### Section 3

Characterization of the Solid Waste and Recyclable Stream

The sixteen counties of the East Tennessee Development District (ETDD) are as varied in the amount of Class I and Class III waste they produce and in the amount of recycling/waste diversion activities within their boundaries as they are in demographics and economics. The geographic or population size of the county does not necessarily correlate with the amount of waste produced or recycling/diversion activity. While counties with larger populations generally produce more waste, smaller counties can produce greater amounts of waste or have greater amounts of recycling/diversion activity than larger counties if the smaller counties have a large industrial or manufacturing sector within their boundaries. Additionally, disaster events, industrial expansion, and infrastructure improvement/expansion (such as Tennessee Department of Transportation (TDOT) projects) can cause temporary increases in an otherwise stable waste stream. Table 3-A below details the 2018 population, tons disposed, and tons recycled or diverted, as well as per capita waste disposal and recycling and diversion for all sixteen counties and the district as a whole. To present the most accurate depiction of activity within ETDD, the tonnages presented come directly from the 2018 Annual Progress Report for each county and account for both public and private disposal and recycling/diversion activity.

Table 3-A

|                    |            | 2018      | Waste      | 2018 Tons   | Recycling   |
|--------------------|------------|-----------|------------|-------------|-------------|
|                    | 2018       | Tons      | Disposed   | Recycled    | & Diversion |
| County             | Population | Disposed  | Per Capita | or Diverted | Per Capita  |
| Anderson           | 76,482     | 75,556    | 0.99       | 55,115      | 0.72        |
| Blount             | 131,349    | 126,482   | 0.96       | 42,137      | 0.32        |
| Campbell           | 39,583     | 31,792    | 0.80       | 54,214      | 1.37        |
| Claiborne          | 31,756     | 23,670    | 0.75       | 22,815      | 0.72        |
| Cocke              | 35,774     | 34,688    | 0.97       | 39,671      | 1.11        |
| Grainger           | 23,145     | 16,275    | 0.70       | 16,213      | 0.70        |
| Hamblen            | 64,569     | 104,563   | 1.62       | 244,738     | 3.79        |
| Jefferson          | 54,012     | 52,314    | 0.97       | 19,774      | 0.37        |
| Knox               | 465,289    | 732,584   | 1.57       | 271,228     | 0.58        |
| Loudon             | 53,054     | 276,027   | 5.20       | 117,164     | 2.21        |
| Monroe             | 46,357     | 40,852    | 0.88       | 121,747     | 2.63        |
| Morgan             | 21,579     | 9,410     | 0.44       | 75,232      | 3.49        |
| Roane              | 53,140     | 235,487   | 4.43       | 46,635      | 0.88        |
| Scott              | 22,039     | 19,546    | 0.89       | 53,680      | 2.44        |
| Sevier             | 97,892     | 83,676    | 0.85       | 256,014     | 2.62        |
| Union              | 19,688     | 8,484     | 0.43       | 12,551      | 0.64        |
| DISTRICT<br>TOTALS | 1,235,708  | 1,871,406 | 1.51       | 1,795,133   | 1.45        |

In terms of total waste disposal (Class I and Class III/IV), ETDD saw a range of tonnages in 2018, from a low of 8,484 tons in Union County to a high of 732,584 in Knox County. 2018 total recycling/diversion tonnages ranged from a low of 12,551 in Union County to 271,228 in Knox County. Loudon County had the highest per capita

rate of disposal in 2018 at 5.20, and Hamblen County had the highest rate of recycling/diversion at 3.79. The ETDD region as a whole disposed of 1.87 million tons of waste and recycled/diverted 1.80 million tons in 2018 with a per capita disposal rate of 1.51 tons/person and a recycling/diversion rate of 1.45 tons/person. More detailed county-level data is provided below. Table 3-B and Charts 3-A and 3-B detail the Class I disposal tonnages for 2014-2018 for each county of ETDD. Table 3-C and Charts 3-C and 3-D detail the Class III/IV disposal tonnages for 2014-2018 for each county of ETDD. Table 3-D and Charts 3-E and 3-F show projected Class I disposal tonnages and Table 3-E and Charts 3-G and 3-H show projected Class III disposal tonnages for all ETDD counties from 2019-2023. Recycling/diversion tonnages for all ETDD counties from 2014-2018 are detailed in Table 3-F and Charts 3-I and 3-J and are projected for 2019-2023 in Table 3-G and Charts 3-K and 3-L. All projections for Class I and Class III waste and recycling/diversion were calculated by ETDD staff utilizing an average of percent change calculated from the changes between years and applied across the proceeding five years after having discussions with county solid waste staffs as needed. Maps that detail the flow of waste and the flow of recyclable materials from each county of ETDD follow the tables and charts. Immediately below is discussion of the waste and recycling stream of each county of ETDD.

#### **Anderson County**

Anderson County saw a stable stream of Class I waste from 2014-2018 with an overall increase of less than 3,000 tons by the end of the five-year period, from 70,842 tons in 2014 to 73,437 tons in 2018. Class I waste is projected to grow at a stable rate up to 80,683 tons in 2023. Anderson County produces minimal amounts of Class III waste, with an overall decrease of over 3,300 tons from 5,500 in 2014 to 2,120 in 2018. Class III tonnages are projected to remain minimal in Anderson County from 2019-2023, up to 3,885 tons in 2023. Recycling tonnage remained relatively stable from 2014-2017, with a high of 55,115 tons in 2018. Recycling tonnages are projected to remain steady from 2019-2023, with minimal increase of 5,000 tons by the end of the five-year period. All reported Class III waste in Anderson County in 2018 was disposed in the DOE Y-12 C&D Landfill. 85.94% of Class I waste was disposed in Chestnut Ridge Landfill, which is located within Anderson County. 10.77% of Class I waste (all private waste) went to Meadow Branch Landfill in McMinn County. Minimal amounts of private Class I waste also went to Loudon County Landfill, Volunteer Regional Landfill in Scott County, and Carter Valley Landfill in Hawkins County. These facilities all have long enough projected lifespans to handle the volume of waste coming from Anderson County well into the next decade. Recyclable materials from Anderson County go to WestRock in Knoxville (Knox County) and to Noble Metals in Oak Ridge (Anderson County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Anderson County for many years to come.

#### **Blount County**

Blount County saw a stable stream of Class I waste from 2014-2018 with an overall decrease of just under 12,000 tons by the end of the five-year period, from 111,343 tons in 2014 to 99,607 tons in 2018. Class I waste is projected to steadily decrease to 90,037 tons in 2023. Blount County produces moderate amounts of Class

III waste, with an overall increase of 5,770 tons from 21,104 tons in 2014 to 26,874 tons in 2018. Class III tonnages are projected to remain moderate in Blount County from 2019-2023, up to 36,647 tons in 2023. Recycling tonnage remained relatively stable from 2014-2018, with a couple decreases in tonnage in 2015 and 2018. Recycling tonnages are projected to remain steady from 2019-2023, with minimal decreases of 4,398 tons by the end of the five-year period. All Class III waste reported in Blount County in 2018 was disposed in the Alcoa/Maryville/Blount County Landfill. 59.81% of Class I waste was disposed in the Alcoa/Maryville/Blount County Landfill. 29.54% of Class I waste went to Chestnut Ridge Landfill in Anderson County and 8.8% went to Meadow Branch Landfill in McMinn County. Minimal amounts of private Class I waste also went to Loudon County Landfill and Volunteer Regional Landfill in Scott County. These facilities all have long enough projected lifespans to handle the volume of waste coming from Blount County well into the next decade. Recyclable materials from Blount County go to WestRock and to PSC Metals in Knoxville (Knox County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Blount County for the foreseeable future.

#### **Campbell County**

Campbell County saw a stable stream of Class I waste from 2014-2018 with an overall increase of 6,290 tons by the end of the five-year period, from 25,502 tons in 2014 to 31,792 tons in 2018. Class I waste is projected to steadily decrease to 42,345 tons in 2023. Campbell County produced no Class III waste from 2014-2018, and Class III tonnages are projected to remain at 0 tons in Campbell County from 2019-2023. Recycling and diversion tonnage remained on a slow decline from 2014-2017, 64,842 tons down to 52,720 tons, before a slight increase back up to 54,214 tons in 2018. Recycling tonnages are projected to remain steady from 2019-2023, with an overall decrease of 8,191 tons by the end of the five-year period. 85.29% of Class I waste was disposed in the Volunteer Regional Landfill in Scott County. 12.21% of Class I waste went to Chestnut Ridge Landfill in Anderson County, and 1.94% went to Meadow Branch Landfill in McMinn County. These facilities all have long enough projected lifespans to handle the volume of waste coming from Campbell County well into the next decade. Recyclable materials from Campbell County go to WestRock, to TAMKO, and to PSC Metals in Knoxville (Knox County) and to Jacksboro Metals in Jacksboro (Campbell County) for processing. These facilities are adequately equipped to handle the projected volumes of materials coming from Campbell County for the next decade at least.

#### **Claiborne County**

Claiborne County had a stable stream of Class I waste from 2014-2018 with an overall increase of 3,090 tons by the end of the five-year period, from 15,754 tons in 2014 to 18,844 tons in 2018. Class I waste is projected to grow at a stable rate up to 23,822 tons in 2023. Claiborne County produces minimal amounts of Class III waste, with an overall increase of 2,151 tons, from 2,676 tons in 2014 to 4,827 tons in 2018. Class III tonnages are projected to remain minimal in Claiborne County from 2019-2023, up to 3,885 tons in 2023. Recycling tonnage dropped from 2014 to 2015, but then remained on a stable increase from 3,881 tons in 2015 up to a high of 22,815 tons in

2018. Recycling tonnages are projected to remain steady from 2019-2023, with minimal increase of 5,000 tons by the end of the five-year period. All reported Class III waste in Claiborne County in 2018 was disposed in the Claiborne County Class III Landfill. 85.98% of Class I waste reported in 2018 was disposed in Volunteer Regional Landfill in Scott County. 8.30% of Class I waste (all of it private waste) went to Lakeway Sanitation and Recycling Class I Landfill in Hamblen County, and 5.72% of Class I waste was disposed in Meadow Branch Landfill in McMinn County. Minimal amounts of private Class I waste also went to Lakeway Sanitation and Recycling C&D Landfill in Hamblen County. These facilities all have long enough projected lifespans to handle the volume of waste coming from Claiborne County for the foreseeable future. Recyclable materials from Claiborne County go to WestRock and to Sonoco in Knoxville (Knox County) and to Abner Metal in Tazewell (Claiborne County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Claiborne County for many years to come.

#### **Cocke County**

Cocke County had a stable stream of Class I waste from 2014-2018 with a slight increase from 2014 to 2015, but with an overall decrease of 3,699 tons by the end of the five-year period, from 38,387 tons in 2014 to 34,688 tons in 2018. Class I waste is projected to decrease at a stable rate to 31,355 tons in 2023. Cocke County produces relatively minimal amounts of Class III waste, with an increase in tonnage from 2014-2016, but then a precipitous decrease to 82 tons in 2018. Class III tonnages are projected to remain minimal in Cocke County from 2019-2023, up to 2,500 tons in 2023. Recycling tonnage varied from 2014-2018, rising and falling based on the level of private activity, with a high of 39,671 tons in 2018. Recycling tonnages are projected to remain steady from 2019-2023, with minimal increase of 2,000 tons by the end of the five-year period. All reported Class III waste in Cocke County in 2018 was disposed in the Jefferson County Class I and Class III Landfill. 90.93% of Class I waste was disposed in Lakeway Sanitation and Recycling Class I Landfill, which is located within Hamblen County. 8.77% of Class I waste (entirely from the private sector) went to the Jefferson County Class I and Class III Landfill. Minimal amounts (less than 1%) of private Class I waste also went to Carter Valley Landfill in Hawkins County and to Lakeway Sanitation and Recycling C&D Landfill in Hamblen County. These facilities all have long enough projected lifespans to handle the volume of waste coming from Cocke County well into the next decade. Recyclable materials from Cocke County go for processing to Sonoco and to Myer's Diversified (both located within Cocke County in Newport) and to Morristown Iron and Metals in Hamblen County. These facilities are equipped to handle the projected volumes of materials coming from Cocke County for at least another five to ten years.

#### **Grainger County**

Grainger County saw a stable stream of Class I waste from 2014-2018 with a gradual increase of 5,676 tons by the end of the five-year period, from 10,600 tons in 2014 to 16,276 tons in 2018. Class I waste is projected to grow at a stable rate up to 17,200 tons in 2023. Grainger County produces minimal amounts of Class III waste, depending on the activity of the private sector, with an overall decrease of 192 tons from

1,555 tons in 2014 to 1,363 tons in 2018. Class III tonnages are projected to remain minimal in Grainger County from 2019-2023, with 500 tons in 2023. Recycling tonnage fluctuated from 2014-2018 due to variations in the reported activity from the private sector, with a reported total of 16,213 tons in 2018. Recycling tonnages are projected to remain steady from 2019-2023, with minimal increase of 1,500 tons by the end of the five-year period. All reported Class III waste in Grainger County in 2018 was disposed in the Jefferson County Class I and Class III Landfill. 84.02% of Class I waste was disposed in Lakeway Sanitation and Recycling Class I Landfill, which is located within Hamblen County. 12.82% of Class I waste went to Chestnut Ridge Landfill in Anderson County. The remaining Class I waste, minimal tonnages of private waste, also went to Volunteer Regional Landfill in Scott County, Carter Valley Landfill in Hawkins County, Jefferson County Class I and Class III Landfill, and Lakeway Sanitation and Recycling C&D Landfill in Hamblen County. These facilities all have long enough projected lifespans to handle the volume of waste coming from Grainger County well into the foreseeable future. Recyclable materials from Grainger County go to WestRock and to Ecyclers USA in Knoxville (Knox County) and to Morristown Iron and Metal (Hamblen County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Grainger County for many years to come.

#### **Hamblen County**

Hamblen County saw a stable stream of Class I waste from 2014-2018 with an increase of 12,604 tons by the end of the five-year period, from 91,947 tons in 2014 to 104,551 tons in 2018. Class I waste is projected to grow at a stable rate up to 124,174 tons in 2023. Hamblen County produces minimal amounts of Class III waste, depending on the activity of the private sector, with only 12 tons reported in 2018. Class III tonnages are projected to remain minimal in Hamblen County from 2019-2023, with 7 tons in 2023. Recycling/diversion tonnage fluctuated from 2014-2018 due to variations in the reported activity from the private sector, with a reported total of 139,396 tons in 2018. Recycling tonnages are projected to remain steady from 2019-2023, with an increase of 12,000 tons by the end of the five-year period. All reported Class III waste in Hamblen County in 2018 was disposed in the Jefferson County Class I and Class III Landfill. Approximately 99% of Class I waste stays within Hamblen County, with 69.06% disposed in the Morristown Balefill Landfill and 29.80% disposed in Lakeway Sanitation and Recycling Class I Landfill. The remaining 1%, all from private sources, was disposed in Meadow Branch Landfill in McMinn County, Chestnut Ridge Landfill in Anderson County, Carter Valley Landfill in Hawkins County, Jefferson County Class I and Class III Landfill, and Lakeway Sanitation and Recycling C&D Landfill in Hamblen County. These facilities all have long enough projected lifespans to handle the volume of waste coming from Hamblen County well into the next decade. Recyclable materials from Hamblen County go to WestRock in Knoxville (Knox County) and to Morristown Iron and Metal (Hamblen County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Hamblen County for many years into the future.

#### **Jefferson County**

Jefferson County saw a stable stream of Class I waste from 2014-2018 with an increase of 4,859 tons by the end of the five-year period, from 38,291 tons in 2014 to 43,150 tons in 2018. Class I waste is projected to grow at a stable rate up to 58,566 tons in 2023. Jefferson County produces moderate amounts of Class III waste. depending on the activity of the private sector, with 9,164 tons reported in 2018. Class III tonnages are projected to remain moderate in Jefferson County from 2019-2023, with 8,800 tons in 2023. Recycling/diversion tonnage fluctuated from 2014-2018 due to variations in the reported activity from the private sector, with a reported total of 19,774 tons in 2018. Recycling tonnages are projected to remain steady from 2019-2023, with an increase of 12,432 tons by the end of the five-year period. All reported Class III waste in Jefferson County in 2018 was disposed in the Jefferson County Class I and Class III Landfill. In 2018, 57.51% of Class I waste stayed within Jefferson County. disposed in the Jefferson County Class I and Class III Landfill. 35.75% of Class I waste was disposed in Lakeway Sanitation and Recycling Class I Landfill and 5.93% in Meadow Branch Landfill in McMinn County. The remaining 1%, all from private sources, was disposed in Chestnut Ridge Landfill in Anderson County, Carter Valley Landfill in Hawkins County, Volunteer Regional Landfill in Scott County, EcoSafe Class I Landfill in Sullivan County, and Lakeway Sanitation and Recycling C&D Landfill in Hamblen County. These facilities all have long enough projected lifespans to handle the projected volume of waste coming from Jefferson County well into the future. Recyclable materials from Jefferson County go to Sonoco in Newport (Cocke County) and to Morristown Iron and Metal (Hamblen County) and Barnes Recycling in New Market (Jefferson County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Jefferson County for many years.

#### **Knox County**

Knox County had a steady stream of Class I waste from 2014-2018 rising and falling over the five years with an overall decrease of 55,765 tons by the end of the fiveyear period, from 484,794 tons in 2014 to 429,029 tons in 2018. Class I waste is projected to decrease at a stable rate to 378,016 tons in 2023. Knox County produces a sizable tonnage of Class III waste, due mainly on the activity of the private sector, with 303,556 tons reported in 2018. Class III tonnages are projected to steadily increase in Knox County from 2019-2023, with 441,909 tons in 2023. Recycling/diversion tonnage fluctuated from 2014-2018 because of variations in the reported activity from the private sector, with a reported total of 271,228 tons in 2018. Recycling tonnages are projected to remain steady from 2019-2023, with an increase of 20,000 tons by the end of the five-year period. Most reported Class III waste in Knox County in 2018 was disposed within Knox County, with 39.08% going to Riverside C&D Landfill, 33.18% going to Poplar View Landfill, and 27.52% going to Yarnell Demolition Landfill. The remaining Class III waste was disposed in Jefferson County Class I and Class III Landfill. 52.82% of Class I waste was disposed in Chestnut Ridge Landfill in Anderson County. 28.05% was disposed in Meadow Branch Landfill in McMinn County, and 18.70% was disposed in Volunteer Regional Landfill in Scott County. The remaining Class I waste, all from private sources, was disposed in Loudon County Landfill, Lakeway Sanitation and Recycling C&D Landfill in Hamblen County, Lakeway Sanitation and Recycling Class I

Landfill in Hamblen County, and Rhea County Class I Landfill. These facilities all have long enough projected lifespans to handle the projected volume of waste coming from Knox County for the foreseeable future. Recyclable materials from Knox County stay within the county and are sent primarily to Knoxville for processing, going to Goodwill, Green Energy Biofuel, Southeastern Recycling, Spectra, WestRock, and PSC Metals in Newport. Some metals are sent to Morristown Iron and Metal (Hamblen County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Knox County well into the next decade.

#### **Loudon County**

Loudon County had a steady stream of Class I waste from 2014-2018, gradually rising over the five years with an overall increase of 58,864 tons by the end of the fiveyear period, from 217,164 tons in 2014 to 276,028 tons in 2018. Class I waste is projected to increase at a stable rate to 372,886 tons in 2023, based primarily on private disposal activity. Loudon County produces nearly no Class III waste, reporting 2 tons in 2017 and 0 tons in 2018. Class III tonnages are projected to remain at 0 tons from 2019-2023. Recycling/diversion tonnage rose substantially from 2014-2018 because of increases in the reported activity from the private sector, with a reported total of 117,164 tons in 2018. Recycling tonnages are projected to steadily increase from 2019-2023, with an increase of 40,000 tons by the end of the five-year period. 51.58% of reported Class I waste in 2018 was disposed in the Loudon County Landfill. 46.52% of Class I waste was disposed in Meadow Branch Landfill in McMinn County. The remaining 1.9% of Class I waste, all from private sources, was disposed in Chestnut Ridge Landfill in Anderson County, Volunteer Regional Landfill in Scott County, and Rhea County Class I Landfill. These facilities all have long enough projected lifespans to handle the projected volume of waste coming from Loudon County for at least the next decade. Recyclable materials from Loudon County are sent to WestRock in Knoxville (Knox County), Seaton Enterprise, LLC in Athens (McMinn County), Caraustar Recycling in Chattanooga (Hamilton County), and Lankford Salvage in Sweetwater (Monroe County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Loudon County for the foreseeable future.

#### **Monroe County**

Monroe County had a steady stream of Class I waste from 2014-2018, gradually rising over the five years with an overall increase of 12,021 tons by the end of the five-year period, from 28,382 tons in 2014 to 40,853 tons in 2018. Class I waste is projected to increase at a stable rate to 65,198 tons in 2023, based primarily on private disposal activity. Monroe County reported no Class III waste in 2017 or 2018. Class III tonnages are projected to remain at 0 tons from 2019-2023. Recycling/diversion tonnage rose substantially from 2014-2018 because of increases in the reported activity from the private sector, with a reported total of 121,747 tons in 2018. Recycling/diversion tonnages are projected to steadily increase from 2019-2023, with a projected tonnage of 140,000 in 2023. 88.29% of reported Class I waste in 2018 was disposed in Meadow Branch Landfill in McMinn County. 10.82% was disposed in the Loudon County Landfill. The remaining 0.89% of Class I waste, all from private sources, was disposed in Chestnut Ridge Landfill in Anderson County, Rhea County Class I Landfill, and McMinn

County Landfill. These facilities all have long enough projected lifespans to handle the projected volume of waste coming from Monroe County for many more years. Recyclable materials from Monroe County are sent to WestRock in Knoxville (Knox County) and Lankford Salvage in Sweetwater (Monroe County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Monroe County for the foreseeable future.

#### **Morgan County**

Morgan County produced a steady stream of Class I waste from 2014-2016, then saw a significant increase in reported tonnage due to a TDOT project within the county, with the reported tonnage increasing in 2017 by twenty-one times the 2016 tonnage to 198,243 before decreasing in 2018 to 56,049. After the TDOT project completes, Class I waste is projected to increase at a stable rate to 14,138 tons in 2023, based primarily on private disposal activity. Morgan County reported a stable stream of Class III waste from 2014-2017, with reported tonnages varying no more than 9 tons across the entire four years, before reporting 0 tons in 2018. Class III tonnages are projected to steadily increase from 2019-2023. Recycling/diversion tonnage rose from 2014-2018 because of increases in diversion activity due to the TDOT project mentioned above producing rock that is reused at Meadow Branch Landfill. Recycling/diversion tonnages are projected to remain steady 2019-2023 but lower from 2017-2018 tonnages as the TDOT project winds down, with a projected tonnage of 22,000 tons in 2023. 92.26% of reported Class I waste in 2018 was disposed in Volunteer Regional Landfill in Scott County. The remaining 7.74% was disposed in Chestnut Ridge Landfill in Anderson County. These facilities all have long enough projected lifespans to handle the projected volume of waste coming from Morgan County for at least another decade. Recyclable materials from Morgan County are sent to WestRock in Knoxville (Knox County) and Roane Metals in Rockwood (Roane County) for processing. These facilities are equipped to handle the projected volumes of recyclable materials coming from Morgan County for many years into the future.

#### **Roane County**

Roane County produced a steadily increasing stream of Class I waste from 2014-2018, due first to a disaster event that led to 86,695 tons produced in 2015 then to a TDOT project that increased reported tonnages to 120,685 in 2017 and 234,067 tons in 2018. After the TDOT project completes, Class I waste is projected to decrease from 2018 levels, but to increase at a stable rate to 42,863 tons in 2023, based primarily on private disposal activity. Roane County reported no Class III waste from 2014-2016, then due to private activity reported 2,511 tons in 2017 and 1,420 tons in 2018. Class III tonnages are projected to steadily decrease from 2019-2023, down to 900 tons in 2023. Recycling/diversion tonnage declined minimally from 2014-2016 then rose significantly because of private recycling activity to 81,295 tons in 2017 before dropping to 46,635 tons in 2018. Recycling/diversion tonnages are projected to remain steady from 2019-2023, with a projected tonnage of 49,501 tons in 2023. All reported Class III waste from Roane County in 2018 was disposed in the DOE Y-12 C&D Landfill. 90.38% of reported Class I waste in 2018 was disposed in Rhea County Class I Landfill. 4.38% was disposed in Loudon County Landfill, and 3.85% was disposed in Meadow Branch

Landfill in McMinn County. The remaining 1.39% was disposed in Carter Valley Landfill in Hawkins County, Volunteer Regional Landfill in Scott County, and Chestnut Ridge Landfill in Anderson County. The Rhea County Landfill has just under five years of life remaining, but the Roane County Solid Waste Director contacted the Rhea County Landfill to discuss the landfill's plans for potential expansion, and he is researching Chestnut Ridge Landfill and Volunteer Regional Landfill (both have the projected lifespans and capacity to handle currently generated and projected waste from Roane County) as options for disposal if Rhea County Landfill closes. Recyclable materials from Roane County are sent to WestRock and to Master Battery in Knoxville (Knox County) and to Roane Metals in Rockwood (Roane County) for processing. These facilities are equipped to handle the projected volumes of recyclable materials coming from Roane County for the foreseeable future.

#### **Scott County**

Scott County had a relatively steady stream of Class I waste from 2014-2018, gradually decreasing from 2014-2016 before slightly rising in 2017 and again to 15,521 tons in 2018. Class I waste is projected to slightly decrease at a stable rate to 14,850 tons in 2023. Scott County reported no Class III waste from 2014-2018. Class III tonnages are projected to remain at 0 tons from 2019-2023. Recycling/diversion tonnage rose substantially from 2014-2018 because of increases in the reported activity from the private sector, with a reported total of 53,680 tons in 2018. Recycling/diversion tonnages are projected to decrease from 2018 levels, but to steadily increase from 2019-2023, with a projected tonnage of 29,500 in 2023. 99.97% of reported Class I waste in 2018 remained in Scott County, disposed in Volunteer Regional Landfill. The remaining 0.03% was disposed in Chestnut Ridge Landfill in Anderson County. These facilities have long enough projected lifespans to handle the projected volume of waste coming from Scott County for many more years. Recyclable materials from Scott County are sent to WestRock in Knoxville (Knox County) and Brawner's Scrapyard in Helenwood (Scott County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Scott County for many years into the future.

#### **Sevier County**

Sevier County had a steady increase of Class I waste from 2014-2018 due primarily to the fire disaster midway through the five-year period, with 19,546 tons reported in 2018. Class I waste is projected to slowly increase at a moderate rate to 20,800 tons in 2023. Sevier County produces a sizable tonnage of Class III waste, which increased in 2016-2017 due to the fire disaster, with 82,061 tons reported in 2017 and a slight decrease to 64,130 tons in 2018. Class III tonnages are projected to steadily increase in Sevier County from 2019-2023, with 72,000 tons in 2023. Recycling/diversion tonnage increased steadily from 2014-2018, with a reported total of 256,014 tons in 2018. Recycling tonnages are projected to remain steady from 2019-2023, with an increase of 8,000 tons by the end of the five-year period. Most reported Class III waste in Sevier County in 2018 was disposed within Sevier County, with 62.46% going to Sevier Solid Waste Inc. and 37.42% going to Sevier Solid Waste Class III Landfill. The remaining 0.11% was disposed in Jefferson County Class I and Class III Landfill. 44.66% of Class I waste was disposed at Sevier Solid Waste Inc. 39.07% was

disposed in Meadow Branch Landfill in McMinn County. 7.94% was disposed in Lakeway Sanitation and Recycling Class I Landfill in Hamblen County, and 5.27% was disposed in Volunteer Regional Landfill in Scott County. The remaining 3.06% of Class I waste, all from private sources, was disposed in Chestnut Ridge Landfill in Anderson County, Carter Valley Landfill in Hawkins County, and Lakeway Sanitation and Recycling C&D Landfill in Hamblen County. These facilities all have long enough projected lifespans to handle the projected volume of waste coming from Sevier County for the foreseeable future. Recyclable materials from Sevier County go to WestRock in Knoxville (Knox County) and to Barnes Recycling in New Market (Jefferson County) for processing. These facilities are equipped to handle the projected volumes of materials coming from Sevier County well into the next decade.

#### **Union County**

Union County produced a steady stream of Class I waste from 2014-2018, with gradually increasing moderate tonnages reported up to 8,484 tons in 2018. Class I waste is projected to increase at a stable rate to 8,851 tons in 2023. Union County reported varying tonnages of Class III waste from 2014-2018 (due to private activity), with tonnages varying from 1,000 tons in 2014 to 1,420 tons in 2016 to 0 tons in 2018. Class III tonnages are projected to steadily increase from 2019-2023 up to 1,100 tons in 2023. Recycling/diversion tonnage varied from 2014-2018 because of fluctuations in private activity, but 2018 had Union County's highest reported recycling/diversion tonnage of 12,551 tons. Recycling/diversion tonnages are projected to remain steady 2019-2023, with 7,000 tons in 2023. 79.23% of reported Class I waste in 2018 was disposed in Chestnut Ridge Landfill in Anderson County. 16.75% was disposed in Meadow Branch Landfill in McMinn County. 2.68% was disposed in Volunteer Regional Landfill in Scott County, and the remaining 1,43% was disposed in EcoSafe Class I Landfill in Sullivan County. These facilities all have long enough projected lifespans to handle the projected volume of waste coming from Union County for at least another decade. Recyclable materials from Union County stay within the county and are sent to Hilltop Recycling in Maynardville for processing. This facility is capable of handling the projected volumes of recyclable materials coming from Union County for many years into the future.

Table 3-B Class I Tons Disposed 2014-2018

| County    | Year    |         |         |         |         |  |
|-----------|---------|---------|---------|---------|---------|--|
|           | 2014    | 2015    | 2016    | 2017    | 2018    |  |
| Anderson  | 70,842  | 57,628  | 69,134  | 73,438  | 73,437  |  |
| Blount    | 111,343 | 92,730  | 98,013  | 88,353  | 99,607  |  |
| Campbell  | 25,502  | 24,966  | 27,348  | 31,114  | 31,792  |  |
| Claiborne | 15,754  | 15,018  | 17,063  | 17,671  | 18,844  |  |
| Cocke     | 38,387  | 41,307  | 37,865  | 32,209  | 34,688  |  |
| Grainger  | 10,600  | 12,686  | 13,537  | 16,446  | 16,276  |  |
| Hamblen   | 91,947  | 89,596  | 100,295 | 109,615 | 104,551 |  |
| Jefferson | 38,291  | 26,751  | 37,858  | 38,110  | 43,150  |  |
| Knox      | 484,794 | 489,109 | 498,266 | 404,647 | 429,029 |  |
| Loudon    | 217,164 | 234,738 | 247,524 | 272,071 | 276,028 |  |
| Monroe    | 28,382  | 34,500  | 35,139  | 37,031  | 40,853  |  |
| Morgan    | 8,913   | 8,609   | 9,063   | 198,243 | 56,049  |  |
| Roane     | 28,092  | 86,695  | 100,767 | 120,685 | 234,067 |  |
| Scott     | 16,335  | 14,022  | 13,831  | 15,223  | 15,521  |  |
| Sevier    | 8,471   | 9,645   | 19,115  | 11,016  | 19,546  |  |
| Union     | 8,468   | 9,362   | 7,518   | 7,778   | 8,484   |  |

Chart 3-A

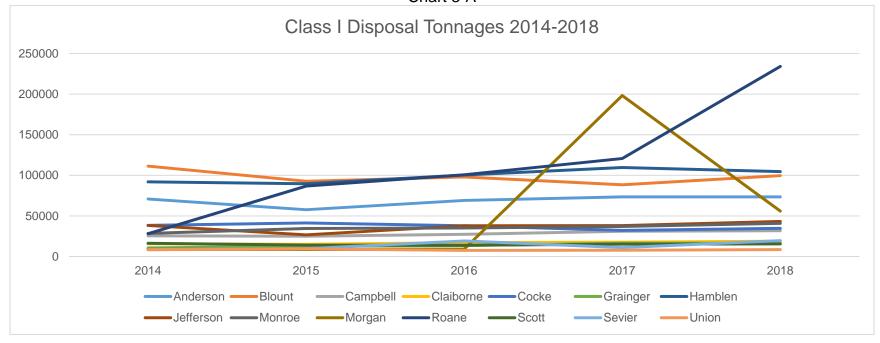
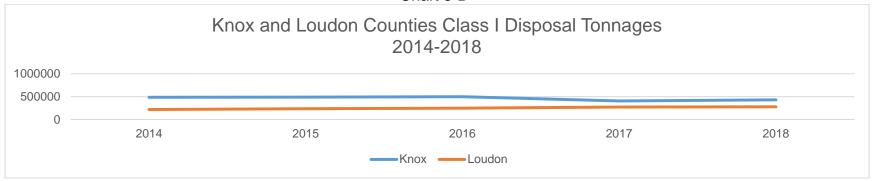


Chart 3-B<sup>7</sup>

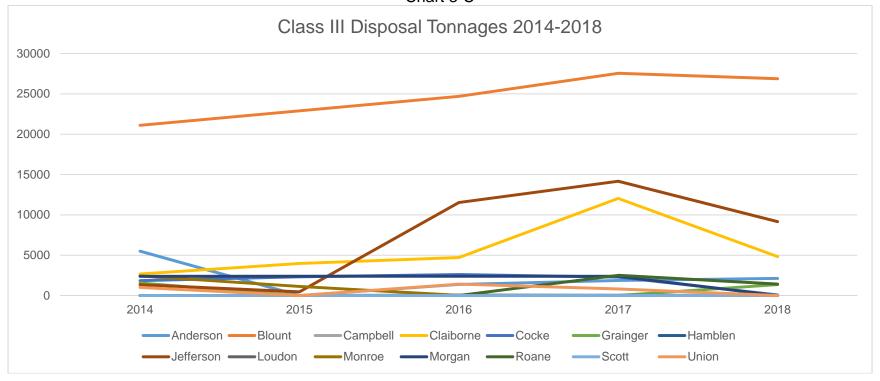


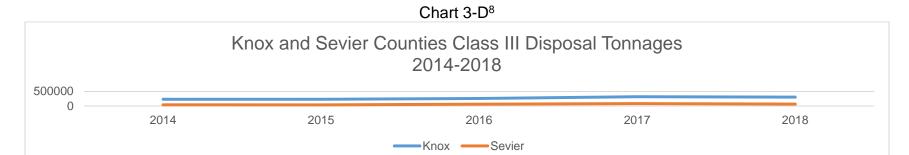
<sup>&</sup>lt;sup>7</sup> Knox and Loudon County data is presented in a separate chart to allow for easier viewing of other counties' data in Chart 3-A.

Table 3-C Class III Tons Disposed 2014-2018

| County    | Year    |         |         |         |         |  |
|-----------|---------|---------|---------|---------|---------|--|
|           | 2014    | 2015    | 2016    | 2017    | 2018    |  |
| Anderson  | 5,500   | 0       | 1,376   | 1,868   | 2,120   |  |
| Blount    | 21,104  | 22,893  | 24,688  | 27,543  | 26,874  |  |
| Campbell  | 0       | 0       | 0       | 0       | 0       |  |
| Claiborne | 2,676   | 3,980   | 4,714   | 12,041  | 4,827   |  |
| Cocke     | 1,849   | 2,323   | 2,598   | 2,282   | 82      |  |
| Grainger  | 1,555   | 0       | 2       | 0       | 1,363   |  |
| Hamblen   | 0       | 0       | 44      | 30      | 12      |  |
| Jefferson | 1,334   | 460     | 11,531  | 14,175  | 9,164   |  |
| Knox      | 229,797 | 227,902 | 254,989 | 317,098 | 303,556 |  |
| Loudon    | 0       | 0       | 18      | 2       | 0       |  |
| Monroe    | 2,431   | 1,130   | 19      | 0       | 0       |  |
| Morgan    | 2,378   | 2,387   | 2,386   | 2,377   | 0       |  |
| Roane     | 0       | 0       | 0       | 2,511   | 1,420   |  |
| Scott     | 0       | 0       | 0       | 0       | 0       |  |
| Sevier    | 40,855  | 36,314  | 60,825  | 82,061  | 64,130  |  |
| Union     | 1,000   | 0       | 1,420   | 810     | 0       |  |

Chart 3-C



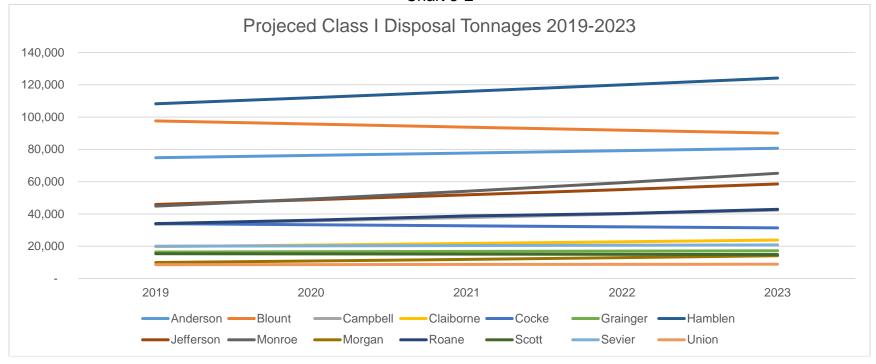


<sup>&</sup>lt;sup>8</sup> Knox and Sevier County data is presented in a separate chart to allow for easier viewing of other counties' data in Chart 3-C.

Table 3-D Projected Class I Tons Disposed 2019-2023

| County    | Year    |         |         |         |         |  |
|-----------|---------|---------|---------|---------|---------|--|
|           | 2019    | 2020    | 2021    | 2022    | 2023    |  |
| Anderson  | 74,832  | 76,254  | 77,703  | 79,179  | 80,684  |  |
| Blount    | 97,615  | 95,663  | 93,749  | 91,874  | 90,037  |  |
| Campbell  | 33,668  | 35,654  | 37,758  | 39,985  | 42,345  |  |
| Claiborne | 19,749  | 20,696  | 21,690  | 22,731  | 23,822  |  |
| Cocke     | 33,994  | 33,314  | 32,648  | 31,995  | 31,355  |  |
| Grainger  | 16,400  | 16,600  | 16,800  | 17,000  | 17,200  |  |
| Hamblen   | 108,210 | 111,998 | 115,918 | 119,975 | 124,174 |  |
| Jefferson | 45,868  | 48,758  | 51,830  | 55,095  | 58,566  |  |
| Knox      | 418,303 | 407,846 | 397,650 | 387,708 | 378,016 |  |
| Loudon    | 293,142 | 311,317 | 330,618 | 351,116 | 372,886 |  |
| Monroe    | 44,857  | 49,253  | 54,079  | 59,379  | 65,198  |  |
| Morgan    | 9,906   | 10,827  | 11,834  | 12,935  | 14,138  |  |
| Roane     | 33,991  | 36,129  | 38,767  | 40,218  | 42,863  |  |
| Scott     | 15,384  | 15,249  | 15,115  | 14,982  | 14,850  |  |
| Sevier    | 20,000  | 20,200  | 20,400  | 20,600  | 20,800  |  |
| 20,800    | 8,556   | 8,629   | 8,702   | 8,776   | 8,851   |  |

Chart 3-E



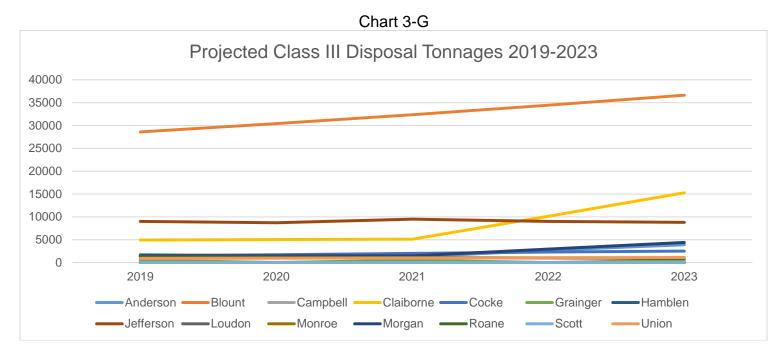


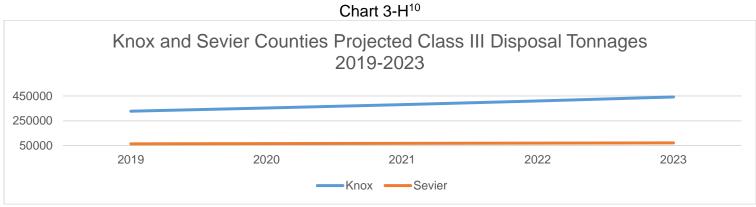


<sup>&</sup>lt;sup>9</sup> Knox and Loudon County data is presented in a separate chart to allow for easier viewing of other counties' data in Chart 3-E.

Table 3-E Projected Class III Tons Disposed 2019-2023

| County    | Year    |         |         |         |         |  |
|-----------|---------|---------|---------|---------|---------|--|
|           | 2019    | 2020    | 2021    | 2022    | 2023    |  |
| Anderson  | 1,760   | 1,460   | 1,212   | 2,673   | 3,885   |  |
| Blount    | 28,594  | 30,424  | 32,371  | 34,443  | 36,647  |  |
| Campbell  | 0       | 0       | 0       | 0       | 0       |  |
| Claiborne | 4,924   | 5,022   | 5,122   | 10,144  | 15,267  |  |
| Cocke     | 1,500   | 1,700   | 2,000   | 2,300   | 2,500   |  |
| Grainger  | 500     | 0       | 500     | 0       | 500     |  |
| Hamblen   | 11      | 10      | 9       | 8       | 7       |  |
| Jefferson | 9,000   | 8,700   | 9,500   | 9,000   | 8,800   |  |
| Knox      | 327,233 | 352,758 | 380,273 | 409,934 | 441,909 |  |
| Loudon    | 0       | 0       | 0       | 0       | 0       |  |
| Monroe    | 0       | 0       | 0       | 0       | 0       |  |
| Morgan    | 1,500   | 1,480   | 1,460   | 1,440   | 1,420   |  |
| Roane     | 1,300   | 1,200   | 1,100   | 1,000   | 900     |  |
| Scott     | 0       | 0       | 0       | 0       | 0       |  |
| Sevier    | 64,000  | 66,000  | 68,000  | 70,000  | 72,000  |  |
| Union     | 900     | 950     | 1,000   | 1,050   | 1,100   |  |





<sup>&</sup>lt;sup>10</sup> Knox and Sevier County data is presented in a separate chart to allow for easier viewing of other counties' data in Chart 3-G.

Table 3-F Recycling/Diversion Tons 2014-2018

| County    | Year    |         |         |         |         |  |
|-----------|---------|---------|---------|---------|---------|--|
|           | 2014    | 2015    | 2016    | 2017    | 2018    |  |
| Anderson  | 48,771  | 50,981  | 52,160  | 49,035  | 55,115  |  |
| Blount    | 56,597  | 40,249  | 57,366  | 60,781  | 42,137  |  |
| Campbell  | 64,842  | 57,021  | 54,131  | 52,720  | 54,214  |  |
| Claiborne | 14,503  | 3,881   | 9,886   | 18,687  | 22,815  |  |
| Cocke     | 19,015  | 12,402  | 11,233  | 22,258  | 39,671  |  |
| Grainger  | 2,279   | 15,371  | 27,920  | 9,015   | 16,213  |  |
| Hamblen   | 80,962  | 74,847  | 70,800  | 109,966 | 139,393 |  |
| Jefferson | 13,488  | 18,733  | 21,453  | 17,848  | 19,774  |  |
| Knox      | 349,185 | 265,245 | 361,985 | 403,884 | 271,228 |  |
| Loudon    | 95,510  | 115,265 | 125,423 | 330,976 | 117,164 |  |
| Monroe    | 41,143  | 75,740  | 135,487 | 59,512  | 121,747 |  |
| Morgan    | 3,766   | 21,866  | 21,607  | 210,370 | 75,232  |  |
| Roane     | 56,668  | 54,728  | 52,367  | 81,295  | 46,635  |  |
| Scott     | 29,609  | 23,742  | 54,289  | 26,770  | 53,680  |  |
| Sevier    | 98,549  | 109,655 | 112,767 | 128,991 | 256,014 |  |
| Union     | 5,130   | 7,084   | 4,734   | 4,509   | 12,551  |  |

Chart 3-I

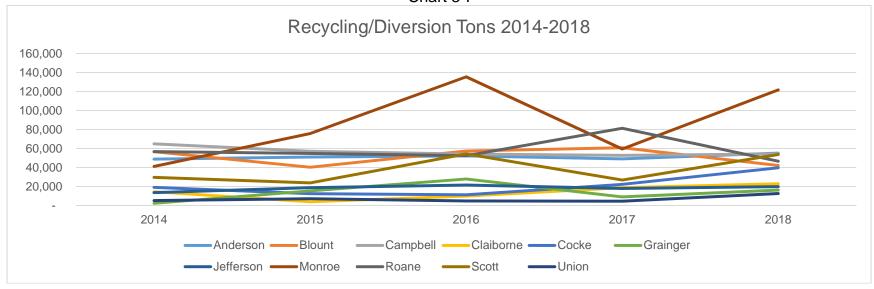
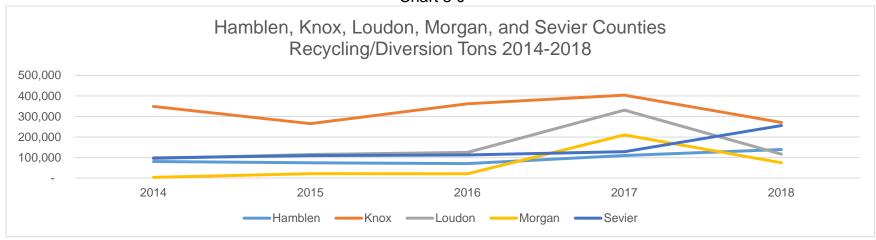


Chart 3-J<sup>11</sup>



<sup>&</sup>lt;sup>11</sup> Hamblen, Knox, Loudon, Morgan, and Sevier County data is presented in a separate chart to allow for easier viewing of other counties' data in Chart 3-I.

Table 3-G Projected Recycling/Diversion Tons 2019-2023

| County    | Year    |         |         |         |         |  |
|-----------|---------|---------|---------|---------|---------|--|
|           | 2019    | 2020    | 2021    | 2022    | 2023    |  |
| Anderson  | 50,000  | 52,000  | 53,000  | 54,000  | 55,000  |  |
| Blount    | 40,957  | 39,810  | 38,696  | 37,612  | 36,559  |  |
| Campbell  | 51,937  | 49,756  | 47,666  | 45,664  | 43,746  |  |
| Claiborne | 14,000  | 14,500  | 15,000  | 15,500  | 16,000  |  |
| Cocke     | 24,000  | 24,500  | 25,000  | 25,500  | 26,000  |  |
| Grainger  | 15,000  | 15,300  | 15,600  | 15,900  | 16,500  |  |
| Hamblen   | 112,000 | 115,000 | 118,000 | 121,000 | 124,000 |  |
| Jefferson | 22,107  | 24,716  | 27,632  | 30,893  | 34,539  |  |
| Knox      | 275,000 | 280,000 | 285,000 | 290,000 | 295,000 |  |
| Loudon    | 130,000 | 140,000 | 150,000 | 160,000 | 170,000 |  |
| Monroe    | 128,000 | 130,000 | 132,000 | 135,000 | 140,000 |  |
| Morgan    | 21,100  | 21,300  | 21,500  | 21,700  | 22,000  |  |
| Roane     | 47,195  | 47,761  | 48,334  | 48,914  | 49,501  |  |
| Scott     | 28,000  | 28,300  | 28,600  | 28,900  | 29,500  |  |
| Sevier    | 110,000 | 112,000 | 114,000 | 116,000 | 118,000 |  |
| Union     | 5,500   | 6,000   | 6,300   | 6,600   | 7,000   |  |

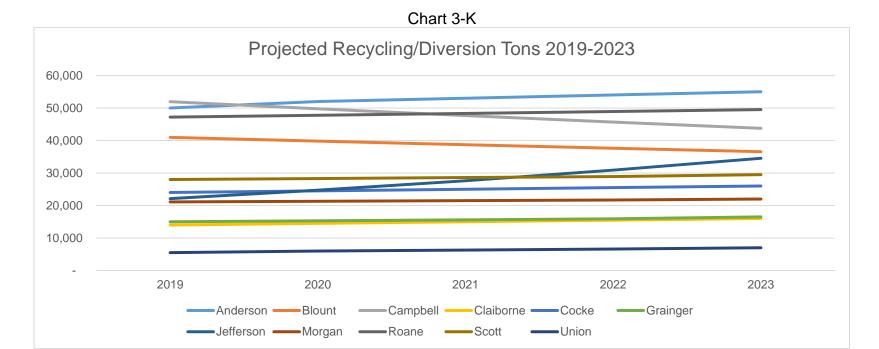
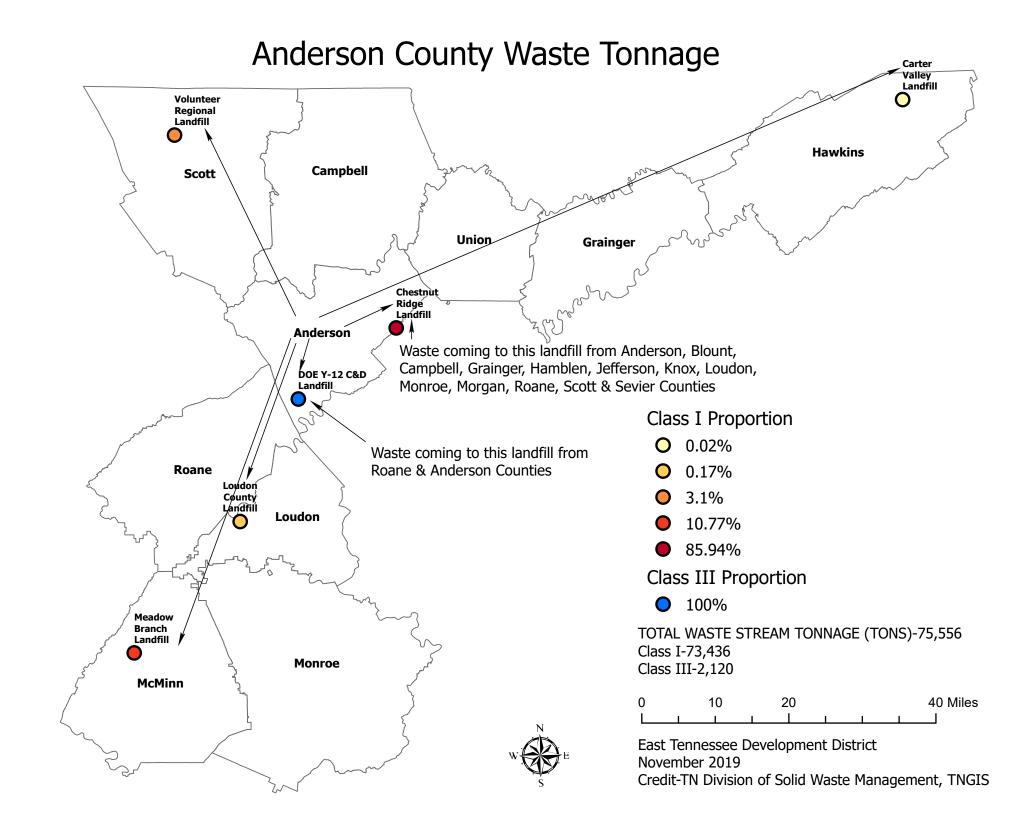
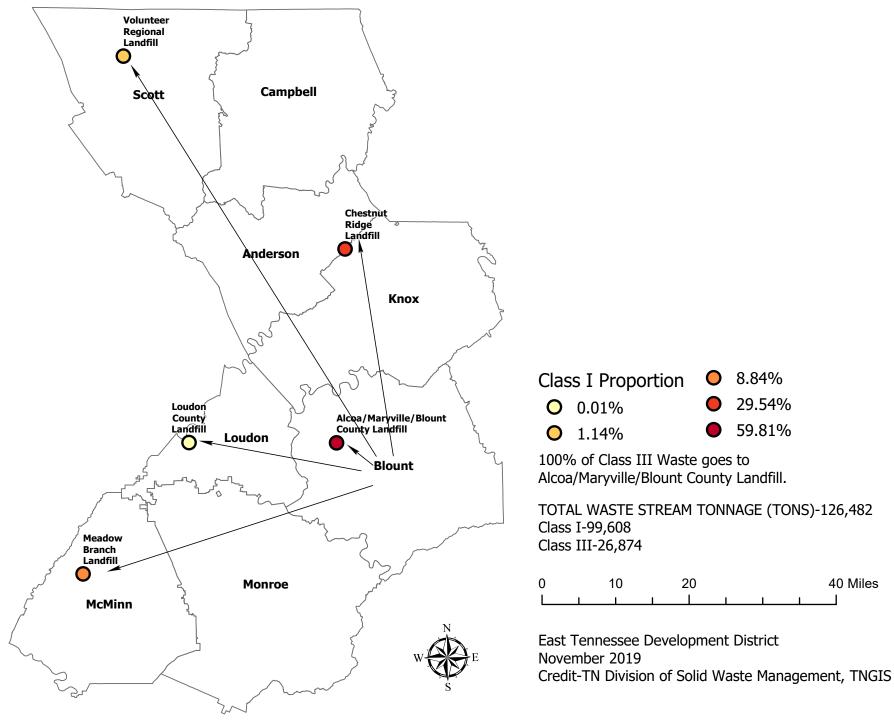


Chart 3-L<sup>12</sup> Hamblen, Knox, Loudon, Monroe, and Sevier Counties Projected Recycling/Diversion Tons 2019-2023 300,000 250,000 200,000 150,000 100,000 2020 2022 2019 2021 2023 —Loudon —Monroe -Sevier Knox

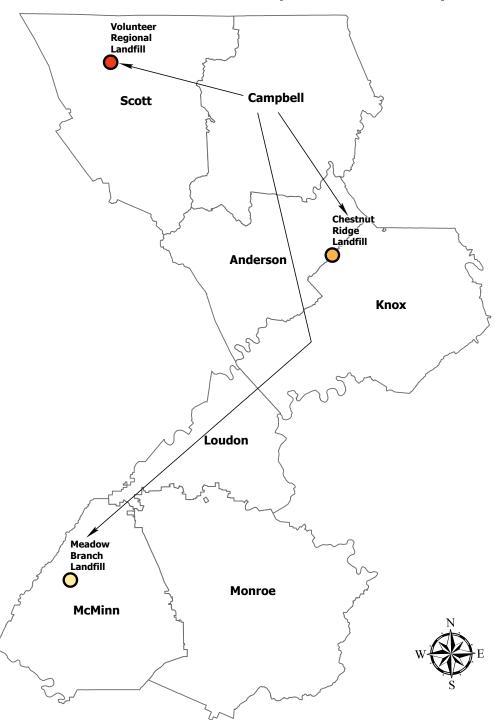
<sup>&</sup>lt;sup>12</sup> Hamblen, Knox, Loudon, Monroe, and Sevier County data is presented in a separate chart to allow for easier viewing of other counties' data in Chart 3-K.



# **Blount County Waste Tonnage**



## Campbell County Waste Tonnage



Class I Proportion

**O** 1.94%

**O** 12.21%

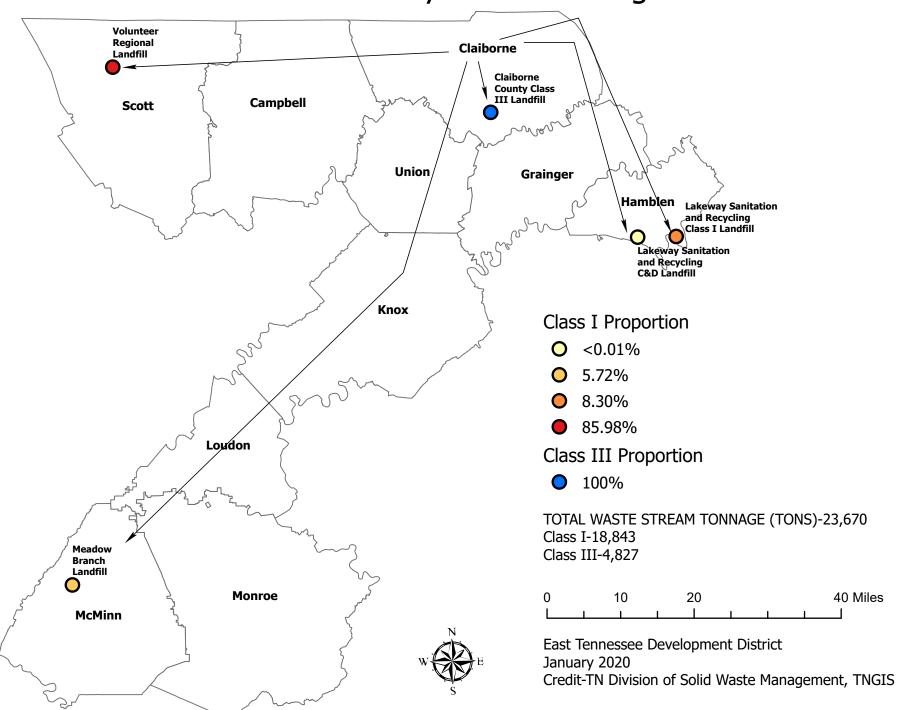
**85.29%** 

TOTAL WASTE STREAM TONNAGE (TONS)-31,792 All Class I

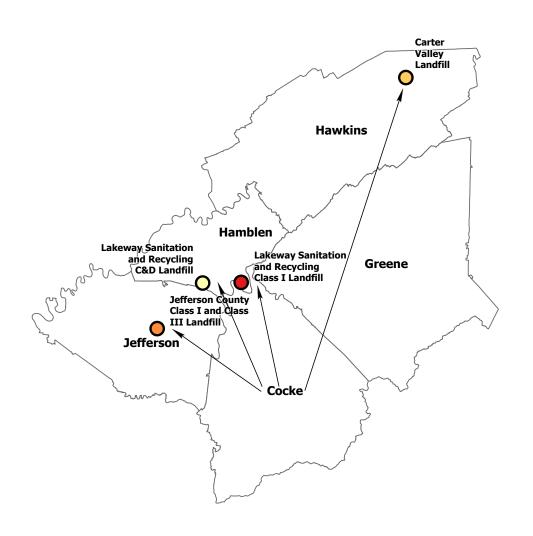


East Tennessee Development District November 2019 Credit-TN Division of Solid Waste Management, TNGIS

### Claiborne County Waste Tonnage



### Cocke County Waste Tonnage



### Class I Proportion

- <0.01%
- 0.30%
- 8.77%
- 90.93%

100% of Class III Waste goes to Jefferson County Class I and Class III Landfill.

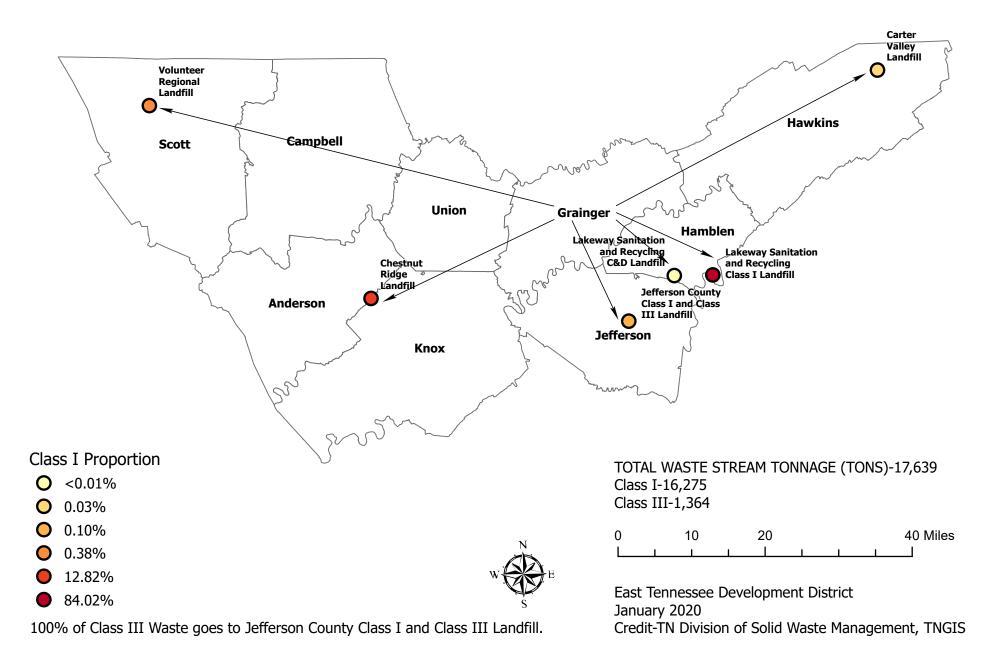
TOTAL WASTE STREAM TONNAGE (TONS)-34,770 Class I-34,688 Class III-82

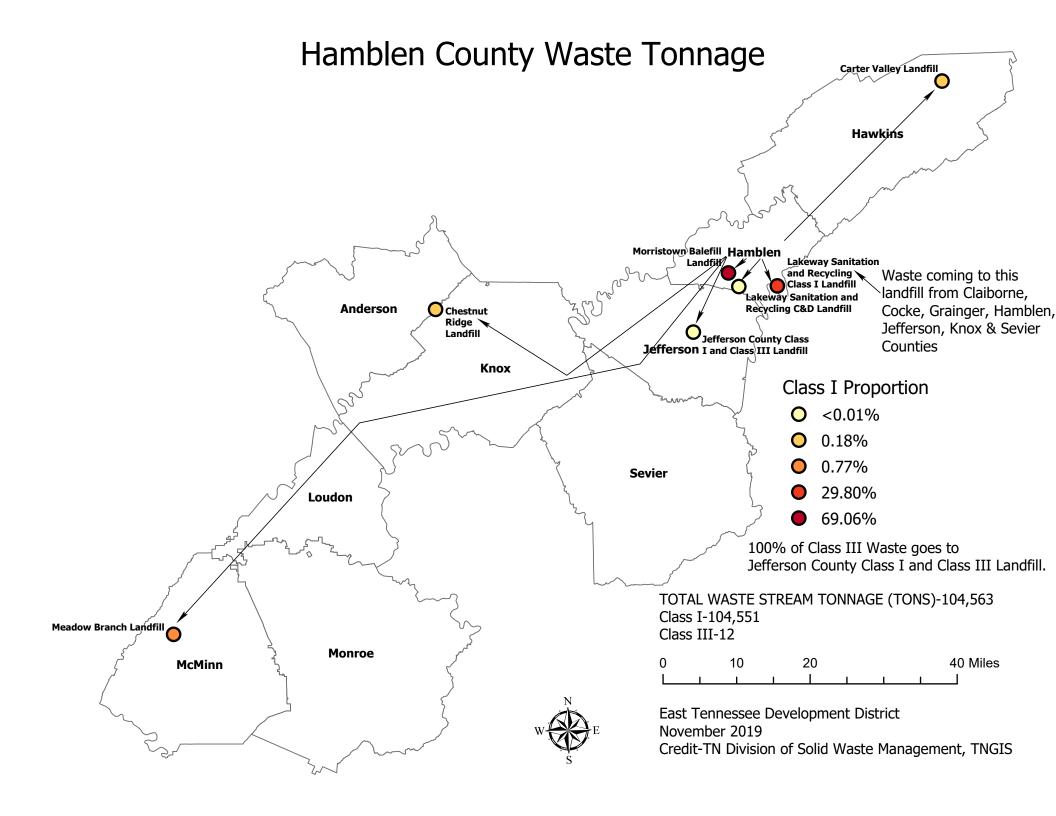


V B

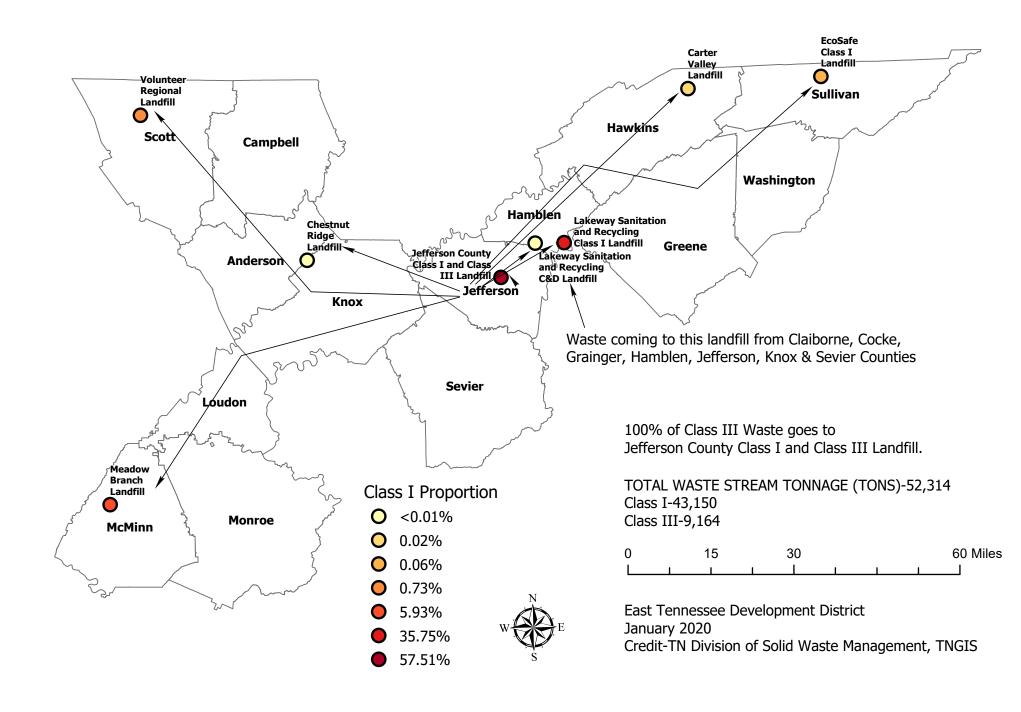
East Tennessee Development District January 2020 Credit-TN Division of Solid Waste Management, TNGIS

### **Grainger County Waste Tonnage**

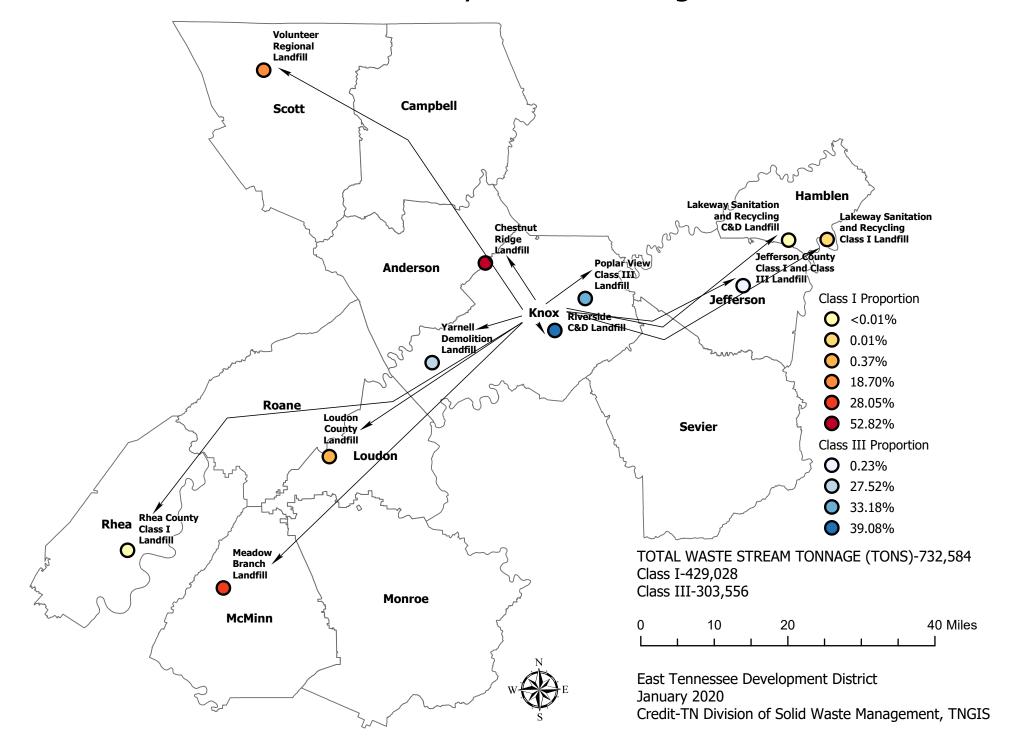




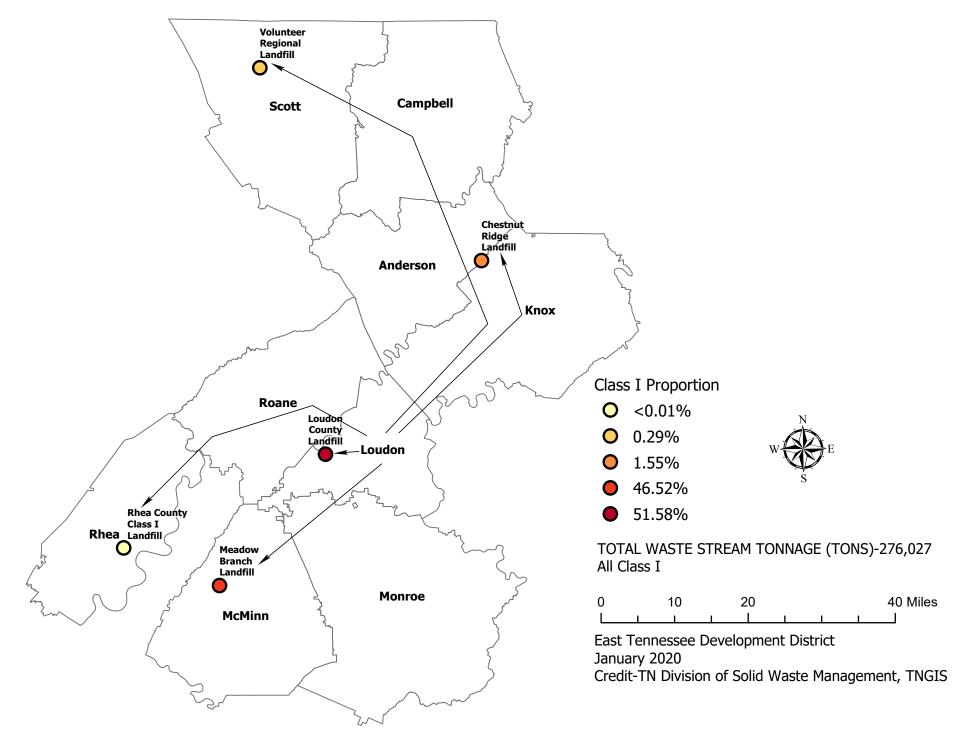
### Jefferson County Waste Tonnage



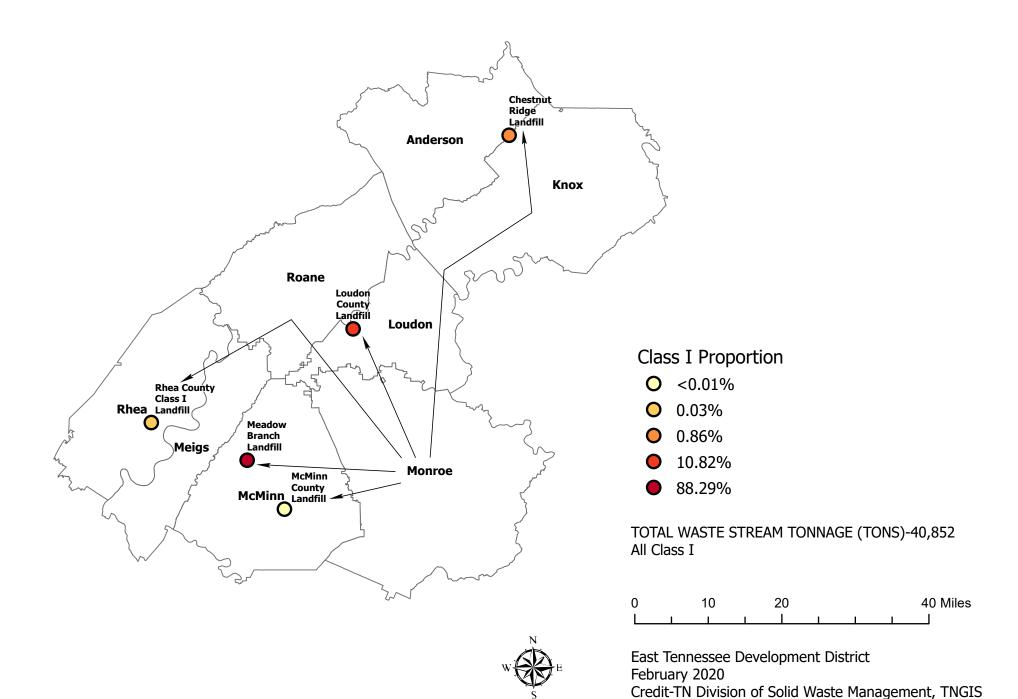
### **Knox County Waste Tonnage**



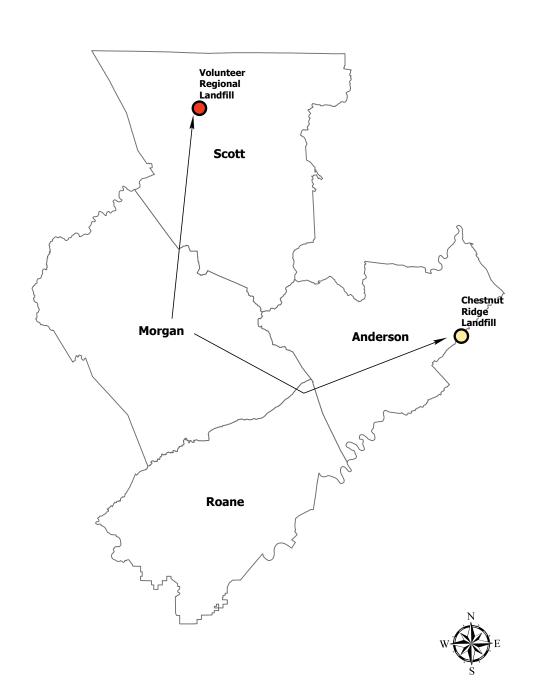
# Loudon County Waste Tonnage



### Monroe County Waste Tonnage



## Morgan County Waste Tonnage



Class I Proportion

**O** 7.74%

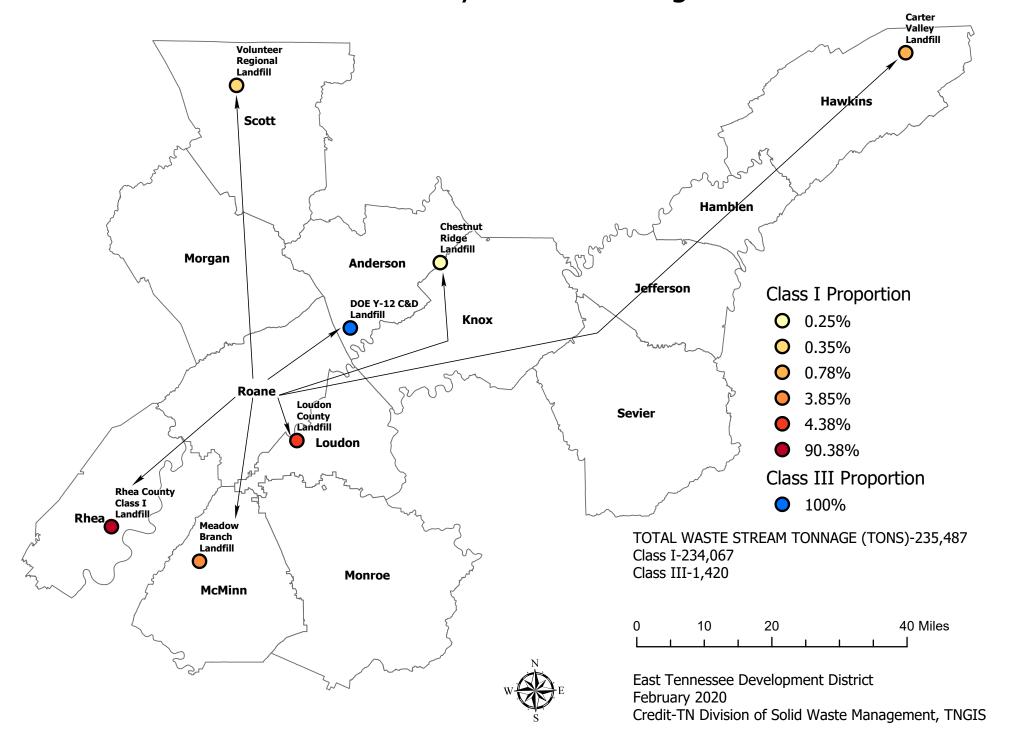
92.26%

TOTAL WASTE STREAM TONNAGE (TONS)-9,410 All Class I

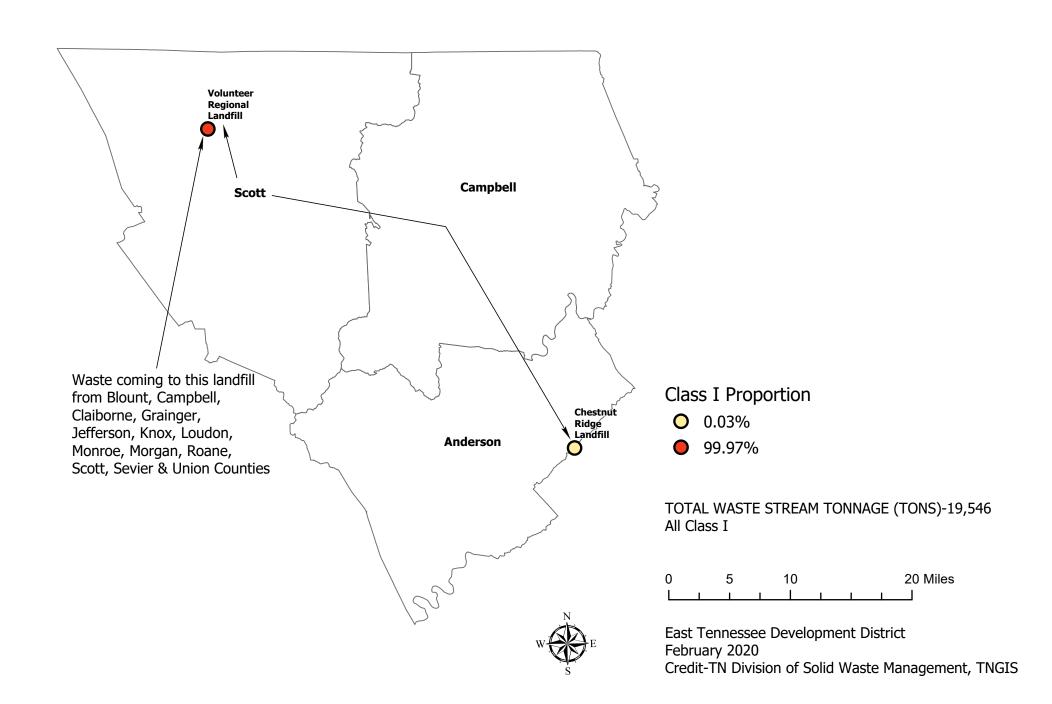
0 5 10 20 Miles

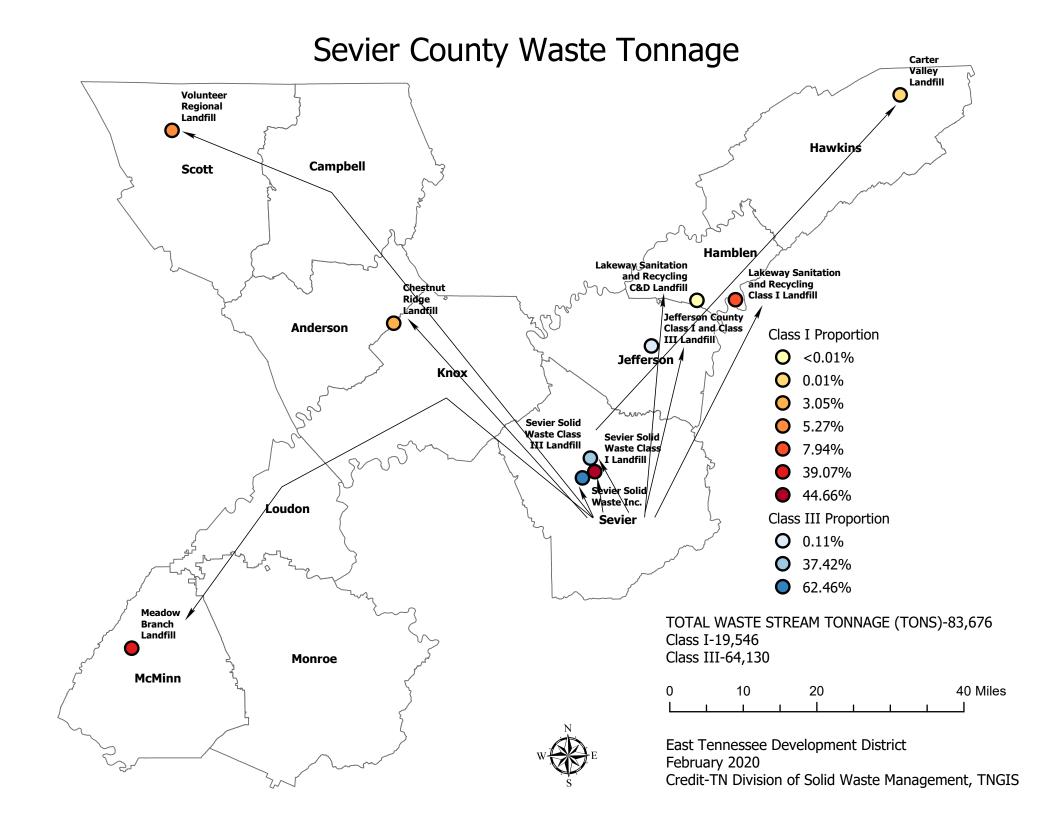
East Tennessee Development District February 2020 Credit-TN Division of Solid Waste Management, TNGIS

### Roane County Waste Tonnage

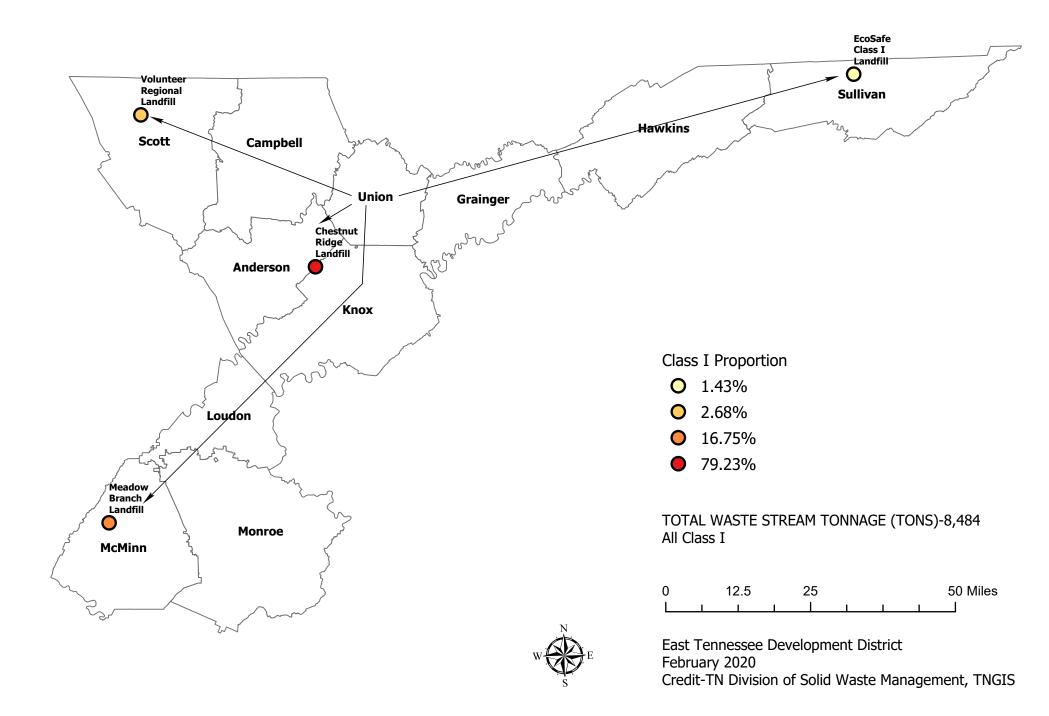


#### Scott County Waste Tonnage

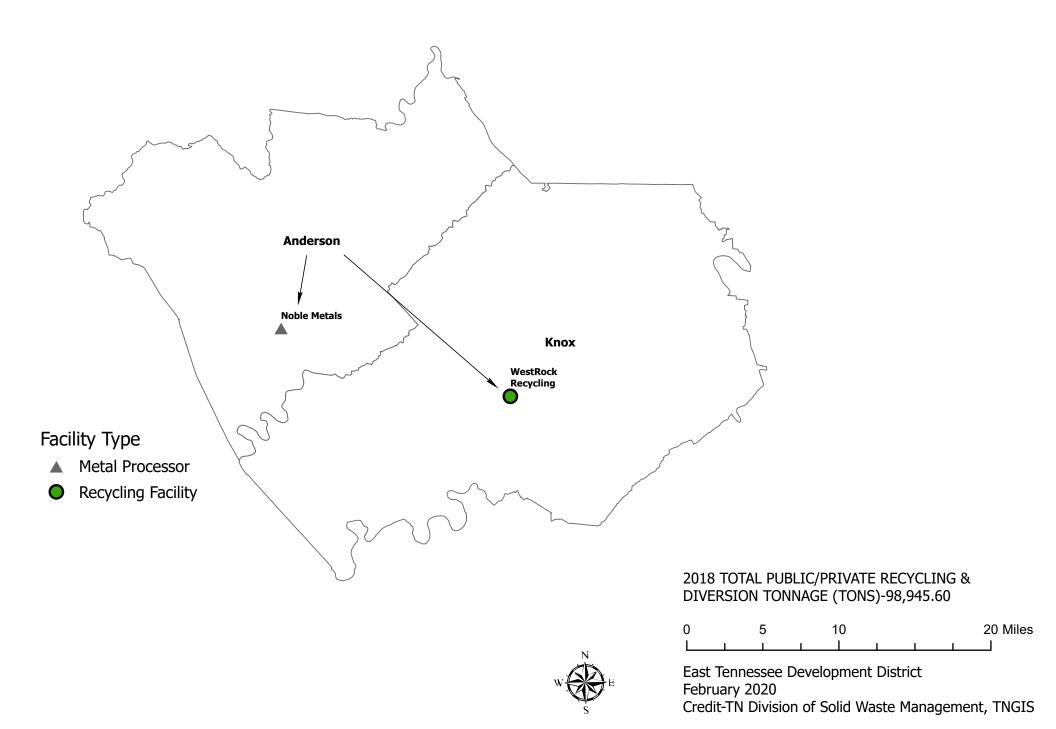




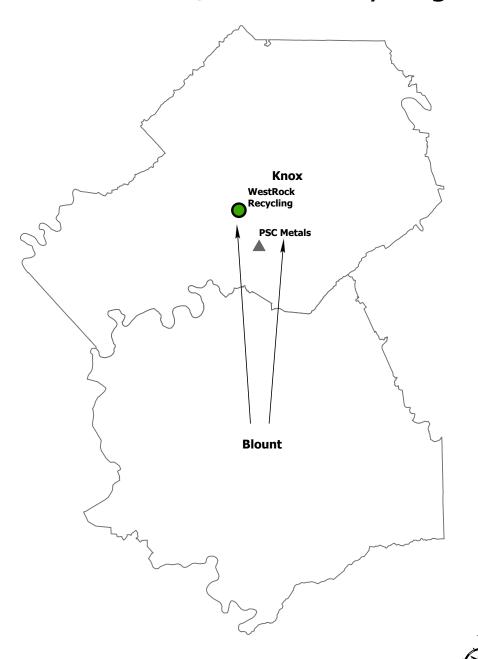
#### **Union County Waste Tonnage**



# Anderson County 2018 Total Public/Private Recycling and Diversion Tonnage



#### **Blount County 2018 Total** Public/Private Recycling and Diversion Tonnage



#### **Facility Type**

Metal Processor

Recycling Facility

2018 TOTAL PUBLIC/PRIVATE RECYCLING & DIVERSION TONNAGE (TONS)-42,137.30

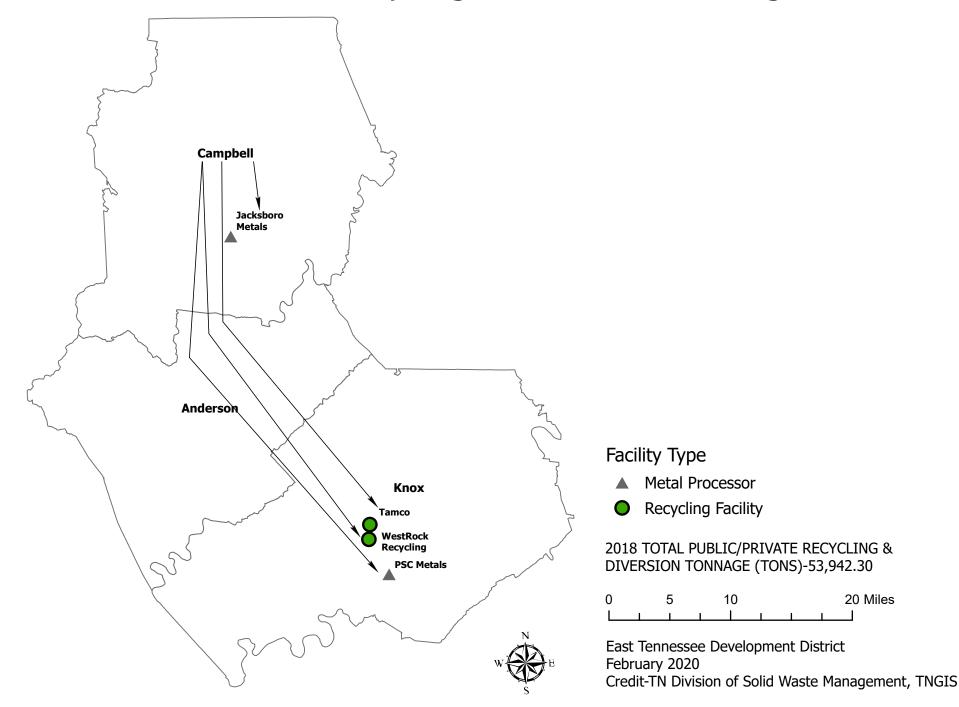
20 Miles

East Tennessee Development District

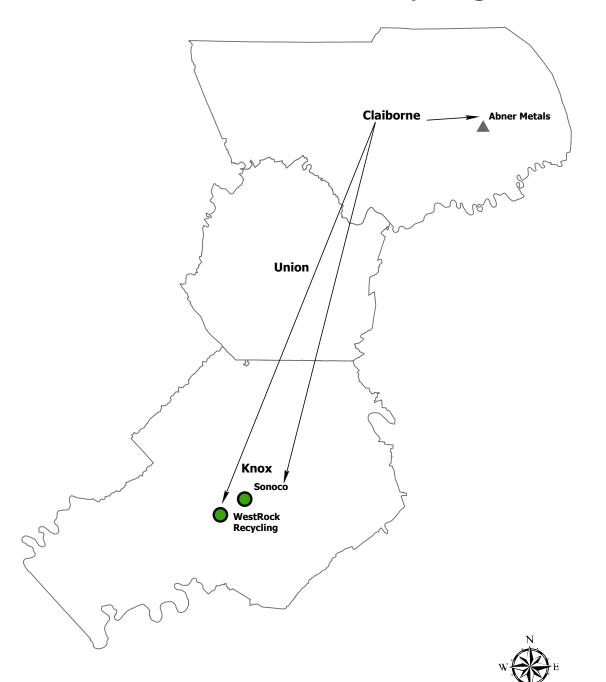
February 2020

Credit-TN Division of Solid Waste Management, TNGIS

# Campbell County 2018 Total Public/Private Recycling and Diversion Tonnage



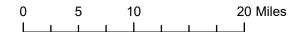
# Claiborne County 2018 Total Public/Private Recycling and Diversion Tonnage



#### Facility Type

- ▲ Metal Processor
- Recycling Facility

2018 TOTAL PUBLIC/PRIVATE RECYCLING & DIVERSION TONNAGE (TONS)-22,815.10

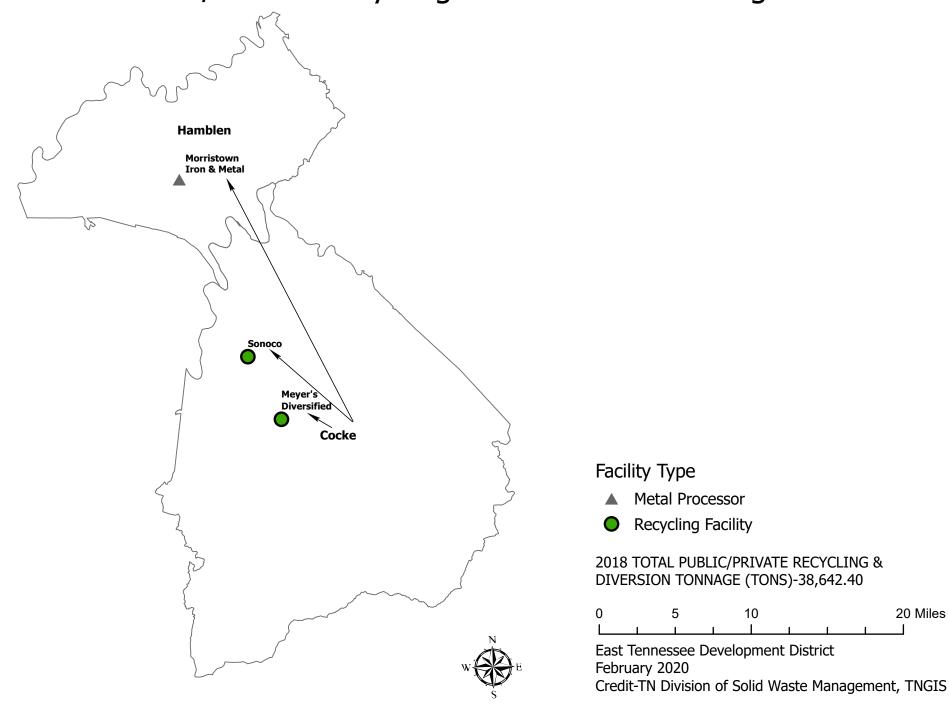


East Tennessee Development District

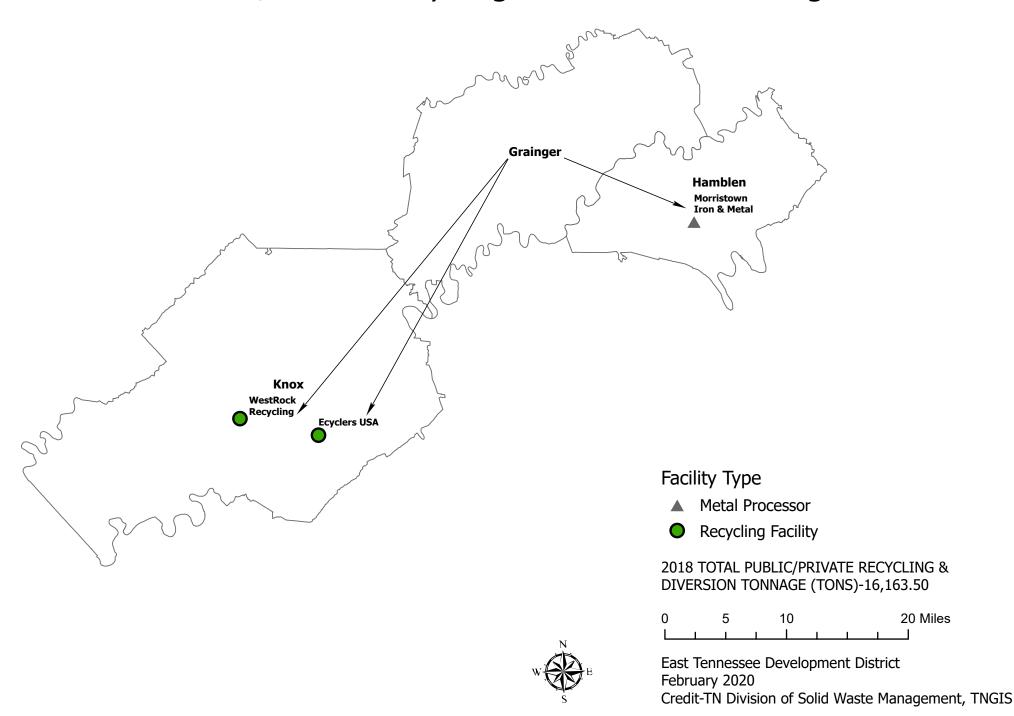
February 2020

Credit-TN Division of Solid Waste Management, TNGIS

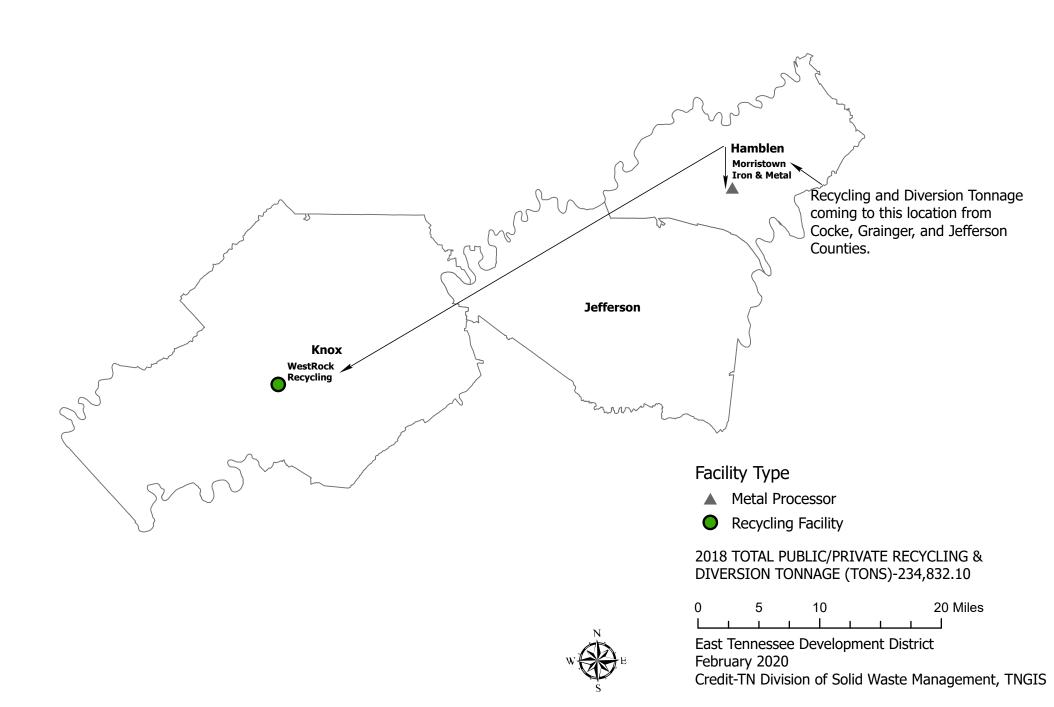
# Cocke County 2018 Total Public/Private Recycling and Diversion Tonnage



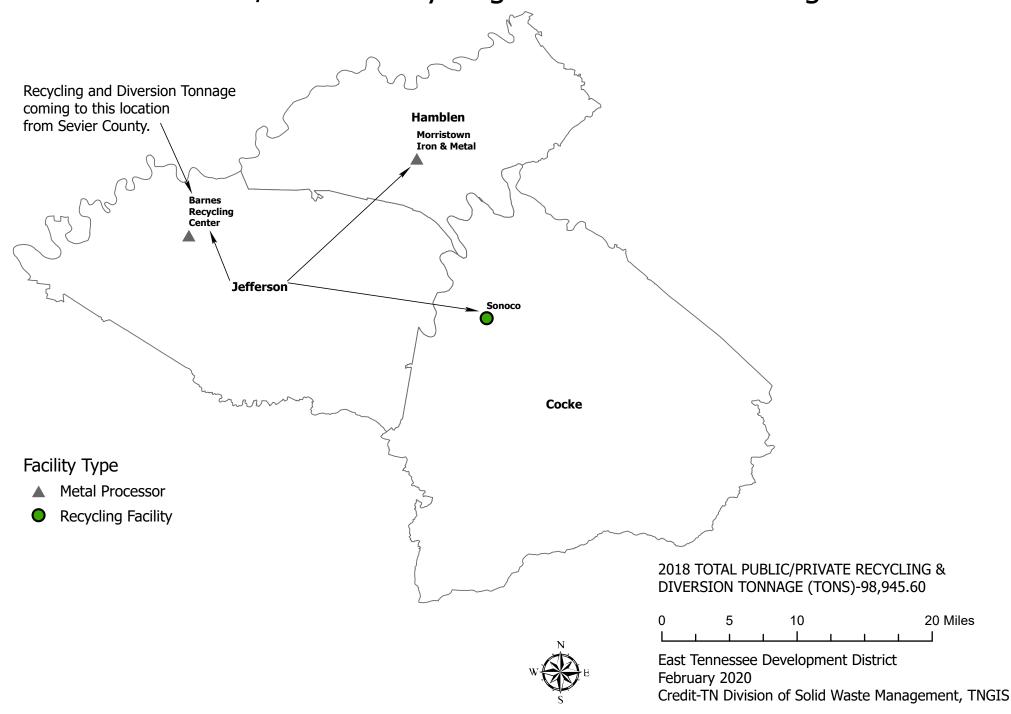
# Grainger County 2018 Total Public/Private Recycling and Diversion Tonnage



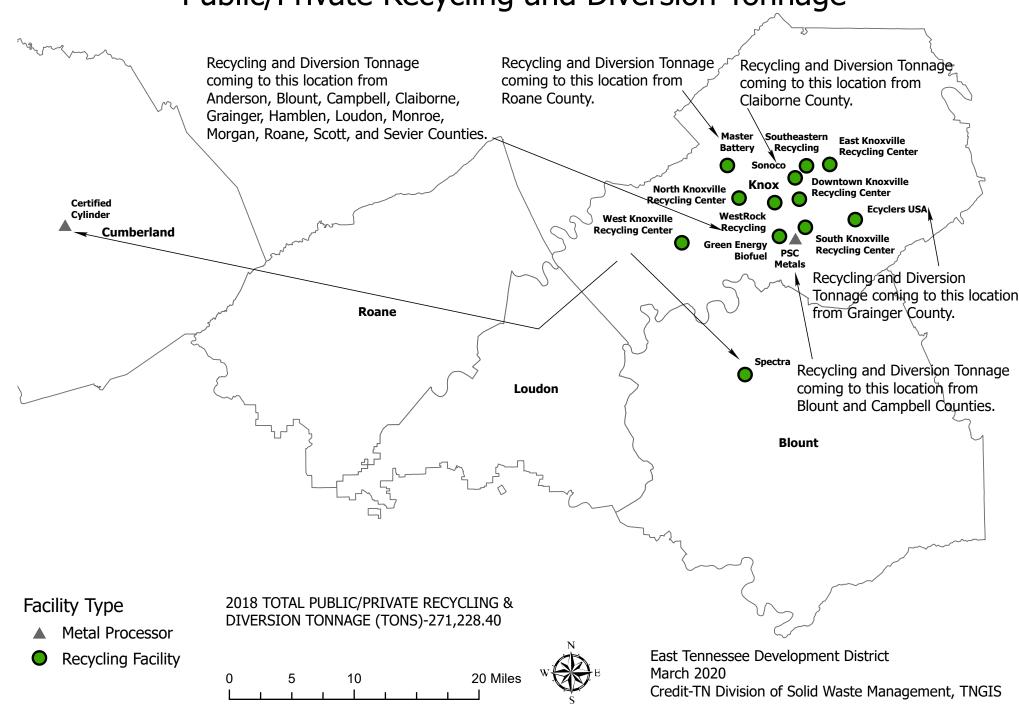
### Hamblen County 2018 Total Public/Private Recycling and Diversion Tonnage



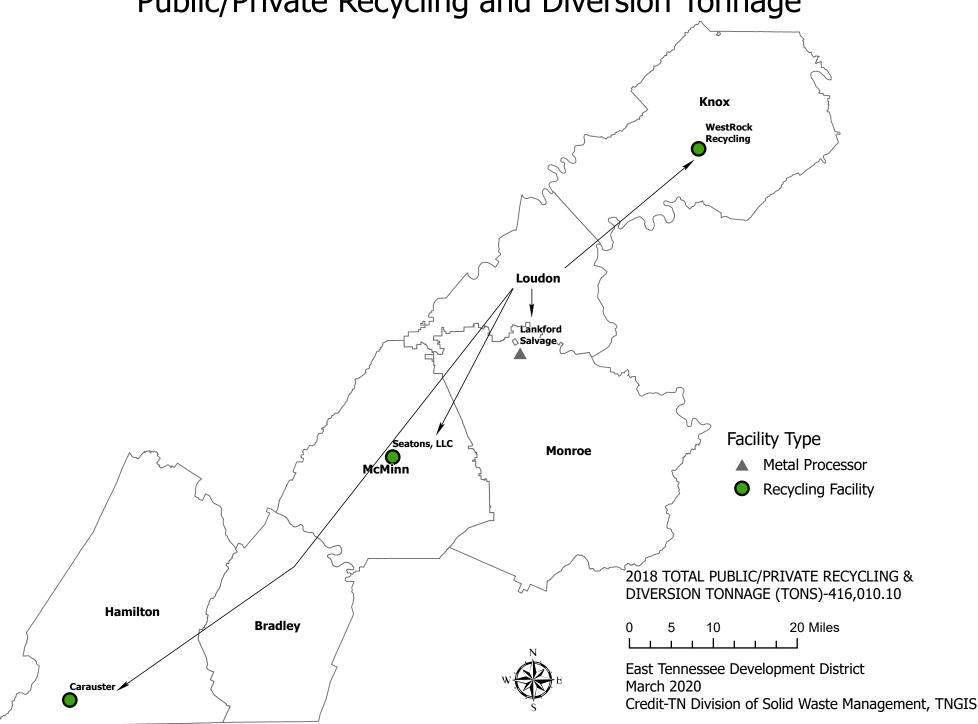
# Jefferson County 2018 Total Public/Private Recycling and Diversion Tonnage



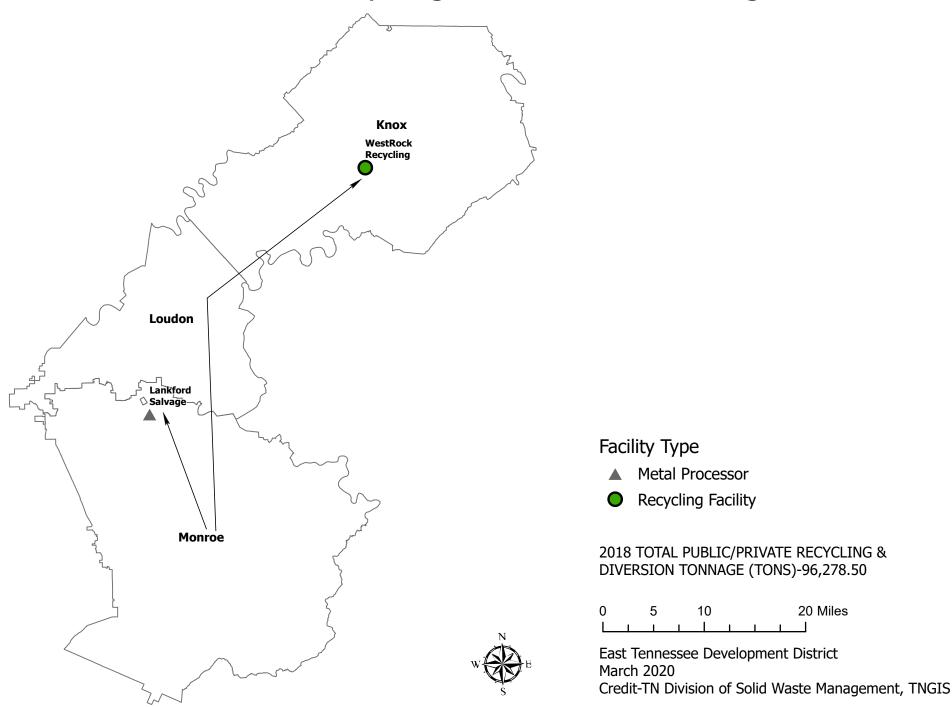
Knox County 2018 Total Public/Private Recycling and Diversion Tonnage

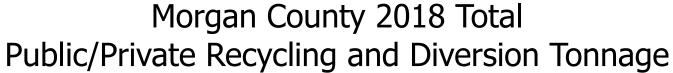


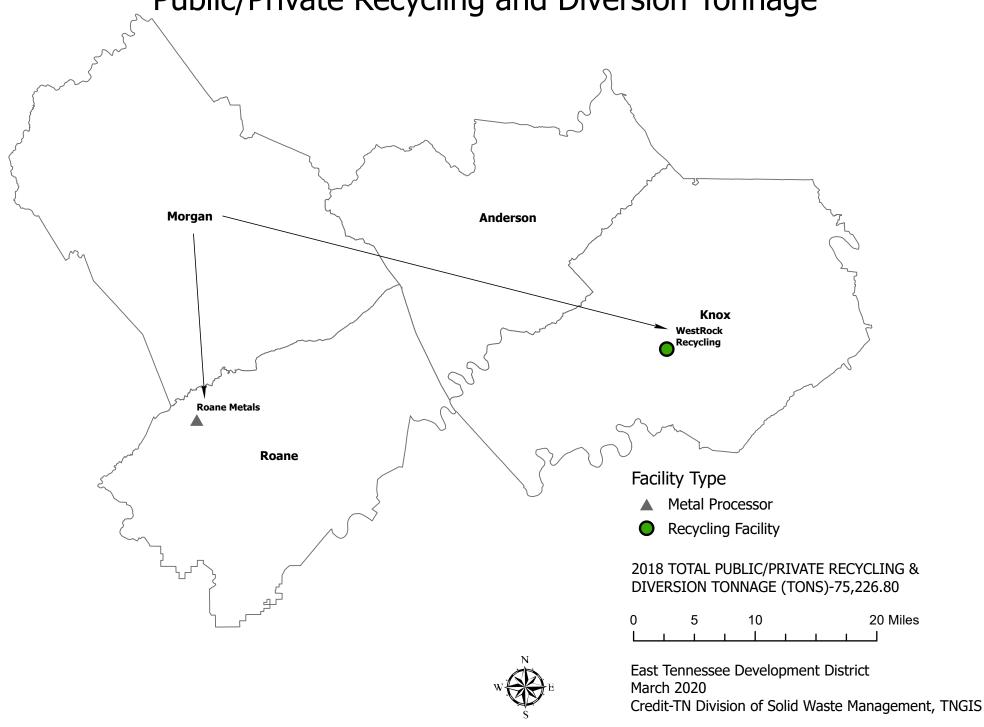
Loudon County 2018 Total Public/Private Recycling and Diversion Tonnage



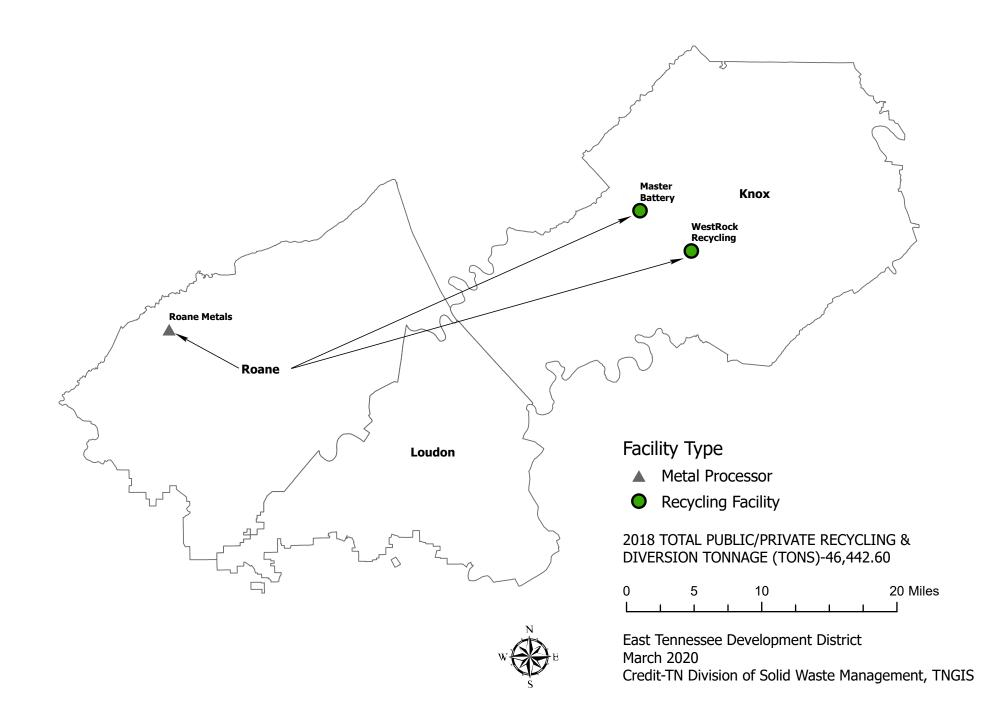
# Monroe County 2018 Total Public/Private Recycling and Diversion Tonnage



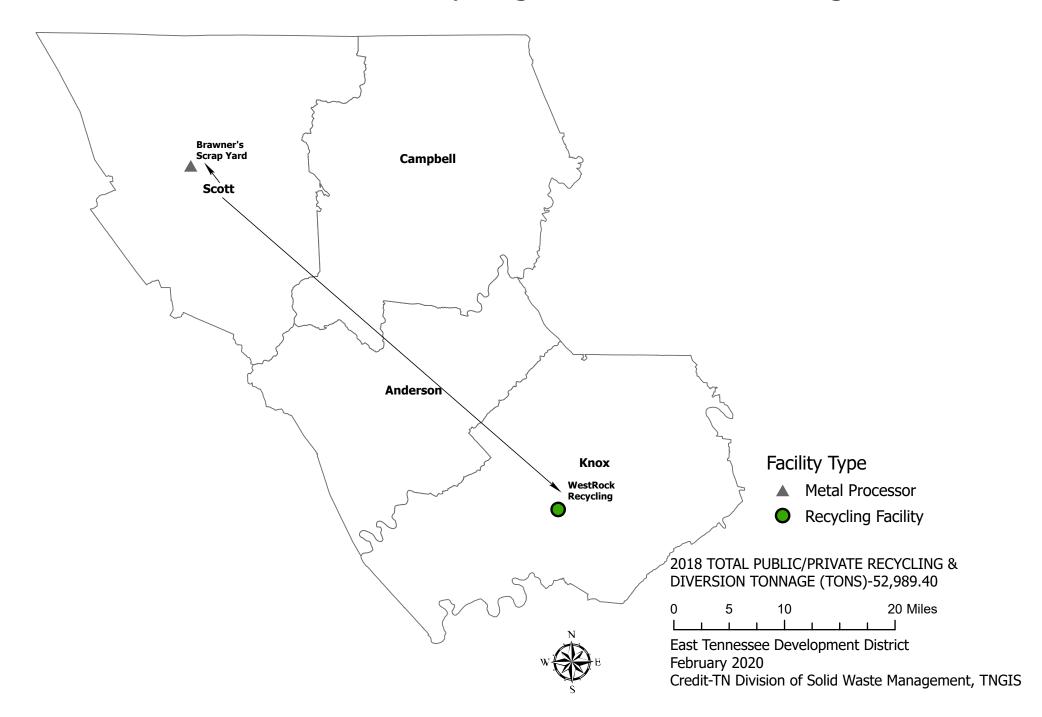




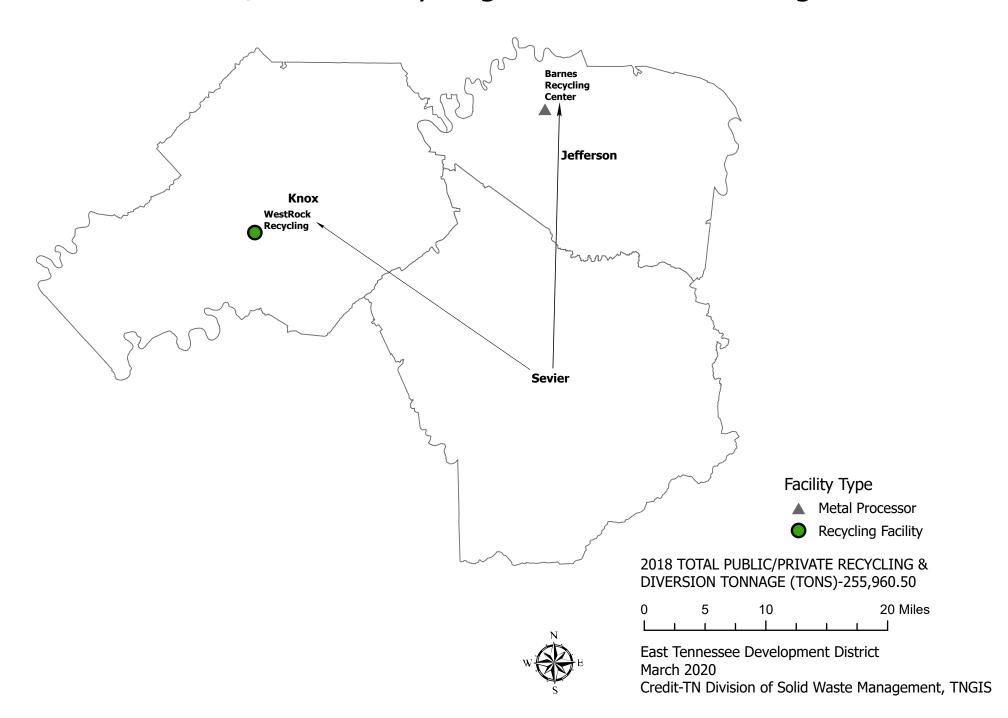
## Roane County 2018 Total Public/Private Recycling and Diversion Tonnage



# Scott County 2018 Total Public/Private Recycling and Diversion Tonnage



## Sevier County 2018 Total Public/Private Recycling and Diversion Tonnage



## Union County 2018 Total Public/Private Recycling and Diversion Tonnage

