Mark Twain once wrote, “The report of my death was an exaggeration.” And so it has been with recycling. There is no doubt that “recycling as we know it” has changed. While the recycling industry is going through a rough patch, it is in fact, a well-established, multi-billion-dollar, international industry with measurable, positive impacts on the economy. Recycling generates hundreds of thousands of jobs, conserves resources by providing feedstock for new, recycled-content products, saves landfill space, reduces greenhouse gas emissions, and conserves materials extracted from the environment.

The Business of Recycling
Recycling is a commodities trading business that deals in specific materials collected from residences and businesses. Once a recyclable item leaves a curbside bin or drop-off site and is hauled to a processor, it becomes a “recovered” commodity. Next, materials are baled and sent to mills to be processed into feedstock for new products.

There is a common misunderstanding that recycling should be free because materials recovery facilities (MRFs) don’t have to pay for the materials they receive. But the fact is, recycling has never been free. Recycling business expenses include collection containers, sorting and baling, fuel and energy, facilities, equipment, labor, freight, and other common overhead costs. Like many other commodity-trading industries, recycling is a cyclical industry – markets rise, fall, and rise again.

Recycling’s Wake-up Call: A Brief History
Since the 1990s, in the early days of free trade agreements and the World Trade Organization, the U.S. began exporting recyclables to China for processing to take advantage of their cheap labor, lack of environmental restrictions, and China’s economic development goals. Many U.S. mills that once processed recyclables (mostly paper fiber) closed because they were unable to compete. Twenty years later...

In 2013, China launched a program called “Operation Green Fence” to improve environmental quality in their country by reducing contamination allowed on imported recyclable materials. In 2017, China announced its “National Sword” policy that defined contamination restrictions and banned the import of several recyclable materials, including mixed paper and mixed plastics. In 2018, contamination allowances were tightened even further, effectively shutting down overseas markets. The U.S.-China trade war escalated in 2019, exacerbating the situation.

China’s import restrictions on mixed paper were particularly harsh, causing imports to drop from hundreds of thousands of tons per year to virtually nothing. This...
caused mixed-paper prices to fall into negative numbers, and resulted in an estimated 500,000 tons of mixed paper collected domestically for recycling in 2018 to be landfilled. New domestic mills for processing mixed paper fiber and OCC are under construction, but it will reportedly take years to reach a full recovery in which supply is (potentially) balanced by demand. [https://resource-recycling.com/recycling/2019/09/10/experts-talk-recycled-paper-realities-and-forecasts/]

The reduction in overseas demand for recovered materials and the resulting low prices have dramatically reduced revenues generated from recycling programs, forcing MRFs to charge tipping fees, similar to landfills, just to cover their costs. The new tipping fees have been a hardship for municipal and institutional recycling programs that have traditionally relied on recycling revenues to offset program costs.

By the summer of 2019, the price paid for OCC (old corrugated cardboard) plummeted to a 25-year low from a high of $180 per ton in 2017 to an average of $28 per ton today.

The True Cost of Waste
There is a cost to managing society’s waste and an important choice to be made. We can pay to have materials landfilled and wasted forever, or we can pay to have materials reprocessed and repurposed into new products. Either way there is a cost to managing extracted resources. Fuel, supplies, labor, and capital costs exist whether materials are landfill or recycled. Canceling recycling in favor of landfiling does not eliminate costs. Landfill tipping fees may be low in Nebraska, but they’re not free. Besides, one can argue that landfill disposal fees do not accurately represent the full cost of disposal. They do not include the opportunity cost of taking agricultural land out of crop production. While disposal fees are intended to cover siting, building, closure, and post-closure costs (i.e. the cost of monitoring key environmental aspects of the facility and surrounding property for 30 years), they do not include mitigation costs if toxic materials end up in our drinking water. [https://toxics.usgs.gov/highlights/2015-11-13-leachate_pathways.html]

In a broader sense, it is long past time to rethink our relationship with waste. Recycling industry woes are only a symptom of a much deeper problem. They expose the underbelly of our rampant extractive and consumer-based economy, of the need for producer responsibility laws (to handle packaging that can’t be reused or even recycled, for example), and the essential truth that our world is finite and our current system is unsustainable.

A Call to Action
With every challenge, there is an opportunity for improvement. Current recycling market conditions have created opportunities for innovation and investment. Core recyclable materials, such as aluminum, metals, office paper, cardboard, and plastics have value and marketability.

In Nebraska, this is an opportune time to restructure local recycling programs to take advantage of new technology platforms (for measurement, communications, and education), of processing advances (requiring less labor for collection and processing), and to create more efficient systems that withstand the ups and downs of markets (e.g. cooperative agreements, recycle right educational campaigns, organized hauling with win-win contracts). It is a good time to change the rules to break down barriers to recycling and place more responsibility on producers that generate unmanageable waste in the first place.

Better legislation and better management of recyclable materials will require both grassroots and top-down leadership. This is about our economy, our livelihoods, our environment, and you.

For action steps that local government, state government, and individuals can take, see Nebraska Recycling Council’s discussion paper, “Coping with Depressed Recycling Markets” and more at [www.nrcne.org](http://www.nrcne.org)

Troubled Times
York Recycling Center and Wahoo’s recycling program had been operated for many years by organizations serving workers with intellectual disabilities to process recycling. York’s program was a hub and spoke operation serving 14 nearby communities. Depressed markets and rising labor costs made the economics unsustainable. Both closed in the summer of 2019.

Recycling programs in other municipalities have been under scrutiny, as programs have moved from covering costs to being cost centers. Refining existing programs to be more efficient and cost effective in these troubled times is key.