

Methods Documentation: Texas

Appendix of Working Paper 24-01 by **Daniel Raimi, Elena Davert, Haley Neuenfeldt, Amy Van Zanen, and Zach Whitlock**

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This document details our methods for collecting and estimating amounts from those taxes, royalties, fees and payments that are distributed to the local level in Texas.

Federal Collections

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State Collections

County Road Oil and Gas Trust Fund – Final values can be found in ‘CountyRoad_Final’ tab in the Estimation_TX.xlsx

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Local Collections

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Ad Valorem Property Taxes on Oil and Gas properties, Gas Distribution Systems, Electric Companies, and Pipelines – Final values for all property taxes can be found in ‘PropTax_Final’ tab in the Estimation_TX.xlsx

2. GOMESA Federal Lands Distribution

2.1. Policy

Texas has relatively few federal lands. However, the state does receive funds from oil and gas leases in the Outer Continental Shelf of the Gulf of Mexico through the Gulf of Mexico Energy Security Act (GOMESA). Some of these funds are distributed directly to coastline counties. From our sample counties in Texas, only Harris County receives GOMESA distributions.

2.2. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_1	US Department of Interior, Office of Natural Resources Revenue	GOMESA Distributions	Revenue from certain leases in the Gulf of Mexico that is shared with coastline counties like Harris County.

2.3. Calculations and Assumptions

These revenues are reported directly by the US Department of Interior's Office of Natural Resources Revenue. Some values may be negative because companies using gulf leases can adjust their payments for up to seven years and may recoup overpayments in subsequent years (Fed_8).

Note: The disbursement amounts can be found in 'GOMESA_Raw' tab.

3. County Road Oil and Gas Trust Fund

3.1. Policy

In 2017, Texas amended Texas Code Chapter 32 to include Sec. 32.2015 which establishes the County Road Oil and Gas Fund. The Fund "[c]onsists of money received from the leasing of oil and gas under lands owned by the state that were or may be acquired by a county to construct a county road. Money is to be disbursed twice a year to the appropriate county for road maintenance purposes" (TX_2). Four counties in our sample received disbursements from this fund between 2018 and 2022: Harris, Martin, Midland and Reeves.

3.2. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_3	Texas Comptroller	County Road Oil and Gas Fund Disbursements	Amounts provided to counties from the County Road Oil and Gas Fund 2018-2022.

3.3. Calculations and Assumptions

These revenues are reported directly by the Texas State Comptroller.

Note: The disbursement amounts can be found in 'CountyRoad_Raw' tab.

4. Oil and Natural Gas Production Taxes; Gas, Water, Electric Utility Tax; Oil Well Service Tax

4.1. Policy

There are several state-levied taxes on oil and gas and related industries that contribute, indirectly to local revenues by way of the Foundation School Account, which is Texas Comptroller Object 0193. The relevant Comptroller Objects for accounts and taxes are henceforth in parentheses. The Foundation School Account (FSA) funds the Foundation School Program which serves as the primary source of state funding for Texas school districts (TX_4). The FSA distributes funding to local school districts based on formulas that incorporate enrollment information and revenues from local property taxes such that schools with greater 'need' receive more funding from the FSA. By way of the General Fund, the FSA receives 25% of revenues derived from several types of energy-related taxes including:

- Oil Production Tax (3290) - Texas Code Sec. 202.352-353
- Gas Production Tax (3291) - Texas Code Sec. 201.403-404
- Gas, Water, Electric Utility Tax (3233) - Texas Code Sec. 182.122
- Oil Well Service Tax (3296) - Texas Code Sec. 191.122

In addition to funds from the FSA, the Foundation School Program is also receives funds from the Available School Fund (0002) (ASF). The ASF serves as a passthrough for funding from the Permanent School Fund (0044) (PSF) which in turn receives 25% of state-collected revenue from oil and gas royalties, bonuses and leases on state lands and lands owned by educational institutions as well as 2/3rds of Outer Continental Shelf Settlement Monies, which are comprised of revenue from offshore oil and gas leases (Texas Code Sec. 202.43.001, U.S. Public Law 99-272).

Therefore, there are two options for attributing Foundation School Program payments to state-collected energy-related revenues. The first is to only follow funds directly distributed to school districts from the Foundation School Account. The second way is to trace distributions back through the ASF to the PSF and its revenue sources. We decided to use the first method and only trace funds received by the FSA and distributed by the FSA because, according to the data we received from the Comptroller as part of our open records request, funds disbursed to school districts never passed through the ASF (0002). However, because the ASF also funds the Foundation School Program, the amount the ASF provides the FSP may influence the amounts of FSP payments. Below we describe both options. The data sources with two asterisks are sources that are only needed for the second option.

4.2. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_5	Texas Comptroller	State Revenues from Energy Sources	Summarizes state revenue collected from for relevant state-collected energy taxes. Data available from 2013-2022. Exact taxes and associated Comptroller Objects listed below: Oil Production Tax (3290), Gas Production Tax (3291), Gas, Water, Electric Utility Tax (3233), Oil Well Service Tax (3296)
TX_6	Texas Comptroller	Gas, Water, Electric Utility tax disaggregation	Data from the Texas Comptroller's Open Records division that reports how much of each tax came from each kind of utility.
TX_7	Texas Comptroller	Revenue distributed to the Foundation School Account	Summarizes amounts coming into the Foundation School Account Comptroller Object (0193) from all sources.
TX_8	Texas Comptroller	FSA Distributions	Texas Comptroller manages the distributions from the Foundation School Account to the individual School Districts. We determined that these records are more accurate than those provided by the Texas Education Agency because they reflect actual amounts distributed rather than calculations. Note that some of these 'disbursements' are negative. Where school districts are well funded by property taxes according to FSP algorithms, FSP does 'recapture' some revenue from those school districts (TX_4).
TX_9	Texas Education Agency	County-School District Files and Shape Files	The Texas Education Agency keeps a list of school districts in Texas and the counties in which they are located, a list of counties and with school districts contained, and shapefiles for counties and school districts were also provided.
TX_10	Texas Comptroller	Revenue to the Permanent School Fund from all sources**	Summarizes revenue to the Permanent School Fund (0044) from all sources including energy-related taxes, royalties, fees, leases and bonuses. Data available 2013-2022.
TX_11	Texas Comptroller	Revenue distributed to the Available School Fund **	Summarizes amounts coming into the Available School Fund (0002) from all sources. Data available 2013-2022.
TX_12	Legislative Budget Board**	Foundation School Program Funding Sources**	Biennial Fiscal Size-up reports published by the Legislative Budget Board contain a section call Foundation School Program Funding Sources which provides funding sources of the FSP by percentages.**

4.3. Calculations and Assumptions

1) Summarizing State-level Revenues

We downloaded state-level energy-related revenue data from the Texas Comptroller, then summarized the data by fiscal year and Comptroller Object: Oil Production Tax (3290), Gas Production Tax (3291), Gas, Water, Electric Utility Tax (3233), and Oil Well Service Tax (3296). A portion of these taxes are distributed to the Foundation School Account (called the Foundation School Fund in some sources) (0193) which then distributes funds to school districts.

Note: These revenues are reported on the “Production_Utility_Raw” tab.

2) Disaggregation and Account Pass-through

We then calculated how much of the revenue from the Oil Production Tax (3290), Gas Production Tax (3291), Gas, Water, Electric Utility Tax (3233), and Oil Well Service Tax (3296) is directed to the FSA. Texas code indicates that one half of one percent of each of the revenues from these taxes goes directly to funding tax collection and the oil and gas regulatory program, and 25% of the remaining revenue is directed to the FSA. The data indicates it may first pass through the General Fund before being directed to the FSA. We therefore multiplied the base tax revenue for Oil Production Tax (3290), Gas Production Tax (3291), and Oil Well Service Tax (3296) for each year by $0.995 * 0.25$ or 0.24875.

Note: These calculations are reported on the “FSA_Ratios” tab.

For the Gas, Water, Electric Utility Tax (3233), we received data from the Comptroller’s Open Records Division which disaggregated this tax so that we could include only taxes from gas utilities. For fiscal year 2022, data was only reported for the first two quarters so instead we used an average of the gas utility revenue from years 2013-2021. We multiplied the revenue from gas utilities for each year by 0.24875.

Note: These data are reported in the “Utility_Breakdown_Raw” tab.

3) Generating Percentages/Ratios

We then generated a percent of funds in the FSA that can be attributed to each of these taxes by dividing the amount generated in Step 2 by the total amount of revenue to the FSA by year.

Note: These calculations are reported on the “FSA_Ratios” tab.

5) Calculating Percentage of School Districts in Each County

We then used Texas Education Agency GIS data to calculate the percentage of each school district’s geographical area in each county and multiplied the FSA disbursements by that percentage to get a sum associated with school district–county. This assumes that the taxable value is proportional to the area in each county which may overcount for some school districts and undercount for others. To ensure we included all relevant school districts for each county, we cross checked the list of school district–county units with other Open Data Requests to the Comptroller that contained school district–county unit lists (TX_34).

Note: The calculation of school district area within a county can be found in the “School_Dist_Overlap_Interim” tab. The distributions can be found in the “FSA_Distro_Raw” tab. The “School_Dist_Attribution_Interim” tab calculates how much of a school district’s distribution can be attributed as revenue to a county based on the geographical area overlap.

We then aggregated up by county.

Note: The results of these calculations are reported in the “School_Dist_Att_PIVOT_Interim” tab.

A note on the Permanent School Fund

Below we document how one could include revenues from oil and gas royalties, bonuses and leases on state lands and lands owned by educational institutions, and Outer Continental Shelf Monies in the analysis with the data we acquired.

Permanent School Fund to Available School Fund Revenues

In order to include revenues from the ASF, researchers could summarize state-level data from the Oil and Gas Lease Bonuses (3315), Oil and Gas Lease Rental (3316), Oil Royalties from lands owned by Educational Institutions (3320), Oil Royalties from Other State Lands (3321), Gas royalties from Lands owned by Educational institutions (3325), and Outer Continental Shelf Settlement Monies (3327) which come from oil and gas leases in the Gulf of Mexico. Royalties – Coal and Lignite (3334) and Wind/Other Surface Lease Income From School Land (3331) are *de minimus* according to our definition and we were not able to procure data from the Comptroller to disaggregate revenue from Wind leases as compared to other leases. Revenues from Wind/Other Surface Lease Income From School Land (3331) are less than \$1,000,000 in any given year except 2022 where they were \$4,690,584.

Permanent School Fund to Available School Fund Revenues

With this data, researchers could generate a percent of the funds in the Permanent School Fund that can be attributed to fossil fuel revenues by dividing the amounts summarized in Step 1 and generated in Step 2 by the total amount of revenue to the Permanent School Fund in each fiscal year.

They could then use state-level data from the Texas Comptroller enumerating how much of the Permanent School Fund is passed on to the Available School Fund to calculate the amounts in the Available School Fund that can be attributed to fossil fuel revenues and divide that by the total revenue to the Available School Fund to generate a percent of the funds in the Available School Fund that can be attributed to fossil fuel revenues in each year.

Calculating amounts of FSP attributable to ASF and FSA

Because the biennial fiscal size-up reports contain pie charts enumerating the percent of the Foundation School Program Budget that comes from each revenue source, it would be possible to multiply the FSP distributions provided by the Texas Comptroller by these ratios to get a dollar amount going to each school district that can be attributable to each fund and then multiply this dollar amount by the percent of those funds that can be attributed to each fossil fuel revenue type (tax, lease, fee, royalty, etc.). Biennial fiscal-size ups are only published every two years. Therefore, we suggest using the report published in 2012 for 2013 and the report published in 2014 for both 2014 and 2015, etc.. Because Texas fiscal years overlap with school years (September to September), they can be used interchangeably to match up Texas Comptroller data and FSP distributions. For example, Texas fiscal year 2021 lines up with the school year 2020-2021.

Note: Data to perform these calculations and some preliminary calculations performed are stored in the Texas data folder under 'State-collected taxes' and 'Data for PSF to ASF to FSP_ NOT USED'.

4.4. Output

Dollars distributed to school districts from the Foundation School Program that can be attributed to fossil fuel taxes.

5. General Methodology Property Taxes and Payments in Lieu of Taxes: Powerplants, Refineries, Natural Gas Processing, Solar Facilities, and Wind Facilities

5.1. Policy

The Texas Constitution and statutory law authorizes local governments to collect property taxes and set tax rates. The state only requires (TX_13):

- All taxation must be equal and uniform. No single property or type of property should be charged more than another.
- Generally, all property must be taxed in proportion to its current market value, with exceptions such as “productivity values for agricultural and timberland”.
- Each property must have a single appraised value. County appraisal districts ensure that individual local taxing units can’t assign different values to a property.

In addition there are several relevant statutes that allow for tax abatement and payments in lieu of taxes. Texas Code Chapter 312 and Chapter 380/381 provide guidelines and criteria localities can use to abate property taxes for local businesses and allow those localities to collect payments in lieu of taxes as part of the agreement. The Chapter 312 program was renewed for another 10 years in 2019.

Texas Code Chapter 313 outlines a program by which school districts can enter similar tax abatement agreements with business. The program also supports school districts in calculating supplemental payments entities are to provide in lieu of taxes. The Chapter 313 program expired on December 31, 2022.

The methodology represents a general approach across counties. Details for each county can be found in subsequent sections. Data inputs in future sections only list county-specific sources.

5.2. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
<i>(Listed by County)</i>	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Eight of the ten Texas counties in our dataset also have a database with tax receipts searchable by owner name, account number, or address. Tax receipts contain actual taxes collected and corresponding school districts.
<i>(Listed by County)</i>	County Appraisal District	Tax Receipts Property Search Database	Some counties separate collection for certain districts such that the tax assessor collector collects for some jurisdictions and the county appraisal district collect for other jurisdictions. In these circumstances there is a separate searchable tax receipt database housed by the County Appraisal District.
Fed_12	U.S. Energy Information Administration	Energy Infrastructure Map	Contains locations of powerplants, renewable energy facilities, pipelines, refineries.
Fed_10	U.S. Energy Information Administration	Natural Gas Processing Facilities	EIA data for Natural Gas Processing facilities by county for 2012, 2014 and 2017.
Fed_6	U.S. Energy Information Administration	Preliminary Monthly Electric Generator Inventory September 2022	Excel/csv data of generation and locations of powerplants, renewable energy facilities by county by month. The September 2022 file contains a tab with information on all facilities retired since 2002.
Fed_4	U.S. Energy Information Administration	860-m	Excel downloads for generation and locations of powerplants, renewable energy facilities by county reported annually. The 2021 data will be used to search for facility names.
Fed_11	U.S. Energy Information Administration	EIA Petroleum Refineries	A downloaded table of refineries from EIA's GIS Mapping system.
<i>(Listed by County)</i>	County Auditor	Annual Financial Reports	Some contain information about Payments in Lieu of Taxes under Chapter 312 or 380/381. Only those statements that contained relevant information are listed.
TX_14	Texas Comptroller	List of 380/381 Agreements for PILOTs to Local Governments	Provides copies of agreements between local governments and entities.

TX_15	Texas Comptroller	List of 313 Agreements for PILOTs to School Districts	Contains information by School District for facilities that provide Payments in Lieu of Taxes including payment amounts.
TX_9	Texas Education Agency	County-School District Files and Shape Files	The Texas Education Agency keeps a list of school districts in Texas and the counties in which they are located, a list of counties and with school districts contained, and shapefiles for counties and school districts were also provided.

5.3. Calculations and Assumptions

1) Compile a list of relevant facilities across fiscal years

- We used EIA 860-m 2021 Plant to collect names, operators, and addresses of currently operating coal, natural gas, petroleum powerplants, wind and solar facilities in each sample county. We cross-referenced this with EIA 860-m 2021 Generator data to ensure we were addressing facilities where generators used in-scope technologies.
- We used the ‘Retired’ tab in EIA Preliminary Monthly Electric Generator Inventory’s September 2022 file to collect the names and operators of facilities retired since 2014. However, many of our sample counties do not publish tax receipts as far back as 2014.
- We used data from the EIA Energy Infrastructure Map to locate natural gas processing facilities and refineries in each county.
- We used EIA data on retired Natural Gas processing facilities for 2014 and 2017 to find names and operators of retired facilities to cross-check with the EIA Energy Infrastructure Map.
- We used EIA data on refinery facilities as of 2021 to find names, operators, and addresses of refineries to cross-check with the EIA Energy Infrastructure Map.

Where other information is not specified, this is the method used to compile a list of facilities.

Note: A list of these facilities and information regarding how they were included in the sample can be found in the Texas data folder in ‘PropertyTaxReceipts_by_County.’

2) Query Property Tax Receipt Databases

We searched operator names in Property Tax Receipt Databases. Details on these databases and their formats in each county can be found in the county-specific methodology.

Note: Data copy and pasted from these receipts for all but Carson and Harris counties can be found in the ‘Facilities_PropTax_Raw’ tab. Revenues for Carson and Harris counties required additional estimation, therefore the receipts received from these counties are stored in their own tabs.

3) Search for Payments in Lieu of Taxes

Chapter 312 are typically reported out in County Audited Financial Statements. We therefore reviewed county financial statements for abatements or payments in lieu of taxes and contacted County Auditor’s, Treasurer’s, Judge’s and Clerk’s offices as needed to receive more information.

The state collects and publishes 380/381 agreements on the Comptroller's website. These were largely used to verify which counties has agreements as the agreements did not stipulate exact amounts for payments in lieu of taxes, rather they provided formulas.

In the case of Chapter 313 agreement, the state collects data on the implementation of these agreements, including names of energy facilities and school districts as well as corresponding supplementary payments from those facilities to the school district. To acquire this data, we cross referenced County-School District Matchup and List of Agreements for PILOTs to School Districts to identify school districts in our sample counties that have entered into agreements and receive PILOTs. We then cross-referenced with our list of facilities compiled in Step 1. We then downloaded the '2022 School District Cost Data Report' for each facility in our sample with an agreement and extracted the payment amounts. There were seven agreements for which the webpages had been removed because the agreements had expired. We received data on corresponding payments for these agreements via an Open Data Request to the Comptroller.

Note: A list of facilities and school districts with agreements can be found in the Texas data folder in 'PILOTs' > 'Chapter 313 Program.' Payments through Chapters 312, 313 and 380 were copied and pasted into the 'Fac_Prop_PILTS_Raw' tab.

In the following county-specific methods sections we detail how many school districts have entered into agreements.

5.4. Output

Actual tax receipt data disaggregated by sub-county jurisdiction from coal and natural gas powerplants, oil refineries, natural gas processing facilities, and wind and solar generation facilities. Exact outputs are detailed in the county-specific methodology. Counties have different tax receipt formats. This means that some counties may aggregate a powerplant's relevant real or personal property whereas other counties break this out by category (i.e. vehicles, computer equipment, storage tanks, etc.).

The output for each county will be the will be the same therefore this section is removed from the following methods sections.

6. Andrews County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

6.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_16	Andrews County Tax Assessor Collector Website	Tax Receipts Property Search Database	The Andrews County Tax Assessor Collector collects taxes for Andrews County and Andrews County Road and Bridge.
TX_17	Andrews County Appraisal District	Tax Receipts Property Search Database	The Andrews County Central Appraisal District collects taxes for Andrews ISD, Andrews County Hospital District and the City of Andrews.

6.2. County-Specific Information

Query Property Tax Receipt Database

Both the County Appraisal District and the County Tax Assessor Collectors' Property Search databases were searchable by Names, Addresses, Property ID and Geographic ID. We then searched by facilities and owner names. Facility and owner names matched up well with the databases and we cross checked the legal descriptions on the county site to ensure the receipts matched the facilities and energy-related property. We then downloaded the tax history page for each facility.

Payments in Lieu of Taxes

All five renewable energy facilities in Andrews County have active Chapter 313 agreements with the county. All five renewable energy facilities also have Chapter 380 agreements. Three provide payments in lieu of taxes as part of the agreement: JumboHill Wind, Prospero Solar and Permian Solar. These amounts were provided over the phone by the County Auditor.

7. Carson County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

7.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_18	County Appraisal District	Tax Receipts Received	The Carson County Appraisal District collects taxes for school districts, hospitals, cities and other special districts.
TX_19	County Auditor	Annual Financial Reports	Contains Payment in Lieu of Taxes and tax abatement information.
TX_20	County Tax Assessor Collector Website	Truth in Taxation Tax Rates	Contains tax rate information for the county for Fiscal Years 2018-2022

7.2. County-Specific Information

Outreach to Carson County CAD and Tax Office

We provided this list of facilities to Carson County Tax Office. They were able to provide only three related records. These were not used to estimate revenue.

Carson County Central Appraisal District has provided tax receipts for most wind facilities. No data was provided for natural gas processing facilities. Because the Central Appraisal District levies tax for most of the jurisdictions in the county, these tax receipts provide the majority of the tax receipts from these facilities to jurisdictions in the county, however, the Tax Office collects taxes for the county itself which includes taxes collected for the Road and Bridge taxing unit.

Note: This information can be found in 'Carson_FacProp_Raw.'

Payments in Lieu of Taxes

Three wind facilities in Carson County have active agreements with school districts.

Note: This information can be found in 'Fac_Prop_PILTS_Raw.'

Carson County Audited Financial Statements for 2018-2021 provide the amounts of several PILOTs paid by wind facilities as well as information on the tax abatement amounts for wind facilities. Most facilities paying PILOTs received 100% tax abatement from the county. Two received 87% abatement. The Audited Financial Statements include a PILOT for a wind facility called Grandview 3, however, Grandview 3 appears to have been cancelled per

EIA-860 data. Because the value of the PILT for both Grandview facilities (1 and 3) in 2020 and 2021 to the value of the PILT for Grandview 1 in 2018 and 2019, we assumed that the actual PILOT received is the same even though Grandview 3 was never built.

Note: These calculations can be found in 'Carson_FacProp_Interim.'

Calculations for Taxes levied by County Taxing Unit

We used the abatement information provided by the Audited Financial Statements as well as the tax rate for the county tax unit for the years 2018-2019 and the taxable values stated on the tax receipts we received from the Central Appraisal District to estimate the amount of tax the County Taxing Unit would have received from the wind facilities within the county. In this circumstance we were not able to separate out the Road and Bridge taxing unit as in other counties. We did this by multiplying the tax rate by the taxable value for those facilities that received no abatement. For those facilities that received 87% abatement, we multiplied their taxable value by 0.13 and then by the tax rate reported in the Truth in Taxation Summary. Because we were missing data for some years for some facilities, we then averaged these calculations by facility over the years for which we had data for each facility, we then summed these averaged amounts and applied them to all four fiscal years.

Note: These calculations can be found in 'Carson_FacProp_Interim.'

Three wind facilities have active Chapter 313 agreements with five school districts in Carson County. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

8. Harris County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

8.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_21	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Harris County Tax Assessor / Collector collects counties for the county, hospital and school jurisdictions.

8.2. County-Specific Information

Property Tax Receipt Database

Harris County's Tax Assessor / Collector Property Tax Search Function could be queried with addresses, 'names', or account numbers. Unlike other county's databases, the address associated with the account was the address of the property. We tried searching for addresses and operator names. However, it was incredibly difficult to associate the receipts with specific energy facilities based on addresses, operator names and legal descriptions. Almost all facilities in Harris are natural gas power plants. No data was found for the single solar facility in Harris County nor for the natural gas processing facilities.

EIA data places eight refineries in Harris County. We found data that could be reasonably associated with the refinery and was reasonably complete for four of these facilities though it was not possible with this data to distinguish between the taxes gathered for natural gas generators associated with the refineries and actual refinery property. We used receipts downloaded to generate a ratio of tax receipts by jurisdiction to AD Mbpd (Atmospheric Distillation Capacity) data from EIA. AD Mbpd is the volume of crude oil, measured in thousands of barrels per day (Mb/d), processed by the atmospheric distillation chamber of a refinery and can be used as a proxy for general facility capacity. We then multiplied the dollar per AD Mbpd amount by the total AD Mbpd in Harris County according to EIA data. This may also shift some tax dollars from the category of natural gas power plants to oil refining.

For natural gas power plants, we used 2021 EIA data for Generators since this reported nameplate capacity. Because there are multiple generators per plant, we aggregated the nameplate capacity at plants in Harris County and then chose the five plants with the largest nameplate capacity. These ranged from 1189.9 MW at TH Wharton (NRG Texas Power) to 815 MW at Pasadena Cogeneration. We searched for the Utility name in the Harris County Tax Office's Property Tax Receipt Search and where necessary cross-referenced the street address listed in the EIA data to identify receipts. We downloaded receipts associated with these facilities and then attempted to determine a tax revenue ratio of dollars per nameplate capacity. Note that TH Wharton is one of the largest natural gas power plants in the county per its megawatt capacity and it also paid much less in tax revenue per MW than the other large natural gas power plants. We suspect that this might be due to the plant's age as it began operating in the 1970's.

We then multiplied this dollar per nameplate capacity by the nameplate capacity for all natural gas generators in Harris County that are not associated with a refinery and are above 1.2 MW since most facilities below this threshold are individual stores and businesses that have their own generators. This does not provide granularity in taxing jurisdictions.

Note: These calculations can be found in the 'Harris_FacProp_Interim' tab.

Payments in Lieu of Taxes

While there are facilities that are covered by the 313 program in Harris, only one appears on the list of EIA facilities and we were not able to find tax receipts to corroborate. The facility appears to be a petrochemical plant that may or may not include refining activities. County Tax Office staff were not aware of any other payments in lieu of taxes. County Audited Financial Statements do not indicate that energy facilities receive tax abatement or provide payments in lieu of taxes to the county. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

9. Limestone County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

9.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_22	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Limestone County Tax Assessor Collector collects taxes for all taxing jurisdiction in Limestone County. Tax receipts contain actual taxes collected for each sub-county taxing jurisdiction.

9.2. County-Specific Information

Property Tax Receipt Database

The Limestone County Tax Assessor-Collector Property search database has an advanced search feature which enables entering more narrow search criteria. We used the Owner Information section of this Advanced Search to search the names of the facilities in the 'Business Name' search bar. Where names of facilities did not return associated results, we searched the name of the operator/owner. We then used a dropdown feature to include the legal description of properties and exported this list to Excel. From there we sorted by the Assessed Value column which allowed us to narrow in on properties most likely associated with facilities of interest and referenced legal descriptions to pull tax receipts for properties associated with the facility. Limestone County has several legacy and current natural gas processing facilities for which we pulled tax receipts for natural gas processing 'plants'. We did not pull receipts of pipelines, vehicles, office buildings or other supplies associated with the facilities. We also did not pull receipts for standalone compressor stations (Sadler, Morton and Chandler). This is aligned with the methodology for other counties. Where the legal descriptions were ambiguous regarding the property taxed, we did not pull receipts where the associated tax revenue was less than \$10,000 or the assessed value in 2022 was less than \$100,000.

We found evidence that at least one piece of 'property' associated with the Limestone Generating Plant, a coal-fired power plant, was entirely exempt from taxes in 2021. However, there are tax receipts for other 'properties' associated with the plant. While the legal descriptions are fairly informative, on occasion the same legal description would be entered for different property IDs so it is not clear what is being taxed and what is exempt.

Payments in Lieu of Taxes

One wind facility in Limestone County has an active agreement with a school district in Limestone County. Limestone County does not publish their audited financial statements on their website. County Appraisal District and County Tax Office staff were not aware of any other payments in lieu of taxes. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

10. Martin County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

10.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_23	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Martin County Tax Assessor Collector collects taxes for Martin County, Martin County Road and Bridge, Permian Basin Underground Water District.
TX_24	County Appraisal District	Tax Receipts Property Search Database	Martin County Appraisal District collects taxes for the City of Stanton, Grady ISD, Stanton ISK, Sands CISD, Martin County Fresh Water District and Martin County Hospital District.

10.2. County-Specific Information

Property Tax Receipt Databases

Both tax receipt databases can be queried with owner name, owner number, property address, account number or parcel ID; we used owner names from the compiled list of relevant facilities to search for receipts. Facilities names were often included with the owner name in the results. Frequently, more than one account number would be associated with a facility name. We opened all receipts associated with the owner/facility name and compared legal descriptions to download energy-related 'properties.' Vehicles and other office equipment were excluded.

Payments in Lieu of Taxes

There is one energy company in Martin County with a current Chapter 313 agreement with a Martin County school district. The County Appraisal District reported over the phone that they are unaware of any other payments in lieu of taxes nor did audited statements indicate any payments or abatement. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

11. Midland County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

11.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_25	County Appraisal District	Tax Receipts Property Search Database	Midland County Appraisal District collects taxes for all taxing jurisdictions in Midland.

11.2. County-Specific Information

Property Tax Receipt Database

The Midland CAD database can be queried using owner name, property address, legal description, geographic ID and property ID. Similarly to other counties, we searched for owner name and facility name from the compiled list from Step 1. We downloaded receipts for plants. These were identified through referencing the legal description. This may not include all compressors associated with each plant, however, there was not a clear way of associating compressors with plants. Two natural gas processing facilities were not included: Bradford Ranch and Midkiff. In the case of Bradford Ranch, which appears to have been retired in 2019, the data that we pulled was not clearly associated with the plant itself. In the case of Midkiff, the plant's name did not appear in legal descriptions associated with the operator company, Atlas Pipeline. The word 'Midkiff' appeared in other legal descriptions for other gas companies. It appeared to be the name of a compressor station as opposed to a plant. This approach may undercount the reliance of taxing jurisdictions on natural gas infrastructure in this county. Based on observation

during the data collection process for this county, however, each compressor station appeared to contribute less than \$30,000 in tax revenue per year between all taxing jurisdictions. Two other plants were found in the data collection process that did not appear in the EIA list of natural gas processing facilities, Midland County Gas Plant and Newberry Gas Plant, both appear to be operated by Navitas Midstream, LLC similarly to the Sprayberry Plant. We downloaded receipts for the Sprayberry plant for FY 2016-2021. There is some evidence from receipts associated with the Roberts Ranch and Pegasus plants (#2957969) that the Sprayberry Plant was operated by DCP Midstream and paid taxes prior to 2016 as far back as 2013, however, searching for the affiliated Property IDs and Geo IDs did not turn up receipts between 2013 and 2016 so the 2013 data was left out of our accounting.

Payments in Lieu of Taxes

At present no facilities in Midland have active agreements under Texas Code 313 with school districts in Midland. Audited Financial Statements for 2018-2021 do not indicate tax abatement taken under Texas Code 312. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

12. Nolan County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

12.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_26	County Appraisal District	Tax Receipts Property Search Database	Nolan County's taxes are assessed and collected by Nolan County Central Appraisal District. All receipts are in the online database.

12.2. County-Specific Information

Property Tax Receipt Database

Some receipts are stored with the EIA 860-m 'Utility Name' and others are stored under the EIA 860-m 'Plant Name'. We tried searching under both names as the 'Owner Name' in the Nolan County Central Appraisal District Property Search Database. Tax receipt downloads do not include taxes on operation and maintenance 'improvements' to facilities. These generally were less than \$10,000 per year per facility. In many cases there was more than one account associated with a facility. For the most part, these accounts were divided by type of property taxes (i.e. turbines, vehicles, electrical equipment). Occasionally, there were two or more accounts for similar property for the same facility. Where it was clear that this property was energy-related, such as turbines, we downloaded receipts even if they were fairly low in value (approximately \$15,000). There were several facilities that had additional accounts that appeared to be associated, but for which the receipts were not currently available. Taxes on renewable energy property such as solar panels and wind turbines were classified as 'Mineral' rather than Real Estate or Personal property.

Payments in Lieu of Taxes

There are three energy companies in Nolan County who have agreements with school districts in Nolan County. Audited Financial Statements for 2018-2021 do not indicate tax abatement taken under Texas Code 312. Nolan County Central Appraisal District was not aware of any other payments in lieu of taxes for energy facilities. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

13. Pecos County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

13.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_27	County Tax Assessor Collector Website	Tax Receipts Property Search Database	In Pecos County, the County Tax Assessor / Collector collects taxes for all jurisdictions. These tax receipts are stored online in the Pecos County Tax Assessor / Collector's Property Search Database.
TX_28	County Auditor	Chapter 312 Payments	Receipts of payments in lieu of taxes.

13.2. County-Specific Information

Property Tax Receipt Database

Some receipts are stored with the EIA 860-m 'Utility Name' and others are stored under the EIA 860-m 'Plant Name'. We tried searching under both names as the 'Owner Name' in the Pecos Tax Assessor / Collector Property Search Database. In the case of several solar facilities, there were several accounts described as Taxable or Abated Groundwater tax receipts of less than \$25,000. These were not included.

Tax receipts for Natural Gas Processing facilities were not found in the database. While there were some accounts that appeared associated, these values were either below \$10,000 or the receipts for those accounts were 'Unavailable'.

Payments in Lieu of Taxes

Ten facilities have active Chapter 313 agreements with school districts in Pecos. Several of our sample facilities also have Chapter 312 agreements with Pecos County. Five of these facilities provide payments in lieu of taxes: Sherbino 1 Wind, Sherbino 2 Wind, Desert Sky Wind, Taygette Solar, Concho Bluff Wind. We received information on the amounts and entities providing these payments from the County Auditor. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

14. Reeves County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

14.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_29	County Tax Assessor Collector	Property Tax Receipts	In Reeves County, the County Tax Assessor / Collector collects taxes for all jurisdictions. Tax collection was centralized in 2019. Prior to 2019 the Central Appraisal District collected taxes for some jurisdictions. All records were transferred to the Tax Assessor / Collector in 2019. The online tax database only contains payment information and amounts due for the current season.
TX_30	County Judge	West of Pecos Chapter 312 Agreement	Contains information used to calculate payments in lieu of taxes

14.2. County-Specific Information

Outreach to Reeves County for Tax Receipts

Because the database only has the current fiscal year, we provided the list of facilities to Reeves County Tax Office. We received several tax receipts in return, but they do not appear to be comprehensive for the list of facilities from the EIA nor across fiscal years. For example, there is a gap for a plant in FY 2016 and receipts for several plants in from EIA data were not provided.

Payments in Lieu of Taxes

There are is one agreement between a facility in our sample and a school district in Reeves under Chapter 313. The County Auditor's Office also provided one Chapter 312 agreement between West of the Pecos Solar, LLC (WPS) and the county. The agreement details that "WPS agrees to make annual an payment for ten years of One Thousand and 00/100 Dollars per megawatt (\$1,000.00/MW)." We used the Megawatt Capacity for WPS from EIA-860 data on Generators to calculate the amount of the payment and applied this to the fiscal years in which WPS was operating and the agreement was in effect. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

15. Titus County Methodology Local Real and Personal Property: Powerplants and Natural Gas Processing, Solar and Wind Facilities

15.1. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_31	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Titus County Tax Assessor / Collector collects counties for the county, hospital and school jurisdictions. Amounts are documented in an online searchable database. These amounts are not stored as downloadable receipts, but rather on a webpage.
TX_32	County Appraisal District	Tax Receipts Property Search Database	Titus County Appraisal District collects for all jurisdictions for which the Tax Assessor / Collector does not. These amounts are also document in a separate CAD online database and are stored not as downloadable receipts, but rather directly on a webpage.

15.2. County-Specific Information

Property Tax Receipt Database

County Central Appraisal District

The County Appraisal District Database contains maps of each parcel. We began by searching the ‘utility’ name for both the Welsh Coal Power Plant (Southwestern Electric Power Co) and the Monticello Coal Power Plant (Luminant Generation Co) which turned up multiple accounts and properties. From there, we determined which properties were associated with the facility based on the map of the area and the assessed value of the property. This may not capture all energy-related properties associated with a facility.

The Welsh Coal Power Plant does not appear to pay taxes to jurisdictions for which the CAD collects.

The maps revealed that Monticello Coal Power Plant was associated with a property ID not associated with Luminant Generation Co, but rather Golden Eagle Development under what appears to be a deed warrantee in place since 2019. These tax receipts were downloaded.

County Tax Assessor / Collector

We then used the Property IDs from the tax receipts Wwe collected from the County Appraisal District Property Search to pull receipts for those same properties from the Titus County Tax Assessor Collector Database.

It should be noted that the ‘utility’ name might appear in both long hand and shorthand. For example, there is a Luminant Generation Company LLC and a Luminant Generation CO LLC.

Payments in Lieu of Taxes

At present no facilities in Titus have active agreements under Texas Code 313 with school districts in Titus. Audited Financial Statements for 2018-2021 do not indicate tax abatement taken under Texas Code 312. The Comptroller query for 380 agreements did not return any agreements associated with our sample facilities for the county.

16. Local Property Tax Data Oil and Gas (G1), Gas Utility (J2), and Electric Utility (J3) properties, and Pipelines (J6)

16.1. Policy

County Appraisal Districts report the value of property by property category within each taxing jurisdiction to the Texas Comptroller. The property categories of interest to our study include oil and gas (G1), gas utility (J2), and electric utility properties (J3), and pipelines (J6). In Texas, electric generation facilities are owned separately from electric transmission and distribution companies. The J3 category includes only the transmission and distribution, not the generation which is generally categorized under F2. The one exception to this rule are wind facilities located outside of the Electric Reliability Council of Texas (ERCOT) operating area. These wind facilities are classified as J3 (TX_33, TX_36). However, none of our sample counties fall outside the operating area therefore estimating J3 taxes as described below will not double count the tax receipts we collected for the wind facilities directly from counties. While there is not explicit guidance on solar facilities in the Tax Assistance Property Classification Guide, we will assume they are treated similarly. A quick check of several solar facilities in our sample confirms they are categorized as F2 and, therefore, will not be double counted. (TX_33).

The same dataset also contains values for the tax rates in each jurisdiction. The value of oil and the value of gas are not disaggregated. All values are the market value of the taxable properties and do not include any exemptions that may have applied to any property. Except under special circumstances, property is assessed and appraised at the market value in Texas.

16.2. Data Inputs

Unique ID	Source	Data Name, Shorthand	Description
TX_34	Texas Comptroller	Oil and gas (G1) property values	This data includes market value of oil and gas properties (G1) within each taxing jurisdiction as well as tax rates for those jurisdictions. We included values for 2013-2022.
TX_35	Texas Comptroller	Electric utility (J3), gas utility (J2) and pipeline (J6) property values	This data includes market value of J category properties within each taxing jurisdiction as well as tax rates for those jurisdictions. We only use values for electric utility (J3), gas utility (J2) and pipeline (J6). The data for utilities and pipelines is only disaggregated at the level of detail we require back to 2019.

16.3. Calculations and Assumptions

1) Estimate tax based on value and tax rate

The total tax levy is calculated based on taxable value and does include exemptions. These exemptions are not broken out by category of property. We multiplied the value in each tax unit by the tax rate to compute the total tax levy. This may slightly overcount the tax levy as there are some entities that have Chapter 380 agreements with localities that abate ad valorem property taxes. In our sample counties, there were only a few entities with these agreements so we do not believe these calculations are significantly different than actual levies.

Note: Calculations for oil and gas can be found in the 'OilGas_PropTax_Raw' tab. Calculations for J2, J3 and J6 properties can be found in 'J2J3J6_PropTax_Raw'.

16.4. Output

Estimated tax levies for electric utility, gas utility, oil and gas property, and pipelines by taxing jurisdiction by year.

Sources

Unique ID	Source	Data Name	Description	Access	Type	Years	Original Source link
TX_1	US Department of Interior Natural Resources Revenue Data	Outer Continental Shelf GOMESA Distributions	Includes distributions authorized under Gulf of Mexico Energy Security Act (GOMESA) to Texas and Counties in Texas for oil and gas leases in the Outer Continental Shelf	Public	Federal Resource Receipt	2003-2021	https://revenuedata.doi.gov/how-revenue-works/gomesa/ https://revenuedata.doi.gov/downloads/disbursements/
TX_2	Texas Comptroller Manual of Accounts	County Road Oil and Gas Trust Fund Code	Information on collection distribution of County Road Oil and Gas Trust Fund monies	Public	Policy Information	na	https://fmcpa.cpa.state.tx.us/fiscalmoa/fund.jsp?num=0808&fy=2018
TX_3	Texas Comptroller	County Road Oil and Gas Trust Fund Distributions	Received from an open records request submitted to fyiopenrecords.com; Contains distributions to counties from the County Road Oil and Gas Trust Fund	Open Records Request	State distributions	2018-2022	fyiopenrecords.com
TX_4	Texas Education Agency	Foundation School Program Webpage and Description information	Webpage that provides background information on the Foundation School Program.	Public	Policy Information	na	https://tea.texas.gov/finance-and-grants/state-funding/foundation-school-program/foundation-school-program

TX_5	Texas Comptroller	State Revenue from Energy Sources	Summarizes state revenue collected from for relevant state-collected energy taxes. We selected "All Revenue" and "All fiscal years." From there we selected the following Comptroller Objects: Oil Production Tax (3290), Gas Production Tax (3291), Gas, Water, Electric Utility Tax (3233), Oil Well Service Tax (3296)	Public	State revenues	2013-2022	https://bivisual.cpa.texas.gov/CPA/opendocnotoolbar.htm?document=documents%5CTR_Master_UI.qvw
TX_6	Texas Comptroller	Gas, Water, Electric Utility Tax Breakdown	Received from an open records request submitted to fyiopenrecords.com; Contains Revenue from the Gas, Water, Electric and Utility Tax broken into receipts from the various categories.	Open Records Request	Disaggregation Input	1993-2021	fyiopenrecords.com
TX_7	Texas Comptroller	Revenues distributed to the Foundation School Account	Summarizes amounts coming into the Foundation School Account Comptroller Object (0193) from all sources. We selected "All Revenue" and "All fiscal years." From there we selected comptroller object 0193.	Public	Disaggregation Input	2013-2022	https://bivisual.cpa.texas.gov/CPA/opendocnotoolbar.htm?document=documents%5CTR_Master_UI.qvw

TX_8	Texas Comptroller	FSA Distributions	Texas Comptroller manages the distributions from the Foundation School Account to the individual School Districts. We determined that these records are more accurate than those provided by the Texas Education Agency because they reflect actual amounts distributed rather than calculations.	Open Records Request	State distributions	2014-2022	fyiopenrecords.com
TX_9	Texas Education Agency	County-School District Files and Shapefiles	The Texas Education Agency keeps a list of school districts in Texas and the counties in which they are located, a list of counties and with school districts contained, and shapefiles for counties and school districts were also provided.	Public	School Districts GIS Data	na	https://schoolsdata2-tea-texas.opendata.arcgis.com/
TX_10	Texas Comptroller	Revenue to the Permanent School Fund from all sources	Summarizes revenue to the Permanent School Fund (0044) from all sources including energy-related taxes, royalties, fees, leases and bonuses. We selected "All Revenue" and "All Fiscal Years." From there we selected comptroller object 0044.	Public	State revenues	2013-2022	https://bivisual.cpa.texas.gov/CPA/opendocnotoolbar.htm?document=documents%5CTR_Master_UI.qvw

TX_12	Legislative Budget Board	Foundation School Program Funding Sources	Biennial Fiscal Size-up reports published by the Legislative Budget Board. Contains a section call Foundation School Program Funding Sources which provides funding sources of the FSP by percentages.	Public	Disaggregation Input	2012-2021	https://www.lbb.texas.gov/Archives.aspx
TX_13	Texas Comptroller	Property Tax System Basics	Webpage that provides background information on how property taxes are collected and administered in Texas.	Public	Policy Information	na	https://comptroller.texas.gov/taxes/property-tax/basics.php
TX_14	Texas Comptroller	List of Chapter 380 Agreements	Documents agreements between local government and entities that qualify for the state's property tax abatement program.	Public	PILT	2013-2022	https://comptroller.texas.gov/economy/local/ch380-381/reporting-search.php
TX_16	Andrews County Tax Assessor Collector Website	Tax Receipts Property Search Database	The Andrews County Tax Assessor Collector collects taxes for Andrews County and Andrews County Road and Bridge.	Public	Property Tax Receipts	2018-2022	https://www.andrewscountytax.com/taxes.html#/WildfireSearch
TX_17	Andrews County Appraisal District	Tax Receipts Property Search Database	The Andrews County Central Appraisal District collects taxes for Andrews ISD, Andrews County Hospital District and the City of Andrews.	Public	Property Tax Receipts	2018-2022	https://propaccess.trueautomation.com/clientdb/?cid=53

TX_18	County Appraisal District	Tax Receipts Received	The Carson County Appraisal District collects taxes for school districts, hospitals, cities and other special districts.	Direct Sent	Property Tax Receipts	2014-2021	
TX_19	County Auditor	Annual Financial Reports	Contains Payment in Lieu of Taxes and tax abatement information.	Public	PILT	2018-2021	https://www.co.carson.tx.us/page/carson.Budgets
TX_20	County Tax Assessor Collector Website	Truth in Taxation Tax Rates	Contains tax rate information for the county for Fiscal Years 2018-2022	Public	Tax Rates	2018-2022	https://www.co.carson.tx.us/page/carson.Tax.Rate
TX_21	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Harris County Tax Assessor / Collector collects counties for the county, hospital and school jurisdictions. Tax receipts were stored online in downloadable PDFs.	Public	Property Tax Receipts	2018-2021	https://www.hctax.net/Property/PropertyTax
TX_22	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Limestone County Tax Assessor Collector collects taxes for all taxing jurisdiction in Limestone County. Tax receipts contain actual taxes collected for each sub-county taxing jurisdiction.	Public	Property Tax Receipts	2010-2022	http://www.limestonetexas-tax.com/

TX_23	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Martin County Tax Assessor Collector collects taxes for Martin County, Martin County Road and Bridge, Permian Basin Underground Water District. Tax receipts were stored online in downloadable PDFs.	Public	Property Tax Receipts	2018-2021	http://taxsearch.co.martin.tx.us/(S(j14gumbvvt2pufktdknazant))/search.aspx?clientid=martincad
TX_24	County Appraisal District	Tax Receipts Property Search Database	Martin County Appraisal District collects taxes for the City of Stanton, Grady ISD, Stanton ISK, Sands CISD, Martin County Fresh Water District and Martin County Hospital District. Tax receipts were stored online in downloadable PDFs.	Public	Property Tax Receipts	2018-2021	http://www.martincad.org/(S(32u1hero1pyk0gj5d3mq0xhv))/search.aspx?clientid=martincad
TX_25	County Appraisal District	Tax Receipts Property Search Database	Midland County Appraisal District collects taxes for all taxing jurisdictions in Midland.	Public	Property Tax Receipts	2018-2021	https://iswdataclient.azurewebsites.net/webindex.aspx?dbkey=MIDLANDCAD&time=202303221520042
TX_26	County Appraisal District	Tax Receipts Property Search Database	Nolan County's taxes are assessed and collected by Nolan County Central Appraisal District. All receipts are in the online database.	Public	Property Tax Receipts	2018-2021	http://nolan-cad.org/(S(auyxuwnelnoray01gy1mevsd))/search.aspx?clientid=nolancad

TX_27	County Tax Assessor Collector Website	Tax Receipts Property Search Database	In Pecos County, the County Tax Assessor / Collector collects taxes for all jurisdictions. These tax receipts are stored online in the Pecos County Tax Assessor / Collector's Property Search Database.	Public	Property Tax Receipts	2018-2021	http://www.pecostax.org/(S(f2w4vz21lipf4ygiflneauza))/search.aspx?clientid=pecoscounty
TX_28	County Auditor	Chapter 312 Payments	Receipts of payments in lieu of taxes.	Direct Sent	PILT	2018-2021	
TX_29	County Tax Assessor Collector	Property Tax Receipts	In Reeves County, the County Tax Assessor / Collector collects taxes for all jurisdictions. Tax collection was centralized in 2019. Prior to 2019 the Central Appraisal District collected taxes for some jurisdictions. All records were transferred to the Tax Assessor / Collector in 2019. The online tax database only contains payment information and amounts due for the current season.	Direct Sent	Property Tax Receipts	2018-2021	
TX_30	County Judge Office	West of Pecos Chapter 312 Agreement	Contains information used to calculate payments in lieu of taxes	Direct Sent	PILT	2022	

TX_31	County Tax Assessor Collector Website	Tax Receipts Property Search Database	Titus County Tax Assessor / Collector collects counties for the county, hospital and school jurisdictions. Amounts are documented in an online searchable database. These amounts are not stored as downloadable receipts, but rather on a webpage.	Public	Property Tax Receipts	2012-2021	http://propaccess.trueautomation.com/clientdb/?cid=82
TX_32	County Appraisal District	Tax Receipts Property Search Database	Titus County Appraisal District collects for all jurisdictions for which the Tax Assessor / Collector does not. These amounts are also document in a separate CAD online database and are stored not as downloadable receipts, but rather directly on a webpage.	Public	Property Tax Receipts	2012-2021	http://propaccess.trueautomation.com/clientdb/?cid=82
TX_33	Texas Comptroller	Tax Assistance Property Classification Guide	Provides information on how Property Taxes are classified including what kinds of properties are included in which Property Category.	Public	Policy Information	na	https://comptroller.texas.gov/taxes/property-tax/docs/96-313.pdf

TX_34	Texas Comptroller	Oil and Gas (G1) Property Values	This data includes market value of oil and gas properties within each taxing jurisdiction as well as tax rates for those jurisdictions. The data are complete and reliable back to 2012 and available back to 1998. We included values for 2013 forward.	Open Records Request	Local Property Values	1998-2021	fyiopenrecords.com
TX_35	Texas Comptroller	Electric utility (J3), gas utility (J2) and pipeline (J6) property values	This data includes market value of J category properties within each taxing jurisdiction as well as tax rates for those jurisdictions. We only use values for electric utility (J3), gas utility (J2) and pipeline (J6). The data for utilities and pipelines is only disaggregated at the level of detail we require back to 2019.	Direct Sent	Local Property Values	2019-2021	
TX_36	ERCOT	ERCOT Map	Shows ERCOT boundary demonstrating that none of the sample counties for this study are within ERCOT.	Public	Policy Information	na	https://www.ercot.com/news/mediakit/maps
Fed_4	U.S. Energy Information Administration	Form EIA-860	These spreadsheets identify utilities, power plants, generators, wind facilities, and solar facilities by county.	Public	Renewable Production, Power Plants		https://www.eia.gov/electricity/data/eia860/

Fed_6	U.S. Energy Information Administration	Preliminary Monthly Electric Generator Inventory	Includes Monthly generation data for powerplants and renewable facilities. Starting with March 2017 data, Preliminary Monthly Electric Generator Inventory includes a comprehensive list of generators which retired since 2002. The list can be found on the 'Retired' tab of the datafile. This information is not available in the annual EIA-860 data.	Public	Renewable Production,	2022	https://www.eia.gov/electricity/data/eia860m/
Fed_8	Office of Natural Resources Revenue - U.S. Department of the Interior	Revenue	Full reporting of bonuses, rents, and royalties received from production on federal lands.	Public	Property Tax Receipts	2012-2021	http://propaccess.trueautomation.com/clientdb/?cid=82
Fed_10	U.S. Energy Information Administration	Natural Gas Processing Facilities	Includes Natural Gas Processing Facilities across the US by county. Method of locating natural gas processing facilities for the sake of cross checking with tax receipts.	Public	Natural Gas Processing	2012, 2014, 2017	https://www.eia.gov/naturalgas/ngqs/#?report=RP9&year1=2012&year2=2017&company=Name
Fed_11	U.S. Energy Information Administration	Petroleum Refineries	Record of operating crude oil refineries.	Public	Petroleum Processing	Current as of 2019	https://www.eia.gov/petroleum/refinerycapacity/ https://atlas.eia.gov/datasets/eia::petroleum-refineries/explore?location=75.117622%2C-126.882310%2C11.54
Fed_12	U.S. Energy Information Administration	Energy Infrastructure Map	GIS rendering of Energy Infrastructure across the US	Public	Energy Infrastructure	na	https://atlas.eia.gov/apps/5039a1a01ec34b6bbf0ab4fd57da5eb4/explore

