# National-Scale Air Toxics Assessment (NATA) – Emissions – 2002, 2005, 2011

*Last modified: CEO 10/16/2017*

## Source Files

**2002**

File: TX\_2002\_NATA\_County\_Emissions.xls

Website: <https://archive.epa.gov/nata2002/web/html/tables.html>

**2005**

File: 2005natav3\_ei\_tx.mdb

Website: <https://www.epa.gov/national-air-toxics-assessment/2005-nata-assessment-results#state>

**2011**

File: State\_emis\_county\_5Aug16.accdb

Website: <https://www.epa.gov/national-air-toxics-assessment/2011-nata-assessment-results#emissions>

## Processing

These Air Quality data come from the National-Scale Air Toxics Assessment (NATA), which is EPA’s ongoing comprehensive evaluation of air toxics in the USA. The emissions data have measurements of various emissions in tons per year, including emissions from point, non-point, on-road, and non-road sources. They are reported by county and pollutant. For 2002 and 2005, the Hazardous Air Pollutant (HAP) category is also included.

Data for the three years were standardized to have the same variable names and formats across years as appropriate. Information on tribal code/name and EPA region were not kept, as they have the same value for all records in Texas.

Checking was done to confirm that:

* There is a one-to-one correspondence between the pollutant code and description.
* Each pollutant is associated with only one HAP (years 2002 and 2005)
* There is only one record per State, County, and Pollutant

### Important Notes for Using these Data

**The EPA does not report comparable measurements across years, so there are few variables that exist in all three years. Some variables with the same name contain ostensibly comparable information, though they may not have been created with the same methodology across years**. Per e-mail from Terri Hollingsworth on 5/15/2017, “I would like to caution you that it is not appropriate to compare results or examine trends from one NATA year to another. Due to the extent of improvements in our methodology (e.g., inventory improvements, modeling changes, background calculation revisions, and changes in health benchmarks), it is not meaningful to directly compare the 2011 assessment with previous assessments. Before changes in risk levels may be attributable to specific reduction efforts, these assessment changes must be considered. Improvements made to the methods since the 2005 NATA include, but are not limited to: the 2010 Census; improved meteorological data from an increased number of stations; improved emissions inventory or location information for oil and gas wells; updated model for onroad emissions with specific emission categories for cold start emissions and extended idle exhaust; more complete port and underway inventories; use of both CMAQ and AERMOD results to take advantage of the strengths of each model; and use of a newer exposure model, HAPEM7. “

**2002 and 2005 AREA\_NONPOINT variables are both sourced from the 2002 data.** Per e-mail from Terri Hollingsworth on 5/15/2017, “For the 2005 NATA, we were not able to update the 2005 National Emissions Inventory for nonpoint sources, so we used our 2002 nonpoint data in the 2005 NATA.” A comparison of the AREA\_NONPOINT variable reveals that the values reported for this measurement in 2005 are not always exactly equal to those from the 2002 source file. Further communication with Terri via e-mail yielded the following:

“There are a few nonpoint changes in TX between the 2002 NEI and 2005 NEI/NATA platforms:

First, minor ones related to portable fuel containers and onroad refueling (a source that now resides in the onroad mobile data category) ‐documentation on this can be found in the emissions modeling platform technical support documents ‐see Section 2.5 here):

<https://urldefense.proofpoint.com/v2/url?u=https‐3A__www.epa.gov_sites_production_files_2015‐2D10_documents_mats‐5Ffinal‐5Femissions‐5Fmodeling‐5Ftsd‐5F9dec2011.pdf&d=DwIGaQ&c=imBPVzF25OnBgGmVOlcsiEgHoG1i6YHLR0Sj_gZ4adc&r=Nwz7_oGlFEW79TxY74hC9Q&m=V1QcHSZTC5TWx3JSv6JYYE9q5xzGY5‐qJhDK1Yxr2Dk&s=EPnWoSm9‐vu0xC9xNoN5dJFlQaewM7tjJZQ0S_hjQd4&e>=

More importantly, we replaced oil and gas emissions in TX for 2005 ‐see Section 2.2.3 here:

https://urldefense.proofpoint.com/v2/url?u=https‐3A\_\_www.epa.gov\_sites\_production\_files\_2015‐

2D10\_documents\_transportrulefinal‐5Feitsd‐5F28jun2011.pdf&d=DwIGaQ&c=imBPVzF25OnBgGmVOlcsiEgHoG1i6YHLR0Sj\_gZ4adc&r=Nwz7\_oGlFEW79TxY74hC9Q&

m=V1QcHSZTC5TWx3JSv6JYYE9q5xzGY5‐qJhDK1Yxr2Dk&s=Ysx448imF2iHwLi7bwNppkDftOLsXyDYoOw3xnY0Nno&e=”

## Published Files, Programs and Audit Trail

File: # Records

NATA\_Emissions\_2002\_v01 37,752

NATA\_Emissions\_2005\_v01 38,341

NATA\_Emissions\_2011\_v01 34,621

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| --- | --- | --- | --- |
| **Program Name** | **Input File(s)** | **Output File(s)\*** | **Date/**  **Time Run** |
| CrNATA\_Emissions\_2002\_v01 | TX\_2002\_NATA\_County\_Emissions.xlsx | NATA\_Emissions\_2002\_v01 | 06/14/2017 09:55:51 am |
| CrNATA\_Emissions\_2005\_v01 | 2005natav3\_ei\_tx.mdb | NATA\_Emissions\_2005\_v01 | 06/14/2017 09:55:56 am |
| CrNATA\_Emissions\_2011\_v01 | State\_emis\_county\_5Aug16.accdb | NATA\_Emissions\_2011\_v01 | 06/14/2017 09:56:02 am |

*\* Datasets are provided in 3 formats: SAS (.sas7bdat), Stata (.dta), and Text (.csv).*