• Largest association for the solid waste & recycling sector in the U.S. & Canada
  • 10,700+ individual members in public and private sector
    • Majority of members work for local govts and are managers or directors at a municipal agency
  • 47 chapters in U.S., Canada, and the Caribbean
  • Michigan chapter established in late 2019 and has about 100 members – join us!

• SWANA’s core programs focus on education, research, advocacy, and safety

• SWANA has active federal advocacy program
  • Congress – Recycling, PFAS
  • EPA – Recycling/PFAS/Air Emissions (methane)
  • Commerce – Chair the Waste Management and Circular Economy Advisory Subcommittee
  • OSHA – Worker Safety
What is the industry talking about in 2022?

- Worker Shortage
- Supply Chain Issues
- Price of Fuel
- Safety
- Recycling/EPR
- Landfills – PFAS and Methane Emissions
- Mergers & Acquisitions
Worker Shortage

• There were growing concerns about the “driver shortage” before COVID
• COVID exposed impact of having 20% of your workers absent
  • Delta and Omicron caused substantial collection delays throughout the U.S.
  • SWANA warned in Dec that Omicron and holidays were going to be a “perfect storm.”
    • CNN, CNBC, AP, NPR all did stories
• Other industries (e.g., Amazon) offering higher wages to drivers/warehouse workers
• Some people are no longer willing to work for low wages
Worker Shortage

- Companies and local governments need to increase wages to attract and retain qualified drivers and other workers
  - WM is offering to pay college tuition for dependents
  - Numerous solid waste companies are paying $2500-$10,000 recruitment and retention bonuses
  - Cities are increasing wages by up to 40%

- It’s not just front-line workers – a lot of older employees in supervisor or manager positions are part of the Great Resignation

With inflation at 7% nationally, you will get less pushback from customers if you raises prices in 2022 to pay higher wages.
Supply Chain Issues Are Very Slowly Decreasing

- Decline in COVID in U.S. means more workers
- Getting parts/supplies from overseas continues to be a challenge
  - China’s Zero COVID policy – mfg and ports
  - U.S. port congestion is declining but …
  - Contract negotiations with ILWU dragging
- Russia/Ukraine – 90% of neon in lasers used to make chips comes from Ukraine
- When do you want a new garbage truck?
  - Chassis/Chips are primary cause of delays
• Fuel is one of the expenses that most companies and local governments have little control over

• Price of fuel increased by about $1/gallon BEFORE the Russia/Ukraine war

• Fuel prices expected to increase over next few weeks and be very volatile in 2022
Solid waste collection workers have the 6th highest occupational fatality rate in the U.S.

Solid waste collection trucks are involved in thousands of crashes each year.

This creates a lot of potential legal exposure for solid waste companies and local governments.

SWANA has an award-winning safety program and fatality/injury rates are declining (but are still too high).
SWANA has a growing number of safety resources available to you:

- Slow Down to Get Around
- 5 to Stay Alive
- Safety Awards
- Safety Matters newsletter (weekly)
- Safety Alerts and data
- Michigan Chapter Safety Programs
  - Hauler Safety Outreach
  - Safety Ambassadors
Over the past few years, there has been an epidemic of fires at recycling facilities

- The majority of these fires are caused by improperly disposed lithium ion batteries
- In 2019, a fire started in a truck and the driver dumped the load – on a windy day in California. The fire spread and killed 2 people and burned 1,000+ acres
- Recycling facilities are having trouble getting insurance coverage due to the fires
- SWANA, NWRA and others working to bring attention to this burning issue
Before COVID, recycling was SWANA’s #1 Issue

• China’s National Sword program (2017-18) caused value of recycled material to plummet
• Many local recycling programs were suspended

Capital markets responded by building new mills in the United States, Canada, and Mexico

• 30 new mills nationwide adding 6M TPY and 1M TPY pulp
• Several of the mills are in the Midwest
  • Graphics Paper – Kalamazoo – 500,000 TPY paperboard
• Republic building a plastic processing facility in Vegas

Consumer-facing companies want to use more recycled content in their products and packaging

The pandemic helped increase value of recovered materials from residential recycling systems

• Less cardboard and clean paper coming out of office buildings and schools
• Americans ordering more on e-commerce (“the Amazon effect”)
• OCC went from $30 to $150/ton – now at $100+/ton
• Congress held numerous hearings on recycling in 2020-21
  • Belated response to National Sword and suspension of recycling programs in some places
• The 2021 Infrastructure Bill included several important recycling-related provisions
  • RECYCLE Act grant funding for education and outreach ($15M/year for 5 years)
  • SOS 2.0 Act funding for solid waste and recycling infrastructure ($275M over 5 years)
  • EPA is in the process of establishing grant application process for both programs
There is continuing bi-partisan interest on Capitol Hill in improving recycling

- Senate EPW – Feb 3 hearing
  - Recycling Infrastructure & Accessibility Act – would provide grants to rural/underserved communities (hub & spoke)
  - Recycling & Composting Accountability Act – data collection
- Break Free From Plastics Act
- National Bottle Bill
- Basel Convention
- SOS 3.0 is being discussed
EPA’s National Recycling Strategy:

- Improve Markets for Recycled Commodities
- Increase Collection & Improve Materials Market Infrastructure
- Reduce Contamination
- Enhance Policies & Programs to SupportCircularity
- Standardize Measurement & Increase Data Collection

Builds on the 2019 National Framework for Advancing the U.S. Recycling System and supported by EPA’s “America Recycles” Network
EPA’s National Recycling Strategy is ambitious and goes well beyond Reduce/Reuse/Recycle

- EPA is developing a plan to implement the Strategy and will likely weave in Climate Change and Environmental Justice priorities
- EPA wants stakeholders to partner to develop the plan and successfully implement the Strategy
  - SWANA has volunteered to assist in several areas
    - Improve Recycling Infrastructure
    - Increase Awareness/Availability of Funding Opportunities
    - Increase Collection of Recyclable Materials
    - Enhance Education/Outreach to the Public
    - Strengthen Federal Coordination

SWANA met with EPA last week - initial actions to start in May. Implementing the NRS will be a multi-year activity.
Growing interest in Extended Producer Responsibility laws as a way to encourage more recycling and the Circular Economy

- EPR makes producers (not taxpayers) responsible for managing the materials or containers they sell at end-of-life
- Some states have it for e-waste, paint, batteries, mattresses, mercury switches
- Common in Europe/Canada
- Maine and Oregon became first states to pass comprehensive EPR bills in 2021
  - Other states considering similar laws
  - Key issue is who controls the system/recyclables
- EPR legislation in Congress not moving
PFAS is a big issue for Michigan landfills

Per and polyfluoroalkyl substances
  • Fluorinated organic chemicals
  • There are 1000s of them
  • Found in firefighting foam and many consumer products
    • Carpeting
    • Cookware (Teflon)
    • Clothing
    • Cosmetics
  • Growing public health concerns about PFAS in soil and drinking water
  • More states are passing laws/rules or issuing guidance in response
Impact on solid waste industry

• We didn’t manufacture them or use them in products, but it’s in our landfills

• PFAS accumulates in landfill leachate (liquid), which is collected and often sent off-site for treatment

• PFAS difficult/costly to remove and treatment plants may no longer want to handle leachate

• US landfills generate 16 billion gallons/leachate per year - $1-6 billion to remove PFAS?
  • Who’s going to pay for this?

• Future federal/state laws & regulations will have a big impact on the waste industry
EPA issued a PFAS Strategic Roadmap in October 2021

1. Research
2. Restrict
3. Remediate

- A lot of Regulatory activity is anticipated:
  - National monitoring for PFAS in drinking water
  - Clean Water Act limits on PFAS discharges
  - Designate PFOA/PFOS as hazardous substances under CERCLA/Superfund
  - Seek public input on whether other PFAS compounds should be CERCLA-designated

- EPA will perform risk assessment on biosolids
  - Biosolids = sewage sludge from WWTFs

- EPA is taking initial steps to add 4 PFAS compounds as RCRA hazardous constituents
  - MSW Landfills are RCRA Subtitle D facilities
EPA – Landfill Emissions

The Biden Administration has a strong focus on Climate Change and reducing GHGs

- Landfills are the 3rd largest source of man-made methane emissions
- Methane is 25-75 times more potent than CO2
- EPA is concerned that current models do not accurately depict methane emissions from landfills
- California data suggests landfills are emitting a lot more methane than previously thought
- EPA collecting more data
  - EPA finalized federal plan to implement 2016 NSPS and Emission Guidelines
  - Change in the model on the horizon?
There continues to be a high level of transactional activity taking place in the solid waste industry

- Large national companies doing tuck ins
  - Republic bought RMS Disposal last month - Muskegon
- Regional companies are buying small haulers
- International buyers – FCC/Premier Waste in Texas
- Private equity buyers
- Companies going private – Covanta
- Companies going public - Rubicon

Some company owners who survived the recycling crisis of 2018-19 and COVID challenges in 2020-21 are looking to sell -- and multiples are high
SWANA has several upcoming events and programs of interest

• **SOAR** – Kansas City MO – March 21-24
  • Technical Conference focused on landfills/LFG/recycling

• **Regional Training Center** – Rosemont – June 6-9
  • MOLO – updated in 2021
  • Recycling & Composting courses

• **WASTECON** – San Diego – December 6-9
THANK YOU

SWANA
SOLID WASTE ASSOCIATION OF NORTH AMERICA