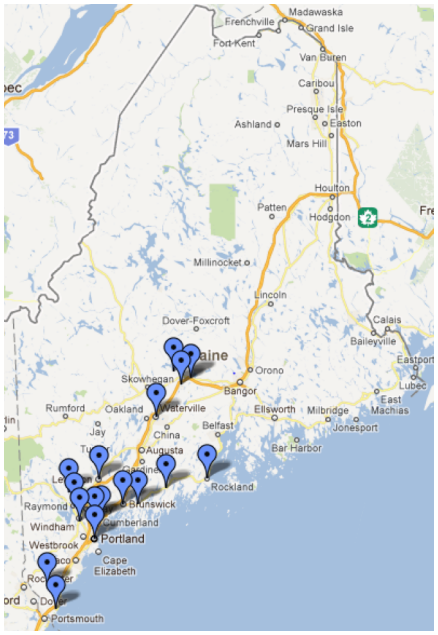
In 2011 the US Bureau of Census reported the following from a national survey of public libraries:

- Visitation and circulation per capita have both increased in public libraries over the past 10 years.
- The nature and composition of collections in U.S. public libraries is changing, indicating the more varied types of materials found in modern public libraries. Although the volume of print materials has decreased over the past 10 years, collections overall continue to grow because of increases in the number of audio, video, and electronic book materials.
- The role of public libraries in providing Internet resources to the public continues to increase. The availability of Internet-ready computer terminals in public libraries has doubled over the past 10 years. Internet PC use has also increased.
- Public libraries have increased their program offerings to meet increased demand and to allow for more individualized attention through smaller class sizes. This is particularly true of public libraries in rural areas, where the number of programs per capita and attendance per capita are both higher than the national average.

C. <u>Current Cornerstones of Science Partners</u>

A core CoS strategy is to build and sustain partnerships. Each of these partnerships allows the organization to achieve its mission and strategic goals. These partnerships include: 1) library partner network; 2) CoS Strategic Partnerships; and 3) program-specific partnerships.

1. **Library Partner Network** – The most pervasive and critical partnership is between CoS and public libraries interested in increasing STEM literacy within their communities. (In 2012 CoS partners with twenty-two public libraries of which eighteen are located in Maine.) CoS recognizes that if our library partners are successful in achieving their science literacy goals, then CoS will be successful in achieving its mission of connecting people of all ages to science and technology.



2. **CoS strategic partnerships** – These partnership extend our organizational capabilities and capacities in such a way that we can access and serve more libraries with the backing and support of other influential organizations. These relationships also set the stage for CoS to scale its efforts to state, regional and ultimately nationwide. Our current strategic partnerships include:

   a. <u>Maine State Library</u> – This state agency is responsible for the health and welfare of all public libraries and special collections. The Maine State Library is considered an extension service to libraries, providing the tools, resources, and support. This partnership shares a goal of

introducing sustainable, science literacy efforts to all public libraries. The Maine State Library provides the introduction to all public libraries and CoS provides the additional infrastructure needed to achieve our shared science literacy objectives.

b. Maine Sea Grant – This organization is a component of the University of Maine and the Maine Cooperative Extension Service. This partnership affords CoS access to high quality outreach, designed for the public, scientists and researchers focused on marine and climate change sciences. In addition, Maine Sea Grant provides small financial grants that allow both CoS and Maine Sea Grant to effectively and efficiently communicate the broader impacts of science literacy. CoS serves as an extension service to Maine Sea Grant by providing both coordination and a means to distribute their research to larger, more diverse audiences through established library networks.

c. Statewide Astronomy Clubs (NH Astronomical Society, Southern Maine Astronomers and Astronomical Society of Northern New England) – The CoS Library Telescope Program requires many layers of support and service including, telescope modification, library partner training, and the development of accurate and high quality materials. In addition, these groups provide an essential intangible – passion and the representation of the "regular public" highly engaged in lifelong learning. In order for both CoS and the library partners to be successful in implementing this program a long-term and sustainable relationship is required. CoS provides an engaging program that allows the astronomy clubs to further their mandates of introducing astronomy and the night skies to the public. Like the Maine Sea Grant partnership, CoS is an extension service to these clubs providing both the coordination and distribution of their efforts through established library partner networks.

3. Program specific partnerships

a. Colleges/Universities – Partnerships, on specific CoS topics and programs are cultivated on a yearly basis with specific faculty, researchers and students at Bowdoin, Bates, Colby, UMO and USM. Programs include: The Rachel Carson Program, Library Telescope Program, and Science Trunk development and facilitation, to name a few. CoS is in discussions with these organizations to establish a deeper partnership. CoS will serve as a public outreach extension service by providing coordination and distribution through the library partner networks to their early-career scientists, faculty and students increasing their abilities to communicate the broader impacts of their work. Colleges/universities are then able to provide ongoing science literacy presenters and programs for our library partners.

CoS programs, services and resources provide patrons with multiple points of access and promotes experiences that frames their pursuits of lifelong learning. The Co*S Participant Experience: Science Literacy Outco*mes graphic below describes this progression and transformation.

4. What Is Cornerstones of Science and What Cornerstones of Science Is Not

III. Our Vision

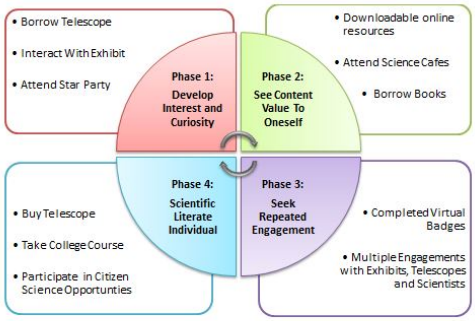
Cornerstones of Science will be a leading advocate for and provider of informal science education in the nation.

IV. Our Mission

Our mission is to **work with public libraries** to create experiences of science that **spark curiosity and foster a deeper understanding** of the world around us.

The first strategic plan was designed around the revised mission statement in 2012. Two major themes were outlined during the first strategic planning session:

4. **Work With Public Libraries to Build Sustainable Science Literacy Capacities** – Cornerstones provides the training, supports and services for all interested public library directors and their staff that empowers them to build their capacity (e.g. funding, community partnerships, STEM library staff, and an innovative library director that includes science literacy in both the daily operations and overall vision for their library) to better facilitate their patrons' connections to scientific information required to make informed decisions about their civic and economic pursuits and address community issues based in science.
5. **Re-envision Public Libraries as Community Science Resource Centers** – increasing public access and opportunities to an environment where people, of all ages, can explore science, technology, engineering and math that is engaging and relevant to them and where the library can provide a program continuum of science tools, experience and connections to the local, state and national formal and informal scientific communities that sparks their curiosity, fosters a deeper understanding and abilities for people to become scientifically literacy.



4 Phase Model of Interest Development Applied to NASA/SMD Space Science Disciplines

Strategic Decisions To Be Considered/Addressed Within FY 2015-2018

1. Continue to support and enhance the current direction and major themes (build library science literacy capacity and re-envision public libraries as community science resource centers)
2. Develop a California pilot site at the Berkeley Public Library using the tools developed within the IMLS grant
3. Explore the "Cornerstones of Science Store" selling science tools, kits and other resources to interested public libraries as a means to achieve our mission as well as create a sustainable additional revenue source

V. CoS Goals, Outcomes and Activities

CoS and its partner libraries will work to achieve the following:

Goal #1
CoS library partners deliver effective Science, Technology, Engineering and Math (STEM) programs and materials. Individuals that participate in Cornerstones of Science sponsored programs have a growing understanding of STEM principles and have a greater appreciation of the world around them. They use scientific ways of thinking in personal decision-making and apply their scientific knowledge in economic, civic, and cultural pursuits.

Outcome 1.1 STEM Connectivity	Outcome 1.2 Libraries as Science Centers	Outcome 1.3 STEM Communication
Librarians receive information, support, and resources to improve their ability to offer STEM	CoS and its library partners champion the vital role of libraries and provide sustainable	Librarians, their Boards and "Friends" understand the economic and quality of life values for

programming	hands-on STEM experiences in their communities	integrating STEM within their organization
Activities	**Activities**	**Activities**
1.1.1 Create and support beneficial relationships with each library partner	**1.2.1** Assist library partners in creating and maintaining a community science center environment within their libraries (HIGH PRIORITY) (Elements include credentialed volunteers, mentors and STEM providers, travelling exhibits, and access to science tools (e.g., telescopes) and interactive materials (e.g., Science Trunks)	**1.3.1** Support library partner communication with their Boards and Friends integrate STEM into their ongoing operational planning
1.1.2 Develop and disseminate CoS-branded programs to participating libraries. (HIGH PRIORITY) (Assist in the acquisition, maintenance and promotion of quality science books, AV, and web resources that support programs and broaden the partner collections. Provide library partners with access to quality service providers that can offer STEM programming.)		**1.3.2** Promote greater public understanding of the value of STEM and the vital role of libraries as community science centers

The Need for Action: Goal #1

There is a regional and national sense of urgency for our citizens to be scientifically and technologically literate. Libraries have the opportunity to further enhance their patron and community connection to current STEM issues.

Goal #1 activities address the libraries' need and ability to connect people with hands-on STEM experiences, programs, resources in an effective and efficient manner; build library capacities to improve and enhance their abilities to serve as the community science center; and, serve as a conduit for the promotion and increased awareness of the value of STEM.

Goal #2

CoS and its partners have the methods, tools and services they need to be successful.

CoS partners work collaboratively to develop, implement and evaluate the programs and services they need to achieve the CoS mission and vision.

Outcome 2.1 CoS Capacity to Support Partners	Outcome 2.2 Library Network
CoS is able to share informal science education best practices, STEM resources and services that enable library partners to provide high quality informal science programs and materials	The CoS network of libraries, community and statewide partners leverages resources and supports informal science education

Activities	Activities
2.1.1 Sustain CoS capacity to support a dynamic, user-driven web presence that enables library partners to share and access STEM materials, program delivery and training methods, and CoS program best practices. (HIGH PRIORITY) (Prepare plan to distribute information, train, create/manage networks of scientists and support libraries in an effective and efficient manner, and allowing CoS the capacity to serve and support large numbers of individuals, libraries and other organizations)	**2.2.1** Establish and support a CoS library partner network, with geographic foci, that enhances/sustains STEM efforts through the exchange of information, training, best practices, fund development and leveraging of resources, at the local level). (HIGH PRIORITY) (This partner network will serve the needs of CoS libraries, their volunteers and related community organizations; statewide informal science education providers; and funding partners.)
2.1.2 Periodically convene CoS library partners, community organizations and statewide informal science education partners to share best practices and strengthen CoS programming.	
The Need for Action: Goal #2 – Public libraries have demonstrated their ability to effectively and efficiently disseminate STEM materials to its patrons. Activities in Goal #2 will accelerate this process by providing CoS public library partners with a user-friendly, collaborative environment where informal science education materials and their best practices are shared. This will support the leveraging of resources between libraries and extend the impact of CoS efforts.	

Goal #3

Develop and support CoS core infrastructure.

CoS has the people and organizational infrastructure to achieve its mission.

Outcome 3.1 **Operational Sustainability** CoS organizational strategies and activities meet the needs of the organization and its partners	Outcome 3.2 **CoS Identity** The CoS brand is an integral part of library partner operations and CoS program experiences
Activities	**Activities**
3.1.1 Implement organizational policies, business strategies and plans (e.g. financial, HR, 501(c)(3) compliance, IT and work plans activities in the Strategic Plan, etc.) that are scalable to meet CoS needs	**3.2.1** Implement strategies that communicate the CoS vision, mission, and activities to our library partners, sponsors and other stakeholders within the state and nationally
3.1.2 Invest in leadership development, retention and recognition of the Board, volunteers, advisors, partners and staff.	**3.2.2** Integrate the science literacy perceptions and values of CoS stakeholders (i.e. librarians, patrons, research institutions) into the CoS experience
3.1.3 Cultivate strategic partnerships and alliances that will	

support and scale CoS mission and initiatives

3.1.4 Develop and implement evaluation, assessment and reporting methods that document internal and external organizational infrastructure and operations

3.1.5 Secure the financial resources required to operate CoS programs and services. Commence work on an endowment to ensure long-term success. Focus on businesses, individuals, public and non-profit organizations with an interest in science literacy/STEM (HIGH PRIORITY)

Income Stream	Goal to be raised	% of total income
Individual Donors	$134,500	64%
Business	$25-40,000	12%
Foundations	$25-125,000	12%
Government Grants	$25 - 100,000	12%
	$209,500 - $399,500	

The Need for Action: Goal #3 CoS needs to develop and sustain the basic core infrastructure (e.g., people, policies and plans) to achieve its mission and to work effectively with its partners.

VI. CoS programs, supports, resources, and services

CoS, in partnership with public libraries, will develop and implement an integrated system of programs (e.g., book clubs/community reads, conversations with scientists, etc.), resources (e.g., books, scientific tools, etc.), supports (e.g., grants, vetted presenter lists, subject matter volunteers/mentors, etc.) and services (e.g., professional development workshops, resource guides, etc.) align with the strategic goals, outcomes and activities, outlined in Section V.

Programs

1. Community Science Center tools - CoS will facilitate the placement of scientific tools, such as telescopes, in each library along with a knowledgeable volunteer to maintain the instruments. Like a book, patrons can check out these tools to get a unique hands-on science experience. Our library partners will also have access to *Traveling Science Trunks* and exhibits that contain curriculum, age-appropriate interactive activities, books and materials to explore a specific topic.

2. Yearly Themes – CoS will focus on one to two themes each year. One example for 2012 is the 50th anniversary of Rachel Carson's seminal work *Silent Spring*. CoS will connect libraries and the audiences around Maine to ocean scientists, literary scholars, and informal educators.

   To maximize library participation in STEM literacy efforts, CoS will align some of its programming to the Maine State reading theme, whenever possible and appropriate. For example, in 2012 the statewide reading theme was "Dream Big" which allowed many libraries to explore astronomy, night skies and telescopes. This alignment allowed the library partners to become familiar with and immersed in CoS scientific tools.

Supports

1. Library Grants - CoS grant money may be available to library partners who promote the CoS mission or for matching funds.
2. Statewide and Community Partnerships - CoS uses strategic partnerships with statewide and national partners to maximize the allocation of funding and the variety of goods and services to all libraries. Currently CoS works with the Maine State Library and Maine Sea Grant to enable statewide coverage and access. CoS is also able to facilitate partnerships between libraries and informal science groups (like astronomy clubs) to provide ongoing maintenance and promotion of scientific tools and content support.
3. Regional Collaboratives – CoS will enable, within defined regions, their library partners, community organizations, research and academia to enhance their combined abilities to routinely connect people of all ages to science and technology. This includes establishing library and regional science literacy goals, joint fund development efforts, and leveraging of resources. They will:

   i. Maximize access to shared resources within their regional collaborative, through joint projects, with public and private sector organizations and institutions interested in connecting science and technology to library patrons;
   ii. Overcome barriers to promoting science literacy by establishing and strengthening library capacity through best practices and library communities of practice;
   iii. Create positive operational and cultural shifts that increase and sustain science literacy within libraries; and
   iv. Create a library network model that has compelling outcomes and can be transferred to other regions

Resources

1. CoS Website - The CoS website expands collaboration between library partners and CoS. It provides information and resources (i.e. webinars) on current events and best practices, contains age-appropriate reviews of on quality science books, programs, citizen science experiences and other valuable information.

2. CoS Science and Technology Vendor List - CoS provides an online contact system that allows librarians to find age-appropriate "vetted" high quality presenters on various science and technology subject matter, service fees and program ratings provided by other librarians.

Services

1. Librarian Professional Development Training - CoS offers training opportunities to librarians on how to best promote various science and technology themes and subject matter to both youth and adult audiences.
2. Library Extension and Advisory Development Support System – Modeled after the Agricultural Extension Service and Maine Sea Grant, CoS will empower libraries to sustain ongoing quality STEM programs, book collections and resources to patrons of all ages. The Library Extension and Advisory Development Support System (LEADS) consists of four components:

   A. Training

   1. Librarian Professional Development Workshops and Training
      i. Yearly CoS-themed Programs (based on, but not limited to, Maine and National Library Reading Themes)
      ii. Mini Science Literacy Strategic Planning Sessions (see Regional Collaborative Overview) – Year 1 Priority
      iii. The Library Telescope Program and Scientific Tools Workshops

   B. Library Capacity Building Grants
      i. Matching Individual Program Library Grants - The library grant program provides libraries with both the capacity and ability to offer science literacy opportunities in their libraries.
      ii. Regional Collaborative Seed Grants – To encourage the formation of regional collaboratives CoS will provide seed grants.

   C. CoS Online Resources, Tools and Science Communication
      i. CoS Website – The CoS website is a core communication tool role and will help CoS to scale science literacy supports, services and programs to public libraries in an effective and efficient manner.
      ii. Science Provider Directory – CoS will work with its partners to create and maintain a directory of proven informal and formal science providers available to offer programs at public libraries. Examples include higher education faculty, science company and non-profit employees, retired scientists, and science consultants.

   D. Library Community of Practice - The CoS community of practice are CoS partners that interact, learn together, build relationships and in the process develop a sense of belonging and mutual commitment. In so doing they build their capacity to learn and innovate. The CoS website is a vital tool for the community of practice. Examples of in-person activities include the annual library partner meetings and workshops that spotlight science providers

as well as create “Speed Dating for Science Literacy” where libraries and science providers meet and arrange programs, presentations and other science literacy support.

Appendices

1. Description of strategic planning process used

In the summer of 2011 the Board directed incoming Executive Director Cynthia Randall to develop a CoS strategic plan. Worked commenced by assessing the current situation in terms of internal resources and capabilities (strengths and/or weaknesses). The Board documented previous outputs (# of partners, # of programs convened) and the outcomes/results (e.g., increased youth science awareness, etc.). It also analyzed external conditions (opportunities and/or threats) including an assessment of informal science education needs and trends; competitors and partners; and youth, teen and adult learning conditions, styles and issues. Interviews were conducted with all board members and CoS advisors. Consultation with CoS library partners commenced with phone interviews with each library. In the summer of 2011 the CoS organized and convened a 1-day retreat to discuss the information collected and to begin charting the future for CoS. In December CoS organized a 1-day session with its library partners to learn of their ideas for the future.

The first draft of the CoS strategic plan was prepared in early 2012 and in late September the Board and its advisors met to finalize 2012-15 goals, outcomes and outputs.

2. Logic Model (insert when available)

3. Plan monitoring and evaluation (criteria, responsibilities, and findings) (insert when available)

4. Communicating the Plan to CoS audiences

Effective implementation of the CoS the strategic plan requires that the Board, Advisors, CoS Partners and prospective partners and donors are aware of the plan's contents and what the organization will do over the next 3-years. Priority communication tasks include:

- Web presence – The Plan will be posted to the CoS web site and highlight the strategic importance of the Plan via a brief narrative.
- Communication materials – CoS materials and handouts (e.g., booklet, flyers, etc.) will specifically mention the plan's goals, activities and outcomes.
- Meetings and presentations – The strategic directions and priorities will be integrated into CoS public appearances.

5. Initial implementation strategy - Year 1 Priorities, Outcomes and Impacts

While work will commence on all Goals and Activities in the strategic plan year 1 priorities (FY 2012-2013) are focused on building capacities across all sectors of the organization and activities. Rationale for this emphasis is the belief that these high priority activities will quickly increase our ability to best achieve our mission and goals, allow for our library partners to sustain their own science literacy efforts as well as see a high return on investment. These focal areas include:

1. **Development and Dissemination of CoS-branded Programs** *(Strategic Goal #1: Outcome 1.1 STEM Connectivity - Activity 1.1.2)* - One such activity includes creating access to a high quality statewide system of STEM service providers, scientists, researchers (that provides flexibility in

timing, topic and targeted audience) that partner libraries can use to develop annual programs. This system will also incentivize librarians to host more STEM-related programs because of easy access, availability of presenters and reduction in their program development time.

2. **Introduction and Integration of Science Tools (i.e. Library Telescope Program)** *(Strategic Goal #1: Outcome 1.2 Libraries as Science Centers - Activity 1.2.1)* - The Library Telescope Program epitomizes, on several levels (i.e. increased awareness for both the organization and libraries, sustained STEM programming in libraries, achieving the mission of connecting youth and adults to science and technology), the strategic directions CoS is committed to accomplishing.

3. **Re-design and Overhaul the CoS Website** *(Strategic Goal #2: Outcome 2.1 CoS Capacity to Support Partners - Activity 2.1.1)* - The current CoS website, content, and functionality will be re-designed to allow the organization to communicate more clearly the activities and progress underway as well as key messaging and information required for CoS key stakeholders.

4. **Establish the Library Extension and Advisory Development System (LEADS)** *(Strategic Goal #2: Outcome 2.2 CoS Capacity to Support Partners-Activity 2.2.1)* - LEADS will align products, services, and supports (i.e. training, grants, regional collaboratives, to name a few) to build the capacity of libraries and abilities of their staff to empower their patrons to connect to science and technology.

5. **Development and Implementation of Regional Collaborative Pilots** *(Strategic Goal #2: Outcome 2.2 -Activity 2.2.1)* - Regional collaboratives are a critical LEADS component. They assist library partners in sustaining their science literacy efforts, maximizing resources and collaborating on shared science literacy goals.

6. **Build Organizational Fund Development Capacity** *(Strategic Goal #3: Outcome 3.1 Operational Sustainability - Activity 3.1.5)* - The ability to successfully achieve the Plan's goals and activities are directly correlated to the amount of human and financial resources available. The organization will move from a single donor system to a diverse multi-donor multi-year approach.

A shared vocabulary for the CoS Strategic Plan

Vision – provides a vivid description of the desired future conditions; an engaging and realistic long-term view of how CoS would like the world to be as it relates to children, teens, adults and science literacy

Example: Children, teens and adults are lifetime learners that share a passion for science.

Common Strategic planning Sequence
Determine the fundamental purpose (mission), describe where you want to go (vision), document your current situation in terms of internal resources and capabilities (strengths and/or weaknesses) and external conditions (opportunities and/or threats), and determine how CoS will reach its desired endpoints (goals, objectives, outputs and outcomes)

Mission – defines the fundamental purpose of CoS; describes why the organization exists and what it does to attain its vision;

Example: the current CoS mission is "*to connect children, teens and adults to science and technology through superb books & initiatives in libraries and other centers of community learning*"

Goal – states the long-term result that CoS, working with its partner libraries, expects to achieve over a period of decades and that contribute toward the vision

Example: Science literacy for CoS participants is ___% higher than non-CoS participants as measured by ___ ; ____% of CoS students choose careers in science-related fields; etc.

Objectives – are intermediate endpoints that are specific, measurable, attainable, realistic and time-sensitive (SMART)

Example: By 2015 CoS will provide 10,000 science books to 100 Maine libraries.

Strategy – describes the methods (e.g., programs) and the means (e.g., policies) that CoS uses to attain its goals and objectives

Example: Read, Write and Win; Books to libraries; Visiting scientists and speakers; Hands-on Science; Career focused programs; Traveling Science Trunks; Citizen Science Opportunities;

Outputs – are a means of producing outcomes. They are the things CoS does on a daily basis to achieve its mission. They are an initial measure of effectiveness but are not ends in and of themselves.

Example: products of program activities, reports, conferences, databases, etc.

Outcomes – are the anticipated or actual effects of program activities and outputs. They constitute changes or improvements in the children and adults being served or the target systems (e.g., libraries, etc.) being affected. They are important, measurable and compelling results that CoS and its partners seek to accomplish in the next five years and that contribute toward the goal.

Example: increased science literacy of children that participate in CoS sponsored programs; etc.

Business Plan - is a formal statement of a set of business goals, the reasons why they are believed attainable, and the plan for reaching those goals. It may also contain background information about the organization or team attempting to reach those goals.

Example: The goal of successfully distributing CoS core programs through libraries is attainable because there is an identified niche and need (verified by Library partner interviews and market analysis). Plan for reaching this goal include: partnering with colleges/universities, training library partners and their volunteers

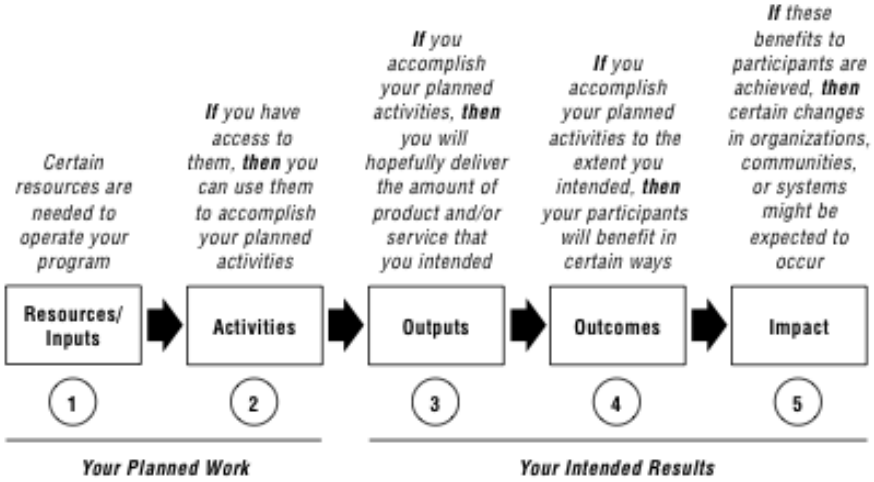
to be empowered to present CoS-developed programs whenever thereby increasing number of science programs presented and finally, develop white paper, create grant proposals and develop potential corporate sponsors to help financially sustain programs long-term.

Communications and Marketing - is central to the success of an organization's mission, goals and activities. Internal communication is essential to motivate, inform, and counsel employees and volunteers and to set the stage for excellent external communications. External communication is necessary to attract and retain constituents and to raise public consciousness, understanding, commitment to, and funding of the organization.

Example: Develop a marketing and community relations strategy that keeps key constituencies informed: governmental units, donors, for profit and nonprofit organizations. Share annual reports, newsletters and media releases with targeted individuals.

Logic Model – is to provide stakeholders with a road map describing the sequence of related events connecting the need for the planned program with the program's desired results. Mapping a proposed program helps visualize and understand how human and financial investments can contribute to achieving your intended program goals and improvements.

Example:



Note: A CoS strategic plan will inform work on organizational development, business planning, and program assessment & evaluation.