



DATA IN THE *Heart of Texas*

A recently completed report indicates significant recycling opportunities exist in the Lone Star State, and the numbers have grabbed the attention of state legislators.

BY SARA NICHOLS AND SCOTT PASTERNAK

Backers of a groundbreaking study of the Texas recycling industry are thrilled at how their report has been received by a variety of audiences, including business leaders, decision-makers, municipalities and trade groups.

The Texas Recycling Data Initiative (TRDI) was conducted in 2014, and its results were released in February this year. It offered the first comprehensive and reliable look at recycling activity in the state since the 1990s and demonstrated a strong market case for much more activity in the materials recovery space.

That's a big deal in a state known for having a pro-business reputation coupled with minimum government regulation, according to Shirlene Sitton, zero waste manager for the city of Denton.

Sitton serves as chair of the board of directors of the State of Texas Alliance for Recycling (STAR), a nonprofit group with a mission to increase recycling rates in Texas. STAR managed the TRDI study, which was presented earlier this year to legislators, local governments and other industry representatives.

The Texas Legislature was so impressed that lawmakers overwhelmingly approved another study to look at trends in recycling and see how the state has improved its efforts since this initial report.

"The true success of TRDI was not the report itself, but what the report represented: collaboration and diverse widespread support throughout the entire process," Sitton said. "TRDI was not just a study; it provided an understanding of what the state of recycling looks like in Texas."

Sparking jobs and markets

TRDI pinpointed some key observations that can be used to initiate and enhance recycling programs at both a regional and state level. The study also provided crucial economic data that will be used to help convince businesses to begin or continue their work in the state. It can also be used to bring more processors, end markets and jobs to Texas.

While 32 million tons of material is being discarded annually by Texas businesses, institutions and residents, TRDI showed that 6.1 million tons (about 19 percent) of that material is being recovered and used as feedstock for manufacturers. Texas has around 27 million residents.

TRDI also estimated that 12,700 jobs are associated with the recycling processing industry in Texas. Considering that there are millions more tons of material that could potentially be recycled, there is a strong case that continued increases in recycling would translate to more jobs.

This means that Texas is full of opportunities for end-market development and job creation through recycling components such as hauling, processing, sales, municipal involvement and programming/education. Texas is a very business-friendly state with light regulation and low taxes, making it a prime location for businesses looking to expand their operations.

Ellen Smyth – environmental services director for the city of El Paso and president of the Lone Star Chapter of the Solid Waste

Association of America (TxSWANA) – has a first-hand appreciation for the information provided by TRDI. Similar to many other Texas cities, El Paso did not implement single-stream recycling until the mid-2000s. Since implementing its program, Smyth has advocated for advances in the recycling industry.

“While the recycling infrastructure is in place for many Texas communities, we have historically lacked reliable data that would legitimize recycling efforts and their economic impacts,” Smyth said. “The results from TRDI validate our collective efforts and provide the data to move programs forward.”

STAR members represent a diverse consortium of public, private and non-government organizations including waste haulers and processors, trade associations, and municipalities big and small.

Supporters say the success of TRDI was due to its voluntary, collaborative, diverse, confidential and straightforward approach to gathering information.

“What encouraged me was the validation of the philosophy and approach we were taking – that it was the right way to go,” said Fred Ecoff, former chair of the STAR board and a participant in the initial survey stakeholder group. “There was a lot of credibility built by stakeholders coming together.”

High response rates

STAR was assisted in developing the TRDI methodology by Burns & McDonnell, a Kansas City-based engineering firm with multiple Texas offices. The company specializes in environmental studies and consulting services.

Students at Texas State University also provided valuable assistance during the data-gathering phase of the project. The survey was offered to participants electronically through the web-based software company Emerge Knowledge, which runs the platform Re-TRAC Connect.

Ecoff said the approach recommended by Burns & McDonnell helped demonstrate to participants the study would be objective, and it helped build the trust of those who were surveyed, leading to what Emerge Knowledge described as one of the highest response rates for a voluntary survey.

“It helped get across we were not driving an agenda,” Ecoff said. “They did a very good job of taking a complex project and putting it together simply and with credibility.”

Obtaining data from the state’s mate-

rials recovery facilities (MRFs) was a key objective for TRDI. Because all of the large MRFs in the state are owned and operated by the private sector, Burns & McDonnell made sure to assure confidentiality, aggregate data and work directly with each company to address relevant issues. One clear indication of the project’s success is the fact that 22 of the 25 commercial MRFs in the state provided data for TRDI.

Waste Management’s Chuck Rivette, who serves as president of the Texas Municipal Solid Waste and Resource Recovery Advisory Council (MSWRRAC), provided advocacy and leadership for the study.

“As a multi-year process, there were so many points along the way where the project could have been derailed,” Rivette said. “Once the project started, we understood that the team was taking every measure to protect confidentiality, and that was a key reason for its accomplishments.”

Tom Baker, president of the Recycling Council of Texas, agreed with Rivette that a major reason behind the study’s success was business owners knew their information would be kept confidential. His organization, which represents the metals industry in Texas, helped compile data for the report.

“There’s always a concern about proprietary practices and the competition,” Baker said. “Many of the key players were willing to share and had faith the information would be kept confidential.”

Prior to conducting the survey, project leaders worked to develop a full understanding of key recycling players both inside and outside Texas. The flows of recycling materials are complex and vary by commodity type (see Figure 1). Burns & McDonnell charted material flows based on their industry experience and interviews with more than 30 recycling stakeholders.

Lawmakers take notice

Ecoff facilitated a group discussion in Austin on the results of the TRDI report in February. About 120 people attended the luncheon and 60 stayed after for a group discussion about what the next steps were for TRDI.

Among those who attended the luncheon was Rep. Ed Thompson, a Republican state lawmaker from the Houston-area city of Pearland. He later co-sponsored a bill – with Sen. Jose R. Rodriguez, a Democrat from El Paso – in the Texas Legislature that called for another recycling study. The action was overwhelmingly approved.

“The TRDI was a long time coming,”

Rodriguez said. “When my office was presented with the results, we were impressed with the high response rate it managed to attract from private industry.

“When we could report that Texas already supported nearly 13,000 jobs through municipal solid waste recycling – with absolutely no support from federal or state government – I think that opened lawmakers’ eyes to the economic possibilities present if we simply understood how much more recycling Texas industry could undertake.”

Maia Corbitt was the executive director at STAR when the TRDI study was first proposed in 2011. She helped shepherd the process that led to the successful survey in 2014 and the release of the report in 2015. Corbitt remembered people were skeptical that a comprehensive and reliable study could be achieved in Texas.

“At multiple meetings, people claimed it would never happen,” she said. “I’m most proud we could coordinate such a wide consortium: federal, state, regional and local officials, businesses and the public. We pulled together an unmatched coalition and were able to obtain the data and demonstrate it was useful.”

That was an important selling point to the Texas business community, said Steve Minnick. He is the vice president for government affairs of the Texas Association of Business.

“Our position always has been that recycling be a market-driven function and self-supporting because of the economic value of what’s being recycled,” Minnick said. “We were not afraid of the facts; if the facts show us where intrinsic value exists, that’s well and good.”

The ability of TRDI to provide a factual framework to begin filling in what had been a blank canvas was appealing to other trade associations as well, including the Texas Product Stewardship Council (TxPSC), a group of STAR members that works to integrate the principles of product stewardship into the policy and economic structures of Texas.

“Our group hopes information about other hard-to-dispose-of items such as paint, batteries, pharmaceuticals and more might be included in future studies,” said Debbie Branch, chair of the TxPSC. “The TRDI study is crucial in helping all entities in Texas understand where the recycling industry is today, but regular studies in the future are needed to understand how recycling is progressing.”

And satisfying that hunger for more information was why Sen. Rodriguez pushed

for legislation for the state to conduct another study on the economic impacts of recycling. It will refine the results of the initial report and provide more information about the potential market for recycling in Texas.

“The legislation is pretty straightforward,” Rodriguez said. “We’re directing the state to study waste reduction in Texas with an eye toward negative economic impacts from the materials that are not currently being recycled, including lost state and local revenues.”

Using TRDI and other economic impact studies as a precedent for the study set forth in the legislation, the planned study would expand upon the information provided in the TRDI report. In addition to quantifying the amount of material currently being recycled, as was performed by TRDI, the next study will also assess the cost, value, and quality of that material and will estimate the amount and value of material that could be recycled but isn’t.

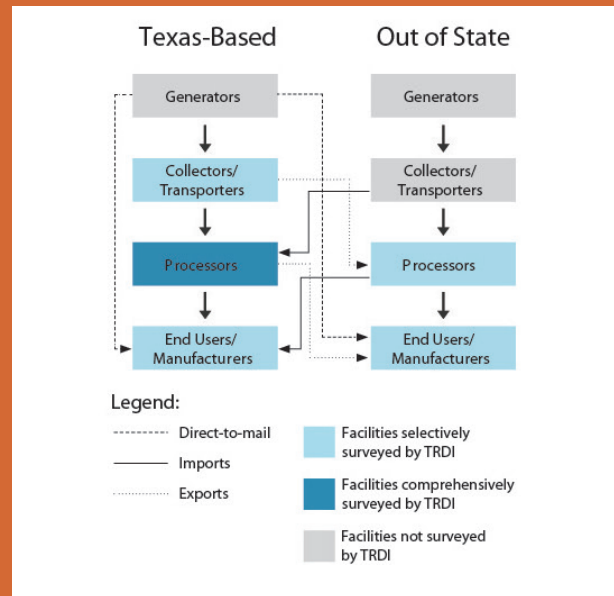
Expanded economic information would also be included in the new study, providing the current number of jobs associated with recycling as well as the potential additional employment opportunities.

It would also glean more information on programmatic developments that would be possible with increased recycling infrastructure, including identifying opportunities that lie in rural areas of the state and methods that could be used to develop new markets for recycled materials.

“I filed this legislation in large part because I think recycling in Texas needs a shot in the arm,” Rodriguez said. “Way back in 1991, our legislature ostensibly said it wanted to take recycling seriously and established a goal of recycling at least 40 percent of total municipal solid waste.

“More than 20 years later, we’re not close to that goal. Clear-

Figure 1 | Recycled material value chain



Source: TRDI study

ly, the state needs to reevaluate its recycling activities and entice business to invest in recycling programs by spelling out for them, in dollars and cents, the economic value of recycling to Texas.”

The next major resource boom

Backers hope the data produced by the TRDI and future reports is used to persuade more businesses to jump into the recycling industry.

“Before the TRDI, it was all guesswork. Whoever needed information about recycling and the availability of raw materials could only guess,” Baker of the Recycling Council of Texas said. “It’s better to make decisions based on real numbers and not estimates because recycling is a significant demand business.

While TRDI didn’t answer all the questions about recycling in The Lone Star State, Corbitt believes it was a milestone in how her state looks at recycling.

“I believe we’ve turned the corner from it being seen as a lefty, tree-hugging conspiracy against the free market,” she said, “to it being embraced as a billion-dollar industry in Texas and opportunity for the next major resource boom.” **RR**

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TRDI STUDY HIGHLIGHTS



Almost **14 million** tons of material recycled in 2013



More than **6 million** tons from homes, businesses, & institutions



Equates to an **18.9 percent** MSW recycling rate for Texas



Nearly **13,000 jobs** supported by materials recycled



Households with curbside recycle a yearly average of **503 lbs**