NewGen NEWS

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# Coping with COVID-19 – Utility Impacts and Response


The coronavirus disease 2019 (COVID-19), which began in late 2019 in Wuhan, China, resulted in a worldwide pandemic response that has profoundly affected all of our lives. Though each country, state, and region have been impacted differently, the way we work, interact, and communicate has been undoubtedly altered. To all those responsible for keeping our utility services operating during this pandemic, NewGen applauds your resilience and commitment to your communities and reliable service. Despite the impacts of COVID-19 and the resulting need for social distancing, the services provided by utilities remain essential to our health and well-being. While sheltering in place, working remotely, and quarantining are stressful for everyone, a disruption or loss of any one of our utility services would make life much more difficult, and in some cases impossible, to live and work safely from our homes.

It is essential for public health that utilities are maintained and financially stable to continue to provide uninterrupted quality service. Utility budgets face challenges even in the best of times. The messaging and financial management of utilities must be realistic and direct, and the path forward in these next months will be paved with difficult decisions. Utilities across the country are engaging in frank discussions to identify areas for cost savings and revisions to revenue and rate forecasts. While rate adjustments at this time may be politically and socially challenging, the financial needs of operations cannot be ignored. All of us will face unique challenges adapting to the "new normal," and that will create unique issues and opportunities for utilities.

Many of the challenges in providing continuity of service during the past few months, and for the foreseeable future, are common for all utility service sectors. Among these are shortages of Personal Protective Equipment (PPE); worker absences due to illness, lack of childcare, and/or transportation; irregular and demanding work schedules; concern about virus contamination and transmission; as well as unprecedented financial constraints and uncertainty. Individually, each sector faces unique conditions and difficulties, such as those outlined in the following sections.

## WATER AND WASTEWATER INDUSTRY

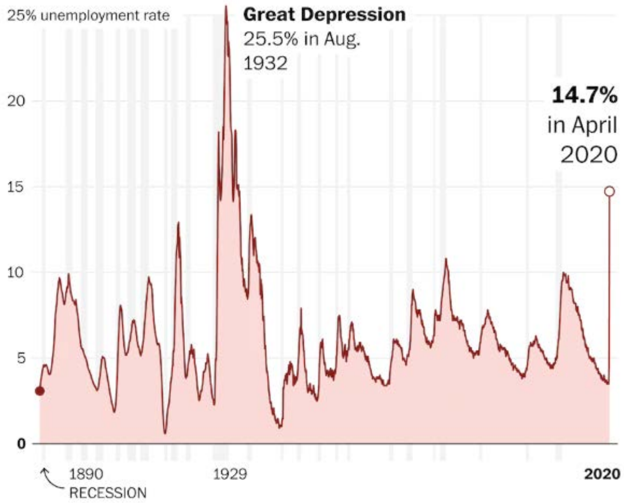
The American Water Works Association's (AWWA) 2019 State of the Water Industry Report indicated that water and wastewater utilities were positioned to go into 2020 on a very positive note. The industry has been regaining public confidence in the quality and reliability of water and wastewater systems and progress was being made on funding the replacement of aging infrastructure. Current conditions are placing that progress, and more, in jeopardy. As the impacts of COVID-19 are evaluated, providers should carefully assess the following issues.

### Equipment and Workforce

In response to COVID-19, providers have scrambled to procure PPE for employees and have dealt with increased absenteeism due to illness and childcare issues. Additionally, remote working options are limited for specially trained and certified essential water and wastewater sector workers. This is placing an additional strain on a labor pool that is already highly burdened with a high rate of retirement and changing technology. To help meet staffing needs and to safeguard the workforce from the virus, some providers have rotated crews to limit exposure and transmission and, in some cases, housed crews in onsite trailers for two weeks or more. Though these are challenging times, altered hours and the shift in some staff working from home may provide an opportunity for organizations to enhance their capabilities, staff expertise, and possibly achieve new efficiencies that were not previously evident. This may also be an ideal time for organizations to consider promoting online training and certification programs for employees through organizations such as AWWA.

### Interruption of Revenues

At the onset of the COVID-19 crisis, many utilities suspended service shut-offs and temporarily halted "past due" notices to customers who were significantly behind on payments and nearing their utility shut-off date. Though these policies were intended to address a short-term problem (i.e. 2 to 4 weeks), it has now been months and despite efforts to reopen the economy, things are far from returning to "normal."




[1] Note: Seasonally adjusted; figures from before 1948 are estimates
Sources: Labor Department (1948-present); Annual estimates from David Weir (University of Michigan) in Research in Economic History disaggregated to monthly data by Nicolas Petrosky-Nadeau (San Francisco Fed) and Lu Zhang (Ohio State University) in Journal of Monetary Economics
THE WASHINGTON POST

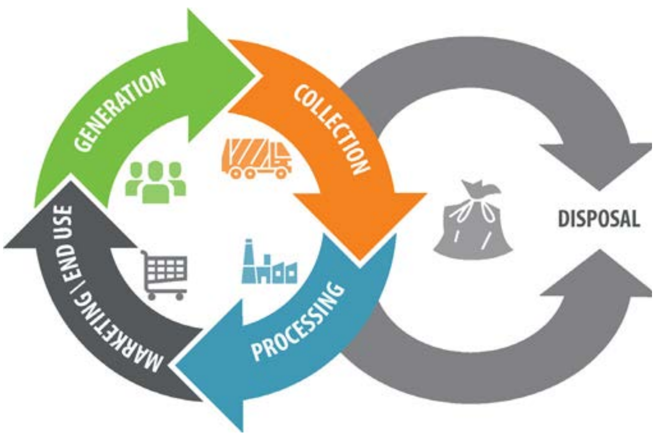
With unemployment and loss of income already reaching heights not seen since the Great Depression, most experts and indicators advise that we should prepare for a long, multi-year road to economic recovery. Most cities, particularly those reliant on sales and income taxes with a high share of vulnerable industries, quickly felt the impact of fiscal declines. According to a May 2020 CBS News[2] report, the National Multifamily Housing Council's data shows that nearly 20% of renters did not pay monthly rent by May 6th. Further, the Los Angeles Times[3] recently reported that though utility companies typically account for approximately 10% defaults, they are not prepared to absorb the anticipated levels of lost revenue. As just one example, one North Texas suburban city (population 28,000) saw utility late payments skyrocket by 750% in April 2020 compared to the prior year, from 50 to 425. Unfortunately, these trends are mirrored at many utilities across the

[1] https://www.washingtonpost.com/business/2020/05/08/april-2020-jobs-report/
[2] https://www.cbsnews.com/news/coronavirus-leaves-20-of-renters-not-paying-may-rent/
[3] https://www.latimes.com/politics/story/2020-05-22/coronavirus-shutdowns-consumers-unpaid-utility-bills-loom-as-costly-problem

nation. To help mitigate these issues, dedicated customer service personnel have reached out to customers offering deferred payment plans. Given that many cities and utilities cannot forego revenues, late payment notices and disconnect policies have been, or soon will be, reinstated. Utilities may find that while revenues ultimately perform adequately, cash-flow is insufficient to cover near-term operating needs. Utility financial leaders need to carefully monitor their cash positions and communicate these to decision-makers as customer service policies are reinstated.

## SOLID WASTE INDUSTRY

COVID-19 has impacted all segments of the solid waste industry's "waste loop" / waste management life cycle. Listed below, we briefly discuss the impact on waste generation, collection, processing, disposal, and revenues.




### Generation

With stay at home orders beginning in March and, in many places, safer at home orders continuing into June or later, more waste is being generated at home and less at businesses. As a result, many solid waste collection service providers are experiencing a significant drop in commercial waste collection and a significant increase in residential waste collected. Several clients we have talked to are experiencing 15% to 20% increases in residential tonnage. The type of waste generated is also shifting, given increased online ordering of supplies and groceries, as well as restaurant takeout and delivery, which has led to an increase in cardboard and plastic in the residential waste stream. Many restaurants that have begun limited "dine-in" service are currently not using dishware and utensils that are normally washed and reused, in an effort to reduce potential contamination issues, with the unintended consequence of a significant increase in waste. While recycling is typically more accessible at home than at work, the recycling industry is facing its own issues as some residential recycling programs have been halted for safety reasons during the pandemic.

### Collection and Transfer

The shift of waste generation from commercial to residential routes is also impacting collection and transfer efforts. Residential routes are generally taking longer to complete with more waste to collect, which affects efficiencies and therefore increases collection costs.[4] Yet, there is not a corresponding increase in revenues, given that most residential trash fees are fixed. Conversely, many commercial routes are taking less time to complete as some businesses have reduced their frequency of collection or canceled service altogether. Speaking with one city in Texas with a population of approximately 65,000, their private commercial collection vendor said they had seen approximately 10% to 15% of their commercial customers cancel or reduce their dumpster collection frequency. If commercial routes continue to wane, the resulting decline in commercial collection revenue (as well as landfill tipping fees and potentially franchise fee revenues) coupled with increasing residential collection costs will converge to significantly disrupt the financial integrity of municipal solid waste collection systems.

### Processing

On a positive note, the increase in cardboard recyclable tonnage generated by residential recycling programs may provide additional revenue to cities and/or processors as many paper mills currently have a high demand for cardboard, with the price for old corrugated containers (OCC) spiking in May over $100 per ton in some parts of the U.S. (although some see this increase as temporary). Additionally, other material types may see a price increase on the commodity market. However, most recyclables coming from residential programs tend to utilize single-stream collection, which results in higher contamination levels than commercial recyclables and thus the materials received may be of lower quality.

### Disposal

The impact of COVID-19 on landfills remains to be seen; however, it most likely will have an adverse impact, from a revenue standpoint, as

[4] However, as proof that the issues facing cities can vary, one large city in Arizona mentioned that while their residential tonnage was up, their drivers had a decrease in time "off route" driving to the transfer station / Material Recovery Facility (MRF), etc. as there was significantly less traffic on the roads, highways, etc.

the decrease in commercial waste generation will more than offset any increase in the residential waste stream.

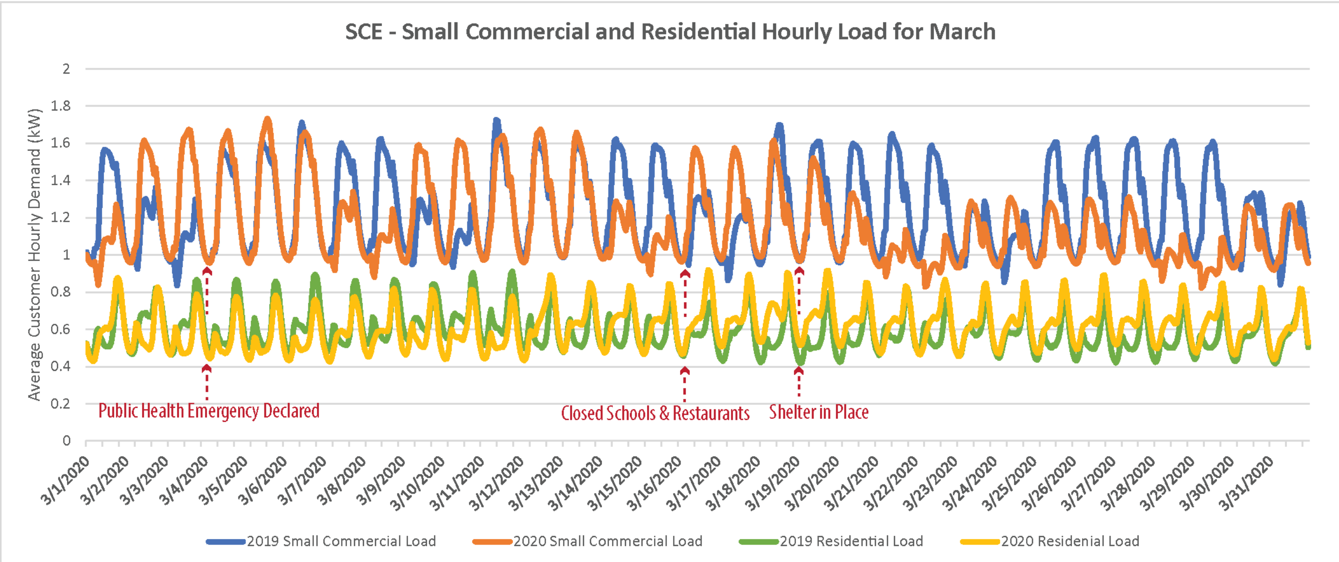
## Revenue Sources

Revenue for municipal collection and disposal providers may be affected differently depending on how services are funded. Services funded through user fees risk non-payment due to current unemployment rates, while services funded via property taxes could be impacted if there is a decline in property values due to increased foreclosures causing local governments to cut their operating and capital budgets accordingly. Services funded through sales tax may take the biggest hit given the closure of many retail establishments following government stay at home orders. Ultimately, the financial impact on solid waste utilities is dependent on how long COVID-19 lingers – if another outbreak returns in the fall / winter and stay-at-home orders are reintroduced, we could be in for more turbulent times.

# ENERGY INDUSTRY

## Demand Impacts

April 2020 offered the first glimpse of the impact of COVID-19 measures on energy demand with indications of significant demand reductions across the country and the globe. The International Energy Agency (IEA) reported data that indicates through mid-April countries in full lock-down were experiencing an average 25% decline in energy demand, while countries in partial lock-down averaged 18% declines. Domestically, commercial customers largely exhibited reduced demands with residential customer demand increases partially offsetting this impact (see graph below for Southern California).




Data from Southern California Edison illustrates the year-over-year change in load as a result of the COVID-19 response in that area of the country. The graph shows hourly load for residential and small commercial customers in March 2019 compared with March 2020. As can be seen from the graph, the residential load increased year-over-year as of mid-March, while the small commercial load peaks declined significantly. The shape of the residential load changed as well, with less of a post-morning drop in load but still requiring significant ramping of energy production as the sun sets and the contribution from solar decreases.

The decreased industrial demand severely limits the ability of markets to use demand response as a tool for grid flexibility, while the overall decrease in demand has resulted in renewable curtailments and further declines in fuel commodity prices. Further, some capital projects, including energy efficiency efforts, have been delayed or cancelled. Employment in the clean energy sector seems particularly adversely impacted, with the possible exception of those in the energy storage sector, leading some to call on Congress to extend deadlines for renewable projects in order to meet tax incentives.

### Affordability

Affordability, which was already a concern for many communities, is greatly amplified due to rising unemployment. Some communities that have local control of the utilities have implemented (or are investigating) rate reductions to help customers survive the financial stress.

Short-term moratorium policies and regulations on disconnections and penalties, which may lead to ballooning uncollectables (bad debt) for utilities, may necessitate special mechanisms to ultimately recover this lost revenue from all customers. Furthermore, some regulatory oversight and guidance is evolving to consider broader COVID-19 impacts on utilities. At the national level, the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) are using regulatory discretion to consider the impact of the COVID-19 crisis in complying with reliability standards. NERC has also extended the postponement of on-site audits and other on-site activities through September 7, 2020. In circumstances where COVID-19 is deemed the cause for non-compliance, the U.S. Environmental Protection Agency (EPA) does not anticipate seeking penalties for violations of routine compliance monitoring; integrity testing; sampling; laboratory analysis, training, and reporting; or certification obligations. However, the entity must provide supporting documentation to the EPA upon request.

### Priorities to Consider

Current top priorities for the public energy industry to consider, as reported by the American Public Power Association (APPA), include:

- Direct assistance from the federal government for public power utilities negatively impacted by declining load and increased customer non-payments.
- Availability of $4.3 billion in new funding for the Low Income Home Energy Assistance Program (LIHEAP).
- Restoration of tax-exempt advance refunding bonds, which were eliminated by the Tax Cuts and Jobs Act of 2017.
- An Increase in the small-issuer exception from $10 million to $30 million, which allows banks to deduct the carrying cost for tax-exempt bonds issued by more issuers (and, presumably, make debt issued by small state and local entities more attractive).
- Making supplemental funding appropriated to the Power Marketing Administrations, Army Corps of Engineers, and Bureau of Reclamation non-reimbursable (meaning such entities cannot seek reimbursement of those funds from customers, which would result in increased federal hydropower rates).

## HELPING SOLVE YOUR CHALLENGES REMAINS OUR PRIORITY

We at NewGen understand the myriad of difficulties this pandemic and resulting financial and operational challenges have presented our customers. We excel at tackling these types of complicated issues to deliver a clear, enduring path forward for our customers; and now more than ever, NewGen continues delivering ***thoughtful decision making for uncertain times***.


## TESLA BECOMES THE MOST VALUABLE CAR COMPANY WORLDWIDE

While its stock prices have been a rollercoaster this year (as have many in 2020), after becoming the 2nd most valuable car company in the world early this year, Telsa's market capitalization now places it neck and neck with Toyota as the world's most valuable. Investors are obviously looking to the future as Tesla's annual revenues are about 10% of Toyota's and they manufacture less than 5% of the automobiles that Toyota typically does. While Tesla greatly lags other manufacturers in delivering cars, the other manufacturers continue to increase their focus and expansion of all electric vehicle (EV) models in the near future. Wall Street has clearly shown a desire and value for EVs with not only Tesla, but other EV manufacturers and companies such as Nikola Corp. and its plans for an EV commercial truck.

## FILING AT FERC MAY CHANGE NET METERING RULES AND JURISDICTION

The New England Ratepayers Association (NERA), a non-profit incorporated in Massachusetts, filed a petition in April to revisit FERC's ruling regarding their designation of excess generation from behind the meter (such as rooftop solar), as customer resources are a wholesale transaction that is subject to FERC's regulatory authority and jurisdiction. FERC recently granted a comment period extension from May 14th to June 15th; NERA had requested a 90-day extension to August. If adopted as envisioned by NERA, the declaratory order would immediately change the jurisdiction, removing state utility commission control of net metering and replacing it with FERC. Although this does not appear likely, many state commissions, NARUC, 3rd parties, renewable interest groups, and other non-profits are preparing comments for the proceeding.

## NewGen's Participation in Two Regulatory Proceedings Results in Historic Benefits to Customers

Bose McKinney & Evans LLP

NewGen recently teamed with Bose McKinney & Evans LLP to intervene in two investor owned utility (IOU) regulatory proceedings at the Indiana Utility Regulatory Commission (IURC). The 2019 Northern Indiana Public Service Company (NIPSCO) base rate case involved a historic shift in how large customers access the electric market. As a result of NewGen and other intervenor's testimony, the IURC approved a new rate structure for the large industrial customers, which allows them access to the wholesale market. In Indiana, this is the first time that retail industrial customers have access to the wholesale market for power. The estimated savings to the customers with access allows them to remain competitive in their respective markets. The proceedings identified up to $60 million per year in savings for the large industrial customers.

NewGen also intervened in the 2019 Indiana Michigan Power (I&M) regulatory proceeding on behalf of two Indiana cities. I&M proposed a shift of $45 million in costs to retail customers related to their wholesale power operations. The shift in costs was a result of I&M failing to effectively manage, maintain, or replace wholesale power sales contracts. As a result of our testimony, the proposed $45 million shift in costs to retail customers was eliminated, reducing power costs to all retail customers.


## UPDATED WATER AND SEWER FITCH RATINGS CRITERIA

Fitch Ratings Agency (Fitch) has announced amendments to their Water and Sewer Ratings criteria following the April 3, 2020 publication of Fitch's revised rating criteria entitled *U.S. Water and Sewer Rating Criteria*. Primary revisions to ratings criteria include "individual assessments for key rating drivers, financial profile alignment with business profile in rating assessment, introduction or re-characterization of certain metrics, forward looking consideration of the impact of existing or needed capital investments that may increase financial leverage, introduction of FAST, an issuer specific scenario analysis tool measuring the effect of a stress on capital requirements and associated spending, and a more comprehensive analysis of purchaser risk for wholesale utilities."

The amendments by Fitch seek to bring more emphasis on the overall leverage exhibited by a utility. Entities should be aware of this heightened emphasis as they plan for funding their capital improvement programs, particularly in the currently favorable interest rate climate.

Source: https://www.fitchratings.com/research/us-public-finance/fitch-ratings-finalizes-us-water-sewer-rating-criteria-03-04-2020

## SENATE COMMITTEE APPROVES WATER INFRASTRUCTURE PACKAGE

The U.S. Senate Environment and Public Works Committee recently unanimously approved America's Water Infrastructure Act of 2020 (AWIA 2020) and the Drinking Water Infrastructure Act of 2020. The AWIA 2020 provides approximately $17 billion in federal aid for additional infrastructure investment, while the Drinking Water Infrastructure Act includes roughly $2.5 billion in additional federal money, along with resources and technical assistance to utilities. While the proposed funding is pending floor action and final passage, this is a significant step during a period of economic uncertainty and will help to provide critical funding.

## PFAS REGULATION

The EPA has released its final rules on regulation of per-and polyfluoroalkyl substances (PFAS). Specifically, 172 PFAs are proposed to be added to the Toxics Release Inventory, which provides the public critical information on the use and tracking of chemicals used in manufacturing processes and their release into the environment. Meanwhile, as the EPA works to establish drinking water standards related to PFAs, the White House has intervened in the process and requested a "Safe Harbor" provision be added to the rule, which would weaken the rule's overall impact and effect.

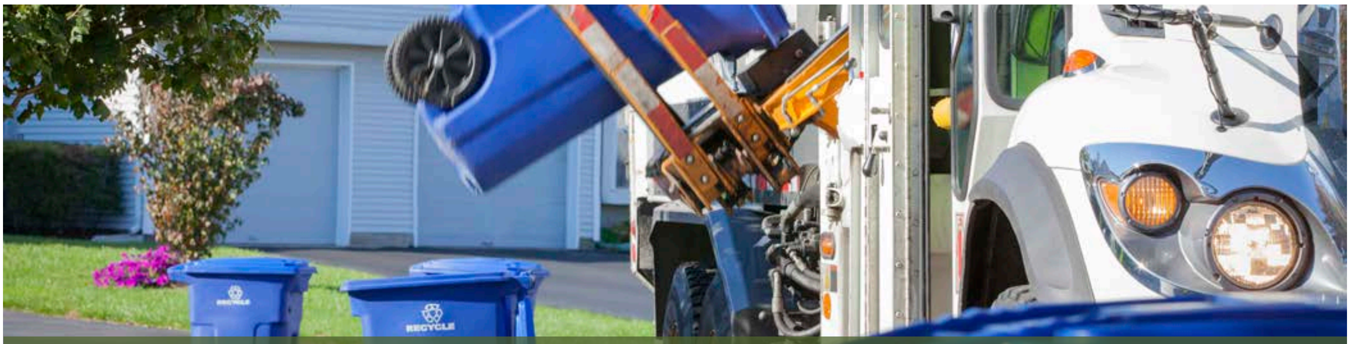
PFAs are widely used in a variety of consumer products and have been shown to be harmful when consumed. Utilities should carefully watch the continued rule-making efforts and determine the cost of compliance as new regulations are released.

## More than Just Rates

City of Frisco, TX

Since 2017, members of NewGen have worked annually with the City of Frisco (Frisco) on the development and update of this fast-growing City's impact fees, and water, wastewater, and solid waste financial forecast and rate plans. Frisco continually faces the need to plan for and fund the significant level of growth it has been experiencing over the past decade and foresees continuing into the next. Additionally, Frisco must absorb expected increases from the North Texas Municipal Water District while minimizing the impact on ratepayers. Each year the project team works with Frisco to update the projections and annual rate plan, and to provide advisement on other related issues as they arise.

In 2019, members of NewGen worked closely with Frisco's financial services staff to develop a new customized water and wastewater rate model with advanced functionality to streamline the update process and provide enhanced analysis, forecasting, and scenario development. NewGen is currently assisting Frisco with its first full indirect cost allocation study and a benchmarking review of their development and stormwater fees. Interactive, reliable models have allowed key decision-makers to quickly adapt to an ever-changing, regional wholesale provider landscape.



# Solid Waste Insights

## MORE TISSUE IS ON THE WAY

The American Forest & Paper Association reported that U.S. paper mills set record-high levels for tissue production this spring, producing approximately 700,000 tons in March. Much of this increase is directly related to COVID-19 and households stocking up on toilet paper, paper towels, etc. This has created an increased demand for these mills to secure materials from residential and commercial recycling programs as many of these mills rely on either a 100% recycled content, or a significant percentage, to operate their facilities and produce the finished product required to meet this increased demand.

**But this tissue isn't free…** As the demand for tissue has increased, the price for OCC (i.e. cardboard boxes – think Amazon), and mixed paper has surged in many markets within the U.S. as mills have struggled to find sufficient quantities to meet the demand for tissue related products. By mid-May, mixed paper, OCC, and other fiber grades had increased, with OCC rising to over $100 per ton. OCC in May was trading at an average of $107 per ton, compared to $73 the prior month. To put things in perspective, OCC was trading at $32 per ton a year ago. The last time OCC was above $100 per ton was in November 2017. Bottom line – when "stay at home" orders were issued and business closures took place, there was a significant decrease in the amount of OCC and sorted office paper that was generated by offices, large retail stores, factories, etc. that had traditionally gone to paper mills. While e-commerce and the increase in shipping of packages to homes increased significantly, it did not increase enough to make up for the commercial decline. In addition, the commercial stream of OCC and mixed paper tends to have much less contamination than the residential stream from the typical "single-stream cart" set out at the curb by a residential household. Overall, it is estimated that recovered paper collection in the U.S. declined by 30% to 50% in the second half of March and April.

## Development of a Solid Waste Cost of Service and Rate Design Study

### City of Weatherford, Texas

NewGen is currently working with the City of Weatherford, Texas to develop a municipal solid waste cost of service and rate design study. The purpose of the study is to develop a five-year forecast of the City's cost of service and proposed rates that will ensure the financial integrity of the utility through fiscal year 2025. Key issues addressed during the cost of service analysis include the determination of the capital costs required to be recovered through rates so as to be able to purchase new solid waste collection vehicles on a regularly scheduled basis via funds that are generated through the solid waste user fees. NewGen is also reviewing the cost of service of the City's bulk and brush collection services. The final report will be issued in early summer of 2020.

## NewGen New Hires

**Aaron Keaton**
Staff Consultant

Aaron joined NewGen's Annapolis office in April 2020 as a Staff Consultant and provides analytical support and works directly with NewGen consultants and clients to collaboratively design programmatic solutions. Aaron graduated from Penn State University with a Bachelor of Science degree in Energy Business and Finance.