TRIED-IT Summit Report

TEXAS RECYCLING INFRASTRUCTURE ECONOMIC DEVELOPMENT – INITIATIVE TEAM

FINDINGS REPORT

TRIED – IT SUMMIT

May 8-9, 2025, Georgetown, Texas

A multi-stakeholder examination of the opportunities, benefits, challenges and methods to develop recycling processing and manufacturing infrastructure in rural and underserved urban areas in Texas.

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1. TRIED-IT Initiative Team Members/Sponsors

- Capital Area Council of Governments (CAPCOG) (With financial support from Texas Commission on Environmental Quality (TCEQ) Grant #582-24-50081)
- Capital Area Regional Environmental Task Force (RETF)
- Texas Association of Regional Councils (TARC)
- Texas Economic Development Council (TEDC)
- Keep Texas Beautiful (KTB)
- The Recycling Partnership (TRP)
- State of Texas Alliance for Recycling (STAR)

2. TRIED – IT Speakers

- **Ken May** – Regional Programs Manager, CAPCOG. Topic: Welcoming Comments. 6-hour Basic Environmental Law Training. Taking Control of Your Environment.
- **Richard Abramowitz** – Chair, STAR Business Council, Member of the Texas Commission on Environmental Quality's (TCEQ's) Municipal Solid Waste Management & Resource Recovery Advisory Council (MSWRRAC). Topic: Evolution of TRIED – IT.
- **Steve Shannon** – Vice-Chair, STAR Business Council, Member of the MSWRRAC. Topic: The magnitude of solid waste management and recycling in Texas – Opportunities.
- **Scott Pasternak** – Associate and Senior Project Manager – Burns and McDonnell Engineers, Member of the MSWRRAC. Topic: TCEQ Texas Recycling Market Development Plan Data.
- **Hannah Ordonez** – Senior Planner, North Central Texas Council of Governments (NCTCOG). Topic: Dallas-Fort Worth (DFW) Regional Recycling Cooperative Activities.
- **Erin Livingston**- Senior Planner, Houston-Galveston Area Council of Governments (H-GAC). Topic: Regional Grants/Public Education and Awareness.
- **Don Tracy** – Chair, CAPCOG's Economic Development Committee, Dean of Continuing Education – Austin Community College. Topic: Workforce Development Opportunities in the Recycling Industry.
- **Carlton Schwab** – President, Texas Economic Development Council. Topic: Recycling infrastructure as a matter of economic development.
- **Kris Collins** – Vice-President, Waco Area Chamber of Commerce. Topic: Chamber of Commerce support for recycling infrastructure capital projects in McClennan County.

- **Danielle Scheiner** – Vice-President, Regional Economic Development, Greater Houston Partnership. Topic: Inter-disciplinary cooperative activities to promote recycling industries in the Houston area.
- **Lou Serna** – Senior Program Manager, Keep Texas Beautiful (KTB). Topic: KTB partnerships with, and logistic and end-use marketing support for, 50 rural communities in Texas that operate small, public recycling centers.
- **Brocke Lively** – Superintendent for Solid Waste, City of Plainview, Texas, Member of the TCEQ MSWRRAC. Topic: Regional cooperation among rural communities in the Plainview area for amalgamating recyclable tonnage and end-use marketing.
- **Alexandra Gyarfas** – Director of Marketing, Balcones Resources (Largest independent Materials Recycling Facility (MRF) Operator in the U.S.). Topic: Request for Proposals – Public/Private Partnerships – Best Practices.
- **Caroline Ogburn** – Director of Business Development, Balcones Resources. Topic: Request For Proposal (RFP) evaluation, contract terms, transparency in a public development process - Best Practices.
- **Dave Yanke** – President, NewGen Strategies, & Solutions, LLC., Past - President, MSWRRAC. Topics: Financial Models to Evaluate the Economic and Systematic Viability of Proposed Recycling Management Systems - Capital and Operating Costs, Debt Service, Revenue and administrative management options.

Please see the synopses of the Presentations in Section 12.

3. Background/Overview

Texas, with 10% of the U.S. population, and with an economy that is more robust than the national average, generates at least 10% of all the Municipal Solid Waste (MSW) in the nation. This material, generated from residences, businesses, schools, government offices, institutions, agriculture and industries, includes C&D material but excludes the material handled or generated by the scrap metal and mining industries, amounts to more than 60,000,000 tons per year and is currently growing at a rate of a million tons per year.

TCEQ documents, including the 2021 Recycling Market Development Plan and the 2024 Report: Municipal Solid Waste in Texas: A Year in Review, reveal that we Texan's generate more than 60,000,000 tons of solid waste per year, averaging 2 tons per person per year or 11 pounds per day of which we landfill 40,000,000 tons and recycle 20,000,000 tons. These, and other studies, indicate that at least 50% of what we landfill are valuable recyclable resources that could be recycled if the infrastructure existed to collect, process and ship them to consuming manufacturers.

Texas has more than 200 MSW landfills and approximately 100 organics composting facilities but only 25 recycling Material Recovery Facilities (MRF) to process traditional recyclables. Of the 20 million tons recycled, 1/3 is composted or mulched organics, 1/3 is recycled construction and demolition debris and 1/3 is traditional recyclables like paper, plastic, metal (ferrous and non-ferrous) and glass.

The ability for any solid waste disposal or recycling system to achieve economy of scale is dependent upon receiving sufficient tonnage and associated revenue from collection service fees and/or facility tipping fees and/or commodity sales to cover the capital debt and operating costs. Landfills are a regulatory absolute, and therefore available throughout the State. Landfill avoidance facilities, such as composters and large MRFs, mostly only exist in the urban areas where it is more economical to collect and amalgamate tonnage. Texas suffers from an infrastructure deficit in the rural areas.

Comparable with other states, Texas' rural communities that want to recycle face four challenges: 1) amalgamation of enough tons to achieve economy of scale; 2)

freight costs; 3) lack of availability to processing facilities and end-use markets; and 4) the challenge of formulating a regional governing body to institute and manage the system. These challenges can be largely overcome through regionalization and cooperation among neighboring communities.

This issue and its challenges and opportunities, except in a few local instances, has never been examined on a broad level by multiple stakeholders in Texas until now. TRIED – IT was convened to begin the dialogue regarding how rural local governments and communities can cooperate and the tools and resources that can be applied to amalgamate tonnage, solicit for infrastructure development and promote and manage a rural, regional recycling system.

The TRIED – IT Summit brought together panelists of speakers representing various stakeholders from throughout Texas. These included private industry, not-for-profit, state representation for the recycling industry, the economic development community, the work-force community, the investment community, financial analysts and local and regional government representatives. It is the sincere hope of the Initiative Team that this effort and document will be useful and inspire rural and underserved urban areas to consider the benefits of recycling, to examine in earnest its potentiality and invest in its institution.

Communities that are interested in hosting a TRIED-It workshop are invited to contact the State of Texas Alliance for Recycling or any of the Initiative Team Members for assistance and support. (See Section 12 – Resources).

4. What is Recycling Infrastructure?

Infrastructure is the mechanical and physical components of a recycling system. It includes collection vehicles, residential, office, school and workplace containers, commercial dumpsters, roll-off boxes, drop-site mobile trailers, transfer stations, densification facilities, composting and construction and demolition debris recycling facilities and MRFs of various sizes and capabilities.

If traditional recyclables are commingled (paper, plastic, metals mixed) in the collection phase, the loads will need to be sorted into respective commodities at some point prior to delivery to an end-use manufacturing consumer. A commingled system requires less containers and fewer collection vehicles but a

more costly MRF to separate them into respective types and grades. Conversely, Source-separated (either material specific separation or paper versus rigid containers at the point of collection.) collection of recyclables requires less MRF equipment and sorting costs but more collection containers and vehicles. Sortation is much easier and cheaper and quality control for all recyclables is better if glass is not included in a commingled collection system and collected and handled separately from the other recyclables.

Most full-scale MRFs generally need a minimum of 3,000 tons per month to achieve economic viability. Rural areas may struggle to achieve this threshold. An alternative, requiring less machinery, facility and operating cost is a "Mini-MRF" that has less robotic and mechanical sorting and more manual sorting, reducing capital and maintenance costs. The facility would feature basic conveyor sortation lines and one or more balers to prepare products for shipment. It may also feature a magnet to capture ferrous containers and an eddy-current separator to capture aluminum containers. Otherwise, the sortation can be performed by hand off conveyors. A forklift and front-end loader are required at a minimum.

The more items that are commingled on a sortation line, the longer the line must be, or the line speed needs to be reduced, and more sorting technicians are required, or mechanical separators must be used. One way to maximize the efficiency of the sort line is to divide the incoming material stream into two separate streams: Paper and paper items like newsprint, office paper, cardboard and Rigid Containers like metal cans and plastic bottles and jugs. These streams would be run across the sort line separately at different times. This requires ample floor space to queue the respective materials for placement on the sorting line. Glass is best collected, stored and transported as a separate recyclable stream.

Another approach is to operate a densification facility where commingled recyclables (less glass) are simply baled and shipped to a full-scale MRF for sortation and end-use marketing. Such densification at 1,000 pounds per cubic yard cuts transportation costs by 50% versus transporting recyclables long distances in compactor type collection vehicles at a density of less than 500 pounds per cubic yard.

Note: Maintenance of collection vehicles and processing equipment is critical to success. Regularly scheduled maintenance must occur for safety and efficiency.

Because of the abrasiveness of glass particles, maintenance costs will be significantly reduced if glass is collected separately and processed outside the MRF, Densification Facility or Transfer Station.

5. Benefits of Recycling:

Recyclables like paper, cardboard, plastic containers and metal cans are manufactured resources that have already borne the costs of raw material extraction, transport, refining and manufacturing processes. Using recyclables as industrial feedstock to create new products significantly reduces industrial energy, processing water, chemicals and transportation cost requirements compared to a supply -chain that utilizes raw materials. Recyclables exist in an already highly engineered and refined form; be they fibers, polymers or alloys. These materials, properly sorted, inherently meet manufacturers' feed-stock specifications and are often preferred by manufacturers; particularly industries that are involved with the original production of the products and/or have environmental sustainability goals.

Environmental benefits of recycling are captured by the U.S. Environmental Protection Agency's Waste Reduction Model (WARM) to provides high-level comparative estimates of the potential GHG emissions, energy savings, and economic impacts of materials managed in baseline and alternative materials management practices, including source reduction, recycling, composting, anaerobic digestion, combustion, and landfilling. The model estimates emissions, energy units and economic factors across a wide range of material types commonly found in municipal solid waste and construction and demolition debris in the following categories:

- Metric tons of carbon dioxide equivalent (MTCO2E),
- Energy units (million British Thermal Unit - BTU),
- Labor hours,
- Wages ($), and
- Taxes ($).

The model is currently available as a downloadable Microsoft Excel spreadsheet at epa.gov/waste-reduction-model/versions-waste-reduction-model#Excel.

How Big is the Economic Impact of Recycling in Texas?

The research to-date regarding recycling in Texas is very conservative and limited by only three formal investigations into its size and magnitude. It has economic impacts larger than currently documented. What is known so far:

- 22,000 Texans are employed in municipal solid waste recycling in collection, initial sortation (Material Recovery Facility) and long-haul transport to an end-use manufacturer or intermediate processor.
- 9,000 person-years of employment is provided to Texans by industries that use recyclables as industrial feedstock.
- 31,000 recycling jobs are equivalent to the number of jobs in the petroleum refining and furniture manufacturing industries in Texas.
- Municipal and Industrial recycling has a $7.8 Billion annual positive impact on Texas' economy,
- Plus, the economic impact of manufacturing that uses recyclables as feedstock,
- Plus, the market value of the products that are made from recyclables.
- The industry pays more than $280 Million annually in State and Local taxes.
- The data indicates that 43% (16 million tons) of what is landfilled could be sustainably recycled if infrastructure was available.
- These 16 million tons of recyclable material have an initial recycling market value exceeding $2 Billion annually.
- These 16 million tons, if recycled once instead of landfilled, have a potential economic impact approaching $6 Billion. Landfilled, it is worth $720 Million.
- Recycled twice - $12 Billion, 3 X - $18 Billion – ad infinitum.
- Depending upon the type of recyclable and the product manufactured from it, it is estimated that recycling provides 4-8 X more jobs/ton than landfilling.

The economic impact of landfilling ends with the burial of solid waste but continues, repeatedly, if recycled in a circular economy.

Local benefits of recycling include the creation of jobs and employment skills, avoided landfill transportation and disposal costs (average $45/ton and rising in Texas), a cleaner community, less litter and participation in the circular economy where recyclables are circulated to financial, employment and environmental benefits repeatedly.

When recyclable material is placed in a landfill it is there forever. The value of a ton of disposed material is worth $45 to the average landfill in Texas. Conversely, when items are recycled, they stimulate a value-chain that includes collection, MRFs, intermediate processors, manufacturers and the associated transportation to and from these facilities that exceeds landfill revenue by several orders of magnitude.

Commodity values and prices change due to many circumstances but MRF products, on average, are sold for considerably more than the landfill tip fee. MRFs are currently selling to end-users: Corrugated cardboard - $90/ton, Residential paper - $60/ton, Office paper - $130/ton, #2 Natural HDPE plastic containers - $1,780/ton, #2 Pigmented HDPE plastic containers - $100/ton, #1 PET bottles - $320/ton, steel cans at $100/ton and aluminum cans at $1,840/ton.

Market values fluctuate and can be 2X – 5X higher than the prices quoted, which are near all-time lows. The materials may be shipped to an intermediate processor who will add value by washing, flaking, pelletizing or powdering and then sell the product to a consuming end-use manufacturer.

Commodities may be shipped from a MRF directly to a consuming end-use manufacturer. The manufacturer then adds value to the material by producing a new product which, once utilized by the public consumer, is again available to be recycled, closing the recycling loop and creating a circular resource economy. Considering the entire workforce engaged in the recyclables supply - chain, the number of jobs supported by recycling is estimated to be 4X – 8X more per ton than landfilling.

The Texas Recycling Market Development Plan identified that in 2020 the economic impact from direct, indirect and induced employment from the MSW

recycling industry in Texas (excluding the scrap metal industry) from collection, MRF processing and the initial transportation away from the MRFs and internal industrial recycling is $7.8 Billion per year, employing more than 31,000 Texans. This is the same size as the number of Texans employed in the Petroleum Refining and Furniture industries respectively. The Recycling Market Development Plan (RMDP) does not reflect the jobs and economic impact of the intermediate processors, the manufacturers, the retail or wholesale market value of the products produced from recyclables, nor the economic impact of transportation related to these activities. Therefore, the economic impact of MSW recycling is much larger than we realize.

The entire benefits of a circular solid waste management system may not be fully recognized at the local level, but capturing recyclables at the local level and rendering them through a MRF for shipment and consumption by manufacturers is the most essential component of a recycling system. It is truly the first step in the circular economic process.

6. Hub and Spoke Logistic Model

Rural regional recycling collection and amalgamation systems often employ a hub and spoke model. The intent is to deliver the recyclables to a central amalgamation point such as a MRF, Densification Facility or Transfer Facility. This is the Hub of the system. At the outlying end of the spokes are local collection routes or drop sites or transfer stations that either deliver their tons to the central receiving facility, or the remote tonnage is collected on a milk-run route.

Cooperation among the outlying generation points for transportation can reduce costs by sharing vehicles and containers. Utilizing roll-off vehicles and open-top boxes or compactor boxes, the route driver(s) can drop empties and retrieve full containers on a route. This can also be applied to collection of baled materials. Such collection routes could be performed by the private or public sector or both and provide a central management platform for data tracking, efficient routing, quality control inspections and determining participation rates. A good example of

a Hub-and-Spoke recycling model is demonstrated by the City of Plainview, Texas and several of its surrounding small communities. Also, several of the rural recycling operations supported by Keep Texas Beautiful employ a Hub-and-Spoke logistic model.

7. A Planning Approach to Develop Recycling Infrastructure in a Rural Region

One example of a planning approach is where a group of neighboring communities, cities, towns, villages and counties decide to investigate the economic viability of developing recycling processing infrastructure by a cooperative, phased effort. These stakeholders should envision a Hub-and-Spoke model, where volumes are collected from outlying communities and delivered to a central regional MRF, Mini MRF or Transfer Facility.

The sequential activity phases are:

1. **Establishment of Interest.**

All the interested and potentially affected communities, local governments, Economic Development Offices, Work-Force Development agencies, private sector haulers and recyclers and interested public parties would send delegates to a regional meeting to discuss the benefits and requirements of establishing regionally accessible processing infrastructure. This will likely require a series of meetings. The governmental parties could agree, through a Memorandum of Understanding or Interlocal Agreement, and issue an RFP for a public/private partnership to develop and operate the infrastructure, withholding final approval and participation pending the RFP results. The stakeholders could authorize a "Steering Committee" to develop and manage the RFP process.

Interest From and Involvement of Existing Service Providers.

On a parallel time track to the regional RFP, the local governments should engage in negotiations with their existing contract haulers. Results of these negotiations can be compared to proposals received for a regional system.

Some rural communities collect their own solid waste and can therefore consider modifying their program internally. Many rural communities' contract with a private sector hauler for collection and disposal services. These contractors have a pecuniary, and perhaps vested, interest in the management of the waste stream and should be openly invited to participate in the regional system by participating in planning discussions and by negotiating modifications to their existing contracts to synchronize with the broader program. If negotiations are not successful, the local governments can subject the service to RFP or Bid, as existing contract terms provide, to render their local system to be compatible or integral to the regional system. Many current service providers possess a sincere interest in the well-being of the communities they serve, and it is to their advantage for their customers to prosper.

Existing solid waste collection contracts can be amended to include recyclables collection, retaining local control of the collection service but also allow for collected recyclable tonnage to be delivered to a regional system transfer station, densification facility or MRF, any of which could be owned and operated jointly or separately by the public or private sector.

TX Health & Safety Code Chapter 363 Policy (12) states:

> (12) local governments should be encouraged to contract with waste management firms to meet the requirements of this chapter.

2) Data Gathering Phase.

The size, capability, costs and economics of processing infrastructure is determined by the amount of tonnage it captures to process. It is therefore necessary to determine the amount and percentages of recyclables in the region's waste stream.

Data is available from each Council of Government's recently published Twenty Year Regional Solid Waste Management Plan. These plans, developed in 2022, provide specific waste generation data, by COG Region.

The TCEQ estimates in the 2024 – Municipal Solid Waste – A Year in Review Report that Texans landfill an average of 6.8 pounds of MSW per day (includes C&D materials). Industrial generated solid wastes add another 4.2 pounds per capita per day. Based on data in the TCEQ RMDP, it can be confidently estimated that at least 50% of the MSW consists of viably recyclable items.

Other supporting data can be derived from municipal solid waste disposal invoices, solid waste haulers, existing recycling centers and on-line research.

3) Request For Proposals or Requests for Interest Phase

The Steering Committee could issue a Request for Interest (RFI) to solicit interest in the project from the private sector recycling industry and potential investors. If interest is received, it is recommended that discussions occur among the parties to develop the details of an RFP.

The RFP would essentially ask the private sector, and/or other public entities, what kind of processing and/or collection infrastructure would they propose to develop and operate, and what contractual arrangements they would require given the tons generated by the potentially participating communities and governments in the region and the costs and revenue sharing thereof.

4) Administration and Management Entity Phase

The Steering Committee should contain members including local elected officials, engineers and attorneys, solid waste professionals, local and regional Planners, Economic Development Corporations and public stakeholders. Consider including local solid waste and recycling services providers, perhaps as Ad Hoc Members, provided no conflict of interest exists. The Committee is responsible for producing a Request for Information (RFI), Request for Quotes (RFQ) or a Request for Proposal (RFP). It may be useful to engage the services of a consultant to help guide and develop the RFP development, issuance and review process and subsequent contract executions.

At some point a management entity will need to be created to provide a legal platform to enter into agreements, obligations and contracts. This governing entity could be in the form of a Cooperative (Co-Op), Authority, Recycling District,

Enterprise Zone, Industrial Development District or other mechanism. These options should be reviewed by the Committee to identify the best option that is most supportive of the system's success and is inclusive of the needs of the participating communities and the public at large.

The system could be developed and operated entirely by the public or in various configurations of a public/private partnership. It could include the contribution and participation of 3rd party players such as haulers, non-profit organizations, economic development agencies, local banks and public groups.

Approval of whatever management model is selected for adoption will likely require considerable inter-local agreement activity and legal instrumentation. To facilitate these decisions and agreements it is critical that the local government officials be kept fully aware of proceedings and recommendations and that the process is highly publicly visible and transparent.

8. Request for Proposals – Best practices

- Provide as much information in the RFP/RFI/RFQ as possible.
- Provide ample time for responses. Suggestion: minimum of 90 days.
- Steering Committee or appointed Review Committee to review and evaluate proposals and recommend them to the larger body (avoid conflict of interests).
- Compare the proposals with a numerical ranking matrix that ranks the various project components.
- Include a draft contract.
- Conduct a mandatory pre-proposal meeting to fully explain the RFP.
- Allow questions to be submitted to the Committee in writing and provide answers in writing, distributed to all potential Proposers, up to two weeks prior to the submittal deadline.
- Engage the services of the local government solid waste professionals and engineers to help craft the RFP and review the responses.

Allow alternative proposals to be considered. A number of the Council of Governments in Texas including the North Central Texas Council and the Houston-

Galveston Area Council have developed guidance documents to help local governments develop RFPs. These could be used as templates.

9. Finance and Funding

The cost of collecting recyclables is essentially the same as the cost of collecting trash. The difference is that with trash, the material is taken to a landfill, deposited at a fee, buried, and lost forever landfill. Recyclables are delivered to a MRF or composting facility and sometimes pay a fee but are then processed and sold back into the economy.

The applicability of a tipping fee at a MRF is largely driven by the cost of removing and disposing of contamination, which averages 25% in Texas' recycling collection programs. The cost of the system may be reduced if strict attention is paid to quality and the absence of contamination. Also, recyclables that have not been mixed with contaminants generally are better quality and fetch best market prices. As a matter of economics, quality in-flow must be an unwavering standard of the recycling program. This will require a robust outreach and education component to educate the target population on what is recyclable and what is not. This may vary by region.

Funding for the program can come from many sources. Commodity market revenue is one source. It can be applied wholly against the system MRF and/or collection operating cost and/or debt service or can be shared with the participating communities. However, depending on the type and weight and quality of the program recyclables, revenue sharing may be provided. Revenue sharing must be balanced against commodity revenue and operating costs to determine the tip fee, if any.

Funding can come from the MRF Developer/Operator that invests private capital in the facility or collection system. The operating contract provides for them to recover their investment from the commodity revenue and/or tipping fees, or in

the case of collection – service fees. Recovery of this capital is normally expected by the industry to occur in 5-10 years.

Funding can come from the industries that produce recyclable packaging products. An example is The Recycling Partnership (TRP), which represents many consumer product brand owners that have corporate goals to recycle a high percentage of their product packaging. TRP provides grants and bridge loans to support the development of recycling infrastructure to promote this recycling.

Service fees for residential and commercial collection can also be a source of funding. If drop-centers are used, they can charge a "dumping" tipping fee. Drop-Centers in some rural communities in some states charge a fee for trash but recycling volumes are "free." The sites charge $2-3 per bag of trash, $0 to drop recyclables. The cost of recycling is included in the charge for the trash, but it provides an economic incentive to recycle and produces clean, uncontaminated material. These facilities normally feature 3 or more 40 cubic yard compactors. The waste stream is divided between trash, corrugated cardboard and other mixed recyclables.

Economic Development Corporations exist to promote economic development, jobs and improvements in their local communities. They have expertise in development project management, are connected to the financial community and understand private/public partnerships.

TCEQ grants for GOGs can provide funding for planning and infrastructure.

Funding can be derived from government sponsored bonds or other financial instruments. Such funding will require considerable support from the public and may require a referendum. Again, another reason why the development process must be highly publicly visible and transparent.

It is highly advised to engage the services of a professional solid waste planning/engineering consulting firm to evaluate the economic feasibility of the proposed systems regarding the capital and operating costs, financial instruments, revenues and the structure of the administrative framework to ensure economic sustainability.

10.Statutory Framework/Historical Context

The first Federal law governing the management of solid waste was promulgated in 1965. The Solid Waste Act (SWA) prohibited open burning of trash and required solid waste to be disposed of in a sanitary landfill. Standards were sketchy and no federal funding was made available to local government.

The SWA was amended in 1976 by the Resource Recovery and Conservation Act (RCRA), which required landfills to protect groundwater from leachate (liners), monitor emissions and cover waste daily in compliance with government design and operating standards. It also established regulations specific to municipal and hazardous waste and suggested a waste management hierarchy, see figure 1. below, of preference in the following descending order:

1) Prevention
2) Reuse
3) Recycling
4) Energy Recovery
5) Treatment & Disposal

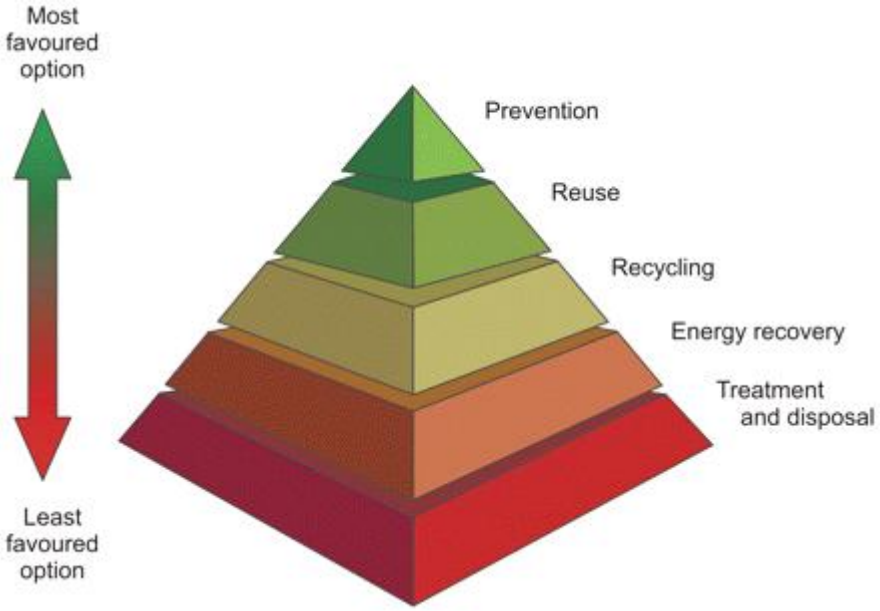

Figure 1: *Municipal Solid Waste Management Hierarchy by Pushpa (Applied Science Department, Gpes Meham, circa ~ 2007)*

Unlike the Clean Water Act and the Clean Air Act that provided government grants, loans and bonds to finance sewage treatment facilities and air quality improvement technology, RCRA did not provide any funding to local governments to meet the requirements of the Act. Most significantly, RCRA declares and establishes that the management of municipal solid waste is a matter for local government.

Table 1: *Landfills in Texas

Landfill Information	Total
Type I	99
Type IAE	22
Type IV	23
Type IVAE	18
Type IAE & IVAE	30
Monofill	14
Total Tons of Waste Disposal	41,321,494
Statewide Remaining Landfill Capacity (Years)	51

Processor Information	Total
Autoclave (5AC)	11
Liquid Waste Processor (5GG)	29
Medical waste processor (5MW)	9
Medical waste transfer station (5MWTS)	11
Liquid waste transfer station (5TL)	4
Transfer station (5TS)	100
Waste incinerator (5WI)	1
Compost (5RC)	21
Total tons of waste processed (Tons)	9,991,754

** TCEQ AS-187/25: Municipal Solid Waste in Texas: A Year in Review*

RCRA was ratified by the State of Texas in 1989. Over the next several years, Texas closed more than 2,804 non-compliant municipal landfills. Today more than 200 MSW landfills operate in the State. The closure of old landfills and the permitting and regulation of the new ones is a giant task consuming much effort by TCEQ. While Texas statute provides for greater recycling efforts on the part of the State's regulatory agency, the State Legislature has not directed funding for the TCEQ to enact such solid waste diversion programs.

Thus, the TCEQ has never received ample funding to promote recycling and is hampered in its efforts to do so without Legislative direction. It does perform some helpful education and awareness functions and provides small grants to COGs that are often used as local pass-through funding for recycling projects and other solid waste related projects such as litter abatement and disaster debris planning. Recycling as an institution has not proven to be a major priority for the Texas Legislature. This trend of limited funding may be on the verge of changing, as the Texas Legislature has recently directed the TCEQ to fund the publication of two salient studies: The Study of the Economic Impact of Recycling in Texas (HB2763 – 2017), and The Texas Recycling Market Development Plan (SB649 – 2021). Both were drafted by Burns & McDonnell, under contract with TCEQ.

It is helpful and encouraging that TCEQ has verbally committed Staff hours in support of any forthcoming regional TRIED-IT seminars.

In the Texas Health and Safety Code (TX H&SC), considerable authority exists for local governments to manage solid wastes and establish recycling programs. The following excerpts provide some insight: (Underlines added for emphasis.)

Relating to TX H&SC Chapter (§) 361 – Texas Solid Waste Disposal Act (1989):

Sec. 361.002. POLICY; FINDINGS. (a) It is this state's policy and the purpose of this chapter to safeguard the health, welfare, and physical property of the people and to protect the environment by controlling the management of solid waste, including accounting for hazardous waste that is generated.

Definitions:

(17) "Local government" means:

(A) a county;

(B) a municipality; or

(C) a political subdivision exercising the authority granted under Section 361.165.

Sec. 361.022. PUBLIC POLICY CONCERNING MUNICIPAL SOLID WASTE AND SLUDGE. (a) To protect the public health and environment, it is the state's goal, through source reduction, to eliminate the generation of municipal solid waste and municipal sludge to the maximum extent that is technologically and economically feasible. Therefore, it is the state's public policy that, in generating, treating, storing, and disposing of municipal solid waste or municipal sludge, the methods listed under Subsections (b) and (c) are preferred to the extent economically and technologically feasible and considering the appropriateness of the method to the type of solid waste material or sludge generated, treated, disposed of, or stored.

(b) For municipal solid waste, not including sludge, the following methods are preferred, in the order listed:

(1) source reduction and waste minimization;

(2) reuse or recycling of waste;

(3) treatment to destroy or reprocess waste to recover energy or other beneficial resources if the treatment does not threaten public health, safety, or the environment; or

(4) land disposal.

(18) "Management" means the systematic control of the activities of generation, source separation, collection, handling, storage, transportation, processing, treatment, recovery, or disposal of solid waste.

(27) "Recycling" has the meaning assigned by Section 361.421.

361.421: (8) "Recycling" means a process by which materials that have served their intended use or are scrapped, discarded, used, surplus, or obsolete are collected, separated, or processed and returned to use in the form of raw materials or feedstocks used in the manufacture of new products. The term does not include incineration of plastics or waste-to-energy processes. Recycling includes:

(A) the composting process if the compost material is put to beneficial reuse as defined by the commission;

(B) the application to land, as organic fertilizer, of processed sludge or biosolids from municipal wastewater treatment plants and other organic matter resulting from poultry, dairy, livestock, or other agricultural operations; and

(C) the conversion of post-use polymers and recoverable feedstocks through pyrolysis, gasification, solvolysis, or depolymerization.

Power to create a Solid Waste Authority or District;

Sec. 361.165. POLITICAL SUBDIVISIONS WITH JURISDICTION IN TWO OR MORE COUNTIES. (a) This section applies to a political subdivision of the state that:

(1) has jurisdiction of territory in more than one county; and

(2) has been granted the power by the legislature to regulate solid waste handling or disposal practices or activities in its jurisdiction.

(b) The governing body of the political subdivision may, by resolution, assume for the political subdivision the exclusive authority to exercise, in the area subject to its jurisdiction, the powers granted by this chapter to a county, to the exclusion of the exercise of the same powers by the counties otherwise having jurisdiction over the area.

(c) In the exercise of those powers, the political subdivision is subject to the same duties, limitations, and restrictions applicable to a county under this chapter.

(d) A political subdivision that assumes the authority granted under this section:

(1) serves as the coordinator of all solid waste management practices and activities for municipalities, counties, and other governmental entities in its jurisdiction

that have solid waste management regulatory powers or engage in solid waste management practices or activities; and

(2) shall exercise the authority as long as the resolution of the political subdivision is effective.

(2) "Principal processor" means a facility that receives recyclable materials from generators or collection programs and sorts, cleans, screens, bales, densifies, cures, or creates product that is ready for beneficial reuse immediately after processing or is ready to be used as a feedstock by a subsequent processor or manufacturer.

(3) "Recyclable material" includes paper, plastic, metal, glass, vegetative waste, compost, mulch, tires, electronic waste, construction and demolition debris, batteries, and paint.

TX H&SC Chapter §362 – Solid Waste Resource Recovery Financing Act – Relating to public financing of solid waste management systems, Bonds, Resolutions

Sec. 362.001. SHORT TITLE. This chapter may be cited as the Solid Waste Resource Recovery Financing Act.

Acts 1989, 71st Leg., Ch. 678, Sec. 1, eff. Sept. 1, 1989.

Sec. 362.002. POLICY AND PURPOSE. (a) The policy of the state is to safeguard the public health, general welfare, and physical property from solid waste pollution by encouraging the processing of solid waste for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse.

(b) It is the policy of the state that the processing of solid waste for reuse is essential to the well-being and survival of state inhabitants and the protection of the environment. That processing will conserve and develop state natural resources, within the meaning of Article XVI, Section

59(a), of the Texas Constitution by preventing further damage to the environment.

(9) "System" means real property, plants, works, facilities, equipment, pipelines, machinery, vehicles, vessels, rolling stock, licenses, or franchises used or useful:

(A) in connection with processing solid waste to extract, recover, reclaim, salvage, reduce, or concentrate the solid waste, or convert it to energy or useful matter or resources including electricity, steam, or other form of energy, metal, fertilizer, glass, or other form of resource; or

(B) in the transportation, receipt, storage, transfer, and handling of solid waste, the preparation, separation, or processing of solid waste for reuse, the handling and transportation of recovered matter, resources, or energy, and the handling, transportation, and disposition of nonrecoverable solid waste residue.

Sec. 362.017. INDUSTRIAL DEVELOPMENT CORPORATION. (a) A public agency that has entered into a contract under Section 362.014 may sponsor the creation of an industrial development corporation under the Development Corporation Act (Subtitle C1, Title 12, Local Government Code).

(b) The corporation may issue bonds, notes, or other evidences of indebtedness under the Development Corporation Act (Subtitle C1, Title 12, Local Government Code) to finance the cost of a system under the contract regardless of whether the system is located within the boundaries of the public agency.

TX H&SC Chapter §363 – Comprehensive Municipal Solid Waste Management, Resource Recovery, and Conservation Act

Sec. 363.001. SHORT TITLE. This chapter may be cited as the Comprehensive Municipal Solid Waste Management, Resource Recovery, and Conservation Act.

Acts 1989, 71st Leg., Ch. 678, Sec. 1, eff. Sept. 1, 1989.

Sec. 363.002. POLICY. It is this state's policy to safeguard the health, general welfare, and physical property of the people and to protect the environment by encouraging the reduction in solid waste generation and the proper management of solid waste, including disposal and processing to extract usable materials or energy. Encouraging a cooperative effort among federal, state, and local governments and private enterprise, to accomplish the purposes of this chapter, will further that policy.

(5) often, operational deficiencies occur at rural solid waste land disposal sites operated by local governments that do not have the funds, personnel, equipment, and technical expertise to properly operate a disposal system;

(6) many smaller communities and rural residents have no organized solid waste collection and disposal system, resulting in dumping of garbage and trash along the roadside, in roadside parks, and at illegal dump sites;

(7) combining two or more small, inefficient operations into local, regional, or countywide systems may provide a more economical, efficient, and safe means for the collection and disposal of solid waste and will offer greater opportunities for future resource recovery;

(9) technologies exist to separate usable material from solid waste and to convert solid waste to energy, and it

will benefit this state to work in cooperation with private business, nonprofit organizations, and public agencies that have acquired knowledge, expertise, and technology in the fields of energy production and recycling, reuse, reclamation, and collection of materials;

(10) the opportunity for resource recovery is diminished unless local governments can exercise control over solid waste and can enter long-term contracts to supply solid waste to resource recovery systems or to operate those systems;

(11) the control of solid waste collection and disposal should continue to be the responsibility of local governments and public agencies, but the problems of solid waste management have become a matter of state concern and require state financial assistance to plan and implement solid waste management practices that encourage the safe disposal of solid waste and the recovery of material and energy resources from solid waste; and

(12) local governments should be encouraged to contract with waste management firms to meet the requirements of this chapter.

Sec. 363.067. STUDY REQUIRED FOR RESOURCE RECOVERY OR OTHER SOLID WASTE MANAGEMENT SYSTEMS. (a) To develop programs to implement regional or local solid waste management plans or other solid waste management alternatives that include resource recovery, a study must be made to determine feasibility and acceptance of the programs.

(b) The study shall be conducted in three phases:

(1) a screening study;

(2) a feasibility study; and

(3) an implementation study.

(c) Public agencies that conduct all or part of one or more phases may qualify for assistance to accomplish other phases or parts of phases.

(d) After each phase, the governing body shall determine whether to proceed to the next phase.

(e) A study may not include final design and working drawings of any request for proposals for project facilities or operations.

Acts 1989, 71st Leg., Ch. 678, Sec. 1, eff. Sept. 1, 1989.

Sec. 363.068. SCREENING STUDY. (a) A screening study must provide a survey and assessment of the various factors affecting the suitability of resource recovery or other solid waste management systems with the scope and detail needed to make an initial determination of whether those systems are potentially successful alternatives to existing systems.

(b) The survey and assessment must include:

(1) the amount and characteristics of available waste;

(2) the suitability and economics of existing solid waste management systems;

(3) institutional factors affecting potential alternatives;

(4) technologies available;

(5) identification of potential material and energy markets;

(6) economics of alternative systems; and

(7) interest of the local citizenry in available alternatives.

Acts 1989, 71st Leg., Ch. 678, Sec. 1, eff. Sept. 1, 1989.

Sec. 363.069. FEASIBILITY STUDY. A feasibility study must provide an evaluation of alternatives that:

(1) identifies current solid waste management practices and costs;

(2) analyzes the waste stream and its availability by composition and quantity;

(3) identifies potential markets and obtains statements of interest for recovered materials and energy;

(4) identifies and evaluates alternative solid waste management systems;

(5) provides an assessment of potential effects of alternatives in terms of their public health, physical, social, economic, fiscal, environmental, and aesthetic implications;

(6) conducts and evaluates results of public hearings or surveys of local citizens' opinions; and

(7) makes recommendations on alternatives for further consideration.

Acts 1989, 71st Leg., Ch. 678, Sec. 1, eff. Sept. 1, 1989.

11. Presentations

Day One – Full Day:

3.a. **Opening Remarks:** Ken May, Regional Programs Manager, CAPCOG; Richard Abramowitz, STAR & MSWRRAC; Steve Shannon, STAR & MSWRRAC; and, Jenna Stanke, Goodwill Central Texas. *Kick off session featuring leaders from CAPCOG, STAR and Goodwill to set the tone for the summit.* Takeaway: The demand for recyclable feedstock is growing, infrastructure development is a critical need and billions of dollars are being invested in processing and manufacturing infrastructure in the U.S. Planning and infrastructure development for rural recycling systems is on an ascent but needs support and guidance. This workshop is an effort to bring increased solid waste diversion to the state of Texas. It is our hope this workshop will build off the Burns & McDonnell Recycling Market Development Plan, drafted in response to 2019 Texas State Legislature's SB 649, which was built on prior Texas statewide recycling studies.

As Richard Abramowitz so clearly stated, this is our effort to move recycling forward from the local approach and moving it up, starting with this state-wide summit which connects recycling professionals with economic development professionals for in-depth discussions on solid waste diversion.

Steve Shannon provided a short history lesson on the development of solid waste services from landfilling to diversion in respect to the solid waste management hierarchy pyramid. He also summarized the Recycling Market Development Plan and the *TCEQ's MS-187, Municipal Solid Waste in Texas: A Year in Review*, MSW annual data, to set the stage for the first session, introducing Mr. Scott Pasternak, P.E., Burns & McDonnell.

3.b. **Presentation: Keynote Speaker - Recycling Market Development Plan:** Scott Pasternak, P.E., Burns & McDonnell. *Recycling Market Development Plan and CAPCOG data, recycling growth potential, job creation, and addressing infrastructure gaps*. Takeaway: Texas' recycling rate is approximately 29%, which is below the national average. Several states have a 40% - 50% recycling rate. Texans dispose of paper in landfills at 4X the national average. Approximately one-half of

the 40,000,000 tons that we Texan's landfill annually could be recycled if economically sustainable collection and processing infrastructure can be developed. It is estimated that we need to double the current number of material recycling facilities (MRFs) in Texas (21 MRFs operate in Texas as of 2025) to capture these 20,000,000 tons of valuable resources.

3.c. **Panel: Texas Association of Regional Councils (TARC)**: Erin Livingston, H-GAC; Don Tracy, President, Capital Area Economic Development District; Hanna Ordonez, NCTCOG. *Insights from regional planning and waste management agencies about Texas waste and recycling infrastructure.* Takeaways: The 24 Councils of Governments in Texas have recently completed their second 20-year regional solid waste plans, all of which in varying degrees identify the need for more recycling infrastructure. COGS, with their Planning and Economic Development Offices, are experienced and available to support the development of rural recycling systems. The Workforce Development Community is eager to interface with the recycling industry to cultivate skilled laborers, drivers, equipment operators, technicians, mechanics and associated career advancement opportunities to the benefit of our residents, economy and communities.

3.d. **Panel: Economic Development (ED)**: Carlton Schwab, President, Texas Economic Development Council; Kris Collins, Senior Vice President Economic Development, Waco Area Chamber of Commerce; Danielle Scheiner, Economic Development Vice President, Greater Houston Partnership. *Corporation function, capabilities, examples of support and regional public/private partnerships. Discussion on economic development and the role of recycling with experts from statewide councils and environmental organizations.* Takeaways: The Economic Development Community (ED) is eager to interface with the recycling industry. Local Economic Development Corporations and Chambers of Commerce are experienced at promoting public/private partnerships and navigating the financial, legal and administrative processes that enable the creation of infrastructure. The ED Community is aware of the supply-chain benefits of a circular economy and recognizes the stimulating value of recyclable materials as a basis for a business model. Two recent examples of large-scale recycling infrastructure are in McClennen County: Knauf - $250M investment in a recycled-glass-to-insulation

facility and Graphic Packaging International - $1B investment in a 100% recycled paper-to-paper packaging facility; opened in 2024/2025. These centrally located mills significantly increase the availability of end-use markets to Texas' recyclers.

3.e. **Panel: Texas Recycling: Rural Recycling in Action; Local Leaders Driving Change.** Lou Serna KTB; Brocke Lively, City of Plainview. *Exploring real world examples of rural recycling infrastructure, the impact of inter-local cooperation, and how community driven innovation is making a difference. A spotlight on local leadership and creativity in recycling initiatives and education.* Takeaways: Keep Texas Beautiful (KTB) organization, supports the recycling operations in more than 50 rural communities in Texas. Some of these communities cooperate with neighbors to amalgamate tonnage in a Hub-and-Spoke model. KTB assists with support for capital expenses, public education, operations training and provides commodity end-use marketing and arranges transportation. Smaller operations often have difficulty generating or storing tractor/trailer or rail car quantities, so these tons are collected on a "milk run" route to obtain best-price, truckload quantities. KTB charges a nominal 10% of commodity revenue for its service. The City of Plainview has been operating a Hub-and-Spoke recyclables collection system with several neighboring cities for almost 20 years. Participation in the program is growing, and it has a significant landfill cost-avoidance benefit.

3.f. **Panel: Recycling Infrastructure Operators**. Alexandra Gyarfas, Director of Marketing, Balcones Resources; Caroline Ogburn, Director of Business Development, Balcones Resources: Joey Harkrider, Purchasing Manager, Green Guy Recycling. *Insights into the challenges, innovations, and daily operations behind recycling infrastructure from those who live it every day.* Takeaways: The recycling processing industry is eager to interface with the public sector and the economic development sector to develop recycling infrastructure. They recognize the enabling benefit of public/private partnerships. They are very interested in responding to growth opportunities providing the solicitation process is fair and transparent. They prefer the RFP method to allow for creative and alternative proposals and negotiations. Enough good quality, uncontaminated, incoming tonnage is critical to reduce operating costs. Longer term contracts provide

economic stability and better return on investment which often equates to lower costs for the operators and the users.

3.g. **Open Discussion**. *Open-floor conversation where each voice matters. A chance to ask questions, share ideas, and collaborate with fellow attendees on recycling, sustainability, and community development and innovation. Learn from each other and spark new ideas together.* Takeaways: Considerable discussion occurred among the attendees and Speakers/Panelists. The conversations were very supportive of pursuing development of recycling infrastructure in rural areas, recognized the various challenges, and acknowledged that robust functional public discourse and local government action are essential.

Day Two – Half Day:

3.h. **Opening Remarks**. Jeremy Starritt, Assistant Director of Public Works, Environmental Services and Sustainability, City of Frisco, and STAR Chair. *Jeremy set the tone for the event with a warm welcome, brief introductions, and a preview of what's ahead, providing an energizing start to the day.*

3.i. **Presentation: How to Conduct a Financial Analysis of Regional Recycling Infrastructure Options**. Dave Yanke, President, NewGen Strategies & Solutions, LLC. *Dive into the financial landscape of regional recycling systems with expert insights. Purpose, methodology, case studies, economic impact of recycling, and closing comments with questions and answers.* Takeaways: Many communities and regions in the U.S. have conducted comprehensive financial analysis of their solid waste management systems with an eye toward increasing recycling. Qualified engineers and analysts possess tools and methods to accurately examine the plethora of logistic, operational and financial considerations; thereby providing decision makers with confidence.

3.j. **Panel: Hard to Recycle Items – Chemicals, Batteries, & Tires.** Jerry White, Environmental Services Superintendent, Frisco Texas Government; Brian Anderson, General Manager, United Electronic Recycling, LLC; Adrian Hernandez, Acting Executive Director, STAR; Jeremy Starritt, Assistant Director of Public Works, Environmental Services and Sustainability, City of Frisco, and STAR Chair. *Discussion on best management practices and challenges in recycling hazardous and hard-to-process materials like chemicals, batteries, and scrap tires.*

3.k. **Presentation: The Recycling Partnership (TRP): Supporting Recycling in Texas**. Zoe Killian, Community Program Manager, The Recycling Partnership; Charlotte Pitt, Vice President of Community Development, The Recycling Partnership; and, Alexandra Gyarfas, Director of Marketing, Balcones Resources. *Discover how effective community engagement can drive higher recycling rates and cleaner streams. Session explores innovative strategies, success stories, and practical tools to inspire action and build lasting impact.* Takeaways: The Recycling Partnership (TRP) is a NGO representing many products Brand Owners that have sustainability goals and desire to recycle more of their packaging materials. In the absence of government funding, these companies have pledged substantial funds to promote local recycling programs. Often, the funding is in the form of "bridge financing" or a grant to fill in capital expenditure shortfalls for specific commodities. TRP is staffed with very experienced people and operates nationwide. TRP is very interested in Texas because we produce at least 10% of the Municipal Solid Waste in the nation and are a prime candidate to capture more recyclables*.*

3.l. **Panel: Hard to Recycle Items – Textiles**. Joey Harkrider, Purchasing Manager, Green Guy Recycling; Colleen Holbrook, Chief Executive Officer, JOSCO; Sam Ebenezer, Green City Recycler; Kim Jennings, Administration Manager, City of Denton. *Series tackling collection, policy, and solutions for hard-to-recycle materials like textiles, and more. Real world approaches and forward thinking strategies making an impact today.*

3.m. **Panel: Advancing Glass Cullet Recycling in Texas: Opportunities, Challenges, and Innovations**. Chris Mahin, Vice President-Sustainability, Knauf, Inc.; Sara Nichols, Glass Recycling Coalition. Moderator: Abbey Patterson, Owner, AMP Consulting. *Gain insights into policy developments, industry initiatives, and community engagement efforts that are driving glass recycling forward in the state.*

3.n. **Presentation: Financial Bridges**. The Recycling Partnership. *Explore innovative funding models and public-private collaborations that help close the financial gaps in recycling infrastructure. Learn how communities and companies are building sustainable programs through grants, partnerships, and strategic investments that drive long-term environmental and economic impact.*

3.o. **Presentation: Austin's Universal Recycling Ordinance: 15 years of Zero Waste Progress**. Tyler Markham, City of Austin; Amy Slagle, Assistant Director, Austin Resource Recovery, City of Austin. *Austin's groundbreaking Universal Recycling Ordinance (URO) and its role in the city's pursuit of zero waste over the past 15 years. Highlights of key milestones, lessons learned, and the impact on the URO on local businesses, residents, and sustainability goals. How policy, education, and community engagement have shaped Austin into a national leader in waste reduction.*

3.p. **Panel: PET**. Abraham Tueme, Director of Sustainability, Coca Cola Southwest; Kim Jennings, Administration Manager, City of Denton. *Insightful discussion on PET (polyethylene terephthalate) recycling, sustainability strategies, and innovations in beverage packaging. Learn how industry leaders are driving circular solutions for plastic use and recovery.*

3.q. **Presentation: Environmental Law Enforcement – Taking Control of Your Environment**. Ken May, Regional Programs Manager, CAPCOG; Dave Yanke, President, NewGen Strategies and Solutions. *Explore how strong enforcement of environmental law empowers communities to protect public health, reduce illegal dumping, and promote sustainability. Practical tools, success stories, and legal strategies that local governments and organizations can use to take control of their environment. Whether with compliance, code enforcement, or community*

leadership – session provide actionable insights for creating cleaner safer spaces. History of NewGen's involvement with environmental law enforcement, technical studies drafted, available resources, and solid waste services.

3.r. **Presentation: Plastics in Texas**. Joshua Redmon, Solutions Provider, Recycling Equipment Inc; Amy Thomaides, Community Enhancement Initiatives Manager, City of San Marcos. *Provide solutions for the need, how to get results, and drive your business in the correct direction to find the best solution.*

12. Resources

TCEQ Recycling Market Development Plan

https://www.tceq.texas.gov/downloads/p2/recycling/recyclable-materials/2021-recycling-market-development-plan.pdf

TCEQ Municipal Solid Waste in Texas – A Year in Review

https://www.tceq.texas.gov/permitting/waste_permits/waste_planning/wp_swasteplan.html

Texas Association of Regional Councils

https://txregionalcouncil.org/

Capital Area Council of Governments

Capital Area Council of Governments (CAPCOG) ⋆ Helping Local Governments, Counties, and Cities Serve Residents

Texas Economic Development Council

https://texasedc.org/

Keep Texas Beautiful

https://ktb.org

The Recycling Partnership

https://recyclingpartnership.org/

State of Texas Alliance for Recycling

https://recyclingstar.org/

Special Mention:

Brittny Luther, Operations Manager, Trashbusters Disposal & Recycling and Secretary of STAR. This event would not have been a success without the enduring dedication, inspiring imagination, and personal creative touch of this superstar. **Thank you very much Brittny!**