Forward, Together

SWANA Strategic Plan 2023-2027

Final | For Board Consideration | June 2022

Contents

SWANA 2.0

Our journey to this plan.

> ### Change is good—but first, know what should never change.
> *- Jim Collins, organizational excellence consultant and best-selling author*

SWANA[1], like all healthy organizations, is constantly evolving. As we learn, we improve. As conditions change, we adapt. The strategic plan you're reading is clear about how, why, and where we need to adapt.

> *But one thing is not changing: our commitment to **why** we do this work.*

The SWANA Board of Directors reaffirmed the Association's Core Purpose and Mission in February 2020. It continues to resonate and serves as our North Star:

SWANA's Core Purpose: To advance the responsible management of solid waste as a resource.

SWANA's Mission: SWANA is an organization of professionals committed to advancing from solid waste management to resource management through their shared emphasis on education, advocacy, safety, and research.

From SWANA 1.0 to SWANA 2.0

SWANA's previous strategic plan, referred to here as "SWANA 1.0" (2016-2021) outlined clear goals tied to the components emphasized in SWANA's mission[2]:

1. *Education* – SWANA will provide industry professionals with the knowledge, skills, tools, and expertise to responsibly manage solid waste resources.
2. *Advocacy* – SWANA will be valued and recognized by industry professionals, other industry associations, and policy makers for promoting balanced and credible approaches to managing solid waste resources.
3. *Research* – SWANA will support and promote research that seeks environmentally responsible solutions to solid waste resource management.

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[1] SWANA as used in this plan refers to the central association incorporated as the Governmental Refuse Collection and Disposal Association in 1966, subsequently amended to Solid Waste Association of North America, governed by a Board of Directors. It is referred to in this plan as SWANA and the Association. The 47 SWANA chapters are legally separate entities affiliated with SWANA but governed by their own separately elected boards.

[2] Given the timing of the strategic plan's development and the subsequent hiring of a new CEO/Executive Director, SWANA 1.0 did not include a specific Safety goal.

4. *Infrastructure* – SWANA will have a financially sustainable funding model with an efficient structure and effective governance that reflects contemporary business practices.

Like SWANA 1.0, the current strategic plan ("SWANA 2.0," 2022-2027) sets four goals. Each goal includes a limited number of objectives that identify major work areas. Each objective and its related strategies will require significant staff, Board of Director, and member work and focus. Implementation plans, schedules, and metrics are incorporated in annual work plans that will be created after the adoption of the goals, objectives and strategies found in SWANA 2.0.

The greatest emphasis of SWANA 2.0 has been and continues to be the future; to provide a moment to look away from ongoing day-to-day operations in order to focus on longer-term and not-yet-realized opportunities and challenges.

To accomplish this, the Board invited a cross-section of members to consider SWANA's future. These inquiries were organized into four Working Groups with each Working Group given a question on which to reflect during summer 2021. The four questions were based somewhat but not entirely around key objectives and strategies left incomplete from the SWANA 1.0 plan:

Events/Connections Working Group: The past year has proven that SWANA has the ability to offer events virtually and in person. SWANA members want to connect through events. SWANA as an association currently relies on event revenues to help fund its programs. How can events of the future do both while also continuing to offer the versatility to move smoothly between in-person and virtual formats?

Safety Working Group: What are the next steps for improving solid waste industry safety and how can SWANA best commit resources and talent to meaningfully create safer workplaces?

Subject Matter Expertise Working Group: As SWANA's mission continues to emphasize a shift toward Resource Management, what role should subject matter expertise in traditional integrated solid waste topics play over the next several years?

Young Professionals Working Group: As industry demographics (age, diversity) continue to evolve, what will young professionals need in the next several years to grow into experienced contributors to SWANA and the industry?

All groups received training in "Signals and Sensemaking," a strategic foresight skill that teaches how to scan for signals of the future coupled with a simple technique to make sense of those signals with a group. After training, each Working Group met regularly throughout the summer to share signals and talk together about what they might mean for SWANA.

The Working Groups generated hundreds of pages of signals and dozens of insights and recommendations. Their insights and recommendations were presented on Nov. 1, 2021, to a larger work group comprised of the Board of Directors, Advisory Board, Working Group members, and SWANA staff. Using the recommendations, that group identified several tactics and strategies[3] to be considered for inclusion in the SWANA 2.0 plan. Those strategies are available online[4] and in Appendix 1 of this document.

Five Drivers of Change

Change or be changed.

As the Working Groups looked to the future, they could see that some changes coming to the solid waste industry are highly visible, expensive, or threatening, like lithium-ion batteries causing damage to trucks and facilities and sustained rain events that outstrip the capacity of stormwater and leachate systems.

Other changes are subtle, like the *drip-drip-drip* of a small leak in the ceiling. They don't create huge, eye-catching change but, left unnoticed, grow bigger and cause structural damage.

The following five drivers of change include both highly visible and subtle changes. All will affect core components of resource management. Beginning to address them now represents a proactive approach to shaping the future rather than being shaped by it.

Driver 1. Shifting Worker Priorities

COVID-19 and the corresponding shutdown of normal life (i.e., the pandemic) from spring 2020 through spring 2022 have provoked and/or sped some social changes. Shifting worker priorities is one such change acting as a driver for the future that is likely more prevalent faster than it would otherwise have been.

Throughout the pandemic, industry employers have had to address risks and illness to frontline employees. As a longer-term consequence, they must also address the effects of a shrinking work force. In 2021, the U.S. "Quits Rate," which measures the number of people voluntarily leaving their jobs, began increasing both nationally and regionally. The Quits Rate reached record high levels in April (3.9M) and continued increasing into November (4.5M) before slowing slightly.

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[3] In SWANA's 2016-2021 plan (aka "SWANA 1.0"), strategies were the smallest unit of focused effort, which could comprise a single project or individual focus area. Tactics are components of strategies and generally too small or specific to be called out in the five-year plan.
[4] https://drive.google.com/drive/folders/1ztTr8C2P4ViGvfcuvgABZWP6xRyH0lxH?usp=sharing

Table 4. Quits levels and rates by industry and region, seasonally adjusted[1]												
Industry and region	Levels (in thousands)						Rates[2]					
	Jan. 2021	Sept. 2021	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022(P)	Jan. 2021	Sept. 2021	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022(P)
Total	3,311	4,253	4,132	4,510	4,403	4,252	2.3	2.9	2.8	3.0	3.0	2.8
REGION[3]												
Northeast	422	572	585	608	601	575	1.7	2.2	2.2	2.3	2.3	2.2
South	1,458	1,793	1,731	1,883	1,820	1,747	2.7	3.3	3.1	3.4	3.3	3.1
Midwest	740	900	870	1,008	998	906	2.4	2.8	2.7	3.1	3.1	2.8
West	691	987	946	1,010	985	1,025	2.1	2.9	2.7	2.9	2.8	2.9

What's going on? Why are workers leaving their jobs in record numbers? During normal times, the Quits Rate reflects:

- Employee confidence (e.g., "I can find a better job somewhere else")
- Employee dissatisfaction (e.g., "I hate this job and have had enough")

The pandemic added factors:

- Burnout – Many employees are leaving the workforce to reclaim mental and physical health. They may return to work, but it is unclear if they'll return to their previous roles or industries.
- Reassessment – The pandemic caused employees to face their own health and mortality and evaluate the importance of their job compared to other priorities. Work seems to have fallen from first place in people's lives to second or even third place.
- Demand for better conditions – Historically, after periods of great unrest, like World War I and World War II, workers have sought better wages, working conditions, and benefits[5]. This is happening now in the pandemic era and may continue for several years as social media increases employees' ability to organize and strike[6].

The pandemic has also led to a sharp increase in worker retirements, with at least 1.7 million more workers than expected choosing to retiree. Further, retirements are not equally distributed across all sectors[7], a statistic important to SWANA and employers in the resource management industry. Retirement is occurring faster–up 5%–among people 55 to 64 without a college degree and has slowed among the same age group with a college degree. That potentially means more near-term pressure to replace supervisory-level and the most experienced skilled workers and frontline staff than to replace professional track staff.

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[5] "Striketober and the Power of Workers," National Public Radio,
https://www.npr.org/2021/11/02/1051483539/striketober-and-the-power-of-workers
[6] "The Great Resignation and Striketober are Sending a Signal," CNN,
https://www.cnn.com/2021/10/29/opinions/labor-activism-and-striketober-hemmer/index.html
[7] "How the COVID Crisis is Making Retirement Inequality Worse,"
https://www.marketwatch.com/story/how-the-covid-crisis-is-making-retirement-inequality-worse-11631201005

Employers must rethink and reimagine the employer-employee contract along three dimensions: compensation, flexibility, and respect for human dignity & diversity. For example:

- HR policies like "Three absences and you're fired" will be replaced by more worker-centric apps like When I Work that give employees and managers just-in-time information about scheduling and allow workers to easily communicate with each other to help each other cover shifts.
- Overstaffing at 110% or more will become common so that if a worker must miss work for family or personal reasons someone can step in to help.
- Employers in industries where positions are hard to fill will have to raise wages. But doing so is likely to be only the minimum necessary to compete in the employment market.

In rank order by importance, employees also want:

- Flexibility and a willingness to accommodate when a health or family issue arises. One-fourth of those who are currently unemployed have a disability that makes work hard and 86% of today's unemployed say that "flexibility" is the most important value in a workplace.
- Training and development opportunities – workers are less willing to stay in dead-end jobs and want work that provide opportunities for growth and advancement.
- A sense of purpose and inclusivity, especially important to American and Canadian workers who perceive their employment as expressions of their values.

Waste Management[8] in spring 2021 implemented a program to provide all U.S. employees with access to fully funded education programs with the program expanding to all benefits-eligible dependents in January 2022. Walmart, Target, and Amazon followed in in the summer of 2021 with announcements they would begin offering free college tuition and textbooks to warehouse employees.[9] SWANA members report that some frontline workers have left to take fast food jobs that pay more and are less fatiguing. We are entering a period in which workers can command higher wages and better working conditions...and employers are responding.

Successful employers are likely to be those who embrace the need to fundamentally rethink the employer-employee value proposition to address these expectations. See Goal 3: Reframe Perception of Industry as Employers of Choice.

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[8] https://www.hrdive.com/news/waste-management-to-offer-no-cost-education-to-employees-dependents/600490/
[9] https://www.inquirer.com/business/warehouse-jobs-amazon-work-employment-20211011.html

Driver 2. Increasing Impacts from Climate Change

Climate change poses a threat and an opportunity for the resource management industry.

As an opportunity, climate change allows SWANA, its chapters, and the industry to position themselves as climate champions. The daily work of SWANA and those in the industry has traditionally been to protect the environment and public health through the provision of traditional collection, processing, and disposal services, while also encouraging the creation of new markets for downstream products. This work must expand in keeping with SWANA's emphasis on resource management to consistently advocate for reduced waste generation and to emphasize discards as resources ripe for recovery and reuse in manufacturing supply chains. If the industry embraced this position, it would change its public perception – essentially gaining a halo effect – that could better attract and keep the next generation, a record number of whom worry about the future of the planet.[10] See Goal 2: Become Climate Champions.

Young professionals will be required to tackle the impacts of climate change and how it affects their organizations. Climate change is changing the way we handle debris management, energy, power needs, and solid waste service changes. The near-term and longer-term impacts of climate changes include management of solid waste facilities adjustments and the flexibility to handle those changes. Planning for climate changes should be a part of SWANA training, ARF research, and best practices.

- **Young Professionals** Strategic Plan Working Group

Climate change will be the driving force behind new environmental legislation to reduce energy consumption, achieve compliant recycling, and facilitate carbon trading. Change in current practices for the solid waste industry is unavoidable in the near future. The carbon credit and trading scheme presents significant challenges and opportunities to municipal solid waste practitioners. Technological advances in waste management may allow the municipal solid waste sector to act as a carbon sink, hence earning tradable carbon credits while addressing emissions.

- **Subject Matter Expertise** Strategic Plan Working Group

As a threat, climate change makes the delivery of resource management services more dangerous, expensive, and laborious. Increased temperature variability (colder winters, hotter summers) poses risks to collection workers and those in facilities that aren't climate-controlled, (e.g., that lack air conditioning). Just as cities like Phoenix have done in their creation of an Office of Heat Response and Mitigation, employers will need to become more focused and attentive to addressing increased temperature variability and stronger, more frequent storm events. SWANA's industry-focused responses to this threat are found in Goal 1: Get off the Top 10 List of Most Dangerous Jobs.

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[10] "Climate Change: Young People are Worried," BBC, https://www.bbc.com/news/world-58549373

Climate impacts can adversely affect our industry because of the impacts on infrastructure and our ability/need to respond to damage. The changing climate exasperates the impact of heat—and the lack of any safety standard—on our workforce. Additionally, there is an opportunity to expand programs as they relate to CO_2 capture.

- **Safety** Strategic Plan Working Group

Additionally, concerns for addressing climate change should create an impetus to reconsider the traditional provision of many SWANA services. Rather than responding as if to a threat, climate change should be the reason for SWANA and its chapters to reassess how people will access conferences, education, and training opportunities, and otherwise connect in the future while simultaneously reducing travel. The COVID-19 pandemic provided a short trial effort in how such services could be delivered. SWANA and its chapters have learned valuable lessons about the delivery of virtual and hybrid services and events during the pandemic. SWANA should not let a rush to return to full in-person events be a reason to forget those lessons or abandon progress that has been made. The ability to pivot from an in-person event to a virtual or hybrid event is equally beneficial in response to severe weather and travel disruptions as it is to pandemic closures.

The pandemic disrupted "events as usual," but climate change may become an even bigger disruptor, especially with regard to travel. Climate change is currently, and will continue to, impact everything in our lives, and should be a key consideration in any future planning.
- Corporate and municipal sustainability policies may affect how/if/when people travel.
- Climate change and sustainability concerns may impact both selection and desirability of potential destination(s) for training, professional development, networking, and recreation.
- Sustainability and climate change concerns will most likely lead to more intentional decisions on what events and which locations are sought and approved for travel, perhaps giving preference to regional events.

- **Events/Connections** Strategic Plan Working Group

Driver 3. Expanding Use for Technology, AI, and Automation

The drivers discussed previously indicate SWANA and its members will experience increasing wage pressure and dwindling labor pools in the coming years. These forces create an environment ripe for additional investments in employee training, technology, Artificial Intelligence (AI), and automation that contribute to reduced costs, increased efficiency on the front line and in the back office, and a workplace that is safer and more attractive to next-gen workers. See Goal 1: Get Off the Top Ten List of Most Dangerous Jobs and Goal 3: Reframe Perception of Industry as Employers of Choice.

Technology has a multipronged impact on our industry. First, there is a significant increase in cab technology and autonomous vehicles/equipment. The increase of technology can improve operations but must be monitored to ensure that it is not creating distractions or other negative impacts. Autonomous equipment could aid operations at landfills. Electric cars/batteries could have a negative impact depending on the management of them after their useful life. Some safety technology could be utilized to monitor and protect our workers.

- **Safety** Strategic Plan Working Group

New emerging technologies (like automation, artificial intelligence, tracker chips in packaging, use of satellites in methane monitoring, etc.) are anticipated to change future material and waste management. Artificial intelligence has the capability to aid companies to create a circular economy by eliminating inefficiencies in sorting and waste facilities. Artificial intelligence can spot items on a conveyor belt faster and with better accuracy than a human by providing composition information and analytics to help facilities increase recycling rates. Satellite technology for monitoring emission sources is rapidly advancing, which may impact future regulations on greenhouse gas emissions. These emerging technologies will impact the future skill set requirement for solid waste professionals in both the public and private sectors.

- **Subject Matter Expertise** Strategic Plan Working Group

Automation has already had a documented effect on collection safety and routing efficiency. Increased technology is also being built into MRFs to allow for faster line speeds and better material separation. Automation and AI will have ongoing roles in new technology rollouts.

Solid waste organizations must continue to examine ways in which automation, AI, and technology can make processes safer, more effective, or efficient. Of note:

- Robotic Process Automation (RPA) is the fastest growing software market and one of the most popular choices for operational efficiency with tactical automation.[11] RPA platforms automate repetitive, rule-based, predictable tasks. Order processing, inventory management, and status monitoring are ripe for RPA applications.
- Robotic Motion Planning automates production systems with AI and robot sensors and cameras to increase autonomy and accuracy. Robot sensors monitor the environment and actuator[12] positions, while algorithms deployed with AI detect objects and command actuator actions to manipulate and place things in the appropriate locations. Example: automated solid waste collection or waste stream sorting flows.

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[11] Gartner, Magic Quadrant for Robotic Process Automation, https://www.gartner.com/doc/reprints?id=1-26YXUBYH&ct=210729&st=sb
[12] Actuator: any component of a machine that is responsible for moving and controlling a mechanism or system, for example by opening a valve. In simple terms, it is a "mover."

- Predictive Maintenance – Organizations with equipment in low bandwidth environments, such as mines, farms, factories, and landfills, can adopt a preemptive approach to part replacement and repair, reducing equipment downtime and minimizing maintenance costs. Sensors collect data on the state of subsystems of a given machine or vehicle. Models deployed with AI monitor them for predictors of failure and queue them for maintenance before they fail.

Consistent with Driver 1 (Changing Worker Priorities), employees expected to become adept at using increasingly complex systems will also expect their employers to invest in worker training and development.

Simultaneously, technology also provides opportunities for enhanced and safer employee training in the future. For example, virtual and augmented reality systems now used in gaming and on sports broadcasts are also being used as simulator platforms for driver, operator, and mechanic training. They also offer potential to safely train on other tasks with dangerous outcomes when done incorrectly (e.g., handling hazardous chemicals and working in a confined space).

> Artificial intelligence is growing more prominently with equipment, robotics, and drones. This will impact the industry for young professionals who will need more training.
> - **Young Professionals** Strategic Plan Working Group

Driver 4. Expanding Value for Resources & the Circular Economy

SWANA's core purpose is *to advance the responsible management of solid waste as a resource.* SWANA's members are integrally involved in the management of a value chain that hasn't been fully recognized or realized—from organics to biogas and carbon capture.

> Alternative fuels can be generated from much of the waste produced, which can positively impact our industry.
> - **Safety** Strategic Plan Working Group

The economics of the waste management industry will be impacted by the American Recycling Infrastructure Plan, private investments into organic processing and recycling, and public-private partnerships. Startups with more environmentally conscious practices will have an edge in the solid waste management market and change the industry dynamics.

- **Subject Matter Expertise** Strategic Plan Working Group

Involvement in management is not enough, nor is it enough to work only downstream to address wasted resources. As a result of climate change, organizations and industries are increasingly looking at the circular economy to reduce wasted resources and to considering environment, society, and governance (ESG) efforts in that light.

Young professionals will be impacted by all the changes coming in the waste industry, i.e., zero-waste, EPR, A.I., circular economy, etc. SWANA's executive team and membership will be the leaders for this change, in particular, accomplishing the mission of "Waste to Resources." These changes will impact SWANA by attracting more young professionals who are focused on the environment and waste issues.

- **Young Professionals** Strategic Plan Working Group

Manufacturers and packaging companies are moving from merely talking about the planet toward more tangible action, reassessing their role in caring for the environment, reducing waste and greenhouse gases, and using more recycled materials in their products. Many of these issues are at the heart of SWANA's purpose. Although SWANA can't require product or packaging changes, it has a role in convening the conversations about market-based and regulatory solutions. SWANA must also lead conversations that address resource management in a way that values the continued role of the public and private sector participants that employ SWANA's members.

This driver of change will be addressed by Goal 2: Become Climate Champions and Goal 3: Reframe Perception of Industry as Employers of Choice.

Driver 5. Changing Norms for Meetings and Connection

People join SWANA because they want to be in a community of their peers and be exposed to industry best practices. Associations like SWANA have traditionally relied on trade publications, newsletters, and conferences as their primary methods to engage members. Of these, annual gatherings have been the highest profile and most financially lucrative offerings for SWANA and individual chapters.

Post-pandemic, people are likely to continue to gather less in person and more online in either hybrid or remote configurations for these reasons[13]:

- Budgets – Many private companies and public agencies saw a significant improvement in their bottom lines by eliminating or reducing travel during the pandemic. They will not be quick to re-add this expense and will evaluate all meeting and conference expenses more carefully before committing. Reductions in travel budgets may be permanent. With 75% of all training dollars spent at the management level and higher, reduced travel dollars will have the largest impact on frontline workers and young professionals, the employees that SWANA members most want to retain. Further, by decreasing the professional development offered to these groups, their chances for promotion are suppressed.
- Climate Change – It is possible that some local sustainability policies may affect how, if, and when people travel. Even if local guidelines allow traveling by airplane to conferences, organizations and individuals may be expected to consider climate impacts in making decisions about attendance at in-person events.
- Upward pressure on wages will be required to attract and keep staff (see Driver #1). To accommodate higher labor costs, savings will be extracted from other parts of the budget. Historically, training and travel have been the first to be cut.

As much as people complain about "Zoom fatigue," we must also acknowledge that remote meetings enable us to reduce our carbon footprint and eliminate geographic distance. (See Goal 2: Become Climate Champions.)

COVID-19 has broadened people's understanding of what is possible online, from making connections to mentoring to technical training and certification. "Young professionals seeking a mentor are not limited to professionals in their local area; they can have several mentors at different locations around the country with whom they connect virtually. Individuals at all levels can connect with learning opportunities virtually, thus addressing some of the travel and environmental concerns identified above. When viewed as an opportunity, SWANA members' timeless desire to connect with each other and to develop as professionals can be amplified in the pandemic's aftermath.

The opportunity is enormous.

Currently, only about 20% of SWANA's members attend annual in-person events (e.g., WASTECON and SOAR) hosted by SWANA. Others participate virtually in online training and webinars, but again the number served indicates a reach of 10 to 20% per year. How can we flip the equation so that 80% of SWANA members have a meaningful interaction each year, whether in person or via a remote meeting? Any meeting that is thoughtfully designed—whether for 15 people or 1,500—can make members feel special, deliver excellent professional development, and increase SWANA's perceived and real value to members.

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[13] As reported by the **Events/Connection** Strategic Plan Working Group

The percentage of members participating in chapter-hosted events is believed to be far higher than the 20% for Association events, but SWANA does not track chapter-level data and the individuals often fail to connect their chapter-level participation to a value derived from SWANA membership. How can we support and encourage chapter-level participation with corresponding benefits to the chapters while also clarifying the link to SWANA?

Despite the opportunities identified, virtual events and learning don't fully address some other needs for connection and visibility that are provided by SWANA. Employers and boards value the enhanced connection and collaboration provided when people meet in person. Companies who support SWANA as exhibitors value the ability to demonstrate goods in person. Both SWANA and chapters have a role to play in continuing to meet these needs for members and industry participants.

Core Purpose
To advance the responsible management of solid waste as a resource.

Mission
SWANA is an organization of professionals committed to advancing *from solid waste management to resource management* through their shared emphasis on education, advocacy, safety, and research.

Goals

I. Get off the Top 10 list of most dangerous jobs	II. Become climate champions	III. Reframe perception of industry as employers of choice	IV. Continue to strengthen SWANA infrastructure and financial viability

Driving Trends

• *Shifting worker priorities* • *Increasing impacts from climate change* • *Expanding use of technology, AI, and automation*	• *Shifting worker priorities* • *Increasing impacts from climate change* • *Expanding value for resources & the circular economy* • *Changing norms for meetings and connection*	• *Shifting worker priorities* • *Increasing impacts from climate change* • *Expanding use of technology, AI, and automation* • *Changing norms for meetings and connection*	• *Shifting worker priorities* • *Expanding use of technology, AI, and automation* • *Changing norms for meetings and connection*

Objectives

1. Develop SWANA resources to support employer safety programs	3. Emphasize resource management in SWANA's structure & communications	6. Engage young professionals and next-generation employees	8. Strengthen working relationships and communication among SWANA HQ and SWANA's sub-units
2. Collaborate with gov't agencies & partners to support industry-appropriate standards and policies that lead to safer work environments	4. Reframe and prioritize resource management in North American instructure to support climate mitigation	7. Improve conditions for everyone in the industry through leadership in Diversity, Equity, and Inclusion	9. Grow and retain membership
	5. Create an organics management emphasis		10. Determine what "hybrid" will mean to SWANA events, meetings, and services

Foundations

Partnerships: Strong and trusting partnerships with chapters, federal agencies, thought leaders, and industry leaders

Resources: the financial resources, talent, and capacity to enable best-in-class training, advocacy, and member experiences

Four Goals

The future starts here.

The goals presented here respond to the five drivers of change and were influenced by a large swath of input: reports of the four Working Groups; output and feedback from the Nov. 1, 2021 strategic planning workshop and Dec. 7, 2021 Town Hall; items identified to the Board; participant feedback on draft plans; operating needs, and some elements carried over from SWANA 1.0.

Not every recommendation provided is included as a goal, objective, or strategy in this draft Strategic Plan. Priority is given to high-level, "big, hairy audacious goals" that give strategic focus rather than tactical direction to SWANA's staff. The goals are straightforward and written to be integrated and supportive of the objectives of the other goals. The recommendations and input collected through 2021 provided considerable guidance and insight in shaping this plan, even if they were not specifically identified as a goal, objective, or strategy.

Goal 1: Get Off the Top 10 List of Most Dangerous Jobs

Rationale

It's often good to be in the "top ten." In this case, SWANA wants solid waste collection and disposal employees to be eleventh or lower on the list of most dangerous jobs measured for 2026 and reported on the US Census of Fatal Occupational Injuries (CFOI) and similar Canadian national or provincial/territorial reporting.

Frontline employees are exposed to risk in a variety of ways during their workday with a few of those exposure areas being:
- Working around vehicles, machinery, and heavy equipment (mechanical operations) operated by themselves, co-workers, and the public
- Physical injury due to lifting, trips, falls, and other exertion
- Exposure to dangerous, hazardous, or potentially harmful materials placed in the various material streams set out for collection and sent for processing or disposal
- A changing climate causing more extreme temperatures and stronger, more frequent storms

Even as some of these risk areas may be addressed through an emphasis on industry training and increased use of automation, it is also necessary to focus on working toward the adoption of policies, regulations, and laws that can help prevent exposures altogether.

An emphasis on working out of the top 10 is critical and will:

- Result in safer workforces
- Encourage and require industry innovation (e.g., automation, AI) to continue reducing physical danger and increasing training effectiveness

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- Have a higher likelihood of attracting and retaining workers who might be discouraged by a "dangerous job"

In addition to increasing worker safety, these outcomes support Goals 2 and 3 in becoming climate champions and reframing the industry in a positive light, respectively.

> SWANA needs to create new training and certification programs focused on new emerging technologies e.g., AI, automation, etc. that can improve safety and increase efficiency. SWANA should also continue taking advantage of virtual platforms to make these trainings available to more solid waste professionals who do not have access to travel funds to attend in-person SWANA training and certifications.
>
> - **Subject Matter Expertise** Strategic Plan Working Group

Objective 1: Develop SWANA resources to support employer safety programs.

Strategy 1.1: In each SWANA training course, incorporate a workplace safety section focused on the most common types of accidents and injuries and reflecting industry best practices.

Strategy 1.2: Develop training materials/short course for frontline supervisors, managers, and leaders on best safety practices and how to effectively discuss safety with workers with emphasis on the role of leaders in workforce engagement, communications, and setting metrics.

Strategy 1.3: Develop safety engagement and outreach programs for solid waste facilities and employees that can be widely distributed through SWANA's network of chapters, technical divisions, equipment ROAD-EOs, and other sub groups. The Hauler Safety Outreach program may be used as a model for these programs.

Strategy 1.4: Develop training materials and/or a course on how to establish safety programs related to countering climate-related effects (heat, floods, wind, and storm events).

Objective 2: Collaborate with government agencies and partners to develop and support industry-appropriate standards and policies that lead to safer work environments

Strategy 1.5: Explore and evaluate the expanded use of autonomous equipment, robotics, and sensors at landfills, transfer stations and MRFs.

More automation and sensing technology are available for implementation in operations today than ever before. Much of the available technology could be utilized to reduce risks to workers by removing them from high risk human/machine interfaces or by providing additional advance notice of potentially hazardous or dangerous substances in material streams. SWANA should support the evaluation of additional technology applications in the solid waste industry to reduce workplace danger.

Strategy 1.6: Identify and promote worker safety as an additional outcome of Extended Producer Responsibility (EPR).

To the extent that EPR policies and programs keep materials such as sharps, dangerous chemicals, and lithium batteries out of discard streams, they reduce frontline employee exposure to workplace injury and fires. SWANA should educate EPR advocates regarding these additional benefits. SWANA's Policy Committee should also consider incorporating this outcome in SWANA's technical positions/policies on EPR policy when they are addressed.

Strategy 1.7: Encourage and participate in the development of temperature standards for employees working in the industry.

More extreme temperatures place frontline workers at greater risk for both heat- and cold-related injuries. This is true for workers on collection routes and at disposal facilities and in other processing facilities that may not be climate controlled. SWANA should participate in the development of heat standards and the recommendation of PPE training and programs that support safe working conditions.

Goal 2: Become Climate Champions

Rationale

SWANA has long believed as a core principle that SWANA members and their employers—whether governments or businesses—share a commitment to the protection of human health and the environment. Service providers are responsible for carrying out services in a way to accomplish that. Local governments have the authority to provide or arrange for the provision of services and the obligation to ensure that the services accomplish the goals of protecting human health and the environment. State/provincial and federal governments establish the legal and regulatory standards that set the measurable goals. Each component of the infrastructure holds some accountability for the overall goal of protecting human health and the environment.

Yet, in the act of meeting those goals, the infrastructure also contributes to climate impacts. Trucks that collect materials (even recyclables and organics) and heavy equipment that bury waste burn fuel and add emissions. Landfills are built to contain leachate and landfill gas and to allow for their extraction but don't prevent all gas emissions from customers or disposal areas through the life of the facility. . Processing facilities require electricity. If we focus only on material streams for their potential as resources and not the effect of the entire industry, we miss an opportunity to become a Climate Champion focused on making real change throughout the infrastructure.

During its Oct. 31, 2021 meeting, the SWANA Board of Directors endorsed the "ISWA Declaration on Climate Change and the Waste and Resource Management Sector[14], dated 3 October 2021," and its use as a reference in developing SWANA policy. This declaration is included in the Strategic Plan as Appendix 2.

By becoming a Climate Champion, SWANA can positively represent and lead the industry in engaging a new generation of workers and leaders, contributing to environmental and worker protection, retooling training, and certification programs, and creating communities of interest.

Three concepts are inherent in this strategy:

- *The circular economy* that decreases or eliminates waste also keeps products and materials in use and reduces demand for new resources, which allows for regeneration of our natural world.
- *Climate change* includes global warming and effects on weather patterns that impact people, plants, animals, and the planet.
- *Co-benefits* are the additional social, economic, environmental, and technological benefits—beyond that of a more stable climate—gained by acting to address climate change.

In becoming a Climate Champion, SWANA will work with and influence government and industry partners to:

- Reframe resource management as critical national infrastructure.
- Raise awareness with members, their employers, and local and state/provincial governments as a whole about the potential effects of:
  - More extreme weather events resulting in flooding of local infrastructure essential to resource management, such as roads, leachate lagoons, catchment areas, and power supplies
  - Common consumer items, such as lithium-ion batteries, which can catch fire and damage or destroy trucks and facilities.
  - The role of properly managing organics in reducing greenhouse gas emissions, increasing carbon sequestration, and increasing soil health and associated benefits

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[14] https://www.iswa.org/wp-content/uploads/2021/10/ISWA-Declaration-2021-Climate-Signatories.pdf?v=06fa567b72d7

- Capitalize on the momentum among product designers and engineers to complete the circle, to use recyclable content in their products, and to recapture its value later in the product life cycle.

Objective 3: Emphasize Resource Management in SWANA's structure and communications

Strategy 2.1: Update and expand SWANA's technical policies to address and support resource management.

SWANA's technical policies reflect the responsibility of industry and local governments to provide ongoing daily management of municipal solid waste as a whole and in its component streams. While continuing to affirm that obligation and the importance of daily services to protect public health and the environment, SWANA will update outdated technical policies and develop new policies to incorporate circular economy concepts and the transition to resource management.

Strategy 2.2: Develop a technical policy and Association position on Extended Producer Responsibility (EPR).

SWANA's technical policies do not currently include a comprehensive position and policy on EPR (beyond those on product stewardship [15] and bottle deposit [16] developed many years ago and due for update) but should. Given the number of materials and topics potentially addressed (car batteries, solar panels, wind turbine propellers, mattresses, pharmaceuticals, Bottle Bills) and the differences in approaches in the United States and Canada, this could be one or two policies (one per country) and the/each policy may need to begin with a single, very broad position in favor of EPR followed by sub-positions and policy statements appropriate for geographic areas and/or materials.

Strategy 2.3: Position SWANA's Technical Divisions for success by retooling the focus of each division toward support of resource management and Climate Champion initiatives.

SWANA has had seven technical divisions for many years with very little change in the fundamental emphasis if each though two were renamed as the Sustainable Materials Management and Waste Conversion & Energy Recovery technical divisions. Little has been done in the past five years to proactively work with leaders and members of any of the divisions to share SWANA's strategic emphasis on resource management. This strategic plan and the Board's endorsement of the ISWA Declaration on Climate Change and the Waste and Resource Management Sector provide an opportunity to do so. They also provide an opportunity to complete an assessment in each specialty area of how to function at the leading edge of resource

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[15] T-2.1: Product Stewardship, approved March 27, 2014.
[16] T-2.2: Deposit Systems, approved July 31, 1993.

management for the industry, the public, and the environment. Completing these steps will help serve and retain existing subscribers and attract additional participation.

Strategy 2.4: Incorporate resource management topics and content as SWANA certification courses are updated.

Objective 4: Reframe and prioritize resource management in North American infrastructure to support plans and initiatives for climate mitigation

Strategy 2.5: Collaborate with other associations and organizations to promote the development of balanced and credible resource management infrastructure across North America.

Strategy 2.6: Maintain a high level of organization visibility and relevance through ongoing outreach, comment, and consultation with policymakers, NGOs, media, and others.

Objective 5: Create an Organics Management Emphasis

Strategy 2.7: Collaborate with US Composting Council, US Composting Infrastructure Coalition, the Compost Council of Canada, and other groups to advance the industry implementation of programs to effectively recover organics as valuable resources

Strategy 2.8: Update the education courses focused on managing organics.

The current *Managing Composting Programs* certification course is outdated and unclear whether its focus is on organics or composting. There are missed opportunities to focus on yard and kitchen wastes and biomass. The *Organics Collection* topic is not well integrated into the *Managing Composting Programs* course and is not focused on industry-wide issues, per subject matter experts who teach it. Develop an updated organics course or courses and/or collaborate with other organizations that have relevant education materials and make the updated courses widely available to SWANA members.

Goal 3: Reframe Perception of Industry as Employers of Choice

Rationale

Although SWANA does not position its member services toward frontline and support employees, employers within the resource management industry offer competitive jobs, good benefits, and the opportunity to do meaningful work. The industry is suffering shortages among skilled trades workers, such as CDL drivers and mechanics. Increased resignations and retirements among those without college degrees will exacerbate the severity of current shortages.

As the industry's leading professional association, SWANA can monitor and share developments in this fast-changing environment, distribute best practices among members, and lead an industry response to help members attract and keep new workers.

Objective 6: Engage Young Professionals and next-generation employees

Strategy 3.1: Implement and refine the Young Professionals Leadership Academy (YPLA).

SWANA's Young Professionals (YP) program consistently focuses on professionals (i.e., those with college degrees) between the ages of 22 and 35. These professionals have advocated for SWANA services that support their growth along a managerial/leadership track. Funded in the FY2022 budget, the YPLA is being implemented and should continue to be a strategy in SWANA 2.0 to address the interests of this membership segment.

Strategy 3.2: Collaborate as needed to create and sustain a program to recruit the next generation of individuals to fill skilled positions in the solid waste industry.

SWANA's has historically not focused on individuals working in skilled positions in the industry. However, employers are already struggling to fill positions such as mechanic, driver and operator. SWANA should collaborate on programs that help recruit and train potential employees. It should also seek methods to collaborate with chapters and industry companies to provide scholarships for students potentially drawn to skilled positions in the industry.

Strategy 3.3: Incorporate the Climate Champion, Resource Management, and Safety emphases in order to progress toward established objectives and strategies in promoting the industry

Objective 7: Improve conditions for everyone in the industry through leadership in Diversity, Equity, and Inclusion

Strategy 3.4: Develop and implement the DEI Initiative.

Funding was allocated for the first year of this effort in the FY2022 budget and must be continued to support plan recommendations in subsequent years. Developing and implementing the plan in a meaningful way throughout SWANA, its chapters, and with member employers will take the term of this SWANA 2.0 plan and beyond.

Goal 4: Continue to Strengthen SWANA's Infrastructure and Financial Viability

Rationale

To accomplish the Board's mission and vision, SWANA must be a strong and vibrant professional association. The Association has grown in size, financial strength, and relevance as a result of implementing SWANA 1.0 during the past several years. But in many ways, SWANA 1.0 accomplished easier wins because the plan and related efforts were fresh and exciting.

SWANA has an incredible opportunity to reinvent and reimagine how it delivers member value through this plan. To do so and in addition to the other goals, SWANA 2.0 must update and strengthen the Association's infrastructure, so it does not continue to rely on systems developed to address past member needs and chapter relationships. Members engaging in SWANA have different expectations than in the past and before changes in operations driven by the pandemic. Chapter functions and, as a result, their relationships with SWANA have evolved over time. Each of these has created different stressors on current systems, all of which will be further affected by the ongoing drivers of shifting employee priorities, increased AI and technology use, and changed meeting and connection norms.

The outcome of addressing infrastructure needs as outlined here will be to improve SWANA's overall strength and financial viability.

Objective 8: Strengthen working relationships and communications among SWANA HQ and SWANA's sub-units (i.e., chapters and technical divisions)

Strategy 4.1: HQ Listening Campaign

This strategy was identified as a need by a cross-functional team tasked with identifying a new essential and potentially difficult task during the Nov. 1, 2021 work session. After trying and failing to reach consensus on many topics similar to those being considered by other work session attendees, the cross-functional team identified an underlying lack of trust across all parties as the barrier to reaching consensus. The cross-functional team recommended a small team of HQ staff and Board members undertake to meet directly and in person with leaders in each chapter at a chapter location to share and develop mutual understanding of Chapter and HQ goals, perspectives, concerns, and needs. The initial objective of the campaign for all parties must be to listen using active listening techniques to enhance understanding of the multiple perspectives in the dialogue. The long-term objective of the strategy is the resolution/removal of impediments *to mutually beneficial* working relationships and communications.

Subsequent responses received via email and from participants in the Dec. 7, 2021 Town Hall endorsed the strategy as a need and recommended expanding the approach to include technical divisions.

To the extent feasible, the Listening Campaign should be undertaken in person and by more than one listener at a time. From the standpoint of reducing additional trips (climate change) and optimizing use of financial resources, it would be advantageous to co-locate listening events at regional conferences – or even an HQ conference – where multiple chapters, technical division leaders, Board members and HQ staff will be gathered. Listeners are likely to vary but should include at least one HQ participant partnered with a member of the Board. Each region has a Director serving on the Board so travel demands may be somewhat offset by the focus on regional events. Written summaries are essential.

The Listening Campaign will help to identify needs that are chapter- or technical division-specific and those that cross over many/most chapters and/or technical divisions. Some of the current needs may already be known and addressed by other goals, objectives and strategies identified in this plan. Work on those should not be delayed by this strategy. Other overarching needs identified as a result of the Listening Campaign can be assigned a priority in relation to the goals of this and/or a future plan.

Strategy 4.2: Revisit the purposes and methods of providing SWANA training to address HQ and chapter needs and financial objectives.

SWANA's articles of incorporation identify member education and training as the purpose for which it was formed. In the 60 years since, SWANA and some chapters have created systems to offer formal training opportunities to individuals as a means of providing a member service and generating revenue for the offering entity. SWANA licenses HQ-owned courses to chapters and other groups on a fee per individual user. When offering a training class directly, SWANA and the chapters are free to set their own registration prices at a level that covers costs and provides needed additional return. Chapters can also develop their own training or contract with other companies to provide training. Attendees – members and non-members – are free to choose from among all training events and courses that fit their interests, schedule, and budget.

Over time and especially through the pandemic (when SWANA invested in making courses suitable for virtual classrooms), concern and a sense of competition for student attention and dollars have grown. Finding mutually acceptable means to resolve these concerns is an identified need. FY2021-22 President Brenda Haney assigned the effort to a Planning & Membership Committee workgroup as a first step in implementing the strategy.

Strategy 4.3: Develop a recurring communication & training program to increase Chapter Leader awareness of SWANA support services and local delivery capabilities

This communication and training program will keep Chapter leaders up to date with an understanding of programs available to support Chapter efforts in membership recruitment, retention, and other service delivery. It should be expandable to pull in other Chapter staff and volunteers and address a shared HQ and Chapter goal of increased member service and satisfaction leading to improved connection with both levels of SWANA and overall retention.

One part of the communication and training program will take the form of a Chapter Officers Boot Camp or series of virtual orientation sessions patterned after those developed for the SWANA Board of Directors.

Another part may be an emphasis on encouraging chapters to keep their websites up-to-date. Although SWANA HQ doesn't manage chapter websites, it can assist with content and regular reminders to make updates. Chapter websites are critical aspects of the overall association infrastructure delivering important and timely information to current and prospective members.

Objective 9: Grow and retain membership

Strategy 4.4: SWANA HQ continues to focus resources on growing and retaining SWANA membership in its current chapter areas through the application of best practices drawn from the association industry.

Relationships are at the heart of SWANA as they are the core of the industry. Success in membership growth will require SWANA members to draw in acquaintances and co-workers to join, as much as it will require the application of association industry best practices. Implementation of this strategy must encourage and link the work of both approaches across the full range of chapters, technical divisions, and the YP Initiative.

Strategy 4.5: Strategically partner with international associations and NGOs to expand SWANA's Latin American presence and membership.

SWANA has been successful recently in drawing grant funding to provide training and capacity building in Latin America. This offers membership growth potential, opportunities to influence practices toward more environmental protection, and may open commercial opportunities for companies that support SWANA.

Objective 10: Determine what "hybrid" will mean to SWANA events, meetings, and services

Strategy 4.6: Offer hybrid events according to an expanded understanding of opportunities and audiences to be served

We are still at the vanguard of what the new best practices will be. To get ahead, SWANA must be creative about how it gathers and engages members. Every meeting and program should have a purpose, a reason ("Why this meeting?") and be built with the "Who" in mind. Only then can the question of "in person, remote or hybrid (a combination of in person and remote)?" be answered.

Hybrid can also reflect a collaborative approach to how events, meetings, and services are offered. It's rare for HQ and one or more chapters to collaborate on an event or gathering; some, but not all, chapters collaborate with each other and/or other organizations to hold regional

events. Content is selected and arranged by the hosting entity. Hybrid approaches could mean a rethinking of those relationships to change hosting and focus of events to regions or to the provision of a roadshow. Hybrid could mean a Chapter conference populated by HQ-provided content. Similarly, consultants, equipment manufacturers and other companies regularly asked to sponsor and exhibit at in-person events have an interest in how SWANA approaches the delivery of hybrid events. A more expansive understanding of hybrid may offer different methods to serve members and address the financial needs of chapters, event participants of all kinds, and SWANA HQ.

Currently, only 20% of SWANA members are reported to attend HQ events. A far larger percentage cumulatively attend their recurring chapter events. The Hybrid strategy creates an opportunity to drastically increase the number of SWANA members who are served by SWANA-inclusive events. This service occurs regardless of whether they are in-person or remote events so long as members connect to their peers and deepen their professional development.

Resource Needs

Achieving major progress on the goals, objectives, and strategies identified above and continuing the basic operations of the organization will require a concentrated focus of existing staff time and available SWANA resources. Some aspects of SWANA 2.0 will outstrip current staff capacity and resources so requests to address some additional needs have been incorporated in the draft FY2023 budget. In coming fiscal years, SWANA Executive Staff will lead the internal focus on prioritizing available resources, identifying additional capacity needs and determining methods to continue addressing Strategic Plan implementation.

Items currently included in the proposed **FY2023 work plan and budget** that will affect the ability to deliver on first-year strategic plan priorities include:

- Filling open staff positions and moving forward into the year with a full staff complement, paid at industry-competitive levels.
- Moving forward during the fiscal year with the acquisition and implementation of Association Analytics®, an analytics platform that will provide improved insight into and use of SWANA's existing data to answer questions about program performance and effectiveness. Senior staff believe the additional use of data analytics, an industry best practice, will lead to better insights into member demographics, engagement, and retention.

These items are included in the proposed FY2023 budget with funding supported by a request for membership dues increase, the first adjustment in four years.

Additionally, the proposed FY2023 budget includes a draw on the Board Designated Reserve Fund to support the DEI project, which kicked off in June 2022 and continues through FY2023.

Thank You

These people brought this strategy to life.

Events/Connections Strategic Plan Working Group
Co-chairs: Elizabeth Roe and Gena Alderson
SWANA staff: Arminda Valles-Hall and Pam Wike
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Methodology

What process was used to build this plan?

An Eye on the Future

To set the strategic direction for this plan, the Board invited a cross-section of members to join one of four teams and look for signals of the future that could inform SWANA's future direction. Each of the four Working Groups was assigned a specific question to consider as it hunted for signals.

Events/Connections Working Group: The past year has proven that SWANA has the ability to offer events virtually as well as in person. SWANA members want to connect through events. SWANA as an association currently relies on event revenues to help fund its programs. How can events of the future do both while also continuing to offer the versatility to move smoothly between in-person and virtual structures?

Safety Working Group: What are the next steps for improving solid waste industry safety and how can SWANA best commit resources and talent to meaningfully create safer workplaces?

Subject Matter Expertise Working Group: As SWANA's mission continues to emphasize a shift toward Resource Management, what role should subject matter expertise in traditional integrated solid waste topics play over the next several years?

Young Professionals Working Group: As industry demographics (age, diversity) continue to evolve, what will young professionals need in the next several years to grow into experienced contributors to SWANA and the industry?
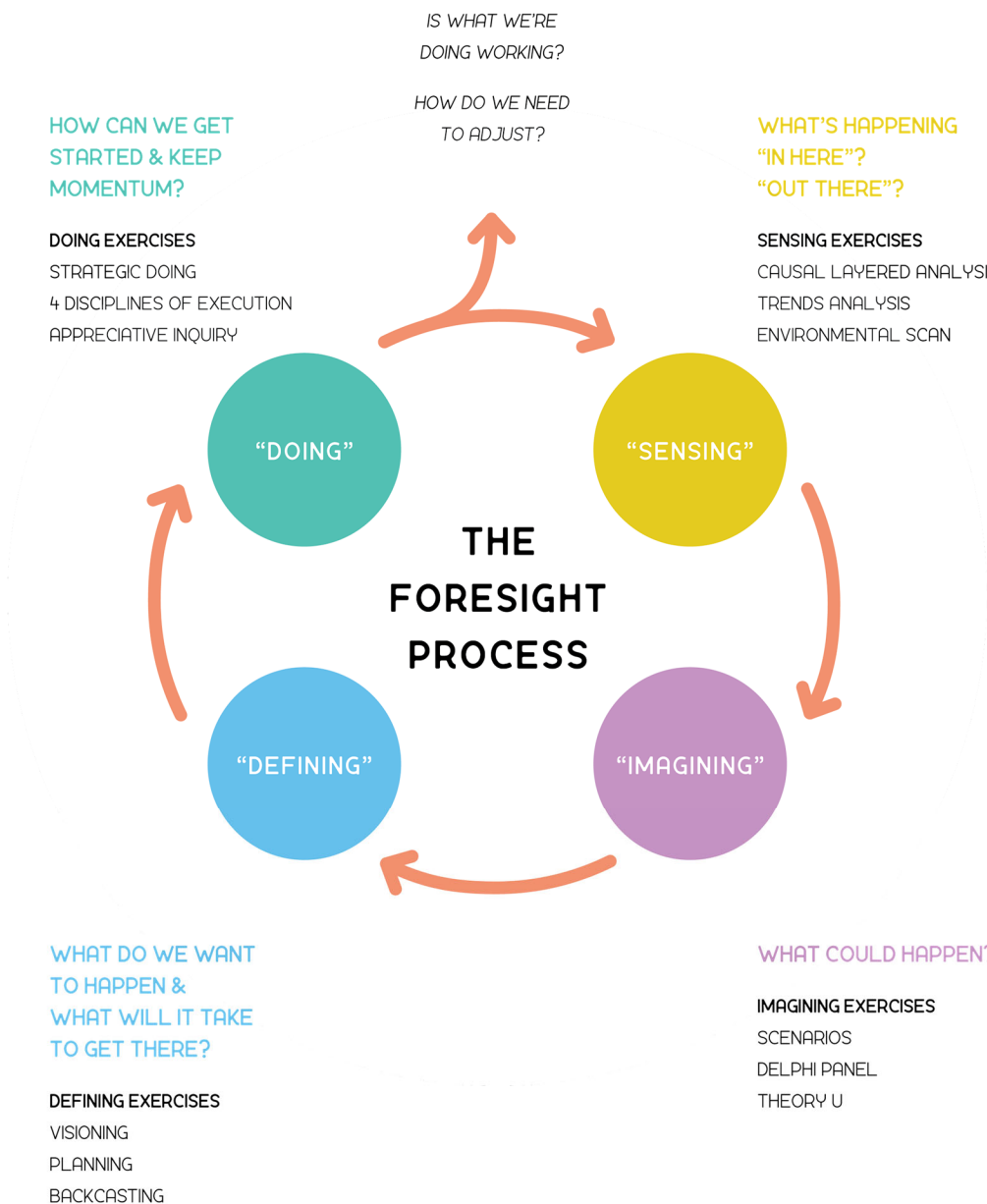
All Working Groups were provided with foresight training:
- What is strategic foresight?
- What is a signal?
- How are signals different from trends?
- How do futurists use signals in planning?

All Working Groups summarized their insights and recommendations and gave a short "TED talk" at the Nov. 1, 2021 strategic planning workshop. The briefing book is available here: https://drive.google.com/file/d/1xDUrJDJ1m8qBb9zZ5x8MLkLWrIAiZfdA/view?usp=sharing.

What is Strategic Foresight?

Strategic Foresight is a proven process used by the oil and gas industry, NATO, the world bank, the US military, Disney, and other Fortune 500 and global NGOs to identify risk, plan for uncertainty, mitigate disruption, unlock creativity, drive innovation, and shape the future. SWANA's Working Groups learned how to spot signals and make sense of them, a critical technique in the "Sensing" phase of strategic foresight as depicted below.

IS WHAT WE'RE DOING WORKING?

HOW DO WE NEED TO ADJUST?

HOW CAN WE GET STARTED & KEEP MOMENTUM?

DOING EXERCISES
STRATEGIC DOING
4 DISCIPLINES OF EXECUTION
APPRECIATIVE INQUIRY

WHAT'S HAPPENING "IN HERE"? "OUT THERE"?

SENSING EXERCISES
CAUSAL LAYERED ANALYSIS
TRENDS ANALYSIS
ENVIRONMENTAL SCAN

"DOING"

"SENSING"

THE FORESIGHT PROCESS

"DEFINING"

"IMAGINING"

WHAT DO WE WANT TO HAPPEN & WHAT WILL IT TAKE TO GET THERE?

DEFINING EXERCISES
VISIONING
PLANNING
BACKCASTING

WHAT COULD HAPPEN?

IMAGINING EXERCISES
SCENARIOS
DELPHI PANEL
THEORY U

This methodology, the November 1 strategic planning workshop, and the Working Groups were developed, facilitated, and trained by futurist and economist Rebecca Ryan.

Appendix 1
Working Group Reports

Appendix 2
ISWA Declaration on Climate Change and the Waste and Resource Management Sector