

Regional Solid Waste Management Implementation Plan Volume II

Regional Organization Information

Table 1. Organization Information

Name of Council of Government	Capital Area Council of Governments
Mailing Address	6800 Burleson Road Building 310, Suite 165 Austin, TX 78744
Website	https://www.capcog.org/
Phone Number	(512) 916-6000
Email Address	mholderread@capcog.org

Section I. Geographic Scope

Table I.I. Geographic Scope

I.A. Names of Member Counties in the Entire Planning Region [Ref. 30 TAC §330.643(a)(1)]	Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, and Williamson
I.B. Geographic Planning Units Used in the Regional Implementation Plan [Ref. 30 TAC §330.643(a)(1)]	<input checked="" type="checkbox"/> Small geographic areas such as census tracts or city boundaries for the most detailed data collection and manipulation; <input type="checkbox"/> Planning areas to be used for the assessment of concerns and the evaluation of alternatives. These planning areas shall be aggregations of small geographic areas; <input checked="" type="checkbox"/> County boundaries for the summarization and presentation of key information; or <input checked="" type="checkbox"/> The entire planning region

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Section II. Planning Periods

[Ref. 30 TAC §330.643(a)(2)]

Table II.I. Planning Periods

II.A.1. Current and Historical Information	Current: 2021; Historical: 2011 – 2019
II.A.2. Short-range Planning Period	2022 – 2026
II.A.3. Intermediate Planning Period	2027 - 2031
II.A.4. Long-range Planning Period	2032 - 2041
<input checked="" type="checkbox"/> Check box if additional details provided in <i>Attachment II.A.</i>	

Section III. Plan Content

III.A. Demographic Information

[Ref. 30 TAC §330.643(a)(3)(A)]

In the table, provide population projections, significant commercial and industrial economic activity affecting waste generation and disposal in the area, and recycling activities. Use five-year increments beginning from the base year to the end of the long-range planning period. Refer to Regional Plan Instructions for more information on III.A. Demographic Information.

Table III.A.I. Residential Waste Generation¹

Year	Growth Rate per Year	Current Population / Population Projection	Landfill Disposal (Tons)	Disposal Rate (lbs./Person/Day)	Recycling (Tons)	Recycling Rate (lbs./Person/Day)	Residential Waste Generation (Tons)
Current (2019)	N/A	2,350,295	2,630,657	6.13	785,781	1.83	3,416,438
2022	1.89%	2,486,273	2,781,456	6.13	830,353	1.83	3,611,809
2027	2.39%	2,797,678	3,129,832	6.13	934,355	1.83	4,064,187
2032	2.35%	3,141,644	3,514,636	6.13	1,049,231	1.83	4,563,866
2037	2.30%	3,520,488	3,938,458	6.13	1,175,755	1.83	5,114,213
2042	2.27%	3,937,949	4,405,482	6.13	1,315,177	1.83	5,720,659

Table III.A.II. Commercial Waste Generation

Year	Description of significant commercial activities affecting waste generation and disposal in the area.	Expected increase or decrease to Commercial Waste Generation
2022	<p>In the short term, commercial waste generation is expected to increase similarly to residential waste generation. Since as the population increases, there will be greater demand for commercial activities that generate waste.</p> <p>Tourism and business travel are also big generators of commercial waste in the CAPCOG region, and these are expected to continue and grow with the region. Depending on how these activities change,</p>	Expected annual increase of roughly 1.89%

	<p>commercial waste generation could increase or decrease its share of the waste generated in the CAPCOG region. In the short term, the expectation is that changes in these activities will track closely with changes in population.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for commercial industries.</p>	
<p>2027</p>	<p>In the next five years, commercial waste generation is expected to increase similarly to residential waste generation. Since as the population increases, there will be greater demand for commercial activities that generate waste.</p> <p>Tourism and business travel are also big generators of commercial waste in the CAPCOG region, and these are expected to continue to grow with the region. Depending on how these activities change, commercial waste generation could increase or decrease its share of the waste generated in the CAPCOG region.</p> <p>There is a continued push by local governments and zero-waste advocates to move the region towards not sending any waste to landfills. One way to accomplish this goal is to encourage businesses to generate less waste. It is hard to know the steps businesses will take to decrease their waste generation, and if these actions may lead to a decrease in the share of total waste generated by commercial industries.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for commercial industries.</p>	<p>Expected annual increase of 2.39%</p>
<p>2032</p>	<p>From 2027 to 2032, commercial waste generation is expected to increase similarly to residential waste</p>	<p>Expected annual increase of 2.35%</p>

	<p>generation. Since as the population increases, there will be greater demand for commercial activities that generate waste.</p> <p>Tourism and business travel are also big generators of commercial waste in the CAPCOG region, and these are expected to continue to grow with the region. Depending on how these activities change, commercial waste generation could increase or decrease its share of the waste generated in the CAPCOG region.</p> <p>There is a continued push by local governments and zero-waste advocates to move the region towards not sending any waste to landfills. One way to accomplish this goal is to encourage businesses to generate less waste. It is hard to know the steps businesses will take to decrease their waste generation, and if these actions may lead to a decrease in the share of total waste generated by commercial industries.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for commercial industries.</p>	
<p>2037</p>	<p>From 2032 to 2037, commercial waste generation is expected to increase similarly to residential waste generation. Since as the population increases, there will be greater demand for commercial activities that generate waste.</p> <p>Tourism and business travel are also big generators of commercial waste in the CAPCOG region, and these are expected to continue to grow with the region. Depending on how these activities change, commercial waste generation could increase or decrease its share of the waste generated in the CAPCOG region.</p> <p>There is a continued push by local governments and zero-waste advocates to move the region towards not sending any waste to landfills. One way to accomplish this goal is to encourage businesses to</p>	<p>Expected annual increase of 2.3%</p>

	<p>generate less waste. It is hard to know the steps businesses will take to decrease their waste generation, and if these actions may lead to a decrease in the share of total waste generated by commercial industries.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for commercial industries.</p>	
<p>2042</p>	<p>From 2037 to 2042, commercial waste generation is expected to increase similarly to residential waste generation. Since as the population increases, there will be a greater demand for commercial activities that generate waste.</p> <p>Tourism and business travel are also big generators of commercial waste in the CAPCOG region, and these are expected to continue to grow with the region. Depending on how these activities change, commercial waste generation could increase or decrease its share of the waste generated in the CAPCOG region.</p> <p>There is a continued push by local governments and zero-waste advocates to move the region towards not sending any waste to landfills. One way to accomplish this goal is to encourage businesses to generate less waste. It is hard to know the steps businesses will take to decrease their waste generation, and if these actions may lead to a decrease in the share of total waste generated by commercial industries.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for commercial industries.</p>	<p>Expected annual increase of 2.27%</p>

Table III.A.III. Industrial Waste Generation

Year	Description of significant industrial waste activities affecting waste generation and disposal in the area.	Expected increase or decrease to Industrial Waste Generation
2022	<p>The biggest driver of industrial waste in the CAPCOG region is construction. The region’s continued growth plays a big factor in the generation of this type of waste as the region attempts to keep up with housing, business, and infrastructure needs that continue to increase as the population grows.</p> <p>The region is also seeing growth in a number of other industries. These include advanced manufacturing, clean technology, data management, life sciences, space technology, and creative and digital media technology. The growth of these industries creates varying amounts of waste, and it is hard to measure their impact. It is anticipated that industrial waste generation will keep up with the growth of the region.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for industrial waste generation.</p>	Expected annual increase of 1.89%
2027	<p>From 2022 to 2027, the biggest driver of industrial waste in the CAPCOG region will continue to be the construction industry. The region's continued growth plays a big factor in the generation of this type of waste as the region attempts to keep up with housing, business, and infrastructure needs that grow as the population grows.</p> <p>The region is also seeing growth in a number of other industries. These include advanced manufacturing, clean technology, data management, life sciences, space technology, and creative and digital media technology. The growth of these industries creates varying amounts of waste, and it is hard to measure their impact. It is anticipated that industrial waste generation will keep up with the growth of the region.</p> <p>The continued push by local governments and zero-waste advocates to move the region towards not sending any waste to landfills is likely to impact the waste generated from industrial activities by this</p>	Expected annual increase of 2.39%

	<p>time. A major step towards accomplishing this goal is to encourage industries to generate less waste. While it is hard to know what steps different industries will take to decrease their waste generation. It is possible that these actions will lead to a decrease in the share of total waste generated that is considered industrial waste.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for industrial waste generation.</p>	
<p>2032</p>	<p>From 2027 to 2032, the biggest driver of industrial waste in the CAPCOG region will continue to be the construction industry. The regions continued growth plays a big factor in the generation of this type of waste as the region attempts to keep up with housing, business and infrastructure needs that are increasing as the population grows.</p> <p>The region is also seeing growth in a number of other industries. These include advanced manufacturing, clean technology, data management, life sciences, space technology, and creative and digital media technology. The growth of these industries creates varying amounts of waste, and it is hard to measure their impact. It is anticipated that industrial waste generation will keep up with the growth of the region.</p> <p>The continued push by local governments and zero-waste advocates to move the region towards not sending any waste to landfills is likely to impact the waste generated from industrial activities by this time. A major step towards accomplishing this goal is to encourage industries to generate less waste. While it is hard to know what steps different industries will take to decrease their waste generation. It is possible that these actions will lead to a decrease in the share of total waste generated that is considered industrial waste.</p>	<p>Expected annual increase of 2.35%</p>

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<p>2037</p>	<p>From 2032 to 2037, the biggest driver of industrial waste in the CAPCOG region will continue to be the construction industry. The region's continued growth plays a big factor in the generation of this type of waste as the region attempts to keep up with housing, business, and infrastructure needs that continue to increase as the population grows.</p> <p>The region is also seeing growth in a number of other industries. These include advanced manufacturing, clean technology, data management, life sciences, space technology, and creative and digital media technology. The growth of these industries creates varying amounts of waste, and it is hard to measure their impact. It is anticipated that industrial waste generation will keep up with the growth of the region.</p> <p>The continued push by local governments and zero-waste advocates to move the region towards not sending any waste to landfills is likely to impact the waste generated from industrial activities by this time. A major step towards accomplishing this goal is to encourage industries to generate less waste. While it is hard to know what steps different industries will take to decrease their waste generation. It is possible that these actions will lead to a decrease in the share of total waste generated that is considered industrial waste.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for industrial waste generation.</p>	<p>Expected annual increase of 2.3%</p>
<p>2042</p>	<p>From 2037 to 2042, the biggest driver of industrial waste in the CAPCOG region will continue to be the</p>	<p>Expected annual increase of 2.27%</p>

	<p>construction industry. The region's continued growth plays a big factor in the generation of this type of waste as the region attempts to keep up with housing, business, and infrastructure needs that increase as the population grows.</p> <p>The region is also seeing growth in a number of other industries. These include advanced manufacturing, clean technology, data management, life sciences, space technology, and creative and digital media technology. The growth of these industries creates varying amounts of waste, and it is hard to measure their impact. It is anticipated that industrial waste generation will keep up with the growth of the region.</p> <p>The continued push by local governments and zero-waste advocates to move the region towards not sending any waste to landfills is likely to impact the waste generated from industrial activities by this time. A major step towards accomplishing this goal is to encourage industries to generate less waste. While it is hard to know what steps different industries will take to decrease their waste generation. It is possible that these actions will lead to a decrease in the share of total waste generated that is considered industrial waste.</p> <p>Trends in sustainable solid waste management such as product stewardship, extended producer responsibility, and innovative technology advancements may lead to more solid waste diversion principles and practices for industrial waste generation.</p>	
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III.B. Estimates of Current and Future Solid Waste Amounts by Type

[Ref. 30 TAC §330.643(a)(3)(B)]

In the table, provide the current and project solid waste amounts by type that will be generated and managed within the region. Use five-year increments beginning from the base year to the end of the long-range planning period. Refer to Regional Plan Instructions for more information on III.B. Estimates of Current and Future Solid Waste Amounts by Type.

Table III.B.1. Current and Future Solid Waste Amounts by Type

Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year (2022)	5-year Projection (tons)	10-year Projection (tons)	15-year Projection (tons)	20-year Projection (tons)
Municipal	3	72.6749%	2,021,420.00	2,274,602.29	2,554,257.72	2,862,270.09	3,201,679.33
Brush	1	0.0765%	2,127.55	2,394.02	2,688.36	3,012.54	3,369.77
Construction or Demolition	4	25.0823%	697,653.29	785,034.17	881,551.73	987,856.13	1,104,996.54
Litter	1	0.0190%	529.08	595.35	668.55	749.17	838.00
Class 1 Non-hazardous	0	0.0000%	0.00	0.00	0.00	0.00	0.00
Classes 2 and 3 Non-hazardous	3	1.2784%	35,558.14	40,011.79	44,931.12	50,349.26	56,319.70
Incinerator Ash	0	0.0000%	0.00	0.00	0.00	0.00	0.00
Treated Medical Waste	0	0.0000%	0.00	0.00	0.00	0.00	0.00

Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year (2022)	5-year Projection (tons)	10-year Projection (tons)	15-year Projection (tons)	20-year Projection (tons)
Municipal Hazardous Waste from CESQGs	0	0.0000%	0.00	0.00	0.00	0.00	0.00
Regulated Asbestos-containing Material (RACM)	2	0.0607%	1,687.80	1,899.19	2,132.69	2,389.87	2,673.26
Non-RACM	3	0.2798%	7,783.13	8,757.96	9,834.73	11,020.68	12,327.51
Dead Animals	2	0.0050%	137.97	155.25	174.34	195.36	218.53
Sludge	3	0.3928%	10,926.42	12,294.96	13,806.58	15,471.49	17,306.11
Grease Trap Waste	0	0.0000%	0.00	0.00	0.00	0.00	0.00
Septage	0	0.0000%	0.00	0.00	0.00	0.00	0.00
Contaminated soil	2	0.1296%	3,604.18	4,055.61	4,554.23	5,103.42	5,708.58
Tires (split, quartered, shredded)	1	0.0002%	5.00	5.63	6.32	7.08	7.92
Pesticides	0	0.0000%	0.00	0.00	0.00	0.00	0.00
Used Oil Filter	0	0.0000%	0.00	0.00	0.00	0.00	0.00

Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year (2022)	5-year Projection (tons)	10-year Projection (tons)	15-year Projection (tons)	20-year Projection (tons)
Other (identify other types reported as <i>Attachment III.B.</i>)	1	0.0008%	21.78	24.51	27.52	30.84	34.50
Total	4	100.000%	2,781,455.76	3,129,832.32	3,514,635.68	3,938,457.94	4,405,482.00
<input checked="" type="checkbox"/> Check box if additional details provided in <i>Attachment III.B.</i>							

III.C. Description of Current and Planned Solid Waste Management Activities

[Ref. 30 TAC §330.643(a)(3)(C)]

In the tables, provide the current and planned solid waste management activities in the region with a description. Solid waste management activities should focus on data, activities, and resources within the planning area. Refer to Regional Plan Instructions for more information on III.C. Description of Current and Planned Solid Waste Management Activities in the Region.

Table III.C.I. Current Solid Waste Management Activities in the Region

Activity	Description
Generation	<p>Many local governments and businesses in the region implement various practices which impact the generation of waste in the CAPCOG region.</p> <ul style="list-style-type: none"> • Many promote waste reduction and recycling through local publications and social media. • Some offer recycling at parks and other public locations. • Local governments hold collection events. Many provide materials on proper solid waste management including, ways to reduce waste and recycle at these events. • Some use fines collected for solid waste ordinance violations for community education efforts. <p>5.5% of responding communities have conducted waste characterization studies in the last 5-years.</p> <p>21.6% of responding communities have a local solid waste management plan.</p>
Source Separation	<p>Most cities in the region ask residents and often businesses to separate their waste into recyclables and landfill waste. A few ask residents to separate food waste, yard waste, and/or other compostable materials. Some counties offer drop-off sites in place of curbside collection. At some of these locations, collection is separated by materials asking customers to separate waste/recyclable into cardboard, plastic, glass, paper, metal cans, aluminum cans, motor oil, electronics, and others.</p> <p>To promote more specialized separation CAPCOG and some local governments provide Drop-off Locator Maps (Example: traviscountyrecycles.com) for specific recyclables, household hazardous waste, and other solid waste.</p> <p>Specialized recycling offered in the region:</p> <ul style="list-style-type: none"> • Christmas tree recycling • Prescription drugs take-back kiosks and events • Brush disposal

Activity	Description
	<p>The region provides social media messaging on recycling, proper disposal, composting, and waste reduction.</p>
<p>Collection</p>	<p>Local governments have ordinances that require solid waste to be disposed of in proper containers and prohibit littering. Fines from city solid waste ordinance violations can be used in public cleanup.</p> <p>Collection Service Providers (contractors #; cities/town #; citizen convenience/drop-off centers #):</p> <p>Refuse (36; 4; 3):</p> <p>Contractors: Waste Management, Al Clawson Disposal, Texas Disposal Systems, Waste Collections, Waste Connections, Republic Waste; DisposeAll, Allied Waste, Progressive Waste Connections, Texas Disposal, ACDI, Central Texas Refuse; Republic Services; City/Towns: City of Austin, City of Luling, City of Round Rock, City of Schulenberg</p> <p>Collection Frequency:</p> <p>Weekly: 95%</p> <p>Twice per Week: 5%</p> <p>Recycling (29; 4; 11):</p> <p>Contractors: Waste Management, Al Clawson Disposal, Texas Disposal Systems, Waste Connections, DisposeAll, Allied Waste, Progressive Waste Connections, Texas Disposal, ACDI, Central Texas Refuse; Republic Services; City/Town: City of Austin, City of Cedar Park, City of Cottonwood Shores, City of Round Rock</p> <p>Collection Frequency:</p> <p>Bi-Weekly (every other week): 73.5%</p> <p>Weekly: 20.5%</p> <p>On-call: 3%</p> <p>Brush and Yard Waste (19; 9; 7):</p> <p>Contractor: Waste Connections, Texas Disposal Systems, Al Clawson Disposal Inc., Central Texas Refuse, Republic Services, Waste Management; Cities/Towns: City of Austin, City of Flatonia, City of Llano,</p>

Activity	Description
	<p>City of Luling, City of Manor, City of Mountain City, City of Round Rock, City of Schulenberg, City of Smithville</p> <p>Food/Other Organics (3; 1; 0)</p> <p>Contractors: Texas Disposal Systems, Waste Management, Al Clawson Disposal Inc.; City/Town: City of Austin</p> <p>Bulky Waste (24; 7; 8):</p> <p>Contractors: Waste Connections, Texas Disposal Systems, Al Clawson Disposal Inc., Central Texas Refuse, Republic Services, Waste Management; Cities/Towns: City of Austin, City of Luling, City of Manor, City of Mountain City, City of Round Rock, City of Schulenberg</p> <p>Also, communities conduct collection and cleanup events to address specific waste issues such as:</p> <ul style="list-style-type: none"> • Household hazardous waste • Litter accumulation on public lands and waterways • Prescription drugs • Christmas trees • Residential street sweeping • Right-of-Way container collections • Dead animal collection • Boulevard/Bike Lane Sweeping
Storage	<p>Waste is typically stored at the individual level between collection opportunities. Contractors and local governments provide carts or dumpsters for storage of waste until they come to collect it.</p> <p>For residential storage of landfill waste, residents use: 90% carts provided, 7.5% use their garbage cans, and 2.5% use dumpsters.</p> <p>For residential storage of recycling: 94% use carts provided, 3% use dumpsters, and 3% use roll-offs.</p>

Activity	Description																																								
	<p>Many local governments in the region also store different materials for recycling until they can collect enough for it to be economically feasible for those materials to be transported to a processing facility or end-user.</p>																																								
<p>Transportation</p>	<p>Waste in the CAPCOG region is transported by licensed haulers to landfills and processing facilities. Most local governments contract with a waste hauler, refuse 90%, recycling 88%, brushy waste 68%, food/other organics 75%, bulky waste 77%, while a few can transport waste themselves.</p>																																								
<p>Processing/Treatment</p>	<p>Waste is usually processed or treated by private industry to prepare it for beneficial use and sale. The table shows waste processed/treated by entities with permits registrations with the Texas Commission on Environmental Quality.</p> <table border="1" data-bbox="548 793 1414 1230"> <thead> <tr> <th data-bbox="557 800 646 869">Year</th> <th data-bbox="651 800 873 869">Landfills (Solid Waste)</th> <th data-bbox="878 800 1133 869">Processing Facilities (Solid Waste)</th> <th data-bbox="1138 800 1409 869">Processing Facilities (Liquid Waste)</th> </tr> </thead> <tbody> <tr> <td data-bbox="557 875 646 909">2011</td> <td data-bbox="651 875 873 909">5,289.13</td> <td data-bbox="878 875 1133 909">42,246.71</td> <td data-bbox="1138 875 1409 909">26,580.00</td> </tr> <tr> <td data-bbox="557 915 646 949">2012</td> <td data-bbox="651 915 873 949">34,611.00</td> <td data-bbox="878 915 1133 949">16,714.00</td> <td data-bbox="1138 915 1409 949">26,926.00</td> </tr> <tr> <td data-bbox="557 955 646 989">2013</td> <td data-bbox="651 955 873 989">35,269.00</td> <td data-bbox="878 955 1133 989">62,101.00</td> <td data-bbox="1138 955 1409 989">26,463.00</td> </tr> <tr> <td data-bbox="557 995 646 1029">2014</td> <td data-bbox="651 995 873 1029">42,053.00</td> <td data-bbox="878 995 1133 1029">39,908.00</td> <td data-bbox="1138 995 1409 1029">26,966.00</td> </tr> <tr> <td data-bbox="557 1035 646 1068">2015</td> <td data-bbox="651 1035 873 1068">40,811.00</td> <td data-bbox="878 1035 1133 1068">211,330.00</td> <td data-bbox="1138 1035 1409 1068">26,949.00</td> </tr> <tr> <td data-bbox="557 1075 646 1108">2016</td> <td data-bbox="651 1075 873 1108">40,528.00</td> <td data-bbox="878 1075 1133 1108">152,088.00</td> <td data-bbox="1138 1075 1409 1108">57,806.00</td> </tr> <tr> <td data-bbox="557 1115 646 1148">2017</td> <td data-bbox="651 1115 873 1148">50,202.00</td> <td data-bbox="878 1115 1133 1148">210,545.00</td> <td data-bbox="1138 1115 1409 1148">140,856.00</td> </tr> <tr> <td data-bbox="557 1155 646 1188">2018</td> <td data-bbox="651 1155 873 1188">42,652.00</td> <td data-bbox="878 1155 1133 1188">365,835.00</td> <td data-bbox="1138 1155 1409 1188">223,075.00</td> </tr> <tr> <td data-bbox="557 1194 646 1228">2019</td> <td data-bbox="651 1194 873 1228">58,661.00</td> <td data-bbox="878 1194 1133 1228">358,778.00</td> <td data-bbox="1138 1194 1409 1228">320,423.00</td> </tr> </tbody> </table> <p data-bbox="548 1287 1370 1434">Not all agencies that process/treat waste in the region report to the TCEQ, so the numbers in this table do not reflect the total amount of municipal solid waste from the region that was processed/treated during this time.</p>	Year	Landfills (Solid Waste)	Processing Facilities (Solid Waste)	Processing Facilities (Liquid Waste)	2011	5,289.13	42,246.71	26,580.00	2012	34,611.00	16,714.00	26,926.00	2013	35,269.00	62,101.00	26,463.00	2014	42,053.00	39,908.00	26,966.00	2015	40,811.00	211,330.00	26,949.00	2016	40,528.00	152,088.00	57,806.00	2017	50,202.00	210,545.00	140,856.00	2018	42,652.00	365,835.00	223,075.00	2019	58,661.00	358,778.00	320,423.00
Year	Landfills (Solid Waste)	Processing Facilities (Solid Waste)	Processing Facilities (Liquid Waste)																																						
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2019	58,661.00	358,778.00	320,423.00																																						
<p>Resource Recovery</p>	<p>Curbside collections and drop-off centers make up a network for resources to be recovered in the CAPCOG region. The majority of the cities in the region offer curbside collection of traditional recyclable materials (75%), and other cities offer drop-off locations for these materials. County governments also offer drop-off locations, and their residents are free to contract with service providers for curbside recycling.</p> <p>In the past few years, a few cities have started the curbside collection of food and other organic waste for composting. Currently, only four cities in the region offer collection of these materials, but by population, about half of the region has access to curbside organics collection. The</p>																																								

Activity	Description
	<p>majority of the region provides collection of yard/brushy waste for mulching or composting.</p> <p>Many private agencies provide avenues for resource recovery, usually through drop-off locations, for specific material to be recovered for reuse and/or repurposing. To help residents figure out what is being collected and where they can take it where it will not end up in a landfill CAPCOG, and other local governments have developed a map that shows the locations of these facilities and identify the materials they accept (Example: Capital Area Recycling and Waste Drop-Off Locator).</p>
Disposal of Solid Waste	<p>The average monthly amount paid by households in the region for solid waste disposal is \$20.50, with the highest monthly rate being \$34.79 and the least being \$1.77. Most households are billed for solid waste services monthly, but some local governments charge them for these services quarterly.</p> <p>The region has four landfills (Type I: 3 and Type IV: 1) that have been operating in the region in the past and a fifth, a Type I facility that just opened in the Spring of 2021. In 2019, the TCEQ calculated that the landfills operating at that time had 4.5 years, 1.3 years (Type IV Facility), 12.9 years , and 67 years of space available for waste.</p>

Table III.C.II. Planned Solid Waste Management Activities in the Region

Activity	Description
Generation	<p>Communities in the CAPCOG region plan to address waste generation in the future by encouraging waste reduction via social and other media that reaches individuals. There are also efforts to reduce waste through the way local governments and businesses in the region operate.</p> <p>Local governments in the region that do not already are looking to move towards collecting comingled recyclables in a single stream that can be sorted at material recovery facilities.</p>
Source Separation	<p>Communities in the region plan to continue the source separation activities they already do. They also plan to increase opportunities for recycling, reuse, and the disposal of special waste, so less waste ends up going to landfills. There are plans to develop new facilities to improve access to diversion options for all community members. Expand services to new waste types that are not traditionally collected in the area.</p> <p>Develop and maintain sustainability plans collections events and other options to improve the separation of waste in the region. Identify gaps in services and work with nearby jurisdictions or businesses to fill these gaps.</p> <p>Increase public education on solid waste diversion. Improve signage at recycling centers. Provide customer education and use of QR codes to improve customer understanding of recycling correctly. Look into ways to hold people and businesses accountable for the waste they produce and how they separate it.</p>
Collection	<p>In the short term, communities in the CAPCOG region plan to provide additional options for waste and recyclable collection. These options include creating additional drop-off facilities, adding waste containers where needed, and expanding brush and bulky waste collections. Local governments are also researching options for collecting materials that are not currently collected in their community, such as compostable materials and electronics.</p> <p>Communities are also looking to expand waste collection into areas in the community that are not always served, like parks and trails. They also plan to continue education efforts so that citizens know their options for disposing of different materials. Communities are always looking for additional funding to provide a more convenient collection of waste materials in the CAPCOG region.</p>

Activity	Description
Storage	In the CAPCOG region, communities plan to continue current solid waste storage activities to maintain proper storage and prevent issues that come from inadequate solid waste storage.
Transportation	Continue to look at waste hauling options and make choices that will improve service quality in the region. Expand infrastructure to allow for more efficient transportation of solid waste as the region continues to grow.
Processing/Treatment	Continue current waste processing/treatment while looking at and implementing options that will result in less waste ending up in the region's landfills.
Resource Recovery	<p>Continue current activities and add recycling and reuse drop-off locations as needed. Expand services that collect special types of waste such as brush and bulky waste.</p> <p>In the long term, there is interest in identifying opportunities for landfill mining to reduce landfill footprints and the need for siting new landfills. Also, increase opportunities for waste to energy facilities, such as pyrolysis and/or gasification, to reduce the need for siting of additional landfill facilities.</p>
Disposal of Solid Waste	<p>Continue current activities to ensure solid waste disposal needs of the CAPCOG region are met. A new landfill opened in May 2021, adding capacity to the region through the time frame of this plan, 2042.</p> <p>Work to educate County Attorneys and elected officials on illegal dumping to impact illegal dumping in the region to ensure violators are held accountable and more waste is disposed of properly.</p>
<p><input checked="" type="checkbox"/> Check box if additional information of solid waste management activities is provided as <i>Attachment III.C.</i></p>	

III.D. Description and Assessment of the Adequacy of Existing Solid Waste Management Facilities & Practices, and Household Hazardous Waste Programs

[Ref. 30 TAC §330.643(a)(3)(D)]

In the table, identify if specific waste management facilities, practices, and programs are adequate in the region. Provide an assessment and description of activities that are inadequate in Attachment III.D. Refer to Regional Plan Instructions for more information on III.D. Description and Assessment of the Adequacy of Existing Solid Waste Management Facilities and Practice, and Household Hazardous Waste Programs.

Table III.D.I. Adequacy of Existing Facilities and Practices

Program	Facility Adequacy	Practices Adequacy
Resource Recovery	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Storage	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Transportation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Treatment	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Disposal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Household Hazardous Waste Collection	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>

Program	Facility Adequacy	Practices Adequacy
Household Hazardous Waste Disposal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>

III.E. Assessment of Current Source Reduction and Waste Minimization Efforts, Including Sludge, and Efforts to Reuse or Recycle Waste

[Ref. 30 TAC §330.643(a)(3)(E)]

Refer to Regional Plan Instructions for more information on III.E. Assessment of Current Source Reduction and Waste Minimization Efforts, Including Sludge, and Efforts to Reuse or Recycle Waste.

- Assessment of current source reduction and minimization efforts, including activities to reduce sludge, and efforts to reuse or recycle waste is provided as *Attachment III.E.*

III.F. Identification of Additional Opportunities for Source Reduction and Waste Minimization, and Reuse or Recycling of Waste

[Ref. 30 TAC §330.643(a)(3)(F)]

In the table, identify new and additional opportunities for source reduction and waste minimization, including waste reuse or recycling programs. Add or remove rows as needed. Refer to Regional Plan Instructions for more information on III.F. Identification of Additional Opportunities for Source Reduction and Waste Minimization, and Reuse or Recycling of Waste.

Table III.F.I Additional Opportunities for Source Reduction and Waste Minimization, Reuse and Recycling of Waste

Category of Activity (Source Reduction and Waste Minimization, Reuse or Recycling of Waste)	Opportunity Name	Brief Description
Source Reduction and Waste Minimization	Waste Characterization Studies	Waste characterization studies are surveys of the waste produced by the community to identify what is being disposed of and where it is going. These studies can help communities plan for offering new recycling options, informational campaigns, and collection or cleanup events.

Category of Activity (Source Reduction and Waste Minimization, Reuse or Recycling of Waste)	Opportunity Name	Brief Description
Source Reduction and Waste Minimization	Local Solid Waste Management Plans	An evaluation of the current solid waste management practices in a community and the options available for future solid waste management. Identifies the steps required to move towards the plan goals.
Reuse or Recycling of Waste	Additional Material Drop-Off Facilities	A place where recyclables or other waste materials can be disposed of by members of the community. Usually for specific types of materials. It is best practice to make these facilities one stop disposal locations where residents can bring anything they wish to dispose of.
Reuse or Recycling of Waste	Recycling/Reuse Market Development	Identify and create a need for materials that are commonly disposed of in the region. Can be done by facilitating relationships between producers of specific waste materials and organizations that use those materials in their business.
Reuse or Recycling of Waste	Green Waste Carts for Curbside Collection	Provide additional carts to residents for the collection of organic materials that can be used in compost.
Reuse or Recycling of Waste	Plastic Bag Recycling	Provide an avenue for the recycling of single-use plastic bags that are not recyclable in most single-stream recycling that is collected curbside.
Reuse or Recycling of Waste	Recycling at Events/Festivals	Provide recycling during events and festivals that are held in communities throughout the region.
Reuse or Recycling of Waste	Affordable Electronics Recycling	Make recycling old electronics affordable for all residents.
<input type="checkbox"/> Check box if additional information of opportunities and source reduction and waste minimization, reuse and recycling of waste is provided in <i>Attachment III. F.</i>		

III.G. Recommendations for Encouraging and Achieving a Greater Degree of Source Reduction and Waste Minimization, and Reuse or Recycling of Waste

[Ref. 30 TAC §330.643(a)(3)(G)]

In the table, provide a list of recommendations for encouraging and achieving a great degree of source reduction and waste minimization, and reuse and recycling of waste in the planning region. Add or remove rows as needed.

Table III.G.I. Recommendations for Greater Source Reduction and Waste Minimization, and Reuse or Recycling of Waste

1. Create a website that allows users to locate and compare the cost of source reduction, waste minimization, reuse, and recycling options.
2. Provide curbside recycling throughout the entire region.
3. Conduct public information campaigns on ways individuals and organizations can accomplish source reduction, waste minimization, reuse, and recycling.
4. Create facilities that offer a one stop location for reuse, recycling, and waste disposal.
5. Locate facilities that specialize in source reduction, waste minimization, reuse, and recycling in areas that are convenient to for the community.
6. Have Goals for source reduction and waste minimization, and reuse or recycling.
7. Track waste generated.
8. Conduct a waste audit.
9. Identify problems in the waste stream and work on solutions that will address those problems.
10. Add staff or time to address solid waste issues on an organizational level.
11. Share the results/successes of activities that accomplish source reduction and waste minimization, and reuse and/or recycling.
12. Buy reusable items instead of disposable ones.
13. Borrow, rent, or share items that are not frequently used.
14. Rather than disposing of them, donate or sell items that are no longer used.
15. Purchase used equipment and other materials.
16. Purchase and use items made from recycled materials.
17. Factor the amount of waste a product creates into purchasing decisions.
18. Keep up with maintenance and repairs to increase the useful life of products.
19. Advertise the benefits of source reduction, waste minimization, reuse, and recycling.
20. Share ideas for reusing commonly disposed items/materials.
21. Foster support and buy in from elected officials and other decision makers.

22. Encourage home composting and other organic recycling options.
23. Promote taking only the needed utensils, napkins, and condiments when eating out.
24. Provide easy to understand instructions for waste disposal at disposal sites.
25. Encourage less printing in work environments. Offer and encourage use of e-billing programs.
26. Purchase and use energy efficient (ENERGY STAR or EPEAT registered) appliances and tools.
27. Upgrade and refurbish old and obsolete technology instead of purchasing new products.
28. Share left over food with guest or neighbors. If it is untouched, consider donating it to a local food bank or homeless shelter.
29. Read and/or subscribe to online newspapers and magazines.
<input type="checkbox"/> Check box if additional details are provided in <i>Attachment III.G.</i>

III.H. Identification of Public and Private Management Agencies and Responsibilities

[Ref. 30 TAC §330.643(a)(3)(H)]

- A list of public and private solid waste management agencies and their responsibilities that affect and impact solid waste management in the planning region is provided as ***Attachment III.H.***

III.I. Identification of Solid Waste Management Concerns and Establishment of Priorities for Addressing Those Concerns

[Ref. 30 TAC §330.643(a)(3)(I)]

In the table, list solid waste management concerns for the planning area and the priorities to address those concerns. Add or remove rows as needed.

Table III.I Solid Waste Management Concerns and Priorities

Solid Waste Management Concern	Priorities to Address the Concern
Community Clean-Up Events	<ol style="list-style-type: none"> 1. Event frequency 2. Amount of waste collected 3. Cost of the event 4. Participation by the community 5. Types of waste brought to the events 6. Types of materials collected
Household Hazardous Waste (HHW) Disposal Options	<ol style="list-style-type: none"> 1. Permanent facility locations 2. Safety 3. Cost of Disposal 4. Staffing and training 5. Citizen participation/use of facilities 6. Hours of operation
Illegal Dumping	<ol style="list-style-type: none"> 1. Illegal dumping awareness campaigns 2. Illegal dump site clean-ups 3. Trail cameras 4. Starting environmental enforcement programs 5. Additional environmental enforcement staff 6. Education/training for elected officials and courts 7. Environmental enforcement training
Recycling Services	<ol style="list-style-type: none"> 1. Curbside collection 2. Cost of services 3. Collection frequency 4. Drop-off locations 5. Materials collected 6. Source separation

Solid Waste Management Concern	Priorities to Address the Concern
	<ul style="list-style-type: none"> 7. Contamination 8. Education on how to use available recycling options
Solid Waste Services	<ul style="list-style-type: none"> 1. Cost of services 2. Landfill and transfer station locations 3. Curbside collection 4. Collection frequency 5. Landfill Capacity 6. Treatment/processing of waste 7. More opportunities for landfill diversion
Used Tires	<ul style="list-style-type: none"> 1. Clean-up of illegally dumped tires 2. Collection of used tires 3. Markets for scrap tires 4. Processors 5. Participation in the Capital Area Regional Environmental Task Force
<input checked="" type="checkbox"/> Check box if additional details are provided in <i>Attachment III.I</i>	

III.J. Planning Areas and Agencies with Common Solid Waste Management Concerns that Could be Addressed Through Joint Action

[Ref. 30 TAC §330.643(a)(3)(J)]

In the table below, list planning areas and agencies that may provide solutions and support to the established priorities for the concerns identified in III. I. Add or remove rows as needed.

Table III.J.I Planning Areas and Agencies with Common Solid Waste Management Concerns

Solid Waste Management Concern	Names of Planning Areas and Agencies that Could Address the Concern via Joint Action(s)
Community Clean-up Events	<p>These events are usually conducted by individual communities, but there are opportunities for local governments in close proximity to each other to partner to clean up shared resources.</p> <p>Agencies that could help with these events include Texas Parks and Wildlife, local Keep Texas Beautiful affiliates, State of Texas Alliance for Recycling, the Lower Colorado River Authority (LCRA), Pedernales Electric Cooperative, Plum Creek Watershed Partnership, Balcones Resources, Central Waste & Recycling, Lone Star Disposal, Green Guy Recycling, Hill Country Recycling, Progressive Waste Solutions, Reliable Tire Disposal, Republic Services, Texas Disposal Systems, TRI Recycling Inc., Waste Connections, Waste Management.</p>
Household Hazardous Waste (HHW) Disposal Options	<p>Local governments can work together to provide convenient disposal options for HHW in the region. Local governments that work in partnership should be geographically adjacent to each other.</p> <p>Agencies that could help with the priorities for addressing this concern are Cleanearth, Clean Harbors, Progressive Waste Solutions, Waste Management.</p>
Illegal Dumping	<p>Illegal dumping is a concern that can be addressed on a regional level all local governments in the region and beyond need to work together to prevent gaps in enforcement and investigate dumping that is done by individuals that cross jurisdictional lines to dump. Since 1996, CAPCOG facilitates a Regional Environmental Task Force,</p>

Solid Waste Management Concern	Names of Planning Areas and Agencies that Could Address the Concern via Joint Action(s)
	<p>which hosts a toll-free number for reporting environmental crimes, 1-877-NO DUMPS. The RETF meets quarterly, conducts Basic and Intermediate Environmental Law training, and maintains an inventory of equipment to use in support of their mission, to prevent illegal dumping and pursue environmental crimes.</p> <p>The Texas Commission on Environmental Quality (TCEQ) and local law enforcement agencies are responsible for enforcing laws against illegal dumping and work together through the Regional Environmental Task Force to enforce these laws in the CAPCOG region.</p> <p>Awareness and educational efforts can also be aided by the TCEQ, law enforcement, and other agencies listed here: Texas Parks and Wildlife, local Keep Texas Beautiful affiliates, Plum Creek Watershed Partnership, Texas Alliance of Groundwater Districts, Lower Colorado River Association, Pedernales Electric Cooperative. Many solid waste management facility operators are also good partners when conducting awareness and educational campaigns.</p>
Recycling Services	<p>Local governments can work together to provide convenient recycling services in the region. Local governments that work in partnership should be geographically adjacent to each other.</p> <p>Agencies that could help local governments with the priorities for addressing this concern are: School Districts, Colleges and Universities, Compost Advisory Council, Ecology Action, State Alliance for Recycling (STAR), Texas Campaign for the Environment, Cooperative Teamwork and Recycling Assistance (CTRA), Austin Wood Recycling, Balcones Resources, Central Waste & Recycling, Circa Recycling (E-Recycling), Cleanearth, Commercial Metals Inc., Garden Ville/Texas Organic Products, GlassAG (Pescador Ventures LLC), Global Electric Electronic Processing, Global Fiberglass Solutions, Green Guy Recycling, Hill Country Recycling, Organics by Gosh, Progressive Waste Solutions, R3eWaste, RBRC, Republic Services, Texas Disposal</p>

Solid Waste Management Concern	Names of Planning Areas and Agencies that Could Address the Concern via Joint Action(s)
	Systems, TRI Recycling Inc., Waste Connections, Waste Management.
Solid Waste Services	<p>Local governments can work together to provide convenient solid waste services in the region. Local governments that work in partnership should be geographically adjacent to each other.</p> <p>Agencies that could help local governments with the priorities for addressing this concern are: School Districts, Colleges and Universities, Ecology Action, Texas Campaign for the Environment, Cleanearth, Green Garbology by LIL Corporation, Junk Buster, Lone Star Waste, Lone Star Disposal, Owens Consulting LLC, Progressive Waste Solutions, Recon Services, Republic Services, River City Roll Offs, Texas Disposal Systems, TFR Enterprises, Waste Connections, Waste Management.</p>
Used Tires	<p>Used tires are a concern that can be addressed on a regional level all local governments in the region and beyond the need to work together to address disposal issues that cause used tires to end up illegally dumped rather than properly disposed.</p> <p>Agencies that could help local governments with the priorities for addressing this concern are: Texas Commission on Environmental Quality, local Keep Texas Beautiful affiliates, State of Texas Alliance for Recycling, Junk Buster, NewGen Strategies & Solutions, Burns McDonnell, Reliable Tire Disposal, Liberty Tire Disposal, Texas Disposal Systems, and Robert Howard and Associates.</p>

III.K. Identification of Incentives and Barriers for Source Reduction and Waste Minimization, and Resource Recovery, Including Identification of Potential Markets

[Ref. 30 TAC §330.643(a)(3)(K)]

In the table, identify incentives and barriers for source reduction and waste minimization and resource recovery including potential markets and strategies. Describe incentives and barriers impacting source reduction and waste minimization, and resource recovery. Identify public and private incentives and markets available to assist in meeting goals and objectives. Add or remove rows as needed for each section. Refer to Regional Plan Instructions for more information on III.K. Identification of Incentives and Barriers for Source Reduction and Waste Minimization, and Resource Recovery, Including Identification of Potential Markets.

Table III.K.I Incentives and Barriers for Source Reduction and Waste Minimization, and Resource Recovery

Source Reduction and Waste Minimization	
Identify incentives for source reduction and waste minimization.	Pay As You Throw Programs; Tiered sizes for solid waste, recycling, and compost bins; waste audits; carbon credits; rebate programs;
Identify barriers to source reduction and waste minimization.	Lack of solid waste services in rural areas; lack of standardization of bin colors; lack of Material Recycling Facilities to handle increased recycling amounts; lack of drop off locations or citizens collection centers that are spaced at 15-mile intervals; cost of landfilling being less than cost of recycling; lack of recycling facilities.
Resource Recovery	
Identify incentives for resource recovery.	Reduction in the need for siting new landfills; product stewardship programs; extended producer responsibility; sustainable resources programs; markets for clean recyclables; economic opportunities for hard to recycle items; code enforcement; bin police; fines; and local ordinances.
Identify barriers to resource recovery.	Low landfill tipping fees; contaminated reusable/recyclable materials; shortage of Material Recycling Facilities; fuel costs for transport of recyclable materials; lack of public education and outreach.
Potential Markets	
Crushed and polished glass	Can be used as aggregate in concrete or as a substitute for pea gravel or crushed rock in construction and utility projects.
Compost	Organic material that can be added to soil to help plants grow. Food scraps and yard waste can be composted instead of being sent to the landfill.

Mulch	A layer of material applied to the surface of soil. Mulch can be created by chipping yard waste, or from other non-organic materials such as used tires.
Plastic Playground Equipment	Recycled plastic can be used to create playground equipment that is durable and reusable.
Tire Derived Fuel	Alternative to coal for use in cement kilns, pulp and paper mills, and electric utility boilers.
Rubber-Modified Asphalt	A ground rubber application, often made used tires that produces quieter, more durable roads.

III.L. Regional Goals and Objectives, Including Waste Reduction Goals

[Ref. 30 TAC §330.643(a)(3)(L)]

In the table, list the regional goals and corresponding objectives for the proper management of solid waste in the planning region. Identify the timetable for achieving each goal and objective using the established planning periods. Add rows as needed. The regional goals and objectives listed should match the goals and objectives provided in Volume I, per 30 TAC §330.635(A)(2)(A).

Table III.L.I Regional Goals and Objectives

<p>Goal #1 Encourage a Household Hazardous Waste (HHW) collection and diversion program.</p>	<p>Objective 1.A. Coordinate public/private partnerships to share the cost burden and provide services.</p> <p>Objective 1.B. Develop sub-regional collection programs that encourage permanent reuse facilities.</p> <p>Objective 1.C. Promote more cost-efficient collection programs other than annual one-day events.</p>
<p>Goal #2 Promote public education on integrated solid waste management.</p>	<p>Objective 2.A. Establish educational programs specific to other goals (HHW, illegal dumping, and recycling).</p> <p>Objective 2.B. Coordinate educational programs through school curricula, advertising, and environmental projects.</p> <p>Objective 2.C. Maintain and promote the environmental resource center for public use.</p>
<p>Goal #3 Promote community clean up events to provide citizens with an alternative to illegal dumping.</p>	<p>Objective 3.A. Coordinate public/private partnerships to share the cost burden and promote sponsorship.</p> <p>Objective 3.B. Educate communities on the availability of funds to provide the service and coordinate events.</p>

	<p>Objective 3.C. Coordinate services to communities that do not have bulky item pick-up, curbside municipal solid waste services, or that have illegal dumping issues.</p>
<p>Goal #4 Continue and enhance current illegal dumping enforcement programs.</p>	<p>Objective 4.A. Support participation in the Regional Enforcement Task Force.</p> <p>Objective 4.B. Support all programs that aim to curtail illegal dumping.</p> <p>Objective 4.C. Provide environmental enforcement training to the entire region throughout the year.</p>
<p>Goal #4 Continue and enhance current illegal dumping enforcement programs.</p>	<p>Objective 4.A. Support participation in the Regional Enforcement Task Force.</p> <p>Objective 4.B. Support all programs that aim to curtail illegal dumping.</p> <p>Objective 4.C. Provide environmental enforcement training to the entire region throughout the year.</p>
<p>Goal #5 Encourage effective and efficient management and operation of recycling services.</p>	<p>Objective 5.A. Coordinate public/private partnerships.</p> <p>Objective 5.B. Coordinate the development of markets for recycled materials and maintain local control as necessary to assure quality of services.</p> <p>Objective 5.C. Seek support for and encourage continued operation of small businesses and non-profit recycling entities.</p>
<p>Goal #6 Explore alternatives to dealing with the disposal of special wastes.</p>	<p>Objective 6.A. Reduce the amount of construction and demolition (C&D) waste and encourage recycling.</p> <p>Objective 6.B. Determine effective and efficient management of used tires and oil.</p>

	<p>Objective 6.C. Provide public education on electronics recycling and work with other entities on maintaining a database of reliable electronic recycling industries.</p> <p>Objective 6.D. Encourage MSW facilities to have used tire programs.</p>
<p>Goal #7 Encourage the proper management and disposal of municipal solid waste.</p>	<p>Objective 7.A. Ensure best industry practices for all MSW facilities.</p> <p>Objective 7.B. Encourage MSW facilities to be involved with surrounding communities.</p>
<p>Goal #8 Promote reduction in the disposal amount of yard waste and encourage recycling.</p>	<p>Objective 8.A. Coordinate programs for the diversion of yard trimmings and brush, and their use of the compost or mulch.</p> <p>Objective 8.B. Provide material on the “Don’t Bag It” program for yard waste and backyard composting.</p> <p>Objective 8.C. Provide education materials on the beneficial use of green waste.</p> <p>Objective 8.D. Coordinate with MSW facilities to divert yard waste and brush from disposal.</p>
<p>Goal #9 Determine whether access to and the availability of legal disposal options in the CAPCOG region are adequate.</p>	<p>Objective 9.A. Determine if new or expanded facilities are needed with the region.</p> <p>Objective 9.B. Coordinate the development of transfer stations and citizen collection stations in areas of need.</p> <p>Objective 9.C. Coordinate open and free markets within the region for solid waste collection, disposal, and recycling.</p>

<p>Goal #10 Promote administrative structures to ensure some measure of local control in the siting, expansion, and operation of MSW facilities.</p>	<p>Objective 10.A. Coordinate with counties to pass municipal solid waste siting ordinances.</p> <p>Objective 10.B. Provide pre-application assistance to interested parties.</p> <p>Objective 10.C. P Utilize a checklist to provide guidance and determine plan conformance for MSW permit and registration applications.</p> <p>Objective 10.D. Coordinate development of regional or local programs to enforce MSW regulations and permit requirements.</p>
<p>Goal #11 Promote incentives for recycling activities and increased recycling participation rates across the region.</p>	<p>Objective 11.A. Work to seek funding for CAPCOG to coordinate, monitor, and report on progress achieved toward meeting regional recycling goals.</p> <p>Objective 11.B. Consider/evaluate volume-based rate structures/recycling programs.</p> <p>Objective 11.C. Encourage studies and analysis of the current waste stream to stimulate economic development in the recycling industry.</p>
<p>Goal #12 Reduce the amount of municipal solid waste generated and disposed of within the region.</p>	<p>Objective 12.A. Coordinate the separation and collection of recyclables from governmental facilities.</p> <p>Objective 12.B. Emphasize market-based incentives and market development.</p> <p>Objective 12.C. Target waste reduction activities to the specific waste streams.</p>
<p>Goal #13 Increase the CAPCOG region recycling rate.</p>	<p>Objective 13.A. Coordinate innovative recycling projects throughout the region.</p>

<p>Goal #14 Provide permanent household hazardous waste collection facilities throughout the region.</p>	<p>Objective 14.A. Coordinate the creation of HHW facilities throughout the region.</p>
<p>Goal #15 Use the Plan Conformance/Facility Application Review process and the provisions of §363.066, Health & Safety Code, to address land use compatibility and other local issues in order to avoid if possible, or minimize if avoidance is not possible, adverse impacts from municipal solid waste (MSW) facilities on human health and the environment.</p>	<p>Objective 15.A. Determine whether the use of a site for a MSW facility may adversely impact human health or the environment by evaluating and determining impacts of the site upon counties, cities, communities, groups of property owners, or individuals in terms of compatibility of land use, zoning in the vicinity, community growth patterns, and other factors associated with the public interest.</p> <p>Objective 15.B. Monitor MSW facilities’ compliance with local zoning requirements, siting ordinances, and other local government land use regulations.</p> <p>Objective 15.C. Assess MSW facilities’ impacts on roads, drainage ways, and other infrastructure. Consider existing and planned future land uses near proposed facilities. Consider and address infrastructure problems created by facilities. Consider and address potential land use conflicts between MSW facilities and existing and planned development.</p> <p>Objective 15.D. Encourage MSW facilities to be good neighbors, by assessing and considering every applicant’s five-year compliance history in Texas to the fullest extent allowed by TCEQ.</p> <p>Objective 15.E. Encourage programs that provide incentives for using landfills instead of illegal dumping including but not limited to conducting and increasing awareness of community cleanup events, efforts to curtail illegal dumping, litter abatement and waste reduction programs, public education programs, lower rates for waste-collection events, etc.</p>

	<p>Objective 15.F. Avoid if possible, or minimize if avoidance is not possible, concerns about visual and aesthetic impacts from MSW facilities on adjacent land uses by incorporating “context sensitive” design, appropriate buffers, and setbacks into facility design. Encourage operators to take reasonable and appropriate steps to avoid such impacts if possible or minimize them if complete avoidance is not possible.</p> <p>Objective 15.G. Address local land use concerns about the long term and cumulative effects of MSW facilities and protect the public interest in a natural landscape, avoid if possible, or minimize if not possible, major disruptions to the landscape and other adverse long term and cumulative effects by monitoring whether the permitted and maximum potential (theoretical geometric calculation) height and capacity of a MSW facility are accurately calculated and taken into account.</p> <p>Objective 15.H. Avoid if possible, or minimize if avoidance is not possible, nuisance conditions associated with MSW facilities that generate community concerns by encouraging applicants to implement reasonable and appropriate measures and best management practices to prevent and control litter, storm water runoff, vectors, odor, excessive noise, light pollution, and other nuisance conditions.</p>
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III.M. Advantages and Disadvantages of Alternative Actions

[Ref. 30 TAC §330.643(a)(3)(M)]

Are alternative actions being considered in this plan for the regional area?	<input type="checkbox"/> Yes. Provide details in <i>Attachment III.M.</i> <input checked="" type="checkbox"/> No. No further action required.
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III.N. Recommended Plan of Action and Associated Timetable for Achieving Specific Goals and Objectives

[Ref. 30 TAC §330.643(a)(3)(N)]

In the table, provide the plan of action and anticipated timetable for achieving the goals and objectives identified in Section III.L. Identify and describe action plans, the corresponding timetables and, where available, implementation milestones. Include brief descriptions of action plans, timetables, and milestones. Milestone dates may include specific years or planning periods; short-term planning period (1-5 years), intermediate planning period (6-10 years), and/or long-range planning period (11-20 years or longer). Refer to Regional Plan Instructions for more information on III.N. Recommended Plan of Action and Timetable for Achieving Regional Goals and Objectives, Including Specified Goals and Objectives.

Table III.N.I Plan of Action and Timetable for Achieving Specific Goals and Objectives

Goal/Objective	Plan of Action	Milestone Dates
Waste Reduction	Provide funding for recycling infrastructure	Biennially driven
	Public education & outreach	Biennially driven
	Promote and facilitate waste characterization studies	Ongoing
	Identify and help develop new markets for hard to recycle materials	Ongoing
Composting Programs for Yard Wastes and Related Organic Wastes	Promote:	
	TCEQ's Compost Rebate Program	Ongoing
	Community Collection Events - green waste	Biennially driven
	Municipal compost programs	Ongoing
	Municipal green waste collection bins	Ongoing
Right of way beautification programs	ongoing	
Household Hazardous Waste Collection and Disposal Programs	Increase number of permanent facilities	Legislatively driven
	Increase funding for collection events	Legislatively driven
	Public Outreach & Education	Biennially driven
Public Education Programs	Outreach & Education materials	Biennially driven
	Outreach & Education literature	Biennially driven
	Public Service Announcements	Biennially driven
	Environmental Law Training	Scheduled annually
	Maintain website	Ongoing
	Provide technical assistance	Ongoing

Goal/Objective	Plan of Action	Milestone Dates
The Need for New or Expanded Facilities and Practices	Monitor landfill capacity	Ongoing
	Monitor advances in solid waste management	Ongoing
	Participate in state agency initiatives	Ongoing
	Participate in non-profit recycling organizations	Ongoing
	Promote solid waste facility siting ordinances	Ongoing
<input type="checkbox"/> Check box if additional details are provided in <i>Attachment III.N.</i>		

III.O. Identification of the Process that Will be Used to Evaluate Whether a Proposed Municipal Solid Waste Facility Application Will be in Conformance with the Regional Plan

[Ref. 30 TAC §330.643(a)(3)(O)]

- The process that will be used to evaluate whether a proposed municipal solid waste facility application will be in conformance with the regional plan is identified in *Attachment III.O.*

Section IV. Required Approvals

Table IV.I Required Approvals

Solid Waste Advisory Committee	Enter approval date by the Solid Waste Advisory Committee.
Public Meeting Dates	September 17, 2021
Executive Committee	Enter approval date by the Executive Committee.

- Check box if local government and jurisdiction resolutions, and letters of support are included in **Attachment IV.A.**
- Public notice, agenda, public comments, and the transcript of the required public meeting are included as **Attachment IV.B.**